



48Gbps 1x2 HDMI Splitter

VLSP-12H21S



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.

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1. Introduction

This 48Gbps 1x2 HDMI Splitter is an advanced solution for splitting single HDMI signal to 2 HDMI outputs synchronously, with video resolution up to 8K@60 4:2:0 12bit. It supports data rates up to 48Gbps to comply with HDMI 2.1 and HDCP 2.3 requirements. It includes several features for ease of integration, including EDID management, cable equalization.

This multi-functional product can work well with xbox or PS5 to achieve 4K@120Hz on your TVs or relative monitors.

2. Features

- ☆ HDMI 2.1 and HDCP 2.3 compliant
- ☆ Support 48Gbps FRL and 18Gbps TMDS video bandwidth
- ☆ Support video resolution up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
- ☆ HDMI 2.1 protocols: VRR, ALLM, QMS, QFT, SBTM are supported
- ☆ Support HDR, HDR 10, HDR 10+, Dolby Vision, HLG pass-through
- ☆ LPCM 7.1CH, Dolby TrueHD, Atmos and DTS-HD Master, DTS:X Audio pass-through
- ☆ 8K to 4K or 8K/4K to 1080P auto downscaling on all outputs
- ☆ HDR to SDR auto converting on all outputs
- ☆ Advanced EDID management
- ☆ Compact design for easy and flexible installation

3. Package Contents

- ① 1 × 48Gbps 1x2 HDMI Splitter
- ② 1 × 5V/2A Multinational Power Supply
- ③ 1 × User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	48Gbps
Video Resolution	Up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
Color Depth	8/10/12bit
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	HDMI input/output: LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	1 × HDMI IN [Type A, 19-pin female]
Output	2 × HDMI OUT [Type A, 19-pin female]
Control	1 × SERVICE [USB Type C, Update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	95mm (W) × 68mm (D) × 18mm (H)
Weight	177g
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 5V/2A (US/EU standards, CE/FCC/UL certified)
Power Consumption	4.3W (Max)
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F

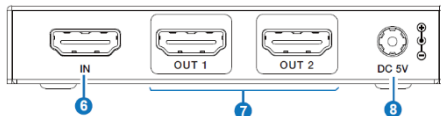
Relative Humidity	20~90% RH (non-condensing)		
Recommended HDMI Cable			
Video Resolution	8K60	4K60	1080P
HDMI Cable Type	Ultra HDMI 2.1 cable	HDMI 2.0 cable	HDMI cable
HDMI Cable Length (HDMI IN / OUT)	2m/6.6ft ~ 3m/10ft	8m/26ft	15m/49ft
The use of "Premium High Speed HDMI" cable is highly recommended.			

5. Operation Controls and Functions

Front Panel



Rear Panel



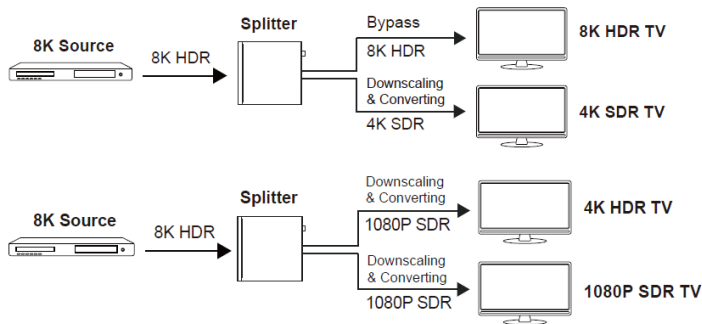
No.	Name	Function Description
1	Power LED	When the device is powered on, the red LED will be on.
2	IN LED	When the HDMI IN port connects an active source device, the green LED will be on.
3	OUT LED (1~2)	When the HDMI OUT 1/2 port connects to a display device and outputs signal, the corresponding green LED will be on.
4	EDID DIP switch	Use the DIP switch to set EDID. [DIP]=111: Copy OUT 1 port sink EDID (as factory default) [DIP]=110: 4K60 (4:4:4), 2.0CH [DIP]=101: FRL12G_8K_HDR, 2.0CH

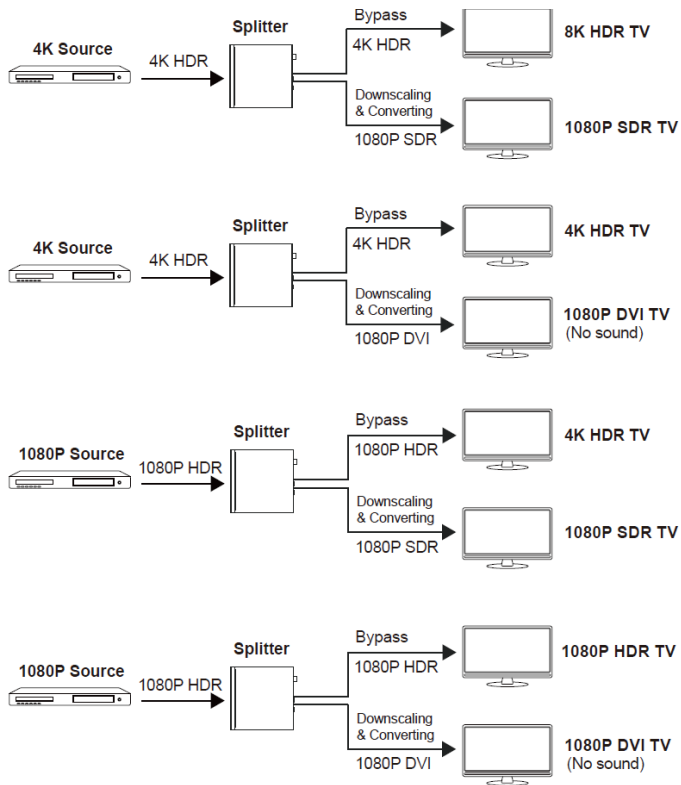
		[DIP]=100: FRL12G_8K_HDR, 5.1CH [DIP]=011: FRL12G_8K_HDR, 7.1CH [DIP]=010: FRL10G_8K_HDR, 2.0CH [DIP]=001: FRL10G_8K_HDR, 5.1CH [DIP]=000: FRL10G_8K_HDR, 7.1CH
5	SERVICE	Firmware update port.
6	IN port	HDMI signal input port, connecting to HDMI source device such as DVD or PS5 with an HDMI cable.
7	OUT port (1~2)	HDMI signal output port, connecting to HDMI display device such as TV or Monitor with an HDMI cable.
8	DC 5V	DC 5V/2A power input port.

6. Auto Downscaling & Auto Converting

This 8K HDMI splitter serial product supports independent auto downscaling and auto converting on all outputs. Before downscaling it will compare all the EDID of the connected display devices and select the minimum resolution to downscale and output.

For example:

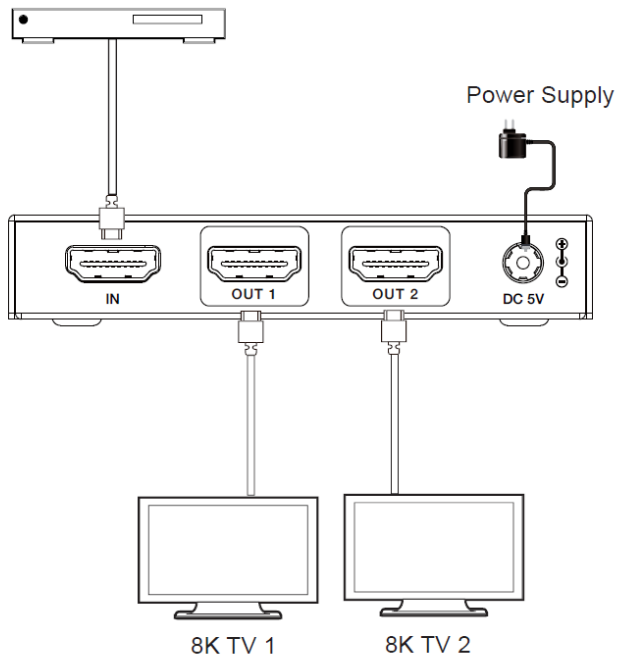




Note: If the source resolution is downscaled and converted to **1080P DVI** according to the EDID of display devices, it will be output without sound on TV.

7. Application Diagram

DVD or Blu-ray Player



HDMI[™]
HIGH DEFINITION MULTIMEDIA INTERFACE

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