

User Guide



Lenovo

Lenovo ThinkBook 13x Gen 2

Read this first

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

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

First Edition (May 2023)

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About this guide

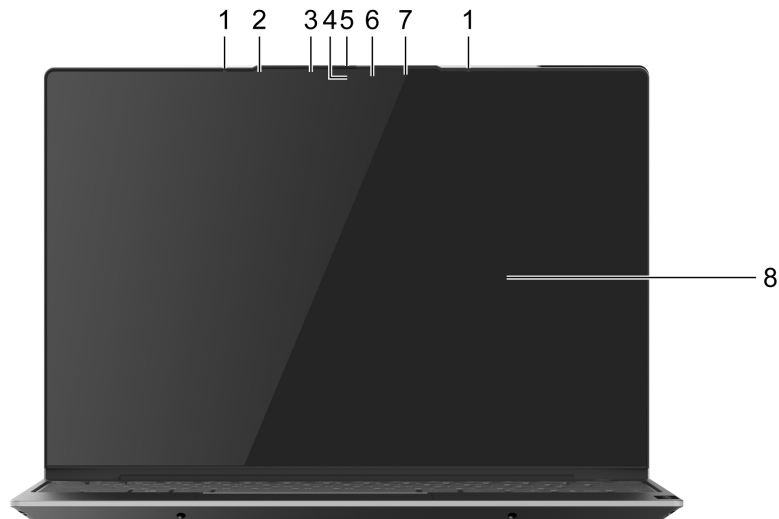
- This guide applies to Lenovo product model(s) listed below. Illustrations in this guide may look slightly different from your product model.

Model name	Machine type (MT)
ThinkBook 13x G2 IAP	21AT

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

Chapter 1. Meet your computer

Front



Item	Controls & Connectors	Description
1	Microphones	Capture or record sound and voice.
2	Ambient light sensor	Detect the surrounding light intensity and adjust the brightness of the built-in screen accordingly. Note: To turn off the automatic brightness adjustment, type display settings in the Windows search box and then press Enter.
3	Infrared LED	Emit infrared light for face authentication.
4	Camera	• Capture still and moving images for taking photos, recording videos, and video chatting. • Capture your face images for face authentication. Note: Use Windows Hello to enroll your face for face authentication.
5	Camera switch	Turn the camera on or off.
6	Camera light	If the light is on, the camera is in use.
7	Time of flight (ToF) sensor	Detect human presence in front of the computer for facilitating zero touch and other convenient features. See “Laser safety for the ToF sensor” on page 9.
8	Screen	Display text, graphics, and videos. Selected models support multi-touch function.

Base



Item	Controls & Connectors	Description
1	Power button/Fingerprint reader	- Press the button to turn on the computer or put the computer into sleep mode. Note: You can turn on the computer by flipping open the LCD screen if Flip to Boot is enabled. - Enroll and read your fingerprint for user authentication.
2	Power light/Fingerprint reader light	- Power light - Fast blinking white for two times: The computer is turned on. - Slow blinking white: The computer is in sleep mode. - Solid white: The computer is in use. - Off: The computer is turned off or in hibernation mode. - Fingerprint reader light - Blinking green and then solid green: The fingerprint reader is ready to scan your fingerprint. - Solid white: The fingerprint scan is successful. - Blinking amber and then solid green: The fingerprint scan has failed (within the first three times). - Blinking amber and then solid white: The fingerprint scan has failed (more than three times).

Item	Controls & Connectors	Description
3	Keyboard	Enter characters and interact with programs. The lights on the keyboard show the following status of your computer. • FnLock light: Turn on/off the FnLock switch. • CapsLock light: Enable/disable the CapsLock function. • Speaker mute light: Mute/unmute the speakers. Note: The keyboard also includes hotkeys and function keys for changing settings and performing tasks quickly.
4	Touchpad	Perform finger touch and all the functions of a traditional mouse. Note: The touchpad also supports multi-touch function.

Left



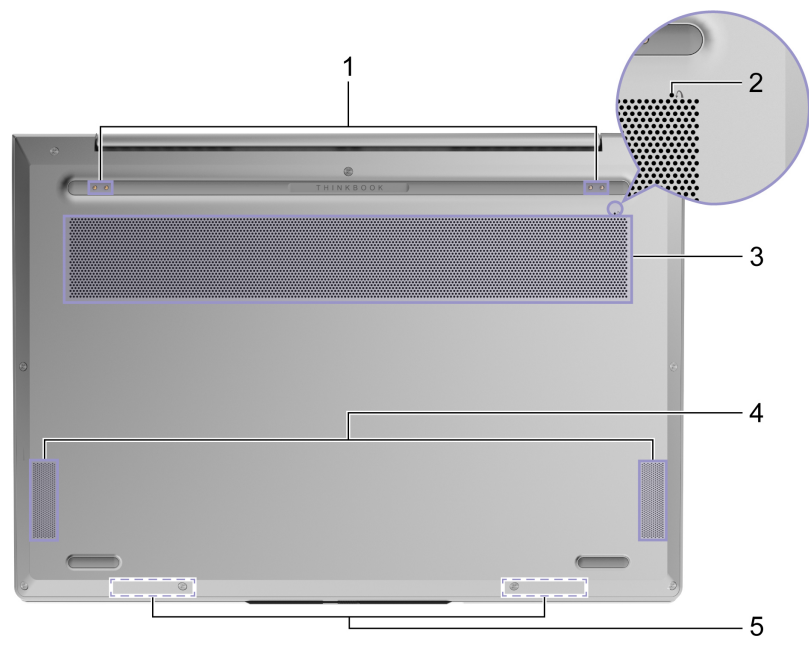
Item	Controls & Connectors	Description
1	Power connector/Thunderbolt™ 4 connector	• Plug the ac power adapter into the Thunderbolt 4 connector to provide power to the computer and charge the internal battery. • Connect to an external display, storage, or data devices. Note: An appropriate adapter may be needed for connecting to external devices.
2	Charging light	Indicate whether the computer is connected to ac power. • Solid white: Connected to ac power; battery capacity 91%–100% • Solid amber: Connected to ac power; battery capacity 1%–90% • Off: Not connected to ac power

Right



Item	Controls & Connectors	Description
1	Power light	• Solid white: The computer is turned on. Battery capacity 21% - 100%. • Fast blinking: The computer is turned on. Battery capacity 1% - 20%. • Slow blinking: The computer is in sleep mode. • Off: The computer is turned off or in hibernation mode.
2	Power connector/Thunderbolt™ 4 connector	• Plug the ac power adapter into the Thunderbolt 4 connector to provide power to the computer and charge the internal battery. • Connect to an external display, storage, or data devices. Note: An appropriate adapter may be needed for connecting to external devices.
3	Combo audio jack	Connect to headphones or headsets with a 3.5 mm (0.14 inch), 4-pole plug. Note: This jack does not support standalone external microphones. If you use headsets, choose one with a single plug.

Bottom



Item	Controls & Connectors	Description
1	Wireless charging connector *	Connect to a wireless charging mat to charge the internal battery.
2	Novo button hole	Press the Novo button to open the Novo Button menu. From the menu, you can choose to open the UEFI/BIOS setup utility, the Boot menu, or the Windows startup options screen.
3	Ventilation slots (inlet)	Maintain the incoming airflow to dissipate internal heat. Note: Do not block the ventilation slots. Otherwise, the computer might overheat.
4	Speakers	Produce sound.
5	Wireless antennas	Send and receive radio waves for the built-in wireless LAN (local area network) and Bluetooth module. Notes: • The antennas are not visible from the outside of the computer. • If the location of the antennas is close to the user's body (< 20 cm), you can find the Specific Absorption Rate (SAR) values in the <i>Setup Guide</i> that comes with your computer.

* for selected models

Features and specifications

Specifications	Descriptions
Dimensions	• Width: 296 mm (11.65 inches) • Depth: 209 mm (8.23 inches) • Thickness: 12.9 mm (0.51 inches)
ac power adapter	• Input: 100 V ac–240 V ac, 50 Hz–60 Hz • Maximum output: – 20 V dc, 3.25 A – 20 V dc, 5 A • Maximum power: – 65 W – 100 W
Battery pack	• Capacity: 56 Wh • Number of cells: 4 Note: The battery capacity is the typical or average capacity as measured in a specific test environment. Capacities measured in other environments may differ but are no lower than the rated capacity (see product label).
Microprocessor	To view the microprocessor information of your computer, type system information in the Windows search box and then press Enter.
Memory	• Type: LPDDR5 • Number of physical slots: 0
Storage device	• Type: M.2 solid-state drive • Bus: PCI Express
Screen	• Size: 337.82 mm (13.3 inches) • Display resolution: 2560 × 1600 pixels (WQXGA model)
Keyboard	• Function keys • Hotkeys • Keyboard backlight

Specifications	Descriptions
Connectors and slots	• Combo audio jack • Power connector/Thunderbolt 4 connector × 2 – Power input up to 20 V and 3.25 A – Power output up to 5 V and 3 A – USB data transfer rate up to 10 Gbps for USB 3.2 Gen 2 – DisplayPort 1.4. Supports maximum output resolution of 5120 × 3200, at 60 Hz frame rate and color depth of 24 bpp (bits per pixel). – Up to 40 Gbps bi-directional data transfer rate in Thunderbolt mode. Note: Data rates and performance ratings are dependent on connected devices and cables if they are used. For DisplayPort connection through a USB-C port, the listed maximum output capacity is only available on external displays with a DisplayPort, a Mini DisplayPort, or a USB-C port that supports DisplayPort Alternate Mode. For connections using a converter or an adapter, the actual output resolution may be lower.
Security	• Fingerprint reader • UEFI/BIOS passwords – Administrator password – User password – Master hard disk password – User hard disk password
Network	• Bluetooth and Wi-Fi combo adapter

Statement on USB transfer rate

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

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

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

- At altitudes up to 2438 m (8000 ft)
 - Operating: 5°C to 35°C (41°F to 95°F)
 - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8000 ft)
 - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

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

Relative humidity

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

Laser safety for the ToF sensor



This device is classified as a Class 1 laser product per *EN/IEC 60825-1:2014*. This device complies with FDA performance standards for laser products except for conformance with *IEC 60825-1 Ed. 3*, as described in *Laser Notice No. 56*, dated May 8, 2019.

CAUTION:

This device contains a laser that could be damaged during repair or disassembly, which could result in hazardous exposure to infrared laser emissions. There are no user serviceable parts with the device. Do not attempt to disassemble or service the device.

Chapter 2. Get started with your computer

Work with Windows

The following table contains Windows frequently used settings. You can learn the basics and start working with Windows right away.

To configure settings, type the corresponding keywords in the Windows search box and select the best match. Follow the on-screen instructions to customize settings.

Table 1. Basic settings

Functions	Descriptions	Search by keywords
Control Panel	View or change Windows settings, including hardware and software setup and configuration.	Control Panel
Connect to Wi-Fi networks	For models with a wireless LAN module, you can connect your computer to a Wi-Fi® network. Click the network icon in the Windows notification area, and then select a network for connection. Note: The wireless LAN module on your computer may support different standards. For some countries or regions, use of 802.11ax may be disabled according to local regulations.	Wi-Fi
Airplane mode	Airplane mode is a convenient setting to turn all wireless communications of your computer on and off. You may need to turn it on when boarding an airplane.	Airplane mode
Night light mode	Night light is a switch in Windows that you can turn on and off. When it is turned on, your screen shows warmer colors and the amount of emitted blue light is reduced. Enabling night light reduces the chances of developing eye fatigue or eye strain.	Night light
Adjust color temperature	If night light mode is turned on, you can adjust the color temperature of the screen. Note: Selected Lenovo computers are low blue light certified. These computers are tested with night light turned on and color temperature set to the default value of 48.	Night light
Windows Updates	Microsoft periodically releases feature and security updates to the Windows operating system. Updates that are applicable to your Windows version are downloaded automatically when your computer is connected to the Internet. When updates are downloaded, you are prompted to restart the computer to install these updates. You can also manually check if there are available updates for the installed version of Windows. Attention: Only use Windows Update to download and install updates. Updates downloaded from other sources may include security risks.	Windows Updates

Table 2. Optional settings

Functions	Descriptions	Search by keywords
Set up face recognition	For models with a Windows Hello-compatible infrared camera, you can set up face recognition to sign in with your face.	Sign-in options
Enroll your fingerprint	For models with a fingerprint reader, you can enroll your fingerprint for Windows sign-in.	Sign-in options

Windows help information

If the on-screen instructions cannot solve your problem, refer to the following to get the online Windows help information.

- Type Get Help or Tips in the Windows search box and then press Enter. When the app opens, type the problem description and select the matched result.
- Visit Microsoft support Web site: <https://support.microsoft.com>. Enter what you are looking for in the search box and get search results.

Lenovo Vantage and Lenovo PC Manager

Lenovo Vantage and Lenovo PC Manager are apps developed by Lenovo. Using either of the app, you can:

- View product information
- View warranty and support information
- Run hardware scan and diagnose problems
- Change hardware settings
- Update Windows, drivers, and UEFI/BIOS

Lenovo Vantage or PC Manager may be pre-installed on your computer. To open it, enter the software name in Windows Search and select the matched result.

Note: If Lenovo Vantage is not pre-installed, you can download it from the Microsoft Store.

The Novo Button menu

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

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

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

Start your computer using a recovery drive

Reset your computer

Open advanced options screen

Open the Novo Button menu

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

Step 1. Turn off the computer.

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

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

Interact with your computer

Keyboard hotkeys

Some keys on the keyboard are printed with icons. These keys are called hotkeys and can be pressed alone or in combination with the Fn key to open certain apps or change certain settings quickly. The functions of the hotkeys are symbolized by the icons printed on them.

Hotkey	Function
	Mute/Unmute sound.
	Decrease/Increase system volume.
	Mute/Unmute the microphone.
	Increase/Decrease screen brightness.
	Switch display devices.
	Turn airplane mode on and off.
	Service key.
	Open the Windows Settings app.
	Lock the screen.
	Open the Windows Calculator app.
	Open Lenovo Vantage, Lenovo PC Manager, or an app launch bar.
	Open the Windows screenshot tool.
	Turn on/off or adjust the brightness of the keyboard backlight. Note: This hotkey must be used with the Fn key.

Dual-function keys without printed icons

Some dual-function keys share keys with letter keys and numeric keys. Such keys do not have a dedicated printed icon. The following table lists the hidden functions for these keys.

Key combination	Hidden function
Fn + Q	Switch operation modes
Fn + M	Enable/disable the touchpad

Hotkey mode

Some hotkeys share keys with function keys (F1 to F12). The hotkey mode is a UEFI/BIOS setting that changes how hotkeys (or function keys) are used.

Hotkey mode setting	How to use hotkeys	How to use function keys
Disabled	Hold down the Fn key and press one of the hotkeys.	Press the function keys directly.
Enabled	Press the hotkeys directly.	Hold down the Fn key and press one of the function keys.

Note: Hotkeys that do not share keys with function keys are not affected by the hotkey mode setting. They should always be used with the Fn key.

The FnLock switch

The FnLock is a switch that reverses the default and hidden function of a hotkey. The following table provides an example of how the FnLock switch changes the default function of the F1 key.

FnLock	FnLock light	Default function of the F1 key
Off	Off	Mute/Unmute sound
On	On	F1 function *

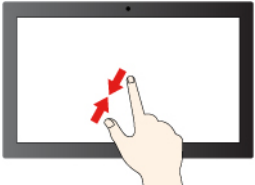
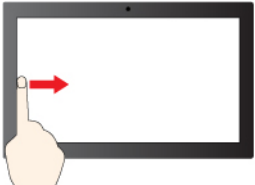
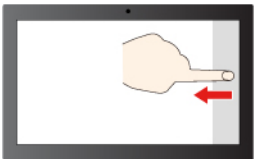
Note: The F1 function is application-dependent. It may have no function if the active application does not have a definition for the key.

The FnLock switch shares the ESC key (in the upper left corner of the keyboard). To turn it on or off, press Fn + ESC.

Touch operations supported by Windows (for selected models)

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

Touch operation	Used for
 Tap	Opening apps, documents, and other functions on the taskbar or the Start menu
 Tap twice quickly	Opening apps that are pinned on the desktop

Touch operation	Used for
 Tap, hold and lift	Opening the context menu
 Pinch	Zooming out
 Spread	Zooming in
 Swipe in from the left edge	Opening the widgets panel
 Swipe in from the right edge	Opening the notification center

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

Chapter 3. Explore your computer

Intelligent features

Some Lenovo computers include a ToF sensor and an IR camera on top of the screen. Using data provided by the ToF sensor and IR camera, the computer is able to behave like a human. It can detect your presence, your movement, and perform operations automatically to protect your privacy, save battery power, or just make your daily use of the computer easier. The following table provides an introduction to some of the intelligent features and where you can set them up.

Table 3. Intelligent features

Your behavior	Computer operation	Setup app
Leave the computer	• Pause the ongoing video playback. • (If you do not come back shortly) Automatically lock the screen and put the computer into sleep mode. Note: Not all applications support automatic video pausing and resuming. In particular, videos played in a Web browser cannot be automatically paused.	Lenovo Vantage
Come back to the computer after leaving it unattended for a while	Automatically wake up the computer and sign you into the system. Note: You must use Windows Hello to set up face recognition before you can be signed in automatically. Face sign-in may fail due to poor domestic lighting or improper setting of the screen opening angle. Improve lighting, adjust the screen opening angle, or use another sign-in option if you're not signed in automatically.	Lenovo Vantage
Use videoconferencing apps	Blur the background	Lenovo Vantage

Note: The above listed features may not be enabled by default. You may need to enable these features in the corresponding setup app.

Customize intelligent features in Lenovo Vantage

You can enable or disable and customize many intelligent features in Lenovo Vantage.

Step 1. Open Lenovo Vantage.

Step 2. Select **Hardware Settings** → **Smart Settings**.

Step 3. Change settings that control the various intelligent features.

Eye care mode

Eye care mode intelligently adjusts the color temperature of the screen to filter blue light, which can effectively reduce damage to the eyes, thus protecting the eyes. Eye care mode can be enabled or disabled in Lenovo Vantage or the Lenovo PC Manager.

Zero touch

Zero touch enables you to improve work efficiency by automatically waking up and logging in to your computer, or dimming the display and locking the computer depending on user detection. For selected video players, this feature will pause any video playing when you leave the computer and resume upon your return. Zero touch can be enabled or disabled in Lenovo Vantage.

Super resolution

This feature enhances the playback experience by improving the video resolution with deep learning by using the capabilities of Intel processors. It works especially well in cases where the source video has poor resolution.

For most players, super resolution can be enabled or disabled in Lenovo Vantage or the Lenovo Smart Engine, but for KMPlayer and PotPlayer, you need to enable this feature manually.

Note: You may need to connect to the Internet and complete Lenovo Vantage update for this function to take effect.

KMPlayer

Step 1. Open **Control Panel**.

Step 2. Select **Preferences → Video Processing → Video Renderer → EVR**.

PotPlayer

Show main menu and click **Video → Video Renderer → EVR (Vista/.Net3)**.

Manage power

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

Check the battery status

The battery status icon  or  is in the Windows notification area. You can check the battery status, view the current power plan, and access battery settings quickly.

Click the battery status icon to display the percentage of battery power remaining and change the power mode. A warning message is displayed when the battery is low.

Charge the battery

When the remaining battery power is low, charge your battery by connecting your computer to ac power.

The battery is fully charged in about two to four hours. The actual charging time depends on the battery capacity, 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:

You can check the battery temperature in Lenovo Vantage or Lenovo PC Manager.

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

To extend your battery's lifespan, 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 Lenovo Vantage.

Set power button behavior

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

- Step 1. Type Control Panel in the Windows search box and then press Enter. Open the control panel and view by large or small icons.
- Step 2. Select the power options and then click choose what the power button does.

A power plan

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

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

- Default power plan: Balanced
- Turn off the display: after 4 minutes
- Put the computer to sleep: after 4 minutes

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

Change or customize a power plan

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

- Step 1. Type power plan in the Windows search box and then press Enter.
- Step 2. Customize a power plan of your preference.

Set performance mode

Your computer can work in different performance modes. The performance and power consumption of the computer vary in different performance modes. Press **Fn + Q** to cycle through different performance modes.

Icon	Option	Description
	Intelligent Cooling	Enables the best all-around user experience with balanced fan speeds and system performance. For example, during gaming, performance is optimized, and while in the office, noise is reduced.
	Battery Saving	Optimizes battery life by automatically adjusting brightness, power and other settings.
	Extreme Performance	Optimizes system performance. In this mode, higher fan speeds may cause a larger amount of noise.

Change settings in UEFI/BIOS setup utility

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

What is UEFI/BIOS setup utility

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

Open the UEFI/BIOS setup utility

- Step 1. Turn on or restart the computer.
- Step 2. When the Lenovo logo appears on the screen, press F1 repeatedly.

Notes:

- For computers with hotkey mode enabled, press Fn + F1.
- If you have set the supervisor password, enter the correct password when prompted. You also can press Enter to skip the password prompt and enter the UEFI BIOS menu. However, you cannot change the system configurations that are protected by the supervisor password.

Enable or disable Fool Proof Fn Ctrl

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Configuration**.
- Step 3. Change the **Fool Proof Fn Ctrl** setting to **Enabled** or **Disabled**.
- Step 4. Select **Exit** → **Exit Saving Changes**.

When enabled, the Fn key and the Ctrl key can be used interchangeably for key combinations involving the **Ctrl** key. For example, you can press either **Ctrl** + **A** or **Fn** + **A** to select all text in a text editing application.

Change hotkey mode

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Configuration** → **Hotkey Mode** and press Enter.
- Step 3. Change the setting to **Disabled** or **Enabled**.
- Step 4. Select **Exit** → **Exit Saving Changes**.

Enable or disable always-on

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

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

Enable or disable Flip to Boot

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

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Configuration**.
- Step 3. Change the setting for **Flip to Boot**.

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

Set passwords in UEFI/BIOS setup utility

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

Password types

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

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

Notes:

- All passwords set in the setup utility consist of alphanumeric characters only.
- If you start the setup utility using the user password, you can only change a few settings.

Set administrator password

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

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

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Security → Set Administrator Password** and press Enter.
- Step 3. Enter a password string that contains only letters and numbers and then press Enter
- Step 4. Enter the password again and press Enter.
- Step 5. Select **Exit → Exit Saving Changes**.

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

Change or remove administrator password

Only the administrator can change or remove the administrator password.

- Step 1. Open the UEFI/BIOS setup utility using the administrator password.
- Step 2. Select **Security → Set Administrator Password** and press Enter.

- Step 3. Enter the current password.
- Step 4. In the **Enter New Password** text box, enter the new password.
- Step 5. In the **Confirm New Password** text box, enter the new password again.

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

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

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

Set user password

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

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

- Step 1. Open the UEFI/BIOS setup utility using the administrator password.
- Step 2. Select **Security → Set User Password** and press Enter.
- Step 3. Enter a password string that contains only letters and numbers and then press Enter.
The user password must be different from the administrator password.
- Step 4. Enter the password again and press Enter.
- Step 5. Select **Exit → Exit Saving Changes**.

Enable power-on password

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

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Security → Power on Password** and press Enter.

Note: The administrator password must be set in advance.

- Step 3. Change the setting to **Enabled**.
- Step 4. Select **Exit → Exit Saving Changes**.

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

Set hard disk password

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

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

- Step 1. Open the UEFI/BIOS setup utility.
- Step 2. Select **Security → Set Hard Disk Password** and press Enter.

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

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

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

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

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

Change or remove hard disk password

Step 1. Open the UEFI/BIOS setup utility.

Step 2. Select **Security**.

Step 3. Change or remove the hard disk password.

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

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

To change user password, select **Change User Password** and press Enter.

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

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

Chapter 4. Accessories

Depending on the model, your computer might not come with certain accessories.

ThinkBook USB-C Micro Hub

Setup instructions

- Step 1. Connect ThinkBook USB-C Micro Hub to the USB-C™ connector or Thunderbolt™ 3 connector on your compatible computer.
- Step 2. You can connect display devices to the High-Definition Multimedia Interface (HDMI™) connector on the hub. You can also connect a USB-compatible device to the USB 3.1 Gen 1 connector on the hub.

Important information

- The hub is only supported by Microsoft® Windows 10 and later.
- For the list of compatible computers and the latest firmware, go to https://support.lenovo.com/us/en/accessories/thinkbook_usb_c_micro_hub.
- To play HDCP (High-bandwidth Digital Content Protection)-encrypted videos on an external display, connect the display to the HDMI connector.

Supported maximum resolutions

- When connected to external display:
 - HDMI video output: 3840 x 2160 pixels / 60 Hz

ThinkBook Wireless Multi-Device Charging Mat

Notes:

- Connect with the power adapter higher than 90 W.
- Place your device on the sensing area (square icon area) for wireless charging.
- Remove any objects from the mat, and wipe the mat gently to ensure that it is clean and dry.
- LED toggling between white and green during dual power supplying is a normal behavior.

LED indicator

LED	LED status	Description
Qi LED	Solid white	Idle
	Solid green	Charging.
	Blinking white	Abnormal / FOD (foreign object detection)
PC charger LED	Solid white	Idle
	Solid green	Charging.
	Blinking red	Abnormal / FOD (foreign object detection)

台灣ROHS表

單元Unit	限用物質及其化學符號					
	鉛 (Pb)	汞(Hg)	鎘(Cd)	六價鉻(Cr ⁶⁺)	多溴聯苯(PBB)	多溴二苯醚PBDE
印刷電路板組件	-	○	○	○	○	○
硬碟	-	○	○	○	○	○
光碟機(選配 件)	-	○	○	○	○	○
記憶體	-	○	○	○	○	○
電源供應器	-	○	○	○	○	○
鍵盤(選配件)	-	○	○	○	○	○
滑鼠(選配件)	-	○	○	○	○	○
機殼	-	○	○	○	○	○
配件(電源線)	-	○	○	○	○	○
散熱模組	-	○	○	○	○	○
無線充(選配 件)	-	○	○	○	○	○
備考1."超出0.1 wt %"及"超出0.01 wt %"係指限用物質之百分比含量超出百分比含量基準值。						
備考2. "○"係指該項限用物質之百分比含量未超出百分比含量基準值。						
備考3. " - "係指該項限用物質為排除項目。						

產品名稱：多設備無線充電板

型號: L01WC012-CS-H

Input rating: 20Vdc/5A max

Output rating :20Vdc/3.25A max. wireless :10Wmax

充電板適用於 20Vdc, 5A規格的電源供應器

NCC 警语

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

FCC statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:

Any Changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

"This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help."

IC statement:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Radiation Exposure

This equipment complies with FCC & Industry Canada exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located operating in conjunction with any other antenna or transmitter.

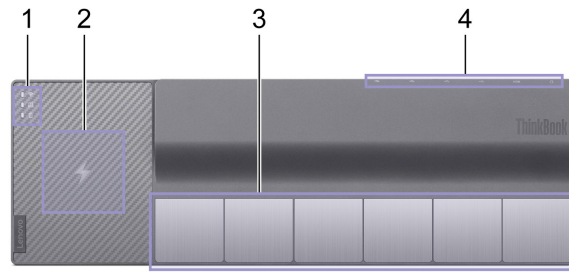
L'équipement est conforme aux limites d'exposition établies par FCC et Industrie Canada pour les environnements non contrôlés. L'émetteur ne doit pas fonctionner en même temps qu'une autre antenne ou un autre émetteur.

ThinkBook Wireless Dock

The dock is a wireless expansion module. The wireless charging area can supply power to select devices when put your device on it. The dock connectors can extend the capabilities of your computer by enabling it to use various optional devices.

Notes:

- The dock is only supported by Windows operating system.
- Only use the power cord and ac power adapter that come with your dock.
- It is recommended that you put the dock flat on the table.
- Remove any objects from the charging area, or wipe the charging area gently to ensure it is clean and dry.



Item	Controls & Connectors	Description
1	LED indicators	For details, refer to “LED indicators” on page 28
2	Qi wireless charging area	- Supported devices: Qi enabled devices - Maximum power: 10W
3	Computer wireless charging area	- Supported devices: Lenovo ThinkBook 13x Gen 2 - Maximum power: 45W
4	Dock connectors	Before using the dock connectors, download and install the ThinkBook Wireless Dock app, go to https://support.lenovo.com/us/en/accessories/thinkbook_wireless_dock. - USB Type-A connector × 3 - Supports USB 2.0 - Multi-purpose USB Type-C connector - Supports USB 2.0 - Supports DisplayPort Alt Mode (DisplayPort 1.2 compliant) - Supports power output up to 15 W (5 V, 3 A) - HDMI connector - When connected to external display, supports maximum resolutions 4K@60Hz - Power connector - Supports Lenovo 135W Slim Tip AC adapter Note: Remove the computer from the dock for more than five seconds, the wireless connection might be disconnected automatically.

LED indicators

LED	LED status	Description
 Wireless LED	Solid white	Idle
	Blinking white	A computer is connecting to the dock
	Solid green	A computer has connected to the dock
 PC charger LED	Solid white	The dock is connected to ac power
	Solid green	Charging
	Blinking red	Abnormal / FOD (foreign object detection)

LED	LED status	Description
Qi LED	Solid white	Idle
	Solid green	Charging
	Blinking red	Abnormal / FOD (foreign object detection)

Use the video output connectors

The dock has two video output connectors:

- HDMI connector
- USB Type-C connector





Note: The dock supports up to two external displays.

Chapter 5. Help and support

Frequently asked questions

How do I partition my storage drive?	Refer to https://support.lenovo.com/solutions/ht503851
What should I do if my computer stops responding.	Press and hold the power button until the computer turns off. Then restart the computer.
What should I do if I spill liquid on the computer?	1. Carefully unplug the ac power adapter and turn off the computer immediately. The more quickly you stop the current from passing through the computer the more likely you will reduce damage from short circuits. Attention: Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable. 2. Wait until you are certain that all the liquid is dry before turning on your computer. CAUTION: Do not try to drain out the liquid by turning over the computer. If your computer has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.
Where can I get the latest device drivers and UEFI/BIOS?	• Lenovo Vantage or Lenovo PC Manager • Lenovo Support Web site at https://support.lenovo.com

Self-help resources

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

Resources	How to access?
Troubleshooting and frequently asked questions	• https://www.lenovo.com/tips • https://forums.lenovo.com
Accessibility information	https://www.lenovo.com/accessibility
Reset or restore Windows	• Use Lenovo recovery options. 1. Go to https://support.lenovo.com/HowToCreateLenovoRecovery. 2. Follow the on-screen instructions. • Use Windows recovery options. 1. Go to https://pcsupport.lenovo.com. 2. Detect your computer or manually select your computer model. 3. Click Diagnostics → Operating System Diagnostics and then follow the on-screen instructions.

Resources	How to access?
Use Lenovo Vantage or Lenovo PC Manager to: • Download and install the latest drivers and firmware. • Configure hardware settings • Diagnose computer hardware problems. • Check the computer warranty status.	Use Windows Search.
Product documentation: • Generic Safety and Compliance Notices • <i>Safety and Warranty Guide</i> • <i>Setup Guide</i> • This <i>User Guide</i> • <i>Regulatory Notice</i>	1. Go to https://support.lenovo.com. 2. Detect your computer or select computer model manually. 3. Select Documentation and filter out the documentation you want.
Lenovo Support Web site with the latest support information of the following: • Drivers and software • Diagnostic solutions • Product and service warranty • Product and parts details • Knowledge base and frequently asked questions	Visit https://support.lenovo.com
Windows help information	• Use Get Help or Tips. • Use Windows Search or the Cortana® personal assistant. • Microsoft support Web site: https://support.microsoft.com

What is a CRU?

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

Self-service CRU

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

Optional-service CRU

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

If you intend to install a CRU, Lenovo will ship the CRU to you. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the *Lenovo Limited Warranty* at https://www.lenovo.com/warranty/llw_02.

CRUs for your product model

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

Part	Self-service CRU	Optional-service CRU
Power cord	X	
ac power adapter	X	
ThinkBook USB-C Micro Hub	X	
ThinkBook Wireless Multi-Device Charging Mat *	X	

* for selected models

Notes:

- CRU replacement instruction is provided in one or more of the following publications and are available from Lenovo at any time upon your request.
 - the product *User Guide*
 - the printed publications that came with the product
- Replacement of any parts not listed above, including the built-in rechargeable battery, must be done by a Lenovo-authorized repair facility or technician. Go to <https://support.lenovo.com/partnerlocation> for more information.

Call Lenovo

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

Before you contact Lenovo

Record product information and problem details before you contact Lenovo.

Product information	Problem symptoms and details
- Product name - Machine type and serial number	- What is the problem? Is it continuous or intermittent? - Any error message or error code? - What operating system are you using? Which version? - Which software applications were running at the time of the problem? - Can the problem be reproduced? If so, how?

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

Lenovo Customer Support Center

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

Telephone numbers

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

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

Services available during the warranty period

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

Services not covered

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

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

Purchase additional services

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

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

Appendix A. Notices and trademarks

Notices

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Morrisville, NC 27560
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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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FCC Caution:

Any Changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

"This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help."

FCC statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IC statement:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Radiation Exposure

This equipment complies with FCC & Industry Canada exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located operating in conjunction with any other antenna or transmitter.

L'équipement est conforme aux limites d'exposition établies par FCC et Industrie Canada pour les environnements non contrôlés. L'émetteur ne doit pas fonctionner en même temps qu'une autre antenne ou un autre émetteur.

This device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.