18Gbps 2x2 HDMI Matrix Switcher with Audio Extractor

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. 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.

Registration page

Please Activate your warranty by registering your 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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Support Email - info@orei.com |**Support Number** - 877-290-5530

Or

Chat Live on www.orei.com

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

Scan the QR code to watch a Video of How to Use the product.

Please Activate your Warranty by registering your product through the link below. - **www.orei.com/register**

Introduction

The 18Gbps 2x2 HDMI Matrix switcher supports the transmission of video signal (up to 4K2K@50/60Hz YCbCr 4:4:4) from two HDMI sources to two HDMI displays simultaneously. This product supports audio extract from output A to optical and analog output. It supports three modes of EDID setting (AUTO, COPY and STD). Flexible control via panel buttons and IR remote, the corresponding LED indicator on front panel will be illuminated.

Features

1. HDCP2.2 / HDCP1.x, DVI 1.0 compliant.
2. Support 18Gbps video bandwidth
3. Video resolution is up to 4K2K@50/60Hz (4:4:4).
4. Support digital and analog audio extract output from output A
5. EDID can be selected with AUTO, COPY and STD mode via the selector on the front panel.
6. Support analog audio PCM 2.0.
7. Supported optical audio pass-through format: LPCM 2.0/2.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6/DTS-HDMA 5.1, DTS HD-HRA 5.1.
8. Support HDR function
9. Flexible control via panel buttons and IR remote.

Package Contents

1.	2×2 HDMI Matrix Switcher	1pcs
2.	5V/1A Power Adapter	1pcs
3.	Matrix IR Remote	1 pcs
4.	User Manual	1 pcs

Specification

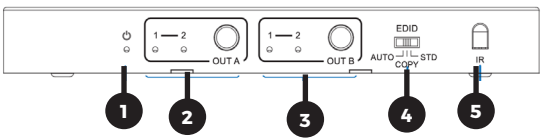
Technical	
HDCP Compliance	HDCP 2.2 and HDCP 1.x
DVI Compliance	DVI 1.0
Video Bandwidth	594MHz / 18Gbps
HDMI Video Resolution	Up to 4K2K@50/60Hz YCbCr 4:4:4
High Dynamic Range	HDR,HDR 10+,HLD,DOLBY VISION
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDMI Audio Formats	PCM2.0/5.1/7.1CH, Dolby 5.1, DTS5.1, Dolby-True-HD, DTS-HD
L/R Audio Formats	Analog stereo PCM 2.0
Optical Audio Formats	LPCM[2.0/2.1]CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6, DTS-HDMA 5.1, DTS HD-HRA 5.1
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Connection	
Input ports	2×HDMI Type A [19-pin female] 1×IR Receiver Window
Output ports	2×HDMI Type A [19-pin female] 1×L/R [3.5mm Stereo Mini-jack] 1×OPTICAL OUT [Optical jack]

Specification

Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	144mm (W)×59.5mm (D)×18mm (H)
Weight	208g
Power Supply	Input: AC100~240V 50/60Hz Output: DC5V/1A (US/EU standard, CE/FCC/UL certified)
Power Consumption	2.7W
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)

Operation controls and functions

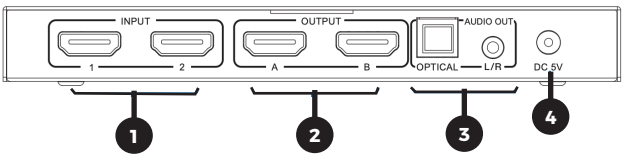
5.1 Front Panel



No.	Name	Function Description
1.	POWER LED	Power LED indicator. Notice: The power LED illuminates in red when the product is working or on standby.
2.	OUTPUT A	Press the OUT A button to select 1 or 2 input source, the corresponding LED indicator will illuminate in green.
3.	OUTPUT B	Press the OUT B button to select 1 or 2 input source, the corresponding LED indicator will be illuminated in green.
4.	EDID AUTO/ COPY/STD	**AUTO:** When the selector is dialled to the AUTO position, the product will compare OUT A and OUT B EDID setting and output the lowest resolution to source devices, then the source devices will send the signal to all HDMI outputs. **COPY:** When the selector is dialled to the COPY position, the product will copy the EDID setting of the HDMI OUT A display device (If no HDMI OUT A capable EDID is detected, the product will copy HDMI OUT B) to source devices, then the source devices will send the signal to all HDMI outputs. **STD:** When the selector is dialled to the STD position, the source devices will send fixed 1080P/60Hz EDID to all HDMI outputs (audio for PCM 2.0 only).
5.	IR	IR receiver window. It receives IR remote signal of this product only.

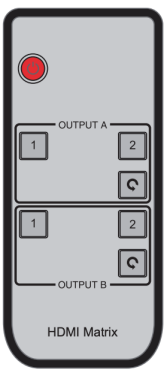
Operation controls and functions

5.2 Rear Panel



No.	Name	Function Description
1.	INPUT 1 / 2	Connect to HDMI sources device such as DVD player or PS4 with an HDMI cable.
2.	OUTPUT A / B	Connect to HDMI display device such as TV or monitor with an HDMI cable.
3.	AUDIO OUT (OPTICAL / L/R)	**OPTICAL:** Optical audio output port. Connect to audio amplifier. **L/R:** Analog audio output port. Connect to audio amplifier. **Notice:** The audio output signal is from OUTPUT A port.
4.	DC 5V	Plug the 5V/1A DC power supply into the unit and connect the adapter to an AC outlet.

IR Remote



	Power on the product or set it to standby status.
OUTPUT A	1/2: Select input 1 or input 2 source signal to OUTPUT A port. Select circularly input 1 or input 2 source signal to OUTPUT A port.
OUTPUT B	1/2: Select input 1 or input 2 source signal to OUTPUT B port. Select circularly input 1 or input 2 source signal to OUTPUT B port.
Notice: (1) The power LED on the front panel will illuminate in red when the product is working or on standby. **(2)** The input source LED on the front panel will illuminate in blue when OUTPUT A or OUTPUT B is selected by an input source.	

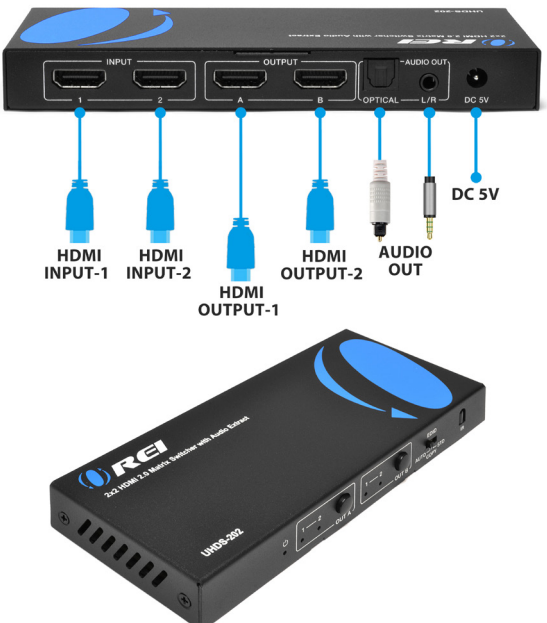
FAQs

Q: Does this product require an HDMI cable length for the connection interface?
A: According to HDMI input / output cable length test, the longest HDMI cabel for 4K2K@60Hz / 8 bit YCbCr 4:4:4 is 5m, the longest HDMI cable for 4K2K@ 30Hz / 8-bit is 10m, the longest HDMI cable for 1080p@60Hz / 8-bit is 15m.

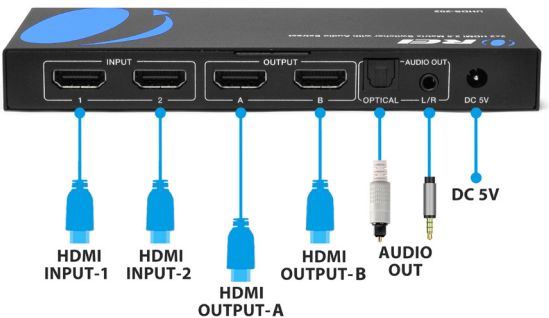
The use of "**Premium High Speed HDMI**" cable is highly recommended.
For using the IR remote, the best distance is 0~7m and the best angle is ± 45˚.

Application Example

Application Example



Application Example



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