# geratech®



# EGE-DCT-25

ARC to Analog Audio Converter



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Version 1.1 August 2011

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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     |
|-------------|---------------|-----------------------|
| VR0         | 07/01/14      | Preliminary Release   |
| VS1         | 2/03/14       | Amended Text/Diagrams |

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#### 1. INTRODUCTION

The ARC to Analog Audio Converter is designed to extract the audio signal from an HDTV's HDMI ARC (Audio Return Channel) connection and convert it to an analog stereo signal, allowing the connection of an HDTV with HDMI-only output to non-HDMI equipped amplifiers, AV receivers or active speakers. It supports HDMI audio sampling rates up to 192 kHz and analog stereo (2 CH) audio output.

#### 2. APPLICATIONS

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

#### 3. PACKAGE CONTENTS

- 1×ARC to Analog Audio Converter
- 1x5 V/1 A DC Power Adaptor
- Operation Manual

#### 4. SYSTEM REQUIREMENTS

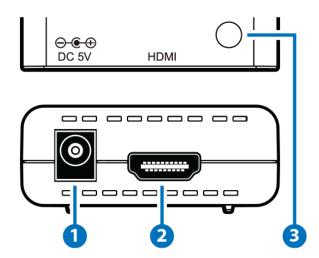
 TV/Display with ARC enabled HDMI connection and analog stereo sound system or active speakers.

#### 5. FEATURES

- Supports Digital to Analog audio Conversion (DAC)
- Extracts the HDMI audio signal from a HDTV's ARC connection and converts it to a line level analog stereo output
- Supports HDMI audio sampling rates up to 192 kHz
- Simultaneous audio from the TV speakers and Line Level output
- 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 Panels**

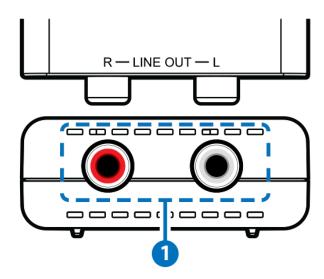


- 1 DC 5V: Connect the 5V DC power supply to the unit and plug the adaptor into an AC outlet.
- **2 HDMI:** Connect to a TV/Display's ARC enabled HDMI connector with an active audio signal.

#### Note:

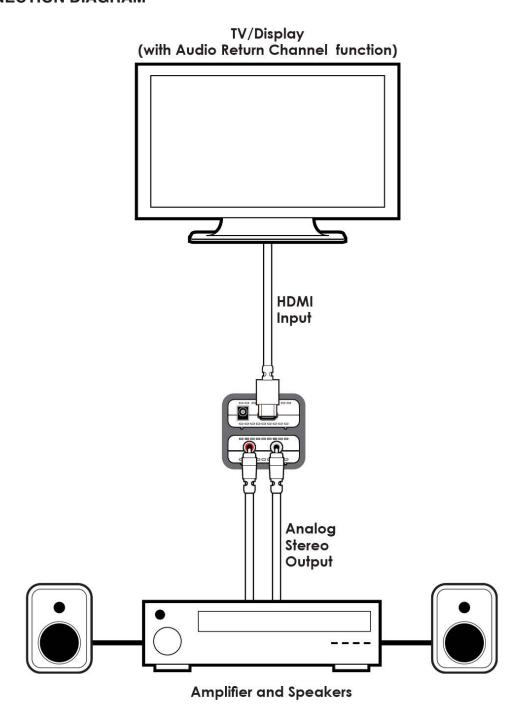
- 1. To ensure proper ARC audio performance, an HDMI High Speed cable is required.
- 2. The ARC function must be enabled in the TV/Display's settings. Please refer to the manual for your model of TV/Display.
- OWER LED: The LED will illuminate when the device is connected to an active power supply.

#### 6.2 Rear Panel



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

#### 7. CONNECTION DIAGRAM



#### 8. SPECIFICATIONS

## **8.1 Technical Specifications**

| 1×HDMI (Female)                                      |  |  |  |
|--|--|--|--|
| 1×Analog Stereo (2 RCA)                              |  |  |  |
| Up to 192 kHz  |  |  |  |
|  |  |  |  |
| Human body model:                                    |  |  |  |
| ±8 kV (air-gap discharge)                            |  |  |  |
| ±4 kV (contact discharge)                            |  |  |  |
| 5 V/1 A DC (US/EU standard, CE/FCC/UL                |  |  |  |
| certified)   |  |  |  |
| 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               |  |  |  |
| ncluded  |  |  |  |
| 46 g   |  |  |  |
| Plastic  |  |  |  |
| White  |  |  |  |
| 0 °C~40 °C/32 °F~104 °F                              |  |  |  |
| 0 °C~40 °C/32 °F~104 °F                              |  |  |  |
| 0 °C~40 °C/32 °F~104 °F<br>-20 °C~60 °C/–4 °F~104 °F |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 8.2 Audio Specifications

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

#### 9. ACRONYMS

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

