User Guide

IdeaPad 5 (14", 05) and IdeaPad 5 (15", 05)

User Guide

IdeaPad 5 (14", 05) and IdeaPad 5 (15", 05)

Read this first

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

- Appendix A “Important safety information” on page 33
- *Safety and Warranty Guide*
- *Setup Guide*

First Edition (November 2019)

© Copyright Lenovo 2019.

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant to a General Services Administration “GSA” contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

Contents

About this guide v

Chapter 1. Meet your computer 1

Front 1
Base 2
Left 4
Right 6
Features and specifications 8
IdeaPad 5 (14", 05) 8
IdeaPad 5 (15", 05) 9
Statement on USB transfer rate 11
Operating environment 11

Chapter 2. Get started with your computer 13

Get started with Windows 10 13
Windows account 13
Windows desktop 14
Lenovo Vantage and Lenovo PC Manager 15
Connect to Wi-Fi networks 15
Forget a Wi-Fi network 16
Turn airplane mode on and off 16
The Novo Button menu 16
Open the Novo Button menu 16
Interact with your computer 16
Keyboard hotkeys 16
Numeric keypad 17
Use the multi-touch screen 17

Chapter 3. Explore your computer . . 21

Manage power 21
Check the battery status 21
Charge the battery 21
Check the battery temperature 21
Set power button behavior 21
Change or create a power plan 21
Set performance mode 22
Change settings in UEFI/BIOS setup utility 22
What is UEFI/BIOS setup utility 22
Open the UEFI/BIOS setup utility 22
Change the startup sequence 22
Change hotkey mode 22
Enable or disable always-on 22
Set passwords in UEFI/BIOS setup utility 23
Password types 23
Set administrator password 23
Change or remove administrator password . . 23
Set user password 24
Enable power-on password 24
Set hard disk password 24
Change or remove hard disk password 25
Reset or restore Windows 25
Windows 10 recovery options 25
Windows System Restore 25
Reset Windows 26
Create a recovery drive 26
Use a recovery drive to restore or reset Windows 27

Chapter 4. Help and support 29

Frequently asked questions 29
Self-help resources 29
Call Lenovo 31
Before you contact Lenovo 31
Lenovo Customer Support Center 31
Purchase additional services 32

Appendix A. Important safety information 33

Appendix B. Accessibility and ergonomic information 45

Appendix C. Compliance information 49

Appendix D. Notices and trademarks 61

© Copyright Lenovo 2019

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)
IdeaPad 5 14IIL05	81YH
IdeaPad 5 15IIL05	81YK
IdeaPad 5 14ARE05	81YM
IdeaPad 5 15ARE05	81YQ

- 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 10 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.

© Copyright Lenovo 2019

Chapter 1. Meet your computer

Front

Figure 1. Front view

1. Microphones	Capture or record sound and voice.
2. Camera	Capture still and moving images for taking photos, recording videos, and video chatting.
3. Camera cover slider	Move the slider to cover or uncover the camera lens. **Note:** The camera cover helps you better protect your privacy.
4. Camera light	If the light is on, the camera is in use.
5. Screen	Display text, graphics, and videos. Selected models support multi-touch function.

© Copyright Lenovo 2019

Base

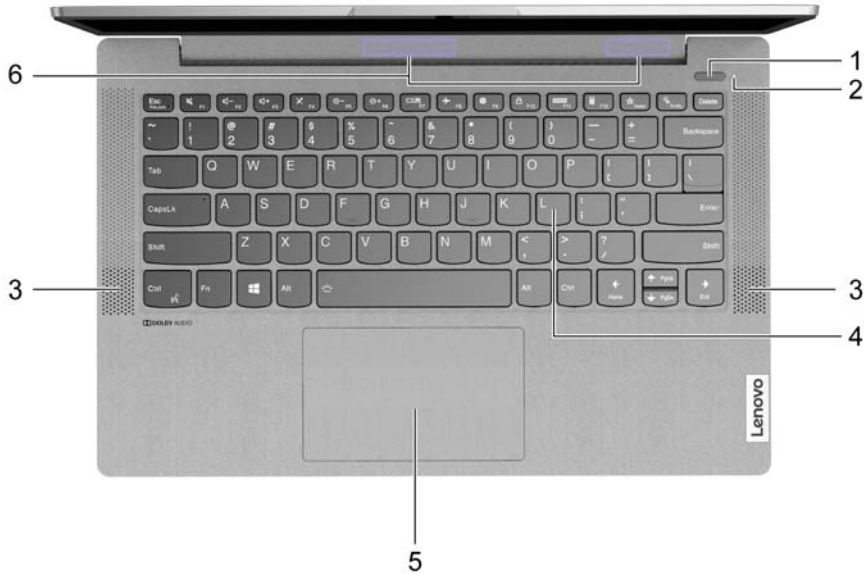


Figure 2. IdeaPad 5 (14", 05) - base view

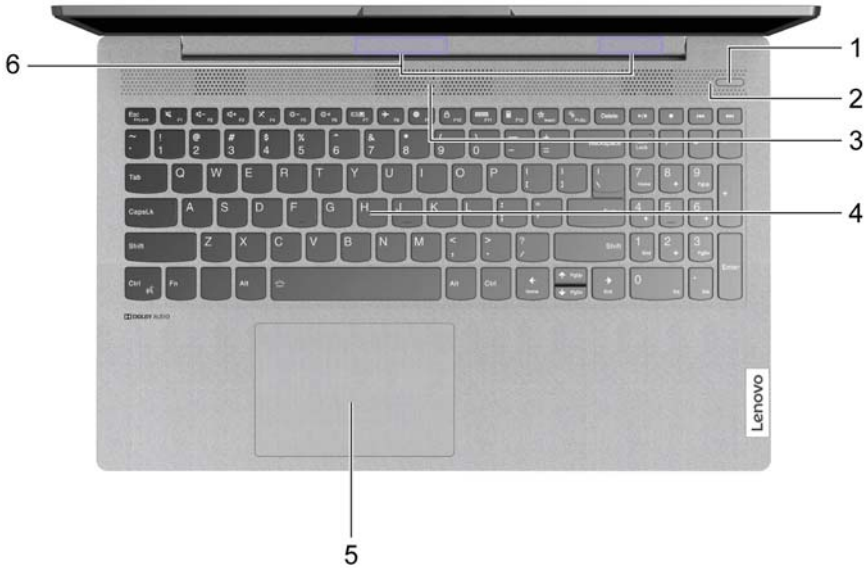


Figure 3. IdeaPad 5 (15", 05) - base view

1. Power button/Fingerprint reader*	• Press the button to turn on the computer or put the computer into sleep mode. • Selected models support the fingerprint reader function. Enroll and read your fingerprint for user authentication.
2. Power light/Fingerprint reader light*	The light shows the power status of the computer. If the computer includes a fingerprint reader, it can also show the status of the reader. • Power light – Solid white: The computer is turned on. – Off: The computer is turned off or in hibernation mode. – Blinking white: The computer is in sleep mode. • Fingerprint reader light* – Blinking (for two seconds) and then solid amber: The fingerprint reader is ready. – Solid white: The fingerprint scan is successful.
3. Speakers	Produce sound.
4. Keyboard	Enter characters and interact with programs. **Note:** The keyboard also includes hotkeys and function keys for changing settings and performing tasks quickly.
5. Touchpad	Perform finger touch and all the functions of a traditional mouse. **Note:** The touchpad also supports multi-touch function.
6. Wireless antennas	Send and receive radio waves for the built-in wireless LAN (local area network) and Bluetooth module. **Note:** The antennas are not visible from the outside of the computer.

* for selected models

Left

Figure 4. IdeaPad 5 (14", 05) - left view

Figure 5. IdeaPad 5 (15", 05) - left view

1. Power connector	Connect to power with the included power cord and ac power adapter. **Note:** Some IdeaPad (14", 05) models do not have an individual power connector. They use the USB-C connector to charge instead. Please refer to the actual product.
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

3. USB-C™ connector/Power connector	Connect to an external display, a storage device, a data device, or to power. **Note:** An appropriate adapter may be needed for connecting external devices.
4. HDMI™ connector	Connect to a compatible digital audio device or video monitor, such as an HDTV.
5. 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.
6. 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.
7. System status light*	Indicate the system status of your computer. • Solid white: The computer is turned on; battery capacity 21%–100% • Blinking quickly: The computer is turned on; battery capacity 1%–20% • Blinking slowly: The computer is in sleep mode. • Off: The computer is turned off.

* for IdeaPad 5 (14", 05) only

Right

Figure 6. IdeaPad 5 (14", 05) - right view

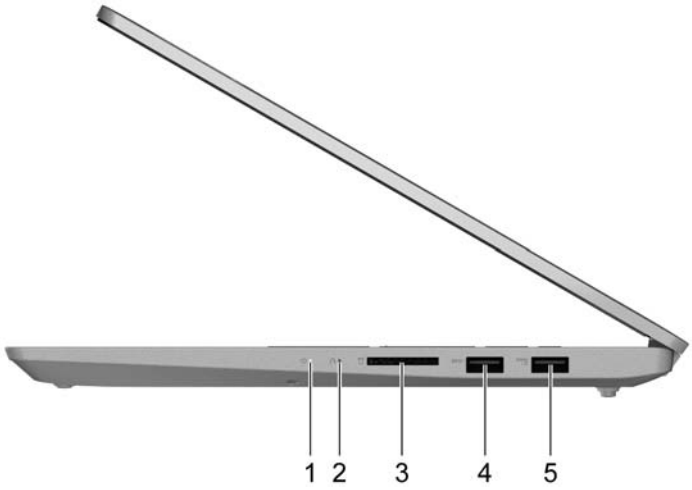


Figure 7. IdeaPad 5 (15", 05) - right view

1. System status light*	Indicate the system status of your computer. • Solid white: The computer is turned on; battery capacity 21%–100% • Blinking quickly: The computer is turned on; battery capacity 1%–20% • Blinking slowly: The computer is in sleep mode. • Off: The computer is turned off.
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. SD card slot	Insert an SD card or a MultiMediaCard (MMC) into the slot for data transfer or storage.
4. USB (3.2 Gen 1/Gen 2) Type-A connector	Connect a USB-compatible device, such as a USB keyboard, a USB mouse, a USB storage device, or a USB printer.
5. USB (3.2 Gen 1/Gen 2) Type-A connector (always-on)	The always-on connector can charge external devices when the computer is turned off, in sleep or hibernation mode. The always-on function can be turned on or off in the UEFI/BIOS setup utility. **Note:** If Lenovo Vantage is pre-installed on your computer, you can also set always-on function from within that software.

* for IdeaPad 5 (15", 05) only

Features and specifications

IdeaPad 5 (14", 05)

Dimensions	• Width: 321.7 mm (12.67 inches) • Depth: 211.8 mm (8.34 inches) • Thickness (plastic version): – Thinnest: 17.9 mm (0.70 inches) – Thickest: 19.9 mm (0.78 inches) • Thickness (metal version): – Thinnest: 16.9 mm (0.67 inches) – Thickest: 19.1 mm (0.75 inches)
ac power adapter	• Input: 100 V ac–240 V ac, 50 Hz–60 Hz • Output: 20 V dc • Power: – 65 W – 95 W (USB-C power adapter)*
Battery pack	• Capacity: – 44.5 Wh – 56.5 Wh • Number of cells: 3
Microprocessor	To view the microprocessor information of your computer, right-click the Start button and then select **System**.
Memory	• Type: Onboard double data rate 4 (DDR4) • Number of slots: 0
Storage device	• Type: M.2 solid-state drive (SSD) • Form factor: – 2242 – 2280 • Bus: PCI Express (PCIe)
Screen	• Size: 355.6 mm (14.0 inches) • Display resolution: 1920 × 1080 pixels
Keyboard	• Function keys • Hotkeys • Keyboard backlight

Connectors and slots	• Power connector* • Combo audio jack • USB (3.2 Gen 1) Type-A connector × 2 (one connector with always-on function) • USB-C connector – Support data transfer rate up to 5 Gbps for USB 3.2 Gen 1 – Provide power output up to 5 V and 3 A – Support DisplayPort 1.4 – Support power connector function* • HDMI connector • SD card slot
Security features	• Fingerprint reader* • UEFI/BIOS passwords – Administrator password – User password – Master hard disk password – User hard disk password
Wireless features	• Bluetooth • Wireless LAN

* for selected models

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).

IdeaPad 5 (15", 05)

Dimensions	• Width: 357.4 mm (14.07 inches) • Depth: 233.2 mm (9.18 inches) • Thickness: – Thinnest: 17.6 mm (0.69 inches) – Thickest: 19.9 mm (0.78 inches)
ac power adapter	• Input: 100 V ac–240 V ac, 50 Hz–60 Hz • Output: 20 V dc • Power: – 45 W* – 65 W – 95 W (USB-C power adapter)*
Battery pack	• Capacity: – 45 Wh – 57 Wh – 70 Wh • Number of cells: 3 or 4

Microprocessor	To view the microprocessor information of your computer, right-click the Start button and then select **System**.
Memory	• Type: Onboard double data rate 4 (DDR4) • Number of slots: 0
Storage device	• Type: M.2 solid-state drive (SSD) • Form factor: – 2242 – 2280 • Bus: PCI Express (PCIe)
Screen	• Size: 396.24 mm (15.6 inches) • Display resolution: 1920 × 1080 pixels
Keyboard	• Function keys • Hotkeys • Numeric keypad • Keyboard backlight*
Connectors and slots	• Power connector • Combo audio jack • USB (3.2 Gen 1/Gen 2) Type-A connector × 2 (one connector with always-on function) • USB-C connector – Support data transfer rates up to 5 Gbps for USB 3.2 Gen 1/Gen 2 – Provide power output up to 5 V and 3 A – Support DisplayPort 1.2 • HDMI connector • SD card slot
Security features	• Fingerprint reader* • UEFI/BIOS passwords – Administrator password – User password – Master hard disk password – User hard disk password
Wireless features	• Bluetooth • Wireless LAN

* for selected models

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).

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
3.2 Gen 2x2	20

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

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

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

Relative humidity

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

Chapter 2. Get started with your computer

Get started with Windows 10

Learn the basics of Windows 10 and start working with it right away. For more information about Windows 10, see the Windows help information.

Windows account

You must create at least one account to use the Windows operating system. It can be either a local account or a Microsoft account.

Local accounts

A local account is created on a particular Windows-enabled device and it can only be used on that device. It is recommended that you set a password for each local account to prevent unauthorized access to the device.

Microsoft accounts

A Microsoft account is a user account that you use to sign in to Microsoft software and services. If you use Microsoft services like OneDrive, Outlook.com, Xbox Live, Office 365, and Skype, you might already have one. If you don't have it, you can create one for free.

There are two main benefits of using a Microsoft account:

- Sign in only once. If you use a Microsoft account to sign in to Windows 10, you don’t need to sign in again to use OneDrive, Skype, Outlook.com, and other Microsoft services.
- Settings can be synced. If you use your Microsoft account to sign in to multiple Windows-enabled devices, certain Windows settings can be synced among the devices.

Switch between a local and a Microsoft account

If you are using a local account to sign in to Windows 10, you can switch to use a Microsoft account instead.

Step 1. Open the Start menu and select **Settings → Accounts**.

Step 2. Select **Sign in with a Microsoft account instead**.

Step 3. If you already have a Microsoft account, enter the account name and password to sign in. Otherwise, select **Create one** to create a new Microsoft account.

Note: The device must have Internet access the first time you use a Microsoft account on that device.

If you want to switch back to use a local account, open the Start menu and select **Settings → Accounts → Sign in with a local account instead**.

Add additional user accounts

Your user account must be of the “Administrator” type to add additional user accounts to Windows.

Add additional user accounts if you need to share your computer with family members or other users.

Step 1. Open the Start menu and select **Settings → Accounts → Family & other users**.

Step 2. Select **Add someone else to this PC**.

© Copyright Lenovo 2019

Note: To add family members, you need to sign in with a Microsoft account.

Step 3. Set the user name and password for the user account.

Enroll your fingerprint

If your computer includes a fingerprint reader, you can enroll your fingerprint for Windows sign-in.

Step 1. Open the Start menu and select **Settings → Accounts → Sign-in options**.

Note: If you are using a local account, the account must be password protected. Otherwise, you cannot enroll fingerprints.

Step 2. Select **Windows Hello Fingerprint → Set up → Get started**.

Step 3. Follow on-screen instructions to complete the enrollment. Create a PIN when prompted, in case your fingerprint cannot be recognized at Windows sign-in.

Note: You can enroll more than one fingerprint.

Windows desktop

1. **Account**	Change account settings, lock the computer, or sign out of the current account.
2. **Documents**	Open the **Documents** folder, a default folder to save your received files.
3. **Pictures**	Open the **Pictures** folder, a default folder to save your received pictures.
4. **Settings**	Open Settings.
5. **Power**	Shut down, restart, or put the computer into sleep mode.
6. **Start button**	Open the Start menu.
7. **Windows Search**	Enter what you are looking for in the search box and get search results from your computer and the Web.

8. **Task View**	Display all opened apps and switch between them.
9. **Windows notification area**	Display notifications and status of some features.
10. **Battery status icon**	Display power status and change battery or power settings.
11. **Network icon**	Connect to an available wireless network and display the network status. When connected to a wired network, the icon changes to .
12. **Action center**	Display the latest notifications from apps and provide quick access to some features.

Open the Start menu

- Click the **Start** button.
- Press the Windows logo key on the keyboard.

Open Control Panel

- Open the Start menu and select **Windows System → Control Panel**.
- Use Windows Search.

Open an app

- Open the Start menu and select the app you want to open.
- Use Windows Search.

Lenovo Vantage and Lenovo PC Manager

Lenovo Vantage and Lenovo PC Manager is software developed by Lenovo. Using the software, 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 Microsoft Store.

Connect to Wi-Fi networks

If your computer includes a wireless adapter, you can connect your computer to Wi-Fi networks.

Step 1. Click the network icon in the Windows notification area. A list of nearby networks is displayed.

Note: If no network is displayed, check to ensure that the airplane mode is not turned on.

Step 2. Select a network and click **Connect**. Provide security key if prompted.

Note: The network key is usually managed by the network administrator.

Forget a Wi-Fi network

Windows saves a list of Wi-Fi networks you have connected to, along with their passwords and other settings. By doing this, your computer is automatically connected when it is in the range of a previously connected network. However, if the network password has been changed, you need to forget the network in order to enter a new password.

Step 1. Select **Start → Settings → Network & Internet → Wi-Fi**.

Step 2. Click **Manage known networks**.

Step 3. Click the network name and click **Forget**.

Turn airplane mode on and off

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.

Step 1. Click the action center icon in the Windows notification area.

Step 2. Click the **Airplane mode** icon to turn it on or off.

Note: Click **Expand** if you cannot find the airplane mode icon.

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

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.

Hotkey	Function
	Mute/Unmute the microphone.
	Increase/Decrease screen brightness.
	Switch display devices.
	Turn airplane mode on and off.
	Open the Windows Settings app.
	Lock the screen.
	Display thumbnails of all open apps.
	Open the Windows Calculator app.
	Open an app.
	Open the Windows Snip Tool app.
	Turn on/off or adjust the brightness of the keyboard backlight. **Note:** This hotkey must be used with the Fn key.
	Open Cortana or Lenovo Voice Assistant (if installed). **Note:** This hotkey must be used with the Fn key.

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. Pressing Fn+ESC can also turn hotkey mode on or off.

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.

Numeric keypad

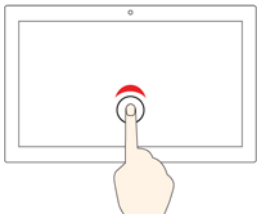
Some Lenovo computers includes a dedicated numeric keypad on the far right of the keyboard. The keypad is used for entering numbers and operators quickly.

Press the **NumLock** key to enable or disable the numeric keypad.

Use the multi-touch screen

If your computer screen supports multi-touch function, you can navigate the screen with simple touch gestures.

Note: Not all gestures are available on all apps.

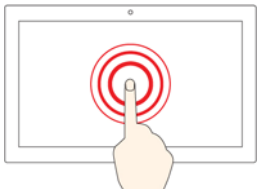


Tap once

- From the Start menu: Open an app or item.
- From the desktop: Select an app or item.
- In an open app: Perform an action such as **Copy**, **Save**, and **Delete**, depending on the app.

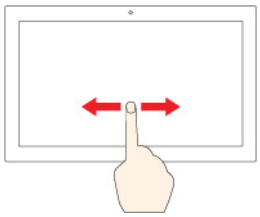
Tap twice quickly

Open an app or item from the desktop.



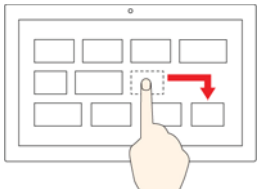
Tap and hold

Open a shortcut menu.



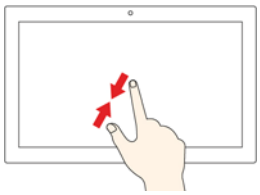
Slide

Scroll through items, such as lists, pages, and photos.



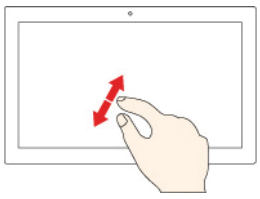
Drag an item to the location you want

Move an object.



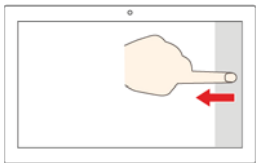
Move two fingers closer together

Zoom out.



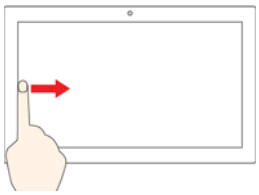
Move two fingers farther apart

Zoom in.



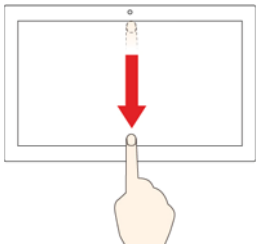
Swipe in from the right edge

Open the action center to see your notifications and quick actions.



Swipe in from the left edge

View all your open windows in task view.



- **Swipe downwards shortly from the top edge (for full-screened app or when your computer is in the tablet mode)**

  Show a hidden title bar.
- **Swipe in from the top edge to the bottom edge (when your computer is in the tablet mode)**

  Close the current app.

Chapter 3. Explore your computer

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

Check the battery temperature

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

Step 1. Open Lenovo Vantage.

Step 2. Click **Hardware Settings → Power**.

Step 3. Locate the **Power Status** section and then click **Show Details** to view the battery temperature.

Note: If you're using Lenovo PC Manager, select **System hardware → Battery**.

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. Right-click the battery status icon in the Windows notification area.

Step 2. Select **Power Options → Choose what the power button does**.

Change or create a power plan

A power plan is a set of power saving settings. You can choose a pre-defined power plan or you can create your own plans.

Step 1. Right-click the battery status icon in the Windows notification area.

Step 2. Select **Power Options → Change plan settings**.

© Copyright Lenovo 2019

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.

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 F2 repeatedly.

Note: For computers with hotkey mode enabled, press Fn + F2.

Change the startup sequence

You may need to change the startup sequence to allow the computer to start from another device or a network location.

Step 1. Open the UEFI/BIOS setup utility.

Step 2. Navigate to the Boot menu.

Step 3. Follow on-screen instructions to change the order of devices under Boot Priority Order.

Note: You can also change startup sequence temporarily without opening the setup utility. To do so, start the computer. When the Lenovo logo appears, press F12 (or Fn + F12) repeatedly.

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**.

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**.

Reset or restore Windows

This section introduces the recovery options of Windows 10. Ensure that you read and follow the on-screen recovery instructions.

Attention: The data on your computer might be deleted during the recovery process. To avoid data loss, make a backup copy of all the data that you want to keep.

Windows 10 recovery options

Windows 10 provides several options for you to restore or reset your computer. The following table helps you decide which option to choose if you are having problems with Windows.

Problem	Option
Your computer is not working well after installing apps, drivers, or updates.	Restore to a system restore point.
Your computer is not working well and you don't know what causes the problem.	Reset your computer.
You want to recycle or donate your computer.	Reset your computer.
Windows cannot start properly.	Use a recovery drive to restore or reset your computer.

Windows System Restore

System Restore is a tool included in Windows 10. It monitors changes to Windows system files and saves system state as a restore point. If your computer does not work well after installing apps, drivers, or updates, you can revert your system to a previous restore point.

Note: If you revert your system to a previous restore point, personal data is not affected.

System Restore creates restore points:

- automatically (when it detects changes to Windows system files)
- at regular intervals (if set up by the user)

- at any time (if initiated manually by the user)

Note: In order for System Restore to create restore points, system protection must be turned on for the system drive.

Create a system restore point manually

You can use Windows System Restore to create a restore point at any time.

Step 1. In the Windows 10 search box, enter **Create a restore point** and select the matched result.

Step 2. Select the **System Protection** tab and then select **Create**.

> **Note:** System protection must be turned on for the system drive (typically with drive letter C) before you can create restore points. Select a drive and then select **Configure** to turn on or disable system protection.

Restore from a system restore point

Step 1. In Windows 10 search box, enter **Recovery** and select the matched result.

Step 2. Select **Open System Restore → Next**.

Step 3. Select a restore point and then select **Next → Finish**.

> **Note:** You may select **Scan for affected programs** to check which program and driver installation is associated with a particular restore point.

Reset Windows

If Windows is not running well as usual, you can choose to reset it.

Step 1. Open the Start menu and then select **Settings → Update & Security → Recovery**.

Step 2. Under **Reset this PC**, click **Get started**.

Step 3. Choose either **Keep my files** or **Remove everything**.

> **Attention:** Back up personal data before choosing **Remove everything**.

Step 4. Follow on-screen instructions to complete the reset process.

Create a recovery drive

Use a USB drive (not supplied) to create a Windows recovery drive. If Windows will not start, you can use the recovery drive to restore or reset Windows.

Notes: Most USB drives utilize the Type-A connector. If your computer does not include a USB Type-A connector, you have two options:

- Purchase and use a USB drive with the Type-C connector, or
- Purchase and use a USB Type-C to Type-A adapter

Step 1. In the Windows 10 search box, enter **Create a recovery drive** and select the matched result.

Step 2. Make sure **Back up system files to the recovery drive** is selected and then select **Next**.

Step 3. Plug a USB drive into your computer, select it, and then select **Next → Create**.

> **Attention:** Previous files on the drive will be deleted. Back up personal files before using it to create a recovery drive.

When the recovery drive is created, you may see a **Delete the recovery partition from your PC** option. If you want to free up drive space on your computer, select it and then select **Delete**. Otherwise, select **Finish**.

Use a recovery drive to restore or reset Windows

If Windows cannot start, you can use a recovery drive (created in advance) to restore or reset Windows.

Step 1. Connect the recovery drive to your computer; restart your computer and set it to start from the recovery drive.

Note: For computers without a USB Type-A connector, you may need to purchase and use an adapter (USB Type-C to Type-A) to use a recovery drive.

Step 2. On the **Choose an option** screen, select **Troubleshoot**.

Step 3. Choose a recovery option.

Select **Advanced Options → System Restore** to restore your computer to a system restore point.

Or select **Recover from a drive** to reset your computer.

Note: If you did not select the **Back up system files to the recovery drive** option when creating the recovery drive, **Recovery from a drive** is not available.

Attention: All personal files created on your computer will be deleted after recovering from the drive.

Chapter 4. Help and support

Frequently asked questions

How do I open the Control Panel?	• Open the Start menu and select **Windows System → Control Panel**. • Use Windows Search.
How should I turn off my computer?	Open the Start menu and select **Power → Shut down**.
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
How can I change the boot mode?	There are two boot modes: UEFI mode and Legacy mode. To change the boot mode, start the UEFI/BIOS setup utility and set boot mode to UEFI or Legacy Support on the boot menu.
When do I need to change the boot-mode?	UEFI mode supports Windows 10 and Windows Cloud S. Legacy mode supports Free DOS. • The default boot mode for your computer with a Windows operating system is UEFI mode. If you need to install a Free DOS on your computer, you must change the boot mode to Legacy Support. • The default boot mode for your computer with Free DOS is Legacy mode. If you need to install Windows on your computer, you must change the boot mode to UEFI mode. The operating system cannot be installed or made to work properly if you don't change the boot mode.

Self-help resources

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

© Copyright Lenovo 2019

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.	• Open the Start menu and select **Lenovo Vantage** or **PC Manager**. • Use Windows Search.
Product documentation: • *Safety and Warranty Guide* • *Setup Guide* • This *User Guide* • *Regulatory Notice*	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	• Open the Start menu and select **Get Help** or **Tips**. • Use Windows Search or the Cortana® personal assistant. • Microsoft support Web site: https://support.microsoft.com

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/supportphonelist.

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://www.lenovo.com/services.

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

Appendix A. Important safety information

Safety notices

This information can help you safely use your 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, 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 hands from using the keyboard by lifting your hands from the palm rest.

© Copyright Lenovo 2019

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.

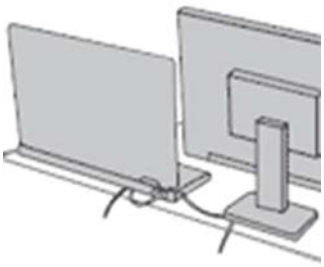
Extended contact with your body, even through clothing, may cause a skin burn.

- 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.

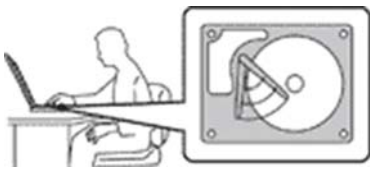
Protect the cables from being damaged.



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 might merely mean that an internal electronic component has failed in a safe and controlled manner. Or, they might indicate a potential safety issue. 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.

- 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 your 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 ensure 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.

Keep fingers and other parts of your body away from hazardous, moving parts. If you suffer an injury, seek medical care immediately.

Avoid contact with hot components inside the computer. During operation, some components become hot enough to burn the skin. Before you open the computer cover, turn off the computer, disconnect power, and wait approximately 10 minutes for the components to cool.

After replacing a CRU, reinstall all protective covers, including the computer cover, before connecting power and operating the computer. This action is important to help prevent unexpected electrical shock and help ensure the containment of an unexpected fire that could happen under extremely rare conditions.

When replacing CRUs, be cautious of sharp edges or corners that might cause injury. If you suffer an injury, seek medical care immediately.

Power cords and power adapters

DANGER

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 mm^2, 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.

Plugs and outlets

DANGER

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

DANGER

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 overheating, liquid leakage, or an explosion. To avoid possible injury, follow these instructions:

- **Do not open, disassemble, 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 rechargeable batteries at room temperature, with batteries charged to approximately 30%–50% of the full capacity. We recommend that the batteries be charged at least once per year to prevent over-discharging.

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

DANGER

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.

Lithium coin-cell battery notice

DANGER

Danger of explosion if battery is incorrectly replaced.

If the coin-cell battery is not a CRU, do not attempt to replace the 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.

When replacing the lithium coin-cell battery, use only the same type or equivalent type that is recommended by the manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of. Swallowing the lithium coin-cell battery will cause choking or severe internal burns in just two hours and might even result in death.

Keep batteries away from children. If the lithium coin-cell battery is swallowed or placed inside any part of the body, seek medical care immediately.

Do not:

- Throw or immerse into water
- Heat to more than 100 °C (212°F).
- Repair or disassemble
- Leave in an extremely low air pressure environment
- Leave in an extremely high-temperature environment
- Crush, puncture, cut, or incinerate

Dispose of the battery as required by local ordinances or 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

DANGER

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).**

Electrical current safety information

DANGER

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 properly wired outlets to 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.**

DANGER

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.

DANGER

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.

Laser safety information

CAUTION:
When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3B laser diode. Note the following:
Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

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

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

DANGER

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

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.

Static electricity prevention

Static electricity, although harmless to you, can seriously damage computer components and options. Improper handling of static-sensitive parts can damage the part. When you unpack an option or CRU, do not open the static-protective package containing the part until the instructions direct you to install it.

When you handle options or CRUs, or perform any work inside the computer, take the following precautions to avoid static-electricity damage:

- Limit your movement. Movement can cause static electricity to build up around you.
- Always handle components carefully. Handle adapters, memory modules, and other circuit boards by the edges. Never touch exposed circuitry.
- Prevent others from touching components.
- When you install a static-sensitive option or CRU, touch the static-protective package containing the part to a metal expansion-slot cover or other unpainted metal surface on the computer for at least two seconds. This reduces static electricity in the package and your body.
- When possible, remove the static-sensitive part from the static-protective packaging and install the part without setting it down. When this is not possible, place the static-protective packaging on a smooth, level surface and place the part on it.
- Do not place the part on the computer cover or other metal surface.

Appendix B. Accessibility and ergonomic information

This chapter provides information about accessibility and ergonomics.

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:

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

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

© Copyright Lenovo 2019

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.

You can use verbal instructions to control the keyboard and mouse. With verbal instructions, you can start programs, open menus, click objects on the screen, dictate text into documents, and write and send e-mails.

To use Speech Recognition:

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

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:

1. Right-click a blank area on the desktop and then click **Display settings → Display**.
2. Follow the on-screen instructions.

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:

– Change the size of all the items on your screen.
  1. Right-click a blank area on the desktop and then click **Display settings → Display**.
  2. Change the item size by following the on-screen instructions. 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 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 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.

Appendix C. Compliance information

This appendix provides the various compliance statements for Lenovo products.

Radio frequency compliance statements

Computer models equipped with wireless communications comply with the radio frequency and safety standards of any country or region in which it has been approved for wireless use.

Besides this document, ensure that you read the *Regulatory Notice* for your country or region before using the wireless devices contained in your computer.

European Union – compliance with the Radio Equipment Directive

This product is in conformity with all the requirements and essential norms that apply to EU Council Radio Equipment Directive 2014/53/EU on the approximation of the laws of the Member States relating to radio equipment. The full text of the system EU declaration of conformity and the EU wireless module declarations are available at the following Internet addresses:

- For notebook computers: https://www.lenovo.com/eu-doc-notebooks
- For tablet computers: https://www.lenovo.com/eu-doc-tablets
- For wireless peripheral devices: https://www.lenovo.com/eu-doc-wireless-options

Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers. This product has been tested and found to comply with the limits for Class B equipment according to European Standards harmonized in the Directives in compliance. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

FCC ID and IC ID location

If you purchased your computer in the United States or Canada and the computer includes factory-preinstalled wireless modules, the FCC ID and IC ID label information for the wireless modules are visible on the computer's bottom cover.

The following graphic shows the location of the engraved (laser etched) text or the attached non-removable label.

© Copyright Lenovo 2019

Brazil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

This equipment is not protected against harmful interference and may not cause interference with duly authorized systems.

Mexico

Advertencia: En Mexico la operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Singapore

Complies with
IMDA Standards
DB102306

Korea

무선설비 전파 혼신 **(**사용주파수 **2400~2483.5 , 5725~5825** 무선제품해당**)**

해당 무선설비가 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

SAR 정보

본 장치는 전파 노출에 대한 가이드라인을 충족합니다.

본 장치는 무선 송수신기 입니다. 본 장치는 국제 가이드라인으로 권장되는 전파 노출에 대한 제한을 초과하지 않도록 설계되었습니다. 장치 액세서리 및 최신 부품을 사용할 경우 SAR 값이 달라질 수 있 습니다. SAR 값은 국가 보고 및 테스트 요구 사항과 네트워크 대역에 따라 다를 수 있습니다. 본 장치 는 사람의 신체에서 20mm 이상의 거리에서 사용할 수 있습니다.

Environmental information by countries and regions

This section provides environmental, recycling, and RoHS information about Lenovo products.

Recycling and environmental information

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information about recycling Lenovo products, go to:

https://www.lenovo.com/recycling

The latest environmental information about our products is available at:

https://www.lenovo.com/ecodeclaration

Important WEEE information

The WEEE marking on Lenovo products applies to countries with WEEE and e-waste regulations (for example, the European WEEE Directive, India E-Waste Management Rules). Appliances are labeled in accordance with local regulations concerning waste electrical and electronic equipment (WEEE). These regulations determine the framework for the return and recycling of used appliances as applicable within each geography. This label is applied to various products to indicate that the product is not to be thrown away, but rather put in the established collection systems for reclaiming these end of life products.

Users of electrical and electronic equipment (EEE) with the WEEE marking must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycling, and recovery of WEEE and to minimize any potential effects of EEE on the environment and human health due to the presence of hazardous substances. Lenovo electrical and electronic equipment (EEE) may contain parts and components, which at end-of-life might qualify as hazardous waste.

EEE and waste electrical and electronic equipment (WEEE) can be delivered free of charge to the place of sale or any distributor that sells electrical and electronic equipment of the same nature and function as the used EEE or WEEE.

For additional WEEE information, go to:

https://www.lenovo.com/recycling

WEEE information for Hungary

Lenovo, as a producer, bears the cost incurred in connection with the fulfillment of Lenovo's obligations under Hungary Law No. 197/2014 (VIII.1.) subsections (1)-(5) of section 12.

Japan recycling statements

Collecting and recycling a disused Lenovo computer or monitor

If you are a company employee and need to dispose of a Lenovo computer or monitor that is the property of the company, you must do so in accordance with the Law for Promotion of Effective Utilization of Resources. Computers and monitors are categorized as industrial waste and should be properly disposed of by an industrial waste disposal contractor certified by a local government. In accordance with the Law for Promotion of Effective Utilization of Resources, Lenovo Japan provides, through its PC Collecting and Recycling Services, for the collecting, reuse, and recycling of disused computers and monitors. For details, visit the Lenovo Web site at:

https://www.lenovo.com/recycling/japan

Pursuant to the Law for Promotion of Effective Utilization of Resources, the collecting and recycling of home-used computers and monitors by the manufacturer was begun on October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For details, go to:

https://www.lenovo.com/recycling/japan

Disposing of Lenovo computer components

Some Lenovo computer products sold in Japan may have components that contain heavy metals or other environmental sensitive substances. To properly dispose of disused components, such as a printed circuit board or drive, use the methods described above for collecting and recycling a disused computer or monitor.

Disposing of disused lithium batteries from Lenovo computers

A button-shaped lithium battery is installed inside your Lenovo computer to provide power to the computer clock while the computer is off or disconnected from the main power source. If you need to replace it with a new one, contact your place of purchase or contact Lenovo for service. If you need to dispose of a disused lithium battery, insulate it with vinyl tape, contact your place of purchase or an industrial-waste-disposal operator, and follow their instructions.

Disposal of a lithium battery must comply with local ordinances and regulations.

Disposing of a disused battery from Lenovo notebook computers

Your Lenovo notebook computer has a lithium ion battery or a nickel metal hydride battery. If you are a company employee who uses a Lenovo notebook computer and need to dispose of a battery, contact the proper person in Lenovo sales, service, or marketing, and follow that person's instructions. You also can refer to the instructions at:

https://www.lenovo.com/jp/ja/environment/recycle/battery/

If you use a Lenovo notebook computer at home and need to dispose of a battery, you must comply with local ordinances and regulations. You also can refer to the instructions at:

https://www.lenovo.com/jp/ja/environment/recycle/battery/

Recycling information for Brazil

Declarações de Reciclagem no Brasil

Descarte de um Produto Lenovo Fora de Uso

Equipamentos elétricos e eletrônicos não devem ser descartados em lixo comum, mas enviados à pontos de coleta, autorizados pelo fabricante do produto para que sejam encaminhados e processados por empresas especializadas no manuseio de resíduos industriais, devidamente certificadas pelos orgãos ambientais, de acordo com a legislação local.

A Lenovo possui um canal específico para auxiliá-lo no descarte desses produtos. Caso você possua um produto Lenovo em situação de descarte, ligue para o nosso SAC ou encaminhe um e-mail para: reciclar@lenovo.com, informando o modelo, número de série e cidade, a fim de enviarmos as instruções para o correto descarte do seu produto Lenovo.

Battery recycling information for the European Union

Notice: This mark applies only to countries within the European Union (EU).

Batteries or packaging for batteries are labeled in accordance with European Directive 2006/66/EC concerning batteries and accumulators and waste batteries and accumulators. The Directive determines the framework for the return and recycling of used batteries and accumulators as applicable throughout the European Union. This label is applied to various batteries to indicate that the battery is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European Directive 2006/66/EC, batteries and accumulators are labeled to indicate that they are to be collected separately and recycled at end of life. The label on the battery may also include a chemical symbol for the metal concerned in the battery (Pb for lead, Hg for mercury, and Cd for cadmium). Users of batteries and accumulators must not dispose of batteries and accumulators as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and treatment of batteries and accumulators. Customer participation is important to minimize any potential effects of batteries and accumulators on the environment and human health due to the potential presence of hazardous substances.

Before placing electrical and electronic equipment (EEE) in the waste collection stream or in waste collection facilities, the end user of equipment containing batteries and/or accumulators must remove those batteries and accumulators for separate collection.

Disposing of lithium batteries and battery packs from Lenovo products

A coin-cell type lithium battery might be installed inside your Lenovo product. You can find details about the battery in the product documentation. If the battery needs to be replaced, contact your place of purchase or contact Lenovo for service. If you need to dispose of a lithium battery, insulate it with vinyl tape, contact your place of purchase or a waste-disposal operator, and follow their instructions.

Disposing of battery packs from Lenovo products

Your Lenovo device might contain a lithium-ion battery pack or a nickel metal hydride battery pack. You can find details on the battery pack in the product documentation. If you need to dispose of a battery pack, insulate it with vinyl tape, contact Lenovo sales, service, or your place of purchase, or a waste-disposal operator, and follow their instructions. You also can refer to the instructions provided in the user guide for your product.

For proper collection and treatment, go to:

https://www.lenovo.com/lenovo/environment

Recycling information for mainland China

《废弃电器电子产品回收处理管理条例》提示性说明

联想鼓励拥有联想品牌产品的用户当不再需要此类产品时，遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。更多回收服务信息，请点击进入http://support.lenovo.com.cn/activity/551.htm

Battery recycling information for Taiwan

廢電池請回收

Battery recycling information for the United States and Canada

US & Canada Only

RoHS compliance statements

Lenovo is committed to protecting the environment. An important priority for Lenovo is the implementation of RoHS (Restriction of Hazardous Substances) requirements globally. Lenovo meets all the RoHS requirements currently in effect. This section provides RoHS compliance statements by countries or regions. See https://www.lenovo.com/ecodeclaration for more information about Lenovo worldwide compliance on RoHS.

European Union

This Lenovo product, with included parts (cables, cords, and so on) meets the requirements of *Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment* (“RoHS recast” or “RoHS 2”).

Turkey

The Lenovo product meets the requirements of the *Republic of Turkey Directive on the Restriction of the Use of Certain Hazardous Substances in Waste Electrical and Electronic Equipment (WEEE)*.

Türkiye AEEE Yönetmeliğine Uygunluk Beyanı

Bu Lenovo ürünü, T.C. Çevre ve Orman Bakanlığı'nın “Atık Elektrik ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmelik (AEEE)” direktiflerine uygundur.

AEEE Yönetmeliğine Uygundur.

Ukraine

Цим підтверджуємо, що продукція Леново відповідає вимогам нормативних актів України, які обмежують вміст небезпечних речовин

Mainland China

为满足中国电子电器产品有害物质限制相关的法律法规和其他要求，联想公司对本产品中有害物质按部件分类，声明如下。

Table 1. 产品中有害物质的名称及含量

部件名称	铅（**Pb**）	汞（**Hg**）	镉（**Cd**）	六价铬（**CR**（**VI**））	多溴联苯（**PBB**）	多溴二苯醚（**PBDE**）
印刷电路板组件*	X	○	○	○	○	○
硬盘	X	○	○	○	○	○
光驱	X	○	○	○	○	○
LCD面板（LED背光源）	X	○	○	○	○	○
键盘	X	○	○	○	○	○
内存	X	○	○	○	○	○
电池	X	○	○	○	○	○
电源适配器	X	○	○	○	○	○
底壳、顶壳和扬声器	X	○	○	○	○	○

注：

本表格依据SJ/T 11364的规定编制。某些型号的产品可能不包含表中的部分部件。

○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。

X：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。标记“X”的部件，皆因全球技术发展水平限制而无法实现有害物质的替代。

*：印刷电路板组件包括印刷电路板及其零部件、电容和连接器等。

在中华人民共和国境内销售的电子信息产品必须带有此“环保使用期限”（EPuP）标志。圆圈内的数字标示正常使用状态下产品的环保使用期限。

Supplier’s declaration of conformity label for mainland China RoHS

依照《电器电子产品有害物质限制使用合格评定制度实施安排》，《绿色产品 标识使用管理办法》以及市场监管总局关于明确电器电子产品有害物质限制使用合 格评定制度“供方符合性标志”的公告中对于合格评定标识的相关要求，联想公司 针对纳入《电器电子产品有害物质限制使用达标管理目录》内的产品，使用自我声 明的合格评定方式，并使用如下合格评定标识：

Taiwan

單元Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmi-um (Cd)	六價鉻 Hexavalent chromium (Cr $^{+6}$)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
外殼	-	○	○	○	○	○
電路板組件	-	○	○	○	○	○
機械部件	-	○	○	○	○	○
顯示螢幕	-	○	○	○	○	○
電源供應器	-	○	○	○	○	○
儲存裝置	-	○	○	○	○	○
輸入裝置	-	○	○	○	○	○
配件	-	○	○	○	○	○

備考1. “○”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。

Note 1: "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考2. “ - ”係指該項限用物質為排除項目。

Note 2: "-" indicates that the restricted substance corresponds to the exemption.

單元	說明
機械部件	泛指風扇、散熱器、喇叭、光碟機(選配)等
儲存裝置	泛指硬碟、固態硬碟、記憶體等
輸入裝置	泛指鍵盤、觸控板、攝影機、麥克風等
配件	泛指電源線、觸控筆(選配)、耳機(選配)等

India

RoHS compliant as per *E-waste (Management) Rules*.

Electromagnetic emission notices

Federal Communications Commission (FCC) Supplier’s Declaration of Conformity

The following information refers to Lenovo product model(s) listed below.

Model name	Machine type (MT)
IdeaPad 5 14IIL05	81YH
IdeaPad 5 15IIL05	81YK
IdeaPad 5 14ARE05	81YM
IdeaPad 5 15ARE05	81YQ

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 an authorized dealer or service representative for help.

Lenovo is not responsible for any radio or television interference caused by using cables and connectors other than those recommended by Lenovo or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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.

Responsible Party:
Lenovo (United States) Incorporated
7001 Development Drive
Morrisville, NC 27560
Email: FCC@lenovo.com

Industry Canada compliance statement

CAN ICES-3(B)/NMB-3(B)

European Union conformity

EU Contact: Lenovo (Slovakia), Landererova 12, 811 09 Bratislava, Slovakia

Compliance with the EMC Directive

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This product has been tested and found to comply with the limits for Class B equipment according to European Standards harmonized in the Directives in compliance. The Class B requirements for equipment are intended to offer adequate protection to broadcast services within residential environments.

German Class B compliance statement

Hinweis zur Einhaltung der Klasse B zur elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie zur elektromagnetischen Verträglichkeit Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der Klasse B der Norm gemäß Richtlinie.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der Lenovo empfohlene Kabel angeschlossen werden. Lenovo übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der Lenovo verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der Lenovo gesteckt/eingebaut werden.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EU Richtlinie 2014/30/EU, der EU Richtlinie 2014/53/EU Artikel 3.1b), für Geräte der Klasse B.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Meitnerstr. 9, D-70563 Stuttgart.

Japan VCCI Class B compliance statement

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Japan compliance statement for products which connect to the power mains with rated current less than or equal to 20 A per phase

日本の定格電流が 20A/相 以下の機器に対する高調波電流規制
高調波電流規格 JIS C 61000-3-2 適合品

Japan notice for ac power cord

The ac power cord shipped with your product can be used only for this specific product. Do not use the ac power cord for other devices.

本製品およびオプションに電源コード・セットが付属する場合は、
それぞれ専用のものになっていますので他の電気機器には使用し
ないでください。

Other compliance information

This section provides other compliance information about Lenovo products.

Export classification notice

This product is subject to the United States Export Administration Regulations (EAR) and has an Export Classification Control Number (ECCN) of 5A992.c. It can be re-exported except to any of the embargoed countries in the EAR E1 country list.

Lenovo product service information for Taiwan

委製商/進口商名稱: 荷蘭商聯想股份有限公司台灣分公司
進口商地址: 台北市中山區北安路780號7樓
進口商電話: 0800-000-702 (代表號)

Taiwan precautionary vision statement

警語：使用過度恐傷害視力

注意事項：

- 使用30分鐘請休息10分鐘。
- 未滿2歲幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。

Supplemental information for the Eurasian Union

Назначение	персональный компьютер для личного и служебного использования, для передачи данных, с поддержкой различных профилей подключения (Wi-Fi, Bluetooth и пр.).
Изготовитель	Леново ПЦ ХК Лимитед, 23/Ф Линколн Хаус, Тайку Плэйс 979 Кингз Роуд, Куарри Бэй, Гонконг (Lenovo PC HK Limited, 23/F Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong)
Страна производства	Китай
Наименование и местонахождение уполномоченного изготовителем лица	ООО «Леново (Восточная Европа/Азия)» 143401, Московская область, г. Красногорск, бульвар Строителей, дом 4, корпус 1, помещение VII, тел. +7 495 645 83 38, факс +7 495 645 78 77.
Импортер	Наименование, адрес импортера и информация для связи с ним указаны на этикетке* на упаковке продукции. **Согласно ГОСТ 2.601-2013 «Единая система конструкторской документации. Эксплуатационные документы», пункт 5.1, подпункт 5.1.2, этикетка является видом эксплуатационных документов.*
Дата изготовления (месяц и год)	Указана на этикетке* на упаковке продукции, в графе Date (дата указана в формате год-месяц-дата). Для получения более подробной информации посетите веб-сайт: https://support.lenovo.com
Единый знак обращения на рынке стран Таможенного союза	EAC

Brazil audio notice

Ouvir sons com mais de 85 decibéis por longos períodos pode provocar danos ao sistema auditivo.

ENERGY STAR

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy aimed at saving money and protecting the environment through energy efficient products and practices.

Lenovo is proud to offer products with the ENERGY STAR certified designation. Lenovo computers, if carry an ENERGY STAR mark, have been designed and tested to conform to the ENERGY STAR program requirements for computers as prescribed by the U.S. Environmental Protection Agency. For certified computers, an ENERGY STAR mark may be affixed to the product, the product packaging, or displayed electronically on the E-label screen or the power settings interface.

By using ENERGY STAR compliant products and taking advantage of the power management features of your computer, you reduce the consumption of electricity. Reduced electrical consumption contributes to potential financial savings, a cleaner environment, and the reduction of greenhouse gas emissions. For more information about ENERGY STAR, go to https://www.energystar.gov

Lenovo encourages you to make efficient use of energy an integral part of your day-to-day operations. To help in this endeavor, Lenovo has preset the following power-management features to take effect when your computer has been inactive for a specified length of time.

Table 2. Balanced (when plugged into ac power)

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

Appendix D. Notices and trademarks

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent programs covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:
Lenovo (United States), Inc.
8001 Development Drive
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

Changes are made periodically to the information herein; these changes will be incorporated in new editions of the publication. To provide better service, Lenovo reserves the right to improve and/or modify the products and software programs described in the manuals included with your computer, and the content of the manual, at any time without additional notice.

The software interface and function and hardware configuration described in the manuals included with your computer might not match exactly the actual configuration of the computer that you purchase. For the configuration of the product, refer to the related contract (if any) or product packing list, or consult the distributor for the product sales. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

© Copyright Lenovo 2019

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.

This document is copyrighted by Lenovo and is not covered by any open source license, including any Linux agreement(s) which may accompany software included with this product. Lenovo may update this document at any time without notice.

For the latest information or any questions or comments, contact or visit the Lenovo Web site:

https://support.lenovo.com

Trademarks

LENOVO and the LENOVO logo are trademarks of Lenovo. Microsoft, Windows, OneDrive, Outlook, Skype, Office 365, and Cortana are trademarks of the Microsoft group of companies. DisplayPort is a trademark of the Video Electronics Standards Association. The terms HDMI and HDMI High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. Wi-Fi and Miracast are registered trademarks of Wi-Fi Alliance. USB-C is a trademark of USB Implementers Forum. All other trademarks are the property of their respective owners. © 2019 Lenovo.