

User Guide

Lenovo
YOGA

Lenovo

Yoga Pro 7 (14", 10) and Yoga Pro 7i Aura Edition (14", 10)

Read this first

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

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

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About this guide

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

Model name	Machine type (MT)
Yoga Pro 7 14AKP10	83KG
Yoga Pro 7 14ASP10	83LX
Yoga Pro 7 14IAH10	83KF

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

Chapter 1. Meet your computer

Front view

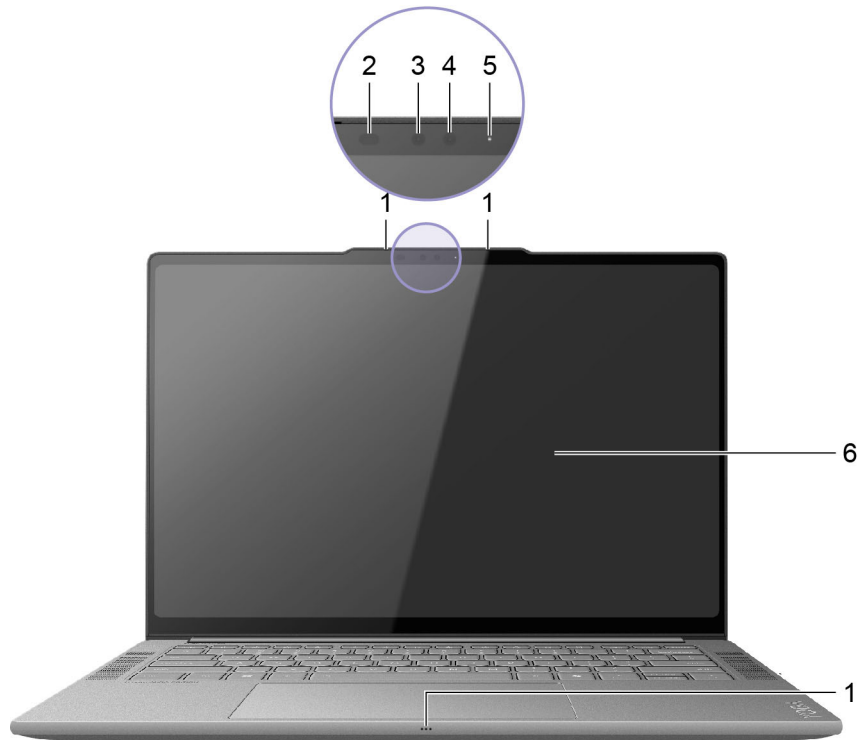


Figure 1. Front view

No.	Description
1	Microphones
2	Infrared LED
3	Infrared camera
4	Camera
5	Camera light
6	Screen

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.

Infrared camera

The infrared camera receives near-infrared waves emitted by an infrared LED and reflected by a human face. It is used for facial recognition.

Camera

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

Camera light

The camera light indicates whether the camera is activated.

Table 1. Camera light status and description

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

Screen

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

Some models offer touch-enabled screens, which allow you to interact with your PC by intuitively touching buttons, icons, and menu items displayed on the screen. Touch-enabled screens also support multi-finger gestures.

Top view



Figure 2. Top view

No.	Description
1	Antennas (cannot be seen from the outside)
2	Speakers
3	Keyboard
4	Touchpad
5	Microphone

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.

Speakers

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

Keyboard

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

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

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.

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.

Left view

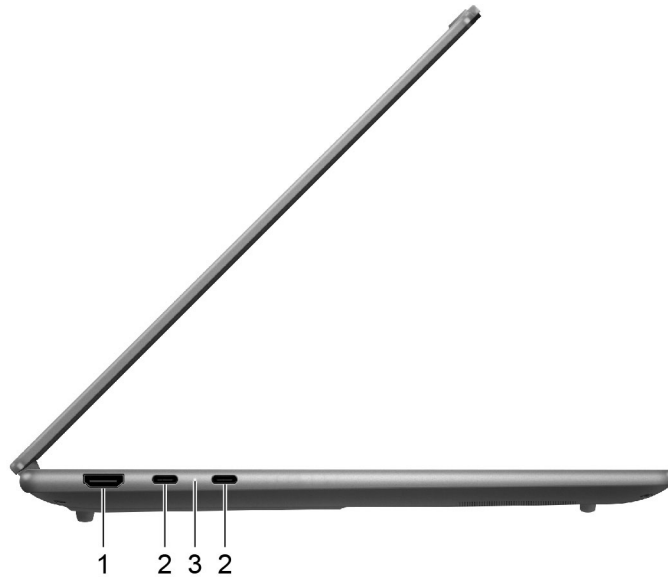


Figure 3. Yoga Pro 7 14AKP10, Yoga Pro 7 14ASP10—Left view

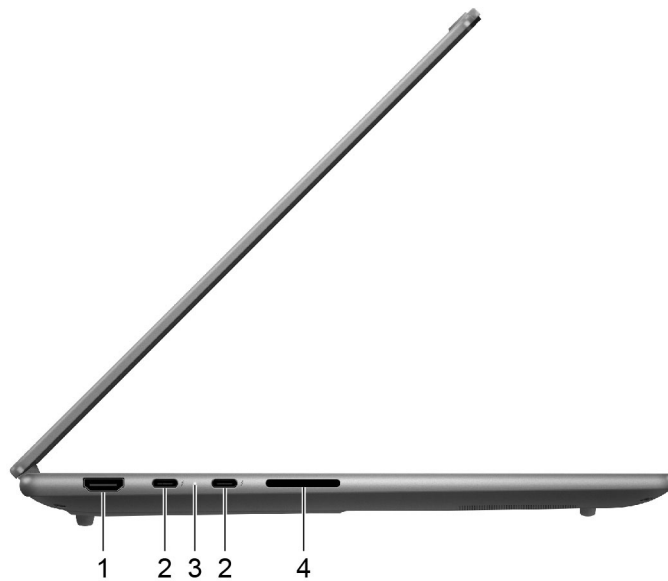


Figure 4. Yoga Pro 7 14IAH10—Left view

No.	Description
1	HDMI™ connector
2	Multi-purpose USB Type-C® connector
3	Charging light
4	SD card slot

HDMI connector

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

Multi-purpose USB Type-C connector

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

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

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

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

- Thunderbolt™-enabled docks or devices (for the connector with ⚡)

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 status and description

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

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.

Right view

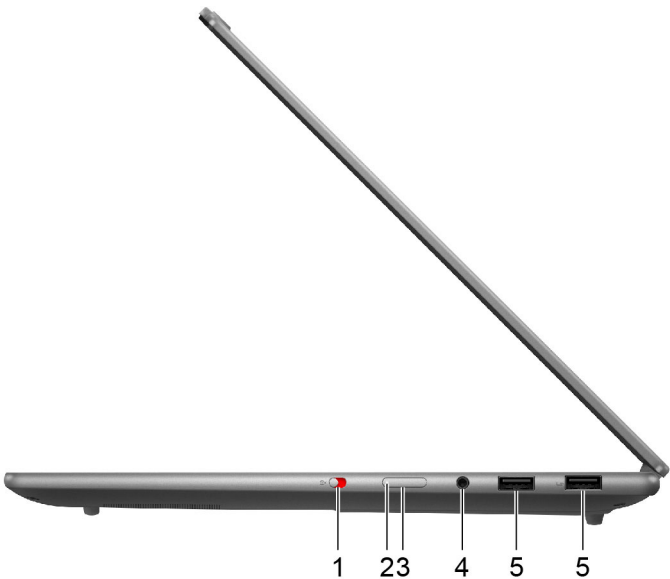


Figure 5. Right view

No.	Description
1	Camera switch
2	Power light
3	Power button
4	Combo audio jack
5	USB Standard-A connector

Camera switch

This toggle switch is used to enable or disable the built-in camera.

Note: This switch is designed for privacy protection. If you don't need to use the camera, slide the switch to the off position to prevent any apps from using the camera.

Power light

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

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

Table 3. Power light status and description

Light status	Power state	Battery charge level
White (solid on)	Powered on	21%–100%
White (blinking rapidly)	Powered on	1%–20%

Table 3. Power light status and description (continued)

Light status	Power state	Battery charge level
White (blinking slowly)	In sleep mode	/
Off	Powered off or in hibernation mode	/

Power button

Press the power button to turn on your PC.

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


Combo audio jack

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

USB Standard-A connector

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

Always-on connector

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

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

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

Bottom view

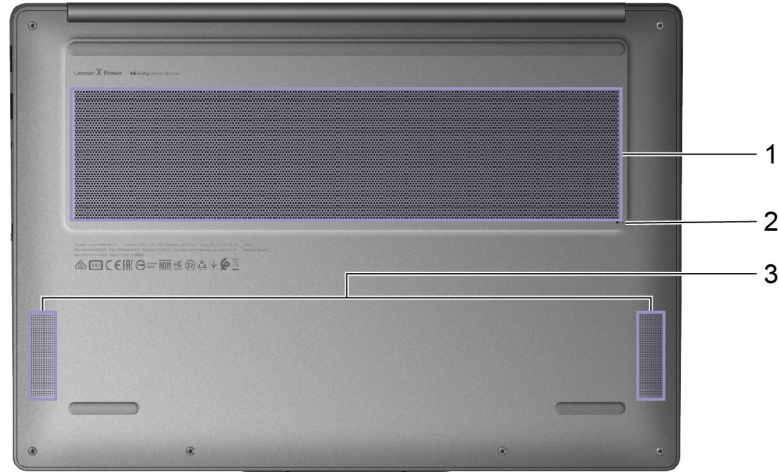


Figure 6. Bottom view

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

Avoid constant body contact with specific hot sections

CAUTION:

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

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.

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.

Features and specifications

Dimensions

Width	325.5 mm
Depth	228.13 mm
Thickness (Yoga Pro 7 14AKP10, Yoga Pro 7 14ASP10)	<ul style="list-style-type: none">• 17.4 mm (thinnest part)• 19.4 mm (thickest part)
Thickness (Yoga Pro 7 14IAH10)	<ul style="list-style-type: none">• 16.9 mm (thinnest part)• 18.9 mm (thickest part)

ac power adapter

Input	100 V ac–240 V ac, 50 Hz–60 Hz
Output voltage	20 V
Maximum output current	5 A
Maximum output power	100 W

Rechargeable battery pack

Capacity	84 Wh
Cell type	Lithium-polymer
Number of cells	4

Note: The battery capacity is the typical or average capacity as measured in a specific test environment. Capacities measured in other environments may differ but are no lower than the rated capacity (see product label).

Memory

Type	LPDDR5X
Number of slots	0

Mass storage device

Type	Solid-state drive (SSD)
Slot type	M.2 (2242)
Number of slots	1
Interface	PCIe Gen4V

Display

Screen size (diagonal)	14.5 inches
Resolution	<ul style="list-style-type: none">• 3000 × 1872• 2944 × 1840
Supported refresh rates	<ul style="list-style-type: none">• 90 Hz• 120 Hz

Connectors and slots

USB Standard-A connector	<ul style="list-style-type: none">• Quantity: 2• Maximum power output: 5 V, 0.9 A• Supported signaling protocols:<ul style="list-style-type: none">– USB 2.0 480 Mbps– SuperSpeed USB 5 Gbps <p>Note: The always-on connector supports maximum power output of 5 V and 2.1 A.</p>
Multi-purpose USB Type-C connector (Yoga Pro 7 14IAH10)	<ul style="list-style-type: none">• Quantity: 2• Maximum power output: 5 V, 3 A• Maximum power input: 20 V, 5 A• Supported signaling protocols:<ul style="list-style-type: none">– USB 2.0 480 Mbps– SuperSpeed USB 5 Gbps– SuperSpeed USB 10 Gbps– Thunderbolt 4 41.25 Gbps– DisplayPort 2.1
Multi-purpose USB Type-C connector (Yoga Pro 7 14AKP10, Yoga Pro 7 14ASP10)	<ul style="list-style-type: none">• Quantity: 2• Maximum power output: 5 V, 3 A• Maximum power input: 20 V, 5 A• Supported signaling protocols:<ul style="list-style-type: none">– USB 2.0 480 Mbps– SuperSpeed USB 5 Gbps– SuperSpeed USB 10 Gbps– USB4 40 Gbps– DisplayPort 2.1
HDMI™ connector	<p>Supported signaling protocols:</p> <ul style="list-style-type: none">• Fixed-rate link (FRL)• Transition minimized differential signaling (TMDS)

Combo audio jack	<ul style="list-style-type: none"> • Diameter: 3.5 mm • Supported plug: <ul style="list-style-type: none"> – 3-pole, TRS – 4-pole, TRRS (CTIA and OMTP)
SD slot*	Supported card types: <ul style="list-style-type: none"> • SD™ • SD High Capacity (SDHC™) • SD Extended Capacity (SDXC™)

Note: Data rates and performance ratings are dependent on connected devices and cables if they are used. USB Type-C connectors that are DisplayPort 2.1 compliant through DisplayPort alternate mode provide maximum output resolution of 7680 x 4320, at 60 Hz frame rate and color depth of 36 bpp (bits per pixel). The actual maximum output resolution is dependent on the connected display device and the cable being used.

Networking

Wi-Fi®	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 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)
3.2 Gen 1	5
USB4 40Gbps	40

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

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

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

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

Relative humidity

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

Chapter 2. Get started with your computer

Your PC and its operating system

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

Your PC comes with Windows 11 pre-installed.

Initial setup of the Windows operating system

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

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

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

Set up facial recognition

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

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

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

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

Windows 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 4. Windows recovery options

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

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 or Lenovo PC Manager.

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

Note:

You can check the battery temperature in Lenovo Vantage.

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

Normal mode

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

Rapid charge mode

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

Table 5. Estimated charge time for batteries in rapid charge mode

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

Note: The estimated charge time assumes that the battery is charged while the PC is in sleep, hibernation, or powered-off state.

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 battery charging mode

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 battery charging mode for the battery.

Overnight battery charging mode 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 battery charging mode ensures safe charging during the night and is beneficial to the long-term health of the battery.

Note: With overnight battery charging mode 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 battery charging mode, it can be enabled in Lenovo Vantage or Lenovo PC Manager.

Recover full battery capacity

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

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

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

Set power button behavior

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

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

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

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 6. 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.

System operation modes

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

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

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

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

Table 7. Operation modes and their recommended usage conditions

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

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

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.

Connect to a network

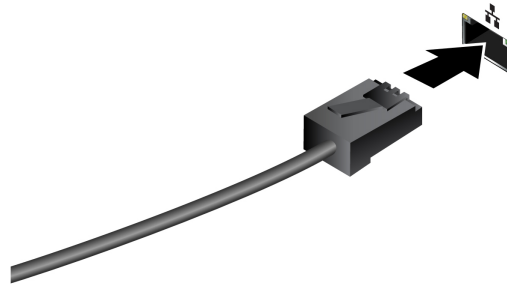
Connect to a Wi-Fi network

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

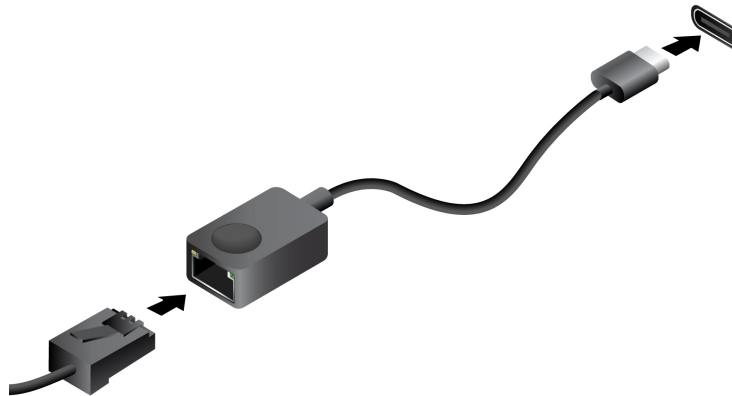
- Step 1. Select the network icon  on the bottom right of your display.
- Step 2. Select an available network, and then select **Connect**.
If you want to be automatically connected to this Wi-Fi network the next time you start your computer, select **Connect automatically** before selecting **Connect**.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

Establish a wired connection

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



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



Unique Lenovo apps

Lenovo Vantage

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

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

Notes:

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


Smart Connect

Smart Connect is an app that can easily pair your PC with your Motorola smartphone and Lenovo tablet. With Smart Connect, you can:

- Access mobile apps on your PC
- Quickly share content between connected devices
- Mirror your phone display or create a virtual phone screen on your PC
- Copy and paste across connected devices


- Use your phone or tablet camera as the PC webcam
- Control your phone or tablet using your PC keyboard and mouse
- Extend or mirror your PC display on the tablet

Note: Smart Connect makes periodic updates to keep improving your experience. Features may be added or modified after updates are installed.


To open Smart Connect, you can type Smart Connect in the Windows search box and then select the matched result. Alternatively, you can also press the hotkey marked with  (F11) as a shortcut.

Lenovo AI Now

Lenovo AI Now is your personal and private AI assistant. It enables you to boost your productivity by building your personal knowledge library, helps you with inspiration, writing and summarizing, and provides troubleshooting and quick settings for your PC.

To open Lenovo AI Now, type Lenovo AI Now in the Windows search box and select the matched result. Alternatively, you can also press the hotkey marked with  as a shortcut.

Notes:

- Lenovo AI Now is not available on all product models. For those models not pre-installed with this app, pressing the hotkey  will open a quick launch panel.
- Lenovo AI Now makes periodic updates to keep improving your experience. Features may be added or modified after updates are installed.

Chapter 3. Explore your computer


Intelligent features

Your computer may be pre-installed with Lenovo Vantage or Lenovo PC Manager. Most features described here can be enabled or disabled in one of these apps. Other features may be enabled in a standalone app.

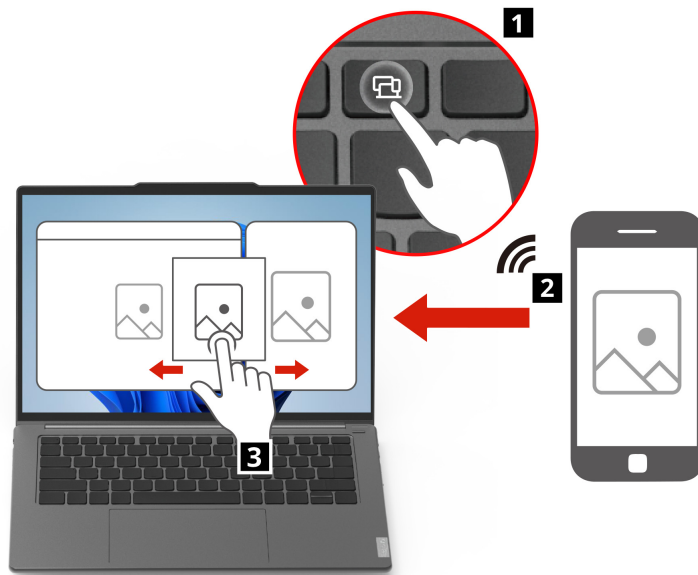
Notes:

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

Smart Share

Your PC supports fast and convenient photo sharing with Android or iOS phones. Pressing the  key on the top row of your keyboard opens the Intel® Unison™ app for a Smart Share experience.

You can follow the instructions on the app to pair your PC with a phone, and then drag and drop photos between the paired PC and phone for editing and sharing.



Smart Modes

During your daily use of the PC, you may wish to enable specific settings to better meet your needs at the moment, but you may find certain setup processes to be complicated or even frustrating.

Your PC provides a Smart Modes feature by categorizing the settings into several pre-defined modes for your convenience. Pressing the **mode** key on the top row of your keyboard opens a Vantage widget, allowing you to select or cancel any desired mode with one click.

Note: To hide the Vantage widget, press **mode** again.



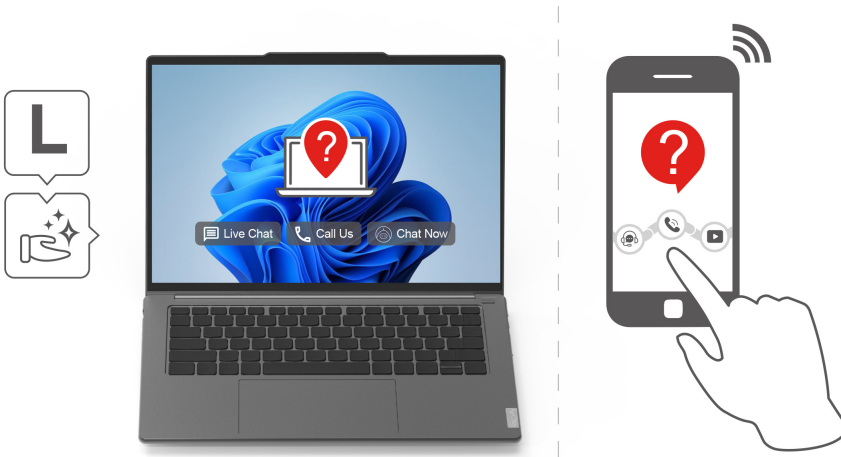
The pre-defined modes are described in the table below.

Table 8. Pre-defined modes for your selection

Mode	Function
Attention Mode	Minimizes distractions by blocking access to pre-set domains and notifications.
Shield mode	Enhances online security and privacy through auto-prompt VPN, privacy alert, and privacy guard features.
Collaboration mode	Improves video effects for virtual meetings to ensure a more immersive collaboration experience.
Wellness mode	Promotes digital health by encouraging regular eye breaks and fostering ergonomic habits.
Power mode	Optimizes energy efficiency by prioritizing performance, battery life, and fan speed.

Smart Care

Whenever you have concerns or doubts about your PC, or encounter any issues during your daily use of the PC, you can get comprehensive help from Lenovo service specialists in the Smart Care section of Lenovo Vantage.



In addition to standard support services such as eTicket and forum, Smart Care provides several options for you to get help from Lenovo.

Table 9. Service options provided by Smart Care

Option	Function
Chat with an agent	Chat with a service specialist to receive immediate help on your questions or concerns about using your PC.
Call Support	Call Lenovo using video or audio, or schedule a time for Lenovo specialists to call you back.
Lena Chat	Talk with the Vantage chatbot to resolve common device issues.

Note: Besides the options listed above, you can also use the Lenovo Smart Care app on your phone to receive equivalent services for your PC.

Eye Care Mode

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

Super Resolution (for selected models)

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

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

Smart Noise Cancelling

Smart Noise Cancelling is a noise reduction feature available on some Lenovo product models. By filtering out input and output noises, Smart Noise Cancelling enhances your audio experience.



Function	Description	Remarks
Microphone noise cancelling	Voice Recognition: Your computer captures multiple voices in a way that reflects their original spatial positions.	<ul style="list-style-type: none"> This function takes effect only when built-in microphones/arrays or 3.5 mm jack wired microphones are used as the input media. To disable this function, select Off.
	Only My Voice: This option requires you to record your voice so that your computer captures this voice only and tries to eliminate other voices. Note: To remove your voice record, select REMOVE MY VOICE .	
	Normal: Your computer focuses on the voice of the person facing it and reduces ambient sounds.	
	Multiple Voices: Your computer captures multiple voices from an expanded range in front of the computer.	
Speaker noise cancelling	Your computer filters out other sounds to play only human voices.	This function is not applicable to scenarios like listening to music and watching videos.

Notes:

- Depending on its hardware, your computer may not support all the functions and options described above.
- You can view and customize this feature under **Device Settings** in Lenovo Vantage or Lenovo PC Manager.

Dolby Atmos

If your PC is preinstalled with Dolby Atmos, you can set or define Dolby profiles in Lenovo Vantage or Lenovo PC Manager.

Dolby Atmos includes a set of fine-tuned audio processing parameters. You can select a profile that best suits your needs and adjust the profile settings if applicable.

Available profiles are described in the table below.

Table 10. Available profiles for Dolby Atmos

Profile	Description
Dynamic	Dolby technology identifies the content type and performs automatic adjustments.
Movie	Virtualized surround sound and clearer dialogues help you attend to every detail of the story.

Table 10. Available profiles for Dolby Atmos (continued)

Profile	Description
Music	Rich, detailed audio optimized for music.
Game	Distinct sound placement makes it easier to locate sounds from any angle.
Voice	Enhances clear and consistent voice quality for virtual meetings and calls.
Custom	More flexibility is available with the audio processing settings. Note: You can create multiple custom profiles to best suit your needs for different scenarios.

Color Management

You may have the impression that sometimes the color display on a PC deviates from the actual situation. To help minimize the deviations and ensure your display presents colors accurately, your PC provides a Color Management function. It allows you to use the Auto mode or to manually select your preferred color display mode in Lenovo Vantage or Lenovo PC Manager.

The available modes are described in the table below.

Table 11. Color display modes

Color display mode	Description
Auto	Automatically switches the color space to display more accurate colors based on the content.
sRGB	Applicable for texts and web pages.
P3	Applicable for videos and photographs.

Interact with your computer

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 12. 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 airplane mode.
⚙️	Opens the Settings app. (Yoga Pro 7 14AKP10, Yoga Pro 7 14ASP10)
mode	Opens or hides Smart Modes. (Yoga Pro 7 14IAH10)
🔒	Locks the screen.
🔗	<ul style="list-style-type: none"> Opens the Smart Connect app. (Yoga Pro 7 14AKP10, Yoga Pro 7 14ASP10) Opens the Intel Unison app for a Smart Share experience. (Yoga Pro 7 14IAH10)
🧮	Opens the Calculator app.
★	Opens the Lenovo AI Now app or a quick launch panel.
🗂️	Opens the Snipping tool. (Windows operating systems)

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.

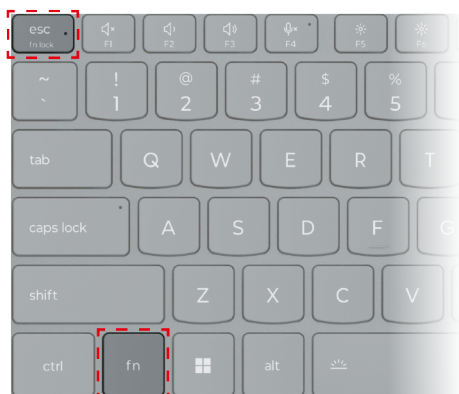


Figure 7. Locations of the fn lock key and the fn key

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

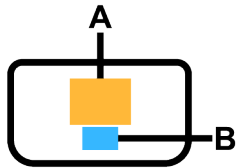


Figure 8. The layout of a dual-function key

Table 13. **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 14. *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 15. 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
+ PrtSc	Takes a full-screen screenshot and saves it to a file

The Copilot key

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

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

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

Touchpad gestures

The touchpad is your PC's built-in pointing device. You can tap and swipe on the touchpad to navigate within the operating system and within apps. In addition, the Windows operating system also supports multi-finger gestures on the touchpad to enhance productivity while interacting with the operating system.

Table 16. Multi-finger touchpad gestures

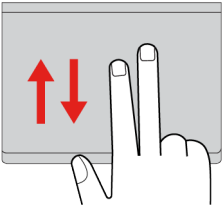
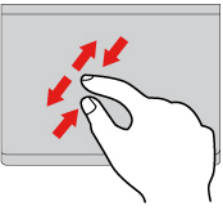
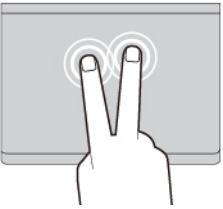
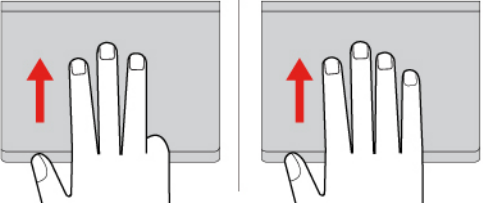
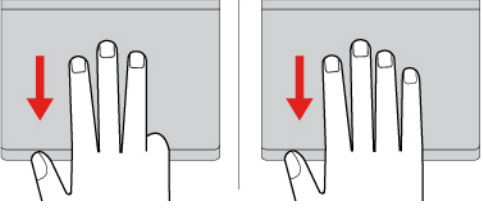
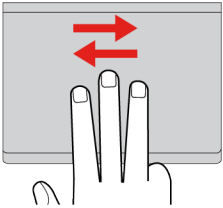
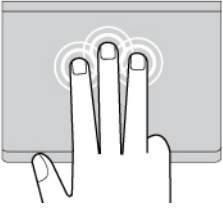
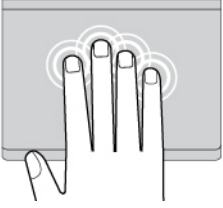
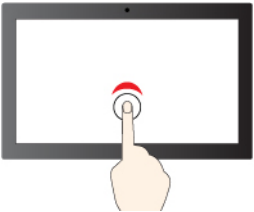

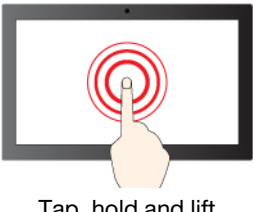
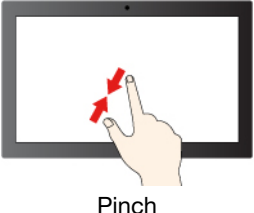
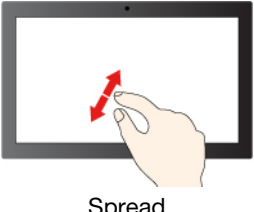
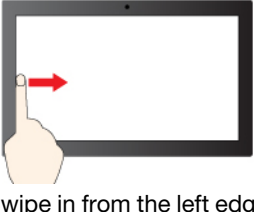
Gesture	Function
<p>Swipe vertically with two fingers</p> 	<p>Scrolls pages</p>
<p>Place two fingers on the touchpad and pinch in or stretch out</p> 	<p>Zooms out / zooms in</p>
<p>Tap two fingers on the touchpad</p> 	<p>Displays the context menu (right-clicking)</p>
<p>Swipe up with three fingers or four fingers</p> 	<p>Shows all open windows</p>
<p>Swipe down with three fingers or four fingers</p> 	<p>Returns to the desktop</p>

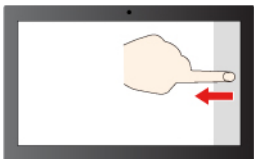
Table 16. Multi-finger touchpad gestures (continued)

Gesture	Function
<p>Swipe left or right with three fingers</p> 	<p>Switches between open apps</p>
<p>Tap three fingers on the touchpad</p> 	<p>Opens Windows Search</p>
<p>Tap four fingers on the touchpad</p> 	<p>Opens Notification Center</p>

Touch operations supported by Windows

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

Touch operation	Used for
 <p>Tap</p>	Opening apps, documents, and other functions on the taskbar or the Start menu
 <p>Tap twice quickly</p>	Opening apps that are pinned on the desktop
 <p>Tap, hold and lift</p>	Opening the context menu
 <p>Pinch</p>	Zooming out
 <p>Spread</p>	Zooming in
 <p>Swipe in from the left edge</p>	Opening the widgets panel

Touch operation	Used for
 <p>Swipe in from the right edge</p>	Opening the notification center

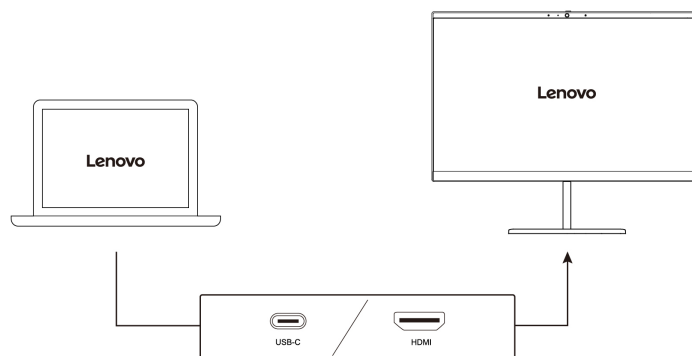
The Windows operating system also supports 3- and 4-finger gestures on the screen and the touchpad. You can set them up in **Settings → Bluetooth & devices**.

Connect to an external display

Connect to a wired display

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

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



Connect to a wireless display

Ensure that:

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



- Step 1. Press Windows key + K.
The computer searches for wireless display devices and audio devices and lists the results.
- Step 2. Select the display you want to connect to, and then follow the on-screen instructions.

Change display settings

- Step 1. Right-click on a blank area on the desktop, and then select **Display settings**.
Your computer shows the **Display** window.
- Step 2. Select the display for which you want to change the settings.

Step 3. Change the display settings as necessary.

Set the display mode




Step 1. Press  or fn + .

Your computer shows a list of display modes, with the current mode highlighted.


Step 2. Select a display mode from the list.

Turn on night light

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

Step 1. Open the quick settings menu by selecting the network, sound, or battery icons (  ) on the far right of the taskbar or by using the keyboard shortcut **Win** + **A**.

Step 2. Select the button for night light to turn it on or off.

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

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

Adjust color temperature

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


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


Step 2. Select **System** → **Display** → **Night light settings**.

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



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

Protect your privacy using the camera switch

The camera switch is a mechanical button that prevents any attempt from capturing your image, thus protecting your privacy. To disable the camera, slide the camera switch to the direction with . When you want to use the camera again, slide the camera switch to the other direction.

If you slide the camera switch to  during a video call, people on the video call will not be able to see you. If you slide the camera switch back to the opposite position, they will be able to see you again.



Note: After you slide the camera switch,  or  is displayed on the screen to indicate that the setting is successful.

The firmware of your PC

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.

Firmware setup utility

Lenovo PCs typically include a 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 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 or Lenovo PC Manager). You can use the Novo button menu to temporarily change the order of boot devices.

There are several ways to open the 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 or F2)

Change settings in firmware setup utility

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

Select boot devices

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

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

You can make a permanent change on boot devices in the 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 setup utility for the change to take effect.

Change hotkey mode

- Step 1. Open the firmware setup utility.
- Step 2. Select **Configuration → Hotkey Mode** and press enter.
- Step 3. Change the setting to **Disabled** or **Enabled**.
- Step 4. Select **Exit → 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 **Configuration → Always On USB** and press enter.
- Step 3. Change the setting to **Disabled** or **Enabled**.
- Step 4. Select **Exit → Exit Saving Changes**.

Enable or disable Flip to Start

When Flip to Start is enabled, you can turn on the computer by flipping open the screen.

- Step 1. Open the firmware setup utility.
- Step 2. Select **Configuration**.
- Step 3. Change the setting for **Flip to Start**.

Note: You may also set Flip to Start in Lenovo Vantage or Lenovo PC Manager.

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
Administrator password	No	You must enter it to start the setup utility.
User password	The administrator 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 administrator password

You set the administrator password to prevent unauthorized access to the firmware setup utility.

Attention: If you forget the administrator 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 → Set Administrator 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 **Exit → Exit Saving Changes**.

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

Change or remove administrator password

Only the administrator can change or remove the administrator password.

- Step 1. Open the firmware setup utility using the administrator password.
- Step 2. Select **Security → Set Administrator 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 **Exit → Exit Saving Changes**.

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

Set user password

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

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

- Step 1. Open the firmware setup utility using the administrator password.
- Step 2. Select **Security → 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 administrator password.
- Step 4. Enter the password again and press enter.
- Step 5. Select **Exit → Exit Saving Changes**.

Enable power-on password

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

- Step 1. Open the firmware setup utility.
- Step 2. Select **Security → Power on Password** and press enter.

Note: The administrator password must be set in advance.
- Step 3. Change the setting to **Enabled**.
- Step 4. Select **Exit → Exit Saving Changes**.

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

Set hard disk password

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

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

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

Note: If you start the setup utility using the user password, you cannot set hard disk password.
- Step 3. Follow on-screen instructions to set both master and user passwords.

Note: The master and user hard disk passwords must be set at the same time.
- Step 4. Select **Exit → 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**.
- Step 3. Change or remove the hard disk password.

To change or remove 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 user password, select **Change User Password** and press enter.

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

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

Chapter 4. Help and support

Frequently asked questions

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

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

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 or disabled in the setup utility program for the PC's firmware or the Lenovo Vantage app.

What should I do if I cannot connect to the network

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.

What should I do with blue screen errors

Blue screen errors can occur if a serious problem causes Windows to shut down or restart unexpectedly. To fix the errors, you can take the following steps to use the Blue Screen Troubleshooter in the Get Help app:

- Step 1. Type **Get Help** in the Windows search box and then press Enter.
- Step 2. In the search box of the Get Help app, type **Troubleshoot BSOD error** and then press Enter.
- Step 3. Follow the guided walkthrough.

What should I do if the screen flickers

Screen flickering in Windows is usually caused by a display driver issue or incompatible app. You can first determine whether the problem is caused by a display driver issue or an incompatible app by checking if Task Manager flickers. To open Task Manager, press Ctrl+Alt+Delete or Ctrl+Shift+Esc.

1. If Task Manager also flickers, the display driver is probably causing the problem. In this scenario, roll back your display driver:
 - a. Type **device manager** in the Windows search box and then press Enter.
 - b. Under **Display adapters**, select a display adapter.
 - c. Select the **Driver** tab and then select **Roll Back Driver**.
 - d. Click **Yes** to roll back your display driver and restart your computer.

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.

2. If Task Manager does not flicker, an incompatible app is probably causing the problem. In this scenario, update or uninstall an incompatible app:
 - a. Check if any app needs to be updated from the Microsoft Store or the manufacturer's site. If yes, update the app.
 - b. If step a does not work, uninstall the app:
 - 1) Select the Start menu on the taskbar and then select **Settings**.
 - 2) Select **Apps → Installed apps**.
 - 3) Scroll down the list, find the app you want to uninstall, and then select **Uninstall**.
 - 4) In the popup window, select **Uninstall**.
 - 5) If you're asked to confirm your choice, select **Yes**.

Note: Check in the recently used app if screen flickering usually occurs in a specific app. If yes, prioritize uninstalling that app.

After uninstalling an app, restart your computer and check if the screen flickering issue is resolved. If the issue retains, uninstall each app one by one until the issue is resolved.

What should I do if my touchpad 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 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. Click 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. Click 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 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:

1. Verify your audio settings:
 - a. Go to **Start → Settings → System → Sound**.
 - b. Verify that the sound output and input devices are selected correctly.

Note: If you are using an external audio device, ensure that the device is properly connected to your computer.
 - c. Verify that the volume is properly set and your computer is not muted.
2. Run the audio troubleshooter:
 - a. Go to **Start → Settings → System → Sound**.
 - b. Under **Advanced**, find **Troubleshoot common sound problems**, and click **Output devices** or **Input devices** 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 camera can't be launched or found

If your camera can't be launched or found, try the following solutions one by one to troubleshoot and fix the issue:

1. 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.
2. If you are using an integrated camera, it might be disabled. To enable your camera:
 - a. Open the **Start** menu, and click **Settings → Bluetooth & devices → Camera**.
 - b. Check if the camera is connected or disabled. If it is disabled, enable the camera.
3. The apps you are using might not have access to your camera. To authorize access to your camera:
 - a. Open the **Start** menu, and select **Settings → Privacy & security → Camera**.
 - b. Turn on **Camera access** switch and **Let apps access your camera** switch.
4. Your antivirus software settings might block access to your camera. Go to your antivirus software settings and unblock the access.
5. Your camera driver might be uninstalled or out-of-date. To update the camera driver:
 - a. Type **device manager** in the Windows search box and then press Enter.
 - b. Click **Device Manager** from the list of results. The Device Manager window opens.
 - c. Click arrow icon > next to **Camera** to expand the section.
 - d. Right-click the camera that you would like to update.
 - e. Select **Update driver** and follow the on-screen instructions.
6. If your camera still does not work, run the automated camera troubleshooter in the Get Help app. To open the Get help app:
 - a. Open the **Start** menu, and click **Settings → Privacy & security → Camera**.

- b. Scroll down to the bottom. Click **Get help** and follow the on-screen instructions.

What should I do if my keyboard does not work

If your keyboard does not work or types wrong characters, try the following solutions to troubleshoot and fix the issue:

1. Ensure that the keyboard is well connected.
 - If you are using a wired keyboard, check if it is connected to your computer correctly or try to connect the keyboard to another compatible connector on your computer.
 - If you are using a wireless keyboard, ensure that your keyboard is powered on. Check if the dongle is connected to your computer correctly or the Bluetooth connection with your computer is established.
2. Ensure that the keyboard layout settings are correct. Take the following steps:
 - a. Go to **Settings → Time & language → Language & region**.
 - b. Under **Preferred languages**, click on the three horizontal dots next to your primary language preference and select **Language options**.
 - c. Under **Installed keyboards**, check the keyboard layout and add the corresponding keyboard if you're not using the right one.
3. Ensure that the keyboard is in good status. Take the following steps:
 - a. Type **device manager** in the Windows search box and then press Enter.
 - b. Click **Device Manager** from the list of results. The Device Manager window opens.
 - c. Click arrow icon > next to **Keyboard** to expand the section.
 - d. Double-click the keyboard that is not working and check the status.
 - e. If it is not working properly, select **Driver** from the tabs on the top and click **Uninstall device** to uninstall the device.
 - f. Apply Windows Update to install the latest driver automatically.
4. Ensure that the sticky keys and filter keys are disabled. Take the following steps:
 - a. Open the **Start** menu, and click **Settings → Accessibility → Keyboard**.
 - b. Disable **Sticky keys** switch and **Filter keys** switch.
5. Restart your computer.

What should I do if my keyboard backlight does not work

If your keyboard backlight does not work, try the following solutions to troubleshoot and fix the issue:

1. Adjust the keyboard backlight by pressing the key combination fn + Space.
2. Open the firmware setup utility and press the key combination fn + Space to check if the keyboard backlight works. If the backlight works in the firmware setup utility, update the UEFI/BIOS to the latest version.
3. Update the keyboard driver:
 - a. Type **Device Manager** in the Windows search box and then press Enter.
 - b. Click the arrow icon next to **Keyboards** to expand the section.
 - c. Right-click the keyboard you would like to update.
 - d. Select **Update driver** and follow the on-screen instructions.

How to reset my Windows password

If you forget your Windows password and want to reset one, you can take the following actions.

- Do the following if you have set security questions.
 1. Click **Reset password** on the sign-in screen after you have entered an incorrect password.

Note: Contact your administrator if you do not see an option to reset your password.
 2. Follow on-screen instructions to reset a new password.
- Do the following if you have created a password reset disk.
 1. Connect a password reset disk to a USB-compatible connector on your computer.
 2. Follow on-screen instructions to reset your password.
- Do the following if you have an administrator account.
 1. Sign in to your computer with the local administrator account.
 2. Follow on-screen instructions to reset your password.

What should I do if the built-in battery cannot be charged

1. Ensure that you use the correct power adapter with the proper wattage. Low-wattage power adapters might cause battery charging problem.
2. Exit the heavy-loading programs and charge the computer again. To check the loads of programs in process, press ctrl + alt + delete and then select **Task Manager → Processes**.
3. Move your computer to a cool and well-ventilated spot. Battery charging may also be affected by its temperature.
4. Update the battery driver or UEFI/BIOS to the latest version. To proceed with a driver update or a BIOS update, select **System Update** in the Lenovo Vantage app. It will automatically check for any updates you may need.

Self-help resources

Use the following self-help resources to learn more about the computer and troubleshoot problems.

Resources	How to access?
Troubleshooting and frequently asked questions	<ul style="list-style-type: none"> • https://www.lenovo.com/tips • https://forums.lenovo.com
Accessibility information	https://www.lenovo.com/accessibility
Reset or restore Windows	<ul style="list-style-type: none"> • Use Lenovo recovery options. <ol style="list-style-type: none"> 1. Go to https://support.lenovo.com/HowToCreateLenovoRecovery. 2. Follow the on-screen instructions. • Use Windows recovery options. <ol style="list-style-type: none"> 1. Go to https://pcsupport.lenovo.com. 2. Detect your computer or manually select your computer model. 3. Click Diagnostics → Operating System Diagnostics and then follow the on-screen instructions.

Resources	How to access?
<p>Use Lenovo Vantage or Lenovo PC Manager to:</p> <ul style="list-style-type: none"> • Download and install the latest drivers and firmware. • Configure hardware settings • Diagnose computer hardware problems. • Check the computer warranty status. 	Use Windows Search.
<p>Product documentation:</p> <ul style="list-style-type: none"> • Generic Safety and Compliance Notices • <i>Safety and Warranty Guide</i> • <i>Setup Guide</i> • This <i>User Guide</i> • <i>Regulatory Notice</i> 	<ol style="list-style-type: none"> 1. Go to https://support.lenovo.com. 2. Detect your computer or select computer model manually. 3. Select Documentation and filter out the documentation you want.
<p>Lenovo Support Web site with the latest support information of the following:</p> <ul style="list-style-type: none"> • Drivers and software • Diagnostic solutions • Product and service warranty • Product and parts details • Knowledge base and frequently asked questions 	Visit https://support.lenovo.com
Windows help information	<ul style="list-style-type: none"> • Use Get Help or Tips. • Use Windows Search. • Microsoft support Web site: https://support.microsoft.com

What is a CRU?

Customer replaceable units (CRUs) are parts that can be upgraded or replaced by the customer. A Lenovo computer may contain the following types of CRUs:

Self-service CRU

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

Optional-service CRU

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

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* at https://www.lenovo.com/warranty/llw_02.

CRUs for your product model

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

Part	Self-service CRU	Optional-service CRU
Power cord	X	
ac power adapter	X	

Notes:

- 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/partnerlocator> for more information.

Call Lenovo

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

Before you contact Lenovo

Record product information and problem details before you contact Lenovo.

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

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

Lenovo Customer Support Center

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

Telephone numbers

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

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 nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI/BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

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

Purchase additional services

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

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

Appendix A. Notices and trademarks

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