

Thunderbolt 3 Dual-4K Docking Station



Actual product may vary from photos

User Manual

SKU#: TB3DK2DHV/TB3DK2DHVUE

For the latest information and specifications visit www.startech.com/TB3DK2DHV www.startech.com/TB3DK2DHVUE



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 câblâge 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。

Misure di sicurezza

- I terminiali 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.



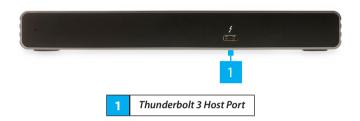
Table of Contents

Compliance Statements	1
Safety Statements	2
Product Diagram	4
Front View	4

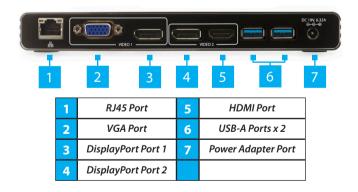


Product Diagram

Front View



Rear View





Product Information

Package contents

- · Docking Station x 1
- Thunderbolt 3 Cable x 1
- Universal Power Adapter x 1
- Power Cords (NA/JP and ANZ for TB3DK2DPPD) (EU and UK for TB3DK2DPPDUE) x 2
- User Manual x 1

Requirements

Requirements are subject to change. For the latest requirements, please visit www.StarTech.com/TB3DK2DHV or www.StarTech.com/TB3DK2DHVUE.

- Host Computer with an available Thunderbolt 3 Port
 - **Note:** The laptop's Thunderbolt 3 port must support USB Power Delivery in order to power and charge your laptop.
- An available AC electrical outlet.
- Two displays with cabling (VGA or DisplayPort for Display output 1 and DisplayPort or HDMI for Display output 2).

Note: For 4K x 2K (4096 x 2160p, 3840x2160p) resolution, a 4K-capable display is required.

Operating System

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



USB Power Delivery

This docking station supports USB Power Delivery, which means it delivers up to 85 watts of power to the Host Computer (your laptop's Thunderbolt 3 port must support Power Delivery). USB Power Delivery is a specification that allows power to be sent over a USB-C or Thunderbolt 3 cable that supports the specification.

Thunderbolt Operating Temperature

Due to the high performance of Thunderbolt technology, Thunderbolt products sometimes generate more heat than traditional hardware. Therefore, it's normal for the docking station to warm up when in use. It's recommended that you don't place your laptop on the docking station's surface, as doing so will result in even higher temperatures.

These higher temperatures do not represent a safety hazard to users or to hardware.

Installation

The docking station will automatically detect and install the required drivers when connected to a Thunderbolt 3 port on your Host Computer. Follow the instructions below to install the docking station.

Powering the Docking Station

- 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 Power Adapter Port.



 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.

Connecting the Docking Station

 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 USB-A Ports located at the back of the docking station 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.

- Connect a CAT6/5e Cable to the RJ45 Port on the Docking Station and the other end to a Network Device.
- Connect a VGA Cable to the VGA Port on the Docking Station and to a VGA port on a Display Device.
 - or -

Connect a DisplayPort Cable to the DisplayPort Port on the Docking Station and to a DisplayPort port on a Display Device.

- 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 HDMI Cable to the HDMI 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.

Driver installation

When the docking station is powered and you connect it to your laptop, the required drivers are installed automatically.

You may see a pop-up message requesting permission to allow the docking station to connect to your computer. If a pop-up message appears, do the following:

- 1. Click on the pop-up message.
- 2. Click on Always Connect.
- 3. Click on the OK button.
- Follow any other on-screen instructions to complete the installation.

Display Configuration

Use your operating system video settings to adjust display settings for each of your monitors.

Note: The Host Computer must support dual external displays through its Thunderbolt 3 port.

Connecting an Active Adapter

You can also connect a display adapter to the Docking Station's DisplayPort Port to connect a different type of Monitor.



Note: The DisplayPort Port does not support Multimode DisplayPort.

Type of Display	Adapter (sold separately)	
HDMI	DisplayPort to HDMI 4K Audio / Video Converter (DP2HD4KS)	
DVI	DisplayPort to DVI Adapter (DP2DVIS)	
VGA	DisplayPort to VGA Adapter (DP2VGA2)	

Visit <u>www.StarTech.com</u> for a range of active DisplayPort video adapters and cables.

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 docking station functions depends entirely on the display configuration you used.



The docking station supports the following maximum resolutions:

Displays	Ports	Maximum Resolution
1	DisplayPort (CH. 1 or 2)	4096 x 2160p (60Hz)
1	VGA (CH. 1)	1920x1200 (60Hz)
1	HDMI (CH. 2)	4096 x 2160p (60Hz)
2	DisplayPort (CH. 1) + DisplayPort (CH. 2)	4096 x 2160p (60Hz)
2	DisplayPort (CH. 1) + HDMI (CH. 2)	4096 x 2160p (60Hz)
2	VGA (CH. 1) + DisplayPort (CH. 2)	1920 x 1200 (60Hz) / 4096 x 2160p (60Hz)
2	VGA (CH. 1) + HDMI (CH 2.)	1920 x 1200 (30Hz) / 4096 x 2160p (60Hz)

 Depending on the configuration and the supported resolutions of your connected monitor(s), the docking station can support video resolutions lower than specified.



 Video output capabilities are dependent on the video card and hardware specifications of your connected host laptop.

Video and download 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 docking station ports (e.g. 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 (e.g. the USB 3.0 ports).



The amount of download bandwidth allocated depends on several variables including the number, type, resolution, and refresh rate of your connected display(s):

Video and I/O	Video Channel 1	Video Channel 2	I/O Bandwidth Remaining
Data only (No displays)	N/A	N/A	Download: 22Gbps
			Upload: 22Gbps
Single display - 4K	4096 x 2160p (4K)	N/A	Download: 22Gbps
			Upload: 22Gbps
Dual display - 4K	4096 x 2160p (4K)	4096 x 2160p (4K)	Download: 8Gbps
			Upload: 22Gbps



Troubleshooting

If you are experiencing device detection 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. To update your computer, follow the instructions on the website or contact your computer's manufacturer.

Verify that your components are Thunderbolt compliant

- A 50 cm StarTech.com cable is included in the box. However, if you're using a different cable, make sure that you are using a Thunderbolt 3 certified cable.
- 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.
- Make sure that your peripheral is Thunderbolt compliant. If you're not sure, check with the manufacturer.

Test the Thunderbolt peripheral

- 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.
- 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.

Verify USB Power Delivery support

- Your laptop's Thunderbolt 3 port must support USB Power Delivery 2.0 in order to power and charge your laptop.
- Your laptop's USB Power Delivery draw must be equal to or less than 85 watts of power.



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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