Product notice

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

Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. Go to [http://www.microsoft.com](http://www.microsoft.com) for details.

To access the latest user guide, go to [http://www.hp.com/support](http://www.hp.com/support), and select your country. Select Find your product, and then follow the on-screen instructions.

The projector and desk lamp are intended to be used for image projection and image capture, and they are not intended for use in other applications.

Safety notice

LED of projector - Classification of risk groups:
Risk Group 1

Software terms

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

Your Sprout immersive computer is a powerful tool designed to enhance your work and entertainment. Read this chapter to learn about best practices after you set up your immersive computer and where to find additional HP resources.

Finding hardware and software information

Locating hardware

To find out what hardware is installed on your Sprout:

▲ Type device manager in the taskbar search box, and then select Device Manager.

A list displays all the devices installed on your Sprout.

Locating software

To find out what software is installed on your immersive computer:

▲ Select the Start button, and then select All apps.
### Front

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) WLAN antennas (2)*</td>
<td>Send and receive wireless signals.</td>
</tr>
<tr>
<td>(2) Webcam light</td>
<td>On: The webcam is on.</td>
</tr>
<tr>
<td>(3) Webcam</td>
<td>Records video and takes still photographs. To use the webcam: ▲ Type <code>camera</code> in the taskbar search box, and then select <code>Camera</code>.</td>
</tr>
<tr>
<td>(4) Speakers (3)</td>
<td>Produce sound.</td>
</tr>
<tr>
<td>(5) Keyboard button/light</td>
<td>Projects the keyboard on the touch mat.</td>
</tr>
<tr>
<td>(6) Home button/light</td>
<td>Displays Sprout Workspace.</td>
</tr>
<tr>
<td>(7) Projector/touch mat button/light</td>
<td>• Tap the button to turn off touch capability on the mat. • Touch-and-hold to turn off the projector. • When the projector is off, tap the button to turn both the projector and the touch mat on.</td>
</tr>
</tbody>
</table>
Component | Description
--- | ---
(8) HP Touch Mat | A touch-sensitive mat on which you can project Sprout Workspace to create a horizontal touch screen.

The antennas are not visible from the outside of the computer. For optimal transmission, keep the areas immediately around the antennas free from obstructions. For wireless regulatory notices, see the section of the Regulatory, Safety, and Environmental Notices that applies to your country or region.

To access this document:
▲ Type support in the taskbar search box, and then select the HP Support Assistant app.

---

Sprout Illuminator

CAUTION: To prevent damage to your vision, avoid staring directly at the lights on Sprout Illuminator.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Desk lamp touch sensor</td>
<td>Touch to turn the desk lamp on, to dim it, or to turn it off.</td>
</tr>
<tr>
<td>(2) High-resolution camera light</td>
<td>On: The high-resolution camera is on.</td>
</tr>
<tr>
<td>(3) Desk lamp (2)</td>
<td>Illuminate the touch mat.</td>
</tr>
<tr>
<td>(4) Depth camera (3)</td>
<td>Capture three-dimensional images.</td>
</tr>
<tr>
<td>(5) Depth camera light</td>
<td>On: The depth camera is on.</td>
</tr>
<tr>
<td>(6) High-resolution camera</td>
<td>Captures high-resolution images from the touch mat.</td>
</tr>
<tr>
<td>(7) Projector mirror</td>
<td>Projects Sprout Workspace on the touch mat.</td>
</tr>
</tbody>
</table>
### Top

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
</table>
| (1) Power button | - When the computer is off, press the button to turn on the computer.  
- When the computer is in the Sleep state, press the button briefly to exit Sleep.  
- When the computer is in Hibernation, press the button briefly to exit Hibernation.  
**CAUTION:** Pressing and holding down the power button will result in the loss of unsaved information.  
If the computer has stopped responding and Microsoft® Windows® shutdown procedures are ineffective, press and hold the power button down for at least 5 seconds to turn off the computer.  
To learn more about your power settings, type `power` in the taskbar search box, and then select **Power Options**. |
| (2) Ambient light sensor | Automatically adjusts the display brightness based on the lighting conditions in your environment. |
### Right side

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Internal magnet</td>
<td>Allows you to attach the stylus.</td>
</tr>
<tr>
<td>(2) Volume up/down button</td>
<td>Increases or decreases the speaker volume.</td>
</tr>
<tr>
<td>(3) USB 3.0 port</td>
<td>Connects an optional USB 1.0, USB 2.0, or USB 3.0 device and provides enhanced USB power performance for USB 3.0 devices.</td>
</tr>
<tr>
<td>(4) USB 3.0 charging (powered) port</td>
<td>Connects an optional USB 1.0, USB 2.0, or USB 3.0 device. USB charging ports allow you to charge connected USB devices. Standard USB ports will not charge all USB devices or will charge using a low current. Some USB devices require power and require you to use a powered port. <strong>NOTE:</strong> USB charging ports can also charge select models of cell phones and MP3 players, even when the computer is off.</td>
</tr>
<tr>
<td>(5) Hard drive activity light</td>
<td>Blinking: The hard drive is being used.</td>
</tr>
</tbody>
</table>
### Left side

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
</table>
| (1) Memory card reader | Reads optional memory (SD, SDHC and SDXC) cards that store, manage, share, or access information.  
To insert a card, hold the card with connectors facing the slot, insert the card into the slot, and then push in on the card until it is firmly seated.  
To remove a card, pull the card out. |
| (2) Audio-out (headphone)/Audio-in (microphone) 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.  
**WARNING!** To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, refer to the *Regulatory, Safety, and Environmental Notices*. To access this guide, type **support** in the taskbar search box, and then select the **HP Support Assistant** app.  
– or –  
Click the question mark icon in the taskbar.  
**NOTE:** When a device is connected to the jack, the computer speakers are disabled.  
**NOTE:** Be sure that the device cable has a 4-conductor connector that supports both audio-out (headphone) and audio-in (microphone). |
<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Vent</td>
<td>Enables airflow to cool internal components.</td>
</tr>
<tr>
<td>(2) Power supply light</td>
<td>On: The AC power cord is connected.</td>
</tr>
<tr>
<td>(3) Security cable slot</td>
<td>Attaches an optional security cable to the computer.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The security cable may not prevent the computer from being mishandled or stolen.</td>
</tr>
<tr>
<td>(4) USB 2.0 ports (2)</td>
<td>Connect optional USB 2.0 devices.</td>
</tr>
<tr>
<td>(5) Power connector</td>
<td>Connects an AC power cord.</td>
</tr>
<tr>
<td>(6) RJ-45 (network) jack</td>
<td>Connects a network cable.</td>
</tr>
<tr>
<td>(7) HDMI output port</td>
<td>Projects the computer screen display to an external monitor.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The HDMI output port cannot be used as an input from a TV, a game console, or a set top box.</td>
</tr>
</tbody>
</table>
### Component Description

**Component**

**Audio-out (headphone) 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.

**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.

**NOTE:** When a device is connected to the jack, the computer speakers are disabled.

**Internal microphones (2)**

Record audio, automatically filtering out the noise around you.

---

### Connecting the HP Touch Mat

Set up your Sprout on a flat, level surface.

⚠️ **CAUTION:** To prevent damage to the touch mat:

- Do not cut or pierce the touch mat.
- Do not bend or fold the touch mat.
- Do not place any magnetic components on the touch mat.
- Do not use metal objects on or under the touch mat.
- When using a stylus on the touch mat, do not place your hand or palm on the touch mat because your hand or palm may be treated as contact points on the touch mat.
To connect the touch mat, place the touch mat on a flat, level surface in front of the monitor, and slide it toward the monitor. The magnets in Sprout Connector connect the touch mat to the monitor automatically.

**NOTE:** If you remove the touch mat, the projector will turn off.

To protect the touch mat from dirt or accidental damage when it is not being used, use the optional HP Touch Mat cover (purchased separately).

## Labels

### Identifying the labels

The labels affixed to the computer provide information you may need when you troubleshoot system problems. The labels are located on the bottom of the computer.

- **Service label**—Provides important information to identify your computer. When contacting support, you will probably be asked for the serial number, and possibly for the product number or the model number. Locate these numbers before you contact support.
- **Regulatory label(s)**—Provide(s) regulatory information about the computer.
- **Wireless certification label(s)**—Provide(s) information about optional wireless devices and the approval markings for the countries or regions in which the devices have been approved for use.
2 Connecting to a network

You can explore the globe and access information from millions of websites using your computer and a wired or wireless network connection. This chapter will help you get connected to that world.

Connecting to a wireless network

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

- **WLAN device**—Connects the computer 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 computer 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, the Internet, and networking, see the information and website links provided in Help and Support. Type help in the taskbar search box, and then select Help and Support.

Using the wireless controls

You can control the wireless devices in your computer using the operating system controls:

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:

1. Type control panel in the taskbar search box, and then select Control Panel.
2. Select Network and Internet, and then select Network and Sharing Center.

For more information, see the information provided in Help and Support. Type help in the taskbar search box, and then select Help and Support.

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 Start button, select Settings, and then select Network & Internet.
3. Select your WLAN from the list.

4. Select Connect.
   
   If the WLAN is a security-enabled WLAN, you are prompted to enter a security code. Type the code, and then select 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, right-click the network status icon, and then select Open Network and Sharing Center. Select 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.

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

   After the connection is made, place the mouse pointer over the network status icon 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 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)
- 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 to a wired network—LAN**

Use a LAN connection if you want to connect the computer directly to a router in your home (instead of working wirelessly), or if you want to connect to an existing network at your office.

Connecting to a LAN requires an 8-pin, RJ-45 (network) cable and a network jack on the computer.

To connect the network cable, follow these steps:

1. Plug the network cable into the network jack (1) on the computer.
2. Plug the other end of the network cable into a network wall jack (2) or router.

**NOTE:** If the network cable contains noise suppression circuitry (3), which prevents interference from TV and radio reception, orient the circuitry end of the cable toward the computer.

---

**Sharing data and drives and accessing software**

When your computer is part of a network, you are not limited to using only the information that is stored in your computer. Computers connected to the network can exchange software and data with each other.

For more information about sharing files, folders, or drives, see the information provided in Help and Support.

▲ Type `help` in the taskbar search box, and then select **Help and Support**.

**NOTE:** When a disc like a DVD movie or game is copy-protected, it cannot be shared.
3 Managing power

User-replaceable battery notices

⚠️ WARNING! Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

⚠️ WARNING! To reduce the risk of fire or burns, do not disassemble, crush, or puncture; do not short external contacts; do not dispose of in fire or water.

⚠️ WARNING! Keep the battery away from children.

⚠️ WARNING! To reduce potential safety issues, use only the user-replaceable battery provided with the computer, a replacement battery provided by HP, or a compatible battery purchased from HP.

Initiating and exiting Sleep and Hibernation

Windows has two power-saving states, Sleep and Hibernation.

- Sleep—The Sleep state is automatically initiated after a period of inactivity. Your work is saved to memory, allowing you to resume working very quickly. You can also initiate Sleep manually. For more information, see Manually initiating and exiting Sleep on page 13.

- Hibernation—The Hibernation state is automatically initiated if Sprout is in the Sleep state for an extended period. Hibernation puts your open documents and programs on your hard drive, and then turns off your Sprout.

📝 NOTE: You can manually initiate Hibernation. See Manually initiating and exiting Sleep on page 13 and Manually initiating and exiting Hibernation on page 14.

⚠️ CAUTION: To reduce the risk of possible audio and video degradation, loss of audio or video playback, or loss of information, do not initiate Sleep while reading from or writing to an external media card.

📝 NOTE: You cannot connect to a network or perform any computer functions while Sprout is in the Sleep state or in Hibernation.

Manually initiating and exiting Sleep

To initiate Sleep, type `power` in the taskbar search box, and then select Power and sleep settings.

To exit Sleep:

- Briefly press the power button.
- Press a key on the keyboard.

When Sprout exits Sleep, the power lights turn on and your work returns to the screen.

📝 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.
Manually initiating and exiting Hibernation

You can enable user-initiated Hibernation and change other power settings and timeouts using Power Options in Control Panel.

1. Type `power` in the taskbar search box, and then select **Power Options**.
2. In the left pane, select **Choose what the power button does**.
3. Select **Change Settings that are currently unavailable**, and then, in the **When I press the power button** area, select **Hibernate**.
   - or –
   Under **Shutdown settings**, select the **Hibernate** box to show the Hibernate option in the Power menu.
4. Select **Save changes**.

To exit Hibernation, briefly press the power button.

When Sprout exits Hibernation, the power lights turn on and your work returns to the screen. 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.

Setting password protection on wakeup (exiting Sleep or Hibernation)

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

1. Type `power` in the taskbar search box, and then select **Power Options**.
2. In the left pane, select **Require a password on wakeup**.
3. Select **Change Settings that are currently unavailable**.
4. Select **Require a password (recommended)**.

**NOTE:** To create a user account password or change your current user account password, select **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. Select **Save changes**.

Shutting down (turning off) Sprout

⚠️ **CAUTION:** Unsaved information is lost when Sprout shuts down. Be sure to save your work before shutting down Sprout.

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

Shut down Sprout under any of the following conditions:
- When you need to access components inside Sprout
- When you are connecting an external hardware device to a port other than a USB or video port
- When Sprout will be unused and disconnected from external power for an extended period
Although you can shut down Sprout with the power button, the recommended procedure is to use the turn off command, as follows:

**NOTE:** If Sprout is in the Sleep state or in Hibernation, you must first exit Sleep or Hibernation before shutdown is possible.

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

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

- Press `ctrl+alt+delete`. Select the **Start** button, select the **Power** icon, and then select **Shut down**.
- Press and hold the power button for at least 5 seconds.
- Disconnect Sprout from external power.
4 Maintaining your Sprout

It is important to perform regular maintenance to keep your Sprout in optimal condition. This chapter explains how to use tools like Disk Defragmenter and Disk Cleanup. It also provides instructions for updating programs and drivers and steps to clean Sprout.

Improving performance

You can improve the performance of your computer by performing regular maintenance tasks with tools such as Disk Defragmenter and Disk Cleanup.

Using Disk Defragmenter

HP recommends using Disk Defragmenter to defragment your hard drive at least once a month.

To run Disk Defragmenter:
1. Type disk defrag in the taskbar search box, and then select Defragment and optimize your drives.
2. Follow the on-screen instructions.
   For additional information, access the Disk Defragmenter software Help.

Using Disk Cleanup

Use Disk Cleanup to search the hard drive for unnecessary files that you can safely delete to free up disk space and help Sprout run more efficiently.

To run Disk Cleanup:
1. Type disk in the taskbar search box, and then select Free up disk space by deleting unnecessary files or Uninstall apps to free up disk space.
2. Follow the on-screen instructions.

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 Sprout. 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.
2. Select Updates and tune-ups, and then select Check for HP updates now.
3. Follow the on-screen instructions.
Cleaning your Sprout

Use the following products to clean your Sprout safely:

- 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 Sprout. If you are not sure that a cleaning product is safe for your Sprout, 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 Sprout. 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 Sprout.

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

Turn off Sprout.
Disconnected power.
Disconnected all powered external devices.

⚠️ **CAUTION:** To prevent damage to internal components, do not spray cleaning agents or liquids directly on any Sprout surface. Liquids dripped on the surface can permanently damage internal components.

Cleaning the display

⚠️ **CAUTION:** Do not spray or place the cleaner directly on the screen, projector, or other glass surfaces.

Gently wipe the sides and the surface of the display, projector, and cameras using a soft, lint-free cloth moistened with an alcohol-free glass cleaner.

Cleaning the sides or cover

To clean the sides or cover, 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 cover of Sprout, use a circular motion to aid in removing dirt and debris.

Cleaning the touch mat

⚠️ **CAUTION:** Do not spray or place the cleaner directly on the touch mat.

- Gently wipe the surface of the touch mat using a soft, lint-free cloth moistened with an alcohol-free glass cleaner.
- To prevent damage to the touch mat, avoid using strong chemicals.
Cleaning the keyboard or mouse

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

⚠️ **CAUTION:** To prevent damage to internal components, do not allow liquids to drip between the keys.

- To clean the keyboard or mouse, use a soft microfiber cloth or a chamois moistened with one of the cleaning solutions listed previously or use an acceptable disposable wipe.
- To prevent keys from sticking and to remove dust, lint, and particles from the keyboard, use a can of compressed air with a straw extension.
5 Securing your computer and information

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

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

### Using passwords

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

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

To create and save passwords, use the following tips:

- To reduce the risk of being locked out of the computer, record each password and store it in a secure place away from the computer. Do not store passwords in a file on the computer.
- When creating passwords, follow requirements set by the program.
- Change your passwords at least every 3 months.
- An ideal password is long and has letters, punctuation, symbols, and numbers.
- Before you send your computer for service, back up your files, delete confidential files, and then remove all password settings.

For additional information about Windows passwords, such as screen-saver passwords:

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

#### Setting Windows passwords

<table>
<thead>
<tr>
<th>Password</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>User password</td>
<td>Protects access to a Windows user account.</td>
</tr>
<tr>
<td>Administrator password</td>
<td>Protects administrator-level access to computer contents.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> This password cannot be used to access Setup Utility (BIOS) contents.</td>
</tr>
</tbody>
</table>

#### Setting Setup Utility (BIOS) passwords

<table>
<thead>
<tr>
<th>Password</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup password</td>
<td>• Must be entered each time you access Setup Utility (BIOS).</td>
</tr>
<tr>
<td>Password</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• If you forget your setup password, you cannot access Setup Utility (BIOS).</td>
</tr>
<tr>
<td>Power-on password</td>
<td>• Must be entered each time you turn on or restart the computer.</td>
</tr>
<tr>
<td></td>
<td>• If you forget your power-on password, you cannot turn on or restart the computer.</td>
</tr>
</tbody>
</table>

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

1. Start Setup Utility (BIOS):
   Turn on or restart the computer, quickly press `esc`, and then press `f10`.

2. Use the arrow keys to select **Security**, and then follow the on-screen instructions.

Your changes take effect when the computer restarts.

**Using Internet security software**

When you use your computer to access email, a network, or the Internet, you potentially expose your computer to computer viruses, spyware, and other online threats. To help protect your computer, Internet security software that includes antivirus and firewall features may be preinstalled on your computer as a trial offer. To provide ongoing protection against newly discovered viruses and other security risks, security software must be kept up to date. It is strongly recommended that you upgrade the security software trial offer or purchase the software of your choice in order to fully protect your computer.

**Using antivirus software**

Computer viruses can disable programs, utilities, or the operating system, 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 computer. It is strongly recommended that you use the antivirus program of your choice in order to fully protect your computer.

For more information about computer viruses, 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 software you install on your computer and/or network, or it can be a combination of both hardware and software.

There are two types of firewalls to consider:

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

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

HP, Windows, and third-party software installed on your computer should be regularly updated to correct security problems and improve software performance. For more information, see Updating programs and drivers on page 16.

⚠️ CAUTION: Microsoft sends out alerts regarding Windows updates, which may include security updates. To protect the computer from security breaches and computer viruses, install all updates from Microsoft as soon as you receive an alert.

You can install these updates automatically.

To view or change the settings:

1. Select the Start button, select Settings, and then select Update & Security.
2. Select Windows Update, and then follow the on-screen instructions.
3. To schedule a time for installing updates, select Advanced Options, and then follow the on-screen instructions.

Securing your wireless network

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.

Backing up your software applications and information

Regularly back up your software applications and information to protect them from being permanently lost or damaged through a virus attack or a software or hardware failure. For more information, see Backing up, restoring, and recovering on page 27.

Using an optional security cable lock

A security cable lock, purchased separately, is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen. Security cable locks are only one of several methods that should be employed as part of a complete security solution to help maximize theft protection.

The security cable slot on your computer may look slightly different from the illustration in this section. For the location of the security cable slot on your computer, see Getting to know your Sprout on page 1.

1. Loop the security cable lock around a secured object.
2. Insert the key (1) into the security cable lock (2).
3. Insert the security cable lock into the security cable slot on the computer (3), and then lock the security cable lock with the key.

4. Remove the key and keep it in a safe place.
6 Using Setup Utility (BIOS)

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

Starting Setup Utility (BIOS)

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

▲ Turn on or restart the computer, quickly press `esc`, and then press `f10`.

Updating Setup Utility (BIOS)

Updated versions of Setup Utility (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 decide whether you need to update Setup Utility (BIOS), first determine the BIOS version on your Sprout. BIOS version information (also known as *ROM date* and *System BIOS*) can be accessed by typing `support` in the taskbar search box, selecting the HP Support Assistant app, selecting *My computer*, and then or by using Setup Utility (BIOS).

1. Start Setup Utility (BIOS) (see *Starting Setup Utility (BIOS) on page 23*).
2. Use the arrow keys to select *File*, select *System Information*, and then make note of your BIOS version.

To exit Setup Utility (BIOS):

1. Use the arrow keys to select *Ignore Changes and Exit*, and then press `enter`.
2. Select *Yes*.

Downloading a BIOS update

⚠️ **CAUTION:** To reduce the risk of damage to Sprout or an unsuccessful installation, download and install a BIOS update only when Sprout is connected to reliable external power using the AC power cord. Do not download or install a BIOS update while the computer 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 from Sprout by unplugging the power cord from the AC outlet.
- Do not shut down Sprout or initiate Sleep.
- Do not insert, remove, connect, or disconnect any device, cable, or cord.
NOTE: If your Sprout is connected to a network, consult the network administrator before installing any software updates, especially system BIOS updates.

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

2. Select Updates and tune-ups, and then select Check for HP updates now.

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 Sprout. If the update is more recent than your BIOS, 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.

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

   1. Select the Start button, 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-click 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.
7 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 computer 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.

When HP PC Hardware Diagnostics (UEFI) detects a failure that requires hardware replacement, a 24-digit Failure ID code is generated. This ID code can then be provided to support to help determine how to correct the problem.

**NOTE:** To start diagnostics on a convertible computer, your computer must be in notebook mode and you must use the keyboard attached.

To start HP PC Hardware Diagnostics (UEFI), follow these steps:

1. Turn on or restart the computer, and quickly press **esc**.
2. Press **f2**.
   
   The BIOS searches three places for the diagnostic tools, in the following order:
   
   a. Connected USB drive
      
      **NOTE:** To download the HP PC Hardware Diagnostics (UEFI) tool to a USB drive, see Downloading HP PC Hardware Diagnostics (UEFI) to a USB device on page 25.
   
   b. Hard drive
   
   c. BIOS
   
   3. 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 **esc**.

### Downloading HP PC Hardware Diagnostics (UEFI) to a USB device

**NOTE:** The HP PC Hardware Diagnostics (UEFI) download instructions are provided in English only, and you must use a Windows computer to download and create the HP UEFI support environment because only .exe files are offered.

There are two options to download HP PC Hardware Diagnostics to a USB device.

**Download the latest UEFI version**

2. In the HP PC Hardware Diagnostics section, select the **Download** link, and then select **Run**.

**Download any version of UEFI for a specific product**

2. Select **Get software and drivers**.
3. Enter the product name or number.
   – or –

   Select **Identify now** to let HP automatically detect your product.

4. Select your computer, and then select your operating system.

5. In the **Diagnostic** section, follow the on-screen instructions to select and download the UEFI version you want.
8 Backing up, restoring, and recovering

This chapter provides information about the following processes. The information in the chapter is standard procedure for most products.

- Creating recovery media and backups
- Restoring and recovering your system

For additional information, refer to the HP support assistant app.

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

-or-

Click the question mark icon in the taskbar.

**IMPORTANT:** If you will be performing recovery procedures on a tablet, the tablet battery must be at least 70% charged before you start the recovery process.

**IMPORTANT:** For a tablet with a detachable keyboard, connect the keyboard to the keyboard dock before beginning any recovery process.

Creating recovery media and backups

The following methods of creating recovery media and backups are available on select products only. Choose the available method according to your computer model.

- Use HP Recovery Manager to create HP Recovery media after you successfully set up the computer. This step creates a backup of the HP Recovery partition on the computer. The backup 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 HP Recovery media (select products only) on page 27. For information on the recovery options that are available using the recovery media, see Using Windows tools on page 28.

- Use Windows tools to create system restore points and create backups of personal information.

For more information, see Recovering using HP Recovery Manager on page 29.

**NOTE:** If storage is 32 GB or less, Microsoft System Restore is disabled by default.

Creating HP Recovery media (select products only)

If possible, check for the presence of the Recovery partition and the Windows partition. From the **Start** menu, select **File Explorer**, and then select **This PC**.

- If your computer does not list the Windows partition and the Recovery partition, you can obtain recovery media for your system from support. See the **Worldwide Telephone Numbers** booklet included with the computer. You can also find contact information on the HP website. Go to [http://www.hp.com/support](http://www.hp.com/support), select your country or region, and follow the on-screen instructions.
You can use Windows tools to create system restore points and create backups of personal information, see Using Windows tools on page 28.

- If your computer does list the Recovery partition and the Windows partition, you can use HP Recovery Manager to create recovery media after you successfully set up the computer. HP Recovery media can be used to perform system recovery if the hard drive becomes corrupted. System recovery reinstall sets the original operating system and software programs that were installed at the factory and then configures the settings for the programs. HP Recovery media can also be used to customize the system or restore the factory image if you replace the hard drive.

  - Only one set of recovery media can be created. Handle these recovery tools carefully, and keep them in a safe place.
  - HP Recovery Manager examines the computer and determines the required storage capacity for the media that will be required.
  - To create recovery discs, your computer must have an optical drive with DVD writer capability, and you must use only high-quality blank DVD-R, DVD+R, DVD-R DL, or DVD+R DL discs. Do not use rewritable discs such as CD±RW, DVD±RW, double-layer DVD±RW, or BD-RE (rewritable Blu-ray) discs; they are not compatible with HP Recovery Manager software. Or, instead, you can use a high-quality blank USB flash drive.
  - If your computer does not include an integrated optical drive with DVD writer capability, but you would like to create DVD recovery media, you can use an external optical drive (purchased separately) to create recovery discs. If you use an external optical drive, it must be connected directly to a USB port on the computer; the drive cannot be connected to a USB port on an external device, such as a USB hub. If you cannot create DVD media yourself, you can obtain recovery discs for your computer from HP. See the Worldwide Telephone Numbers booklet included with the computer. You can also find contact information on the HP website. Go to http://www.hp.com/support, select your country or region, and follow the on-screen instructions.
  - Be sure that the computer is connected to AC power before you begin creating the recovery media.
  - The creation process can take an hour or more. Do not interrupt the creation process.
  - If necessary, you can exit the program before you have finished creating all of the recovery DVDs. HP Recovery Manager will finish burning the current DVD. The next time you start HP Recovery Manager, you will be prompted to continue.

To create HP Recovery media:

**IMPORTANT:** For a tablet with a detachable keyboard, connect the keyboard to the keyboard dock before beginning these steps.

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.

If you ever need to recover the system, see Recovering using HP Recovery Manager on page 29.

**Using Windows tools**

You can create recovery media, system restore points, and backups of personal information using Windows tools.

**NOTE:** If storage is 32 GB or less, Microsoft System Restore is disabled by default.

For more information and steps, see the Get started app.

▲ Select the Start button, and then select the Get started app.
### Restore and recovery

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

---

**IMPORTANT:** Not all methods are available on all products.

- Windows offers several options for restoring from backup, refreshing the computer, and resetting the computer to its original state. For more information see the Get started app.
  - Select the **Start** button, and then select the **Get started** app.

- If you need to correct a problem with a preinstalled application or driver, use the Reinstall drivers and/or applications option (select products only) of HP Recovery Manager to reinstall the individual application or driver.
  - Type recovery in the taskbar search box, select **HP Recovery Manager**, select **Reinstall drivers and/or applications**, and then follow the on-screen instructions.

- If you want to recover the Windows partition to original factory content, you can choose the System Recovery option from the HP Recovery partition (select products only) or use the HP Recovery media. For more information, see **Recovering using HP Recovery Manager on page 29**. If you have not already created recovery media, see **Creating HP Recovery media (select products only) on page 27**.

- On select products, if you want to recover the computer’s original factory partition and content, or if you have replaced the hard drive, you can use the Factory Reset option of HP Recovery media. For more information, see **Recovering using HP Recovery Manager on page 29**.

- On select products, if you want to remove the recovery partition to reclaim hard drive space, HP Recovery Manager offers the Remove Recovery Partition option.
  For more information, see **Removing the HP Recovery partition (select products only) on page 32**.

### Recovering using HP Recovery Manager

HP Recovery Manager software allows you to recover the computer to its original factory state by using the HP Recovery media that you either created or that you obtained from HP, or by using the HP Recovery partition (select products only). If you have not already created recovery media, see **Creating HP Recovery media (select products only) on page 27**.

### What you need to know before you get started

- HP Recovery Manager recovers only software that was installed at the factory. For software not provided with this computer, you must either download the software from the manufacturer’s website or reinstall the software from the media provided by the manufacturer.

  **IMPORTANT:** Recovery through HP Recovery Manager should be used as a final attempt to correct computer issues.

- HP Recovery media must be used if the computer hard drive fails. If you have not already created recovery media, see **Creating HP Recovery media (select products only) on page 27**.

- To use the Factory Reset option (select products only), you must use HP Recovery media. If you have not already created recovery media, see **Creating HP Recovery media (select products only) on page 27**.

- If your computer does not allow the creation of HP Recovery media or if the HP Recovery media does not work, you can obtain recovery media for your system from support. See the **Worldwide Telephone Numbers** booklet included with the computer. You can also find contact information from the HP
website. Go to http://www.hp.com/support, select your country or region, and follow the on-screen instructions.

**IMPORTANT:** HP Recovery Manager does not automatically provide backups of your personal data. Before beginning recovery, back up any personal data you want to retain.

Using HP Recovery media, you can choose from one of the following recovery options:

**NOTE:** Only the options available for your computer display when you start the recovery process.

- System Recovery—Reinstalls the original operating system, and then configures the settings for the programs that were installed at the factory.
- Factory Reset—Restores the computer to its original factory state by deleting all information from the hard drive and re-creating the partitions. Then it reinstalls the operating system and the software that was installed at the factory.

The HP Recovery partition (select products only) allows System Recovery only.

### Using the HP Recovery partition (select products only)

The HP Recovery partition allows you to perform a system recovery without the need for recovery discs or a recovery USB flash drive. This type of recovery can be used only if the hard drive is still working.

To start HP Recovery Manager from the HP Recovery partition:

**IMPORTANT:** For a tablet with a detachable keyboard, connect the keyboard to the keyboard dock before beginning these steps (select products only).

1. Type *recovery* in the taskbar search box, select **Recovery Manager**, and then select **HP Recovery Environment**.
   - or-
   For computers or tablets with keyboards attached, press f11 while the computer boots, or press and hold f11 as you press the power button.
   For tablets without keyboards:
   Turn on or restart the tablet, and then quickly hold down the volume down button; then select f11.
   - or -
   Turn on or restart the tablet, and then quickly hold down the Windows button; then select f11.

2. Select **Troubleshoot** from the boot options menu.

3. Select **Recovery Manager**, and then follow the on-screen instructions.

### Using HP Recovery media to recover

You can use HP Recovery media to recover the original system. This method can be used if your system does not have an HP Recovery partition or if the hard drive is not working properly.

1. If possible, back up all personal files.
2. Insert the HP Recovery media, and then restart the computer.

**NOTE:** If the computer does not automatically restart in HP Recovery Manager, change the computer boot order. See Changing the computer boot order on page 31.

3. Follow the on-screen instructions.
Changing the computer boot order

If your computer does not restart in HP Recovery Manager, you can change the computer boot order, which is the order of devices listed in BIOS where the computer looks for startup information. You can change the selection to an optical drive or a USB flash drive.

To change the boot order:

**IMPORTANT:** For a tablet with a detachable keyboard, connect the keyboard to the keyboard dock before beginning these steps.

1. Insert the HP Recovery media.
2. Access BIOS:
   For computers or tablets with keyboards attached:
   ▲ Turn on or restart the computer or tablet, quickly press esc, and then press f9 for boot options.
   For tablets without keyboards:
   ▲ Turn on or restart the tablet, and then quickly hold down the volume down button; then select f9.
   - or -
   ▲ Turn on or restart the tablet, and then quickly hold down the Windows button; then select f9.
3. Select the optical drive or USB flash drive from which you want to boot.
4. Follow the on-screen instructions.
Removing the HP Recovery partition (select products only)

HP Recovery Manager software allows you to remove the HP Recovery partition to free up hard drive space.

**IMPORTANT:** After you remove the HP Recovery partition, you will not be able to perform System Recovery or create HP recovery media from the HP Recovery partition. So before you remove the Recovery partition, create HP Recovery media; see Creating HP Recovery media (select products only) on page 27.

**NOTE:** The Remove Recovery Partition option is only available on products that support this function.

Follow these steps to remove the HP Recovery partition:

1. Type `recovery` in the taskbar search box, and then select **HP Recovery Manager**.
2. Select **Remove Recovery Partition**, and then follow the on-screen instructions.
9 Troubleshooting

Wireless connection problems

Some possible causes for wireless connection problems include the following:

- Wireless device is not turned on.
- Wireless device is not installed correctly or has been disabled.
- Wireless device encountered interference from other devices.
- Wireless device or router hardware has failed.

Cannot connect to a WLAN

If you have a problem connecting to a WLAN, confirm that the integrated WLAN device is turned on and properly installed on your Sprout.

1. Be sure that the wireless device is turned on.
2. Then try connecting to the WLAN again.

If you are still unable to connect, follow the steps below.

1. Type control panel in the taskbar search box, and then select Control Panel.
2. Select System and Security, select System, and then select Device Manager.
3. Select the arrow next to Network adapters to expand the list and show all adapters.
4. Identify the WLAN device from the Network adapters list. The listing for a WLAN device may include the term wireless, wireless LAN, WLAN, or 802.11.

   If no WLAN device is listed, either your Sprout does not have an integrated WLAN device, or the driver for the WLAN device is not properly installed.

For more information about troubleshooting WLANs, see the website links provided in Help and Support.

Cannot connect to a preferred network

You may not be able to connect to a preferred network because it is a security-enabled WLAN. You must have the security code to connect to this type of WLAN. See the next section for additional information.

If entering a security code is not the problem, you may have a corrupted WLAN connection. Many times, Windows can automatically repair a corrupted WLAN connection.

- If there is a network status icon at the far right of the taskbar, right-click the icon, and then select Troubleshoot problems.

   Windows resets your network device and attempts to reconnect to one of the preferred networks.

- If there is no network status icon at the far right of the taskbar, follow these steps:
1. Type control panel in the taskbar search box, and then select Control Panel.

2. Select Network and Internet, and then select Network and Sharing Center.

3. Select Troubleshoot problems, and then select the network you want to repair.

**Current network security codes are unavailable**

If you are prompted for a security code (or network key) or a name (SSID) when connecting to a WLAN, the network is protected by security. The SSID and security code are alphanumeric codes that you enter into your Sprout to identify your Sprout to the network. You must have the current codes to connect to a secure network.

- For a network connected to your personal wireless router, review the router user guide for instructions on setting up the same codes on both the router and the WLAN device.

- For a private network, such as a network in an office or at a public Internet chat room, contact the network administrator to obtain the codes, and then enter the codes when you are prompted to do so.

Some networks change the SSID or network keys used in their routers or access points on a regular basis to improve security. You must change the corresponding code in your Sprout accordingly.

If you are provided with a new wireless network key and SSID for a network, and if you have previously connected to that network, follow the steps below to reconnect to the network:

1. Right-click the network status icon at the far right of the taskbar.

   A list showing the available WLANs is displayed. If you are in a hotspot where several WLANs are active, several will be displayed.

2. Right-click the network, and then select Properties.

   
   **NOTE:** If the network you want is not listed, check with the network administrator to be sure that the router or access point is operating.

3. Select the Security tab, and then enter the correct wireless encryption data into the Network security key box.

4. Select OK to save these settings.

**Cannot connect to the wireless router**

If you are trying to connect to the wireless router and are unsuccessful, reset the wireless router by removing power from the router for 10 to 15 seconds.

If Sprout still cannot connect to a WLAN, restart the wireless router. For details, see the router manufacturer's instructions.

**Network status icon is not displayed**

If the network status icon is not displayed at the far right of the taskbar after you configure the WLAN, the software driver is either missing or corrupted. A Windows “Device not Found” error message may also be displayed.

To resolve this problem, get the latest version of the WLAN device software and drivers for your Sprout from http://www.hp.com.

1. Open your Internet browser.

2. For support, go to http://www.hp.com/support.
3. Select the option for software and driver downloads, and then type your computer model number in the search box.

4. Press enter, and then follow the on-screen instructions.

NOTE: If the WLAN device you are using was purchased separately, consult the manufacturer's website for the latest software.

Power problems

Sprout will not turn on or start

1. Test the AC outlet by connecting a different electrical device to it.

2. Reconnect the computer's cables, being sure that the connection from the AC power cord to the computer and the connection from the AC power cord to the AC outlet are secure.

3. Try to turn on Sprout.

   - If the power lights turn on, the AC power cord is working properly.
   - If the connections are secure and the power lights remain off, the AC power cord is not functioning and should be replaced.

   Contact support for information about obtaining a replacement AC power cord.

Hard drive error

1. Press the ctrl+alt+delete keys simultaneously.

2. Select the Power icon in the lower-right corner of the screen, and then select Restart.

   Or, press and hold the power button on Sprout for 5 or more seconds to turn off Sprout, and then press the power button to turn on Sprout.

3. If Windows opens, immediately back up all important information to an external hard drive.

4. Whether Windows started or not, contact support. Either the hard drive or the system board may need to be replaced.

Sprout is not responding

Use the Windows Task Manager to close any programs that are not responding.

1. Press the ctrl+alt+delete keys.

2. Select Task Manager.

3. Select any program that is not responding, and then select End Task.

If closing programs does not work, restart Sprout.

1. Press the ctrl+alt+delete keys.

2. Select the Power icon, and then select Restart.

   – or –

   Press and hold the power button for 5 or more seconds to turn off Sprout, and then press the power button to turn on Sprout.
Sprout shuts down unexpectedly

- Sprout might be in an exceedingly hot environment. Turn it off and let it cool down.
- Be sure that Sprout vents are not blocked and that the internal fan is running. See Getting to know your Sprout on page 1 for the location of the computer vents.

Display problems

The display is blank

- Exit Sleep to redisplay the screen image.
  - Press the power button briefly.
  - Press a key on the keyboard.
  - Press the space bar.
  - Press the esc key.
- Press the power button to turn on Sprout.

Images on the screen are too large or too small, or the images are fuzzy

Adjust the resolution settings.

1. Type control panel in the taskbar search box, and then select Control Panel.
2. Select Appearance and Personalization.
3. Under Display, select Adjust Screen Resolution.
4. Adjust resolution as necessary, and then select Apply.

Keyboard and mouse problems

- Be sure that you are using the keyboard or mouse within range of the receiver.
- Be sure that the mouse is not in Suspend mode, which occurs after 20 minutes of inactivity. Click the left mouse button to reactivate it.
- Replace the batteries in the keyboard and mouse.
- Re-pair the keyboard and mouse to the receiver.

[NOTE:] The illustrations below may look slightly different from your keyboard and mouse.

[IMPORTANT:] During these steps, place the keyboard and mouse on the same level as the receiver.

To re-pair the keyboard and mouse:

1. Be sure that the mouse is on (1), and then press and hold the Connect button (2) for 5 to 10 seconds. To confirm the connection, move the mouse and check for a response on the screen.
2. After the mouse connection is established, complete the following steps to re-pair the keyboard.
3. On the keyboard, press and hold the Connect button (3) for 5 to 10 seconds.
Touch mat problems

Projection remains when the touch mat is removed.

1. Restart HPPCSERVICE:
   a. Press `ctrl+alt+delete`.
   b. Select Task Manager, and then select the Services tab.
   c. In the Name column, select HPPCSERVICE.
   d. Right-click HPPCSERVICE, and then select Stop.
   e. Right-click HPPCSERVICE, and then select Start.

2. Select the Power icon, and then select Restart.

   — or —

   Press and hold the power button on Sprout for 5 or more seconds to turn off Sprout, and then press the power button to turn on Sprout.

Projection does not come back when the touch mat is connected again.

1. If the touch mat workspace icon is amber, touch the icon to enable the projector. When the projector is on, the icon is white.

2. Remove the touch mat, and remove any debris from the touch mat or the connector that would interrupt the connection.

   — or —

   Clean the touch mat and the connector with a cloth.

3. Select the Power icon, and then click Restart.

   — or —

   Press and hold the power button on Sprout for 5 or more seconds to turn off Sprout, and then press the power button to turn on Sprout.

The touch mat is not registering touches.

1. If the touch mat workspace icon is amber, touch the icon to enable the projector. When the projector is on, the icon is white.

2. Remove the touch mat, and remove any debris from the touch mat or the connector that would interrupt the connection.

   — or —

   Clean the touch mat and the connector with a cloth.

3. Select the Power icon, and then select Restart.

   — or —

   Press and hold the power button for 5 or more seconds to turn off Sprout, and then press the power button to turn on Sprout.

4. Remove any metal objects from the touch mat.
Audio problems

No sound is produced through external speakers (purchased separately)

- Be sure that you connected powered speakers and that they are turned on.
- Adjust the volume, either on the speakers or through the computer operating system.
- Turn off your Sprout, and then unplug and reconnect the speakers. Be sure that the speakers are properly connected.
- Unplug headphones if they are connected to your Sprout (or speaker system).
- If Sprout is in the Sleep state, exit Sleep by briefly pressing the power button.
- Check the audio functions.

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

1. Type control panel in the taskbar search box, and then select Control Panel.
2. Select Hardware and Sound, and then select Sound.
3. When the Sound window opens, select the Sounds tab. Under Program Events, select any sound event, such as a beep or alarm, and then select Test.
   You should hear sound through the speakers or through connected headphones.

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

1. Type sound in the taskbar search box, and then select Sound Recorder.
2. Select Start Recording and speak into the microphone. Save the file to your Windows desktop.
3. Open a multimedia program and play back the sound.

NOTE: To confirm or change the audio settings on your Sprout, type control panel in the taskbar search box, and then select Control Panel. Select Hardware and Sound, and then select Sound.

Software problems

- Shut down Sprout, and then turn it on again.
- Update or reinstall the drivers. See Updating programs and drivers on page 16.
- Refresh or restore your Sprout. See Backing up, restoring, and recovering on page 27.
10 Specifications

Input power

<table>
<thead>
<tr>
<th>Input power</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage and current</td>
<td>100–240 V dc @ 4.5–2.25 A, 50/60Hz</td>
</tr>
</tbody>
</table>

Operating specifications

**NOTE:** To see the electrical ratings, refer to your computer’s ratings label, located on the outside of the computer, to determine the exact electrical rating.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Metric</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>5°C to 35°C</td>
<td>41°F to 95°F</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>−30°C to 65°C</td>
<td>−22°F to 149°F</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>15% to 80% @ 26°C</td>
<td>15% to 80% @ 78°F</td>
</tr>
<tr>
<td>Operating altitude</td>
<td>0 m to 2000 m</td>
<td>0 ft to 6561 ft</td>
</tr>
<tr>
<td>Storage altitude</td>
<td>0 m to 4572 m</td>
<td>0 ft to 15,000 ft</td>
</tr>
</tbody>
</table>
11 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.
# 12 More HP resources

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

<table>
<thead>
<tr>
<th>Resource</th>
<th>Contents</th>
</tr>
</thead>
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<tr>
<td>Sprout website</td>
<td>● Current information about learning, inspiration, and troubleshooting.</td>
</tr>
<tr>
<td><a href="http://sprout.hp.com">http://sprout.hp.com</a></td>
<td></td>
</tr>
<tr>
<td>Help and Support</td>
<td>● A broad range of how-to information and troubleshooting tips</td>
</tr>
<tr>
<td>To access Help and Support:</td>
<td></td>
</tr>
<tr>
<td>▲ Type help in the taskbar search box, and then select Help and Support.</td>
<td></td>
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<tr>
<td>– or –</td>
<td></td>
</tr>
<tr>
<td>Click the question mark icon in the taskbar.</td>
<td></td>
</tr>
<tr>
<td>HP Support</td>
<td>● Online chat with an HP technician</td>
</tr>
<tr>
<td>For support, go to</td>
<td>● Support telephone numbers</td>
</tr>
<tr>
<td><a href="http://www.hp.com/support">http://www.hp.com/support</a></td>
<td>● HP service center locations</td>
</tr>
<tr>
<td>Safety &amp; Comfort Guide</td>
<td>● Proper workstation setup</td>
</tr>
<tr>
<td>To access this guide:</td>
<td>● Guidelines for posture and work habits that increase your comfort</td>
</tr>
<tr>
<td>1. Type support in the taskbar search box, and then select the HP Support Assistant app.</td>
<td>● Electrical and mechanical safety information</td>
</tr>
<tr>
<td>2. Select My computer, and then select User guides.</td>
<td></td>
</tr>
<tr>
<td>– or –</td>
<td></td>
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<tr>
<td>Go to <a href="http://www.hp.com/ergo">http://www.hp.com/ergo</a></td>
<td></td>
</tr>
<tr>
<td>Regulatory, Safety and Environmental Notices</td>
<td>● Important regulatory notices, including proper battery disposal information</td>
</tr>
<tr>
<td>To access this document:</td>
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<tr>
<td>1. Type support in the taskbar search box, and then select the HP Support Assistant app.</td>
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<td>– or –</td>
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<tr>
<td>Click the question mark icon in the taskbar.</td>
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<tr>
<td>2. Select My computer, and then select User guides.</td>
<td></td>
</tr>
<tr>
<td>Limited Warranty*</td>
<td>● Specific warranty information about this computer</td>
</tr>
<tr>
<td>To access this document:</td>
<td></td>
</tr>
<tr>
<td>1. Type support in the taskbar search box, and then select the HP Support Assistant app.</td>
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<td>– or –</td>
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<tr>
<td>Click the question mark icon in the taskbar.</td>
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<tr>
<td>2. Select My computer, and then select Warranty and services.</td>
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</tbody>
</table>

*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](http://www.hp.com/go/orderdocuments). For products purchased in Asia Pacific, you can write to HP at Hewlett Packard, POD, PO Box 161, Kitchener Road Post Office, Singapore 912006. Include your product name, and your name, phone number, and postal address.
13 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.
A Scanning safety information

Carefully read all of the following safety precautions before using the Sprout 2D calibration, 3D calibration, and 3D Capture scans.

⚠️ **WARNING! Photosensitive Epileptic Seizures**—A very small percentage of individuals may experience a seizure or other complications when exposed to certain visual images, including flashing lights or patterns that may appear during Sprout 2D and 3D calibration, and/or 3D Capture scans. If you, or any user, have a history of seizures or epilepsy, consult a physician before using Sprout calibration or 3D Capture scan functionality. Even those without a personal family history of epilepsy or stroke may have an undiagnosed condition that can cause photosensitive epileptic seizures.

If you experience any of the following symptoms, immediately stop using Sprout calibration or 3D scanning functionality and consult a physician:

- Altered vision
- Light-headedness
- Dizziness
- Involuntary movements such as eye or muscle twitching
- Nausea
- Convulsions
- Loss of awareness
- Confusion
- Cramps
- Disorientation

**Resume Sprout usage only on approval of your physician**

Parents should monitor and ask their children if they have any of the above symptoms. Children and teenagers may be more likely than adults to experience these symptoms.

The vision of young children (especially children under the age of 6) is still under development. Consult your physician (such as a pediatrician or eye doctor) before allowing young children to use Sprout calibration or scanning functionality.

To help reduce the likelihood of adverse physical reactions:

- Use in a well-lit area and do not look directly at the Sprout or the light patterns generated by the Sprout during calibration or 3D scans.
- Avoid prolonged use of the 3D scanning process.
- Take a 15-minute break during each hour of Sprout use. The length and frequency of necessary breaks may vary from person to person. Please take breaks that are long enough to allow any feelings of discomfort to subside. If symptoms persist, consult a physician.
- Avoid calibrating Sprout or producing 3D scans when you are tired or need sleep.
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