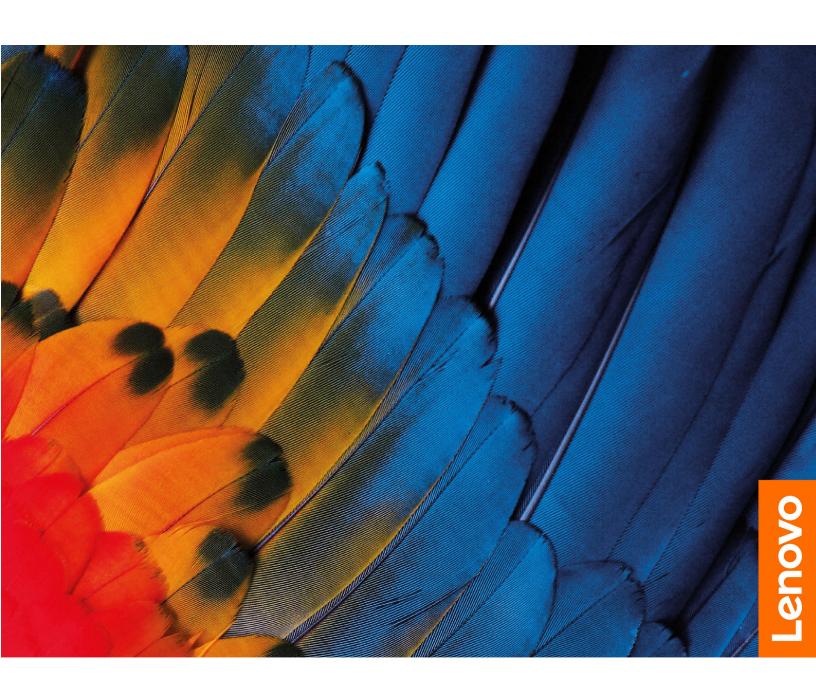
IdeaCentre AIO 5 User Guide



Read this first

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

- Safety and Warranty Guide
- Generic Safety and Compliance Notices
- Setup Guide

First Edition (May 2021)

© Copyright Lenovo 2021.

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 documentation iii	Connect to a Bluetooth-enabled device (for selected models)
Chapter 1. Meet your computer 1	Use the optical drive (for selected models) 15
Front	Use a media card (for selected models) 15
Rear	Purchase accessories
Bottom	Observed OBH seeks seek 4
Features and specifications 6	Chapter 4. CRU replacement 17
USB specifications	CRU list
Operating environment	Remove or replace a CRU
	Power adapter and power cord
Chapter 2. Get started with your	Storage drive
computer	Computer cover
Work with Windows	
Windows help information 9	Chapter 5. Help and support 27
Use the touch screen (for selected models) 10	Frequently asked questions
Connect an external display	Self-help resources
	Call Lenovo
Chapter 3. Explore your computer 13	Before you contact Lenovo 29
Adjust the computer stand (for selected models) 13	Lenovo Customer Support Center 29
Lenovo Vantage	Purchase additional services
Set the power plan	
Transfer data	Appendix A. Notices and trademarks

© Copyright Lenovo 2021 i

About this documentation

• This guide applies to the Lenovo product models listed below. Illustrations in this guide may look slightly different from your product model.

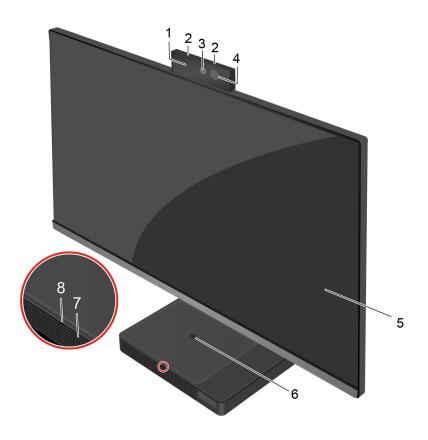
Model name	Machine types (MT)
IdeaCentre AIO 5 24ALC6	F0G2
IdeaCentre AIO 5 24IOB6	F0G3
IdeaCentre AIO 5 27IOB6	F0G4

- For further compliance information, refer to the *Generic Safety and Compliance Notices* at https://pcsupport.lenovo.com/docs/generic_notices.
- Depending on the model, some optional accessories, features, and software programs might not be available on your computer.
- Depending on the version of the operating systems and programs, some user interface instructions might not be applicable to your computer.
- Documentation content is subject to change without notice. Lenovo makes constant improvements to the
 documentation of your computer, including this *User Guide*. To get the latest documentation, go to https://pcsupport.lenovo.com.
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. As a result, some information in this documentation might become outdated. Refer to Microsoft resources for the latest information.

© Copyright Lenovo 2021 iii

Chapter 1. Meet your computer

Front



Integrated camera activity indicator	2. Integrated microphones (2)
3. Integrated camera*	4. Infrared camera*
5. Multi-touch screen	6. Wireless charging pad**
7. Internal speakers	8. Wireless charging indicator*

^{*} Either an integrated camera or an infrared camera is provided on your computer.

Wireless charging indicator

Show the charging status of a phone that supports wireless charging.

- Blinking white: The phone is being charged.
- Solid white: The phone is fully charged.
- Blinking amber: Charging error occurs.
- Off: No phone is detected.

© Copyright Lenovo 2021

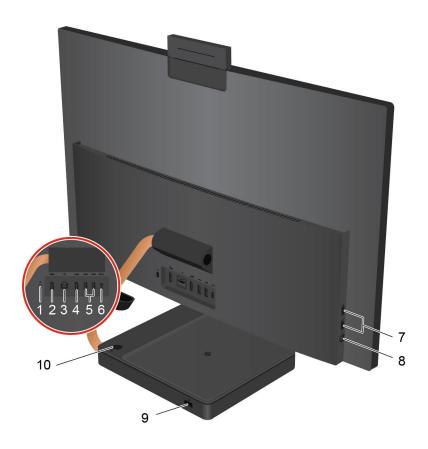
^{**} for selected models

Note: For some phones, the indicator might still blink white when the phone is fully charged.

Related topics

• "USB specifications" on page 7.

Rear

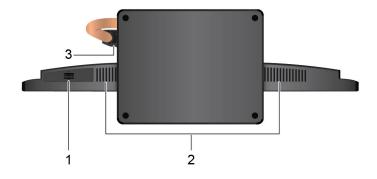


1. PC/Monitor mode switcher 2. HDMI 1.4 in connector	
3. Ethernet connector	4. HDMI 1.4 out connector
5. USB 2.0 connectors (2)	6. USB-C® connector (USB 3.1 Gen 1)
7. USB 3.1 connectors Gen 2 (2)	8. Audio combo jack
9. Power adapter connector	10. Power button

Related topics

• "USB specifications" on page 7.

Bottom



1. Storage drive door*

2. Internal speakers (2)

3. Cable clip

^{*} for 24-inch models only

Features and specifications

For detailed specifications of your computer, go to https://psref.lenovo.com.

Hardware	To view the hardware information of your computer, type device manager in the Windows search box and then press Enter.			
Power supply	 AIO 5 24ALC6: 120-watt/135-watt automatic voltage-sensing power supply AIO 5 24IOB6: 90-watt/120-watt/135-watt/150-watt/170-watt automatic voltage-sensing power supply AIO 5 27IOB6: 120-watt/135-watt/150-watt/170-watt automatic voltage-sensing power supply 			
Adaptability for power supply	 Mainland China: 220 V±22 V, 50 Hz±1 Hz Adaptive voltage positioning: 90 V to 264 V, 50/60 Hz With voltage selection switch: 90 V to 264 V, 50 Hz±1 Hz 			
Microprocessor	To view the microprocessor information of your computer, type system information in the Windows search box and then press Enter.			
Memory	Double data rate 4 (DDR4) small outline dual in-line memory module (SODIMM)			
Storage device	 2.5-inch form factor, 7-mm (0.28-inch) height hard disk drive M.2 solid-state drive To view the storage drive capacity of your computer, type disk management in the Windows search box and then press Enter. Note: The storage drive capacity indicated by the system is less than the nominal capacity. 			
Expansion	 Memory slots M.2 solid-state drive slot External optical drive* Storage drive bay 			
Network features	 Bluetooth Ethernet LAN Wireless LAN* 			
Other features	 PC/Monitor mode switcher Wireless charging pad**(Output: 15 W maximum) Infrared camera/Integrated camera Modern standby** Storage drive door** 			

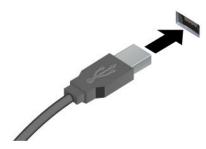
^{*} optional

^{**} for selected models

USB specifications

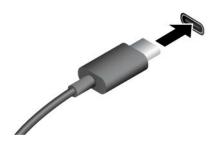
Note: Depending on the model, some USB connectors might not be available on your computer.

Connector name Description



- SB 2.0 connector
- SS USB 3.2 connector Gen 1
- 10 ← USB 3.2 connector Gen 2

Connect USB-compatible devices, such as a USB keyboard, USB mouse, USB storage device, or USB printer.



- SS USB-C (3.2 Gen 1) connector
- 10 USB-C (3.2 Gen 2) connector
- Thunderbolt 3 connector (USB-C)
- Thunderbolt 4 connector (USB-C)

- Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A.
- · Connect to an external display:
 - USB-C to VGA: 1900 x 1200 pixels, 60 Hz
 - USB-C to DP: 3840 x 2160 pixels, 60 Hz
- Connect to USB-C accessories to help expand your computer functionality. To purchase USB-C accessories, go to https://www.lenovo.com/accessories.

Statement on USB transfer rate

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

USB device	Data rate (Gbit/s)
3.2 Gen 1 / 3.1 Gen 1	5
3.2 Gen 2 / 3.1 Gen 2	10
3.2 Gen 2 × 2	20
Thunderbolt 3 (USB-C)	40
Thunderbolt 4 (USB-C)	40

Operating environment

Temperature

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage or transportation:
 - For common desktop computers: From -40°C (-40°F) to 60°C (140°F)
 - For all-in-one desktop computers: From -20°C (-4°F) to 60°C (140°F)

Relative humidity

- Operating: 20%-80% (non-condensing)
- Storage: 10%–90% (non-condensing)

Altitude

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 12192m (40,000 ft)

Chapter 2. Get started with your computer

Work with Windows

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

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

Table 1. Basic settings

Functions	Descriptions	Search by keywords
Control Panel	View or change Windows settings, including hardware and software setup and configuration.	Control Panel
Connect to Wi-Fi networks	For models with a wireless LAN module, you can connect your computer to a Wi-Fi® network. Click the network icon in the Windows notification area, and then select a network for connection. Note: The wireless LAN module on your computer may support different standards. For some countries or regions, use of 802.11ax may be disabled according to local regulations.	Wi-Fi
Connect to wired networks	For models with an Ethernet (RJ-45) connector, you can use an Ethernet cable to connect your computer to a wired network.	-
Airplane mode	Airplane mode is a convenient setting to turn all wireless communications of your computer on and off. You may need to turn it on when boarding an airplane.	Airplane mode
Night light mode	Night light is a switch in Windows that you can turn on and off. When it is turned on, your screen shows warmer colors and the amount of emitted blue light is reduced. Enabling night light reduces the chances of developing eye fatigue or eye strain. Note: For more guidance on reducing eye fatigue or eye strain, go to https://www.lenovo.com/us/en/compliance/visual-fatigue .	Night light
Adjust color temperature	If night light mode is turned on, you can adjust the color temperature of the screen. Note: Selected Lenovo computers are low blue light certified. These computers are tested with night light turned on and color temperature set to the default value of 48.	Night light
Windows Updates	Microsoft periodically releases feature and security updates to the Windows operating system. Updates that are applicable to your Windows version are downloaded automatically when your computer is connected to the Internet. When updates are downloaded, you are prompted to restart the computer to install these updates. You can also manually check if there are available updates for the installed version of Windows. Attention: Only use Windows Update to download and install updates. Updates downloaded from other sources may include security risks.	Windows Updates

Windows help information

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

© Copyright Lenovo 2021

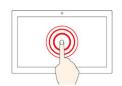
- Type Get Help or Tips in the Windows search box and then press Enter. When the app opens, type the
 problem description and select the matched result.
- Visit Microsoft support Web site: https://support.microsoft.com. Enter what you are looking for in the search box and get search results.

Use the touch screen (for selected models)

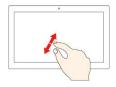
Note: Some gestures might not be applicable when you use certain apps.



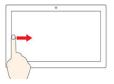
Tap once to single click



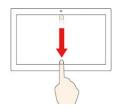
Tap and hold to right-click



Zoom in



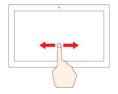
Swipe from the left to view all open windows



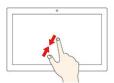
Swipe downwards shortly to show title bar Swipe downwards to close the current app



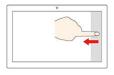
Tap twice quickly to double-click



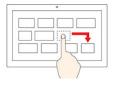
Slide to scroll through items



Zoom out



Swipe from the right to open the action center



Drag

Maintenance tips

- Turn off the computer before cleaning the touch screen.
- Use a dry, soft, and lint-free cloth or a piece of absorbent cotton to remove fingerprints or dust from the touch screen. Do not apply solvents to the cloth.
- The touch screen is a glass panel covered with a plastic film. Do not apply pressure or place any metallic object on the screen, which might damage the touch panel or cause it to malfunction.
- Do not use fingernails, gloved fingers, or inanimate objects for input on the screen.
- Regularly calibrate the accuracy of the finger input to avoid a discrepancy.

Connect an external display

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

Connect a wireless display

Ensure that both your computer and the wireless display support Miracast®.

Press the **Windows** and **K** Keys, and then select a wireless display to connect.

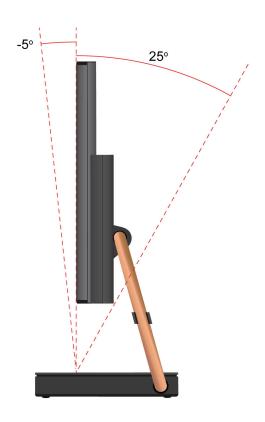
Change display settings

To change display settings, type display settings in the Windows search box and then press Enter.

Chapter 3. Explore your computer

Adjust the computer stand (for selected models)

For full-function monitor stand



Lenovo Vantage



The preinstalled Lenovo Vantage is a customized one-stop solution to help you maintain your computer with automated updates and fixes, configure hardware settings, and get personalized support.

Access Lenovo Vantage

Type Lenovo Vantage in the search box and then press Enter.

To download the latest version of Lenovo Vantage, go to Microsoft Store and search by the app name.

Key features

Lenovo Vantage enables you to:

© Copyright Lenovo 2021

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware and driver updates to keep your computer up-to-date.
- Monitor your computer health, and secure your computer against outside threats.
- Scan your computer hardware and diagnose hardware problems.
- · Look up warranty status (online).
- · Access User Guide and helpful articles.

Notes:

- The available features vary depending on the computer model.
- Lenovo Vantage makes periodic updates of the features to keep improving your experience with your computer. The description of features might be different from that on your actual user interface.

Set the power plan

For ENERGY STAR® compliant computers, the following power plan takes effect when your computers have been idle for a specified duration:

- turn off the display: After 10 minutes
- put the computer to sleep: After 25 minutes

To awaken the computer from Sleep mode, press any key on your keyboard.

To change or customize a power plan:

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

Transfer data

Quickly share your files using the built-in Bluetooth technology among devices with the same features. You also can install a disc or media card to transfer data.

Connect to a Bluetooth-enabled device (for selected models)

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



- 1. Click the action center icon in the Windows notification area. Enable the Bluetooth feature.
- 2. Click the bluetooth options to add a bluetooth device, and then follow the on-screen instructions.

Use the optical drive (for selected models)

If your computer has an optical drive, read the following information.

Know the type of your optical drive

To view the type of the optical driver, type device manager in the Windows search box and then press Enter.

Install or remove a disc

- 1. With the computer on, press the eject button on the optical drive. The tray slides out of the drive.
- 2. Insert a disc into the tray or remove a disc from the tray, and then push the tray back into the drive.

Note: If the tray does not slide out of the drive when you press the eject button, turn off the computer. Then, insert a straightened paper clip into the emergency-eject hole adjacent to the eject button. Use the emergency eject only in an emergency.

Record a disc

- 1. Insert a recordable disc into the optical drive that supports recording.
- 2. Do one of the following:
 - Open Windows Media Player.
 - · Double-click the ISO file.
- 3. Follow the on-screen instructions.

Use a media card (for selected models)

If your computer has a SD-card slot, read the following information.

Install a media card

1. Locate the SD-card slot.

2. Ensure that the metal contacts on the card are facing the ones in the SD-card slot. Insert the card firmly into the SD-card slot until it is secured in place.

Remove a media card

Attention: Before removing a media card, eject the card from the Windows operating system first. Otherwise, data on the card might get corrupted or lost.

To remove a media card, type remove hardware and eject media in the Windows search box and then press Enter.

Purchase accessories

Lenovo has a number of hardware accessories and upgrades to help expand the capabilities of your computer. Options include memory modules, storage devices, network cards, power adapters, keyboards, mice, and more.

To shop at Lenovo, go to https://pcsupport.lenovo.com/warrantyupgrade.

Chapter 4. CRU replacement

Customer Replaceable Units (CRUs) are parts that can be upgraded or replaced by the customer. Lenovo computers contain the following types of CRUs:

- Self-service CRUs: Refer to parts that can be installed or replaced easily by customer themselves or by trained service technicians at an additional cost.
- Optional-service CRUs: Refer to parts that can be installed or replaced by customers with a greater skill
 level. Trained service technicians can also provide service to install or replace the parts under the type of
 warranty designated for the customer's machine.

If you intend on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty documentation at:

https://www.lenovo.com/warranty/llw_02

CRU list

The following is the CRU list of your computer.

Self-service CRUs

- · Hinge bracket
- Power adapter
- Power cord
- Storage device
- · Storage drive bracket
- Keyboard*
- Mouse*

Remove or replace a CRU

This section provides instructions on how to remove or replace a CRU.

Power adapter and power cord

Prerequisite

Before you start, read Generic Safety and Compliance Notices, and print the following instructions.



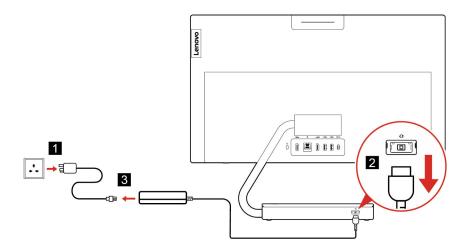
© Copyright Lenovo 2021

^{*} For selected models

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

Removal steps

- 1. Turn off the computer and remove all connected devices and cables.
- 2. Disconnect the power cord from the electrical outlet.
- 3. Remove the ac power adapter from the computer.
- 4. Remove the power cord from the power adapter.



Storage drive

Prerequisite

Before you start, read Generic Safety and Compliance Notices, and print the following instructions.

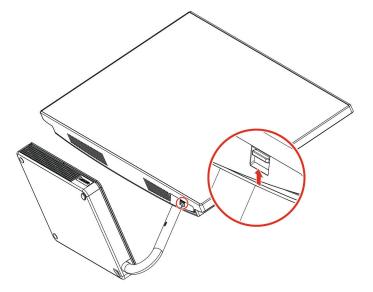
Attention: The internal storage drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the internal storage drive, observe the following guidelines:

- Replace the internal storage drive only for upgrade or repair. The internal storage drive is not designed for frequent changes or replacement.
- Before replacing the internal storage drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the internal storage drive. Otherwise, the internal storage drive might get damaged.
- Do not apply pressure to the internal storage drive.
- Do not make the internal storage drive subject to physical shocks or vibration. Put the internal storage drive on a soft material, such as cloth, to absorb physical shocks.

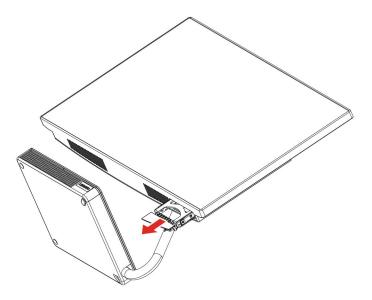
Removal steps

- 1. Turn off the computer and remove all connected devices and cables.
- 2. Place a soft, clean towel or cloth on the desk or surface, Hold the sides of your computer and gently lay it down so that the computer cover is against the surface and the screen is facing up.

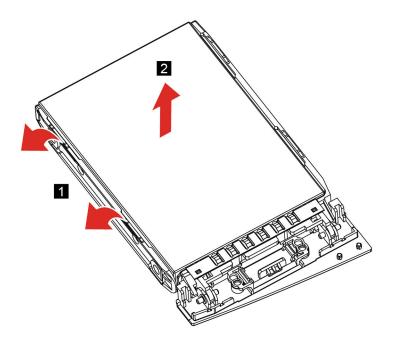
3. Push the latch to unlock the storage drive door.



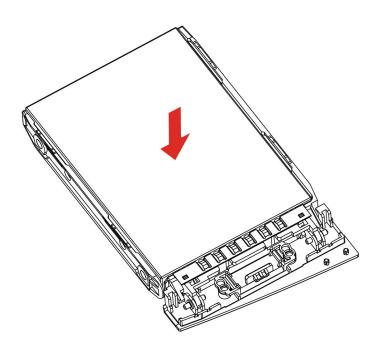
4. Pull the storage drive and the bracket out.



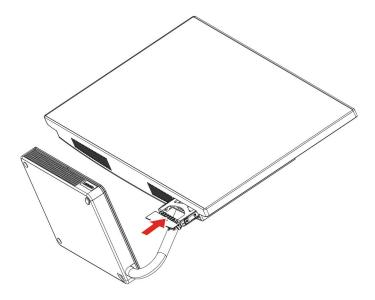
5. Remove the storage drive from the bracket.



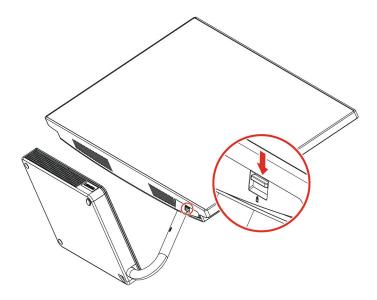
- 6. Install the storage drive into the bracket.
 - a. Insert the storage drive into the two pins on the right side of the bracket.
 - b. Bend the left side of the bracket to install the other two pins.



7. Install the storage drive and the bracket.



8. Lock the storage drive door.



- 9. Place the computer in an upright position.
- 10. Reconnect the ac power adapter and all disconnected cables to the computer.

Computer cover

Prerequisite

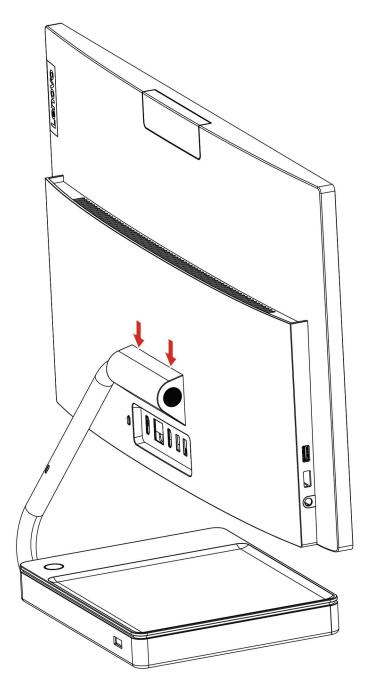
Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



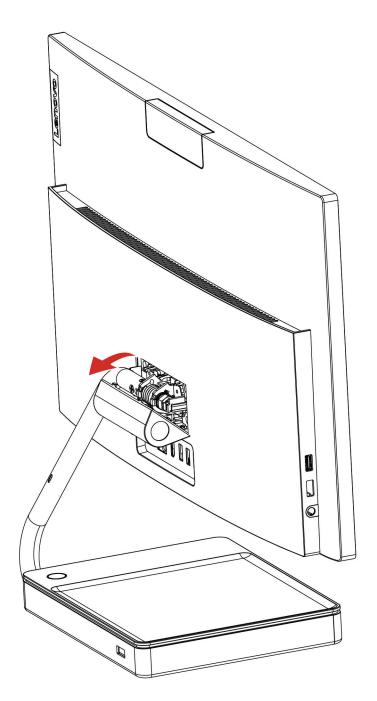
Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

Removal steps

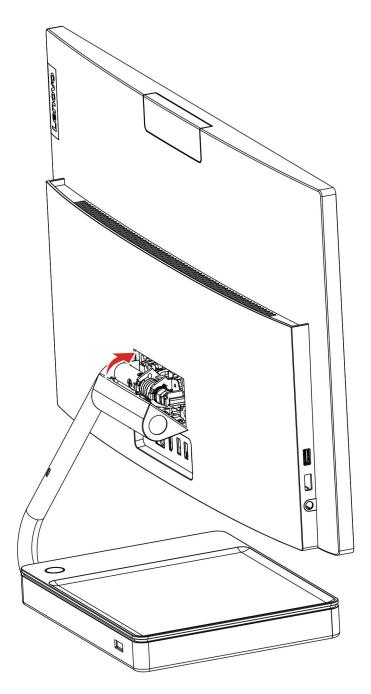
- 1. Turn off the computer and remove all connected devices and cables.
- 2. Position the computer to see the rear side of the computer.
- 3. Slightly press the hinge cover.



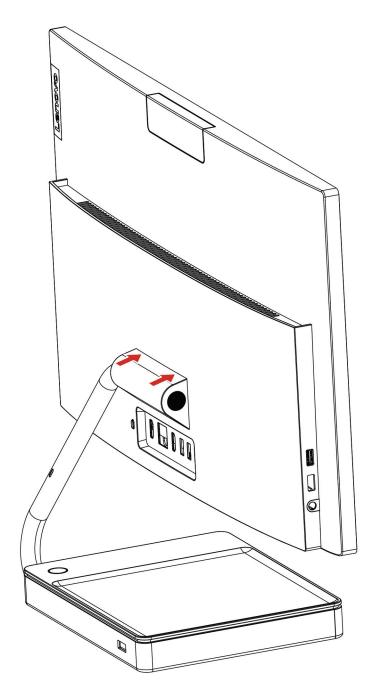
4. Remove the hinge cover.



5. Install the hinge cover.



6. Slightly press the hinge cover until it snaps into position.



- 7. Reconnect the ac power adapter and all disconnected cables to the computer.
- 8. Position the computer to see the front side of the computer.

Chapter 5. Help and support

Frequently asked que	estions
----------------------	---------

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.		
	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.		
What should I do if I spill liquid on the computer?	Attention: Although you might lose some data or work by turning off the computer immediately, leaving the computer on might make your computer unusable.		
	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	Lenovo Vantage or Lenovo PC Manager		
drivers and UEFI/BIOS?	Lenovo Support Web site at https://support.lenovo.com		

Self-help resources

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

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

© Copyright Lenovo 2021

How to access?	
Type Lenovo Vantage in the search box and then press	
Enter.	
Go to https://pcsupport.lenovo.com. Then, follow the on-	
screen instructions to filter out the documentation you want.	
Go to https://support.lenovo.com.	
Use Get Help or Tips.	
 Use Windows Search or the Cortana® personal assistant. 	
 Go to Microsoft support Web site: https://support.microsoft.com. 	

Call Lenovo

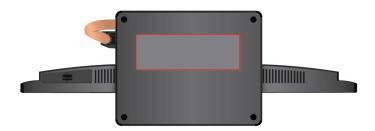
If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

Before you contact Lenovo

Prepare the following before you contact Lenovo:

- 1. Record the problem symptoms and details:
 - 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?
- 2. Record the system information:
 - Product name
 - Machine type and serial number

The following illustration shows where to find the machine type and serial number of your computer.



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. 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 2021

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://pcsupport.lenovo.com

Trademarks

LENOVO, LENOVO logo, IDEACENTRE, and IDEACENTRE logo are trademarks of Lenovo. Optane is trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries. Microsoft, Windows, Direct3D, and Cortana are trademarks of the Microsoft group of companies. 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. © 2021 Lenovo.

Lenovo