



8K 1x8 HDMI™ Splitter USER MANUAL

BK-108

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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 - www.orei.com/register

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.

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Introduction

The BK-108 8K 1x8 Splitter is an advanced solution for splitting a single HDMI signal to 8 HDMI outputs synchronously, with video resolutions up to 8K@60Hz 4:2:0 12bit. It supports video bandwidth of up to 48Gbps FRL & 18Gbps TMDS, and complies with HDMI 2.1 and HDCP 2.3 requirements. HDR/10/10+, Dolby Vision and HLG pass through is supported. The device features advanced EDID management and can also downscale from 8K to 4K and from 8K/4K to 1080p. Moreover, it also features automatic HDR to SDR conversion for all outputs. It also features a compact design and plug & play setup.



Features & Package Contents

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

Package Contents

1.	BK-108 Splitter 1pcs	
2.	2. 12V/2.5A Power Adapter 1pcs	
3.	. Mounting Ear 2pcs	
4.	4. Machine Screw (KM3*6) 4pcs	
5. User Manual 1pcs		1 pcs

Specifications

Technical	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3, HDCP 1.4
Video Bandwidth	48Gbps FRL and 18Gbps TMDS
Video Resolution	Up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
Color Space	RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
Color Depth	8/10/12bit
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	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	1 × HDMI IN [Type A, 19-pin female]
Output	8 × OUT [HDMI Type A, 19-pin female]
Control	1 × SERVICE [USB Type C, Update port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	L: 176mm / 6.92in W: 68mm / 2.67in H: 18mm / 0.7in
Weight	295g / 10.4oz

Specifications

Mechanical					
Power Supply		DC 12V/2.5A			
Power Consumption		12.2W (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)			
Recommended HDMI Cable					
Video Resolution		8K	4K60	4K24	1080P
HDMI Cable Length (HDMI IN/OUT)	3m/10ft (Ultra HDMI 2.1)		8m/26ft	12m/39ft	15m/49ft
The use of "Premium High Speed HDMI" cable is highly recommended.					

Operation Controls and Functions

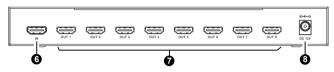
Front Panel



No.	Name	Function Description
1.	Power LED	The red LED will light up when the device is powered on.
2.	IN LED	When the HDMI IN port connects to an active source device, the green LED will light up.
3.	OUT LED (1~8)	When an active display device connects to the respective output ports, the Green LED will light up.
4.	EDID DIP switch	Use the DIP switch to set EDID. [DIP]=111: Copy OUT 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]=001: FRL10G_8K_HDR, 5.1CH
5.	SERVICE	Firmware update port.

Operation Controls and Functions

Rear Panel



No.	Name	Function Description
6.	IN port	Connect a media device such as a DVD Player, Streaming device, etc.
7.	OUT port (1~4)	Connect a display device such as a TV, Monitor, etc.
8.	DC 12V	Connect the included power adapter to power the device.

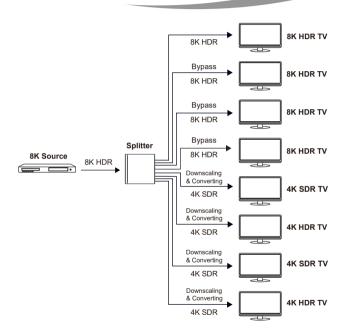
Auto Downscaling & Auto Converting

This 1x8 splitter supports auto downscaling and auto converting on all outputs. Before downscaling it will compare the EDID of the connected display devices and select the minimum resolution to downscale and output.

Downscaling will not work in the following conditions:

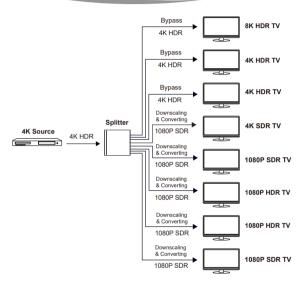
- 1. The input source is 8K DSC format.
- 2. The resolution of input source is not supported by the splitter.

Auto Downscaling & Auto Converting



In the example above, 4K is lower than the resolution of input source, so it will downscale and output according to the the minimum resolution of 4K SDR.

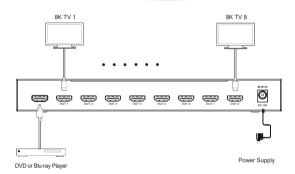
Auto Downscaling & Auto Converting



In the example above, 1080P is lower than the resolution of the input source, so it will downscale and output according to the the minimum resolution of 1080P SDR.

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.

Application Example



Steps To Connect:

- 1. Connect your media devices such as DVD player, streaming device, etc. to the HDMI input port on the splitter.
- 2. Connect your displays to the 8 available outputs on the splitter.
- 3. Connect the included power adapter to a wall outlet to power the device.
- 4. Now play any media from your source and enjoy!



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FAQs & Troubleshooting

1. What is the maxmum cable length this splitter supports?

We suggest using high quality HDMI 2.1 cables under 30 feet with this Splitter.

2. Can I connect extra monitors to my laptop/PC and have different image on all monitors?

This is an HDMI splitter and it will only mirror your laptop/PC screen. It will NOT Extend your PC display.

3. I am unable to get any output from the Splitter.

Try the below:

- 1. Check if the HDMI cables are plugged in correctly.
 2. Try changing the HDMI cables.
 - 3. Check if the LEDs on the fron are lighting up.
 - 4. Try a lower resolution from the source device.

3. Can I turn off all the displays using a single TV remote?

Unfortunately, that is not possible because this model does not support CEC.

Still have some questions?

Please feel free to contact us at: info@orei.com. OR Fill out the form on the 'Contact Us' page on the website.

Our team will be more than happy to help you.

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