ThinkPad Universal Thunderbolt 4 Dock ThinkPad Thunderbolt 4 Workstation Dock User Guide



## 1 https://www.lenovo.com/safety

**Note:** Before using this documentation and the product it supports, ensure that you read and understand the warranty information in the documentation that comes with the product.

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## Chapter 1. About the dock

Thanks for using ThinkPad Universal Thunderbolt 4 Dock / ThinkPad Thunderbolt 4 Workstation Dock.

This dock is an enhanced universal compatible module to help you expand your computer with automated and silent updates. You can use it to connect your computer (Microsoft<sup>®</sup> Windows<sup>®</sup> 10 only) to a local area network (LAN) and multiple devices, such as a headset, external displays, and Universal Serial Bus (USB) devices.

To view the compatible computers,

- 1. Go to https://support.lenovo.com/us/en/solutions/accs-guide.
- 2. Select ThinkPad, ThinkCentre, ThinkStation, Ideapad and Ideacentre Option Compatibility Matrix. Then follow the on-screen instructions.

### In the box

### ThinkPad Universal Thunderbolt 4 Dock

- ThinkPad Universal Thunderbolt 4 Dock
- 135 W power adapter and power cord
- Thunderbolt 4 cable
- Documentation



### ThinkPad Thunderbolt 4 Workstation Dock

- ThinkPad Thunderbolt 4 Workstation Dock
- 300 W power adapter and power cord
- ThinkPad Thunderbolt 4 Workstation Dock Split Cable
- Documentation



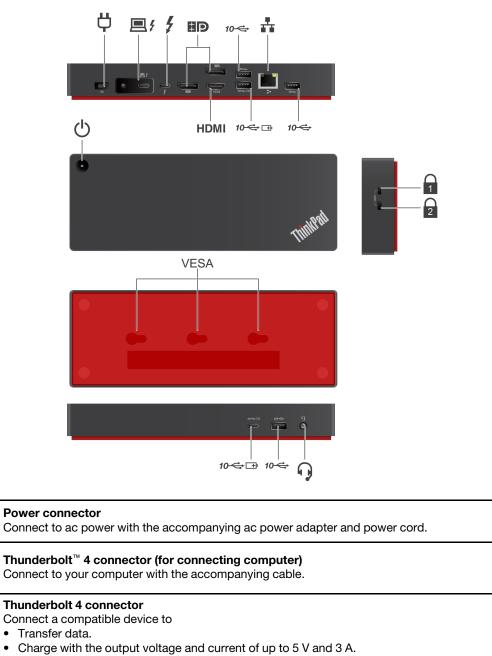
Contact your place of purchase if any item is missing or damaged. Ensure that you retain your proof of purchase and packing material. They might be required to receive warranty service.

### **Product overview**

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• Connect an external display with a Thunderbolt cable or USB-C cable.

**Note:** Do not connect your computer to this connector.

₿Þ	<b>DisplayPort<sup>®</sup> connectors</b> Connect to external displays with DisplayPort cables.
10 🚓	<b>USB 3.2 connector Gen 2</b> Connect a compatible device to transfer data.
**	Ethernet connector Connect to a LAN with an Ethernet cable.

10-🖙 🕀	<ul> <li>Always On USB 3.2 connector Gen 2</li> <li>Connect a compatible device to</li> <li>Transfer data.</li> <li>Charge with the output voltage and current of up to 5 V and 2.4 A.</li> </ul>
HDMI	HDMI <sup>™</sup> connector Connect to an external display with a High-Definition Multimedia Interface (HDMI) cable.
Ċ	<b>Power button</b> Press to turn off or turn on the dock.
1	<b>Security-lock slot</b> Support cable locks that conform to the Kensington / Lenovo NanoSaver lock standards (using Cleat locking technology).
2	<b>Security-lock slot</b> Support cable locks that conform to the Kensington / Lenovo MicroSaver lock standards (using T- bar locking technology) or MiniSaver lock standards (using Cleat locking technology).
VESA	<b>VESA mount holes</b> Mount to wall or monitor stand with VESA mount screws (M4 x 10 mm x 2 pcs).
0	<b>Audio connector</b> Connect a headset or headphones with 3.5 mm plug.

#### 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
Thunderbolt 3 connector (USB-C)	40
Thunderbolt 4 connector (USB-C)	40

#### **ThinkPad logo Indication**

When the dock is connected to ac power, this indicator shows the dock status:

LED status	Dock status
Red	Connected to ac power

#### **Power button Indication**

When the dock is connected to ac power but not your computer, this indicator shows the dock status:

LED status	Dock status
Amber	On
Off	Off

When the dock is connected to both your computer and ac power, this indicator shows the computer status:

LED status	Computer status
Solid white	On
Blinking white slowly (1 second on/off)	In sleep mode
Off	Off or in hibernation mode

When the dock is updating firmware, this indicator shows the update status:

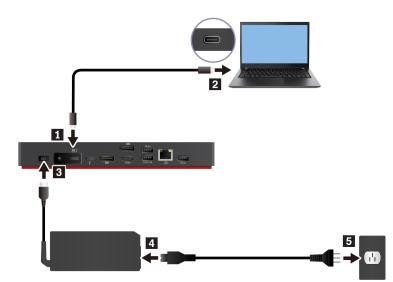
LED status	Firmware update status
Blinking rapidly (0.5 second on/off)	Updating
Off	Completed

## Chapter 2. Set up the dock

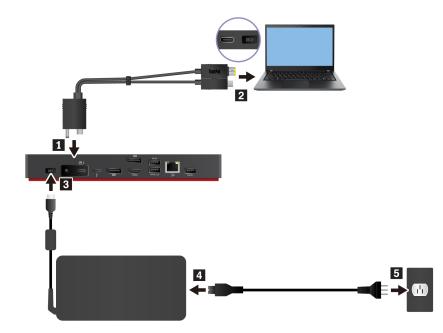
### Install the dock

Use the accompanying ac power adapter, power cord, and cable to install the dock. The dock supplies power to the computer when the dock is connected to ac power and your computer.

### ThinkPad Universal Thunderbolt 4 Dock



ThinkPad Thunderbolt 4 Workstation Dock



### Update the dock driver and firmware

The dock driver and firmware are preinstalled on compatible computers. The dock is ready for use after you connect it to your computer and ac power.

It is recommended that you update the dock driver and firmware whenever a new version is available to improve performance of the dock.

To update the dock driver and firmware:

- 1. Go to https://www.lenovo.com/support/docks.
- 2. Select the entry for the dock and then follow the on-screen instructions to download and install the dock driver and firmware.
- 3. The driver update takes effect when you restart your computer. The firmware update takes effect when you reconnect the dock to your computer.

### Install Lenovo Dock Manager

Lenovo Dock Manager is designed to provide silent firmware update and device information query.

To download Lenovo Dock Manager, go to https://support.lenovo.com/us/en/solutions/ht037099.

## Chapter 3. Use the dock

### Use the video output connectors

The dock has four video output connectors to support up to four external displays:

- One Thunderbolt 4 connector (support DisplayPort 1.4 and Thunderbolt 4)
- Two DisplayPort connectors (support DisplayPort 1.4)
- One HDMI connector (supports HDMI 2.1)

#### Supported resolutions

Depending on the USB-C connector or Thunderbolt connector on your computer, the dock supports the following display resolutions:

- One video output connector: up to 7680 x 4320 pixels / 30 Hz (HDMI only)
- Two video output connectors: up to 7680 x 4320 pixels / 30 Hz (HDMI only) and 5120 x 2880 pixels / 60 Hz (Thunderbolt 4 only)
- Three video output connectors: up to 3840 x 2160 pixels / 60 Hz
- Four video output connectors: up to 3840 x 2160 pixels / 60 Hz

To view the maximum display matrix, go to <u>https://www.lenovo.com/support/docks</u> and select the entry for the dock.

#### Configure the external displays

You can configure the external displays connected to your dock:

- Set the display mode: extend, mirror or duplicate, or single display.
- Set the orientation, brightness, resolution, color, and more.

To configure the external displays:

- 1. Right-click a blank area on the desktop and select **Display settings**.
- 2. Select the display that you want to configure.
- 3. Configure display settings of your preference.

For more information, see the Windows help information.

### **Use the Ethernet connector**

You can use the Ethernet connector on the dock to connect your computer to a standard 10 Mbps, 100 Mbps, or 1000 Mbps network with an Ethernet cable.

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

Depending on your computer, some of the following functions are available when the dock is connected to a LAN.

Preboot eXecution Environment

- MAC address Pass Through
- Wake on LAN
- vPro

To view the functions supported by your computer, go to <u>https://support.lenovo.com/us/en/solutions/accs-guide</u>. Select **Network function support – Option Compatibility Matrix**. Then follow the on-screen instructions.

## Chapter 4. Troubleshooting

### General

1. The dock does not work after connected to my computer.

Ensure that:

- You use the accompanying ac power adapter, power cord, and cable.
- The dock is powered by its power adapter. The dock always needs the power adapter for operation.
- The dock driver is installed on your computer.
- The USB-C connector or Thunderbolt connector on your computer works well.
- 2. The function of wireless keyboard or mouse (2.4 GHz) is interrupted. The mouse pointer lags or does not move. Some characters are lost when I input by the keyboard.

Connect the wireless device receiver to one of the following connectors on the dock:

- USB 3.2 connector Gen 2 on the front panel
- Right-most USB 3.2 connector Gen 2 on the rear panel
- The mouse and keyboard cannot wake up my computer when connected to the Always On USB
   3.2 connector Gen 2 on the dock.

Connect the mouse or keyboard to another USB connector on the dock.

4. The charging speed for my device, such as a smartphone, is slow.

Connect your device to an Always On USB 3.2 connector Gen 2 on the dock.

5. My computer cannot be charged by the dock.

Ensure that you use the accompanying ac power adapter, power cord, and cable to set up the dock.

#### Video output

#### 1. The external display is blank.

Ensure that:

- The external display is connected to ac power and turned on.
- Your computer is running correctly and not in standby or hibernation mode. When the computer is in standby or hibernation mode, the external monitor display is always blank.
- The dock is securely connected to ac power, computer, and external display.
- The dock driver is installed on your computer.

If the problem persists, disconnect all cables from the dock, and uninstall the dock driver. Then, reinstall the dock driver and reconnect all cables to the dock. See Chapter 2 "Set up the dock" on page 7.

# 2. The external DisplayPort or HDMI display has no display after I connect a Thunderbolt display to the dock.

- a. Disconnect all external displays from the dock.
- b. Connect the DisplayPort or HDMI display to the dock.
- c. Connect the Thunderbolt display.
- 3. The images on the external display flutter.

Ensure that the display cable is securely connected to the dock.

Disconnect and reconnect the display cable.

4. The computer can play back flash content. However, when I drag the window to the external display and maximize the window, the playback stops.

Update your Adobe Flash Player program to the latest version.

### Audio output

### Sound does not come from the headset after connected to the dock.

Ensure that the dock is set as the default audio device:

- 1. Right-click the speaker icon in the Windows notification area and select **Playback devices**. The Sound window is displayed.
- 2. On the Playback tab, select the dock. Then click Set Default.
- 3. Click the Recording tab. Select the dock. Then click Set Default.
- 4. Click OK.

Note: You might need to restart the application that is using the audio device to apply the changes.

## Appendix A. Accessibility information

### **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 to explain the image so that visually impaired users can understand the image when they use a screen reader.

To open and view PDF files, your computer must have the Adobe Reader program installed. The Adobe Reader program also is available for download at: <a href="http://www.adobe.com">http://www.adobe.com</a>

## Appendix B. Trademarks

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