

CPRO-11SE2 HDMI 4K2K Audio Extractor



Operation Manual



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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU
 if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
RDV1	10/06/13	Preliminary release
RDV2	23/10/13	Top Panel Printing
VS1	06/01/16	Updated text/diagrams



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1. INTRODUCTION

The HDMI $^{\text{TM}}$ 4K×2K Audio Extractor allows you to de-embed the audio signal from an HDMI source. With this Audio Extractor you can take your original HDMI audio signal and convert it to digital optical or analog stereo (L/R) audio, allowing you to output your audio signal to an external audio system or to extend your audio signal pathway. It also has the added benefit of 4K×2K and 3D support, allowing full resolution video and eliminating the need to downscale the image.

2. APPLICATIONS

- Play a game console on monitor lacking audio output by connecting a separate audio system
- Extend your audio signal
- Audio extraction for non-HDMI AV Receivers or wider audio systems
- De-embedding of HDMI digital audio to optical digital or analog outputs
- De-embed HDMI audio for use with non-HDMI equipped devices such as an AV Receiver

3. PACKAGE CONTENTS

- HDMI 4K×2K Audio Extractor
- 5V/1.2A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

Source device such as a Blu-ray player or games console and display (TV/monitor) and amplifier/active speakers with suitable connection cables.



5. FEATURES

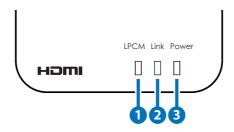
- Compliant with HDMI, HDCP 1.2 and DVI 1.0
- Supports HDMI audio sampling rates up to 192kHz
- Supports Optical (S/PDIF) digital audio sampling rates up to 192kHz
- HDMI supports high-bit-rate (HBR) audio
- No HDMI output connection is required for analog or optical audio output
- Supports analog stereo (L/R) and Optical digital audio (S/PDIF) outputs
- Supports maximum input and output HDMI cable lengths of up to 15 meters each at 1080p/8-bit resolution or 10 meters each at 1080p/12-bit or 4K×2K resolution
- Supports built-in audio EDID switching between LPCM 2CH, TV (external) EDID or Bitstream audio
- Supports 4K×2K resolution and 3D signals

Note: For playback of 4K×2K/3D HDMI source signals, a 4K×2K/3D capable display and High Speed HDMI cables are required.



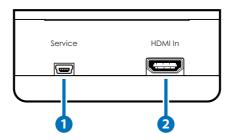
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel



- 1 LPCM LED: This LED will illuminate to indicate that the output audio EDID is switched to LPCM 2CH.
- 2 Link LED: This LED will illuminate when input source is connected and receiving an HDMI signal.
- 3 Power LED: This LED will illuminate when the unit is connected to an active power supply.

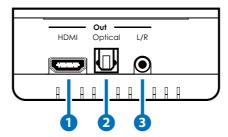
6.2 Right Panel



- 1 Service: Manufacturer use only.
- 2 HDMI In: Connect to source device such as a Blu-ray player or games console with an HDMI cable.



6.3 Left Panel

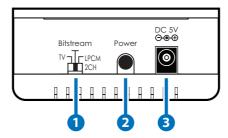


1 HDMI Out: Connect the HDMI output port to the HDMI input port of your display with an HDMI cable.

Note:

- For playback of 4K×2K/3D HDMI source signals, a 4K×2K/3D capable display and High Speed HDMI cables are required.
- No HDMI output connection is required for analog or optical audio output.
- 2 Optical Out: Connect to audio equipment such as an amplifier or Hi-Fi system with an optical cable for digital audio output. Supports up to Bitstream 5.1CH and LPCM 2CH audio.
- 3 L/R Out: Connect to audio equipment such as an amplifier or active speakers with a 3.5mm mini-jack cable for analog stereo audio output.





1 Audio EDID Switch: This switch allows users to select which audio EDID settings are used for audio output.

TV Mode: Switch to TV mode to use the EDID settings of the display connected to the HDMI output port.

Bitstream Mode: Switch to set the HDMI source device to output the audio in bitstream mode (supports up to 5.1 channels of compressed audio).

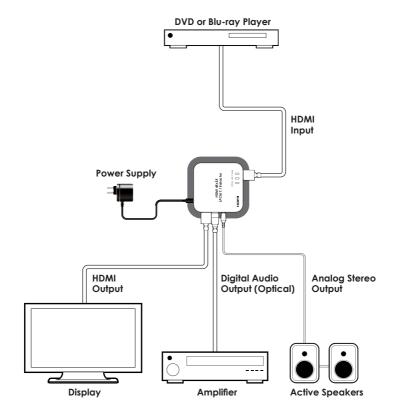
LPCM 2CH Mode: Switch to set the HDMI source device to output the audio in LPCM 2CH mode.

Note: Depending on the input audio format, the unit may not output audio through all output ports (See Section 8.2). For Example, there will be no audio output from the L/R analog output port when the input audio format is LPCM 5.1CH.

- Power Button: Press to turn on the unit or to set it into standby mode.
- 3 DC 5V: Plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.



7. CONNECTION DIAGRAM





8.1 Technical Specifications

Video Bandwidth 300 Mbps/10.2 Gbps

Input Ports 1×HDMI, 1×Mini-USB (Service only)

Output Ports 1×HDMI, 1×Optical, 1×3.5mm Mini-jack

Audio Sampling Rates HDMI: Up to 192kHz

S/PDIF (Optical): Up to 192kHz

HDMI Audio Formats LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH,

DTS 2~5.1CH, Dolby Digital Plus, Dolby

TrueHD & DTS-HD Master Audio

Optical Audio Formats LPCM 2CH, Dolby Digital 2~5.1CH & DTS

2~5.1CH

Analgo Audio Format Analog Stereo 2CH

HDMI Cable I/O Distance 15m (1080p@8-bit), 10m (1080p@12-bit),

10m (4K×2K)

Power Supply 5 V/1.2 A DC (US/EU standards, CE/FCC/

UL certified)

ESD Protection Human body model:

±8kV (air-gap discharge) ±6kV (contact discharge)

Dimensions 85 mm (W)×87.5 mm (D)×34 mm (H)

Weight 102g

Chassis Material Plastic

Color White

Operating Temperature $0 \,^{\circ}\text{C} \sim 40 \,^{\circ}\text{C} / 32 \,^{\circ}\text{F} \sim 104 \,^{\circ}\text{F}$

Storage Temperature $-20 \,^{\circ}\text{C} \sim 60 \,^{\circ}\text{C} / -4 \,^{\circ}\text{F} \sim 140 \,^{\circ}\text{F}$

Relative Humidity 20 ~ 90% RH (non-condensing)

Power Consumption 2.2 W



8.2 Supported Audio Formats

OUTPUT	HDMI	Optical	Analog
LPCM 2CH	✓	✓	✓
LPCM 5.1CH	✓	-	-
LPCM 7.1CH	✓	-	-
Bitstream 5.1CH	✓	✓	-
Bitstream 7.1CH	✓	-	-

9. ACRONYMS

ACRONYM	COMPLETE TERM
4K×2K	Ultra HD (3840×2160/4096×2160)
DTS	Digital Theater System
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
HDTV	High-Definition Television

