48Gbps eARC Audio Adapter

User Manual

VER 1.0

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.

Table of Contents

1. Introduction

This 48Gbps eARC Audio Adapter is designed for de-embedding audio signals from an HDMI source or TV with ARC/eARC, and outputting HDMI audio, digital S/PDIF audio or analog audio to AV Receiver. It supports data rates up to 48Gbps complying with HDMI 2.1 and HDCP 2.3 requirements. 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 soundbar, amplifier or any 5.1/2.0CH sound system. CEC control from TV to the source, amplifier or soundbar is also supported.

2. Features

- ☆ HDCP 2.3 compliant
- ☆ Support 48Gbps video bandwidth and video resolution up to 8K@60Hz 4:2:0 12bit and 4K@120Hz 4:4:4 12bit, as specified in HDMI 2.1
- ☆ VRR, ALLM, QMS, QFT, SBTM are supported, as specified in HDMI 2.1
- ☆ Support HDR, HDR10, HDR10+, Dolby Vision pass-through
- ☆ Support LPCM 7.1CH, Dolby TrueHD, Atmos and DTS-HD Master,DTS:X Audio pass-through
- ☆ HDMI input source and TV eARC/ARC audio are de-embedded to S/PDIF, L/R and HDMI audio to output
- ☆ HDMI input source is de-embedded to any eARC/ARC soundbar to output
- ☆ Support full Audio up to Dolby Atmos/DTS:x from eARC TV to SONOS ARC& Beam or any eARC soundbar
- ☆ Support CEC control from TV to the source
- ☆ Support CEC volume control from TV to any eARC sound system
- ☆ Advanced EDID management

3. Package Contents

① 1 × 48Gbps eARC Audio Adapter
② 1 × 5V/2A Multinational Power Supply
③ 1 × User Manual

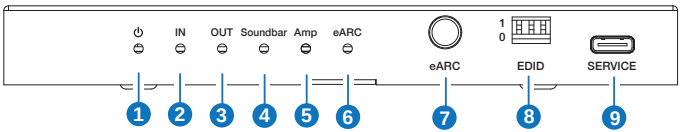
4. Specifications

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	8/10/12bit
Color Space	RGB, YCbCr_4:4:4, YCbCr_4:2:2, YCbCr_4:2:0
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	**HDMI input/output:** LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DSD DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X **eARC AUDIO OUT:** LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DSD DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X **Amp AUDIO OUT:** LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DSD DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DTS:X **Audio de-embedding output:** **Optical:** PCM 2.0CH/Dolby/DTS 5.1CH **L/R:** PCM 2.0CH
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	1 × Source IN [HDMI Type A, 19-pin female]
Output	1 × TV(eARC) OUT [HDMI Type A, 19-pin female] 1 × Soundbar eARC OUT [HDMI Type A, 19-pin female] 1 × Amp AUDIO OUT [HDMI Type A, 19-pin female] 1 × OPTICAL [S/PDIF] 1 × L/R [3.5mm Stereo Mini-jack]
Control	1 × SERVICE [USB Type C, Update port]

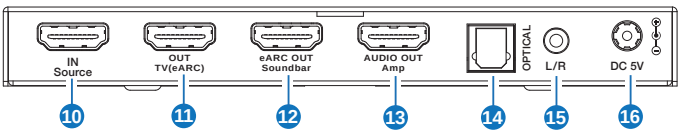
Mechanical				
Housing	Metal Enclosure			
Color	Black			
Dimensions	145mm [W] × 68mm [D] × 18mm [H]			
Weight	262g			
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 5V/2A (US/EU standards, CE/FCC/UL certified)			
Power Consumption	5.2W (Max)			
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F			
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F			
Relative Humidity	20~90% RH (non-condensing)			
Recommended HDMI Cable				
Video Resolution	8K	4K60	4K24	1080P
HDMI Cable Length (HDMI IN / OUT)	3m/10ft (Ultra HDMI 2.1)	8m/26ft	12m/39ft	15m/49ft
The use of “Premium High Speed HDMI” cable is highly recommended.				

5. Operation Controls and Functions

Front Panel

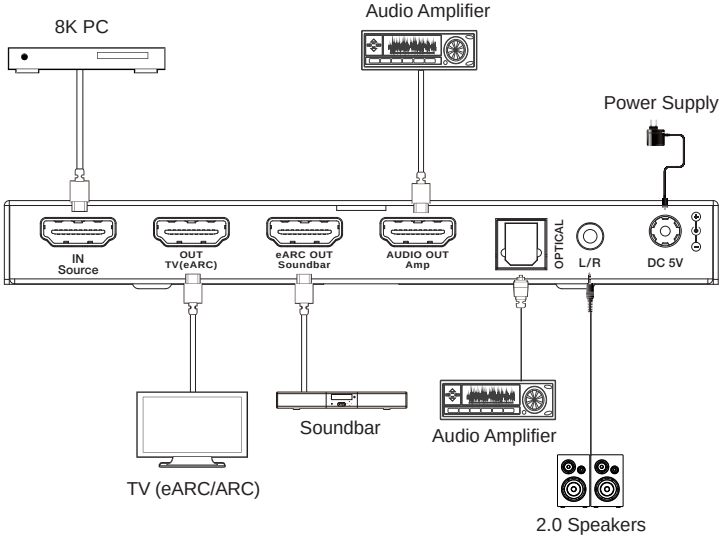


Rear Panel



No.	Name	Function Description
1	Power LED	The red LED is on when the device is working.
2	IN LED	The green LED will be on when the input source signal is detected.
3	OUT LED	The green LED will be on, when the HDMI OUT port connects a display device and outputs signal.
4	Soundbar LED	The green LED will be on when a soundbar is connected properly.
5	Amp LED	The green LED will be on when an amplifier is connected properly.
6	eARC LED	▪ **On:** The eARC/ARC mode is enabled. CEC communication and eARC is working properly. ▪ **Flashing:** The eARC/ARC mode is enabled. CEC communication and eARC is not working properly. ▪ **Off:** The eARC mode is disabled.
7	eARC button	Press this button to enable or disable the eARC/ARC mode.
8	EDID DIP switch	Use the DIP switch to set EDID. [DIP]=111: Copy OUT port sink EDID (as factory default) [DIP]=110: Copy video EDID of sink and audio EDID of Soundbar [DIP]=101: FRL12G_8K_HDR, 2.0CH [DIP]=100: FRL12G_8K_HDR, 5.1CH [DIP]=011: FRL12G_8K_HDR, 7.1CH [DIP]=010: FRL10G_8K_HDR, 2.0CH [DIP]=001: FRL10G_8K_HDR, 5.1CH [DIP]=000: FRL10G_8K_HDR, 7.1CH
9	SERVICE	Used for firmware update and serial commands control.
10	Source IN	HDMI signal input port, connected to HDMI source device such as 8K PC, DVD or PS5 with an HDMI cable.
11	TV(eARC) OUT	HDMI signal output port, connected to TV (eARC/ARC) with an HDMI cable. It can be used as an eARC/ARC audio channel when the eARC/ARC mode is enabled.
12	Soundbar eARC OUT	HDMI audio output port, connected to a soundbar (eARC/ARC).
13	Amp AUDIO OUT	HDMI audio output port, connected to an amplifier.
14	OPTICAL	Optical fiber audio output port.
15	L/R	Analog audio output port.
16	DC 5V	DC 5V/2A Power input port.

6. Application Example



Note: When eARC/ARC mode is enabled, the audio signal of Amplifier/Soundbar is the audio returned from the TV. When eARC/ARC mode is disabled, the audio signal of Amplifier/Soundbar is from the HDMI input source.