

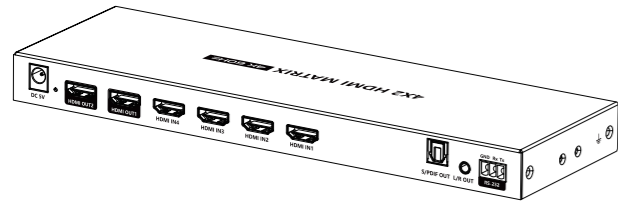
材质:157g铜版纸 正反印刷

H22060英文说明书AH1 : 0106010022019

尺寸: 100x138mm

## User Manual

# 4x2 HDMI Matrix Switch



### • Important Safety Instructions

1. To prevent electric shock, please ensure that all devices are properly grounded.
2. Do not place this device near or over a radiator or heat register, or where it is exposed to direct sunlight.
3. Place the device in a well-ventilated area, do not block any ventilation openings.
4. Do not expose this device to rain or place it near water. Any liquid that goes into the device may cause a failure, fire, or electric shock.
5. Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
6. Never insert anything metallic into the open parts of this device. This may cause a danger of electric shock.
7. The device should be repaired only by a qualified technician.
8. If a third-party power supply is used, please ensure that the power supply specifications meet the product requirements.

### • Introduction

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. This device is a reliable, ultra-high-definition video transmission solution widely used in security monitoring, education and training, exhibition and broadcasting, command center, and other scenarios.

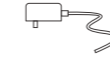
### • Features

1. Support 4 HDMI input and 2 HDMI output
2. Support up to 4096x2160@60Hz resolution and is backward compatible
3. Support HDR10
4. Support multiple switching mode: IR remote control, buttons, RS-232
5. Support additional audio output from stereo jack and S/PDIF port
6. HDMI outputs support auto down-scaling
7. Lightning protection, surge protection, ESD protection

### • Package Contents



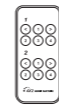
Matrix switch x1



Power adapter 5V/1A x1



User manual x1



Remote control x1



Mounting ear x2



Screw x6



Grounding screw x2

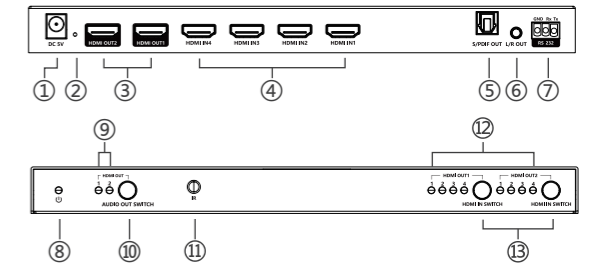


Terminal block x1

### • Installation Requirements

1. HDMI source device (DVD, game console, PC, etc.)
2. HDMI display device (TV, projector, LED screen, etc.)

### • Panel Description

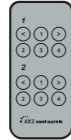


① Power input	Connect with DC 5V/1A power adapter
② Reset pinhole	Press the pinhole reset button with a straightened paper clip
③ HDMI output 1,2	Connect with HDMI display devices
④ HDMI input 1,2,3,4	Connect with HDMI source devices
⑤ S/PDIF out	Connect to the audio device with optical audio cable
⑥ 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

①	HDMI input indicator 1,2,3,4	Corresponding to HDMI inputs 1,2,3,4
②	HDMI output switch 1,2	Choose an output from HDMI inputs 1,2,3,4

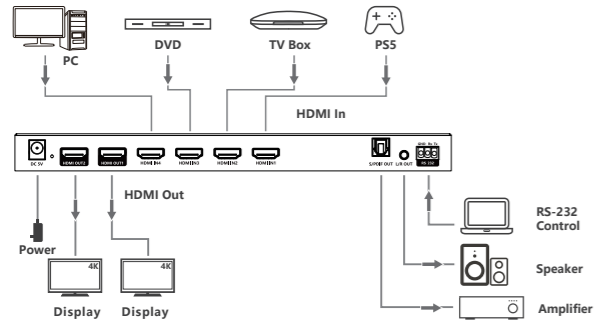
## Remote Control

The remote control is used to switch inputs and outputs.



## Installation Procedures

### 1. Connection Diagrams



### 2. Connection Instructions

- 1) Connect the source devices to the HDMI input ports with HDMI cables.
- 2) Connect the display devices to the HDMI output ports with HDMI cables.
- 3) If using RS-232 control, connect the control device to the RS-232 port.
- 4) If you need to output audio additionally, connect the audio device to the L/R port and/or S/PDIF port with stereo or optical audio cable.
- 5) Power on the devices to get started.

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### 3. RS-232 control

Baud rate: 9600

Data bits: 8

Stop bits: 1

Parity: none

Operation mode one	/	HDMI1 input	HDMI2 input	HDMI3 input	HDMI4 input
	HDMI1 output	PS11R	PS12R	PS13R	PS14R
	HDMI2 output	PS21R	PS22R	PS23R	PS24R
	HDMI1/2 output	PA1R	PA2R	PA3R	PA4R

Operation mode two	PAPXPX	
	Prefix	1 2
		Content for output port HDMI 2
		Content for output port HDMI 1

PAPXPX  
PA is the command prefix, and the "X" of PX can be any number from 1 to 4; P1 represents HDMI 1 source content for output, P2 represents HDMI 2 source content for output.

E.g. PAP3P1 represents:  
Output port HDMI 1 outputs content from input port HDMI 3.  
Output port HDMI 2 outputs content from input port HDMI 1.

<b>Return value</b>	PAXXR is the command to read the status of all interfaces; after sending the command, OKPXPX is displayed, where X is 1 to 4; if the command sent is incorrect, ERR appears.
<b>Reset</b>	Device restart
<b>Recover</b>	Restore device factory setting
<b>BaudXX</b>	Set baud rate value: 9600 (default), 19200

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## FAQ

Q: No video or audio signal output on the displays?

A:

- 1) Make sure the matrix switch is powered on and all the cables are connected properly.
- 2) Please check and make sure the input channel of displays are correct.

Q: Picture quality is not fluent and stable?

A:

- 1) Please check and make sure all HDMI cables are connected firmly.
- 2) Try to connect the source device to display device directly, or change to another source device for a try to see the picture quality if is improved.
- 3) Please use high quality HDMI cable for 4K signal.

## Specification

Items	Description
<b>HDMI version</b>	HDMI 2.0 (HDR, YUV444) Compatible with HDCP 2.2, HDCP 1.4
<b>HDMI interface</b>	4 HDMI input, 2 HDMI output
<b>Transmission rate</b>	18Gbps
<b>Resolutions</b>	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840×2160@24/25/30/50/60Hz, 4096×2160@24/25/30/50/60Hz

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<b>Audio format</b>	LPCM7.1/DTS-HD/DTS-Audio/Dolby Digital plus/ Dolby TrueHD 7.1/Dolby Digital 7.1CH/Dolby Atmos
<b>RS-232</b>	3 Pin (GND/Rx/Tx), Baud rate 9600
<b>Voltage</b>	DC 5V/1A
<b>Power consumption</b>	< 4W
<b>Working temperature</b>	-20°C~60°C
<b>Storage temperature</b>	-30°C~70°C
<b>Humidity</b>	0~90%RH (No Condensation)
<b>Housing</b>	Iron
<b>Color</b>	Black
<b>Weight</b>	375g
<b>Dimensions</b>	250.0(L) x 80.0(W) x 21.0(H) mm
<b>Protection</b>	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2 Lightning protection, Surge protection

## Disclaimer

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