



# Dual HDMI eARC & Audio Extractor

Incorporates HDMI® technology

*-HDMI eARC, HDMI Audio, Optical and 3.5mm audio output*

*HDMI 2.1(eARC) / HDCP 2.3 /4K60 HDR*



Model: HDA-931

## INTRODUCTION

The OREI HDA-931 is a video and audio separated converter with three sets of HDMI outputs, one for TV 4K@60/HDR video and audio signals, one for eARC Soundbar, one for Amplifier HDMI audio, and S/PDIF(Optical) and analog 3.5mm stereo interface outputs.

The TV signal can be transmitted back to Soundbar (eARC) via eARC (enhanced Audio Return Channel) to play high-quality surround sound.

Even Non-eARC TV can enjoy the high-quality of eARC audio return for lossless audio up to Atmos.

Build-in eARC automatically detects the source of the signal (TV or external signal), no need to switch on or off.

## CONTENTS OF PACKAGE

- 1 x Main Unit
- 1 x DC 5V/1A power adaptor
- 1 x 3.5mm to RL cable
- User Manual

## FEATURES

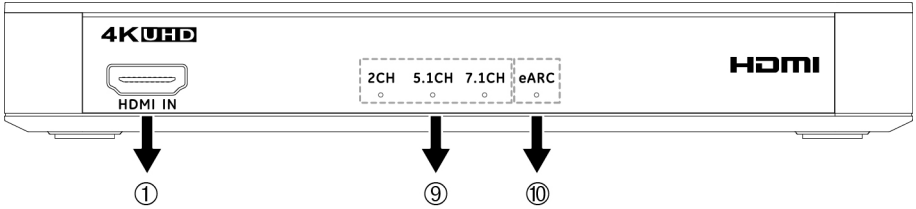
- Video and audio separation
- Auto eARC Detection when using the TV's app or external devices
- Supports dual HDMI audio interface (HDMI\_eARC and HDMI\_Audio)
- Supports 4K@60 HDR
- Compatible Dolby Atmos (via HDMI)
- Supports Pixel clock rate up to 600 MHz
- Supports S/PDIF, Stereo 3.5mm audio output
- Supports DTS HD, Dolby TrueHD (via HDMI\_eARC)
- HDMI 2.0 / 2.1(eARC) support, HDCP 2.3 compliant
- Three modes selection for audio format setting (2ch/ 5.1ch/ 7.1ch)
- Support CEC (Use the TV RC to adjust the Soundbar sound and CEC connecting device power on/off)

## APPLICATION

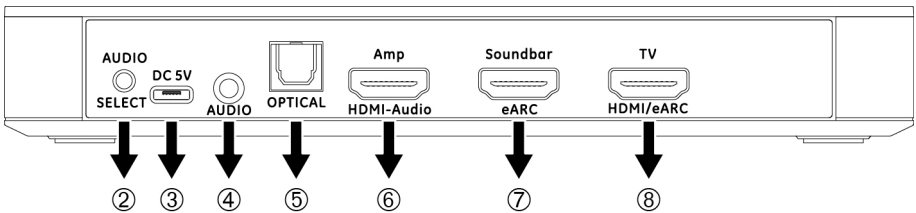
1. Play the high quality audio from your source devices or smart TV streaming app to eARC / ARC soundbar, home cinema set, audio amplifier and Enjoy 4K HDR Video on TV.
2. Use TV eARC function for old audio equipment.
3. Enjoy PS5 / Xbox Series X lossless 7.1 surround sound.
4. Route eARC audio signal to other room.
5. Extract the eARC audio signal for amp to power the speakers.
6. Enable audio devices to accept TV eARC sound formats up to it's full potential.

## I/O INTERFACE

[Front]

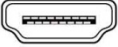
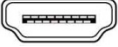




[Back]



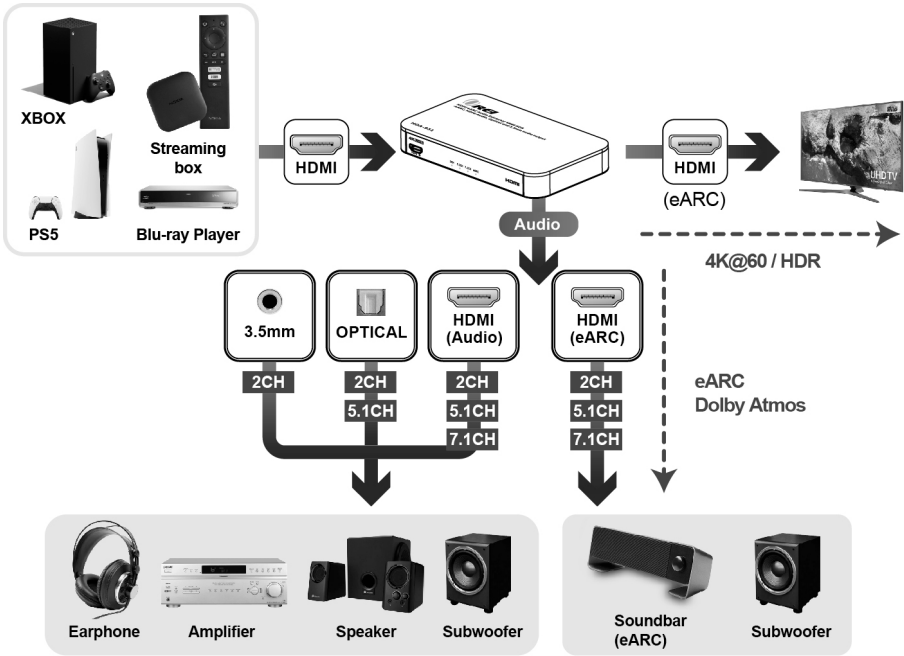
- |   |  |
|---|--|
| <p>① Connect external source</p> <p>② Audio Format select key (2CH / 5.1CH / 7.1CH)</p> <p>③ Connect power adaptor (microUSB)</p> <p>④ Connect Analog 3.5mm stereo audio device</p> <p>⑤ Connect Optical audio device</p> <p>⑥ Connect Amplifier or Soundbar with HDMI_Audio port</p> <p>⑦ Connect Soundbar or Amplifier with eARC(or ARC) port</p> <p>⑧ Connect TV (HDMI port) or (HDMI_eARC port)</p> | <p>⑨ Audio select Indication LED<br/>The Audio select light position is displayed.<br/>*Audio Format select (2CH &gt; 5.1CH &gt; 7.1CH) with ② key<br/><b>Default : 2CH</b></p> <p>⑩ eARC Indication LED<br/><b>light on :</b> eARC Audio signal from TV<br/><b>light off :</b> eARC Audio signal from external source<br/><b>Default :</b> eARC Audio signal from external source</p> |
|---|--|

## AUDIO INTERFACE TABLE

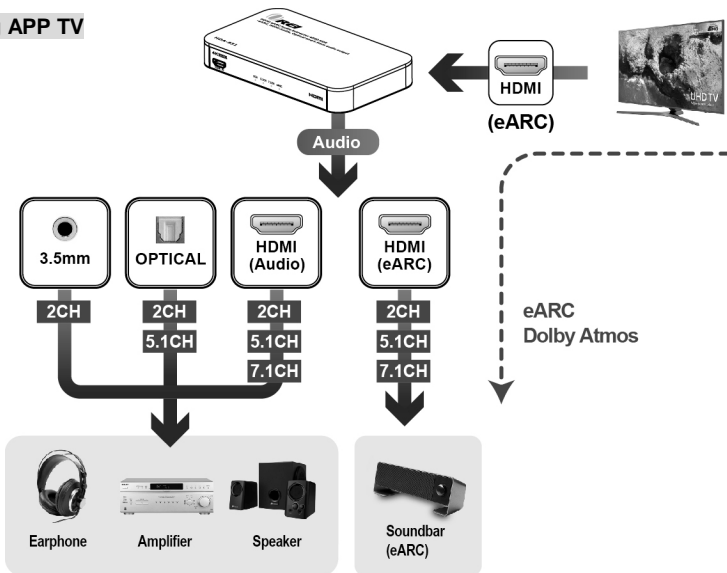
Audio Output	Icon	Support audio formats (channel)		
		2CH	5.1CH	7.1CH
HDMI_eARC		◎	◎	◎ (Uncompressed)
HDMI_Audio		◎	◎	◎ (Compressed)
S/PDIF(Optical)		◎	◎	
Stereo 3.5mm (Analog)		◎		

# APPLICATION ILLUSTRATION

## External Source



## Streaming APP TV



## CONNECTION

### Connection external source

- Step 1.** Connect the HDMI cables from the external HDMI source devices (or HDMI switcher) to the input port **HDMI IN** of the HDA-931.
- Step 2.** Connect the HDMI cable from your TV to the output port **TV (HDMI/eARC)** of the HDA-931.
- Step 3.** Connect HDMI cable (with eARC function) or Optical cable or 3.5mm audio cable from Audio System (Soundbar, Amplifier, Speaker etc.) to the output port **Soundbar (eARC)** or **Amp(HDMI-Audio)** or **OPTICAL** or **AUDIO** of the HDA-931.
- Step 4.** Set the audio format select **AUDIO SELECT** to 2CH or 5.1CH or 7.1CH (by audio system).
- Step 5.** Connect the DC 5V/1A power adaptor to the micro USB **DC 5V** of HDA-931.
- Step 6.** After you finish the connection, one of the audio format indication LED (green) will be lighted on.

### Connection streaming APP TV

- Step 1.** Connect the HDMI cables from the TV (with ARC function) to the output port **TV (HDMI/eARC)** of the HDA-931.
- Step 2.** Connect HDMI cable (with eARC function) or Optical cable or 3.5mm audio cable from Audio System (Soundbar, Amplifier, Speaker etc.) to the output port **Soundbar(eARC)** or **Amp(HDMI-Audio)** or **OPTICAL** or **AUDIO** of the HDA-931.
- Step 3.** Connect the DC 5V/1A power adaptor to the micro USB **DC 5V** of HDA-931.
- Step 4.** After you finish the connection, one of the audio format indication LED (green) will be lighted on.

### Notes.

- eARC auto detect function default value is external source.
- Connecting streaming APP TV successes, the eARC indication LED (green) will be lighted on.

## TROUBLE SHOOTING

### **Q1: When there is no picture presented, please:**

- (1) Make sure the direct connection from the source device to the display device without the main unit is working.
- (2) Check if all connectors are connected well; and check if all cables can support the transmission speed. High Speed HDMI cables are recommended.
- (3) Check the power of main unit.

### **Q2: When resolution could not show in 4K.**

- (1) Make sure your sources and displays are fully supporting 4K.
- (2) Make sure your HDMI cables are capable of transmit 4K video signal. (Use Premium HDMI cable)

### **Q3: When there is no audio by audio system**

- (1) Make sure your audio system power is turned on and select correct source position.
- (2) Make sure your audio cable is connected and non-destructive.
- (3) Make sure the HDA-931 audio select position that matches the sound device.
- (4) Please refer your sound bar's set up instruction

### **Q4: If you hear unusual audio noise from headphone or speaker that connect to 3.5mm output?**

- Please set your TV audio format from Auto(default:Dolby) to PCM.

**Q5: I've got an Atmos-enabled Sonos Soundbar.**

**Why I still cannot get Dolby Atmos Audio while watching TV streaming program ?**

- Make sure your audio system power is turned on and select correct source position.
- **For Dolby Atmos to work with HDMI eARC, you will need to have:**
  - (1) A TV that supports Dolby Digital Plus through HDMI ARC or has an HDMI eARC port.
  - (2) A soundbar or AV system that supports Dolby Atmos.
  - (3) An HDMI cable that can support the HDMI 2.1 specification.
  - (4) A streaming service or media type that uses Dolby Atmos.
- **Kindly note that HDA-931 cannot create Atmos sound from not Atmos content**

**Q6: My TV only has HDMI ARC (not eARC), can this device make it to eARC?**

- **If your TV only has ARC input, HDA-931 cannot upgrade to eARC.**

The capabilities that your TV only has the ARC connection (5.1 or DD+ only)
- **However you can run the apps from external HDMI sources.**
  - (1) When you are watching Dolby Atmos content over a streaming app from external HDMI source devices, when connect to HDA-931 you can still have Dolby Atmos capable soundbar / AVR to get the Dolby Atmos sound.
  - (2) **For example:**

External HDMI source → HDA-931 → one output to TV/ projector/ monitor and one output to eARC soundbars.



**Q7: How to change audio settings on PlayStation 5 console and pass-through Dolby Atmos to eARC soundbar ?**

▪ **PLAY STATION 5:**

- (1) Settings → Sound → Audio Output → HDMI Device Type >>> change to Sound Bar
- (2) Settings → Sound → Audio Output → Audio Format (Priority) >>> change to Dolby, if your speaker is connected directly to PS5)

▪ **BLU-RAY DISC (while playing):**

- (1) Enable Dolby Atmos in the disc audio menu/settings
- (2) Press "Options" button on PS5 controller → 3-dots menu → Settings → Audio Format>>> change to Bitstream



**Q8: I can get Atmos from other external source but I cannot get Atmos from TV APP**

- (1) Please check eARC Indication LED
  - light on : eARC Audio signal from TV
  - light off : eARC Audio signal from external source
  - Default : eARC Audio signal from external source
- (2) Make sure the cable connect your TV HDMI(eARC) port.
- (3) Make sure the HDMI cable that can support the HDMI 2.1 specificaiton.
- (4) Power cycler the device then turn back on again with following order : HAD-931 , external source device, Soundbar then TV

**Q9: Audio cuts in and out on soundbar, what could it be?**

- (1) Try power cycling it by unplug the power cord, wait a few seconds, and then plug it back in.
- (2) The Internet connection should allow at least 3 Mbps downstream other video streaming services such as Amazon Prime rely on DD+ when delivering surround sound.

**Q10: Why I can't get uncompressed 5.1/7.1CH Dolby True HD, when connect my AVR to HDMI audio port**

- (1) HDA-931: HDMI\_eARC Audio support uncompressed 7.1CH.
- (2) HDA-931: HDMI\_Audio support compressed 7.1CH
  - **Please switch Audio format to 5.1 or 7.1CH on HDA-931**

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