

Thunderbolt 3 Dual - 4K Docking Station for Laptops | Mac | Windows



Actual product may vary from photos

User Manual

SKU#: TB3DKDPMW/TB3DKDPMWUE

For the latest information and specifications visit
www.startech.com/TB3DKDPMW
www.startech.com/TB3DKDMAWUE

Compliance Statements

FCC Compliance Statement

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

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.

CAN ICES-3 (B)/NMB-3(B)

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Safety Statements

Safety Measures

- Wiring terminations should not be made with the product and/or electric lines under power.
- Cables (including power and charging cables) should be placed and routed to avoid creating electric, tripping or safety hazards.

Mesures de sécurité

- Les terminaisons de câblage ne doivent pas être effectuées lorsque le produit et/ou les câbles électriques sont sous tension.
- Les câbles (y compris les câbles d'alimentation et de chargement) doivent être placés et acheminés de façon à éviter tout risque électrique, de chute ou de sécurité

安全対策

- 電源が入っている状態の製品または電線の終端処理を行わないでください。
- ケーブル(電源ケーブルと充電ケーブルを含む)は、適切な配置と引き回しを行い、電気障害やつまづきの危険性など、安全上のリスクを回避するようにしてください。

Misure di sicurezza

- I terminali dei fili elettrici non devono essere realizzate con il prodotto e/o le linee elettriche sotto tensione.
- I cavi (inclusi i cavi di alimentazione e di ricarica) devono essere posizionati e stesi in modo da evitare pericoli di inciampo, rischi di scosse elettriche o pericoli per la sicurezza.

Säkerhetsåtgärder

- Montering av kabelavslutningar får inte göras när produkten och/eller elledningarna är strömförda.
- Kablar (inklusive elkablar och laddningskablar) ska dras och placeras på så sätt att risk för snubblingsolyckor och andra olyckor kan undvikas.

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Product Diagram

Front View



1	<i>USB-A Port (Fast Charge and Sync)</i>
2	<i>USB-C Port</i>

Back View



1	RJ45 Port	5	Thunderbolt 3 Host Port
2	USB-A	6	Thunderbolt 3 Port
3	Microphone Input Port	7	DisplayPort Port
4	Audio Output Port	8	DC In Port

Product Information

Package Content

- Thunderbolt 3 Docking Station x 1
- Thunderbolt 3 Cable (40Gbps - 0.5m) x 1
- Universal Power Adapter x 1
- Power Cords (NA/JP and ANZ for TB3DKDPMW) (EU and UK for TB2DKDPMWUE) x 2
- User Manual x 1

Requirements

Requirements are subject to change. For the latest requirements, please visit www.startech.com/TB3DKDPMW or www.startech.com/TB3DKDPMWUE.

Host Computer

- An available Thunderbolt 3 port.

Notes: *In order to use multiple displays, the Thunderbolt 3 port on the Host Computer must support dual external displays.*

The Docking Station is not compatible with USB-C only computers.

Display

- DisplayPort equipped display(s) with cable(s) (for additional external display).
- Thunderbolt 3 equipped display(s) with cable(s) (for additional external display).
- For 4K (4096 x 2160p) resolution, a 4K-capable display is

required.

Operating System

- Windows® 10, 8, 8.1 or 7.
- macOS 10.14, 10.13 or 10.12.

Installation

Powering the Docking Station

1. Select the appropriate power cord for your region and connect it to the power adapter.
2. Connect the power adapter to an AC electrical outlet and then to the docking station's DC IN (power input) port.
3. Connect the provided Thunderbolt 3 Cable to a Thunderbolt 3 Port on the on the docking station and the other end to a Thunderbolt 3 port on the Host Computer.

Note: *The Docking Station does not support Power Delivery. Use the power adapter that came with the connected Host Computer in order to charge the Host Computer.*

Connecting the Docking Station

1. Connect a USB Peripheral Device to either the USB-A Ports or Thunderbolt 3 Port on the back of the Docking Station. Devices may include USB peripherals, headset, microphone, etc.

Notes: *The three USB ports located at the back of the docking station (2 x USB-A, 1 x Thunderbolt 3) are standard USB 3.0 throughput ports. When the dock is connected to a Host Computer, these ports provide a trickle charge to a connected device.*

The docking station supports DP Alt Mode, you can connect Thunderbolt 3 or USB-C based video devices, cables, or adapters to the secondary Thunderbolt 3 port on the rear of the docking station.

2. Connect a CAT6/5e Cable to the RJ45 Port on the Docking Station and the other end to a Network Device.
3. Connect an Thunderbolt 3 Cable to the Thunderbolt 3 Port on the Docking Station and the other end to a Display Device.
4. For a second display, connect a DisplayPort Cable to the DisplayPort Port on the Docking Station and the other end to a Display Device.

- or -

Connect an Thunderbolt 3 Cable to the Thunderbolt 3 Port on the Docking Station and the other end to a Display Device.

Notes: Video output capabilities are dependent on the video card and hardware specifications of your connected Host Computer.

Installing the Remaining Drivers

Depending on your operating system, the dock will automatically install some of the required drivers once connected to your Host Computer. Follow the below instructions to complete the full driver installation process.

1. Using a Web browser navigate to www.startech.com/MST30C2DPPD.
2. Click the Support tab.
3. Download the drivers.
4. When the download is complete, extract the contents of the compressed file(s) that you downloaded.
5. Double-click the appropriate driver for the version of Windows that you are running and follow the on-screen instructions to complete the installation.

Note: If you are prompted to restart your computer, do so to complete the installation.

Charging a Device

If using the front USB-A port to charge a device, a connection to a Host Computer isn't required.

- Connect a USB device to the USB-A port located on the front of the docking station.

Notes: This front USB-A port can only fast-charge connected

devices that comply with USB Battery Charging Specification Revision 1.2.

When the docking station is connected to a Host Computer, the front USB-A port functions as a Charging Downstream Port (CDP), which has simultaneous charge and sync capabilities.

Configuring a Display Device

Use your Windows operating system to adjust display settings for multiple monitors. Your laptop hardware must support dual external displays.

- You can set up dual displays by using the video output ports (1x DisplayPort and 1x HDMI).

Connect a display to the DisplayPort port

The docking station's DisplayPort connection supports DisplayPort 1.2, as well as DP++. Because the port supports DP++, you can use passive adapters or cables to connect different types of monitors to the DisplayPort port.

Type of Display	Adapter
DisplayPort	None
HDMI	DisplayPort to HDMI 4K Audio/Video Converter (DP2HD4KS)
DVI	DisplayPort to DVI Adapter (DP2DVI2)
VGA	DisplayPort to VGA Adapter (DP2VGA2)

Connect a display to the Thunderbolt 3 USB-C port

You can also connect a display (or a display adapter) to one of the docking station's **Thunderbolt 3** ports. One of the docking station's Thunderbolt 3 ports must remain connected to your Host Computer.

Type of Display	Adapter
DisplayPort	None
HDMI	USB-C to DisplayPort Adapter Cable (CDP2DPMM1MB)
DVI	USB-C to HDMI Adapter (CDP2HD4K60)

VGA

USB-C to VGA Adapter (CDP2VGA)

Visit www.StarTech.com/AV/usb-c-video-adapters/ for a range of USB-C video adapters and cables.

Notes:

- The docking station lets you connect two 4K displays.
- The maximum available resolution might be limited if your monitor is connected through a video adapter. Check the documentation of the video adapter to determine its maximum supported resolution.

Connect multiple Thunderbolt 3 displays in a daisy chain

You can also set up dual displays using multiple Thunderbolt 3 displays in a daisy-chain configuration. For example, you can connect a Thunderbolt 3 display to the **Thunderbolt 3 port** on the docking station. You can then connect another Thunderbolt 3 device, such as a second Thunderbolt 3 display, through the first Thunderbolt 3 display.

Supported Video Resolutions

Thunderbolt technology supports both video and data throughput. However, it prioritizes video bandwidth to help ensure seamless display performance. The performance of the remaining dock functions depends entirely on the display configuration you used.

The docking station supports the follow maximum resolutions:

Number of Displays	Ports	Maximum Resolution
1	DisplayPort port	4096 x 2160p
1	Thunderbolt 3 port	4096 x 2160p (60Hz) (Thunderbolt 3 monitor only)
1	Thunderbolt USB-C port (using DP alt mode)	4096 x 2160p
2	DisplayPort port and Thunderbolt 3 USB-C port	4096 x 2160p

- 3840 x 2160p resolution, found on most standard 4K monitors, is also a fully supported resolution
- Depending on the configuration and the supported resolutions of your connected monitor(s), the docking station can support video resolutions lower than specified above.
- In a multi-display configuration, set the refresh rates on each of your connected monitors to the same values, otherwise your monitors might not properly display.
- Video output capabilities are dependent on the video card and hardware specifications of your connected Host Computer.
- Certain monitors may be limited to 4K at 30Hz when connecting through DisplayPort. (See [Troubleshooting](#) for further details).

Bandwidth Allocation

Thunderbolt technology carries video and data bandwidth, and it prioritizes video bandwidth to help ensure seamless display performance. The performance of the remaining dock ports (for example, the USB 3.0 ports) depends entirely on the display and I/O (input and output) configuration that you have used.

When multiple high-resolution displays are connected, the docking station needs to allocate additional bandwidth to the displays, and the extra bandwidth is reallocated from the other I/O ports on the docking station. In this situation there is less bandwidth available for the remaining ports (for example, the USB 3.0 ports).

The bandwidth allocation table outlines the approximate

download bandwidth allocation values. The allocation amount depends on the number and the resolution of your connected displays.

Video and I/O Configuration	DisplayPort Resolution	Thunderbolt 3 USB-C Resolution	I/O Bandwidth Remaining
Data only (No Displays)	N/A	N/A	Download: 22Gbps Upload: 22Gbps
DisplayPort (Single Display - 4K)	4096 x 2160p (4K)	N/A	Download: 22Gbps Upload: 22Gbps
Thunderbolt 3 USB-C (Single Display - 4K)	N/A	4096 x 2160p (4K - 60Hz)	Download: 22Gbps Upload: 22Gbps
DisplayPort and Thunderbolt 3 USB-C (Two Displays - Dual-4K)	4096 x 2160p (4K)	4096 x 2160p (4K)	Download: 8Gbps Upload: 22Gbps

- The bandwidth values are approximate and depend on several variables including the number, type, resolution, and refresh rate of your connected display(s).
- When connecting a display to one of the Thunderbolt 3 USB-C ports, a USB-C video adapter may be required, depending on the input of your display.

Troubleshooting

If you are experiencing issues, there are some quick tests that you can complete to narrow down the source of the issue.

Update your computer to use Thunderbolt 3

Visit <http://thunderbolttechnology.net/updates> and look for your computer in the list of affected computers. If your computer is listed, then you must update your computer for its Thunderbolt 3 ports to function properly. To update your computer, follow the instructions on the website or contact your manufacturer.

Verify that your components are Thunderbolt compliant

6. Make sure that you are using Thunderbolt 3 certified cables.
7. Make sure that the port on your computer is Thunderbolt 3 compliant. Thunderbolt 3 uses the USB-C connector type, but not all USB-C connectors are compatible with Thunderbolt 3. If you are using a USB-C port that is not Thunderbolt 3 compliant, switch to a port that is Thunderbolt 3 compliant.
8. Make sure that your peripheral is Thunderbolt compliant. If you're not sure, check with the manufacturer.

Replace the Thunderbolt cable

- Use the Thunderbolt peripheral with a different cable that is Thunderbolt compliant.

Test the Thunderbolt peripheral

1. Use a second Thunderbolt peripheral, and see if it works. Ideally, the second peripheral is one that you know works in other setups. If the second peripheral works in the current setup, then there is probably an issue with the first Thunderbolt peripheral.
2. Use the Thunderbolt peripheral with a second setup. If it works in the second setup, then there is probably an issue with the first setup.

Important operation notes

- Certain monitors may be limited to 4K at 30Hz when connecting through DisplayPort. These monitors include the following models: Dell P2715Q, Viewsonic VX2475Smhl-4K, Philips 288P6LJEB, LG 31MU97C-B, Asus PB287Q (these models will need to be set to 4K at 30Hz).

Warranty Information

This product is backed by a three-year warranty.

For further information on product warranty terms and conditions, please refer to www.startech.com/warranty.

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