StarTechcom Hard-to-find made easu®

# Multi Stream Transport Hub – DisplayPort<sup>™</sup> 1.2 to Dual Head DisplayPort MST Hub

# Product Diagram (MSTDP122DP)



Component		Component	Function	
	1	DisplayPort Connector	<ul> <li>Connects the Hub to the Host Computer.</li> <li>After the MST hub has been connected to the Host Computer it may be necessary to initiate the operation of additional displays from within your Windows Display Settings.</li> </ul>	
	2	USB-A Power Connector	Connect the Hub to a USB Power Adapter.	
	3	DisplayPort Ports x 2	Connect up to 2 Display Devices to the Hub.	
	4	Scan Button	<ul> <li>Re-syncs all of the attached displays, and can be utilized if any of the displays are not detected.</li> </ul>	

## Requirements

For the latest requirements, please visit <u>www.startech.com/MSTDP122DP</u>

DisplayPort 1.2 enabled Host Computer x 1

Note: MST is certified for operation with Microsoft® Windows 10, 8, 8.1, and 7 devices.

- DisplayPort Monitors x 2
- DisplayPort Cables (max.15 ft.) x 2
- USB Power Adapter x 1

### **Installing the Hub**

- 1. Ensure the Host Computer and Displays are powered off.
- 2. Connect the **DisplayPort Connect** on the **Hub** to a DisplayPort port on a **Host Computer**.
- 3. Connect a **DisplayPort Cable** (sold separately) to one of the **DisplayPort Ports** on the **Hub** and the other end up to a DisplayPort port on a **Display Device**.
- 4. Repeat step 3 to connect a second **Display Device** to the Hub.

**Note:** Certain graphics adapters have limited MST support and will only output to three displays in total. If more than three monitors are attached, the fourth will be disabled, including built-in laptop monitors or touchscreen displays.

- 5. Connect the **USB-A Power Connector** on the **Hub** to a **USB Power Adapter**.
- 6. Connect the USB Power Adapter to an AC Electrical Outlet.
- 7. Power on the connected **Display Devices** followed by the **Host Computer**.
- 8. The system will now detect the **Hub**, and add the attached **Display Devices** to the **Display Settings** on the System.

# **Average Resolution Bandwidth Allocation**

MST shares 21.6Gbps of bandwidth across all attached displays. Higher resolutions can restrict the bandwidth available for the remaining ports. Please see our guidelines below for determining the ideal resolution for your setup.

Resolution	Bandwidth
1920x1080 (High-definition 1080p) @ 60Hz	22%
1920x1200 @ 60Hz	30%
2560x1440 @ 60Hz	35%
2560x1600@60Hz	38%
3840x2160 (Ultra HD 4K) @ 30Hz	38%

*Note:* Exceeding 100% will prevent monitors from turning on.

### **Supported Resolution Configurations**

Screen 1 resolution	Screen 2 resolution	Screen 3 resolution	Total % of bandwidth
1920x1200 @60Hz	1920x1200 @60Hz	1920x1200 @60Hz	90%
(30%)	(30%)	(30%)	
2560x1440 @60Hz	2560x1440 @60Hz	1920x1200 @60Hz	100%
(35%)	(35%)	(30%)	
2560x1600 @60Hz	2560x1600 @60Hz	1920x1080 @60Hz	98%
(38%)	(38%)	(22%)	
3840x2160 @30Hz	2560x1600 @60Hz	1920x1080 @60Hz	98%
(38%)	(38%)	(22%)	
3840x2160 @30Hz	3840x2160 @30Hz	1920x1080 @60Hz	98%
(38%)	(38%)	(22%)	

#### **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
- 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. Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

#### 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)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of thirdparty companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

#### 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.

#### Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

#### Safety Measures

• If product has an exposed circuit board, do not touch the product under power.

#### Mesures de sécurité

- Si l'un des circuits imprimés du produit est visible, ne pas touchez le produit lorsqu'il est sous tension.
- 安全対策

・製品に露出した状態の回路基盤が含まれる場合、電源が入っている状態で製品に触らないでください。

#### Misure di sicurezza

• Se il prodotto ha un circuito stampato visibile, non toccare il prodotto quando è acceso.

#### Säkerhetsåtgärder

Rör aldrig vid enheter med oskyddade kretskort när strömmen är påslagen.

<b>StarTech.com Ltd.</b> 45 Artisans Cres London, Ontario N5V 5E9 Canada	StarTech.com LLP 2500 Creekside Parkwy Lockbourne, Ohio 43137 U.S.A.	StarTech.com Ltd. Unit B, Pinnacle 15 Gowerton Rd, Brackmills Northampton NN4 7BW United Kingdom	FR: startech.com/fr DE: startech.com/de ES: startech.com/es NL: startech.com/nl IT: startech.com/it JP: startech.com/jp
--	---	--	--