NTI DP-HP-MNTR-SRC DisplayPort 1.4 Hotplug Maintainer User Manual

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NTI DP-HP-MNTR-SRC DisplayPort 1.4 Hotplug Maintainer

The DP-HP-MNTR-SRC manages communication between a DisplayPort source device (e.g., computer) and sink device (e.g., monitor) with the purpose of maintaining the screen settings in the event of the sink device being disconnected. One application of this device is to resolve screen resetting issues when employing a DisplayPort KVM to actively switch between two sources and a single sink. By installing the DP-HP-MNTR-SRC in series with the source and KVM, the source will see a constantly connected sink and will therefore maintain the screen setting when the KVM user selects the other channel.

Features

- Emulates a DisplayPort display (sink device) by providing Hot Plug Detect to the DisplayPort source device.
- Designed for use with KVM/video switches.
  - When the input channel is deselected, the host computer connected to that input channel via the DisplayPort Hotplug Maintainer will recognize the monitor as connected.
  - Eliminates the need to reconfigure monitor settings – keeps screen settings while switching to another computer and then back.
- Supports all source and display resolutions, including Ultra-HD 8K (7680×4320) @30Hz, 4Kx2K (4096×2160 and 3840×2160) @60Hz, 2560×1600 (WQXGA), 2560x1440p (WQHD), and HDTV 1080p @120Hz.
- The Hotplug Maintainer is completely transparent.
- DisplayPort features supported:
  - DisplayPort v1.4
  - Multi-Stream Transport (MST)
  - 10-bit Color / 30-bit Deep Color
  - RGB, YCC 4:4:4, YCC 4:2:2
  - LPCM
  - HDR
  - High-bandwidth HBR3
  - Bandwidth up to 8.1Gbps per channel (32.4Gbps total)
- Compact design for easy installation and operation.
- No power supply- powered by video source.
- TAA Compliant

- One 1-foot DisplayPort male-to-female cable (NTI# DP-PM-1-MF) included

- Use the extension cable in tight spaces or where connectors are too close together
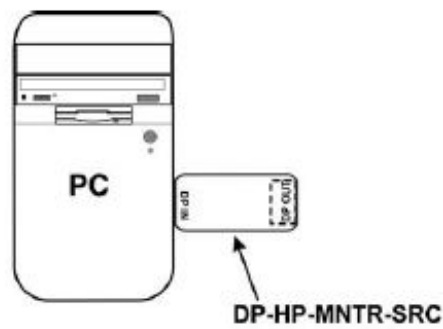
- Patent pending
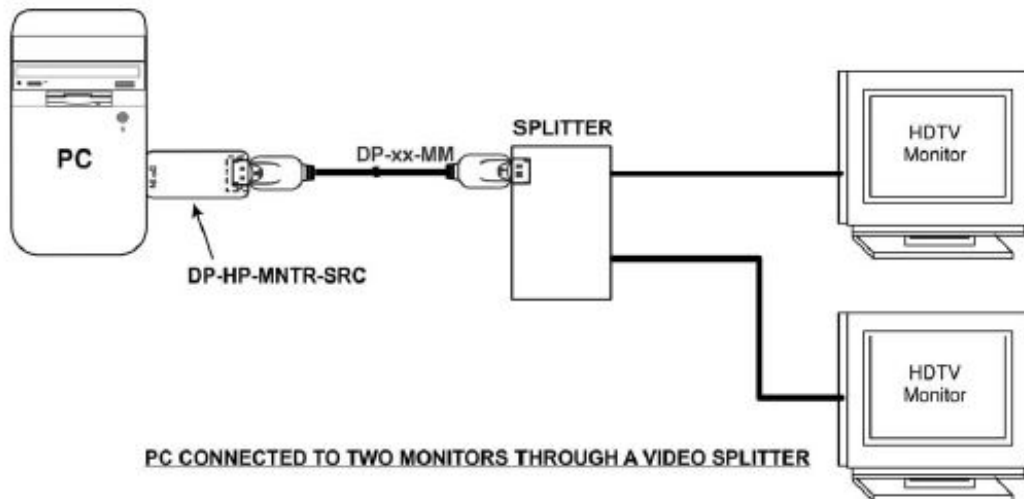
Installation

Connect to Your Application
The DP-HP-MNTR-SRC is outfitted with a full-size DisplayPort plug and receptacle. The plug is to be inserted into the video source port, and the cable connecting to the downstream KVM Switch should be plugged into the receptacle. The DP-HP-MNTR-SRC is powered by the DisplayPort source.
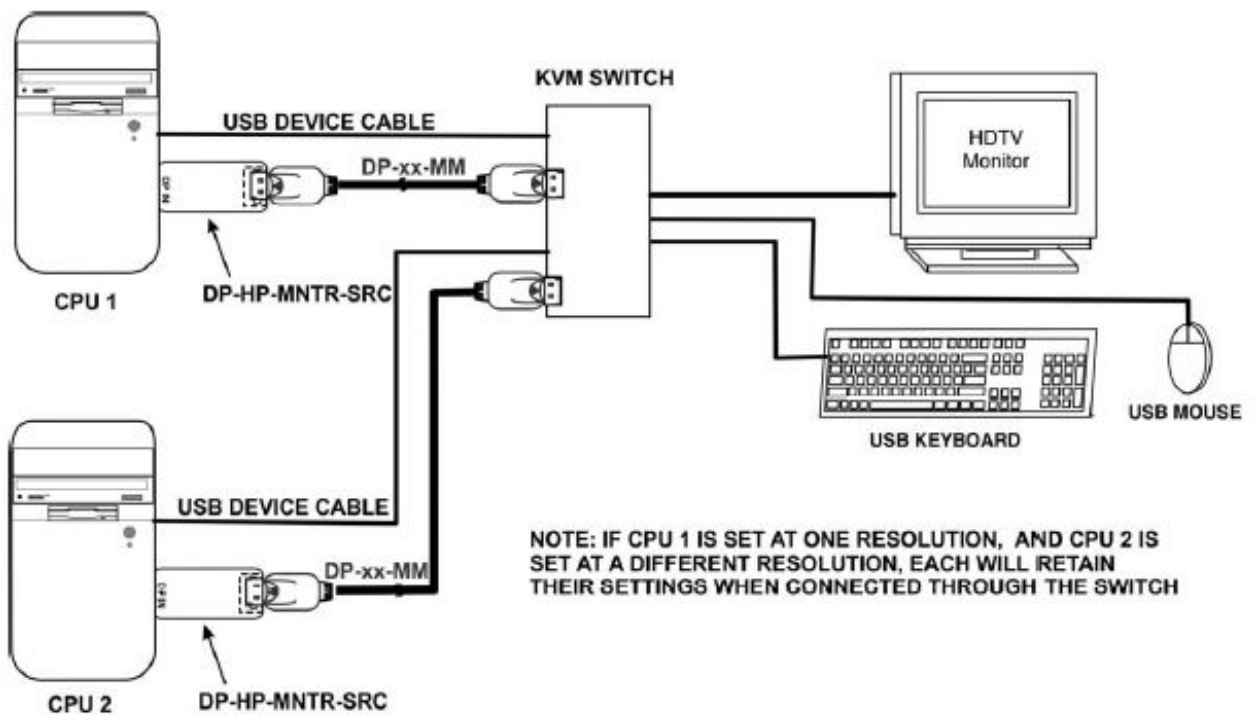The recommended installation procedure is as follows:

1. Power down all equipment

2. Install the DP-HP-MNTR into the source port.

3. Connect all cabling

4. Power up the monitor

5. If there is any, power up mid-stream equipment (e.g., KVM Switch)

6. Power up source. If there is a KVM switch, ensure that the KVM is set to the source that is being powered

7. Once the source is fully booted and an image is displayed, the DP-HP-MNTR-SRC is functioning. The KVM Switch (if any) can be switched and other sources can be powered.

PC/VIDEO SOURCE WITHOUT A MONITOR

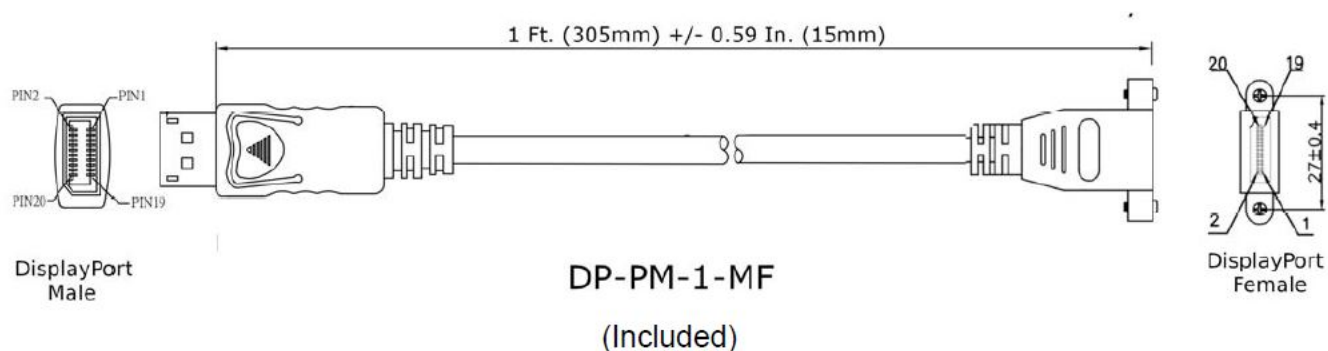PC CONNECTED TO TWO MONITORS THROUGH A VIDEO SPLITTER

NOTE: IF CPU 1 IS SET AT ONE RESOLUTION, AND CPU 2 IS
SET AT A DIFFERENT RESOLUTION, EACH WILL RETAIN
THEIR SETTINGS WHEN CONNECTED THROUGH THE SWITCH

TWO CPUS CONNECTED TO USER THROUGH A KVM SWITCH

Specifications

Video Format	DP 1.4
Max. Resolution	7680×4320 @30Hz
Color Depth	RGB/YCC444/YCC422: 16-bit
Support pass-through	Yes
Support headless (no monitor actually attached)	Yes
HDCP Support	HDCP 1.4 and HDCP 2.2
Audio Format	LPCM
Power Supply	By video source
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-22 to 140°F (-30 to 60°C)
Operating and Storage Relative Humidity	5 to 90% non-condensing RH

Patent pending.

Tip: When a computer turns OFF the display or goes to sleep, it will stop providing power on the video output ports and the DP-HP-MNTR-SRC will power OFF. As a result, windows may be resized and moved after the PC "wakes up" and starts to display again. To avoid the issue, it is recommended to disable the sleep mode and set the computer to not turn OFF the display. If you are running Windows, related settings are found in "Power Options".

Change settings for the plan: Balanced

Choose the sleep and display settings that you want your computer to use.

🕐 Turn off the display: | Never ▼ |

🌐 Put the computer to sleep: | Never ▼ |

Documents / Resources

NTI DP-HP-MNTR-SRC DisplayPort 1.4 Hotplug Maintainer [pdf] User Manual
DP-HP-MNTR-SRC, DisplayPort 1.4 Hotplug Maintainer