

4x2 HDMI 2.0 Matrix Switcher



User Manual

VER 1.2

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

| | |
|--|---|
| 1. Introduction..... | 1 |
| 2. Features..... | 1 |
| 3. Package Contents..... | 1 |
| 4. Specifications..... | 2 |
| 5. Operation Controls and Functions..... | 3 |
| 5.1. Front Panel..... | 3 |
| 5.2. Rear Panel..... | 3 |
| 6. Remote Control..... | 5 |
| 7. FAQ..... | 5 |
| 8. Application Example..... | 6 |

1. Introduction

The 4x2 HDMI 2.0 Matrix Switcher simultaneously routes four HDMI sources to two HDMI displays. It supports up to 4K2K@60Hz YCbCr 4:4:4 and HDCP 2.2. Output A supports audio de-embedding to optical and analog L/R outputs. Output B can support 4K to 1080P downscale function automatically if source is 4K but TV only supports up to 1080P. 16 different EDID configurations can meet most of use cases. Flexible control through on-panel buttons, IR control.

2. Features

- ☆ HDMI2.0b, HDCP2.2 / HDCP1.4 compliant.
- ☆ Up to 4K2K@60Hz (4:4:4) on all HDMI ports.
- ☆ Supports pass-through audio up to 7.1 channels of High Definition audio (LPCM, Dolby TrueHD, and DTS-HD Master Audio).
- ☆ Out A audio de-embedding to optical and analog L/R out.
- ☆ Out B supports 4K to 1080P downscale automatically.
- ☆ HDR, Smart EDID management.
- ☆ Control is via on-panel Button and IR remote.

3. Package Contents

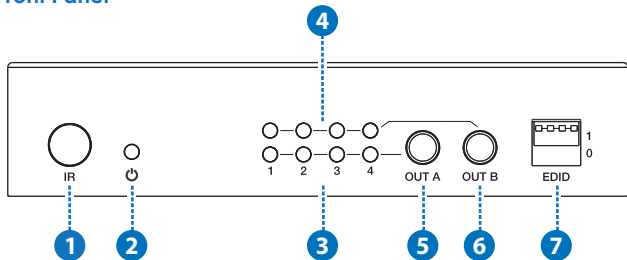
- ① 1× 4×2 HDMI Matrix Switcher
- ② 1× 5V/1A Power Adaptor
- ③ 1× IR Remote Control
- ④ 2× Mounting ears
- ⑤ 1× User Manual

4. Specifications

| Technical | |
|-----------------------|--|
| HDMI Compliance | HDMI 2.0b |
| HDCP Compliance | HDCP 2.2 and HDCP 1.4 |
| Video Resolution | 4K2K@50/60Hz(YUV4:4:4),4K2K@30Hz.All HDMI 3D TV format |
| Color Space | RGB, YCbCr4:4:4,YCbCr4:2:2 |
| Color Depth | 8-bit, 10-bit, 12-bit |
| HDMI Audio Formats | PCM2.0/5.1/7.1CH, Dolby 5.1, DTS5.1, Dolby-TrueHD, DTS-HD |
| Optical Audio Formats | LPCM 2CH, LPCM 5.1, Dolby Digital 2/5.1CH, DTS 2/5.1CH |
| L/R Audio Formats | Analog stereo 2CH |
| ESD Protection | Human-body Model: $\pm 8\text{kV}$ (Air-gap discharge), $\pm 4\text{kV}$ (Contact discharge) |
| Connections | |
| Input Ports | 4×HDMI Type A(19-pin female) 1×IR Receiver Window |
| Output Ports | 2×HDMI Type A(19-pin female) 1×L/R Audio out (3.5mm Stereo Mini-jack) 1×Optical out (S/PDIF) |
| Mechanical | |
| Housing | Metal Enclosure |
| Color | Black |
| Dimensions | 130mm(W)×94.2mm(D)×28mm(H) |
| Weight | 363g |
| Power Supply | Input: AC100~240V 50/60Hz Output: DC5V/1A(US/EU standards , CE/FCC/UL certified) |
| Power Consumption | 3.2W (max) |
| Operating Temperature | 0°C ~ 40°C / 32°F ~ 104°F |
| Storage Temperature | -20°C ~ 60°C / -4°F ~ 140°F |
| Relative Humidity | 20~90% RH (non-condensing) |

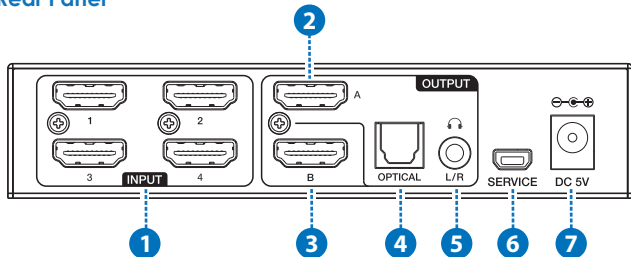
5. Operation Controls and Functions

5.1 Front Panel



| Number | Name | Function description |
|--------|--------------|--|
| 1 | IR | IR receiver window. |
| 2 | POWER LED | Power LED indicator. |
| 3 | OUT A LED | Select the input channel indicator light for the output A. |
| 4 | OUT B LED | Select the input channel indicator light for the output B. |
| 5 | OUT A button | Select the input channel button for the output A. |
| 6 | OUT B button | Select the input channel button for the output B. |
| 7 | EDID | Select HDMI output signal format via EDID Selector. |

5.2 Rear Panel

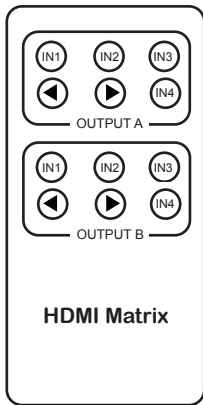


| Number | Name | Function description |
|--------|----------------|---|
| 1 | INPUT ports | Connect to HDMI sources device such as DVD player. |
| 2 | OUTPUT A | Connect to HDMI display device such as TV or monitor. |
| 3 | OUTPUT B | Connect to HDMI display device such as TV or monitor. |
| 4 | OPTICAL output | Extracts HDMI Output A audio to optical out. |
| 5 | L/R output | Extracts HDMI Output A audio to L/R analog audio out. |
| 6 | SERVICE | System software update. |
| 7 | DC 5V | DC 5V power supply interface. |

Notice: The following is the EDID schema table

| Number | EDID mode | EDID description |
|--------|-----------|----------------------------|
| 1 | 0000 | AUTO |
| 2 | 0001 | Copy HDMI OUT A |
| 3 | 0010 | Copy HDMI OUT B |
| 4 | 0011 | 720p, 2CH AUDIO |
| 5 | 0100 | 1080p, 2CH AUDIO |
| 6 | 0101 | 1080p, DOLBY/DTS 5.1 |
| 7 | 0110 | 1080p, HD AUDIO 7.1 |
| 8 | 0111 | 4K30, 2CH AUDIO |
| 9 | 1000 | 4K30, DOLBY/DTS 5.1 |
| 10 | 1001 | 4K30, HD AUDIO 7.1 |
| 11 | 1010 | 4K60(4:2:0), 2CH AUDIO |
| 12 | 1011 | 4K60(4:2:0), DOLBY/DTS 5.1 |
| 13 | 1100 | 4K60(4:2:0), HD AUDIO 7.1 |
| 14 | 1101 | 4K60, 2CH AUDIO |
| 15 | 1110 | 4K60, DOLBY/DTS 5.1 |
| 16 | 1111 | 4K60, HD AUDIO 7.1 |

6. Remote Control



OUTPUT A:

IN1 / IN2 / IN3 / IN4: Select the input channel for the output A.

◀ ▶ : Select the last or next input channel for the output A.

OUTPUT B:

IN1 / IN2 / IN3 / IN4: Select the input channel for the output B.

◀ ▶ : Select the last or next input channel for the output B.

7. FAQ

1. **Q:** Does this product require an HDMI line length for the connection interface?

A: According to HDMI line length test, HDMI input / output with 1080P60Hz 12bit is the longest line length up to 49.2ft / 15m, and HDMI input / output with 4K60Hz YCbCr 4:4:4 is the longest line length up to 9.8ft / 3m. The transmission distance up to 7M when the IR remote control sends signal to the IR receiver window, and the angle is plus or minus 45 degrees.

The use of "Premium High Speed HDMI" cable is highly recommended.

8. Application Example

