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HDMI MATRIX

4x4 18Gbps HDMI Matrix (70M)

AHDMX-V2044C



PRODUCT DESCRIPTION

The 18Gbps 4x4 HDMI Matrix can connect four HDMI sources to eight displays.

It features four HDMI outputs and each HDMI output is mirrored to provide a CAT-Cable output which runs simultaneously. It supports the transmission of video

(resolution is up to 1080p Full HD and 4Kx2K@60Hz 4:4:4) and supports HD digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio.

Connect a CAT Receiver to each of the CAT-Cable outputs to extend the HDMI signal up to 230ft/70m for multi-room connectivity. Each HDMI output supports 4K2K to 1080P downscaler independently.

The product supports control via front panel buttons, IR remote, RS-232, LAN, and Web GUI.

PRODUCT KEY FEATURES

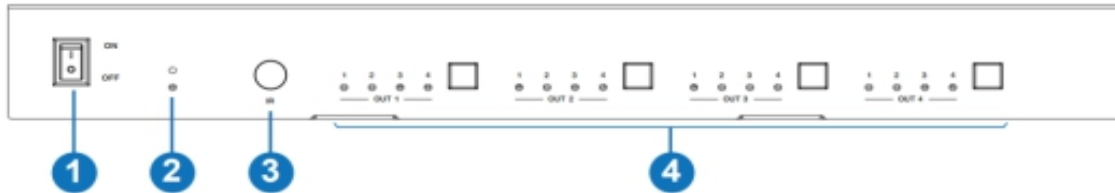
- HDMI 2.0b and HDCP 2.2/1.x compliant
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI & CAT ports
- 4 HDMI inputs, 4 HDMI & CAT mirrored outputs
- HDMI ports support 18Gbps lossless uncompressed video bandwidth
- Support 4K->1080P Down Scaler for each output port
- HDR, HDR10, HDR10+, Dolby Vision, HLG are supported
- CAT output can extend the transmission distance up to 230ft/70m via a single CAT6 cable
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio)
- Advanced EDID management and CEC control are supported
- 12V POC on all CAT ports
- Control via front panel buttons, IR remote, RS-232, LAN and Web GUI

SPECIFICATIONS

Technical			
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2/1.x		
Video Bandwidth	18Gbps		
Video Resolution	Up to 4K2K@50/60Hz (4:4:4)		
Color Space	RGB 4:4:4, YCbCr 4:4:4/2:2/4:2:0		
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz) 8-bit (4K2K@60Hz YUV4:4:4) 8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2/4:2:0)		
HDR	HDR10, HDR10+, Dolby Vision, HLG		
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus (DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X		
Transmission Distance	230ft / 70m (via a single CAT6 cable)		
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)		
Connection			
Matrix	Inputs: 4 x HDMI Type A [19-pin female] Outputs: 4 x HDMI Type A [19-pin female] 4 x CAT port [RJ45] 4 x IR OUT [3.5mm Stereo Mini-jack] Controls: 1 x TCP/IP [RJ45] 1 x RS-232 [3-pin phoenix connector]		
CAT Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] 1x CAT port [RJ45] Output: 1x HDMI Type A [19-pin female] Control: 1x SERVICE [Micro USB, Update port]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	Matrix: 320mm (W) × 100mm (D) × 36mm (H) Receiver: 61mm (W) x 88mm (D) x 18mm (H)		
Weight	Matrix: 915g, Receiver: 155g		
Power Supply	Input: AC 90 - 260V 50/60Hz Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)		
Power Consumption	19.68W (Max)		
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F		
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F		
Relative Humidity	20~90% RH (non-condensing)		
Resolution / Cable length	4K60 - Feet / Meters	4K30 - Feet / Meters	1080P60 - Feet / Meters
HDMI IN / OUT	16ft / 5M	32ft / 10M	50ft / 15M
The use of "Premium High Speed HDMI" cable is highly recommended.			

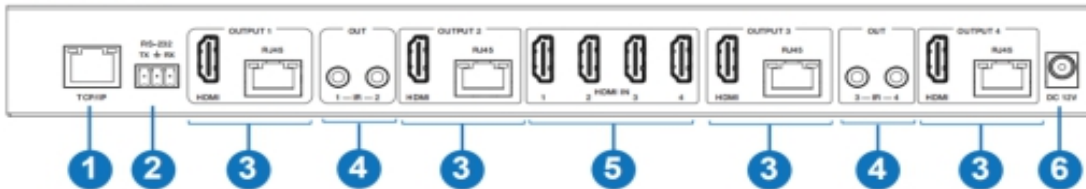
Operation Controls and Functions

Front Panel



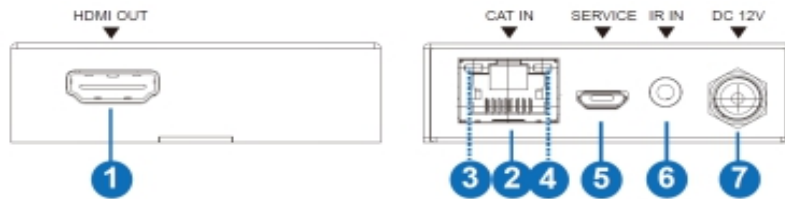
NO.	Name	Function Description
1	Power switch	Press the switch to power on/off the Matrix.
2	Power LED	The LED will illuminate in green when the Matrix is working normally, and red when the Matrix is on standby.
3	IR Window	IR receiver window, it only receives the IR remote signal from this Matrix.
4	OUT 1-4 buttons & Source LED 1~4	Press the OUT 1/2/3/4 button to circularly select HDMI source signal for the corresponding output port, then the corresponding source LED will be on.

Rear Panel



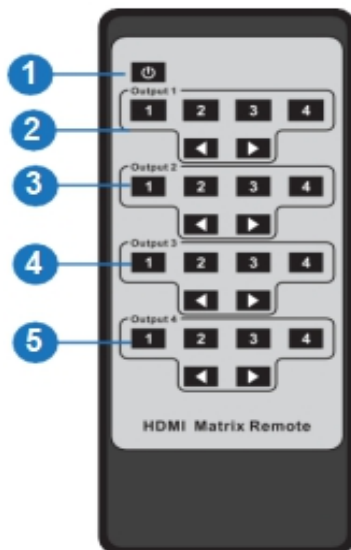
No.	Name	Function Description
1	TCP/IP port	The link port for TCP/IP control. Connect to an active Ethernet link with an RJ45 cable.
2	RS-232 port	RS-232 command control port. Connect to a PC or control system with a D-Sub 9-pin cable to control the Matrix.
3	OUTPUT 1-4 ports	HDMI output ports, connect to HDMI display devices such as TV or monitor with HDMI cable. CAT mirrored output ports, connect to CAT Receivers with CAT cable.
4	IR OUT 1-4 ports	Connect to IR blaster cable, the IR signal is from the "IR IN" port of the CAT Receiver.
5	HDMI IN 1-4 ports	HDMI signal input ports, connect to HDMI source device such as DVD or PS4 with HDMI cable.
6	DC 12V	DC 12V power supply port.

CAT Receiver Panel



No.	Name	Function Description
1	HDMI OUT	HDMI output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	CAT IN	Connect to the CAT OUTPUT port on the Matrix with a CAT cable.
3	Power Indicator Lamp (Green)	When the receiver is powered on, the power indicator lamp will be on.
4	Data signal Indicator Lamp (Orange)	When there is signal transmission between the Matrix and the receiver, the lamp will be on.
5	SERVICE port	Used for firmware update.
6	IR IN	Connect to the IR Receiver cable. The IR signal will send to the IR OUT port of the Matrix.
7	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The CAT receiver also can be powered by the Matrix via a CAT cable.)

IR Remote



- ① **Power on or Standby:** Power on the Matrix or set it to standby mode.
 - ② **Output 1:** Press 1/2/3/4 button to select input source to HDMI OUTPUT 1.
 - ③ **Output 2:** Press 1/2/3/4 button to select input source to HDMI OUTPUT 2.
 - ④ **Output 3:** Press 1/2/3/4 button to select input source to HDMI OUTPUT 3.
 - ⑤ **Output 4:** Press 1/2/3/4 button to select input source to HDMI OUTPUT 4.
- ◀ ▶ : Select the last or next input source button.