





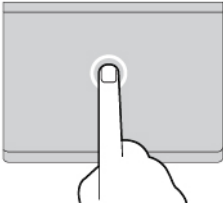
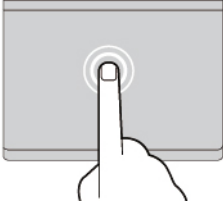
Item	Description	Item	Description
	Left-click zone		Right-click zone

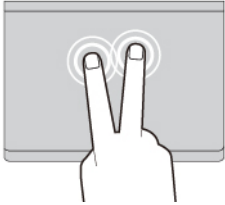
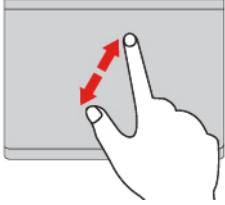
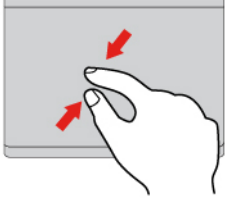
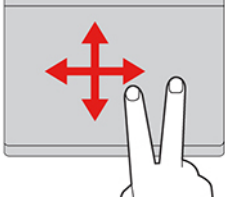
Notes:

- Some gestures are not available in the following cases:
 - if the last action was done from the TrackPoint pointing device.
 - when you are using certain apps.
 - when you are using two or more fingers and your fingers are too close.
- Trackpad might be insensitive in the following cases:
 - when you position your fingers too close to the edge of trackpad .
 - when you touch the trackpad with wet fingers.
 - if the trackpad surface is stained with water or oil. Turn off the computer first. Then, gently wipe the trackpad surface with a soft and lint-free cloth that is moistened with lukewarm water or computer cleaner.

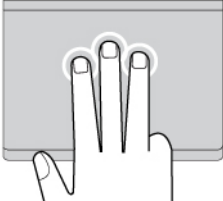
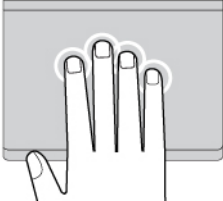
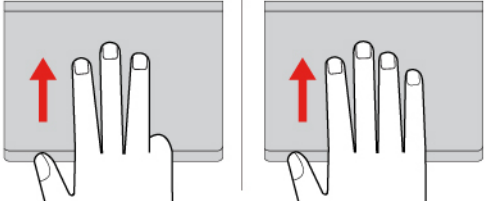
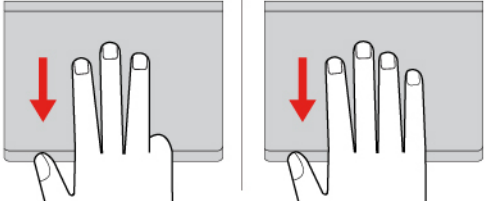
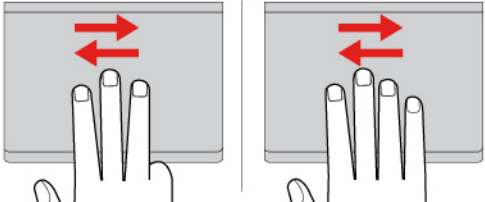
The following tables introduce default trackpad touch gestures.

One and two-finger touch gestures

To do this	Gesture
Select an item.	<p>One finger taps once.</p> 
Open an item.	<p>One finger taps twice.</p> 

To do this	Gesture
Display a shortcut menu.	<p data-bbox="987 226 1304 258">Two fingers tap twice quickly.</p> 
Zoom in.	<p data-bbox="1019 516 1271 548">Two fingers stretch out.</p> 
Zoom out.	<p data-bbox="1036 810 1255 842">Two fingers pinch in.</p> 
Scroll through items.	<p data-bbox="922 1104 1369 1136">Two fingers slide horizontally or vertically.</p> 

Three- and four-finger touch gestures

To do this	Gesture
Open search window	<p>Three fingers tap once.</p> 
Open notification center.	<p>Four fingers tap once.</p> 
Show all windows.	<p>Three- or four-finger swipes up</p> 
Show the desktop.	<p>Three- or four-finger swipes down.</p> 
Switch between open apps or windows.	<p>Three- or four-finger swipes left or right.</p> 

To change other settings, such as cursor speed, touch gesture, and trackpad sensitivity, do the following:

1. Type touchpad in the Windows search box and then press Enter.
2. Follow the on-screen instructions to change the settings as you prefer.


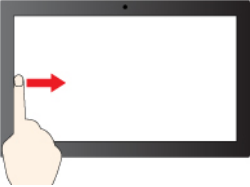
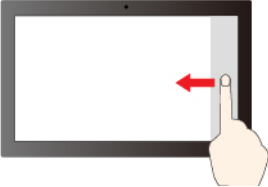
Use the touch screen (for selected models)

For computers with a touch-enabled screen, you can touch the screen directly with your fingers and interact with computer in a simple way. The following sections introduce frequently used touch gestures.

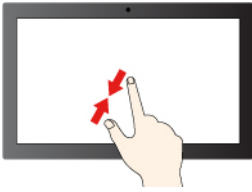
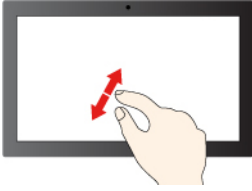
Notes:

- Some gestures might not be available when you are using certain apps.
- Do not use gloved fingers or incompatible pens for input on the screen. Otherwise, the touch screen might be not sensitive or does not respond.
- The touch screen is delicate. Do not apply pressure on the screen or touch the screen with anything hard or sharp. Otherwise, the touch panel might malfunction or get damaged.

One finger touch gesture

To do this	Gesture
Open a shortcut menu.	Tap and hold. 
Open the widget panel.	Swipe from the left. 
Open notification center.	Swipe from the right. 

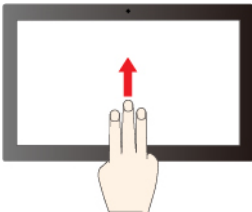
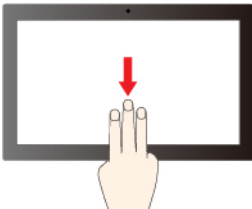
Two-finger touch gesture

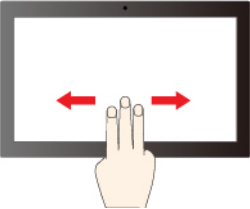
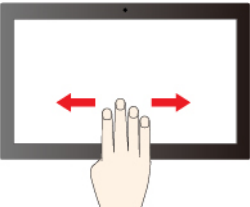
To do this	Gesture
Zoom out.	Move two fingers towards. 
Zoom in.	Spread two fingers apart. 

Three- and four-finger touch gesture

To enable three- and four-finger touch gestures:

1. Type touch gesture in the Windows search box and then press Enter.
2. Turn on the Three- and four-finger touch gestures switch.

To do this	Gesture
Show all open windows.	Swipe with three fingers up. 
Show the desktop.	Swipe with three fingers down. 

To do this	Gesture
Switch apps.	Swipe with three fingers to the left or right. 
Switch desktops.	Swipe with four fingers to the left or right. 

If the touch screen is not sensitive or does not respond, do the following:

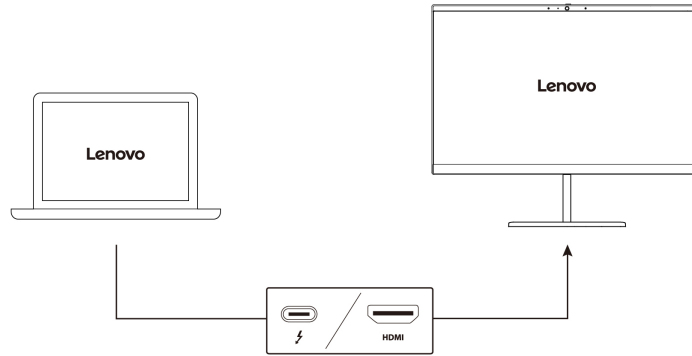
1. Turn off the computer.
2. Use a dry, soft, and lint-free cloth or a piece of absorbent cotton to remove fingerprints or dust from the touch screen. Do not apply solvents to the cloth.
3. Restart the computer and check if the touch screen works normally.
4. If the touch screen cannot work normally, type `Windows Update` in the Windows search box and then press `Enter`.
5. Follow the on-screen instructions to update Windows.
6. After updating Windows, check if the touch screen works normally.
7. If the touch screen still cannot work normally, the touch screen might get damaged. You can call Lenovo Customer Support Center to get further help.

Connect to an external display

Connect your computer to a projector or a monitor to give presentations or expand your workspace.

Connect to a wired display

If your computer cannot detect the external display, right-click a blank area on the desktop and select display settings. Then follow the on-screen instructions to detect the external display.



Supported resolution

The following table lists the supported maximum resolution of the external display.

Connect the external display to	Supported resolution
USB-C connector (Thunderbolt 4)	Up to 5K / 60 Hz
HDMI™ connector	Up to 4K / 60 Hz

Note: The refresh rate higher than 60 Hz can also be supported. If you set the refresh rate higher than 60 Hz, the maximum resolution might be limited.

Connect to a wireless display

To use a wireless display, ensure that both your computer and the external display support the Miracast® feature.

Press Windows logo key + K and then select a wireless display to connect with.

Set the display mode

Press F7 or Fn + F7 and then select a display mode of your preference.

Change display settings

1. Right-click a blank area on the desktop and select display settings.
2. Select the display that you want to configure and change display settings of your preference.

You can change the settings for both the computer display and the external display. For example, you can define which one is the main display and which one is the secondary display. You also can change the resolution and orientation.

Get to know convertible multi-modes

The computer display can be opened up to an angle of 360 degrees. Rotate the computer display to switch among different convertible multi-modes for different purposes.

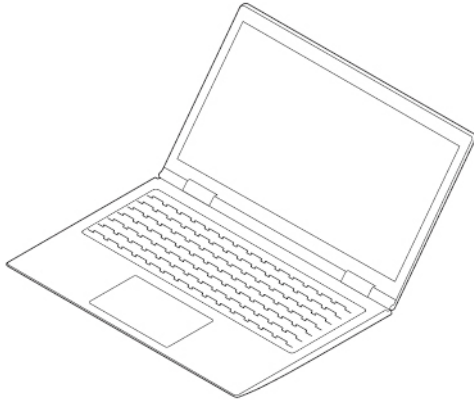
Notes:

- Do not rotate the display with too much force, or apply too much force to the upper-right or upper-left corner of the display. Otherwise, the computer display or hinges might get damaged.

- The keyboard and the pointing device are automatically disabled in the stand mode, tent mode, and tablet mode. Use the touch screen to control your computer instead. The keyboard and the pointing device will be enabled again automatically when you switch from other modes to notebook mode.

Mode	Recommended scenario
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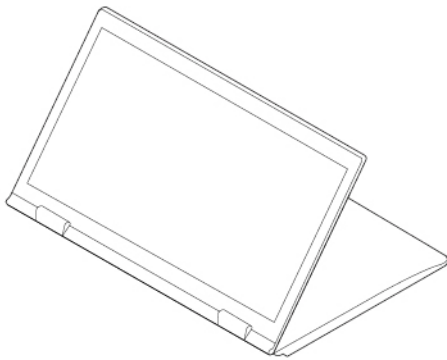
Notebook mode



Enter text.

Use the trackpad and the pointing device.

Stand mode

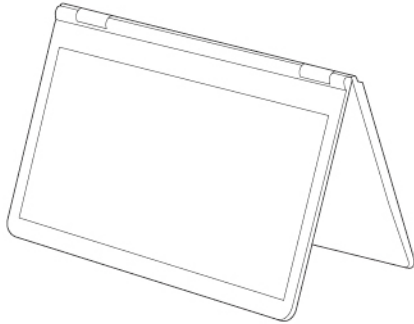


Have a video call.

Give a presentation.

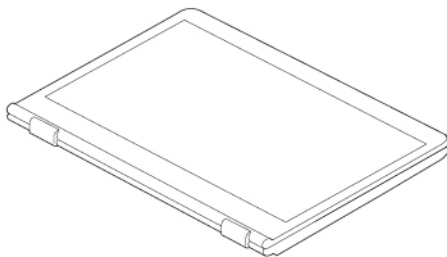
Mode	Recommended scenario
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Tent mode



Watch a video.
View a slide show.

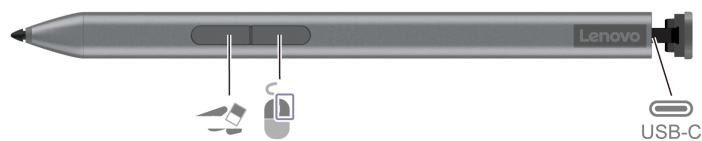
Tablet mode






Write and draw.
Play touch-enabled games.

Use Lenovo Slim Pen (for selected models)

The New Slim Pen (hereafter referred to as the pen) enables a more precise and easier way of writing and sketching. It attaches magnetically to your computer.



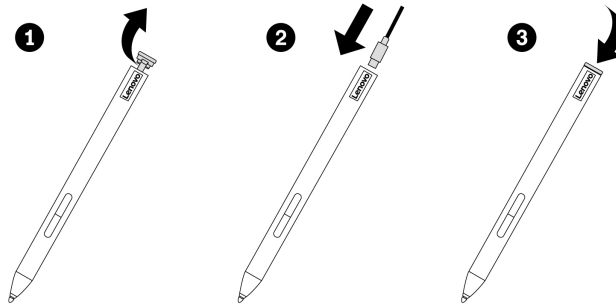
Item	Description	Item	Description
	Eraser button		Click button
	USB-C connector		

Notes:

- The default function of each barrel button might vary in different apps.
- To customize the barrel button functions, use Lenovo Pen Settings. You can also check the battery life on your pen in Lenovo Pen Settings. If Lenovo Pen Settings is not installed on your computer, download and install the latest WinTab driver from <https://support.lenovo.com> or from Microsoft Store.
- To purchase the pen, go to <https://www.lenovo.com/accessories>.

Charge the pen

1. Remove the pen cap in the direction as shown.
2. Connect the pen to a charger with a USB-C cable.
3. Install the pen cap back on the pen after charging.

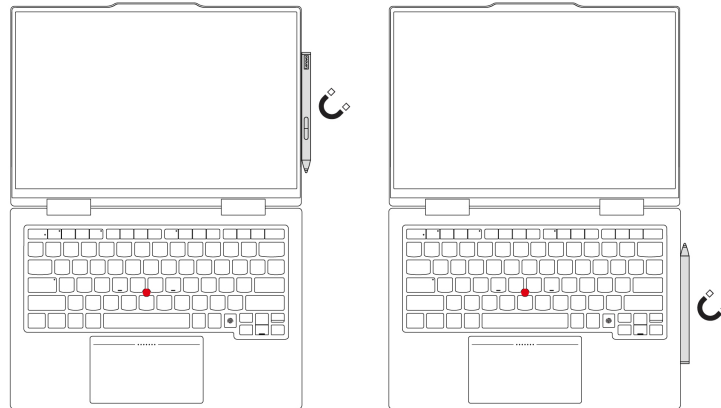


Place the pen

Attach the pen to the magnetic side of your computer. Depending on different scenarios, the pen should be attached to different magnetic sides as shown.

- Attach the pen to the right side of the display for temporal using.
- Attach the pen to the right side of the body for carrying.

Note: Ensure that the pen tip is oriented the direction as shown when attaching it to the computer. Otherwise, the pen may drop.



Maintenance tips

- Do not attach the pen to other areas on your computer even it can be magnetically attached. Otherwise, the pen and your computer might be broken.
- The pen is not waterproof. Keep the pen away from water and excessive moisture.
- If possible, place your pen in a well-ventilated and dry area without direct exposure to sunshine.
- Do not use or store the pen in a place where excessive changes in temperature might occur such as in a car.
- The pen contains pressure sensors. Apply an appropriate amount of pressure when writing on the screen. Do not subject the pen to shock or vibration.

Chapter 3. Explore your computer

Lenovo apps

This section provides introduction to Lenovo apps.

Lenovo Commercial Vantage

The Lenovo Commercial Vantage app (hereafter referred to as Vantage app) is a customized one-stop solution to help you maintain your computer with automated updates and fixes, configure hardware settings, and get personalized support.

To access the Vantage app, type `Lenovo Commercial Vantage` in the Windows search box.

Notes:

- The available features vary depending on the computer model.
- The Vantage app makes periodic updates of the features to keep improving your experience with your computer. The description of features might be different from that on your actual user interface. Ensure that you use the latest version of Vantage app, and apply Windows Update to get the latest updates.

The Vantage app enables you to:

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware, and driver updates to keep your computer up-to-date.
- Monitor your computer health, and secure your computer against outside threats.
- Scan your computer hardware and diagnose hardware problems.
- Look up warranty status (online).
- Access *User Guide* and helpful articles.
- Temporarily disable the keyboard, screen, trackpad, and TrackPoint pointing device for cleaning.
- Control settings for smart features including noise suppression and presence detection.

Lenovo View

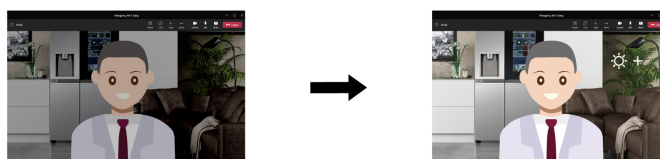
Lenovo View is an app that enhances camera quality and provides collaboration features for some mainstream video call apps.

Access Lenovo View

Type `Lenovo View` in the Windows search box and then press Enter.

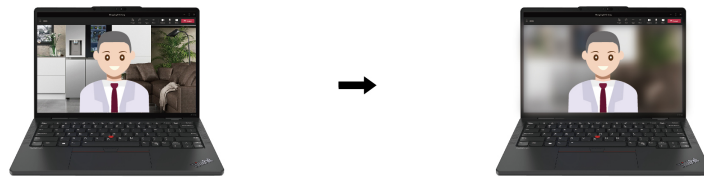
Explore key features

- **Video Enhancer:** Adjust relevant camera parameters (light, intensity, color) and reduce noise to improve your video call experience. In low light, automatically improve video brightness and colors.

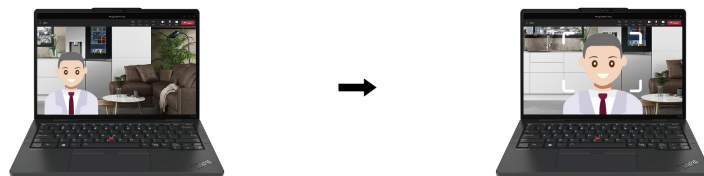


- **Collaboration**

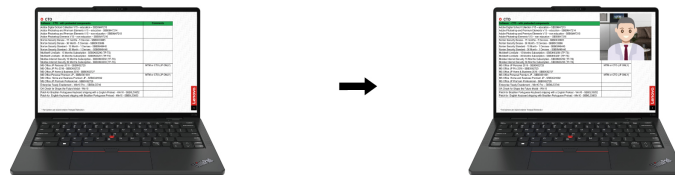
- **Background Removal:** Conceal the background during a video call to keep the focus on you.



- **Auto-framing:** Automatically keep your face centered in the video call when you move around.

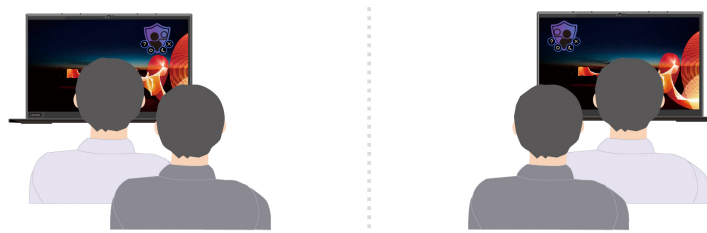


- **Virtual presenter:** Overlay your face on any materials you want to present like a presentation.

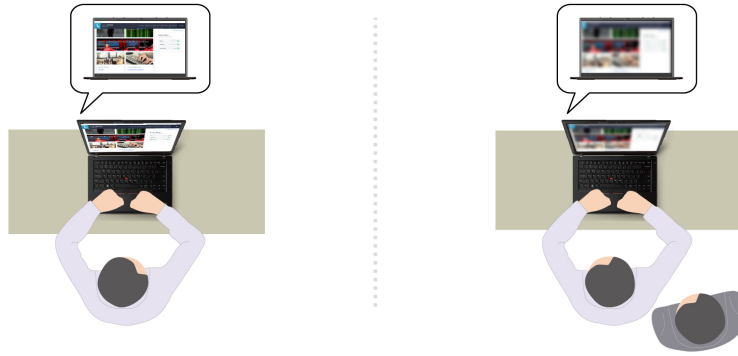


- **Privacy**

- **Privacy Alert:** An alert icon appears on your computer screen when a shoulder surfer appears behind you.



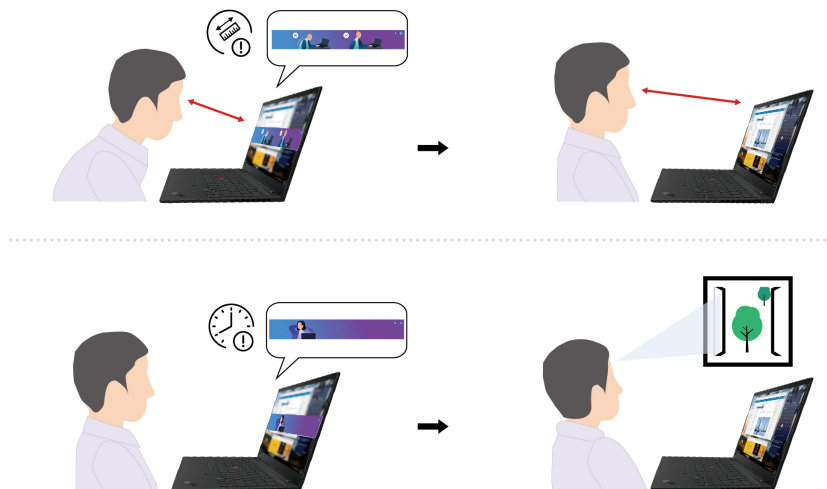
- **Privacy Guard:** Your screen becomes blurred when a shoulder surfer appears behind you.



Note: For ePrivacy displays, the Privacy Guard function will be enabled automatically when a shoulder surfer appears behind you. Press Alt+F2 to cancel the blur.

- **Wellness**

- **Posture Warning:** Remind you to adjust your posture when you hunch toward the screen.
- **Eye Wellness:** Remind you to look away from the screen and relax your eyes for 20 seconds every 20 minutes.



Notes:

- The available features vary depending on the computer model.
- The features only work when camera shutter is open.
- Some features might not be able to be used at the same time.
- The Lenovo View app periodically updates features to improve your camera and video call experience. The feature description might be different from that on your actual user interface.

TrackPoint Quick Menu

Launch the TrackPoint Quick Menu

Double-tap the TrackPoint pointing stick to launch the TrackPoint Quick Menu. You can also set single-tapping as the way to launch in OS settings. To change the settings, do the following:


1. Click the flyout ⓘ and click **ADVANCED SETTINGS**.

2. Select **Single-tapping** under **TrackPoint Quick Menu Launch**.


The TrackPoint Quick Menu is enabled by default. Press Fn+G to disable or enable the double-tapping gesture. When disabled, it cannot be launched by double-tapping or single-tapping the TrackPoint pointing stick.



Use the TrackPoint Quick Menu

You can click the edit button  to rearrange the features in the preview panel, or drag and drop the features on the right to the preview panel to customize your quick menu.

- **Camera**

You can adjust the brightness and contrast of the camera, and restore the settings to default by tapping the reset button .

- **Microphone**

You can mute your computer, and adjust the sound effect of your microphone by selecting the following modes:

- Center mode: Capture the speaker's voice.
- Spatial mode: Capture the speaker's voice and the ambience.

Note: When internal microphone is not supported by Dolby or the Dolby driver is disabled, an input device list will be displayed instead. The list provides options and one volume bar to test your microphone.

- **Voice typing**

You can convert the speech to text in the text box. Click **START VOICE TYPING** to invoke the text box.

- **Battery**

You can extend the battery lifespan and health by setting the charging threshold below 100%.

To set the threshold, enable the feature and click **ADJUST THRESHOLD**. Then set the charge threshold in the Vantage app.

- **Audio playback**

You can select the output device of your preference and set the volume of your selected channel or mute it.

- **Noise suppression**

You can suppress your own background noise and the noise from other meeting participants.

- Off: Disable noise suppression.
- Low: Suppress low-level background noise.
- High: Suppress all non-speech background noise.

Note: The feature does not work when Dolby Voice is off. Click the link in NOISE SUPPRESSION to help you enable it.

- **Enable Haptic Touchpad button area**

You can enable or disable the TrackPoint buttons. When the Haptic Touchpad button area is enabled, it works as the TrackPoint buttons corresponding to the left and right buttons on a traditional mouse. When the Haptic Touchpad button area is disabled, it becomes part of the Haptic Touchpad. You can also click **ADVANCED SETTINGS** to enter OS settings to customize your Touchpad features.

- **Quick Clean**

You can temporarily disable the keyboard, screen, trackpad, and TrackPoint pointing device to clean your computer.

Notes:

- The features may vary due to periodic updates. For details of the version installed on your computer, click the flyout ⓘ at the top-right corner of the page and click **LEARN MORE**.

Intelligent Cooling

The Intelligent Cooling feature helps you adjust power consumption, fan speed, computer temperature, and performance.

You can press F8 or do the following to switch among preferred modes:

1. Right-click the battery icon in the task bar to access power and sleep settings.
2. Locate the Power section and select a preferred mode.

Mode	Recommended scenario
Best power efficiency	<ul style="list-style-type: none"> • You want the computer to be quieter and cooler. • You want to maximize the battery life.
Balanced	<ul style="list-style-type: none"> • You plan to frequently switch between different computer tasks over a period time. • You prefer to balance device performance with temperature and fan noise.
Best performance	<ul style="list-style-type: none"> • You want the computer to achieve the best performance. • Your computer is connected to ac power adapter. • Louder fan noise and higher temperature are acceptable to you. <p>Note: Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for 10 seconds or longer.</p>

Note: Balanced mode is the default setting in both ac and dc power mode.

Manage power

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

Check the battery status

Go to **Settings** → **System** to check the battery status. For more details about your battery, refer to the Vantage app.

Charge the computer

Use ac power

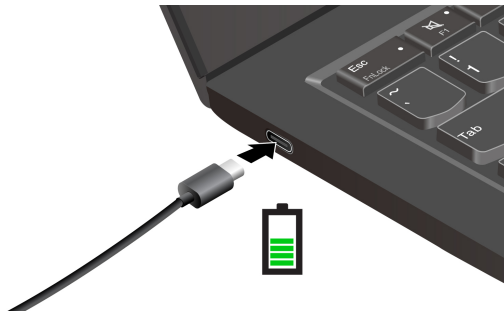
Power source of the ac power adapter:

- Power: 45 W or 65 W
- Sine-wave input at 50 Hz to 60 Hz
- Input rating of the ac power adapter: 100 V to 240 V ac, 50 Hz to 60 Hz
- Output rating of the ac power adapter: 20 V dc, 2.25 A or 3.25 A

When the battery power is low, charge your battery by connecting your computer to ac power with the supplied power adapter. The 65 W ac power adapter supports the rapid charge function, the battery is 80% charged in about one hour when the computer is turned off. The actual charging time depends on the battery size, the physical environment, and whether you are using the computer.

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: Some models may not ship with ac adapters or power cords. Use only the certified adapters and power cords provided by Lenovo that comply with the requirements of relevant national standards to charge the product. It is recommended to use the Lenovo qualified adapters. You can refer to <https://www.lenovo.com/us/en/compliance/eu-doc>.



Notes: To maximize the life of the battery:

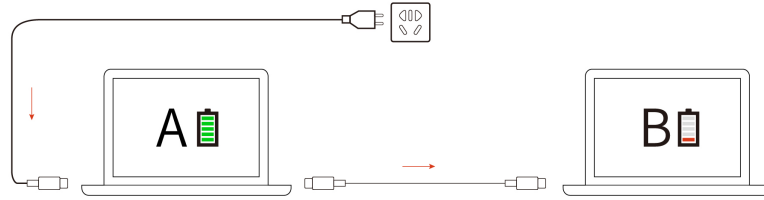
- Use the battery until the charge is depleted and recharge the battery completely before using it. Once the battery is fully charged, it must discharge to 94% or lower before it will be allowed to recharge again.
- Keep the battery from full charge when it is not in heavy use. For more information, refer to the **Battery settings** tab in the power section of the Vantage app.
- The battery may optimize its full charge capacity based on your usage. After prolonged periods of limited use, full battery capacity may not be available until you discharge to as low as 20% and recharge completely. For more information, refer to the power section of the Vantage app.

Use P-to-P 2.0 (Peer to Peer 2.0) charging function

Both USB-C connectors (Thunderbolt 4) on the computer feature the Lenovo-unique P-to-P 2.0 charging function. To use the function, ensure that **Always On USB** and **Charge in Battery Mode** are enabled in UEFI BIOS of your computers, so that the function works even when the computers are off or in hibernation mode.

To enable **Always On USB** and **Charge in Battery Mode**:

1. Press F1 to enter the UEFI BIOS menu.
2. Click **Config** → **USB**, and then to enable **Always On USB** and **Charge in Battery Mode**.



Note: The actual charging speed of your computer depends on many factors, such as the remaining battery power of the computers, the wattage of the ac power adapter, and whether you are using the computers.

Change the power settings

For ENERGY STAR® compliant computers, the following power plan takes effect by default when your computer is on ac power and has been idle for a specified duration:

For models with Windows 10

- Turn off the display: After 10 minutes
- Put the computer to sleep: After 10 minutes

For models with Windows 11

- Turn off the display: After 5 minutes
- Put the computer to sleep: After 5 minutes

To reset the power plan:

1. Go to **Control Panel** and view by Large icons or Small icons.
2. Click **Power Options**.
3. Choose or customize a power plan of your preference.

To reset the power button function:

1. Go to **Control Panel** and view by Large icons or Small icons.
2. Click **Power Options**, and then click **Choose what the power buttons do** on the left pane.
3. Change the settings as you prefer.

Enable Flip to Start

Your computer supports Flip to Start feature. It is disabled by default. If you enable this feature, the computer will start up automatically without pressing power on button when you open the lid.

To enable Flip to Start feature:

1. Open the Vantage app, and then click **Device** → **Power** → **Power settings**.
2. Turn on the **Flip to start** toggle to enable the feature.

If the Vantage app is uninstalled, you can enable this feature in UEFI BIOS menu:

1. Restart the computer. When the logo is displayed, press F1 to enter the UEFI BIOS menu.

2. Select **Config** → **Power**.
3. Turn on the **Flip to start** toggle to enable the feature.

Transfer data

Quickly share your files using the built-in Bluetooth or NFC technology among devices with the same features.

Connect to a Bluetooth device

You can connect all types of Bluetooth-enabled devices to your computer, such as a keyboard, a mouse, a smartphone, or speakers. To ensure successful connection, place the devices at most 10 meters (33 feet) from the computer.

Set up an NFC connection

If your computer supports NFC, you will see an NFC mark or label  around the trackpad area.

To turn on NFC:

1. Type **Airplane mode** in the Windows search box and then press **Enter**.
2. Ensure that the **Airplane mode** is off and turn on the **NFC** function.

By using NFC, you can simply tap and connect your computer and another NFC-enabled device over a few centimeters or inches. To pair with an NFC card or smartphone:



Note: Ensure that the NFC card is in NFC Data Exchange Format (NDEF), otherwise the card cannot be detected.

Accessories

This section provides instructions on how to use hardware accessories to expand your computer functionalities.

Purchase accessories

Lenovo has a number of hardware accessories and upgrades to help expand the functionalities of your computer. Options include memory modules, storage devices, network cards, port replicators or docking stations, batteries, power adapters, keyboards, mice, and more.

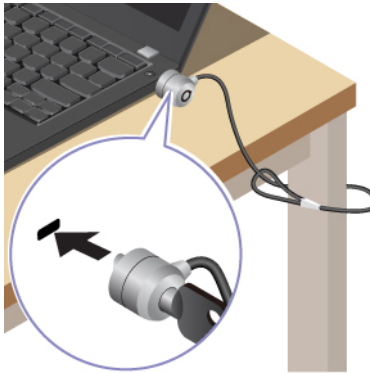
To shop at Lenovo, go to <https://www.lenovo.com/accessories>.

Chapter 4. Secure your computer and information

Lock the computer

Lock your computer to a desk, table, or other fixtures through a compatible security cable lock.

Note: The slot supports cable locks that conform to the Kensington NanoSaver® lock standards using Cleat™ locking technology. You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo is not responsible for the locking device and security feature. You can purchase the cable locks at <https://smartfind.lenovo.com>.



Log in with your fingerprint

Enroll your fingerprints and unlock computer by scanning your fingerprints on the fingerprint reader key.

1. Type Sign-in options in the Windows search box and then press Enter.
2. Select the fingerprint setting and then follow the on-screen instruction to enroll your fingerprint.

Note: It is recommended that you put your finger at the center of the fingerprint reader key during enrollment and enroll more than one fingerprint in case of any injuries to your fingers. After the enrollment, the fingerprints are associated with the Windows password automatically.

3. Log in with your fingerprint.



Associate your fingerprints with UEFI BIOS passwords

You can associate your fingerprints with your power-on password and NVMe password. See “Associate your fingerprints with passwords (for selected models)” on page 43.

Maintenance tips:

- Do not scratch the surface of the reader with anything hard or sharp.
- Do not use or touch the reader with a wet, dirty, wrinkled, or injured finger.

Log in with face recognition (for selected models)

For models come with a webcam privacy shutter, slide the webcam privacy shutter to uncover the camera lens before using the Windows Hello face recognition.

Set up Windows Hello Face and unlock your computer by scanning your face:

1. Type Sign-in options in the Windows search box and then press Enter.
2. Select **Windows Hello Face** and then follow the on-screen instruction.

User Presence Sensing (for selected models)

Your computer with 4K camera might support User Presence Sensing feature. This feature offers smarter privacy protection, simpler login convenience, and better energy management for your computer. You can customize this feature in the Vantage app.

Note: Before using this feature, ensure you set up Windows Hello Face with the IR camera.

1. Open the Vantage app, and then click **Device → Smart Assist**.
2. Turn on the **User Presence Sensing** toggle to enable the feature.
3. Customize the sub-features such as **Zero Touch Login**, **Zero Touch Lock** and **Adaptive Dimming** according to your preference.

When using this feature, it provides the following functions:

- **Face Sensing:** Wake your computer from sleep mode without touching when you have set up Windows Hello Face.