



**BK-104**

**48Gbps 1x4 HDMI Splitter**

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**USER MANUAL**



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## **Thank you for purchasing this product**

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 service life of your equipment.

# Registration Page

Please Activate your warranty by registering our product through the link below - <https://www.orei.com/pages/warranty-registration>

## **Technical Support**

### ***Need Help?***

Our experienced Technical Support Team is here for you to answer your questions, give technical advice or help troubleshoot your project to get you installed on time and on budget. Call, email or chat with us now.

### **OREI Live Technical Support Hours**

US team (US/Canada/Mexico): Monday-Friday, 9 a.m. - 6 p.m. Central Time **Support Email** - [info@orei.com](mailto:info@orei.com) |

**Support Number** - 877-290-5530

Or

### **Chat Live on [www.orei.com](http://www.orei.com)**

Send us an instant message now. Our Technical Support Team will respond momentarily. Available during live support hours.

# Introduction

The BK-104 Splitter is an advanced solution for splitting single HDMI signal to 4 HDMI outputs synchronously, with video resolution up to 8K@60Hz 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.



1. HDMI 2.1 and HDCP 2.3 compliant
2. Support 48Gbps FRL and 18Gbps TMDS video bandwidth
3. Support video resolution up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
4. HDMI 2.1 protocols: VRR, ALLM, QMS, QFT, SBTM are supported
5. Support HDR, HDR 10, HDR 10+, Dolby Vision, HLG pass-through
6. LPCM 7.1CH, Dolby TrueHD, Atmos and DTS-HD Master, DTS:X Audio pass-through
7. 8K to 4K or 8K/4K to 1080P auto downscaling on all outputs
8. HDR to SDR auto converting on all outputs
9. Advanced EDID management
10. Compact design for easy and flexible installation

## Package Contents

1.	BK-104 Splitter	1 pcs
2.	5V/1A Multinational Power Supply	1 pcs
3.	User Manual	1 pcs

# Specifications

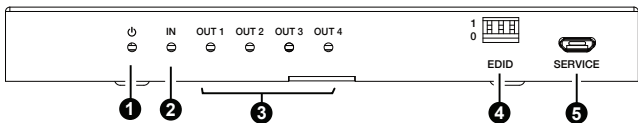
Technical	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	48Gbps
Video Resolution	Up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8/10/12-bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	<b>HDMI Input/Output:</b> 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	4 × HDMI OUT [Type A, 19-pin female]
Control	1 × SERVICE [Micro USB, Update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	145mm[W] × 68mm[D] × 17mm[H]
Weight	263g
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)

# Specifications

<b>Mechanical</b>			
Power Consumption	3.35W (Max)		
Operating 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)		
<b>Recommended HDMI Cable</b>			
<b>Video Resolution</b>	8K60	4K60	1080P
<b>HDMI Cable Type</b>	Ultra HDMI 2.1 cable	HDMI 2.0 cable	HDMI cable
<b>HDMI Cable Length</b> (HDMI IN/OUT)	2m/6.6ft ~ 3m/10ft	10m/33ft	15m/49ft
The use of "Premium High Speed HDMI" cable is highly recommended.			

# Operation Controls and Functions

## Front Panel

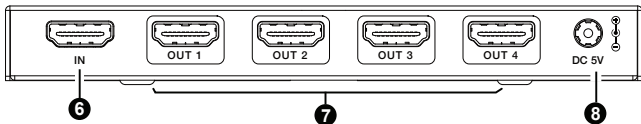


No.	Name	Function Description
1.	Power LED	When the device is powered on, the red LED will be on.
2.	IN LED	When the HDMI IN port connects to an active source device, the green LED will be on.
3.	OUT LED (1~4)	When the HDMI OUT 1/2/3/4 port connects to a display device and outputs signal, the corresponding 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.



# Operation Controls and Functions

## Rear Panel

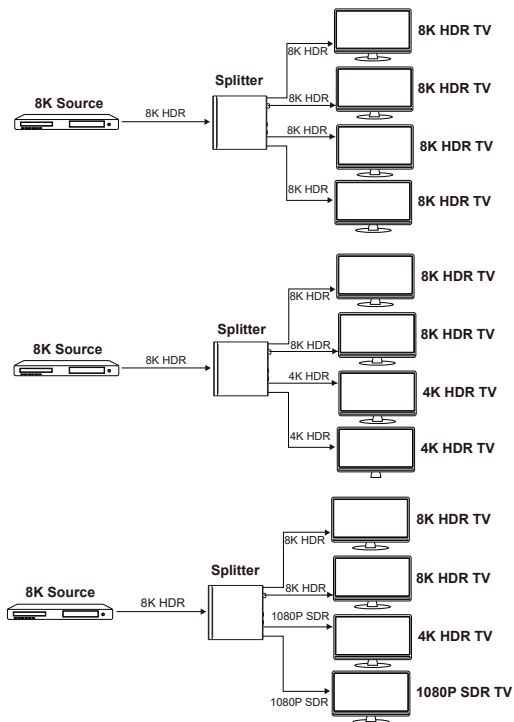


No.	Name	Function Description
6.	IN port	HDMI signal input port, connected to HDMI source device such as DVD or PS5 with an HDMI cable.
7.	OUT port (1~4)	HDMI signal output port, connected to HDMI display device such as TV or Monitor with an HDMI cable.
8.	DC 5V	DC 5V/1A power input port.

## Auto Downscaling & Auto Converting

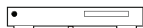
This 8K HDMI splitter serial product supports independent auto downscale (8K to 4K or 8K/4K to 1080P) and auto HDR to SDR convert on all outputs. It will automatically output the correct HDMI signal according to the EDID of the display device, for example:

# Auto Downscaling & Auto Converting

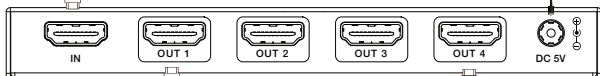


# Application Example

DVD or Blu-ray Player



Power Supply



8K TV 1



8K TV 4

**HDMI**<sup>TM</sup>  
HIGH-DEFINITION MULTIMEDIA INTERFACE

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