

## MST Hub - DisplayPort over USB-C to 3x DisplayPort

### MSTCDP123HD

DE: Bedienungsanleitung - de.startech.com

FR: Guide de l'utilisateur - fr.startech.com

ES: Guía del usuario - es.startech.com

IT: Guida per l'uso - it.startech.com

NL: Gebruiksaanwijzing - nl.startech.com

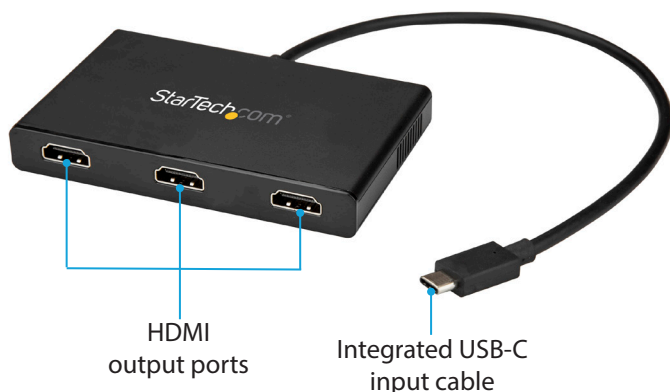
PT: Guia do usuário - pt.startech.com

## Introduction

This MST hub enables a Windows® device that's equipped with DisplayPort over USB-C™ (DP alt mode) to connect three DisplayPort monitors.

## Product overview

\*actual product may vary from photos



HDMI output ports

Integrated USB-C input cable

## Package contents

- 1 x MST hub

## Requirements

- 1 x computer with:
  - DisplayPort over USB-C video support (DP Alt Mode)
  - One of the following operating systems:
    - Windows® 10 (32-bit or 64-bit)
    - Windows 8 / 8.1 (32-bit or 64-bit)
    - Windows 7 (32-bit or 64-bit)
- 3 x HDMI displays with cabling

Operating systems are subject to change. For the latest requirements, please visit:

[www.StarTech.com/MSTCDP123HD](http://www.StarTech.com/MSTCDP123HD).

## Installation

This device is natively supported in compatible operating systems and supports plug-and-play installation.

## Important operation notes

- The USB-C port on your computer must support DisplayPort over USB-C (DP Alt mode) in order to work with this MST hub.
- MST is certified for operation with Microsoft® Windows 10, 8/8.1 and 7 devices.
  - MST is currently not supported by other operating systems such as Mac OS X and Chrome OS™.
  - Other operating systems might adopt MST in the future. Verify MST support with your operating system manufacturer.
  - Operating system support is subject to change. For the latest requirements, please visit: [www.StarTech.com/MSTCDP123HD](http://www.StarTech.com/MSTCDP123HD).
- After the MST hub has been connected to your computer it may be necessary to initiate the operation of additional displays from within your Windows **Display Settings**.
- The SCAN button resyncs all of the attached displays, and can be utilized if any of the displays are not detected
- The MST adapter works with HDMI cables up to 15 ft. in length.
- 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.
- 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.

## Average resolution bandwidth allocation

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.

## Examples of supported resolution configurations

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

## Examples of unsupported resolution configurations

Screen 1 resolution	Screen 2 resolution	Screen 3 resolution	Total % of bandwidth
2560x1600 @60Hz (38%)	2560x1600 @60Hz (38%)	1920x1200 @60Hz (30%)	106%
3840x2160 @30Hz (38%)	2560x1600 @60Hz (38%)	1920x1200 @60Hz (30%)	106%
3840x2160 @30Hz (38%)	2560x1600 @60Hz (38%)	2560x1440 @60Hz (35%)	111%
3840x2160 @30Hz (38%)	3840x2160 @30Hz (38%)	3840x2160 @30Hz (38%)	114%

## 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 third-party 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. Regardless of any direct acknowledgement elsewhere in the body of this document, 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. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum.

Chrome OS is a registered trademark of Google Inc.

## Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit [www.startech.com/support](http://www.startech.com/support) and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit [www.startech.com/downloads](http://www.startech.com/downloads)

## Warranty Information

This product is backed by a two-year warranty.

StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

## 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.