



CPRO-11SE8

HDMI 4Kx2K LPCM 7.1 Extractor



Operation Manual

HDMI[®]
HIGH-DEFINITION MULTIMEDIA INTERFACE

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

DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

COPYRIGHT NOTICE

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means—electronic, mechanical, magnetic, optical, chemical, manual, or otherwise—without express written permission and consent from Cypress Technology.

© Copyright 2018 by Cypress Technology.

All Rights Reserved.

TRADEMARK ACKNOWLEDGMENTS

All products or service names mentioned in this document are trademarks of the companies with which they are associated.



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.
- Please completely disconnect the power when the unit is not in use to avoid wasting electricity.

VERSION HISTORY

REV.	DATE	SUMMARY OF CHANGE
RDV1	2013/10/06	Preliminary release



CONTENTS

1. Introduction	1
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	2
6. Operation Controls and Functions	3
6.1 Top Panel.....	3
6.2 Right Panel.....	4
6.3 Left Panel	4
6.4 Front Panel.....	5
6.5 Rear Panel.....	5
7. Connection Diagram	6
8. Specifications	7
8.1 Audio Supports Chart	8
9. Acronyms	8





1. INTRODUCTION

The HDMI™ 4Kx2K LPCM Extractor allows you to extract audio signals from your HDMI source. When connecting to a TV or display you don't always get the best audio, or in the case of a PC monitor, no audio at all. With this Audio Extractor you can take your original HDMI audio signal and convert it to digital optical or analog multi-channel audio. This means that you can output your audio signal to external speakers or extend your audio signal pathway. Meanwhile, when connecting a 4Kx2K display a true video will be performed without down grading the resolution.

2. APPLICATIONS

- Game Entertainment on monitor
- Extend your audio signal
- Audio extraction for non-HDMI AV receivers or wider audio systems

3. PACKAGE CONTENTS

- HDMI 4Kx2K LPCM 7.1 Extractor
- 5V Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

Input source equipment such as Blu-ray/PS3 player and output display (TV/monitor) and amplifier/active speakers with connection cables.

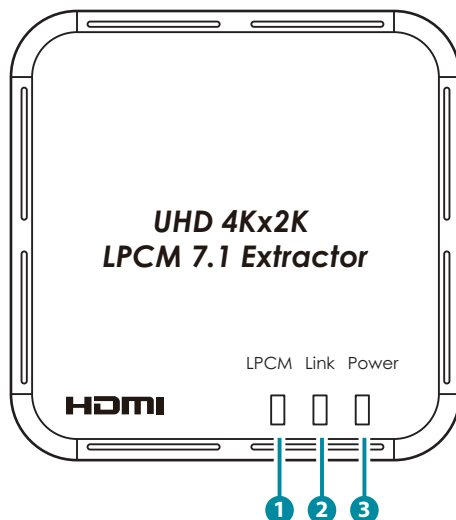
5. FEATURES

- Compliant with HDMI, HDCP 1.2 and DVI 1.0
- Supports HDMI audio sampling rate up to 192 kHz
- Supports Optical S/PDIF audio sampling rate up to 192 kHz
- HDMI supports high-bit-rate (HBR) audio
- No HDMI output connection is required to receive audio at the analog and optical outputs
- Supports 4 x 3.5mm phone jack for analog multi-channel audio outputs
- Maximum input and output HDMI cable length can run up to 15 meters at 1080p 8-bit resolution or 10 meters at 1080p 12-bit resolution
- Supports built-in audio EDID switching among LPCM 7.1CH, TV (external) EDID, and Bitstream audio
- Supports CEC bypass
- Supports 4Kx2K resolution and 3D signal

Note: When displaying HDMI 4Kx2K signal, equivalent source signal, output display and HDMI cables are required in order to secure the best image display.

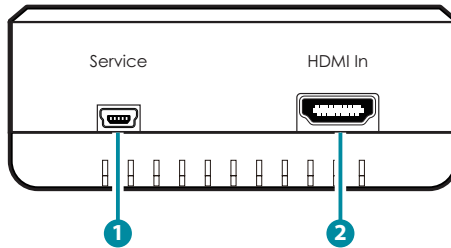
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel



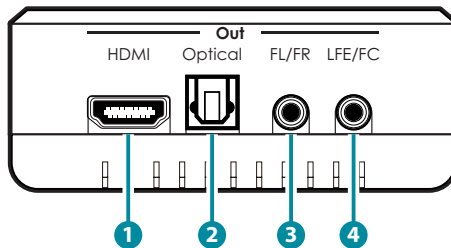
- 1 LPCM:** This LED will illuminate when the output audio EDID is switch to LPCM 7.1CH.
- 2 Link:** This LED will illuminate when input source is connected with HDMI signal.
- 3 Power:** This LED will illuminate when the unit is connected with power supply.

6.2 Right Panel



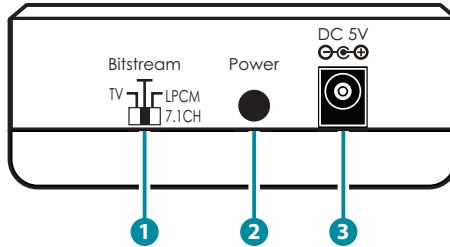
- 1 **Service:** This port is reserved for firmware update only.
- 2 **HDMI IN:** This slot is to connect with source equipment such as Blu-ray/PS3 player with HDMI signal sending.

6.3 Left Panel



- 1 **HDMI OUT:** Connect to the display (TV/monitor) with an HDMI cable for video and audio signal output. For 4Kx2K or 3D image display, an equivalent standard display is required. No HDMI output connection is required to send audio through the analog and optical outputs.
- 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 audio 5.1CH and LPCM 2CH.
- 3 **FL/FR OUT:** Connect to audio equipment such as an amplifier or active speakers with 3.5mm phone jack cable for front left and front right audio outputs.
- 4 **LFE/FC OUT:** Connect to audio equipment such as an amplifier or active speakers with 3.5mm phone jack cable for low-frequency effects/subwoofer and front center audio outputs.

6.4 Front Panel



- 1 **TV/Bitstream/LPCM 7.1CH:** This switch allows users to select the source's audio EDID.

TV Mode: Switch to TV mode to use the HDMI output port's EDID, the audio supports up to LPCM 7.1 channels.

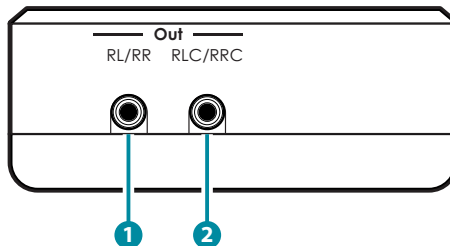
Bitstream Mode: Switch to Bitstream mode to use the HDMI output port's EDID, the audio supports up to compressed audio 5.1 channels.

LPCM 7.1CH Mode: Switch to LPCAM 7.1 mode to use the HDMI output port's EDID, the audio supports up to LPCM 7.1 channels.

Note: Depending on the input audio format, the unit may not output audio through all output port. For Example, the optical output port will have no audio when the input audio format is more than LPCM 7.1CH.

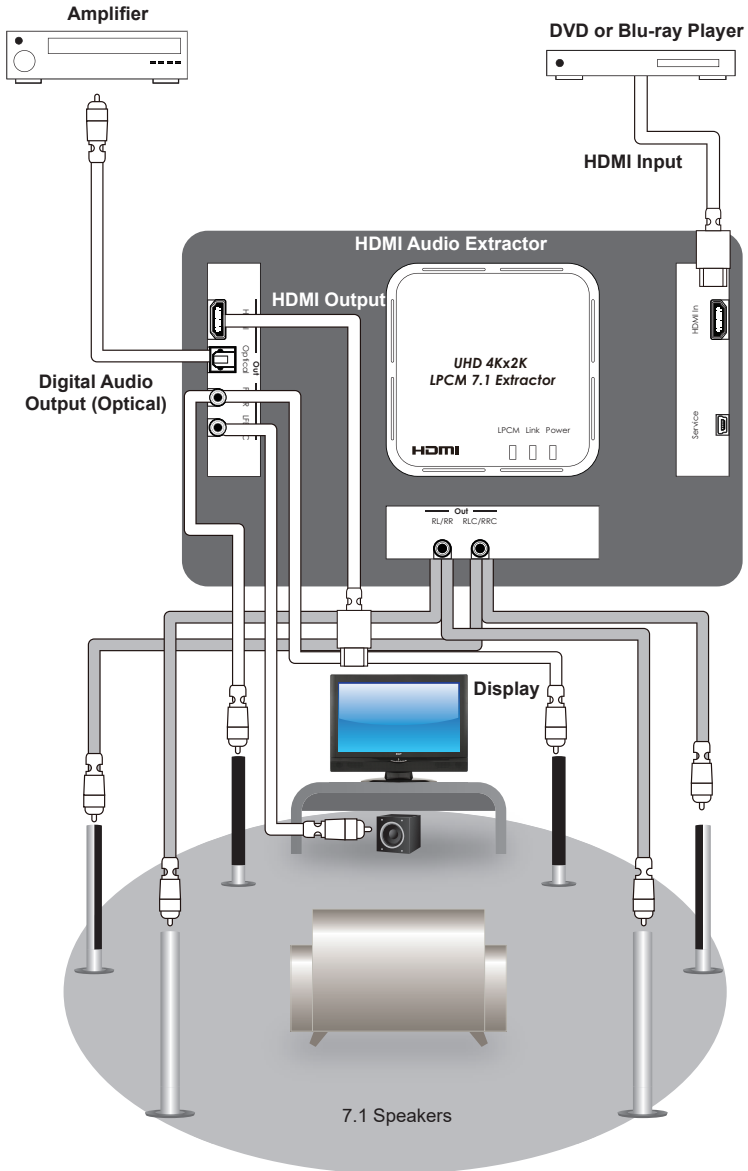
- 2 **Power:** Press this button to switch on the device or to set it into standby mode.
- 3 **DC 5V:** Plug with 5V DC power adaptor from the AC wall outlet for power supply.

6.5 Rear Panel



- 1 **RL/RR:** Connect to audio equipment such as an amplifier or active speakers with 3.5mm phone jack cable for rear left and rear right audio outputs.
- 2 **RLC/RRC:** Connect to audio equipment such as an amplifier or active speakers with 3.5mm phone jack cable for rear left center and rear right center audio outputs.

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Video Bandwidth	300Mbps / 10.2Gbps
Input Ports	1 x HDMI, 1 x Mini-USB (service only)
Output Ports	1 x HDMI, 1 x Optical, 4 x 3.5mm Phone Jack
HDMI Audio Sampling Rate	Up to 192 kHz
Optical S/PDIF Audio Sampling Rate	Up to 192 kHz
HDMI Audio Format	LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH, Dolby Digital Plus, Dolby TrueHD, and DTS-HD Master Audio
Optical Audio Format	LPCM 2CH, Dolby Digital 2~5.1CH, and DTS 2~5.1CH
L/R Audio Format	4 x Phone Jacks Output Format 7.1 CH Analog Audio
HDMI I/O 4Kx2K Cable Distance	
Power Supply	5V / 1.2A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8kV (air-gap discharge) ±6kV (contact discharge)
Dimensions (mm)	85 (W) x 87.5 (D) x 34(H)
Weight (g)	102
Chassis Material	Plastic
Silkscreen Color	White
Operating 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)
Power Consumption	2.37W

8.1 Audio Supports Chart

Output Audio Mode	HDMI	Optical	L/R
2CH	V	V	V
LPCM 5.1	V		V
LPCM 7.1	V		V
Bitstream 5.1	V	V	
Bitstream 7.1	V		

9. ACRONYMS

ACRONYM	COMPLETE TERM
DTS	Digital Theater System



CYPRESS TECHNOLOGY CO., LTD.
www.cypress.com.tw
