



User Guide

SUMMARY

This guide provides basic information for using and upgrading this product, including topics such as components, features, and HP resources.

Legal information

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Product notice

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

Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows is automatically updated, which is always enabled. High-speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

To access the latest user guides, go to <http://www.hp.com/support>, and follow the instructions to find your product. Then select **Setup & User Guides**.

Software terms

By installing, copying, downloading, or otherwise using any software product preinstalled on this device, 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 device, please contact your seller.

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1 About this guide

This guide provides basic information for using and upgrading this product.

-
-  **WARNING!** Indicates a hazardous situation that, if not avoided, **could** result in serious injury or death.
 -  **CAUTION:** Indicates a hazardous situation that, if not avoided, **could** result in minor or moderate injury.
 -  **IMPORTANT:** Indicates information considered important but not hazard-related (for example, messages related to property damage). Warns the user that failure to follow a procedure exactly as described could result in loss of data or in damage to hardware or software. Also contains essential information to explain a concept or to complete a task.
 -  **NOTE:** Contains additional information to emphasize or supplement important points of the main text.
 -  **TIP:** Provides helpful hints for completing a task.
-



This product incorporates HDMI® technology.

2 Locating HP resources

Read this chapter to learn about where to find additional HP resources.

Product information

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

Table 2-1 Where to find product information

Topic	Location
Technical specifications	To find the QuickSpecs for your product, go to http://www.hp.com/go/quickspecs , and then select the link. Select Search all QuickSpecs , type your model name in the search box, and then select Go .
<i>Regulatory, Safety, and Environmental Notices</i>	See the <i>Regulatory, Safety, and Environmental Notices</i> for product regulatory information. You can also see the Agency/Environmental label. To access this guide: ■ Select the Search icon in the taskbar, type HP Documentation in the search box, and then select HP Documentation.
System board	A diagram of the system board is located on the inside of the chassis. Additional information is located in the device <i>Maintenance and Service Guide</i> on the web at http://www.hp.com/support . Follow the instructions to find your product, and then select Setup & User Guides .
Serial number, Agency/Environmental, and operating system labels	The serial number, Agency/Environmental, and operating system labels might be on the bottom of the device, on the rear panel of the device, or under the service door.

Support

Use this table to locate resources that provide support and warranty information.

Table 2-2 Where to find support information

Topic	Location
Product support	For HP support, go to http://www.hp.com/support. Here you can access the following types of support: • Online chat with an HP technician • Support telephone numbers • HP service center locations

Table 2-2 Where to find support information (continued)

Topic	Location
Warranty information	To access this document, perform one of these actions: - Select the Search icon in the taskbar, type HP Documentation in the search box, and then select HP Documentation. - Go to http://www.hp.com/go/orderdocuments. IMPORTANT: You must be connected to the internet to access the latest version of the warranty. In some countries or regions, HP might 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 name, phone number, address, and product name.

Product documentation

Use this table to locate resources that provide product documentation.

Table 2-3 Where to find product documentation

Topic	Location
HP user documentation, white papers, and third-party documentation	User documentation is located on your hard drive. Select the Search icon in the taskbar, type HP Documentation in the search box, and then select HP Documentation . For the latest online documentation, go to http://www.hp.com/support and follow the instructions to find your product. Then select Setup & User Guides . The documentation includes this user guide and the <i>Maintenance and Service Guide</i> .
Product notifications	Subscriber's Choice is an HP program that allows you to sign up to receive driver and software alerts, proactive change notifications (PCNs), the HP newsletter, customer advisories, and more. Sign up at https://h41369.www4.hp.com/ .
Technical specifications	The Product Bulletin application contains QuickSpecs for HP computers. QuickSpecs include information about the operating system, power supply, memory, processor, and many other system components. To access the QuickSpecs, go to http://www.hp.com/go/quickspecs/ .
Bulletins and Alerts	To find bulletins, alerts, guides, and whitepapers: - Go to http://www.hp.com/support. - Follow the instructions to find your product. - Select Bulletins and Alerts.

Product diagnostics

Use this table to locate resources that provide product diagnostics tools.

Table 2-4 Where to find diagnostics tools

Topic	Location
Diagnostics tools	For additional information, see the device <i>Maintenance and Service Guide</i> at http://www.hp.com/support . Follow the instructions to find your product, and then select Setup & User Guides .

Table 2-4 Where to find diagnostics tools (continued)

Topic	Location
Audible beep and light code definitions	See the device <i>Maintenance and Service Guide</i> at http://www.hp.com/support . Follow the instructions to find your product, and then select Setup & User Guides .
POST error codes	See the device <i>Maintenance and Service Guide</i> at http://www.hp.com/support . Follow the instructions to find your product, and then select Setup & User Guides .

Product updates

Use this table to locate resources that provide product updates.

Table 2-5 Where to find product updates

Topic	Location
Driver and BIOS updates	Go to http://www.hp.com/support and select Software and Drivers to verify that you have the latest drivers for the device.
Operating systems	For information about Windows® operating systems, go to http://support.microsoft.com .

3 Device features

This chapter provides you with an overview of your device's features.

 **IMPORTANT:** Your keyboard might include a Copilot key. Copilot in Windows (select products only) requires Windows 11. Some features require a neural processing unit (NPU). The timing of feature delivery and availability varies by market and device. You must have a Microsoft account to use the Copilot feature. When the Copilot feature is not available, pressing the Copilot key opens the Bing search engine. See <http://aka.ms/WindowsAIFeatures>.

Standard configuration features

Read this section to identify a typical device configuration. Features vary depending on the model. For support assistance and to learn more about the hardware and software installed on your device model, run the HP Support Assistant utility.

 **NOTE:** You can use this device model in a tower orientation or a desktop orientation. See [Changing from desktop to tower orientation on page 9](#).

 **NOTE:** Your device model might look slightly different from the illustration in this section.



Front panel components

Use the illustration and table to identify the front panel components.

 **NOTE:** Drive configuration varies by model. Some models have a bezel blank that covers one or more drive bays.

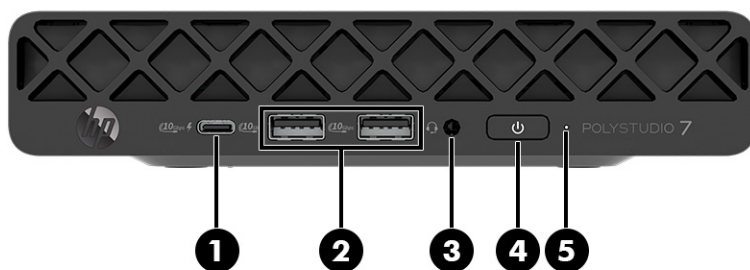


Table 3-1 Identifying the front panel components

Front panel components				
(1)		USB Type-C® 10 Gbps port with HP Sleep and Charge	(4)	 Power button**
(2)		USB 10 Gbps ports (2) NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device such as a smartphone.	(5)	 Hard drive activity light
(3)		Audio-out (headphone)/Audio-in (microphone) combo jack*		

*The combo jack supports headphones, line output devices, microphones, line input devices, or CTIA-style headsets.

**The light on the power button is normally white when the power is on. If the light blinks red, the device displays a diagnostic code to indicate a problem.

Rear panel components

Use the illustration and table to identify the rear panel components.

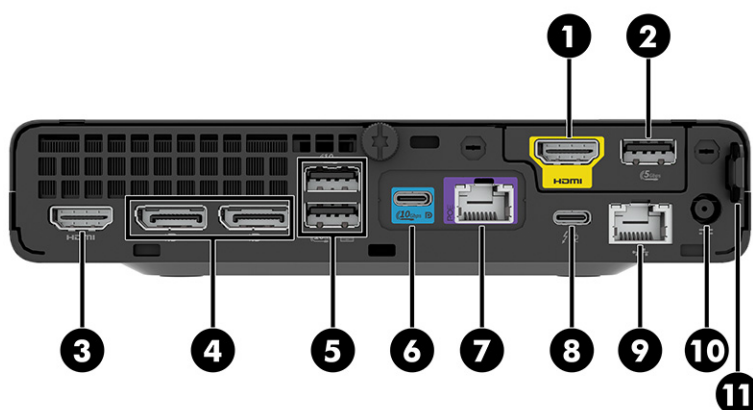


Table 3-2 Identifying the rear panel components

Rear panel components			
(1)		HDMI Ingest port	(7)  Power-over-Ethernet (POE) port
(2)		USB 5 Gbps port Connects a USB device, provides high-speed data transfer, and (for select products) charges small devices (such as a smartphone) when the device is on or in sleep mode. NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.	(8)  Connects a USB device, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off. - and - Connects a display device that has a USB Type-C connector, providing DisplayPort™ output. NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.
t(3)		HDMI port	(9)  RJ-45 (network) jack
(4)		DisplayPort monitor connectors (2)	(10) Power connector

Table 3-2 Identifying the rear panel components (continued)

Rear panel components			
(5)		USB 10 Gbps ports (2)	(11) Padlock or security cable loop
Connect a USB device, provide high-speed data transfer, and (for select products) charge small devices (such as a smartphone) when the device is on or in sleep mode. NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.			
(6)		USB Type-C port with HP Sleep and Charge	
Connects a USB device, provides data transfer, and charges small devices (such as a smartphone), even when the device is off. NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device. - and - Connects a display device that has a USB Type-C connector, providing DisplayPort output.			

 **NOTE:** Your model might have additional ports available from HP.

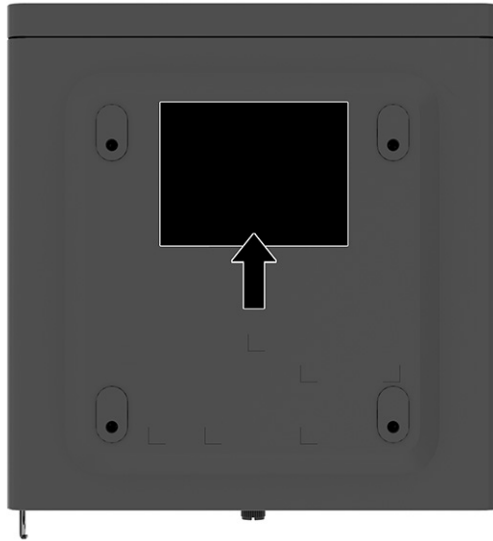
When a graphics card is installed in one of the system board slots, you can use the video connectors on the graphics card or the integrated graphics on the system board. The specific graphics card installed and software configuration determine the behavior.

You can disable the system board graphics by changing settings in BIOS F10 Setup.

Serial number location

Each device has a unique serial number and a product ID number that are located on the exterior of the device. Keep these numbers available when contacting customer service for assistance.





Changing from desktop to tower orientation

You can use the device in a tower orientation with an optional tower stand that you can purchase from HP.



NOTE: To stabilize the device in a tower orientation, HP recommends the use of the tower stand.

1. Remove or disengage any security devices that prohibit opening the device.
2. Remove all removable media, such as compact discs and USB flash drives, from the device.
3. Turn off the device properly through the operating system, and turn off any external devices.
4. Disconnect the power cord from the AC outlet and disconnect any external devices.
5. Position the device so that its right side faces up, and place the device in the optional stand.



6. Reconnect the power cord and any external devices, and then turn on the device.



NOTE: Be sure that at least 10.2 centimeters (4 inches) of space on all sides of the device remains clear and free of obstructions.

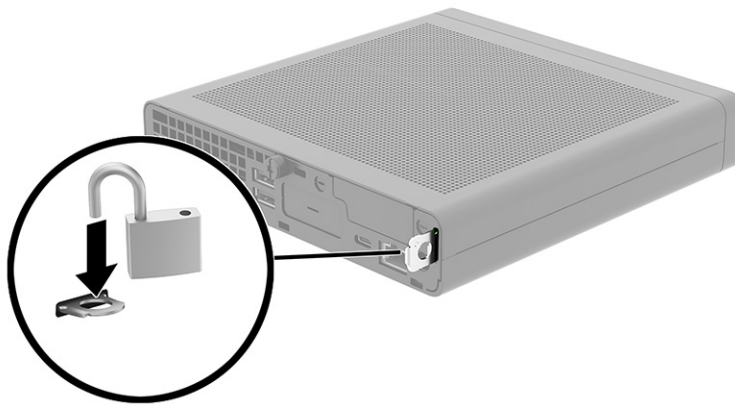
7. Lock any security devices that were disengaged before the device was moved.

Using an optional security lock

You can use different types of locks (purchased separately), including a padlock, to secure the device.

Padlock

You can secure the device with a padlock.



4 Backing up, restoring, and recovering

You can use Windows tools or HP software to back up your information, create a restore point, reset your device, create recovery media, or restore your device to its factory state. Performing these standard procedures can return your device to a working state faster.

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

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

Backing up information and creating recovery media

These methods of creating recovery media and backups are available on select products only.

Using Windows tools for backing up

HP recommends that you back up your information immediately after initial setup. You can do this task either using Windows Backup locally with an external USB flash drive or using online tools.

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

Using the HP Cloud Recovery Download Tool to create a recovery USB flash drive (select products only)

You can use the HP Cloud Recovery Download Tool to create an HP Recovery bootable USB flash drive.

For details:

- Go to <http://www.hp.com>, search for HP Cloud Recovery, and then select the result that matches the type of device that you have and follow the on-screen instructions.

 **NOTE:** In select countries, if you cannot create the HP Recovery USB flash drive yourself, contact support. Go to <http://www.hp.com/support>, select your country or region, and then follow the on-screen instructions.

 **IMPORTANT:** HP recommends that you follow the [Restoring and recovery methods on page 12](#) to restore your device before you obtain and use the HP USB flash drive. Using a recent backup can return your machine to a working state sooner than using the HP USB flash drive. After the system is restored, reinstalling all the operating system software released since your initial purchase can be a lengthy process.

Restoring and recovering your system

You have several tools available to recover your system both within and outside of Windows if the desktop cannot load.

HP recommends that you attempt to restore your system using the [Restoring and recovery methods on page 12](#).

Creating a system restore

System Restore is available in Windows. The System Restore software can automatically or manually create restore points, or snapshots, of the system files and settings on the device at a particular point.

When you use System Restore, it returns your device to its state at the time you made the restore point. Your personal files and documents should not be affected.

Restoring and recovery methods

After you run the first method, test to see whether the issue still exists before you proceed to the next method, which might now be unnecessary.

1. Run a Microsoft System Restore.
2. Run Reset this PC.



NOTE: The options **Remove everything** and then **Fully clean the drive** can take several hours to complete and leave no information on your device. It is the safest way to reset your device before you recycle it.

3. Recover using the HP Recovery USB flash drive. For more information, see [Recovering using the HP Recovery USB flash drive on page 12](#).

For more information about the first two methods, see the Get Help app:

- Select the **Start** button, select **All apps**, select the **Get Help** app, and then enter the task you want to perform.



NOTE: You must be connected to the internet to access the Get Help app.

Recovering using the HP Recovery USB flash drive

You can use the HP Recovery USB flash drive to recover the operating system and drivers that were installed at the factory. On select products, you can create recovery media on a bootable USB flash drive using the HP Cloud Recovery Download Tool.

For details, see [Using the HP Cloud Recovery Download Tool to create a recovery USB flash drive \(select products only\) on page 11](#).



NOTE: In select countries, if you cannot create the HP Recovery USB flash drive yourself, contact support. Go to <http://www.hp.com/support>, select your country or region, and then follow the on-screen instructions.

To recover your system:

- Insert the HP Recovery USB flash drive, and then restart the device.



NOTE: HP recommends that you follow the [Restoring and recovery methods on page 12](#) to restore your device before you obtain and use the HP USB flash drive. Using a recent backup can return your machine to a working state sooner than using the HP USB flash drive. After the system is restored, reinstalling all the operating system software released since your initial purchase can be a lengthy process.

Changing the device boot order

If your device does not restart using the HP Recovery USB flash drive, you can change the device boot order, which is the order of devices listed in BIOS for startup information.



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

To change the boot order:

1. Insert the HP Recovery USB flash drive.
2. Access the system **Startup** menu.
 - For devices or tablets with keyboards attached, turn on or restart the device or tablet, quickly press **esc**, and then press **f9** for boot options.
 - For tablets without keyboards, turn on or restart the tablet, and then quickly press and hold one of the following buttons:
 - Volume up
 - Volume down

Then select **f9**.
3. Select the USB flash drive to boot from, and then follow the on-screen instructions.

Using HP Sure Recover (select products only)

Select device models are configured with HP Sure Recover, an operating system (OS) recovery solution built into the hardware and software. HP Sure Recover can fully restore the HP OS image without installed recovery software.

Using HP Sure Recover, an administrator or user can restore the system and install:

- Latest version of the OS
- Platform-specific device drivers
- Software applications, in the case of a custom image

To access the latest documentation for HP Sure Recover, go to <http://www.hp.com/support>. Follow the on-screen instructions to find your product and locate your documentation.

5 Specifications

This section provides specifications for your device.

Table 5-1 Specifications

	Metric	U.S.
Dimensions		
Height	175 mm	6.9 in
Width	177 mm	7.0 in
Depth	34 mm	1.3 in
Approximate weight	1.3 kg	2.9 lb
Temperature range		
Operating	4°C to 35°C	40°F to 95°F
Nonoperating	-30°C to 60°C	-22°F to 140°F
Maximum altitude (unpressurized)		
Operating	3,048 m	10,000 ft
Nonoperating	9,144 m	30,000 ft
Relative humidity (noncondensing)		
Operating	10% to 90%	
Nonoperating (38.7°C max wet bulb)	5% to 95%	
Power supply		
Operating voltage range	90 V AC to 264 V AC	
Rated voltage range ¹	100 V AC to 240 V AC	
Rated line frequency	50 Hz to 60 Hz	
Operating line frequency	47 Hz to 63 Hz	
Standard efficiency	65 W, 87% efficient	

¹ This system uses an active power factor-corrected power supply. This allows the system to pass the CE mark requirements for use in the countries of the European Union. The active power factor-corrected power supply also has the added benefit of not requiring an input-voltage range select switch.



NOTE: Operating temperature is derated 1.0°C per 300 m (1000 ft) to 3000 m (10,000 ft) above sea level; no direct sustained sunlight. Maximum rate of change is 10°C/hour. The upper limit might be limited by the type and number of options installed.

6 Device operating guidelines, routine care, and shipping preparation

Follow these guidelines to ensure the best performance and useful life of your device.

Operating guidelines and routine care

HP has developed guidelines to help you properly set up and care for the device and monitor.

- Keep the device away from excessive moisture, direct sunlight, and extreme heat and cold.
- Operate the device on a sturdy, level surface. Leave a 10.2 cm (4 inch) clearance on all vented sides of the device and above the monitor to permit the required airflow.
- Never restrict the airflow into the device by blocking any vents or air intakes. Do not place the keyboard, with the keyboard feet down, directly against the front of the desktop unit because this also restricts airflow.
- Never operate the device with the access panel or any of the expansion card slot covers removed.
- Do not stack devices on top of each other or place devices so near each other that they are subject to each other's recirculated or preheated air.
- To operate a device within a separate enclosure, intake and exhaust ventilation must be provided on the enclosure, and the previous operating guidelines still apply.
- Keep liquids away from the device and keyboard.
- Never cover the ventilation slots on the monitor with any type of material.
- Install or enable power management functions of the operating system or other software, including sleep states.
- Turn off the device before you do either of the following tasks:
 - Wipe the exterior of the device with a soft, damp cloth as needed. Cleaning products might discolor or damage the finish. See [Removing dirt and debris from your device on page 16](#) for the recommended steps to clean the high-touch, external surfaces on your device. After you remove the dirt and debris, you can also clean the surfaces with a disinfectant. See [Cleaning your device with a disinfectant on page 16](#) for guidelines to help prevent the spread of harmful bacteria and viruses.
 - Occasionally clean the air vents on all vented sides of the device. Lint, dust, and other foreign matter can block the vents and limit the airflow.

Cleaning your device

Cleaning your device regularly removes dirt and debris so that your device continues to operate at its best. Use the following information to safely clean the external surfaces of your device.

Removing dirt and debris from your device

Here are the recommended steps to clean dirt and debris from your device.

1. Wear disposable gloves made of latex (or nitrile gloves, if you are latex-sensitive) when cleaning the surfaces.
2. Turn off your device and unplug the power cord and other connected external devices. Remove any installed batteries from items such as wireless keyboards.

 **CAUTION:** To prevent electric shock or damage to components, never clean a product while it is turned on or plugged in.

3. Moisten a microfiber cloth with water. The cloth should be moist, but not dripping wet.

 **IMPORTANT:** To avoid damaging the surface, avoid abrasive cloths, towels, and paper towels.

4. Wipe the exterior of the product gently with the moistened cloth.

 **IMPORTANT:** Keep liquids away from the product. Avoid getting moisture in any openings. If liquid makes its way inside your HP product, it can cause damage to the product. Do not spray liquids directly on the product. Do not use aerosol sprays, solvents, abrasives, or cleaners containing hydrogen peroxide or bleach that might damage the finish.

5. Start with the display (if applicable). Wipe carefully in one direction, and move from the top of the display to the bottom. Finish with any flexible cables, like power cord, keyboard cable, and USB cables.
6. Be sure that surfaces have completely air-dried before turning the device on after cleaning.
7. Discard the gloves after each cleaning. Clean your hands immediately after you remove the gloves.

See [Cleaning your device with a disinfectant on page 16](#) for recommended steps to clean the high-touch, external surfaces on your device to help prevent the spread of harmful bacteria and viruses.

Cleaning your device with a disinfectant

The World Health Organization (WHO) recommends cleaning surfaces, followed by disinfection, as a best practice for preventing the spread of viral respiratory illnesses and harmful bacteria.

After cleaning the external surfaces of your device using the steps in [Removing dirt and debris from your device on page 16](#), you might also choose to clean the surfaces with a disinfectant. A disinfectant that is within HP's cleaning guidelines is an alcohol solution consisting of 70% isopropyl alcohol and 30% water. This solution is also known as rubbing alcohol and is sold in most stores.

Follow these steps when disinfecting high-touch, external surfaces on your device:

1. Wear disposable gloves made of latex (or nitrile gloves, if you are latex-sensitive) when cleaning the surfaces.
2. Turn off your device and unplug the power cord and other connected external devices. Remove any installed batteries from items such as wireless keyboards.

 **CAUTION:** To prevent electric shock or damage to components, never clean a product while it is turned on or plugged in.

3. Moisten a microfiber cloth with a mixture of 70% isopropyl alcohol and 30% water. The cloth should be moist, but not dripping wet.

 **CAUTION:** Do not use any of the following chemicals or any solutions that contain them, including spray-based surface cleaners: bleach, peroxides (including hydrogen peroxide), acetone, ammonia, ethyl alcohol, methylene chloride, or any petroleum-based materials, such as gasoline, paint thinner, benzene, or toluene.

 **IMPORTANT:** To avoid damaging the surface, avoid abrasive cloths, towels, and paper towels.

4. Wipe the exterior of the product gently with the moistened cloth.

 **IMPORTANT:** Keep liquids away from the product. Avoid getting moisture in any openings. If liquid makes its way inside your HP product, it can cause damage to the product. Do not spray liquids directly on the product. Do not use aerosol sprays, solvents, abrasives, or cleaners containing hydrogen peroxide or bleach that might damage the finish.

5. Start with the display (if applicable). Wipe carefully in one direction, and move from the top of the display to the bottom. Finish with any flexible cables, like power cord, keyboard cable, and USB cables.
6. Be sure that surfaces have completely air-dried before turning the device on after cleaning.
7. Discard the gloves after each cleaning. Clean your hands immediately after you remove the gloves.

Shipping preparation

If you have to ship your device, follow these tips to keep your equipment safe.

1. Back up your files to an external storage device. Be sure that the backup media is not exposed to electrical or magnetic impulses while stored or in transit.
2. Remove and store all removable media.
3. Turn off the device and external devices.
4. Disconnect the power cord from the AC outlet, and then from the device.
5. Disconnect the system components and external devices from their power sources and then from the device.

 **NOTE:** Be sure that all boards are seated properly and secured in the board slots before shipping the device.

6. Pack the system components and external devices in their original packing boxes or similar packaging with sufficient packing material to protect them.

7 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 can damage electronic components.



IMPORTANT: To prevent damage to the device, damage to a drive, or loss of information, observe these precautions:

- If removal or installation instructions direct you to unplug the device, 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.
-

8 Accessibility

HP's goal is to design, produce, and market products, services, and information that everyone everywhere can use, either on a standalone basis or with appropriate third-party assistive technology (AT) devices or applications.

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. AT removes barriers and helps you create independence at home, at work, and in the community. AT helps increase, maintain, and improve the functional capabilities of electronic and information technology.

For more information, see [Finding the best assistive technology on page 20](#).

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 standalone 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 AT and solution providers.
- Support internal and external research and development that improves AT 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 AT to help with your specific situation—a variety of ATs make HP products easier to use. How do you choose?

Assessing your needs

Technology can unleash your potential. AT removes barriers and helps you create independence at home, at work, and in the community. 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

These links provide information about accessibility features and AT, if applicable and available in your country or region, that are included in various HP products. These resources will help you select the specific AT features and products most appropriate for your situation.

- HP Aging & Accessibility: Go to <http://www.hp.com>, type **Accessibility** in the search box. Select **Office of Aging and Accessibility**.
- HP computers: For Windows products, go to <http://www.hp.com/support>, type **Windows Accessibility Options** in the **Search our knowledge library** search box. Select the appropriate operating system in the results.
- HP Shopping, peripherals for HP products: Go to <http://store.hp.com>, select **Shop**, and then select **Monitors** or **Accessories**.

If you need additional support with the accessibility features on your HP product, see [Contacting support on page 23](#).

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

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

Standards and legislation

Countries worldwide are enacting regulations to improve access to products and services for persons with disabilities. These regulations are historically applicable to telecommunications products and services, PCs and printers with certain communications and video playback features, their associated user documentation, and their customer support.

Standards

The US Access Board created Section 508 of the Federal Acquisition Regulation (FAR) standards 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 European Union created the EN 301 549 standard within Mandate 376 as an online toolkit for public procurement of ICT products. The standard specifies the accessibility requirements applicable to ICT products and services, with a description of the test procedures and evaluation methodology for each 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 ATs)

Legislation and regulations

Accessibility of IT and information has become an area of increasing legislative importance.

The [HP policy landscape](#) website provides information about key legislation, regulations, and standards in the following locations:

- United States
- Canada
- Europe
- Australia

Useful accessibility resources and links

These organizations, institutions, and resources might be good sources of 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

These organizations are a few of the many that provide information about disabilities and age-related limitations.

- 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

Many educational institutions, including these examples, provide information about disabilities and age-related limitations.

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

Other disability resources

Many resources, including these examples, provide information about disabilities and age-related limitations.

- 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

These HP-specific links provide information that relates to disabilities and age-related limitations.

[HP comfort and safety guide](#)

[HP public sector sales](#)

Contacting support

HP offers technical support and assistance with accessibility options for customers with disabilities.



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:
 - Call (888) 259-5707 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.

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