

# KanexPro®



**Ultra-Fast 4x2 HDMI Matrix Switcher with Audio  
Extraction 4K/60Hz**

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MPN: HDMX42A-18G

# Ultra-Fast 4x2 HDMI Matrix Switcher with Audio Extraction 4K/60Hz

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## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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# Premium Extender Kit for K-12 Educational Applications

## 1. Introduction

The KanexPro HDMX42A-18G is an easy to use, cost-effective 4K/60Hz with 4:4:4, 16-bit Deep Color, HDR (High Dynamic Range) and HD audio formats. Designed with 4-inputs and 2-outputs the matrix can extract the audio from any of the sources and outputs via optical Toslink or analog 2 Channel audio formats. The powerful matrix can downscale 4K sources to 1080p displays allowing for the unit to be integrated in mixed 4K and 1080p systems with no loss of quality to the 4K display. The HDMX42A-18G is ideal for swift switching and routing of any HDMI sources such as laptops, Blu-ray players, and 4K based Apple TV to any four displays. This matrix switcher is HDCP 2.2 compliant and supports 4K@60Hz, 4:4:4 video. It can be controlled via front panel buttons, IR remote.

## 2. Features

- ★ HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- ★ Supports 4 HDMI inputs and 2 HDMI outputs
- ★ Video resolution up to 4K2K@60Hz YCbCr 4:4:4
- ★ Supports 18Gbps uncompressed bandwidth on all HDMI ports
- ★ Supports Dolby Vision, HDR 10+, HLG
- ★ Supports source audio extraction via optical Toslink or analog L/R outputs.
- ★ HDMI Outputs support 4K to 1080P downscaling
- ★ Supports ARC (Audio Return Channel)
- ★ Supports advanced EDID management including AUTO, COPY and STD
- ★ Control via the front panel buttons or IR remote

## 3. Package Contents

1. 1x 4x2 HDMI2.0 Matrix Switcher
2. 1x 12V/1A Locking Power Adapter
3. 2x Mounting ears
4. 1x IR Remote
5. 1x User Manual

## 4. Specifications

Technical	
HDMI Compliance	HDMI 2.0
HDCP Compliance	HDCP 2.2/HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolution	up to 4K2K@50/60Hz(YCbCr 4:4:4), 4K2K@30Hz. All HDMI 3D TV format, etc.
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8-bit, 10-bit, 12-bit [1080P, 4K30Hz, 4K60Hz (YCbCr 4:2:0)] 8-bit [4K60Hz (YCbCr4:4:4)]
HDMI Audio Formats	PCM2.0/5.1/7.1CH, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX,DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Optical Audio Formats	PCM2.0, Dolby Digital / Plus, DTS
L/R Audio Formats	PCM2.0CH (Note: If ARC function is turned on, the audio port will mute.)
ESD Protection	Human-body Model: 38kV (Air-gap discharge), 34kV (Contact discharge)

## Premium Extender Kit for K-12 Educational Applications

Connections	
Input Ports	4xHDMI Type A [19-pin female]
Output Ports	2xHDMI Type A [19-pin female] 1xL/R audio out [3.5mm Stereo Mini-jack] 1xOPTICAL audio out [S/PDIF]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	251mm(W)x105mm(D)x20mm(H)
Weight	620g
Power Supply	Input: AC100-240V 50/60Hz Output: DC12V/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)

## 5. Operation Controls and Functions

### 5.1 Front Panel

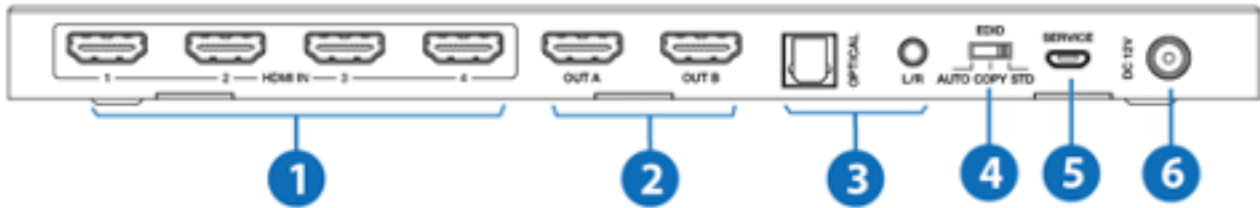


Number	Name	Function Description
1	Power LED	The blue LED will illuminate when the product is connected power supply.
2	IR	IR receiver window. It only receives IR remote signal from this product.
3	OUT A button and LED	Press the OUT A button to select an input source to OUT A output, the corresponding blue LED will illuminate.
	AUTO LED	The blue AUTO LED will illuminate 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, the corresponding blue LED will illuminate.
	AUTO LED	The blue AUTO LED will illuminate, 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. 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.

## 4x2 HDMI 2.0 Seamless Matrix Switcher

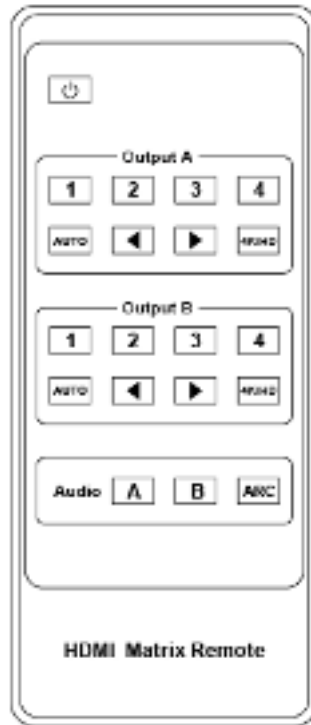
5	Audio button	<ul style="list-style-type: none"> <li>Press AUDIO button to select extract the input source audio from OUT A port or OUT B port to optical and analog L/R output, the corresponding blue LED will illuminate.</li> <li>If ARC function is turned on, press Audio button to select return the audio signal from OUT A or OUT B display device to optical output, the corresponding blue LED will illuminate. At this time, the analog L/R port is mute.</li> </ul>
6	4k→1080P button	Press the button to select OUT A or OUT B 4k→1080P downscale function, the corresponding blue LED will illuminate. 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.
7	ARC button	Turn on / off ARC function. The ARC LED will illuminate when you turn on the ARC function.



### 5.2 Rear Panel



Number	Name	Function Description
1	HDMI IN port	HDMI input ports, connect to HDMI source device such as DVD or PS4 with an HDMI cable.
2	HDMI OUT A / OUT B port	HDMI output ports, connect to HDMI display device such as TV or Monitor 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	<p><b>AUTO:</b> 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.</p> <p><b>COPY:</b> 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.</p> <p><b>STD:</b> Out A and Out B display device output default 1080P.</p>
5	SERVICE port	Firmware update port.
6	DC 12V	Plug in 12V/1A adapter to AC wall outlet for power supply.

6. IR Remote

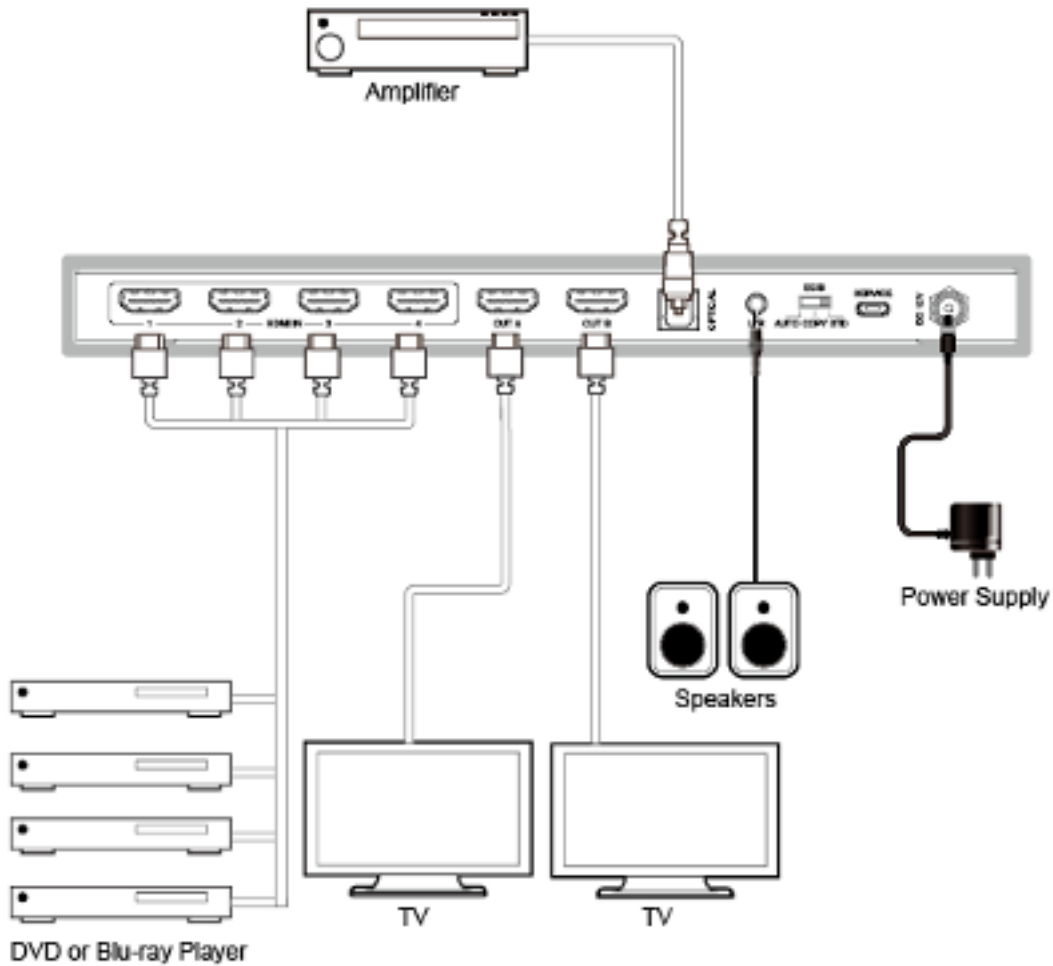


	Power on the product or set it to standby mode.
<b>Output A (Output B)</b>	
<b>1/2/3/4</b>	Select input source signal to Out A port output, the corresponding blue LED on the front panel will illuminate.
	Select the last or next input source signal to OUT A port output, the corresponding blue LED on the front panel will illuminate.
<b>AUTO</b>	Turn on or off AUTO function. 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.
<b>4K/HD</b>	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

## 4x2 HDMI 2.0 Seamless Matrix Switcher

Audio function	
<b>ARC</b>	Turn on / off ARC function.
<b>Audio A/B</b>	<ul style="list-style-type: none"><li>■ 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.</li><li>■ 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.</li></ul>

### 7. Application Example



### 8. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

#### ① Warranty

The limited warranty period of the product is fixed 3 (three) years.

#### ② Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

#### ③ Warranty Exclusions:

Warranty expiration.

Factory applied serial number has been altered or removed from the product. Damage, deterioration or malfunction caused by:

- √ Normal wear and tear.
- √ Use of supplies or parts not meeting our specifications.
- √ No certificate or invoice as the proof of warranty.
- √ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
- √ Damage caused by force majeure.
- √ Servicing not authorized by distributor.
- √ Any other causes which does not relate to a product defect. Shipping fees, installation or labor charges for installation or setup of the product.

#### ④ Documentation:

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defeat has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

Remarks: For further assistance or solutions, please contact your local distributor, or email directly to us at [support@kanepro.com](mailto:support@kanepro.com)



