

BLACKBIRD™



8K HDMI 2x2 Matrix Switcher

P/N **44438**
Quick Start Guide

Thank you for purchasing this product

To ensure optimum performance and safety, read the following instructions before connecting, operating, or adjusting the product. Keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may have been damaged by electrical spikes, surges, electric shocks, lightning strikes, etc. The use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

Introduction.....	2
Features.....	2
Package Contents.....	3
Operation Controls and Functions.....	3
IR Remote.....	5
Application Example.....	6
Specifications.....	7

Introduction

The 8K HDMI 2x2 Matrix Switcher can do more than just switch any of the two HDMI input signals; it manages to simultaneously distribute it onto two displays. Video resolution is supported until up to 8K@60Hz 4:2:0. In addition, it also supports advanced EDID management and the audio de-embedding function (output found in the optical and analog ports). With the ability to be used as either a splitter or a switcher, this multi-functional product can be widely applied for various demonstrations such as video conferences, multimedia teachings, and other events that require a big screen.

Features

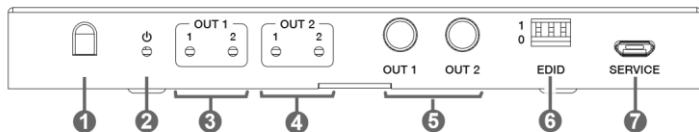
- HDMI 2.1 and HDCP 2.3 compliant
- 40Gbps video bandwidth
- Video resolution of up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit, and 4K@120Hz 4:4:4 10bit
- VRR, FVA, and ALLM
- HDR, HDR10, HDR10+, Dolby Vision, HLG pass-through
- HDMI audio formats: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
- Built-in Equalizer, Retiming, and Driver
- Advanced EDID management
- Audio de-embedding function (output through the optical and analog port)
- IR remote control and front panel button switching
- Compact design for easy and flexible installation

Package Contents

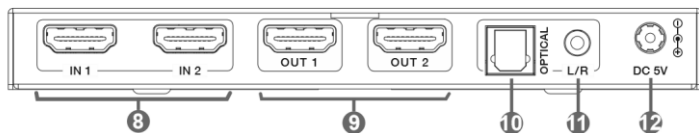
- 1 × 8K HDMI 2x2 Matrix Switcher
- 1 × IR Remote
- 1 × 5V/2A Multinational Power Supply
- 1 × User Manual

Operation Controls and Functions

Front Panel



Rear Panel

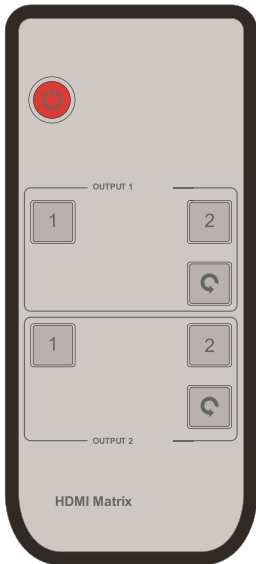


No.	Name	Function Description
1	IR Window	IR input signal receiving window.
2	POWER LED	The power LED lights in green when the device is working, and red when the device is on standby.

3	OUT 1 LED (1~2)	When the IN 1/2 port is selected as the signal source input channel for the OUT 1 port, the corresponding green LED 1/2 will be on.
4	OUT 2 LED (1~2)	When the IN 1/2 port is selected as the signal source input channel for the OUT 2 port, the corresponding green LED 1/2 will be on.
5	OUT 1~2 button	Used to select the signal source for OUT 1/2 port. Pressing the button OUT 1/2 will allow the device to switch any of the two HDMI input signals and distribute it to the corresponding output port.
No.	Name	Function Description
6	EDID DIP switch	Use the DIP switch to set EDID. 111 - Copy OUT1 port sink EDID (as factory default) 110 - HDMI 1080p@60Hz, Audio 2ch PCM 101 - HDMI 4K@60Hz 4:4:4, Audio 2ch PCM, HDR 100 - HDMI 4K@60Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY, HDR 011 - HDMI 4K@60Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD, HDR 010 - HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 2ch PCM, HDR 001 - HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 5.1ch PCM/DTS/DOLBY, HDR 000 - HDMI 8K@60Hz 4:2:0+8K@30Hz 4:4:4, 4K@120Hz 4:4:4, Audio 7.1ch PCM/DTS/DOLBY/HD, HDR
7	SERVICE	Firmware update and debug port.
8	IN (1~2) port	HDMI signal input port, connecting to HDMI source devices such as DVDs or the Playstation5 with an HDMI cable.

9	OUT (1~2) port	HDMI signal output port, connecting to HDMI display devices such as televisions or monitors with an HDMI cable.
10	OPTICAL	Optical fiber audio output port.
11	L/R	Analog audio output port.
12	DC 5V	DC 5V/2A Power input port.

IR Remote



Power on the product or set it to standby mode

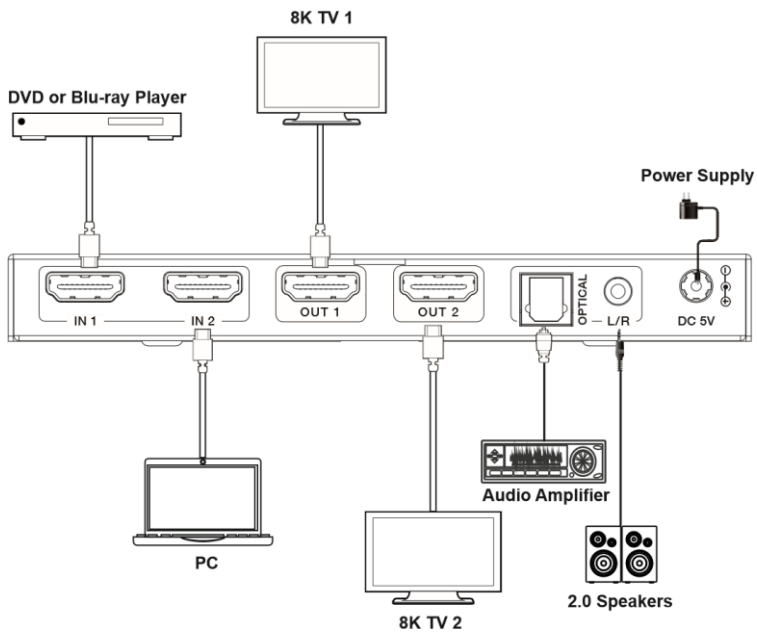
1 or 2

Press the 1 or 2 button to select an HDMI signal source to the corresponding OUT 1 or 2 port



Press the button to cyclically switch the HDMI signal source to the corresponding OUT 1 or 2 port

Application Example



Specifications

Technical	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
Video Bandwidth	40Gbps
Video Resolution	Up to 8K@60Hz 4:2:0 10bit, 8K@30Hz 4:4:4 10bit, 4K@120Hz 4:4:4 10bit
Color Depth	8/10/12-bit
Color Space	RGB, YCbCr 4:4:4 / 4:2:2. YUV 4:2:0
Audio Formats	HDMI input/output: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD Audio de-embedding output: Optical: LPCM 2/5.1 CH, Dolby Digital 2/5.1 CH, DTS 2/5.1 CH Analog: PCM 2.0
ESD Protection	Human body model — $\pm 8\text{kV}$ (Air-gap discharge) & $\pm 4\text{kV}$ (Contact discharge)
Connection	

Input	2 × HDMI IN [Type A, 19-pin female]
Output	2 × HDMI OUT [Type A, 19-pin female] 1 × OPTICAL [S/PDIF] 1 × L/R [3.5mm Stereo Mini-jack]
Control	1 × SERVICE [Micro USB, Update port]
Mechanical	
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	145mm (W) × 68mm (D) × 17mm (H)
Weight	268 g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 5V/2A (US standards, FCC/ETL certified)
Power Consumption	6.2 W (Max)
Operation 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)

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problems with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website www.monoprice.com or via email at support@monoprice.com. Check the website for support times and links.

TECHNICAL SUPPORT

Monoprice™ is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website www.monoprice.com or through email by sending a message to tech@monoprice.com. Check the website for support times and links.

To download the latest drivers, firmware, manuals, etc., go to www.monoprice.com and type **44438** into the search bar. If available, support files are linked at the bottom of the product page.

REGULATORY COMPLIANCE

Notice for FCC



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice for ISED Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Monoprice™ and all Monoprice logos are trademarks of Monoprice Inc.



TECHNOLOGY AT PRICES THAT MAKE SENSE

www.monoprice.com

Need Help? We're here for you!

Contact us: www.monoprice.com/contactus

Product pictures are for reference only.

Specifications described herein are subject to change without prior notification.

Monoprice™ and all Monoprice logos are trademarks of Monoprice Inc.

Copyright © 2022 Monoprice, Inc. All rights reserved.

Monoprice, Inc.

1 Pointe Drive, Suite 400

Brea, CA 92821 – USA

www.monoprice.com