

# SIMPLIFIED MFG AUDEX1 HDMI 18Gbps Audio Extractor User Manual

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SIMPLIFIED MFG AUDEX1 HDMI 18Gbps Audio Extractor



#### Thank you for purchasing this device

The Simplified MFG AUDEX1 is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience.

#### Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection such as the HDSURGE and other systems is highly recommended in order to protect and extend the life of your equipment

#### Introduction

The AUDEX1 HDMI 18Gbps Audio Extractor extracts audio signals from any HDMI compliant source to digital optical or analog stereo L/R audio outputs. Both input and output HDMI connections support video resolution up to 4K2K@50/60Hz (YUV444) while supporting 10bit HDR (High Dynamic Range) pass through and HDMI high resolution digital audio formats bypass, LPCM 2CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio, audio sampling rate up to 192 kHz. HDCP 2.2 and CEC bypass are supported.

#### **Features**

- HDMI 2.0b (18Gbps), HDCP 2.2 and DVI compliant
- Video resolutions up to 4K2K@50/60Hz (YUV444)
- Extracts HDMI audio to multi-channel optical (SPDIF) or L/R analog audio
- Optical audio supports LPCM 2CH, Dobly Digital 2/5.1CH, DTS 2/5.1CH
- Supports HDMI High Bit Rate(HBR) audio pass through
- Audio sample rates up to 192kHz
- 10bits HDR (High Dynamic Range) pass through

• Supports CEC bypass

# **Package Contents**

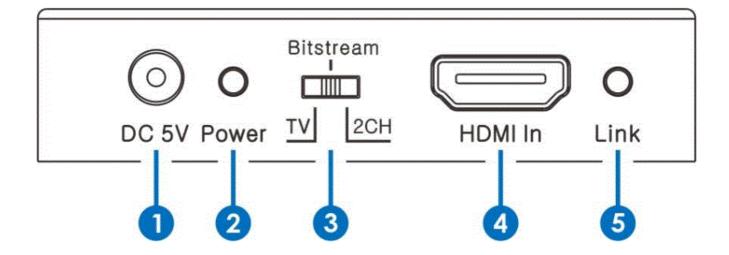
- 1 x AUDEX1 HDMI 18Gbps Audio Extractor
- 1 x 5V/1A Power Adaptor
- 1 x User Manual

# **Specifications**

Technical	
2-0-100-1-1-1-100-1-1-1-1-1-1-1-1-1-1-1-	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18 Gbps
Video Resolutions	up to 4K2K@50/60Hz(YUV4:4:4),4K2K@30Hz,1080P@120Hz, and 1080P
	3D@60Hz
Color Space	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,
(Pass-through)	DTS-HD Master Audio, Dolby Atmos, DTS:X
	, , , , , , , , , , , , , , , , , , ,
Optical Audio Formats	LPCM 2CH, LPCM 5.1, Dolby Digital 2/5.1CH, DTS 2/5.1CH
L/R Audio Formats	Analog Stereo 2CH
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact
	discharge)
Connections	
Inputs	1x HDMI Type A [19-pin female]
Outputs	1x HDMI Type A [19-pin female]
	1x L/R Audio Out [3.5mm Stereo Mini-jack]
	1x Optical Out [S/PDIF]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	73.5mm [W] x 60.7mm [D] x 17mm [H]
Weight	130g
Power Supply	Input: AC100 - 240V 50/60Hz
	Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	1W (Max)
Operation	32 - 104°F / 0 - 40°C
Temperature	
Storage temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

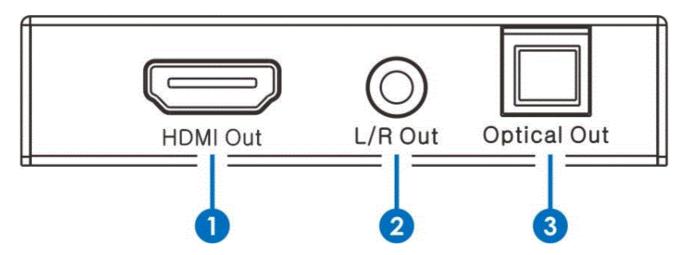
# **Operation Controls and Functions**

# **Front Panel**



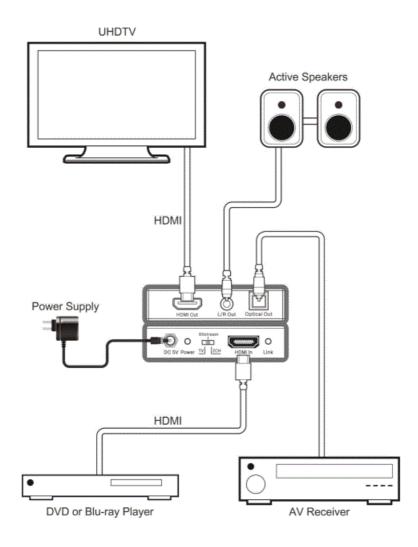
- DC 5V: Connect 5V/1A adaptor to AC wall outlet for power supply.
- Power LED: System power indicator.
- TV / Bit Stream / 2CH: This allows users to select audio format according to TV, Bit Stream or LPCM 2CH.
- HDMI In: Connect this to HDMI source devices such as Blu-ray or PS4 player
- Link LED: The LED will illuminate when detected HDMI input signal.

## **Rear Panel**



- HDMI Out: Connect to HDMI display devices such as TV/Projector.
- L/R Out: Connect to audio amplifier or TV L/R audio input port.
- Optical Out: Connect to audio amplifier optical audio input port.

# **Connection Diagram**



### Warranty

Should you feel your product does not function adequately due to defects in materials or workmanship, we (referred to as "the warrantor") will, for the length of the period indicated below (starting from the original date of purchase) either: a) Repair the product with new or refurbished parts. or b) Replace it with a new or refurbished product. All Simplified MFG products are covered by a 3 year PARTS and LABOR warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of product if necessary. The decision to repair or replace will be made by the warrantor. The purchaser must mail-in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferable to subsequent owners, even during the warranty period. A purchase receipt or other proof of original purchase date is required for the limited warranty service.

- This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship and DOES NOT COVER normal wear and tear or cosmetic damage. The limited warranty also DOES NOT COVER damage that occurs in shipment or failures caused by products not supplied by the warrantor, failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, incorrect installation, set-up adjustment, implementation of/to consumer controls, improper maintenance, power line surge, lightening damage, modification, service by anyone other than a manufacturer-approved service center or factory authorized personnel, or damage attributable 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 damage resulting from the use of this product or arising out of any breach of this
  warranty. For example: damages for lost time, the cost of having a person/persons remove or re-install
  previously installed equipment, travel to and from service location, loss of or damage to media, images, data or

other recorded/stored content. The items listed here are not exclusive, but are for illustration only. Parts and service not covered by this limited warranty are not the responsibility of the warrantor and should be considered the responsibility of the individual.

## **Simplified MFG Publication Disclaimer**

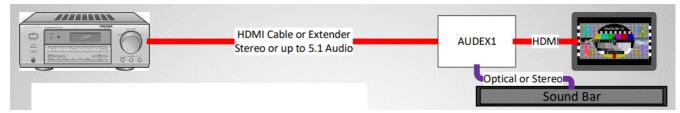
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#### Contact

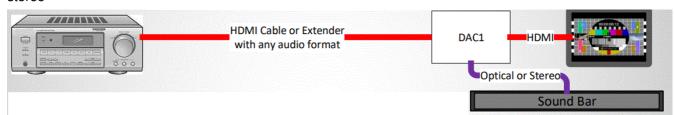
- Sales and Tech Support
- P 1-833-HDMI-411
- E info@simplifiedmfg.com

#### How to extract audio from HDMI

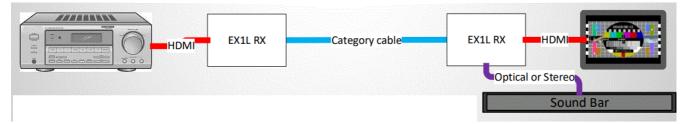
Audio Extraction with no conversion. AUDEX1 extracts the audio in the format sent up to 5.1



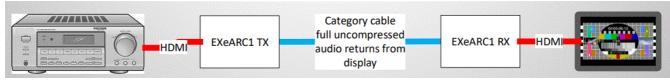
 Audio Extraction with down conversion. DAC1 extracts the audio from any format and down converts it to stereo



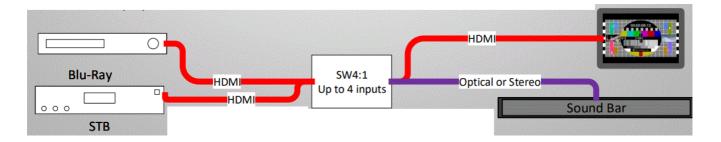
Audio Extraction with no conversion via audio breakout on RX of EX1L HDMI Extender



Fully uncompressed audio extraction from display back to AVR via eARC (including Atmos)

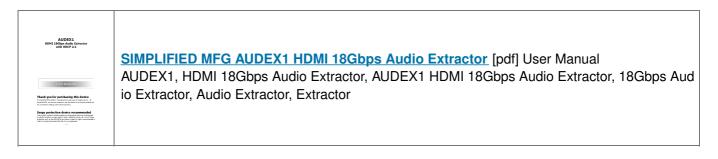


Several sources, no AVR audio extraction at display to soundbar via SW4:1



Note: SW4:1 does not convert audio Can be switched automatically or with IR remote also supports ARC from display

# **Documents / Resources**



Manuals+,