# Cable Matters

## USB-C™ Dual 4K DisplayPort™ Docking Station with 80W PD

### Model 201054

# User Manual

# Table of Contents

# 1. INTRODUCTION

### 1.1 <u>Introduction</u>

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 the

## USB-C™ Dual 4K DisplayPort™ Docking Station with 80W PD

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

Contact **support@cablematters.com** for product support.

### 1.2 <u>Copyright and Trademarks</u>

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USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum
DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries.

### 1.3 <u>FCC Compliance Statement</u>

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 <u>Package Contents</u>

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

- USB-C Dual 4K DisplayPort Docking Station with 80W PD
- Docking Station Stand
- USB-C 3.1 Gen 2 Host Cable in Black - 1m
- AC Power Adapter
- User Manual (available in a PDF from www.cablematters.com)

## 2.2 <u>USB-C Docking Station Features</u>

- Add video, data, and charging functions over a single USB-C or Thunderbolt 3 port
- Connect dual 4K external displays with DisplayPort input
- Dynamically configure the bandwidth to connect 4K displays with the 4K/HD switch
- Charge a notebook up to 80 watts with a power delivery equipped USB-C port
- Connect to a wired Ethernet network
- Transfer files and charge a USB-A or USB-C peripheral with USB-C 3.1 (up to 10 Gbps)
- Transfer files to a USB 3.0 (5 Gbps) peripheral
- Add a 2.4 GHz mouse/keyboard combo with the dedicated USB 2.0 port
- Transfer files from a UHS-I microSD card or a UHS-II SD card
- Audio support for a microphone and a headset or speaker
- Brushed aluminum housing with a power-saving On/Off switch
- Optional stand to place the Dock in a vertical orientation

## 2.3 <u>System Requirements</u>

| | |
|---|---|
| Computer: | USB-C or Thunderbolt™ 3 equipped port |
| | DisplayPort Alternate Mode support for video over USB-C |
| Supported Systems/OS: | Windows 10, Linux, select Chromebook models with Skylake (6th gen) or Kaby Lake (7th gen) or newer |
| External Display: | DisplayPort input ports and DisplayPort cables |
| microSD: | UHS-I microSD, SDHC or SDXC card |
| UHS-II SD: | UHS-I or UHS-II SD, SDHC or SDXC card |
| Ethernet Network: | Active LAN or router with an available RJ45 Port |
| | Cat 6 Ethernet cable (recommended for Gigabit) |
| USB-A 2.0: | Recommended for a 2.4 GHz wireless mouse/keyboard |
| USB-A 3.0: | USB 2.0 or 3.0 cable to connect a peripheral device |
| USB-A 3.1: | USB 3.1 data and charging cable (backwards compatible) |
| USB-C 3.1: | USB-C data and charging cable to connect a USB-C device |
| Audio Ports: | Mic, speaker, or combo headset cables |
| Power: | AC outlet |

**Note**: All cables to connect devices to the Dock are sold separately (excluding the host cable).

## 3. Connection and Operating Instructions

### 3.1 Installation Checklist

Driver Requirements
- A PC with Thunderbolt 3 may need an update for Thunderbolt 3 to function properly

  For more information go to **kb.cablematters.com**
- Be prepared to reboot your computer after the driver installation
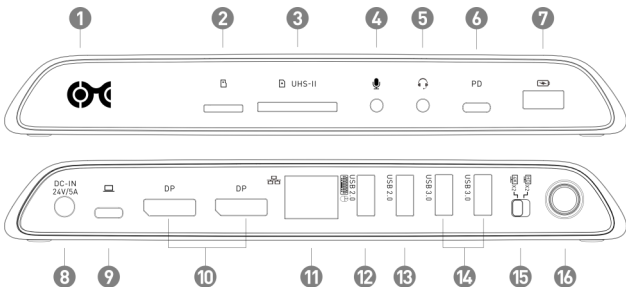
Power Requirements
- The Docking Station must be connected to an AC outlet in order to operate
- Your computer must support power delivery over USB-C for charging up to 80 watts

External Display Requirements
- Check if your computer supports DisplayPort Alternate Mode over USB-C
- Check if your computer supports one or more external displays over USB-C
- DisplayPort MST support is required (macOS does not support this)
- Bandwidth configuration switch must be set to 4K to connect dual 4K displays
  (resolution is dependent on the available Dock bandwidth)

| # Displays | Max Resolution | Mode |
|:---:|:---:|:---:|
| 2 | 3840x2160@30Hz | 4K |
| 2 | 3840x2160@30Hz<br>2560x1440@60Hz | 4K |
| 1 | 3840x2160@60Hz | 4K |
| 2 | 1920x1200@60Hz | HD |
| 1 | 3840x2160@30Hz | HD |

### 3.2 Panel Diagrams



1) Power and connection status LED
2) microSD UHS-I memory card slot
3) SD UHS-II memory card slot
4) Mono microphone line-in port
5) Combo audio headset port
6) USB-C 3.1 Gen 2 (10 Gbps) downstream data transfer and charging port supports power profiles for 5V/3A, 9V/2A and 15V/1.2A
7) USB 3.1 Standard-A Gen 2 (10 Gbps) data transfer and charging port up to (5V/2.1A)
8) Power-in port (24VDC/5A)
9) Host USB-C port
10) 2x DisplayPort video ports
11) Ethernet port 1000Mbps Gigabit (HD mode) or 100-480Mbps (4K mode)
12) USB 2.0 port for a 2.4 GHz wireless mouse/keyboard
13) USB 2.0 port
14) 2x USB 3.0 (5 Gbps) data transfer ports
15) Bandwidth configuration switch for 4K or HD
16) On/Off switch

**Note**: All cables to connect devices to the USB-C Docking Station are sold separately

### 3.3 <u>Connecting the USB-C Docking Station</u>

1) Connect the Dock to an AC power outlet or the Dock will not operate
2) Connect the included USB-C cable to the USB-C or Thunderbolt 3 port on the host computer
3) Depress the On/Off button to turn on the Dock
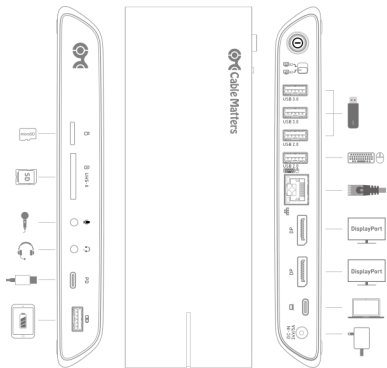4)  Wait while any additional drivers are automatically installed

Notes:
- Charge a laptop up to 80 watts while in use with a power delivery equipped USB-C or Thunderbolt 3 port
- Computers requiring more than 80 watts will charge at a slower rate. Some computer models may not charge over USB-C and require an AC power adapter.

#### <u>Troubleshooting Tips</u>

- Unplug and re-plug the USB-C host cable to the Dock
- Reboot the computer and check that the Dock has AC power
- Check that the power status LED is lit on the front of the Dock
- Check for updated BIOS and USB-C or Thunderbolt 3 drivers
- Test the USB-C cable with a different device



www.cablematters.com

### 3.4 <u>Dynamic Bandwidth Switch</u>

This USB-C Docking Station supports the full USB-C Gen 2 10 Gbps bandwidth. This bandwidth is shared by all connected devices. The 4K - HD switch allows the Dock to be configured for the maximum performance of different functions. Dynamically adjust the bandwidth allocation on the Dock by clicking the switch.

**4K Setting**

Use this setting for connecting dual 4K displays.

- Ethernet speed is limited to 100-480Mbps Ethernet
- USB 3.0 or USB 3.1 transfer speed is reduced to USB 2.0 speed
- UHS-I or UHS-II SD card R/W speed is reduced to 480Mbps (USB 2.0 speed)

**HD Setting**

Use this setting for connecting dual HD/QHD displays or one 4K display

- Gigabit Ethernet 1000Mbps speed is supported
- USB 3.1 Gen 2 10 Gbps data transfer rate is supported on the front panel USB ports
- USB 3.0 5 Gbps data transfer rate is supported on the rear ports
- UHS-II SD card data transfer rate is supported

### 3.5 Connecting Dual DisplayPort Monitors

DP                    DP

1) Connect a DisplayPort cable (sold separately)

2) Set the bandwidth switch to 4K or HD (see below)

3) Select the DisplayPort video input from the monitor menu

4) Select the audio output from the computer and input from the monitor menu

Windows (Duplicate or Extend the Display)

Video: Press Windows Logo + P
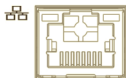
or search *Display* >Click *Adjust Resolution*

Audio: Search *Sound* > Click on the display name > *Set Default* > *OK*

Troubleshooting Tips

- Passive adapters are not compatible. An active DP to HDMI/DVI adapter is required.
- Check that your computer supports DisplayPort Alternate Mode over USB-C
- Check that your computer supports two external displays
- 4K UHD video resolution requires a 4K video card source, cable, and output display
- DisplayPort 1.2 should be disabled on the monitor when using 4K@60Hz

| # Displays | Max Resolution | Mode |
|:---:|:---:|:---:|
| 2 | 3840x2160@30Hz | 4K |
| 2 | 3840x2160@30Hz<br>2560x1440@60Hz | 4K |
| 1 | 3840x2160@60Hz | 4K |
| 2 | 1920x1200@60Hz | HD |
| 1 | 3840x2160@30Hz | HD |

### 3.6 **Connecting to an Ethernet Network**

1) Connect an RJ45 patch cable to the Dock (Cat 6 recommended for Gigabit Ethernet)

2) Connect the patch cable to an active LAN or router port

3) Check the documentation of your LAN or router to configure network access

4) Link and Status LEDs should blink to indicate a live connection

Troubleshooting Tips

- Ethernet network speed is limited to 100-480Mbps Ethernet when in 4K mode
- Reboot the computer and check that the Link and Status LEDs are lit
- Test the patch cable with a different device or try another USB port

Check if your computer recognizes the Dock:

*Windows: Search Device Manager > Click on Universal Serial Bus devices > USB-C Computer Docking Station*

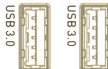### 3.7 **Connecting a USB-A Peripheral Device**

**FRONT PANEL**
*2.1A charging+10Gbps*

**REAR PANEL**
*data only*

**REAR PANEL**
*data only*

1) Connect a USB 2.0 or 3.0 device to the Dock

2) Wait while any needed device drivers are downloaded

3) Use *Safely Remove* or *Eject* to remove the device before unplugging, if needed

**Notes**:

- Front Panel USB 3.1 port supports the USB Gen 2 data transfer rate up to 10 Gbps and provides fast charging up to 5V/2.1A
- Rear Panel USB 2.0 ports are designed for 2.4 GHz devices such as a mouse/ keyboard. USB 2.0 offers less interference for wireless connections.
- Maximum data transfer rate is limited to 480Mbps (USB 2.0 speed) when the Dock is switched to 4K mode

### 3.8 Connecting a USB-C Peripheral Device

PD

**USB-C**

1) Connect a USB-C peripheral device
2) Wait while any needed device drivers are downloaded
3) Transfer files and charge a smartphone

*3A charging + data*

**Notes**:
- USB-C 3.1 port provides 5V/3A, 9V/2A and 15V/1.2A charging and a data transfer up to 10 Gbps
- Not compatible with USB-C video adapters or Thunderbolt 3 devices

### 3.9 Connecting an SD Memory Card

UHS-II

- **microSD Card** slot supports UHS-I microSD/ SDHC/SDXC cards
- **SD Card** slot supports UHS-I and UHS-II SD/SDHC/SDXC cards. A microSD card is supported with an adapter (sold separately).

### Installation Instructions

1) Insert an SD card into the slot with the label facing up
2) SD card should be recognized after downloading any needed drivers
3) Always *Safely Remove* or *Eject* the device before unplugging

### Troubleshooting Tips

- Both cards Read/Write simultaneously
- Data transfer rate is limited to 480 Mbps (USB 2.0 speed) when the Dock is switched to 4K mode
- Disconnect the Dock, reboot the computer and reconnect everything
- Test the card with a different card reader

### 3.10 Connecting Audio Devices

1) Connect an external 3.5mm mono microphone to the port
2) Connect a stereo headset or external speaker to the combo audio port. This port also supports a headset/mic combo.

**Note**:

Configure the audio settings from the computer:

Search *Control Panel* > Click on *Sound* > Adjust *Playback* or *Recording* devices

**Troubleshooting Tips**

- 3.5mm TS microphone port does not provide power to a mic
- Test the cable/device an audio port on a different device

**3.11 Troubleshooting Tips**

Check for updated drivers from your computer manufacturer
Check for Thunderbolt 3 computer updates at:

## kb.cablematters.com

Dock
- Check that the Dock is connected to AC power and that the LED is lit
- Check that your computer is connected to the **Host** USB-C port

Cabling
- Check that all cable connections are secure
- Test device cables with different equipment

Computer Source
- Check the specifications from the manufacturer to see if your computer supports power delivery over USB-C, DisplayPort Alternate Mode, and two external displays
- Some computers require more than 80 watts for charging or do not accept charging over USB-C
- Reboot the computer after making multiple changes

Connected Displays
- Select the DisplayPort input from the display menu
- Adjust the audio level from the computer and connected display menu
- DP to HDMI conversion requires an active adapter
- 4K video resolution requires a 4K video card source, cable, and output display
- Check the video resolution support list under Section 3.5 (page 7)

USB Peripheral Devices
- USB-A or USB-C devices must support Battery Charging 1.2 to benefit from the fast-charge function of the USB ports on the front panel
- USB-C 3.1 device port (not Host port) is NOT compatible with USB-C adapters or Thunderbolt 3 devices for video output or data transfer

Contact **support@cablematters.com** with a description of your computer

## 4. TECHNICAL SPECIFICATIONS Model 201054

| | |
|---|---|
| USB-C/Thunderbolt 3 (upstream/host): | USB Type-C with power delivery |
| USB-C (downstream/device): | USB 3.1 Type-C (5V/3A, 9V/2A, 15V/1.2A charging) |
| Ethernet Network Port: | RJ45 8P/8C 568-B |
| microSD Memory Card Slot: | microSD (SDHC/SDXC UHS-I) |
| SD Memory Card Slot: | SD (SDHC/SDXC UHS-I/UHS-II |
| USB 3.1 (front panel): | USB-C 3.1 Type A Gen 2 (10 Gbps) (data and charging) |
| 2x USB 3.0 (rear panel): | USB 3.0 Type A (data only) |
| 2x DisplayPort Video: | DisplayPort 20-Pin |
| DisplayPort Audio: | 8-Ch LPCM, compressed audio |
| Audio Input: | 3.5mm TS Mic Port |
| Audio Output: | 3.5mm TRRS Combo Headset/Mic |
| Power: | 24V/5A |
| OS Support: | Windows 10 / Linux /Select Chromebook models |
| Dock Housing (LxWxH): | 7.9 x 2.8 x 1.0 Inches |
| Dock Stand: (LxWxH): | 3.4 x 2.8 x 1.8 Inches |
| Compliance: | C E, FCC, RoHS |
| Warranty: | Limited One-Year |

Note: Specifications are subject to change without notice

## 5. WARRANTY AND SUPPORT

### 5.1 Customer Support and Contact Information

Cable Matters offers lifetime technical support as an integral part of our commitment to provide industry leading solutions.

Email us with any questions at **support@cablematters.com.**

### 5.2 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.

### 5.3 Limitation of Liability

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USB-C to 4K HDMI Multiport Adapter
with UHS-II Card Reader and 100W PD

Model 201044





USB-C Multiport Adapter with Dual
DisplayPort and 60W PD

Model 201055

USB-C to DisplayPort Multiport Adapter
with 60W PD

Model 201046





USB-C to HDMI Multiport Adapter with
80W PD

Model 201048

**View compatible products at www.cablematters.com**

Certified USB-C Gen 2
Video, Data & 100W Charging Cable

Model 201025

100W

4K-Rated DisplayPort Cable

Model 102005

Snagless Cat 6 Patch Cables

Model 160021