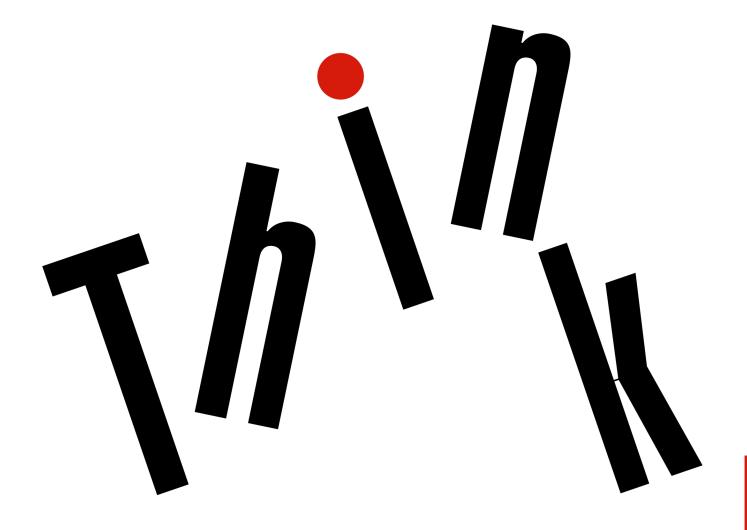


ThinkPad®

11e 5th Gen and Yoga 11e 5th Gen User Guide



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

- · Safety and Warranty Guide
- Setup Guide
- "Important safety information" on page iii

Lenovo makes constant improvement on the documentation of your computer, including this *User Guide*. To get all the latest documents, go to:

https://support.lenovo.com

Depending on the version of operating systems and programs, some user interface instructions might not be applicable to your computer.

Sixth Edition (June 2020)

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Important safety information

Note: Read the important safety information first.

Read this first

This information can help you safely use your notebook computer. Follow and retain all information included with your computer. The information in this document does not alter the terms of your purchase agreement or the Limited Warranty. For more information, see "Warranty Information" in the Safety and Warranty Guide that comes with your computer.

Customer safety is important. Our products are developed to be safe and effective. However, personal computers are electronic devices. Power cords, power adapters, and other features can create potential safety risks that can result in physical injury or property damage, especially if misused. To reduce these risks, follow the instructions included with your product, observe all warnings on the product and in the operating instructions, and review the information included in this document carefully. By carefully following the information contained in this document and provided with your product, you can help protect yourself from hazards and create a safer computer work environment.

Note: This information includes references to power adapters and batteries. In addition to notebook computers, some products (such as speakers and monitors) ship with external power adapters. If you have such a product, this information applies to your product. In addition, computer products contain a coin-sized internal battery that provides power to the system clock even when the computer is unplugged, so the battery safety information applies to all computer products.

Important information about using your computer

Ensure that you follow the important tips given here to get the most use and enjoyment out of your computer. Failure to do so might lead to discomfort or injury, or cause the computer to fail.

Protect yourself from the heat that your computer generates.



When your computer is turned on or the battery is charging, the base, the palm rest, and some other parts may become hot. The temperature they reach depends on the amount of system activity and the level of charge in the battery.

Extended contact with your body, even through clothing, could cause discomfort or even a skin burn.

- Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for any extended time.
- Periodically take your hands away from the keyboard by lifting your hands from the palm rest.

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Protect yourself from the heat generated by the ac power adapter.



When the ac power adapter is connected to an electrical outlet and your computer, it generates heat.

Extended contact with your body, even through clothing, may cause a skin burn.

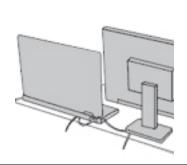
- Do not place the ac power adapter in contact with any part of your body while it is in use.
- Never use it to warm your body.
- Do not wrap the cords around the ac power adapter while in use.

Prevent your computer from getting wet.



To avoid spills and the danger of electrical shock, keep liquids away from your computer.

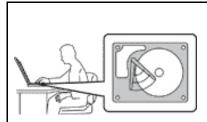
Protect the cables from being damaged.



Applying strong force to cables may damage or break them.

Route communication lines, or the cables of an ac power adapter, a mouse, a keyboard, a printer, or any other electronic device, so that they cannot be walked on, tripped over, pinched by your computer or other objects, or in any way subject to treatment that could interfere with the operation of your computer.

Protect your computer and data when moving it.

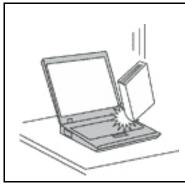


Before moving a computer equipped with a hard disk drive, do one of the following:

- Turn it off.
- Put it in sleep mode.
- Put it in hibernation mode.

This helps to prevent damage to the computer, and possible loss of data.

Handle your computer gently.



Do not drop, bump, scratch, twist, hit, vibrate, push, or place heavy objects on your computer, display, or external devices.

Carry your computer carefully.



- Use a quality carrying case that provides adequate cushioning and protection.
- Do not pack your computer in a tightly packed suitcase or bag.
- Before putting your computer in a carrying case, make sure that it is off, in sleep mode, or in hibernation mode. Do not put a computer in a carrying case while it is turned on.

Conditions that require immediate action

Products can become damaged due to misuse or neglect. Some product damage is serious enough that the product should not be used again until it has been inspected and, if necessary, repaired by an authorized servicer.

As with any electronic device, pay close attention to the product when it is turned on. On very rare occasions, you might notice an odor or see a puff of smoke or sparks vent from your product. Or you might hear sounds like popping, cracking, or hissing. These conditions might merely mean that an internal electronic component has failed in a safe and controlled manner. Or, they might indicate a potential safety issue. However, do not take risks or attempt to diagnose the situation yourself. Contact the Customer Support Center for further guidance. For a list of Service and Support phone numbers, see the following Web site:

https://pcsupport.lenovo.com/supportphonelist

Frequently inspect your computer and its components for damage or wear or signs of danger. If you have any question about the condition of a component, do not use the product. Contact the Customer Support Center or the product manufacturer for instructions on how to inspect the product and have it repaired, if necessary.

In the unlikely event that you notice any of the following conditions, or if you have any safety concerns with your product, stop using the product and unplug it from the power source and telecommunication lines until you can speak to the Customer Support Center for further guidance.

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- Power cords, plugs, power adapters, extension cords, surge protectors, or power supplies that are cracked, broken, or damaged.
- Signs of overheating, smoke, sparks, or fire.
- Damage to a battery (such as cracks, dents, or creases), discharge from a battery, or a buildup of foreign substances on the battery.
- A cracking, hissing, or popping sound, or strong odor that comes from the product.
- Signs that liquid has been spilled or an object has fallen onto the computer product, the power cord, or power adapter.
- The computer product, power cord, or power adapter has been exposed to water.
- The product has been dropped or damaged in any way.
- The product does not operate normally when you follow the operating instructions.

Note: If you notice these conditions with a product (such as an extension cord) that is not manufactured for or by Lenovo®, stop using that product until you can contact the product manufacturer for further instructions, or until you get a suitable replacement.

Service and upgrades

Do not attempt to service a product yourself unless instructed to do so by the Customer Support Center or vour documentation. Only use a Service Provider who is approved to repair your particular product.

Note: Some computer parts can be upgraded or replaced by the customer. Upgrades typically are referred to as options. Replacement parts approved for customer installation are referred to as Customer Replaceable Units, or CRUs. Lenovo provides documentation with instructions when it is appropriate for customers to install options or replace CRUs. You must closely follow all instructions when installing or replacing parts. The Off state of a power indicator does not necessarily mean that voltage levels inside a product are zero. Before you remove the covers from a product equipped with a power cord, always make sure that the power is turned off and that the product is unplugged from any power source. If you have any questions or concerns, contact the Customer Support Center.

Although there are no moving parts in your computer after the power cord has been disconnected, the following warnings are required for your safety.



Hazardous moving parts. Keep fingers and other body parts away.

CAUTION:





Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

Power cords and power adapters



Use only the power cords and power adapters supplied by the product manufacturer.

The power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm², or better. For other countries, the suitable types shall be used accordingly.

Never wrap a power cord around a power adapter or other object. Doing so can stress the cord in ways that can cause the cord to fray, crack, or crimp. This can present a safety hazard.

Always route power cords so that they will not be walked on, tripped over, or pinched by objects.

Protect power cords and power adapters from liquids. For instance, do not leave your power cord or power adapter near sinks, tubs, toilets, or on floors that are cleaned with liquid cleansers. Liquids can cause a short circuit, particularly if the power cord or power adapter has been stressed by misuse. Liquids also can cause gradual corrosion of power cord terminals and/or the connector terminals on a power adapter, which can eventually result in overheating.

Ensure that all power cord connectors are securely and completely plugged into receptacles.

Do not use any power adapter that shows corrosion at the ac input pins or shows signs of overheating (such as deformed plastic) at the ac input pins or anywhere on the power adapter.

Do not use any power cords where the electrical contacts on either end show signs of corrosion or overheating or where the power cord appears to have been damaged in any way.

To prevent possible overheating, do not cover the power adapter with clothing or other objects when the power adapter is plugged into an electrical outlet.

Extension cords and related devices

Ensure that extension cords, surge protectors, uninterruptible power supplies, and power strips that you use are rated to handle the electrical requirements of the product. Never overload these devices. If power strips are used, the load should not exceed the power strip input rating. Consult an electrician for more information if you have questions about power loads, power requirements, and input ratings.

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Plugs and outlets



If a receptacle (power outlet) that you intend to use with your computer equipment appears to be damaged or corroded, do not use the outlet until it is replaced by a qualified electrician.

Do not bend or modify the plug. If the plug is damaged, contact the manufacturer to obtain a replacement.

Do not share an electrical outlet with other home or commercial appliances that draw large amounts of electricity; otherwise, unstable voltage might damage your computer, data, or attached devices.

Some products are equipped with a three-pronged plug. This plug fits only into a grounded electrical outlet. This is a safety feature. Do not defeat this safety feature by trying to insert it into a non-grounded outlet. If you cannot insert the plug into the outlet, contact an electrician for an approved outlet adapter or to replace the outlet with one that enables this safety feature. Never overload an electrical outlet. The overall system load should not exceed 80 percent of the branch circuit rating. Consult an electrician for more information if you have questions about power loads and branch circuit ratings.

Be sure that the power outlet you are using is properly wired, easily accessible, and located close to the equipment. Do not fully extend power cords in a way that will stress the cords.

Be sure that the power outlet provides the correct voltage and current for the product you are installing.

Carefully connect and disconnect the equipment from the electrical outlet.

Power supply statement



Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

External devices

CAUTION:

Do not connect or disconnect any external device cables other than Universal Serial Bus (USB) and 1394 cables while the computer power is on; otherwise, you might damage your computer. To avoid possible damage to attached devices, wait at least five seconds after the computer is shut down to disconnect external devices.

General battery notice



Batteries supplied by Lenovo for use with your product have been tested for compatibility and should only be replaced with approved parts. A battery other than the one specified by Lenovo, or a disassembled or modified battery is not covered by the warranty.

Battery abuse or mishandling can cause overheat, liquid leakage, or an explosion. To avoid possible injury, do the following:

- · Do not open, dissemble, or service any battery.
- . Do not crush or puncture the battery.
- Do not short-circuit the battery, or expose it to water or other liquids.
- · Keep the battery away from children.
- · Keep the battery away from fire.

Stop using the battery if it is damaged, or if you notice any discharge or the buildup of foreign materials on the battery leads.

Store the rechargeable batteries or products containing the rechargeable batteries at room temperature, charged to approximately 30 to 50% of capacity. We recommend that the batteries be charged about once per year to prevent overdischarge.

Do not put the battery in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations.

Notice for built-in rechargeable battery



Do not attempt to remove or replace the built-in rechargeable battery. Replacement of the battery must be done by a Lenovo-authorized repair facility or technician.

Only recharge the battery strictly according to instructions included in the product documentation.

The Lenovo-authorized repair facilities or technicians recycle Lenovo batteries according to local laws and regulations.

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Notice for non-rechargeable coin-cell battery



Do not attempt to replace the non-rechargeable coin-cell battery. Replacement of the battery must be done by a Lenovo-authorized repair facility or technician.

The Lenovo-authorized repair facilities or technicians recycle Lenovo batteries according to local laws and regulations.

The following statement applies to users in the state of California, U.S.A.

California Perchlorate Information:

Products containing manganese dioxide lithium coin-cell batteries may contain perchlorate.

Perchlorate Material - special handling may apply, See https://www.dtsc.ca.gov/hazardouswaste/ perchlorate/

Heat and product ventilation



Computers, ac power adapters, and many accessories can generate heat when turned on and when batteries are charging. Notebook computers can generate a significant amount of heat due to their compact size. Always follow these basic precautions:

- When your computer is turned on or the battery is charging, the base, the palm rest, and some other parts may become hot. Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for any extended length of time. When you use the keyboard, avoid keeping your palms on the palm rest for a prolonged period of time. Your computer generates some heat during normal operation. The amount of heat depends on the amount of system activity and the battery charge level. Extended contact with your body, even through clothing, could cause discomfort or even a skin burn. Periodically take breaks from using the keyboard by lifting your hands from the palm rest; and be careful not to use the keyboard for any extended length of time.
- Do not operate your computer or charge the battery near flammable materials or in explosive environments.
- Ventilation slots, fans and/or heat sinks are provided with the product for safety, comfort, and
 reliable operation. These features might inadvertently become blocked by placing the product on
 a bed, sofa, carpet, or other flexible surface. Never block, cover, or disable these features.
- When the ac power adapter is connected to an electrical outlet and your computer, it generates
 heat. Do not place the adapter in contact with any part of your body while using it. Never use the
 ac power adapter to warm your body. Extended contact with your body, even through clothing,
 may cause a skin burn.

For your safety, always follow these basic precautions with your computer:

- Keep the cover closed whenever the computer is plugged in.
- Regularly inspect the outside of the computer for dust accumulation.
- Remove dust from vents and any perforations in the bezel. More frequent cleanings might be required for computers in dusty or high-traffic areas.
- Do not restrict or block any ventilation openings.
- Do not operate your computer inside furniture, as this might increase the risk of overheating.
- Airflow temperatures into the computer should not exceed 35°C (95°F).

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Electrical current safety information



Electric current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not use your computer during a lightning storm.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- Whenever possible, use one hand only to connect or disconnect signal cables.
- · Never turn on any equipment when there is evidence of fire, water, or structural damage.
- · Disconnect the attached power cords, battery, and all the cables before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- . Do not use your computer until all internal parts enclosures are fastened into place. Never use the computer when internal parts and circuits are exposed.



Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To connect:

- 1. Turn everything OFF.
- 2. First, attach all cables to devices.
- 3. Attach signal cables to connectors.
- 4. Attach power cords to outlets.
- 5. Turn devices ON.

To disconnect:

- 1. Turn everything OFF.
- 2. First, remove power cords from outlets.
- 3. Remove signal cables from connectors.
- 4. Remove all cables from devices.

The power cord must be disconnected from the wall outlet or receptacle before installing all other electrical cables connected to the computer.

The power cord may be reconnected to the wall outlet or receptacle only after all other electrical cables have been connected to the computer.



During electrical storms, do not perform any replacement and do not connect the telephone cable to or disconnect it from the telephone outlet on the wall.

Liquid crystal display (LCD) notice

CAUTION:

The liquid crystal display (LCD) is made of glass, and rough handling or dropping the computer can cause the LCD to break. If the LCD breaks and the internal fluid gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes; if any symptoms are present after washing, get medical care.

Note: For products with mercury-containing fluorescent lamps (for example, non-LED), the fluorescent lamp in the liquid crystal display (LCD) contains mercury; dispose of according to local, state, or federal laws.

Using headphones or earphones

CAUTION:

Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

Excessive use of headphones or earphones for a long period of time at high volume can be dangerous if the output of the headphone or earphone connectors do not comply with specifications of EN 50332-2. The headphone output connector of your computer complies with EN 50332-2 Sub clause 7. This specification limits the computer's maximum wide band true RMS output voltage to 150 mV. To help protect against hearing loss, ensure that the headphones or earphones you use also comply with EN 50332-2 (Clause 7 limits) for a wide band characteristic voltage of 75 mV. Using headphones that do not comply with EN 50332-2 can be dangerous due to excessive sound pressure levels.

If your Lenovo computer came with headphones or earphones in the package, as a set, the combination of the headphones or earphones and the computer already complies with the specifications of EN 50332-1. If different headphones or earphones are used, ensure that they comply with EN 50332-1 (Clause 6.5 Limitation Values). Using headphones that do not comply with EN 50332-1 can be dangerous due to excessive sound pressure levels.

Choking hazard notice



CHOKING HAZARD - Product contains small parts.

Keep away from children under three years.

Plastic bag notice



Plastic bags can be dangerous. Keep plastic bags away from babies and children to avoid danger of suffocation.

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Glass parts notice

CAUTION:

Some parts of your product may be made of glass. This glass could break if the product is dropped on a hard surface or receives a substantial impact. If glass breaks, do not touch or attempt to remove it. Stop using your product until the glass is replaced by trained service personnel.

Chapter 1. Product overview

This chapter provides basic information to help you get familiar with your computer.

Computer controls, connectors, and indicators

This section introduces hardware features of the computer.

Front view

Front view for ThinkPad 11e 5th Gen



1 Microphones	2 Camera
3 Speakers	4 Touch pad

Microphones

The microphones capture sound and voice when used with a program capable of handling audio.

2 Camera

The camera enables you to take pictures or hold a video conference. For more information, see "Using the cameras" on page 30.

Speakers

Your computer is equipped with a pair of stereo speakers.

4 Touch pad

Your computer is equipped with a touch pad under the bottom edge of the keyboard. The touch pad enables you to move the pointer, without the use of a conventional mouse. For more information, see "Using the touch pad" on page 25.

Front view for ThinkPad Yoga® 11e 5th Gen



1 Microphones	2 Front camera
3 Speakers	4 Rear camera
5 Touch pad	Multi-touch screen

Microphones

The microphones capture sound and voice when used with a program capable of handling audio.

2 Front camera

The camera enables you to take pictures or hold a video conference. For more information, see "Using the cameras" on page 30.

Speakers

Your computer is equipped with a pair of stereo speakers.

4 Rear camera

The camera enables you to take pictures or hold a video conference in the tablet mode. For more information, see "Using the cameras" on page 30.

Touch pad

Your computer is equipped with a touch pad under the bottom edge of the keyboard. The touch pad enables you to move the pointer, without the use of a conventional mouse. For more information, see "Using the touch pad" on page 25.

Multi-touch screen

The multi-touch screen enables you to use your computer with simple touch gestures. For more information, see "Using the multi-touch screen" on page 21.

Left-side view



■ Pen tether hole	2 Power connector
3 Ethernet connector	■ HDMI [™] connector
■ Always On USB 3.0 connector	₫ microSD card slot

Pen tether hole

The ThinkPad Pen Pro (an electronic pen) might be shipped with some computer models. To protect your pen from theft or loss, use a tether to tie the pen through the pen tether hole.

Notes:

- The tether does not come with your computer or the ThinkPad Pen Pro.
- Do not hang the computer with the tether.

For more information, see "ThinkPad Pen Pro" on page 35.

2 Power connector

The power connector enables you to connect the computer to ac power.

B Ethernet connector

The Ethernet connector enables you to connect the computer to a local area network (LAN).



To avoid the risk of electrical shock, do not connect the telephone cable to the Ethernet connector. You can only connect an Ethernet cable to this connector.

The Ethernet connector has two network status indicators. When the green indicator is on, the computer is connected to a LAN. When the yellow indicator blinks, data is being transmitted.

Note: If the computer is connected to a docking station, use the Ethernet connector on the docking station instead of the one on the computer.

4 HDMI connector

The High-Definition Multimedia Interface (HDMI) connector is a digital audio and video interface. It enables you to connect your computer to a compatible digital audio device or video monitor, such as a DVD player or an HDTV.

Always On USB 3.0 connector

To charge the USB-compatible devices when your computer is off, in sleep mode, or in hibernation mode, enable the Always On USB feature on your computer.

To configure the Always On USB settings, open Lenovo Vantage, and then follow the on-screen instructions.

microSD card slot

You can insert a microSD card into the microSD card slot for data access or storage. For more information, see "Using a media card" on page 30.

Right-side view



1 Power button	2 Audio connector
■ USB 3.0 connector	4 USB-C [™] connector
■ Security-lock slot	6 Pen tether hole

Power button

You can press the power button to turn on the computer or put the computer to sleep mode.

To turn off the computer, open the Start menu, click **O Power**, and then click **Shut down**.

If your computer is unresponsive, you can turn off the computer by pressing and holding the power button for four or more seconds. If the computer cannot be turned off, see "Computer stops responding" on page 66.

You also can define what the power button does. For example, by pressing the power button, you can turn off the computer or put the computer to sleep or hibernation mode. To change what the power button does, do the following:

- 1. Go to Control Panel, and then change the view of Control Panel from Category to Large icons or Small icons.
- 2. Click Power Options → Choose what the power buttons do.
- 3. Follow the instructions on the screen.

2 Audio connector

You can connect headphones or a headset with a 3.5-mm (0.14-inch), 4-pole plug to the audio connector to listen to the sound from the computer.

If you are using a headset with a function switch, do not press this switch while using the headset. If you press the switch, the headset microphone is disabled, and the integrated microphones on the computer are enabled instead.

Note: The audio connector does not support a conventional microphone. For more information, see "Using audio features" on page 29.

USB 3.0 connector

You can use the USB 3.0 connector to connect USB-compatible devices, such as a USB keyboard, USB mouse, USB storage device, or USB printer.

Attention: When you attach a USB cable to this connector, ensure that the USB mark is facing upward. Otherwise the connector might get damaged.

USB-C connector

The USB-C connector on your computer supports the USB Type-C™ standard. With an appropriate USB-C cable connected, you can use the connector to transfer data, charge your device, or connect your computer to external displays.

Lenovo provides various USB-C accessories to help you expand your computer functionality. For more information, go to:

https://www.lenovo.com/accessories

Note: When the battery power is below 10%, the USB-C accessories connected to the USB-C connector might not work correctly.

Security-lock slot

To protect your computer from theft, lock your computer to a desk, table, or other fixture through a security cable lock that fits this security-lock slot.

Note: You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature.

Pen tether hole

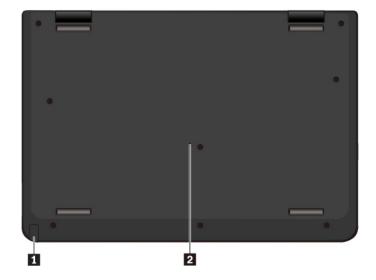
The ThinkPad Pen Pro (an electronic pen) might be shipped with some computer models. To protect your pen from theft or loss, use a tether to tie the pen through the pen tether hole.

Notes:

- The tether does not come with your computer or the ThinkPad Pen Pro.
- Do not hang the computer with the tether.

For more information, see "ThinkPad Pen Pro" on page 35.

Bottom view



1 Pen slot	2 Emergency-reset hole
------------	------------------------

Pen slot

The ThinkPad Pen Pro (an electronic pen) might be shipped with some computer models. Use the pen slot to store the pen. For more information, see "ThinkPad Pen Pro" on page 35.

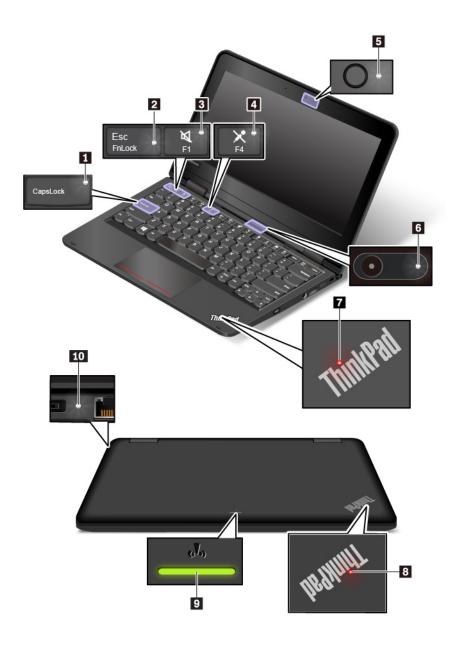
☑ Emergency-reset hole

If the computer stops responding and you cannot turn it off by pressing the power button, remove the ac power adapter. Then, insert a straightened paper clip into the emergency-reset hole to reset the computer.

Status indicators

This topic provides information about locating and identifying the various status indicators on your computer.

Note: Depending on the model, your computer might look different from the following illustrations.



Caps Lock indicator

When this indicator is on, you can type uppercase letters by directly pressing the letter keys.

2 Fn Lock indicator

This indicator shows the status of Fn Lock function. For more information, see "Using the special keys" on page 23.

■ Speaker-mute indicator

When this indicator is on, the speakers are muted.

4 Microphone-mute indicator

When this indicator is on, the microphones are muted.

Front camera status indicator

When this indicator is on, the front camera is in use.

Rear camera status indicator

When this indicator is on, the rear camera is in use.

System status indicators

The indicator in the ThinkPad logo on the computer lid and the indicator in the power button show the system status of your computer.

- Blinks for three times: The computer is initially connected to power.
- On: The computer is on (in normal mode).
- Off: The computer is off or in hibernation mode.
- Blinks rapidly: The computer is entering sleep or hibernation mode.
- Blinks slowly: The computer is in sleep mode.

Wireless-status indicator

The wireless-status indicator is located on the outer lid of the computer and it helps you identify the wireless status of your computer.

- Solid green: The wireless features of the computer are on.
- Off: The wireless features of the computer are off.

10 ac power status indicator

This indicator shows the ac power and battery power status of the computer.

- White: connected to ac power (battery power 90%–100%)
- Amber: connected to ac power (battery power 0%–90%)
- Off: not connected to ac power

Important product information

This section provides information to help you locate the following:

- Machine type and model information
- FCC ID and IC Certification information
- Windows operating systems information

Machine type and model information

When you contact Lenovo for help, the machine type and model information helps the technicians to identify your computer and provide faster service.

The following illustration shows where to find the machine type and model information of your computer.



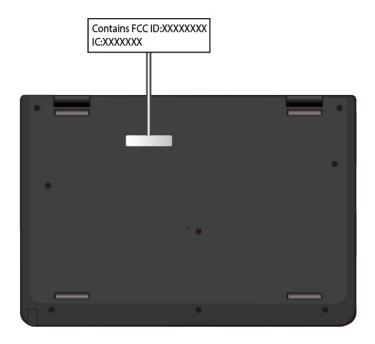
FCC ID and IC Certification number

The FCC and IC Certification information is identified by a label on the computer as shown in the following illustration.

Note: Depending on the model, your computer might look different from the following illustration.

For a factory-preinstalled wireless module, this label identifies the actual FCC ID and IC certification number for the wireless module installed by Lenovo.

Note: Do not remove or replace a factory-preinstalled wireless module by yourself. For replacement, you must contact Lenovo service first. Lenovo is not responsible for any damage caused by unauthorized replacement.



Labels for the Windows operating systems

Windows® 10 Genuine Microsoft® label: Your computer might have a Genuine Microsoft label affixed to its cover depending on the following factors:

- Your geographic location
- · Date when your computer was manufactured
- · Version of Windows 10 that is preinstalled

Go to https://www.microsoft.com/en-us/howtotell/Hardware.aspx for illustrations of the various types of Genuine Microsoft labels.

- In the People's Republic of China, the Genuine Microsoft label is required on all computer models preinstalled with any version of Windows 10.
- In other countries and regions, the Genuine Microsoft label is required only on computer models licensed for Windows 10 Pro.

The absence of a Genuine Microsoft label does not indicate that the preinstalled Windows version is not genuine. For details on how to tell whether your preinstalled Windows product is genuine, refer to the information provided by Microsoft at:

https://www.microsoft.com/en-us/howtotell/default.aspx

There are no external, visual indicators of the Product ID or Windows version for which the computer is licensed. Instead, the Product ID is recorded in the computer firmware. Whenever a Windows 10 product is installed, the installation program checks the computer firmware for a valid, matching Product ID to complete the activation.

In some cases, an earlier Windows version might be preinstalled under the terms of the Windows 10 Pro license downgrade rights.

Computer features

The computer features introduced in this topic cover various models. Some computer features might be available only on specific models.

Microprocessor

To view the microprocessor information of your computer, right-click the Start button and then click System.

Memory

- Type: Double data rate 3 (DDR3) low power (LP) memory or double data rate 4 (DDR4) memory, soldered on the system board
- Maximum size: 8 GB

Storage device

- Embedded Multi Media Card (eMMC) (available on some models)
- M.2 solid-state drive

Display

- · Brightness control
- Color display with Thin Film Transistor (TFT) technology
- Color display with In-Plane Switching (IPS) or Twisted Nematic (TN) technology
- Display size: 294.64 mm (11.6 inches)
- Display resolution: 1366 x 768 pixels
- Multi-touch technology (available on some models)

Keyboard

- Six-row keyboard
- Function keys
- Touch pad

Connectors and slots

- ac power connector
- Audio connector
- Ethernet connector
- HDMI connector
- MicroSD slot
- One Always On USB 3.0 connector
- One USB-C connector
- One USB 3.0 connector
- Pen slot

· Pen tether holes

Security features

- · Security-lock slot
- Trusted Platform Module (TPM)

Wireless features

- Bluetooth
- Wireless LAN

Others

- Front camera
- Microphones
- Rear camera (available on yoga 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 / 3.1 Gen 1	5
3.2 Gen 2 / 3.1 Gen 2	10
3.2 Gen 2 × 2	20

Computer specifications

Size

• Width: 300 mm (11.81 inches)

• Depth: 210 mm (8.27 inches)

• Thickness:

- Non-touch models: 21.9 mm (0.86 inches) - Touch models: 22.55 mm (0.89 inches)

Maximum heat output (depending on the model)

• 45 W (154 Btu/hr)

• 65 W (222 Btu/hr)

Power source (ac power adapter)

• 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

Operating environment

Maximum altitude (without pressurization)

• 3048 m (10 000 ft)

Temperature

- Operating: 5°C to 35°C (41°F to 95°F)
- Storage and transportation in original shipping package: -20°C to 60°C (-4°F to 140°F)
- Storage without package: 5°C to 43°C (41°F to 109°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 and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

If possible, place your computer in a well-ventilated and dry area without direct exposure to sunshine.

Attention:

- Keep electrical appliances such as electric fans, radio, air conditioners, and microwave ovens away from the computer. The strong magnetic fields generated by these appliances can damage the monitor and data on the internal storage drive.
- Do not place any beverages on top of or beside the computer or other attached devices. If liquid is spilled on or in the computer or an attached device, a short circuit or other damage might occur.
- Do not eat or smoke over your keyboard. Particles that fall into your keyboard can cause damage.

Lenovo programs

Your computer comes with Lenovo programs to help you work easily and securely.

Accessing Lenovo programs

To access Lenovo programs on your computer, do the following:

- 1. Open the Start menu and locate a program by the program name.
- 2. If you do not find the program in the program list, search for the program in the search box.

An introduction to Lenovo programs

This topic provides a brief introduction to Lenovo programs. Depending on your computer model, some of the programs might not be available.

The available programs are subject to change without notice. To learn more about the programs and other computing solutions offered by Lenovo, go to:

https://support.lenovo.com

Hotkey Features Integration	This software enables F1–F12 special keys and buttons on your computer. For example, when the microphone mute key or button is pressed, the microphone state switches between mute and unmute. The mute state indicator is displayed on the screen whenever the mute state is changed.
Lenovo Vantage	Your computer's best features and capabilities should be easy to access and understand.
	Lenovo Vantage enables you to:
	Configure device settings.
	 Download and install UEFI BIOS, drivers, and firmware updates.
	Secure your computer from outside threats.
	Diagnose hardware problems.
	Check the computer warranty status.
	 Access User Guide and helpful articles.
	Notes:
	The available features vary depending on the computer model.
	 Lenovo Vantage 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.
	This app is filled with exclusive Lenovo content to help you learn more about what you can do with your Lenovo computer.

Chapter 2. Using your computer

This chapter provides information to help you use the various features provided by your computer.

Registering your computer

When you register your computer, information is entered into a database, which enables Lenovo to contact you if there is a recall or other severe problem. In addition, some locations offer extended privileges and services to registered users.

When you register your computer with Lenovo, you also will receive the following benefits:

- · Quicker service when you call Lenovo for help
- Automatic notification of free software and special promotional offers

To register your computer with Lenovo, go to https://support.lenovo.com/productregistration and follow the instructions on the screen.

Frequently asked questions

This topic provides a few tips to help you optimize the use of your ThinkPad notebook computers.

Can I get my user guide in another language?

To download the user guide in another language, go to https://support.lenovo.com. Then follow the instructions on the screen.

How do I get help about the Windows operating system?

The Windows help information system provides you with detailed information about using the Windows operating system so that you can get the most of your computer. To access the Windows help information system, click the **Start** button to open the Start menu, and then click **Get Help** or **Tips**. Additionally, you can use the Cortana® personal assistant to search for help, apps, files, settings, and so on.

How do I access Control Panel?

Click the Start button to open the Start menu, and then click Windows System → Control Panel.

How to turn off my computer?

Open the Start menu, click **O Power**, and then click **Shut down**.

How to partition my storage drive?

To partition the storage drive of your computer in the Windows operating system, refer to https://support.lenovo.com/solutions/ht503851.

How do I use battery power more effectively when I am on the go?

- To conserve power, or to suspend operation without exiting programs or saving files, see "Power-saving modes" on page 27.
- To achieve the best balance between performance and power saving, create and apply an appropriate power plan. See "Managing the battery power" on page 27.

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How do I securely dispose of data stored on the internal storage drive?

- Study Chapter 5 "Security" on page 45 to find out how you can protect your computer from theft and unauthorized use.
- Before you dispose of the data on the internal storage drive, ensure that you read "Deleting data from your storage drive" on page 48.

How do I attach an external display?

- Refer to "Using an external display" on page 31.
- With the Extend desktop function, you can display output on both the computer display and an external display.

How do I attach or replace a device?

Refer to the appropriate topic in Chapter 9 "Replacing devices" on page 83.

I have been using the computer for some time already, and is getting slower. What should I do?

- Follow the "General tips for preventing problems" on page 65.
- Diagnose problems yourself by using the preinstalled diagnostic software. See "Diagnosing problems" on page 65.
- Check for recovery solutions in Chapter 8 "Recovery information" on page 81.

Print the following topics and keep them with your computer in case you are unable to access this electronic user guide when necessary.

- "Installing a Windows 10 operating system" on page 51
- "Computer stops responding" on page 66
- "Power problems" on page 77

Operating modes

The ThinkPad Yoga 11e 5th Gen computer features four operating modes: notebook mode, stand mode, tablet mode, and tent mode. You can switch between different modes according to your preference and working convenience.

Note: Depending on the model, your computer might look different from the illustrations in this topic.

Rotating the computer display

This topic provides instructions on how to rotate the display of your computer properly. This topic also provides information about the operating modes of your computer and corresponding display angle ranges.

You can open the computer display to any angle within a range of up to 360 degrees as shown in the following illustration.

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



Notebook mode

You can use the computer in the notebook mode in scenarios that require using a keyboard and a mouse, such as editing documents and writing e-mails.

Attention: The angle between the front of the computer display and the keyboard for the notebook mode is at most 190 degrees. Do not rotate the computer display with too much force, otherwise the computer display or hinges might get damaged. Do not apply too much force to the upper-right or upper-left corner of the computer display.

Open the computer display slowly as shown in the following illustration. Your computer is now in the notebook mode.



In the notebook mode, the keyboard and the touch pad are automatically enabled.

Stand mode

You can use your computer in the stand mode in scenarios that require limited interaction with the screen, such as viewing photos and playing videos.

Attention: The angle between the front of the computer display and the keyboard for the stand mode is above 190 degrees and below 350 degrees. Do not rotate the computer display with too much force, otherwise the computer display or hinges might get damaged. Do not apply too much force to the upperright or upper-left corner of the computer display.

If your computer is in the notebook mode, do the following to turn the computer from the notebook mode into the stand mode:

1. Slowly rotate the display clockwise until the back of the display is facing the base cover.



2. Position your computer as shown. Your computer is now in the stand mode.



In the stand mode, the keyboard and the touch pad are automatically disabled. However, you can control some functions of your computer through the multi-touch screen, without the use of the keyboard and the touch pad. For more information, see "Using the multi-touch screen" on page 21.

Tablet mode

You can use the computer in the tablet mode in scenarios that require frequent interaction with the screen, such as browsing the Web site.

Attention: The angle between the front of the computer display and the keyboard for the tablet mode is 360 degrees. Do not rotate the computer display with too much force, otherwise the computer display or hinges might get damaged. Do not apply too much force to the upper-right or upper-left corner of the computer display.

If your computer is in the stand mode, do the following to turn the computer from the stand mode into the tablet mode:

1. Position your computer as shown and slowly rotate the computer display clockwise.



2. Position your computer as shown. Your computer is now in the tablet mode. By default, the autorotate feature is enabled.



In the tablet mode, the keyboard and the touch pad are automatically disabled. However, you can control some functions of your computer through the multi-touch screen, without the use of the keyboard and the touch pad. For more information, see "Using the multi-touch screen" on page 21.

Tent mode

You can use your computer in the tent mode in scenarios that require limited interaction with the screen, such as viewing photos and making a presentation.

Attention: The angle between the front of the computer display and the keyboard for the tent mode is at least 270 degrees and at most 340 degrees. Do not rotate the computer display with too much force, otherwise the computer display or hinges might get damaged. Do not apply too much force to the upperright or upper-left corner of the computer display.

If your computer is in the tablet mode, do the following to turn the computer from the tablet mode into the tent mode:

1. Slowly rotate your computer display counterclockwise to any angle within a range of 270 degrees to 340 degrees.

Note: The degrees refer to the angle degrees between the computer display and the keyboard.



2. Position your computer as shown. Your computer is now in the tent mode.



In the tent mode, the keyboard and the touch pad are automatically disabled. However, you can control some functions of your computer through the multi-touch screen, without the use of the keyboard and the touch pad. For more information, see "Using the multi-touch screen" on page 21.

Using the multi-touch screen

This topic provides instructions on how to use the multi-touch screen that is available on some models.

Notes:

- Your computer screen might look different from the following illustrations.
- Depending on the program you use, some gestures might not be available.

The following table introduces some frequently used gestures.

Touch gesture (touch models only)	Description
	Touch: Tap. Mouse action: Click.
	Function: Open an app or perform an action on an open app, such as Copy, Save, and Delete, depending on the app.
•	Touch: Tap and hold.
	Mouse action: Right-click. Function: Open a menu with multiple options.
	Touch: Slide.
• • • • • • • • • • • • • • • • • • •	Mouse action : Scroll the mouse wheel, move the scroll bar, or click the scroll arrow.
	Function: Scroll through items, such as lists, pages, and photos.
	Touch: Drag an item to the location you want.
	Mouse action: Click, hold, and drag an item.
	Function: Move an object.
	Touch: Move two fingers closer together.
*	Mouse action: Press the Ctrl key while scrolling the mouse wheel backward.
	Function: Zoom out.
•	Touch: Move two fingers farther apart.
•	Mouse action: Press the Ctrl key while scrolling the mouse wheel forward.
	Function: Zoom in.
	Touch: Swipe in from the right edge.
	Mouse action: Click the action center icon in the Windows notification area.
	Function: Open the action center to see your notifications and quick actions.

Touch gesture (touch models only)	Description
	Touch: Swipe in from the left edge. Mouse action: Click the task-view icon ☐ on the taskbar. Function: View all your open windows in task view.
	 Short swipe for full-screened app or when your computer is in the tablet mode Touch: Swipe downwards shortly from the top edge. Mouse action: Move your pointer to the top edge of the screen. Function: Show a hidden title bar. Long swipe when your computer is in the tablet mode Touch: Swipe in from the top edge to the bottom edge. Mouse action: From the top edge of the screen, click and hold, move the pointer to the bottom of the screen, and then release. Function: Close the current app.

Tips on using the multi-touch screen

- The multi-touch screen is a glass panel covered with a plastic film. Do not apply pressure or place any metallic object on the screen, which might damage the touch panel or cause it to malfunction.
- Do not use fingernails, gloved fingers, or inanimate objects for input on the screen.
- Regularly calibrate the accuracy of the finger input to avoid a discrepancy.

Tips on cleaning the multi-touch screen

- Turn off the computer before cleaning the multi-touch screen.
- Use a dry, soft, and lint-free cloth or a piece of absorbent cotton to remove fingerprints or dust from the multi-touch screen. Do not apply solvents to the cloth.
- Gently wipe the screen using a top-down motion. Do not apply any pressure on the screen.

Using the special keys

Your computer has several special keys to help you work more easily and effectively.



Windows logo key

Press the Windows logo key to open the Start menu. For information about using the Windows logo key with other keys, see the help information system of the Windows operating system.

2 B Fn key and function keys

You can configure the Fn key and function keys by doing the following:

- 1. Go to Control Panel, and then change the view of Control Panel from Category to Large icons or Small icons.
- 2. Click **Keyboard** or **Lenovo Keyboard Manager** and the Keyboard Manager window is displayed.
- 3. Select the options of your preference.
- Switch the key function between the standard F1–F12 function and the special function printed as an icon on each key. When the Fn Lock indicator is off, you can use the default function. You can change the default function in the Keyboard Properties window.
- Mute or unmute the speakers.

If you mute the sound and turn off your computer, the sound will remain muted when you turn on your computer. To turn on the sound, press or or or less.

- Decrease the speaker volume.
- Increase the speaker volume.
- Mute or unmute the microphones.
- Darken the computer display.
- Brighten the computer display.
- Manage external displays.
- Enable or disable the built-in wireless features.
- Open the Settings window.
- Enable or disable the built-in Bluetooth features.
- Open a keyboard setting page.
- Invoke the function defined by yourself. You can define different functions for the F12 key on Lenovo Vantage.

Key combinations

- Priso: Open the Snipping Tool program.
- Fn+B: This key combination has the same function as the Break key on a conventional external keyboard.
- Fn+K: This key combination has the same function as the ScrLK or Scroll Lock key on a conventional external keyboard.
- Fn+P: This key combination has the same function as the Pause key on a conventional external keyboard.
- Fn+S: This key combination has the same function as the SysRq key on a conventional external keyboard.

- **Fn+4**: Press Fn+4 to put the computer to sleep mode. To wake up the computer, press the Fn key or the power button.
- Fn+Left arrow key: This key combination has the same function as the Home key.
- Fn+Right arrow key: This key combination has the same function as the End key.

Using the touch pad

Note: Your computer might look slightly different from the following illustration.

Your computer is equipped with a touch pad under the bottom edge of the keyboard. To move the pointer on the screen, slide your fingertip over the touch pad in the direction in which you want the pointer to move. The left and right bottoms of the touch pad work as click buttons. The functions correspond to those of the left and right mouse buttons on a conventional mouse.



Customizing the touch pad

To customize the touch pad, do the following:

- 1. Go to Control Panel and click **Hardware and Sound** → **Mouse**.
- 2. Follow the instructions on the screen.

Power management

This section provides information about how to use ac power and battery power to achieve the best balance between performance and power management.

Using the ac power adapter

The power to run your computer can come either from the battery or from ac power. While you use ac power, the battery charges automatically.

Your computer comes with an ac power adapter and a power cord.

- ac power adapter: Converts ac power for notebook computer use.
- Power cord: Connects the ac outlet and the ac power adapter.

Connecting the ac power adapter

To connect the computer to ac power, ensure that you follow the steps in order:

Attention: Using an improper power cord might severely damage your computer.

- 1. Connect the power cord to the ac power adapter.
- 2. Connect the ac power adapter to the power connector of the computer.
- 3. Connect the power cord to an electrical outlet.

Tips on using the ac power adapter

- When the ac power adapter is not in use, disconnect it from the electrical outlet.
- Do not bind the power cord tightly around the ac power adapter transformer pack when it is connected to the transformer.

Using the battery

When you use your computer away from electrical outlets, you depend on battery power to keep your computer running. Different computer components consume power at different rates. The more you use the power-intensive components, the faster you consume battery power.

Spend more time unplugged with ThinkPad batteries. Mobility has revolutionized business by enabling you to take your work wherever you go. With ThinkPad batteries, you are able to work longer without being tied to an electrical outlet.

Checking the battery status

Move your pointer to the battery-status icon in the Windows notification area to check the battery status. The battery-status icon displays the percentage of battery power remaining and how long you can use your computer before you must charge the battery.

The rate at which you use battery power determines how long you can use the battery of your computer between charges. Because every computer user has individual habits and needs, it is difficult to predict how long a battery charge lasts. There are two main factors:

- How much energy is stored in the battery when you begin to work
- The way you use your computer, for example:
 - How often you access the storage drive
 - How bright you make the computer display
 - How often you use the wireless feature

Charging the battery

When you find that the remaining battery power is low, charge your battery or replace the battery with a charged battery.

If an ac outlet is convenient, connect the computer to ac power. The battery is fully charged in about four to eight hours. The actual charging time depends on the battery size, the physical environment, and whether you are using the computer. You can check the battery charging status at any time through the batterystatus icon in the Windows notification area.

Note: To maximize the life of the battery, the computer does not start recharging the battery if the remaining power is greater than 95%.

When to charge the battery

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

Note: To check the battery temperature, open Lenovo Vantage, and then follow the on-screen instructions to view battery details.

- Charge the battery in any of the following conditions:
 - A new battery is installed.
 - The percentage of power remaining is low.
 - The battery has not been used for a long time.

Maximizing the battery life

To maximize the life of the battery, do the following:

- Use the battery until the charge is depleted.
- Recharge the battery completely before using it. You can see whether the battery is fully charged from the battery-status icon in the Windows notification area.
- Always use power management features such as power-saving modes.

Managing the battery power

To achieve the best balance between performance and power saving, adjust your power plan settings. To adjust power plan settings, do the following:

- 1. Go to Control Panel, and then change the view of Control Panel from Category to Large icons or Small icons.
- 2. Click Power Options.
- 3. Follow the instructions on the screen.

For more information, see the Windows help information system.

Power-saving modes

There are several modes that you can use at any time to conserve power. This section introduces each mode and gives tips on the effective use of battery power.

Sleep mode

In sleep mode, your work is saved to memory, and then the storage drive and the computer display are turned off. When your computer wakes up, your work is restored within seconds.

To put your computer to sleep mode, open the Start menu, click **O Power**, and then click **Sleep**.

Hibernation mode

By using this mode, you can turn off your computer completely without saving files or exiting any programs that are running. When the computer enters hibernation mode, all open programs, folders, and files are saved to the storage drive, and then the computer turns off.

To put the computer to hibernation mode, define what the power button does first, and then press the power button to put the computer to hibernation mode.

If you put your computer to hibernation mode with the wake-up function disabled, the computer does not consume any power. The wake-up function is disabled by default. If you put your computer to hibernation mode with the wake-up function enabled, the computer consumes a small amount of power.

To enable the wake-up function, do the following:

- 1. Open Control Panel, view Control Panel by Category, and then click System and Security.
- 2. Click Administrative Tools.
- 3. Double-click Task Scheduler. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

- 4. From the left pane, select the task folder for which you want to enable the wake-up function. The scheduled tasks are displayed.
- 5. Click a scheduled task, and then click the **Conditions** tab.
- 6. Under Power, select Wake the computer to run this task.

· Wireless off

When you are not using the wireless features, such as Bluetooth or wireless LAN, turn them off to help conserve power.

Cabled Ethernet connections

With an Ethernet cable, you can connect your computer to a local network through the Ethernet connector on your computer.

The Ethernet connector has two network status indicators. When the green indicator is on, the computer is connected to a LAN. When the yellow indicator blinks, data is being transmitted.

Note: If the computer is connected to a supported docking station or a supported dock, use the Ethernet connector on the docking station or the dock instead of the one on the computer.



Your computer has an Ethernet connector. To avoid the risk of electrical shock, do not connect the telephone cable to the Ethernet connector.

Wireless connections

Wireless connection is the transfer of data without the use of cables but by means of radio waves only.

Using the wireless-LAN connection

A wireless local area network (LAN) covers a relatively small geographic area, such as an office building or a house. Devices based on the 802.11 standards can connect to this type of network.

Your computer comes with a built-in wireless network card to help you establish wireless connections and monitor the connection status.

To establish a wireless-LAN connection, do the following:

- 1. Turn on the wireless feature. See "Using the special keys" on page 23.
- 2. Click the wireless-network-connection-status icon in the Windows notification area. A list of available wireless networks is displayed.
- 3. Double-click a network to connect to it. Provide required information if needed.

The computer automatically connects to an available and remembered wireless network when the location changes. If the available wireless network is secured, provide the password as required. For more information, see the Windows help information system.

Tips on using the wireless-LAN feature

To achieve the best connection, use the following guidelines:

 Place your computer so that there are as few obstacles as possible between the wireless-LAN access point and the computer.

• Open your computer cover to an angle of slightly more than 90 degrees.

Checking the wireless-LAN connection status

You can check the wireless-LAN connection status through the wireless-network-connection-status icon in the Windows notification area. The more bars encompassed, the better the signal is.

Using the Bluetooth connection

Bluetooth can connect devices that are within a short distance from one another. Bluetooth is commonly used in the following scenarios:

- Connecting peripheral devices to a computer
- Transferring data between hand-held devices and a personal computer
- Remotely controlling and communicating with devices such as mobile phones

Depending on the model, your computer might support the Bluetooth feature. To transfer data through the Bluetooth feature, do the following:

Note: It is not recommended to use the wireless feature (the 802.11 standards) of your computer simultaneously with a Bluetooth option. The data transmission speed can be delayed and the performance of the wireless feature can be degraded.

- 1. Do one of the following:
 - Press the Bluetooth-control key
 and turn on the Bluetooth feature.
 - Open the Start menu, and then click Settings → Devices → Bluetooth & other devices. Turn on the **Bluetooth** switch to enable the Bluetooth feature.
- 2. Right-click the data that you want to send.
- Select Send to → Bluetooth device.
- 4. Select a Bluetooth device, and then follow the instructions on the screen.

For more information, see the Windows help information system and the help information system of the Bluetooth device.

Using the Airplane mode

If the Airplane mode is enabled, all wireless features are disabled.

To enable or disable the Airplane mode, do the following:

- Open the Start menu.
- Click Settings → Network & Internet → Airplane mode.
- 3. Slide the control for **Airplane mode** to turn it on or off.

Using audio features

Your computer is equipped with the following items:

- Audio connector, 3.5 mm (0.14 inches) in diameter
- Microphones
- Speakers

Your computer also has an audio chip that enables you to enjoy various multimedia audio features, such as the following:

- · Compliant with High Definition Audio
- Playback of MIDI and MP3 files
- Recording and playback of PCM and WAV files
- Recording from various sound sources, such as a headset attached

The following list provides information about supported functions of the audio devices attached to the connectors on your computer or the docking station.

- Headset with a 3.5-mm (0.14-inch), 4-pole plug: Headphone and microphone functions
- Conventional headphone: Headphone function

Note: The conventional microphone is not supported.

Using the smart audio feature

The smart audio feature is supported on some computer models. To help protect against hearing loss, the feature limits the computer's maximum wide band true RMS output voltage to 130 mV when a headset or headphone is connected.

To change the setting, do the following:

- 1. Go to Control Panel and view by Large icons.
- 2. Click SmartAudio. In the window displayed, click the Disable Headphone Limiter icon. Then follow the on-screen instructions.

Using the cameras

Your computer might be equipped with two conventional cameras, a front camera and a rear camera. You can use the camera to preview your video image and take a snapshot of your current image.

To start the camera, open the Start menu and click Camera. When the camera is started, the indicator is turned on in white, indicating that the camera is in use.

You also can use the camera with other programs that provide features such as photographing, video capturing, and video conferencing. To use the camera with other programs, open one of the programs and start the photographing, video capturing, or video conferencing function. Then, the camera starts automatically and the white camera status indicator turns on. For more information about using the camera with a program, see the help information system of the program.

Using a media card

Your computer has one media-card slot.

The media-card slot supports the following types of cards:

Note: Your computer does not support the content protection for recordable media (CPRM) feature for the SD card.

- · Secure Digital (SD) card
- · Secure Digital eXtended-Capacity (SDXC) card
- · Secure Digital High-Capacity (SDHC) card

Attention: When transferring data to or from a media card, such as an SD card, do not put your computer to sleep or hibernation mode before the data transfer is completed. Otherwise, your data could get damaged.

Installing a media card

To install a media card, do the following:

- 1. Locate the appropriate type of slot for your card. See "Computer controls, connectors, and indicators" on page 1.
- 2. Ensure that the metal contacts are facing down and toward the card slot.
- 3. Press the card firmly into the card slot.

If the plug-and-play feature is not enabled, do the following:

- 1. Go to Control Panel.
- 2. View Control Panel by Category. Click **Hardware and Sound**.
- 3. Click **Device Manager**. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
- 4. From the Action menu, select Add legacy hardware. The Add Hardware Wizard starts.
- 5. Follow the instructions on the screen.

Removing a media card

Attention:

- · Stop all the activities involving the card before removing it. Otherwise, data on the card might get damaged or lost.
- Do not remove a card when the computer is in sleep or hibernation mode. Otherwise, the system might not respond when you try to resume operation.

To remove a media card, do the following:

- 1. Click the triangular icon in the Windows notification area to show hidden icons.
- Right-click the Safely Remove Hardware and Eject Media icon.
- 3. Select the corresponding item to eject the card from the Windows operating system.
- 4. Press the card to eject it from your computer.
- 5. Remove the card and store it safely for future use.

Note: If you do not remove the card from your computer after you eject the card from the Windows operating system, the card can no longer be accessed. To access the card, you must remove it first, and then insert it again.

Using an external display

This section provides instructions on how to connect an external display, choose display modes, and change display settings.

You can use an external display such as a projector or a monitor to give presentations or to expand your workspace.

Your computer supports the following video resolution, if the external display also supports that resolution.

- Up to 3840 x 2160 pixels / 60 Hz, with an external display connected to the USB-C connector
- Up to 3840 x 2160 pixels / 30 Hz, with an external display connected to the HDMI connector

For more information about the external display, see the manuals that come with it.

Connecting an external display

You can use either a wired display or a wireless display. The wired display can be connected to a video connector such as the USB-C connector or the HDMI connector by a cable. The wireless display can be added through the Miracast® function.

Connecting a wired display

Note: When you connect an external monitor, a video interface cable with a ferrite core is required.

- 1. Connect the external display to an appropriate video connector on your computer, such as the HDMI connector.
- 2. Connect the external display to an electrical outlet.
- 3. Turn on the external display.

If your computer cannot detect the external display, right-click on the desktop, and then click Screen resolution/Display settings → Detect.

Connecting a wireless display

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

Do one of the following:

- Open the Start menu, and then click Settings → Devices → Bluetooth & other devices → Add Bluetooth or other device. In the Add a device window, click Wireless display or dock. Then, follow the instructions on the screen.
- Click the action center icon

 in the Windows notification area. Click Connect. Select the wireless display and follow the instructions on the screen.

For more information, see the Windows help information system.

Choosing a display mode

You can display your desktop and apps on the computer display, the external display, or both. To choose how to display the video output, press the display-mode switching key and then select a display mode you prefer.

There are four display modes:

- Show only on 1: Displays the video output only on your computer screen.
- Duplicate these displays: Displays the same video output on both your computer screen and an external display.
- Extend these displays: Extends the video output from your computer display to an external display. You can drag and move items between the two displays.
- **Show only on 2**: Shows the video output only on an external display.

If you show programs using DirectDraw or Direct3D® in full-screen mode, only the main display shows the video output.

Changing display settings

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.

To change display settings, do the following:

- 1. Right-click on the desktop and select **Display settings**.
- 2. Select the display that you want to configure.
- 3. Change display settings as you want.

Note: If you set a higher resolution for the computer display than the external display, only part of the screen can be shown on the external display.

Traveling with your computer

This topic provides information to help you work with your computer when you are traveling.

Use the following travel tips to travel more confidently and efficiently with your computer.

- When your computer goes through the x-ray machines at airport security stations, it is important to keep your eyes on the computer at all times to prevent theft.
- Consider bringing an electrical adapter for use on an airplane or automobile.
- If you carry an ac power adapter, detach the ac cord from it to avoid damaging the cord.

Travel tips on airplanes

If you carry your computer onto an airplane, observe the following tips:

- Be careful about the seat in front of you on airplanes. Angle your computer display so that it does not get caught when the person in front of you leans back.
- When taking off, remember to turn off your computer or put it to hibernation mode.
- If you intend to use your computer or wireless services (such as Internet and Bluetooth), check with the airline for restrictions and availability of services before boarding the airplane. If there are restrictions on the use of computers with wireless features on the airplane, you must abide by those restrictions.

The Airplane mode is supported on the Windows 10 operating system. In the Airplane mode, all wireless features are disabled.

To enable the Airplane mode, do the following:

- 1. Open the Start menu, and then click **Settings** → **Network & Internet** → **Airplane mode**.
- 2. Slide the Airplane mode control to turn it on.

Travel accessories

If you are traveling to another country or region, you might want to consider an appropriate ac power adapter for the country or region to which you are traveling.

To purchase travel accessories, go to:

https://www.lenovo.com/accessories

Chapter 3. Enhancing your computer

This chapter provides instructions on how to use hardware devices to expand your computer capabilities.

Finding ThinkPad options

If you want to expand the capabilities of your computer, Lenovo has a number of hardware accessories and upgrades to meet your needs. 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

ThinkPad Pen Pro

The ThinkPad Pen Pro (an electronic pen) might be shipped with some computer models. The ThinkPad Pen Pro enables you to input text in a natural manner when you are:

- · Taking notes
- Annotating Portable Document Format (PDF) files
- · Drawing graphics with applications capable of editing and sketching

When you draw or write with the ThinkPad Pen Pro, keep it perpendicular to the computer display to achieve the best line quality.

Use the ThinkPad Pen Pro instead of your finger in conditions such as the following:

- You need precise and detailed input, such as drawing a picture or using the handwriting mode.
- Too many elements are crowded on the screen, for example, when you are playing games.
- You want to keep your screen free from smudges.
- You have long fingernails and it is difficult for you to type.

Notes:

- The ThinkPad Pen Pro is not waterproof. Do not soak it or dip it in water.
- Do not hang the computer with the tether.
- To purchase the ThinkPad Pen Pro, go to:

https://www.lenovo.com/accessories

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Using the ThinkPad Pen Pro

The following illustration shows the ThinkPad Pen Pro.

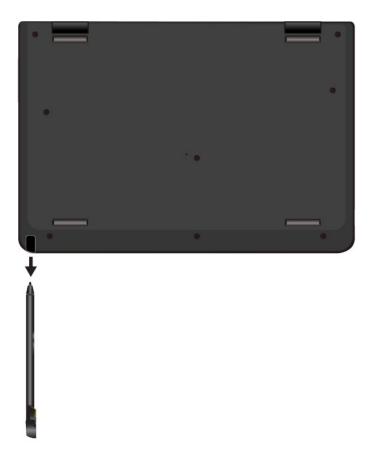
- 1 Tip
- 2 Eraser button
- Right-click button
- 4 Pen tether hole



You can perform the following operations with the ThinkPad Pen Pro:

- To click or make a selection, tap the display once with the pen.
- To double-click, tap twice without pausing.
- To right-click, tap the tip 🛮 on the display and hold the pen there for one second. Alternatively, you can press and hold the right-click button 3 while tapping the tip 1 on the display.
- To erase ink, press and hold the eraser button 2, tap the tip 1 on the display, and drag the pen across the ink you want to erase.

The ThinkPad Pen Pro is stored in the slot on the bottom side of the computer. To remove the pen from the slot, slide the tab of the pen slightly out, and then completely pull out the pen.



Charging the ThinkPad Pen Pro

To charge the pen, insert the pen slightly into the slot until it snaps into position. The pen will be 80% charged in about 15 seconds and 100% charged in about five minutes.

The following illustration is an example. You can insert the pen into the slot for charging no matter the computer is in the notebook mode, stand mode, tent mode, or tablet mode.

Note: Ensure that your computer is on or in sleep mode. Otherwise, the pen will not be charged.



Chapter 4. Accessibility, ergonomic, and maintenance information

This chapter provides information about accessibility, ergonomic, and cleaning and maintenance.

Accessibility information

Lenovo is committed to providing users who have hearing, vision, and mobility limitations with greater access to information and technology. This section provides information about the ways these users can get the most out of their computer experience. You also can get the most up-to-date accessibility information from the following Web site:

https://www.lenovo.com/accessibility

Keyboard shortcuts

The following list contains keyboard shortcuts that can help make your computer easier to use.

Note: Depending on your keyboard, some of the following keyboard shortcuts might not be available.

- Windows logo key + U: Open Ease of Access Center
- Right Shift for eight seconds: Turn on or turn off Filter Keys
- Shift five times: Turn on or turn off Sticky Keys
- Num Lock for five seconds: Turn on or turn off Toggle Keys
- Left Alt+Left Shift+Num Lock: Turn on or turn off Mouse Keys
- Left Alt+Left Shift+PrtScn (or PrtSc): Turn on or turn off High Contrast

For more information, go to https://windows.microsoft.com/, and then search using any of the following keywords: keyboard shortcuts, key combinations, shortcut keys.

Ease of Access Center

Ease of Access Center on the Windows operating system enables you to configure your computers to suit their physical and cognitive needs.

To access Ease of Access Center, do the following:

- 1. Go to Control Panel, and ensure that you view Control Panel using Category.
- 2. Click Ease of Access → Ease of Access Center.
- 3. Choose the appropriate tool by following the instructions on the screen.

Ease of Access Center mainly includes the following tools:

Magnifier

Magnifier is a useful utility that enlarges the entire screen or part of the screen so that you can see the items better.

Narrator

Narrator is a screen reader that reads what is displayed on the screen aloud and describes events such as error messages.

On-Screen Keyboard

If you prefer to type or enter data into your computer using a mouse, joystick, or other pointing device instead of a physical keyboard, you can use On-Screen Keyboard. On-Screen Keyboard displays a visual keyboard with all the standard keys. You can select keys using the mouse or another pointing device, or you can tap to select the keys if your computer supports multi-touch screen.

High Contrast

High Contrast is a feature that heightens the color contrast of some text and images on your screen. As a result, those items are more distinct and easier to identify.

Personalized keyboard

Adjust keyboard settings to make your keyboard easier to use. For example, you can use your keyboard to control the pointer and make the keyboard easier to type certain key combinations.

· Personalized mouse

Adjust mouse settings to make your mouse easier to use. For example, you can change the pointer appearance and make your mouse easier to manage windows.

Speech Recognition

Speech Recognition enables you to control your computer by voice.

Using only your voice, you can start programs, open menus, click objects on the screen, dictate text into documents, and write and send e-mails. Everything you do with the keyboard and mouse can be done with only your voice.

To use Speech Recognition, do the following:

- 1. Go to Control Panel, and ensure that you view Control Panel by Category.
- 2. Click Ease of Access → Speech Recognition.
- 3. Follow the instructions on the screen.

Screen-reader technologies

Screen-reader technologies are primarily focused on software program interfaces, help systems, and various online documents. For additional information about screen readers, see the following:

Using PDFs with screen readers:

https://www.adobe.com/accessibility.html?promoid=DJGVE

• Using the JAWS screen reader:

https://www.freedomscientific.com/Products/Blindness/JAWS

• Using the NVDA screen reader:

https://www.nvaccess.org/

Screen resolution

You can make the text and images on your screen easier to read by adjusting the screen resolution of your computer.

To adjust the screen resolution, do the following:

- 1. Right-click an empty area of the desktop and then click **Display settings** → **Display**.
- 2. Follow the instructions on the screen.

Note: Setting a resolution too low might prevent some items from fitting on the screen.

Customizable item size

You can make the items on your screen easier to read by changing the item size.

- To change the item size temporarily, use the Magnifier tool in Ease of Access Center.
- To change the item size permanently, do the following:
 - Change the size of all the items on your screen.
 - 1. Right-click an empty area of the desktop and then click **Display settings** → **Display**.
 - 2. Change the item size by following the instructions on the screen. For some applications, your configuration might not take effect until you sign out and then sign in again.
 - Change the size of the items on a Web page.

Press and hold Ctrl, and then press the plus-sign key (+) to enlarge or the minus-sign key (-) to reduce the text size.

- Change the size of the items on the desktop or a window.

Note: This function might not work on some windows.

If your mouse has a wheel, press and hold Ctrl, and then scroll the wheel to change the item size.

Industry-standard connectors

Your computer provides industry-standard connectors that enable you to connect assistive devices.

Documentation in accessible formats

Lenovo provides electronic documentation in accessible formats, such as properly tagged PDF files or HyperText Markup Language (HTML) files. Lenovo electronic documentation is developed to ensure that visually impaired users can read the documentation through a screen reader. Each image in the documentation also includes adequate alternative text so that visually impaired users can understand the image when they use a screen reader.

Ergonomic information

Good ergonomic practice is important to get the most from your personal computer and to avoid discomfort. Arrange your workplace and the equipment you use to suit your individual needs and the kind of work that you perform. In addition, use healthy work habits to maximize your performance and comfort when using your computer.

Working in the virtual office might mean adapting to frequent changes in your environment. Adapting to the surrounding light sources, active seating, and the placement of your computer hardware, can help you improve your performance and achieve greater comfort.

This example shows someone in a conventional setting. Even when not in such a setting, you can follow many of these tips. Develop good habits, and they will serve you well.



General posture: Make minor modifications in your working posture to deter the onset of discomfort caused by long periods of working in the same position. Frequent short breaks from your work also help to prevent minor discomfort associated with your working posture.

Display: Position the display to maintain a comfortable viewing distance of 510 mm to 760 mm (20 inches to 30 inches). Avoid glare or reflections on the display from overhead lighting or outside sources of light. Keep the display screen clean and set the brightness to levels that enable you to see the screen clearly. Press the brightness control keys to adjust display brightness.

Head position: Keep your head and neck in a comfortable and neutral (vertical, or upright) position.

Chair: Use a chair that gives you good back support and seat height adjustment. Use chair adjustments to best suit your comfort posture.

Arm and hand position: If available, use chair arm rests or an area on your working surface to provide weight support for your arms. Keep your forearms, wrists, and hands in a relaxed and neutral (horizontal) position. Type with a soft touch without pounding the keys.

Leg position: Keep your thighs parallel to the floor and your feet flat on the floor or on a footrest.

What if you are traveling?

It might not be possible to observe the best ergonomic practices when you are using your computer while on the move or in a casual setting. Regardless of the setting, try to observe as many of the tips as possible. Sitting properly and using adequate lighting, for example, helps you maintain desirable levels of comfort and performance. If your work area is not in an office setting, ensure to take special note of employing active sitting and taking work breaks. Many ThinkPad product solutions are available to help you modify and expand your computer to best suit your needs. You can find some of these options at https:// www.lenovo.com/accessories. Explore your options for docking solutions and external products that provide the adjustability and features that you want.

Questions about vision?

The visual display screens of ThinkPad notebook computers are designed to meet the highest standards. These visual display screens provide you with clear, crisp images and large, bright displays that are easy to see, yet easy on the eyes. Any concentrated and sustained visual activity can be tiring. If you have questions on eye fatigue or visual discomfort, consult a vision-care specialist for advice.

Cleaning and maintenance

With appropriate care and maintenance your computer will serve you reliably. The following topics offer information to help you keep your computer in top working order.

Basic maintenance tips

Here are some basic points about keeping your computer functioning properly:

- Store packing materials safely out of the reach of children to prevent the risk of suffocation from plastic bags.
- Keep your computer away from magnets, activated cellular phones, electrical appliances, or speakers (more than 13 cm or 5 inches).
- Avoid subjecting your computer to extreme temperatures (below 5°C/41°F or above 35°C/95°F).
- Avoid placing any objects (including paper) between the display and the keyboard or the palm rest.
- Do not turn your computer over when the ac power adapter is plugged in, otherwise, it could break the adapter plug.

- Before moving your computer, be sure to remove any media, turn off attached devices, and disconnect cords and cables.
- When picking up your open computer, hold it by the bottom. Do not pick up or hold your computer by the display.
- Only an authorized ThinkPad repair technician should disassemble and repair your computer.
- Do not modify or tape the latches to keep the display open or closed.
- Avoid directly exposing your computer and peripherals to the air from an appliance that can produce negative ions. Wherever possible, ground your computer to facilitate safe electrostatic discharge.

Cleaning your computer

It is a good practice to clean your computer periodically to protect the surfaces and ensure trouble-free operation.

Cleaning the computer cover: Wipe it with a lint-free cloth dampened in mild soap and water. Avoid applying liquids directly to the cover.

Cleaning the keyboard: Wipe the keys one by one with a lint-free cloth dampened in mild soap and water. If you wipe several keys at a time, the cloth might hook onto an adjacent key and possibly damage it. Avoid spraying cleaner directly onto the keyboard. To remove any crumbs or dust from beneath the keys, you can use a camera blower with a brush or use cool air from a hair dryer.

Cleaning the computer screen: Scratches, oil, dust, chemicals, and ultraviolet light can affect the performance of your computer screen. Use a dry, soft lint-free cloth to wipe the screen gently. If you see a scratchlike mark on your screen, it might be a stain. Wipe or dust the stain gently with a soft, dry cloth. If the stain remains, moisten a soft, lint-free cloth with water or eyeglass cleaner, but do not apply liquids directly to your computer screen. Ensure that the computer screen is dry before closing it.