

User Guide

Lenovo
ThinkBook



Lenovo

Lenovo ThinkBook 14 2-in-1 Gen 6

Read this first

Before using this documentation and the product it supports, ensure that you read and understand the following:

- [Generic Safety and Compliance Notices](#)
- *Safety and Warranty Guide*
- *Setup Guide*

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About this guide

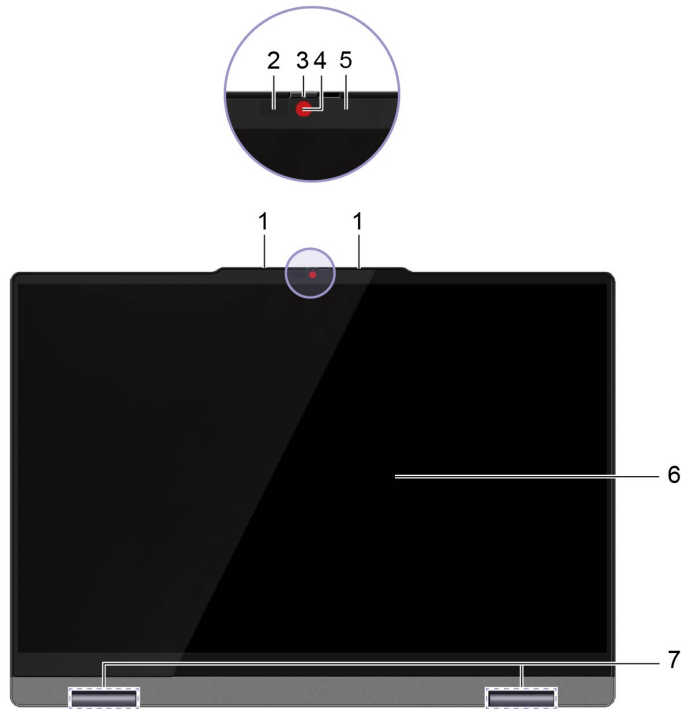
- This guide applies to Lenovo product model(s) listed below. Illustrations in this guide may look slightly different from your product model.

Model name	Machine type (MT)
ThinkBook 14 2-in-1 G6 IPL	22AR

- For further compliance information, refer to the *Generic Safety and Compliance Notices* at https://pcsupport.lenovo.com/docs/generic_notices.
- This guide may contain information about accessories, features, and software that are not available on all models.
- This guide contains instructions that are based on the Windows® operating system. These instructions are not applicable if you install and use other operating systems.
- Microsoft® makes periodic feature changes to the Windows operating system through Windows Update. As a result, the operating system related instructions may become outdated. Refer to Microsoft resources for the latest information.
- The content of the guide is subject to change without notice. To obtain the latest version, go to <https://support.lenovo.com>.

Chapter 1. Meet your computer

Front



No.	Description
1	Microphones
2	Infrared LED
3	Camera shutter
4	Camera
5	Camera light
6	Screen
7	Antennas

Microphones

The microphones are the PC's built-in sound input devices. They capture your voice and ambient sound and convert them into digital form. Microphones are essential components when you use your PC for video conferencing or voice recording.

Infrared LED

The infrared LED generates and emits near-infrared waves that are received and used by a camera (or a dedicated infrared camera) for facial recognition.

Camera shutter

The camera shutter is a sliding cap that you can move to block the camera lens.

Note: The camera shutter is designed for privacy protection. When the camera lens is blocked, the camera function is disabled.

Camera

The built-in camera captures visible light and converts it to digital signals. It is used for video recording and video conferencing.

This camera also receives near-infrared waves emitted by an infrared LED and reflected by a human face, so it can also be used for facial recognition.

Camera light

The camera light indicates whether the camera is activated.

Table 1. Camera light status and description

Camera light status	Description
On	The camera is activated.
Off	The camera is not activated.

Screen

The screen of the built-in display is where text, graphics, and videos are displayed.

The screen is touch-enabled, allowing you to interact with your PC by intuitively touching buttons, icons, and menu items displayed on the screen. Touch-enabled screens also support multi-finger gestures.

Related tasks

“Turn on night light” on page 32

“Adjust color temperature” on page 32

Antennas

The antennas transmit and receive radio waves to allow data to be transferred between your PC and a Wi-Fi network device or a Bluetooth device.

Note: The antennas are hidden inside the PC.

Base



No.	Description
1	Speakers
2	Keyboard
3	Touchpad

Speakers

The speakers are the PC's built-in sound output devices.

Keyboard

The keyboard is the primary input device for a PC, designed for typing characters. A Lenovo keyboard also includes shortcut keys that enhance productivity when interacting with the PC, applications, and the Windows operating system.

Note: Keyboard layouts vary by language and region, so your PC's keyboard may differ from the illustrations in this publication.

Related topics

“Hotkeys” on page 23

Touchpad

The touchpad is the PC's built-in pointing device, which provides the basic functionality of an external mouse. Slide your finger on the touchpad to move the pointer on the screen and tap or double-tap to select or execute a screen item.

The touchpad also supports Windows multi-finger gestures, which provide shortcuts to frequently used apps and functions.

Left



No.	Description
1	HDMI™ connector
2	Combo audio jack
3	Multi-purpose USB Type-C® connector
4	Charging light
5	Novo button hole

HDMI connector

The HDMI connector is used to connect an external display device, such as a television, a projector, or a monitor.

Combo audio jack

The combo audio jack is used to connect single-plug headsets, headphones, or external speakers.

Multi-purpose USB Type-C connector

This USB Type-C® connector is the PC's power input connector. Use the included power adapter and this connector to supply power to the PC.

Note: This multi-purpose USB Type-C connector complies with the USB Power Delivery specification. If your PC is sold without an included ac power adapter, you can reuse an existing USB Power Delivery-capable charger or purchase one separately. Refer to the specifications section in this publication for the minimum and maximum negotiable power levels supported by this connector.

When this connector is not used by the included power adapter, it can also be used to connect:

- Storage or peripheral devices that follow the universal serial bus (USB) specification for data transfer and device interconnection
- Display devices

Note: When connecting display devices, you need to use appropriate cables and adapters (if needed) according to the connection capabilities of the display device.

Tips for selecting a certified charger

When selecting or reusing a third-party USB Type-C charger for this PC, choose a product that is safety-approved or certified.

Attention: An uncertified charger may damage your PC or pose an electrical hazard.

In many countries and regions, manufacturers or importers of electric chargers can submit their products to certification authorities or approved and recognized testing laboratories. These products typically bear a mark indicating that they meet the relevant quality and safety standards. In some countries and regions, this certification process is mandatory.

If you live in mainland China, choose a charger with the "CCC" mark. For users in many European countries, select one with the "CE" mark. For users in the United States and Canada, choose a charger listed by one of the Nationally Recognized Testing Laboratories (for example, the "UL Listed" mark). For people living in other countries or regions, consult a qualified electrical engineer to learn how to select a safety-approved electric charger.

Charging light

The charging light indicates whether the PC is plugged into an electrical outlet. When the PC is plugged into an electrical outlet, the color of the light indicates whether the battery is fully charged (or will shortly be fully charged).

Table 2. Charging light statuses and descriptions

Light status	Plugged in?	Battery charge level
Off	No	/
On, amber	Yes	1%–90%
On, white	Yes	91%–100%

Novo button hole

When the PC is powered off, you can press the Novo button to display the Novo button menu. From the menu, you can then choose to:

- Open the firmware setup utility
- Display the boot device selection menu
- Display the Windows advanced startup options page

Note: The Novo button is rarely used during normal PC operations. To prevent users from accidentally pressing it, the Novo button is placed in a recessed hole. You can use a straightened paper clip to press this button.

Right



No.	Description
1	Power light
2	Power button
3	microSD™ card slot
4	USB Standard-A connector
5	USB Standard-A connector (always-on)

Power light

The power light indicates the current power state of the PC: whether it is powered on, powered off, in sleep mode, or in hibernation mode.

When the PC is powered on, this light can also indicate low battery by blinking rapidly.

Table 3. Power light status and description

Light status	Power state	Battery charge level
White (solid on)	Powered on	21%–100%
White (blinking rapidly)	Powered on	1%–20%
White (blinking slowly)	In sleep mode	/
Off	Powered off or in hibernation mode	/

Power button

Press the power button to turn on your PC.

Note: By default, on a Windows PC, pressing the power button when the PC is turned on will put the PC into sleep mode.

microSD card slot

The microSD card slot is used to insert a microSD, microSDHC, or microSDXC memory card to transfer data between the memory card and your PC.

USB Standard-A connector

The USB Standard-A connector is used to connect storage or peripheral devices that follow the universal serial bus (USB) specification for data transfer and device interconnection.

Always-on connector

A USB connector with a battery icon (🔋) supports the always-on function. The PC can supply power to a USB device connected to this type of connector even when the PC is powered off, in sleep mode, or in hibernation mode.

The always-on function can be turned on and off in:

- The PC's firmware setup utility, or
- Lenovo Vantage or Lenovo PC Manager

Bottom



No.	Description
1	Air vents (intake)

Avoid constant body contact with specific hot sections

CAUTION:

When the computer is operating, it should be placed on a hard and flat surface with its bottom area not in contact with user's bare skin. Under normal operating conditions, the temperature of the bottom surface will remain within an acceptable range as defined in *IEC 62368-1*, but such temperatures can still be high enough to cause discomfort or harm to the user if directly touched for over 10 seconds at a time. As such, it is recommended that users avoid prolonged direct contact with the bottom of the computer.

Note: Some Lenovo computers include a display that can be rotated 360 degrees. When those products are used as a tablet computer, the temperatures of all the accessible parts are within an acceptable range as defined in *IEC 62368-1*.

Air vents (intake)

The air vents allow air to be sucked inside of the PC to cool the internal components.

Important: When the PC is operating, do not place it on a bed, sofa, carpet, or other flexible surfaces. Otherwise, the air vents will be blocked and the PC may overheat, reducing performance or causing the PC to be unresponsive or even shut down.

Rear



No.	Description
1	Air vents (outlet)

Air vents (outlet)

The air vents allow hot air to be discharged out of the PC.

Important: When the PC is operating, do not place it on a bed, sofa, carpet, or other flexible surfaces. Otherwise, the air vents will be blocked and the PC may overheat, reducing performance or causing the PC to be unresponsive or even shut down.

Specifications

Dimensions

Item	Value or specification
Width	311.6 mm
Depth	224.9 mm
Thickness	<ul style="list-style-type: none">• T2: 16.9 mm• T4: 17.4 mm

ac power adapter

Item	Value or specification
Input	100 V ac–240 V ac, 50 Hz–60 Hz
Output voltage	20 V
Maximum current	3.25 A
Maximum power	65 W

Note: The PC is available in certain countries or regions without an included ac power adapter.

Rechargeable battery pack

Item	Value or specification
Capacity	60 Wh
Cell type	Rechargeable Li-ion Battery
Number of cells	3

Memory

Item	Value or specification
Type	DDR5
Installation	Slot mounted
Slot type	SO-DIMM
Slot quantity	2

Mass storage device

Item	Value or specification
Type	SSD
Slot quantity	2

Item	Value or specification
Slot type	<ul style="list-style-type: none"> • Slot 1: M.2 (2242) • Slot 2: M.2 (2280/2242)
Slot interface	<ul style="list-style-type: none"> • Slot 1: PCIe Gen4 × 4 with NVMe support • Slot 2: PCIe Gen4 × 4 with NVMe support

Display

Item	Value or specification
Size	14.0 inches
Resolution	1920 × 1200 (@60 Hz)
Maximum refresh rate	60 Hz
Screen type	IPS Value

Connectors and slots

Item	Value or specification
USB Standard-A connector	<ul style="list-style-type: none"> • Quantity: 2 • Power level (output) <ul style="list-style-type: none"> – Voltage: 5 V – Maximum current: 0.9 A <p>Note: The USB Standard-A connector on the upper right side of the PC support maximum power output of 5 V and 2 A.</p> <ul style="list-style-type: none"> • Data protocol <ul style="list-style-type: none"> – USB 2.0 480Mbps – SuperSpeed USB 5Gbps
Multi-purpose USB Type-C connector	<ul style="list-style-type: none"> • Quantity: 2 • Power level <ul style="list-style-type: none"> – Output <ul style="list-style-type: none"> – Voltage: 5 V – Maximum current: 3 A – Input <ul style="list-style-type: none"> – Maximum: 65 W (20 V, 3.25 A) (USB Power Delivery) – USB Power Delivery <ul style="list-style-type: none"> • Minimum: 45 W (20 V, 2.25 A) • Maximum: 65 W (20 V, 3.25 A) <p>Note: The minimum power represents the lowest acceptable power level to keep the PC operational and initiate charging of the internal battery, while the maximum power allows for the fastest charging speed. Both power levels are negotiated according to the protocols specified in the <i>USB Power Delivery Specification</i>.</p> <ul style="list-style-type: none"> • Data protocol <ul style="list-style-type: none"> – USB 2.0 480Mbps – SuperSpeed USB 5Gbps – DisplayPort 2.1 <ul style="list-style-type: none"> – Maximum data rate: 80 Gbps – Maximum output resolution: 10240 × 4320 (60 Hz)
HDMI connector	<ul style="list-style-type: none"> • Data protocol: Transition minimized differential signaling (TMDS) • Maximum output resolution: 7680 × 4320 (60 Hz)

Item	Value or specification
SD slot	Card type <ul style="list-style-type: none"> • microSD card • microSDHC card • microSDXC card
Audio jack	<ul style="list-style-type: none"> • Diameter: 3.5 mm • Supported plug: <ul style="list-style-type: none"> – 3-pole, TRS – 4-pole, TRRS (CTIA and OMTP)

Note: Data transmission rates are presented as maximum theoretical values in compliance with applicable specifications. The actual data transmission rates depend on various factors, including the performance of the connected devices and the quality of the cables being used. These rates are typically slower than the maximum theoretical values listed.

Networking

Item	Value or specification
Wi-Fi	802.11be (Wi-Fi 7) Note: Different Wi-Fi standards may operate on different frequency bands. In some countries or regions, certain frequency bands may be prohibited for unlicensed use or may require specific conditions. Wi-Fi 6E and Wi-Fi 7 on this PC are disabled in some countries or regions in accordance with local regulations.
Bluetooth	Bluetooth 5.4

Statement on USB transfer rate

Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed below for each corresponding device.

USB device	Data rate (Gbit/s)
USB 3.2 Gen 1	5
USB 3.2 Gen 2	10

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

- At altitudes up to 2438 m (8000 ft)
 - Operating: 5°C to 35°C (41°F to 95°F)
 - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8000 ft)

- Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

Note: When you charge the battery, its temperature must be no lower than 10°C (50°F).

Relative humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 5% to 95% at wet-bulb temperature 27°C (81°F)

Chapter 2. Get started with your computer

Your PC and its operating system

The operating system is essential software for a PC. It manages the hardware devices of the PC, provides utility applications and user interfaces, and enables the installation of various applications for a wide range of purposes.

Your PC comes with Windows 11 pre-installed.

Initial setup of the Windows operating system

When you turn on your PC for the first time, the Windows operating system will guide you through the initial setup process. Most importantly, you will:

- Create a user account
- Connect to a wireless network that has Internet access
- Select language-related settings

Note: If you choose to set up Windows for personal use, you must either use an existing Microsoft account or create a new one. You can switch to a local account after the initial setup.

Set up facial recognition

Apart from text-based passwords, Windows 11 supports additional user authentication methods for PCs with the required hardware devices. For PCs equipped with a built-in infrared LED and an infrared camera, you can enable facial recognition to sign into Windows using your face.

Step 1. Select **Start** → **Settings** → **Accounts** → **Sign-in options** → **Facial recognition**.

Step 2. Select **Set up** → **Get started** and follow on-screen instructions to enroll your face.

Note: If you are using a local account to sign into Windows, you must set a password for the account before you can enable facial recognition.

Windows recovery options

While using your PC, you may encounter various issues. Windows provides several recovery options to help restore your system to normal functionality. The table below will help you choose the right option for different situations.

Table 4. Windows recovery options

Situations	Recovery options
Windows runs much slower after you install an app.	Restore Windows from a system restore point.
Windows hasn't been functioning properly for some time.	Reset your PC while keeping your personal files.

Table 4. Windows recovery options (continued)

Situations	Recovery options
Your PC won't start.	Utilize Windows startup repair function.
Your PC won't start and cannot be repaired using Windows startup repair function.	Use a recovery drive to restore Windows.

Reset Windows

Resetting Windows allows you to reinstall the operating system while retaining your personal files. This gives the operating system a fresh start and, in some cases, restores the PC's original performance.

- Step 1. Select **Settings → System → Recovery**.
- Step 2. Under recovery options, select **Reset PC**.
When prompted, choose between **Keep my files** and **Remove everything**.
- Step 3. Follow the on-screen instructions to complete the reset process.

Create a recovery drive

It is advisable to create a recovery drive after completing the initial setup of Windows. If you encounter a significant issue that prevents Windows from starting, you can use the recovery drive to restore the operating system on your PC.

- Step 1. Prepare an empty USB drive with a storage capacity of 32 GB or more.
- Step 2. In the search box on the taskbar, type **Create a recovery drive** and select the matched app.
- Step 3. Make sure **Back up system files to the recovery drive** checkbox is selected and select **Next**.
- Step 4. When prompted, connect the USB drive to your PC, select it, and then select **Next**.
- Step 5. Select **Create**.

Restore Windows using a recovery drive

If the Windows operating system fails to start, you can use a previously created recovery drive to restore Windows onto your PC.

- Step 1. Shut down your PC.
- Step 2. Connect the recovery drive to your PC.
- Step 3. Press the Novo button or the Lenovo Smart Key ☆ to open the Novo button menu.
- Step 4. Select **Boot Menu**.
- Step 5. Select the USB drive as the boot device.
The PC will start to the Windows Recovery Environment.
- Step 6. Follow the on-screen instructions to restore Windows onto your PC.

Windows Update

From time to time, your PC receives update notifications. These notifications may include new features, security updates, and device drivers. While security-related updates are typically downloaded and installed automatically, you can manually control the installation of other available updates.

In Windows Update, you can view available updates, manually check for updates, and configure settings related to updates. To navigate to Windows Update, select **Settings → Windows Update**.

Use power efficiently

As an electronic device, your PC requires electricity to operate. The Windows operating system provides advanced power management features for the devices within your PC. You can take advantage of these features to use your PC in an energy-efficient manner.

Shut down your PC

When you have finished using your PC and do not plan to resume shortly, shut it down.

- Step 1. Select **Start → Power**.
- Step 2. Select **Shut down**.

Put your PC into sleep mode

If you need to stop using your PC but plan to resume shortly, you can put it into sleep mode. Your PC will wake up more quickly from sleep mode, allowing you to return to where you left off with your work.

- Step 1. Select **Start → Power**.
- Step 2. Select **Sleep**.

Adjust timeout settings for saving power

Setting appropriate timeouts for your PC to enter sleep mode and for the built-in screen to turn off is an effective method of reducing your PC's power consumption. The Windows operating system comes with default timeout settings for these two items, which you can adjust to better suit your preferences.

- Step 1. Select **Start → Settings → System → Power & battery → Screen, sleep, & hibernation timeouts**.
- Step 2. Adjust the settings.
For notebook PCs, you can set distinct timeouts for two usage scenarios: when the PC is plugged in and when it is running on battery power.

Default timeout settings for power saving

The operating system on your PC has the following timeouts enabled by default. You can adjust these settings to better suit your preferences.

Note: Setting appropriate timeouts is an effective method of reducing your PC's power consumption. Avoid setting excessively long timeouts to effectively disable this power-saving feature.

Table 5. Default timeout settings for the PC to enter sleep mode and the screen to turn off

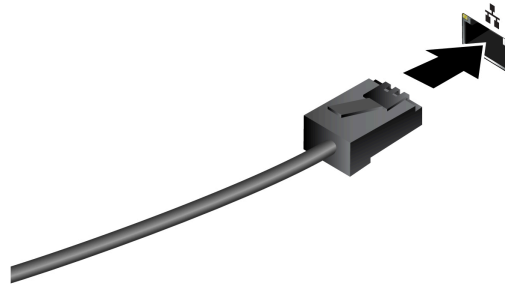
Power saving action	Power state	Timeout (minute)
Turn off the screen	Plugged in	5
	On battery	3
Put the PC into sleep mode	Plugged in	5
	On battery	3

Note: To wake the PC from sleep mode, press the power button or any key on the keyboard.

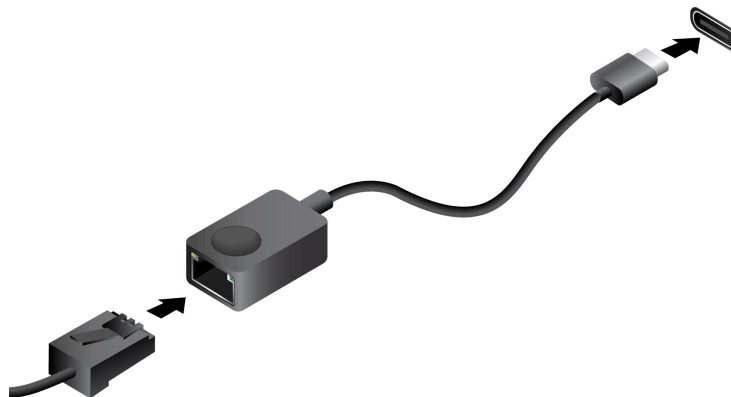
Connect to a network

Establish a wired connection

- Step 1. Plug an Ethernet cable into the Ethernet connector on your computer.
- Step 2. Plug the other end of the Ethernet cable into a network wall jack or a router.




Note: If your computer does not include an Ethernet connector, you can purchase a USB-C to Ethernet adapter from Lenovo at <https://www.lenovo.com/accessories>.



Connect to a Wi-Fi network

Ensure that you have a secure Wi-Fi network account and the required credentials.

- Step 1. Select the network icon  on the bottom right of your display.
- Step 2. Select an available network, and then select **Connect**. If you want to be automatically connected to this Wi-Fi network the next time you start your computer, select **Connect automatically** before selecting **Connect**.
- Step 3. Input your credentials if necessary, and then follow the on-screen instructions to connect to the desired Wi-Fi network.

Unique Lenovo apps

Lenovo Vantage

Lenovo Vantage is a one-stop solution to help you update your computer, configure hardware settings, and access personalized support.

If your computer is pre-installed with Lenovo Vantage, type *Vantage* in the Windows search box to launch this app.

Notes:

- Available features may vary depending on your computer model.
- You can download the latest version of this app from Microsoft Store.

Lenovo Smart Meeting

Lenovo Smart Meeting is a video conferencing app with multiple features for enhancing your professional image, protecting your privacy, and reducing your computer's power consumption.

If you want your settings in this app to also take effect on other mainstream video conferencing apps, such as Microsoft Teams and Zoom, ensure that you select Lenovo Virtual Camera in the app.

Access the app

Type *Lenovo Smart Meeting* in the Windows search box and then press enter.

Explore key features

- **Smart appearance**
 - **Video enhancer:** Adjust the brightness automatically for better image quality during the video call.



- **Face framing:** Keep your face centered automatically during the video call when you move around.



- **Customized background:** Blur or customize your background during the video call to protect your privacy.



- **Temporary Avatar:** Create and display a temporary portrait of you as if you were still in the video conference when you are temporarily away.



Notes:

- Lenovo does not collect any personal data from this app.
- The available features vary depending on the computer model.
- Lenovo Smart Meeting makes periodic feature updates to keep improving your experience. The description described here might be different from that on your actual user interface.

The Novo Button menu

The Novo Button menu can be displayed before the operating system starts. From the menu, you can choose to

- Open the UEFI/BIOS setup utility
- Open the boot device selection menu
- Open the Windows startup options screen

Note: From the Windows startup options screen, you can then choose to

- Start your computer using a recovery drive
- Reset your computer
- Open the advanced options screen

Open the Novo Button menu

For Lenovo computers with a Novo button, you can press the button to open the Novo Button menu.

Step 1. Turn off the computer.

Step 2. Open the LCD screen and press the Novo button.

Note: Alternatively, turn off the computer. Press fn and the power button to open the Novo Button menu.

Yoga modes

The screen of your computer can open up to an angle of 360 degrees, enabling you to use your computer for different purposes.

Mode

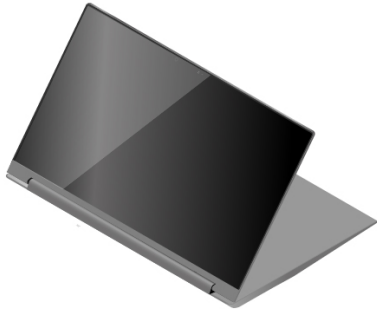
Notebook mode



Suitable for

- Entering text
- Drag and drop operations using the touchpad

Stand mode



- Giving a presentation
 - Viewing a slide show
-

Mode

Tent mode

Suitable for

Watching movies



Tablet mode

Playing touch-enabled games



Note: Product illustrations in this section are used to demonstrate features that are supported by a range of Lenovo products. It is normal that they may look different from your product model.

Interact with your computer

Hotkeys

Hotkeys provide quick access to frequently used settings and applications. Typically located in the top row of the keyboard, they often share keys with the function keys (F1–F12) and several other keys. Each hotkey's function is denoted by the icon printed on the key.

Table 6. Hotkey functions

Hotkey icon	Function description
🔇	Mutes/Unmutes sound.
🔊	Decreases volume.
🔊	Increases volume.
🎤	Enables/Disables the microphone.

Table 6. Hotkey functions (continued)

Hotkey icon	Function description
☀	Decreases screen brightness.
☀	Increases screen brightness.
📺	Selects and sets up display devices.
✈	Enables/Disables airplane mode.
🖱x	Enables/Disables the touchpad.
📶	Opens the phone link.
★	Opens an AI experience, an application launch panel, or a pre-installed PC management application.
📷	Takes a screenshot.

The fn lock switch

The fn lock is an electronic switch that affects how you use hotkey functions. To turn it on and off, press fn + esc.

Note: The esc key is in the upper left corner of the keyboard. It has an LED that indicates the status of the fn lock switch.

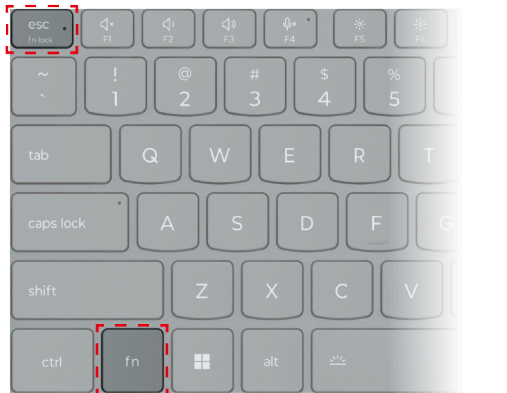


Figure 1. Locations of the fn lock key and the fn key

A Lenovo keyboard usually contains hotkeys in the top row. These hotkeys share keys with the function keys (F1–F12) and other keys. For these dual-function keys, the icons or characters denoting the primary functions are printed on top of the icons and characters denoting the secondary functions.

- A: an icon or character denoting the primary function
- B: an icon or character denoting the secondary function

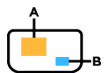


Figure 2. The layout of a dual-function key

Table 7. **fn lock** and dual-function keys

fn lock (esc) LED	fn lock status	Pressing the hotkey alone	Pressing the hotkey while holding down the fn key
Off	Disabled	Primary function	Secondary function
On	Enabled	Secondary function	Primary function

Combination keys using the fn key

The fn key can be used in combination with specific keys to adjust device settings or activate additional functions.

Table 8. *fn*-based key combinations

Key combination	Function
fn + Q	Switches the PC's active power mode
fn + N	Shows key device information
fn + Space	Adjusts keyboard backlight
fn + B	Break
fn + P	Pause
fn + S	SysRq
fn + K	ScrLk
fn + I	Insert
fn + T	PrtScr
fn + left arrow	Home
fn + right arrow	End
fn + up arrow	PgUp
fn + down arrow	PgDn

Combination keys using the Windows logo key

The Windows logo key is located in the lower-left corner of the keyboard. It can be used alone or in combination with specific keys to quickly change settings and access utilities within the Windows operating system. The table below lists frequently used key combinations. For a complete list of all key combinations that utilize the Windows logo key, please refer to the official Microsoft online documentation.

Table 9. *Windows logo* key combinations



Key or key combination	Function
Windows logo key 	Opens or closes the Start menu
+ A	Opens or closes Quick Settings
+ D	Returns to the desktop
+ E	Opens File Explorer
+ I	Opens Settings

Table 9. Windows logo key combinations (continued)

Key or key combination	Function
+ L	Locks the screen
+ M	Minimizes all open windows
+ N	Opens or closes the Notification Area
+ P	Switches multi-screen modes
+ W	Opens or closes Widgets
+ ; (semicolon)	Opens the emoji panel
+ Tab	Opens or closes Task View
+ PrtSc	Takes a full-screen screenshot and saves it to a file

The Copilot key

The era of AI has arrived, and many Lenovo PCs now include a Copilot key on the keyboard. It is located either in the bottom or the top row of the keyboard and is marked with .

For Windows PCs with Copilot in Windows available and enabled, pressing the Copilot key opens Copilot in Windows. Otherwise, pressing the Copilot key opens Windows Search.

Note: Copilot in Windows may not be available in all geographical locations. In regions where Copilot in Windows is available, you may need to update your Windows operating system to version 23H2 or later through Windows Update for Copilot in Windows to become available.

Related topics

“I pressed the Copilot key on my keyboard, but neither Copilot in Windows nor Windows Search opened. What could be the potential cause?” on page 57

Touchpad gestures

The Windows operating system supports multi-finger gestures on the touchpad, enhancing productivity while interacting with the operating system.

Table 10. Multi-finger touchpad gestures

Number of fingers to use	Gesture	Function
Two	Swipe vertically	Scrolls pages
Two	Pinch in or stretch out	Zooms out / Zooms in
Two	Tap	Displays the context menu (right-clicking)
Three	Swipe up	Shows all open windows
Three	Swipe down	Returns to the desktop
Three	Swipe left or right	Switches between open apps
Three	Tap	Opens Windows Search

Modify the default functions for touchpad gestures

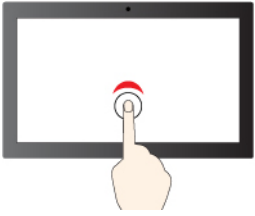


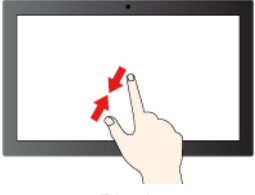
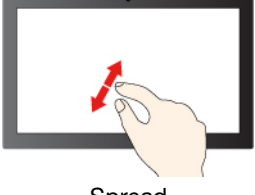
The functions for three-finger touchpad gestures can be modified in Windows Settings.

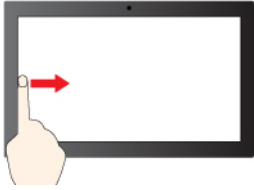
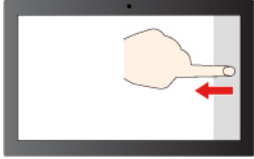
Step 1. Select **Settings** → **Bluetooth & devices** → **Touchpad**.

Step 2. Under **Three-finger gestures**, use the drop-down lists to modify the functions for the swipe or tap gestures.

Touch operations supported by Windows

For computers with a touch-enabled screen, you can touch the screen directly with your fingers and interact with your computer in a more natural way. The following table lists frequently used touch operations that are supported by the Windows operating system.

Touch operation	Used for
 Tap	Opening apps, documents, and other functions on the taskbar or the Start menu
 Tap twice quickly	Opening apps that are pinned on the desktop
 Tap, hold, and lift	Opening the context menu
 Pinch	Zooming out
 Spread	Zooming in

Touch operation	Used for
 <p data-bbox="363 426 647 453">Swipe in from the left edge</p>	Opening the widgets panel
 <p data-bbox="358 640 652 667">Swipe in from the right edge</p>	Opening the notification center

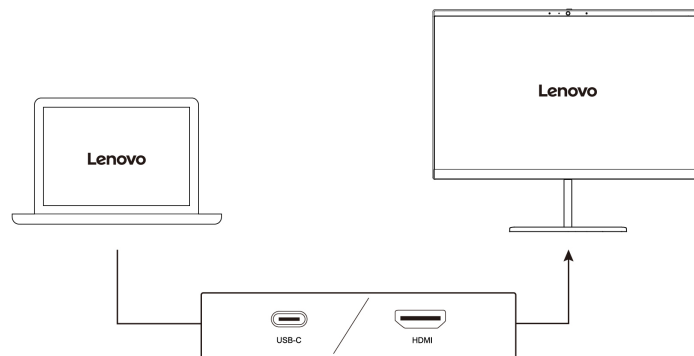
The Windows operating system also supports 3- and 4-finger gestures on the screen and the touchpad. You can set them up in **Settings** → **Bluetooth & devices**.

Connect to an external display

Connect to a wired display

Connect your computer to the desired display with an appropriate cable.

- Step 1. Connect one end of the display cable to the HDMI connector or a multi-purpose USB Type-C connector on your computer.
- Step 2. Connect the other end of the cable to the display.



Connect to a wireless display

Ensure that:

- Both your computer and the display support Miracast® technology.
- The display is connected to the same Wi-Fi network as your computer and is discoverable.

- Step 1. Press Windows key + K.

The computer searches for wireless display devices and audio devices and lists the results.

Step 2. Select the display you want to connect to, and then follow the on-screen instructions.

Change display settings

Step 1. Right-click on a blank area on the desktop, and then select **Display settings**.
Your computer shows the **Display** window.

Step 2. Select the display for which you want to change the settings.

Step 3. Change the display settings as necessary.

Set the display mode

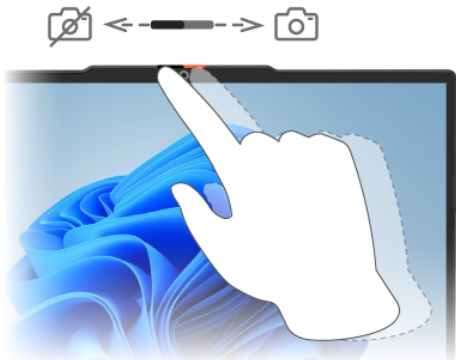
Step 1. Press  or fn + .
Your computer shows a list of display modes, with the current mode highlighted.

Step 2. Select a display mode from the list.

Protect your privacy using the camera shutter

The camera shutter is a mechanical component that prevents any attempt from capturing your image, thus protecting your privacy. To cover the camera lens, slide the camera shutter to the left. When you want to use the camera, slide the camera shutter to the right.

If you slide the camera shutter to the left during a video call, people on the video call will not be able to see you. If you slide the camera shutter back to the right, they will be able to see you again.



Smart Linear Pen 2.0 (for selected models)

Depending on the model, your PC may come with a Smart Linear Pen 2.0 (hereinafter referred to as “the pen” in this Guide). The pen offers a more precise and effortless way for you to write and sketch on the touchscreen or the haptic touchpad (depending on your PC’s configuration).

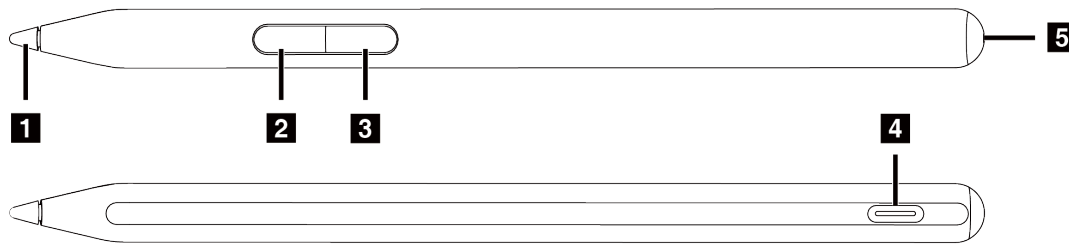


Figure 3. Overview of the pen

Item	Description
1. Pen tip	Write or sketch on the touchscreen or haptic touchpad. Note: Apply an appropriate amount of pressure when writing or sketching.
2. Bottom Barrel Button*	To erase text or drawings, hold the button to erase the object in supported apps.
3. Top Barrel Button*	To right-click, hold the button and tap the screen or haptic touchpad in supported apps.
4. USB Type-C connector	Charge the pen using a USB Type-C cable. Notes: <ul style="list-style-type: none"> The pen battery is set to shipping mode at the factory to prevent over-discharge during transit. Connect the pen to a power source to deactivate its shipping mode before using it for the first time. Do not use the pen while charging, as it may cause damage to the pen's functions.
5. Power status LED	<ul style="list-style-type: none"> Blinking amber: The battery level is low. Solid amber: The pen is charging. Solid white: The pen has been fully charged.

* The default function of each button may vary in different apps.

Pen settings

You can view the pen status and configure pen settings in the Lenovo Pen Settings app.

To open this app, type **Lenovo Pen Settings** in the Windows search box, and then select the matched result.

From Lenovo Pen Settings, you can configure the following settings:

- View the battery status of the pen
- Change the functions of the pen buttons
- Enable or disable hovering click
- Set one pen button as the radial menu for quick access

- Make other software adjustments such as pen tip sensitivity

Notes:

- If Lenovo Pen Settings is not installed on your PC, download and install the latest WinTab driver from <https://support.lenovo.com> or from Microsoft Store.
- Additionally, you can configure pen settings under Pen & Windows Ink in Windows Settings.

Pen attachment

You can store the pen as you prefer. However, the pen is designed to work closely with your PC. When not in use, it can be magnetically attached to the upper cover of your PC or placed in the pen holder (for selected models), which can also be magnetically attached to the upper cover of your PC.

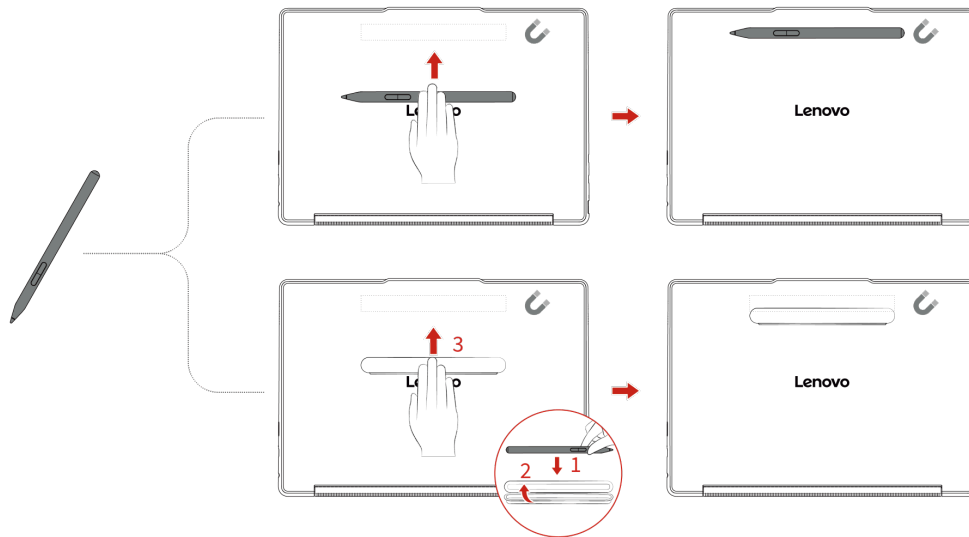


Figure 4. Pen attachment to the upper cover of the PC

Note: The illustration above is intended to demonstrate pen attachment methods. The PC depicted may differ from your actual device.




Choking hazard warning




CHOKING HARZARD— The pen contains a small component (the tip). Keep the pen out of reach of children under three years old and individuals who have a tendency to place inedible objects in their mouths.

Turn on night light

The night light feature in Windows 11 enables users to switch to warmer color tones, reducing blue light emission to alleviate eye strain or fatigue.

- Step 1. Open the quick settings menu by selecting the network, sound, or battery icons (  ) on the far right of the taskbar or by using the keyboard shortcut **Win** + **A**.
- Step 2. Select the button for night light to turn it on or off.

Note: Some Windows 11 versions allow users to customize their quick settings. If the night light button is not visible, you can add it to the quick settings menu by selecting the edit button ().

For more tips on reducing eye strain or fatigue, visit <https://www.lenovo.com/us/en/compliance/visual-fatigue>.

Adjust color temperature

If Windows 11 night light mode is turned on, you can adjust the color temperature of the screen.

- Step 1. Select **Start** → **Settings**.
- Step 2. Select **System** → **Display** → **Night light settings**.
- Step 3. Move the slider to adjust the color temperature.

Note: Selected Lenovo PCs are low blue-light certified. These PCs undergo testing with the night light turned on and the color temperature value set at 48 or above.

Chapter 3. Explore your computer

Intelligent features

Your computer may be pre-installed with one of Lenovo Vantage or Lenovo PC Manager but not both. Most features described here can be enabled or disabled in one of these apps. Other features may be enabled in a standalone app.

Notes:

- Software features are subject to change. Please refer to your actual product.
- You may need to complete online updates to the apps for the features to take effect.

Eye Care Mode


Eye Care Mode intelligently adjusts the color temperature of the screen and can reduce the chances of developing eye fatigue or eye strain.

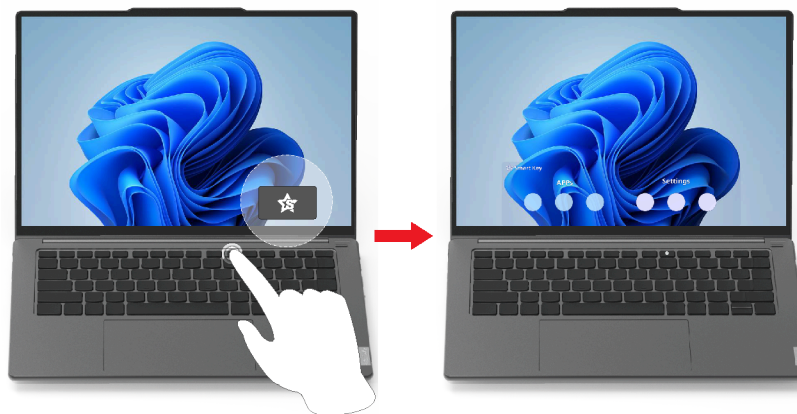
Super Resolution

By utilizing the capabilities and potentials of Intel processors, Super Resolution helps you play videos with a higher resolution than the original. It works especially well in cases where the source video has poor resolution.

For most players, Super Resolution can be enabled or disabled in Lenovo Vantage or Lenovo PC Manager, but for some specific players, you might need to enable this feature manually.

Smart Key

Smart Key  provides a quick shortcut to Lenovo apps and service. Press Smart Key to open the launch panel.



Note: There is also a trick to Smart Key. Go to **Preference** on the launch panel, select **ADD** and choose your favorite app to associate with Smart Key. When it is done, press Smart Key twice in quick succession and your favorite app is opened.

Manage power

Use the information in this section to achieve the best balance between performance and power efficiency.

Rechargeable battery pack

Your computer includes a built-in, rechargeable battery pack that makes mobile computing a reality. When the computer is plugged into an electrical outlet, the battery charges. If you use the computer when you don't have access to an electrical outlet, the battery discharges to supply electricity that the computer system requires for operation.

You can charge the battery any time you want. The battery packs of Lenovo computers support multiple charging modes that are suitable for different power usage habits. You can switch the battery's active charging mode in Lenovo Vantage, Lenovo PC Manager, or Lenovo Smart Engine.

Battery charging is also affected by its temperature. The recommended temperature range for charging the battery is between 10°C (50°F) and 35°C (95°F).

Note:

You can check the battery temperature in Lenovo Vantage.

To maximize the life of the battery, once the battery is fully charged, it must discharge to 94% or lower before it will be allowed to recharge again.

Normal mode

Normal mode is the most basic charging mode. In normal mode, it typically takes 2 to 4 hours for the battery to charge from 0% to 100%.

Rapid charge mode

If you want the battery to be charged faster than in normal mode, switch the battery charging to rapid charge mode. The following table lists the typical time needed for batteries in rapid charge mode to be charged to 80% and 100% respectively.

Table 11. Reference charge time for batteries in rapid charge mode

Mode	Time needed to charge from 0% to 80%	Time needed to charge from 0% to 100%
Rapid charge	Less than 1 hour	Less than 2 hours

Conservation mode

If your computer is constantly plugged into an electrical outlet, consider switching the battery charging to conservation mode. In conservation mode, the battery will not be fully charged. Instead, the battery's charge will be kept within 75%–80%. This is beneficial to the long-term health of the battery.

Note: If you want the battery to be fully charged before bringing the computer to work, disable conservation mode by switching the battery charging to normal or rapid charge mode.

Overnight charge optimization

Some people follow a regular pattern when using their computers. They finish their workday with the computer at a low battery charge level. They plug in their computers at night and need the battery to be fully charged the next morning so they can unplug the computer and bring it to work. These activities happen at approximately the same time each day. If this sounds like you, consider enabling overnight charge optimization for the battery.

Overnight charge optimization affects battery charging during the night hours, the time when you're usually asleep. When it is enabled, the computer regularly adapts its charging behavior based on observation of when you plug in the computer at night and unplug it in the morning. During the nighttime, the battery is charged to a particular range and is kept within that range for an extended period, before being further charged to 100%. Overnight charge optimization ensures safe charging during the night and is beneficial to the long-term health of the battery.

Note: With overnight charge optimization enabled, if you break your routine one day by unplugging the computer much earlier than usual in the morning, you may find that the battery is not fully charged.

If the battery pack of your computer supports overnight charge optimization, it can be enabled in Lenovo Vantage or Lenovo PC Manager.

Recover full battery capacity

If your computer is constantly plugged in to an electrical outlet and the battery rarely discharges, the battery may not be charged to its full capacity even if the battery meter reports 100% charge. You can recover the battery's full charging potential simply by discharging and re-charging the battery.

Step 1. Unplug the computer and use it until the battery charge drops below 20%.

Step 2. Plug in the computer and charge the battery to 100%.

Set power button behavior

By default, pressing the power button puts the computer to sleep mode. However, you can change the power button behavior in Windows Control Panel.

Step 1. Type Control Panel in the Windows search box and then press enter. Open the control panel and view by large or small icons.

Step 2. Select the power options and then click to choose what the power button does.

System operation modes

Lenovo has preset several modes in which your computer can operate. The maximum attainable performance, power consumption, and speed limit for the heat sink fan vary between the operation modes. Consider the following conditions when you want to switch operation modes.

- The environment where you use your computer, and
- The tasks running on your computer

You can switch the operation mode in the pre-installed app Lenovo Vantage, Lenovo Smart Engine, or Lenovo PC Manager. As a shortcut, you can also use the key combination **fn + Q**. Three modes are usually available for most Lenovo computers. The following table lists the operation modes and the recommended conditions for each mode.

Note: The operation modes listed in the table are descriptive and may not be the same as those displayed by the app.

Table 12. Operation modes and their recommended usage conditions

Operation mode	Recommended conditions
High Performance	<ul style="list-style-type: none"> Your computer is plugged into an electrical outlet. You want the best performance, and You don't care if the fan makes a little noise.
Auto (Balance)	You plan to frequently switch between different computer tasks over a period of time.
Power Saving (Quiet)	<ul style="list-style-type: none"> Your computer is operating on battery power, or You want the computer to be as quiet as possible.

Note: In Auto (Balance) mode, the computer dynamically switches between High Performance mode and Power Saving (Quiet) mode depending on the tasks running on the computer.

Secure data erasure

It is advisable to reuse or recycle your PC when it is no longer needed. Options include selling, donating, or using a reputable recycling service. Properly reusing and recycling your PC can help minimize its environmental impact.

When reusing or recycling a PC, data security is a major concern due to the potential storage of personal and sensitive information. Before selling, donating, or recycling your Lenovo PC, it is essential to erase all personal data from its storage device to safeguard your privacy and prevent data breaches. Lenovo offers free data erasure tools on your PC, or you can choose third-party tools based on your specific needs.

Data erasure tools available on your PC

Two free data erasure tools are available on your PC. The reset function in Windows allows you to erase the storage device and reinstall the operating system simultaneously, eliminating the need for the next user to install a new operating system. However, the clean data option in Windows Reset does not adhere to widely recognized data erasure standards. If your organization mandates a specific data erasure standard, you may want to consider using Lenovo Secure Wipe.

Lenovo Secure Wipe is initiated within the firmware setup utility. It can erase both built-in and external storage devices and supports widely recognized data erasure standards. Unless you have specifically selected only data partitions for erasure, the boot and system partitions will be overwritten, rendering the device unbootable after the data erasure process. The new owner of this PC will need to install an operating system. The data erasure function provided by Lenovo Secure Wipe complies with the “clean” method of data sanitization as defined by *IEEE Standard for Sanitizing Storage*.

Table 13. Available data erasure options

Data erasure options	Where to start the utility	Provider	Reinstall Windows	Support data erasure standards	Erase external storage devices
Windows Reset	Windows Settings or the Windows recovery environment	Microsoft	Yes	No	No
Lenovo Secure Wipe	The Setup Utility of the PC's firmware	Lenovo	No	Yes	Yes

Use the Windows reset feature to erase user data

Before selling or donating a PC, you can use the reset feature in Windows to erase user data.

- Step 1. In Windows 11, select **Start → Settings → System → Recovery**.
- Step 2. Under Recovery options, select **Reset PC**.
- Step 3. On the Choose an option page, select **Remove everything**.
- Step 4. On the Additional settings page, select **Change settings**.
- Step 5. Click the toggle button for Clean data to activate it, select **Confirm**, and then select **Next**.

Note: If users do not activate the clean data option, personal files are only deleted and can be recovered using data recovery tools. Activating clean data enables the utility to perform data erasure on the storage device, significantly reducing the chances of data recovery by others.

- Step 6. On the Ready to reset this PC page, select **Reset**.

Important: Make sure to back up all personal files that you want to keep to an external storage device before selecting **Reset**. This is your last chance to cancel the reset process.

After selecting **Reset**, the utility will reinstall Windows and erase data on the storage device. This process may take several hours to complete. Ensure your PC is plugged in during this process.

Use Lenovo Secure Wipe to erase the built-in storage device

Supervisor password must be set for the firmware setup utility prior to using Lenovo Secure Wipe.

Some Lenovo PCs include a utility called Lenovo Secure Wipe. Before selling or donating a Lenovo PC, you can use this software utility to overwrite or block erase the PC's built-in storage device.

- Step 1. Disconnect all external storage devices from your PC.
- Step 2. Open the PC's firmware setup utility.
- Step 3. On the start page, select **Boot → Wipe Storage Devices** and press enter. Lenovo Secure Wipe will start.

Note: If supervisor password is not set, you must set it, save changes and exit the setup utility, and then repeat the above steps.

- Step 4. Make sure the storage device displayed is correct and select **Next**.
- Step 5. Choose options to erase the entire device or selected partitions of the device.
- Step 6. Choose a data erasure standards from the list of available standards according to your needs or your organization's requirements, and then select **Next**.
- Step 7. On the final confirmation page, select **Yes**.

Important: Make sure to back up all personal files that you want to keep to an external storage device before selecting **Yes**. This is your last chance to cancel the device erasure process.

After selecting **Yes**, the utility will either overwrite or perform a block erase on the built-in storage device using the data erasure standards you have selected. Unless you have only selected data partitions for erasure, the boot and system partitions will also be overwritten, rendering the device unbootable. The new owner of this PC will need to install a new operating system.

Note: This process may take several hours to complete and the time needed varies greatly based on the selected data erasure standards. Ensure your PC is plugged in during this process.

Data erasure standards supported by Lenovo Secure Wipe

Data erasure standards are established by military organizations, government agencies, and private institutions to ensure quality and consistency in data sanitization. These standards primarily differ in the number of overwrite or erase stages and the bit patterns used to overwrite or block erase the addressable storage space. The following table lists the data erasure standards supported by Lenovo Secure Wipe.

Table 14. Data erasure standards supported by Lenovo Secure Wipe

Standard	Number of overwrite stages	Verification
<i>Single pass zeros</i>	1	No
<i>DoD 5220.22-M</i>	3	Yes
<i>US Navy and Airforce</i>	3	Yes
<i>CSE Canada ITSG-06</i>	3	No
<i>British HMG Infosec Standard 5</i>	3	Yes
<i>German VSITR</i>	7	No
<i>Russian GOST P50739-95 Level 1</i>	1	No
<i>Russian GOST P50739-95 Level 4</i>	4	No
<i>RCMP TSSIT OPS-II</i>	7	Yes

Change settings in UEFI/BIOS setup utility

This section introduces what UEFI/BIOS is and the operations you can perform in its setup utility.

What is UEFI/BIOS setup utility

UEFI/BIOS is the first program that runs when a computer starts. UEFI/BIOS initializes hardware components and loads the operating system and other programs. Your computer may include a setup program (setup utility) with which you can change certain UEFI/BIOS settings.

Open the UEFI/BIOS setup utility

- Step 1. Turn on or restart the computer.
- Step 2. When the Lenovo logo appears on the screen, press F1 repeatedly. Or enter **Novo Button** menu.
- Step 3. Select UEFI/BIOS Setup.

Select boot devices

Normally, the computer starts with a boot manager loaded from the secondary storage device of the computer. Occasionally, you may need to start the computer with a program or boot manager loaded from another device or a network location. After the system firmware initializes all devices, you can press an interruption key to display the boot menu and select a desired boot device.

- Step 1. Turn on or restart the computer.
- Step 2. Press F12.
- Step 3. From the boot device menu, select a boot device to start the computer.

You can make a permanent change on boot devices in the UEFI/BIOS setup utility. Select the **Boot** menu; in the **EFI** section, select the desired boot device and move it to the top of the device list. Save changes and exit the setup utility for the change to take effect.

Enable or disable F1-F12 as primary function

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Config** → **Keyboard** → **F1-F12 as Primary Function** and press enter.
- Step 3. Change the setting to **Disabled** or **Enabled**.
- Step 4. Select **Restart** → **Exit Saving Changes**.

Enable or disable always-on

For some Lenovo computers with always-on connectors, the always-on function can be enabled or disabled in the UEFI/BIOS setup utility.

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Config** → **USB** → **Always On USB** and press enter.
- Step 3. Change the setting to **Disabled** or **Enabled**.
- Step 4. Select **Restart** → **Exit Saving Changes**.

Set passwords in UEFI/BIOS setup utility

This section introduces the types of passwords that you can set in the UEFI (Unified Extensible Firmware Interface) or BIOS (Basic Input/Output System) setup utility.

Password types

You can set various types of passwords in the UEFI/BIOS setup utility.

Password type	Pre-requisite	Usage
Supervisor password	No	You must enter it to start the setup utility.
User password	The supervisor password must be set.	You can use the user password to start the setup utility.
Master hard disk password	No	You must enter it to start the operating system.
User hard disk password	The master hard disk password must be set.	You can use the user hard disk password to start the operating system.

Note: If you start the setup utility using the user password, you can only change a few settings.

Set supervisor password

You set the supervisor password to prevent unauthorized access to the UEFI/BIOS setup utility.

Attention: If you forget the supervisor password, a Lenovo authorized service personnel cannot reset your password. You must take your computer to a Lenovo authorized service personnel to have the system board replaced. Proof of purchase is required and a fee will be charged for parts and service.

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Security** → **Password** → **Set Supervisor Password** and press enter.
- Step 3. Enter a password string and then press enter.

Step 4. Enter the password again and press enter.

Step 5. Select **Restart → Exit Saving Changes**.

Next time you start the computer, you must enter the supervisor password to open the setup utility. If **Power on Password** is enabled, you must enter the supervisor password or the user password to start the computer.

Change or remove supervisor password

Only the administrator can change or remove the supervisor password.

Step 1. Open the UEFI/BIOS setup utility using the supervisor password.

Step 2. Select **Security → Password → Set Supervisor Password** and press enter.

Step 3. Enter the current password.

Step 4. In the **Enter New Password** text box, enter the new password.

Step 5. In the **Confirm New Password** text box, enter the new password again.

Note: If you want to remove the password, press enter in both text boxes without entering any character.

Step 6. Select **Restart → Exit Saving Changes**.

If you remove the supervisor password, the user password is also removed.

Set user password

You must set the supervisor password before you can set the user password.

The administrator of the setup utility might need to set a user password for use by others.

Step 1. Open the UEFI/BIOS setup utility using the supervisor password.

Step 2. Select **Security → Password → Set User Password** and press enter.

Step 3. Enter a password string that contains only letters and numbers and then press enter.
The user password must be different from the supervisor password.

Step 4. Enter the password again and press enter.

Step 5. Select **Restart → Exit Saving Changes**.

Enable power-on password

If the supervisor password has been set, you can enable the power-on password to enforce greater security.

Step 1. Open the UEFI/BIOS setup utility.

Step 2. Select **Security → Password → Power on Password** and press enter.

Note: The supervisor password must be set in advance.

Step 3. Change the setting to **Enabled**.

Step 4. Select **Restart → Exit Saving Changes**.

If the power-on password is enabled, a prompt appears on the screen every time you turn on the computer. You must enter the supervisor or user password to start the computer.

Set hard disk password

You can set a hard disk password in the setup utility to prevent unauthorized access to your data.

Attention: Be extremely careful when setting a hard disk password. If you forget the hard disk password, a Lenovo authorized service personnel cannot reset your password or recover data from the hard disk. You must take your computer to a Lenovo authorized service personnel to have the hard disk drive replaced. Proof of purchase is required and a fee will be charged for parts and service.

Step 1. Open the UEFI/BIOS setup utility using the supervisor password.

Step 2. Select **Security → Password → Set Hard Disk Password** and press enter.

Note: If you start the setup utility using the user password, you cannot set the hard disk password.

Step 3. Follow on-screen instructions to set both master and user hard disk passwords.

Note: The master and user hard disk passwords must be set at the same time.

Step 4. Select **Restart → Exit Saving Changes**.

If the hard disk password is set, you must provide the correct password to start the operating system.

Change or remove hard disk password

Step 1. Open the UEFI/BIOS setup utility.

Step 2. Select **Security → Password**.

Step 3. Change or remove the hard disk password.

To change or remove the master password, select **Change Master Password** and press enter.

Note: If you remove the master hard disk password, the user hard disk password is also removed.

To change the user hard disk password, select **Change User Password** and press enter.

Note: The user hard disk password cannot be removed separately.

Step 4. Select **Restart → Exit Saving Changes**.

Set strong password

You can set a strong password to strengthen the password security.

Step 1. Open the UEFI/BIOS setup utility.

Step 2. Select **Security → Password → Set Strong Password** and press enter.

Step 3. Change the setting to **Disabled** or **Enabled**.

Step 4. Select **Restart → Exit Saving Changes**.

If the strong password is enabled, supervisor password, user password, and hard disk password lengths must range between eight and 128 characters. Each password must include at least one uppercase character, one lowercase character, and one number.

Chapter 4. PC and accessibility

PCs are powerful general-purpose computing devices that many individuals rely on for accessing information, connecting with friends, pursuing education, conducting research, and completing work tasks. This reliance extends to individuals with vision, hearing, cognitive, or mobility impairments, as well as to those whose abilities may decline due to illness or aging.

This chapter explores the accessibility features available on your Lenovo PC, including both hardware components and those offered by the pre-installed operating system. By gaining a comprehensive understanding of the available accessibility features and how to activate and configure them, you can enhance your PC's usability for individuals with disabilities.

Accessibility features of the PC hardware

Lenovo PCs are designed with accessibility in mind. Throughout the design process, special considerations are prioritized for individuals with disabilities and best industry practices are implemented in hardware design.

USB connectors for connecting assistive technology devices

Several types of assistive technology devices are available on the market that can be connected to a PC to enhance its accessibility. For example, a refreshable braille display is an assistive technology device that enables individuals who are both deaf and blind to use a PC. When connected to a PC, a refreshable braille display can work in conjunction with a compatible screen reader to provide tactile output in braille characters. Blind individuals who have been trained to read braille can run their fingers over the display to comprehend the information presented on the PC.

Many assistive technology devices utilize USB technology for connectivity. Most Lenovo PCs are equipped with at least one USB connector that adheres to the relevant USB specifications and is backward compatible. A Lenovo PC may feature a USB Standard-A connector, a USB Type-C connector, or both. If the plug type of the assistive technology device does not match the USB connector on your PC, you can easily purchase and use a USB adapter to resolve the issue.

Keyboard accessibility

The keyboard serves as the primary input device for many PC users. Lenovo keyboards, whether integrated or supplied separately with the PC, are designed and manufactured with accessibility in mind. This section highlights the accessibility features of Lenovo keyboards that benefit all users, including those with disabilities.

keyboard layout

The alphabetic keys on a Lenovo keyboard are arranged in a QWERTY layout, which is standard for input devices featuring alphabetic keys. The F and J keys have bumps that make them tactilely distinguishable from other keys. This feature serves as an orientation aid for skilled typists, allowing them to rest their index fingers without looking at the keys. Some Lenovo keyboards include a separate numeric keypad. The numeric keys are organized in four rows and three columns, arranging in ascending order from left to right and bottom to top. Additionally, the 5 key features a bump to make it tactilely distinguishable.

Standard modifier keys

Lenovo keyboards are equipped with standard modifier keys for PCs, including:

- the alt key

- the ctrl key
- the shift key
- the Windows logo key

These keys are extensively used as the modifier key for shortcuts by the operating system and other applications.

The tab key

The tab key is located in the leftmost column of the keyboard. For operating systems, applications, and web documents that are designed with accessibility in mind, users can press the tab key and alt + tab (in reverse order) to cycle through the interactive elements.

Hotkeys

Many Lenovo keyboards feature hotkeys in the top row, offering convenient access to frequently used settings.

The fn key and the fnlock

The fn key is a Lenovo-defined modifier key. It can be used with the top-row dual-function keys to switch their functionalities. It can also be used with several other keys to access Lenovo defined settings.

The fnlock is a switch that can be turned on and off by pressing fn + esc. Instead of holding down the fn key to switch the functionality of dual-functionkeys, you can turn on fnlock. This feature allows users to access both hotkey and function key functionalities without the need to press two keys simultaneously.

Keyboard backlight

Many Lenovo keyboards are equipped with backlights to help you use the keyboard in dark lighting conditions. The backlights can be controlled by pressing fn + Space.

Biometric devices

Some Lenovo PCs are equipped with biometric devices that facilitate easy and secure identity authentication. If your PC includes an IR LED and an IR camera, you can enable facial recognition in Windows 11. Additionally, you can use your fingerprint for authentication on PCs with a fingerprint reader. Biometric identity authentication can be particularly beneficial for users who find it difficult typing passwords.

Note: When biometric devices are used for device authentication, they are not the only available method for this purpose. If biometric authentication fails, you can use a password or PIN to sign in to Windows.

Accessibility features of Windows 11

An operating system is a crucial piece of software installed on a PC. It plays a vital role in the PC's basic functionality by providing a user interface, various tools for system management, and a foundation upon which additional specialized applications can be installed.

Microsoft's Windows 11 is a modern operating system that comes preinstalled on many Lenovo PCs. It offers a rich set of accessibility features designed for individuals with diverse disabilities. This section outlines the accessibility features available in Windows 11, explains how to activate them, and discusses the benefits they provide.

Configuring accessibility features in the Settings app

Windows 11 provides a centralized location within the Settings app for activating and configuring all accessibility features. You can access this section by selecting **Start → Settings → Accessibility**. Additionally, the keyboard shortcut Windows logo key + U provides quick access to this interface.

Narrator

Narrator is Windows 11's built-in screen-reading application. It can read screen content aloud to users and also accept input from the keyboard, enabling individuals with visual impairments to navigate effectively within Windows 11, use applications, and browse the web.

Start and stop Narrator

You can start and stop Narrator by selecting the toggle button for Narrator in the centralized Accessibility section of the Settings app. Additionally, the keyboard shortcut Windows logo key + ctrl + enter provides quick access to both the start and stop functions.

Customize Narrator

Narrator offers a variety of controls that allow you to customize it to suit your preferences. For example, you can install additional text-to-speech voices and select your preferred voice for Narrator. You also have the option to adjust the verbosity level to choose the type of content to be read. All Narrator settings are conveniently located in the centralized Accessibility section of the Settings app. Additionally, the keyboard shortcut Windows logo key + ctrl + N offers quick access to these settings.

Adjusting text sizes, applying a high-contrast theme, and using Magnifier

For individuals who find it difficult to see text clearly on the screen, Windows offers the options of adjusting text sizes, applying a high-contrast theme, and using Magnifier.

Adjust text sizes

If you find the text on the screen is too small to read, you can scale up the size of text displayed by Windows and other applications.

Step 1. Select **Start → Settings → Accessibility → Text size**.

Step 2. Use the slider and the preview pane to select a size that fits your need and then select **Apply**.

Apply a high-contrast theme

For individuals with low vision, Windows 11 offers contrast themes that enhance text readability by using a background color that sharply contrasts with the text.

Step 1. Select **Start → Settings → Accessibility → Contrast themes**.

Step 2. In the dropdown list for **Contrast themes**, select one option and then select **Apply**.

To exit a contrast theme, select **None** from the dropdown list. The keyboard shortcut for turning on and off contrast theme is left alt + left shift + prt sc.

Enable Magnifier

You can enable Windows 11 Magnifier to enlarge specific areas or the entire screen, making text and images easier to see.

Step 1. Select **Start → Settings → Accessibility → Magnifier**.

Step 2. Select the toggle to enable or disable Magnifier.

The keyboard shortcuts for enabling and disabling Magnifier are Windows logo key + Plus sign (+) and Windows logo key + esc, respectively. When Magnifier is enabled, you can use Windows logo key + plus sign (+) and minus sign (-) to zoom in and zoom out.

Sticky Keys

Microsoft Windows offers numerous keyboard shortcuts that require users to hold down a modifier key (such as shift, ctrl, alt, or the Windows logo key) before pressing one or more additional keys. While these shortcuts provide significant convenience for many users, they can pose accessibility challenges for individuals who have difficulty holding down multiple keys at the same time.

Sticky Keys is an accessibility feature in Windows that, when enabled, allows users to press keys in sequence to activate shortcut functions. For example, instead of holding down the ctrl key and the C key simultaneously, users can press each key individually to copy text to the clipboard.

To enable Sticky Keys, press the shift key five times in quick succession. When the confirmation dialog box appears, select **Yes** to disable Sticky Keys, press the shift key five times again and choose **No** when prompted.

Accessible user documentation

Documentation containing instructions for the use of the product, including its accessibility features, is available in accessible formats (such as HTML and PDF) on the Lenovo Support Website. When creating documentation, a series of industry standards and best practices are followed to ensure that the content is useful to as broad an audience as possible. Additionally, automated testing tools are employed to identify issues that may hinder the accessibility of information. These issues are addressed to the extent permitted by commonly available technologies.

Accessibility features of user documentation

By adhering to industry standards and best practices, Lenovo documentation offers numerous features that facilitate the perception and understanding of the content. Additionally, several of these features are specifically designed to ensure that users of assistive technology devices can access information comparable to that available to those who do not rely on such devices.

Perceivable content

Text content is presented using popular and easy-to-read fonts. Text colors are in high contrast with the background. Non-text elements, such as graphics and videos that convey important information, are accompanied by alternative text descriptions. Users with visual impairments can utilize screen readers to access information comparable to that available to sighted users.

Understandable content

The documentation is presented visually in a well-structured and simple layout. It also includes hidden tags or other markup information that store the content's structure, which can be utilized programmatically by assistive technologies to convey this structure to users.

Operable content

Documentation includes industry-standard tags for sectioning and interactive elements, such as titles, headings, various structural components, links, buttons, and input fields. Screen reader users can utilize standard modifier keys on the keyboard to effectively navigate and interact with the documentation.

Testing documentation accessibility

Before being officially released, Lenovo documentation undergoes testing with automated tools to evaluate its accessibility. HTML documents are assessed for compliance with the success criteria outlined in the *Web Content Accessibility Guidelines (WCAG)*, a widely accepted set of standards designed to enhance web document accessibility. PDF documents are evaluated for accessibility using the accessibility checker in Adobe Acrobat for the same purpose. Automated testing tools help identify elements within a document that may present challenges when rendered by screen readers and other assistive technology devices. Accessibility issues identified by these automated tools are subsequently analyzed manually and corrected as needed.

Chapter 5. Warranty, help, and support

Given the complexity and open nature of PCs, it is not uncommon to encounter issues during daily use. Lenovo PCs come with a limited warranty. During the warranty period, if you experience problems caused by defects in workmanship, you may contact Lenovo for warranty service.

Most other issues are often related to software settings that prevent the PC from functioning as expected. This chapter provides information about warranty service, as well as help and support resources you can use to resolve issues yourself or receive assistance from Lenovo, the operating system manufacturer, or other users like you.

Lenovo Limited Warranty

Lenovo PC products come with a limited warranty. The general terms and conditions, along with country- or region-specific warranty provisions, are detailed in the [Lenovo Limited Warranty](#) document. If you experience issues during the warranty period due to defects in materials or workmanship, you can contact Lenovo to receive warranty service, which is available through one of the following service types.

- Customer Replaceable Unit (CRU) Service
- On-site Service
- Courier or Depot Service
- Customer Carry-in Service
- Mail-in Service
- Customer Two-Way Mail-in Service

Note: Not all service types are available for every PC model and availability varies by geographic location.

Customer Replaceable Unit Service

Customer Replaceable Unit Service is a type of warranty service offered by Lenovo. One or more components of a Lenovo PC may be designated by Lenovo as Customer Replaceable Units (CRUs) based on their ease of replacement. During the warranty period, if a part designated by Lenovo as a Customer Replaceable Unit becomes defective, and if this service is available for your model and geographic location, the warranty service may be performed using this service type.

If you intend to install a CRU, Lenovo will ship the CRU to you. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the [Lenovo Limited Warranty](#) document.

A Lenovo computer may contain the following types of CRUs:

CRU type**Description**

Self-service CRU

Parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.

Optional-service CRU

Parts that can be installed or replaced by customers with a greater skill level. Trained service technicians can also provide service to install or replace the parts under the type of warranty designated for the customer's machine.

CRUs for your product model

The table below lists the CRUs and CRU types that are defined for your product model.

Note: Laws and regulations in certain countries or regions are enacted to protect customers' rights to independently service a product both during and after the warranty period. The designation of CRUs for your product model is intended solely for performing warranty service and does not affect customers' statutory rights. Parts not classified as CRUs are not eligible for CRU service but may still be replaceable by customers in accordance with applicable laws and regulations.

Part	Self-service CRU	Optional-service CRU
Power cord*	X	
ac power adapter*	X	
Smart Linear Pen 2.0*	X	

* For selected models

Notes:

- The PC is available in certain countries or regions without an included ac power adapter.
- Some models come with a wall-mounted ac power adapter and does not include a power cord.
- CRU replacement instruction is provided in one or more of the following publications and are available from Lenovo at any time upon your request.
 - the product *User Guide*
 - the printed publications that came with the product
- Replacement of any parts not listed above, including the built-in rechargeable battery, should be done by a qualified repair technician or by ensuring that you carefully follow all instructions provided by Lenovo. You can also find Lenovo-authorized repair facilities by going to <https://support.lenovo.com/partnerlocation> for more information.

Lenovo Support Website

The [Lenovo Support Website](#) offers tools and resources that allow you to check your warranty status, purchase parts and services, and troubleshoot issues independently. It also provides links to access additional help and support from Lenovo.

To access tools and resources relevant to your PC product, select **PC** from the product categories on the support homepage. Then, navigate to your product model's support page by entering the product name, choosing from a list of models, or allowing the website to automatically detect your product.

Lenovo Support Community

The [Lenovo Support Community](#) is an online forum organized into a series of subcommunities dedicated to sub-brands and specific product categories. It enables customers to share knowledge and discuss issues they may be experiencing. Should you encounter an issue with your product, you can search for a solution or post a question in the Community. Using an AI translation solution, Lenovo Community content can be created and viewed in twenty-one different languages, with the number potentially increasing.

The Community homepage offers intuitive navigation. You can select the product group, then narrow down to the subcategory and product name that matches your device. Viewing and searching content does not require an account. A one-time guest post is possible without registration; however, creating a Community account with your [Lenovo ID](#) provides full access and a better experience. Before posting, we recommend reviewing the Community Guidelines, which explain how to search, post, and maintain respectful interactions.

Note: Please note that while Lenovo representatives may participate in discussions by responding to questions, the Community is primarily a peer to peer Community and not an official support channel. Most solutions are provided by users from around the world. As products and services vary across countries and regions, we advise that customers approach solutions shared on the forum with caution, carefully evaluating and validating them for their product and symptoms.

Support from the operating system manufacturer

Practically speaking, you cannot use a PC without its operating system. The operating system's manufacturer provides the official and usually the most comprehensive information about it.

Windows 11 is an operating system developed by Microsoft®. If you encounter any issues or would like to learn more about Windows 11, you can visit the [official Microsoft support website for Windows](#).

Frequently asked questions

What should I do if my PC won't start

Try any of the following solutions to resolve the issue.

- Disconnect all external devices, including the USB drive, portable hard disk, printer, docking station, and even the mouse and keyboard, because a malfunctioning external device may prevent the PC from starting up.
- Change a compliant power adapter to connect your PC to a working electrical outlet.
- Use the Windows startup repair tool if you can still see the Windows logo.
 1. Start your PC and wait for the Windows logo (or other logos) to appear.
 2. As soon as the logo appears, press and hold the power button until the PC shuts down.
 3. Turn your PC on again and repeat the previous step.
 4. Turn your PC on again. Windows should display the **Automatic Repair** screen.
 5. Select **Advanced options** → **Startup Repair**.
- Use a restore point recorded on your PC or use a recovery drive to restore Windows.

What should I do if my PC gets stuck in sleep or hibernate mode

Try any of the following solutions to resolve the issue.

- Reset your graphics driver by pressing Windows logo key + ctrl + shift + B.
- Restart your PC.
 1. Press and hold the power button until your PC shuts down completely.
 2. Wait about 15 seconds.
 3. Press the power button to start your PC.
- Identify the root cause of the problem after restarting your PC.
 - Allow your desired mouse to wake up your PC.
 1. Type device manager in the Windows search box and then press enter.
 2. Under **Mice and other pointing devices**, select your desired mouse.
 3. Under **Power Management**, check **Allow this device to wake the computer**.
 4. Select **OK**.
 - Disable fast startup because it may conflict with sleep or hibernate mode.
 1. Type control panel in the Windows search box and then press enter.
 2. Select **Hardware and Sound → Power Options → Choose what the power button does → Change settings that are currently unavailable**.
 3. Uncheck **Turn on fast startup (recommended)**.
 4. Select **Save changes**.
 - Disable wake timers because they may cause system instability or a black screen.
 1. Type control panel in the Windows search box and then press enter.
 2. Select **Hardware and Sound → Power Options → Change when the computer sleeps → Change advanced power settings**.
 3. Select **Sleep → Allow wake timers**.
 4. Next to **On battery** and **Plugged in**, disable wake timers.
 5. Select **Apply → OK**.

What should I do if my PC is plugged in but not charging

Try any of the following solutions to resolve the issue.

- Make sure the power adapter is plugged in securely to both the wall outlet and your PC.
- Make sure the power adapter and the connector are not damaged. Plug the power adapter into a different wall outlet.
- Ensure that you use the power adapter with proper wattage. Low-wattage power adapters might cause a battery charging problem.
- Restart your PC.
- Roll back the battery driver.
 1. Type device manager in the Windows search box and then press enter.
 2. Under **Batteries**, select **Microsoft AC Adapter** or **Microsoft ACPI-Compliant Control Method Battery**.
 3. Select the **Driver** tab and then select **Roll Back Driver**.
 4. Select **Yes** to roll back your battery driver and restart your PC.

Note: If the **Roll Back Driver** option is unavailable, Windows does not have a previous driver to roll back to. In this scenario, you can try updating or uninstalling the battery driver in the **Driver** tab.

- Check the battery charging mode in Lenovo Vantage or Legion Space. In certain modes, charging will stop when the battery reaches a specific threshold to extend battery life.
- Update the firmware setup utility in Lenovo Vantage or Legion Space.

What should I do if the battery drains fast

Try any of the following solutions to resolve the issue.

- Avoid your PC in high heat or freezing cold because extreme temperatures affect battery performance.
- Disconnect all unnecessary external devices.
- Restrict background activities of high-power-consuming apps.
 1. Select **Settings → System → Power & battery → Battery usage**.
 2. Under **Battery usage per app**, you can check the high-power-consuming apps. Then limit the background activity of a desired app by selecting **More options ⋮ → Manage background activity**.
 3. Under **Background app permissions**, select **Power optimized (recommended)** or **Never** to manage the background activity for the app.
- Disable all unnecessary startup apps.
 1. Select **Settings → Apps → Startup**.
 2. Disable all unnecessary startup apps.
- Adjust Power & battery settings.
 1. Select **Settings → System → Power & battery**.
 2. In **Screen, sleep and hibernate timeouts → On battery**, set the **Turn my screen off after** and **Make my device sleep after** timeouts shorter.
 3. In **Power Mode → On battery**, select **Best Power Efficiency**.
- Decrease the screen brightness using F5 (or fn + F5) or in **Settings → System → Display → Brightness**.
- Decrease or turn off the keyboard backlight using fn + Space or fn + down arrow key.

How to fix blue screen errors

1. Restart your PC.
2. Type get help in the Windows search box and then press enter.
3. In the search box of the Get Help app, type troubleshoot BSOD error.
4. Follow the guided walkthrough.

What should I do if my screen flickers

Try any of the following solutions to resolve the issue.

- Reset your graphics driver by pressing Windows logo key + ctrl + shift + B.
- Restart your PC.
- Check whether Task Manager flickers by pressing ctrl + alt + delete or ctrl + shift + esc.
 - If Task Manager also flickers, roll back your display driver.
 1. Type device manager in the Windows search box and then press enter.
 2. Under **Display adapters**, select a display adapter.
 3. Select the **Driver** tab and then select **Roll Back Driver**.
 4. Select **Yes** to roll back your display driver and restart your PC.

Note: If the **Roll Back Driver** option is unavailable, Windows does not have a previous driver to roll back to. In this scenario, you can try updating or uninstalling your display driver in the **Driver** tab.

- If Task Manager does not flicker, update or uninstall incompatible apps that are probably causing the problem.
 1. Keep all apps updated from the Microsoft Store or the manufacturer's site.
 2. Check whether the screen flickers in a specific app. If yes, uninstall the app.

Why can't I adjust the display brightness

If you are unable to adjust the display brightness, it may be due to adaptive brightness being enabled or an outdated display driver. You can try the following solutions to troubleshoot and fix the issue:

- Disable adaptive brightness:
 1. Go to **Start** → **Settings** → **System** → **Display**.
 2. Under **Brightness**, select the switch for **Change brightness automatically when lighting changes** to turn it off.
 3. Under **Brightness**, set the **Change brightness based on content** option to **Off**.
- Update the display driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select the arrow icon > next to **Display adapters** to expand the section.
 3. Right-click your display adapter, select **Update driver**, and follow the on-screen instructions.

What should I do if my computer responds slowly

Try the following solutions to troubleshoot and fix the problem:

- Restart your computer.
- Delete temporary files and free up more drive space on your computer. For details, go to https://support.microsoft.com/disk_cleanup.
- Remove unnecessary programs from the startup programs:
 1. Open the **Start** menu, and then select **Settings** → **Apps** → **Startup**.
 2. In the **Startup** section, turn off the switch of programs that are not necessary to start automatically when you log in to Windows.
- Uninstall unnecessary or unused software.
- Scan for viruses and malware using the anti-virus software that is installed on your computer.
- Update the Windows operating system.

Get the latest updates from the Windows Update. For details, go to https://support.microsoft.com/windows_update.
- Recover your Windows operating system.

Depending on your specific situation, you can choose from different recovery options. For details, go to https://support.microsoft.com/windows_recovery.
- Repair missing or corrupted system files using the System File Checker tool. For details, go to https://support.microsoft.com/system_file_checker.

What should I do if my camera can't be launched or found

Try the following solutions to troubleshoot and fix the issue:

- Ensure that your camera is not disconnected or covered:
 - If you are using an external camera, ensure that you have connected it to a working USB connector on your computer.
 - If you are using an integrated camera, slide the camera shutter or camera switch to the on position.
- If you are using an integrated camera, it might be disabled. Go to **Start** menu, and select **Settings → Bluetooth & devices → Camera** to enable the integrated camera.
- The apps you are using might not have access to your camera. To authorize access to your camera:
 1. Open the **Start** menu, and select **Settings → Privacy & security → Camera**.
 2. Turn on **Camera access** switch and **Let apps access your camera** switch.
- Your antivirus software settings might block access to your camera. Go to your antivirus software settings and unblock the access.
- Your camera driver might be outdated. To update the camera driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select **Device Manager** from the list of results. The Device Manager window opens.
 3. Select arrow icon > next to **Camera** to expand the section.
 4. Right-click the camera that you would like to update.
 5. Select **Update driver** and follow the on-screen instructions.
- Run the automated camera troubleshooter in the Get Help app:
 1. Open the **Start** menu, and select **Settings → Privacy & security → Camera**.
 2. Scroll down to the bottom. Select **Get help** and follow the on-screen instructions.

What should I do if the audio does not work

If you encounter any audio problems, such as no audio or malfunctioning audio, try the following solutions to troubleshoot and fix the issue:

- Go to **Start → Settings → System → Sound** to verify that the sound output or input devices are selected correctly, and the volume is properly set.
- Run the audio troubleshooter:
 1. Go to **Start → Settings → System → Sound**.
 2. Under **Advanced**, find **Troubleshoot common sound problems**, select **Output devices** or **Input devices**, and follow the on-screen instructions to troubleshoot and fix the problem.

For more solutions to audio problems, go to <https://support.lenovo.com/solutions/ht501860>.

What should I do if my keyboard types wrong characters


- Ensure that the keyboard layout settings are correct. Take the following steps:
 1. Go to **Settings → Time & language → Language & region**.
 2. Under **Preferred languages**, select the three horizontal dots next to your primary language preference and select **Language options**.
 3. Under **Installed keyboards**, check the keyboard layout and add the corresponding keyboard if you're not using the right one.
- Sometimes the keyboard types wrong characters because you may have enabled the feature of auto-correcting misspelled words. Take the following steps to disable this feature:
 1. Go to **Settings → Time & language → Typing**.
 2. Select the switch for **Autocorrect misspelled words** to turn it off.

- Ensure that the keyboard driver is in good status. Take the following steps:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select **Device Manager** from the list of results. The Device Manager window opens.
 3. Select arrow icon > next to **Keyboard** to expand the section.
 4. Double-click the keyboard that is not working and check the status.
 5. If it is not working properly, select **Driver** from the tabs on the top and select **Uninstall device** to uninstall the device.
 6. Apply Windows Update to install the latest driver automatically.

What should I do if my touchpad or trackpad does not respond

If your touchpad does not respond, it might be because you have disabled the touchpad or your touchpad driver is out-of-date or malfunctioning. To solve the problem, you can try the following solutions.

- Enable the touchpad:
 1. Go to **Start → Settings → Bluetooth & devices → Touchpad**.
 2. Turn on the **Touchpad** toggle.

Note: Alternatively, you can also press the touchpad hotkey  or the key combination fn+M to enable or disable the touchpad.
- Update the touchpad driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select the arrow icon > next to **Human Interface Devices** to expand the section.
 3. Right-click the touchpad, select **Update driver**, and follow the on-screen instructions.
- If a touchpad problem occurs after a recent driver update, follow the instructions below to roll back to the previously installed driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select the arrow icon > next to **Human Interface Devices** to expand the section.
 3. Right-click the touchpad, and select **Properties**.
 4. Under **Driver**, select **Roll Back Driver** and follow the on-screen instructions.





What should I do if my touchpad or trackpad responds slowly

If your touchpad is not responding as quickly or accurately as you expect, you can try the following solutions.

- Ensure the touchpad surface is clean, dry, and free from dirt or oils. Gently clean it with a soft, lint-free cloth.
- Disconnect any external mouse, keyboard or other USB devices. A faulty peripheral can sometimes cause cursor lag.
- Go to **Start → Settings → Bluetooth & devices → Touchpad** and then adjust the cursor speed.
- Update the touchpad driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select the arrow icon > next to **Human Interface Devices** to expand the section.
 3. Right-click **HID-compliant touch pad**, select **Update driver**, and follow the on-screen instructions.







What should I do if I cannot connect to the network




If you're unable to access email, browse the web, or stream music, it's likely you're not connected to your network and can't access the internet. To solve the problem, you can try the following solutions.

- Check your network connection status:
 1. Select the quick setting area    on the right side of the side bar.
 2. Make sure that Wi-Fi is turned on.
 3. Check if your network name shows **Connected** below it. If it displays a status other than **Connected**, select a Wi-Fi network you recognize from the list of available networks. Then, click on the network and attempt to connect.
- Check Airplane mode:
 1. Select **Start → Settings → Network & Internet → Airplane mode**.
 2. Ensure Airplane mode is turned off.
- Run automated diagnostics process:
 1. Right-click on the network icon  on the right side of the task bar.
 2. Select **Diagnose network problems** and then follow the on-screen instructions.
- Forget and reconnect to the Wi-Fi network:
 1. Select **Start → Settings → Network & Internet → Wi-Fi → Manage known networks**.
 2. Select your Wi-Fi network and then select **Forget**.
 3. Reconnect to the network by selecting it and entering the password.
- Restart your modem and wireless router.

What should I do if I cannot connect to Bluetooth

If you cannot connect to Bluetooth, try the following solutions one by one.

- Ensure Bluetooth is supported and enabled on both your computer and your Bluetooth device. To turn on Bluetooth on your computer, take the following steps:
 1. Select the quick settings area    on the right side of the taskbar.
 2. In the Bluetooth quick setting, ensure that Bluetooth is turned on. If not, select the Bluetooth icon to turn it on.
- Restart your Bluetooth device.
- Ensure that your Bluetooth device is charged or has enough power.
- Ensure that your Bluetooth device is placed within the required Bluetooth connection distance range of your computer.
- Ensure that airplane mode is turned off on your computer. Take the following steps:
 1. Select the quick settings area    on the right side of the taskbar.
 2. In the Airplane mode quick setting, ensure that Airplane mode is turned off. If not, select the Airplane mode icon to turn it off.
- Ensure that your Bluetooth device is not too close to other USB devices that are connected to your computer. Unshielded USB devices might interfere with Bluetooth connections.
- Remove your Bluetooth device, and then add it again:

1. Select **Start → Settings → Bluetooth & devices → Devices**.
2. Select **More options** of the Bluetooth device you are having the problem with.
3. Select **Remove device** to remove the Bluetooth device.
4. Select the quick settings area    on the right side of the taskbar.

Note: Ensure that the Bluetooth on both your computer and the Bluetooth device is turned on. Ensure that the device is discoverable.

5. Select **Manage Bluetooth devices (>)** on the Bluetooth quick setting to expand the section.
 6. Select the device when it is displayed on the **New devices** list, and then follow the on-screen instructions.
- Run the Bluetooth troubleshooter:
 1. Select **Start → Settings → System → Troubleshoot → Other troubleshooters**.
 2. Locate the Bluetooth section, select **Run** and then follow the on-screen instructions.
 - Uninstall the driver of the Bluetooth adapter. Windows will automatically install the latest driver.
 1. Type Device Manager in the Windows search box.
 2. Select **Device Manager** from the list of results. The Device Manager window opens.
 3. Select the arrow icon > next to **Bluetooth** to expand the section.
 4. Right-click the Bluetooth device you are having problem with, and then select **Uninstall device**.
 5. Confirm that you want to uninstall this device from your system in the Uninstall Device window, and then select **Uninstall**.
 6. After the driver is uninstalled, restart your computer. Windows will automatically install the latest driver.
 7. If Windows does not reinstall the driver automatically, open device manager and select **Scan for hardware changes** on the tool bar (the magnifying glass icon).

How to reset my Windows password

If you have forgotten the password for your Windows account, you can try the following solutions.

- If you sign in to Windows with an email address, you have a Microsoft Account. You can reset your password online:
 1. Go to the Microsoft password reset page from any other device.
 2. Enter your Microsoft email address and follow the on-screen instructions.
 3. You will be asked to verify your identity using a security code sent to your alternate email address or phone number.
 4. Once reset, use your new password to sign in to your laptop.

Note: An internet connection is required on your laptop for this to work.

- If you sign in with a username that does not use an email, you have a local account. Do the following to reset your password:
 1. Use a password reset hint:

On the Windows sign-in screen, select **Sign-in options** and then enter your password. If you see a **Password hint** displayed below the password field, it may help you remember your password.

Note: This feature is only available if you set up the hint in advance. You can see the option to set up a password hint when you create a local account password.

2. Use a previously created password reset disk:

If you have created a password reset disk, you can connect it to a USB-compatible connector on your computer and then follow the on-screen instructions to reset your password.

What should I do if my computer stops responding?

Press and hold the power button until the computer turns off. Then restart the computer.

What should I do if I spill liquid on the computer?

1. Carefully unplug the ac power adapter and turn off the computer immediately. The more quickly you stop the current from passing through the computer the more likely you will reduce damage from short circuits.

Attention: Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable.

2. Wait until you are certain that all the liquid is dry before turning on your computer.

CAUTION:

Do not try to drain out the liquid by turning over the computer. If your computer has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.

Why does my computer start automatically when I open the lid?

Your computer may have Flip to Start enabled. Many Lenovo notebook computers include a sensor that can detect the angle at which the lid is opened. When you open the lid, the sensor can detect this behavior. If Flip to Start is enabled, the computer will respond by starting up automatically.

If you don't like this feature, you can disable it. Flip to Start can be enabled and disabled in:

- Lenovo Vantage, Lenovo PC Manager or Lenovo Smart Engine
- Firmware Setup Utility

What should I do if my fan makes unusual noise

If your fan makes unusual noise, you can try the following solutions.

- Terminate power-consuming applications or processes that are not in use to reduce fan noise:
 1. Type Task Manager in the Windows search box and press enter.
 2. Terminate power-consuming applications or processes that are not in use.
- Adjust your computer operation mode in the pre-installed app Lenovo Vantage or Lenovo PC Manager or Lenovo Baiying or Legion Space. As a shortcut, you can also use the key combination fn+Q. For details, see "System operation modes" on page 35.
- Update the operating system or device drivers to the latest version.

I pressed the Copilot key on my keyboard, but neither Copilot in Windows nor Windows Search opened. What could be the potential cause?

Your Windows operating system version is not up to date and does not include the necessary software components. Update your Windows operating system to version 23H2 or later using Windows Update and then try again.

Note: The Version 23H2 update may not be immediately available for your PC. You may need to periodically open Windows Update and manually check for updates to install the 23H2 update when it becomes available for your PC.

Where can I get the latest device drivers and UEFI/BIOS?

- Lenovo Vantage or Lenovo PC Manager
- Lenovo Support Web site at <https://support.lenovo.com>.

How do I partition my storage drive?

Refer to <https://support.lenovo.com/solutions/ht503851>.

Call Lenovo

If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

Before you contact Lenovo

Record product information and problem details before you contact Lenovo.

Product information	Problem symptoms and details
<ul style="list-style-type: none">• Product name• Machine type and serial number	<ul style="list-style-type: none">• What is the problem? Is it continuous or intermittent?• Any error message or error code?• What operating system are you using? Which version?• Which software applications were running at the time of the problem?• Can the problem be reproduced? If so, how?

Note: The product name and serial number can usually be found on the bottom of the computer, either printed on a label or etched on the cover.

Lenovo Customer Support Center

During the warranty period, you can call Lenovo Customer Support Center for help.

Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region, go to <https://pcsupport.lenovo.com/supportphonenumber>.

Note: Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

Services available during the warranty period

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

Services not covered

- Replacement or use of parts not manufactured for or by Lenovo or non-warranted parts
- Identification of software problem sources
- Configuration of UEFI/BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, see “Warranty information” in the *Safety and Warranty Guide* that comes with your computer.

Purchase additional services

During and after the warranty period, you can purchase additional services from Lenovo at <https://pcsupport.lenovo.com/warrantyupgrade>.

Service availability and service name might vary by country or region.

Appendix A. Important notice for Quebec consumers

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Appendix B. Notices and trademarks

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