



User Guide

SUMMARY

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

Legal information

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First Edition: February 2024

Document Part Number: N79673-001

Product notice

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

Not all features are available in all editions or versions of Windows. Systems might 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 might apply and additional requirements might apply over time for updates. See <http://www.windows.com>. **If your product ships with Windows in S Mode:** Windows in S Mode works exclusively with apps from the Microsoft Store within Windows. Certain default settings, features, and apps cannot be changed. Some accessories and apps that are compatible with Windows might not work (including some antivirus, PDF writers, driver utilities, and accessibility apps), and performance might vary, even if you switch out of S Mode. If you switch to Windows, you cannot switch back to S Mode. Learn more at Windows.com/SmodeFAQ.

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**.

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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

Reduce the possibility of heat-related injuries or of overheating the computer by following the practices described.

-
- ⚠ 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.
-

Processor configuration setting (select products only)

Important information about processor configurations.



IMPORTANT: Select products are configured with an Intel® Pentium® N35xx/N37xx series or a Celeron® N28xx/N29xx/N30xx/N31xx series processor and a Windows® operating system. **If your computer is configured as described, do not change the processor configuration setting in msconfig.exe from 4 or 2 processors to 1 processor.** If you do so, your computer will not restart. You will have to perform a factory reset to restore the original settings.

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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.
-

2 Getting started

This 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 computer, fun things to do with your computer, and where to find additional HP resources.

Best practices

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

- Back up your hard drive by creating recovery media. See [Backing up, restoring, and recovering on page 58](#).
- If you haven't already done so, connect to a wired or wireless network. See details in [Connecting to a network on page 17](#).
- Become familiar with the computer hardware and software. For more information, see [Getting to know your computer on page 4](#) and [Enjoying entertainment features on page 22](#).
- Update or purchase antivirus software. See [Using antivirus software on page 46](#).
- **Access HP Support Assistant app**—For quick online support, open the HP Support Assistant app (select products only). HP Support Assistant optimizes computer performance and resolves problems using the latest software updates, diagnostic tools, and guided assistance. Select the **Search** icon in the taskbar, type `support` in the search box, and then select **HP Support Assistant**.

More HP resources

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

Table 2-1 Additional information

Resource	Contents
<i>Setup Instructions</i>	<ul style="list-style-type: none">• Overview of computer setup and features
HP support	<ul style="list-style-type: none">• Online chat with an HP technician
For HP support, go to http://www.hp.com/support , and follow the instructions to find your product.	<ul style="list-style-type: none">• Support telephone numbers
– or –	<ul style="list-style-type: none">• Replacement parts videos (select products only)
Select the Search icon in the taskbar, type <code>support</code> in the search box, and then select HP Support Assistant .	<ul style="list-style-type: none">• Maintenance and service guides
– or –	<ul style="list-style-type: none">• HP service center locations
Select the question mark icon in the taskbar.	

Table 2-1 Additional information (continued)

Resource	Contents
<p><i>Safety & Comfort Guide</i></p> <p>To access this guide:</p> <ul style="list-style-type: none">■ Select the Search icon in the taskbar, type HP Documentation in the search box, and then select HP Documentation. <p>– or –</p> <ul style="list-style-type: none">■ Go to http://www.hp.com/ergo. <p>IMPORTANT: You must be connected to the internet to access the latest version of the user guide.</p>	<ul style="list-style-type: none">● Proper workstation setup● Guidelines for posture and work habits that increase your comfort and decrease your risk of injury● Electrical and mechanical safety information
<p><i>Regulatory, Safety, and Environmental Notices</i></p> <p>To access this document:</p> <ul style="list-style-type: none">■ Select the Search icon in the taskbar, type support in the search box, and then select HP Documentation.	<ul style="list-style-type: none">● Important regulatory notices, including information about proper battery disposal, if needed.
<p><i>Limited Warranty*</i></p> <p>To access this document:</p> <ul style="list-style-type: none">■ Select the Search icon in the taskbar, type support in the search box, and then select HP Documentation. <p>– or –</p> <ul style="list-style-type: none">■ Go to http://www.hp.com/go/orderdocuments. <p>IMPORTANT: You must be connected to the internet to access the latest version of the user guide.</p>	<ul style="list-style-type: none">● Specific warranty information about this computer

*You can find your HP Limited Warranty located with the user guides on your product and/or on the CD or DVD provided in the box. In some countries or regions, HP 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 product name, and your name, phone number, and postal address.

3 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.

Locating hardware

To find out what hardware is installed on your computer, select the **Search** icon in the taskbar, type `device manager` in the search box, and then select the **Device Manager** app.

For information about system hardware components and the system BIOS version number, press `fn+esc` (select products only).

Locating software

To find out what software is installed on your computer, right-click the **Start** button, and then select **Apps and Features**.

Right side

Identify the components on the right side of the computer.

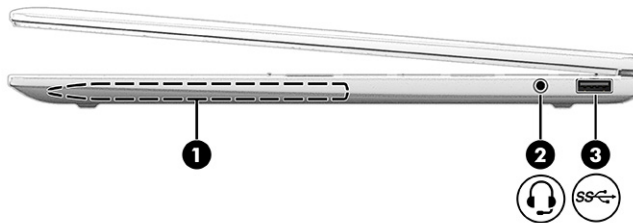




Table 3-1 Right-side components and their descriptions

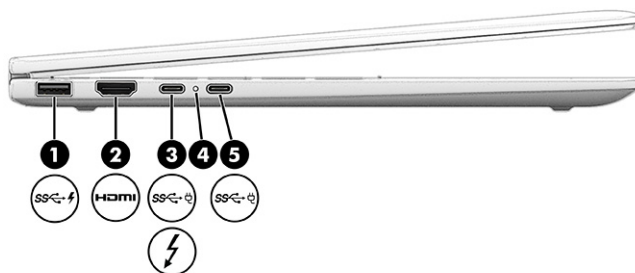
Component	Description
(1)	Magnetic pen attachment area

Table 3-1 Right-side components and their descriptions (continued)

Component	Description
<p>(2)  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 optional 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>To access this guide:</p> <ul style="list-style-type: none"> Select the Search icon in the taskbar, type HP Documentation in the search box, and then select HP Documentation. <p>NOTE: When a device is connected to the jack, the computer speakers are disabled.</p>
<p>(3)  USB 10 Gbps port</p>	<p>Connects a USB device, provides high-speed data transfer, and (for select products) charges small devices (such as a smartphone) when the computer is on or in Sleep mode.</p> <p>NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.</p>

Left side

Identify the components on the left side of the computer.



updated image to show the two USB-C port options for callout #3.

Table 3-2 Left-side components and their descriptions






Component	Description
<p>(1)  USB 10 Gbps port with HP Sleep and Charge</p>	<p>Connects a USB device, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off.</p> <p>NOTE: Use a standard USB Type-A charging cable or cable adapter (purchased separately) when charging a small external device.</p>
<p>(2)  HDMI port</p>	<p>Connects an optional video or audio device, such as a high-definition television, any compatible digital or audio component, or a high-speed High-Definition Multimedia Interface (HDMI) device.</p>

Table 3-2 Left-side components and their descriptions (continued)

Component	Description
<p>(3)  USB Type-C® power connector and 10 Gbps port with HP Sleep and Charge and DisplayPort™ output</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, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off.</p> <p>NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.</p> <p>- and -</p> <p>Connects a display device that has a USB Type-C connector, providing DisplayPort output.</p>
<p> USB Type-C power connector and Thunderbolt™ port with HP Sleep and Charge and DisplayPort output</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, provides high-speed data transfer, and charges small devices (such as a smartphone), even when the computer is off.</p> <p>NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.</p> <p>- and -</p> <p>Connects a display device that has a USB Type-C connector, providing DisplayPort output.</p> <p>NOTE: Your computer might also support a Thunderbolt docking station.</p>
<p>(4) AC adapter and battery light</p>	<ul style="list-style-type: none"> • White: The AC adapter is connected and the battery is fully charged. • Blinking amber: The AC adapter is disconnected and the battery has reached a low battery level. • Amber: The AC adapter is connected and the battery is charging. • Off: The battery is not charging.

updated USB description

Table 3-2 Left-side components and their descriptions (continued)

Component	Description
(5) 	<p>USB Type-C power connector and 10 Gbps port with DisplayPort output</p> <p>- and -</p> <p>Connects a USB device, provides high-speed data transfer, and (for select products) charges small devices (such as a smartphone) when the computer is on or in Sleep mode.</p> <p>NOTE: Use a standard USB Type-C charging cable or cable adapter (purchased separately) when charging a small external device.</p> <p>- and -</p> <p>Connects a display device that has a USB Type-C connector, providing DisplayPort output.</p>

360 modes

If your computer offers 360 modes, the following illustration shows how you can use and fold your device.



Display

The computer display can include essential components such as speakers, antennas, cameras, and microphones.

Low blue light mode (select products only)

Your computer display is shipped from the factory in low blue light mode for improved eye comfort and safety. Also, blue light mode automatically adjusts blue light emissions when you are using the computer at night or for reading.

⚠ WARNING! To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup and proper posture, health, and work habits for computer users. The *Safety & Comfort Guide* also provides important electrical and mechanical safety information. The *Safety & Comfort Guide* is available on the web at <http://www.hp.com/ergo>.

IMAX Enhanced Mode (select products only)

Select computer models are configured with IMAX® Enhanced Mode, a solution built into the hardware and software to enhance the IMAX audio and video experience.

To access the latest setup documentation, go to <http://www.hp.com/support>, type IMAX in the **Search our knowledge library** search box, and then select **HP Consumer Notebook PCs - Enabling the IMAX features**.

Wake-on-voice (select products only)

Use the wake-on-voice feature to bring the computer out of the Sleep state quickly.

To access the wake-on-voice settings, follow these steps:

1. Select the **Search** icon in the taskbar, type **XiaoWei** in the search box, and then select **XiaoWei**.
2. When the tool opens, scan the QR code with your mobile device, which takes you to the settings page, where you can select your wake-on-voice features.
3. Follow the on-screen instructions.



NOTE: Allow the XiaoWei app to continue running on the computer.

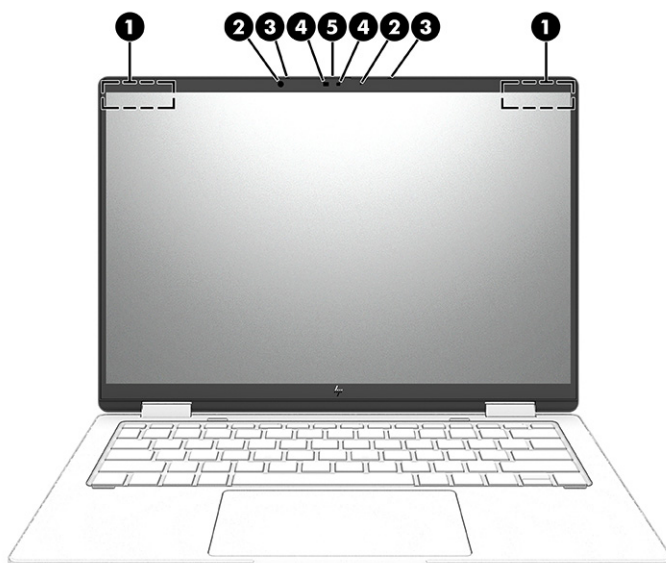


Table 3-3 Display components and their descriptions

Component	Description
(1) WLAN antennas* (2)	Send and receive wireless signals to communicate with wireless local area networks (WLANs).
(2) Camera lights (2)	On: One or more cameras are in use.
(3) Internal microphones (2)	Record sound.
(4) Cameras (2)	Allow you to video chat, record video, and record still images. To use your camera, see Using the camera on page 22 . Some cameras also allow a facial recognition logon to Windows®, instead of a password logon. For more information, see Using Windows Hello (select products only) on page 46 .

NOTE: Camera functions vary depending on the camera hardware and software installed on your product.

Table 3-3 Display components and their descriptions (continued)

Component	Description
(5) Camera privacy cover	By default, the camera lens is uncovered, but you can slide the camera privacy cover to block the camera's view. To use the camera, slide the camera privacy cover in the opposite direction to reveal the lens.

*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 guide:

- Select the **Search** icon in the taskbar, type `HP Documentation` in the search box, and then select **HP Documentation**.

Keyboard area

Keyboards can vary by language.



NOTE: The keyboard area, including the function keys and (select products only) power key, is disabled in stand, tent, and tablet modes. To enable the keyboard, including the power key, change to the clamshell mode.

Touchpad settings and components

Learn the touchpad settings and components.

Touchpad settings

Learn how to adjust touchpad settings.

Adjusting touchpad settings

Use these steps to adjust touchpad settings and gestures.

1. Select the **Search** icon in the taskbar, type `touchpad settings` in the search box, and then press `enter`.
2. Choose a setting.

Turning on the touchpad

Follow these steps to turn on the touchpad.

1. Select the **Search** icon in the taskbar, type `touchpad settings` in the search box, and then press `enter`.
2. Using an external mouse, click the **touchpad** button.

If you are not using an external mouse, press the `Tab` key repeatedly until the pointer rests on the **touchpad** button. Then press the `spacebar` to select the button.

Touchpad components

Identify the touchpad components.

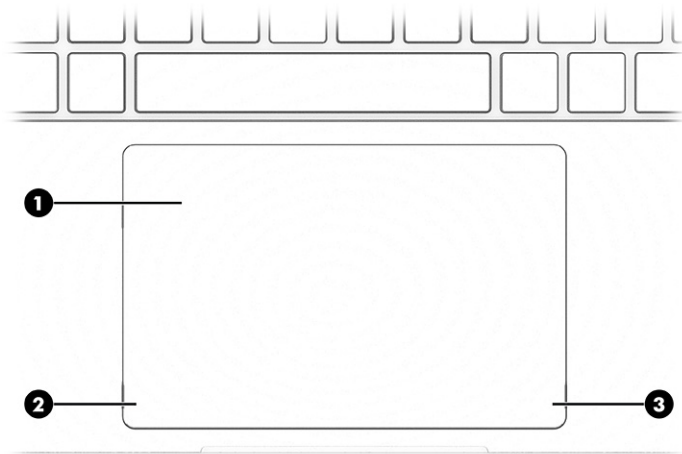
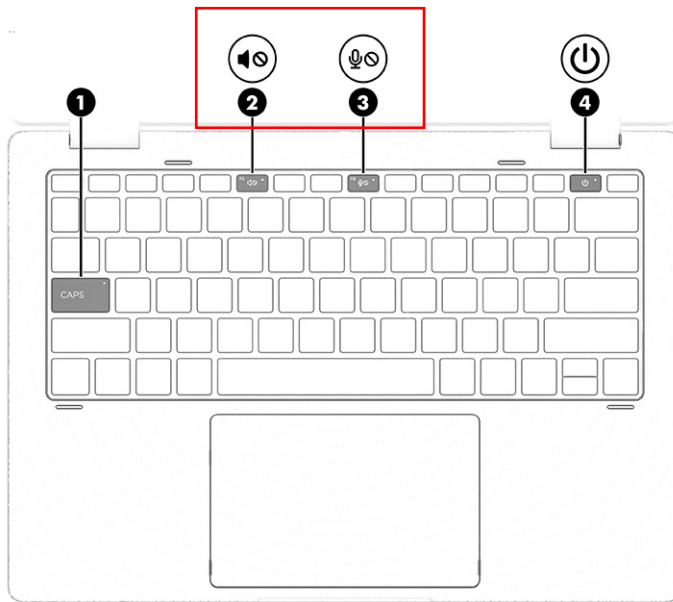


Table 3-4 Touchpad components and their descriptions

Component	Description
(1) 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 28 .
(2) Left touchpad button	Functions like the left button on an external mouse.
(3) Right touchpad button	Functions like the right button on an external mouse.




Lights

Identify the lights on the computer.



Have the mute and mic mute icons been updated? Please verify.

Table 3-5 Lights and their descriptions

Component	Description
(1) Caps lock light	On: Caps lock is on, which switches the key input to all capital letters.
(2)  Mute light	<ul style="list-style-type: none"> On: Computer sound is off. Off: Computer sound is on.
(3)  Microphone mute light	<ul style="list-style-type: none"> On: Microphone is off. Off: Microphone is on.
(4)  Power light	<ul style="list-style-type: none"> On: The computer is on. Blinking (select products only): The computer is in the Sleep state, a power-saving state. The computer shuts off power to the display and other unnecessary components. Off: Depending on your computer model, the computer is off, in Hibernation, or in Sleep. Hibernation is the power-saving state that uses the least amount of power.

Special keys

Identify the special keys.