



# **HDMI 8K Audio De-Embedder w/ ARC User Manual**

**SKU: AUD-DEBED-8K**

## 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.

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# 1. Introduction

The KanexPro AUD-DEBED-8K HDMI audio de-embedder can extract audio signals from an HDMI source or ARC-compatible TV to output analog stereo and digital S/PDIF audio, with a buffered HDMI video output. It supports data rates up to 48Gbps to comply with HDMI 2.1 and HDCP 2.3 requirements. It is compatible with UHDTV 8K@60Hz. It includes several features for ease of integration, such as EDID management and cable equalization. It provides an easy solution for HDMI installations to send audio signals to a stereo audio or surround sound system.

## 2. Features

- ☆ HDMI 2.1 and HDCP 2.3 compliant
- ☆ Support 48Gbps FRL and 18Gbps TMDS video bandwidth
- ☆ Support video resolution up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit
- ☆ HDMI 2.1 protocols: VRR, ALLM, QMS, QFT, SBTM are supported
- ☆ HDR, HDR 10, HDR 10+, Dolby Vision, HLG pass-through
- ☆ LPCM 7.1CH, Dolby TrueHD, Atmos and DTS-HD Master, DTS:X Audio pass-through
- ☆ HDMI input audio or TV ARC audio de-embedded to S/PDIF and L/R audio output
- ☆ Support CEC control from output devices to input sources
- ☆ Advanced EDID management
- ☆ Compact design for easy and flexible installation

## 3. Package Contents

- ① 1 × 48Gbps HDMI Audio De-embedder
- ② 1 × 5V/1A Multinational Power Supply
- ③ 1 × User Manual

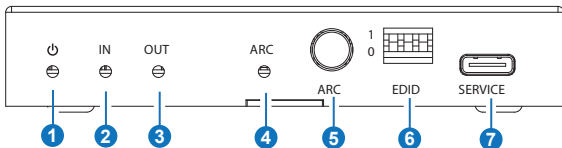
## 4. Specifications

| Technical         |                                                                                                                                                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HDMI Compliance   | HDMI 2.1                                                                                                                                                                                                                                   |
| HDCP Compliance   | HDCP 2.3                                                                                                                                                                                                                                   |
| Video Bandwidth   | 48Gbps FRL and 18Gbps TMDs                                                                                                                                                                                                                 |
| Video Resolution  | Up to 8K@60Hz 4:2:0 12bit, 4K@120Hz 4:4:4 12bit                                                                                                                                                                                            |
| Color Depth       | 8/10/12-bit                                                                                                                                                                                                                                |
| Color Space       | RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0                                                                                                                                                                                                 |
| Audio Formats     | <b>HDMI IN/OUT:</b><br>LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD<br><b>AUDIO BREAKOUT:</b><br>OPTICAL OUT: PCM 2.0CH, Dolby, DTS 5.1CH<br>L/R OUT: PCM 2.0CH |
| HDR               | HDR, HDR 10, HDR 10+, Dolby Vision, HLG                                                                                                                                                                                                    |
| ESD Protection    | Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)                                                                                                                                                                     |
| Connection        |                                                                                                                                                                                                                                            |
| Input             | 1 × Source IN [HDMI Type A, 19-pin female]                                                                                                                                                                                                 |
| Output            | 1 × TV(ARC) OUT [HDMI Type A, 19-pin female]<br>1 × L/R [3.5mm Stereo mini-jack]<br>1 × OPTICAL [S/PDIF, female]                                                                                                                           |
| Control           | 1 × SERVICE [USB Type C, Update port]                                                                                                                                                                                                      |
| Mechanical        |                                                                                                                                                                                                                                            |
| Housing           | Metal Enclosure                                                                                                                                                                                                                            |
| Color             | Black                                                                                                                                                                                                                                      |
| Dimensions        | 95mm [W] × 68mm [D] × 18mm [H]                                                                                                                                                                                                             |
| Weight            | 178g                                                                                                                                                                                                                                       |
| Power Supply      | Input: AC 100-240V 50/60Hz, Output: DC 5V/1A<br>(US/EU standards, CE/FCC/UL certified)                                                                                                                                                     |
| Power Consumption | 4W (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)  |                |            |
| Recommended HDMI Cable                                            |                             |                |            |
| Video Resolution                                                  | 8K60                        | 4K60           | 1080P      |
| HDMI Cable Type                                                   | Ultra HDMI 2.1 cable        | HDMI 2.0 cable | HDMI cable |
| HDMI Cable Length<br>(HDMI IN / OUT)                              | 2m/6.6ft ~ 3m/10ft          | 10m/33ft       | 15m/49ft   |
| The use of "Premium High Speed HDMI" cable is highly recommended. |                             |                |            |

## 5. Operation Controls and Functions

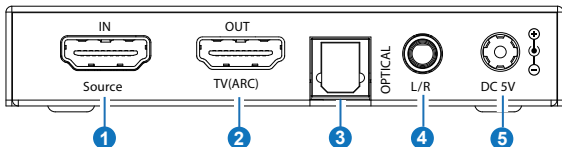
### Front Panel



| No. | Name      | Function Description                                                                                                                                                                                                                                                                                                                                     |
|-----|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Power LED | When the device is powered on, the red LED will be on.                                                                                                                                                                                                                                                                                                   |
| 2   | IN LED    | When the IN port connects to an active source device, the green LED will be on.                                                                                                                                                                                                                                                                          |
| 3   | OUT LED   | When the OUT port connects to a display device and outputs signal, the corresponding green LED will be on.                                                                                                                                                                                                                                               |
| 4   | ARC LED   | <ul style="list-style-type: none"> <li>Light on: The ARC is enabled with a normal CEC communication. The audio is returned to output via the optical port.</li> <li>Light flashing: The ARC is enabled with an abnormal CEC communication. The audio is failed to return to the output optical port.</li> <li>Light off: The ARC is disabled.</li> </ul> |

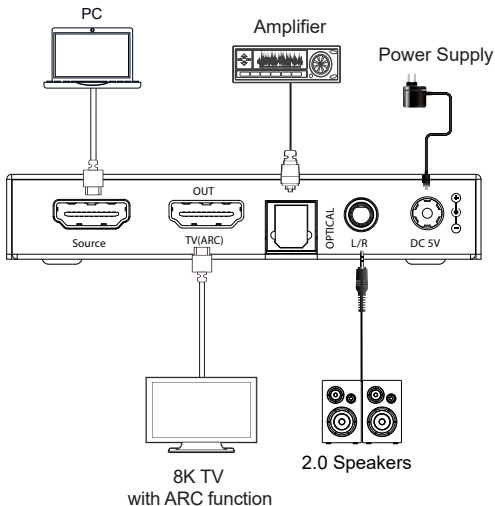
| No. | Name            | Function Description                                                                                                                                                                                                                                                                                                                                                           |
|-----|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5   | ARC button      | Press this button to enable or disable the ARC function.                                                                                                                                                                                                                                                                                                                       |
| 6   | EDID DIP switch | Use the DIP switch to set EDID.<br>[DIP]=111: Copy OUT port sink video and audio EDID<br>[DIP]=110: Copy OUT port sink video EDID, Audio 2.0CH<br>[DIP]=101: Copy OUT port sink video EDID, Audio 5.1CH<br>[DIP]=100: FRL12G_8K_HDR, 2.0CH<br>[DIP]=011: FRL12G_8K_HDR, 5.1CH<br>[DIP]=010: FRL10G_8K_HDR, 2.0CH<br>[DIP]=001: FRL10G_8K_HDR, 5.1CH<br>[DIP]=000: 1080P, 2.0CH |
| 7   | SERVICE         | Firmware update and debug port.                                                                                                                                                                                                                                                                                                                                                |

## Rear Panel



| No. | Name     | Function Description                                                                                                                                                          |
|-----|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | IN port  | HDMI signal input port, connected to HDMI source device such as DVD or PS5 with an HDMI cable.                                                                                |
| 2   | OUT port | HDMI signal output port, connected to HDMI display device such as TV or Monitor with an HDMI cable. It can be used as the ARC audio channel when the ARC function is enabled. |
| 3   | OPTICAL  | Optical audio output port.                                                                                                                                                    |
| 4   | L/R      | Analog audio output port.                                                                                                                                                     |
| 5   | DC 5V    | DC 5V/1A power input port.                                                                                                                                                    |

## 6. Application Example



**HDMI™**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

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