# **Owner's Manual**

# Thunderbolt<sup>™</sup> 3 Docking Station with Dual 4K Video

Model: MTB3-DOCK-03

Este manual esta disponible en español en la página de Tripp Lite: tripplite.com/support

Ce manuel est disponible en français sur le site Web de Tripp Lite : tripplite.com/support

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## **WARRANTY REGISTRATION**

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## **Product Features**

- For use with Mac OS and Windows host computers via either Thunderbolt 3 or Multi-Function DisplayPort (MFDP) USB-C ports (product features vary based on port type, see Specifications Table for exact product features).
- Thunderbolt 3 input port supports data transfer rates up to 40 Gbps when used with a Thunderbolt 3-enabled host computer; data transfer rates up to 26.2 Gbps are supported via a MFDP-enabled host computer.
- Supports up to 60W of charging power to the connected host computer.
- Thunderbolt 3 output port supports daisy-chaining up to six devices with source capability of 15W (5V 3A), and supports Thunderbolt 3-enabled devices such as monitors, RAID memory and more\*.
- DisplayPort connector supports 4-Lane DP1.4 video resolutions up to 8K (7680 x 4320) @ 30 Hz when used with a Thunderbolt 3-enabled host computer and 2-Lane DP1.4 video resolutions up to 4K (3840 x 2160) @ 60 Hz via a MFDP-enabled host computer (requires DP1.4 Alt Mode).
- Supports DisplayPort Multi-Stream Transport (MST) Mode to allow two displays to be connected, one to the Thunderbolt 3 output port and a second to the DisplayPort connector for combined resolutions of 8K @ 30 Hz + 4K @ 30 Hz, or dual 4K @ 60 Hz.

Note: See Multi-Monitor Requirements for details.

- RJ45 port supports Gigabit Ethernet speeds to connect to a wired network.
- Includes two USB 3.2 Gen 2 Type-A ports, both of which support 10 Gbps data transfer speeds. One USB-A port supports BC1.2 charging speeds up to 5V 1.5A and the other supports charging up to 5V 900mA.
- Includes one USB 3.2 Gen 2 Type-C port that supports 10 Gbps data transfer speed and USB charging up to 5V 1.5A.
- Includes one 3.5 mm audio jack for stereo audio with auto-detection and autoswitching between OMTP and CTIA.
- SD 4.0 and Micro SD 4.0 slots are available for memory cards. Both can be used simultaneously.
- Plug-and-play; no external drivers or software are needed
- \*Only applies to Thunderbolt 3 devices, USB Type-C devices are not supported in the chain.

# **System Requirements**

- Windows or Mac OS computer with Thunderbolt 3 or Multi-Function DisplayPort (MFDP)-enabled USB Type-C port
- DisplayPort or Thunderbolt 3 compatible monitor
- Ethernet network with speeds up to 10/100/1000 Mbps

# **Package Includes**

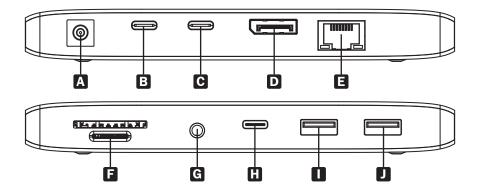
- MTB3-D0CK-03
- Thunderbolt 3 Cable, M/M, 1.6 ft. (0.5m)
- External Power Supply (Input: 100-240V, 50/60 Hz, 3.0A, Maximum Output: 20V 6A)
- Owner's Manual

## **Optional Accessories**

- MTB3-Series 40 Gbps Active Thunderbolt 3 Cables
- N201-Series Cat6 Gigabit Snagless Patch Cables
- P580-Series DisplayPort Cables
- U322-Series USB 3.0 A/B Cables
- U326-Series USB 3.0 Micro-B Device Cables
- U420-003-G2-5A USB 3.1 Gen 2 USB-C M/M Cable (3 ft.)

# **Product Overview**

- **A** DC Power Jack, 120W (20V 6A)
- **B** Thunderbolt 3 Port for TBT3 Source or Multi-Function DisplayPort (MFDP) USB Type-C Host
- C Thunderbolt 3 Port
- D DisplayPort 1.4 Port
- E RJ45 Port for Gigabit Ethernet (10/100/1000 Mbps) Connection
- F SD/Micro SD Memory Card Slots
- G 3.5 mm Audio Jack
- H USB-C Port
- USB-A Port
- USB-A BC1.2 Port



## Installation

#### Notes:

- Supports the connection of two monitors at the same time through DisplayPort Multi-Stream Transport (MST) Mode: one monitor via the Thunderbolt 3 port and a second monitor via the DisplayPort connector. See Multi-Monitor Requirements section for details.
- When the included 120W (20V 6A) power supply is connected to the DC power jack, it supplies power to charge the host PC first, with the rest of the power supplied to the dock.
- See Optional Accessories section for suggested cables.
- When the unit is connected to the USB-C port on the host computer and to a network using UTP patch cabling, such as Tripp Lite's N201-Series Cat6 cables, a network connection will be established automatically. If no connection is made, one can be established manually by going to the host computer's network settings page. For example, on a Mac, navigate to the Network section in System Preferences, click the "Assist Me" button to get to the Network Setup Assistant, then follow the prompts to establish a connection.
- **1.** Connect the included power supply between the unit and a power source.
- **2.** Connect a Thunderbolt 3-enabled laptop or computer to the unit's Thunderbolt 3 host port using the included Thunderbolt 3 cable.
- Connect the dock's DisplayPort connector to a DisplayPort monitor using a DisplayPort cable, such as Tripp Lite's P580-Series of DisplayPort cables.

#### OR

- 4. Connect the dock's Thunderbolt 3 output port to a Thunderbolt 3-enabled monitor using a Thunderbolt 3 cable, such as Tripp Lite's MTB3-series of Thunderbolt 3 cables.\*
  - \*Note: The DisplayPort and Thunderbolt 3 ports can be used to transmit video simultaneously in DisplayPort MST Mode. See **Multi-Monitor Requirements** section for details.
- **5.** Connect a user-supplied 3.5 mm Mini Stereo cable to the unit to connect an external speaker.
- 6. Connect up to three USB devices via the two USB-A ports and USB-C port.
- **7.** Connect the dock's RJ45 port to a network using a UTP patch cable, such as Tripp Lite's N201-Series Cat6 cables.
- **8.** Insert SD or Micro-SD memory cards in the dock's SD and Micro-SD slots. Both slots can be used simultaneously.

# **Multi-Monitor Requirements**

The MTB3-DOCK-03 supports the connection of two monitors at the same time through DisplayPort Multi-Stream Transport (MST) mode. Connect a DisplayPort monitor and Thunderbolt 3-enabled monitor at the same time. The following limitations must be taken into account when connecting multiple monitors at the same time:

#### **Does the Source Computer Support DisplayPort MST Mode?**

When connecting to a Thunderbolt 3 source that supports DisplayPort MST mode, the EDID information of both connected monitors will be read by the computer and appear as separate displays that can be shown in mirror mode or extended mode. Both the DisplayPort and Thunderbolt 3 ports can achieve video resolutions up to 8K (7680 x 4320) @ 30 Hz when used with a Thunderbolt 3-enabled source computer and Thunderbolt 3 cable. The ports can be used simultaneously at resolutions of 8K @ 30 Hz plus 4K @ 30 Hz.

When connecting to a Thunderbolt 3 source that does not support DisplayPort MST mode, only one video port will display video on a first-come basis, and will always be the first video port connected.

#### **Does the Source Computer Support a Thunderbolt 3 Connection?**

The MTB3-DOCK-03 can be used to transmit video from source computers that have a Thunderbolt 3 port or USB Type-C port that supports Multi-Function DisplayPort (MFDP). In order to achieve optimal performance and video resolution, the device should be used with a Thunderbolt 3-enabled port. When connected to a computer's Thunderbolt 3 port, the DisplayPort connector supports 4-Lane DP1.4 video resolutions up to 8K (7680 x 4320) @ 30 Hz. When connected to a USB Type-C MFDP-enabled port, the DisplayPort connector can only reach 2-Lane DP1.4 video resolutions up to 4K (3840 x 2160) @ 60 Hz, and requires the host computer to support DP1.4 Alternate Mode. The Thunderbolt 3 output port cannot be used to transmit video when plugged into a USB Type-C port, as it only supports USB 2.0 data transmission in this way.

# **Specifications**

# When Plugged into Thunderbolt 3-Enabled Port

# When Plugged into USB Type-C MFDP Port

Connectors - Input			
DC Port	DC Power (Female)		
Thunderbolt 3	Thunderbolt 3 Type-C (Female)		
Connectors - Output			
USB-A	USB 3.2 Gen 2 Type-A (Female) x2		
USB-C	USB 3.2 Gen 2 Type-C (Female)		
Ethernet	RJ45 (Female)		
DisplayPort	DisplayPort (Female)		
Audio Port	3.5 mm (Female)		
Memory	SD 4.0 (Female); Micro-SD 4.0 (Female)		
Data Transfer Specs			
Thunderbolt 3 (Input)	Thunderbolt 3 (40 Gbps)	USB 3.2 Gen 2 (26.2 Gbps)	
Thunderbolt 3 (Output)	Thunderbolt 3 (40 Gbps), Data + Video	USB 2.0 (480 Mbps), Data + Charging	
USB-A (x2)	USB 3.2 Gen 2 (10 Gbps), Data + Charging		
USB-C	USB 3.2 Gen 2 (10 Gbps), Data + Charging		
Memory (SD + Micro-SD)	SD 4.0, mSD 4.0 (312 MB/s)		
Audio Port	Up to 384 Khz, 16/24/32 Bit Sample Rate		
Environmental			
Operating Temperature	32 to 113°F (0 to 45°C)		
Operating Humidity	10% to 90% RH, Non-Condensing		
Storage Temperature	32 to 158°F (0 to 70°C)		
Storage Humidity	10% to 90% RH, Non-Condensing		
Network Specs			
RJ45	10/100/1000 Mbps (1 Gigabit)		
Display Specs			
DisplayPort	7680 x 4320 @ 30 Hz (	680 x 4320 @ 30 Hz (8K UHD) (Individually)	
Thunderbolt 3	7680 x 4320 @ 30 Hz	Video Not Supported	
Dual Display (MST Mode)	8K @ 30 Hz + 4K @ 30Hz, or 4K @ 60 Hz + 4K @ 60 HZ	Video Not Supported	
Electrical Specs			
Power Supply	DC 120W (20V 6A)		
Thunderbolt 3 (Input)	Charges host PC up to 60W (5V-20V 3A)		
Thunderbolt 3 (Output)	Daisy chain up to 6 devices with source capability of 15W (5V 3A)		
USB-A (BC1.2)	Maximum 5V 1.5A downstream charging		
USB-A	Maximum 5V 900mA downstream charging		
USB-C	Maximum 5V 1.5A downstream charging		

## **Warranty and Product Registration**

#### 3-Year Limited Warranty

Tripp Lite warrants its products to be free from defects in materials and workmanship for a period of three (3) years from the date of initial purchase. Tripp Lite's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from Tripp Lite or an authorized Tripp Lite service center. Products must be returned to Tripp Lite or an authorized Tripp Lite service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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Visit tripplite.com/warranty today to register your new Tripp Lite product. You'll be automatically entered into a drawing for a chance to win a FREE Tripp Lite product!\*

\* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

#### FCC Notice, Class B

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to this equipment not expressly approved by Tripp Lite could void the user's authority to operate this equipment.

#### WEEE Compliance Information for Tripp Lite Customers and Recyclers (European Union)

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Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite they are entitled to:

- · Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- · Send the new equipment back for recycling when this ultimately becomes waste

Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. Do not use this equipment in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Photos and illustrations may differ slightly from actual products.





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