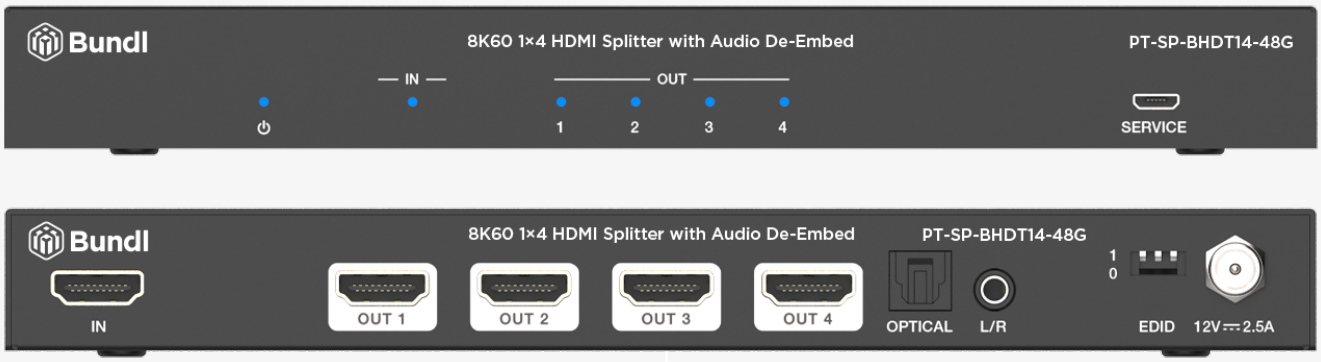


User Manual

8K60 1×4 HDMI Splitter with Audio De-Embed

PT-SP-BHDT14-48G

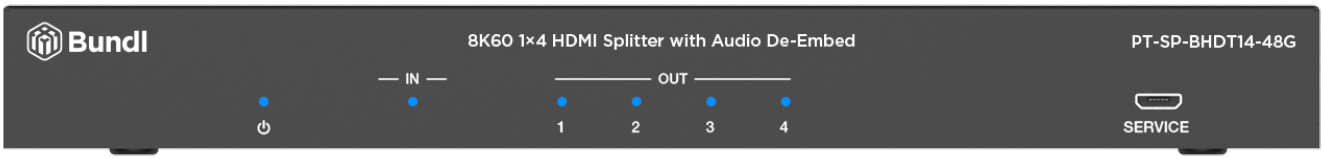
Website
bundltech.com

Product Information
info@bundltech.com

Technical Support
support@bundltech.com

Contents

Package Contents



Q.1 8K60 1×4 Splitter

Q.1 100-240 50/60 Hz VAC to 5VDC Power Adapter

Introduction

The Bundl™ 8K HDMI Splitter is designed to distribute one HDMI 8K60 source to up to four 8K60 outputs with exceptional precision. Supporting up to 8K60 resolution with HDR10+ and Dolby Vision, it delivers vibrant color, sharp contrast, and smooth motion for every frame.

Perfect for home theaters, gaming setups, or digital signage, this 1x4 HDMI distribution amplifier ensures consistent, lag-free performance across all screens. The 8K HDMI Splitter also features analog and optical audio de-embedding, letting you easily connect external sound systems for an immersive audio experience.

With advanced EDID management, installation is quick and compatibility is seamless — no guesswork required. Compact, reliable, and plug-and-play ready, it's the ultimate choice for anyone looking to expand their 8K entertainment system with confidence and quality.

Standards & Compliance

Features

- Full 48Gbps bandwidth for HDMI 2.1 8K60 signals
- Resolutions up to 8K60 4:2:0 12 bit and 8K30 4:4:4 12 bit
- Latency reduction technologies for improved response time
    - Variable Refresh Rate (VRR)
    - Auto Low Latency Mode (ALLM)
    - Quick Frame Transport (QFT)
    - Quick Media Switching (QMS)
    - Source Based Tone Mapping (SBTM)
- HDR, HDR10, HDR10+, Dolby Vision, and HLG pass through
- LPCM 7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio
- Individual downscaling on each output port
- Advanced EDID management

Specifications

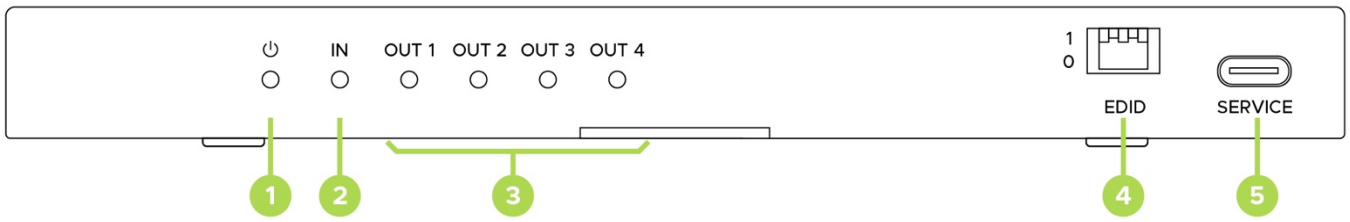
Standards & Compliance	
Signal Standards	HDMI 2.1
HDCP	HDCP 2.3, HDCP 1.4
Regulatory Certifications	CE, FCC, RoHS, UL
AV & Data Connections	
HDMI Inputs	1 × HDMI IN (Type A, 19-pin female)
HDMI Outputs	4 × HDMI OUT (Type A, 19-pin female)
ARC	ARC HDMI
Audio Outputs	L/R Analog TRS 3.5mm jack, Toslink
Performance	
Max Video Resolution	Up to 8K60 4:2:0, 8K30 4:4:4, 4K120 4:4:4
Video Bandwidth	48Gbps FRL (Fixed Rate Link)
Color Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	12 bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
HDMI Audio Format	LPCM, Dolby Digital Plus / EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96 / 24, DTS High Res, DTS-HD Master Audio, DSD
Optical Audio Format	LPCM / Dolby / DTS 5.1CH
Analog Audio Format	LPCM 2CH
Scaling	Auto-Downscaling
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Power	
Power Input	AC 100-240V 50/60Hz
Power Supply	DC 5V/2A
Power Consumption	6W (max)
Environment	
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90% RH (non-condensing)
Enclosure	
Product Dimensions (W × D × H)	6.9 in x 2.7 in x 0.71 in (176mm × 68mm × 18mm)
Weight	0.65 lbs (295g)
Warranty	
Parts	1 year
Labor	1 year

Note: Specifications are subject to change without notice.

Connections and Diagnostics

Front Panel



The front panel of the PT-SP-BHDT14-48G provides:

Six Diagnostic LEDs

1. **Power**
   - LED Off: no power detected
   - LED On - Red: power is present

2. **Input**

   - LED Off: no valid input signal
   - LED On – Green: valid input signal present

3. **Outputs 1-4**

   - LED Off: no valid display detected
   - LED On – Green: valid display present

4. **EDID Selector**

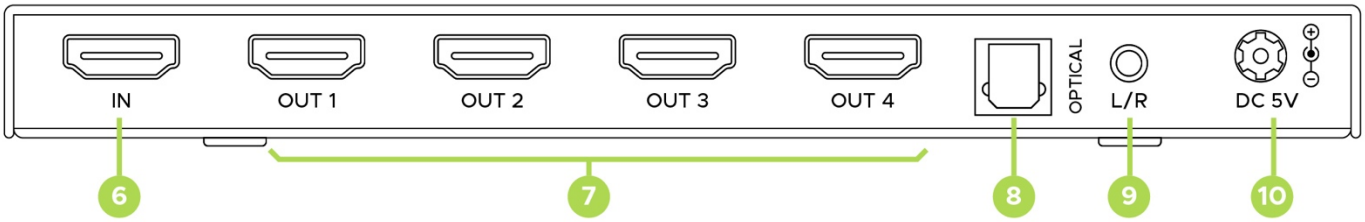
   EDID 'tables' are settings that help ensure your displays properly present your source.
   The EDID switches are set in combinations shown below to provide EDID data to the source connected to the input.
   The switches are labeled '0' in the down position (Off) and '1' in the up position (On). The following chart shows the various settings and EDID info that will be sent to your source:

   EDID tables: front panel switch positions

Copy EDID from output Port 1		4K60 4:4:4 and 2 channel audio	
FRL 12G 8K HDR and 2 channel audio		FRL 12G 8K HDR and 5.1 channel audio	
FRL 12G 8K HDR and 7.1 channel audio		FRL 10G 8K HDR and 2 channel audio	
FRL 10G 8K HDR and 5.1 channel audio		FRL 10G 8K HDR and 7.1 channel audio	

5. **The USB-C port is for technical firmware service only.**

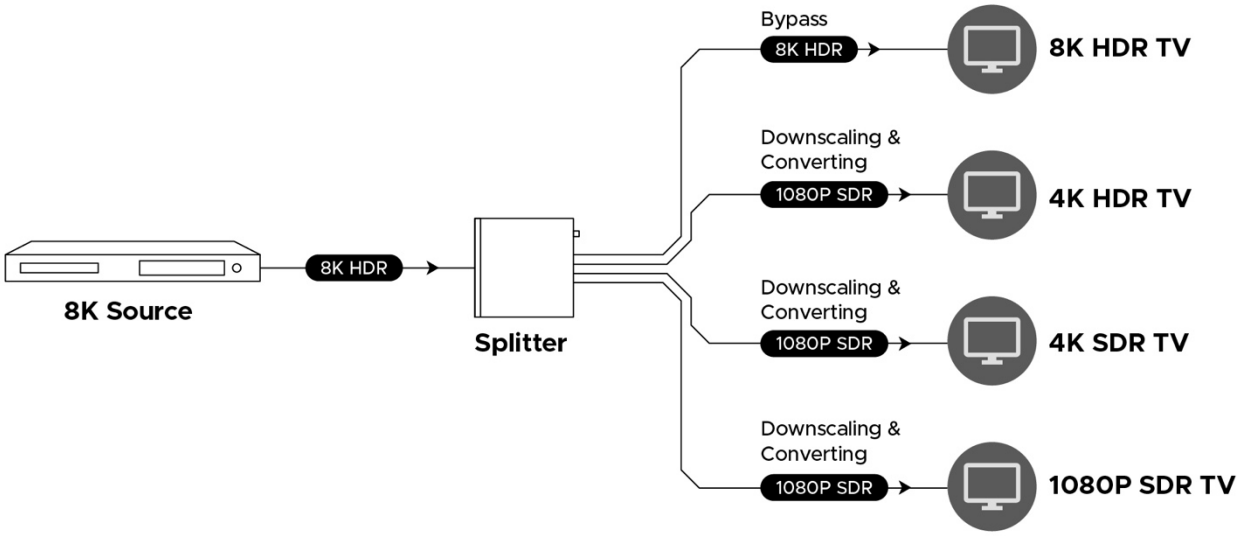
Rear Panel

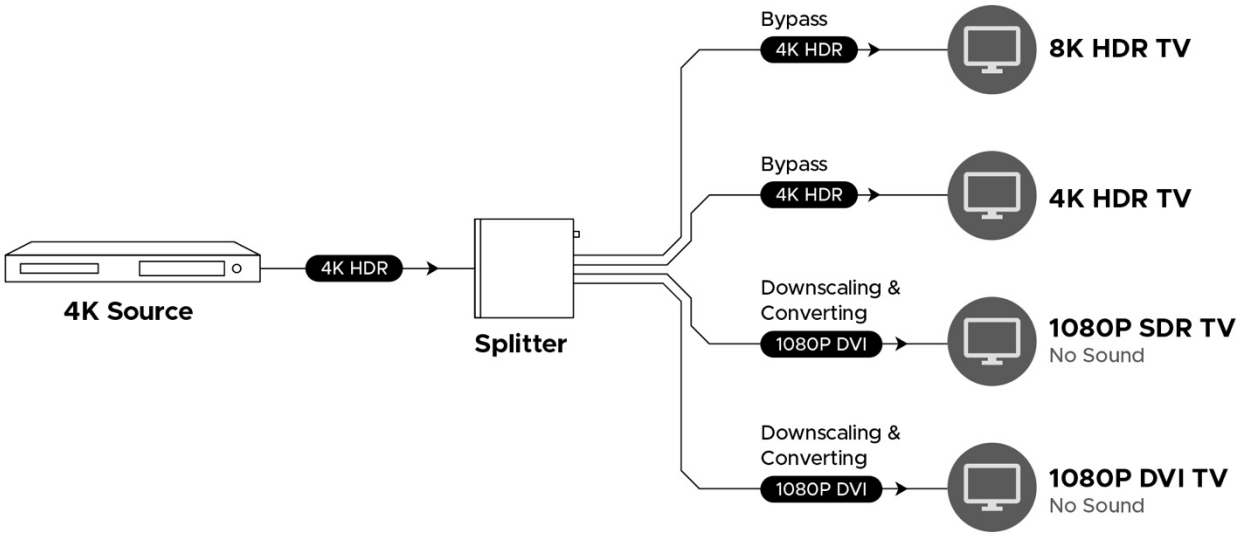


6. **HDMI 2.1 Input Port**
7. **4x HDMI 2.1 Output Ports with down-scaling**
8. **Toslink optical audio output:** All supported audio formats
9. **3.5mm TRS analog audio output.** Two-channel audio out
10. **Power Adapter input**

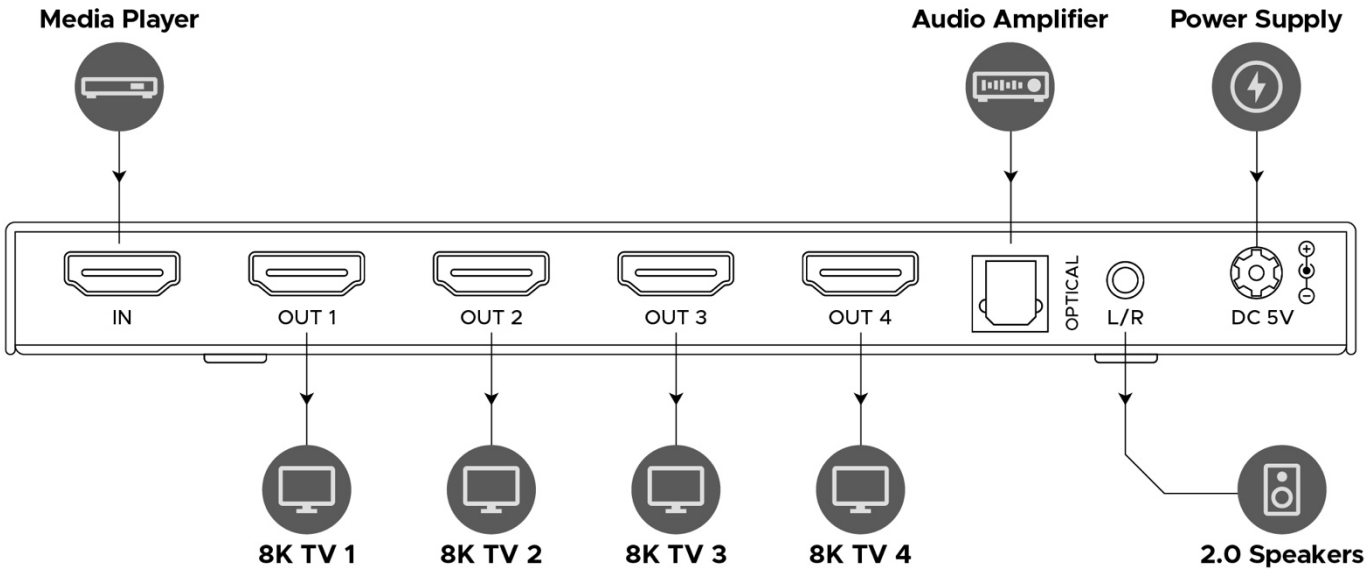
Downscaling

Automatic downscaling will look for the lowest resolution device connected to the outputs and set outputs, that do not detect an 8K device, to that resolution. Please see the example diagrams below.





Application Diagram



FAQ

1. **What is FRL 10G?**

   FRL 10G refers to a specific speed within the Fixed Rate Link (FRL) signaling technology used in HDMI 2.1, where data travels in fixed-speed lanes (3-12 Gbps) for higher bandwidth, with 10 Gbps being one of those potential lane speeds, enabling features like 4K/120Hz, 8K/60Hz, and dynamic HDR by maximizing throughput for high-resolution video. It replaced the older TMDS signaling, offering much greater bandwidth (up to 48 Gbps total) for modern displays and devices.

2. **What is FRL 12G?**

   FRL 12G refers to Fixed Rate Link (FRL) technology in HDMI 2.1, specifically a high-speed signaling mode where data travels on three or four lanes, each at up to 12 Gigabits per second (Gbps) for a massive total bandwidth of 48 Gbps, enabling features like 4K@120Hz, 8K, and higher resolutions/refresh rates by efficiently transmitting massive amounts of uncompressed video. It's the core innovation of HDMI 2.1, replacing older TMDS, though it maintains backward compatibility and can scale down to lower speeds like 3, 6, 8, or 10 Gbps per lane.

For further information,
contact support@bundltech.com

Bundl