



# **AU-1HARC**

**HDMI to Stereo Audio (2 Phono) ARC Extractor** 





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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	SUMMARY OF CHANGE
v1.00	15/08/2013	First release
v1.01	17/03/2014	Updated Text/Diagrams





# **CONTENTS**

1. Introduction	6
2. Applications	6
3. Package Contents	6
4. System Requirements	6
5. Features	6
6. Operation Controls and Functions	7
6.1 Front Panel	7
6.2 Rear Panel	7
7. Connection Diagram	8
8. Specifications	9
8.1 Technical Specifications	9
8.2 Audio Specifications	9
9. Acronyms	10





### 1. INTRODUCTION

The AU-1HARC is designed to extract the audio signal from any ARC (Audio Return Channel) enabled HDTV and convert it to a line-level analogue stereo signal. This device is perfect for use with HDTV's with no dedicated audio output allowing the audio to be extracted from the ARC enabled HDMI connection and sent to a non-HDMI equipped amplifier, AVR, or active speakers. It supports HDMI audio sampling rates up to 192 kHz and provides an analogue 2-channel stereo output using the integrated DAC (Digital to Analogue Converter).

### 2. APPLICATIONS

- ## HDMI/ARC audio conversion to analogue stereo output
- TV audio output over external analogue sound system/active speakers

#### 3. PACKAGE CONTENTS

- **III** 1×ARC to Analogue Audio Converter
- **III** 1×5 V/1 A DC Power Adaptor
- **///** Operation Manual

### 4. SYSTEM REQUIREMENTS

TV/Display with ARC enabled HDMI connection and analogue stereo sound system or active speakers.

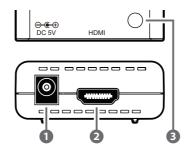
# 5. FEATURES

- Integrated Digital to Analogue Conversion (DAC)
- Extracts the HDMI audio signal from an HDTV's ARC connection and converts it to a Line-Level Analogue Stereo output
- Supports HDMI audio sampling rates up to 192 kHz
- Supports volume control from the TV's remote control via CEC function
- Plug and play, with no software required



### 6. OPERATION CONTROLS AND FUNCTIONS

#### 6.1 Front Panel

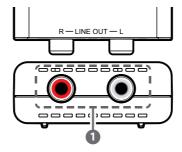


- **1) DC 5V:** Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet.
- **Description HDMI:** Connect to a TV/Display's ARC enabled HDMI connector with an active audio signal.

#### Note:

- 1. To ensure proper ARC audio performance, an HDMI High Speed cable is required.
- 2. The ARC function must be enabled in the TV/Display's settings. Please refer to the manual for your model of TV/Display.
- **3 POWER LED:** The LED will illuminate when the device is connected to an active power supply.

#### 6.2 Rear Panel

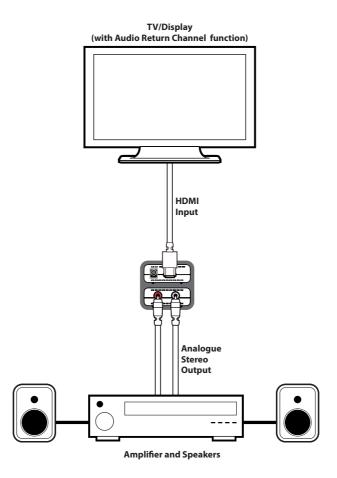


1 LINE OUT: Connect the R/L OUT to an analogue stereo (R/L) amplifier or active speakers for audio output.





# 7. CONNECTION DIAGRAM





### 8. SPECIFICATIONS

# **8.1 Technical Specifications**

**HDMI ARC Port** 1×HDMI (Female)

Output Port 1×Analogue Stereo (2 RCA)

**HDMI Audio** Up to 192 kHz

**Sampling Rates** 

**ESD Protection** Human body model:

±8 kV (air-gap discharge) ±4 kV (contact discharge)

**Power Supply** 5 V/1 A DC (US/EU standard, CE/FCC/UL certified)

**Dimensions** 55 mm (W)×75.5 mm (D)×22.5 mm(H)/Jacks

Excluded

55 mm (W)×80.5 mm (D)×22.5 mm(H)/Jacks

Included

Weight 46 g

Chassis Material Plastic

**Colour** 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** 0.72W

# **8.2 Audio Specifications**

Input Level/Freq.	Output	Output Level	THD+N	Frequency Response	SNR	Crosstalk
HDMI 0dB/1kHz 32kHz~192kHz	L/R	2Vrms ±10%	<0.01%	±1 dBFS	>80 dB	<-80 dB



# 9. ACRONYMS

ACRONYM	COMPLETE TERM
ARC	Audio Return Channel
DAC	Digital to Analogue Converter
CEC	Consumer Electronic Control
номі	High-Definition Multimedia Interface



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