



KA227A HDMI SEAMLESS MATRIX 4X4 WITH MULTIVIEWER & VIDEO WALL 2X2 (4K60HZ)



Introduction

The 18Gbps 4x4 Seamless Matrix is a perfect solution for video transmission from 4 HDMI sources to 4 HDTV displays. It has video wall and multi-viewer functions with multiple display modes. 4x4 IR matrix, audio embedded and de-embedded are also supported. Video resolution is up to 4K@60Hz 4:4:4. Each of the sources can be individually scaled. And seamless switching ensures a smooth picture transition without frame loss. This matrix can be controlled via front panel buttons, IR remote, RS-232 and Web GUI.

Features

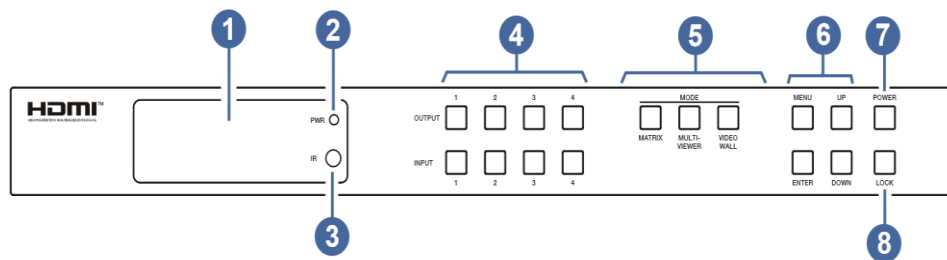
- HDCP 2.2 compliant
- Support video resolution up to 4K@60Hz 4:4:4 and 18Gbps video bandwidth, as specified in HDMI 2.0
- Support 12 display categories in multi-viewer mode, and 9 splicing modes in video wall mode
- HDMI audio format: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio
- Support CEC control, and multiple video resolution output
- Advanced EDID management
- Control via front panel buttons, IR remote, RS-232, and Web GUI

Specifications

Technical			
HDMI Compliance	HDMI 2.0		
HDCP Compliance	HDCP 2.2		
Video Bandwidth	594MHz/18Gbps		
Video Resolution	480i ~1080P@50/60Hz, 4K2K@24/30Hz, 4K2K@60Hz		
Colour Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0		
Colour Depth	8/10/12-bit		
Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS96/24, DTS High Res, DTS-HD Master Audio		
IR Level	12Vp-p		
IR Frequency	Wideband 20K-60KHz		
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)		
Connection			
Input ports	4 × HDMI INPUT [Type A, 19-pin female] 4 × L/R AUDIO INPUT [3.81mm, 3pin Phoenix Connector]		
Output ports	4 × HDMI OUTPUT [Type A, 19-pin female] 4 × OPTICAL AUDIO OUT [S/PDIF] 4 × L/R AUDIO OUT [3.81mm, 5pin Phoenix Connector]		
Control ports	1 × TCP/IP [RJ45] 1 × RS-232 [D-Sub 9] 1 × IR EXT [3.5mm, Stereo Mini jack] 4 × IR INPUT [3.5mm, Stereo Mini jack] 4 × IR OUTPUT [3.5mm, Stereo Mini jack]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	440mm [W] × 203mm [D] × 44.5mm [H]		
Weight	2.55kg		
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 12V/2.5A (US/EU standard, CE/FCC/UL certified)		
Power Consumption	25W (Max)		
Operating Temperature	32 - 104°F / 0 - 40°C		
Storage Temperature	-4 - 140°F / -20 - 60°C		
Relative Humidity	20 - 90% RH (no-condensing)		
Video Resolution	4K60	4K30	1080P60
HDMI Cable Length (HDMI IN / OUT)	5m/16ft	10m/32ft	15m/50ft
The use of "Premium High-Speed HDMI" cable is highly recommended.			

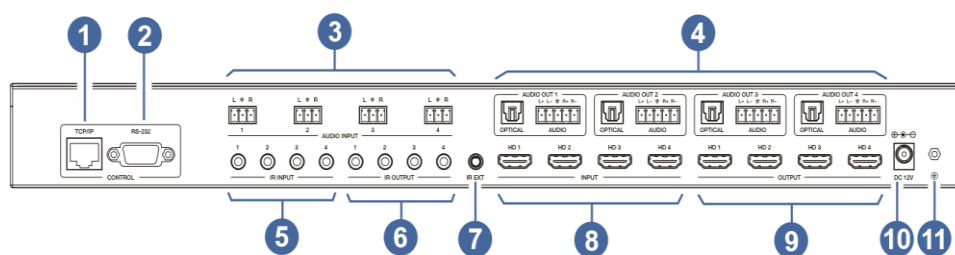
Operation Controls and Functions

Front Panel



NO.	Name	Function Description
1	LCD screen	Display matrix switching status, input / output port, EDID, Baud rate, IP Address, etc.
2	PWR LED	The LED is on green when the device is working. The LED is on red when the device is on standby.
3	IR	IR signal receiver, receiving the signal from the IR remote.
4	INPUT / OUTPUT buttons	You need to press an output button (1~4) firstly and then press an input button (1~4) to select the corresponding input source for the output port.
5	MODE (MATRIX / MULTIVIEWER / VIDEO WALL)	Press these buttons to select the corresponding video mode as required. MATRIX: Press Matrix button to enter the matrix mode. You can operate via front panel buttons, RS-232 commands and Web GUI to set more details of the matrix mode. MULTIVIEWER: Press MULTIVIEWER button to enter the multi-viewer mode (The output buttons are used as Windows). You can operate via front panel buttons, RS-232 commands and Web GUI to set more details of the multi-viewer mode. VIDEO WALL: Press VIDEO WALL button to enter the video wall mode (The output buttons are used as Groups). You can operate via front panel buttons, RS-232 commands and Web GUI to set more details of the video wall mode.
6	MENU / ENTER / UP / DOWN	Take RESET, for example. <ol style="list-style-type: none"> On the initial LCD display screen, press "MENU" button. There are OUTPUT/MV/VW/INPUT/EXTAUDIO/SET items to be selected. Press the "UP/DOWN" button to select "SET" item. Press the "ENTER" button to enter into the next level menu. There are LCD ONTIME/BAUD RATE/IP INFO/BG PATTERN/REBOOT/ RESET items to be selected. Press the "UP/DOWN" button to select "RESET" item. Press the "ENTER" button to confirm the selection. Press the "ENTER" button, and then it will prompt: SUCCESS! Note: <ul style="list-style-type: none"> Pressing the "MENU" button will return to the previous menu. In any level menu, it will return to the initial display screen if no operation goes on within 10 seconds.
7	POWER button	Long press the button for 1 second to enter the standby mode, then short press it to wake up the device.
8	LOCK button	Short press the button to lock front panel buttons (Except the power button); press it again to unlock.

Rear Panel



NO.	Name	Function Description
1	TCP/IP	TCP/IP control port, connected to PC or router with a CAT cable.
2	RS-232 port	Connect to a PC or control system by D-Sub 9-pin cable to transmit RS-232 command.
3	AUDIO INPUT (1~4)	L/R analogue audio input port, connected to an analogue audio input source such as DVD or Blu-ray Player. It follows HDMI input (1~4), and the embedded audio cannot be extracted to audio out channel to output.
4	AUDIO OUT (1~4)	OPTICAL: Optical audio output port, connected to an audio output device such as audio amplifier.
		L/R AUDIO: Analog audio output port, supporting balanced audio output (with a maximum support of 2Vrms) and unbalanced audio output. Balanced connection method: L+, L-, \oplus , R+, R- Unbalanced connection method: L+, \oplus , R+
5	IR INPUT (1~4)	Connect with IR receiver cable.
6	IR OUTPUT (1~4)	Connect with IR blaster cable.
7	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 connected to the "IR EXT" port to receive the IR remote signal.
8	HDMI INPUT ports (1~4)	HDMI input ports, connected to HDMI source devices such as computer, DVD or set-top box with an HDMI cable.
9	HDMI OUTPUT ports (1~4)	HDMI output ports, connected to HDMI display devices such as TV or monitor with an HDMI cable.
10	DC 12V	Connect to 12V/2.5A power adapter.
11	GND	Connect the housing to the ground.

IR Remote



⏻: Power on the Matrix or set it to standby mode.

INFO: Press to check the serial baud rate and IP address. It will be displayed in the top right corner of the screen, and disappear in five seconds or press the button again.

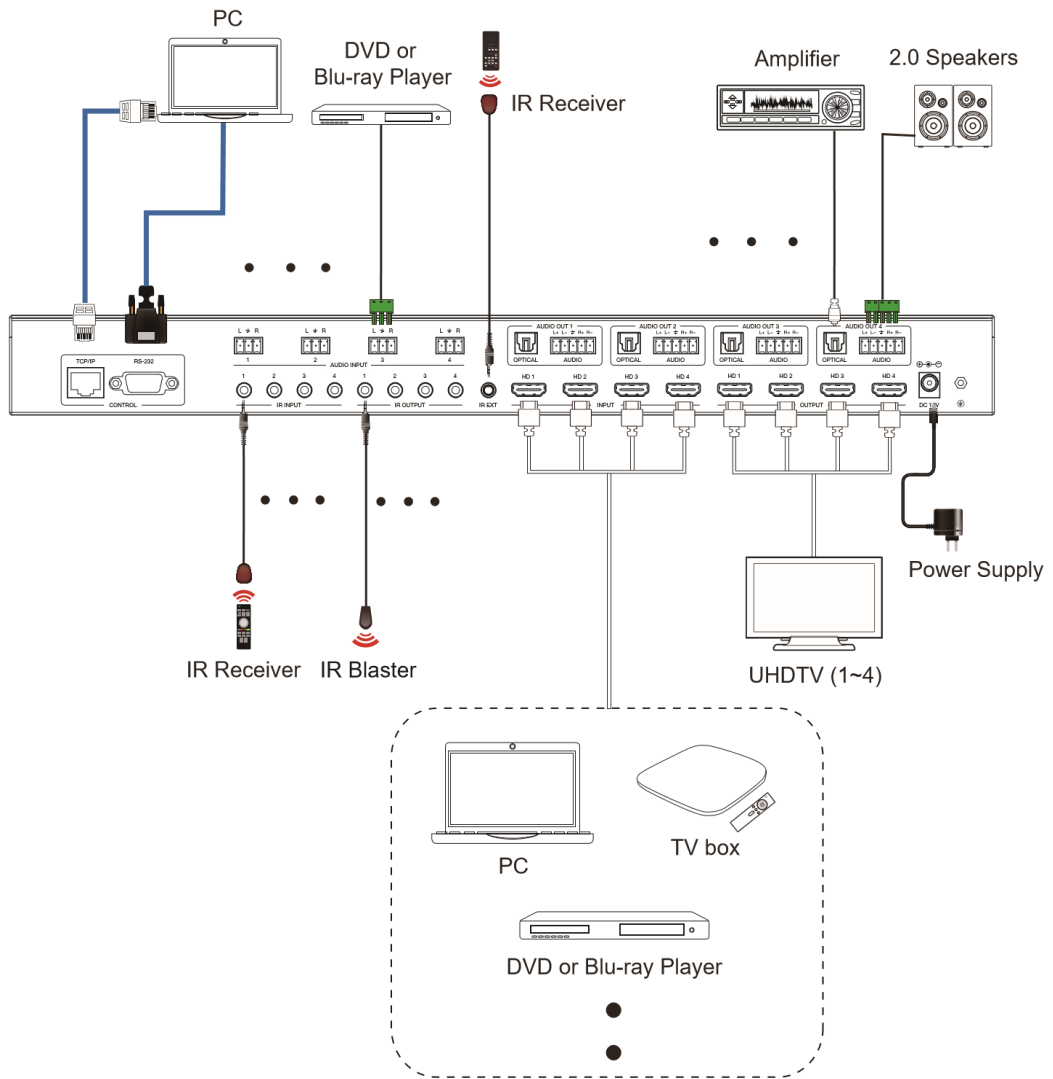
INPUT 1/2/3/4: Press these buttons to select input sources.

◀ ▶: Select the last or next input source.

OUTPUT 1/2/3/4: Select the output display device.

ALL: Select all output simultaneously. For example, when you press the "ALL" button and then press input "1" button, at this time the input "1" source will be output to all display devices.

Application Example





NEW ARRIVAL!

Experience Seamless AV Control

MODEL: KA227A



- 4K 60HZ Seamless Switching
- Multiviewer & Video Wall
- Advance Matrix Control
- Professional Audio Visual