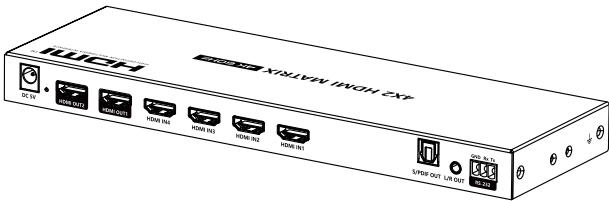


User Manual

4x2 HDMI Matrix Switch



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• 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

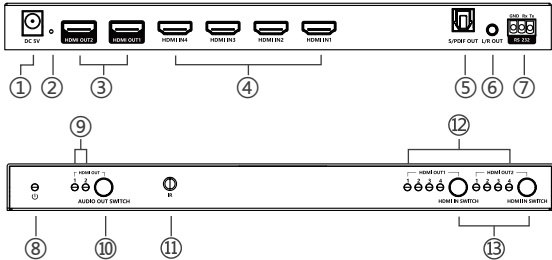


Terminal block
x1

• Installation Requirements

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

• Panel Description

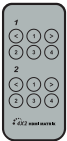


| | | |
|---|----------------------------|---|
| ① | Power input | Connect with DC 5V/1A power adapter |
| ② | Reset pinhole | Press the pinhole reset button with a straightened paper clip |
| ③ | HDMI output 1,2 | Connect with HDMI display devices |
| ④ | HDMI input 1,2,3,4 | Connect with HDMI source 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 |

| | | |
|---|------------------------------|---|
| ⑫ | HDMI input indicator 1,2,3,4 | Corresponding to HDMI inputs 1,2,3,4 |
| ⑬ | HDMI output switch 1,2 | Choose an output from HDMI inputs 1,2,3,4 |

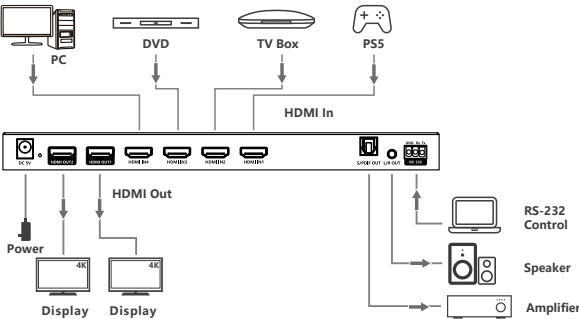
Remote Control

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.

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 | <div><div>PAPXPX</div><div>Prefix12</div><div>Content for output port HDMI 2</div><div>Content for output port HDMI 1</div></div> <p>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.</p> <p>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.</p> | | | | |
| Return value | 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. | | | | |
| Reset | Device restart | | | | |
| Recover | Restore device factory setting | | | | |
| BaudXX | Set baud rate value: 9600 (default), 19200 | | | | |

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 |
|-------------------|--|
| HDMI version | HDMI 2.0 (HDR, YUV444) |
| | 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, 1080p@50/60Hz, 3840×2160@24/25/30/50/60Hz, 4096×2160@24/25/30/50/60Hz |

| | |
|---------------------|--|
| 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) Implementation of the standard: IEC61000-4-2 |
| | Lightning protection, Surge protection |

Disclaimer

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