Cable Matters

18Gbps A/V Audio Extractor

Model 103090

♦ Extracts audio signals from an A/V source to digital optical or analog stereo L/R audio

User Manual

Download the user manual at:
www.cablematters.com/dl/103090

support@cablematters.com

Table of Contents

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 your new

18Gbps A/V Audio Extractor

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

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Dolby, Dolby Audio and the double-D symbol are trademarks of Dolby Laboratories.
HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and/or other countries.

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.
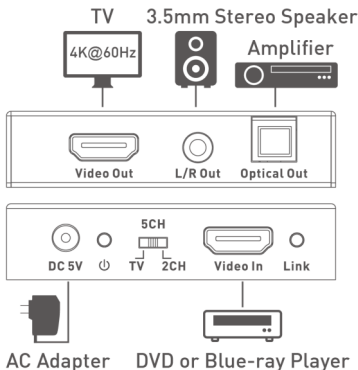
2. PRODUCT OVERVIEW

2.1 Package Contents

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

- 1x 18Gbps A/V Audio Extractor
- 1x AC Power Adapter
- 2x HDMI® Cables
- 1x User Manual

2.2 Product Description

The Cable Matters 18Gbps A/V Audio Extractor
extracts audio signals from an HDMI
compliant source to multi-channel optical
(SPDIF) or analog stereo L/R audio outputs.
It supports up to 4K@60Hz resolution,
10bits High Dynamic Range (HDR) pass
through and audio sampling rate up to 192
kHz.

2.3 Product Feaures

- Extracts HDMI audio signal to multi-channel optical (SPDIF) or L/R analog audio signal

- Supports up to 4K@60Hz resolution,YCbCr 4:4:4

- 18 Gbps bandwidth for HDMI 2.0b compatibility

- HDCP 2.2 support for viewing protected content

- Optical audio supports LPCM 2CH, Dolby Digital 2/5.1CH, DTS 2/5.1CH

- LCPM, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS HD-Master Audio support

- Supports 10bits HDR pass through

- Supports HDMI High Bit Rate (HBR) audio pass through

- Supports Consumer Electronics Control (CEC) bypass

- Rugged metal housing reduces EMI electromagnetic noise

- Mountable with the included brackets and screws

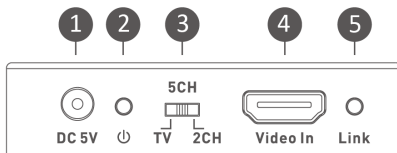- Includes a 2-Pack of 4K-rated HDMI cables

3. CONNECTION AND OPERATION

3.1 Installation Checklist

Please review this information before installing this 18Gbps A/V Audio Extractor.
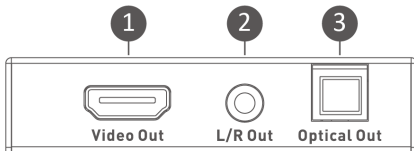
- Installation with a surge protector is recommended to protect the equipment
- Power-off the source and display equipment before connecting
- Check for a nearby AC outlet for the power adapter
- Recommended maximum total HDMI cable distance In/Out is 15/15ft (4K) and 25/25ft (HD)
- 4K displays require a 4K-rated source and HDMI 2.0 cables (Included)
- Test the Extractor and cabling before installing in a permanent location

3.2 Front Panel Connections

1. **DC 5V:** Connect to AC power adapter (Included)
2. **Power**: Green LED indicates that power is supplied to the Extractor
3. **TV / 5CH / 2CH:** Dip switch to select output audio format (see page 5 **TV / 5CH / 2CH Dip Switch setting)**
4. **Video IN**: Connect HDMI source equipment
5. **Link LED:** Green LED indicates that HDMI input signal is detected

3.3 Rear Panel Connections

1. **Video OUT:** Connect HDMI display
2. **L/R Out:** 3.5mm Aux Stereo audio Output Port
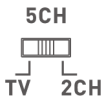3. **Optical Out:** Digital OPTICAL S/PDIF audio Output Port

3.4 Connection Instructions

1. Power off all the source equipment and the output display
2. Connect a High-Speed HDMI cable from the source equipment to the **Video IN** port
3. Connect a High-Speed HDMI cable from the output display to the **Video OUT** port
4. (Optional) Connect a 3.5mm Stereo Audio Cable (Not included) or an S/PDIF Optical Audio cable (Not included) from the amplifier or receiver to the **L/R Out** or the **Optical Out** port
5. Select the **TV / 5CH / 2CH** mode
6. Connect the AC power adapter to the unit and an electrical outlet, and power on everything

Note: 4K video requires a 4K source and a 4K-rated HDMI cable

3.5 TV / 5CH / 2CH Dip Switch setting

TV / 5CH / 2CH Dip switch allows to select different output audio formats:

Position	Audio Format Setting
TV	Same as the output display connected to the Video OUT port
5CH	Same as the video source equipment connected to the Video IN port
2CH	Set to LPCM 2 channel stereo Audio

3.6 Troubleshooting Notes

- Check that the Extractor and all connected displays have power. The green LED power indicator should be lit.

- Check that all cables are connected to the correct IN and OUT ports.

- Check that the correct video input source and output display is selected. Check the green LED indicators on the front panel of the Extractor.

- All connected equipment must support HDCP to view protected content.

- Directly connect the video source to a display to test for compatibility.

- Check the audio output settings from the source device or computer.

- Test each HDMI cable by connecting it with other equipment.

- Recommended maximum total HDMI cable distance In/Out is 15/15ft (4K) and 25/25ft (HD).

- Connecting through an HDMI coupler or wall plate may degrade the signal transmission.

- Place the Extractor away from fluorescent lighting or equipment that generates electrical noise.

- A 'Not Supported' error message may indicate that the connected equipment does not support HDCP (or more than 2 outputs) for viewing content-protected video.

- Reboot the video source and output displays after making changes if the display is not detected.

Contact **support@cablematters.com** with any questions.

4. TECHNICAL SPECIFICATIONS Model 103087

Extractor Ports	
HDMI Input	1x HDMI Female
HDMI Output	1x HDMI Female
AUDIO Output 1	S/PDIF Optical - LCPM-2/5.1 Ch, Dolby Digital 2/5.1 Ch, DTS 2/5.1 Ch
AUDIO Output 2	3.5mm TRS stereo - 2 Ch Female (CTIA & OMTP headset compatible)
Audio/Video Compatibility	
HDMI Compatibility	HDMI 2.0b and below
HDCP Compatibility	HDCP 2.2, 1.4
Video Bandwidth	Up to 18 Gbps
Video Resolution	Up to 4K@60Hz 4:4:4
Color Spaces	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	10-bit, 12-bit
HDMI Audio Formats	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Mechanical	
Extractor Housing	LxWxH) 2.9 x 2.4 x 0.7 Inches / 4.6 Ounces
Power Supply	Input: 100-240VAC, 50/60Hz, Output: DC 5V/1A
Operating Temperature	32F - 140F
Miscellaneous	
Regulatory Compliance	C E, FCC, RoHS
Warranty	Limited One-Year

Note: Specifications are subject to change without notice

5. WARRANTY AND SUPPORT

5.1 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.**

5.2 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.

5.3 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.

View related products at www.cablematters.com

Certified Premium HDMI® Cable

Model 300016

Toslink S/PDIF Optical Audio Cable

Model 120001

3.5mm Stereo Audio Cable

Model 500001