

User Guide

© Copyright 2015 HP Development Company, L.P.

Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. Intel and Intel Atom are trademarks of Intel Corporation in the U.S. and other countries. Microsoft and Windows are trademarks of the Microsoft group of companies.

For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS Licensing Limited. DTS, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS Studio Sound is a trademark of DTS, Inc. © DTS, Inc. All Rights

Reserved  .

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

First Edition: August 2015

Document Part Number: 829962-001

Product notice

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

Not all features are available in all editions of Windows. This tablet may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows functionality. Go to <http://www.microsoft.com> for details.


To access the latest user guide, go to <http://www.hp.com/support>, and select your country. Select **Drivers & Downloads**, and then follow the on-screen instructions.

Software terms

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

For any further information or to request a full refund of the price of the tablet, please contact your 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. Do not allow a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to come into contact with the skin or a soft surface, such as pillows or rugs or clothing, during operation. The 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 60950-1).

Processor configuration setting (select products only)



IMPORTANT: Select tablet models are configured with an Intel® Atom™ series processor and a Windows® operating system. **If your tablet is configured as described, do not change the processor configuration setting in msconfig.exe from 4 or 2 processors to 1 processor.** If you do so, your tablet will not restart. You will have to perform a factory reset to restore the original settings.

Table of contents



1 Welcome	1
Finding information	2
2 Components	4
Locating software	4
Identifying components	5
3 Network connections	8
Connecting to a wireless network	8
Using the wireless controls	8
Connecting to a WLAN	8
Using HP Mobile Broadband (select products only)	9
Using HP Mobile Connect (select products only)	10
Installing a nano SIM card (select products only)	10
Using GPS (select products only)	11
Using Bluetooth wireless devices (select products only)	11
Connecting Bluetooth devices	11
Sharing using NFC (select products only)	11
Connecting to an NFC device	11
Finding NFC apps	12
4 Screen navigation	13
Using the touch gestures	13
Tap	13
Two-finger pinch zoom	13
One-finger slide	14
Using an optional external keyboard	14
Using a tablet pen (select products only)	14
5 Entertainment features	15
Using a webcam	15
Using audio	15
Adjusting the volume	15
Connecting speakers	15
Connecting headphones	16
Connecting headsets	16

Using sound settings	16
Using video	17
Discovering and connecting to Miracast-compatible wireless displays (select products only)	17
6 Power management	18
Shutting down (turning off) the tablet	18
Using power-saving states	18
Initiating and exiting Sleep	18
Using the power meter and power settings	19
Setting password protection on wakeup	19
Using battery power	19
Testing the battery	20
Displaying the remaining battery charge	20
Maximizing battery discharge time	20
Managing low battery levels	20
Identifying low battery levels	20
Resolving a low battery level	21
Resolving a low battery level when external power is available	21
Resolving a low battery level when no power source is available	21
Conserving battery power	21
Disposing of a battery	21
Replacing a battery	21
Using external AC power	21
7 MicroSD cards	23
Using the microSD card reader	23
Inserting a microSD card	23
Removing a microSD card	24
8 Security	25
Protecting the tablet	25
Using passwords	25
Setting passwords in Windows	26
Setting passwords in Computer Setup	26
Managing a BIOS administrator password	26
Entering a BIOS administrator password	27
Using antivirus software	27
Using firewall software	28
Installing critical security updates	28
Using HP Client Security (select products only)	29

Using HP Touchpoint Manager (select products only)	29
Using TPM (select products only)	29
9 Maintenance	30
Updating programs and drivers	30
Cleaning your tablet	30
Cleaning procedures	31
Cleaning the display	31
Cleaning the sides or back	31
Traveling with or shipping your tablet	32
10 Backup and recovery	33
Creating recovery media and backups	33
Creating recovery media	33
Backing up your information	34
Performing a system recovery	34
Using the Windows recovery tools	34
Changing the boot device order	35
11 Using Computer Setup (BIOS)	36
Starting Computer Setup	36
Navigating and selecting in Computer Setup	36
Restoring factory settings in Computer Setup	37
Updating the BIOS	37
Determining the BIOS version	37
Downloading a BIOS update	38
12 Using HP PC Hardware Diagnostics (UEFI)	39
Downloading HP PC Hardware Diagnostics (UEFI)	39
13 Electrostatic Discharge	40
14 Accessibility	41
Supported assistive technologies	41
Contacting support	41
Index	42

1 Welcome

After you set up and register the tablet, we recommend the following steps to get the most out of your smart investment:

-  **TIP:** To quickly return to the Start screen from an open app or the Windows desktop, press the Windows button . Pressing the Windows button again will return you to the previous screen.
- **Connect to the Internet**—Set up your wireless network so that you can connect to the Internet. For more information, see [Network connections on page 8](#).
- **Update your antivirus software**—Protect your tablet from damage caused by viruses. The software may be preinstalled on the tablet. For more information, see [Using antivirus software on page 27](#).
- **Get to know your tablet**—Learn about your tablet features. See [Identifying components on page 5](#) and [Screen navigation on page 13](#) for additional information.
- **Find installed software**—Access a list of the software preinstalled on the tablet:
 - ▲ Select the **Start** button, and then select **All apps**.
 - or –
 - Tap and hold the **Start** button, and then select **Programs and Features**.
- Back up your hard drive by creating a recovery flash drive. See [Backup and recovery on page 33](#).

Finding information

To locate resources that provide product details, how-to information, and more, use this table.

Resource	Contents
<i>Quick Start</i>	<ul style="list-style-type: none"> Overview of tablet setup and features
Get started app To access the Get started app: ▲ Select the Start button, and then select the Get started app.	<ul style="list-style-type: none"> A broad range of how-to information and troubleshooting tips
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 .	<ul style="list-style-type: none"> Online chat with an HP technician Support telephone numbers HP service center locations
<i>Safety & Comfort Guide</i> To access this guide: 1. Type support in the taskbar search box, and then select the HP Support Assistant app. – or – Tap the question mark icon in the taskbar. 2. Select My PC , select the Specifications tab, and then select User Guides . – or – Go to http://www.hp.com/ergo .	<ul style="list-style-type: none"> Proper tablet setup Guidelines for posture and work habits that increase your comfort and decrease your risk of injury Electrical and mechanical safety information
<i>Regulatory, Safety and Environmental Notices</i> To access this document: 1. Type support in the taskbar search box, and then select the HP Support Assistant app. – or – Tap the question mark icon in the taskbar. 2. Select My PC , select the Specifications tab, and then select User Guides .	<ul style="list-style-type: none"> Important regulatory notices, including information about proper battery disposal, if needed.
<i>Limited Warranty*</i> To access this document: 1. Type support in the taskbar search box, and then select the HP Support Assistant app. – or – Tap the question mark icon in the taskbar. 2. Select My PC , and then select Warranty and services . – or –	<ul style="list-style-type: none"> Specific warranty information about this tablet

Resource	Contents
Go to http://www.hp.com/go/orderdocuments .	
<p>*You can find your HP Limited Warranty located with the user guides on your product and/or on the CD or DVD provided in the box. In some countries or regions, HP may provide a printed warranty in the box. For countries or regions where the warranty is not provided in printed format, you can request a copy from http://www.hp.com/go/orderdocuments. For products purchased in Asia Pacific, you can write to HP at Hewlett Packard, POD, P.O. Box 200, Alexandra Post Office, Singapore 911507. Include your product name, and your name, phone number, and postal address.</p>	

2 Components

Locating software

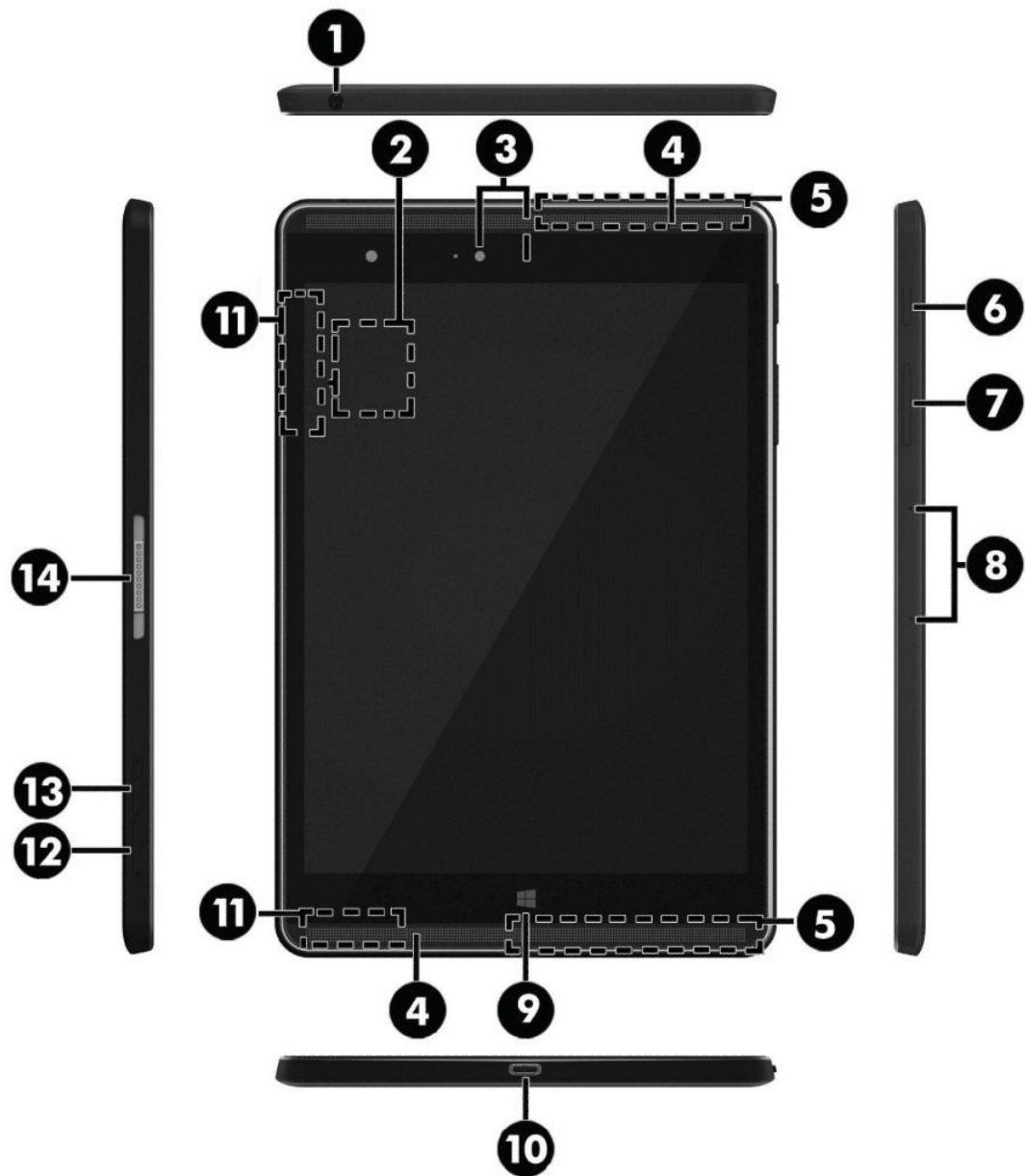
To find out what software is installed on your tablet:

- ▲ Select the **Start** button, and then select **All apps**.

– or –

Tap and hold the **Start** button, and then select **Programs and Features**.

Identifying components



Component		Description
(1)	Audio-out (headphone)/Audio-in (microphone) combo jack	Connects optional powered stereo speakers, headphones, earbuds, a headset, or a television audio cable. Also connects an optional headset microphone. This jack does not support optional microphone-only devices.

Component	Description
	<p>WARNING! To reduce the risk of personal injury, adjust the volume before using headphones, earbuds, or a headset. For additional safety information, see the <i>Regulatory, Safety and Environmental Notices</i>.</p> <p>To access this guide:</p> <ol style="list-style-type: none"> 1. Type <code>support</code> in the taskbar search box, and then select the HP Support Assistant app. – or – Tap the question mark icon in the taskbar. 2. Select My PC, select the Specifications tab, and then select User Guides. <p>NOTE: When a device is connected to the jack, the tablet speakers are disabled.</p>
(2) NFC (Near Field Communications) area (select products only)	<p>Allows you to share data and files with another device that has NFC by simply touching the devices together. The NFC area is on the back of the tablet. For more information, see Sharing using NFC (select products only) on page 11.</p>
(3) Webcams	<p>Record video and capture photographs. Some products allow you to video conference and chat online using streaming video.</p> <p>To use the webcam:</p> <ul style="list-style-type: none"> ▲ Type <code>camera</code> in the taskbar search box, and then select Camera.
(4) Speakers	<p>Produce sound.</p>
(5) WWAN antennas* (select products only)	<p>Send and receive wireless signals to communicate with wireless wide area networks (WWANs).</p>
(6) 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 results in the loss of unsaved information.</p> <p>NOTE: Although you can turn off the tablet with the power button, the recommended procedure is to use the Windows Shut down command.</p> <p>To learn more about your power settings, see your power options.</p> <ul style="list-style-type: none"> ▲ Type <code>power</code> in the taskbar search box, and then select Power and sleep settings.
(7) Volume button	<p>Press to increase or decrease sound.</p>
(8) Internal microphones	<p>Record sound.</p>
(9) Windows button	<p>Opens the Start menu.</p> <p>NOTE: Pressing the Windows button again will return you to the previous screen.</p>

Component		Description
(10)	USB Type-C (charging) port	<p>Connects any USB device with a Type-C connector.</p> <p>NOTE: Some USB Type-C ports can charge select models of cell phones, laptops, tablets, and MP3 players, even when the tablet is off. Some can also connect DisplayPort, VGA, HDMI, and other video devices.</p> <p>NOTE: Adapters (purchased separately) may be required.</p>
(11)	WLAN antennas*	Send and receive wireless signals to communicate with wireless local area networks (WLANs).
(12)	MicroSD card reader	<p>Reads microSD cards that store, manage, share, or access information. For installation instructions, see MicroSD cards on page 23.</p> <p>NOTE: Your tablet has read/write support for SDXC microSD cards up to 2 TB.</p>
(13)	Nano SIM card slot (select products only)	Supports a wireless subscriber identity module (SIM) card. If a nano SIM card was not preinstalled in your tablet, see Installing a nano SIM card (select products only) on page 10 .
(14)	ZIF (Zero Insertion Force) expansion slot	Allows you to connect accessories such as a keyboard or power supply using the POGO pin connector.
<p>*The antennas are not visible from the outside of the tablet. For optimal transmission, keep the areas immediately around the antennas free from obstructions. For wireless regulatory notices, see the section of the <i>Regulatory, Safety, and Environmental Notices</i> that applies to your country or region.</p> <p>To access this guide:</p> <ol style="list-style-type: none"> 1. Type <code>support</code> in the taskbar search box, and then select the HP Support Assistant app. – or – Tap the question mark icon in the taskbar. 2. Select My PC, select the Specifications tab, and then select User Guides. 		

3 Network connections

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 wireless network connection. This chapter will help you get connected to that world.

Connecting to a wireless network

Your tablet may be equipped with one or more of the following wireless devices:

- **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.
- **HP Mobile Broadband Module (select products only)**—A wireless wide area network (WWAN) device that gives you wireless connectivity over a much larger area. Mobile network operators install base stations (similar to cell phone towers) throughout large geographic areas, effectively providing coverage across entire states, regions, or even countries.
- **Bluetooth device**—Creates a personal area network (PAN) to connect to other Bluetooth-enabled devices such as tablets, 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.
- **NFC support**—Allows you to share data and files with another device that has NFC.

Using the wireless controls

You can control the wireless devices in your tablet using the operating system controls.

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

To use operating system controls:

- ▲ From the Windows desktop, tap and hold the network status icon, and then select **Network and Sharing Center**.

Connecting to a WLAN



NOTE: 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 router to the modem, and test the Internet service.

To connect to a WLAN, follow these steps:

1. Be sure that the WLAN device is on.
2. Select the network status icon in the taskbar, and then connect to one of the available networks.

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

3. Follow the on-screen instructions to complete the connection.

After the connection is made, tap 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 HP Mobile Broadband (select products only)

Your HP Mobile Broadband tablet has built-in support for mobile broadband service. Your new tablet, when used with a mobile operator's network, gives you the freedom to connect to the Internet, send e-mail, or connect to your corporate network without the need for Wi-Fi hotspots.



NOTE: If your tablet includes HP Mobile Connect, the instructions in this section do not apply. See [Using HP Mobile Connect \(select products only\) on page 10](#).

You might need the HP Mobile Broadband Module IMEI and/or MEID number to activate mobile broadband service. The number is located on the back of the tablet.

– Or –

You can find the number following these steps:

1. From the taskbar, select the network status icon.
2. Select **View Connection Settings**.
3. Under the **Mobile broadband** section, select the network status icon.

Some mobile network operators require the use of a SIM card. A SIM card contains basic information about you, such as a personal identification number (PIN), as well as network information. Some tablets include a SIM card that is preinstalled. If the SIM card is not preinstalled, it may be provided in the HP Mobile Broadband information provided with your tablet or the mobile network operator may provide it separately from the tablet.

For information about installing a SIM card, see [Installing a nano SIM card \(select products only\) on page 10](#).

For information about HP Mobile Broadband and how to activate service with a preferred mobile network operator, see the HP Mobile Broadband information included with your tablet.

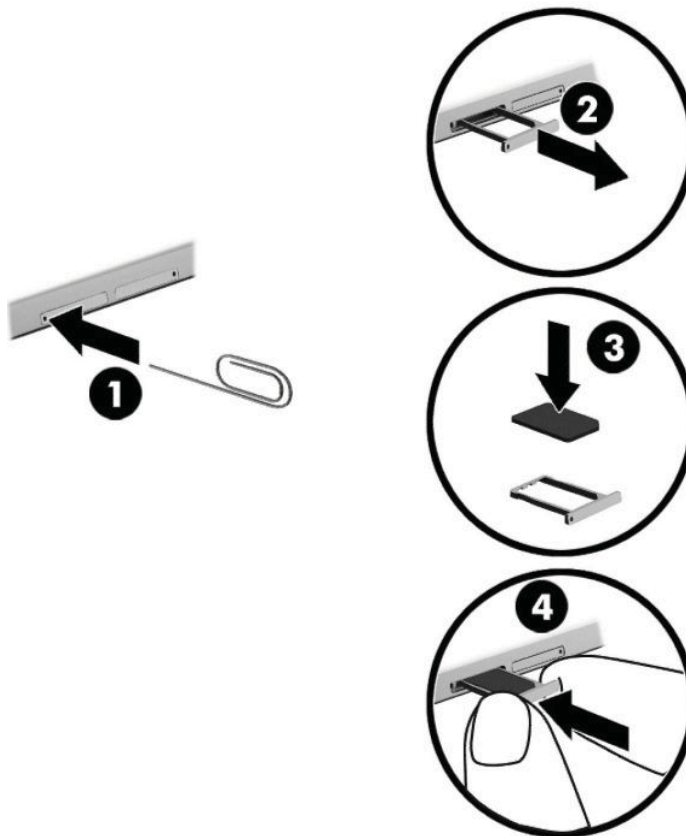
Using HP Mobile Connect (select products only)

HP Mobile Connect is a prepaid, mobile broadband service that provides a cost-effective, secure, simple, and flexible mobile broadband connection for your tablet. To use HP Mobile Connect, your tablet must have a SIM card and the **HP Mobile Connect** app. For more information about HP Mobile Connect and where it is available, go to <http://www.hp.com/go/mobileconnect>.

Installing a nano SIM card (select products only)

⚠ CAUTION: To prevent damage to a SIM card or a tablet, do not change the size of a SIM card by cutting or sanding the card.

1. Insert a small straightened paper clip (**1**) into the card tray access hole.
2. Press in gently only until the card tray is ejected.
3. Remove the tray (**2**) from the tablet and insert the card (**3**).
4. Replace the tray (**4**) in the tablet.
5. Press in gently on the tray until it is firmly seated.



To set your mobile network, refer to the documentation from your mobile provider.

Using GPS (select products 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 (select products 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 (desktop, notebook, tablet)
- Phones (cellular, cordless, smartphone)
- Imaging devices (printer, camera)
- Audio devices (headset, speakers)
- Mouse
- External keyboard

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

Connecting Bluetooth devices

Before you can use a Bluetooth device, follow these steps to establish a Bluetooth connection:

1. Type **Bluetooth** in the taskbar search box, and then select **Bluetooth settings**.
2. Select **Devices**, select **Connected devices**, and then follow the on-screen instructions.



NOTE: If the device requires verification, a pairing code is displayed. On the device you are adding, follow the on-screen instructions to verify that the code matches.

Sharing using NFC (select products only)

Your tablet supports NFC, which is a high-frequency and short-range wireless communications technology. You can touch an NFC-compatible device to the NFC area on the back of the tablet to wirelessly connect and communicate with the tablet and transfer data back and forth. NFC can also be used for security purposes. See [Identifying components on page 5](#) to locate the NFC tapping area.

The NFC function is enabled by default on your tablet.



NOTE: Not all applications support NFC.

Connecting to an NFC device

1. Touch an NFC-compatible device to the NFC area on the back of your tablet.
2. After the **Add a device?** prompt displays, follow the on-screen instructions to connect.

Finding NFC apps



IMPORTANT: You must be connected to the Internet to access the Apps Store.

To view and download an NFC app:

1. Select the **Start** button, and then select the **Store** app.
– or –
Select the **Store** icon next to the taskbar search box.
2. Enter `NFC` in the search box.
3. Select the app you want to download, and then follow the on-screen instructions. When the download is complete, the app appears on the All apps screen.

4 Screen navigation

You can navigate the tablet screen in the following ways:

- Use touch gestures
- Use an external keyboard and optional mouse (purchased separately)
- Use a tablet pen

Using the touch gestures

Tap

Use the tap gesture to open an item on the screen.

- Point to an item on the screen, and then tap one finger on the touch screen to open it.



Two-finger pinch zoom

Use the two-finger pinch zoom to zoom out or in on images or text.

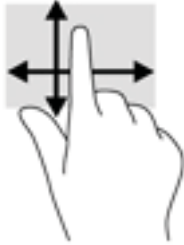
- Zoom out by placing two fingers apart on the touch screen and then moving your fingers together.
- Zoom in by placing two fingers together on the touch screen and then moving your fingers apart.



One-finger slide

Use the one-finger slide to pan or scroll through lists and pages, or to move an object.

- To scroll across the screen, lightly slide one finger across the screen in the direction you want to move.
- To move an object, press and hold your finger on an object, and then drag your finger to move the object.



Using an optional external keyboard

Connecting an external keyboard allows you to type, select items, and scroll to perform some of the same functions you do using touch gestures. A keyboard also allows you to use action keys and key combinations to perform specific functions.



NOTE: Depending on the country or region, your keyboard may have different keys and keyboard functions than those discussed in this guide.

An action key performs an assigned function. The icon an action key illustrates the assigned function for that key.

To use an action key function, press the key.



NOTE: On some keyboards, you may need to press the **fn** key in combination with the appropriate action key.

Using a tablet pen (select products only)

You can use the pen directly on the tablet. For details about using the pen, refer to the instructions included with the pen.



5 Entertainment features

Your tablet includes the following:

- Integrated speakers
- Integrated microphones
- Integrated webcam
- Preinstalled multimedia software

Using a webcam

Your tablet has a webcam (integrated camera) that records video and captures photographs. Some models allow you to video conference and chat online using streaming video.


- ▲ To access the camera, type `camera` in the taskbar search box, and then select **Camera** from the list of applications.

Using audio

On your 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 button.

 **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*.


To access this document:

1. Type `support` in the taskbar search box, and then select the **HP Support Assistant** app.

– or –

Tap the question mark icon in the taskbar.

2. Select **My PC**, select the **Specifications** tab, and then select **User Guides**.


 **NOTE:** You can also control volume through the operating system and some programs.

Connecting speakers

You can attach wired speakers to your tablet by connecting them to the USB port or to the audio-out (headphone)/audio-in (microphone) combo jack on your tablet.

To connect wireless speakers to your tablet, follow the device manufacturer's instructions. Before connecting speakers, lower the volume setting.

Connecting headphones

 **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*.

To access this document:


1. Type `support` in the taskbar search box, and then select the **HP Support Assistant** app.
– or –
Tap the question mark icon in the taskbar.

2. Select **My PC**, select the **Specifications** tab, and then select **User Guides**.

You can connect wired headphones to the audio-out (headphone)/audio-in (microphone) jack on your tablet.

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

Connecting headsets

 **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*.

To access this document:

1. Type `support` in the taskbar search box, and then select the **HP Support Assistant** app.
– or –
Tap the question mark icon in the taskbar.

2. Select **My PC**, select the **Specifications** tab, and then select **User Guides**.

Headphones combined with a microphone are called headsets. You can connect wired headsets to the audio-out (headphone)/audio-in (microphone) combo jack on your tablet.

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

Using sound settings

Use sound settings to adjust system volume, change system sounds, or manage audio devices.

To view or change sound settings:

- ▲ Type `control panel` in the taskbar search box, select **Control Panel**, select **Hardware and Sound**, and then select **Sound**.

Your tablet may include an enhanced sound system by Bang & Olufsen, DTS, Beats audio, or another provider. As a result, your tablet may include advanced audio features that can be controlled through an audio control panel specific to your audio system.

Use the audio control panel to view and control audio settings.

- ▲ Type `control panel` in the taskbar search box, select **Control Panel**, select **Hardware and Sound**, and then select the audio control panel specific to your system.

Using video

Your HP tablet is a powerful video device that enables you to watch streaming video from your favorite websites and download video and movies to watch on your tablet without needing to connect to a network.

To enhance your viewing enjoyment, use the USB Type-C port on the tablet and the correct video adapter to connect an external monitor, projector, or TV.





IMPORTANT: Be sure that the external device is connected to the correct port on the tablet, using the correct cable. Check the device manufacturer's instructions if you have questions.

Discovering and connecting to Miracast-compatible wireless displays (select products only)



NOTE: To learn what type of display you have (Miracast-compatible or Intel WiDi), refer to the documentation that came with your TV or secondary display device.


To discover and connect to Miracast-compatible wireless displays, follow the steps below.

1. Tap the **Notifications** icon  in the taskbar.
2. Tap the **Connect** icon .
3. Select the display to connect to, and then follow on-screen instructions.

6 Power management

Your tablet can operate on either battery power or external power. When the tablet is running on battery power only and an AC power source is not available to charge the battery, it is important to monitor and conserve the battery charge.


Shutting down (turning off) 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 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, first exit Sleep by briefly pressing the power button.

1. Save your work and close all open programs.
2. Select the **Start** button, select the **Power** icon, and then select **Shut down**.

If the tablet is unresponsive and you are unable to use the preceding shutdown procedures, 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.

Using power-saving states

This tablet has the Windows power-saving state of Sleep.

Sleep—The Sleep state is automatically initiated after a period of inactivity. Your work is saved to memory, allowing you to resume your work very quickly. The tablet maintains network connectivity during sleep, allowing the system to update things in the background, and keeping the tablet ready to resume instantly.

You can also initiate Sleep manually. For more information, see [Initiating and exiting Sleep on page 18](#).


 **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 the Sleep state while reading from or writing to an external media card.

Initiating and exiting Sleep

To initiate Sleep, select the **Start** button, select the **Power** icon, and then select **Sleep**.



To exit Sleep, briefly press the power button.

When the tablet exits Sleep, your work returns to the screen.

 **NOTE:** If you have set a password to be required on exiting Sleep, you must enter your Windows password before your work returns 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 view the percentage of remaining battery charge and the current power plan, tap the power meter icon .
- To use Power Options, tap the power meter icon , and then select an item from the list. You can also type `power options` in the task bar search box, and then select **Power Options**.

Different power meter icons indicate whether the tablet is running on battery or external power. The icon also reveals 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, follow these steps:

1. Type `power options` in the taskbar search box, and then select **Power Options**.

– or –

Tap and hold the **Power meter** icon , and then select **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

When a charged battery is in the tablet and the tablet is not plugged into external power, the tablet runs on battery power. When the tablet is off and unplugged from external power, the battery in the tablet slowly discharges. The tablet will display a message when the battery reaches a low or critical battery level.

Tablet battery life varies, depending on power management settings, programs running on the tablet, screen brightness, external devices connected to the tablet, and other factors.

Testing the battery

Computer Setup provides information on the status of the battery installed in the tablet.

To run HP Battery Test:

1. Shut down the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F2 System Diagnostics**.
4. Make the selections for Component Tests and then battery. Follow the on-screen instructions to continue.

Displaying the remaining battery charge

- ▲ Tap the **Power meter** icon .

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.

Type `power options` in the taskbar search box, 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 **Power meter** icon  shows a low or critical battery notification.

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

To conserve battery power and maximize battery life:

- Lower the brightness of the display.
- Select the **Power saver** setting in Power Options.
- Turn off wireless devices when you are not using them.
- Disconnect unused external devices that are not plugged into an external power source, such as an external hard drive connected to a USB port.
- Stop, disable, or remove any external media cards that you are not using.
- Before you leave your work, initiate Sleep or shut down the tablet.

Disposing of a battery

When a battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for battery disposal.


Replacing a battery

The battery(ies) in this product cannot be easily replaced by users themselves. Removing or replacing the battery could affect your warranty coverage. If a battery is no longer holding a charge, contact support.

Using external AC power

For information about connecting to AC power, refer to the *Quick Start* guide provided in the tablet box.


The tablet does not use battery power when the tablet is connected to AC power with an approved AC adapter or an optional docking/expansion device.

 **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.


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

- When charging or calibrating a battery
- When installing or modifying system software
- When performing a backup or recovery

When you connect the tablet to AC power:

- The battery begins to charge.
- The screen brightness increases.
- The power meter icon  changes appearance.

When you disconnect AC power:

- The tablet switches to battery power.
- The screen brightness automatically decreases to save battery life.
- The power meter icon  changes appearance.

7 MicroSD cards

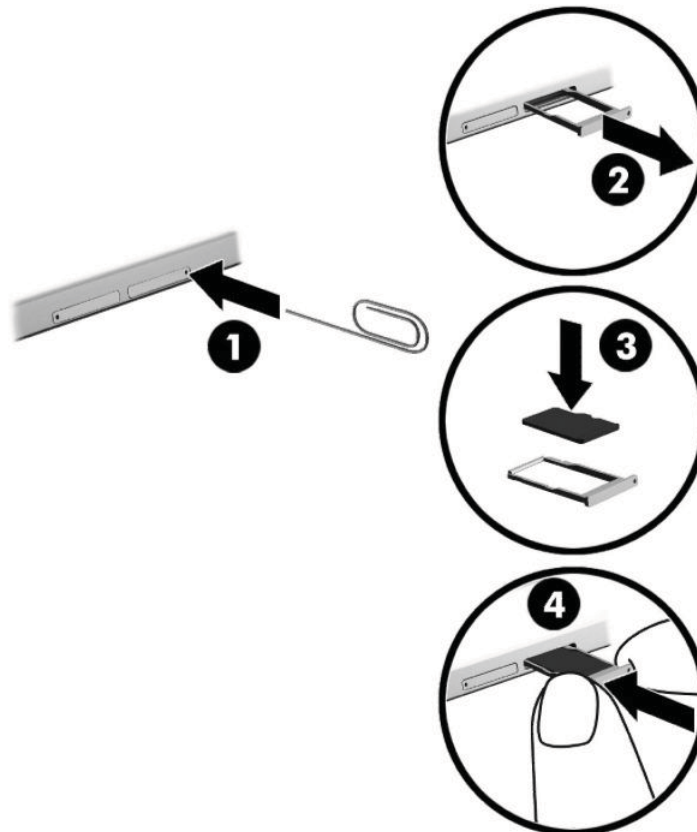
Using the microSD card reader

Optional microSD 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.

Your tablet has read/write support for SDXC microSD cards up to 2 TB.

Inserting a microSD card

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



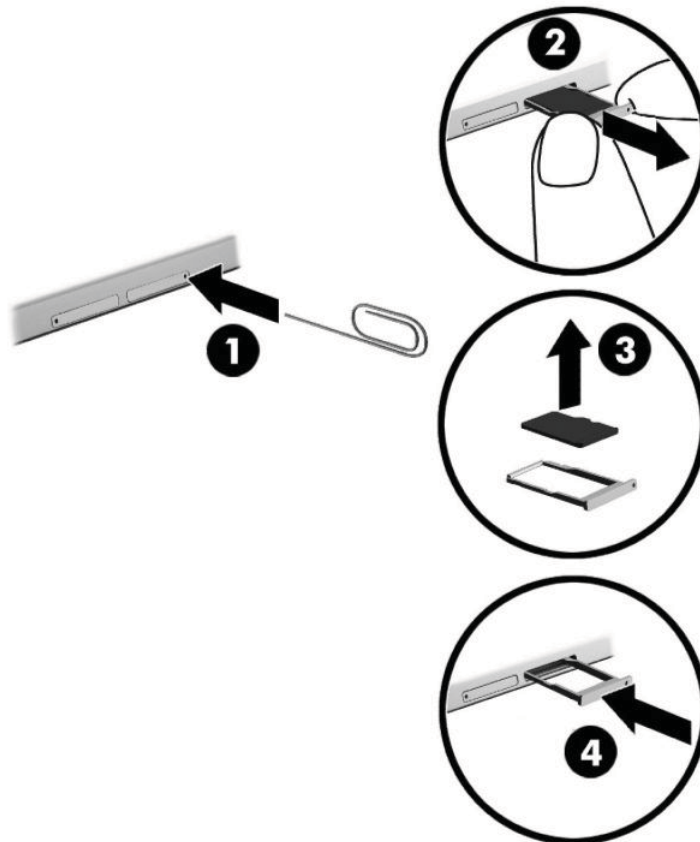
1. Insert a small straightened paper clip **(1)** into the card tray access hole.
2. Press in gently only until the card tray is ejected.
3. Remove the tray **(2)** from the tablet and insert the card **(3)**.
4. Replace the tray **(4)** in the tablet.
5. Press in gently on the tray until it is firmly seated.

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

Removing a microSD card

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

1. Save your information and close all programs associated with the microSD 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. Insert a small straightened paper clip **(1)** into the card tray access hole.
4. Press in gently only until the card tray is ejected.
5. Remove the tray **(2)** from the tablet and remove the card **(3)**.
6. Replace the tray **(4)** in the tablet.
7. Press in gently on the tray until it is firmly seated.

8 Security

Protecting the tablet

Standard security features provided by the Windows operating system and the non-Windows Computer Setup utility (BIOS) 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 security features listed in this chapter may not be available on your tablet.
-  **NOTE:** Your tablet supports Absolute Persistence technology, which provides online security-based tracking and recovery service available in select regions. If the tablet is stolen, it can be tracked once the unauthorized user accesses the Internet. You must purchase the Absolute Computrace software and subscribe to the service to use this feature. For more information about Absolute Persistence technology and Computrace software, go to <http://www.hp.com>.
-

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 Computer Setup, which is preinstalled on the tablet.

- BIOS administrator passwords are set in Computer Setup 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 Computer Setup feature and for a Windows security feature. You can also use the same password for more than one Computer Setup feature.

Use the following tips for creating and saving passwords:

- When creating passwords, follow requirements set by the program.
- Do not use the same password for multiple applications or websites, and do not reuse your Windows password for any other application or website.
- Use the Password Manager feature of HP Client Security to store your user names and passwords for your websites and applications. You can securely read them in the future if they cannot be remembered.
- 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: Setting the Windows administrator password does not set the BIOS Administrator password.
User password*	Protects access to a Windows user account.
*For information about setting a Windows administrator password or a Windows user password, type <code>support</code> in the taskbar search box, and then select the HP Support Assistant app.	

Setting passwords in Computer Setup

Password	Function
BIOS administrator password*	Protects access to Computer Setup. NOTE: If features have been enabled to prevent removing the BIOS administrator password, you may not be able to remove it until those features have been disabled.
*For details about this password, see the following topics.	

Managing a BIOS administrator password

To set, change, or delete this password, follow these steps:

Setting a new BIOS administrator password

1. Turn off the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F10 BIOS Setup**.
4. Select **Security**, and then select **Setup BIOS Administrator Password**.
5. When prompted, type a password and select **Enter**.
6. When prompted, type the new password again and confirm.
7. To save your changes and exit, select **Save**, and then follow the on-screen instructions.

Your changes go into effect when the tablet restarts.

Changing a BIOS administrator password

1. Turn off the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F10 BIOS Setup**.

4. Select **Security**, and then select **Change Password**.
5. When prompted, type your current password and select **Enter**.
6. When prompted, type your new password again and confirm.
7. To save your changes and exit, select **Save**, and then follow the on-screen instructions.

Your changes go into effect when the tablet restarts.

Deleting a BIOS administrator password

1. Turn off the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F10 BIOS Setup**.
4. Select **Security**, and then select **Change Password**.
5. When prompted, type your current password.
6. When prompted for the new password, leave the field empty, and then make the selection to save the password.
7. Read the warning. To continue, select **YES**.
8. When prompted to type your new password again, leave the field empty, and then make the selection to save the password.
9. To save your changes and exit, select **Save**, and then follow the on-screen instructions.

Your changes go into effect when the tablet restarts.

Entering a BIOS administrator password

At the **BIOS administrator password** prompt, enter your password (using the same kind of keys you used to set the password). After three unsuccessful attempts to enter the BIOS administrator password, you must restart the tablet and try again.

Using antivirus software

When you use the tablet to access e-mail, a network, or the Internet, you potentially expose it to viruses. 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.

Windows Defender is preinstalled on your tablet. It is strongly recommended that you continue to use an antivirus program in order to fully protect your tablet.

For more information about viruses, access HP Support Assistant. To access HP Support Assistant, type `support` in the taskbar search box, and then 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 tablet it is installed on.
- Network-based firewalls—Installed between your DSL or cable modem and your home network to protect all the tablets 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 e-mail attachments. To temporarily resolve the problem, disable the firewall, perform the task that you want to perform, and then reenable 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 viruses, install all critical updates from Microsoft as soon as you receive an alert.

You can choose whether updates are installed automatically. To change the settings, type `control panel` in the taskbar search box, and then select **Control Panel**. Select **System and Security**, select **Windows Update**, select **Change settings**, and then follow the on-screen instructions.


Using HP Client Security (select products only)

HP Client Security software is preinstalled on your tablet. This software can be accessed through the HP Client Security icon at the far right of the taskbar or through Windows Control Panel. It provides security features that help protect against unauthorized access to the tablet, networks, and critical data. For more information, see the HP Client Security software Help.

Using HP Touchpoint Manager (select products only)

HP Touchpoint Manager is a cloud-based IT solution that enables businesses to effectively manage and secure their company assets. HP Touchpoint Manager helps protect devices against malware and other attacks, monitors device health, and enables you to reduce time spent solving end-user device and security issues. You can quickly download and install the software, which is highly cost effective relative to traditional in-house solutions.

Using TPM (select products only)

 **IMPORTANT:** Before enabling Trusted Platform Module (TPM) functionality on this system, you must ensure that your intended use of TPM complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable. For any compliance issues arising from your operation/usage of TPM which violates the above mentioned requirement, you shall bear all the liabilities wholly and solely. HP will not be responsible for any related liabilities.

TPM provides additional security for your tablet. You can modify the TPM settings in Computer Setup (BIOS).

The TPM setting is only displayed after you set a BIOS administrator password. For more information on setting a password, see [Managing a BIOS administrator password on page 26](#).

 **NOTE:** If you change the TPM setting to Hidden, TPM is not visible in the operating system.

To access TPM settings in Computer Setup:

1. Turn off the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F10 BIOS Setup**.
4. Select **Security**, select **TPM**, and then follow the on-screen instructions.

9 Maintenance

It is important to perform regular maintenance to keep your tablet in optimal condition. This chapter provides instructions for updating programs and drivers, steps to clean the tablet, and tips for traveling with (or shipping) the tablet.

Updating programs and drivers

HP recommends that you update your programs and drivers on a regular basis. Updates can resolve issues and bring new features and options to your tablet. For example, older graphics components might not work well with the most recent gaming software. Without the latest driver, you would not be getting the most out of your equipment.

Go to <http://www.hp.com/support> to download the latest versions of HP programs and drivers. In addition, register to receive automatic notifications when updates become available.


If you would like to update your programs and drivers, follow these instructions:

1. Type `support` in the taskbar search box, and then select the **HP Support Assistant** app.
– or –
Tap the question mark icon in the taskbar.
2. Select **My PC**, select the **Updates** tab, and then select **Check for updates and messages**.
3. Follow the on-screen instructions.

Cleaning your tablet

Use the following products to safely clean your tablet:


- Dimethyl benzyl ammonium chloride 0.3 percent maximum concentration (for example, disposable wipes, which come in a variety of brands)
- Alcohol-free glass-cleaning fluid
- Solution of water and mild soap
- Dry microfiber cleaning cloth or a chamois (static-free cloth without oil)
- Static-free cloth wipes

 **CAUTION:** Avoid strong cleaning solvents that can permanently damage your tablet. If you are not sure that a cleaning product is safe for your tablet, check the product contents to make sure that ingredients such as alcohol, acetone, ammonium chloride, methylene chloride, and hydrocarbons are not included in the product.


Fibrous materials, such as paper towels, 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 on.

1. Turn off the tablet.
2. Disconnect AC power.
3. Disconnect all powered external devices.


 **CAUTION:** To prevent damage to internal components, 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.

Cleaning the sides or back


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

 **NOTE:** When cleaning the back of the tablet, use a circular motion to aid in removing dirt and debris.


Traveling with or shipping your tablet

If you have to travel with or ship your tablet, follow these tips to keep your equipment safe.

- Prepare the tablet for traveling or shipping:
 - Back up your information to an external drive.
 - Remove all external media cards, such as memory cards.
 - 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 luggage.


 **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.


- If you plan to use the tablet during a flight, listen for the in-flight announcement that tells you when you are allowed to use your tablet. In-flight tablet use is at the discretion of the airline.
- If you are shipping the tablet, use suitable protective packaging and label the package “FRAGILE.”
- The use of wireless devices may be restricted in some environments. Such restrictions may apply aboard aircraft, in hospitals, near explosives, and in hazardous locations. If you are uncertain of the policy that applies to the use of a wireless device in your tablet, ask for authorization to use your tablet before you turn it on.
- If you are traveling internationally, follow these suggestions:
 - Check the tablet-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.


10 Backup and recovery

To protect your information, create recovery media by using an optional external flash drive and use Windows backup and restore utilities to back up and create system restore points. In case of system failure, you can use the backup files to restore the contents of your tablet.

 **IMPORTANT:** If you will be creating recovery media or using recovery media to recover your system, the tablet battery must be at least 70% charged before you start the process.

 **NOTE:** For detailed instructions on various backup and restore options, see the Get started 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, see the Get started app.

Creating recovery media and backups

The following methods of creating recovery media and backups are available.

- Use HP Recovery Manager to create recovery media after you successfully set up the tablet. This step creates a Windows Reset image that can be used to reinstall the original operating system in cases where the hard drive is corrupted or has been replaced. For information on creating recovery media, see [Creating recovery media on page 33](#).
 - Use Windows tools to create system restore points and create backups of personal information.
- For more information, see [Backing up your information on page 34](#).

Creating recovery media

HP Recovery Manager is a software program that allows you to create recovery media (using a flash drive) after you successfully set up the tablet. The recovery media can be used to perform system recovery if the hard drive becomes corrupted. System recovery reinstalls the original operating system. Recovery media can also be used to repair the system if you replace the hard drive.

- Handle these recovery tools carefully, and keep them in a safe place.
- HP Recovery Manager examines the tablet and determines the required storage capacity for the media that will be required.
- The creation process can take an hour or more. Do not interrupt the creation process.

To create recovery media:

1. Type **recovery** in the taskbar search box, and then select **HP Recovery Manager**.
2. Select **Create recovery media**, and then follow the on-screen instructions.

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.

For more information on the Windows backup features, see the Get started app.

Performing a system recovery

There are several options for recovering your system. Choose the method that best matches your situation and level of expertise:

- 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. For more information, see the Get started app.
 - Select the **Start** button, and then select the **Get started** app.
- 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. See [Using the Windows recovery tools on page 34](#).
- The Windows Reset option allows you to perform detailed reformatting of your tablet, or remove personal information before you give away or recycle your tablet. For more information on these features, see the Get started app.
 - Select the **Start** button, and then select the **Get started** app.



NOTE: If you are unable to boot (start up) your tablet, contact support.

Using the Windows recovery tools

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.

Windows recovery tools offer you the ability to recover information you previously backed up as well as refresh the tablet.

The Windows Reset option allows you to perform detailed reformatting of your tablet, or remove personal information before you give away or recycle your tablet. For more information on these features, see the Get started app.

To recover information you previously backed up, see the Get started app for steps on restoring files and folders.

To recover your information using Windows 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.



NOTE: An external flash drive may be required to perform this procedure.

1. If possible, back up all personal files.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F11 HP Recovery**.
4. Select **Troubleshoot**, select **Advanced Options**, and then select **Startup Repair**.
5. Follow the on-screen instructions.



NOTE: For additional information on recovering information using the Windows tools, see the Get started app.

Changing the boot device order

To change the boot order so that you can boot from an external device:



NOTE: An external flash drive is required to perform this procedure.

1. If possible, back up all personal files.
2. Shut down the tablet.
3. Connect the external flash drive.
4. Turn off the tablet.
5. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
6. Tap **F9 Boot Options**.
7. Select the external flash drive as the boot device.
8. Restart the tablet.

11 Using Computer Setup (BIOS)

Computer Setup, or F10 BIOS Setup (Basic Input/Output System), controls communication between all the input and output devices on the system (such as disk drives, display, keyboard, mouse, and printer). Computer Setup 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 Computer Setup. Errors can prevent the tablet from operating properly.

Starting Computer Setup

1. Shut down the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.

The Startup menu is displayed.

3. Tap **F10 BIOS Setup** to enter Computer Setup.

Navigating and selecting in Computer Setup

To navigate and select in Computer Setup, follow these steps:

1. Shut down the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.
The Startup menu is displayed.
3. Tap **F10 BIOS Setup** to enter Computer Setup.
 - Tap a menu or a menu item to select it.
 - To close open dialog boxes and return to the main Computer Setup screen, tap **Escape**, and then follow the on-screen instructions.
4. To exit Computer Setup menus without saving your changes, select **Main**, select **Ignore Changes and Exit**, and then follow the on-screen instructions.

– or –

To save your changes and exit, select **Main**, select **Save Changes and Exit**, and then follow the on-screen instructions.

Restoring factory settings in Computer Setup



NOTE: Restoring defaults will not change the hard drive mode.

To return all settings in Computer Setup to the values that were set at the factory, follow these steps:

1. Shut down the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.

The Startup menu is displayed.

3. Tap **F10 BIOS Setup** to enter Computer Setup.
4. Select **Main**, and then tap **Restore Defaults**.
5. Follow the on-screen instructions.
6. Make the selections to save your changes and exit.

Your changes go into effect when the tablet restarts.



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

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.


BIOS version information (also known as *ROM date* and *System BIOS*) can be revealed from the HP Support Assistant app. You can also reveal the version from BIOS Setup.

1. Shut down the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.

The Startup menu is displayed.

3. Tap **F10 BIOS Setup** to enter Computer Setup.
4. Select **Main**, select **System Information**, and then make note of your BIOS version.
5. Make the selections to exit without saving your changes.

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. Type `support` in the taskbar search box, and then select the **HP Support Assistant** app.
– or –
Tap the question mark icon in the taskbar.
2. Make the selections for updates.
3. Follow the on-screen instructions.
4. At the download area, follow these steps:
 - a. Identify the most recent BIOS update and compare it to 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.

If the update is more recent than your BIOS, 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 revealed on the screen after the download is complete. If no instructions are revealed, follow these steps:

1. Type `file` in the taskbar search box, and then select **File Explorer**.
2. Select your hard drive designation. The hard drive designation is typically Local Disk (C:).
3. Using the hard drive path you recorded earlier, open the folder on your hard 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 hard drive.

12 Using HP PC Hardware Diagnostics (UEFI)

HP PC Hardware Diagnostics is a Unified Extensible Firmware Interface (UEFI) that allows you to run diagnostic tests to determine whether the tablet hardware is functioning properly. The tool runs outside the operating system so that it can isolate hardware failures from issues that are caused by the operating system or other software components.

To start HP PC Hardware Diagnostics (UEFI):

1. Turn off the tablet.
2. Press the power button and when the **Press and hold the Volume down button or the ESC key on external Keyboard to enter Startup Menu** message displays, press the volume down button.

The Startup menu is displayed.

3. Tap **F2 System Diagnostics**.
4. When the diagnostic tool opens, select the type of diagnostic test you want to run, and then follow the on-screen instructions.



NOTE: If you need to stop a diagnostic test, press the volume down button.

Downloading HP PC Hardware Diagnostics (UEFI)



NOTE: Instructions for downloading HP PC Hardware Diagnostics (UEFI) are provided in English only.

The preferred method is to download UEFI to your tablet. You can also download UEFI to a USB device; depending on the type of USB device used, an adapter for the USB Type-C port may be needed to transfer the data to the tablet.

There are two options to download HP PC Hardware Diagnostics:

Option 1: HP PC Diagnostics homepage—Provides access to the latest UEFI version

1. Go to <http://www.hp.com/go/techcenter/pcdiags>.
2. Click the **Download** link under HP PC Hardware Diagnostics, and then select **Run**.

Option 2: Support and Drivers pages—Provide downloads for a specific product for earlier and later versions

1. Go to <http://www.hp.com>.
2. Point to **Support**, located at the top of the page, and then click **Download Drivers**.
3. In the text box, enter the product name, and then click **Go**.

– or –

Click **Find Now** to let HP automatically detect your product.

4. Select your model, and then select your operating system.
5. In the **Diagnostic** section, click **HP UEFI Support Environment**.

– or –

Click **Download**, and then select **Run**.

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

- If removal or installation instructions direct you to unplug the computer, first be sure that it is properly grounded.
- 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.
- If you remove a component, place it in an electrostatic-safe container.

14 Accessibility

HP designs, produces, and markets products and services that can be used by everyone, including people with disabilities, either on a stand-alone basis or with appropriate assistive devices.

Supported assistive technologies

HP products support a wide variety of operating system assistive technologies and can be configured to work with additional assistive technologies. Use the Search feature on your device to locate more information about assistive features.



NOTE: For additional information about a particular assistive technology product, contact customer support for that product.

Contacting support

We are constantly refining the accessibility of our products and services and welcome feedback from users. If you have an issue with a product or would like to tell us about accessibility features that have helped you, please contact us at +1 (888) 259-5707, Monday through Friday, 6 a.m. to 9 p.m. North American Mountain Time. If you are deaf or hard-of-hearing and use TRS/VRS/WebCapTel, contact us if you require technical support or have accessibility questions by calling +1 (877) 656-7058, Monday through Friday, 6 a.m. to 9 p.m. North American Mountain Time.



NOTE: Support is in English only.

Index

A

- accessibility 41
- administrator password 26
- antivirus software 27
- Audio 16
- audio-out (headphone)/audio-in (microphone) combo jack
 - identifying 5

B

- battery
 - conserving power 21
 - discharging 20, 21
 - displaying remaining charge 20
 - disposing 21
 - low battery levels 20
 - replacing 21

BIOS

- determining version 37
- updating 37

Bluetooth

- connecting 11
- device 8

- Bluetooth device 11

button

- power 6
- volume 15
- volume down 6
- volume up 6
- Windows 6

C

- cameras, identifying 6
- caring for your tablet 30
- cleaning your tablet 30
- components 5
- Computer Setup
 - BIOS administrator password 26
- connecting to a WLAN 8
- corporate WLAN connection 8
- critical updates, software 28

E

- electrostatic discharge 40
- external AC power, using 21

F

- firewall software 28

G

- gestures, using 13
- GPS 11

H

- headsets, connecting 16
- high-definition devices, connecting 17
- HP Client Security 29
- HP Mobile Broadband
 - activating 9
 - IMEI number 9
 - MEID number 9
- HP Mobile Connect 10
- HP PC Hardware Diagnostics (UEFI)
 - downloading 39
- HP Touchpoint Manager 29

I

- IMEI number 9
- internal microphones, identifying 6

J

- jacks
 - audio-out (headphone)/audio-in (microphone) combo 5

L

- locating information
 - software 4
- low battery level 20

M

- maintenance
 - updating programs and drivers 30
- MEID number 9
- microSD card
 - inserting 23
 - removing 24
 - supported formats 23
- microSD card reader, identifying 7

- microSD card size 7

- Miracast 17

mobile broadband

- activating 9
- IMEI number 9
- MEID number 9

N

- NFC area, identifying 6
- NFC, using 11

O

- one-finger slide touch screen
 - gesture 14

P

- passwords
 - administrator 26
 - BIOS administrator 26
 - user 26
- POGO pin connector, identifying 7
- ports
 - Miracast 17
 - USB Type-C (charging) 7
- power button, identifying 6
- power-saving states 18
- public WLAN connection 8

R

- recover
 - options 34
- recovery media
 - creating 33
 - creating using HP Recovery Manager 33

S

- setting password protection on
 - wakeup 19
- shipping the tablet 32
- shutdown 18
- SIM card
 - inserting 7
 - removing 7
- SIM card slot, identifying 7

- Sleep
 - exit 6
 - exiting 18
 - initiate 6
 - initiating 18
- slots
 - microSD card reader 7
 - SIM card 7
- software
 - antivirus 27
 - critical updates 28
 - firewall 28
- sound settings, using 16
- speakers
 - connecting 15
 - identifying 6
- system restore point, creating 33

T

- tap touch screen gesture 13
- touch screen gestures
 - one-finger slide 14
 - tap 13
 - two-finger pinch/zoom 13
- TPM Embedded Security 29
- traveling with the tablet 32
- turning off the tablet 18
- two-finger pinch/zoom touch screen gesture 13

U

- unresponsive system 18
- updating programs and drivers 30
- USB Type-C (charging) port,
 - identifying 7
- user password 26
- using
 - external AC power 21
 - power-saving states 18
- using passwords 25
- using sound settings 16

V

- video 17
- volume
 - adjusting 15
 - button 15
 - keys 15
- volume button, identifying 6

W

- webcam
 - using 15
- webcams, identifying 6
- Windows
 - system restore point 33
- Windows button, identifying 6
- wireless controls
 - operating system 8
- wireless network (WLAN)
 - connecting 8
 - corporate WLAN connection 8
 - functional range 9
 - public WLAN connection 8
- WLAN antennas, identifying 7
- WWAN antennas, identifying 6
- WWAN device 8, 9

Z

- ZIF expansion slot, identifying 7