

Lenovo N23

User Guide



Read the safety notices and important tips in the included manuals before using your computer.

Lenovo[™]

Notes

- Before using the product, be sure to read *Lenovo Safety and General Information Guide* first.
- The latest electronic compliance and environmental information are available from the Lenovo compliance information Web sites.
 - To view compliance information go to:
<http://www.lenovo.com/compliance>.
 - To download environmental information go to:
<http://www.lenovo.com/ecodeclaration>.
- Some instructions in this guide may assume that you are using Windows® 10. If you are using another Windows operating system, some operations may be slightly different. If you are using other operating systems, some operations may not apply to you.
- The features described in this guide are common to most models. Some features may not be available on your computer or your computer may include features that are not described in this user guide.
- The illustrations in this manual may differ from the actual product. Please refer to the actual product.

Regulatory Notice

- For details, refer to **Guides & Manuals** at <http://support.lenovo.com>.

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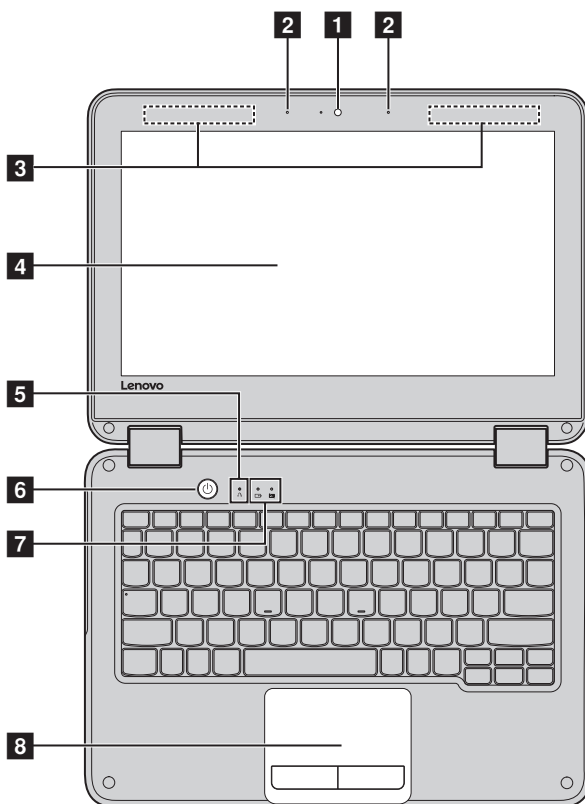
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Chapter 1. Getting to know your computer

■ ■ Top view



Note: The dashed areas indicate parts that are not visible externally.

● **Attention:**

- Do *not* open the display panel beyond 360 degrees. When closing the display panel, be careful *not* to leave pens or any other objects in between the display panel and the keyboard. Otherwise, the display panel may be damaged.

Chapter 1. Getting to know your computer

- | | | |
|----------|------------------------------|--|
| 1 | Integrated camera | Use the camera for video communication. |
| 2 | Built-in microphone | Capture sound which can be used for video conferencing, voice narration, or audio recording. |
| 3 | Wireless LAN antennas | Connect to a wireless LAN adapter to send and receive wireless radio signals. |
| 4 | Multi-touch screen | The LCD display with LED backlight provides brilliant visual output. Multi-touch function is available on this display. |
| 5 | Novo button | When the computer is off, press this button to start the recovery system or the BIOS setup utility, or to enter the boot menu. |
- Note:** For details, see “Chapter 3. Recovery system” on page 26.
- | | | |
|----------|---------------------|--|
| 6 | Power button | Press this button to turn on the computer. |
|----------|---------------------|--|

7 **System status indicators**

Battery/Charging status indicator 
Keyboard lock indicator 

AC power adapter status	Indicator status	Meaning
Disconnected	Off	The computer is in hibernation mode or turned off; The battery has more than 20% charge.
	Solid amber	The battery has between 5% and 20% charge.
	Fast blinking amber	The battery has between 1% and 5% charge.
Connected	Slow blinking amber	The battery is being charged. When battery charge reaches 20%, the blinking color changes to white.
	Slow blinking white	The battery has between 20% and 80% charge and is still charging. When the battery reaches 80% charge the light will stop blinking.
	Solid white	The battery has more than 80% charge, charging will continue until the battery is fully charged.

8 **Touch pad**

The touch pad functions as a conventional mouse.

Touch pad: To move the pointer on the screen, slide your fingertip over the pad in the direction in which you want the pointer to move.

Touch pad buttons: The functions of the left/right side correspond to those of the left/right mouse button on a conventional mouse.

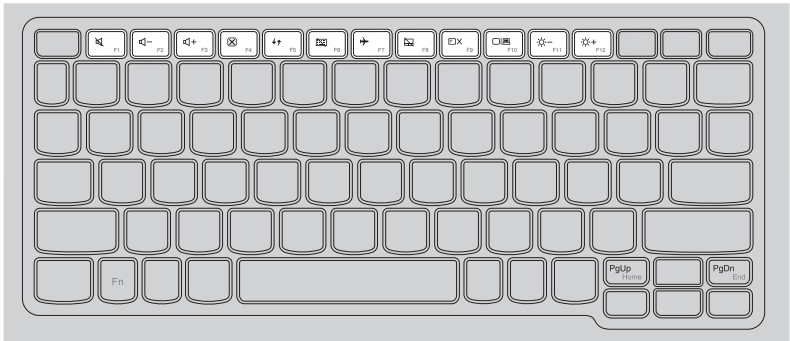
Note: You can enable/disable the touch pad by pressing F8 (.

Chapter 1. Getting to know your computer

■ Using the keyboard

Hotkeys

You can access certain system settings quickly by pressing the appropriate hotkeys.

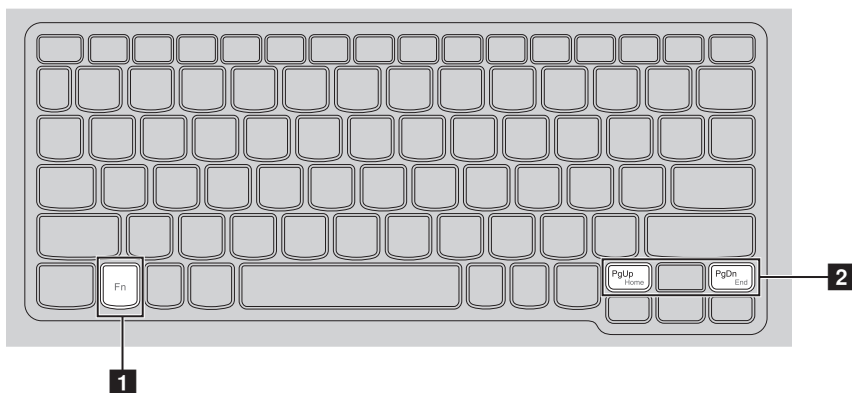


 : Mutes/unmutes the sound.	 : Enables/disables airplane mode.
 : Decreases the volume level.	 : Enables/disables the touch pad.
 : Increases the volume level.	 : Turns on/off the backlight of the LCD screen.
 : Closes the currently active window.	 : Toggles the display between the computer and an external device.
 : Refreshes the desktop or the currently active window.	 : Decreases display brightness.
 : Enable /disables the keyboard.	 : Increases display brightness.

Note: If you changed the **Hotkey Mode** from **Enabled** to **Disabled** in the BIOS setup utility, you will need to press the Fn key in combination with the appropriate hotkey.

Function key combinations

Through the use of the function keys, you can change operational features instantly. To use this function, press and hold **Fn** **1**; then press one of the function keys **2**.



The following describes the features of each function key.

Fn + PgUp: Enable/Disable the scroll lock.

Fn + PgDn Activate the system request.

Chapter 1. Getting to know your computer

■ Positioning the display panel

The display panel can be opened to any angle up to 360 degrees.



Notebook Mode



Suitable for tasks that require a keyboard and mouse (such as creating documents, writing e-mails, and so on).

Chapter 1. Getting to know your computer

Stand Mode (Theater Mode)



Suitable for tasks that require little or no touch (such as viewing photos or playing videos).

Tablet Mode



Suitable for tasks that require touching the screen often (such as surfing the Web, playing games, and so on).

Chapter 1. Getting to know your computer

Tent Mode (Presentation Mode)



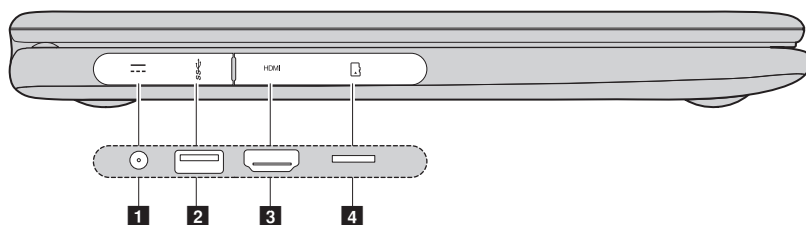
Suitable for tasks that require limited interaction with the touch screen (such as displaying graphs or PowerPoint presentations).

ⓘ **Attention:**

- Do *not* open the display with too much force, otherwise the panel or hinges may be damaged.

Note: The keyboard and touch pad are automatically locked when the screen is opened beyond 190 degrees (approximately).

■ ■ Left-side view



1 AC power adapter jack Connects to the AC power adapter.

2 USB 3.0 port Connects to USB devices.

Note: For details, see “Connecting USB devices” on page 10.

3 HDMI port Connects to devices with HDMI input such as a TV or a display.

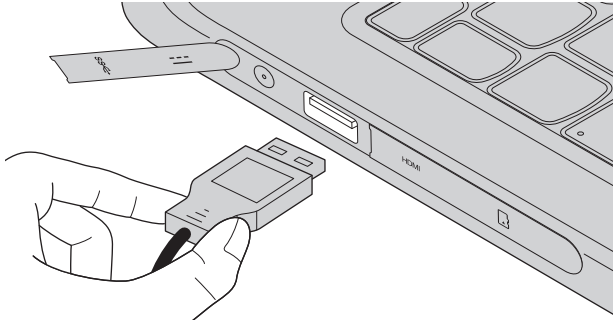
4 Micro SD card slot Accepts a micro SD card (not supplied).

Note: For details, see “Using a micro SD card (not supplied)” on page 11.

Chapter 1. Getting to know your computer

■ Connecting USB devices

You can connect a USB device to your computer by inserting its USB plug (Type A) into the USB port on your computer.



The first time you plug a USB device into a particular USB port on your computer, Windows automatically installs a driver for that device. After the driver has been installed, you can disconnect and reconnect the device without performing any additional steps.

Note: Typically, Windows detects a new device after it has been connected, and then installs the driver automatically. However, some devices may require you to install the driver before connecting. Check the documentation provided by the device's manufacturer before connecting the device.

Before disconnecting a USB storage device, make sure your computer has finished transferring data to that device. Click the **Safely Remove Hardware and Eject Media** icon in the Windows notification area to remove the device before disconnecting.

Note: If your USB device uses a power cord, connect the device to a power source before connecting it. Otherwise, the device may not be recognized.

■ Using a micro SD card (not supplied)

Your computer supports micro Secure Digital (SD) cards.

Notes:

- Insert *only* one card in the slot at a time.
- This card reader does not support SDIO devices (e.g., SDIO Bluetooth, etc.).

Inserting a card

Slide the card in until it clicks into place.

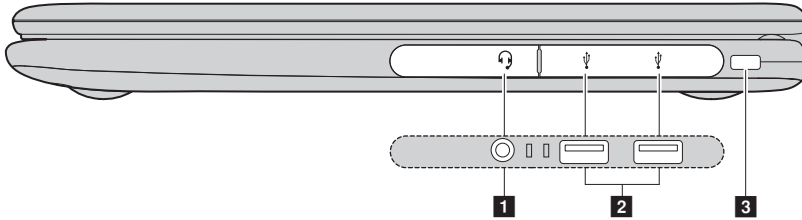
Removing a card

- ① Push the card in until you hear a click.
- ② Gently pull the memory card out of the slot.

Note: Before removing the memory card, disable it by using the Windows safely remove hardware and eject media utility to avoid data corruption.

Chapter 1. Getting to know your computer

■ ■ Right-side view



- 1 Combo audio jack** Connects to headsets.

Notes:

- The combo audio jack does not support conventional microphones.
- The recording function may not be supported if third-party headphones or headsets are connected, due to different industry standards.

- 2 USB port** Connects to USB devices.

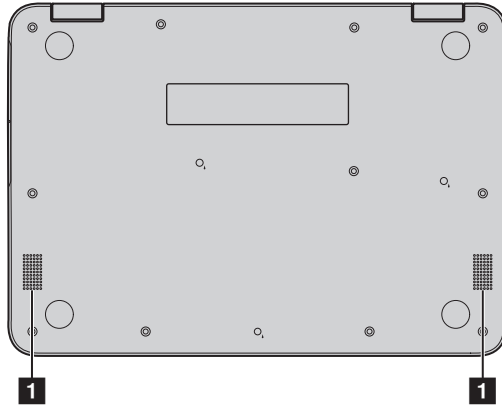
Note: For details, see “Connecting USB devices” on page 10.

- 3 Kensington mini security slot** For attaching a Kensington MiniSaver™ Mobile (or compatible) lock.
- Attach a security lock (not supplied) here to help protect your computer from theft and unauthorized use. You can attach a security lock to your computer to help prevent it from being removed without your permission. For details on installing the security lock, please refer to the instructions shipped with the security lock that you have purchased.

Notes:

- Lock is not supplied. When purchasing a lock, choose one that utilizes the Cleat™ locking mechanism and verify its compatibility with the slot before purchase. A lock utilizing the T-Bar™ locking mechanism is not compatible with the Kensington Mini Security slot.
- Before purchasing any security product, verify that it is compatible with this type of security keyhole.
- You are responsible for evaluating, selecting, and implementing the locking devices and security features. Lenovo offers no comment, judgment, or warranty regarding the function, quality, or performance of locking devices and security features.

■ ■ Bottom view



1 Speakers

Provide audio output.

Chapter 2. Starting to use Windows 10

■ ■ Configuring the operating system for the first time

You may need to configure the operating system when it is first used. The configuration process may include the procedures below:

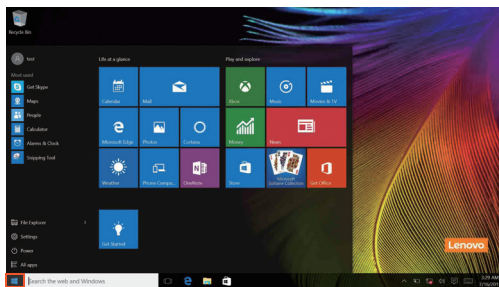
- Accepting the end user license agreement
- Configuring the Internet connection
- Registering the operating system
- Creating a user account

■ ■ Operating system interfaces

The return of the Start menu

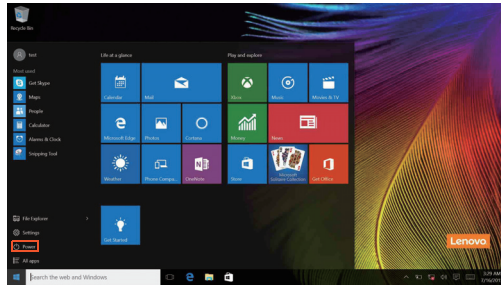
Windows 10 comes with a powerful and useful start menu. To open the start menu, do one of the following:

- Select the Start button in the lower-left corner, the Start menu is displayed.
- Press the Windows key on the keyboard.



Chapter 2. Starting to use Windows 10

The power button is on the Start menu, click it you can choose to shut down or restart the computer, or put the computer into sleep mode.

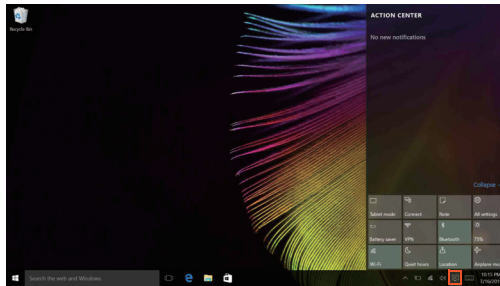


Through the Start menu, you can locate all the installed apps or view the frequently used apps.

Chapter 2. Starting to use Windows 10

The ACTION CENTER

Select the ACTION CENTER icon  on the taskbar and the ACTION CENTER is displayed.



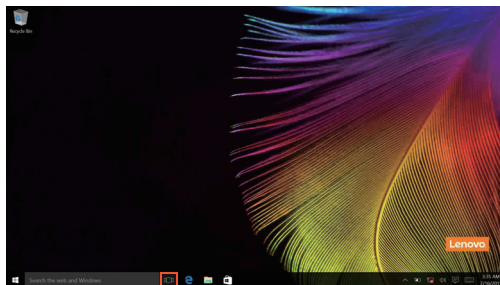
From the ACTION CENTER, you can examine important notifications from Windows and your apps. Moreover, you can change common settings quickly.

Task View in taskbar

In Windows 10, you can add a new desktop and switch between different desktops.

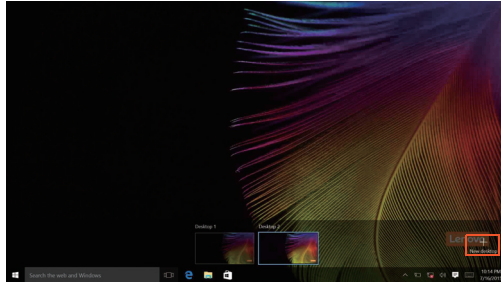
To add a new desktop, do the following:

- Click the Task View icon  in the taskbar area.



Chapter 2. Starting to use Windows 10

- Click **New desktop**.



To switch between desktops, click the Task View icon , then select your desired desktop.

■ ■ Putting the computer to sleep or shutting it down

When you have finished working with your computer, you can put it to sleep or shut it down.

■ Putting your computer to sleep

If you will be away from your computer for only a short time, put the computer to sleep.

When the computer is in sleep mode, you can quickly wake it to resume use, bypassing the startup process.

To put the computer to sleep, do one of the following:

- Close the display lid.
- Press the power button.
- Move the cursor to the lower-left corner, and then select the Start button.

Select **Power**  → **Sleep**.

Note: Put your computer to sleep before you move it. Moving your computer while the hard disk drive is spinning can damage the hard disk, causing loss of data.

To wake the computer, do one of the following:

- Press any key on the keyboard.
- Press the power button.

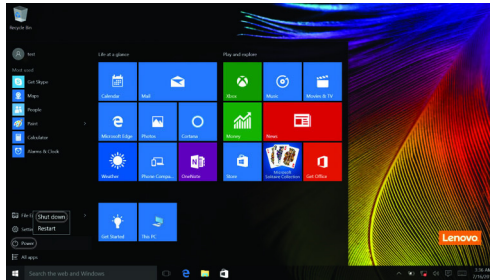
■ Shutting down the computer

If you are not going to use your computer for a long time, shut it down.

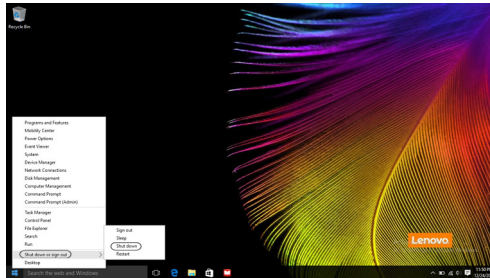
To shut down your computer, do one of the following:

- Move the cursor to the lower-left corner, and then select the Start button.

Select **Power**  → **Shut down**.



- Right-click the Start button in the lower-left corner and select **Shut down or sign out** → **Shut down**.



■ ■ Touch screen operation

The display panel can accept inputs like a tablet, using the multi-touch screen, or like a traditional notebook computer, using the keyboard and touch pad.

■ Multi-touch gestures

You can touch the screen with one or more fingertips to perform a variety of tasks.

Frequently used gestures	
Tap Tap once on an item. 	Performs an action, such as starting an app, opening a link, or performing a command. Similar to left-clicking with a mouse.
Press and hold Press your finger down and leave it there for a moment. 	Allows you to see detailed information before selecting an action. Can also open a menu with more options. Similar to right-clicking with a mouse.

(continued)

Frequently used gestures	Tasks performed
Zoom Move two fingers together or apart while touching the screen.  An illustration of a tablet screen displaying a document. A hand is shown with two fingers touching the screen, with arrows indicating they are moving apart to zoom in.	Zooms in and out on visual apps, such as pictures and maps. Can also jump to the beginning or end of a list.
Rotate Place two or more fingers on an item and then turn your hand.  An illustration of a tablet screen displaying a colorful, swirling abstract image. A hand is shown with two fingers touching the screen, with a circular arrow indicating a rotation gesture.	Turns an object. (Note: Not all items can be rotated, depending upon the app.)

Chapter 2. Starting to use Windows 10

Frequently used gestures	Tasks performed
Slide Drag your finger across the screen. 	Pans or scrolls through lists and pages. Can also move an object or be used to draw or write, depending upon the app. Similar to pressing and holding to pan and to scrolling with a mouse.

(continued)

Frequently used gestures	Tasks performed
Swipe Start from any edge of the screen, then swipe inwards toward the center. 	Swiping in from the left edge can: • Bring in and open an app currently running in the background. Swipe from the right edge can open the ACTION CENTER.

■ ■ Connecting to a wireless network

Enabling wireless connection

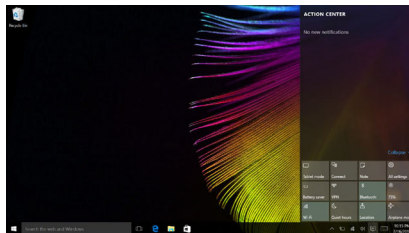
To enable wireless functions, do one of the following:

- Click the ACTION CENTER icon  in the notification area, and then deselect **Airplane mode**.
- Press  to disable airplane mode.
- Click Settings  → **Network & Internet** → **Airplane mode** to open the network configuration page. Then toggle the airplane mode switch to **Off**.

Connecting to a wireless network

After wireless has been enabled, the computer will automatically scan for available wireless networks and display them in the wireless network list. To connect to a wireless network, click the network name in the list, and then click **Connect**.

Note: Some networks require a network security key or passphrase for connection. To connect to one of those networks, ask the network administrator or the Internet service provider (ISP) for the security key or passphrase.



■ ■ Get help from Windows

If you have a problem with the operating system, see the Windows Get Started app. To open it, do the following:

- Move the cursor to the lower-left corner, and then select the Start button. Select **Get Started** from **All apps**.

Chapter 3. Recovery system

■ Introduction

Push-button reset is a built-in recovery tool that enables users to restore their operating system to its original state. This preserves their data and important customizations, without the need to back up their data in advance. The following **Push-button reset** features are available to users from multiple locations within Windows:

Refreshing the computer

Fixes software problems by reinstalling the factory default configuration. This preserves the user's data, important settings, and any Windows Store apps previously purchased from the Windows Store.

Resetting the computer

Prepares the computer for recycling or transfer of ownership. This reinstalls the factory default configuration and returns all user data and applications to the state of their original Out-of-Box Experience (OOBE).

■ Using Push-button reset

Push-button reset can be launched using one of the following methods:

- Novo button:
 - Shut down the computer and wait at least five seconds. Press the Novo button and then select **System Recovery**.
- Settings:
 - **Settings** → **Update & security** → **Recovery** → **Advanced startup** → select **Restart now**.

For more instructions, see the Windows Help and Support file on your computer.

When I purchased my computer, it included a copy of Windows. How can I determine whether the copy of Windows is preinstalled by Lenovo?

On the outside of the sales package of your computer, you should find a label containing configuration information for your computer. Check the printed string next to **OS**. If it contains **Windows** or **WIN**, the copy of Windows was preinstalled by Lenovo.

What is the Recovery Partition?

If your computer is preinstalled with any version of Windows 10, the storage device of your computer contains a Recovery Partition. This

partition contains the image file of the preinstalled Windows operating system. In cases of system failure, you can use the Lenovo OneKey Recovery system or the Windows Reset feature to restore the operating system to its factory status.

Note: The Recovery Partition is not assigned a drive letter and cannot be accessed through Windows File Explorer.

I uninstalled a preinstalled software, but there is no significant increase in the free drive space.

The copy of Windows running on your computer may be Compact technology enabled. For computers with Compact technology enabled Windows, the majority of files needed for preinstalled software are installed on the Recovery Partition and won't be deleted through normal uninstallation.

What happens if I attempt to delete or modify the Recovery Partition?

Attention: Do *not* delete or modify the Recovery Partition on a Compact technology enabled computer.

If the Recovery Partition is deleted or modified, you may not be able to restore Windows to the factory status. For computer models on which Compact technology is enabled, deleting the Recovery Partition may cause Windows to fail to start.

How can I determine whether the Windows running on my computer is Compact technology enabled?

Compact technology is normally enabled on copies of Windows 10 Update running on SSD (or eMMC) -only computer models. To check your computer,

- ❶ Right-click the Start button in the lower-left corner and select **Disk Management**.
- ❷ The Disk Management program starts.

If **Wim Boot** is labeled on the Windows partition (as illustrated), Compact technology is enabled on your copy of Windows.

Chapter 3. Recovery system



Where can I find drivers for the various hardware devices of my computer?

If your computer is preinstalled with a Windows operating system, first check the installation program on the C partition of your hard disk. If you cannot find the drivers for all the hardware devices that you need there, download the drivers from the Lenovo consumer support website.

Note: The Lenovo support Web site contains the latest drivers.

Chapter 4. Troubleshooting

■ Frequently asked questions

This section lists frequently asked questions by category.

■ Finding information

What safety precautions should I follow when using my computer?

Read and follow all safety precautions included in *Lenovo Safety and General Information Guide*.

Note: To view *Lenovo Safety and General Information Guide*, select the **User Manuals** icon on the desktop. You can also download it from the Lenovo Support Web site.

What is the address of the Lenovo support Web site?

<http://support.lenovo.com>

Where can I find warranty information?

Visit the Lenovo Support Web site and type the serial number for your computer to look up warranty information.

■ Lenovo preinstalled operating system and software

What is the Lenovo preinstalled operating system?

Some Lenovo computers come with copies of the operating system installed at factory. Lenovo provides computers with preinstalled operating system for your convenience. If you purchased such a computer, you can use your computer out of the box and do not need to install a separate operating system.

What is Lenovo preinstalled software?

This is software (developed by Lenovo or other software vendors) installed and licensed at factory for your convenience. The license for some preinstalled software may be for trial versions. When the trial period expires, you may need to purchase a license if you want to continue to use the software.

Note: If a license agreement is displayed when you first start the software, read the agreement carefully. If you don't accept the terms of the agreement, do not use the software.

Chapter 4. Troubleshooting

■ BIOS setup utility

What is the BIOS setup utility?

The BIOS setup utility is ROM-based software. It communicates basic computer information and provides options for setting boot devices, security, hardware mode, and other preferences.

How can I start the BIOS setup utility?

To start the BIOS setup utility:

- ❶ Shut down the computer.
- ❷ Press the Novo button and then select **BIOS Setup**.

How can I change the boot mode? (on select models)

There are two boot modes: **UEFI First** and **Legacy Support**. To change the boot mode, start the BIOS setup utility and set boot mode to **UEFI First** or **Legacy Support** on the boot menu.

When do I need to change the boot mode? (on select models)

The default boot mode for your computer is **UEFI First** mode. If you need to install a legacy Windows operating system on your computer, you must change the boot mode to **Legacy Support**. The legacy Windows operating system cannot be installed if you don't change the boot mode.

■ Getting help

How can I contact the customer support center?

See “Chapter 3. Getting help and service” of *Lenovo Safety and General Information Guide*.

■ ■ Troubleshooting

Display problems

When I turn on the computer, nothing appears on the screen.

- If the screen is blank, make sure that:
 - The AC power adapter is connected to the computer, and the power cord is plugged into a working electrical outlet.
 - The computer power is on. Press the Power button again for confirmation.
- If these items are set correctly, and the screen remains blank, have the computer serviced.

When I turn on the computer, only a white cursor appears on a blank screen.

- Restore backed-up files to your Windows environment or the entire contents of your hard disk to its original factory contents using the Lenovo OneKey Recovery system. If you still see only the cursor on the screen, have the computer serviced.

The screen goes blank while the computer is on.

- Your power management is enabled. Do one of the following to resume from sleep mode:
 - Press any key on the keyboard.
 - Press the Power button.
 - Press **F9** () to confirm whether the backlight of the LCD screen has been turned off.

Sleep problems

The critical low-battery error message appears, and the computer immediately turns off.

- The battery power is getting low. Connect the AC power adapter to the computer.

The computer enters sleep mode immediately after Power-on.

- Make sure that:
 - The battery is charged.
 - The operating temperature is within the acceptable range. See "Chapter 2. Use and care Information" in the *Lenovo Safety and General Information Guide*.

Note: If the battery is charged and the temperature is within range, have the computer serviced.

Chapter 4. Troubleshooting

The computer does not return from sleep mode and the computer does not work.

- If your computer is in sleep mode, connect the AC power adapter to the computer, then press the Windows button or the Power button.
- If the system still does not return from sleep mode, your system has stopped responding, and you cannot turn off the computer; reset the computer. Unsaved data may be lost. To reset the computer, press and hold the Power button for eight seconds or more. If the computer still does not reset, remove the AC power adapter.

Display panel problems

The screen is blank.

- Do the following:
 - If you are using the AC power adapter or the battery, and the battery status indicator is on, press **F12** () to make the screen brighter.
 - If the power indicator is blinking, press the Power button to resume from sleep mode.
 - Press **F9** () to confirm whether the backlight of the LCD screen has been turned off.
 - If the problem persists, follow the solution in the next problem "The screen is unreadable or distorted."

The screen is unreadable or distorted.

- Make sure that:
 - The screen resolution and color quality are correctly set.
 - The monitor type is correct.

Incorrect characters appear on the screen.

- Is the operating system or programs installed correctly? If they are installed and configured correctly, have the computer serviced.

Sound problems

No sound can be heard from the speakers even when the volume is turned up.

- Make sure that:
 - The Mute function is off.
 - The combo audio jack is not being used.
 - Speakers are selected as the playback device.

Battery problems

Your computer shuts down before the battery status indicator shows empty.

-or-

Your computer operates after the battery status indicator shows empty.

- Recharge the battery.

Other problems

Your computer does not respond.

- To turn off your computer, press and hold the Power button for eight seconds or more. If the computer still does not respond, remove the AC power adapter.
- Your computer might lock when it enters sleep mode during a communication operation. Disable the sleep timer when you are working on the network.

The connected external device does not work.

- Do *not* connect or disconnect any external device cables other than USB while the computer power is on. Otherwise, you might damage your computer.
- When using high power consumption external devices, such as an external USB optical drive, use an external device power adapter. Otherwise, the device may not be recognized, or the system may shut down as a result.

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OneKey

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