

# Thunderbolt<sup>™</sup> 5 Docking Station

# Model 107064



# **User Manual**

Download the user manual at: www.cablematters.com/dl/107064

support@cablematters.com



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# Cable Matters

# 1. INTRODUCTION

# 1.1 Introduction

Thank you for your purchase from Cable Matters® Inc., the 'Reliable Connectivity' company. This User Manual provides an overview of the features and installation of your new:

## Thunderbolt<sup>™</sup> 5 Docking Station

Please read these instructions carefully before connecting, operating or configuring this product. Please keep this manual for future reference.

Contact support@cablematters.com for guestions or product support.

# 1.2 Copyright and Trademarks

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USB Type-C<sup>®</sup> and USB-C<sup>®</sup> are registered trademarks of USB Implementers Forum.

Windows® is a registered trademark of Microsoft Corporation in the U.S. and other countries.

# **1.3 FCC Compliance Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device must not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

# 2. PRODUCT OVERVIEW

## 2.1 Package Contents

Please check that the following items are contained in the package:

Thunderbolt<sup>™</sup> 5 Docking Station

Thunderbolt™ 5 80/120Gbps USB-C<sup>®</sup> Cable

AC Power Adapter

User Manual (available in a PDF from cablematters.com)

## 2.2 Product Description

The Cable Matters<sup>®</sup> Thunderbolt<sup>™</sup> 5 Docking Station supports three Thunderbolt<sup>™</sup> 5 Downstream Ports, USB peripherals, 2.5 Gigabit Ethernet networking, SD cards and up to 140W power delivery for your computer over a single Thunderbolt 5 80/120Gbps cable. This innovative docking station uses the Intel<sup>®</sup> Goshen Ridge chipset for backward compatibility with a computer with only USB-C<sup>®</sup> connectivity.

# 2.3 Product Features

- Connects to any Thunderbolt 5 or USB-C<sup>®</sup> computer port and provides up to 140W of Power Delivery charging to the host computer
- Supports up to three 8K monitors at 60Hz in Thunderbolt 5 Mode (with DSC enabled). Support two monitors
  up to 8K@120Hz each (see details in on page 4)
- Provides 3xThunderbolt 80/120Gbps ports, 2x USB-A 10Gbps ports, 1x USB-A 5Gbps ports with 5V@1.5A BC1.2 charging support.
- · Connect USB peripherals with three Thunderbolt 5/USB-C ports and three USB-A ports
- · Audio support for a speaker or headset with a microphone
- · Connect to a wired 2.5 Gigabit Ethernet network
- · Supports microSD or SD cards at 300MB/s speeds

Computer Compatibility	Thunderbolt 4/5 host (Thunderbolt mode) USB-C host (MFDP mode), USB4, USB3.2 Gen1/Gen2		
Note:	Computers with ChromeOS are NOT compatible		
OS Compatibility	macOS 10.13 and up Windows 10 and up		
External Displays	Thunderbolt monitors or USB-C to HDMI/DP cables		
Ethernet Networking	LAN or router with RJ45 and an Ethernet cable (Cat 6 for 2.5 Gigabit Ethernet)		
USB Connectivity	Compatible USB-A devices and cables. To achieve 10Gpbs speed on 10Gbps ports, 10Gbps-compatible devices and cables are required		
	Compatible Thunderbolt devices and cables. To achieve 80/120Gbps speed on Thunderbolt ports, 80/120Gbps-compatible devices and cables are required		
SD Cards	Compatible microSD or SD Card		
Audio Port	3.5mm TRS or TRRS headset or microphone cable		
Power Port	Use only the power adapter included with the dock		

### 2.4 System Requirements

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# 3. Connection and Operating Instructions

# 3.1 Installation Checklist

- ✓ Computers with Thunderbolt 5 and USB-C ports do not need to download any additional driver
- ✓ Check that your Thunderbolt port is wired for 80/120Gbps to support three 8K@60hz monitors
- ✓ The max resolutions depend on host capabilities
- If you want the network port on this dock to reach a speed of 2.5Gbps, it is crucial to ensure that your router's Ethernet port supports 2.5Gbps
- ✓ Use the included Thunderbolt 5 cable to connect to the Dock for the best performance USB-C only computers must use a passive Thunderbolt 5 cable up to 1m (Cable Matters Model 107062)
- ✓ MacOS computers do not require any additional external software
- ✓ For additional troubleshooting information, go to <u>kb.cablematters.com</u> and search for 107064.

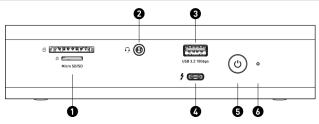
## 3.2 USB-C or Thunderbolt 5 External Display Chart

Thunderbolt 5 hosts support three 8K displays. The display support of USB-C hosts depends on the DP Alt Mode and Display Stream Compression (DSC) support of the host.

Windows 11 (23H2 or later)				
Thunderbolt 5 *	Up to 8K@144Hz	Up to 8K@120Hz	Up to 8K@60Hz/4K@144Hz	
Thunderbolt 4 / USB 4 *	Up to 8K@60Hz	Up to 4K@120Hz	Х	
Thunderbolt 3	Х	Х	Х	
USB-C Alt Mode	Up to 4K@60Hz	Х	Х	
macOS (14.5 or later)				
M4 Base/Pro/Max	Up to 8K@60Hz	Up to 6K@60Hz	Х	
M1/M2/M3 Pro and Max	Up to 6K@60Hz	Up to 6K@60Hz	Х	
M1/M2/M3 Base	Up to 4K@60Hz (M1/M2)		x	
	Up to 6K@60Hz (M3)	Х	Х	
Note: *Support for Display Stream Compression (DSC) is required to achieve the maximum resolution.				

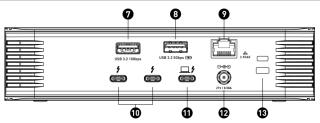


## 3.3 Front Panel Diagram



- 1) SD and microSD card slots
- 2) 3.5mm TRRS combo headphones/mic port
- 3) USB-A 3.2 Gen2 10Gbps port
- 4) Thunderbolt 5 80/120Gbps / USB4, USB3.2 Gen1/Gen2 ports with PD3.0 5V3A charging support
- 5) Power button
- 6) Power LED

## 3.4 Rear Panel Diagram



- 7) USB-A 3.2 Gen2 10Gbps port
- 8) USB-A 3.2 Gen1 5Gbps port with BC1.2 5V1.5A charging support
- 9) 2.5 Gigabit Ethernet RJ45 connector
- 10) Thunderbolt 5 80/120Gbps / USB4, USB3.2 Gen1/Gen2 ports with PD3.0 5V3A charging support
- 11) Thunderbolt 5 80/120Gbps / USB-C host connector port with 140W charging for computer
- 12) DC power port
- 13) K-Lock slot

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## 3.5 Connecting the Docking Station

- 1) Connect the dock to an AC power outlet
- 2) Press the power button to power on the dock
- 3) Check the power LED is lit
- 4) Connect the included cable to the Thunderbolt 5 or USB-C port on the computer
- 5) A computer equipped with Power Delivery should indicate that it is charging
- 6) Wait up to 20 seconds while USB drivers are automatically installed
- 7) Windows may request the user to approve the dock
- 8) Check the status of connected Thunderbolt devices from the Thunderbolt software in Windows



The following Thunderbolt™ device chain ha require your permission to connect to this s		I in and one or more o	levices
Select the devices you wish to connect:			
Cable Matters Inc., 107064	0	Always Connect	

#### **Troubleshooting Tips**

- · Reboot the computer and check that the dock has power
- · Check with the computer manufacturer for BIOS updates and latest graphics drivers for Windows
- · Avoid rapidly disconnecting and reconnecting the dock from your computer
- Connect the Thunderbolt 5 cable to the host port located on the rear panel of the dock, rather than the downstream facing Thunderbolt port on the front panel of the dock
- Connect the dock to your computer's Thunderbolt 5 port or USB-C port with video feature, rather than the charging
  port or a port that only supports data transfer.

### 3.6 Connecting to a LAN or Router

- 1) Connect an RJ45 patch cable to the dock (Cat 6 recommended for 2.5 Gigabit Ethernet)
- 2) Connect the patch cable to a LAN or router port
- 3) Check the documentation of your LAN or router to configure network access
- Link and Status LEDs should blink to indicate a live connection 2.5G mode: LED1 blinks yellow, LED2 is solid orange 10M/100M/1G mode: LED1 blinks yellow, LED2 is solid green

#### Troubleshooting Tips

- · Check the LED indicators to determine the current connection speed.
- · Test by turning off all wireless connections on the computer
- Test the patch cable with a different device or try another Ethernet port
- · Maximum connection speed is limited by the network equipment and the Internet speed
- Download the additional driver at: <u>www.cablematters.com/dl/107064</u>



2.5GbE

#### 3.7 Connecting an Audio Device

- 1) Connect a headset or microphone to the 3.5mm audio port (3 pole TRS or 4 pole TRRS)
- 2) Configure the audio settings from the computer

#### Windows 10 and up

- 1) Device Manager > Click on Sound, video and game controllers> Realtek USB2.0 Audio
- 2) Click on Audio inputs and output > Select Microphone or Speakers

#### macOS 10.13 and up

- 1) System Information > Hardware > USB > USB 3.0 Bus > Realtek USB2.0 Audio
- 2) Select the audio in System Preferences > Sound > Select the Output or Input

#### 3.8 Connecting External Monitors

- 1) Connect the monitor to the Thunderbolt port via a USB-C cable or a USB-C to HDMI/DP cable
- 2) Select the desired video input from each monitor's menu
- 3) Select the audio output from the computer, if needed

Windows 10 and up: Press Windows Logo + P or launch the Intel HD Graphics Control Panel from the search bar

macOS 10.13 and up: Select System Preferences > Displays > Click the Arrangement tab

#### **Troubleshooting Tips**

- · Test the video cables with other equipment
- · Check that your computer supports 3 external monitors
- · Check the resolution chart on Page 4 to verify display and resolution host device support
- Base-level M1 Mac computers support only one extended monitor, while the Mac with the M1 Pro chip can support up to two external displays, and the Mac with the M1 Max chip can support up to three external displays.
- To connect multiple monitors, it is recommended to visit the official website of Intel and update your graphics card driver to the latest version. This will ensure compatibility and optimal performance
- If you want to connect three 8K@60Hz monitors, it is recommended to use monitors with the highest resolution that supports 8K@60Hz, make sure your USB-C to HDMI2.1 cable support 8K60hz.







#### 3.9 Connecting a USB-A or USB-C Device

#### FRONT PANEL



- 1) Connect a USB-A or Thunderbolt/USB-C device or cable to the dock
- 2) The device should be recognized after downloading any needed USB drivers
- The USB3.2 port supports data transfer up to 10Gbps. The Thunderbolt 5 port supports up to 80Gbps data transfer and 5V3A PD3.0 charging.
- 4) Use Safely Remove or Eject when disconnecting, if needed

Connect a USB-A or Thunderbolt/USB-C device or cable to the Dock
 The device should be recognized after downloading any needed USB

Drivers

3) The USB3.2 10Gbps port supports data transfer up to 10Gbps. The USB3.2 5Gbps port supports data transfer up to 5Gbps and 5V1.5A BC1.2 charging. The Thunderbolt 5 port supports up to 80Gbps data transfer and 5V3A PD3.0 charging.

4) Use Safely Remove or Eject when disconnecting, if needed

#### **Troubleshooting Tips**

- A USB external hard drive may require more power than the USB port provides. If the external hard drive has an
  external power adapter, connect it to the hard drive
- · Test the USB cable or device with a different port
- · Data transfer speed is limited by the Thunderbolt 5 or USB-C host port and the connected device

#### 3.10 Connecting SD Cards



- Connect an SD card to the SD card slot, and/or a microSD card to the microSD card slot
- 2) The card should be recognized automatically
- 3) Data transfer up to 300MB/s is supported
- 4) Use Safely Remove or Eject before removing SD cards

#### **Troubleshooting Tips**

- · Make sure the card is formatted for use. Try backing up data and reformatting a new or used card
- Test the card in another device
- · Data transfer speed is limited by the Thunderbolt 5 or USB-C host port, connected devices, and card type

# 4. THUNDERBOLT SHARE INSTRUCTIONS

This Thunderbolt 5 Docking Station supports Thunderbolt Share, an innovative software application from Intel that enables fast and seamless Windows PC-to-PC connectivity.

Requirements

Both computers must be running Windows 10/11 Both computers must have Intel Graphics driver version 0.101.4826 (or higher) Both computers must be equipped with Thunderbolt™ 4/5 ports Two Thunderbolt 4/5 cables are required to connect each PC to the docking station One cable is included with the dock. A second cable needs to be purchased separately. We recommend Cable Matters Model 107062

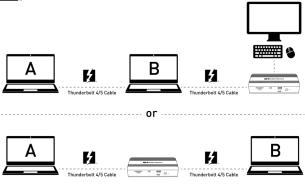
Instructions:

Download and install Thunderbolt™ Share on both PCs. You can download it from <u>https://</u> www.cablematters.com/downloads</u> under SKU 107064

- Use the included Thunderbolt 5 cable to connect PC "A" to the Thunderbolt 5 host port on the Cable Matters Thunderbolt 5 Docking Station
- Use an additional Thunderbolt 4/5 cable to connect PC \*B\* to one of the downstream ports on the Cable Matters Thunderbolt 5 docking station
- The Thunderbolt Share application will automatically form a connection between the two PCs. You can then start a screen sharing or file sharing session using Thunderbolt Share.



Thunderbolt<sup>™</sup> Share



# 5. TECHNICAL SPECIFICATIONS

Thunderbolt 5 /USB-C (host) Included Host Cable 2.5 Gigabit Ethernet Network Port Thunderbolt 5(front panel) Thunderbolt 5(rear panel) USB-A 3.2 (front panel) USB-A 3.2 (rear panel) USB-A 3.2 (rear panel) Displays Audio SD Card Power LED	Thunderbolt 5 80/120 Gbps / USB-C Thunderbolt 5 80/120 Gbps passive cable RJ45 1x Thunderbolt 80/120 Gbps with 5V3A PD3.0 charging 2x Thunderbolt 80/120 Gbps with 5V3A PD3.0 charging 1x USB-A 3.2 10Gbps for data transfer only 1x USB-A 3.2 10Gbps for data transfer only 1x USB-A 3.2 10Gbps for data transfer only 1x USB-A 3.2 5Gbps with 5V1.5A BC1.2 charging 3x Thunderbolt 5 3.5mm TRRS Combo Audio Port / 2 Ch audio 1x microSD card slot, 1x SD card slot—300MB/s Input: AC 100/240V Output: 21V/8.58A US Standard White
Audio	3.5mm TRRS Combo Audio Port / 2 Ch audio 1x microSD card slot, 1x SD card slot—300MB/s
	1x microSD card slot, 1x SD card slot—300MB/s
LED	White
Operation/Storage Temperature OS Support Maximum Resolution Support Dock Housing (LxWxH) Dock Weight Compliance Warranty	32-104°F / -4-158°F Windows 10 and up 64-bit, macOS 10.13 and up Up to 7680 x 4320 @ 144Hz 6.93 x 3.03 x 1.65 in (176 x 77 x 42 mm) 24.7 oz (700g) C E, FCC, RoHS Limited One-Year

Note: Specifications are subject to change without notice

# 6. WARRANTY & SUPPORT INFORMATION

### 6.1 Customer Support and Contact Information

Cable Matters offers lifetime technical support as an integral part of our commitment to provide industry leading solutions. Contact us with any questions at **support@cablematters.com**.

## 6.2 Warranty Information

This product is backed by a limited one-year warranty. The warranty covers parts and labor costs only. Cable Matters does not warrant its products from defects or damages arising from misuse, abuse, or normal wear.

## 6.3 Limitation of Liability

In no event shall Cable Matters Inc. (including their officers, directors, employees or agents) be liable for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of data, loss of business, or any pecuniary loss, arising out of, or related to the use of this product exceeding the actual price paid for the product (as allowed by state law).