



BK-301P

8K 3-port HDMI™ Switch

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USER MANUAL



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Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating, or adjusting this product. Keep this manual for future reference.

Important Safety Note - Surge Protection Recommended

This product contains sensitive electronic components that may be damaged by electrical spikes, surges, lightning strikes, or static discharge. To protect and extend the service life of your equipment, we strongly recommend using a surge protection device.

Warranty Registration

Activate your warranty by registering your product at:
→ www.orei.com/register

Need Technical Support? We're Here to Help.

Our experienced Technical Support Team is available to answer your questions, offer expert advice, and help troubleshoot any issues to keep your project on track—on time and on budget.

Live Support Hours (US/Canada/Mexico):

🕒 Monday–Friday | 9:00 a.m. – 5:00 p.m. Central Time

Contact Us:

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📞 Phone: 877-290-5530

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Send us an instant message—our team typically responds within moments during live support hours.

Introduction

The BK-301P is a premium ultra-compact 3x1 HDMI™ switcher designed to simplify signal routing for modern home theater and professional AV installations. With three HDMI™ inputs and one HDMI™ output, this compact switcher allows seamless selection between multiple HDMI™ sources for a single display.

It supports cutting-edge 48Gbps FRL and 18Gbps TMDS bandwidth, delivering stunning video resolutions up to 8K@60Hz (4:2:0 12bit) and 4K@120Hz (4:4:4 12bit), fully compliant with HDMI™ 2.1 standards. Advanced video features like HDR10+, Dolby Vision, and HLG are supported for an immersive visual experience.

In addition to video, the BK-301P ensures pristine audio performance with pass-through support for LPCM 7.1CH, Dolby TrueHD, Dolby Atmos, DTS-HD Master, and DTS:X formats. Convenient control is provided via front panel buttons and the included IR remote, with auto-switching and manual switching options.

Ideal for next-generation home entertainment setups, gaming systems, or conference rooms, the BK-301P delivers reliable, high-performance HDMI™ switching in a sleek, space-saving design.

Features

1. **HDCP 2.3 Compliant** – Ensures compatibility with the latest content protection standards.
2. **Ultra HD 8K & 4K Video** – Transmits video resolutions up to 8K@60Hz (4:2:0 12bit) and 4K@120Hz (4:4:4 12bit) as per HDMI™ 2.1 specifications.
3. **48Gbps FRL & 18Gbps TMDS Bandwidth** – Delivers uncompressed, high-quality video and audio signals.
4. **Advanced HDR Support** – Pass-through for HDR10+, Dolby Vision, and HLG ensures compatibility with high dynamic range content.
5. **HDMI™ 2.1 Features Supported** – Includes VRR, ALLM, QMS, QFT, and SBTM for enhanced video and gaming performance.
6. **Multichannel Audio Pass-through** – Supports premium audio formats including LPCM 7.1CH, Dolby TrueHD, Dolby Atmos, DTS-HD Master, and DTS:X.
7. **3x1 HDMI™ Switching** – Three HDMI™ inputs routed to one HDMI™ output for flexible source selection.
8. **Convenient Control Options** – Easily switch inputs via front panel buttons or included IR remote.
9. **Auto & Manual Switching** – Supports automatic source detection and manual switching modes.
10. **CEC Pass-through** – Allows device control over HDMI™ for simplified system operation.

Package Contents & Specifications

Package Contents

1.	BK-301P	1 pcs
2.	Remote	1 pcs
2.	Power Adapter	1 pcs
3.	User Manual	1 pcs

Specifications

Technical	
HDMI™ Compliance	HDMI™ 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	48Gbps FRL and 18Gbps TMDS
Video Resolution	Up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit * All available resolutions are shown as follow.
Color Space	RGB_4:4:4, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
Color Depth	8/10/12bit
HDMI™ Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)

Specifications

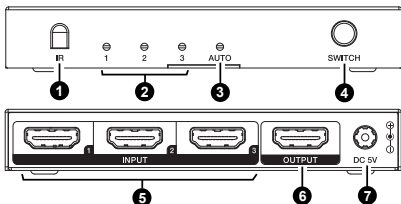
Connection				
Input	3× HDMI™ [Type A, 19-pin female]			
Output	1× HDMI™ [Type A, 19-pin female]			
Mechanical				
Housing	Metal			
Color	Black			
Dimensions	L: 110mm / 4.33in W: 75mm / 2.95in H: 18mm / 0.70in			
Weight	180g / 6.34oz			
Power Supply	Input: AC 100~240V 50/60Hz, Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)			
Power Consumption	1.94W (Max)			
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F			
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F			
Operating Humidity	20%~80% relative humidity, non-condensing			
Storage Humidity	10%~90% relative humidity, non-condensing			
Recommended HDMI™ Cable				
Video Resolution	8K	4K60	4K24	1080p
HDMI™ Cable Length (IN / OUT)	5m/16.4ft (Ultra HDMI™ 2.1)	8m/26ft	12m/39ft	15m/49ft
The use of "Premium High Speed HDMI™" cable is highly recommended.				

Specifications

*** All available input/output resolutions:**

640x480p60Hz, 800x600p60Hz, 720x480i59.94Hz(480i59),
720x480p59.94Hz(480p59), 720x576i50Hz(576i50),
720x576p50Hz(576p50), 1024x768p60Hz,
1280x720p50Hz(720p50), 1280x720p59.94Hz(720p59),
1280x720p60Hz(720p60), 1280x1024p60Hz, 1360x768p60Hz,
1440x900p60Hz, 1440x1050p60Hz, 1600x1200p60Hz,
1920x1080i50Hz(1080i50), 1920x1080i59.94Hz(1080i59),
1920x1080i60Hz(1080i60), 1920x1080p23.98Hz(1080p23),
1920x1080p24Hz(1080p24), 1920x1080p25Hz(1080p25),
1920x1080p29.97Hz(1080p29), 1920x1080p30Hz(1080p30),
1920x1080p50Hz(1080p50), 1920x1080p59.94Hz(1080p59),
1920x1080p60Hz(1080p60), 3840x2160p23.98Hz(2160p23),
3840x2160p24Hz(2160p24), 3840x2160p25Hz(2160p25),
3840x2160p29.97Hz(2160p29), 3840x2160p30Hz(2160p30),
3840x2160p50Hz(2160p50), 3840x2160p59.94Hz(2160p59),
3840x2160p60Hz(2160p60), 3840x2160p100Hz(2160p100),
840x2160p120Hz(2160p120), 4096x2160p23.98Hz,
4096x2160p24Hz, 4096x2160p25Hz, 4096x2160p29.97Hz,
4096x2160p30Hz, 4096x2160p50Hz, 4096x2160p59.94Hz,
4096x2160p60Hz, 4096x2160p100Hz, 4096x2160p120Hz,
5120x2160p50Hz, 5120x2160p60Hz, 7680x4320p23.98Hz,
7680x4320p24Hz, 7680x4320p25Hz, 7680x4320p29.97Hz,
7680x4320p30Hz, 7680x4320p50Hz, 7680x4320p60Hz

Operation Controls and Functions



No.	Name	Function Description
1.	IR	IR signal receiving window.
2.	INPUT 1/2/3	When the INPUT 1/2/3 port is selected as the signal source input channel, the corresponding green LED will light up.
3.	AUTO	When the auto switching mode is enabled, the green LED will light up.
4.	SWITCH	Input signals switching button. - Press this button to circularly switch the input signal. - Long press this button for 3 seconds to enable or disable the auto switching mode*. Note: Auto switching is disabled by default.
5.	INPUT 1/2/3	Connect a media source device such as DVD Player, Streaming device, etc.

Operation Controls and Functions

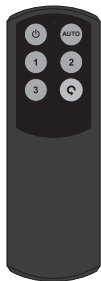
No.	Name	Function Description
6.	OUTPUT	Connect a display device such as TV, Monitor, etc.
7.	DC 5V	Connect the included power adapter.

* Auto Switching

The auto switching function can be enabled or disabled via the SWITCH button on the front panel or IR remote. It is disabled by default.

1. If one INPUT port is connected, and the others are connected later. It will switch to the latest one automatically (last in gets priority) as the input channel, and the corresponding LED will be on.
2. If the three INPUT ports are all connected, when one of them is disconnected, it will switch to the next INPUT port automatically according to the order of INPUT 1-3.
3. If only one INPUT port is connected, it will not automatically switch to the others when disconnected.

IR Remote

**Power:**

Press to turn on or turn off the switch.

Auto:

Press to enable or disable auto switching for input sources.

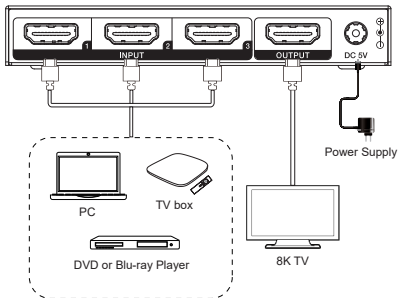
1/2/3:

Press 1/2/3 button to select the corresponding input channel.



Press to circularly switch the signal source INPUT 1/2/3 to the OUTPUT port.

Application Example



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

FAQs & Troubleshooting

1. No video output

Please check the following:

- Try changing the HDMI™ cables.
- Check if the HDMI™ cables are HDMI™ 2.1 compliant.
 - Check if the LED on the device is lighting up.
 - Try a lower resolution from the media source.

2. 8K Resolution Not Working

Please check the following:

- Check if the HDMI™ cables are HDMI™ 2.1 compliant.
- Check if the media source and display are capable of handling 8K resolution.
 - Check if the refresh rate is set to 60Hz.

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.

OREI Live Technical Support Hours

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