



USER MANUAL ^{V1.0}



48Gbps eARC Audio Adapter

JTD-3200 | JTECH-8KAE

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HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE



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Scan the QR code below or visit
(<https://resource.jtechdigital.com/products/3200>)
to view and access detailed digital



Safety Instructions:

- Before using this product, please carefully read the following safety instructions to ensure its proper use and keep this manual for future reference:
- To prevent electric shock, do not attempt to open the product.
- Only qualified personnel should perform any repairs or maintenance.
- Always place the product on a stable, flat surface to prevent it from falling.
- Do not expose the product to water, moisture, or high-humidity environments to avoid the risk of damage.
- To prevent damage from direct sunlight or high temperatures, do not expose the product to such environments.
- Do not place the product near heat sources like radiators, heat registers, stove, or other heat-producing apparatus.
- Do not place any objects on top of the product to avoid damage.
- Use only the attachments and accessories specified by the manufacturer.
- During lightning storms or prolonged periods of disuse, unplug the power supply to prevent damage.

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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
- ☆ Support HDR, HDR10, HDR10+, Dolby Vision, HLG 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

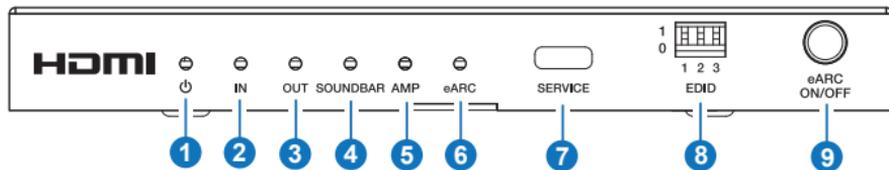
4. Specifications

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	<p>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</p> <p>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</p> <p>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</p> <p>Audio De-embedding Output: Optical: PCM 2.0CH/Dolby/DTS 5.1CH L/R: PCM 2.0CH</p>
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 × HDTV OUT (eARC) [HDMI Type A, 19-pin female] 1 × SOUNDBAR eARC AUDIO OUT [HDMI Type A, 19-pin female] 1 × AMP AUDIO OUT [HDMI Type A, 19-pin female] 1 × OPTICAL AUDIO OUT [S/PDIF] 1 × L/R AUDIO OUT [3.5mm Stereo Mini-jack]
Control	1 × SERVICE [USB Type C, Update port]

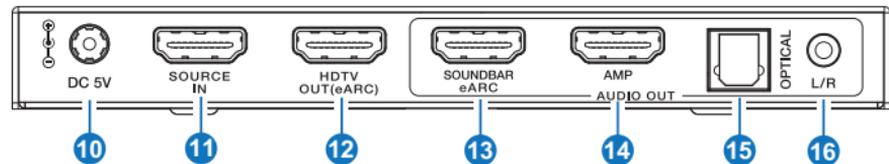
Mechanical				
Housing	Metal Enclosure			
Color	Black			
Dimensions	145mm [W] × 68mm [D] × 18mm [H]			
Weight	262g			
Power Supply	Input: AC 100-240V 50/60Hz, Output: DC 5V/2A (US/EU standards, CE/FCC/UL certified)			
Power Consumption	5.2W (Max)			
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F			
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

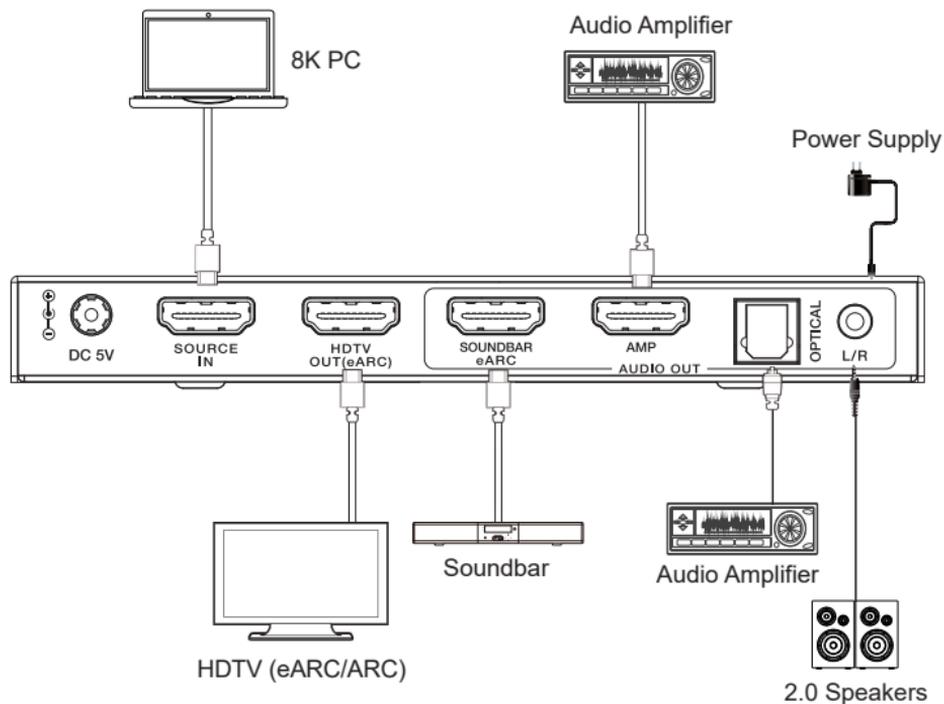


Rear Panel



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	<p>On: The eARC/ARC mode is enabled. CEC communication and eARC is working properly.</p> <p>Flashing: The eARC/ARC mode is enabled. CEC communication and eARC is not working properly.</p> <p>Off: The eARC mode is disabled.</p>
7	SERVICE	Used for firmware update and serial commands control.
8	EDID DIP switch	<p>Use the DIP switch to set EDID.</p> <p>[DIP]=111: Copy OUT port sink EDID (as factory default)</p> <p>[DIP]=110: Copy video EDID of sink and audio EDID of Soundbar</p> <p>[DIP]=101: FRL12G_8K_HDR, 2.0CH</p> <p>[DIP]=100: FRL12G_8K_HDR, 5.1CH</p> <p>[DIP]=011: FRL12G_8K_HDR, 7.1CH</p> <p>[DIP]=010: FRL10G_8K_HDR, 2.0CH</p> <p>[DIP]=001: FRL10G_8K_HDR, 5.1CH</p> <p>[DIP]=000: FRL10G_8K_HDR, 7.1CH</p>
9	eARC ON/OFF button	Press this button to enable or disable the eARC/ARC mode.
10	DC 5V	DC 5V/2A Power input port.
11	Source IN	HDMI signal input port, connected to HDMI source device such as 8K PC, DVD or PS5 with an HDMI cable.
12	HDTV OUT (eARC)	HDMI signal output port, connected to HDTV (eARC/ARC) with HDMI cable. It can be used as an eARC/ARC audio channel when the eARC/ARC mode is enabled.
13	SOUNDBAR eARC	HDMI audio output port, connected to a soundbar (eARC/ARC).
14	AMP	HDMI audio output port, connected to an amplifier.
15	OPTICAL	Optical fiber audio output port.
16	L/R	Analog audio output 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.

HDMI[™]
HIGH-DEFINITION MULTIMEDIA INTERFACE

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Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner, or benzene to clean.

Warranty

If your product does not work properly because of a defect in materials or workmanship, our company (referred to as “the warrantor”) will, for the length of the period indicated as below, “Parts and Labor (1) Year”, which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” limited warranty period, there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers products purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured, and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

Limited Warranty Limits and Exclusions

This Limited Warranty ONLY COVERS failures due to defects in material or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, mis- adjustment of consumer controls, improper maintenance, power line

Limited Warranty Limits and Exclusions

surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributed to acts of God.

There are no express warranties except as listed under “Limited Warranty Coverage”.

The warrantor is not liable for incidental or consequential damages resulting from the use of this product or arising out of any breach of this warranty. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive but are for illustration only).

Parts and service, which are not covered by this limited warranty, are your responsibility



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