



KA270 HDMI VIDEO WALL CONTROLLER 2X2 4K-LITE VERSION



Introduction

The 18Gbps 1x4 Video Wall Controller is designed to realize truly capturing, AD converting, routing, and distributing all-format signal to the video wall (LCD displays), while maintaining a true digital signal transmission. It features HDMI and USB-C input with resolution up to 4K@60 4:4:4, and 4 HDMI outputs. It supports multiple video wall modes to be set for video output. Furthermore, optical audio and L/R analog audio de-embedding output are also supported. It can be controlled via front panel buttons, IR remote and RS-232 commands.

Features

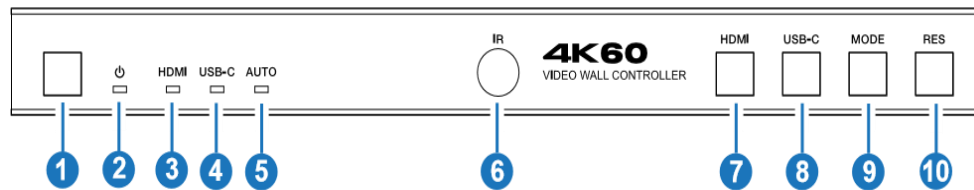
- HDCP 2.2 and DP 1.2a compliant
- Support video bandwidth up to 18Gbps, as specified in HDMI 2.0
- Support HDMI input and USB-C input, and the resolution is up to 4K@60Hz 4:4:4
- Support optical audio and L/R analog audio de-embedding output
- Support 8 video wall splicing modes: 1x1, 2x1, 3x1, 4x1, 1x2, 1x3, 1x4, 2x2
- Support image 180° rotation, convenient for ceiling installation
- Support bezel adjustment for the splicing edge
- Advanced EDID management
- Control via front panel buttons, IR remote and RS-232 commands
- Simple plug and play, no drive and installation setting are required

Specifications

Technical			
HDMI Compliance	HDMI 2.0b		
HDCP Compliance	HDCP 2.2		
Video Bandwidth	18Gbps		
Video Resolution	Input: up to 4K@60Hz 4:4:4 Output: 720P60Hz, 1080P60Hz, 4K30Hz, 1024x768P60Hz		
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0		
Color Depth	8/10/12 bit		
IR Level	5Vp-p		
IR Frequency	38KHz		
Audio Formats	HDMI IN/OUT: LPCM 2.0/5.1, Dolby Digital/Plus/EX, DTS, DTS-EX, DTS-96/24 L/R OUT: PCM 2.0 SPDIF(OPTICAL): Dolby Digital/plus, DTS 5.1, PCM 2.0		
Audio Latency	No Latency		
Video Latency	No Latency		
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)		
Connection			
Input ports	1 × HDMI INPUT [Type A, 19-pin female] 1 × USB-C INPUT [Type C, 24-pin female]		
Output ports	4 × HDMI OUTPUT [Type A, 19-pin female] 1 × OPTICAL AUDIO OUT [S/PDIF] 1 × L/R AUDIO OUT [RCA]		
Control ports	1 × RS-232 [3pin-3.81mm phoenix connector] 1 × IR EXT [3.5mm, Stereo Mini-jack]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	220mm [W] × 100mm [D] × 30mm [H]		
Weight	590g		
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 12V/1A (US/EU standard, CE/FCC/UL certified)		
Power Consumption	5.5W (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	4K24	1080P60
HDMI Cable Length (HDMI IN / OUT)	8m/26ft	10m/32ft	15m/49ft
The use of “Premium High Speed HDMI” cable is highly recommended.			

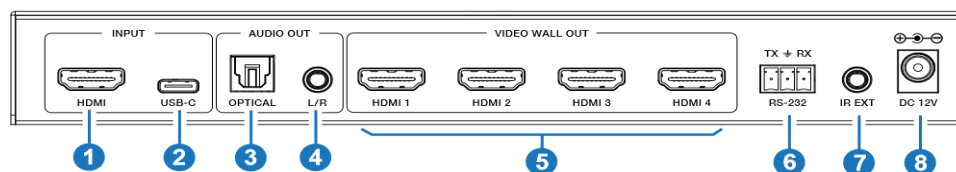
Operation Controls and Functions

Front Panel



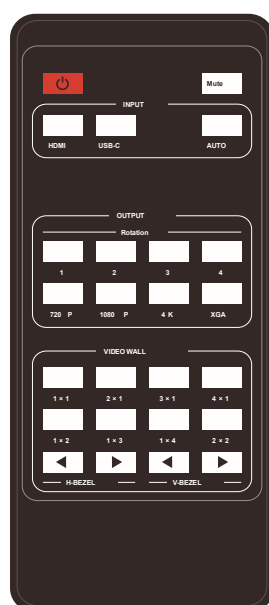
NO.	Name	Function Description
1	Power button	In shutdown/standby status, press this button to power on; in power-on status, press this button for 2~3 seconds to enter standby status.
2	Power LED	The LED will light in green when the product is working normally, and red when the product is on standby.
3	HDMI LED	The LED will light in green when HDMI input is selected.
4	USB-C LED	The LED will light in green when USB-C input is selected.
5	AUTO LED	The LED will light in green when auto switching is enabled.
6	IR window	IR signal receiving window.
7	HDMI button	Press this button to select the HDMI input channel.
8	USB-C button	Press this button to select the USB-C input channel.
9	MODE button	Press this button to switch the 8 splicing modes circularly.
10	RES button	Press this button to switch the resolutions of the four HDMI outputs circularly.

Rear Panel



NO.	Name	Function Description
1	HDMI INPUT	HDMI signal input port, connected to an HDMI source device.
2	USB-C INPUT	USB-C signal input port, connected to a USB-C source device.
3	OPTICAL AUDIO OUT	Optical audio output port, connected to an audio output device such as an audio amplifier.
4	L/R AUDIO OUT	Analog audio output port, connected to an audio output device such as a speaker.
5	VIDEO WALL OUT (HDMI1~4)	HDMI signal output port, connected to TVs.
6	RS-232	3-pin phoenix connector, connected to a PC or control system for serial port upgrade or RS-232 command control.
7	IR EXT	IR signal receiving port, connected with IR Receiver cable. If the IR signal receiving 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.
8	DC 12V	Connect to 12V/1A power adapter.

IR Remote



Power on or Standby: Power on the device or set it to standby mode.

Mute: Turn off/on the audio output, including HDMI, Optical and L/R audio.

HDMI: Press to select HDMI input channel.

USB-C: Press to select USB-C input channel.

AUTO: Press to disable or enable the input auto switching.

Rotation 1/2/3/4: Press to switch rotation angle between 0° and 180° for the corresponding output channel.

Resolution 720P/1080P/4K/XGA: Press to switch the resolution for the 4 output channels at the same time.

VIDEO WALL MODE: There are 8 splicing modes: 1x1, 2x1, 3x1, 4x1, 1x2, 1x3, 1x4, 2x2. Press to select the display mode.

H/V-BESEL ◀ ▶: Press to adjust the bezels of the splicing images.

Video wall supports 8 splicing modes as below:



Application Example

