



8K HDMI 2x1 Switcher

VLSW-21H21



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 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	3
2. Features	3
3. Package Contents	3
4. Specifications	4
5. Operation Controls and Functions	5
6. IR Remote	7
7. Application Diagram	8

1. Introduction

This 8K HDMI 2x1 Switcher can switch any of the two HDMI source signals to one HDMI display. 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). 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

3. Package Contents

- ① 1 × 8K HDMI 2x1 Switcher
- ② 1 × IR Remote
- ③ 1 × 5V/2A Multinational Power Supply
- ④ 1 × User Manual

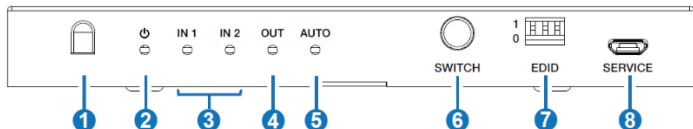
4. Specifications

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	8/10/12bit
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	1 × HDMI OUT [Type A, 19-pin female] 1 × OPTICAL [S/PDIF] 1 × L/R [3.5mm Stereo Mini-jack]
Control	1 × SERVICE [USB Type C, Update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	145mm (W) × 68mm (D) × 17mm (H)
Weight	268g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 5V/2A (US/EU standards, CE/FCC/UL certified)
Power Consumption	5.25W (Max)
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F

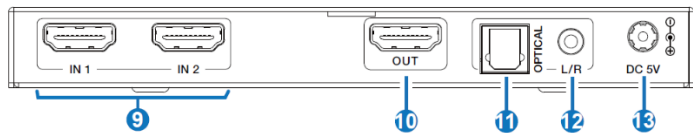
Relative Humidity	20~90% RH (non-condensing)			
Recommended HDMI Cable				
Video Resolution	8K	4K60	4K24	1080P
HDMI Cable Type	Ultra HDMI 2.1	HDMI 2.0	HDMI 1.4	HDMI 1.4
HDMI Cable Length (HDMI IN / OUT)	3m/10ft	8m/26ft	12m/39ft	15m/49ft
The use of "Premium High Speed HDMI" cable is highly recommended.				

5. Operation Controls and Functions

Front Panel



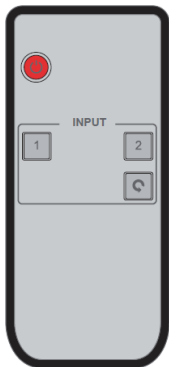
Rear Panel




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	IN LED (1~2)	When the HDMI IN 1/2 port is selected as the signal source input channel, the corresponding green LED will be on.
4	OUT LED	When the HDMI OUT port connects a display device and outputs signal, the green LED will be on.


5	AUTO LED	When the auto switching function (switch to the corresponding signal input channel when the signal source is connected.) is turned on, the green AUTO LED will be on.
6	SWITCH button	Used to select signal source for OUT port. Short pressing this button will allow the device to switch any of the two HDMI input signals to the OUT port. Long pressing this button for 3 seconds will turn on/off the auto switching function.
7	EDID DIP switch	Use the DIP switch to set EDID. 111- Copy OUT 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
8	SERVICE	Firmware update and debug port.
9	IN port (1~2)	HDMI signal input port, connecting to HDMI source device such as DVD or PS5 with an HDMI cable.
10	OUT port	HDMI signal output port, connecting to HDMI display device such as TV or Monitor with an HDMI cable.
11	OPTICAL	Optical fiber audio output port.
12	L/R	Analog audio output port.
13	DC 5V	DC 5V/2A Power input port.

6. IR Remote

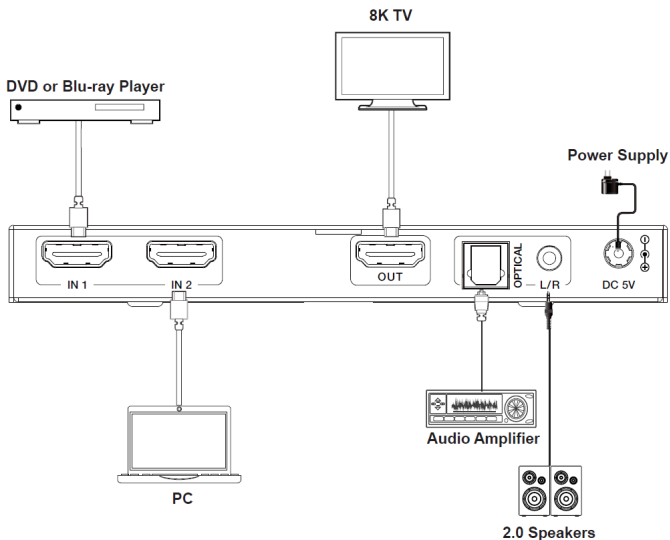


 : Power on the product or set it to standby mode.

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

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

7. Application Diagram



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