

# Lenovo Thunderbolt 3 Essential Dock User Guide

 <http://www.lenovo.com/safety>

**Note:** Before using this information 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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# Contents

<b>Chapter 1. About the dock</b> . . . . .	<b>1</b>
Product description . . . . .	1
In the box . . . . .	1
Product overview . . . . .	2
Statement on USB transfer rate . . . . .	2
<b>Chapter 2. Set up the dock</b> . . . . .	<b>3</b>
Install the dock . . . . .	3
Update the device driver and firmware . . . . .	3
<b>Chapter 3. Use the video output connectors of the dock</b> . . . . .	<b>5</b>

Supported resolutions . . . . .	5
Configure the external displays . . . . .	5

<b>Chapter 4. Use the Ethernet connector of the dock</b> . . . . .	<b>7</b>
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<b>Chapter 5. Troubleshooting</b> . . . . .	<b>9</b>
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<b>Appendix A. Accessibility information.</b> . . . . .	<b>11</b>
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<b>Appendix B. Trademarks</b> . . . . .	<b>13</b>
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## Chapter 1. About the dock

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### Product description

The dock is an expansion module. It can easily connect your computer to multiple devices, such as a headset, a monitor, and a Universal Serial Bus (USB) device.

**Operating system requirement:** Microsoft® Windows® 10.

### Compatible computers list

Go to <https://www.lenovo.com/support/docks> and select the entry for the dock.

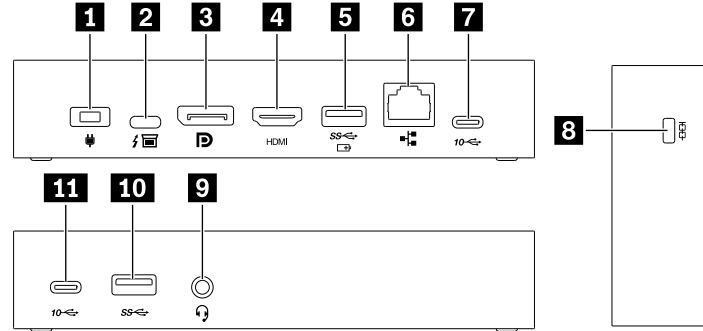
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### In the box

- Lenovo Thunderbolt 3 Essential Dock
- ac power adapter
- Power cord
- Thunderbolt™ 3 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



<b>1</b> Power connector	Connect to ac power with the accompanying ac power adapter and power cord.
<b>2</b> USB-C™ connector (for connecting to computer)	Connect to your computer with the accompanying Thunderbolt 3 cable.
<b>3</b> DisplayPort® 1.4 connector	Connect to an external display with a DisplayPort cable.
<b>4</b> HDMI™ 2.0 connector	Connect to an external display with a High-Definition Multimedia Interface (HDMI) cable.
<b>5</b> Always On USB 3.2 connector Gen 1	<ul style="list-style-type: none"> <li>When the dock is connected to ac power (no matter the dock is connected to your computer or not), charge a USB-compatible device with the output voltage and current of up to 5 V and 3 A.</li> <li>Connect a USB-compatible device to transfer data at USB 3.2 speed, up to 5 Gbps.</li> </ul>
<b>6</b> Ethernet connector	Connect to a LAN with an Ethernet cable.
<b>7 11</b> USB-C (USB 3.2 Gen 2) connector	Connect to a USB-C compatible device to transfer data at USB 3.2 speed, up to 10 Gbps.
<b>8</b> Security-lock slot	<p>Lock the dock to a desk, table, or other fixture through a compatible security cable lock.</p> <p><b>Note:</b> The slot supports cable locks that conform to the Kensington MiniSaver® lock standards using Cleat™ locking technology.</p>
<b>9</b> Audio connector	<p>Connect to a headphone or a headset with a 3.5-mm (0.14-inch) and 4-pole plug.</p> <p><b>Note:</b> Ensure that the dock is the default audio device of your computer. See “Use audio” in your computer <i>User Guide</i>.</p>
<b>10</b> USB 3.2 connector Gen 1	Connect to a USB-compatible device to transfer data at USB 3.2 speed, up to 5 Gbps.

## 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

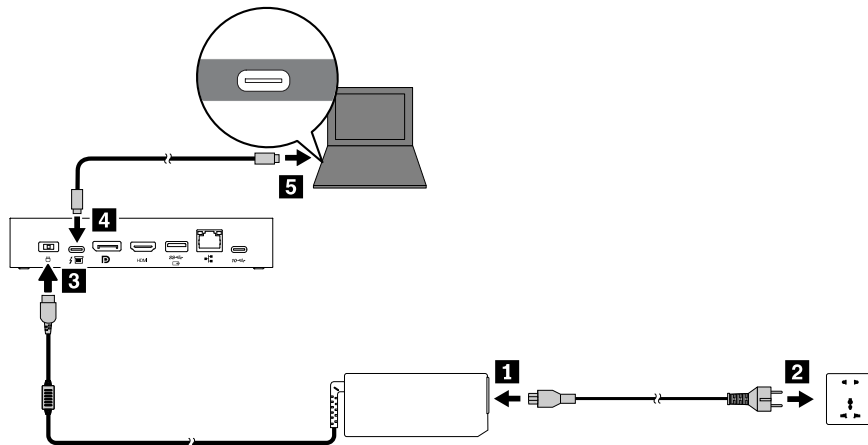
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## Chapter 2. Set up the dock

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### Install the dock

Use the accompanying ac power adapter, power cord, and Thunderbolt 3 cable to install the dock. The dock supplies power to the computer when the dock is connected to ac power and your computer.



### Enable the dock

To enable the dock when you connect it to the computer for the first time, do either of the following:

- Confirm the change when prompted if you have the administrator privilege.
- Restart the computer. When the logo screen is displayed, press F1 or Fn+F1 to enter the BIOS menu. Select **Config** → **Thunderbolt(TM) 3** → **Security level** → **No Security**.

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### Update the device driver and firmware

**Note:** This is an optional operation.

The device driver is preinstalled on compatible Lenovo computers and the firmware is embedded into the dock. The dock is ready for use after you connect it to your computer.

Lenovo recommends that you update the device driver and firmware whenever a later version is available.

You also can download the latest device driver and firmware from <http://www.lenovo.com/support/docks>.

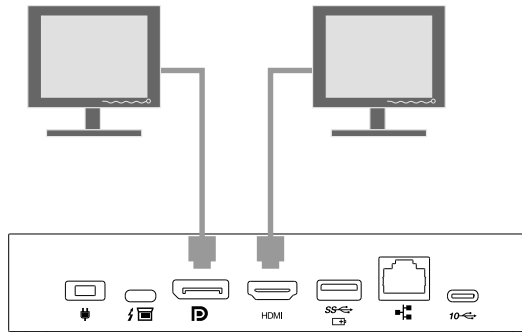


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## Chapter 3. Use the video output connectors of the dock

The dock has two video output connectors:

- One DisplayPort connector
- One HDMI connector



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### Supported resolutions

- If you connect the dock to a Thunderbolt 3 connector on your computer, and the connector supports DisplayPort 1.4,
  - One video output: up to 3840 x 2160 pixels / 60 Hz
  - Two video output: up to 3840 x 2160 pixels / 60 Hz
- If you connect the dock to a Thunderbolt 3 connector on your computer, and the connector supports DisplayPort 1.2,
  - One video output: up to 3840 x 2160 pixels / 60 Hz
  - Two video output: up to 3840 x 2160 pixels / 30 Hz
- If you connect the dock to a USB-C connector on your computer, and the connector supports DisplayPort 1.2,
  - One video output: up to 3840 x 2160 pixels / 30 Hz
  - Two video output: up to 1920 x 1080 pixels / 60 Hz

For the maximum display matrix, go to <https://support.lenovo.com/us/zh/solutions/pd029622#USB-C%20dock> and select the entry for the dock.

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### 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.

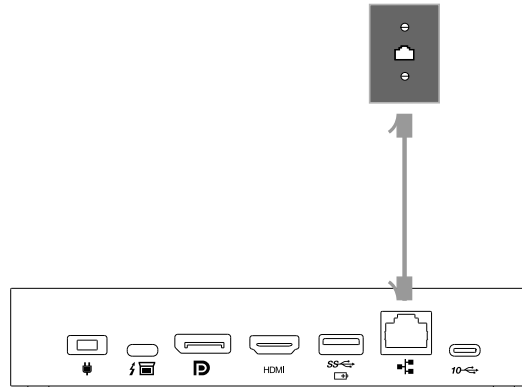
To configure the external displays, see “Connect to an external display” in your computer *User Guide*.



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## Chapter 4. Use the Ethernet connector of the dock

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
- Wake on LAN from Dock

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



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## Chapter 5. Troubleshooting

### General

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

Ensure that:

- You use the accompanying ac power adapter, power cord, and Thunderbolt 3 cable to connect the dock correctly.
- The USB-C connector on your computer works correctly.

**2. The charging speed for the connected device, such as a mobile phone, is slow.**

Connect your device to the Always On USB 3.2 connector Gen 1.

**3. The mouse and keyboard cannot wake up my computer when connected to the Always On USB 3.2 connector Gen 1.**

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

**4. My computer cannot be charged after I connect it to the dock.**

Ensure that you connect the dock to ac power with the power adapter accompanied with the dock.

### Video output

**1. I connect the external display to the dock. The external display is blank.**

Ensure that:

- No more than two external displays are connected to the dock.
- Your computer connected to the dock is running correctly and is not in sleep or hibernation mode. When the computer is in sleep or hibernation mode, the external display is always blank.
- The latest device driver is correctly installed.
- The following components are securely connected:
  - Your computer and the dock
  - The dock and electrical outlet
  - The dock and external displays

If the problem persists, disconnect all cables from the dock, and uninstall the dock device driver. Then, reinstall the device driver and reconnect all cables to the dock.

**2. I connect the external display to the dock. I cannot play back videos on the external display but can play them back on the computer display.**

Some computers do not support the Certified Output Protection Protocol (COPP), and you cannot play back the protected videos on the external display connected to the dock.

To play back videos on the external display, you can connect the external display to the corresponding video output connector on your computer, and configure the display settings to your preference. See “Configure the external displays” on page 5.

**3. I connect the external display to the dock. The images on the external displays flutter.**

Check the display resolution of the external displays and ensure that the resolution is supported by the dock.



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## 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:

<http://www.adobe.com>



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