



## **KA139A 18Gbps 8x8 HDMI Matrix with ARC Function**



### **Introduction**

The 18Gbps 8x8 HDMI Matrix supports the transmission of video (up to 4K2K@60Hz YUV 4:4:4) and multi-channel high resolution digital audio from 8 HDMI sources to 8 HDMI displays. Audio de-embedded to analog and coaxial audio is supported from 8 HDMI output ports. While HDMI output ARC function is enabled, the ARC audio from HDMI display devices will be extracted to coaxial audio output. Each HDMI output of this 8x8 HDMI Matrix supports 4K2K to 1080P downscaler independently. Control is via front panel buttons, IR remote, RS-232, LAN and Web GUI.

### **Feature:**

- HDMI 2.0b, HDCP 2.2 and HDCP 1.4 compliant
- Video resolution up to 4K2K@60Hz (YUV 4:4:4) on all HDMI ports
- Support 18Gbps video bandwidth
- Dolby Vision, HDR10+ and HLG are supported.
- Support 4K->1080P Down Scaler for each output port
- HDMI audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD and DTS-HD Master Audio)
- Audio de-embedded is supported via analog and coax ports
- ARC, CEC and smart EDID management are supported
- 1U rack mounted design with front panel OLED display
- Control via front panel buttons, IR remote, RS-232, LAN and Web GUI

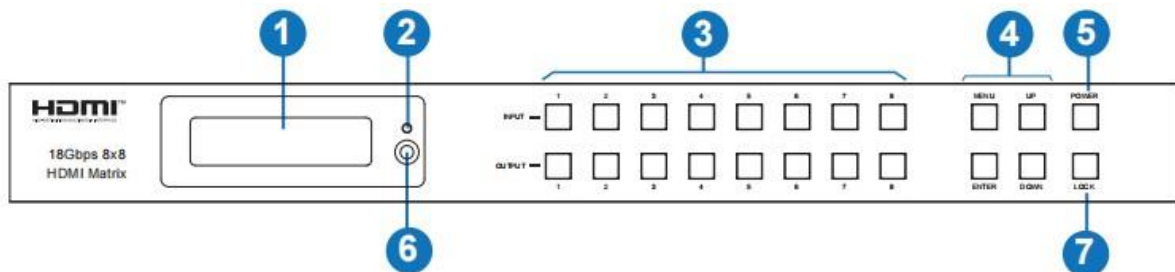
## Specification

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@50/60Hz (4:4:4)
Color Space	RGB, YCbCr 4:4:4/4:2:2/4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Coax Audio Formats	LPCM 2.0, Dolby Digital / Plus, DTS 5.1
L/R Audio Formats	PCM2.0
HDR formats	HDR10,HDR10+,Dolby Vision, HLG
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Connection	
Input Ports	8×HDMI Type A [19-pin female] 1×IR EXT [3.5mm Stereo Mini-jack]
Output Ports	8×HDMI Type A [19-pin female] 8×Coax Audio (RCA) 8×L/R Audio [3.5mm Stereo Mini-jack]
Control Ports	1×TCP/IP [RJ45] 1×RS-232 [D-Sub 9]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	440mm (W)×200mm (D)×44.5mm (H)
Weight	2.8kg
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 12V/5A (US/EU standard, CE/FCC/UL certified)
Power Consumption	43W
Operating Temperature	-10°C ~ 45°C / 14°F ~ 113°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 Control and Functions

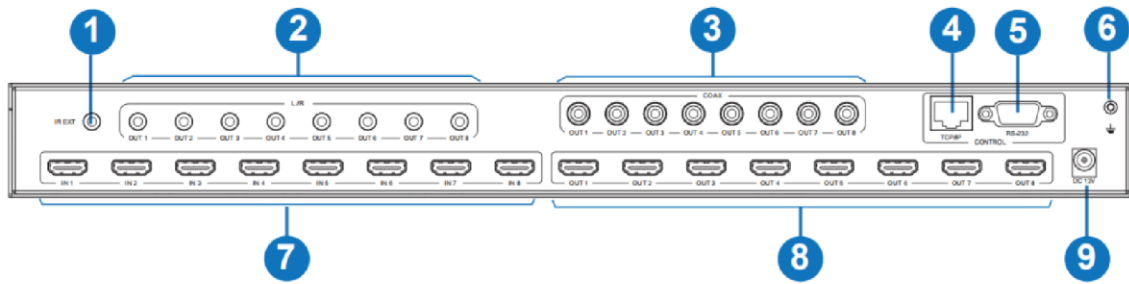
Front Panel



NO.	Name	Function Description
1	OLED screen	Display matrix switching status, input / output port, EDID, Baud rate, IP Address.
2	Power LED	The LED will illuminate in green when the product is connected to power supply, and red when the product is on standby.
3	Input / Output buttons	You need to press an output button (1~8) firstly and then press an input button (1~8) to select the corresponding input source for the output port.

4	MENU / ENTER / UP / DOWN	<p>①<b>EDID Check:</b>On the initial OLED display screen, press "MENU" button to enter the Matrix switching state interface, then press "UP/DOWN" button to check the current EDID information of each HDMI input port.</p> <p>②<b>EDID setting:</b> On the initial OLED display screen, press "MENU" button to enter the EDID setting interface, press "UP/DOWN" button to select the required EDID, and press the "ENTER" button. A prompt "copy to input : " will appear. Then press "UP/DOWN" button to select the input port you need to set, and press "ENTER" button again to confirm.</p> <p>③<b>Baud rate setting:</b> On the initial OLED display screen, press "MENU" button to enter the Baud rate interface, and press "UP/DOWN" button to select the required Baud rate, finally press the "ENTER" button to confirm the setting.</p> <p>④<b>IP Address Check:</b> On the initial OLED display screen, press "MENU" button to enter the IP interface, then press "UP/DOWN" button to check the current IP address. Pressing the "MENU" button again will return to the initial OLED display status.</p>
5	POWER button	Long press the POWER button for 3 seconds to enter the standby mode, then short press it to wake up the device.
6	IR Window	IR receiver window, it only receives the IR remote signal from this product.
7	LOCK button	Short press the LOCK button to lock front panel buttons (Except the power button); Press it again to unlock.

Rear Panel



No.	Name	Function Description
1	IR EXT	If the IR receiver window of the unit is blocked or the unit is installed in a closed area out of infrared line of sight, the IR receiver cable can be inserted to the "IR EXT" port to receive the IR remote signal.
2	L/R OUT(1-8)	Analog audio output port, connect to an amplifier or speaker via a 3.5mm audio cable.
3	COAX OUT (1-8)	Coaxial audio output port, connect to audio output device such as audio amplifier via a coaxial cable.
4	TCP/IP port	TCP/IP control port, connect to PC or router with an RJ45 cable.
5	RS-232 port	Connect to a PC or control system by D-Sub 9-pin cable to transmit RS-232 command.
6	GND	Connect the housing to the ground.
7	INPUT ports (1-8)	HDMI input ports , connect to HDMI source device such as DVD or set-top box with an HDMI cable.
8	OUTPUT ports (1-8)	HDMI output ports, connect to HDMI display device such as TV or monitor with an HDMI cable.
9	DC 12V	Connect to 12V/5A power adapter.

## Application Example

