

DVDO

DVDO-Matrix-42-HDBT

4K 4x2 Matrix Switcher with HDMI & HDBaseT Inputs & Outputs



DVDO-Matrix-42-HDBT is a matrix switcher with two HDMI + two HDBaseT inputs and two HDMI with two mirrored HDBaseT outputs, allowing to route independently four HDMI sources up to four separate displays.

It supports HDMI signals with resolutions up to 4K60 4:4:4 with an 18Gbps bandwidth.

The HDBaseT inputs and outputs can transmit 1080p signals up to 70m and 4K signals up to 40m and support 48V PoC.

It features audio de-embedding with separate S/PDIF optical and analog L/R audio outputs.

It also supports HDR, 4K to 1080p downscaling as well as advanced EDID management.

The unit can be controlled via the front panel buttons, IR, RS232 or TCP/IP with an intuitive web GUI.

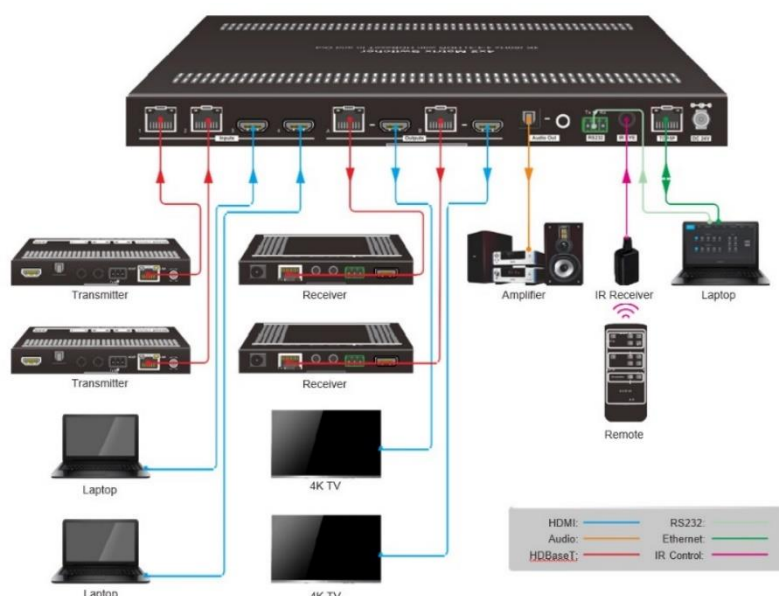
Features

- HDMI 2.0, HDCP 2.2
- Video resolutions up to 4K@60Hz 4:4:4 18Gbps
- 2 HDMI + 2 HDBaseT inputs & 2 HDMI with 2 mirrored HDBaseT outputs
- Individual 4K -> 1080p downscaling for each output
- Auto-switching
- Audio de-embedding with separate S/PDIF optical & analog L/R audio outputs
- Supports HDR 10 & Dolby Vision
- Advanced EDID management
- Control via front panel buttons, IR, RS232 and IP with intuitive web GUI
- HDBaseT inputs and outputs support 48V PoC
- HDBaseT transmission distance: 70m (1080p) / 40m (4K)
- HDBaseT transmitter (P/N DVDO-Matrix-HDBT-Tx) and receiver (P/N DVDO-Matrix-HDBT-Rx) to be ordered separately

Applications

- Conference Rooms
- Hospitality
- Digital Signage
- Houses of Worship
- Education
- Restaurants
- Retail
- Residential

Application Diagram



Technical Specifications

Technical	
Compliance	HDMI 2.0 / HDCP 2.2
Transmission Distance	1080p ≤ 230 ft / 70m 4K@60Hz ≤ 131 ft / 40m
Video	
Video Bandwidth	18Gbps
Video Inputs	2 x HDMI [Type A, 19-pin female] 2 x HDBaseT [RJ45]
Input Resolutions	HDMI: up to 4K@60Hz 4:4:4, HDR 10 HDBaseT: up to 4K@60Hz 4:2:0
Video Outputs	2 x HDMI [Type A, 19-pin female] 2 x HDBaseT [RJ45]
Video Resolutions	HDMI: up to 4K@60Hz 4:4:4, HDR 10 HDBaseT: up to 4K@60Hz 4:2:0 HDMI & HDBaseT outputs support 4K to 1080p downscaling
Audio	
Audio Outputs	1 x Analog Stereo L/R [3.5mm jack] 1 x Digital S/PDIF [Toslink]
Audio Formats	HDMI: LPCM 7.1 audio, Dolby Atmos, Dolby TrueHD, Dolby Digital Plus, DTS:X, and DTS-HD Master Audio pass-through Analog Stereo L/R: PCM 2CH Digital S/PDIF: PCM, Dolby Digital, DTS, DTS-HD
Frequency Response	20Hz–20KHz, ±1dB
Max Output Level	Stereo: 2.0Vrms ± 0.5dB. 2V = 16dB headroom above -10dBV (316mV) nominal consumer line level signal S/PDIF: ±0.05dBFS
THD+N	< 0.05%, 20Hz – 20kHz bandwidth, 1 kHz sine at 0dBFS level (or max level)

THD+N	< 0.05%, 20Hz – 20kHz bandwidth, 1 kHz sine at 0dBFS level (or max level)
SNR	Stereo: > 80dB, 20Hz to 20kHz bandwidth S/PDIF: > 90dB, 20Hz to 20kHz bandwidth
Crosstalk Isolation	Stereo: < -80dB, 10kHz sine at 0dBFS level (or max level before clipping) S/PDIF: < -70dB, 10KHz sine at 0dBFS level (or max level before clipping)
L-R Level Deviation	Stereo: < 0.05dB, 1kHz sine at 0dBFS level (or max level before clipping)
Output Load Capability	Stereo: 1KΩ and higher (supports 10x paralleled 10KΩ loads)
Noise Level	Stereo: -80dB S/PDIF: -90dB
Control	
Control Ports	1 x FW [Micro-USB] 1 x IR Eye [3.5mm jack] 1 x RS232 [3-pin terminal block] 1 x TCP/IP [RJ45]
Mechanical	
Enclosure	Black metal
Dimensions	300mm (W) × 220mm (D) × 25mm (H)
Weight	1.6kg
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 24V/5A
Power Consumption	45W (Max)
Operating Temperature	-5°C ~ 55°C / 23°F ~ 131°F
Storage Temperature	-25°C ~ 70°C / -13°F ~ 158°F
Relative Humidity	10%~90% (non-condensing)