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imoware AEM100

HDMI 18Gbps Audio Embedder with HDCP 2.2

User Manual

VER 1.0

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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.

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1. Introduction

The HDMI 18Gbps Audio Embedder could embed audio signals from digital optical or analog stereo Line audio to HDMI output. Further, both input and output HDMI support video resolution up to 4K2K@50/60Hz (YUV444). It supports 10bits 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.

2. Features

☆ Embeds multi-channel optical (SPDIF) or Line analog audio to HDMI output

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

☆ Analog audio supports PCM2.0

☆ HDMI 2.0b (18Gbps), HDCP 2.2 and DVI 1.0 compliant

☆ Video resolutions up to 4K2K@50/60Hz (YUV444)

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

☆ 10bits HDR (High Dynamic Range) pass through

☆ Supports CEC bypass

3. Package Contents

① 1 x HDMI 18Gbps Audio Embedder
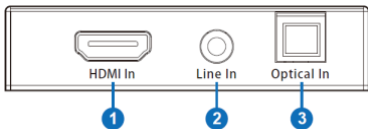② 1 x 5V/1A Power Adapter
③ 1 x User Manual

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4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps
Video Resolutions	up to 4K2K@50/60Hz(YUV4:4:4),4K2K@ 30Hz,1080P@120Hz and 1080P3D@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:0
Color Depth	10-bit, 12-bit
HDMI Audio Formats (Pass-through)	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Optical Audio Formats	LPCM 2CH, 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] 1x Line In [3.5mm Stereo Mini-jack] 1x Optical In [S/PDIF]
Outputs	1x HDMI Type A [19-pin female]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	73.5mm [W] x 60.7mm [D] x 17mm [H]
Weight	122g
Power Supply	Input: AC100 - 240V 50/60Hz Output: DC 5V/1A (US/EU standards, CE/FCC/UL certified)

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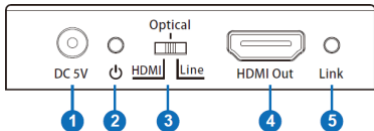|		
Power Consumption	1.25W	
Operation Temperature	32 - 104°F / 0 - 40°C	
Storage temperature	-4 - 140°F / -20 - 60°C	
Relative Humidity	20 - 90% RH (no condensation)	

5. Operation Controls and Functions
5.1 Front Panel

Number	Name	Function description
1	HDMI In	Connect to HDMI source device, such as DVD player or Set top box
2	Line In	Analog audio input port.
3	Optical In	Optical audio input port.

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5.2 Rear Panel

Number	Name	Function description
1	DC 5V	Connect 5V/1A adapter to AC wall outlet for power supply.
2	Power LED	System power indicator.
3	HDMI/ Optical/Line	User can select input audio format according to HDMI, Optical or Line. • When the dial switch is dialed to HDMI, the HDMI Out port output audio from HDMI In port input. • When the dial switch is dialed to Optical, the HDMI Out port output audio from Optical In port input. • When the dial switch is dialed to Line, the HDMI Out port output audio from Line In port input.
4	HDMI Out	Connect to HDMI display device such as TV/Projector.
5	Link LED	The LED will illuminate when detected HDMI output signal.

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DVD or Blu-ray Player

Notebook

DVD or Blu-ray Player

HDMI In   Line In   Optical In

Optical

DC 5V   HDMI | Line   HDMI Out   Link

UHDTV