ThinkPad Universal USB-C Dock
ThinkPad Universal USB-C Smart Dock
User Guide

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 USB-C Dock / ThinkPad Universal USB-C Smart 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® Windows® 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 USB-C Dock / ThinkPad Universal USB-C Smart Dock
- 90W ac power adapter and power cord
- 1m USB-C® 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.

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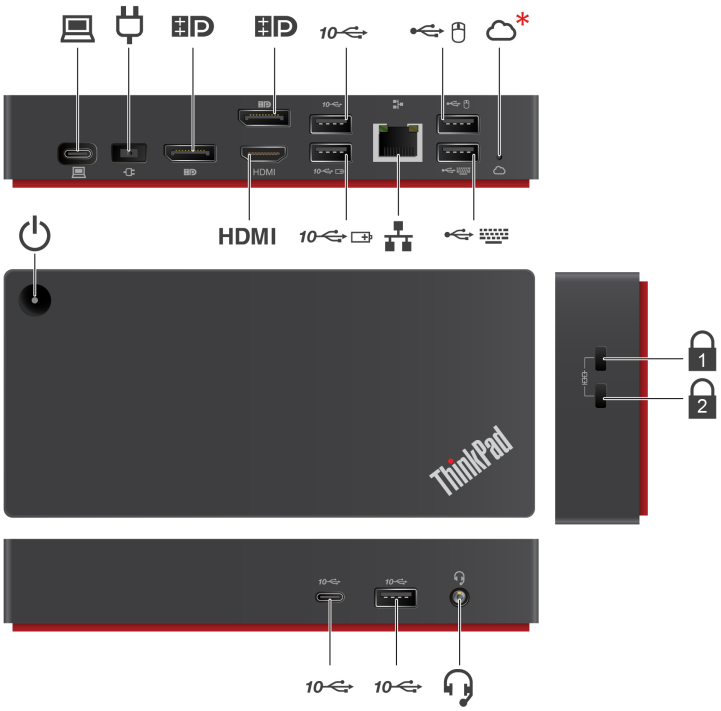
Product overview



	USB-C connector (for connecting computer) Connect to your computer with the accompanying USB-C cable.
	Power connector Connect to ac power with the accompanying ac power adapter and power cord
	DisplayPort® connector Connect to an external display with a DisplayPort cable.
	USB 3.2 connector Gen 2 Connect a compatible device to transfer data at USB 3.2 speed, up to 10 Gbps.
	USB 2.0 connector Connect a USB device, such as mouse.
	Cloud indication (* For ThinkPad Universal USB-C Smart Dock only) Indicates the cloud connection status. • **Solid amber:** Disconnected • **Blinking amber (1 second on/off):** Connecting • **Solid green:** Connected
	USB 2.0 connector Connect a USB device, such as keyboard.
	Ethernet connector Connect to a LAN with an Ethernet cable.

10	**Always On USB 3.2 connector Gen 2** Connect a compatible device to transfer data or charge with the output voltage and current of up to 5 V and 2.4 A.
HDMI	**HDMI™ connector** Connect to an external display with a High- Definition Multimedia Interface (HDMI) cable.
	Power button Press to turn off or turn on the dock.
1	**Security-lock slot** Support cable locks that conform to the Kensington / Lenovo NanoSaver® lock standards (using Cleat locking technology).
2	**Security-lock slot** 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).
	Audio connector Connect a headset or headphones with 3.5 mm plug.

Power button Indication

When the dock is connected to ac power but not your computer, press the dock power button to turn off or turn on the dock. The indicator on the dock power button shows the dock status:

LED status	Dock status
Amber	On
Off	Off

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

LED status	Computer status
Solid white	On
Blinking white	In sleep mode
Blinking orange	Updating driver
Off	Off or in hibernation mode

Statement on USB transfer rate

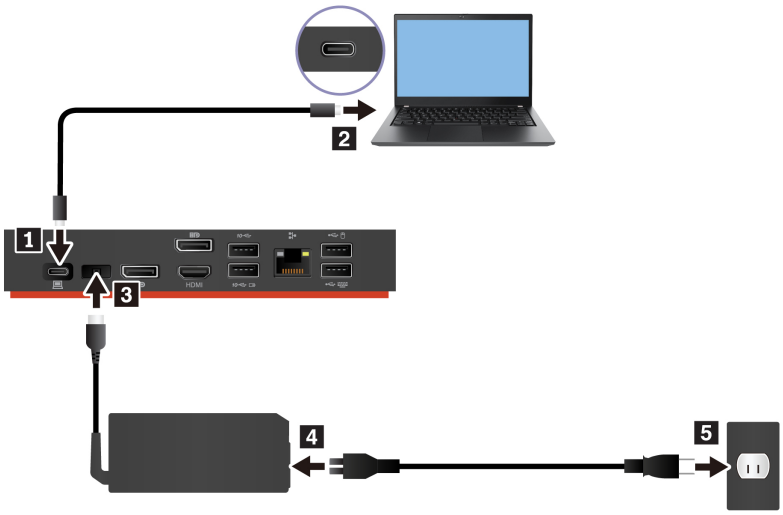
Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the 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 connector (USB-C)	40
Thunderbolt 4 connector (USB-C)	40

Chapter 2. Set up the dock

Install the dock

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



Install the dock driver and firmware

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

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 dock 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 the firmware.
3. When the indicator on the dock power button turns to solid white, the update is completed. The 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.

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Chapter 3. Use the dock

Use the video output connectors

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

- Two DisplayPort connectors (support DisplayPort 1.4)
- One HDMI connector (supports HDMI 2.0)

Supported resolution

Depending on the USB-C connector or Thunderbolt 3 connector on your computer, the dock supports the following display resolutions:

- One / two video output connectors: up to 3840 x 2160 pixels / 60 Hz
- Three video output connectors: up to 3840 x 2160 pixels / 30 Hz

To view the maximum display matrix, go to https://support.lenovo.com/us/zh/solutions/pd029622#USB-C%20dock 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
- Wake on LAN from Dock

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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.

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 USB-C cable.
   - The dock is powered by its power adapter. The dock always needs an external power adapter for operation.
   - The dock driver is installed on your computer.
   - The USB-C 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 a USB 2.0 connector on the dock.

3. **The mouse or 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 a USB 2.0 connector on the dock.

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

   Connect your device to the 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 USB-C cable to set up the dock.
   - The USB-C connector on your computer supports ac input.

Video output

1. **The external display is blank.**

   - Ensure that:
     - Your computer 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 dock is securely connected to ac power, computer, and external display.
     - The dock driver is installed on your computer.
   - Reduce the resolution of the external display.

   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 5.

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

   Some computers do not support High-bandwidth Digital-content Copy Protection (HDCP), so you cannot play back protected videos on the external display connected to the dock.

   To play back videos on the external display, connect the external display to a DisplayPort or HDMI connector on your computer. Then, set the display mode into extend mode or single-display mode from your computer. See “Configure the external displays” on page 7.

3. **The images on the external display flutter.**

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

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- Disconnect and reconnect the display cable.

4. **The colors of the images on the external display are not correct.**
   - Ensure that the display cable is securely connected to the dock.
   - Adjust color settings of the external display. See “Configure the external displays” on page 7.
5. **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.

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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