



User Guide

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Second Edition: November 2019

First Edition: September 2018

Document Part Number: L41338-002

Product notice

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

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.

Safety warning notice


 **WARNING!** To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to come into contact with the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by applicable safety standards.

Table of contents

1 Getting to know your computer	1
Right side	1
Left side	2
Display	4
Speakers	5
Keyboard area	6
Touchpad	6
Special keys	7
Action keys	8
Bottom	9
Labels	9
2 Navigating the screen	11
Using touchpad and touch screen gestures	11
Tap	11
Scrolling (touchpad only)	12
One-finger scrolling (touch screen only)	12
One-finger swipe (touch screen only)	13
Two-finger pinch zoom (touch screen only)	13
3 Power and battery	14
Factory-sealed battery	14
Charging the battery	14
4 Printing	15
Printing	15
Printing from Google Chrome	15
Printing with Google Cloud Print Web printing service	15
5 Backing up, resetting, and recovering	16
Backing up	16
Resetting	16
Recovering	16
Installing the Chromebook Recovery Utility	17
Creating recovery media	17
Recovering the Chrome operating system	17

Setting up your computer after a reset or recovery	18
Erasing and reformatting the recovery media	18
6 More HP resources	19
More HP resources	19
7 Specifications	20
Input power	20
Operating environment	21
8 Electrostatic discharge	22
9 Accessibility	23
HP and accessibility	23
Finding the technology tools you need	23
The HP commitment	23
International Association of Accessibility Professionals (IAAP)	23
Finding the best assistive technology	24
Assessing your needs	24
Accessibility for HP products	24
Standards and legislation	25
Standards	25
Mandate 376 – EN 301 549	25
Web Content Accessibility Guidelines (WCAG)	25
Legislation and regulations	25
Useful accessibility resources and links	26
Organizations	26
Educational institutions	26
Other disability resources	26
HP links	27
Contacting support	27
Index	28

1 Getting to know your computer

Your computer features top-rated components. This chapter provides details about your components, where they are located, and how they work.

Right side

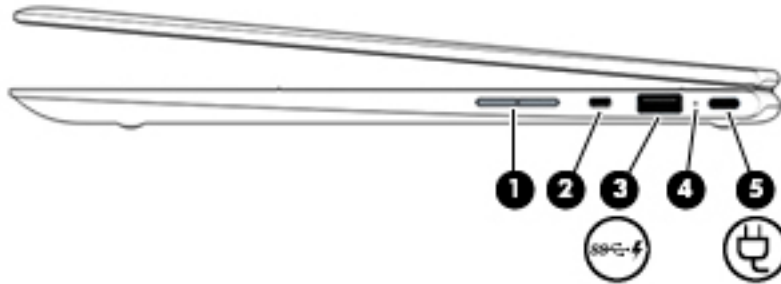




Table 1-1 Right-side components and their descriptions

Component	Description
(1)	Volume button Controls speaker volume on the computer.
(2)	Security cable slot Attaches an optional security cable to the computer. NOTE: The security cable is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen.
(3)	 USB SuperSpeed port with HP Sleep and Charge Connects a USB device, provides high-speed data transfer, and, even when the computer is off, charges most products such as a cell phone, camera, activity tracker, or smartwatch.
(4)	AC adapter and battery light <ul style="list-style-type: none">White: The AC adapter is connected and the battery is fully charged.Amber: The AC adapter is connected and the battery is charging.Blinking amber: The batter has an error.Off: The battery is not charging.
(5)	 USB Type-C power connector and port Connects an AC adapter that has a USB Type-C connector, supplying power to the computer and, if needed, charging the computer battery. – and – Connects a USB device that has a Type-C connector, such as a cell phone, camera, activity tracker, or smartwatch, and provides data transfer. – and – Connects a display device that has a USB Type-C connector, providing DisplayPort™ output. NOTE: Cables and/or adapters (purchased separately) may be required.

Left side

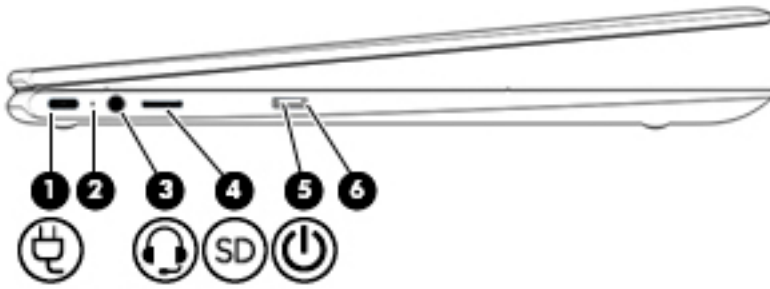


Table 1-2 Left-side components and their descriptions





Component	Description
(1) 	<p>USB Type-C power connector and port</p> <p>Connects an AC adapter that has a USB Type-C connector, supplying power to the computer and, if needed, charging the computer battery.</p> <p>– and –</p> <p>Connects a USB device that has a Type-C connector, such as a cell phone, camera, activity tracker, or smartwatch, and provides data transfer.</p> <p>– and –</p> <p>Connects a display device that has a USB Type-C connector, providing DisplayPort output.</p> <p>NOTE: Cables and/or adapters (purchased separately) may be required.</p>
(2)	<p>AC adapter and battery light</p> <ul style="list-style-type: none"> • White: The AC adapter is connected and the battery is fully charged. • Amber: The AC adapter is connected and the battery is charging. • Blinking amber: The batter has an error. • Off: The battery is not charging.
(3) 	<p>Audio-out (headphone)/Audio-in (microphone) combo jack</p> <p>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 standalone microphones.</p> <p>WARNING! To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset. For additional safety information, see the <i>Regulatory, Safety, and Environmental Notices</i>.</p> <p>NOTE: When a device is connected to the jack, the computer speakers are disabled.</p>
(4) 	<p>microSD memory card reader</p> <p>Reads optional memory cards that enable you to store, manage, share, or access information.</p> <p>To insert a card:</p> <ol style="list-style-type: none"> 1. Hold the card label-side up, with connectors facing the computer. 2. Insert the card into the memory card reader, and then press in on the card until it is firmly seated.

Table 1-2 Left-side components and their descriptions (continued)

Component	Description
(5)  Power button	<p>To remove a card:</p> <ul style="list-style-type: none">▲ Press in on the card, and then remove it from the memory card reader. <ul style="list-style-type: none">• 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 on and you want to turn it off, press and hold the button to lock the screen, and then continue to press the button until the computer turns off.
(6) Power light	<ul style="list-style-type: none">• On: The computer is on.• Blinking: The computer is in the Sleep state, a power saving state. The computer shuts off power to the display and other unneeded components.• Off: The computer is off.

Display

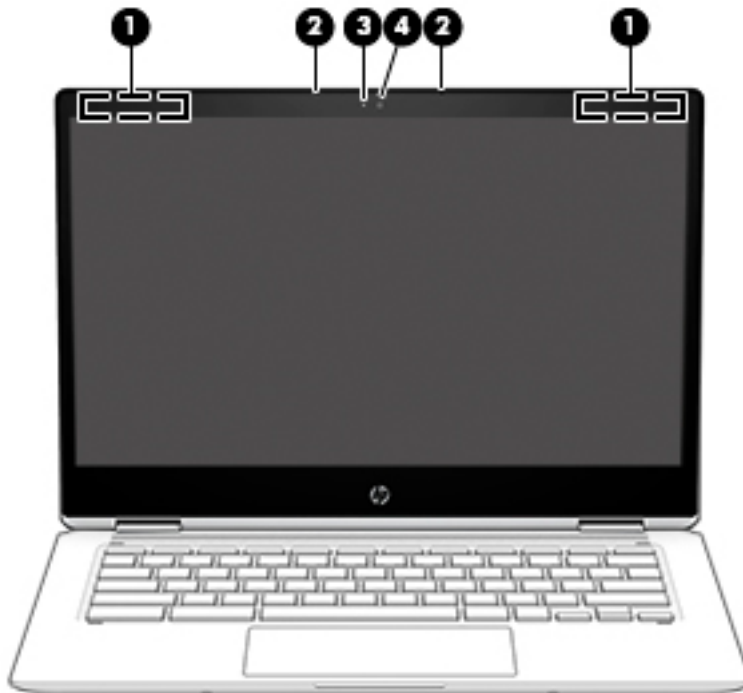


Table 1-3 Display components and their descriptions

Component	Description
(1) WLAN antennas*	Send and receive wireless signals to communicate with wireless local area networks (WLANs).
(2) Internal microphones (2)	Record sound.
(3) Camera light	On: The camera is in use.
(4) Camera	Allows you to video chat, record video, and record still images.

*The antennas are not visible from the outside of the computer, and antenna location varies. 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 guide, go to <http://www.hp.com/support>, and follow the instructions to find your product. Then select **User Guides**.

Speakers



Table 1-4 Speakers and their descriptions

Components	Description
Speakers (2)	Produce sound.

Keyboard area

Touchpad

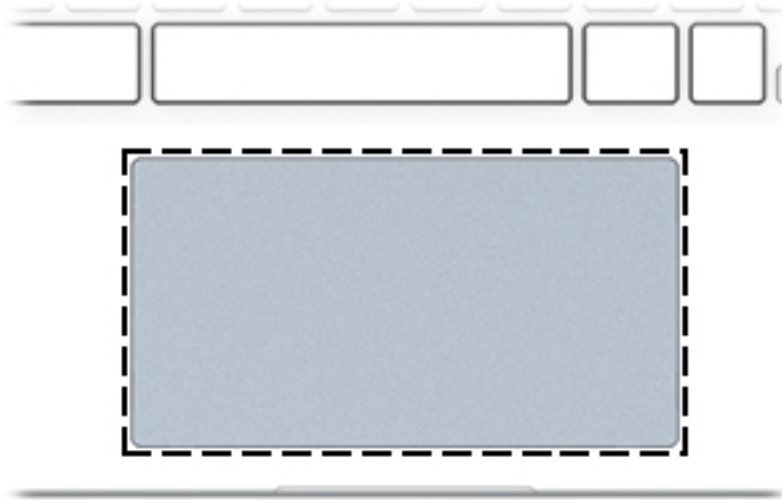


Table 1-5 Touchpad components and their descriptions

Component	Description
Touchpad zone	Reads your finger gestures to move the pointer or activate items on the screen. NOTE: For more information, see Using touchpad and touch screen gestures on page 11 .

Special keys

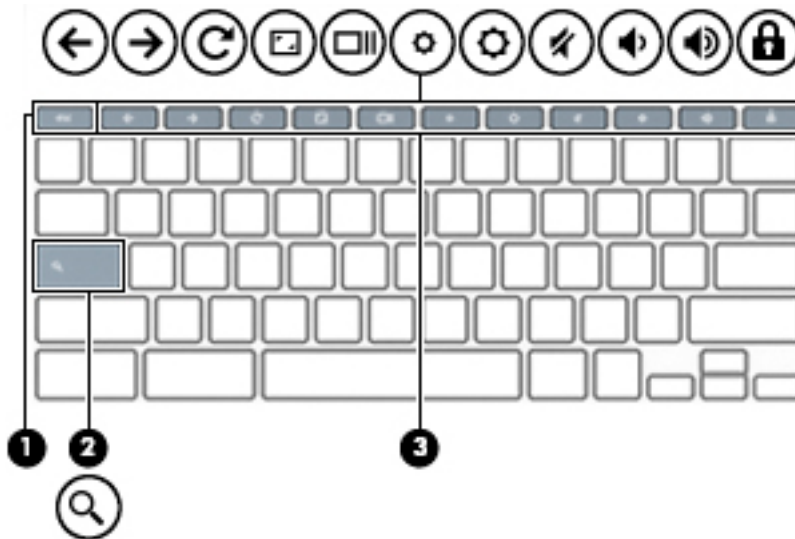



Table 1-6 Special keys and their descriptions

Component	Description
(1) <code>esc</code> key	Activates certain computer functions when pressed in combination with other keys, such as <code>tab</code> or <code>shift</code> .
(2)  Search key	Searches your apps and the Web from your apps list.
(3) Action keys	Execute frequently used system functions.














Action keys

An action key performs the function indicated by the icon on the key. To determine which keys are on your product, see [Special keys on page 7](#).

▲ To use an action key, press and hold the key.

For more information about action keys and keyboard shortcuts, see <https://support.google.com/chromebook/answer/183101>. Select your language at the bottom of the page.

Table 1-7 Action keys and their descriptions

Icon	Key	Description
	Back	Displays the previous page in your browser history.
	Forward	Displays the next page in your browser history.
	Reload	Reloads your current page.
	Full screen	Opens your page in full-screen mode.
	Display apps	Displays open apps. NOTE: Pressing this button in conjunction with <code>ctrl</code> takes a screenshot.
	Brightness down	Decreases the screen brightness incrementally as long as you hold down the key.
	Brightness up	Increases the screen brightness incrementally as long as you hold down the key.
	Mute	Mutes speaker sound.
	Volume down	Decreases speaker volume incrementally as long as you hold down the key.
	Volume up	Increases speaker volume incrementally as long as you hold down the key.
	Lock screen	Locks and unlocks the screen.
<code>alt+</code> 	Keyboard backlight brightness down	Decreases the keyboard backlight brightness.
<code>alt+</code> 	Keyboard backlight brightness up	Increases the keyboard backlight brightness.

Bottom

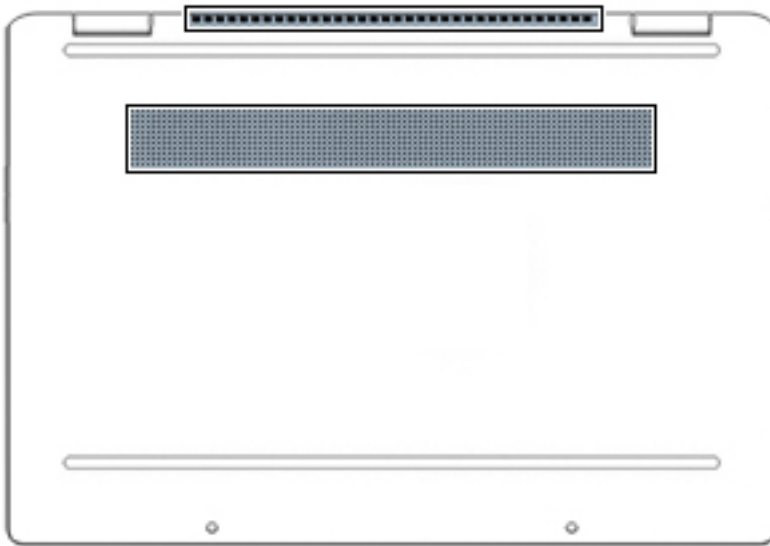


Table 1-8 Bottom components and their descriptions

Components	Description
Vents (2)	Enable airflow to cool internal components. NOTE: The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.

Labels

The labels affixed to the computer provide information you may need when you troubleshoot system problems or travel internationally with the computer. Labels may be in paper form or imprinted on the product.

IMPORTANT: Check the following locations for the labels described in this section: the bottom of the computer, inside the battery bay, under the service door, on the back of the display, or on the bottom of a tablet kickstand.

- Service label—Provides important information to identify your computer. When contacting support, you may be asked for the serial number, the product number, or the model number. Locate this information before you contact support.

Your service label will resemble one of the examples shown below. Refer to the illustration that most closely matches the service label on your computer.

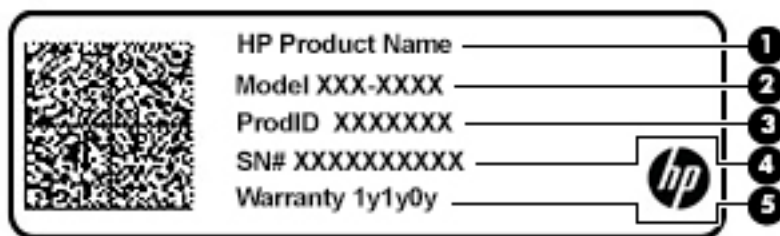


Table 1-9 Service label components

Component	
(1)	HP product name
(2)	Model number
(3)	Product ID
(4)	Serial number
(5)	Warranty period

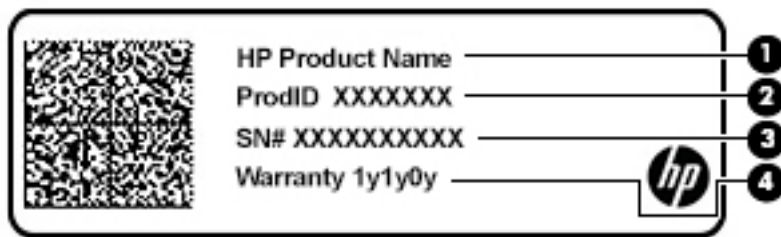


Table 1-10 Service label components

Component	
(1)	HP product name
(2)	Product ID
(3)	Serial number
(4)	Warranty period

- 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 Navigating the screen

You can navigate the computer screen in one or more of the following ways:

- Use touch gestures directly on the computer screen
- Use touch gestures on the touchpad

Using touchpad and touch screen gestures

The touchpad helps you navigate the computer screen and control the pointer using simple touch gestures. To navigate a touch screen (select products only), touch the screen directly using gestures described in this chapter.

Tap

Use the tap/double-tap gesture to select or open an item on the screen.

- Point to an item on the screen, and then tap one finger on the touchpad zone or touch screen to select the item. Double-tap to open it.



- Tap two fingers on the touchpad zone or touch screen to bring up a context-sensitive menu.



Scrolling (touchpad only)

Scrolling is useful for moving up, down, or sideways on a page or image. Scrolling to the left or the right with two fingers will scroll the screen, if there is more content viewable to either side, or will move back and forth through web browser history.

- Place two fingers slightly apart on the touchpad zone, and then drag them up, down, left, or right.



NOTE: Scrolling speed is controlled by finger speed.



- To scroll between open tabs in Chrome, slide three fingers left or right on the touchpad zone.



One-finger scrolling (touch screen only)

Scrolling to the left or the right with one finger will move back and forth through web browser history.

- Place one finger on the touch screen, and then drag it across the touch screen in a left or right motion.



NOTE: Scrolling speed is controlled by finger speed.



One-finger swipe (touch screen only)

Swiping up with one finger will hide or show your shelf. The shelf contains a list of popular shortcuts to apps so that you can find them easily.

- Place your finger on the bottom of the screen, quickly slide your finger up a short distance, and then lift it.



Two-finger pinch zoom (touch screen only)

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

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



3 Power and battery

Factory-sealed battery

You cannot easily replace the battery in this product. Removing or replacing the battery could affect your warranty coverage. If a battery is no longer holding a charge, contact support. When a battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for battery disposal.

Charging the battery

1. Connect the AC adapter to the computer.
2. Verify that the battery is charging by checking the AC adapter and battery light. This light is located on either the right or left side of the computer, next to the power connector.

Table 3-1 Battery charging status indicators

AC adapter light	Status
White	The AC adapter is connected and the battery is charged.
Amber	The AC adapter is connected and the battery is charging.
Off	The computer is using battery power.

3. While the battery is charging, keep the AC adapter connected until the AC adapter and battery light turns white.

4 Printing

Printing

Use one of the following methods to print from your computer:

- Print from Google Chrome using the HP Print for Chrome™ app.
- Print with Google Cloud Print™ Web printing service.



NOTE: If you use HP Print for Chrome, the printer cannot be registered with Google Cloud Print.

Printing from Google Chrome

To print from Google Chrome, use the HP Print for Chrome app. You can install the HP Print for Chrome app from the Chrome Web Store. For more information, see the HP website.

1. Go to <http://www.hp.com/support>.
2. In the **Search our knowledge library** box, type `Printing with the HP Print for Chrome App`, and then follow the on-screen instructions.

Printing with Google Cloud Print Web printing service

Google Cloud Print Web printing service is a free service that allows you to print documents and photos securely from your computer. For information about prerequisites and steps for using Google Cloud Print, see the HP website.


1. Go to <http://www.hp.com/support>.
2. In the **Search our knowledge library** box, type `Connecting and Using Google Cloud Print`, and then follow the on-screen instructions.

5 Backing up, resetting, and recovering

Backing up

You can back up your data to an optional USB flash drive or SD memory card or through Google Drive™. For detailed information about creating a backup, go to <http://www.support.google.com>.

Resetting


 **IMPORTANT:** A factory reset erases all the information on your computer hard drive, including all the files in the Downloads folder. Before you reset, make sure to back up your files to an optional USB flash drive, SD memory card, or through Google Drive. The factory reset won't delete any of your files on Google Drive or an external storage device.

You might want to reset your computer in the following circumstances:

- You see the message "Reset this Chrome device."
- You are having problems with your user profile or settings.
- You have tried restarting your computer, and it's still not working properly.
- You want to change the owner of your computer.

To reset your computer:


1. Under the **Settings** menu, select **Advanced**.
2. In the **Powerwash** section, select **Powerwash**.
3. Select **Restart**, and then sign in with your Google account.


 **NOTE:** The account you sign in with after you reset your computer will be recognized as the owner account.

4. Follow the on-screen instructions to reset your computer.
5. After you complete the reset, you can set up your computer and check to see whether the problem is fixed.

Recovering

When your Chrome operating system (OS) isn't working properly, you can perform a recovery. A recovery reinstalls the operating system and software programs and restores the original factory settings. Locally saved files and saved networks are deleted for all accounts. Your Google accounts and any data synced to your Google Drive are not affected by a system recovery.

 **IMPORTANT:** Recovery permanently erases everything on your computer hard drive, including your downloaded files. If possible, back up your files before you recover your computer.

 **NOTE:** For more information about performing a system recovery on your computer, see <http://www.support.google.com>.

Before beginning the recovery process, you need the following:

- A USB flash drive or SD memory card with a capacity of 4 GB or greater. Because all data is erased from this storage device when the recovery media is created, back up any files from the device before you begin.
- A computer with Internet access. You must also have administrative rights to the computer.
- Computer AC adapter. The computer must be plugged into AC power during recovery.
- The “Chrome OS is missing or damaged” screen displaying on your computer. If this message is not already displayed:
 - Turn on the computer, press and hold the **esc+f3** keys, and then press the power button. The computer restarts, and the screen shows the “Chrome OS is missing or damaged” message.

Installing the Chromebook Recovery Utility

The Chromebook™ Recovery Utility is an app used to recover the original operating system and software programs that were installed at the factory. This utility can be installed from the Chrome Web Store on any computer.

To install the Chromebook Recovery Utility:


- ▲ Open the Chrome Web Store, search for `chrome recovery`, click **Chromebook Recovery Utility** from the Apps list, and follow the on-screen instructions.

Creating recovery media

Recovery media is used to recover the original operating system and software programs that were installed at the factory.

To create recovery media:


1. Turn on a computer with Internet access.
-
2. Select the **Launcher** icon, and then select **All Apps**.
 3. In the Apps window, select **Recovery**, and then select **Get started**.
 4. Follow the on-screen instructions to create the recovery media.


 **NOTE:** All data and partitions on your recovery media will be deleted. Do not remove the USB flash drive or SD memory card until the process is complete.

Recovering the Chrome operating system

To recover the Chrome operating system on your computer using the recovery media that you created:

1. Disconnect any external devices connected to your computer, plug in the power cord, and then turn on the computer.
2. To enter recovery mode, press and hold **esc+f3**, and then press the power button. When the “Chrome OS is missing or damaged” screen appears, insert the recovery media into your computer. The recovery process begins immediately.
3. Wait while Chrome verifies the integrity of the recovery media.

 **NOTE:** If you need to cancel the recovery during the verification process, press and hold the power button until the computer turns off. Do not disrupt the system recovery process after the verification step is complete.

 **NOTE:** If an error message displays, you might need to run the Chrome Recovery Utility again, or use a different USB flash drive or SD memory card.

4. When the “System Recovery is complete” message appears, remove the recovery media.
The computer restarts with Chrome OS reinstalled.

Setting up your computer after a reset or recovery

After a reset or recovery is complete, perform the initial setup process. For details on setting up the computer, go to <http://www.support.google.com>.

Erasing and reformatting the recovery media

During the process of creating recovery media, the USB flash drive or SD memory card is formatted for use as a recovery tool. After you recover your computer, you will need to erase the recovery media if you want to reuse your USB flash drive or SD memory card to store other files. Use the steps in this section to erase the recovery media using the Chromebook Recovery Utility.

1. Select the **Launcher** icon, and then select **All Apps**.
2. In the apps window, select **Recovery**.
3. Select the **Settings** icon, and then select **Erase recovery media**.
4. Select the USB flash drive or SD memory card that you inserted, select **Continue**, and then select **Erase now**.
5. After the recovery media is erased, select **Done** to close the Chromebook Recovery Utility, and then remove the USB flash drive or SD memory card.

The media is ready to be formatted by a formatting tool provided by your operating system.

6 More HP resources

More HP resources

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

Table 6-1 Additional information

Resource	Contents
<i>Setup Instructions</i>	<ul style="list-style-type: none">• Overview of computer setup and features
HP support For HP support, go to http://www.hp.com/support , and follow the instructions to find your product.	<ul style="list-style-type: none">• Online chat with an HP technician• Support telephone numbers• Replacement parts videos (select product only)• Maintenance and service guides• HP service center locations
<i>Safety & Comfort Guide</i> Go to http://www.hp.com/ergo .	<ul style="list-style-type: none">• Proper workstation setup• Guidelines for posture and work habits that increase comfort and decrease risk of injury• Electrical and mechanical safety information
<i>Regulatory, Safety, and Environmental Notices</i> Go to http://www.hp.com/support , and follow the instructions to find your product. Then select User Guides .	<ul style="list-style-type: none">• Important regulatory notices, including information about proper battery disposal, if needed
<i>Limited Warranty*</i> Go to http://www.hp.com/go/orderdocuments .	<ul style="list-style-type: none">• Specific warranty information about this computer

*In some countries or regions, HP may provide a printed warranty in the box. For countries or regions where the warranty is not provided in printed format, you can request a copy from <http://www.hp.com/go/orderdocuments>. For products purchased in Asia Pacific, you can write to HP at POD, PO Box 161, Kitchener Road Post Office, Singapore 912006. Include your product name, and your name, phone number, and postal address.

7 Specifications

Input power

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

The computer operates on DC power, which can be supplied by an AC or a DC power source. The AC power source must be rated at 100–240 V, 50–60 Hz. Although the computer can be powered from a standalone DC power source, it should be powered only with an AC adapter or a DC power source that is supplied and approved by HP for use with this computer.


The computer can operate on DC power within the following specifications. Operating voltage and current varies by platform. The voltage and current for your computer is located on the regulatory label.

Table 7-1 DC power specifications

Input power	Rating
Operating voltage and current	5 V dc @ 2 A / 12 V dc @ 3 A / 15 V dc @ 3 A – 45 W USB-C
	5 V dc @ 3 A / 9 V dc @ 3 A / 12 V dc @ 3.75 A / 15 V dc @ 3 A – 45 W USB-C
	5 V dc @ 3 A / 9 V dc @ 3 A / 10 V dc @ 3.75 A / 12 V dc @ 3.75 A / 15 V dc @ 3 A / 20 V dc @ 2.25 A – 45 W USB-C
	5 V dc @ 3 A / 9 V dc @ 3 A / 12 V dc @ 5 A / 15 V dc @ 4.33 A / 20 V dc @ 3.25 A – 65 W USB-C
	5 V dc @ 3 A / 9 V dc @ 3 A / 10 V dc @ 5 A / 12 V dc @ 5 A / 15 V dc @ 4.33 A / 20 V dc @ 3.25 A – 65 W USB-C
	5 V dc @ 3 A / 9 V dc @ 3 A / 10 V dc @ 5 A / 12 V dc @ 5 A / 15 V dc @ 5 A / 20 V dc @ 4.5 A – 90 W USB-C
	19.5 V dc @ 2.31 A – 45 W
	19.5 V dc @ 3.33 A – 65 W
	19.5 V dc @ 4.62 A – 90 W
	19.5 V dc @ 6.15 A – 120 W
	19.5 V dc @ 6.9 A – 135 W
	19.5 V dc @ 7.70 A – 150 W
	19.5 V dc @ 10.3 A – 200 W
	19.5 V dc @ 11.8 A – 230 W
19.5 V dc @ 16.92 A – 330 W	

DC plug of external HP power supply (select products only)



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

Operating environment

Table 7-2 Operating environment specifications

Factor	Metric	U.S.
Temperature		
Operating	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
Maximum altitude (unpressurized)		
Operating	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating	-15 m to 12,192 m	-50 ft to 40,000 ft

8 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.



IMPORTANT: 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.
-

9 Accessibility

HP and accessibility

Because HP works to weave diversity, inclusion, and work/life into the fabric of the company, it is reflected in everything HP does. HP strives to create an inclusive environment focused on connecting people to the power of technology throughout the world.

Finding the technology tools you need

Technology can unleash your human potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology helps increase, maintain, and improve the functional capabilities of electronic and information technology. For more information, see [Finding the best assistive technology on page 24](#).

The HP commitment

HP is committed to providing products and services that are accessible for people with disabilities. This commitment supports the company's diversity objectives and helps ensure that the benefits of technology are available to all.

The HP accessibility goal is to design, produce, and market products and services that can be effectively used by everyone, including people with disabilities, either on a stand-alone basis or with appropriate assistive devices.

To achieve that goal, this Accessibility Policy establishes seven key objectives to guide HP actions. All HP managers and employees are expected to support these objectives and their implementation in accordance with their roles and responsibilities:

- Raise the level of awareness of accessibility issues within HP, and provide employees with the training they need to design, produce, market, and deliver accessible products and services.
- Develop accessibility guidelines for products and services, and hold product development groups accountable for implementing these guidelines where competitively, technically, and economically feasible.
- Involve people with disabilities in the development of accessibility guidelines and in the design and testing of products and services.
- Document accessibility features, and make information about HP products and services publicly available in an accessible form.
- Establish relationships with leading assistive technology and solution providers.
- Support internal and external research and development that improves assistive technology relevant to HP products and services.
- Support and contribute to industry standards and guidelines for accessibility.

International Association of Accessibility Professionals (IAAP)

IAAP is a not-for-profit association focused on advancing the accessibility profession through networking, education, and certification. The objective is to help accessibility professionals develop and advance their careers and to better enable organizations to integrate accessibility into their products and infrastructure.

As a founding member, HP joined to participate with other organizations to advance the field of accessibility. This commitment supports HP's accessibility goal of designing, producing, and marketing products and services that people with disabilities can effectively use.

IAAP will make the profession strong by globally connecting individuals, students, and organizations to learn from one another. If you are interested in learning more, go to <http://www.accessibilityassociation.org> to join the online community, sign up for newsletters, and learn about membership options.

Finding the best assistive technology

Everyone, including people with disabilities or age-related limitations, should be able to communicate, express themselves, and connect with the world using technology. HP is committed to increasing accessibility awareness within HP and with our customers and partners. Whether it's large fonts that are easy on the eyes, voice recognition that lets you give your hands a rest, or any other assistive technology to help with your specific situation—a variety of assistive technologies make HP products easier to use. How do you choose?

Assessing your needs

Technology can unleash your potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology (AT) helps increase, maintain, and improve the functional capabilities of electronic and information technology.

You can choose from many AT products. Your AT assessment should allow you to evaluate several products, answer your questions, and facilitate your selection of the best solution for your situation. You will find that professionals qualified to do AT assessments come from many fields, including those licensed or certified in physical therapy, occupational therapy, speech/language pathology, and other areas of expertise. Others, while not certified or licensed, can also provide evaluation information. You will want to ask about the individual's experience, expertise, and fees to determine if they are appropriate for your needs.

Accessibility for HP products

The following links provide information about accessibility features and assistive technology, if applicable, included in various HP products. These resources will help you select the specific assistive technology features and product(s) most appropriate for your situation.

- [HP Elite x3—Accessibility Options \(Windows 10 Mobile\)](#)
- [HP PCs—Windows 7 Accessibility Options](#)
- [HP PCs—Windows 8 Accessibility Options](#)
- [HP PC's—Windows 10 Accessibility Options](#)
- [HP Slate 7 Tablets—Enabling Accessibility Features on Your HP Tablet \(Android 4.1/Jelly Bean\)](#)
- [HP SlateBook PCs—Enabling Accessibility Features \(Android 4.3,4.2/Jelly Bean\)](#)
- [HP Chromebook PCs—Enabling Accessibility Features on Your HP Chromebook or Chromebox \(Chrome OS\)](#)
- [HP Shopping—peripherals for HP products](#)

If you need additional support with the accessibility features on your HP product, see [Contacting support on page 27](#).

Additional links to external partners and suppliers that may provide additional assistance:

- [Microsoft Accessibility information \(Windows 7, Windows 8, Windows 10, Microsoft Office\)](#)
- [Google Products accessibility information \(Android, Chrome, Google Apps\)](#)

- [Assistive Technologies sorted by impairment type](#)
- [Assistive Technologies sorted by product type](#)
- [Assistive Technology vendors with product descriptions](#)
- [Assistive Technology Industry Association \(ATIA\)](#)

Standards and legislation

Standards

Section 508 of the Federal Acquisition Regulation (FAR) standards was created by the US Access Board to address access to information and communication technology (ICT) for people with physical, sensory, or cognitive disabilities. The standards contain technical criteria specific to various types of technologies, as well as performance-based requirements which focus on functional capabilities of covered products. Specific criteria cover software applications and operating systems, web-based information and applications, computers, telecommunications products, video and multimedia, and self-contained closed products.

Mandate 376 – EN 301 549

The EN 301 549 standard was created by the European Union within Mandate 376 as the basis for an online toolkit for public procurement of ICT products. The standard specifies the functional accessibility requirements applicable to ICT products and services, together with a description of the test procedures and evaluation methodology for each accessibility requirement.

Web Content Accessibility Guidelines (WCAG)

Web Content Accessibility Guidelines (WCAG) from the W3C's Web Accessibility Initiative (WAI) helps web designers and developers create sites that better meet the needs of people with disabilities or age-related limitations. WCAG advances accessibility across the full range of web content (text, images, audio, and video) and web applications. WCAG can be precisely tested, is easy to understand and use, and allows web developers flexibility for innovation. WCAG 2.0 has also been approved as [ISO/IEC 40500:2012](#).

WCAG specifically addresses barriers to accessing the web experienced by people with visual, auditory, physical, cognitive, and neurological disabilities, and by older web users with accessibility needs. WCAG 2.0 provides characteristics of accessible content:

- **Perceivable** (for instance, by addressing text alternatives for images, captions for audio, adaptability of presentation, and color contrast)
- **Operable** (by addressing keyboard access, color contrast, timing of input, seizure avoidance, and navigability)
- **Understandable** (by addressing readability, predictability, and input assistance)
- **Robust** (for instance, by addressing compatibility with assistive technologies)

Legislation and regulations

Accessibility of IT and information has become an area of increasing legislative importance. The links listed below provide information about key legislation, regulations, and standards.

- [United States](#)
- [Canada](#)
- [Europe](#)

- [United Kingdom](#)
- [Australia](#)
- [Worldwide](#)

Useful accessibility resources and links

The following organizations might be good resources for information about disabilities and age-related limitations.



NOTE: This is not an exhaustive list. These organizations are provided for informational purposes only. HP assumes no responsibility for information or contacts you encounter on the Internet. Listing on this page does not imply endorsement by HP.

Organizations

- American Association of People with Disabilities (AAPD)
- The Association of Assistive Technology Act Programs (ATAP)
- Hearing Loss Association of America (HLAA)
- Information Technology Technical Assistance and Training Center (ITTATC)
- Lighthouse International
- National Association of the Deaf
- National Federation of the Blind
- Rehabilitation Engineering & Assistive Technology Society of North America (RESNA)
- Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI)
- W3C Web Accessibility Initiative (WAI)

Educational institutions

- California State University, Northridge, Center on Disabilities (CSUN)
- University of Wisconsin - Madison, Trace Center
- University of Minnesota computer accommodations program

Other disability resources

- ADA (Americans with Disabilities Act) Technical Assistance Program
- ILO Global Business and Disability network
- EnableMart
- European Disability Forum
- Job Accommodation Network
- Microsoft Enable

HP links

[Our contact webform](#)

[HP comfort and safety guide](#)

[HP public sector sales](#)

Contacting support



NOTE: Support is in English only.

- Customers who are deaf or hard of hearing who have questions about technical support or accessibility of HP products:
 - Use TRS/VRS/WebCapTel to call (877) 656-7058 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.
- Customers with other disabilities or age-related limitations who have questions about technical support or accessibility of HP products, choose one of the following options:
 - Call (888) 259-5707 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.
 - Complete the [Contact form for people with disabilities or age-related limitations](#).

Index

A

- AC adapter light 1, 2
- accessibility 23
- accessibility needs assessment 24
- action keys 8
 - back 8
 - brightness down 8
 - brightness up 8
 - forward 8
 - full screen 8
 - identifying 7
 - mute 8
 - next window 8
 - reload 8
 - volume down 8
 - volume up 8
- assistive technology (AT)
 - finding 24
 - purpose 23
- AT (assistive technology)
 - finding 24
 - purpose 23
- audio-in (microphone) jack,
 - identifying 2
- audio-out (headphone) jack,
 - identifying 2

B

- back action key 8
- backing up 16
- battery
 - charging 14
 - factory sealed 14
 - light 1, 2
- Bluetooth label 10
- brightness down action key 8
- brightness up action key 8
- buttons
 - power 3
 - volume 1

C

- camera light, identifying 4
- camera, identifying 4

Chromebook Recovery Utility,

- installing 17
- components
 - bottom 9
 - display 4
 - left side 2
 - right side 1
 - speakers 5
- connector, power 1, 2
- customer support, accessibility 27

E

- electrostatic discharge 22
- esc key, identifying 7

F

- forward action key 8
- full screen action key 8

H

- headphone (audio-out) jack 2
- HP Assistive Policy 23

I

- input power 20
- internal microphone, identifying 4
- International Association of Accessibility Professionals 23

J

- jacks
 - audio-in (microphone) 2
 - audio-out (headphone) 2

K

- keyboard backlight, identifying 8
- keys
 - esc 7
 - search 7

L

- labels
 - Bluetooth 10
 - regulatory 10
 - serial number 9

- service 9
- wireless certification 10
- WLAN 10

lights

- AC adapter and battery 1, 2
- camera 4
- lights, power 3
- lock screen, identifying 8

M

- microphone (audio-in) jack,
 - identifying 2
- microSD memory card reader,
 - identifying 2
- mute action key 8

N

- next window action key 8

O

- operating environment 21

P

- ports
 - USB SuperSpeed port with HP Sleep and Charge 1
 - USB Type-C power connector and port 1, 2
- power button, identifying 3
- power connector, identifying 1, 2
- power light, identifying 3
- printing 15
- product name and number, computer 9

R

- recovery media
 - creating 17
 - erase 18
- recovery, performing 16
- regulatory information
 - regulatory label 10
 - wireless certification labels 10
- reload action key 8
- resetting 16

resources 19
resources, accessibility 26

S

scrolling touch screen gesture 12
scrolling touchpad gesture 12
search key, identifying 7
Section 508 accessibility standards 25
security cable slot, identifying 1
serial number, computer 9
service labels, locating 9
slots, microSD memory card reader 2
speakers, identifying 5
standards and legislation, accessibility 25
support 19
swiping touch screen gesture 13
system recovery
 Chrome operating system 17
 Chromebook Recovery Utility 17
 recovery media 17

T

tap gestures 11
touch screen gestures
 one-finger scrolling 12
 one-finger swipe 13
 two-finger pinch zoom 13
touchpad and touch screen gestures, tap 11
touchpad gestures, scrolling 12
touchpad zone, identifying 6
traveling with the computer 10
two-finger pinch zoom touch screen gesture 13

U

USB SuperSpeed port with HP Sleep and Charge 1
USB Type-C power connector and port, identifying 1, 2

V

vents, identifying 9
volume button, identifying 1
volume down action key 8
volume up action key 8

W

wireless certification label 10
WLAN antennas, identifying 4
WLAN device 10
WLAN label 10