

User Guide

Lenovo
ThinkBook



Lenovo

Lenovo ThinkBook 16p 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*

Third Edition (March 2026)

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About this *User Guide*

This *User Guide* is intended for users of the Lenovo personal computer (PC) products listed in the table below. It provides feature descriptions, specifications, and operating instructions to assist users with the daily operation of their PCs. Additionally, it offers support resources to help users troubleshoot issues independently or obtain assistance when needed.

Table 1. Models supported by this User Guide

Model name	Machine type
ThinkBook 16p G6 IAX	21R0
ThinkBook 16p G6 IAX D1	
ThinkBook 16p G6 ADR	21U0
ThinkBook 16p G6 AFR	21U1

PCs are general-purpose computing devices. Users interact with a PC through the interface provided by the operating system, on top of which additional applications can be installed to enhance and extend the PC's functionality. In fact, the ability to add and install applications is what makes PCs so versatile and popular. Given the open nature of PCs, it is impossible to cover every aspect of PC usage in this guide. Instead, this guide provides information on features and functions available out of the box, focusing on essential, security, and convenience features that enable you to use the PC effectively, securely, and efficiently. We hope the information provided here serves as a starting point from which your knowledge and creativity will guide you in transforming this PC into a valuable companion for learning, leisure, entertainment, and academic or professional endeavors. For questions not covered in this guide, please refer to the included support resources.

Other supporting documents

This *User Guide* is part of a comprehensive documentation set designed to support your use of the PC product. The documents may be specific to your product model or applicable to all Lenovo PC products and are available either as printed materials or digitally on the Lenovo Support website.

Setup Guide

A printed material included in the product packaging that provides instructions to help you connect your PC to a power source and turn it on for the first time.

Safety and Warranty Guide

A printed material included in the product packaging that contains important safety information you must read before using your PC. It also provides compliance statements and disclosures required by applicable laws and regulations.

Note: This is a generic document intended for use with all Lenovo PC products and may contain information that does not apply to your specific product model.

Generic Safety and Compliance Notice

A digital document in Portable Document Format (PDF) that contains important safety information you should know while using your PC. It also provides compliance statements and disclosures required by applicable laws and regulations.

Note: This is a generic document intended for use with all Lenovo PC products and may contain information that does not apply to your specific product model.

Hardware Maintenance Manual

A digital document in Portable Document Format (PDF) and Hypertext Markup Language (HTML), primarily intended for Lenovo service technicians, contains instructions for disassembling and servicing the product. This document is made available to users in accordance with applicable laws and regulations that protect customers' rights to independently service their products.

Regulatory Notice

A digital document in Portable Document Format (PDF) containing radio frequency-related statements or disclosures as required by applicable laws and regulations.

Notice regarding the accuracy of information

Product illustrations in this *User Guide* are intended to demonstrate features and may include details that differ from those of the actual product. This *User Guide* may cover multiple product models or configurations and, as such, may include feature descriptions that do not apply to your specific model or configuration.

Many operating instructions, especially those on device configuration and setup are closely related to the operating system. If you install a different operating system than what is described in this guide, some instruction provided may not apply.

Both the operating system and applications can now be updated over the Internet. As a result, the feature descriptions and operating instructions related to the operating system and applications may differ from the actual features and operations.

Chapter 1. Product overview and specifications

This chapter presents product illustrations with key user interface components labeled and explained to help you identify and locate them, as well as understand the basic functionalities they provide during routine PC use. The specifications at the end of this chapter offer technical details of the included devices, along with the designed limits for the operation and storage of the PC.

Top view



No.	Description
1	Pogo pins connector
2	Charging light
3	Antennas

Pogo pins connector

This connector consists of a magnetic strip and a set of metal contacts for magnetically attaching Lenovo Magic Bay extension modules with a set of matching pogo pins.

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

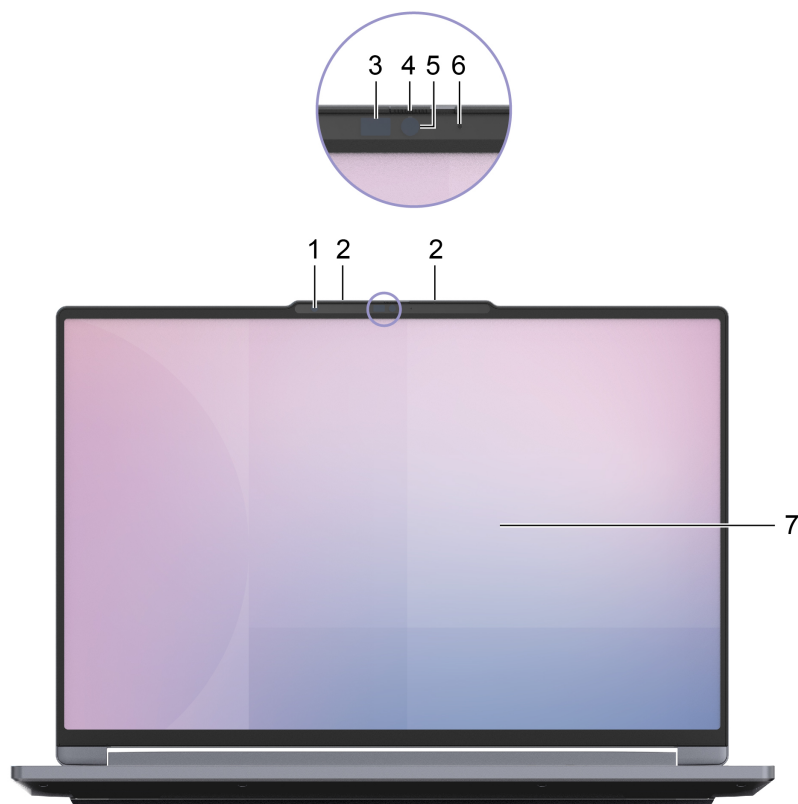
Light status	Plugged in?	Battery charge level
Off	No	/
On, amber	Yes	1%–90%
On, white	Yes	91%–100%

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.

Front view



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

* for selected models

Ambient light sensor

The ambient light sensor detects and measures the intensity of light in the user's environment. The data collected by this sensor can be used to enable adaptive brightness for the screen backlight and the keyboard backlight.

Related topics

“Why does my screen brightness change constantly?” on page 57

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 3. 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.

Related tasks

“Turn on night light” on page 25

“Adjust color temperature” on page 25

Base view



No.	Description
1	Power light
2	Power button (with fingerprint sensor*)
3	Keyboard
4	Touchpad
5	Speakers

* for selected models

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 4. 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	/

If the PC's power button includes an embedded fingerprint sensor, the power light turns solid green to prompt you to enroll or scan your fingerprint.

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.

Fingerprint sensor

The fingerprint sensor scans your finger to unlock your PC or verify your identity.

Note: You need to enroll one or more fingerprints before using them for identity verification. On a Windows PC, go to **Settings → Accounts → Sign-in options** to enroll your fingerprints.

Keyboard

The keyboard is the PC's built-in input device for typing characters. It also includes keys that can make you more productive when interacting with the PC, apps, and the Windows operating system.

Table 5. Productivity keys

Key	Location on the keyboard	Function
Function keys (F1 through F12)	In the top row	Executing predefined commands or functions for selected apps
Hotkeys	In the top row	• Changing some of the PC's frequently used settings • Opening an app or a Windows gadget
fn key	In the lower-left corner	• Toggling the functions of dual-function keys • Used with several letter keys to change some of the PC's frequently used settings
Windows key	In the lower-left corner	Used with certain keys to change some frequently used Windows settings

Hotkeys share keys with function keys. To toggle the functions for these keys, hold down the fn key or turn on the fn lock switch.

Note: Keyboard layout varies by language and geographical location. The keyboard on your PC may look slightly different from the product illustrations of this publication.

Related topics

“Hotkeys” on page 27

“Combination keys using the fn key” on page 28

“Combination keys using the Windows logo key” on page 28

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.

Speakers

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

Left view



No.	Description
1	Security lock slot
2	USB Standard-A connector (always-on connector)
3	Multi-purpose USB Type-C® connectors. • AMD platform: Supports USB 3.2 Gen 2 • Intel platform: Supports Thunderbolt™ 4 (⚡)
4	Combo audio jack

Security lock slot

The security lock slot is used to attach a compatible cable lock. The cable lock typically includes a loop at one end and can be used to secure the PC to a stationary object, preventing theft when the PC is left unattended for a short period of time in cafes, shops, libraries, and other public places.

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, Lenovo PC Manager, or Lenovo Baiying

Multi-purpose USB Type-C connector

This multi-purpose USB Type-C® connector is 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.

- Thunderbolt™-enabled docks or devices

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.

Combo audio jack

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

Right view



No.	Description
1	SD card slot
2	State light
3	USB Standard-A connectors

SD card slot

The SD card slot is used to insert an SD, SDHC, or SDXC memory card to transfer data between the memory card and your PC.

State light

The state 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, the color of the state light helps you determine whether the battery is running low.

Note: The status of the state light is synchronized with that of the power light. The state light is usually located on the right or left side of the PC and is visible when the LCD lid is closed.

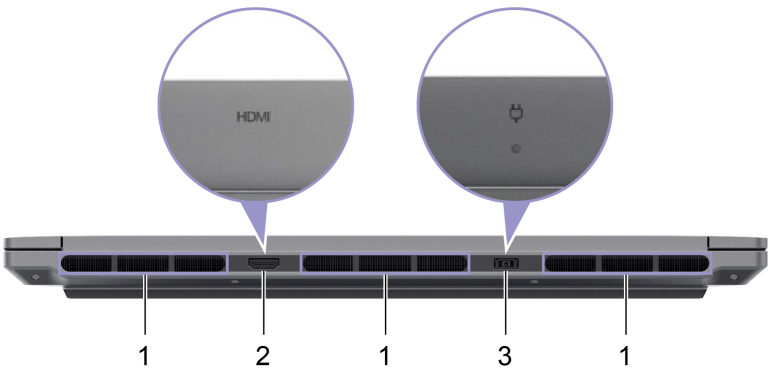
Table 6. State light status and description

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

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.

Rear view



No.	Description
1	Air vents (outlet)
2	HDMI™ connector
3	Power connector

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.

HDMI connector

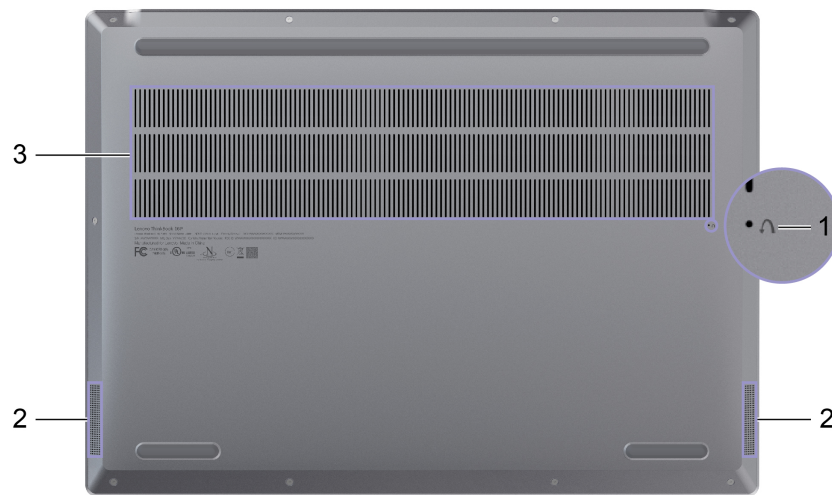
The HDMI connector is used to connect an external display device, such as a television, a projector, or a monitor.

Power connector

This connector is designed to accept the plug of the included ac power adapter and serves as the primary power input for the PC.

Note: If your PC is sold without an included ac power adapter, you may either reuse an existing Lenovo-branded ac power adapter or purchase one separately. The selected ac power adapter must be compatible with the connector in terms of plug type and must provide the required power levels (voltage and current) for the PC. Refer to the specifications section in this publication for the power levels supported by the ac adapter designed for this PC.

Bottom view



No.	Description
1	Novo button hole
2	Speakers
3	Air vents (intake)

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.

Speakers

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

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.

Specifications

Dimensions

Item	Value or specification
Width	354.6 mm
Depth	256.2 mm
Thickness	T2: • Intel platform: 17.92 mm • AMD platform: 19.34 mm

ac power adapter

Item	Value or specification
Input	100 V ac–240 V ac, 50 Hz–60 Hz
Output voltage	20 V dc
Maximum current	15 A
Maximum power	300 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	85 Wh
Cell type	Rechargeable Li-ion Battery
Number of cells	4

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	- Slot 1: M.2 (2242/2280) - Slot 2: M.2 (2242/2280)
Slot interface	- Intel platform: - Slot 1: PCIe Gen5×4 with NVMe support - Slot 2: PCIe Gen5×4 with NVMe support - AMD platform: - Slot 1: PCIe Gen4×4 with NVMe support - Slot 2: PCIe Gen4×4 with NVMe support

Display

Item	Value or specification
Size	16.0 inches
Resolution	- Intel platform: 3200 × 2000 pixels 2560 × 1600 pixels - AMD platform: 2560 × 1600 pixels
Maximum refresh rate	165 Hz 240 Hz
Screen type	IPS

Keyboard

Item	Value or specification
Backlight color	White
Shortcut keys	- Function keys - Hotkeys
Modifier keys	- alt key - ctrl key - shift key - Windows key - fn key
Special keys or key group	Numeric keypad

Connectors and slots

Item	Value or specification
USB Standard-A connector	- Quantity: 3 - Power level (output) - Voltage: 5 V - Maximum current: 0.9 A Note: The USB Standard-A connector on the left side of the PC support maximum power output of 5 V and 2 A. - Data protocol - USB 2.0 480Mbps - SuperSpeed USB 5Gbps - SuperSpeed USB 10Gbps (for always-on connector)
Multi-purpose USB Type-C connector	- Quantity: 2 - Power level - Maximum power output 5 V, 3 A 20 V, 7 A - Input - Maximum: 100 W (20 V, 5 A) (Lenovo proprietary) - USB Power Delivery - Minimum: 65 W (20 V, 3.25 A) - Maximum: 100 W (20 V, 5 A) 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>. - Data protocol - USB 2.0 480Mbps - SuperSpeed USB 5Gbps - SuperSpeed USB 10Gbps - Thunderbolt 41.25Gbps* - DisplayPort 2.1 - Maximum output resolution: 7680 × 4320 (60 Hz)
HDMI connector	- Data protocol - Fixed-rate link (FRL) - Transition minimized differential signaling (TMDS) - Maximum output resolution: 7680 × 4320 (60 Hz)
SD slot	Card type - Standard Capacity SD (SDSC) - High Capacity SD (SDHC) - Extended Capacity SD (SDXC)

Item	Value or specification
Audio jack	• Diameter: 3.5 mm • Supported plug: – 3-pole, TRS – 4-pole, TRRS (CTIA and OMTP)
Security lock slot	Kensington Nano Security Slot™

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.

Security

Item	Value or specification
Fingerprint sensor	Location: Power button (Intel platform)
Firmware setup utility passwords	• Supervisor password • User password • Master hard disk password • User hard disk password

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

* for selected models

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

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.

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. Daily use

This chapter provides instructions to help you set up your PC and get it running, while also highlighting out-of-the-box features that enable you to use the PC efficiently and effectively. Please keep in mind that many of the instructions in this chapter are closely related to the preinstalled operating system and applications and may become outdated due to updates delivered over the Internet.

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 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**.

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 7. 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.
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.

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 8. 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.

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 Baiying.

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%.

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, Lenovo PC Manager, or Lenovo Baiying.

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.

A power plan

A power plan is a collection of power-saving settings made available by an operating system. With a power plan, you can set idle time-outs for different hardware components to enter a low-power state. The default power plan and some of its idle time-out settings are listed below for computer models pre-installed with Windows.

The listed settings are active when the computer is connected to an electrical outlet. If your computer includes a built-in battery pack, a different collection of time-out settings is set to take effect when the computer is operating on battery power.

- Default power plan: Balanced
- Turn off the display: after 5 minutes
- Put the computer to sleep: after 5 minutes

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

Change or customize a power plan

This operation is applicable to computers with pre-installed Windows.

Step 1. Type power plan in the Windows search box and then press enter.

Step 2. Customize a power plan of your preference.

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 among the different 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 PC Manager, or Lenovo Baiying. 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 9. Operation modes and their recommended usage conditions

Operation mode	Recommended conditions
High Performance	• 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)	• 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.

Set up Internet access

In your home or office, Internet access is typically provided through Wi-Fi-enabled networks. You can connect to such a network to access the Internet. The Windows operating system provides utilities that assist in searching, connecting to, and managing wireless networks within range.

- Step 1. Select the Network, Sound, and Battery icons (  ) on the right side of the taskbar to open quick settings.
- Step 2. On the quick settings pane, select the > symbol next to the network icon. Wireless networks within range should be displayed.
- Step 3. Select the network you want to connect to and then select **Connect**.
- Step 4. Enter the network security key when prompted.

Interact effectively with your computer

You interact with your PC through its input and output devices. You spend a significant amount of time looking at the screen, where the user interface and content are displayed. The speakers produce sound, allowing you to listen to music or a voice recording. You type with the keyboard and navigate with the touchpad. You can join and participate in a web conference using the built-in camera and microphone.

Apart from the built-in devices, you can connect both wired and wireless external devices to enhance your interaction with your PC.

The display device

Adjustable display refresh rate

Your eyes might not notice it but the content displayed on the computer screen refreshes constantly. Display refresh rate refers to the number of times per second the screen content refreshes itself and is measured in hertz (Hz).

A refresh rate of 60 Hz is adequate for most situations and is energy efficient. However, when viewing videos or playing video games, a higher refresh rate usually provides a smoother viewing experience.

The displays of some Lenovo computers support dual refresh rates. For such a computer, you can manually switch its display to work at either the higher or lower refresh rate. For Windows operation systems, the manual settings are usually found in **Settings → System → Display**. As a shortcut, you can also use the key combination **fn + R** to switch the display refresh rate.

Note: Not all displays support dual refresh rates. If you cannot find settings to change the display refresh rate, the refresh rate of the display might be fixed or cannot be manually changed.

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**.
- Step 3. Move the slider to adjust the color temperature.

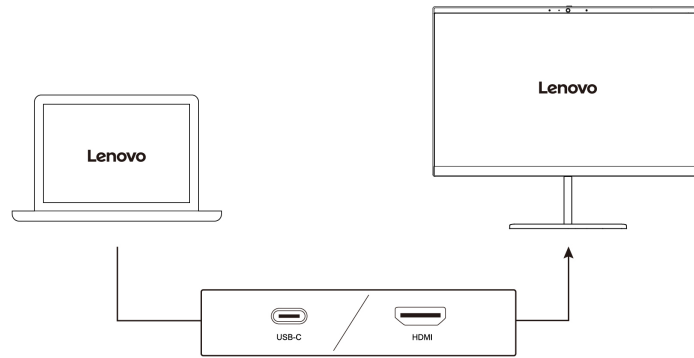
Note: Selected Lenovo PCs are low blue-light certified. These PCs undergo testing with the night light turned on and the color temperature value set at 48 or above.

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.

Keyboard

Shortcut keys

A Lenovo keyboard usually includes the following shortcut keys that you can use to quickly access apps or adjust settings.

- Functions keys (F1–F12)
- Hotkeys
- Combination keys using the fn key
- Combination keys using the Windows logo key
- The Copilot key

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 10. Hotkey functions

Hotkey icon	Function description
	Mutes/Unmutes sound.
	Decreases volume.
	Increases volume.
	Enables/Disables the microphone.
	Decreases screen brightness.
	Increases screen brightness.
	Selects and sets up display devices.
	Enables/Disables the touchpad.
	Opens an AI experience, an application launch panel, or a pre-installed PC management application.
	Starts a snip.
	Opens the Smart Connect app.
	Opens the Calculator app.
	Puts the computer to sleep.

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.

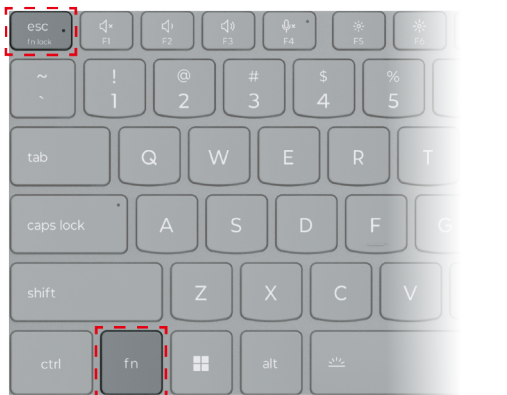


Figure 1. Locations of the fn lock key and the fn key

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

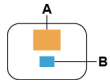


Figure 2. The layout of a dual-function key

Table 11. **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 12. *fn*-based key combinations

Key combination	Function
fn + Q	Switches the PC's active power mode
fn + R	Switches the refresh rates of the built-in display
fn + M	Enables/disables the touchpad
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 13. 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
+ 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

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.

Numeric keypad

Some Lenovo computers include a dedicated numeric keypad on the far right of the keyboard. The keypad is used for entering numbers and operators quickly.

Press num lock to enable or disable the numeric keypad.

Touchpad gestures

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

Table 14. 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)

Table 14. Multi-finger touchpad gestures (continued)

Number of fingers to use	Gesture	Function
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.

Bluetooth connectivity

Bluetooth is a short-range wireless technology commonly used for connections between nearby devices. Your PC is equipped with a built-in Bluetooth adapter. You can connect other Bluetooth-enabled devices to your PC. Bluetooth-enabled headphones, earbuds, loudspeakers, keyboards, and mice are among the devices you may consider connecting to your PC.

Connect a Bluetooth-enabled device to your PC

Establishing a Bluetooth connection requires actions on both the device and your PC. Turn on the device and make it discoverable before performing any actions on your PC.

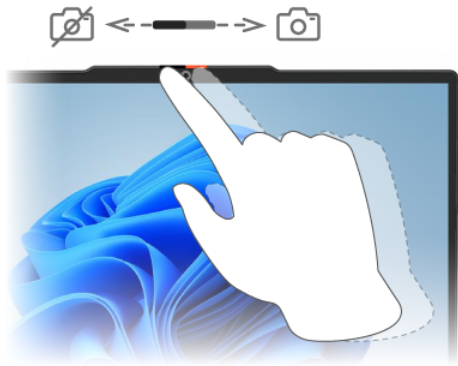
- Step 1. Select **Settings → Bluetooth & devices → Add device → Bluetooth**.
- Step 2. Select the device you want to connect, and then select **Connect**.
- Step 3. Depending on the type of device, you may need to either confirm the connection on the device side or enter a pairing code on your PC.

When a Bluetooth-enabled device is connected to your PC, its name and status are displayed under **Bluetooth & devices** on your PC .

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.



Enroll your fingerprints

You can use the biometric fingerprint option to sign in to Windows quickly if your computer includes a fingerprint sensor. This sign-in option provides a reliable and secure way of identity verification.

- Step 1. Select **Start → Settings → Accounts → Sign-in options**.
- Step 2. Under **Ways to sign in**, select **Fingerprint recognition (Windows Hello™)** to set up sign-in with a fingerprint sensor.
- Step 3. Follow the on-screen instructions to enroll your fingerprints.

Notes:

- You need to set up a PIN code before you are allowed to use this sign-in option.
- It is recommended that you enroll multiple fingerprints in case of any injuries to your fingers.

Installing applications

Applications are software programs developed by individuals and software companies. They are typically installed on top of the operating system to provide specialized functions. To install an application on your PC, you generally have two options.

- Download and install the application from your operating system's app store.
- Download the installation package from the developer's website and run the installation file to install it on your PC.

Note: Applications are usually licensed for use. When downloading and installing applications, be sure to check their license files, which contain the terms and conditions for use. For proprietary applications, you typically need to pay a licensing fee to install and use the software.

Pre-installed Lenovo-developed applications

As a PC manufacturer, Lenovo develops applications and may preinstalled some of them on PCs that come with an operating system to help users maximize their PC experience, especially when they are just getting started. This section highlights the Lenovo-developed applications that we believe will be particularly useful to you.

Lenovo Vantage

PCs are complex computing devices composed of numerous components, which can be categorized into power, display, sound, input, network, and other devices. Typically, these devices operate as intended without user intervention. However, there are times when you may want to adjust their settings to enable specific functions or enhance your experience for particular use cases.

The settings for these devices can be accessed through the operating system's settings utility. Lenovo also offers an app called Lenovo Vantage, which provides comprehensive, centralized, and more advanced control over the devices included in the PC. Additionally, it features combined, pre-defined settings for common usage scenarios in the form of modes. Instead of adjusting multiple individual settings, you can simply select or switch a mode, making PC usage much easier.

Lenovo Vantage is typically pre-installed on Lenovo PCs that come with a Windows operating system. You can open the application from the Windows Start menu by locating it in the app list or by searching for its name. If Lenovo Vantage is not pre-installed or if you need to install it after reinstalling Windows, you can download it from the Microsoft Store.

Note: If you purchased your Lenovo PC in mainland China, Lenovo PC Manager or Lenovo Baiying may be pre-installed instead of Lenovo Vantage. Lenovo PC Manager or Lenovo Baiying offers features similar to those of Lenovo Vantage and may include functionalities specifically tailored for local users.

Frequently used settings within Lenovo Vantage

The following table highlights settings within Lenovo Vantage that you may want to enable or adjust to enhance your PC experience for specific use cases or to better suit your preferences.

Table 15. Frequently used settings within Lenovo Vantage

Settings	Section within Lenovo Vantage	Description	Benefits
Power modes	Power	A list of power-related modes for selection. Note: The keyboard shortcut fn + Q can be used to cycle through the available power modes.	Provides a quick and easy way for users to balance performance and power consumption on their PC or to allow the PC to automatically make this decision based on usage scenarios.
Flip to start	Power	A toggle switch. When enabled, the PC can be turned on by flipping open the display.	Provides an easy and alternative way to turn on the PC.
Conservation mode	Power	A toggle switch. When enabled, the battery stops charging once it reaches 80% of its full capacity.	It is beneficial for the battery's lifespan, especially if your PC is constantly connected to a power source.
Overnight battery charging	Power	A toggle button designed for users who typically charge their PCs overnight. Enabling this feature ensures the battery is fully charged by morning while minimizing the time the battery remains at full charge.	It is beneficial for the battery's lifespan.
Eye care mode	Display	A toggle switch and an adjustment control for color temperature.	Reduces the chances of developing eye strain or fatigue.
Color management	Display	A list of popular color spaces for selection.	Provides a quick and easy method for switching between popular color spaces.
Super resolution (Intel platform)	Display	A toggle switch. When enabled, it improves the playback clarity of low-resolution videos. Note: For most players, Super Resolution can be enabled or disabled in Lenovo Vantage, Lenovo PC Manager, or Lenovo Baiying, but for some specific players, you might need to enable this feature manually.	Helps you play videos with a higher resolution than the original. It works especially well in cases where the source video has poor resolution.

Table 15. Frequently used settings within Lenovo Vantage (continued)

Settings	Section within Lenovo Vantage	Description	Benefits
Dolby Atmos® (Intel platform)	Sound	Lenovo has partnered with Dolby® to design and fine-tune the built-in speakers of its PCs, delivering a spatial and immersive audio experience. A variety of audio profiles are available, each optimized for common use cases. Users can manually select a profile or allow the PC to automatically switch profiles based on the active application.	Provides a quick and easy way to apply settings that deliver a professionally tuned, spatial, and immersive audio experience.
Smart noise cancelling	Sound	For the microphone, you can choose from several options that allow it to suppress or filter out non-voice sounds. You can even configure the microphone to pick up only your voice, filtering out other voices and ambient noise. A toggle switch for speakers is available to enable voice-only audio output.	Enhances sound quality for recordings and teleconferences, especially in noisy environments.

Smart Connect

In addition to PCs, many people today own other smart devices, such as smartphones and tablets, which they use daily. There is a growing demand for sharing files and pictures between these devices. Lenovo offers Smart Connect to enable fast, secure, and easy sharing between devices. Additionally, when connected through Smart Connect, you can check your phone's messages, view notifications, and even open its apps directly on your PC.

To connect through Smart Connect, the application must be installed on all devices. Smart Connect is typically pre-installed on Lenovo PCs that come with a Windows operating system. You can open the application from the Windows Start menu by locating it in the app list or by searching for its name.

To download Smart Connect on your phone or tablet, open Smart Connect on your PC, select **Add a device**, then select **Download Smart Connect** to display the QR code for the download link. Use your phone or tablet to scan the QR code to download the app.

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.



- **Dual Camera Fusion:** Show the image of any participant that is visible from the front or rear of the camera on the screen when collaborating with a Lenovo Magic Bay 4K Webcam.



Note: You can purchase the Lenovo Magic Bay 4K Webcam from Lenovo at <https://www.lenovo.com/accessories>.

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



- **Intelligent sensing**

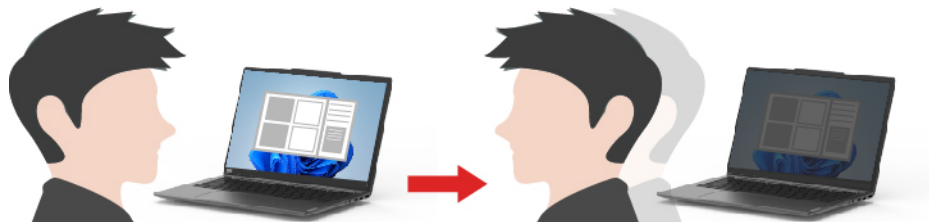
- **Presence detection:** Keep your computer awake when you are facing the screen and lock the computer screen automatically when you leave. You can customize the screen-off time from 10 to 60 seconds.



- **Privacy protection:** Blur your screen and display a warning message when a shoulder surfer is detected.



- **Adaptive dimming:** Track your face movements to recognize your focus of attention. When you are facing away, the display dims to conserve power. You can customize the brightness value and screen dimming timer.



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.

Lenovo Qira (for selected models)

Lenovo Qira is a personal ambient intelligence that supports live voice or text interactions and can generate outputs such as text, images, summaries, and transcriptions based on your prompts. It supports multiple processing modes, including both on-device processing and hybrid processing that may use secure cloud-based services. The mode used depends on your settings, the feature requirements, and device capabilities.

Lenovo Qira is integrated into the system and works with supported apps and services. If you use multiple Lenovo devices and sign in with the same Lenovo ID, you can enjoy a consistent experience across supported Lenovo PCs, Lenovo tablets, and Motorola smartphones. This allows you to switch between devices and maintain continuity of your tasks, subject to feature availability, permissions, and your settings.

Notes:

- Lenovo Qira is not available on all product models. On models that do not support Lenovo Qira, pressing the hotkey ☆ opens a pre-installed PC management app or an application launch panel instead.
- Using Lenovo Qira through the hotkey ☆ may require an online update.
- Lenovo Qira receives periodic updates to enhance functionality. Features may change as updates are installed.
- Lenovo Qira may generate inaccurate, incomplete or biased information. It is not a substitute for professional advice or independent judgement, and may not be suitable for some minors. You should review and verify the outputs before use. If you share unverified content, clearly label it as “generated by artificial intelligence”. For more information, refer to the [Lenovo AI Acceptable Use Policy](#).
- Lenovo Qira follows strict, regulatory-compliant consent rules and does not share your data without your explicit permission.

Upgrade Lenovo AI Now to Lenovo Qira

Depending on the manufacturing date, your PC may come pre-installed with Lenovo AI Now, the predecessor to Lenovo Qira. Lenovo Qira succeeds Lenovo AI Now by providing an updated and enhanced AI experience.

To help eligible devices upgrade smoothly, Lenovo has deployed an online upgrade program. If your PC qualifies, you will receive an on-screen upgrade prompt.



Select **Learn More** to view upgrade details and then select **Update** to begin the upgrade process.

Note: The upgrade may take some time to complete. Before starting, make sure your PC is plugged in and connected to a stable internet connection.

Launch Lenovo Qira

- Type Qira in the Windows search box and select the matching result.
- Press the dedicated hotkey marked with ☆ as a shortcut.

A prompt bar appears on your desktop.

Set up Lenovo Qira

To begin using Lenovo Qira, you must first sign in and configure your preferred interaction settings.

Sign in to Lenovo Qira

After launching the Lenovo Qira prompt bar, a sign-in webpage automatically appears. Follow the on-screen instructions to sign in with your Lenovo ID.

Alternatively, hover over the prompt bar, select the Lenovo Qira icon  to open the main window, and navigate to **Settings → Account**.

Configure Lenovo Qira

In the Lenovo Qira window, access the **Settings** menu to customize your preferences.

Table 16. Lenovo Qira settings

Setting	Description
Language	Choose the response language.
Launch Options	Enable or disable the wake word feature, which allows you to invoke Lenovo Qira by saying “Hey, Qira.” Note: The wake word feature requires microphone permission. To manage this, go to Start → Settings → Privacy & security → Microphone under App permissions , and ensure Lenovo Qira is allowed to access the microphone.
Voice	• Set up the voiceprint recognition and select the voice tone. Voiceprint recognition is used only to identify your voice on the device. • Select whether Lenovo Qira responds using audio or text.
Sync Data	Enable or disable data synchronization.
Processing Mode	Choose how requests are processed: • Hybrid Mode: Uses a combination of on-device AI and cloud-based services. Certain requests may be processed using cloud services. • Local Mode: Uses on-device AI only. Some features may be limited or unavailable compared to Hybrid Mode.
Personalized Answers	Select whether Lenovo Qira is allowed to access your stored personal data to provide personalized and contextual responses.
Connectors	Select the apps, services, and device defaults that Lenovo Qira is permitted to connect to.

Table 16. Lenovo Qira settings (continued)

Setting	Description
Close Behavior	Select whether Lenovo Qira is allowed to run in the background after it is closed.
Catch Me Up	Select the apps whose notifications you want summarized.

Invoke Lenovo Qira

When Lenovo Qira is minimized as a pill  on your desktop, you can invoke it by:

- Clicking the Lenovo Qira pill on your desktop.
- Saying “Hey, Qira” when the wake word feature and microphone permission are enabled.
- Pressing the dedicated hotkey marked with ☆.

Close Lenovo Qira

You can close Lenovo Qira as follows:

Table 17. How to close Lenovo Qira

Current view	Action to close
Prompt bar	1. Hover over the prompt bar and select the Minus (–) button to minimize Lenovo Qira into a pill on the desktop. 2. Right-click the pill icon  and select Close.
Full window	Select the Close (X) button in the upper-right corner.

After closing, Lenovo Qira minimizes to the system tray and remains inactive until you launch it again.

If you want to fully exit Lenovo Qira:

- Right-click the Lenovo Qira icon in the system tray and select **Exit**.
- Open Task Manager, locate Lenovo Qira, and select **End task**.

Explore Lenovo Qira

Lenovo Qira is built around the following attributes:

- Presence: Lenovo Qira is easily accessible when you choose to use it.
- Actions: Lenovo Qira can assist with tasks such as drafting emails or editing documents, subject to your review and confirmation.
- Perceptions: When enabled and permitted by you, Lenovo Qira can analyze information from supported apps or device inputs to provide contextual assistance.

Table 18. Key features of Lenovo Qira

Feature	Description
Question answering	Responds to your prompts with helpful information.
Proactive suggestions (Next Move)	Provides suggestions based on your activity, supporting you with relevant guidance while you remain control of all actions.
Content generation & editing	Helps draft, rewrite, and edit content for emails, documents, messages, and notes, subject to your review and approval before anything is shared or saved.
Local Mode	Performs select tasks using on-device AI when Local Mode is enabled or the device is offline. Some features may be limited or unavailable.
Hybrid Mode	Combines on-device AI with cloud-based services to enable additional features and capabilities when Hybrid Mode is enabled and an internet connection is available. Certain requests may be processed using cloud services.
Live interaction (Live Mode)	Supports real-time voice conversations and camera-enabled interactions when you actively invoke Lenovo Qira and grant necessary microphone or camera permissions.
Notifications summary (Catch Me Up)	Summarizes recent notifications from the apps you choose, helping stay informed while giving you full control over which apps are included and how notifications are synced.
Live recording (Pay Attention)	Supports meetings and conversations with transcriptions, optional translations, and summaries.
AI image creation (Creator Zone)	Creates AI-generated images in Creator Zone , a dedicated creative workspace with built-in safety checks and watermarking.
Knowledge base (Knowledge)	Helps you build and access a personal knowledge library by storing and recalling information you choose to save such as notes, documents, or meeting summaries.

Note: All features operate only when enabled by you, in accordance with your device settings and permissions.

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 19. 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.

Related topics

“Firmware setup utility” on page 42

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 20. Data erasure standards supported by Lenovo Secure Wipe

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

Chapter 3. Firmware setup

When you power on your PC, a series of instructions are executed to initialize devices, identify a boot device, and locate a program called the bootloader. The bootloader then searches for the operating system installed on your PC and transfers control to it. Once the operating system has started, your PC is ready for use.

These instructions are stored on a flash memory chip located on the PC's system board. The flash memory chip and the instructions it contains are collectively referred to as the PC's firmware.

Generally, firmware code executes automatically without user intervention. However, some configurations remain firmware-related, such as setting a password for the PC's mass storage device or enabling a specific feature of an integrated device. When users need to perform these operations, they can do so through an interface called the firmware setup utility.

Firmware setup utility

Lenovo PCs typically include a firmware setup utility in the firmware that allows you to:

- View information about your PC and its devices
- Change device settings
- Change the order of boot devices
- Set passwords for the firmware and the mass storage device

Note: You should rarely need to use the firmware setup utility for your daily PC usage. To view device information, you can use the utilities provided by the operating system or applications provided by Lenovo (Lenovo Vantage, Lenovo PC Manager, or Lenovo Baiying). You can use the Novo button menu to temporarily change the order of boot devices.

There are several ways to open the firmware setup utility:

- Utilize the Advanced startup feature of the Windows operating system
- Use the Novo button menu
- Start or restart your PC and press an interrupt key (F1)

Related topics

“Novo button hole” on page 13

Change settings in firmware setup utility

This section introduces the operations you can perform in the firmware setup utility.

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. When the Lenovo logo appears on the screen, 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 firmware 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 firmware setup utility for the change to take effect.

Enable or disable F1-F12 as primary function

- Step 1. Open the firmware 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 firmware setup utility.

- Step 1. Open the firmware 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 firmware setup utility

This section introduces the types of passwords that you can set in the firmware setup utility.

Password types

You can set various types of passwords in the firmware 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.

Notes:

- All passwords set in the setup utility consist of alphanumeric characters only.
- 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 firmware 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 firmware setup utility.
- Step 2. Select **Security → Password → Set Supervisor Password** and press enter.
- Step 3. Enter a password string that contains only letters and numbers 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 firmware 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 firmware 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 firmware setup utility might need to set a user password for use by others.

- Step 1. Open the firmware 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 firmware 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 firmware 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 firmware setup utility using the supervisor password.
- Step 2. Select **Security → Password → Set Hard Disk Password** and press enter.

Note: If you start the firmware 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 firmware 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 firmware 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 fn lock

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 fn lock 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 fn lock. 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.

Notes: The following accessibility features of Windows have been tested and confirmed to deliver their essential functionalities on Lenovo PCs that come pre-installed with Windows 11.

- Narrator

- Magnifier

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

Self-service CRU

Description

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	

* for selected models

Notes:

- The PC is available in certain countries or regions without an included ac power adapter.
- 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](https://support.lenovo.com) 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 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.

Why does my screen brightness change constantly?

Your computer may include an ambient light sensor and the adaptive brightness feature is enabled. The light sensor can detect the intensity of the surrounding light. Using data provided by the sensor, the operating system can dynamically adjust the screen brightness.

The adaptive brightness feature of the operating system can be disabled. For Windows operating systems, adaptive brightness settings are usually found in **Settings → System → Display**.

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 fingerprint can't be recognized

If your computer comes with a fingerprint reader and it fails to recognize your enrolled fingerprint, please try the following solutions to troubleshoot and fix the issue:

- Clean the fingerprint reader with a soft microfiber cloth and ensure the fingerprint reader is completely dry before you attempt to use it again.
- Remove your fingerprint and enroll it again:
 1. Select **Start → Settings → Accounts → Sign-in options → Fingerprint recognition (Windows Hello)**.
 2. Select **Remove** to remove the enrolled fingerprint.
 3. Enroll the fingerprint again.
- Update the fingerprint driver:
 1. Type Device Manager in the Windows search box and then press enter.
 2. Select the arrow icon > next to **Biometric devices** to expand the section.
 3. Right-click the fingerprint driver, click **Update driver**, and follow the on-screen instructions.

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, Lenovo Baiying, 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" in this *User Guide*.
- Update the operating system or device drivers to the latest version.

How can I start my PC from another device?

You can open the Novo button menu, select **boot device**, and select a device to start your PC.

What should I do if saying “Hey, Qira” does not elicit a response

Try any of the following solutions to resolve the issue.

- In Lenovo Qira window, go to **Settings → Launch Options**, and ensure the wake word feature is enabled.
- Ensure your microphone is working properly and not muted.
- Make sure the volume on your PC is turned up.
- Exit and restart Lenovo Qira.
- In Windows Settings, go to **Start → Settings → Privacy & security → Microphone** under **App permissions**, and check if Lenovo Qira is permitted to access the microphone.
- Confirm you are using the latest version of Lenovo Qira.
- Restart your PC.
- Ensure that no other apps are using the microphone at the same time, as this may prevent Lenovo Qira from responding.
- Navigate to **Settings → Feedback** for assistance within the Lenovo Qira app.

If the issue persists, consult Lenovo support resources or forums for further assistance.

What should I do with Lenovo Qira transcription or translation quality issues

Try any of the following solutions to resolve the issue.

- Ensure the audio input is clear. Background noise may affect the accuracy.
- Keep your PC stable during live interaction.
- Confirm you are using the latest version of Lenovo Qira.
- Navigate to **Settings → Feedback** for assistance within the Lenovo Qira app.

If the issue persists, consult Lenovo support resources or forums for further assistance.

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
• Product name • Machine type and serial number	• 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 the firmware setup utility 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

In regard to section 79.18 of Quebec's Regulation respecting the application of the Consumer Protection Act, Lenovo in no way guarantees the availability of (a) replacement parts; (b) repair services; and (c) information necessary to maintain or repair the goods. For up-to-date information on the technical support and parts available for your purchase, please consult <https://support.lenovo.com/ca/en>.

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Appendix B. Notices and trademarks

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