1 x 4 4K HDMI Splitter with Scaler

VLSP-14H20D

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, 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

The VLSP-14H20D is a 1 x 4 HDMI splitter with scaler, reliably distributes one HDMI input signal to four outputs at resolutions up to 4K@60Hz 4:4:4 chroma subsampling. It supports HDCP 2.2 and HDMI 2.0b specifications. With the built-in scaler, when connected to different displays, the corresponding HDMI output is capable of scaling down automatically (down to 1080P) to feed an optimal output signal to its attached display.

2. Features

☆ Distributes one HDMI input signal to four HDMI displays.
☆ Supports HDMI 2.0b Specifications, including:
　　Data rates up to 18.0 Gbps
　　HDR and 3D
　　HD lossless audio formats
☆ HDCP 2.2 compliant.
☆ Each HDMI output supports scaling down to 1080P individually (fps will not change during scaling down from 4K to 1080P).
☆ Automatic input cable equalization for signal regeneration compensation.

3. Package Contents

① 1 x Splitter VLSP-14H20D
② 1 x Power Adapter (DC 5V 1A)
③ 2 x Mounting Brackets

4. Specifications

Video	
Input/Output Signal Type	HDMI with 4K@60Hz 4:4:4, HDCP 2.2, HDR, 3D, Scaler
Input/Output Resolution Supported	Up to 4096x2160@60Hz, include 4K@60Hz /4K@30Hz / 1080P /1080i /720P
Deep color	4K: 8/10/12 bit 1080P: up to 16 bit
Maximum Data Rate	18 Gbps
Maximum Pixel Clock	600MHz
Audio	
Audio Format Supported	Fully supports audio formats in HDMI 2.0 specification, including PCM, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X
Mechanical	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Supply	DC 5V 1A
Power Consumption (Maximum)	4K: 1.8W 1080P: 1.1W
Device Dimension (W x H x D)	140mm x 20mm x 65.2mm/ 5.5'' x 0.8'' x 2.6''
Product Weight	0.24kg/0.53lb

Transmission Distance:

Cable	Range	Supported Video
HDMI	Input/Output: 15m/50ft	1080P@60Hz
	Input: 10m/33ft Output: 15m/50ft	4K@30Hz
	Input/Output: 5m/16ft	4K@60Hz

5. Operation Controls and Functions
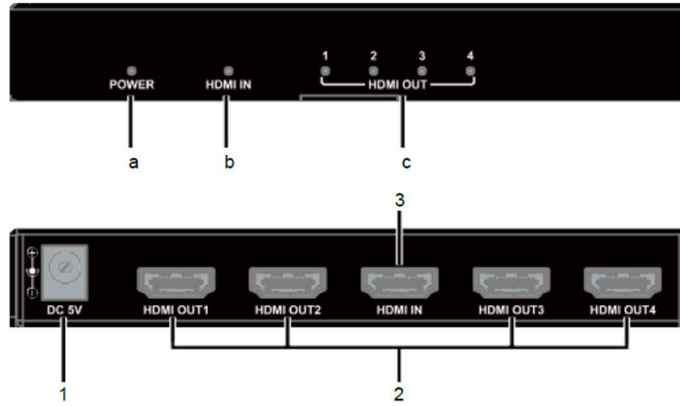
No.	Name	Function Description
A	Power LED	**On/Off**: The device is powered on/off.
B	HDMI IN LED	**On:** HDMI signal is detected on the HDMI input. **Off:** No HDMI signal is detected on the HDMI input.
C	HDMI OUT LED (1-4)	**On:** An HDMI display is connected to the HDMI output. **Off:** No HDMI display is connected to the HDMI output.
1	DC 5V	Connect to the power adapter.
2	HDMI OUT (1-4)	Connect to the HDMI display using an HDMI cable.
3	HDMI IN	Connect to the HDMI source using an HDMI cable.

6. Troubleshooting

1. No Power

    -   Ensure the power is on.
    -   Ensure you use the power adapter provided in the package.

2. No Picture or Video Flash

    -   Ensure all devices are on, and all cables are qualified and connected properly. Ensure all the cables' length are within the maximum distance (refer to Specification table).
    -   Ensure all the LED indicators are normal.
    -   When connecting source to display directly, ensure them can work properly.
    -   Ensure the input resolution is supported by the device.
    -   Ensure the input resolution is within 4K@30Hz when Dolby vision signal is input.

3. HDR Video Not Supported
    Ensure the source and all displays support HDR. If any display doesn't support HDR, all outputs will not support HDR video.

4. Surround Audio Not Supported

    Ensure the source and all displays support surround. If one display supports stereo only, all displays will output stereo audio.

7. Application Diagram