



UHDS-402A

**4x2 HDMI 2.0 Matrix Switcher
with Audio Extract**

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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 |

Support Number - 877-290-5530

Introduction

The UHDS-402A Switcher can switch any of these four HDMI sources to two HDMI displays. It supports resolution up to 4K2K@60Hz YCbCr 4:4:4 and HDCP 2.2. It can extract HDMI source device audio to optical and analog L/R output. It supports 4K->1080P downscale function if source is 4K but TV only supports up to 1080P. It also supports ARC and EDID (AUTO/COPY/STD) function. With its 18Gbps bandwidth and the additional features with latest HDMI standards. Flexible control via front panel buttons and IR remote.



Features

1. HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
2. Supports 4 HDMI inputs and 2 HDMI outputs
3. Video resolution up to 4K2K@60Hz YCbCr 4:4:4
4. Supports 18Gbps uncompressed bandwidth on all HDMI
5. Supports Dolby Vision, HDR 10+, HLG
6. Supports extract HDMI input source device audio of OUT A or OUT B to optical and analog L/R output
7. OUT A and OUT B support 4K to 1080P downscale function
8. Supports ARC (Audio Return Channel) function
9. Supports advanced EDID management including AUTO, COPY and STD
10. Control is via front panel buttons and IR remote

Package Contents

1.	UHDS-402A	1pcs
2.	12V/1A Locking Power Adapter	1pcs
3.	Mounting Ears	2pcs
4.	IR Remote	1pcs
5.	User Manual	1pcs

Specifications

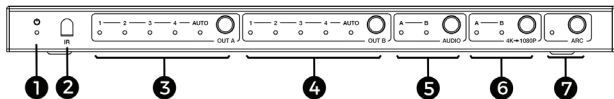
Technical	
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@50/60Hz (YCbCr 4:4:4), 4K2K@30Hz. All HDMI 3D TV format, etc.
Color Depth	8-bit, 10-bit, 12-bit [1080P, 4K30Hz, 4K60Hz (YCbCr 4:2:0)] 8-bit [4K60Hz (YCbCr4:4:4)]
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
HDMI Audio Formats	PCM 2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Optical Audio Formats	PCM 2.0, Dolby Digital / Plus, DTS
L/R Audio Format	PCM 2.0CH (Note: If ARC function is turned on, the audio port will mute.)
ESD Protection	Human body model – $\pm 8kV$ (Air-gap discharge) & $\pm 4kV$ (Contact discharge)
Connections	
Input Ports	4 \times HDMI Type A [19-pin female]
Output Ports	2 \times HDMI Type A [19-pin female] 1 \times L/R audio out [3.5mm Stereo Mini-jack] 1 \times OPTICAL audio out [S/PDIF]

Specifications

Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	251mm[W] × 105mm[D] × 20mm[H]
Weight	620g
Power Supply	Input: AC 100-240V 50/60Hz Output: DC 12V/1A
Power Consumption	3.8W (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)

Operation Controls and Functions

Front Panel



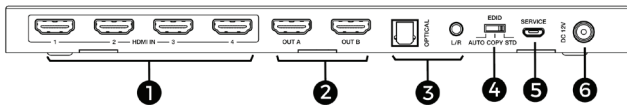
No.	Name	Function Description
1.	Power LED	The blue LED will be on when the product is connected power supply.
2.	IR	IR receiver window. It only receives IR remote signal from this product.
3.	OUT A button and LED	Press the OUT A button to select an input source to OUT A output, and the corresponding blue LED will be on.
	AUTO LED	The blue AUTO LED will be on and the AUTO function will be turned on when you press the OUT A button up to 3 seconds. Press the OUT A button up to 3 seconds again will turn off the AUTO function. AUTO function: Detect input signal source. The AUTO function is turned on, if an or a few HDMI IN ports are connected source device. OUT A port will output the signal from the last connected input source.
4.	OUT B button and LED	Press the OUT B button to select an input source to OUT B output, and the corresponding blue LED will be on.

Operation Controls and Functions

No.	Name	Function Description
4.	AUTO LED	<p>The blue AUTO LED will be on and the AUTO function will be turned on when you press the OUT B button up to 3 seconds. Press the OUT B button up to 3 seconds again will turn off the AUTO function.</p> <p>AUTO function: Detect input signal source. The AUTO function is turned on, if an or a few HDMI IN ports are connected source device. OUT B port will output the signal from the last connected input source.</p>
5.	AUDIO button	<ul style="list-style-type: none">• Press AUDIO button to select extract the input source audio from OUT A port or OUT B port to optical and analog L/R output, the corresponding blue LED will be on.• If ARC function is turned on, press AUDIO button to select return the audio signal from OUT A or OUT B display device to optical output, the corresponding blue LED will be on. At this time, the analog L/R port is mute.
6.	4K->1080P button	<p>Press the button to select OUT A or OUT B 4k->1080P downscale function, and the corresponding blue LED will be on. For example, if source is 4K but TV only supports 1080P, at this time the input resolution with 4K will be downscaled to 1080P to TV output.</p>
7.	ARC button	<p>Turn on/off ARC function. The blue ARC LED will be on when you turn on the ARC function.</p>

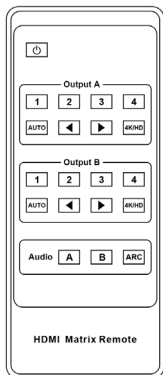
Operation Controls and Functions



Rear Panel



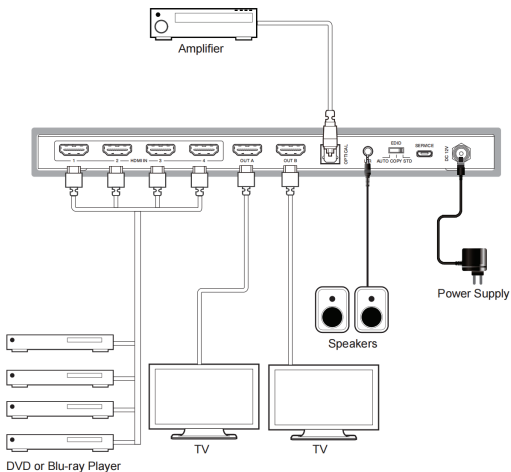
No.	Name	Function Description
1.	HDMI IN port	HDMI input ports, connected to HDMI source device such as DVD or PS4 with an HDMI cable.
2.	HDMI OUT A / OUT B port	HDMI output ports, connected to HDMI display device such as TV or Projector with an HDMI cable.
3.	OPTICAL / L/R port	Connect to audio output device such as amplifier or speaker with optical and analog audio cable.
4.	EDID AUTO / COPY / STD	AUTO: Compare with Out A and Out B display device's EDID information, and then sending the best EDID information to source device of Out A and Out B. The source device of Out A and Out B will send the EDID information again to Out A and Out B display device output. COPY: Copy Out A display device's EDID information to source device of Out A and Out B. Then the source device of Out A and Out B will send the EDID information again to Out A and Out B display device output. STD: Out A and Out B display device output default 1080P.
5.	SERVICE port	Firmware update port.
6.	DC 12V	Plug in 12V/1A adapter to AC wall outlet for power supply.

IR Remote



	Power on the product or set it to standby mode.
Output A / Output B	
1/2/3/4	Select input source signal to Out A port output, the corresponding blue LED on the front panel will be on.
	Select the last or next input source signal to OUT A port output, the corresponding blue LED on the front panel will be on.
AUTO	Turn on or off AUTO function. The Auto function is turned on, if an or a few HDMI IN ports are connected to source device, Out A port will output the signal from the last connected input source.
4K/HD	Select Out A 4k->1080P downscale function. For example, if source is 4K but TV only supports 1080P, at this time the input resolution with 4K will downscale to 1080P to TV output
Audio function	
ARC	Turn on/off ARC function.
Audio A/B	<ul style="list-style-type: none"> • If ARC function is turned on, press Audio A or B button to select return the audio signal from Out A or Out B display device to optical port (TOSLINK) output. At this time, the analog L/R port (Audio out) is mute. • If ARC function is turned off, press Audio A or B button to select extract the input source audio from Out A port or Out B port to optical port (TOSLINK) and analog L/R port (Audio out) output.

Application Example



FAQ

Q: Does this product require an HDMI line length for the connection interface?

A: According to HDMI line length test, HDMI input / output with 4K60Hz YCbCr 4:4:4 is the longest line length up to 8m / 3m.

The use of "Premium High Speed HDMI" cable is highly recommended.

IR remote sends signal distance for 0-7 meters, and angle is plus-minus 45 degrees.



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