Getting Started

Mini

© Copyright 2010 Hewlett-Packard Development Company, L.P.

Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. SD Logo is a trademark of its proprietor.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

First Edition: May 2010

Document Part Number: 605306-001

Product notice

This guide describes features that are common to most models. Some features may not be available on your computer.

Software terms

By installing, copying, downloading, or otherwise using any software product preinstalled on this computer, you agree to be bound by the terms of the HP End User License Agreement (EULA). If you do not accept these license terms, your sole remedy is to return the entire unused product (hardware and software) within 14 days for a refund subject to the refund policy of your place of purchase.

For any further information or for requesting a full refund of the computer, please contact your local point of sale (the seller).

Safety warning notice

▲ WARNING! To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air 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 rugs or clothing, to block airflow. Also, do not allow the AC adapter to come into contact with the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

Table of contents

1	Welcome	1
	Finding information	2
2	Getting to know your computer	4
	Top	4
	TouchPad	4
	Lights	5
	Keys	6
	Front	7
	Right side	8
	Left side	g
	Display	10
	Bottom	11
3	HP QuickWeb (select models only)	12
	Enabling HP QuickWeb	12
	Starting HP QuickWeb	13
	Identifying the QuickWeb LaunchBar	14
	Identifying the QuickWeb control icons	14
	Identifying the QuickWeb LaunchBar icons	14
	Identifying the QuickWeb notification icons	15
	Configuring the network	17
	Starting Microsoft Windows	17
	Turning HP QuickWeb on and off	17
4	Networking	18
	Using an Internet service provider (ISP)	19
	Connecting to a wireless network	
	Connecting to an existing WLAN	
	Setting up a new WLAN network	
	Configuring a wireless router	
	Protecting your WLAN	0.0

5	Keyboard and pointing devices	23
	Using the keyboard	23
	Using the action keys	23
	Using pointing devices	25
	Setting pointing device preferences	25
	Using the TouchPad	25
	Navigating	25
	Selecting	26
6	Maintenance	27
	Inserting or removing the battery	27
	Replacing or upgrading the hard drive	29
	Removing the hard drive	29
	Installing a hard drive	30
	Adding or replacing memory modules	31
	Updating programs and drivers	36
	Routine care	36
	Cleaning the display	36
	Cleaning the TouchPad and keyboard	36
7	Backup and recovery	
	Backing up your information	
	Creating a copy of the hard drive	
	Performing a recovery	
	Using the Disaster Recovery utility	
	Downloading and extracting the Disaster Recovery utility	
	Restoring your hard drive image	
	Using the Instant Restore utility	
	Using the Instant Restore utility when the operating system is functioning	
	Using the Instant Restore utility when the operating system is not functioning	
8	Customer support	41
	Contacting customer support	41
	Labels	41
9	Specifications	
	Input power	
	Operating environment	44
le.	ndev	45

1 Welcome

After you set up and register the computer, it is important to take the following steps:

- Set up HP QuickWeb—Immediately access your music, digital photos, and the Web without launching your main operating system. For more information, refer to <u>HP QuickWeb (select models only) on page 12</u>.
- **Connect to the Internet**—Set up your wired or wireless network so that you can connect to the Internet. For more information, refer to Networking on page 18.
- Update your antivirus software—Protect your computer from damage caused by viruses. The
 software is preinstalled on the computer and includes a limited subscription for free updates. For
 more information, refer to the HP Notebook Reference Guide. For instructions on accessing this
 guide, refer to Finding information on page 2.
- **Get to know your computer**—Learn about your computer features. Refer to <u>Getting to know your computer on page 4</u> and <u>Keyboard and pointing devices on page 23</u> for additional information.
- **Back up and recover your files and folders**—Recover your computer image in case of system instability or failure. For instructions, refer to Backup and recovery on page 37.
- Find installed software—Access a list of the software preinstalled on the computer. Select
 Start > All Programs. For details about using the software included with the computer, refer to
 the software manufacturer's instructions, which may be provided with the software or on the
 manufacturer's Web site.

Finding information

The computer comes with several resources to help you perform various tasks.

Resources	For information about
Quick Setup poster	How to set up the computer
	Help to identify computer components
HP Notebook Reference Guide	Power management features
To access this guide, select Start > Help and	How to maximize battery life
Support > User Guides.	How to use the multimedia features of the computer
	How to protect the computer
	How to care for the computer
	How to update the software
Help and Support	Operating system information
To access Help and Support, select Start > Help and	Software, driver, and BIOS updates
Support.	Troubleshooting tools
NOTE: For country- or region-specific support, go to http://www.hp.com/support , select your country or region, and follow the on-screen instructions.	How to access technical support
Regulatory, Safety, and Environmental Notices	Regulatory and safety information
To access the notices, select Start > Help and Support > User Guides .	Battery disposal information
Safety & Comfort Guide	Proper workstation setup, posture, health, and work habits
To access this guide:	Electrical and mechanical safety information
Select Start > Help and Support > User Guides.	
- or -	
Go to http://www.hp.com/ergo.	
Worldwide Telephone Numbers booklet	HP support telephone numbers
This booklet is provided with your computer.	
HP Web site	Support information
To access this Web site, go to http://www.hp.com/	Ordering parts and finding additional help
support.	Software, driver, and BIOS (Setup Utility) updates
	Accessories available for the device

Resources	For information about
Limited Warranty*	Warranty information
To access this warranty:	
Select Start > Help and Support > HP Warranty.	

– or –

Go to http://www.hp.com/go/orderdocuments.

*You can find the expressly provided HP Limited Warranty applicable to your product in the start menu on your PC and/or in the CD/DVD provided in the box. For some countries/regions a printed HP Limited Warranty is provided in the box. In countries/regions where the warranty is not provided in printed format, you may request a printed copy from http://www.hp.com/go/orderdocuments or write to HP at: Hewlett Packard, MS POD, 11311 Chinden Blvd, Boise, ID 83714, USA; Hewlett Packard, POD, Via G. Di Vittorio, 9, 20063, Cernusco s/Naviglio (MI), Italy; Hewlett Packard, POD, P.O. Box 200, Alexandra Post Office, Singapore 911507. Please include your product name, warranty period (found on your serial number label), name and postal address.

2 Getting to know your computer

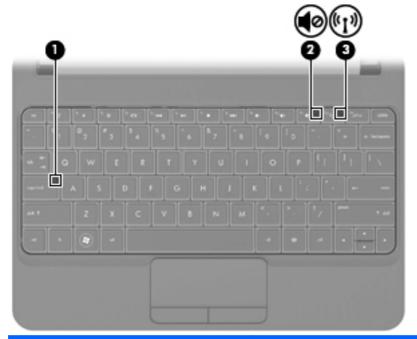
Top

TouchPad



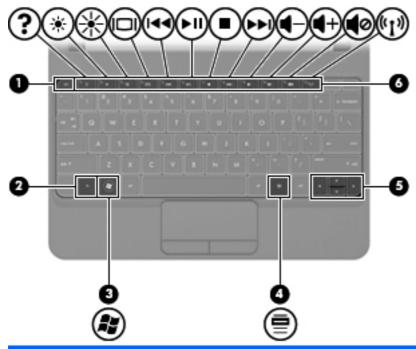
Compone	ent	Description
(1)	TouchPad zone	Moves the pointer and selects or activates items on the screen.
(2)	Left TouchPad button	Functions like the left button on an external mouse.
(3)	Right TouchPad button	Functions like the right button on an external mouse.

Lights



Component			Description	
(1)		Caps lock light	White: Caps lock is on.	
			Off: Caps lock is off.	
(2)	4 ⊘	Mute light	Amber: Computer sound is off.	
	40		Off: Computer sound is on.	
(3)	(₁)	Wireless light	 White: An integrated wireless device, such as a wireless local area network (WLAN) device, a wireless wide-area network (WWAN) device, and/or a Bluetooth® device, is on. 	
			Amber: All wireless devices are off.	

Keys



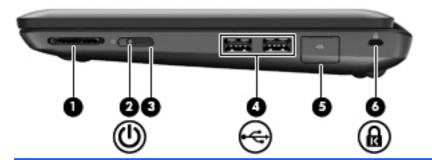
Component			Description
(1)		esc key	Displays system information when pressed in combination with the fn key.
(2)		fn key	Executes frequently used system functions when pressed in combination with an arrow key or the esc key.
(3)	•	Windows logo key	Displays the Windows Start menu.
(4)		Windows applications key	Displays a shortcut menu for items beneath the pointer.
(5)		Arrow keys	Scroll the page up or down, or when pressed in combination with the fn key, move to the beginning or end of the document.
(6)		Action keys	Execute frequently used system functions.

Front



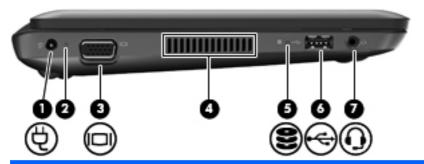
		• •
Comp	onent	Description
(1)	Vents (2)	Enable airflow to cool internal components.
		NOTE: The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
(2)	Speaker	Produces sound.

Right side



Component			Description	
(1)		Digital Media Slot	Supports the following digital card formats: MultiMediaCard (MMC) Secure Digital (SD) Memory Card Secure Digital Extended Capacity (SDxC) Memory Card Secure Digital High Capacity (SDHC) Memory Card	
(2)	ψ	Power light	 White: The computer is on. Blinking white: The computer is in Standby. Off: The computer is off or in Hibernation. 	
(3)		Power switch	 When the computer is off, slide the switch to turn on the computer. When the computer is on, slide the switch briefly to initiate Standby. When the computer is in Standby, slide the switch briefly to exit Standby. When the computer is in Hibernation, slide the switch briefly to exit Hibernation. If the computer has stopped responding and Windows® shutdown procedures are ineffective, slide and hold the power switch for at least 4 seconds to turn off the computer. To learn more about your power settings, select Start > Control Panel > Performance and Maintenance > Power Options, or refer to the HP Notebook Reference Guide. 	
(4)	.	USB ports (2)	Connect optional USB devices.	
(5)	**	RJ-45 (network) jack and cover	Connects a network cable.	
(6)	ß	Security cable slot	Attaches an optional security cable to the computer. NOTE: The security cable is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen.	

Left side



Component			Description
(1)	Ą	Power connector	Connects an AC adapter.
(2)		AC adapter light	 White: The computer is connected to external power and the battery is fully charged. Amber: The computer is connected to external power and the battery is charging. Off: The computer is not connected to external power.
(3)		External monitor port	Connects an external VGA monitor or projector.
(4)		Vent	Enables airflow to cool internal components. NOTE: 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.
(5)	8	Drive light	Blinking white: The hard drive is being accessed.
(6)	.	USB port	Connects an optional USB device.
(7)	O	Audio-out (headphone) jack/Audio- in (microphone) jack	Connects optional powered stereo speakers, headphones, earbuds, a headset, or television audio. Also connects an optional headset microphone. WARNING! To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, refer to the <i>Regulatory, Safety, and Environmental Notices</i> . NOTE: When a device is connected to the jack, the computer speakers are disabled.

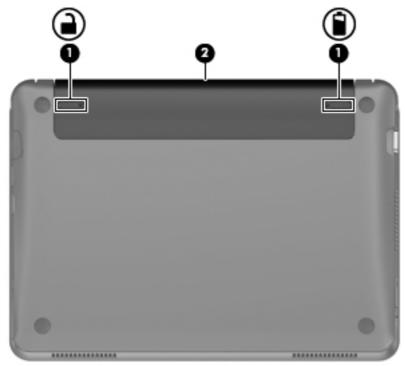
Display



Component		Description	
(1)	WWAN antennas* (2) (select models only)	Send and receive wireless signals to communicate with wireless wide-area networks (WWAN).	
(2)	WLAN antennas (2)*	Send and receive wireless signals to communicate with wireless local area networks (WLAN).	
(3)	Webcam light	On: The webcam is in use.	
(4)	Webcam	Records video and captures still photographs.	
		To use the webcam, select Start > HP > HP MediaSmart > HP MediaSmart Webcam .	
(5)	Internal microphone	Records sound.	

^{*}The antennas are not visible from the outside of the computer. For optimal transmission, keep the area immediately around the antennas free from obstructions. To see wireless regulatory notices, refer to the section of the *Regulatory, Safety, and Environmental Notices* that applies to your country or region. These notices are located in Help and Support.

Bottom

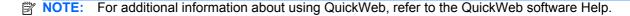


Component			Description
(1)		Battery release latches (2)	Release the battery from the battery bay.
(2)		Battery bay	Holds the battery.

3 HP QuickWeb (select models only)

After completing the Windows setup the first time you turn on the computer, the QuickWeb setup screen appears. HP QuickWeb is an optional, instant-on environment that is separate from the main operating system. QuickWeb allows you to access the following applications without the need to first start Windows.

- Web browser
- Chat
- Skype (select models only)
- Web e-mail
- Web calendar
- Music Player
- Photo Viewer



Enabling HP QuickWeb

Follow the on-screen instructions to enable QuickWeb. After you have enabled QuickWeb, the QuickWeb Home screen appears whenever you turn on the computer.

NOTE: To turn on or turn off HP QuickWeb, refer to the section <u>Turning HP QuickWeb on and off</u> on page 17.

Starting HP QuickWeb

1. Turn on the computer.

The HP QuickWeb Home screen appears.

2. Click an icon on the QuickWeb Home screen to launch an application.

Identifying the QuickWeb LaunchBar

The QuickWeb LaunchBar contains the QuickWeb control icons (1), LaunchBar icons (2), and the notification icons (3).



Identifying the QuickWeb control icons

lcon	Function
□ 从	Launches the Windows operating system.
Q	Shuts the computer down.
企	Returns to the QuickWeb Home screen.

Identifying the QuickWeb LaunchBar icons

Icon	Function
	Launches the Web browser. You can browse and search the Web, open bookmarks, and create links to your favorite Web sites.
S	Launches the Chat application. Chat is the instant messaging (IM) program that allows you to chat with friends on multiple instant messaging programs simultaneously.
8	Launches Skype (select models only). Skype is the preinstalled Internet calling software that allows you to have a conference call or video chat. You can also chat with one or more people at a time.
	Launches Web e-mail so you can view your recent e-mail, check for new e-mail, and configure your e-mail account.
	Launches the Web calendar so you can schedule and manage your activities using your favorite online calendar program.

Icon	Function
П	Launches the Music Player so you can quickly browse and manage your music collection by artist, album, song, genre, or playlist. Supported music formats include .mp3 files.
o	Launches the Photo Viewer. You can view your favorite photos and albums and manage your photo collection. Supports .bmp, .gif, .jpg, and .png file types.

Identifying the QuickWeb notification icons

Icon	Function	
	When a USB drive is inserted, the File Manager window containing a USB icon appears. Click the USB icon to open the File Manager window. Right-click the USB icon to open a menu to safely remove the device.	
(₍))	Indicates that the network is connected. Click the network icon to open the Network dialog box.	
(6)	Indicates that the network is disconnected.	
●	Launches the Volume Control dialog box.	
\$	Launches the Settings panel. Use the Settings panel to modify the following QuickWeb settings: • Set date and time	
	Configure network connections	
	Manage power settings	
	Manage QuickWeb applications	
	Restore QuickWeb	

Icon	Function	
	Launches the Power Control dialog box to see information about battery capacity:	
*ૄ∎	When the computer is connected to AC power, the icon appears with an AC power cord.	
	When the computer is running on battery power, the icon appears as only a battery.	
	The state of charge is indicated by the color of the battery icon:	
	Green: charged	
	Yellow: low	
	Red: critically low	
.	Launches the QuickWeb software Help.	

Configuring the network

You can set up a wireless connection in QuickWeb using the HP QuickWeb Configuration Tool.

To access this tool:

- 1. Click the **Settings** icon in the system tray.
- 2. Select **Network**, and then select the **Enable Wi-Fi** check box.

For more information on setting up a wireless connection using QuickWeb, refer to the software Help.

Starting Microsoft Windows

1. Turn on the computer.

The HP QuickWeb Home screen appears.

- Click the Start icon , at the far left of the QuickWeb LaunchBar.
- 3. Click **Yes** in the Windows dialog box.
- NOTE: Clicking Make Windows your default Power On experience in this dialog box turns off QuickWeb. To turn on QuickWeb, refer to Turning HP QuickWeb on and off on page 17.

Turning HP QuickWeb on and off

1. Select Start > All Programs > HP QuickWeb > HP QuickWeb Configuration Tool.

The QuickWeb dialog box is displayed.

- 2. Select the **Status** tab.
- 3. Select the **Enable** or **Disable** check box to turn on or turn off QuickWeb.
- 4. Click OK.

4 Networking

NOTE: Internet hardware and software features vary depending on computer model and your location.

Your computer supports two types of Internet access:

- Wireless—For mobile Internet access, you can use a wireless connection. Refer to <u>Connecting</u>
 to an existing WLAN on page 19 or <u>Setting up a new WLAN network on page 21</u>.
- Wired—You can access the Internet by connecting to a wired network. For information on connecting to a wired network, refer to the HP Notebook Reference Guide.

Using an Internet service provider (ISP)

Before you can connect to the Internet, you must establish an ISP account. Contact a local ISP to purchase Internet service and a modem. The ISP will help set up the modem, install a network cable to connect your wireless computer to the modem, and test the Internet service.

NOTE: Your ISP will give you a user ID and password to access the Internet. Record this information and store it in a safe place.

The following features will help you set up a new Internet account or configure the computer to use an existing account:

- Internet Services & Offers (available in some locations)—This utility assists with signing up for a new Internet account and configuring the computer to use an existing account. To access this utility, select Start > All Programs > Online Services > Get Online.
- **ISP-provided icons (available in some locations)**—These icons may be displayed either individually on the Windows desktop or grouped in a desktop folder named Online Services. To set up a new Internet account or configure the computer to use an existing account, double-click an icon, and then follow the on-screen instructions.
- **Windows Connect to the Internet Wizard**—You can use the Windows Connect to the Internet Wizard to connect to the Internet in any of these situations:
 - You already have an account with an ISP.
 - You do not have an Internet account and want to select an ISP from the list provided within the wizard. (The list of ISP providers is not available in all regions.)
 - You have selected an unlisted ISP, and the ISP has provided you with information such as a specific IP address and POP3 and SMTP settings.

To access the Windows Connect to the Internet Wizard and instructions for using it, select **Start** > **Help and Support**, and then type Connect to the Internet wizard in the Search box.

NOTE: If you are prompted within the wizard to choose between enabling or disabling Windows Firewall, choose to enable the firewall.

Connecting to a wireless network

Wireless technology transfers data across radio waves instead of wires. Your computer may be equipped with one or more of the following wireless devices:

- Wireless local area network (WLAN) device
- HP Mobile Broadband Module (a wireless wide area network (WWAN) device)
- Bluetooth device

For more information on wireless technology and connecting to a wireless network, refer to the *HP Notebook Reference Guide* and information and Web site links provided in Help and Support.

Connecting to an existing WLAN

- 1. Turn on the computer.
- 2. Be sure that the WLAN device is on.

- 3. Select Start > Connect To, and then click Wireless Network Connection.
- **4.** Select the network to which you want to connect and click **Connect**. If required, enter the security key.
 - If the network is unsecured, meaning that anyone can access the network, a warning is displayed. Click **Connect Anyway** to accept the warning and complete the connection.
 - If the network is a security-enabled WLAN, you are prompted to enter a network security key, which is a security code. Type the code, and then click **Connect** to complete the connection.
- NOTE: If no WLANs are listed, you are out of range of a wireless router or access point.

NOTE: If you do not see the network you want to connect to, click **Set up a connection or network**. A list of options is displayed. You can choose to manually search for and connect to a network or to create a new network connection.

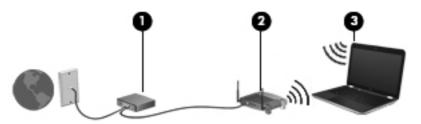
5. After the connection is made, place the mouse pointer over the wireless network connection icon in the notification area, at the far right of the taskbar, to verify the name, speed, strength, and status of the connection.

Setting up a new WLAN network

Required equipment:

- A broadband modem (either DSL or cable) (1) and high-speed Internet service purchased from an Internet service provider (ISP)
- A wireless router (purchased separately) (2)
- Your new wireless computer (3)
- NOTE: Some modems have a built-in wireless router. Check with your ISP to determine what type of modem you have.

The illustration shows an example of a completed WLAN network installation that is connected to the Internet. As your network grows, additional wireless and wired computers can be connected to the network to access the Internet.



Configuring a wireless router

For help in setting up a WLAN, refer to the information provided by your router manufacturer or your ISP.

The Windows operating system also provides tools to help you set up a new wireless network. To use the Windows tools to set up your network, select **Start > Control Panel > Network and Internet Connections > Network Connections > Create a new connection**. Then follow the on-screen instructions.

NOTE: It is recommended that you initially connect your new wireless computer to the router by using the network cable provided with the router. When the computer successfully connects to the Internet, you can disconnect the cable, and then access the Internet through your wireless network.

Protecting your WLAN

When you set up a WLAN or access an existing WLAN, always turn on security features to protect your network from unauthorized access.

For information on protecting your WLAN, refer to the HP Notebook Reference Guide.

5 Keyboard and pointing devices

Using the keyboard

Using the action keys

Action keys are customized actions that are assigned to specific keys at the top of the keyboard. The icons on the f1 through f12 keys represent the action key functions.

To use an action key, press and hold this key to activate the assigned function.

NOTE: The action key feature is enabled at the factory. You can disable this feature in Setup Utility. If this feature is disabled in Setup Utility, you must press fn and an action key to activate the assigned function.



lcon	Key	Description
?	f1	Opens Help and Support, which provides information about your Windows operating system and computer, answers to questions and tutorials, and updates to your computer.
		Help and Support also provides automated troubleshooting and links to support specialists.
*	f2	Decreases the screen brightness level incrementally when you hold down this key.
*	f3	Increases the screen brightness level incrementally when you hold down this key.
	f4	Switches the screen image among display devices connected to the system. For example, if a monitor is connected to the computer, pressing this key alternates the screen image from computer display to monitor display to simultaneous display on both the computer and the monitor.
		Most external monitors receive video information from the computer using the external VGA video standard. The switch screen image key can also alternate images among other devices that are receiving video information from the computer.
144	f5	Plays the previous track of an audio CD or the previous section of a DVD or a BD.

lcon	Key	Description
►II	f6	Plays, pauses, or resumes a track of an audio CD or a section of a DVD or a BD.
	f7	Stops playback.
▶ ▶I	f8	Plays the next track of an audio CD or the next section of a DVD or a BD.
4 -	f9	Decreases speaker volume incrementally when you hold down this key.
4 +	f10	Increases speaker volume incrementally when you hold down this key.
4 ◎	f11	Mutes or restores speaker sound.
(₍ 1 ₎₎	f12	Turns the wireless feature on or off. NOTE: This key does not establish a wireless connection. To establish a wireless connection, a wireless network must also be set up.

Using pointing devices

NOTE: In addition to the pointing devices included with your computer, you can use an external USB mouse (purchased separately) by connecting it to one of the USB ports on the computer.

Setting pointing device preferences

Use Mouse Properties in Windows® to customize settings for pointing devices, such as button configuration, click speed, and pointer options.

To access Mouse Properties, select **Start > Control Panel > Printers and Other Hardware > Mouse**.

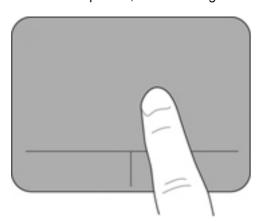
Using the TouchPad

To move the pointer, slide one finger across the TouchPad in the direction you want the pointer to go. Use the left and right TouchPad buttons like the buttons on an external mouse. To scroll up and down using the TouchPad vertical scroll zone, slide your finger up or down over the lines.

NOTE: If you are using the TouchPad to move the pointer, you must lift your finger off the TouchPad before moving it to the scroll zone. Simply sliding your finger from the TouchPad to the scroll zone does not activate the scrolling function.

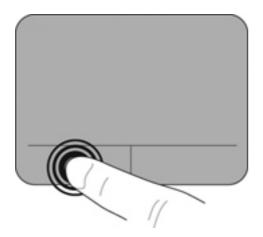
Navigating

To move the pointer, slide one finger across the TouchPad in the direction you want the pointer to go.



Selecting

Use the left and right TouchPad buttons like the corresponding buttons on an external mouse.



6 Maintenance

Inserting or removing the battery

NOTE: For additional information on using the battery, refer to the HP Notebook Reference Guide.

To insert the battery:

▲ Insert the battery (1) into the battery bay until it is seated.

The battery release latches (2) automatically lock the battery into place.



To remove the battery:

- △ CAUTION: Removing a battery that is the sole power source for the computer can cause loss of information. To prevent loss of information, save your work and initiate Hibernation or shut down the computer through Windows before removing the battery.
 - 1. Slide the battery release latches (1) to release the battery.

2. Remove the battery from the computer (2).



Replacing or upgrading the hard drive

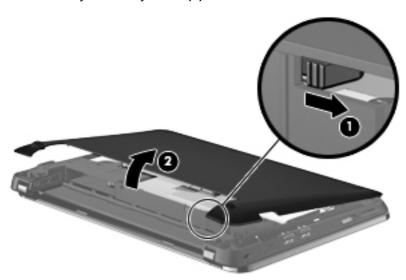
△ CAUTION: To prevent information loss or an unresponsive system:

Shut down the computer before removing the hard drive from the hard drive bay. Do not remove the hard drive while the computer is on, in Standby, or in Hibernation.

If you are not sure whether the computer is off or in Hibernation, turn the computer on by sliding the power switch. Then shut down the computer through the operating system.

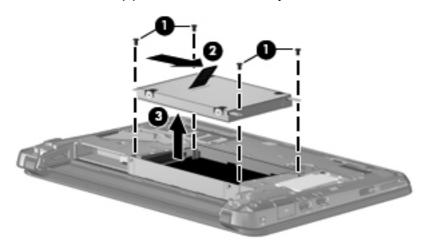
Removing the hard drive

- 1. Save your work and shut down the computer.
- Disconnect all external devices connected to the computer.
- 3. Unplug the power cord from the AC outlet.
- 4. Turn the computer upside down on a flat surface.
- **5.** Remove the battery from the computer.
 - NOTE: For more information, refer to the previous section, <u>Inserting or removing the battery on page 27.</u>
- Remove the vanity cover:
 - **a.** Slide the inner release latch **(1)** to loosen the vanity cover.
 - **b.** Pull away the vanity cover (2).



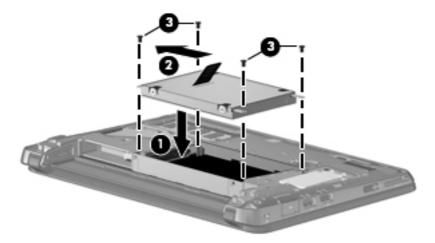
- 7. Remove the 4 hard drive screws (1).
- 8. Pull the hard drive tab (2) to the right to disconnect the hard drive.

9. Lift the hard drive (3) out of the hard drive bay.



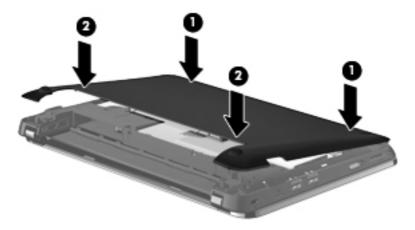
Installing a hard drive

- 1. Insert the hard drive into the hard drive bay (1).
- 2. Pull the hard drive tab (2) to the left until the hard drive snaps into place.
- 3. Replace the 4 hard drive screws (3).



- 4. Replace the vanity cover:
 - a. With the battery bay toward you, position the vanity cover at a 45–degree angle from the surface of the computer so that the tabs on the underside of the panel align with the matching slots on the computer (1).

b. Gently press the vanity cover **(2)** down, applying pressure to both the left and right edges of the panel, until it snaps into place.



- Replace the battery.
- Turn the computer right-side up, and then reconnect external power and external devices.
- 7. Turn on the computer.

Adding or replacing memory modules

The computer has one memory module compartment, which is located on the bottom of the computer, beneath the removable vanity cover. The memory capacity of the computer can be upgraded by replacing the existing memory module in the memory module slot.

- ⚠ **WARNING!** To reduce the risk of electric shock and damage to the equipment, unplug the power cord and remove all batteries before installing a memory module.
- △ **CAUTION:** Electrostatic discharge (ESD) can damage electronic components. Before beginning any procedure, ensure that you are discharged of static electricity by touching a grounded metal object.

To add or replace a memory module:

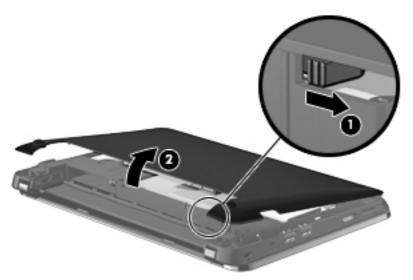
△ CAUTION: To prevent information loss or an unresponsive system:

Shut down the computer before adding or replacing memory modules. Do not remove a memory module while the computer is on, in Standby, or in Hibernation.

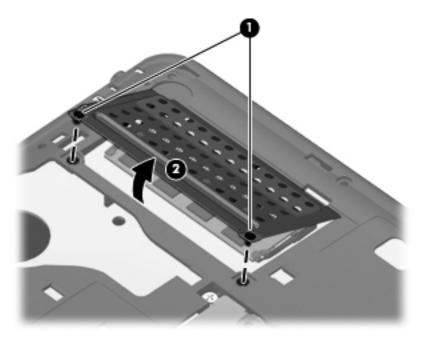
If you are not sure whether the computer is off or in Hibernation, turn the computer on by sliding the power switch. Then shut down the computer through the operating system.

- Save your work and shut down the computer.
- 2. Disconnect all external devices connected to the computer.
- 3. Unplug the power cord from the AC outlet.
- 4. Turn the computer upside down on a flat surface.
- **5.** Remove the battery from the computer.
- NOTE: For more information, refer to the section Inserting or removing the battery on page 27.

- **6.** Remove the vanity cover:
 - **a.** Slide the inner release latch **(1)** to loosen the vanity cover.
 - **b.** Pull away the vanity cover **(2)**.

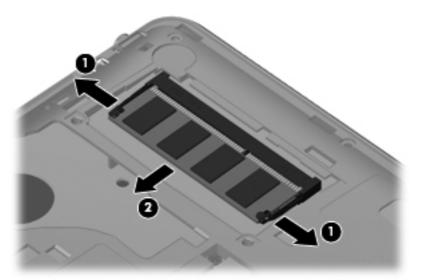


- 7. Loosen the 2 memory bracket screws (1).
- 8. Remove the memory bracket (2).



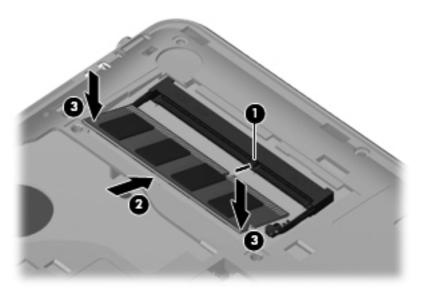
- **9.** If you are replacing a memory module, remove the existing memory module:
 - a. Pull away the retention clips (1) on each side of the memory module.The memory module tilts up.

- **b.** Grasp the edge of the memory module **(2)**, and then gently pull the memory module out of the memory module slot.
- △ CAUTION: To prevent damage to the memory module, hold the memory module by the edges only. Do not touch the components on the memory module.

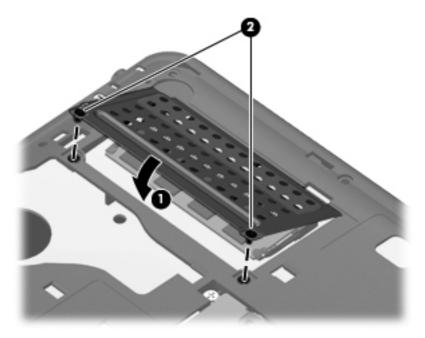


To protect a memory module after removal, place it in an electrostatic-safe container.

- 10. Insert a new memory module:
 - △ **CAUTION**: To prevent damage to the memory module, hold the memory module by the edges only. Do not touch the components on the memory module.
 - a. Align the notched edge (1) of the memory module with the tab in the memory module slot.
 - **b.** With the memory module at a 45-degree angle from the surface of the memory module compartment, press the module (2) into the memory module slot until it is seated.
 - **c.** Gently press the memory module **(3)** down, applying pressure to both the left and right edges of the memory module, until the retention clips snap into place.
 - △ CAUTION: To prevent damage to the memory module, be sure that you do not bend the memory module.

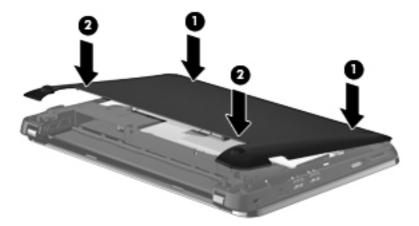


- 11. Replace the memory bracket (1).
- 12. Tighten the 2 memory bracket screws (2).



- **13.** Replace the vanity cover:
 - **a.** With the battery bay toward you, position the vanity cover at a 45–degree angle from the surface of the computer so that the tabs on the underside of the panel align with the matching slots on the computer (1).

b. Gently press the vanity cover **(2)** down, applying pressure to both the left and right edges of the panel, until it snaps into place.



- **14.** Replace the battery.
- **15.** Turn the computer right-side up, and then reconnect external power and external devices.
- **16.** Turn on the computer.

Updating programs and drivers

HP recommends that you update your programs and drivers on a regular basis with the latest versions. Go to http://www.hp.com/support to download the latest versions. You can also register to receive automatic update notifications when they become available.

Routine care

Cleaning the display

△ CAUTION: To prevent permanent damage to the computer, never spray water, cleaning fluids, or chemicals on the display.

To remove smudges and lint, frequently clean the display with a soft damp, lint-free cloth. If the screen requires additional cleaning, use premoistened antistatic wipes or an antistatic screen cleaner.

Cleaning the TouchPad and keyboard

Dirt and grease on the TouchPad can cause the pointer to jump around on the screen. To avoid this, clean the TouchPad with a damp cloth, and wash your hands frequently when using the computer.

▲ WARNING! To reduce the risk of electric shock or damage to internal components, do not use a vacuum cleaner attachment to clean the keyboard. A vacuum cleaner can deposit household debris on the keyboard surface.

Clean the keyboard regularly to prevent keys from sticking, and to remove dust, lint, and particles that can become trapped beneath the keys. A can of compressed air with a straw extension can be used to blow air around and under the keys to loosen and remove debris.

7 Backup and recovery

To protect your information, back up your files and folders. In case of system failure, you can use the backup files to restore your computer.

NOTE: For detailed information, perform a search for these topics in Help and Support.

Backing up your information

Successful recovery after a system failure depends on whether you have completely backed up your files. If Roxio BackOnTrack is preinstalled on your computer, BackOnTrack allows you to create a backup of your computer image. You should create the initial backup immediately after software setup. As you add new software and data files, you should continue to back up your system on a regular basis to maintain a reasonably current backup.

△ CAUTION: In the event of a hard drive failure, you cannot use your computer to access the Disaster Recovery utility. Therefore, HP recommends that you download the Disaster Recovery utility SoftPaq, and then extract it to a USB flash drive as soon as possible after software setup. For details, refer to "Downloading and extracting the Disaster Recovery utility" later in this chapter.

Note the following guidelines:

- Store personal files in the My Documents folder and back up this folder regularly.
- Back up templates stored in their associated programs.
- Save customized settings in a window, toolbar, or menu bar by taking a screen shot of your settings. The screen shot can be a time-saver if you have to reset your preferences.

To copy the screen and paste it into a word-processing document, follow these steps:

- **1.** Display the screen.
- **2.** Copy the screen:

To copy the active window, press alt+fn+prt sc.

To copy the entire screen, press fn+prt sc.

- 3. Open a word-processing document, and then select **Edit > Paste**.
- 4. Save the document.

Creating a copy of the hard drive

The *back up drive* function of BackOnTrack creates a Disaster Recovery Set that is an exact image of your hard drive data. You can back up the image to an external hard drive (purchased separately).

To create a Disaster Recovery Set using BackOnTrack, follow these steps:

- NOTE: Be sure that the computer is connected to AC power before you start the backup process.
 - Select Start > All Programs > Roxio.
 - Select BackOnTrack > BackOnTrack Home > Disaster Recovery.
 - 3. Click Backup drive.
 - Select a drive to back up.
 - 5. Add a comment to describe the backup.
 - NOTE: Comments are optional, but adding comments can help you remember the purpose of the backup. The date and list of drives being backed up are automatically included in the description.
 - Select a destination for the Disaster Recovery Set.
 - NOTE: The destination cannot be a network drive.
 - Click the action button at the bottom-right of the computer screen.
 - 8. Follow the on-screen instructions.

Performing a recovery

In case of system failure or instability, the computer provides the following ways to recover your files:

- BackOnTrack Disaster Recovery utility: You can use Disaster Recovery to recover your hard drive image (including your files, programs, and operating system) after a hard drive failure.
- BackOnTrack Instant Restore utility: You can use Instant Restore to quickly restore your
 computer to a working state if a software-related problem occurs. The Instant Restore utility
 automatically creates working states periodically. You can also define a working state by saving
 the current computer state manually.

For more information about computer system states, refer to the BackOnTrack software Help.

Using the Disaster Recovery utility

NOTE: To perform a recovery with Disaster Recovery, you need a USB flash drive (purchased separately). For optimum performance, the capacity of the drive should be no larger than 2 GB.

Disaster Recovery recovers data from a Disaster Recovery Set that you previously created with Roxio BackOnTrack. Disaster Recovery is available from the HP Web site in a compressed file called a *SoftPag*.

NOTE: Running the SoftPaq makes the USB drive bootable.

Before performing a disaster recovery, you must download the Disaster Recovery utility and extract it to a USB flash drive.

Downloading and extracting the Disaster Recovery utility

To download and extract Disaster Recovery, follow these steps:

- Connect a USB flash drive to a USB port on your computer.
- 2. Open your Web browser, go to http://www.hp.com, and select your country or region.
- 3. Type Roxio BackOnTrack 3 Disaster Recovery Boot Utility in the Search box, press enter, and then select Roxio BackOnTrack 3 Disaster Recovery Boot Utility from the Search results.
- 4. Select **Download only** to save the file to your computer.
- 5. When prompted, click **Save**, and then select the computer hard drive from the list of storage locations.
- After the file is downloaded, navigate to the location where you saved the SoftPaq, and then double-click the SoftPaq file to format the USB flash drive and extract the Disaster Recovery files.
- 7. If prompted to do so, restart your computer after the installation is complete.

Restoring your hard drive image

To restore your hard drive image using Disaster Recovery, follow these steps:

- 1. Connect the external hard drive containing the Disaster Recovery Set to your computer.
- Connect the bootable USB flash drive containing the extracted Disaster Recovery utility to a USB port on your computer.
- Change the boot device order by turning on or restarting the computer, and then pressing f9.
- 4. Use the arrow keys to select the USB flash drive, and then press enter.
- At the Roxio BackOnTrack Disaster Recovery screen, select Disaster Recovery, and then click Next.
- 6. Browse to the external hard drive containing the Disaster Recovery Set, and then click **Next**.
- 7. Click **Next** to proceed with the recovery.
- NOTE: This process may take several minutes.
- 8. After a message on the screen reports a successful recovery, click **Finish**.

Using the Instant Restore utility

You can restore your computer from Windows when the operating system is functioning. If the operating system is not functioning, you can also access the utility by restarting your computer.

NOTE: For more information about the Instant Restore utility, refer to the BackOnTrack software Help.

Using the Instant Restore utility when the operating system is functioning

To recover information when the operating system is functioning properly, follow these steps:

- 1. Save and close all open documents and close any open programs.
- Select Start > All Programs > Roxio.
- 3. Select BackOnTrack > BackOnTrack Home > Instant Restore.
- 4. Click **Restore State**, and then select a restore state.
- 5. Click the action button in the bottom-right corner of the computer screen.
- 6. Click **Yes** to confirm your selected restore state.

When the restore process is complete, the computer restarts and a notification message is displayed.

Using the Instant Restore utility when the operating system is not functioning

To recover information when the operating system is not functioning, follow these steps:

- 1. Restart the computer.
- NOTE: If the operating system has stopped responding and the computer screen is blue, restart the computer by sliding the power switch off and then on.
- 2. When the computer logo is displayed on the screen, press the f6 key repeatedly until the Windows status bar is displayed.
- 3. When the Roxio BackOnTrack screen is displayed, follow the on-screen instructions.

8 Customer support

Contacting customer support

If the information provided in this user guide, in the *HP Notebook Reference Guide*, or in Help and Support does not address your questions, you can contact HP Customer Support at:

http://www.hp.com/go/contactHP

NOTE: For worldwide support, click **Contact HP worldwide** on the left side of the page, or go to http://welcome.hp.com/country/us/en/wwcontact_us.html.

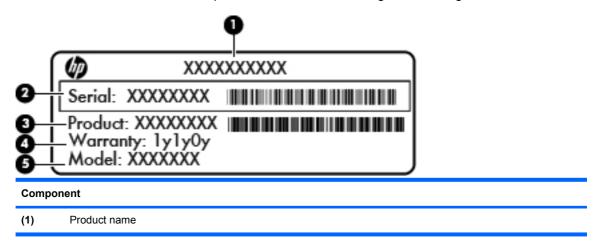
Here you can:

- Chat online with an HP technician.
- NOTE: When technical support chat is not available in a particular language, it is available in English.
- E-mail HP Customer Support.
- Find HP Customer Support worldwide telephone numbers.
- Locate an HP service center.

Labels

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

Serial number label—Provides important information, including the following:



Component		
(2)	Serial number (s/n)	
(3)	Part number/Product number (p/n)	
(4)	Warranty period	
(5)	Model description (select models only)	

Have this information available when you contact technical support. The serial number label is located inside the battery bay of your computer.

- Microsoft® Certificate of Authenticity—Contains the Windows® Product Key. You may need the
 Product Key to update or troubleshoot the operating system. This certificate is located under the
 vanity cover of the computer. To access this certificate in your computer, refer to the "Replacing
 or upgrading the hard drive" section.
- Regulatory label—Provides regulatory information about the computer, including the following:
 - Information about optional wireless devices and the approval markings of some of the countries or regions in which the devices have been approved for use. An optional device may be a wireless local area network (WLAN) device, a wireless wide-area network (WWAN) 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.
 - The serial number of your HP Mobile Broadband Module (select models only).

The regulatory label is located under the vanity cover of the computer. To access the regulatory label in your computer, refer to the "Replacing or upgrading the hard drive" section.

9 Specifications

Input power

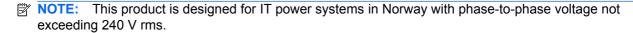
The power information in this section may be helpful if you plan to travel internationally with the computer.

The computer operates on DC power, which can be supplied by an AC or a DC power source. The AC power source must be rated at 100–240 V, 50–60 Hz.

Although the computer can be powered from a standalone DC power source, it should be powered only with an AC adapter or a DC power source supplied and approved by HP for use with this computer.

The computer can operate on DC power within the following specifications.

Input power	Rating
Operating voltage	19 V dc @ 1.58 A - 30W
Operating current	1.58 A



NOTE: The computer operating voltage and current can be found on the system regulatory label under the vanity cover of the computer.

Operating environment

Factor	Metric	U.S.			
Temperature					
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%			

Index

A A Constant Sold Co	left-side 9	K
AC adapter light 9 action keys	right-side 8 top 4	keys action 6
decrease screen	connector, power 9	action 6 arrow 6
brightness 23	connector, power 9	esc 6
Help and Support 23	D	fn 6
identifying 6	Digital Media Slot, identifying 8	Windows applications 6
increase screen brightness 23	Disaster Recovery utility 38	Windows logo 6
next track 24	drive light 9	
play, pause, resume 24	•	L
previous track 23	E	labels
stop 24	esc key, identifying 6	Microsoft Certificate of
switch screen image 23	external monitor port 9	Authenticity 42
volume down 24	_	regulatory 42
volume mute 24	F	serial number 41
volume up 24	fn key, identifying 6	latches, battery release 11
wireless 24	н	lights
arrow keys, identifying 6	hard drive	AC adapter 9
audio-in (microphone) jack,	installing 30	caps lock 5
identifying 9	removing 29	drive 9
audio-out (headphone) jack,	headphone (audio-out) jack 9	mute 5
identifying 9	neadpriene (dadie edi) jack	power 8 webcam 10
В	T. Control of the Con	wireless 5
BackOnTrack backup	input power 43	Wileless 5
software 37	Instant Restore utility 39	M
backup 38	integrated webcam light,	memory module
battery bay 11	identifying 10	inserting 33
battery release latches 11	internal microphones,	removing 32
battery, replacing 27	identifying 10	replacing 31
buttons	Internet connection setup 18	microphone (audio-in) jack,
left TouchPad 4	ISP, using 19	identifying 9
right TouchPad 4		mouse, external
	J jacks	setting preferences 25
C	audio-in (microphone) 9	mute light, identifying 5
caps lock light, identifying 5	audio-out (headphone) 9	
components	RJ-45 (network) 8	O operating any ironment 44
bottom 11		operating environment 44
display 10		
front 7		

P	T
pointing devices	TouchPad
setting preferences 25	buttons 4
ports	using 25
external monitor 9 USB 8, 9	TouchPad zone, identifying 4
power connector, identifying 9	U
power light, identifying 8	USB ports, identifying 8, 9
power switch, identifying 8	V
product name and number,	vents, identifying 7, 9
computer 41	vents, identifying 7, 9
Q	W
QuickWeb	webcam light, identifying 10
configuring the network 17	webcam, identifying 10
control icons 14	Windows applications key,
Home screen 13	identifying 6
LaunchBar icons 14	Windows logo key, identifying 6
notification icons 15	wireless antennas, identifying 10
setting up 12	wireless light 5
starting 13	wireless network (WLAN),
starting Windows 17	equipment needed 18
turning off 12	wireless network, connecting 19
turning on 12	wireless router, configuring 22 wireless set up 18
QuickWeb software 1	wireless set up 18 WLAN
R	connecting 18
recovery, system 38	protecting 22
regulatory information	WLAN antennas, identifying 10
HP Mobile Broadband Module	WWAN antennas, identifying 10
serial number 42	
regulatory label 42	
wireless 42	
RJ-45 (network) jack,	
identifying 8	
Roxio BackOnTrack 37	
S	
security cable slot, identifying 8	
serial number label 41	
serial number, computer 41	
setup of WLAN 18	
slots	
Digital Media 8	
security cable 8	
speaker, identifying 7	
system recovery 38	

