



MODEL NUMBER : RKV422

4K60HZ 4X2 HDMI MATRIX SWITCHER

This is a 4-in 2-out HDMI™ matrix switch, which can switch 4 HDMI™ input signals to 2 HDMI™ displays as required. It supports up to 4096x2160@60Hz HDR resolution, with multiple switching methods (IR remote control, buttons, RS-232) to flexibly match input and output devices. HDMI™ outputs support auto down-scaling. Additional audio output is supported through the S/PDIF port and stereo jack.

RGB Logic AV Equipment Corporation

No. 3, Jalan Rajawali, Singapore. -598436

Website : www.rgblogicav.com

Email : sales@rgblogicav.com

4k60hz 4X2 HDMI Matrix switcher

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The 4x2 HDMI Matrix Switch is a versatile device designed to route multiple HDMI inputs to different display outputs, supporting 4 HDMI inputs and 2 HDMI outputs. Targeted for environments that require flexible video signal management, it accommodates high-resolution standards up to 4096x2160 at 60Hz with HDR, making it suitable for dynamic AV setups in security monitoring, education, and commercial digital signage applications.



HDMI Version and Interface

This matrix switch operates on HDMI 2.0 and supports HDR with YUV444 color space. It is compliant with HDCP 2.2 and HDCP 1.4, ensuring secure transmission of copyrighted content. The hardware provides 4 HDMI input ports and 2 HDMI output ports, offering ample connectivity options for multiple source and display combinations in sophisticated AV systems.

Video Resolutions and Transmission Rate

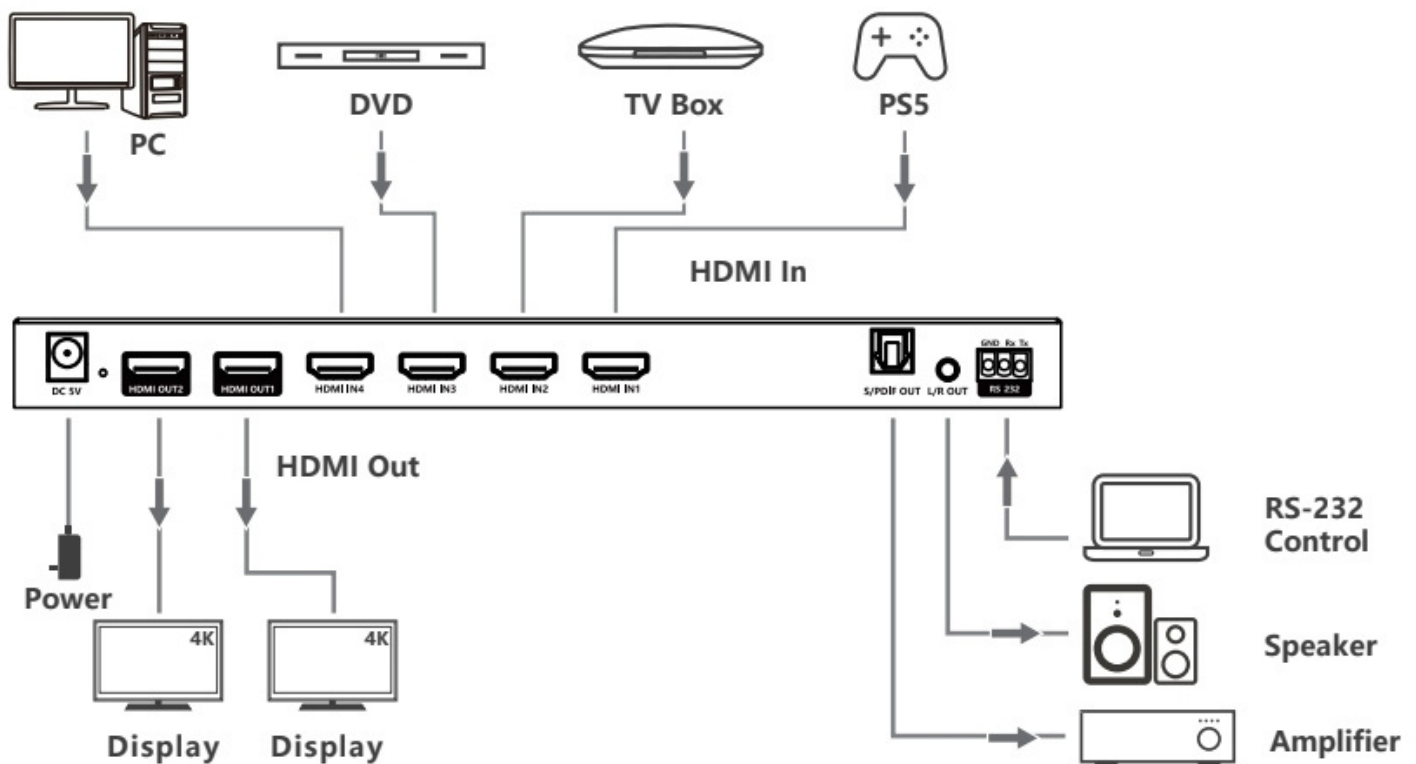
Supporting an impressive range of video resolutions, the box handles up to 4096x2160 (4K) at 60Hz for ultra-clear visuals. Other supported resolutions include 1080p, 720p, 576p, and 480p at various refresh rates. The transmission rate is 18Gbps, ensuring seamless data flow and maintaining high video quality even for demanding video formats and large-screen displays.

Audio Features

Audio compatibility is robust, with support for LPCM 7.1, DTS-HD, DTS, Dolby Digital Plus, Dolby TrueHD 7.1, and Dolby Atmos standards. This makes the device ideal for immersive audio setups where cinema-quality sound is required. Such audio capabilities ensure that end-users experience rich, multi-channel sound alongside high-definition visuals in their AV systems.

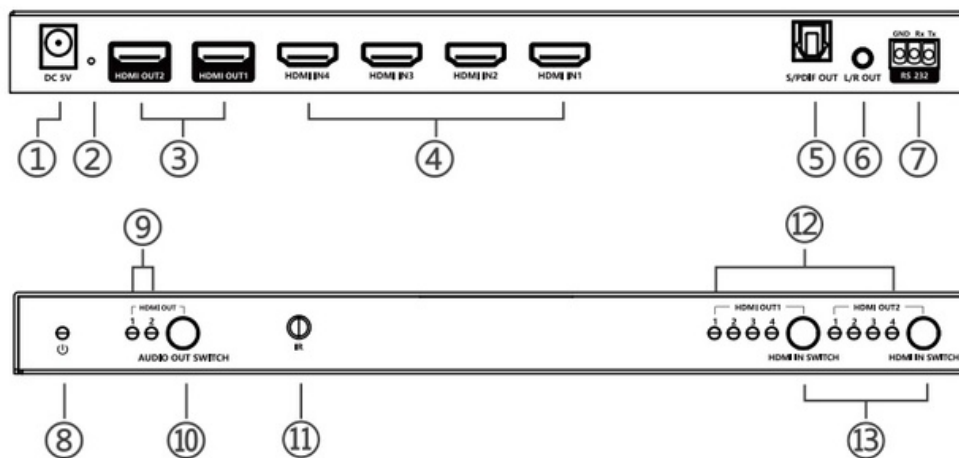
Build Quality and Power Specifications

Constructed with an iron housing, the matrix switch is both sturdy and reliable for long-term use. It operates on DC 5V/1A and consumes less than 44W of power, making it energy efficient. The device is black in color, weighs 375g, and has compact dimensions of 250mm x 90mm x 21mm, ensuring it fits easily within most AV racks or installations



Environmental and Protection Features

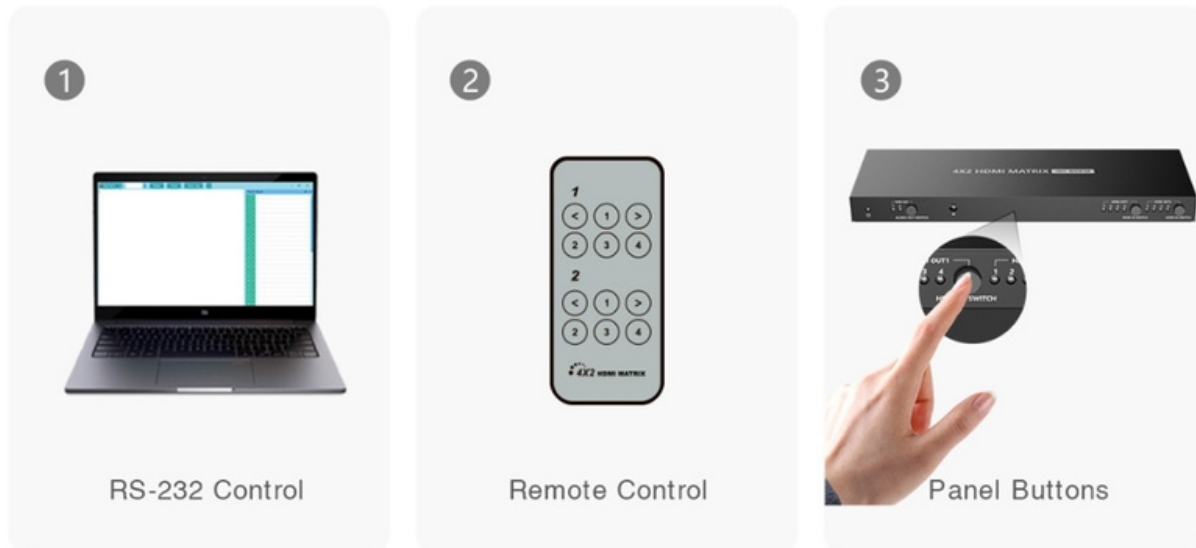
Engineered for durability, the device can function reliably in working temperatures of -20°C to 60°C and withstand storage temperatures from -30°C to 70°C, with a humidity tolerance up to 90% RH without condensation. Notably, it incorporates ESD protection, lightning and surge protection, and complies with IEC61000-4-2 standards, ensuring safe and reliable operation in various environmental conditions.



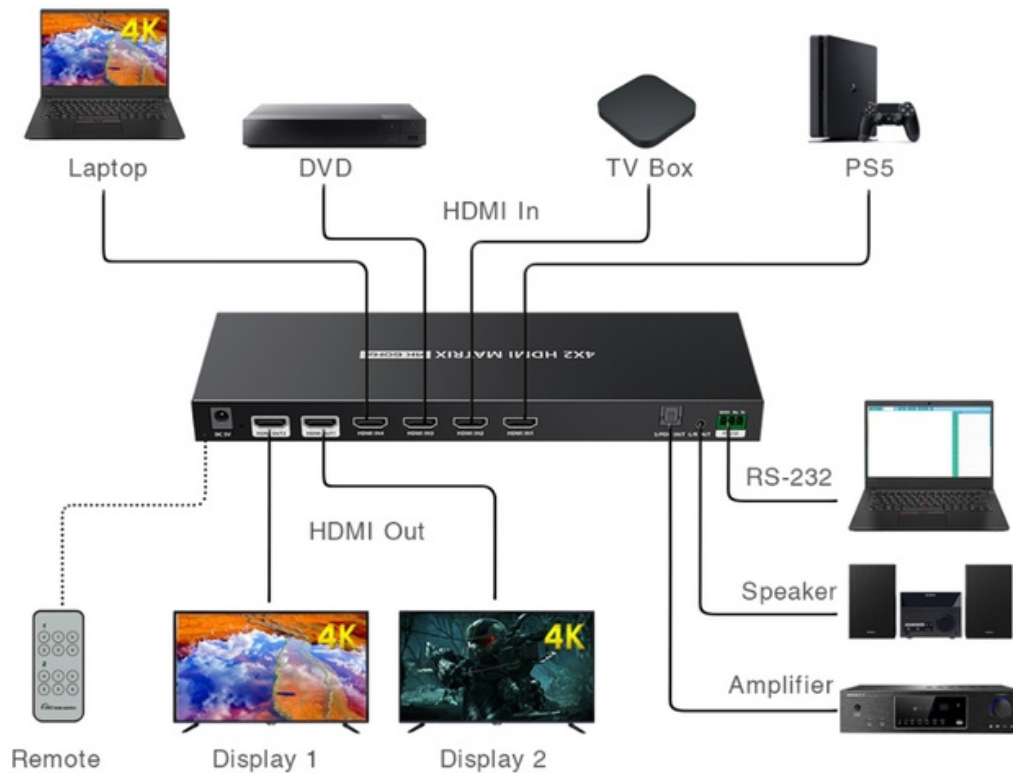
①	Power input	Connect with DC 5V/1A power adapter
②	Reset pinhole	Press the pinhole reset button with a straightened paper clip
③	HDMI output 1,2	Connect with HDMI display devices
④	HDMI input 1,2,3,4	Connect with HDMI source devices
⑤	S/PDIF out	Connect to the audio device with optical audio cable
⑥	3.5mm L/R out	Connect to the audio device with stereo audio cable
⑦	RS-232	Used for RS-232 command control
⑧	Power indicator	The indicator will be solid yellow if there is power
⑨	Audio output indicator 1,2	Corresponding to the audio output of HDMI 1, 2
⑩	Audio switch	Audio output can be switched between HDMI 1, 2
⑪	IR window	Receive IR signal

Multiple Control Methods

Users can easily control the matrix switch via RS-232 port, remote control and the panel buttons.



Connection



Specifications Table

Specifications	Value
HDMI version	HDMI 2.0 (HDR, YUV444)
HDCP	Compatible with HDCP 2.2, HDCP 1.4
HDMI interface	4 HDMI input, 2 HDMI output
Transmission rate	18Gbps
Resolutions	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz.
Audio format	LPCM7.1/DTS-HD/DTS-Audio/Dolby Digital plus/Dolby TrueHD 7.1/Dolby Digital 7.1CH/Dolby Atmos
RS-232	3 Pin (GND/Rx/Tx), Baud rate 9600
Voltage	DC 5V/1A
Power consumption	<4W
Working temperature	-20°C ~ 60°C
Storage temperature	-30°C ~ 70°C
Humidity	0~90%RH (No Condensation)
Housing	Iron
Color	Black
Weight	375g
Dimensions	250.0(L) x 80.0(W) x 21.0(H) mm
Protection	ESD protection; 1a Contact discharge level 2 (±4kV); 1b Air discharge level 3 (±8kV); IEC61000-4-2; Lightning & Surge protection

