18Gbps 4x4 HDMI Matrix



User Manual

VER 1.0

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 electr-ical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

The 4x4 HDMI Matrix supports the transmission of video signal (up to 4K2K@60Hz YCbCr 4:4:4) with multichannel digital audio from up to four high definition sources to up to four HDMI outputs. Each output supports downscaler functionality. It can display the same or different screen on four displays (the user can choose the display screen for any signal source). Also, the product has distribution mode and switching mode.

2. Features

- ☆ HDCP 2.2 compliant
- ☆ Up to 4K2K@60Hz with 24bit RGB/YCbCr 4:4:4
- ☆ HDR, HDR10, HDR10+, Dolby Vision passthrough
- ☆ Support LPCM 7.1CH, Dolby TrueHD, and DTS-HD Master Audio
- ☆ Support 4K -> 1080P Downscaler
- ☆ Support advanced EDID management
- ☆ Flexible control via panel or IR remote control

3. Package Contents

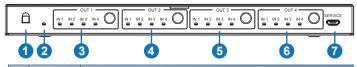
- ① 1× 4×4 HDMI Matrix
- 2 1× 12V/2.5A Power Adapter
- ③ 1× Matrix IR Remote Control
- 4 1× User Manual
- ⑤ 2× Mounting Ears

4. Specifications

| Technical | Technical | | | | |
|---|---|--|--|--|--|
| HDCP Compliant | HDCP 2.2 / 1.x | | | | |
| Video Bandwidth | 594MHz / 18Gbps | | | | |
| Video Resolution | 480i ~ 1080p 50/60Hz, 4Kx2K@24/30Hz, 4K2K@60Hz | | | | |
| Color Space | RGB, YCbCr 4:4:4 / 4:2:2. YUV 4:2:0 | | | | |
| Color Depth | 8-bit, 10-bit, 12-bit (1080p@60Hz) 8-bit (4K2K@60Hz YUV4:4:4) 8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2 / 4:2:0) | | | | |
| HDMI Audio Formats | LPCM 7.1CH, Dolby TrueHD, and DTS-HD Master Audio | | | | |
| ESD Protection | Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge) | | | | |
| Connection | | | | | |
| Inputs | 4×HDMI Type A [19-pin female] 1×IR Receiver Window 1×Micro USB | | | | |
| Outputs | 4×HDMI Type A [19-pin female] | | | | |
| Mechanical | | | | | |
| Housing | Metal Enclosure | | | | |
| Color | Black | | | | |
| Dimensions | 220mm(W)×205mm(D)×19mm(H) | | | | |
| Weight | 535g | | | | |
| Power Supply | Input: AC100~240V 50/60Hz Output: DC 12V/2.5A(US/EU standard, CE/FCC/UL certified) | | | | |
| Power Consumption | 11.04W | | | | |
| 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) | | | | |

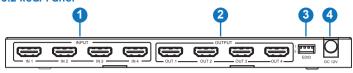
5. Operation Controls and Functions

5.1 Front Panel



| No. | Name | Function Description |
|-----|-----------|---|
| 1 | IR | IR receive window |
| 2 | Power LED | The red LED illuminates when the device is working or on standby. |
| 3 | OUT 1 | Button: Short press to switch the input selected by OUT 1; Long press for 3s to turn on/off the downscaler corresponding to OUT 1. LED: When switching to the corresponding input source, the correspongding input LED illuminates green; Otherwise, the LED will not light up. |
| 4 | OUT 2 | Button: Short press to switch the input selected by OUT 2; Long press for 3s to turn on/off the downscaler corresponding to OUT 2. LED: When switching to the corresponding input source, the corresponding input LED illuminates green; Otherwise, the LED will not light up. |
| 5 | OUT 3 | Button: Short press to switch the input selected by OUT 3; Long press for 3s to turn on/off the downscaler corresponding to OUT 3. LED: When switching to the corresponding input source, the correspongding input LED illuminates green; Otherwise, the LED will not light up. |
| 6 | OUT 4 | Button: Short press to switch the input selected by OUT 4; Long press for 3s to turn on/off the downscaler corresponding to OUT 4. LED: When switching to the corresponding input source, the correspongding input LED illuminates green; Otherwise, the LED will not light up. |
| 7 | SERVICE | Connect to PC via Micro to USB cable for firemware upgrade. |

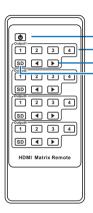
5.2 Rear Panel



| No. | Name | Function Description |
|-----|--------|--|
| 1 | INPUT | Connect to HDMI source device such as DVD player or PC. |
| 2 | OUTPUT | Connect to HDMI display device such as TV or Projector. |
| 3 | EDID | EDID SWITCH control. 0000 1080P, Stereo Audio 2.0 0001 1080P, Dolby/DTS 5.1 0010 1080P, HD Audio 7.1 0011 4K2K30_444, Stereo Audio 2.0 0100 4K2K30_444, Dolby/DTS 5.1 0101 4K2K30_444, HD Audio 7.1 0110 4K2K60_444, HD Audio 7.1 0111 4K2K60_444, Dolby/DTS 5.1 SDR 1001 4K2K60_444, Dolby/DTS 5.1 SDR 1001 4K2K60_444, HD Audio 7.1 SDR 1001 4K2K60_444, Stereo Audio 2.0 HDR 1010 4K2K60_444, Dolby/DTS 5.1 HDR 1010 4K2K60_444, DAUDIO 7.1 HDR 1011 4K2K60_444, DAUDIO 7.1 HDR 1010 COPY OUTPUT 1 1101 COPY OUTPUT 2 1110 COPY OUTPUT 3 1111 COPY OUTPUT 4 |
| 4 | DC 12V | DC 12V power supply interface. |

6. Remote Control

2 3



- ① Power button: Press this button to power on the device or put it into standby mode.
- ② 1/2/3/4: Press buttons 1~4 to select the required source for Output1.
- ③ ◀ ▶: Select the last or next input channel among 1/2/3/4, to select the required source for Output1.
- 4 SD: Press this button to turn on / off the downscaler function.

The corresponding button function of Output2/ Output3/Output4 is the same with that of Output1.

7. Application Example

