

User Guide

HP Slate

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Product notice

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

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1 Welcome

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

- **Connect to the Internet**—Set up your wireless network so that you can connect to the Internet. For more information, refer to [Networking \(select models only\) on page 19](#).
- **Get to know your Slate**—Learn about your Slate features. Refer to [Getting to know your Slate on page 4](#) for additional information.
- **Find installed software**—Access a list of the software preinstalled on the Slate. Tap **Start**, and then tap **All Programs**. For details about using the software included with the Slate, refer to the software manufacturer's instructions, which may be provided with the software or on the manufacturer's Web site.

Finding information

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

Resources	For information about
<i>Setup Instructions</i> poster	<ul style="list-style-type: none">• How to set up the Slate• Help to identify Slate components
<i>User Guide</i> To access this guide: Tap Start , tap Help and Support , and then tap User Guides .	<ul style="list-style-type: none">• Slate features• Power management features• Instructions for the following:<ul style="list-style-type: none">◦ Connecting to a wireless network◦ Using the on-screen keyboard and pointing devices◦ Using the multimedia features of the Slate◦ Maximizing battery life◦ Protecting the Slate◦ Performing a backup and a recovery◦ Contacting customer support◦ Caring for the Slate◦ Updating the software• Slate specifications
Help and Support To access Help and Support, tap Start , and then tap Help and Support . NOTE: For country- or region-specific support, go to http://www.hp.com/support , tap your country or region, and then follow the on-screen instructions.	<ul style="list-style-type: none">• Operating system information• Software, driver, and BIOS updates• Troubleshooting tools• How to access technical support
<i>Regulatory, Safety, and Environmental Notices</i> To access this guide: Tap Start , tap Help and Support , and then tap User Guides	<ul style="list-style-type: none">• Regulatory and safety information• Disposal information
<i>Safety & Comfort Guide</i> To access this guide: Tap Start , tap Help and Support , and then tap User Guides – or – Go to http://www.hp.com/ergo .	<ul style="list-style-type: none">• Proper workstation setup, posture, health, and work habits• Electrical and mechanical safety information
<i>Worldwide Telephone Numbers</i> booklet This booklet is provided with your Slate.	HP customer support telephone numbers

Resources	For information about
<p>HP Web site</p> <p>To access this Web site, go to http://www.hp.com/support.</p>	<ul style="list-style-type: none"> • Customer support information • Information for ordering parts • Software, driver, and BIOS updates • Information about accessories available for the device
<p><i>Limited Warranty*</i></p> <p>To access the warranty:</p> <p>Tap Start, tap Help and Support, tap User Guides, and then tap View Warranty Information.</p> <p>– or –</p> <p>Go to http://www.hp.com/go/orderdocuments.</p>	<p>Warranty information</p>
<p>*You can find the expressly provided HP Limited Warranty applicable to your product located with the user guides on your Slate and/or on the CD/DVD provided in the box. In some countries/regions, HP may provide a printed HP Limited Warranty in the box. For some 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:</p>	
<ul style="list-style-type: none"> • North America: Hewlett-Packard, MS POD, 11311 Chinden Blvd, Boise, ID 83714, USA • Europe, Middle East, Africa: Hewlett-Packard, POD, Via G. Di Vittorio, 9, 20063, Cernusco s/Naviglio (MI), Italy • Asia Pacific: Hewlett-Packard, POD, P.O. Box 200, Alexandra Post Office, Singapore 911507 	
<p>When you request a printed copy of your warranty, please include your product number, warranty period (found on your serial number label), name, and postal address.</p>	
<p>IMPORTANT: Do NOT return your HP product to the addresses above. For product support, refer to your product home page at http://www.hp.com/go/contactHP.</p>	

2 Getting to know your Slate

Using the touch screen

You can use your fingers to perform most actions on the touch screen.

The instructions in this section are based on the preferences set at the factory. To modify settings for recognized taps and flicks, refer to [Setting touch screen preferences on page 9](#).



NOTE: Some gestures are not supported in all programs.

Changing the view

The orientation, or view, changes automatically from landscape to portrait view, or from portrait to landscape view.

1. To change the view of your Slate from landscape view to portrait view:

Hold the Slate vertically, and then turn it 90 degrees to the right (in a clockwise direction).

2. To change the view of your Slate from portrait view to landscape view:


Hold the Slate vertically, and then turn it 90 degrees to the left (in a counter-clockwise direction).

Landscape view



Portrait view



 **NOTE:** The appearance of the desktop may vary.


Adjusting the screen brightness

To adjust the screen brightness:

1. Tap the **Power Meter** icon in the notification area, at the far right of the taskbar.
2. Tap **Adjust screen brightness**.
3. Move the slider next to **Screen brightness** at the bottom of the screen.


Tapping

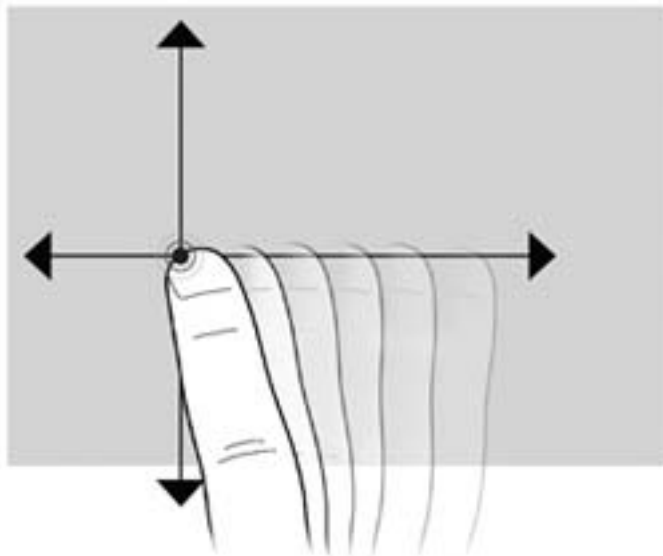
Tap or double-tap an item on the screen as you would click or double-click with an external mouse. Tap and hold an item to see the context menu.

 **NOTE:** Tap and hold your finger until the operating system draws a circle around the area you are touching, and then the context menu appears.

Flicking

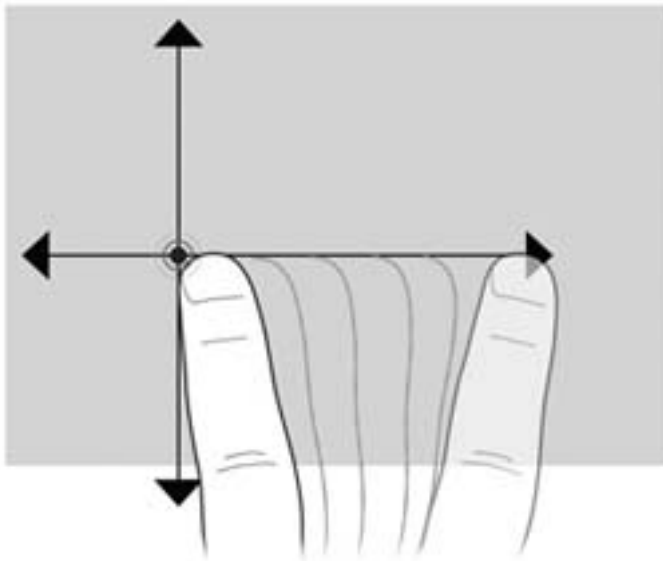
Touch the screen in a light, quick flicking motion up, down, left, or right to navigate through screens or quickly scroll through documents.

 **NOTE:** For the flick movement to work, a scroll bar must be present in the active window.




Dragging

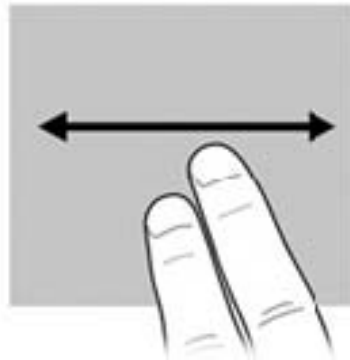
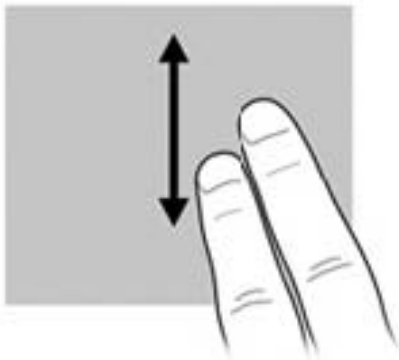
Press your finger on an item on the screen, and then move your finger to drag the item to a new location. You can also use this motion to slowly scroll through documents.



Scrolling

Scrolling is useful for moving up and down or left and right on a page or image. To scroll, place two fingers slightly apart on the screen, and then drag them across the screen in an up, down, left, or right motion.

 **NOTE:** Scrolling speed is controlled by finger speed.

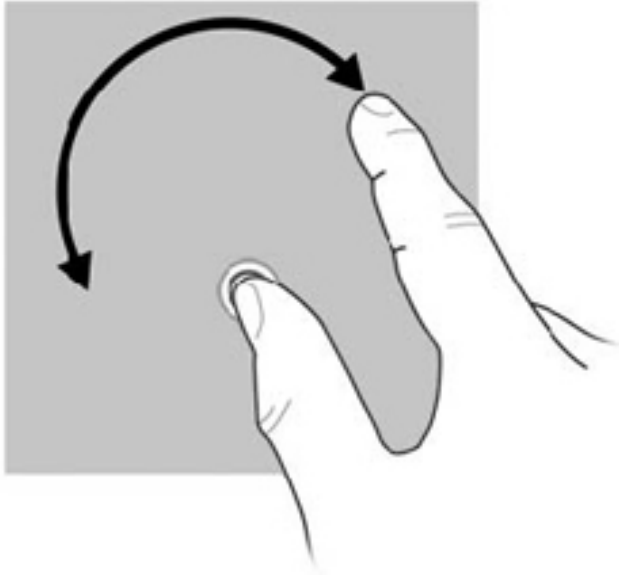


Rotating

Rotating allows you to rotate items such as photos and pages. To rotate, anchor your thumb on the screen, and then move your forefinger in a semicircular motion around your thumb.



NOTE: You must move your forefinger for at least 90 degrees of a circle.

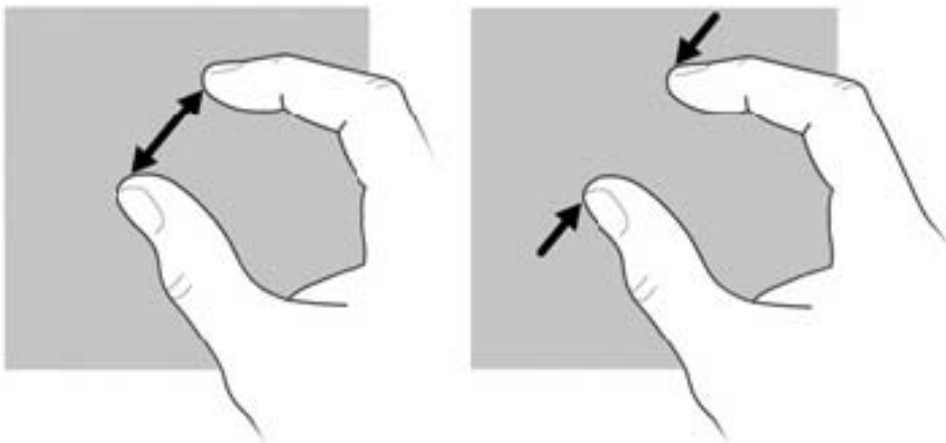


Pinching

Pinching allows you to zoom in or out on items such as PDF files, images, and photos.

To pinch:

- Zoom out by holding two fingers apart on the screen, and then pull the fingers together to decrease an object's size.
- Zoom in by holding two fingers together on the screen, and then pull the fingers apart to increase an object's size.



Setting touch screen preferences

To change or test tap settings:

1. Tap **Start**, and then tap **Control Panel**.
2. Tap **Hardware and Sound**, tap **N-trig DuoSense Digitizer Settings**, tap **Digitizer options** tab, and then follow the on-screen instructions.

These preferences are specific to the touch screen and the Slate.

To change or create flick assignments:

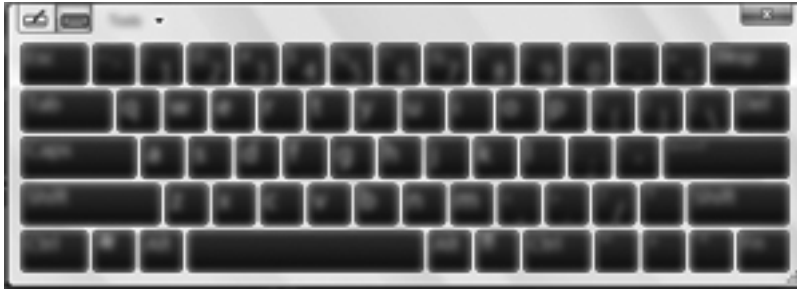
1. Tap **Start**, and then tap **Control Panel**.
2. Tap **Hardware and Sound**, tap **Pen and Touch**, and then tap the **Flicks** tab.
3. Tap **Navigational flicks and editing flicks**, and then tap **Customize**.
4. Follow the on-screen instructions to change or create a flick assignment.
5. Tap **OK**.

To turn off the auto-rotation feature:

1. Tap the video icon in the notification area, at the far right of the taskbar, and then tap **Graphics Properties**, or tap and hold the desktop.
2. Tap **Display Settings**, tap to clear the **Enable Rotation** checkbox, and then tap **OK**.

Using the on-screen keyboard

Your Slate has an on-screen keyboard that is displayed when you need to enter information into a document or data field.



1. To display the keyboard, tap in the first data field. Tap the small keyboard icon that is displayed.
– or –
Double-tap the keyboard icon at the left side of the screen.
– or –
Press the Keyboard button, located on the top left edge of the Slate.
2. To enlarge the size of the on-screen keyboard, tap the lower-right corner and drag it to the desired size.
3. Tap each character, continuing until you have spelled out the name or word that you are entering into the data field.



NOTE: Suggested words may be displayed at the top of the keyboard. If an appropriate word is displayed, tap it to select it.

4. Tap **enter** on the keyboard.


On-screen keyboard options

To access options for the on-screen keyboard, tap **Tools** at the top of the keyboard, and then tap one of the following options:

- **Show expanded keyboard**—Displays the expanded keyboard.
- **Docking**—Allows you to select the location where the on-screen keyboard displays on the screen.
 - **Float**—Allows you to reposition the on-screen keyboard by tapping the top of the keyboard window and dragging it to the desired location.
 - **Dock at top of screen**—Displays the keyboard at the top of the screen automatically.
 - **Dock at bottom of screen**—Displays the keyboard at the bottom of the screen automatically.
- **Help topics**—Displays Help and Support.
- **Options**—Displays the Input Panel Options.

Using the Swype keyboard

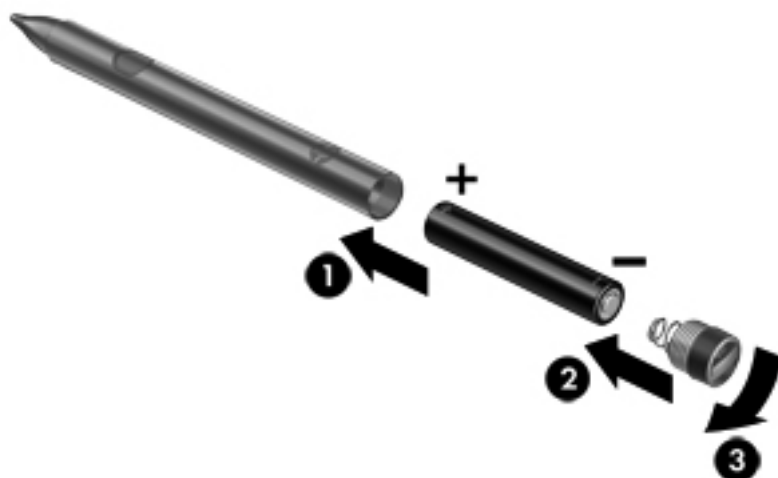
After the Slate is set up, a welcome screen is displayed that allows you to select the Swype keyboard as your default on-screen keyboard. Once you have selected it as the default, the Swype keyboard is displayed when you tap in a text field.

1. To access settings for the Swype keyboard, tap and hold the Swype icon  in the notification area, at the far right of the taskbar, and then tap **Settings**.

If the Swype icon is not displayed in the notification area, tap and hold the **Show hidden icons** icon (the arrow at the far left of the notification area).

2. To stop using the Swype keyboard as the default on-screen keyboard, tap and hold the Swype icon, and then tap **Exit**.

Using the digital pen (select models only)



To insert the battery in the pen:

1. Unscrew the cap from the pen.
2. Insert the battery in the pen (1).
3. Replace the cap on the pen (2).
4. Turn the cap in a clockwise direction (3) to tighten it.

The digital pen is now ready to use with your HP Slate. Simply touch the tip of the pen lightly on the screen to write text or items on the screen. To perform a right-click action, press the button on the side of the pen when selecting an item on the screen.

The digital pen uses inherent pressure sensitivity, so you can create a bolder stroke by pressing harder on the screen with the digital pen. Pressure sensitivity may not be supported in all programs.

To calibrate the pen and change pen settings, such as pen sensitivity, tap **Start**, tap **Control Panel**, tap **Hardware and Sound**, tap **N-trig DuoSense Digitizer Settings**, and then follow the on-screen instructions.




NOTE: For regulatory and safety information, refer to the *Regulatory, Safety, and Environmental Notices* on the HP Slate. Tap **Start**, tap **Help and Support**, and then tap **User Guides**.

Identifying the software on the Slate

To see a list of the software preinstalled on the Slate, follow these steps:

- ▲ Tap **Start**, and then tap **All Programs**. Tap the name of a program to open it.

 **NOTE:** For details about using software included with the Slate, refer to the software manufacturer's instructions, which may be provided with the software or on the manufacturer's Web site.

Updating the software installed on the Slate

Most software, including the operating system, is updated frequently by the manufacturer or provider. Important updates to the software included with the Slate may have been released since the Slate left the factory.






Some updates may affect the way the Slate responds to optional software or external devices. Many updates provide security enhancements.

Update the operating system and other software installed on the Slate as soon as the Slate is connected to the Internet. Access the updates on the HP Web site at <http://www.hp.com>.

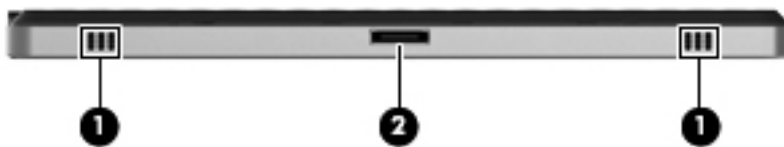
Knowing the parts

Top edge



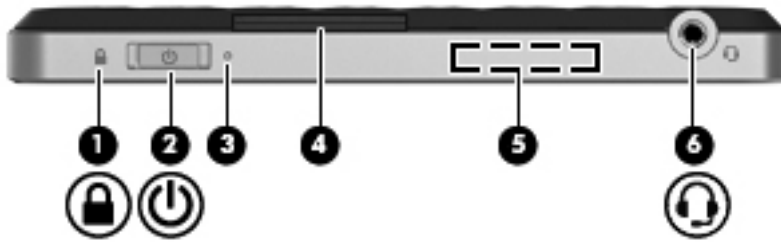
Component	Description
(1) 	Volume down button Decreases speaker volume.
(2) 	Volume up button Increases speaker volume.
(3) 	USB port Connects optional USB devices. NOTE: To use an external optical disc drive (purchased separately) connected to the Slate, you must connect AC power separately to the external drive.
(4) 	Ctrl+alt+del (Security) button Performs the same action as pressing <code>ctrl+alt+del</code> on a computer keyboard.
(5) 	Home button Minimizes all open applications and displays the Windows desktop.




Bottom edge




Component	Description
(1) Speakers (2)	Produce sound.
(2) Power connector	Connects an AC adapter or an HP Slate Dock.

Right edge

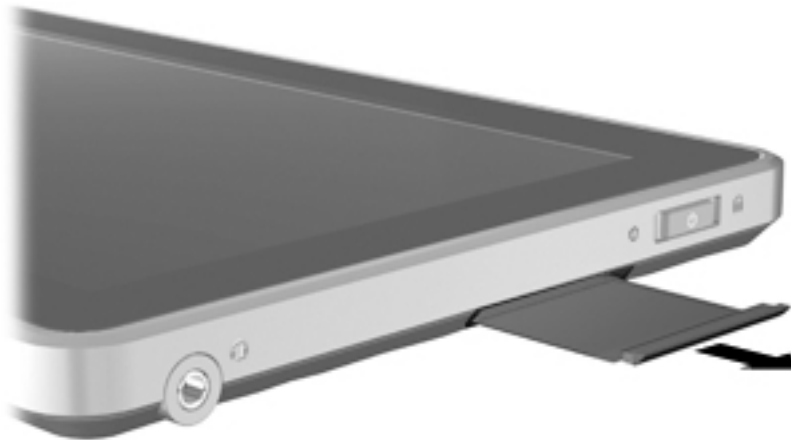


Component	Description
(1)  PowerLock icon	<p>When the Slate is on, slide the power switch up to the lock position to lock the auto-rotate feature of the display.</p> <p>To turn off the auto-rotation feature:</p> <ol style="list-style-type: none"> 1. Tap the video icon in the notification area, at the far right of the taskbar, and then tap Graphics Properties, or tap and hold the desktop. 2. Tap Display Settings, tap to clear the Enable Rotation checkbox, and then tap OK.
(2)  Power switch	<ul style="list-style-type: none"> • When the Slate is off, slide the switch down to turn on the Slate. • When the Slate is on, briefly slide the switch down to initiate Sleep. • When the Slate is in the Sleep state, briefly slide the switch down to exit Sleep. • When the Slate is in Hibernation, briefly slide the switch down to exit Hibernation. <p>If the Slate has stopped responding and Windows shutdown procedures are ineffective, slide and hold the power switch down for at least five seconds to turn off the Slate.</p> <p>To learn more about your power settings, tap Start, tap Control Panel, tap System and Security, and then tap Power Options.</p>
(3)  Power light	<ul style="list-style-type: none"> • White: <ul style="list-style-type: none"> ◦ The Slate is on and connected to external power. ◦ The Slate is docked in the optional docking station, and the docking station is connected to external power. • Blinking: The Slate is in the Sleep state. • Off: The Slate is off or in Hibernation.
(4) Label tray	Holds the serial number label and other labels.

Component	Description
(5) WLAN antennas	Sends and receives wireless signals to communicate with wireless local area networks (WLAN).
(6)  Audio-out (headphone)/Audio-in (microphone) combo jack	<p>Produces sound when connected to optional powered stereo speakers, headphones, earbuds, a headset, or line-in stereo audio connectors. Also connects an optional headset microphone.</p> <p>NOTE: When an audio component is connected to the jack, the Slate speakers are disabled.</p> <p>The audio component cable may have a 3-conductor or 4-conductor connector.</p>





Opening the label tray

Pull the label tray out to view the serial number label, Microsoft® Certificate of Authenticity label, regulatory label, Wireless certification label (select models only), SIM (subscriber identity module) label (select models only), and HP Broadband Module serial number label (select models only).



Left edge



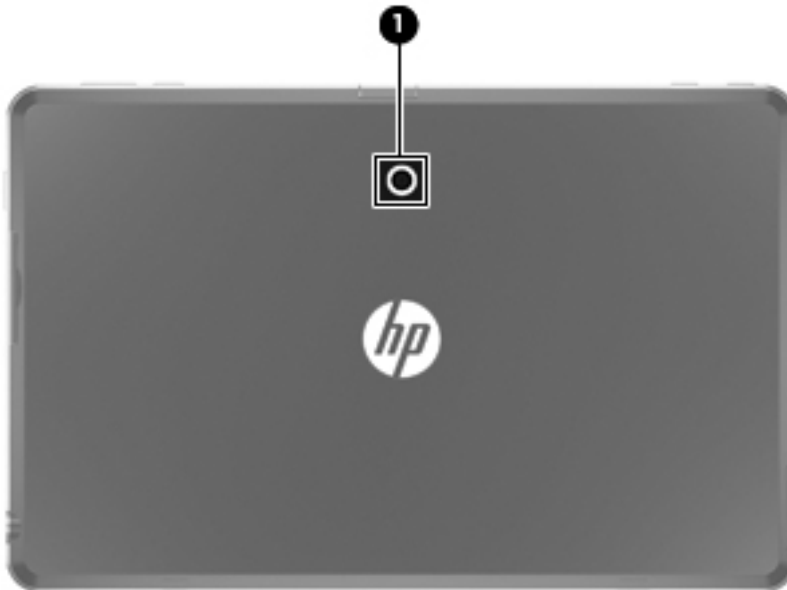
Component	Description
(1)  SIM slot (select models only)	Supports a wireless subscriber identity module (SIM) (select models only).
(2)  SD Card Reader	Supports the following optional digital card formats: <ul style="list-style-type: none">Secure Digital High Capacity (SDHC) Memory Card (standard and large size)xD-Picture card
(3)  Keyboard button	Displays the default on-screen keyboard.
(4)  Internal microphone	Records sound.

Display




Component	Description
(1) Inward camera	Records video and captures still photographs.

Rear



Component	Description
(1) Outward camera	Records video and captures still photographs.


3 Networking (select models only)

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

Your Slate supports wireless Internet access. For mobile Internet access, you can use a wireless connection. Refer to [Connecting to an existing WLAN on page 20](#) or [Setting up a new WLAN network on page 21](#).

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 Slate 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 Slate 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 Slate to use an existing account. To access this utility, tap **Start**, tap **All Programs**, tap **Online Services**, and then tap **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 Slate to use an existing account, double-tap 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, tap **Start**, tap **Control Panel**, tap **Network and Internet**, and then tap **Network and Sharing Center**.

 **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 Slate may be equipped with one or more of the following wireless devices:


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

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

Connecting to an existing WLAN

1. Turn on the Slate.
2. Be sure that the WLAN device is on.
3. Tap the network icon in the notification area, at the far right of the taskbar.
4. Select a network to connect to.

 **NOTE:** If no WLANs are listed, you may be out of range of a wireless router or access point.


 **NOTE:** If you do not see the WLAN you want to connect to, tap **Open Network and Sharing Center**, and then tap **Set up a new 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. Tap **Connect**.
6. If the network is a security-enabled WLAN, you are prompted to enter a network security code. Type the code, and then tap **OK** to complete the connection.

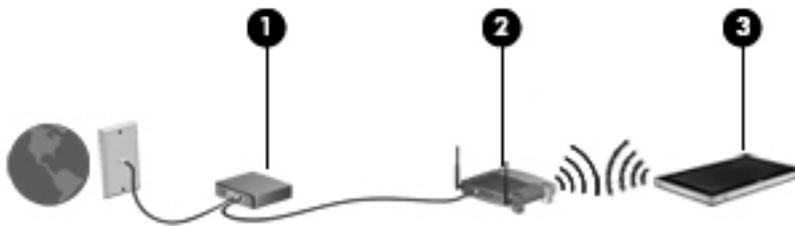
Setting up a new WLAN network

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 Slate **(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, tap **Start**, tap **Control Panel**, tap **Network and Internet**, tap **Network and Sharing Center**, tap **Set up a new connection or network**, and then tap **Set up a network**. Then follow the on-screen instructions.

Protecting your WLAN

When you set up a WLAN or access an existing WLAN, always enable security features to protect your network from unauthorized access. WLANs in public areas (hotspots) like coffee shops and airports may not provide any security. If you are concerned about the security of your Slate in a hotspot, limit your network activities to email that is not confidential and basic Internet surfing.

Wireless radio signals travel outside the network, so other WLAN devices can pick up unprotected signals. You can take the following precautions to protect your WLAN:

- **Firewall**—A firewall checks both data and requests for data that are sent to your network, and discards any suspicious items. Firewalls are available in both software and hardware. Some networks use a combination of both types.
- **Wireless encryption**—Your Slate supports three encryption protocols:
 - Wi-Fi Protected Access (WPA)
 - Wi-Fi Protected Access II (WPA2)
 - Wired Equivalent Privacy (WEP)



NOTE: HP recommends that you select WPA2, which is the most advanced of the three encryption protocols. The use of WEP encryption is not recommended, because it can be overcome with little effort.

- Wi-Fi Protected Access (WPA) and Wi-Fi Protected Access II (WPA2) use security standards to encrypt and decrypt data transmitted over the network. Both WPA and WPA2 dynamically generate a new key for every packet, and they also generate a different set of keys for each computer on the network. To accomplish this:
 - WPA uses Advanced Encryption Standard (AES) and Temporal Key Integrity Protocol (TKIP).
 - WPA2 uses Cipher Block Chaining Message Authentication Code Protocol (CCMP), which is a new AES protocol.
- Wired Equivalent Privacy (WEP) encrypts data with a WEP key before it is transmitted. Without the correct key, others will not be able to use the WLAN.





Roaming to another network

When you move your Slate within range of another WLAN, Windows attempts to connect to that network. If the attempt is successful, your Slate is automatically connected to the new network. If Windows does not recognize the new network, follow the same procedure you used initially to connect to your WLAN.

Creating a wireless connection

For more information on wireless technology, refer to the information and Web site links provided in Help and Support.

Identifying wireless and network status icons

Icon	Name	Description
	HP Connection Manager (select models only)	Opens HP Connection Manager, which enables you to create and manage WWAN connections (select models only), and monitor the status of WLAN and Bluetooth connections.
	Network (connected)	Indicates that one or more network devices are connected to a network.
	Network (disconnected)	Indicates that network devices are not connected to a network.
	Network (disabled/ disconnected)	Indicates that no wireless connections are available.

Turning wireless devices on or off

You can use HP Connection Manager (select models only) to turn on and turn off wireless devices.

To turn off wireless devices using HP Connection Manager:

- ▲ Tap and hold the **HP Connection Manager** icon in the notification area, at the far right of the taskbar, and then tap the power button next to the desired device.

– or –

Tap **Start**, tap **All Programs**, tap **HP**, tap **HP Connection Manager**, and then tap the power button next to the desired device.

Using HP Connection Manager (select models only)

HP Connection Manager provides a central location for managing your wireless devices, an interface for connecting to the Internet using HP Mobile Broadband, and an interface for sending and receiving SMS (text) messages. HP Connection Manager allows you to manage the following devices:

- Wireless local area network (WLAN)/Wi-Fi
- Wireless wide area network (WWAN)/HP Mobile Broadband
- Bluetooth®

HP Connection Manager provides information and notifications on connection status, power status, SIM details, and SMS messages. Status information and notifications are provided in the notification area, at the far right of the taskbar.

To open HP Connection Manager:

- ▲ Tap the **HP Connection Manager** icon in the taskbar.

– or –

Tap **Start**, tap **All Programs**, tap **HP**, and then tap **HP Connection Manager**.

For more information, refer to the HP Connection Manager software Help.

Using operating system controls

The Network and Sharing Center allows you to set up a connection or network, connect to a network, manage wireless networks, and diagnose and repair network problems.

To use operating system controls:

- ▲ Tap **Start**, tap **Control Panel**, tap **Network and Internet**, and then tap **Network and Sharing Center**.

For more information, tap **Start**, and then tap **Help and Support**.

Using GPS (select models only)

Your Slate may be equipped with a Global Positioning System (GPS). GPS satellites deliver location, speed, and direction information to GPS-equipped systems.

For more information, refer to the HP GPS and Location software Help.

Using Bluetooth wireless devices (select models only)

A Bluetooth device provides short-range wireless communications that replace the physical cable connections that traditionally link electronic devices such as the following:

- Computers
- Phones
- Imaging devices (cameras and printers)
- Audio devices


Bluetooth devices provide peer-to-peer capability that allows you to set up a personal area network (PAN) of Bluetooth devices. For information on configuring and using Bluetooth devices, refer to the Bluetooth software Help.

Bluetooth and Internet Connection Sharing (ICS)

HP does **not** recommend setting up one Slate with Bluetooth as a host and using it as a gateway through which other computers may connect to the Internet. When two or more computers are connected using Bluetooth, and Internet Connection Sharing (ICS) is enabled on one of the computers, the other computers may not be able to connect to the Internet using the Bluetooth network.


The strength of Bluetooth is in synchronizing information transfers between your Slate and wireless devices including cellular phones, printers, cameras, and PDAs. The inability to consistently connect two or more computers to share the Internet through Bluetooth is a limitation of Bluetooth and the Windows operating system.

Using HP Mobile Broadband (select models only)

 **NOTE:** For optimized WWAN performance, it is highly recommended that the case that came with this device is used when the WWAN is turned on.

HP Mobile Broadband enables your Slate to use wireless wide area networks (WWANs) to access the Internet from more places and over larger areas than it can by using WLANs. Using HP Mobile Broadband requires a network service provider, which in most cases is a mobile phone network provider.

When used with mobile network provider service, HP Mobile Broadband gives you the freedom to stay connected to the Internet, send email, or connect to your corporate network whether you are on the road or outside the range of Wi-Fi hotspots.

 **NOTE:** You may need the HP Mobile Broadband Module serial number to activate mobile broadband service. Refer to [Left edge on page 17](#) for the location of the serial number label.

Some mobile network service providers require the use of a subscriber identity module (SIM). A SIM contains basic information about you or your Slate, such as a personal identification number (PIN), as well as network information. Some Slates include a preinstalled SIM. If the SIM is not preinstalled, it may be included with the HP Mobile Broadband information provided with your Slate, or it may be provided separately by the mobile network service provider.

For information on inserting and removing the SIM, refer to [Inserting a SIM on page 27](#) and [Removing a SIM on page 27](#).

For additional information on HP Mobile Broadband and how to activate service with a preferred mobile network service provider, refer to the HP Mobile Broadband information if it is included with your Slate. For additional information, see the HP Web site at <http://www.hp.com/go/mobilebroadband> (U.S. only).

Inserting a SIM



NOTE: To identify the SIM slot location, refer to [Left edge on page 17](#).

1. Shut down the Slate. If you are not sure whether the Slate is off or in Hibernation, turn it on by sliding the power switch. Then shut down the Slate through the operating system.
2. Disconnect all external devices connected to the Slate.
3. Unplug the power cord from the AC outlet.
4. Insert the SIM into the SIM slot, and gently press the SIM into the slot until it is firmly seated.



CAUTION: When inserting a SIM, position the card to match the icon next to the SIM slot on the Slate. If a SIM is inserted incorrectly, it could damage the SIM and the SIM connector.

To reduce the risk of damage to the connector, use minimal force when inserting a SIM.

5. Reconnect external power and external devices.
6. Turn on the Slate.

Removing a SIM



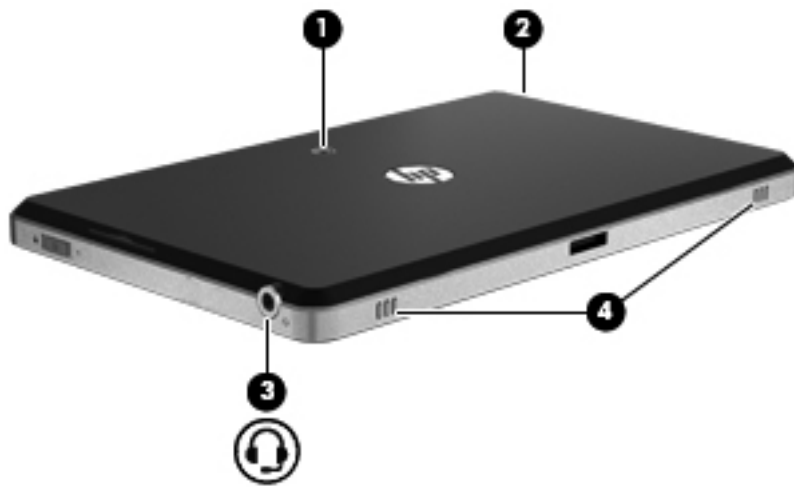
NOTE: To identify the SIM slot location, refer to [Left edge on page 17](#).


1. Shut down the Slate. If you are not sure whether the Slate is off or in Hibernation, turn it on by sliding the power switch. Then shut down the Slate through the operating system.
2. Disconnect all external devices connected to the Slate.
3. Unplug the power cord from the AC outlet.
4. Press in on the SIM, and then remove it from the slot.
5. Reconnect external power and external devices.
6. Turn on the Slate.

4 Multimedia

Identifying your multimedia components

The following illustration and table describe the multimedia features of the Slate.



Component	Description
(1) Outward camera	Records video and captures still photographs. NOTE: To capture still photos and record video, you can use the HP Slate Camera software. Tap the Outward button to use the outward camera.
(2) Inward camera	Records video and captures still photographs. NOTE: To capture still photos and record video, you can use the HP Slate Camera software. Tap the Inward button to use the inward camera.
(3)  Audio-out (headphone)/Audio-in (microphone) combo jack	Produces sound when connected to optional powered stereo speakers, headphones, earbuds, a headset, or line-in stereo audio connectors. Also connects an optional headset microphone. NOTE: When an audio component is connected to the jack, the Slate speakers are disabled. The audio component cable may have a 3-conductor or 4-conductor connector.
(4) Speakers (2)	Produce sound.

Audio

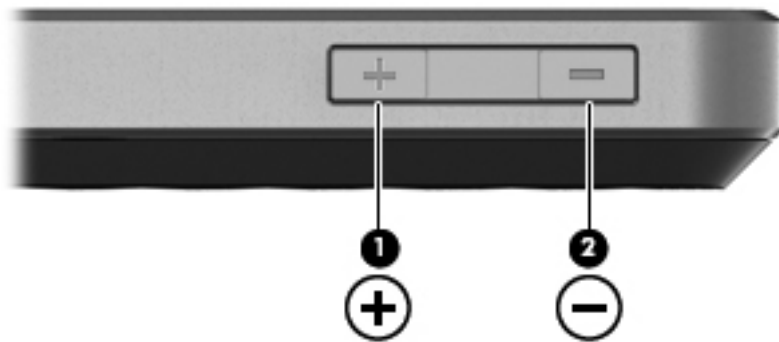
Your Slate has a variety of audio features that allow you to:

- Play music using your Slate speakers, which have SRS Premium Sound.
- Record sound using the internal microphone or an optional external headset microphone.
- Download music from the Internet.
- Create multimedia slideshows and presentations using audio and images.
- Transmit sound and images with instant messaging programs.

Adjusting the volume

⚠ 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 *Regulatory, Safety, and Environmental Notices*.

You can adjust the volume using the following volume controls:



- To increase volume, press the Volume up button **(1)** on the top edge of the Slate.
- To decrease volume, press the Volume down button **(2)** on the top edge of the Slate.
- Windows® volume control:
 - a. Tap the **Speakers** icon in the notification area, and then tap **Mixer**.
 - b. In the Speakers column, increase or decrease the volume by moving the slider up or down. You can also mute the volume by tapping the **Mute Speakers** icon.

If the Speakers icon is not displayed in the notification area, follow these steps to add it:

- a. Tap and hold the **Show hidden icons** icon (the arrow at the far left of the notification area).
 - b. Tap **Customize**.
 - c. Under **Behaviors**, tap **Show icon and notifications** for the Speakers icon.
 - d. Tap **OK**.
- Program volume control:

Volume can also be adjusted within some programs.

Checking audio functions on the Slate

To check the audio functions on your Slate, follow these steps:

1. Tap **Start**, and then tap **Control Panel**.
2. Tap **Hardware and Sound**, and then tap **Sound**.
3. When the Sound window opens, tap the **Sounds** tab. Under **Program Events**, tap any sound event, such as a beep or alarm, and then tap the **Test** button.

You should hear sound through the speakers or through connected headphones.

To check the record functions of the Slate, follow these steps:

1. Tap **Start**, tap **All Programs**, tap **Accessories**, and then tap **Sound Recorder**.
2. Tap **Start Recording** and speak into the microphone. Save the file to your desktop.
3. Open a multimedia program and play back the sound.



NOTE: For best results when recording, speak directly into the microphone and record sound in a setting free of background noise.

To confirm or change the audio settings:

1. Tap **Start**, and then tap **Control Panel**.
2. Tap **Hardware and Sound**, and then tap **Sound**.

Cameras

Your Slate includes an outward camera and an inward camera. The cameras are input devices that allow you to record video and capture still photographs.

HP Slate Camera

With HP Slate Camera software, you can take snapshots and record video with either the inward or the outward camera.


To start the HP Slate Camera software:





- ▲ Tap the **HP Slate Camera** icon on the desktop.



– or –

Tap **Start**, tap **All Programs**, tap **HP**, and then tap **HP Slate Camera**.

Using HP Slate Camera

 **NOTE:** For more information about the HP Slate Camera software, refer to the software Help.

Icon	Description
	Tap the Outward/Inward icon to switch between the inward and outward cameras.
	Tap the Photo icon to capture photos.
	Tap the Video icon to record video.
	Tap the Photo Shooting/Video Recording icon to switch between the photo shooting mode and video recording mode.


Icon	Description
	Tap the Library icon to display a preview of the photos or video that were just taken.
	Tap the Settings icon to select the following camera settings: <ul style="list-style-type: none">• Image size—Tap the down arrow, and then select the size for the photos that you take.• Video quality—Tap the down arrow, and then select high, medium, or low video quality for the photos and videos that you take.• Self-timer—Tap the + or - button to set a time delay before you begin shooting photos or videos.• Recording time—Tap the + or - button to set a length of time to stop recording video automatically, or tap No limit to stop recording manually.• Show mirrored video preview for inward camera—Select the check box to enable this option.• Photo Auto Enhance—Select the check box to enable this option.• Hard Disk—Displays the available space on the drive.• Estimated recording time—Displays the available recording time.



NOTE: “Hard drive” references in this guide refer to the solid-state drive.

5 Power management

Shutting down the Slate


 **CAUTION:** Unsaved information will be lost when the Slate is shut down.

The Shut down command closes all open programs, including the operating system, and then turns off the display and Slate.

Shut down the Slate when the Slate is unused and disconnected from external power for an extended period.

Although you can shut down the Slate with the power switch, the recommended procedure is to use the Windows Shut down command.

To shut down the Slate, follow these steps:

 **NOTE:** If the Slate is in the Sleep state or in Hibernation, you must first exit Sleep or Hibernation before shut down is possible.

1. Save your work and close all open programs.
2. Tap **Start**.
3. Tap **Shut down**.

If the Slate is unresponsive and you are unable to use the preceding shut down procedures, try the following emergency procedures in the sequence provided:

- Press the Ctrl+alt+del button on the top edge of the Slate, next to the Home button, and then slide the power switch down.
- Slide and hold the power switch down for at least 5 seconds.


Setting power options


Using power-saving states

The Slate has two power-saving states enabled at the factory: Sleep and Hibernation.

When Sleep is initiated, the screen clears. Your work is saved to memory, letting you exit the Sleep state faster than exiting Hibernation. If the Slate is in the Sleep state for an extended period or if the battery reaches a critical battery level while in the Sleep state, the Slate initiates Hibernation.

When Hibernation is initiated, your work is saved to a hibernation file on the drive, and the Slate turns off.

 **CAUTION:** To prevent possible audio and video degradation, loss of audio or video playback functionality, or loss of information, do not initiate Sleep or Hibernation while reading from or writing to a disc or an external media card.

 **NOTE:** You cannot initiate any type of networking connection or perform any Slate functions while the Slate is in the Sleep state or in Hibernation.

Initiating and exiting Sleep

The system is set at the factory to initiate Sleep after 10 minutes of inactivity when running on battery power and 20 minutes of inactivity when running on external power.

Power settings and timeouts can be changed using Power Options in Windows Control Panel.


With the Slate on, you can initiate Sleep in any of the following ways:

- Briefly slide the power switch down.
- Tap **Start**, tap the arrow next to the Shut down button, and then tap **Sleep**.

To exit Sleep:

- ▲ Briefly slide the power switch down.

When the Slate exits Sleep, your work returns to the screen where you stopped working.

 **NOTE:** If you have set a password to be required when the Slate exits Sleep, you must enter your Windows password before your work returns to the screen.

Initiating and exiting Hibernation

The system is set at the factory to initiate Hibernation after a period of inactivity when running on battery power or on external power, or when the battery reaches a critical battery level.

Power settings and timeouts can be changed using Power Options in Windows Control Panel.


To initiate Hibernation:

- ▲ Tap **Start**, tap the arrow next to the Shut down button, and then tap **Hibernate**.

To exit Hibernation:

- ▲ Briefly slide the power switch down.

When the Slate exits Hibernation, your work returns to the screen where you stopped working.

 **NOTE:** If you have set a password to be required when the Slate exits Hibernation, you must enter your Windows password before your work returns to the screen.

Using the power meter

The power meter is located in the notification area, at the far right of the taskbar. The power meter allows you to quickly access power settings, view remaining battery charge, and select a different power plan.

- To display the percentage of remaining battery charge and the current power plan, tap the **Power Meter** icon.
- To access Power Options, or to change the power plan, tap the **Power Meter** icon, and then select an item from the list.

Different power meter icons indicate whether the Slate is running on battery or external power. The icon also displays a message if the battery has reached a low battery level, critical battery level, or reserve battery level.

To hide or display the power meter icon:

1. Tap and hold the **Show hidden icons** icon (the arrow at the left side of the notification area).
2. Tap **Customize notification icons**.
3. Under **Behaviors**, tap **Show icon and notifications** for the Power Meter icon.
4. Tap **OK**.

Using power plans

A power plan is a collection of system settings that manages how the Slate uses power. Power plans can help you conserve power and maximize Slate performance.

The following power plans are available:

- HP Recommended
- Power saver

You can change the settings of these power plans through Power Options.

Viewing the current power plan

▲ Tap the **Power Meter** icon in the notification area, and then tap **More power options**.

– or –

Tap **Start**, tap **Control Panel**, tap **System and Security**, and then tap **Power Options**.

Selecting a different power plan

1. Tap the **Power Meter** icon in the notification area, and then tap **More power options**.

– or –

Tap **Start**, tap **Control Panel**, tap **System and Security**, and then tap **Power Options**.

2. Select a power plan from the list.

Customizing power plans

1. Tap the **Power Meter** icon in the notification area, and then tap **More power options**.

– or –

Tap **Start**, tap **Control Panel**, tap **System and Security**, and then tap **Power Options**.

2. Tap a power plan, and then tap **Change plan settings**.

3. Change the settings as needed.

4. To change additional settings, tap **Change advanced power settings** and make your changes.

Setting password protection on wakeup

To set the Slate to prompt for a password when the Slate exits Sleep or Hibernation, follow these steps:

1. Tap the **Power Meter** icon in the notification area, and then tap **More power options**.

– or –

Tap **Start**, tap **Control Panel**, tap **System and Security**, and then tap **Power Options**.

2. In the left pane, tap **Require a password on wakeup**.
3. Tap **Change settings that are currently unavailable**.
4. Tap **Require a password (recommended)**.




NOTE: If you need to create a user account password or change your current user account password, tap **Create or change your user account password**, and then follow the on-screen instructions. If you do not need to create or change a user account password, go to step 5.


5. Tap **Save changes**.

Using battery power

The Slate runs on battery power whenever it is not plugged into external power. Slate battery life varies, depending on power management settings, running programs, display brightness, external devices connected to the Slate, and other factors.

If the battery is charged and the Slate is running on external AC power supplied through the AC adapter, the Slate switches to battery power if the AC adapter is disconnected from the Slate.

 **CAUTION:** If the option **Initiate orderly shutdown when AC is removed** is enabled in Setup Utility, data loss could occur when AC power is disconnected from the Slate.

 **NOTE:** When you disconnect AC power, the display brightness is automatically decreased to save battery life. For information on increasing or decreasing display brightness, refer to [Adjusting the screen brightness on page 6](#).

Displaying the remaining battery charge

- ▲ Move the pointer over the **Power Meter** icon in the notification area, at the far right of the taskbar.

Maximizing battery discharge time

Battery discharge time varies depending on the features you use while on battery power. Maximum discharge time gradually shortens, as the battery storage capacity naturally degrades.

Tips for maximizing battery discharge time:

- Decrease the brightness on the display.
- Store the Slate in a cool, dry location.
- Tap the **Power saver** setting in Power Options.

Managing low battery levels

The information in this section describes the alerts and system responses set at the factory. Some low-battery alerts and system responses can be changed using Power Options in Windows Control Panel. Preferences set using Power Options do not affect lights.

Identifying low battery levels

The Slate takes the following actions for a critical battery level:

- If Hibernation is enabled and the Slate is on or in Sleep, the Slate initiates Hibernation.
- If Hibernation is disabled and the Slate is on or in Sleep, the Slate remains briefly in Sleep, and then shuts down and loses any unsaved information.

Resolving a low battery level

Resolving a low battery level when external power is available

Connect one of the following devices:

1. AC adapter
2. HP Slate Dock

Resolving a low battery level when no power source is available

▲ Initiate Hibernation.

– or –

Save your work and shut down the Slate.

Resolving a low battery level when the Slate cannot exit Hibernation

When the Slate lacks sufficient power to exit Hibernation, follow these steps:

1. Plug the Slate into external power.
2. Exit Hibernation by briefly sliding the power switch.

Conserving battery power

- Tap the **Power saver** power plan through Power Options under System and Security in Windows Control Panel.
- Turn off wireless and local area network (LAN) connections and exit modem applications when you are not using them.
- Disconnect unused external devices that are not plugged into an external power source.
- Stop, disable, or remove any external media cards that you are not using.
- Decrease screen brightness.
- Before you leave your work, initiate Sleep or Hibernation, or shut down the Slate.

Using external AC power

External AC power is supplied through an approved AC adapter or an HP Slate Dock.

⚠ WARNING! To reduce potential safety issues, use only the AC adapter provided with the Slate, a replacement AC adapter provided by HP, or a compatible AC adapter purchased from HP.

Connect the Slate to external AC power under any of the following conditions:

⚠ WARNING! Do not charge the battery while you are onboard aircraft.

- When charging or calibrating a battery
- When installing or modifying system software
- When writing information to an optional external drive
- When running Disk Defragmenter
- When performing a backup or recovery

When you connect the Slate to external AC power, the battery begins to charge.

When you disconnect external AC power, the Slate switches to battery power.

Protecting the Slate from power surges

To protect the Slate from power surges that may be caused by an uncertain power supply or an electrical storm, observe these practices:

- Plug the Slate power cord into a high-quality surge protector (purchased separately). Surge protectors are available from most consumer hardware or electronics retailers.
- During an electrical storm, either run the Slate on battery power, or shut down the Slate and then unplug the power cord.

6 Drives

Using Disk Defragmenter

As you use the Slate, files on the drive become fragmented. Disk Defragmenter consolidates the fragmented files and folders on the drive so that the system can run more efficiently.



NOTE: It is not necessary to run Disk Defragmenter on solid-state drives.

After you start Disk Defragmenter, it works without supervision. Depending on the size of your drive and the number of fragmented files, Disk Defragmenter may take more than an hour to complete. You may want to set it to run during the night or at another time when you do not need access to your Slate.

HP recommends defragmenting your drive at least once a month. You may set Disk Defragmenter to run on a monthly schedule, but you can defragment your Slate manually at any time.

To run Disk Defragmenter:

1. Connect the Slate to AC power.
2. Tap **Start**, tap **All Programs**, tap **Accessories**, tap **System Tools**, and then tap **Disk Defragmenter**.
3. Tap **Defragment disk**.



NOTE: Windows includes the User Account Control feature to improve the security of your Slate. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. Refer to Help and Support for more information.

For additional information, access the Disk Defragmenter software Help.

Using Disk Cleanup

Disk Cleanup searches the drive for unnecessary files that you can safely delete to free up disk space and help the Slate to run more efficiently.

To run Disk Cleanup:

1. Tap **Start**, tap **All Programs**, tap **Accessories**, tap **System Tools**, and then tap **Disk Cleanup**.
2. Follow the on-screen instructions.

7 External cards and devices

Using Media Card Reader cards (select models only)

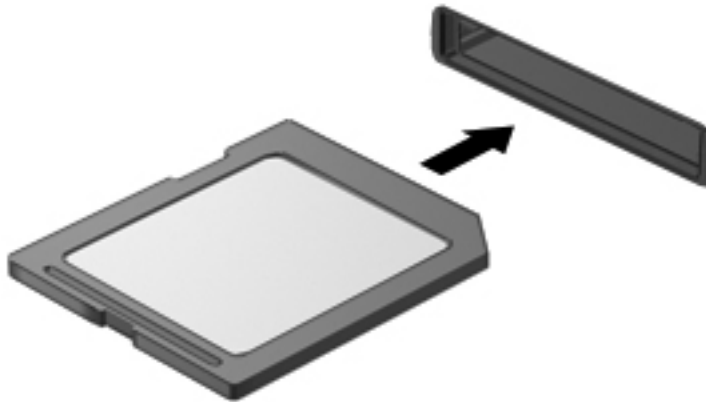
Optional digital cards provide secure data storage and convenient data sharing. These cards are often used with digital media–equipped cameras and PDAs as well as with other computers.

To determine the digital card formats that are supported on your Slate, refer to [Left edge on page 17](#).

Inserting a digital card

⚠ CAUTION: To reduce the risk of damage to the digital card connectors, use minimal force to insert a digital card.

1. Hold the card label-side up, with the connectors facing the Slate.
2. Insert the card into the Media Card Reader, and then press in on the card until it is firmly seated.

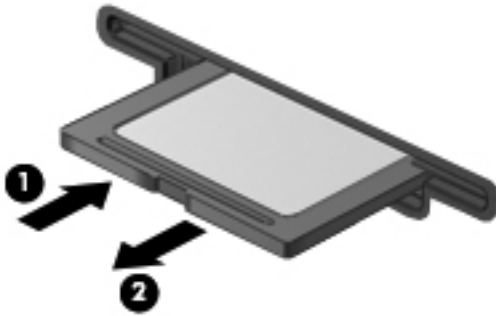


You will hear a sound when the device has been detected, and a menu of options may be displayed.

Removing a digital card

CAUTION: To reduce the risk of loss of data or an unresponsive system, use the following procedure to safely remove the digital card.

1. Save your information and close all programs associated with the digital card.
2. Tap the remove hardware icon in the notification area, at the far right of the taskbar. Then follow the on-screen instructions.
3. Press in on the card **(1)**, and then remove it from the slot **(2)**.



NOTE: If the card does not eject, pull the card out of the slot.

Using a USB device

Universal Serial Bus (USB) is a hardware interface that can be used to connect an optional external device, such as a USB keyboard, mouse, drive, printer, scanner, or hub.

Some USB devices may require additional support software, which is usually included with the device. For more information about device-specific software, refer to the manufacturer's instructions. These instructions may be provided with the software, on disc, or on the manufacturer's Web site.

The Slate has at least 1 USB port that supports USB 1.0, 1.1, or 2.0 devices. An optional HP Slate Dock or USB hub provides additional USB ports that can be used with the Slate.

Connecting a USB device

CAUTION: To reduce the risk of damage to a USB connector, use minimal force to connect the device.

- ▲ Connect the USB cable for the device to the USB port.


NOTE: The following illustration may look slightly different than your Slate.



You will hear a sound when the device has been detected.

NOTE: The first time you connect a USB device, a message in the notification area lets you know that the device is recognized by the Slate.


Removing a USB device

 **CAUTION:** To reduce the risk of damage to a USB connector, do not pull on the cable to remove the USB device.


CAUTION: To reduce the risk of loss of information or an unresponsive system, use the following procedure to safely remove the USB device.

1. To remove a USB device, save your information and close all programs associated with the device.
2. Tap the remove hardware icon in the notification area, at the far right of the taskbar, and then follow the on-screen instructions.
3. Remove the device.

Using optional external devices

 **NOTE:** For more information about required software and drivers, or to learn which port to use, refer to the manufacturer's instructions.

To connect an external device to the Slate:

 **CAUTION:** To reduce the risk of damage to the equipment when connecting a powered device, be sure that the device is turned off and the AC power cord is unplugged.

1. Connect the device to the Slate.
2. If you are connecting a powered device, plug the device power cord into a grounded AC outlet.
3. Turn on the device.

To disconnect an unpowered external device, turn off the device, and then disconnect it from the Slate. To disconnect a powered external device, turn off the device, disconnect it from the Slate, and then unplug the AC power cord.

Using optional external drives

Removable external drives expand your options for storing and accessing information. A USB drive (purchased separately) can be added by connecting the drive to a USB port on the Slate or the HP Slate Dock.

USB drives include the following types:

- 1.44-megabyte diskette drive
- Hard drive module
- External optical drive (CD, DVD, and Blu-ray)
- MultiBay device

Docking the Slate to the HP Slate Dock (select models only)

To dock the Slate to the HP Slate Dock, follow these steps:

1. Align the docking connector on the dock base with the power connector on the bottom edge of the Slate, and then lower the Slate onto the dock.
2. Plug the AC adapter into the power connector on the back of the dock.
3. Plug the power cord into the AC adapter.
4. Plug the other end of the power cord into an AC outlet.



8 Keeping your Slate safe

Your Windows files must be backed up on a regular basis, and you must guard against viruses and privacy violations. The following sections address the importance of protecting your Slate as you use your Slate and the Windows operating system.

Securing your Slate and information

Security is essential for protecting the confidentiality, integrity, and availability of your information. Standard security solutions provided by the Windows® operating system, HP applications, the non-Windows Setup Utility (BIOS), and other third-party software can help protect your Slate from a variety of risks, such as viruses, worms, and other types of malicious code.



IMPORTANT: Some security features listed in this chapter may not be available on your Slate.

Slate risk	Security feature
Unauthorized use of the Slate	Power-on password
Computer viruses	Antivirus software
Unauthorized access to data	Firewall software
Unauthorized access to Setup Utility (BIOS) settings and other system identification information	Administrator password
Ongoing or future threats to the Slate	Software updates
Unauthorized access to a Windows user account	User password

Using passwords

A password is a group of characters that you choose to secure your information and to have safer online transactions. Several types of passwords can be set. For example, when you set up your Slate for the first time, you were asked to set up a user password to secure your Slate. Additional passwords can be set in Windows or in the HP Setup Utility (BIOS) that is preinstalled on your Slate.

You may find it helpful to use the same password for a Setup Utility (BIOS) feature and for a Windows security feature.

Use the following tips for creating and saving passwords:

- To reduce the risk of being locked out of the Slate, record each password and store it in a secure place away from the Slate. Do not store passwords in a file on the Slate.
- When creating passwords, follow requirements set by the program.
- Change your passwords at least every three months.
- An ideal password is long and has letters, punctuation, symbols, and numbers.
- Before you send your Slate for service, back up your files, delete confidential files, and then remove all password settings.

For additional information about Windows passwords, such as screen-saver passwords, tap **Start**, and then tap **Help and Support**.

Setting Windows passwords

Password	Function
User password	Protects access to a Windows user account. It also must be entered when you exit Sleep or Hibernation.
Administrator password	Protects administrator-level access to Slate contents. NOTE: This password cannot be used to access Setup Utility (BIOS) contents.

Setting Setup Utility (BIOS) passwords

Password	Function
Administrator password*	<ul style="list-style-type: none">• Must be entered each time you access Setup Utility (BIOS).• If you forget your administrator password, you cannot access Setup Utility (BIOS). <p>NOTE: The administrator password can be used in place of the power-on password.</p> <p>NOTE: Your administrator password is not interchangeable with an administrator password set in Windows, nor is it displayed as it is set, entered, changed, or deleted.</p> <p>NOTE: If you enter the power-on password at the first password check before the “Press the (-) key for Startup Menu” message is displayed, you must enter the administrator password to access Setup Utility (BIOS).</p>
Power-on password*	<ul style="list-style-type: none">• Must be entered each time you turn on or restart the Slate, or exit Hibernation.• If you forget your power-on password, you cannot turn on or restart the Slate, or exit Hibernation. <p>NOTE: The administrator password can be used in place of the power-on password.</p> <p>NOTE: A power-on password is not displayed as it is set, entered, changed, or deleted.</p>

To set, change, or delete an administrator or power-on password in Setup Utility (BIOS):

1. Open Setup Utility (BIOS) by turning on or restarting the Slate. While the “Press the (-) key for Startup Menu” message is displayed in the lower-left corner of the screen, press the Volume down button (-) repeatedly.
2. When the Startup Menu is displayed, press the Volume down button (-) to navigate.
3. Press and hold the Home button, and then press either the Volume down button (-) or the Volume up button (+) to select **Security**, and then follow the on-screen instructions.

Your changes take effect when the Slate restarts.

Using antivirus software

When you use your Slate to access email, a network, or the Internet, you potentially expose your Slate to computer viruses, spyware, and other online threats. Antivirus software (purchased separately) can detect most viruses, destroy them, and in most cases, repair damage they have caused. To provide ongoing protection against newly discovered viruses, antivirus software must be kept up to date. For more information about computer viruses, type `viruses` in the Search box in Help and Support.

Using firewall software

Firewalls are designed to prevent unauthorized access to a system or network. A firewall can be software you install on your Slate and/or network, or it can be a combination of both hardware and software.

There are two types of firewalls to consider:

- Host-based firewalls—Software that protects only the computer it is installed on.
- Network-based firewalls—Installed between your DSL or cable modem and your home network to protect all the computers on the network.

When a firewall is installed on a system, all data sent to and from the system is monitored and compared with a set of user-defined security criteria. Any data that does not meet those criteria is blocked.

Managing Internet privacy

To manage Internet privacy settings, follow these steps:

1. Tap **Start**, and then tap **Control Panel**.
2. Tap **Network and Internet**, and then tap **Internet Options** to define the level of security your Slate should use.
3. Tap the **Privacy** tab to determine which embedded programs your browser should allow.

Installing software updates

HP, Microsoft Windows, and third-party software installed on your Slate should be regularly updated to correct security problems and improve software performance.

Installing Windows security updates

Updates to the operating system and other software may have become available after the Slate left the factory. Microsoft® sends out alerts regarding critical updates. To protect the Slate from security breaches and computer viruses, install all critical updates from Microsoft as soon as you receive an alert.

To be sure that all available updates are installed on the Slate, observe these guidelines:

- Run Windows Update as soon as possible after you set up your Slate. Tap **Start**, tap **All Programs**, and then tap **Windows Update**.
- Run Windows Update monthly thereafter.
- Obtain updates to Windows and other Microsoft programs, as they are released, from the Microsoft website and through the updates link in Help and Support.

Installing HP and third-party software updates

HP recommends that you regularly update the software and drivers that were originally installed on your Slate. To download the latest versions, go to <http://www.hp.com/support>. At this location, you can also register to receive automatic update notifications when they become available.

If you have installed third-party software after you purchased your Slate, regularly update the software. Software companies provide software updates to their products to correct security problems and improve functionality of the software.

Securing your wireless network

When you set up your wireless network, always enable security features. For more information, see [Protecting your WLAN on page 22](#).

Backing up your software applications and information


Regularly back up your software applications and information to protect them from being permanently lost or damaged through a virus attack or a software or hardware failure. For more information, see [Backup and recovery on page 53](#)

9 Backup and recovery


To protect your information, use Windows Backup and Restore to back up individual files and folders, back up your entire drive, create system repair discs (select models only) by using an optional external optical drive (purchased separately), or create system restore points. In case of system failure, you can use the backup files to restore the contents of your Slate.

Windows Backup and Restore provides the following options:

- Creating a system repair disc (select models only) by using an optional external optical drive (purchased separately)
- Backing up your information
- Creating a system image (select models only)
- Scheduling automatic backups (select models only)
- Creating system restore points
- Recovering individual files
- Restoring the Slate to a previous state
- Recovering information using recovery tools

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

In case of system instability, HP recommends that you print the recovery procedures and save them for later use.

 **NOTE:** Windows includes the User Account Control feature to improve the security of your Slate. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. Refer to Help and Support for more information.

Backing up your information

Recovery after a system failure is as good as your most recent backup. You should create system repair discs by using an optional external optical drive (purchased separately) and your 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. The system repair discs (select models only) are used to start up (boot) the Slate and repair the operating system in case of system instability or failure. Your initial and subsequent backups allow you to restore your data and settings if a failure occurs.

You can back up your information to an optional external drive, a network drive, or discs.

Note the following when backing up:

- Store personal files in the Documents library, and back it up regularly.
- Back up templates that are stored in their associated programs.
- Save customized settings that appear 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.
- When backing up to discs, use any of the following types of discs (purchased separately): CD-R, CD-RW, DVD+R, DVD+R DL, DVD-R, DVD-R DL, or DVD±RW. The discs you use will depend on the type of external optical drive you are using.



NOTE: DVDs and DVDs with double-layer (DL) support store more information than CDs, so using them for backup reduces the number of recovery discs required.

- When backing up to discs, number each disc before inserting it into the external drive.

To create a backup using Backup and Restore:



NOTE: Be sure that the Slate is connected to AC power before you start the backup process.




NOTE: The backup process may take over an hour, depending on file size and the speed of the Slate.

1. Tap **Start**, tap **All Programs**, tap **Maintenance**, and then tap **Backup and Restore**.
2. Follow the on-screen instructions to set up your backup, create a system image (select models only), or create a system repair disc (select models only).

Performing a system recovery

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

- Windows recovery tools: You can use Windows Backup and Restore to recover information you have previously backed up. You can also use Windows Startup Repair to fix problems that might prevent Windows from starting correctly.


 **NOTE:** If you are unable to boot (start up) your Slate and you cannot use the system repair discs you previously created, you must purchase a Windows 7 operating system DVD to reboot the Slate and repair the operating system. For additional information, refer to [Using a Windows 7 operating system DVD \(purchased separately\) on page 56](#).


Using the Windows recovery tools

To recover information you previously backed up:

1. Tap **Start**, tap **All Programs**, tap **Maintenance**, and then tap **Backup and Restore**.
2. Follow the on-screen instructions to recover your system settings, your Slate (select models only), or your files.

To recover your information using Startup Repair, follow these steps:


 **CAUTION:** Using Startup Repair completely erases drive contents and reformats the drive. All files you have created and any software installed on the Slate are permanently removed. When reformatting is complete, the recovery process restores the operating system, as well as the drivers, software, and utilities from the backup used for recovery.

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.


1. If possible, back up all personal files.
2. If possible, check for the presence of the Windows partition and the HP Recovery partition.

To check for the Windows partition, tap **Start**, and then tap **Computer**.

To check for the HP Recovery partition, tap **Start**, tap and hold **Computer**, tap **Manage**, and then tap **Disk Management**.


 **NOTE:** If the Windows partition and the HP Recovery partition are not listed, you must recover your operating system and programs using the Windows 7 operating system DVD and the *Driver Recovery* disc (both purchased separately). For additional information, refer to [Using a Windows 7 operating system DVD \(purchased separately\) on page 56](#).

3. If the Windows partition and the HP Recovery partition are listed, restart the Slate, and then press **f8** before the Windows operating system loads.
4. Select **Startup Repair**.
5. Follow the on-screen instructions.


 **NOTE:** For additional information on recovering information using the Windows tools, perform a search for these topics in Help and Support.


Using a Windows 7 operating system DVD (purchased separately)

To order a Windows 7 operating system DVD, go to <http://www.hp.com/support>, tap your country or region, and then follow the on-screen instructions. You can also order the DVD by calling technical support. For contact information, refer to the *Worldwide Telephone Numbers* booklet included with the Slate.

 **CAUTION:** Using a Windows 7 operating system DVD completely erases drive contents and reformats the drive. All files you have created and any software installed on the Slate are permanently removed. When reformatting is complete, the recovery process helps you restore the operating system, as well as drivers, software, and utilities.

To initiate recovery using a Windows 7 operating system DVD:

 **NOTE:** An optional external optical drive and an external keyboard (purchased separately) may be connected to the USB port to perform these steps.

 **NOTE:** This process takes several minutes.

1. If possible, back up all personal files.
2. Restart the Slate, and then insert the Windows 7 operating system DVD into the connected external optical drive (purchased separately) before the Windows operating system loads.
3. When prompted, press any keyboard key.
4. Follow the on-screen instructions.
5. Tap **Next**.
6. Select **Repair your computer**.
7. Follow the on-screen instructions.

After the repair is completed:

1. Eject the Windows 7 operating system DVD from the connected external optical drive (purchased separately), and then insert the *Driver Recovery* disc.
2. Install the Hardware Enabling Drivers first, and then install Recommended Applications.

10 Maintenance

Cleaning your Slate

Cleaning products

Use the following products to safely clean and disinfect your Slate:

- Dimethyl benzyl ammonium chloride 0.3 percent maximum concentration (For example: germicidal disposable wipes. These wipes come in a variety of brand names.)
- Alcohol-free glass cleaning fluid
- Water with mild soap solution
- Dry microfiber cleaning cloth or a chamois (static-free cloth without oil)
- Static-free cloth wipes

⚠ CAUTION: Avoid the following cleaning products:

Strong solvents, such as alcohol, acetone, ammonium chloride, methylene chloride, and hydrocarbons, which can permanently damage the surface of the Slate.

Fibrous materials, such as paper towels, which can scratch the Slate. Over time, dirt particles and cleaning agents can get trapped in the scratches.

Cleaning procedures

Follow the procedures in this section to safely clean your Slate.

⚠ WARNING! To prevent electric shock or damage to components, do not attempt to clean your Slate while it is turned on:

Turn off the Slate.

Disconnect external power.

Disconnect all powered external devices.

⚠ CAUTION: Do not spray cleaning agents or liquids directly on any Slate surface. Liquids dripped on the surface can permanently damage internal components.

Cleaning the display

Gently wipe the display using a soft, lint-free cloth moistened with an *alcohol-free* glass cleaner. Be sure that the display is dry before closing the display.

Cleaning the sides and cover

To clean and disinfect the sides and cover, use a soft microfiber cloth or chamois moistened with one of the cleaning solutions listed previously or use an acceptable germicidal disposable wipe.



NOTE: When cleaning the cover of the Slate, use a circular motion to aid in removing dirt and debris.

Cleaning a tablet PC pen and pen holder (select models only)

Using one of the cleaning solutions listed previously, moisten a soft microfiber cloth or chamois or use an acceptable germicidal disposable wipe:

- To clean the pen, rub the pen in an up and down motion to aid in removing dirt and debris.
- To clean the pen holder, use a rotating motion around the opening of the pen holder.



CAUTION: Do not put any fluid or material other than the pen in the pen holder. The pen holder is not sealed off from some of the internal electronics of the tablet PC.

Updating programs and drivers

To download and install software other than a BIOS update, follow these steps:

1. Access the updates on the HP Web site at <http://www.hp.com>.
2. Follow the instructions on the screen to find the software you want to update.
3. At the download area, tap the software you want to download and follow the instructions on the screen.



NOTE: Make a note of the path to the location on your drive where the software is to be downloaded. You will need to access this path when you are ready to install the software.

4. When the download is complete, open Windows Explorer by tapping **Start**, and then tapping **Computer**.
5. Double-tap your drive designation. The drive designation is typically Local Disk (C:).
6. Using the drive path you recorded earlier, open the folder on your drive that contains the update.
7. Double-tap the file that has an .exe extension (for example, *filename.exe*).

The installation begins.

8. Complete the installation by following the instructions on the screen.



NOTE: After a message on the screen reports a successful installation, you can delete the downloaded file from your drive.

Using SoftPaq Download Manager

HP SoftPaq Download Manager (SDM) is a tool that provides quick access to SoftPaq information for HP business computers without requiring the SoftPaq number. Using this tool, you can easily search for SoftPaqs, and then download and unpack them.

SoftPaq Download Manager works by reading and downloading, from the HP FTP site, a published database file containing computer model and SoftPaq information. SoftPaq Download Manager allows you to specify one or more computer models to determine which SoftPaqs are available for download.

SoftPaq Download Manager checks the HP FTP site for updates to the database and software. If updates are found, they are downloaded and applied automatically.

SoftPaq Download Manager is available on the HP Web site. To use SoftPaq Download Manager to download SoftPaqs, you must first download and install the program. Go to the HP Web site at <http://www.hp.com/go/sdm>, and follow the instructions to download and install SoftPaq Download Manager.

To download SoftPaqs:

1. Tap **Start**, tap **All Programs**, tap **HP Software Setup**, and then tap **HP SoftPaq Download Manager**.
2. When SoftPaq Download Manager opens for the first time, a window is displayed asking if you want to show only software for the computer you are using or to show the software for all supported models. Tap **Show software for all supported models**. If you have used HP SoftPaq Download Manager previously, go to step 3.
 - a. Select your operating system and language filters in the Configuration Options window. The filters limit the number of options that are listed in the Product Catalog pane. For example, if only Windows 7 Professional is selected in the operating system filter, the only operating system that is displayed in the Product Catalog is Windows 7 Professional.
 - b. To add other operating systems, change the filter settings in the Configuration Options window. Refer to the HP SoftPaq Download Manager software Help for more information.
3. In the left pane, tap the plus sign (+) to expand the model list, and then tap the model or models of the products you want to update.
4. Tap **Find Available SoftPaqs** to download a list of available SoftPaqs for the selected Slate.
5. Select from the list of available SoftPaqs, and then tap **Download Only** if you have many SoftPaqs to download, because the SoftPaq selection and Internet connection speed determine how long the download process will take.


If you want to download only one or two SoftPaqs and have a high-speed Internet connection, tap **Download & Unpack**.

6. Tap and hold **Install SoftPaq** in the SoftPaq Download Manager software to install the selected SoftPaqs on the Slate.

11 Setup Utility (BIOS) and System Diagnostics

Using Setup Utility (BIOS)

Setup Utility, or Basic Input/Output System (BIOS), controls communication between all the input and output devices on the system (such as disk drives, display, keyboard, mouse, and printer). Setup Utility (BIOS) includes settings for the types of devices installed, the startup sequence of the Slate, and the amount of system and extended memory.


 **NOTE:** Use extreme care when making changes in Setup Utility (BIOS). Errors can prevent the Slate from operating properly.

Starting Setup Utility

Setup Utility is a ROM-based information and customization utility that can be used even when your Windows operating system is not working.

The utility reports information about the Slate and provides settings for startup, security, and other preferences.

To start Setup Utility:

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

1. Open the Startup Menu by turning on or restarting the Slate, and then, while the hyphen is displayed in the upper-left corner of the screen, repeatedly pressing the Volume down button (-) on the Slate or **f10** on an external keyboard.
2. Press the Volume down button (-) on the Slate to advance to **BIOS Setup**, and then select it by pressing the Home button on the Slate or **enter** on an external keyboard.

Using Setup Utility

Changing the language of Setup Utility

The following procedure explains how to change the language of Setup Utility. If Setup Utility is not already running, begin at step 1. If Setup Utility is already running, begin at step 3.




NOTE: An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

1. Open the Startup Menu by turning on or restarting the Slate, and then, while the hyphen is displayed in the upper-left corner of the screen, repeatedly pressing the Volume down button (-) on the Slate or **f10** on an external keyboard.
2. Press the Volume down button (-) on the Slate, or use the arrow keys on an external keyboard to advance to **BIOS Setup**, and then select it by pressing the Home button on the Slate or **enter** on an external keyboard.
3. Press and hold the Home button and then press either the Volume up button (+) or the Volume down button (-) on the Slate, or use the arrow keys on an external keyboard to select **System Configuration > Language**.
4. Press the Volume up button (+) or Volume down button (-) on the Slate or the arrow keys on an external keyboard to select a language, and then press the Home button on the Slate or **enter** on an external keyboard.
5. To save your changes and exit Setup Utility, tap **Exit**, and then tap **Exit Saving Changes** or use the arrow keys on an external keyboard to select **Exit > Exit Saving Changes**. Then press the Home button on the Slate or **enter** on an external keyboard.

Your change goes into effect immediately.


Navigating and selecting in Setup Utility

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

- To choose a menu or a menu item, press the Home button on the Slate, or use the arrow keys on an external keyboard.
- To navigate between menus in Setup Utility, press and hold the Home button and then press either the Volume up (+) or Volume down (-) button, or use the arrow keys on an external keyboard.
- To choose an item in a list or to toggle a field, for example an Enable/Disable field, use either the Home button, the Volume up button, or the Volume down button on the Slate, or the arrow keys on an external keyboard.
- To select an item, press the Home button on the Slate or the **enter** key on an external keyboard.
- To close a text box or return to the menu display, press the Ctrl+alt+del (Security) button on the top edge of the Slate or **esc** on an external keyboard.
- Information about navigation keys is displayed at the bottom of the screen. To display additional navigation and selection information while Setup Utility is open, press **f1** on an external keyboard.

Displaying system information

The following procedure explains how to display system information in Setup Utility. If Setup Utility is not open, begin at step 1. If Setup Utility is open, begin at step 3.

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.


1. Open the Startup Menu by turning on or restarting the Slate, and then, while the hyphen is displayed in the upper-left corner of the screen, repeatedly pressing the Volume down button (-) on the Slate or **f10** on an external keyboard.
2. Press the Volume down button (-) on the Slate, or use the arrow keys on an external keyboard, to advance to **BIOS Setup**, and then select it by pressing the Home button on the Slate or **enter** on an external keyboard.
3. If Setup Utility does not open with the system information displayed, press and hold the Home button and then press the Volume up button (+) on the Slate, or use the arrow keys on an external keyboard, to select the **Main** menu.

When the Main menu is selected, system information is displayed.

4. To exit Setup Utility without changing any settings, press the Ctrl+alt+del (Security) button on the top edge of the Slate or the arrow keys on an external keyboard to select **Exit > Exit Discarding Changes**. Then press the Home button on the Slate or the **enter** key on an external keyboard.


Restoring factory settings in Setup Utility

The following procedure explains how to restore the Setup Utility factory settings. If Setup Utility is not already running, begin at step 1. If Setup Utility is already running, begin at step 3.

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.


1. Open the Startup Menu by turning on or restarting the Slate, and then, while the hyphen is displayed in the upper-left corner of the screen, repeatedly pressing the Volume down button (-) on the Slate or **f10** on an external keyboard.
2. Press the Volume down button (-) on the Slate, or use the arrow keys on an external keyboard, to advance to **BIOS Setup**, and then select it by pressing the Home button on the Slate or **enter** on an external keyboard.
3. Press and hold the Home button and then press the Volume up button (+) on the Slate or the arrow keys on an external keyboard to select **Exit > Load Setup Defaults**. Then press the Home button on the Slate or the **enter** key on an external keyboard.
4. When the Setup Confirmation is displayed, press the Home button on the Slate or the **enter** key on an external keyboard
5. To save your changes and exit Setup Utility, press the Ctrl+alt+del (Security) button on the top edge of the Slate, or use the arrow keys on an external keyboard, to select **Exit > Exit Saving Changes**. Then press the Home button on the Slate or the **enter** key on an external keyboard.

The Setup Utility factory settings go into effect when the Slate restarts.

 **NOTE:** Your password, security, and language settings are not changed when you restore the factory default settings.

Exiting Setup Utility

You can exit Setup Utility with or without saving changes.

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

- To exit Setup Utility and save your changes from the current session:

Press the Ctrl+alt+del (Security) button on the top edge of the Slate, or use the arrow keys on an external keyboard, to select **Exit > Exit Saving Changes**. Then press the Home button on the Slate or the **enter** key on an external keyboard.

- To exit Setup Utility without saving your changes from the current session:

Press the Ctrl+alt+del (Security) button on the top edge of the Slate, or use the arrow keys on an external keyboard, to select **Exit > Exit Discarding Changes**. Then press the Home button on the Slate or the **enter** key on an external keyboard.

After either choice, the Slate restarts in Windows.

Updating the BIOS

Updated versions of the BIOS may be available on the HP Web site.

Most BIOS updates on the HP Web site are packaged in compressed files called *SoftPaqs*.

Some download packages contain a file named *Readme.txt*, which contains information regarding installing and troubleshooting the file.

Determining the BIOS version

To determine whether available BIOS updates contain later BIOS versions than those currently installed on the Slate, you need to know the version of the system BIOS currently installed.


BIOS version information (also known as *ROM date* and *System BIOS*) can be displayed by pressing **fn+esc** (if you are already in Windows) or by using Setup Utility (BIOS).



NOTE: An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

1. Open the Startup Menu by turning on or restarting the Slate, and then, while the hyphen is displayed in the upper-left corner of the screen, repeatedly pressing the Volume down button (-) on the Slate or **f10** on an external keyboard.
2. Press the Volume down button (-) on the Slate, or use the arrow keys on an external keyboard, to advance to **BIOS Setup**, and then select it by pressing the Home button on the Slate or **enter** on an external keyboard.
3. If Setup Utility does not open with the system information displayed, press and hold the Home button and then press the Volume up button (+) on the Slate, or use the arrow keys on an external keyboard, to select the **Main** menu.
4. To exit Setup Utility without changing any settings, press the Ctrl+alt+del (Security) button on the top edge of the Slate or the arrow keys on an external keyboard to select **Exit > Exit Discarding Changes**. Then press the Home button on the Slate or the **enter** key on an external keyboard.
5. To exit Setup Utility (BIOS) without saving your changes, use the tab key and the arrow keys to select **Exit > Exit Discarding Changes**, and then press **enter**.

Downloading a BIOS update

 **CAUTION:** To reduce the risk of damage to the Slate or an unsuccessful installation, download and install a BIOS update only when the Slate is connected to reliable external power using the AC adapter. Do not download or install a BIOS update while the Slate is running on battery power, docked in an optional HP Slate Dock, or connected to an optional power source. During the download and installation, follow these instructions:


Do not disconnect power from the Slate by unplugging the power cord from the AC outlet.

Do not shut down the Slate or initiate Sleep or Hibernation.

Do not insert, remove, connect, or disconnect any device, cable, or cord.

1. Tap **Start**, tap **Help and Support**, and then tap **Maintain**.
2. Follow the on-screen instructions to identify your Slate and access the BIOS update you want to download.
3. At the download area, follow these steps:
 - a. Identify the BIOS update that is later than the BIOS version currently installed on your Slate. Make a note of the date, name, or other identifier. You may need this information to locate the update later, after it has been downloaded to your drive.
 - b. Follow the on-screen instructions to download your selection to the drive.

Make a note of the path to the location on your drive where the BIOS update is downloaded. You will need to access this path when you are ready to install the update.


 **NOTE:** If you connect your Slate to a network, consult the network administrator before installing any software updates, especially system BIOS updates.

BIOS installation procedures vary. Follow any instructions that are displayed on the screen after the download is complete. If no instructions are displayed, follow these steps:

1. Open Windows Explorer by tapping **Start**, and then tapping **Computer**.
2. Double-tap your drive designation. The drive designation is typically Local Disk (C:).
3. Using the drive path you recorded earlier, open the folder on your drive that contains the update.
4. Double-tap the file that has an .exe extension (for example, *filename.exe*).


The BIOS installation begins.

5. Complete the installation by following the on-screen instructions.

 **NOTE:** After a message on the screen reports a successful installation, you can delete the downloaded file from your drive.

BIOS Setup Menu

The tables in this section provide an overview of the BIOS Setup menu options.

 **NOTE:** Some of the BIOS Setup menu items listed in this chapter may not be supported by your Slate.

Main menu

Select	To do this
System information	<ul style="list-style-type: none">• View and change the system time and date.• View identification information about the Slate.• View specification information about the processor, memory size, and system BIOS.

Security menu

Select	To do this
Administrator password	Control access to Setup Utility.
Power-on password	Control access to the Slate
TPM Status	Disabled and inactive (select models only)
TPM Operation	No (select models only)

Diagnostics menu

Select	To do this
Primary Hard Disk Self Test	Run a quick or comprehensive self-test on the hard drive.
Memory Test	Run a diagnostic test on the system memory.

System Configuration menu


Select	To do this
Language	Change the display language for BIOS Setup.
USB rear-facing camera	Enable or disable rear-facing camera.
Power-on when AC is detected	Enable or disable the Slate to turn on automatically when connected to AC power.
Initiate orderly shutdown when AC is removed	Enable or disable the Slate to automatically initiate an orderly shutdown when AC power is disconnected. CAUTION: If this option is enabled, data loss could occur when AC power is disconnected.
USB Legacy	Enable or disable a USB keyboard, disk, or drive to be used in BIOS Setup.
Boot Options	<ul style="list-style-type: none">• POST HotKey Delay—Select 0, 5, 10, 15, or 20 seconds to allow more time to press a hotkey to enter BIOS Setup when the Slate restarts.• Boot Order options —Select the order in which the Slate searches for a boot disk.

Using System Diagnostics

System Diagnostics allows you to run diagnostic tests to determine if the Slate hardware is functioning properly. Depending on your Slate model, the following diagnostic tests may be available in System Diagnostics:


- **Hard disk test**—This test analyzes the physical condition of the drive, and then checks all data in every sector of the drive. If the test detects a damaged sector, it attempts to move the data to a good sector.
- **Memory test**—This test analyzes the physical condition of the memory modules. If it reports an error, replace the memory modules immediately.

You can also view system information and error logs in the System Diagnostics window.

 **NOTE:** An external keyboard (purchased separately) may be connected to the USB port to perform these steps.

To start System Diagnostics:

1. Turn on or restart the Slate. While the “Press the (-) key for Startup Menu” message is displayed in the lower-left corner of the screen, press the Volume down button (-) repeatedly. When the Startup Menu is displayed, press the Volume down button (-).
2. Tap the diagnostic test you want to run, and then follow the on-screen instructions.

 **NOTE:** If you need to stop a diagnostics test while it is running, press **esc** on an external keyboard.

A Traveling with the Slate

For best results, follow these traveling and shipping tips:

- Prepare the Slate for traveling or shipping:


- Back up your information.
- Remove all discs and all external media cards, such as digital cards.

⚠ CAUTION: To reduce the risk of damage to the Slate, damage to a drive, or loss of information, remove the media from a drive before removing the drive from a drive bay and before shipping, storing, or traveling with a drive.

- Turn off and then disconnect all external devices.
 - Shut down the Slate.
- Take along a backup of your information. Keep the backup separate from the Slate.
 - When traveling by air, carry the Slate as hand luggage; do not check it in with the rest of your bags.


⚠ CAUTION: Avoid exposing a drive to magnetic fields. Security devices with magnetic fields include airport walk-through devices and security wands. Airport conveyer belts and similar security devices that check carry-on baggage use X-rays instead of magnetism and do not damage drives.

- In-flight Slate use is at the discretion of the airline. If you plan to use the Slate during a flight, check with the airline in advance.
- If you are shipping the Slate, use suitable protective packaging and label the package "FRAGILE."
- If the Slate has a wireless device or an HP Mobile Broadband Module installed, such as an 802.11b/g device, a Global System for Mobile Communications (GSM) device, or a General Packet Radio Service (GPRS) device, the use of these devices may be restricted in some environments. Such restrictions may apply onboard aircraft, in hospitals, near explosives, and in hazardous locations. If you are uncertain of the policy that applies to the use of a particular device, ask for authorization to use it before you turn it on.
- If you are traveling internationally, follow these suggestions:
 - Check the computer-related customs regulations for each country or region on your itinerary.
 - Check the power cord and adapter requirements for each location in which you plan to use the Slate. Voltage, frequency, and plug configurations vary.


 **WARNING!** To reduce the risk of electric shock, fire, or damage to the equipment, do not attempt to power the Slate with a voltage converter kit sold for appliances.

B Troubleshooting resources

- Access Web site links and additional information about the Slate through Help and Support. Tap **Start**, and then tap **Help and Support**.


 **NOTE:** Some checkup and repair tools require an Internet connection. HP also provides additional tools that do not require an Internet connection.

- Contact HP Customer Support at <http://www.hp.com/go/contactHP>.

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

Choose from the following types of support:

- Chat online with an HP technician.

 **NOTE:** When chat is not available in a particular language, it is available in English.

- Email HP Customer Support.
- Find HP Customer Support worldwide telephone numbers.
- Locate an HP service center.

C Electrostatic discharge

Electrostatic discharge is the release of static electricity when two objects come into contact—for example, the shock you receive when you walk across the carpet and touch a metal door knob.

A discharge of static electricity from fingers or other electrostatic conductors may damage electronic components. To prevent damage to the Slate, damage to a drive, or loss of information, observe these precautions:

- If removal or installation instructions direct you to unplug the Slate, unplug it after being properly grounded and before removing a cover.
- Keep components in their electrostatic-safe containers until you are ready to install them.
- Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- Use nonmagnetic tools.
- Before handling components, discharge static electricity by touching an unpainted metal surface of the component.
- If you remove a component, place it in an electrostatic-safe container.

If you need more information about static electricity or assistance with installation, contact HP Customer Support.

D Specifications


Input power


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

The Slate 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 Slate can be powered from a standalone DC power source, it should be powered only with an HP Slate 30W AC adapter or a DC power source supplied and approved by HP for use with this Slate.

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

Input Power	Rating
Operating voltage and current	19.0 V dc @ 1.58 A - 30W

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

 **NOTE:** The operating voltage and current can be found on the system regulatory label, located inside the label tray on the right edge of the Slate.

Operating environment

Factor	Metric	U.S.
Temperature		
Operating	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	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating	-15 m to 12,192 m	-50 ft to 40,000 ft

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