KanexPro

AUD-AMP-8K

8K HDMI 2.1 eARC Audio to Amplifier Adapter

De-embed ARC/eARC Audio to Any AVR — HDMI 2.1 Video Passes Through at Full 48Gbps

QUICK SPECS

HDMI Compliance	**Video Resolution**
HDMI 2.1 / HDCP 2.3	8K@60Hz / 4K@120Hz
Video Bandwidth	**Audio**
48Gbps FRL / 18Gbps TMDS	Dolby Atmos, DTS:X, LPCM 7.1CH
Power	**Dimensions**
DC 5V/2A (CE/FCC/UL PSU included)	95 × 68 × 18mm / 178g

CE   FCC   UL   HDMI 2.1   HDCP 2.3

1. Introduction

Bridges the gap between HDMI 2.1 eARC displays and legacy AV receivers by de-embedding ARC/eARC audio from any 8K-capable TV or HDMI source and routing it via HDMI directly to the amplifier — no AVR replacement required. Fully compliant with HDMI 2.1 and HDCP 2.3, supporting data rates up to 48Gbps FRL with zero video and audio latency.

Designed for CEDIA integrators specifying retrofit and new-build installations, the AUD-AMP-8K handles video resolutions up to 8K@60Hz and 4K@120Hz with full HDR pass-through (HDR10, HDR10+, Dolby Vision, HLG) and HDMI 2.1 protocols including VRR, ALLM, QMS, QFT, and SBTM. Eight DIP-switch EDID modes, CEC volume control, and a USB-C firmware update port ensure long-term serviceability in the field.

2. Features

✓ HDMI 2.1 and HDCP 2.3 compliant with 48Gbps FRL and 18Gbps TMDS video bandwidth

✓ Supports video resolutions up to 8K@60Hz (4:2:0, 12-bit) and 4K@120Hz (4:4:4, 12-bit)

✓ De-embeds ARC/eARC audio from HDMI source input or TV ARC/eARC port to dedicated Amp AUDIO OUT

✓ Full audio pass-through: LPCM 7.1CH, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X

✓ HDR pass-through: HDR10, HDR10+, Dolby Vision, HLG; HDMI 2.1 protocols VRR, ALLM, QMS, QFT, SBTM

✓ Advanced EDID management via 8-mode DIP switch — copy sink EDID or select fixed FRL12G/FRL10G profiles at 2.0, 5.1, or 7.1CH

✓ CEC control and CEC volume control from TV to source and amplifier

✓ USB-C SERVICE port for field firmware updates and debug

✓ CE/FCC/UL certified 5V/2A multinational power supply included

3. Package Contents

① 1 × AUD-AMP-8K 48Gbps HDMI eARC Audio to Amplifier Adapter
② 1 × 5V/2A Multinational Power Supply (CE/FCC/UL certified)
③ 1 × User Manual

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4. Specifications

SPECIFICATION	VALUE
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, 12-bit) / 4K@120Hz (4:4:4, 12-bit)
Audio Latency	No Latency
Video Latency	No Latency
Color Depth	8/10/12-bit
Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
HDR	HDR10, HDR10+, Dolby Vision, HLG
HDMI 2.1 Protocols	VRR, ALLM, QMS, QFT, SBTM
Audio Formats (IN/OUT)	LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, Dolby Atmos, DTS, DSD, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap) / ±4kV (Contact)
CONNECTION	
Input	1 × Source IN [HDMI Type A, 19-pin female]
Output	1 × TV(eARC) OUT [HDMI Type A, 19-pin female] 1 × Amp AUDIO OUT [HDMI Type A, 19-pin female]
Control / Service	1 × SERVICE [USB Type C — firmware update & debug]
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/2A (CE/FCC/UL certified)
Power Consumption	4.5W (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)
RECOMMENDED HDMI CABLE LENGTH (HDMI IN / OUT)	
8K@60	2m/6.6ft – 3m/10ft (Ultra HDMI 2.1)
4K@60	5m/16ft
4K@30	10m/33ft
1080p	15m/49ft
CERTIFICATIONS	
Power Supply	CE / FCC / UL

5. Operation Controls and Functions

FRONT PANEL
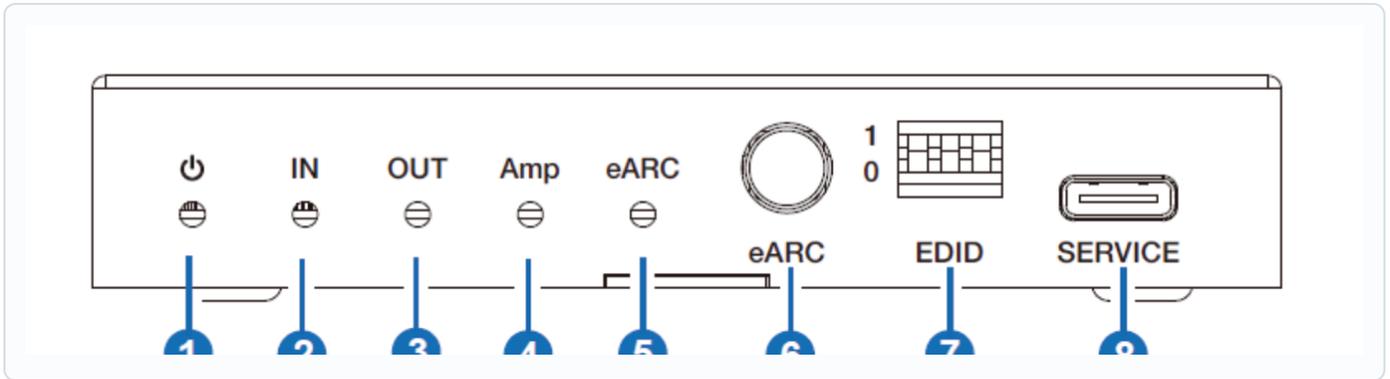
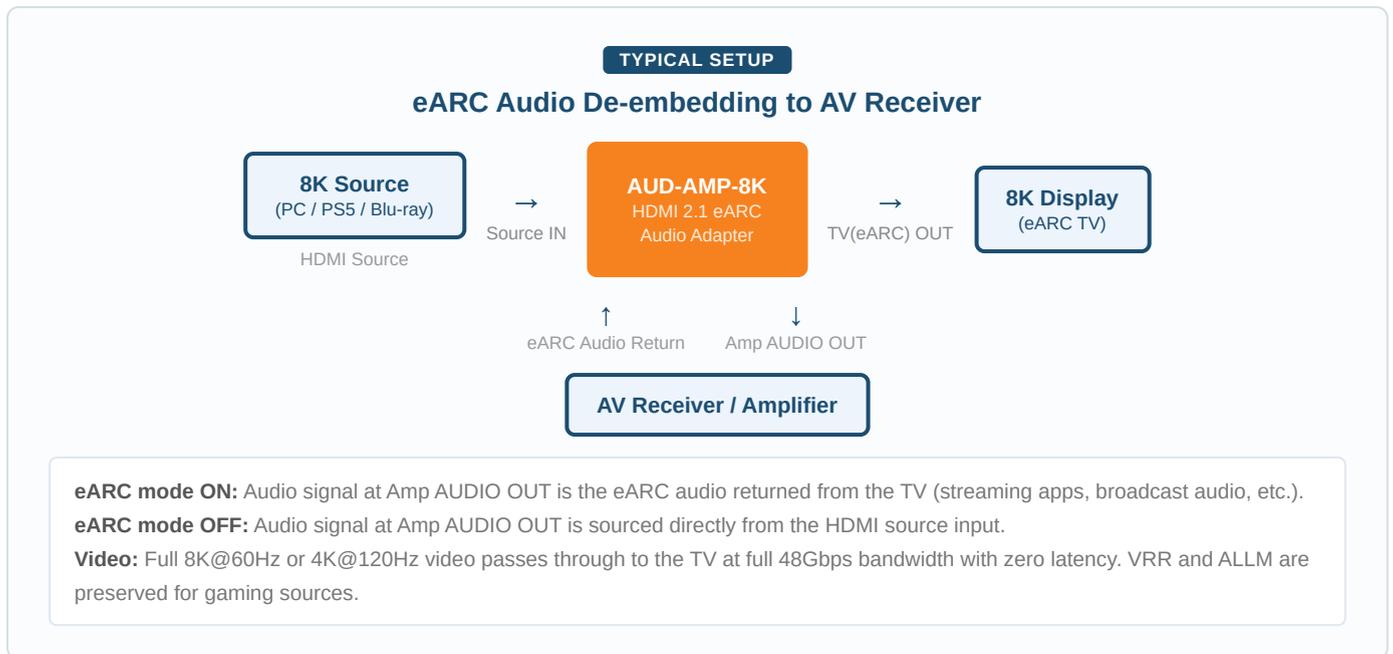| NO.	NAME	FUNCTION DESCRIPTION
1	Power LED	When the device is powered on, the red LED will be on.
2	IN LED	When the input signal is detected, the green LED will be on.
3	OUT LED	When the OUT port connects to a TV, the green LED will be on.
4	Amp LED	When the AUDIO OUT port connects to an amplifier, the green LED will be on.
5	eARC LED	**On:** ARC/eARC function is on; CEC communication and ARC/eARC working properly. **Flashing:** ARC/eARC on; CEC/ARC not working properly. **Off:** ARC/eARC function is off.
6	eARC Button	Press to enable or disable the eARC function.
7	EDID DIP Switch	[111] Copy OUT sink EDID [110] Copy AUDIO OUT sink EDID [101] FRL12G 8K HDR 2.0CH [100] FRL12G 8K HDR 5.1CH [011] FRL12G 8K HDR 7.1CH [010] FRL10G 8K HDR 2.0CH [001] FRL10G 8K HDR 5.1CH [000] FRL10G 8K HDR 7.1CH
8	SERVICE	USB Type-C port for firmware update and debug.

REAR PANEL
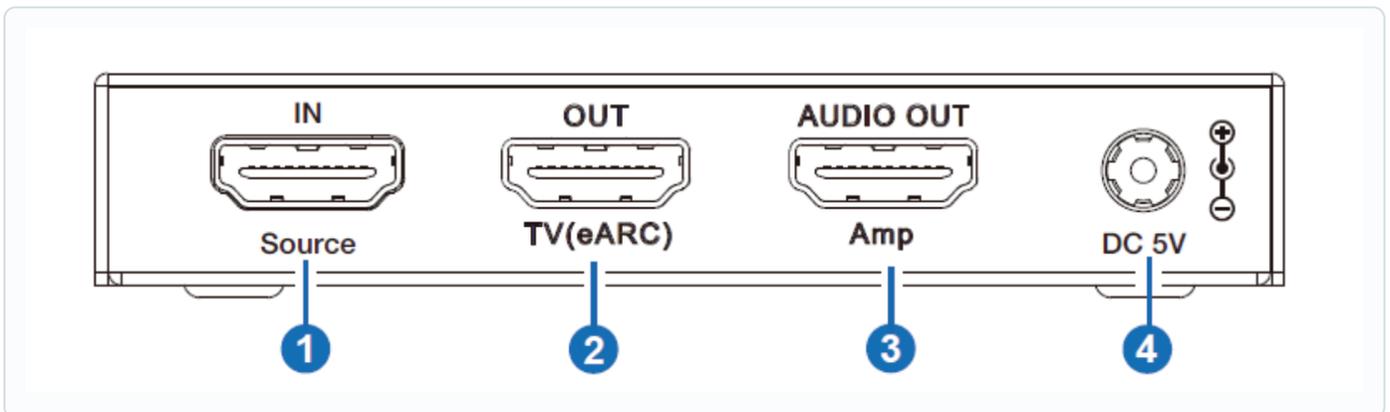
NO.	NAME	FUNCTION DESCRIPTION
1	Source IN	HDMI input. Connect to an HDMI source device such as a Blu-ray player, PS5, or 8K computer host.
2	TV(eARC) OUT	HDMI output to TV (ARC/eARC). Used as ARC/eARC audio return channel when ARC function is enabled.
3	Amp AUDIO OUT	HDMI audio output. Connect to an AV receiver or amplifier with an HDMI cable.
4	DC 5V	DC 5V/2A power input port.

6. Application Example

TYPICAL SETUP

eARC Audio De-embedding to AV Receiver

| 8K Source (PC / PS5 / Blu-ray) | → Source IN | AUD-AMP-8K HDMI 2.1 eARC Audio Adapter | → TV(eARC) OUT | 8K Display (eARC TV) |

HDMI Source

↑ eARC Audio Return   ↓ Amp AUDIO OUT

AV Receiver / Amplifier

eARC mode ON: Audio signal at Amp AUDIO OUT is the eARC audio returned from the TV (streaming apps, broadcast audio, etc.).

eARC mode OFF: Audio signal at Amp AUDIO OUT is sourced directly from the HDMI source input.

Video: Full 8K@60Hz or 4K@120Hz video passes through to the TV at full 48Gbps bandwidth with zero latency. VRR and ALLM are preserved for gaming sources.

Troubleshooting

Q: No audio from the amplifier?

A: Verify the eARC button is set to the correct mode. If using eARC audio return, ensure ARC/eARC is enabled in the TV's audio settings. Check that the amplifier's HDMI input is connected to the Amp AUDIO OUT port. Try toggling the eARC button to reset the CEC handshake.

Q: eARC LED is flashing — what does that mean?

A: Flashing eARC LED indicates ARC/eARC is enabled but CEC communication or the ARC channel is not established. Check HDMI cable quality and ensure Premium High Speed HDMI cables (48Gbps rated) are used on all connections. Verify CEC is enabled on both the TV and the source device.

Q: No video on the display?

A: Confirm Ultra HDMI 2.1 cables are used for 8K@60Hz signals (2–3m max). For 4K@60Hz, standard Premium HDMI up to 5m is sufficient. Check the EDID DIP switch setting matches the display's capability. Try DIP mode [111] to copy the TV's EDID automatically.

Q: How do I update the firmware?

A: Connect a USB Type-C cable from a PC to the SERVICE port. Contact KanexPro support at support@kanexpro.com for firmware files and update instructions.