



Sprout by HP User Guide

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Product notice

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

Not all features are available in all editions of Windows. This computer 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.

Safety notice

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

Software terms

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For any further information or to request a full refund of the price of the computer, please contact your seller.

Table of contents

1 Getting to know your Sprout	1
Finding hardware and software information	1
Locating hardware	1
Locating software	1
Front	2
Sprout Illuminator	3
Top	4
Right side	5
Left side	6
Rear	7
Connecting the HP Touch Mat	8
Labels	9
Identifying the labels	9
2 Connecting to a network	10
Connecting to a wireless network	10
Using the wireless controls	10
Operating system controls	10
Connecting to a WLAN	11
Using Bluetooth wireless devices	11
Connecting to a wired network—LAN	11
Sharing data and drives and accessing software	12
3 Managing power	13
User-replaceable battery notices	13
Initiating Sleep and Hibernation	13
Manually initiating and exiting Sleep	13
Manually initiating and exiting Hibernation	14
Setting password protection on wakeup	14
Shutting down (turning off) the Sprout	14
4 Managing and sharing information	16
Using a USB device	16
Connecting a USB device	16
Removing a USB device	16
Inserting and removing a memory card	17

5 Maintaining peak performance	19
Performing routine maintenance	19
Using Disk Cleanup	19
Using Disk Defragmenter	19
Updating programs and drivers	19
Cleaning your Sprout	20
Cleaning procedures	20
Cleaning the display and glass surfaces	20
Cleaning the sides or cover	20
Cleaning the Touch mat	20
Cleaning the keyboard or mouse	21
6 Securing your computer and information	22
Using passwords	22
Setting Windows passwords	22
Setting Setup Utility (BIOS) passwords	23
Using Internet security software	23
Using antivirus software	23
Using firewall software	23
Installing software updates	24
Installing critical security updates	24
Securing your wireless network	24
Backing up your software applications and information	24
Using an optional security cable lock	24
7 Using Setup Utility (BIOS)	26
Starting Setup Utility (BIOS)	26
Updating the BIOS	26
Determining the BIOS version	26
Downloading a BIOS update	26
8 Using HP PC Hardware Diagnostics (UEFI)	28
Downloading HP PC Hardware Diagnostics (UEFI) to a USB device	28
9 Backing up, restoring, and recovering	29
Creating recovery media and backups	29
Creating HP Recovery media	29
Using Windows tools	30
Restore and recover	30
Recovering using HP Recovery Manager	31

What you need to know	31
Using the HP Recovery partition	31
Using HP Recovery media to recover	31
Changing the computer boot order	32
10 Troubleshooting	33
Wireless connection problems	33
Cannot connect to a WLAN	33
Cannot connect to a preferred network	33
Current network security codes are unavailable	34
Cannot connect to the wireless router	34
Network status icon is not displayed	34
Power problems	35
Sprout will not turn on or start	35
Hard drive error	35
Sprout is not responding	35
Sprout shuts down unexpectedly	36
Display problems	36
The display is blank	36
Images on the screen are too large or too small, or the images are fuzzy	36
Keyboard and mouse problems	36
Touch mat problems	37
Audio problems	38
No sound is produced through external speakers (purchased separately)	38
Software problems	38
11 Specifications	39
Input power	39
Operating specifications	39
12 Electrostatic Discharge	40
13 More HP resources	41
Index	43

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:

1. From the Start screen, type `control panel`, and then select **Control Panel**.
– or –
From the Windows desktop, right-click the **Start** button, and then select **Control Panel**.
2. Select **System and Security**, select **System**, and then click **Device Manager** in the left column.

Locating software

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

- ▲ From the Start screen, click the down arrow in the lower-left corner of the screen.
– or –
From the Windows desktop, right-click the **Start** button, and then select **Programs and Features**.
A list displays all the devices installed on your Sprout.

Front



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

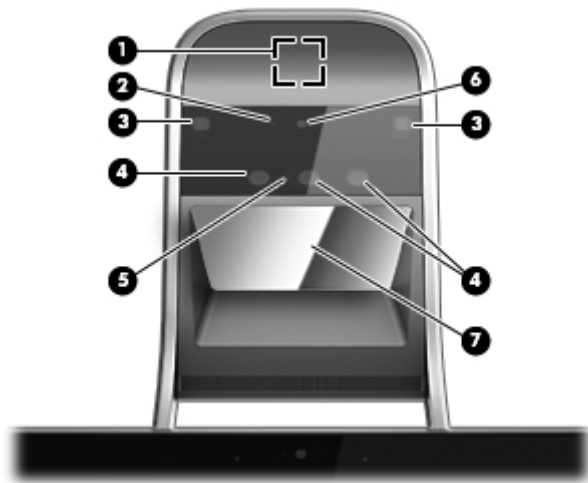
*The antennas are not visible from the outside of the computer. For optimal transmission, keep the areas immediately around the antennas free from obstructions. For wireless regulatory notices, see the section of the *Regulatory, Safety, and Environmental Notices* that applies to your country or region.

To access this document:

- ▲ From the Start screen, type [support](#), and then select the **HP Support Assistant** app.

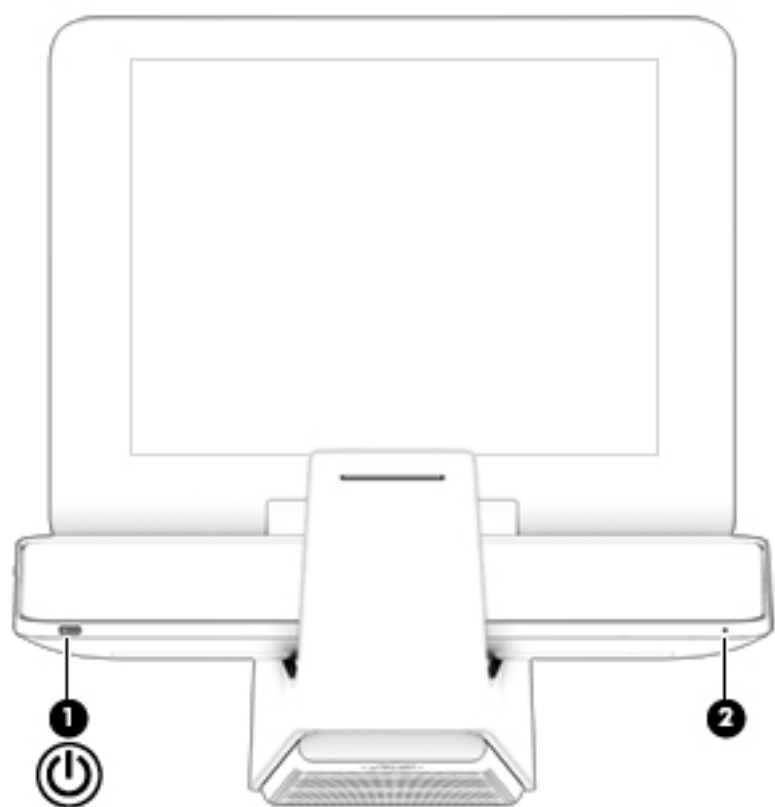
Component	Description
– or –	
From the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.	

Sprout Illuminator



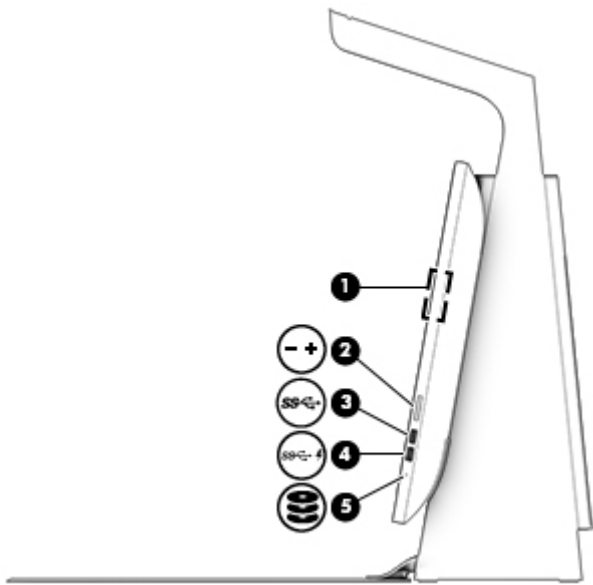
CAUTION: To prevent damage to your vision, avoid staring directly at the lights on the Sprout Illuminator.

Component	Description	
(1)	Desk lamp touch sensor	Touch to turn the desk lamp on, to dim it, or to turn it off.
(2)	High-resolution camera light	On: The high-resolution camera is on.
(3)	Desk lamp (2)	Illuminates the touch mat.
(4)	Depth camera (3)	Captures three-dimensional images.
(5)	Depth camera light	On: The depth camera is on.
(6)	High-resolution camera	Captures high-resolution images from the touch mat.
(7)	Projector mirror	Projects the Sprout Workspace on the touch mat.



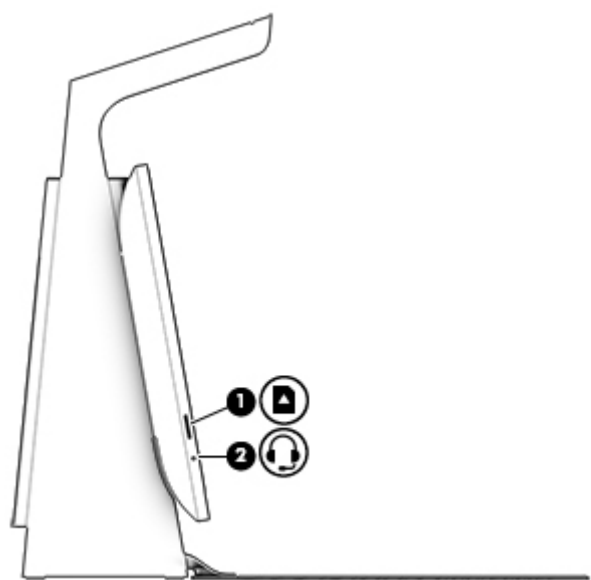
Component		Description
(1)	 Power button	• When the computer is off, press the button to turn on the computer. • When the computer is in the Sleep state, press the button briefly to exit Sleep. • When the computer is in Hibernation, press the button briefly to exit Hibernation. CAUTION: Pressing and 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, from the Start screen, type <code>power</code>, and then select Power Options. – or – From the Windows desktop, right-click the Start button, and then select Power Options.
(2)	Ambient light sensor	Automatically adjusts the display brightness based on the lighting conditions in your environment.

Right side



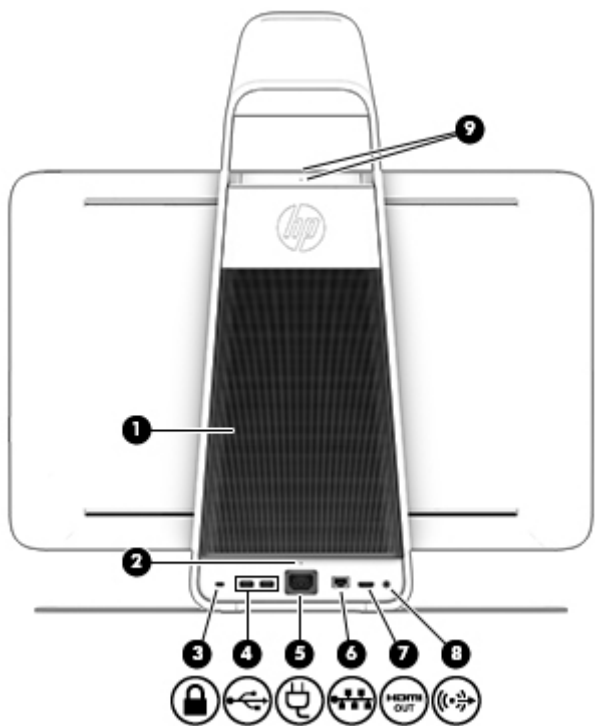
Component		Description
(1)	Internal magnet	Allows you to attach the stylus.
(2)	 Volume up/down button	Increases or decreases the speaker volume.
(3)	 USB 3.0 port	Connects an optional USB 1.0, USB 2.0, or USB 3.0 device and provides enhanced USB power performance for USB 3.0 devices.
(4)	 USB 3.0 charging (powered) port	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. NOTE: USB charging ports can also charge select models of cell phones and MP3 players, even when the computer is off.
(5)	 Hard drive activity light	Blinking: The hard drive is being used.

Left side



Component	Description
(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 <i>Regulatory, Safety, and Environmental Notices</i>. To access this guide, from the Start screen, type <code>support</code>, and then select the HP Support Assistant app. – or – From the Windows desktop, click the question mark icon in the notification area, at the far right of 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).

Rear



Component		Description
(1)	Vent	Enables airflow to cool internal components.
(2)	Power supply light	On: The AC power cord is connected.
(3)	 Security cable slot	Attaches an optional security cable to the computer. NOTE: The security cable may not prevent the computer from being mishandled or stolen.
(4)	 USB 2.0 ports (2)	Connect optional USB 2.0 devices.
(5)	 Power connector	Connects an AC power cord.
(6)	 RJ-45 (network) jack	Connects a network cable.
(7)	 HDMI output port	Projects the computer screen display to an external monitor. NOTE: The HDMI output port cannot be used as an input from a TV, a game console, or a set top box.
(8)	 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.

Component	Description
(9)	Internal microphones (2)
NOTE: When a device is connected to the jack, the computer speakers are disabled.	
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 front of the monitor. The magnets in the 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.

- ▲ From the Start screen, type `help`, and then select **Help and Support**.

– or –

From the Windows desktop, right-click the **Start** button, and then select **Search**. In the search field, type `help`, 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. From the Start screen, type `control panel`, and then select **Control Panel**.

– or –

From the Windows desktop, right-click the **Start** button, 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.

- ▲ From the Start screen, type `help`, and then select **Help and Support**.

– or –

From the Windows desktop, right-click the **Start** button, and then select **Search**. In the search field, type `help`, and then select **Help and Support**.

Connecting to a WLAN

To connect to a WLAN, follow these steps:

1. Be sure that the WLAN device is on.
2. From the Start screen or the Windows desktop, point to the upper-right or lower-right corner of the display to reveal the charms.
3. Select **Settings**, and then click the network status icon.
4. Select your WLAN from the list.
5. Click **Connect**.

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

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

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

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

Using 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

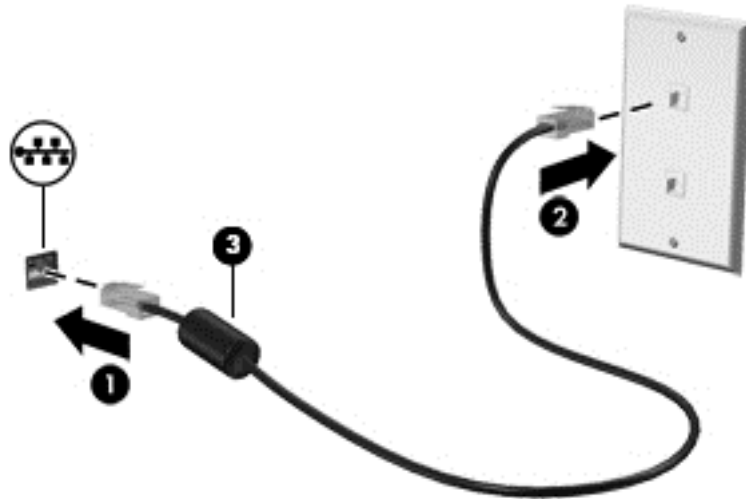
Use a LAN connection if you want to connect the computer directly to a router in your home (instead of working wirelessly), or if you want to connect to an existing network at your office.

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.

- ▲ From the Start screen, type `help`, and then select **Help and Support**.

– or –

From the Windows desktop, right-click the **Start** button, and then select **Search**. In the search field, type `help`, 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 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 the 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 the Sprout is in the Sleep state or in Hibernation.

Manually initiating and exiting Sleep

- ▲ To initiate Sleep, from the Start screen or the Windows desktop, point to the far-right upper or lower corner of the screen to display the charms. Click the **Power** icon, and then select **Sleep**.

– or –

From the Windows desktop, right-click the **Start** button, select **Shut down or sign out**, and then select **Sleep**.

To exit Sleep:

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

When the 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. From the Start screen, type `power`, and then select **Power Options**.

– or –

From the Windows desktop, right-click the **Start** button, and then click **Power Options**.

2. In the left pane, select **Choose what the power buttons do**.
3. Select **Change Settings that are currently unavailable**.
4. In the **When I press the power button** area, select **Hibernate**.
5. Click **Save changes**.

To exit Hibernation, briefly press the power button.

When the 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

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

1. From the Start screen, type `power`, and then select **Power Options**.

– or –

From the Windows desktop, right-click the **Start** button, and then click **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: If you need to create a user account password or change your current user account password, click **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. Click **Save changes**.

Shutting down (turning off) the Sprout



CAUTION: Unsaved information is lost when the Sprout shuts down.

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

Shut down the Sprout under any of the following conditions:

- When you need to access components inside the Sprout
- When you are connecting an external hardware device to a port other than a USB or video port
- When the Sprout will be unused and disconnected from external power for an extended period

Although you can shut down the Sprout with the power button, the recommended procedure is to use the turn off command, as follows:



NOTE: If the 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. From the Start screen or the Windows desktop, point to the far-right upper or lower corner of the screen to display charms, and then select **Settings**.
3. Click the **Power** icon, and then click **Shut down**.

If the 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**. Click the **Power** icon in the lower-right corner of the screen, and then click **Shut Down**.
- Press and hold the power button for at least 5 seconds.
- Disconnect the Sprout from external power.

4 Managing and sharing information

Drives are digital storage devices that help you store, manage, share, and access information. Your Sprout has an internal hard drive that stores your personal files and your Sprout's software and operating system. For added capacity or functionality, connect an external drive (purchased separately), such as an optical drive or hard drive.

To quickly transfer information, connect a USB flash drive to the USB port on your Sprout, or insert the memory card from your phone or camera into the memory card reader.



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

Using a USB device

Your Sprout has more than one type of USB port. See [Getting to know your Sprout on page 1](#) for the types of USB ports on this Sprout. Be sure to purchase devices that are compatible with your Sprout.

Connecting a USB device



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

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



A sound indicates that the device has been detected.



NOTE: The first time you connect a USB device, a message displays on the Windows desktop and an icon in the notification area lets you know that the device is recognized by the Sprout.

Removing a USB device



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

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

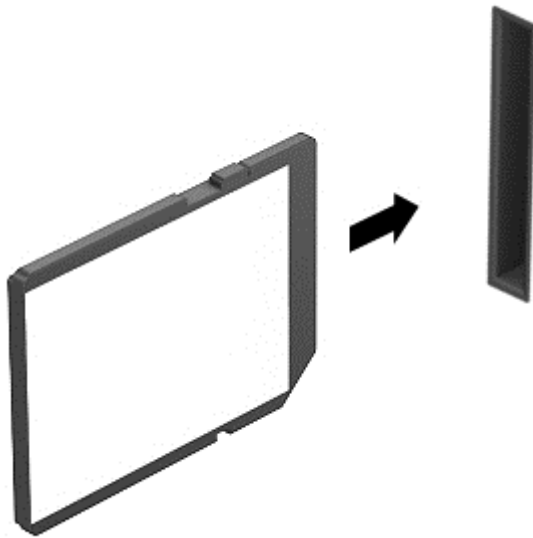
1. Save your information and close all programs associated with the device.
2. From the Windows desktop, click the hardware icon in the notification area, at the far right of the taskbar. A message, **Safely remove hardware and eject media** displays.
3. Follow the on-screen instructions.

Inserting and removing a memory card

To insert a memory card:

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

1. Hold the card with the connectors facing the Sprout.
2. Insert the card into the memory card reader, and then press in on the card until it is firmly seated.

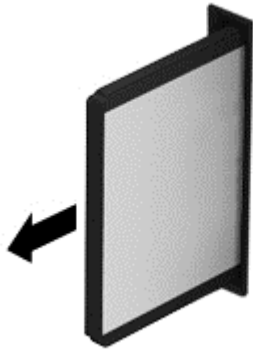


A sound indicates that the device has been detected.

To remove a memory card:

1. Save your information and close all programs associated with the card.
2. From the Windows desktop, click the remove hardware icon in the notification area, at the far right of the taskbar. Then, follow the on-screen instructions.

3. Pull the card to remove it from the slot **(2)**.



5 Maintaining peak performance

Keep your Sprout at peak operating performance using the practices and tools described in this chapter. Start with routine maintenance, keep the equipment clean, and regularly update software. Also pay attention to important security issues, including passwords, virus protection, and anti-theft measures. Finally, find out how to access your system settings when you need to contact support or run diagnostics on your Sprout system.

Performing routine maintenance

Using Disk Cleanup

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

To run Disk Cleanup:

1. From the Start screen, type `disk`.
2. Select **Free up space on this PC**.
3. Follow the on-screen instructions.

Using Disk Defragmenter

As you use your Sprout over time, the files on the hard drive become fragmented. Because of this, the hard drive works harder to locate files, and the Sprout slows down. Disk Defragmenter consolidates and reorganizes the fragmented files on the hard drive so that the system can run more efficiently.

Depending on the size of your hard drive and the number of fragmented files, Disk Defragmenter may need more than an hour to complete the task.

To run Disk Defragmenter:

1. From the Start screen, type `disk defrag`.
2. Select **Defragment and optimize your drives**.
3. 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. 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. From the Start screen, type `support`, and then select the **HP Support Assistant** app.

– or –

From the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.

2. Click **Updates and tune-ups**, and then click **Check for HP updates now**.
3. Follow the on-screen instructions.

Cleaning your Sprout

Use the following products to safely clean your Sprout:

- 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 the 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 the Sprout.

Disconnect external power.

Disconnect 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 and glass surfaces

 **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 the 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.

6 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:

- ▲ From the Start screen, type `support`, and then select the **HP Support Assistant** app.

– or –

From the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.

Setting Windows passwords

Password	Function
User password	Protects access to a Windows user account.
Administrator password	Protects administrator-level access to computer contents.
	NOTE: This password cannot be used to access Setup Utility (BIOS) contents.

Setting Setup Utility (BIOS) passwords

Password	Function
Setup password	• Must be entered each time you access Setup Utility (BIOS). • If you forget your setup password, you cannot access Setup Utility (BIOS).
Power-on password	• Must be entered each time you turn on or restart the computer. • If you forget your power-on password, you cannot turn on or restart the computer.

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, from the Start screen, type [support](#), and then select the **HP Support Assistant** app, or from the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.

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 19](#).

Installing critical security updates

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

You can install these updates manually or automatically.

To view or change the settings:

1. From the Start screen, type `control panel`, and then select **Control Panel**.
– or –
From the Windows desktop, right-click the **Start** button, and then select **Control Panel**.
2. Select **System and Security**, select **Windows Update**, select **Change settings**, 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 29](#).

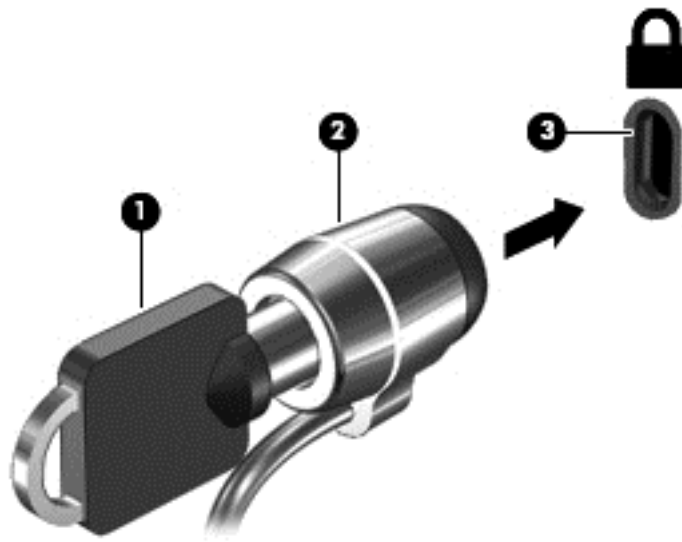
Using an optional security cable lock

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.

7 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 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 the one currently installed on the computer, you need to know the version of the system BIOS that is installed.

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

1. Start Setup Utility (BIOS) (see [Starting Setup Utility \(BIOS\) on page 26](#)).
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 the computer or an unsuccessful installation, download and install a BIOS update only when the computer 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 the computer by unplugging the power cord from the AC outlet.
- Do not shut down the computer or initiate Sleep.
- Do not insert, remove, connect, or disconnect any device, cable, or cord.

 **NOTE:** If your computer is connected to a network, consult the network administrator before installing any software updates, especially system BIOS updates.

1. From the Start screen, type `support`, and then select the **HP Support Assistant** app.
– or –
From the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.
2. Click **Updates and tune-ups**, and then click **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 computer. 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.

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.

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. From the Start screen, type `file`, and then select **File Explorer**.
– or –
From the Windows desktop, right-click the **Start** button, and then select **File Explorer**.
2. Click 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.

8 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.

To start HP PC Hardware Diagnostics (UEFI):

1. Turn on or restart the computer, quickly press **esc**, and then press **f2**.

The BIOS searches 3 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 28](#).

- b. Hard drive

- c. BIOS

2. When the diagnostic tool opens, use the keyboard arrow keys to select the language and 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: Instructions for downloading HP PC Hardware Diagnostics (UEFI) are provided in English only.

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

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

1. Go to <http://hp.com/go/techcenter/pcdiags>.
2. Click the **UEFI Download** link, 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 computer model, and then select your operating system.
5. In the **Diagnostic** section, click **HP UEFI Support Environment**.

– or –

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

9 Backing up, restoring, and recovering

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

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

For additional information, refer to HP Support Assistant.

- ▲ From the Start screen, type `support`, and then select the **HP Support Assistant** app.

– or –

From the Windows desktop, click the question mark icon in the notification area, at the far right of the taskbar.

Creating recovery media and backups

- Use HP Recovery Manager after you successfully set up the computer, to create HP Recovery media. 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 on page 29](#). For information on the recovery options that are available using the recovery media, see [Recovering using HP Recovery Manager on page 31](#)

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

Creating HP Recovery media

HP Recovery Manager is a software program that allows you 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 reinstalls the original operating system and the software programs 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 HP 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 blank USB flash drive or the number of blank DVD discs that will be required.
- If you would like to create DVD recovery media, you can use an external optical drive with DVD writer capability (purchased separately) to create recovery discs, 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.
- You can obtain recovery discs for your computer 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. 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.

- 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, and the remaining discs will be burned.

To create HP Recovery media:

1. From the Start screen, type `recovery`, and then select **Recovery Media Creation**.
2. Follow the on-screen instructions.

If you ever need to recover the system, see [Recovering using HP Recovery Manager on page 31](#).

Using Windows tools

You can create system restore points and create backups of personal information using Windows tools. For more information and steps, see Help and Support.

- ▲ From the Start screen, type `help`, and then select **Help and Support**.

– or –

From the Windows desktop, right-click the **Start** button, and then select **Search**. In the search field, type `help`, and then select **Help and Support**.

Restore and recover

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

- Windows offers several options for restoring from backup, refreshing the computer, and resetting the computer to its original state. For more information and steps, see Help and Support.
 - ▲ From the Start screen, type `help`, and then select **Help and Support**.
 - or –
 - From the Windows desktop, right-click the **Start** button, and then select **Search**. In the search field, type `help`, and then select **Help and Support**.
- To correct a problem with a preinstalled driver, use the Hardware Driver Reinstallation option of HP Recovery Manager to reinstall the individual driver.
 - ▲ From the Start screen, type `recovery`, select **Recovery Manager**, select **Hardware Driver Reinstallation**, and then follow the on-screen instructions.
- On select models, if you want to recover the computer's original factory partitioning and content, you can choose the System Recovery option from the HP Recovery partition or use the HP Recovery media that you have created. For more information, see [Recovering using HP Recovery Manager on page 31](#). If you have not already created recovery media, see [Creating HP Recovery media on page 29](#).
- On select models, if you have replaced the hard drive, you can use the Factory Reset option of HP Recovery media to restore the factory image to the replacement drive. For more information, see [Recovering using HP Recovery Manager on page 31](#).

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 created or by using the HP Recovery partition. If you have not already created recovery media, see [Creating HP Recovery media on page 29](#).

From the Start screen, type `recovery`, select **Recovery Manager**, select **System Recovery**, and then follow the on-screen instructions.

What you need to know

- HP Recovery Manager recovers only software that was installed at the factory. For software not provided with the 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 on page 29](#).
- 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 the HP Recovery partition

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:

1. From the Start screen, type `recovery`, select **Recovery Manager**, and then select **HP Recovery Environment**.
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 that you created, 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 32](#).

3. Follow the on-screen instructions.

Changing the computer boot order

If the computer does not restart in HP Recovery Manager, you can change the computer boot order, which is the order of devices where the computer searches for startup information. You can specify that an optical drive or a USB flash drive should be checked first.

To change the boot order:

1. Insert the HP Recovery media you created.
2. Restart the computer, quickly press **esc**, and then press **f9** for boot options.
3. Select the optical drive or USB flash drive you want to boot from.
4. Follow the on-screen instructions.

10 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. From the Start screen, type `control panel`, and then select **Control Panel**.
2. Select **System and Security**, select **System**, and then click **Device Manager**.
3. Click 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 in the notification area, at the far right of the taskbar, right-click the icon, and then click **Troubleshoot problems**.

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

- If there is no network status icon in the notification area, follow these steps:

1. From the Start screen, type `control panel`, 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. From the Windows desktop, click the network status icon in the notification area, 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 click **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. Click the **Security** tab and enter the correct wireless encryption data into the **Network security key** box.
4. Click **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 the 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 in the notification area 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 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.

3. Click 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 the 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. Click the **Power** icon in the lower-right corner of the screen, and then click **Restart**.

Or, press and hold the power button on the Sprout for 5 or more seconds to turn off the Sprout, and then press the power button to turn on the 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. Click **Task Manager**.
3. Select any program that is not responding, and then click **End Task**.

If closing programs does not work, restart the Sprout.

1. Press the [ctrl+alt+delete](#) keys.
2. Click the **Power** icon, and then click **Restart**.

– or –

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

Sprout shuts down unexpectedly

- The Sprout might be in an exceedingly hot environment. Turn it off and let it cool down.
- Be sure that the 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 the Sprout.

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

Adjust the resolution settings.

1. From the Start screen, type `control panel`, and then select **Control Panel**.
2. Select **Appearance and Personalization**.
3. Under **Display**, select **Adjust Screen Resolution**.
4. Adjust resolution as necessary, and then click **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. Click **Task Manager**, and then click the **Services** tab.
 - c. In the Name column, click **HPPCSERVICE**.
 - d. Right-click **HPPCSERVICE**, and then select **Stop**.
 - e. Right-click **HPPCSERVICE**, and then select **Start**.
2. Click the **Power** icon, and then click **Restart**.

– or –

Press and hold the power button on the Sprout for 5 or more seconds to turn off the Sprout, and then press the power button to turn on the 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. Click the Power icon, and then click **Restart**. Or,

– or –

Press and hold the power button on the Sprout for 5 or more seconds to turn off the Sprout, and then press the power button to turn on the 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. Click the Power icon, and then click **Restart**.

– or –

Press and hold the power button for 5 or more seconds to turn off the Sprout, and then press the power button to turn on the 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 the 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. From the Start screen, type `control panel`, and then select **Control Panel**.
2. Select **Hardware and Sound**, and then select **Sound**.
3. When the Sound window opens, click the **Sounds** tab. Under **Program Events**, select any sound event, such as a beep or alarm, and click the **Test** button.

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

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

1. From the Start screen, type `sound`, and then select **Sound Recorder**.
2. Click **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, from the Start screen, type `control panel`, and then select **Control Panel**. Select **Hardware and Sound**, and then select **Sound**.

Software problems

- Shut down the Sprout, and then turn it on again.
- Update or reinstall the drivers. See [Updating programs and drivers on page 19](#).
- Refresh or restore your Sprout. See [Backing up, restoring, and recovering on page 29](#).

11 Specifications

Input power

Input power	Rating
Operating voltage and current	100–240 V dc @ 4.5–2.25 A, 50/60Hz

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.

Factor	Metric	U.S.
Operating temperature	5°C to 35°C	41°F to 95°F
Storage temperature	–30°C to 65°C	–22°F to 149°F
Operating humidity	15% to 80% @ 26°C	15% to 80% @ 78°F
Operating altitude	0 m to 2000 m	0 ft to 6561 ft
Storage altitude	0 m to 4572 m	0 ft to 15,000 ft

12 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, and then remove the cover.
- Keep components in their electrostatic-safe containers until you are ready to install them.
- Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- Use nonmagnetic tools.
- Before handling components, discharge static electricity by touching an unpainted metal surface of the component.
- If you remove a component, place it in an electrostatic-safe container.

If you need more information about static electricity or assistance with component removal or installation, contact support.

13 More HP resources

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

Resource	Contents
Sprout website http://www.sprout.hp.com	Current information about learning, inspiration, and troubleshooting.
Help and Support To access Help and Support, from the Start screen, type help , and then from the Search window, select Help and 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 .	A broad range of how-to information and troubleshooting tips
Worldwide support To get support in your language, go to http://welcome.hp.com/country/us/en/wwcontact_us.html .	- Online chat with an HP technician - Support telephone numbers - HP service center locations
Safety & Comfort Guide To access this guide: - From the Start screen, type support, and then select the HP Support Assistant app. - Select My computer, and then select User guides. – or – Go to http://www.hp.com/ergo .	- Proper workstation setup - Guidelines for posture and work habits that increase your comfort and decrease your risk of injury - Electrical and mechanical safety information
Regulatory, Safety and Environmental Notices To access this document: - From the Start screen, type support, and then select the HP Support Assistant app. - Select My computer, and then select User Guides.	Important regulatory notices, including proper battery disposal information
Limited Warranty* To access this guide: - From the Start screen, type support, and then select the HP Support Assistant app. - Select My computer, and then select Warranty and services. – or – Go to http://www.hp.com/go/orderdocuments .	Specific warranty information about this computer

*You can find the expressly provided HP Limited Warranty applicable to your product located with the user guides on your computer. In some countries/regions, HP may provide a printed HP Limited Warranty in the box. For countries/regions where the warranty is not provided in printed format, you may request a printed copy from <http://www.hp.com/go/orderdocuments> or write to:

Resource	Contents
• North America: Hewlett-Packard, MS POD, 11311 Chinden Blvd., Boise, ID 83714, USA • Europe, Middle East, Africa: Hewlett-Packard, POD, Via G. Di Vittorio, 9, 20063, Cernusco s/Naviglio (MI), Italy • Asia Pacific: Hewlett-Packard, POD, P.O. Box 200, Alexandra Post Office, Singapore 911507 When you request a printed copy of your warranty, please include your product number, warranty period (found on your service label), name, and postal address. IMPORTANT: Do NOT return your HP product to the addresses above. For U.S. support, go to http://www.hp.com/go/contactHP. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.	

Index

A

- ambient light sensor, identifying 4
- antivirus software, using 23
- audio (headphone) jack, identifying 7
- audio-out (headphone)/audio-in (microphone) jack 6

B

- backing up software and information 24
- backups 29
- battery
 - user-replaceable 13
- BIOS
 - determining version 26
 - downloading an update 26
 - starting the Setup Utility 26
 - updating 26
- Bluetooth device 10, 11
- Bluetooth label 9
- boot order
 - changing 32
- bottom 9
- buttons
 - power 4
 - projector/touch mat 2
 - volume 5

C

- cables, USB 16
- caring for your Sprout 20
- cleaning your Sprout 20
- components
 - back 4
 - front 2
 - left side 6
 - rear 7
 - right side 5
- connecting to a WLAN 11
- connector, power 7
- corporate WLAN connection 11
- critical security updates, installing 24

D

- deleted files, restoring 30
- depth camera light, identifying 3
- Depth camera, identifying 3
- desk lamp sensor, identifying 3
- desk lamp, identifying 3
- Disk Cleanup 19
- Disk Defragmenter software 19
- drivers, updating 19

E

- electrical ratings 39
- electrostatic discharge 40

F

- firewall software 23

H

- hard drive light 5
- HDMI port, identifying 7
- Hibernation
 - exiting 14
 - initiating 14
- High-resolution camera light, identifying 3
- High-resolution camera, identifying 3
- home button/light, identifying 2
- HP PC Hardware Diagnostics (UEFI)
 - downloading 28
- HP Recovery Manager
 - correcting boot problems 32
 - starting 31
- HP Recovery media
 - creating 29
 - recovery 31
- HP Recovery partition
 - recovery 31
- HP Touch Mat
 - connecting 8
- HP Touch Mat, identifying 2

I

- input power 39

- installing

- critical security updates 24
 - optional security cable lock 24
- internal magnet, identifying 5
- Internet security software, using 23

J

- jacks
 - audio-out (headphone)/audio-in (microphone) 6

K

- keyboard button, identifying 2

L

- labels
 - Bluetooth 9
 - regulatory 9
 - serial number 9
 - wireless certification 9
 - WLAN 9
- lights
 - hard drive 5
 - power supply 7

M

- maintenance, Disk Defragmenter 19
- memory card reader, identifying 6
- memory card, identifying 6
- memory card, inserting 17
- microphones, identifying 8

O

- operating specifications 39
- original system recovery 31

P

- passwords
 - Setup Utility (BIOS) 23
 - Windows 22
- ports
 - USB 3.0 5
 - USB 3.0 (powered) charging 5
- power button, identifying 4

- power connector, identifying 7
- power supply light, identifying 7
- product name and number,
 - computer 9
- programs, updating 19
- projector mirror, identifying 3
- Projector/touch mat button/light,
 - identifying 2
- public WLAN connection 11

R

- re-pair, wireless keyboard and mouse 36
- recover
 - options 30
- recovery
 - discs 29, 31
 - HP Recovery Manager 31
 - media 31
 - starting 31
 - supported discs 29
 - system 31
 - USB flash drive 31
 - using HP Recovery media 30
- recovery media
 - creating 29
 - creating using HP Recovery Manager 30
- regulatory information
 - regulatory label 9
 - wireless certification labels 9
- RJ-45 jack, identifying 7

S

- security cable lock, installing 24
- security cable slot, identifying 7
- serial number 9
- serial number, computer 9
- setting password protection on wakeup 14
- Setup Utility (BIOS) passwords 23
- shutdown 14
- Sleep
 - exiting 13
 - initiating 13
- slots
 - memory card reader 6
- software
 - Disk Defragmenter 19
- software updates, installing 24

- speakers, identifying 2
- specifications 39
- Sprout Illuminator 3
- supported discs, recovery 29
- system recovery 31
- system restore point
 - creating 30
- system restore point, creating 29

T

- troubleshooting 33
 - audio functions 38
 - computer will not turn on 35
 - display is blank 36
 - hard drive error 35
 - images on screen problems 36
 - keyboard 36
 - mouse 36
 - re-pair the wireless keyboard and mouse 36
 - software problems 38
 - Sprout is not responding 35
 - Sprout shuts down
 - unexpectedly 36
 - touch mat 37
 - wireless connection 33
- turning off the Sprout 14

U

- unresponsive system 14
- USB 3.0 charging (powered) port,
 - identifying 5
- USB 3.0 port, identifying 5
- USB cable, connecting 16
- USB devices
 - connecting 16
 - removing 16
- USB ports, identifying 7
- using passwords 22

V

- vent, identifying 7
- volume button, identifying 5

W

- webcam
 - identifying 2
- webcam light, identifying 2
- Windows
 - system restore point 29, 30
- Windows passwords 22

- Windows tools
 - using 30
- wireless certification label 9
- wireless controls
 - operating system 10
- wireless network (WLAN)
 - connecting 11
 - corporate WLAN connection 11
 - functional range 11
 - public WLAN connection 11
- wireless network, securing 24
- WLAN device 9
- WLAN label 9