8K HDMI 2x2 Matrix Switcher

User Manual

VER 1.1

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, lighting 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

This 8K HDMI 2x2 Matrix Switcher can not only switch any of the two HDMI input signals, but also distribute it to two displays simultaneously. It supports video resolution up to 8K@60Hz 4:2:0. It supports advanced EDID management and audio de-embedding function (output through the optical and analog port). As able to be used either as a splitter or a switcher, this multi-functional product can be widely applied in scenarios of demonstration, video conference, multimedia teaching and other occasions requiring for big-screen demonstration.

2. Features

☆ HDMI 2.1 and HDCP 2.3 compliant
☆ Support 40Gbps video bandwidth
☆ Support video resolution up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit, 4K@120Hz 4:4:4 10bit
☆ VRR, FVA, ALLM supported
☆ Support HDR, HDR10, HDR10+, Dolby Vision, HLG pass through
☆ Support HDMI audio formats: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
☆ Built-in Equalizer, Retiming and Driver
☆ Advanced EDID management
☆ Support audio de-embedding function (output through the optical and analog port)
☆ Support IR remote control and front panel button switching
☆ Compact design for easy and flexible installation

3. Package Contents

① 1 × 8K HDMI 2x2 Matrix Switcher
② 1 × IR Remote
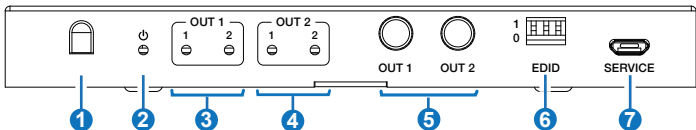③ 1 × 5V/2A Multinational Power Supply
④ 1 × User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	40Gbps
Video Resolution	Up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit, 4K@120Hz 4:4:4 10bit
Color Depth	8/10/12-bit
Color Space	RGB, YCbCr 4:4:4 / 4:2:2. YUV 4:2:0
Audio Formats	**HDMI input/output:** LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD **Audio de-embedding output:** Optical: LPCM 2/5.1 CH, Dolby Digital 2/5.1 CH, DTS 2/5.1 CH Analog: PCM 2.0
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	2 × HDMI IN [Type A, 19-pin female]
Output	2 × HDMI OUT [Type A, 19-pin female] 1 × OPTICAL [S/PDIF] 1 × L/R [3.5mm Stereo Mini-jack]
Control	1 × SERVICE [Micro USB, Update port]
Mechanical	
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	145mm (W) × 68mm (D) × 17mm (H)
Weight	268 g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 5V/2A (US/EU standards, CE/FCC/UL certified)
Power Consumption	6.2 W (Max)
Operation 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)

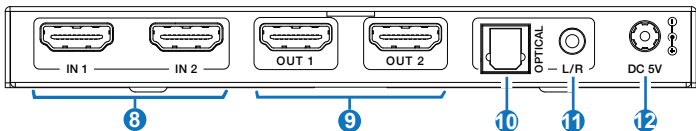| Recommended HDMI Cable				
Video Resolution	8K	4K60	4K24	1080P
HDMI Cable Type	Ultra HDMI 2.1	HDMI 2.0	HDMI 1.4	HDMI 1.4
HDMI Cable Length (HDMI IN / OUT)	3m/10ft	8m/26ft	12m/39ft	15m/49ft
The use of "Premium High Speed HDMI" cable is highly recommended.				

5. Operation Controls and Functions

Front Panel

Rear Panel

No.	Name	Function Description
1	IR Window	IR input signal receiving window.
2	POWER LED	The power LED lights in green when the device is working, and red when the device is in standby.
3	OUT 1 LED (1~2)	When the IN 1/2 port is selected as the signal source input channel for OUT 1 port, the corresponding green LED 1/2 will be on.
4	OUT 2 LED (1~2)	When the IN 1/2 port is selected as the signal source input channel for OUT 2 port, the corresponding green LED 1/2 will be on.
5	OUT 1~2 button	Used to select signal source for OUT 1/2 port. Pressing the button OUT 1/2 will allow the device to switch any of the two HDMI input signals and distribute it to the corresponding output port.

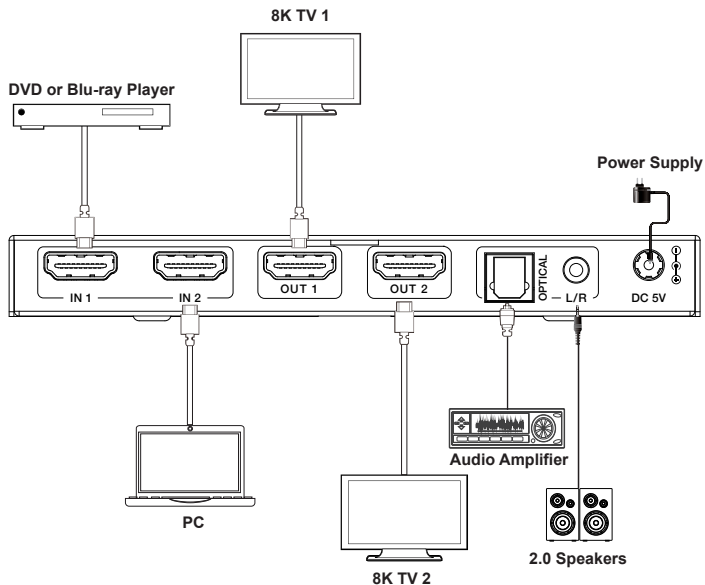| No.	Name	Function Description
6	EDID DIP switch	Use the DIP switch to set EDID. 111- Copy OUT1 port sink EDID (as factory default) 110- HDMI 1080p@60Hz, Audio 2ch PCM 101- HDMI 4K@60Hz 4:4:4, Audio 2ch PCM, HDR 100- HDMI 4K@60Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY, HDR 011- HDMI 4K@60Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD, HDR 010- HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 2ch PCM, HDR 001- HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY, HDR 000- HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD, HDR
7	SERVICE	Firmware update and debug port.
8	IN (1~2) port	HDMI signal input port, connecting to HDMI source device such as DVD or PS5 with an HDMI cable.
9	OUT (1~2) port	HDMI signal output port, connecting to HDMI display device such as TV or Monitor with an HDMI cable.
10	OPTICAL	Optical fiber audio output port, used for audio de-embedding output which follows the OUT 1 output.
11	L/R	Analog audio output port, used for audio de-embedding output which follows the OUT 1 output.
12	DC 5V	DC 5V/2A Power input port.

6. IR Remote

○ : Power on the product or set it to standby mode.

1/2 : Press 1/2 button to select HDMI signal source to the corresponding OUT 1/2 port.

○ : Press this button to cyclically switch HDMI signal source to the corresponding OUT 1/2 port.

7. Application Example

8K TV 1

DVD or Blu-ray Player

Power Supply

IN 1   IN 2   OUT 1   OUT 2   OPTICAL   — L/R —   DC 5V

PC

Audio Amplifier

2.0 Speakers

8K TV 2

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