User Guide

USBC-MSTH3 HDMI Triple Display Adapter

Host Compatibility

Compatible with Windows and ChromeOS systems equipped with a USB-C, USB4, Thunderbolt 3, or Thunderbolt 4 port that supports DisplayPort Alternate Mode (DP Alt Mode).

macOS and iPadOS can use the adapter, but MST is not supported. Multiple external displays will mirror the same image. Macs are not recommended if multiple extended displays are required.

Supported Operating Systems

- Windows 10 or newer
- ChromeOS 100 or newer
- macOS 11 or newer single extended with additional displays mirrored
- Linux not recommended due to inconsistent MST driver behavior

Overview

The Plugable USBC MSTH3 connects a compatible USB C or Thunderbolt host to up to three HDMI displays using MST. No drivers required.

Typical capabilities depend on the host DisplayPort version and DSC support.

- Single display up to 8K 60Hz with HDMI 2.1 display and cable
- Dual displays up to 4K 144Hz with DP 1.4 plus DSC
- Triple displays up to 4K 60Hz with DP 1.4 plus DSC, or up to 1080p 60Hz without DSC
- Bus-powered. No external power supply or charging passthrough
- HDCP and HDR supported when the host and display support them

In the Box

- Plugable USBC-MSTH3 adapter
- Welcome card
  (HDMI cables not included)

Host System Requirements

- USB-C / USB4 / Thunderbolt 3 / Thunderbolt 4 port supporting DisplayPort Alt Mode
- For triple 4K 60Hz the host must support DP 1.4 with DSC or DP 2.1
- DP 1.4 without DSC is typically limited to dual 4K 60Hz or triple 1080p 60Hz
- DisplayPort 1.2 host limited to dual 1080p @ 60Hz or Single 4K @ 30Hz
- Certified High Speed HDMI 2.0 or higher cables are recommended
- Latest graphics driver and firmware updates are recommended

Monitor and Cable Requirements

- HDMI monitors supporting desired resolutions and refresh rates
- Use HDMI 2.0 cables for 4K 60Hz
- Use HDMI 2.1 cables for 8K 60Hz or high refresh rate 4K
- HDCP compliant for DRM-protected playback
- Avoid passive converters and extra adapters where possible

Power and Charging

- Adapter is bus-powered via the USB-C connection
- No external power adapter required
- Does not provide laptop charging (no USB Power Delivery passthrough)

Quick Setup

Windows

1. Connect the USBC-MSTH3 adapter directly to the USB-C port on your computer.
2. Connect each HDMI output on the adapter to a monitor using HDMI 2.0 or higher-rated cables.
3. Power on the monitors and select the HDMI inputs.
4. Right-click the desktop → Display settings.
5. Under Multiple displays, select Extend these displays.
6. Select each display to set the desired resolution and refresh rate (e.g., 3840×2160 @ 60Hz).

ChromeOS

1. Connect the adapter directly to the USB-C port on your Chromebook.
2. Connect the HDMI cables to each display.
3. Open Settings → Device → Displays.
4. Set Arrangement to Extend and adjust resolution and refresh rate.

macOS (limited)

- macOS does not support MST. All HDMI outputs mirror the same image. Only one extended display is possible.

Best Practices and Tips

- Ensure monitors and cables support the target resolution and refresh rate.
- Connect displays directly to the adapter; avoid splitters, converters, or daisy-chains.
- Use certified HDMI 2.0 or 2.1 cables for high resolutions and refresh rates.
- For best performance, update your graphics driver and system BIOS/firmware.
- If a display is not detected, unplug the adapter, power-cycle the monitors, and reconnect.
- When using ultrawide monitors (for example 3440×1440), confirm the mode is listed by your OS and supported by your GPU bandwidth.

Supported Display Modes (Typical)

Host DisplayPort Version	Example Configurations (HDMI outputs)
DP 2.1	● Single up to 8K 60Hz ● Dual up to 4K 144Hz ● Triple up to 4K 60Hz
DP 1.4 with DSC enabled	● Single up to 8K 30Hz ● Dual up to 4K 120Hz ● Triple up to 4K 60Hz
DP 1.4 (no DSC) or DP 1.3	● Dual up to 4K 60Hz ● Triple up to 1080p 60Hz
DP 1.2	● Dual 1080p 60Hz ● Triple 1080p 60Hz (host dependent)
macOS / iPadOS	● Three mirrored 1080p displays

Actual results vary by GPU, number of DP lanes exposed over USB-C, and driver support.

Looking for More Information?

Additional setup and compatibility details are available on the Plugable support page:
https://plugable.com/products/usbc-msth3#nav-get-started

For personalized assistance, contact: support@plugable.com