



48Gbps HDMI® Audio Extractor with eARC

Model 103104



Supports 8K@60Hz Video

HDMI® CE FC

User Manual

Download the user manual at:

www.cablematters.com/dl/103104

support@cablematters.com

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1. INTRODUCTION

1.1 Introduction

Thank you for your purchase from Cable Matters® Inc., the 'Reliable Connectivity' company. This User Manual provides an overview of the features and installation of the

48Gbps HDMI® Audio Extractor with eARC

Supports up to 8K@60Hz video

Please read these instructions carefully before connecting, operating or configuring this product.

Please keep this manual for future reference.

Contact support@cablematters.com for questions or product support.

1.2 Copyright and Trademarks

Cable Matters is a registered trademark or trademark of Cable Matters Inc. All rights reserved. All other trademarks are the property of their respective owners.

Dolby, Dolby Audio and the double-D symbol are trademarks of Dolby Laboratories.

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

1.3 FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device must not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

2. PRODUCT OVERVIEW

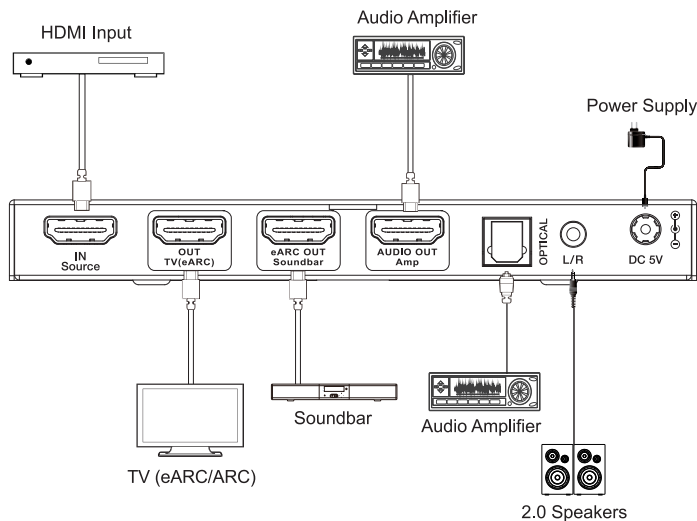
2.1 Package Contents

Please check that the following items are contained in the package:

- 1x 48Gbps HDMI Audio Extractor
- 1x 5V/2A Multinational Power Supply
- 1x 6ft HDMI 2.1 Cable
- 1x User Manual

2.2 Product Description

This 48Gbps HDMI Audio Extractor 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.



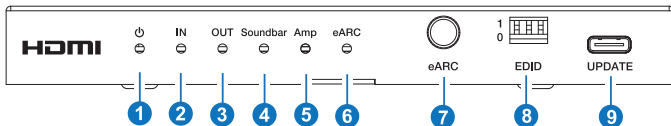
Note: When eARC/ARC mode is enabled, the audio signal for the amplifier or soundbar is returned from the TV. When eARC/ARC mode is disabled, the audio signal for the amplifier or soundbar comes from the HDMI input source.

2.3 Product Features

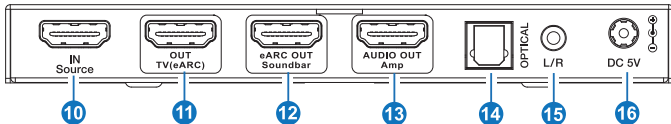
- HDCP 2.3 compliant
- Support 48Gbps video bandwidth and video resolution up to 8K@60Hz 4:2:0 12bit and 4K@120Hz 4:4:4 12bit, as specified in HDMI 2.1
- VRR, ALLM, QMS, QFT, SBTM are supported, as specified in HDMI 2.1
- Support HDR, HDR10, HDR10+, Dolby Vision pass-through
- Support LPCM 7.1CH, Dolby 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. CONNECTION AND OPERATING INSTRUCTIONS

Front Panel



Rear Panel



No.	Name	Description
1	Power LED	The red LED lights up when the device is operating.
2	IN LED	The green LED lights up when an input source signal is detected.
3	OUT LED	The green LED will light up when the HDMI OUT port is connected to a display device and is sending a signal.
4	Soundbar LED	The green LED lights up when a soundbar is connected.
5	Amp LED	The green LED lights up when an amplifier is connected.
6	eARC LED	<ul style="list-style-type: none"> ▪ 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	UPDATE	Used for firmware update and serial commands control.
10	IN Source	HDMI signal input port, for connecting to an HDMI source device.
11	OUT TV (eARC)	HDMI signal output port, for connecting to a TV (eARC/ARC). It can be used as an eARC/ARC audio channel when eARC/ARC mode is enabled.
12	eARC OUT Soundbar	HDMI audio output port, for connecting to a soundbar (eARC/ARC).
13	AUDIO OUT Amp	HDMI audio output port, for connecting 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.

4. TECHNICAL 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 × 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]

Note: Specifications are subject to change without notice

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. TROUBLESHOOTING NOTES

- Check that all cables are connected to the correct input and output ports.
- OUT TV(eARC) port must be connected to a eARC TV port
- eARC OUT Soundbar port must be connected to the Output port of a Soundbar
- AUDIO OUT Amp port must be connected to the Input port of a Amplifier
- Directly connect the HDMI source equipment to the TV to test for compatibility.
- Try using the factory default EDID settings, set DIP to 111
- Test with a different display for compatibility issues.
- Connecting an HDMI cable with a coupler or wall plate may degrade the signal transmission.
- Wait 10 seconds for a handshake signal when connecting a computer.
- Optical port supports up to 5.1 channel output only

Contact support@cablematters.com with any questions.

6. WARRANTY AND SUPPORT

6.1 Customer Support and Contact Information

Cable Matters offers lifetime technical support as an integral part of our commitment to provide industry leading solutions.

Email us with any questions at support@cablematters.com.

6.2 Warranty Information

This product is backed by a limited one-year warranty. The warranty covers parts and labor costs only. Cable Matters does not warrant its products from defects or damages arising from misuse, abuse, or normal wear.

6.3 Limitation of Liability

In no event shall Cable Matters Inc. (including their officers, directors, employees or agents) be liable for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, loss of data, or any pecuniary loss, arising out of, or related to the use of this product exceeding the actual price paid for the product (as allowed by state law).

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