DP4K-EDID-EMLTR
DisplayPort 1.2 EDID Emulator

The DP4K-EDID-EMLTR DisplayPort 1.2 EDID Emulator copies the EDID of the desired DisplayPort display and connects directly to the DisplayPort source to ensure that the EDID is not lost in connections between devices such as switches, splitters, and extenders.

- Emulates a DisplayPort display (sink device) by providing Hot Plug Detect and EDID to the DisplayPort source device.
- Supports Ultra-HD 4Kx2K resolutions up to 3840x2160 @60Hz 4:4:4, 2560x1600 (WQXGA), 2560x1440p (WQHD), and HDTV resolutions to 1080p.
- DisplayPort features supported:
    - DisplayPort v1.2a
    - 10-bit Color \ 30-bit Deep Color
    - RGB, YCC 4:4:4, YCC 4:2:2
    - LPCM
    - Bandwidth up to 5.4Gbps per channel (21.6Gbps total)
- HDCP 1.3 compliant.
- Supports Learning and Emulation modes.
    - Learning mode: store a display's EDID for later use.
    - Emulation mode: provides EDID to the DisplayPort source device from the emulator's internal memory.
        - Does not support headless operation – monitor must be connected.
- Pre-programmed with many standard resolutions with native set to 1080p.
    - Use learning mode to program other resolutions.
- LED indicators provide signal status information.
- Compact design for easy installation and operation.
- No power supply – powered by video source.
- Ideal for resolving signal handshaking problems between a source and a display.

Installation

1. Switch the EDID/COPY switch to "COPY".

2. Connect an DisplayPort cable between the emulator (at "Display") and the display device.

3. Plug the DisplayPort male ("Source") connector of the DP4K-EDID-EMLTR emulator into the video source.

4. Unplug the DisplayPort cable from the emulator, causing the blue "EDID" LED to flash.   This indicates the emulator is in Learning Mode.

5. Within 10 seconds, plug the DisplayPort cable back into the emulator.   The green "Emulator" and blue "EDID" LEDs should change to solid ON, indicating that Learning Mode has been successful and the emulator is now in Emulation Mode.

Note: If the emulator needs to be reset back to its default EDID resolution of 1920x1080p, switch the EDID/COPY switch to "EDID".

If the DisplayPort cable is unplugged during Learning Mode or the 10 seconds is allowed to elapse, Learning Mode will fail and both LEDs will go dark.   The emulator will remain at the last EDID it learned.

Specifications

Video Format	DP 1.2
Max. Resolution	3840x2160p@60Hz
Default Resolution	1920x1080p@60Hz
Color Depth	RGB/YCC444/YCC422: 16-bit
Support pass-through	Yes
Support headless (no monitor actually attached)	No
HDCP Support	HDCP 1.3
Audio Format	LPCM
Power Supply	By video source
Operating Temperature	0 to 50°C
Dimension	2.835 x 0.4724 x 1.1811 in
	72 x 12 x 30 mm
Compliance	CE, FCC, RoHS

Video EDID

Resolution	Resolution
640 x 480p @60Hz	1280 x 1024p @60Hz
720 x 480p @60Hz	1440 x 900p @60Hz
800 x 600p @60Hz	2560 x 1440p @60Hz
1024 x 768p @60Hz	2560 x 1600p @60Hz
1280 x 720p @60Hz	3840 x 2160p @30Hz
1280 x 800p @60Hz	3840 x 2160p @60Hz
1280 x 960p @60Hz	

Audio EDID
LPCM 2-channel, 16/20/24 bit depths at 32/44/48/88/96/176/192 kHz