



KA196 HDMI V2.0 SEAMLESS SWITCHER 5X2 WITH HDBASE-T 70M



The 5x2 Seamless Presentation Switcher provides 3×HDMI, 1×DP and 1×USB-C (video only) inputs, 1×HDMI and 1×HDBaseT mirrored outputs with PIP/PAP/Tri/Quad-view Multiview functionality. It supports single screen seamless switching with no freezing, black or snow screen. One 3.5mm audio de-embedding jacket can output analogue stereo audio. User can use Front Buttons or RS232 commands to control the switcher.

Features

1. 5x2 presentation switcher with PIP/PAP/Tri/Quad-view
2. True seamless switching, no freezing, black or snow screen
3. HDMI 2.0b, HDCP 2. 2, DP1.4 up to 4K60@4:4:4
4. 3×HDMI, 1×DisplayPort and 1×USB-C inputs
5. 1×HDMI, 1×Mirrored HDBaseT 70M/POC outputs
6. Full screen/PIP/PAP/Tri/Quad-view 5 configurable display modes
7. Up to 14 output resolutions selectable
8. 3.5mm analog audio de-embedding

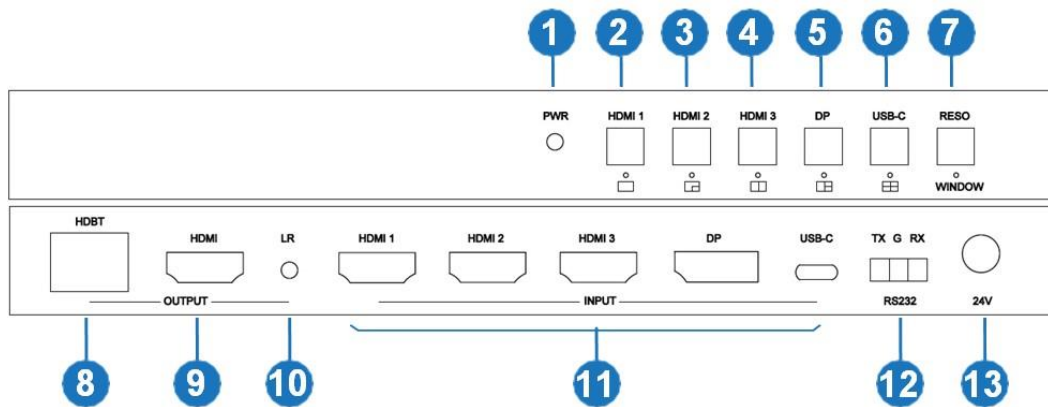
- 9. EDID management
- 10. Buttons and RS-232 control






Specification

TECHNICAL	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
DP Compliance	DP 1.4
Video Resolution	Up to 3840x2160@60Hz
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Switcher	INPUTS: 3×HDMI IN [Type A, 19-pin, Female] 1×DP IN 1×USB-C OUTPUTS: 1×HDBaseT OUT [RJ45] 1×HDMI OUT [Type A, 19-pin, Female] 1×L/R OUT [3.5mm, mini-Jack]
Receiver	INPUT: 1×HDBaseT In [RJ45] OUTPUT: 1×HDMI OUT [Type A, 19-pin Female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Switcher: 225mm(W) × 100mm(D) × 25mm(H) Receiver: 157mm(W) × 90mm(D) × 20mm(H)
Weight	Switcher: 750g; Receiver: 333g
Power Supply	Input: AC100~240V 50/60Hz Output: DC 24V/1A
Power Consumption	14W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Relative Humidity	10~50% RH (non-condensing)

Operation Controls and functions

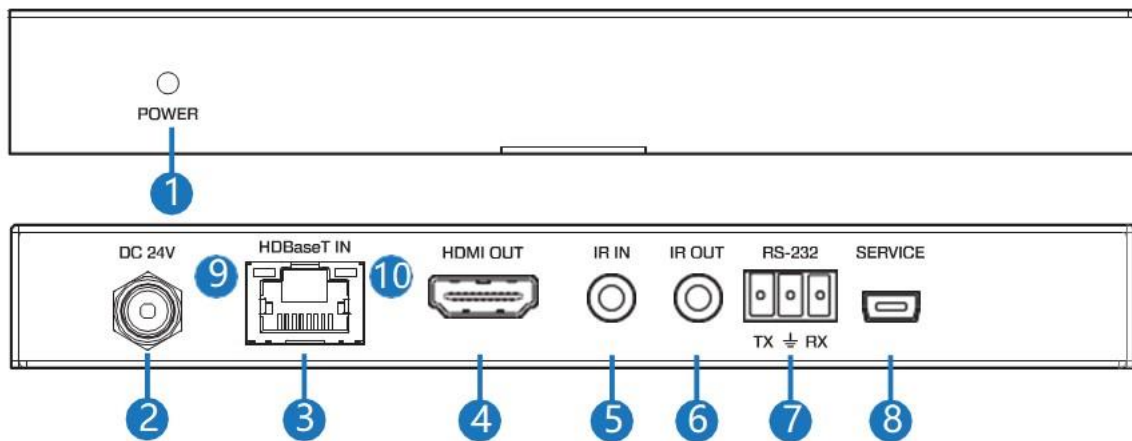
Switcher panels



NO	NAME	FUNCTION DESCRIPTION
1.	PWR	When the device is powered on, the red LED lights on.
2.	HDMI 1	Press HDMI 1 button to select HDMI 1 as the input source. Long press it for 3 seconds to enter SINGLE mode,  . SINGLE mode means only one display window on the screen. Note: When works on non-SINGLE mode, directly short press input buttons will be invalid.
3.	HDMI 2	Press HDMI 2 button to select HDMI 2 as the input source. Long press it for 3 seconds to enter PIP Multiview mode,  .
4.	HDMI 3	Press HDMI 3 button to select HDMI 3 as the input source. Long press it for 3 seconds to enter PBP Multiview mode,  .
5.	DP	Press DP button to select DP as the input source. Long press it for 3 seconds to enter 3xWIN mode,  . 3xWIN mode is Three Windows Multiview mode.
6.	USB-C	Press USB-C button to select USB-C (video only) as the input source. Long press it for 3 seconds to enter 4xWIN mode,  . 4xWIN mode is Four Windows Multiview mode

7.	RESO	Press RESO (short for Resolution) button to select different output resolution. The resolution info will be shown on screen. Long press this button for 3 seconds the screen will show up one yellow border on window 1. Continue press this button the border will be shown on window 2 or 3...then press one input button such as HDMI 1, and then HDMI 1 will displayed on the current selected window.
8.	HDBT OUT	HDBaseT Scaling output up to 3840x2160@60-4:2:0. Act as 24V POC-PSE.
9.	HDMI OUT	HDMI scaling output up to 3840x2160@60.
10.	LR OUT	3.5mm LR stereo audio output, 20Hz ~ 20kHz, 1.5Vrms max
11.	INPUTS	HDMI 1, HDMI 2, HDMI 3, DP, USB-C
12.	RS232	External RS232 control Baud Rate: 9600, Data Bits:8, Parity: None Stop Bits:1 3 way 3.5mm phoenix connector TX means Switcher PC RX means Switcher PC G means Ground
13.	24V	24V power adapter to plug in

Receiver Panels



No.	Name	Function Description
1.	Power LED	System power indicator.
2.	DC 24V	Connect 24V/1A adaptor to AC wall outlet for power supply.

3.	HDBASET IN	Standard HDBaseT signal input port. Connect the HDBaseT port of the switcher with a UTP cable following the standard of direct interconnection method.
4.	HDMI OUT	HDMI output port. This slot is where you connect the HDTV or monitor with HDMI cable.
5.	IR IN	IR signal receiving port (function reserved).
6.	IR OUT	IR signal emitting port (function reserved).
7.	RS232	Phoenix jack provides serial control signal from switcher to receiver.
8.	SERVICE	Manufacturer use only.
9.	Connection Signal	Illuminating: The switcher and receiver are in good connection.
	Indicator Lamp	Flashing: The switcher and receiver are in poor connection. Dark: The switcher and receiver are not connected.
10.	Data Signal Indicator Lamp	Illuminating: The HDMI signal with HDCP. Flashing: The HDMI signal without HDCP. Dark: No HDMI signal.

Multi-view

The Switcher supports 5 Multi-view display modes:

SINGLE, PIP, PBP, 3xWIN, 4Xwin

Users can select different operations for different Multi-view modes as following:

SINGLE and 4xWIN: Inputs selection;

PBP and 3xWIN: Inputs selection, Display Ratio selection;

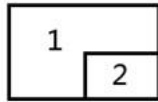
PIP: Inputs selection, Display Ratio selection, Sub window size and position selection.

Multi-view window distribution as following:

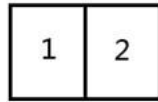
SINGLE



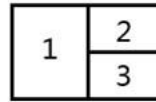
PIP



PBP



3xWIN



4xWIN



Application Example

