

# 4K HDMI Audio Decoder & Down Mixer with Dolby/DTS

The KanexPro AUD-DCODEHDMI-4K HDMI 18Gbps Audio Extractor extracts audio signals from any HDMI compliant source to digital optical or analog stereo L/R audio outputs. This audio extractor supports bitstream audio down-mix to analog stereo output and keeps optical and HDMI out audio pass-through. Both input and output HDMI support video resolution up to 4K2K@50/60Hz (YUV 4:4:4). It supports 10-bit HDR pass-through and HDMI high-resolution digital audio formats including LPCM 2CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos, and DTS-HD Master Audio with audio sampling rates up to 192kHz. HDCP 2.2 and CEC bypass are supported.

**Surge Protection Recommended** — This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

## TABLE OF CONTENTS

<b>1. Features</b>	1
<b>2. Package Contents</b>	1
<b>3. Specifications</b>	2
<b>4. Operation Controls</b>	2
4.1 Front Panel	2
4.2 Rear Panel	3
<b>5. Application Example</b>	3
<b>6. Troubleshooting</b>	3

## 1. FEATURES

- ✓ HDMI 2.0b (18Gbps), HDCP 2.2, and DVI compliant
- ✓ Video resolutions up to 4K2K@50/60Hz (YUV 4:4:4)
- ✓ Extract HDMI audio to multi-channel optical (S/PDIF) or L/R analog audio
- ✓ HDMI pass-through audio input to HDMI and optical audio output
- ✓ Bitstream audio down-mix to L/R analog output (Dolby/DTS decode)
- ✓ Optical audio supports LPCM 2CH, Dolby Digital 2/5.1CH, DTS 2/5.1CH
- ✓ HDMI High Bit Rate (HBR) audio pass-through
- ✓ Audio sample rates up to 192kHz
- ✓ 10-bit HDR (High Dynamic Range) pass-through
- ✓ CEC pass-through for single-remote control

## 2. PACKAGE CONTENTS

1× HDMI 18Gbps Audio Extractor • 1× 5V/1A Power Adapter • 1× User Manual



### 3. 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 (YUV 4:4:4), 4K2K@30Hz, 1080P@120Hz, 1080P 3D@60Hz
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	10-bit, 12-bit
HDMI Audio (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	±8kV (air-gap) & ±4kV (contact)
CONNECTIONS	
Inputs	1× HDMI Type A [19-pin female]
Outputs	1× HDMI Type A, 1× Optical [S/PDIF], 1× L/R Audio [RCA]
MECHANICAL	
Housing	Metal Enclosure
Color	Black
Dimensions	73.5mm (W) × 60.7mm (D) × 20mm (H)
Weight	135g
Power Supply	AC 100–240V 50/60Hz; DC 5V/1A (CE/FCC/UL)
Power Consumption	1.25W (Max)
Operating Temp	32–104°F / 0–40°C
Storage Temp	-4–140°F / -20–60°C
Relative Humidity	20–90% RH (no condensation)

### 4. Operation Controls and Functions

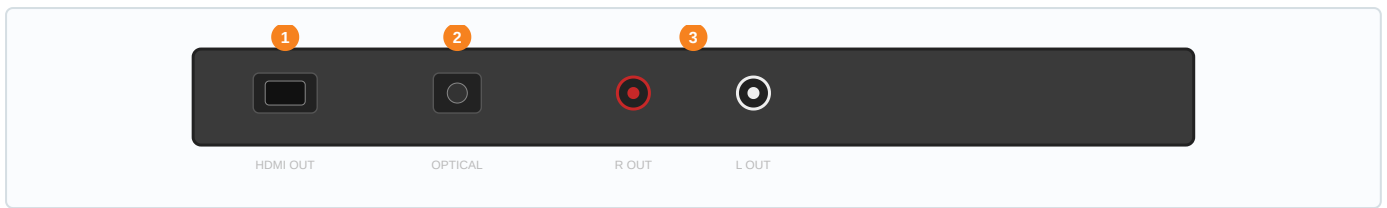
#### 4.1 FRONT PANEL



No.	Name	Function Description
1	DC 5V	Connect the included 5V/1A adapter to an AC wall outlet for power supply.
2	Power LED	System power indicator.
3	TV/Bitstream/2CH	<b>TV:</b> Copy EDID from TV. <b>Bitstream:</b> Multi-channel audio up to 5.1CH. <b>2CH:</b> Decode and down-mix to 2-channel stereo PCM.
4	HDMI IN	HDMI video/audio input.
5	Status LED	<b>Red solid:</b> PCM decoder or no signal. <b>Red blink:</b> Dolby decoder. <b>Green blink:</b> DTS decoder.

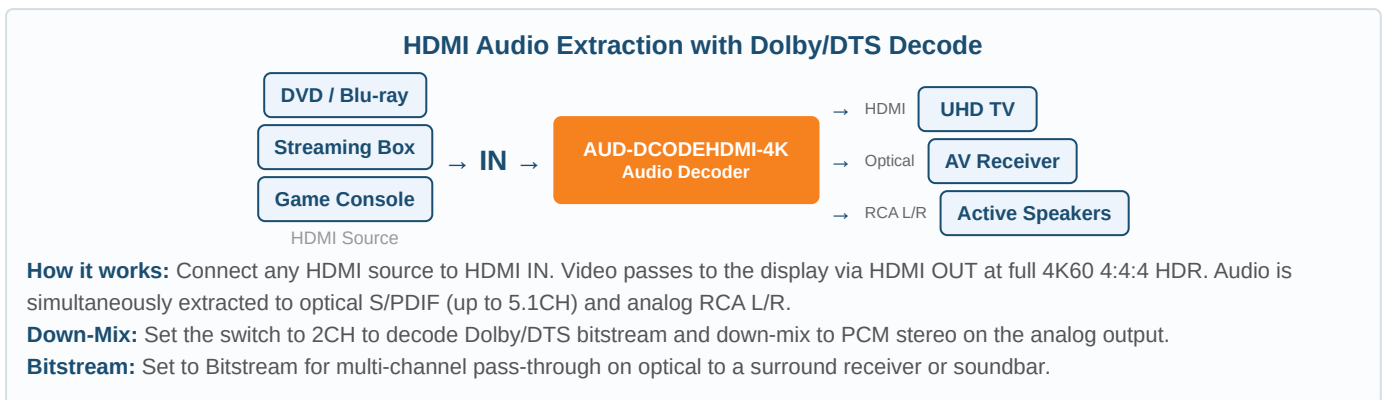


## 4.2 REAR PANEL



No.	Name	Function Description
1	HDMI OUT	HDMI output for display. Passes full 4K60 4:4:4 HDR video and audio.
2	OPTICAL OUT	Toslink digital audio output (S/PDIF). Supports LPCM 2CH, Dolby Digital 2/5.1CH, DTS 2/5.1CH.
3	R / L OUT	Stereo RCA analog audio output. In 2CH mode, outputs decoded down-mixed stereo.

## 5. Application Example



## 6. Troubleshooting

**Q: No audio from analog L/R output when playing a Blu-ray disc?**

**A:** Set the front-panel switch to 2CH. Most Blu-ray discs output Dolby/DTS bitstream which requires decoding. The 2CH mode activates the built-in decoder.

**Q: No video on the display?**

**A:** Confirm a Premium High Speed HDMI cable is used. For 4K60, cable length should not exceed 5 meters. Check that the source is powered on and outputting a valid signal.

**Q: Optical output has no sound?**

**A:** Set the switch to Bitstream mode. Verify the optical cable is firmly seated. Ensure the source outputs Dolby or DTS bitstream (not PCM multichannel).

**Q: Status LED shows red solid but there should be audio?**

**A:** Red solid indicates PCM mode or no signal. If the source is sending PCM audio, this is normal. If you expect Dolby/DTS, check the source audio output settings.

