

AVG-PMXS1616-4K

16x16 HDMI/HDBaseT Modular Matrix Seamless



This product is a pre-configured 16 x 16 HDMI Seamless Matrix with HDMI 4K@60Hz (4:4:4) and HDCP 2.2 compatibility, allows 16 sources to be shown or switched to any of the 16 outputs simultaneously. Each video output has a 4K60 scaler built-in, and supports seamless switching with no black screen transition. Within the matrix, it supports two different cards to flexibly meet the requirements of any field application. It supports both HDMI output card for local displays and HDBT output card for remote displays. The matrix also supports 16x16 independent audio switching. It includes 16x de-embedded audio from 16x HDMI inputs. Each audio output port could be configured to independent switching or follow associated card video output.

The matrix can be controlled by front panel buttons, IR, RS232, and LAN (Telnet API and Web GUI). As a 4U stand-alone 16x16 HDMI matrix, the matrix offers the convenience of future-ready Ultra HD A/V switching and distribution solution, and the reliability of cutting-edge HDMI 2.0 and HDCP 2.2 compatibility.

The matrix is designed for commercial integrations such as mid-to-large meeting room spaces, university teaching spacing etc.

Features

- Seamless switching up to 4K@60 across all video inputs and outputs.
- HDCP 2.2 and backwards compliant
- HDMI inputs and outputs support video up to 4K@60Hz (chroma sub-sampling 4:4:4 8bit only)
- Each output has a 4K60 scaler built-in with both auto and manual scaling.
- HDBT OUT supports transmitting 4K@60 4:2:0 8bit signal up to 70m/230ft, or 1080P signal up to 100m/330ft via Cat 5e/6 cable. Alternatively, it supports to transmit 4K@60 4:2:0 8bit signal and 1080P signal up to 100m/330ft via Cat 6a/7 cable.
- HDBT cards supports PoE (PSE) function, the matrix can supply power for the connected receiver.
- Supports 16 x 16 independent audio switching, each audio output can be configured in independent switching or follow video output.
- Support IR, RS232, Ethernet and LAN control with Telnet API and Web GUI.
- Supports CEC control sink for both HDBT outputs and HDMI outputs
- EDID management: Front panel buttons, API commands and Web GUI
- Supports source/zone user restriction.
- Supports RS232 routing, control any 3rd party device connected with the remote receiver through LAN port or RS232 port on the matrix.

Specifications

Technical	
Input/output ports	By default: 16 x HDMI IN, 8 x HDMI OUT, 8 x HDBT OUT, 16 x AUDIO OUT (3.5mm, 5-Pin) Main board: 1 x RS232, 1 x LAN, 1 x IR EXT., 1 x AC 240V 50/60Hz IN, 1 x RESET
Input/Output signal type	HDMI 2.0 up to 4K@60Hz 4:4:4 8bit and HDCP 2.2 800x600P8, 1024x768P8, 1280x768P8, 1280x800P8, 1280x960P8, 1280x1024P8, 1360x768P8, 1266x768P8, 1440x900P8, 1600x900P8, 1600x1200P8, 1680x1050P8, 1280x720P6,8, 1920x1080P6,8, 1920x1200P8,
Input/Output Resolution Supported	3840x2160P2,3,5,6,8, 4096x2160P2,3,5,8 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = at 60 Hz, 9 = at 120 Hz Note: HDBT outputs port supports resolution up to 4K@60Hz 4:2:0 8bit, and HDMI output ports support resolution up to 4K@60Hz 4:4:4 8bit.
Maximum Data Rate	18 Gbps
Audio Format	HDMI IN/OUT: Fully supports audio formats in HDMI 2.0 specification, including PCM, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X AUDIO OUT: PCM 2.0
Control	Front Panel Buttons, IR Remote, RS232, LAN (Telnet & Web UI)

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)

Power Supply	AC 240V 50/60Hz
Power Consumption (Max)	252.23W
Device Dimension (W x H x D)	440mm x 176mm x 382.7mm/17.32" x 6.93" x 15.07"
Rack Space Required	4U
Product Weight	TBD

Transmission Distance


Note: Straight-through category cable wired to T568B standard is recommended.

Cable Type	Range	Supported Video
Cat 5e/6	100m/330ft	1080P@60Hz 36bpp
	70m/230ft	1080P@60Hz 48bpp 4K@30Hz 4:4:4 24bpp 4K@60Hz 4:2:0 24bbpp
Cat 6a/7	100m/330ft	1080P@60Hz
HDMI	Input: 15m/49ft Output: 10m/16ft	1080P@60Hz
	Input/Output: 10m/33ft	4K@30Hz 4:4:4 24bpp 4K@60Hz 4:2:0 24bbpp
	Input/Output: 5m/16ft	4K@60Hz 4:4:4 24bpp



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