



User Guide

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First Edition: October 2012

Document Part Number: 698485-001

Product notice

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

To obtain the latest information in this guide, contact support. For U.S. support, go to <http://www.hp.com/go/contactHP>. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.

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

Safety warning notice


 **WARNING!** To reduce the possibility of heat-related injuries or of overheating the tablet, do not place the tablet directly on your lap or obstruct the tablet air vents. Use the tablet only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The tablet and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

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1 Welcome

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

- Take a minute to browse the printed *Windows 8 Basics* guide to explore the new Windows® features.
- **Connect to the Internet**—Set up your wireless network so that you can connect to the Internet. For more information, see [Connecting to a network on page 13](#).
- **Update your antivirus software**—Protect your tablet from damage caused by viruses. The software is preinstalled on the table. For more information, see [Using antivirus software on page 38](#).
- **Get to know your tablet**—Learn about your tablet features. Refer to [Getting to know your tablet on page 5](#) and [Navigating using touch gestures on page 19](#) for additional information.
- **Find installed software**—Access a list of the software preinstalled on the tablet:

On the Start screen, swipe from the top of the touch screen to display the App commands, and then tap the **All apps** icon. For details about using the software included with the tablet, see the software manufacturer's instructions, which may be provided with the software or on the manufacturer's website.

- Back up your hard drive by creating a recovery flash drive. See [Backup and recovery on page 43](#).

Finding information

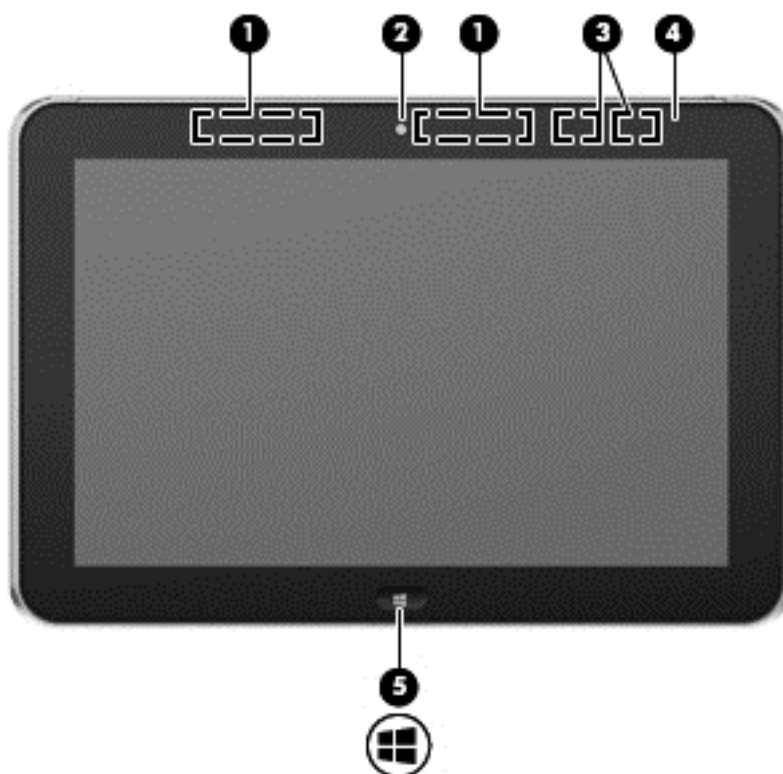
The tablet comes with several resources to help you perform various tasks.

Resources	For information about
<i>Setup Instructions</i> poster	<ul style="list-style-type: none">• How to set up the tablet• Help to identify tablet components
<i>Windows 8 Basics</i> guide	Overview of using and navigating with Windows® 8.
HP Support Assistant	<ul style="list-style-type: none">• Operating system information• Software, driver, and BIOS updates• Troubleshooting tools• How to access support
To access HP Support Assistant on the Start screen, select the HP Support Assistant app.	
To obtain the latest information in this guide, contact support. For U.S. support, go to http://www.hp.com/go/contactHP . For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html .	
<i>Regulatory, Safety, and Environmental Notices</i>	<ul style="list-style-type: none">• Regulatory and safety information• Battery disposal information
To access the user guides, select the HP Support Assistant app on the Start screen, select My computer , and then select User guides .	
<i>Safety & Comfort Guide</i>	<ul style="list-style-type: none">• Proper workstation setup, posture, health, and work habits• Electrical and mechanical safety information
To access the user guides, select the HP Support Assistant app on the Start screen, select My computer , and then select User guides .	
– or –	
Go to http://www.hp.com/ergo .	
<i>Worldwide Telephone Numbers</i> booklet	HP support telephone numbers
This booklet is provided with your tablet.	
HP website	<ul style="list-style-type: none">• Support information• Ordering parts and finding additional help• Accessories available for the device
To obtain the latest information in this guide, contact support. For U.S. support, go to http://www.hp.com/go/contactHP . For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html .	

Resources	For information about
<p><i>Limited Warranty*</i></p> <p>To access this guide, select the HP Support Assistant app on the Start screen, select My computer, and then select Warranty and services.</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 tablet 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 service label), name, and postal address.</p> <p>IMPORTANT: Do NOT return your HP product to the addresses above. For U.S. support, go to http://www.hp.com/go/contactHP. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.</p>	

2 Getting to know your tablet

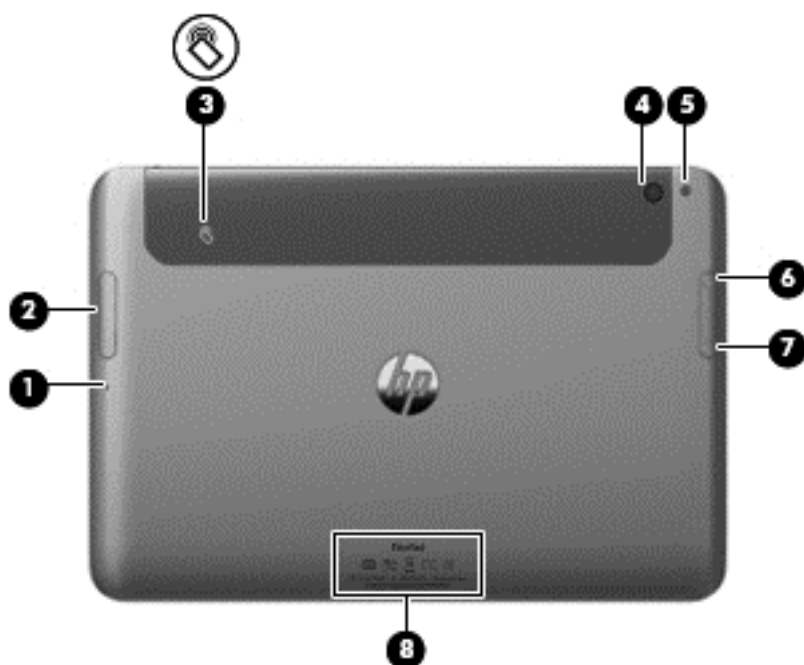
Display







Component		Description
(1)	WLAN antennas (2)*	Send and receive wireless signals to communicate with wireless local area networks (WLAN).
(2)	Front webcam	Records video and captures still photographs. Swipe from the top of the touch screen to display the charms, tap Search , and then tap the search box. In the search box, type <i>you</i> , and then select YouCam .
(3)	WWAN antennas (2)* (select models only)	Send and receive wireless signals to communicate with wireless wide area networks (WWAN).
(4)	Internal microphone	Records sound.




Component	Description
(5) Windows logo key	Displays the Start screen.
<p>*The antennas are not visible on the outside of the tablet. For optimal transmission, keep the areas immediately around the antennas free from obstructions. To see wireless regulatory notices, see the section of the <i>Regulatory, Safety, and Environmental Notices</i> that applies to your country or region. To access the user guides, select the HP Support Assistant app on the Start screen, select My computer, and then select User guides.</p>	

Rear

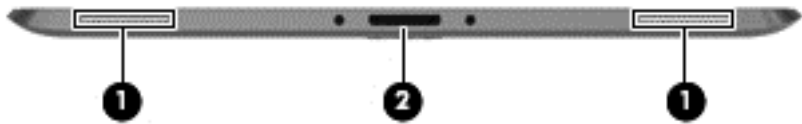


Component	Description
(1) Micro SD Card Reader/Micro SIM slot access hole	Allows you to insert a paper clip to open the tray to insert or remove a micro SD card or micro SIM module.
(2)  Micro SD Card Reader/Micro SIM slot (select models only)  SIM	Supports a micro SDHC memory card or an optional wireless micro subscriber identity module (SIM):
(3) Near Field Communication (NFC) antenna	Sends and receives wireless signals to connect, communicate, and transfer data with Near Field Communication (NFC)-compatible devices. NFC software is not included and is sold separately.
(4) Rear webcam	Records video, captures still photographs, and allows video conferences and online chat by means of streaming video. To use the webcam, type c , and then select CyberLink YouCam .
(5) Webcam light (rear)	Provides flash lighting for the camera.
(6)  Volume up button	To increase speaker volume, press the + edge of the button.
(7)  Volume down button	To decrease speaker volume, press the - edge of the button.
(8) System information	Displays regulatory and wireless certification information. See Labels on page 52 .



Component		Description
(1)	 Audio-out (headphone) jack/Audio-in (microphone) jack	<p>Produces sound when connected to optional powered stereo speakers, headphones, earbuds, a headset, or television audio. Also connects an optional headset microphone.</p> <p>WARNING! To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the <i>Regulatory, Safety, and Environmental Notices</i>. To access the user guides, tap the HP Support Assistant app on the Start screen, tap My computer, and then tap User guides.</p> <p>NOTE: When a device is connected to the jack, the tablet speakers are disabled.</p> <p>NOTE: Be sure that the device cable has a 4-conductor connector that supports both audio-out (headphone) and audio-in (microphone).</p>
(2)	Autorotate lock switch	When the tablet is on, slide the power switch to the lock position to lock the autorotate feature of the display.
(3)	 Integrated microphone holes (2)	Record sound.
(4)	 Power button	<ul style="list-style-type: none">When the tablet is off, press the button to turn on the tablet.When the tablet is on, press the button briefly to initiate Sleep.When the tablet is in the Sleep state, press the button briefly to exit Sleep. <p>CAUTION: Pressing and holding down the power button will result in the loss of unsaved information.</p> <p>If the tablet has stopped responding and Windows® shutdown procedures are ineffective, press and hold the power button for at least 5 seconds to turn off the tablet.</p> <p>Swipe from the right edge of the touch screen to display the charms, tap Search, and then tap the search box. In the search box, type <code>power</code>, select Settings, and then select Power Options, or see Power management on page 29.</p>

Bottom



Component		Description
(1)	Speakers (2)	Produce sound.
(2)	Docking connector	Connects an AC adapter or an optional docking device.

Changing your tablet's settings

You can change view and screen brightness.

Changing your tablet's view

Your tablet's orientation, or view, changes automatically from landscape to portrait view, or from portrait to landscape view.

1. To change the view of your tablet from landscape view to portrait view:
Hold the tablet vertically, and then turn it 90 degrees to the right (in a clockwise direction).
2. To change the view of your tablet from portrait view to landscape view:
Hold the tablet vertically, and then turn it 90 degrees to the left (in a counter-clockwise direction).

Adjusting your tablet's autorotate lock

To turn on your tablet's autorotate lock:

1. Swipe from the right edge of the touch screen to display the charms, and then tap **Settings**.
2. Tap the screen icon to lock your current tablet screen in place and to prevent rotation. The icon displays a lock symbol when the autorotate lock is active.

– or –

Slide the autorotate lock switch on the top edge of the tablet to the lock position.

To turn off your tablet's autorotate lock:

1. Swipe from the right edge of the touch screen to display the charms, and then tap **Settings**.
2. Tap the **Screen** icon at the bottom right, and then tap the autorotate lock icon again.

– or –

Slide the autorotate lock switch on the top edge of the tablet again.

Adjusting your tablet's screen brightness

To adjust the screen brightness:

1. Swipe from the right edge of the touch screen to display the charms, and then tap **Settings**.
2. Tap the **Screen** icon at the bottom right. A vertical slider displays that controls the screen brightness.



NOTE: On the Windows desktop, you can also tap the **Power Meter** icon in the notification area at the far right of the taskbar, tap **Adjust screen brightness**, and then move the slider next to **Screen brightness** at the bottom of the screen.

Finding your hardware and software information

Locating hardware

To find out what hardware is installed on your tablet:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap the search box.
2. In the search box, type **c**, and then select **Control Panel**.
3. Select **System and Security**, and then in the System area, click **Device Manager**.

A list displays all the devices installed on your tablet.

Locating software

- ▲ To find out what software is installed on your tablet, swipe from the top of the touch screen to display the App commands, and then select the **All apps** icon.

Updating the software installed on the tablet

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

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

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

3 Connecting to a network

Your tablet can travel with you wherever you go. But even at home, you can explore the globe and access information from millions of websites using your tablet and a wired or wireless network connection. This chapter will help you get connected to that world.

Connecting to a wireless network

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

- **Wireless local area network (WLAN) device**—Connects the tablet to wireless local area networks (commonly referred to as Wi-Fi networks, wireless LANs, or WLANs) in corporate offices, your home, and public places such as airports, restaurants, coffee shops, hotels, and universities. In a WLAN, the mobile wireless device in your tablet communicates with a wireless router or a wireless access point.
- **Bluetooth device**—Creates a personal area network (PAN) to connect to other Bluetooth-enabled devices such as computers, phones, printers, headsets, speakers, and cameras. In a PAN, each device communicates directly with other devices, and devices must be relatively close together—typically within 10 meters (approximately 33 feet) of each other.

For more information about wireless technology, see the information and website links provided in HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Using the wireless controls

You can control the wireless devices in your tablet using these features:

- Wireless button, wireless switch, or wireless key (referred to in this chapter as the wireless button)
- Operating system controls

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:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap the search box.
2. In the search box, type `network and sharing`, select **Settings**, and then select **Network and Sharing Center**.

For more information, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Using a WLAN

With a WLAN device, you can access a wireless local area network (WLAN), which is composed of other computers and accessories that are linked by a wireless router or a wireless access point.



NOTE: The terms *wireless router* and *wireless access point* are often used interchangeably.

- A large-scale WLAN, such as a corporate or public WLAN, typically uses wireless access points that can accommodate a large number of computers and accessories and can separate critical network functions.
- A home or small office WLAN typically uses a wireless router, which allows several wireless and wired computers to share an Internet connection, a printer, and files without requiring additional pieces of hardware or software.

To use the WLAN device in your tablet, you must connect to a WLAN infrastructure (provided through a service provider or a public or corporate network).

Using an Internet service provider

When you are setting up Internet access in your home, you must establish an account with an Internet service provider (ISP). To purchase Internet service and a modem, contact a local ISP. The ISP will help set up the modem, install a network cable to connect your wireless tablet to the modem, and test the Internet service.



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

Setting up a WLAN

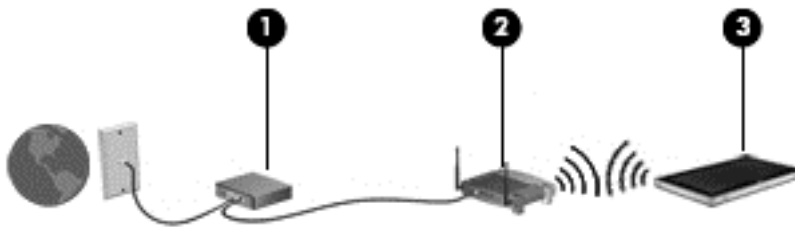
To set up a WLAN and connect to the Internet, you need the following equipment:

- A broadband modem (either DSL or cable) **(1)** and high-speed Internet service purchased from an Internet service provider
- A wireless router **(2)** (purchased separately)
- A wireless tablet **(3)**



NOTE: Some modems have a built-in wireless router. Check with your ISP to determine what type of modem you have.

The illustration below shows an example of a wireless 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.

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

Configuring a wireless router

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



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

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 tablet 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. Take the following precautions to protect your WLAN:

- Use a 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.


- Use wireless encryption.

Wireless encryption uses security settings to encrypt and decrypt data that is transmitted over the network. For more information, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Connecting to a WLAN


To connect to the WLAN, follow these steps:


1. Be sure that the WLAN device is on. If the device is on, the wireless light is on. If the wireless light is off, press the wireless button.

 **NOTE:** On some models, the wireless light is amber when all wireless devices are off.


2. From the Windows desktop, tap and hold the network status icon in the notification area, at the far right of the taskbar.
3. Select your WLAN from the list.
4. Tap **Connect**.

If the WLAN is a security-enabled WLAN, you are prompted to enter a security code. Type the code, and then tap **OK** to complete the connection.

 **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, from the Windows desktop, tap and hold the network status icon, and then select **Open Network and Sharing Center**. Tap **Set up a new connection or network**. A list of options is displayed, allowing you to manually search for and connect to a network or to create a new network connection.

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

 **NOTE:** The functional range (how far your wireless signals travel) depends on WLAN implementation, router manufacturer, and interference from other electronic devices or structural barriers such as walls and floors.

Using GPS (select models only)

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

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

Using Bluetooth wireless devices

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

- Computers (desktop, notebook, PDA)
- Phones (cellular, cordless, smart phone)
- Imaging devices (printer, camera)

- Audio devices (headset, speakers)
- Mouse

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

4 Navigating using touch gestures

Your tablet allows navigation using touch gestures on the touch screen.

Review the *Windows 8 Basics* guide included with your tablet. The guide provides information on common tasks using the touch screen or an optional keyboard.


Using touch screen gestures

You can control items on the touch screen directly with your fingers.

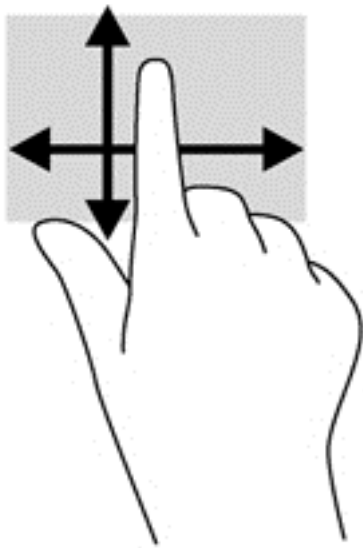
One-finger slide

The one-finger slide is mostly used to pan or scroll through lists and pages, but you can use it for other interactions, too, such as moving an object.

- To scroll across the screen, lightly slide one finger across the screen in the direction you want to move.

 **NOTE:** When many apps are displayed on the Start screen, you can slide your finger to move the screen left or right.


- To drag, press and hold an object, and then drag the object to move it.



Tapping

To make an on-screen selection, use the tap function.

- Use one finger to tap an object on the screen to make a selection. Double-tap an item to open it.

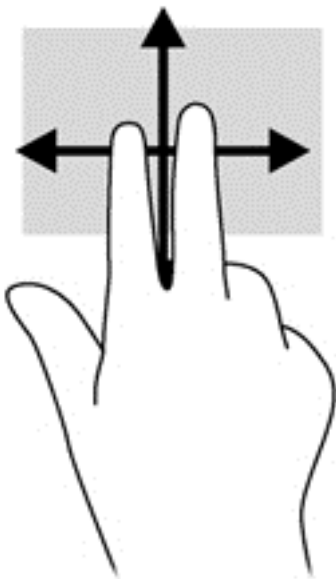
 **NOTE:** Press and hold your finger on an object to open a help screen that provides information about the object.



Scrolling

Scrolling is useful for moving the pointer up, down, left, or right on a page or image.

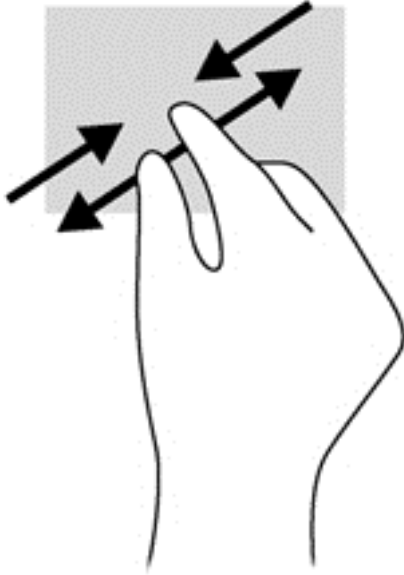
- Place two fingers on the screen and then drag them in an up, down, left, or right motion.



Pinching/stretching

Pinching and stretching allows you to zoom out or in on images or text.


- Zoom in by placing two fingers together on the display and then move your fingers apart.
- Zoom out by placing two fingers apart on the display and then move your fingers together.

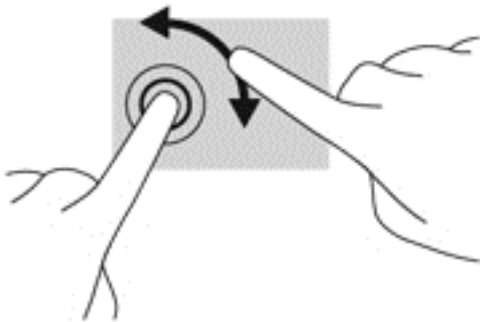


Rotating (select models only)

Rotating allows you to turn items such as photos.

- Anchor the forefinger of your left hand on the object you want to rotate. Using your right hand, slide your forefinger around in a sweeping motion from 12 o'clock to 3 o'clock. To reverse the rotation, move your forefinger from 3 o'clock to 12 o'clock.

 **NOTE:** Rotate is intended for specific apps where you can manipulate an object or image. Rotate may not be functional for all apps.



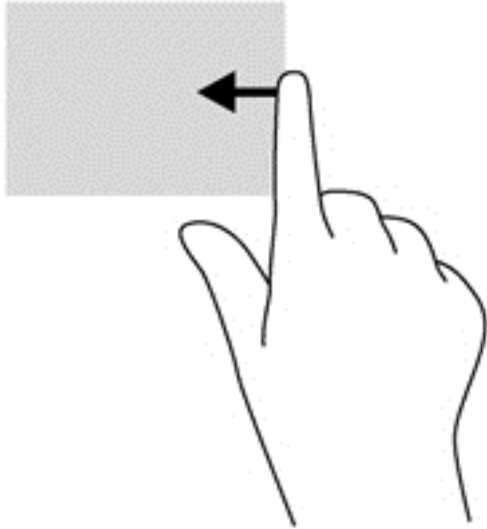
Edge swipes

With edge swipes you can perform tasks such as changing settings and finding or using apps.

Right-edge swipe

The right-edge swipe reveals the charms, which let you search, share, start apps, access devices, or change settings.

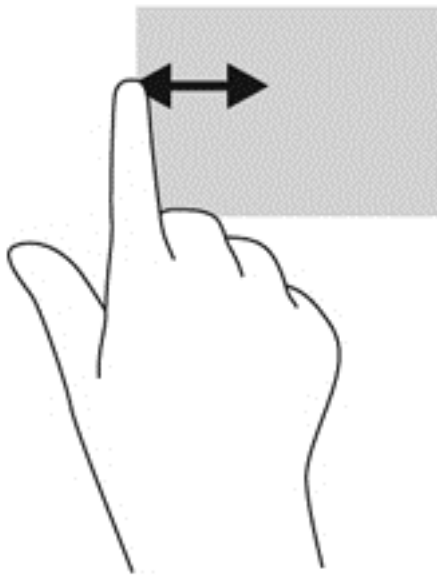
- Gently swipe your finger inward from the right edge of the display bezel onto the screen to display the charms.



Left-edge swipe

The left-edge swipe reveals your open apps so that you can switch to them quickly.

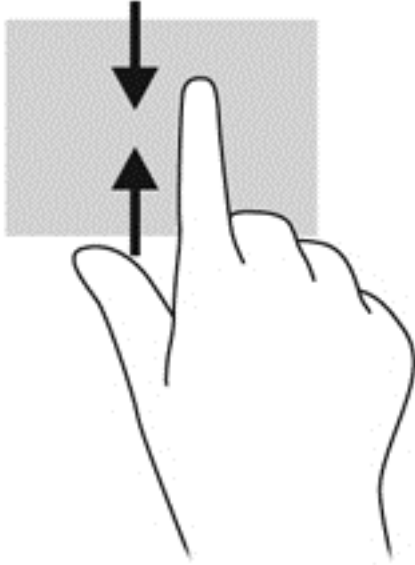
- Gently swipe your finger inward from the left edge of the display bezel to switch between apps. Without lifting your finger, swipe back toward the left edge to display all open apps.



Top-edge swipe and bottom-edge swipe

The top-edge swipe or bottom-edge swipe allows you to open a list of apps available on your tablet.

1. Gently swipe finger from the top edge or the bottom edge of the display bezel onto the screen.
2. Tap **All apps** to view available apps.



Using the on-screen keyboard

You may want to enter data into a data field. This may be required when you set up a wireless network configuration or a weather reporting location, or when you access user accounts on Internet sites. The tablet has an on-screen keyboard that is displayed when you need to enter such information into data fields.

1. To display the keyboard, tap in the first data field. The keyboard is displayed.

– or –

On the Windows desktop, tap the keyboard icon at the far right of the notification area.

2. Tap each character, continuing until you have spelled out the name or word that you are entering into the data field.



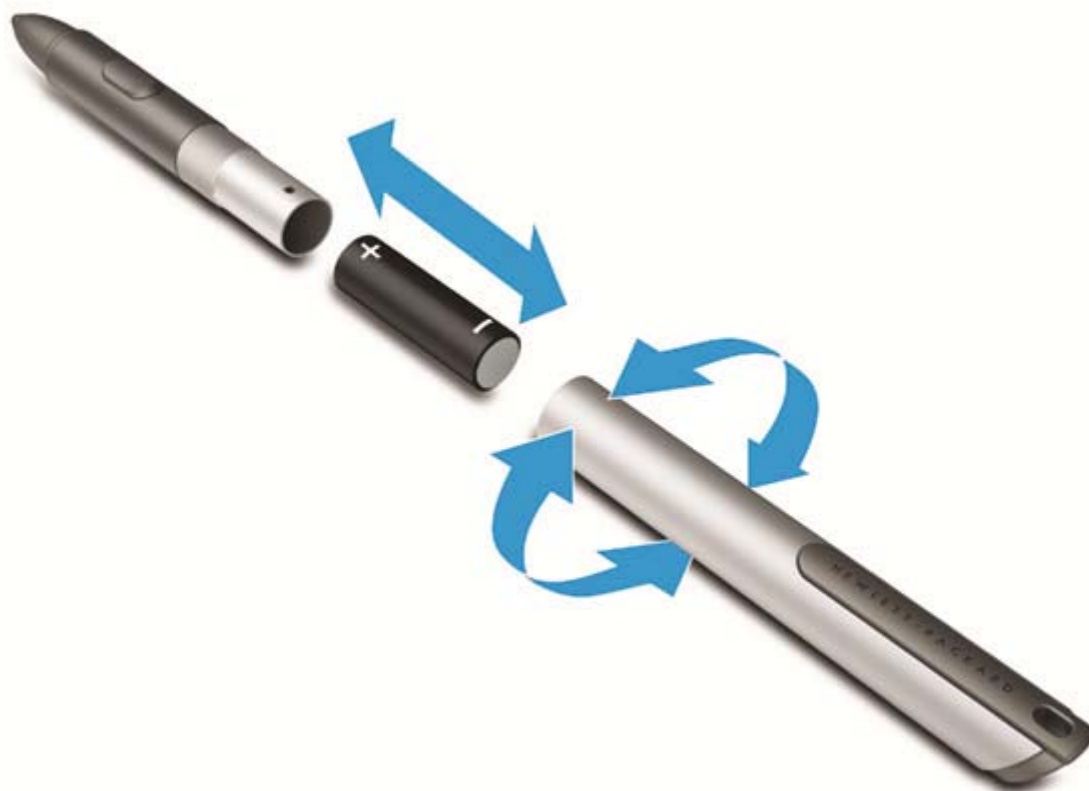
NOTE: Suggested words may be displayed at the top of the keyboard. If an appropriate word is displayed, tap it to select it.

3. Tap **enter** on the keyboard.

To change settings for the on-screen keyboard:

1. 'Swipe from the right side of the touch screen to display the charms, and then tap **Settings**.
2. Tap **Change PC settings**, and then tap **General**.
3. Under Touch keyboard, you can enable or disable any of the following settings:
 - Show text suggestions as I type
 - Add a space after I choose a text suggestion
 - Add a period after I double-tap the Spacebar
 - Capitalize the first letter of each sentence
 - Use all uppercase letters when I double-tap Shift key
 - Play key sounds as I type
 - Make the standard keyboard layout available

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.
3. Replace the cap on the pen.
4. Turn the cap in a clockwise direction to tighten it.

The digital pen is now ready to use with your HP tablet. 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.

To calibrate the pen and change pen settings, such as pen sensitivity, swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type **c**, and then tap **Control Panel**. Tap **Hardware and Sound**, tap **Pen and Touch**, and then follow the on-screen instructions.



NOTE: For regulatory and safety information, refer to the *Regulatory, Safety, and Environmental Notices* on the HP tablet. To access this guide, tap the **HP Support Assistant** app on the Start screen, tap **My Computer**, and then select **User guides**.

5 Multimedia

Your tablet may include the following:


- Integrated speaker(s)
- Integrated microphone(s)
- Integrated webcam(s)
- Preinstalled multimedia software
- Multimedia buttons or keys


Audio

On your HP tablet, you can download and listen to music, stream audio content from the web (including radio), record audio, or mix audio and video to create multimedia. To enhance your listening enjoyment, attach external audio devices such as speakers or headphones.

Adjusting the volume

You can adjust the volume using the volume buttons.

 **WARNING!** To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the *Regulatory, Safety and Environmental Notices*. To access the user guides, select the **HP Support Assistant** app on the Start screen, select **My computer**, and then select **User guides**.


 **NOTE:** Volume can also be controlled through the operating system and some programs.

 **NOTE:** Refer to the [Getting to know your tablet on page 5](#) section for information on what type of volume controls your tablet has.

Connecting headphones

You can connect wired headphones to the headphone jack on your tablet.

To connect wireless headphones to your tablet, follow the device manufacturer's instructions.

 **WARNING!** To reduce the risk of personal injury, lower the volume setting before putting on headphones, earbuds, or a headset. For additional safety information, see the *Regulatory, Safety and Environmental Notices*.

Checking audio functions on the tablet



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

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

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type **c**, and then select **Control Panel**.
3. Select **Hardware and Sound**, and then select **Sound**.

When the Sound window opens, select the **Sounds** tab. Under **Program Events**, select any sound event, such as a beep or alarm and then tap **Test**. You should hear sound through the speakers or through connected headphones.

To check the recording functions on your tablet, follow these steps:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type **so**, and then select **Sound Recorder**.
3. Tap **Start Recording** and speak into the microphone. Save the file to your Windows desktop.
4. Open a multimedia program and play back the recording.

To confirm or change the audio settings on your tablet:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type **c**, and then select **Control Panel**.
3. Select **Hardware and Sound**, and then select **Sound**.

Webcam (select models only)


Some tablets include two integrated webcams. With the preinstalled software, you can use the webcams to take a photo or record a video. You can preview and save the photo or video recording.

The webcam software enables you to experiment with the following features:


- Capturing and sharing video
- Streaming video with instant message software
- Taking still photos

For details about using the webcam, refer to the help for the app.

6 Power management

 **NOTE:** Your tablet has a power button.

Shutting down the tablet


 **CAUTION:** Unsaved information is lost when the tablet shuts down.

The shutdown command closes all open programs, including the operating system, and then turns off the display and tablet.

Shut down the tablet under any of the following conditions:

- When you are connecting an external hardware device that does not connect to a Universal Serial Bus (USB) port
- When the tablet will be unused and disconnected from external power for an extended period

Although you can turn off the tablet with the power button, the recommended procedure is to use the Windows shutdown command:

 **NOTE:** If the tablet is in the Sleep state or in Hibernation, you must first exit Sleep or Hibernation before shutdown is possible by briefly pressing the power button.

1. Save your work and close all open programs.
2. Swipe from the right edge of the touch screen to display the charms, tap **Settings**, tap the **Power** icon, and then tap **Shut down**.

If the tablet is unresponsive and you are unable to use the preceding shutdown procedure, try the following emergency procedures in the sequence provided:


- Press and hold the power button for at least 5 seconds.
- Disconnect the tablet from external power.


Setting power options

Using power-saving states

Sleep is enabled at the factory.

When Sleep is initiated, the power lights blink and the screen clears. Your work is saved to memory.

 **CAUTION:** To reduce the risk of possible audio and video degradation, loss of audio or video playback functionality, or loss of information, do not initiate Sleep 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 computer functions while the tablet is in the Sleep state.


Initiating and exiting Sleep

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

- Briefly press the power button.
- Swipe from the right edge of the touch screen to display the charms, tap **Settings**, tap the **Power** icon, and then tap **Sleep**.

To exit Sleep, briefly press the power button.

When the tablet exits Sleep, the power lights turn on and the tablet returns to the screen where you stopped working.

 **NOTE:** If you have set a password to be required on wakeup, you must enter your Windows password before the tablet will return to the screen.


Enabling and exiting user-initiated Hibernation



You can enable user-initiated Hibernation and change other power settings and timeouts using Power Options:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `power`, select **Settings**, and then select **Power Options**.
3. In the left pane, tap **Choose what the power button does**.
4. Tap **Change Settings that are currently unavailable**.
5. In the **When I press the power button** area, select **Hibernate**.
6. Tap **Save changes**.

To exit Hibernation, briefly press the power button. The power lights turn on and your work returns to the screen where you stopped working.

 **NOTE:** If you have set a password to be required on wakeup, you must enter your Windows password before your work will return to the screen.

Using the power meter and power settings

The power meter is located on the Windows desktop. The power meter allows you to quickly access power settings and view the remaining battery charge.

- To display the percentage of remaining battery charge and the current power plan, on the Windows desktop, point over the power meter icon.
- To use Power Options, or to change the power plan, tap the power meter icon, and then select an item from the list. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type `power`, select **Settings**, and then select **Power Options**.

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

Setting password protection on wakeup

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


1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `power`, select **Settings**, and then select **Power Options**.
3. In the left pane, tap **Require a password on wakeup**.
4. Tap **Change Settings that are currently unavailable**.
5. 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.

6. Tap **Save changes**.

Using battery power

 **WARNING!** To reduce potential safety issues, use only the battery provided with the tablet, a replacement battery provided by HP, or a compatible battery purchased from HP.

The tablet runs on battery power whenever it is not plugged into external AC power. Tablet battery life varies, depending on power management settings, running programs, display brightness, external devices connected to the tablet, and other factors. Keeping the battery in the tablet whenever the tablet is plugged into AC power charges the battery and also protects your work in case of a power outage. If the tablet contains a charged battery and is running on external AC power, the tablet automatically switches to battery power if the AC adapter is disconnected on the tablet or an AC power loss occurs.



NOTE: When you disconnect AC power, the display brightness is automatically decreased to save battery life. For more information, see [Using external AC power on page 34](#).

Factory-sealed battery

To monitor the status of your battery, or if the battery is no longer holding a charge, run Battery Check in HP Support Assistant. To access battery information, select the **HP Support Assistant** app on the

Start screen, and then select **Battery and performance**. If Battery Check indicates that your battery should be replaced, contact support.

Finding additional battery information

HP Support Assistant provides the tools and information about the battery. To access battery information, select the **HP Support Assistant** app on the Start screen, and then select **Battery and performance**.

- Battery Check tool to test battery performance
- Information on calibration, power management, and proper care and storage to maximize battery life
- Information on battery types, specifications, life cycles, and capacity

To access battery information:

- ▲ To access battery information, select the **HP Support Assistant** app on the Start screen, and then select **Battery and performance**.

Using Battery Check

HP Support Assistant provides information on the status of the battery installed in the tablet.

To run Battery Check:

1. Connect the AC adapter to the tablet.



NOTE: The tablet must be connected to external power for Battery Check to work properly.

2. To access battery information, select the **HP Support Assistant** app on the Start screen, and then select **Battery and performance**.

Battery Check examines the battery and its cells to see if they are functioning properly, and then reports the results of the examination.

Displaying the remaining battery charge

- ▲ Tap and hold the power meter icon on the Windows desktop in the notification area, at the far right of the taskbar.

Maximizing battery discharge time

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

Tips for maximizing battery discharge time:

- Lower the brightness on the display.
- Select 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. Preferences set using Power Options do not affect lights.

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `power`, select **Settings**, and then select **Power Options**.

Identifying low battery levels

When a battery that is the sole power source for the tablet reaches a low or critical battery level, the following behavior occurs:

- The battery light (select models only) indicates a low or critical battery level.
- or –
- The power meter icon in the notification area shows a low or critical battery notification.



NOTE: For additional information about the power meter, see [Using the power meter and power settings on page 31](#).

If the tablet is on or in the Sleep state, the tablet remains briefly in the Sleep state, 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:
 - AC adapter
 - Optional docking or expansion device
 - Optional power adapter purchased as an accessory from HP

Resolving a low battery level when no power source is available


To resolve a low battery level when no power source is available, save your work and shut down the tablet.


Conserving battery power


- Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type `power`, select **Settings**, and then select **Power Options**.
- Select low power-use settings through Power Options.
- Turn off wireless and 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 shut down the tablet.

Using external AC power

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

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

 **NOTE:** For information on connecting to AC power, see the *Setup Instructions* poster provided in the tablet box.

External AC power is supplied through an approved AC adapter or an optional docking or expansion device.

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

- When charging or calibrating a battery
- When installing or modifying system software
- When writing information to a CD, a DVD, or a BD (select models only)
- When running Disk Defragmenter
- When performing a backup or recovery

When you connect the tablet to external AC power, the following events occur:

- The battery begins to charge.
- If the tablet is turned on, the power meter icon in the notification area changes appearance.

When you disconnect external AC power, the following events occur:

- The tablet switches to battery power.
- The display brightness is automatically decreased to save battery life.

7 External cards and devices

Using digital storage cards (select models only)

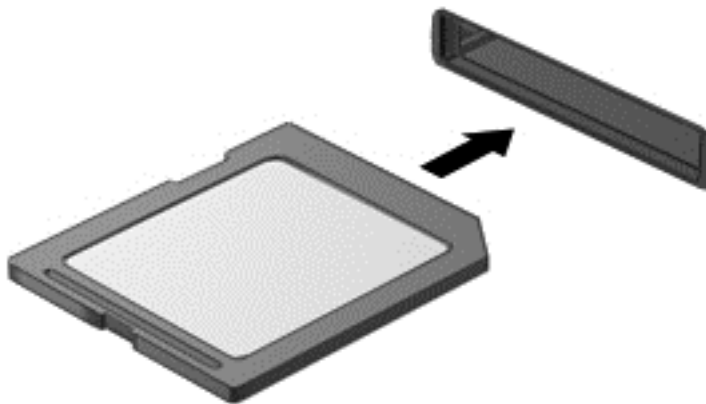
Optional digital cards provide secure data storage and convenient data sharing. These cards are often used with digital media-equipped cameras and PDAs as well as with other computers.

To determine the digital card formats that are supported on your tablet, see the [Getting to know your tablet on page 5](#) section.

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 tablet.
2. Insert the card into the digital storage slot, and then press in on the card until it is firmly seated.

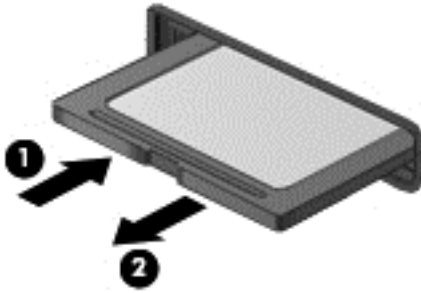


You will hear a sound when the device has been detected, and a menu of options may be displayed.

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 on the Windows desktop in the notification area, at the far right of the taskbar. Then follow the on-screen instructions.
3. Insert a paper clip in the Micro SD card reader/Micro SIM access hole.
4. When the tray opens, 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.


8 Security

Protecting the tablet

Standard security features provided by the Windows operating system and the HP BIOS Settings utility can protect your personal settings and data from a variety of risks.

 **NOTE:** Security solutions are designed to act as deterrents. These deterrents may not prevent a product from being mishandled or stolen.

 **NOTE:** Before you send your tablet for service, back up and delete confidential files, and remove all password settings.

 **NOTE:** Some features listed in this chapter may not be available on your tablet.

Tablet risk	Security feature
Unauthorized use of the tablet	HP ProtectTools Security Manager, in combination with a password or other authentication credential
Unauthorized access to HP BIOS Settings and other system identification information	BIOS administrator password in HP BIOS Settings
Unauthorized startup from an optional external optical drive, diskette drive, or internal network adapter	Boot options feature in HP BIOS Settings
Unauthorized access to a Windows user account	Windows user password
Unauthorized access to data	<ul style="list-style-type: none">• Firewall software• Windows updates

Using passwords

A password is a group of characters that you choose to secure your tablet information. Several types of passwords can be set, depending on how you want to control access to your information. Passwords can be set in Windows or in HP BIOS Settings that is preinstalled on the tablet.

- Setup passwords are set in HP BIOS Settings and are managed by the system BIOS.
- Windows passwords are set only in the Windows operating system.

You can use the same password for a HP BIOS Settings feature and for a Windows security feature. You can also use the same password for more than one HP BIOS Settings feature.

Use the following tips for creating and saving passwords:

- When creating passwords, follow requirements set by the program.
- Write down your passwords and store them in a secure place away from the tablet.
- Do not store passwords in a file on the tablet.

The following tables list commonly used Windows and BIOS administrator passwords and describe their functions.

Setting passwords in Windows

Password	Function
Administrator password*	Protects access to a Windows administrator-level account. NOTE: This password cannot be used to access HP BIOS Settings contents.
User password*	Protects access to a Windows user account.
*For information about setting a Windows administrator password or a Windows user password, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the HP Support Assistant app.	

Setting passwords in HP BIOS Settings

Password	Function
BIOS administrator password*	Protects access to HP BIOS Settings.
*For details on setting passwords in HP BIOS Settings, see BIOS Password on page 48 .	

Using antivirus software

When you use the tablet to access email, a network, or the Internet, you potentially expose it to computer viruses. Computer viruses can disable the operating system, programs, or utilities, or cause them to function abnormally.

Antivirus software can detect most viruses, destroy them, and, in most cases, repair any damage they have caused. To provide ongoing protection against newly discovered viruses, antivirus software must be kept up to date.

An antivirus program may be preinstalled on your tablet. It is strongly recommended that you use the antivirus program of your choice in order to fully protect your tablet.

For more information about viruses, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Using firewall software


Firewalls are designed to prevent unauthorized access to a system or network. A firewall can be a software program you install on your tablet and/or network, or it can be a solution made up 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.

Your tablet or networking equipment may already have a firewall installed. If not, firewall software solutions are available.

 **NOTE:** Under some circumstances a firewall can block access to Internet games, interfere with printer or file sharing on a network, or block authorized email attachments. To temporarily resolve the problem, disable the firewall, perform the task that you want to perform, and then reenabling the firewall. To permanently resolve the problem, reconfigure the firewall.

Installing critical security updates

 **CAUTION:** Microsoft® sends out alerts regarding critical updates. To protect the tablet from security breaches and computer viruses, install all critical updates from Microsoft as soon as you receive an alert.

Updates to the operating system and other software may have become available after the tablet left the factory. To be sure that all available updates are installed on the tablet, observe these guidelines:

- Run Windows Update as soon as possible after you set up your tablet.
- 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 HP Support Assistant.

Using HP ProtectTools Security Manager (select models only)

HP ProtectTools Security Manager software is preinstalled on select models. This software can be accessed through Windows Control Panel. It provides security features that help protect against unauthorized access to the computer, networks, and critical data. For more information, see the HP ProtectTools software Help.


9 Maintenance

Cleaning your tablet

Cleaning products

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

- 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 tablet.

Fibrous materials, such as paper towels, which can scratch the tablet. 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 tablet.

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

Turn off the tablet.

Disconnect external power.

Disconnect all powered external devices.

 **CAUTION:** Do not spray cleaning agents or liquids directly on any tablet 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 tablet, use a circular motion to aid in removing dirt and debris.

Updating programs and drivers

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

Using SoftPak Download Manager

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

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

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

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

To download SoftPaks:

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `softpak`, and then select HP SoftPak Download Manager. Follow the instructions to download SoftPaks.



NOTE: If prompted by User Account Control, tap **Yes**.

10 Backup and recovery



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

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `restore`, tap **Settings**, and then select from the list of displayed options.



NOTE: This guide describes an overview of backing up, restoring and recovering options. For more details about the tools provided, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

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 tablet. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. For more information, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Backing up your information

Recovery after a system failure is as good as your most recent backup. You should create system repair media and your initial backup immediately after initial system 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 media (select models only) are used to start up (boot) the tablet 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.

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `backup`, tap **Settings**, and then select **Save backup copies of your files with File History**.

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

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.

To create a backup using Backup and Restore:



NOTE: Be sure that the tablet 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 tablet.

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `backup`, tap **Settings**, and then select from the list of displayed options.
3. Follow the on-screen instructions to set up your backup, create a system image (select models only), or create system repair media (select models only).

Performing a system recovery

In case of system failure or instability, the tablet 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 tablet and you cannot use the system repair media you previously created (select models only), contact support.

Using the Windows recovery tools

To recover information you previously backed up:

- ▲ To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

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

 **CAUTION:** Some Startup Repair options will completely erase and reformat the hard drive. All files you have created and any software installed on the tablet 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.

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


Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type **e**, and then tap **File Explorer**.

– or –

Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type **c**, and then select **Computer**.


 **NOTE:** If the Windows partition and the HP Recovery partition are not listed, contact support.


3. If the Windows partition and the HP Recovery partition are listed, restart the tablet. After Windows has loaded, press and hold the **shift** key while tapping **Restart**.
4. Select **Startup Repair**.
5. Follow the on-screen instructions.


 **NOTE:** For additional information on recovering information using the Windows tools, access HP Support Assistant. To access HP Support Assistant, on the Start screen, select the **HP Support Assistant** app.

Using Windows Refresh for quick and easy recovery

When your tablet is not working properly and you need to regain system stability, the Windows Refresh option allows you to start fresh and keep what is important to you.

 **IMPORTANT:** Refresh removes any traditional applications that were not originally installed on the system at the factory.

 **NOTE:** During Refresh, a list of removed traditional applications will be saved so that you have a quick way to see what you might need to reinstall. See HP Support Assistant for instructions on reinstalling traditional applications. To access HP Support Assistant from the start screen, select the **HP Support Assistant** app.

 **NOTE:** You may be prompted for your permission or password when using Refresh. See HP Support Assistant for more information. .

To start Refresh:

1. Swipe from the right edge of the touch screen to display the charms, and then tap **Settings**.
2. Tap **Change PC settings** in the bottom-right corner of the screen, and then select **General** from the PC settings screen.
3. Under **Refresh your PC without affecting your files**, select **Get started**, and then follow the on-screen instructions.

Remove everything and reinstall Windows

Sometimes you want to perform detailed reformatting of your tablet, or you want to remove personal information before you give away or recycle your tablet. The process described in this section provides a speedy, simple way to return the tablet to its original state. This option removes all personal data, apps, and settings from your tablet, and reinstalls Windows.



IMPORTANT: This option does not provide backups of your information. Before using this option, back up any personal information you wish to retain.

You can initiate this option from the Start screen.

To use the Start screen:

1. Swipe from the right edge of the touch screen to display the charms, and then tap **Settings**.
2. Tap **Change PC settings** in the bottom-right corner of the screen, and then select **General** from the PC settings screen.
3. Under **Remove everything and reinstall Windows**, select **Get started**, and follow the on-screen instructions.

Using HP Software Setup

HP Software Setup can be used to reinstall drivers or select software that has been corrupted or deleted from the system.


1. Swipe from the right edge of the touch screen, tap **Search**, and then tap in the search box. In the search box, type `HP Software Setup`, and then select **Apps**.
2. Open HP Software Setup.
3. Follow the on-screen directions to reinstall drivers or select software.

11 HP BIOS Settings



Using HP BIOS Settings

HP BIOS Settings controls communication between all the input and output devices on the system (such as disk drives, display, keyboard, mouse, and printer). HP BIOS Settings includes settings for the types of devices installed, the startup sequence of the tablet, and the amount of system and extended memory.

 **NOTE:** Use extreme care when making changes in HP BIOS Settings. Errors can prevent the tablet from operating properly.

Starting HP BIOS Settings

To start HP BIOS Settings, follow these steps:

1. Swipe from the right edge of the touch screen, tap **Search**, and then tap in the search box.
2. In the search box, type **c**, tap **Control Panel**, tap **System and Security**, and then tap **HP BIOS Settings**.
3. To make changes if a BIOS password has been set, enter the BIOS password, and then tap **Finish**.
4. To view system settings in read-only mode, tap **Cancel**.

View System Information

The following information is displayed about your tablet:

- Manufacturer
- Product name
- Processor type
- Processor speed
- Total memory size
- BIOS date
- System BIOS version
- Serial number
- Video BIOS revision

- Warranty start date
- SKU number
- System board ID
- Primary battery serial number
- Secondary battery serial number
- Universal unique identifier (UUID)

Boot options

If you have entered the BIOS Administrator password correctly, you can change the following settings:

Item	Description
Boot delay (seconds)	Move the slider to adjust the boot delay time.
Ethernet Boot	Tap on or off .
USB Device Boot	Tap on or off .

▲ Click **Apply** to apply the changes you have made on this page, or click **Cancel** to close the app.

Device configurations

If you have entered the BIOS Administrator password correctly, you can change the following settings:

Item	Description
Shutdown on battery	Tap on or off .
Secure Boot	Tap on or off .

▲ Click **Apply** to apply the changes you have made on this page, or click **Cancel** to close the app.

BIOS Password

You can change the current BIOS password or create a new password if one has not been set.

1. Enter a new password, and then enter it again to confirm it.
2. Click **Apply** to save the password, or click **Cancel** to close the app.

Updating the BIOS

Updated versions of the BIOS may be available on the HP website.

Most BIOS updates on the HP website 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 tablet, you need to know the version of the system BIOS currently installed.

To display BIOS version information (also known as *ROM date* and *System BIOS*), see [Using HP BIOS Settings on page 47](#).

Downloading a BIOS update

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

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

Do not shut down the tablet or initiate Sleep.

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

1. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type *h*, and then select **HP Support Assistant**.
3. In the HP Support Assistant search box, type *maintain*, and then follow the on-screen instructions to identify your tablet and access the BIOS update you want to download.
4. At the download area, follow these steps:
 - a. Identify the BIOS update that is later than the BIOS version currently installed on your tablet. 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 hard drive.
 - b. Follow the on-screen instructions to download your selection to the hard drive.

Make a note of the path to the location on your hard 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 tablet 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. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box.
2. In the search box, type `e`, and then tap **File Explorer**.
3. Double-tap your hard drive designation. The hard drive designation is typically Local Disk (C:).
4. Using the hard drive path you recorded earlier, open the folder on your hard drive that contains the update.
5. Double-tap the file that has an .exe extension (for example, *filename.exe*).

The BIOS installation begins.

6. 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 hard drive.

12 Support

Contacting support

If the information provided in this user guide or HP Support Assistant does not address your questions, you can contact support. For U.S. support, go to <http://www.hp.com/go/contactHP>. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.

Here you can:

- Chat online with an HP technician.



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

- Email support.
- Find support telephone numbers.
- Locate an HP service center.

Labels

The labels etched on the rear and the bottom edge of the tablet provide information you may need when you troubleshoot system problems or travel internationally with the tablet:

- Service label—Provides important information, including the following:

Component	
(1)	Product name
(2)	Serial number
(3)	Part number/Product number
(4)	Warranty period
(5)	Model description

Have this information available when you contact support. The service label is etched on the bottom edge of the tablet.

- Regulatory label—Provides regulatory information about the tablet. The regulatory label is etched on the rear of the tablet.
- Wireless certification label or labels (select models only)—Provide information about optional wireless devices and the approval markings of some of the countries or regions in which the devices have been approved for use. If your tablet model includes one or more wireless devices, one or more certification labels are included with your tablet. You may need this information when traveling internationally. Wireless certification labels are etched on the rear of the tablet.
- SIM (subscriber identity module) label (select models only)—Provides the ICCID (Integrated Circuit Card Identifier) of the SIM. This label is etched on the rear of the tablet.

13 Specifications


Input power


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

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

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

Input Power	Rating
Operating voltage and current	9 Vdc @ 1.11 A – 10W

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



 **NOTE:** The tablet operating voltage and current can be found on the system regulatory label.


Operating environment

Factor	Metric	U.S.
Temperature		
Operating (writing to optical disc)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
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

A Traveling with the tablet

For best results, follow these traveling and shipping tips:

- Prepare the tablet for traveling or shipping:
 - Back up your information.
 - Remove all external media cards, such as digital cards.
-  **CAUTION:** To reduce the risk of damage to the tablet, damage to a drive, or loss of information, remove the media from a drive before shipping, storing, or traveling with a drive.
- Turn off and then disconnect all external devices.
- Shut down the tablet.
- Take along a backup of your information. Keep the backup separate from the tablet.
- When traveling by air, carry the tablet 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 tablet use is at the discretion of the airline. If you plan to use the tablet during a flight, check with the airline in advance.
- If you are shipping the tablet, use suitable protective packaging and label the package “FRAGILE.”
- If the tablet has a wireless device 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 tablet. 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 tablet with a voltage converter kit sold for appliances.

B Troubleshooting

The following sections are included in this appendix:

Troubleshooting resources

- Access website links and additional information about the tablet through HP Support Assistant. Swipe from the right edge of the touch screen to display the charms, tap **Search**, and then tap in the search box. In the search box, type **h**, and then select **HP Support Assistant**.



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

- Contact HP support. For U.S. support, go to <http://www.hp.com/go/contactHP>. For worldwide support, 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 support.
- Find HP support worldwide telephone numbers.
- Locate an HP service center.


Resolving issues

The following sections describe several common issues and solutions.

The tablet is unable to start up

If the tablet does not turn on when you press the power button, the following suggestions may help you determine why the tablet does not start up:

- If the tablet is plugged into an AC outlet, plug another electrical device into the outlet to be sure that the outlet is providing adequate power.

 **NOTE:** Use only the AC adapter provided with the tablet or one approved by HP for this tablet.

- If the tablet is plugged into an external power source other than an AC outlet, plug the tablet into an AC outlet using the AC adapter. Be sure that the power cord and AC adapter connections are secure.

The tablet screen is blank

If the screen is blank but you have not turned off the tablet, the following setting may be the cause:


- The tablet may be in the Sleep state. To exit Sleep, briefly press the power button. Sleep is an energy-saving feature that turns off the display. Sleep can be initiated by the system while the tablet is on but is not in use, or when the tablet has reached a low battery level. To change these and other power settings, tap and hold the **Battery** icon on the Windows desktop in the notification area, at the far right of the taskbar, and then tap **Preferences**.

Software is functioning abnormally

To restart the tablet if the software is unresponsive or responds abnormally, swipe from the right edge of the touch screen to display the charms, tap **Settings**, tap the **Power** icon, and then tap **Shut down**. If you cannot restart the tablet using this procedure, see the next section, [The tablet is on but not responding on page 58](#).

The tablet is on but not responding

If the tablet is turned on but is not responding to software or keyboard commands, try the following emergency shutdown procedure until shutdown occurs:


 **CAUTION:** Emergency shutdown procedures result in the loss of unsaved information.

- Press and hold the power button for at least 5 seconds.

The tablet is unusually warm

It is normal for the tablet to feel warm to the touch while it is in use. But if the tablet feels *unusually* warm, it may be overheating because a vent is blocked.

If you suspect that the tablet is overheating, allow the tablet to cool to room temperature. Be sure to keep all vents free from obstructions while you are using the tablet.

 **WARNING!** To reduce the possibility of heat-related injuries or of overheating the tablet, do not place the tablet directly on your lap or obstruct the tablet air vents. Use the tablet only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The tablet and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).



NOTE: The fan in the tablet starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during operation.

An external device is not working

Follow these suggestions if an external device does not function as expected:

- Turn on the device according to the manufacturer's instructions.
- Be sure that all device connections are secure.
- Be sure that the device is receiving electrical power.
- Be sure that the device, especially if it is older, is compatible with the operating system.
- Be sure that the correct drivers are installed and updated.

The wireless network connection is not working

If a wireless network connection is not working as expected, follow these suggestions:

- To enable or disable a wireless or wired network device, tap and hold the **Network Connection** icon on the Windows desktop in the notification area, at the far right of the taskbar. To enable devices, select the check box from the menu option. To disable the device, clear the check box.
- Be sure that the wireless device is turned on.
- Be sure that the tablet wireless antennas are free from obstructions.
- Be sure that the cable or DSL modem and its power cord are properly connected and that the lights are on.
- Be sure that the wireless router or access point is properly connected to its power adapter and to the cable or DSL modem, and that the lights are on.
- Disconnect and then reconnect all cables, and turn the power off and then back on.

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 tablet, damage to a drive, or loss of information, observe these precautions:

- If removal or installation instructions direct you to unplug the tablet, 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 component removal or installation, contact HP support.

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