

# 4x1 4K HDMI Switcher with ARC, Audio Extraction, and RS-232

18Gbps, HDCP 2.2, Dolby TrueHD/DTS-HD 7.1, Smart EDID, Auto-Switch

Route four 4K HDMI sources to a single display with integrated audio extraction and ARC — eliminating the need for a separate audio extractor or AVR upgrade. The KanexPro SW-4X1HDAUD is an 18Gbps HDMI 2.0a 4x1 switcher that combines source switching, audio de-embedding (optical S/PDIF + analog L/R), and Audio Return Channel in a single compact device. RS-232 control enables integration into managed AV environments.

Compliant with HDMI 2.0a, DVI 1.0, and HDCP 2.2/1.4, the switcher supports resolutions up to 4Kx2K@60Hz and all HDMI 3D formats. Audio pass-through supports PCM, Dolby TrueHD, and DTS-HD Master Audio up to 7.1 channels. Smart EDID management (Auto/2CH/5.1CH/7.1CH). Switch via front-panel button, IR remote, RS-232, or auto-detect. ARC extracts return audio from a connected TV. Compact metal enclosure, 2.5W max.

**Surge Protection Recommended** — This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes.

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## 2. PACKAGE CONTENTS

1x HDMI 4x1 Switcher • 1x 5V/1A PSU • 1x 38KHz IR Rx Cable • 1x Optical Convert Header • 1x IR Remote • 1x User Manual

## 3. FEATURES

- ✓ Compliant with HDMI 2.0a and DVI 1.0 standards
- ✓ HDCP 2.2 and HDCP 1.4 compliant with repeater function
- ✓ Video formats up to 4Kx2K@60Hz and all HDMI 3D video formats
- ✓ Supports PCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1CH
- ✓ Digital (optical S/PDIF) and analog (L/R) audio output
- ✓ Smart EDID management (Auto/2CH/5.1CH/7.1CH selectable)
- ✓ Auto or manual input switching mode
- ✓ Audio Return Channel (ARC) support



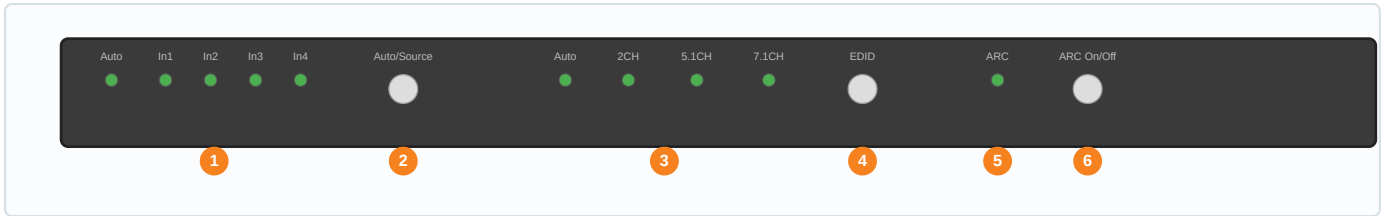
## 4. Specifications

TECHNICAL		
<b>HDMI</b>		HDMI 2.0a, DVI 1.0
<b>HDCP</b>		HDCP 2.2 / 1.4
<b>Bandwidth</b>		18Gbps
<b>Resolution</b>		Up to 4Kx2K@60Hz, all HDMI 3D
<b>Audio</b>		PCM 2.1/5.1/7.1CH, Dolby 5.1, DTS 5.1, Dolby TrueHD, DTS-HD MA
<b>ESD</b>		±8kV (air-gap) & ±4kV (contact)
CONNECTION		
<b>Input</b>		4 × HDMI [Type A] • 1 × IR Receive • 1 × RS-232
<b>Output</b>		1 × HDMI [Type A] • 1 × L/R Analog + Optical S/PDIF
MECHANICAL		
<b>Dimensions</b>		180mm (D) × 85mm (W) × 11.6mm (H)
<b>Weight</b>		300g
<b>Power</b>		DC 5V/1A • 2.5W max
<b>Operating Temp</b>		0°C – 40°C / 32°F – 104°F
<b>Storage Temp</b>		-20°C – 60°C / -4°F – 140°F



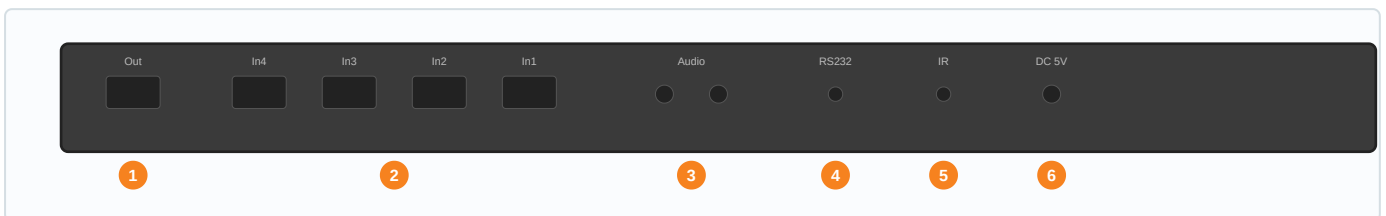
## 5. Operation Controls and Functions

### FRONT PANEL



No.	Name	Function
1	<b>Input LEDs</b>	Auto, In1–In4 — LED illuminates when selected.
2	<b>Auto/Source</b>	Long press (>2s): toggle auto/manual. Short press: cycle inputs.
3	<b>EDID LEDs</b>	Auto, 2CH, 5.1CH, 7.1CH — shows active EDID mode.
4	<b>EDID Button</b>	Cycle EDID: Auto / 2.1CH / 5.1CH / 7.1CH.
5	<b>ARC LED</b>	Illuminates when ARC is active.
6	<b>ARC On/Off</b>	Enable or disable ARC.

### REAR PANEL



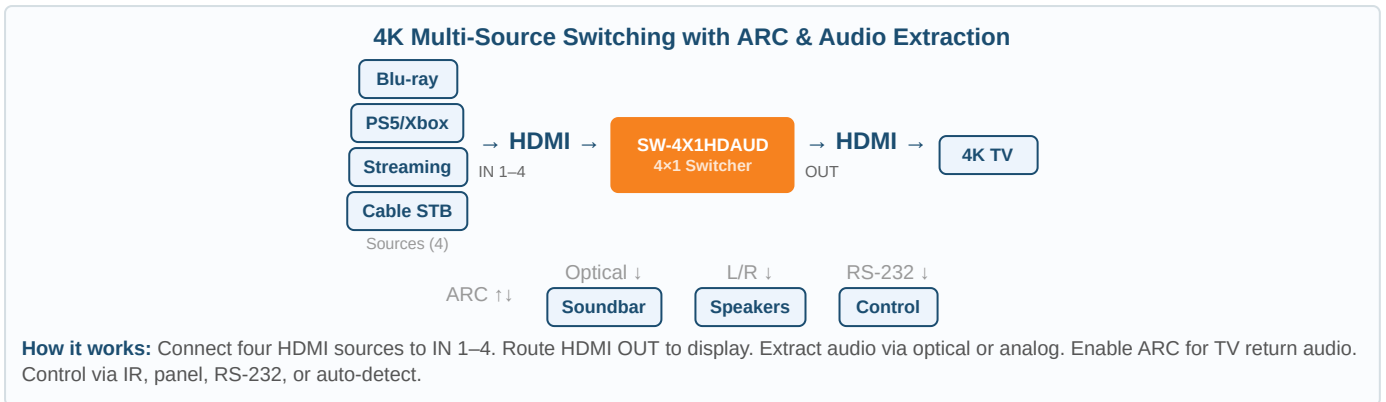
No.	Name	Function
1	<b>HDMI Output</b>	Connect to display.
2	<b>HDMI Inputs</b>	4 ports — connect to sources.
3	<b>Audio Output</b>	Analog L/R + optical S/PDIF.
4	<b>RS-232</b>	Serial control port.
5	<b>IR Receiver</b>	38KHz IR input.
6	<b>DC 5V In</b>	5V/1A power input.

## 6. IR REMOTE

**ARC:** Enable/disable ARC. **Auto/2.1ch/5.1ch/7.1ch:** Select EDID. **Auto Source:** Toggle auto/manual. **In1–In4:** Select input.



## 7. Application Example



### TROUBLESHOOTING

**Q: No signal on the display?**

A: 1) Verify certified High Speed HDMI cables. 2) Try a different EDID mode. 3) Power-cycle the switcher.

**Q: No audio from optical or analog output?**

A: 1) If using ARC, confirm ARC LED is lit. 2) Check EDID matches desired channel count. 3) Verify optical convert header connection.

**Q: Auto-switch not detecting new source?**

A: Long-press Auto/Source (>2s) to enable auto mode. Ensure previous source is powered off.

