

geratech[®]

DCT-1

Optical to Analog Audio Converter



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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 to 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

VER- SION NO.	DATE (DD/MM/ YY)	SUMMARY OF CHANGE
VR0	10/07/13	Preliminary Release

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1. INTRODUCTION

The Optical to Analog Audio Converter (DAC) provides the ideal solution for converting an Optical digital audio signal to analog stereo audio. With support for audio sampling rates up to 192 kHz/24-bit, it provides high quality sound conversion. This unit is perfect for use in, computer audio systems or digital mixing consoles and can be powered from any spare USB port allowing it to be used with USB equipped HDTVs, Blu-ray players or computers without the need for a separate power supply.

2. APPLICATIONS

- Converting digital optical audio into analog stereo
- Converting digital audio for output on analog stereo active speakers
- HDTV with digital audio only output to analog amplifier input
- Improving the digital to analog conversion quality from any stereo optical digital audio source

3. PACKAGE CONTENTS

- Optical to Analog Audio Converter
- Mini-USB to USB Type A Cable
- Operation Manual

4. SYSTEM REQUIREMENTS

Digital audio source device such as DVD/Blu-ray player or media player with an optical output cable to a device such as an amplifier or AV receiver with analog stereo input.

5. FEATURES

- Supports optical digital audio signal input and conversion into analog stereo audio output
- Supports uncompressed digital LPCM stereo audio input
- Supports LPCM 2CH audio sampling rates up to 192 kHz
- Supports S/PDIF bitstream 24-bit of data for the left and right channels
- Compact, elegant design and easy to install
-

Note: Does not support the decoding of compressed audio signals such as Dolby Digital and DTS.

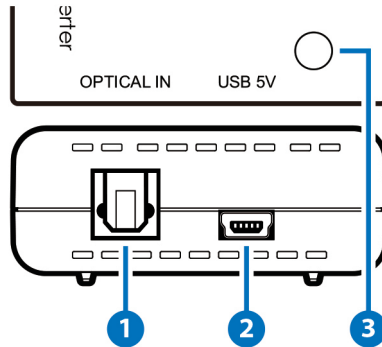
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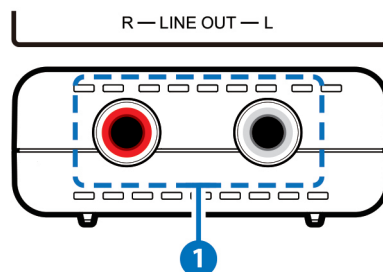
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



- 1 OPTICAL IN: Connect the Optical input to an Optical digital audio source, such as a Games Console, HDTV or Set-top Box.
- 2 USB 5V: Connect the USB power port to any powered USB port with a Mini USB cable or Mini-USB to AC adaptor.
- 3 Power LED: The LED will illuminate when connected to power.

6.2 Rear Panel



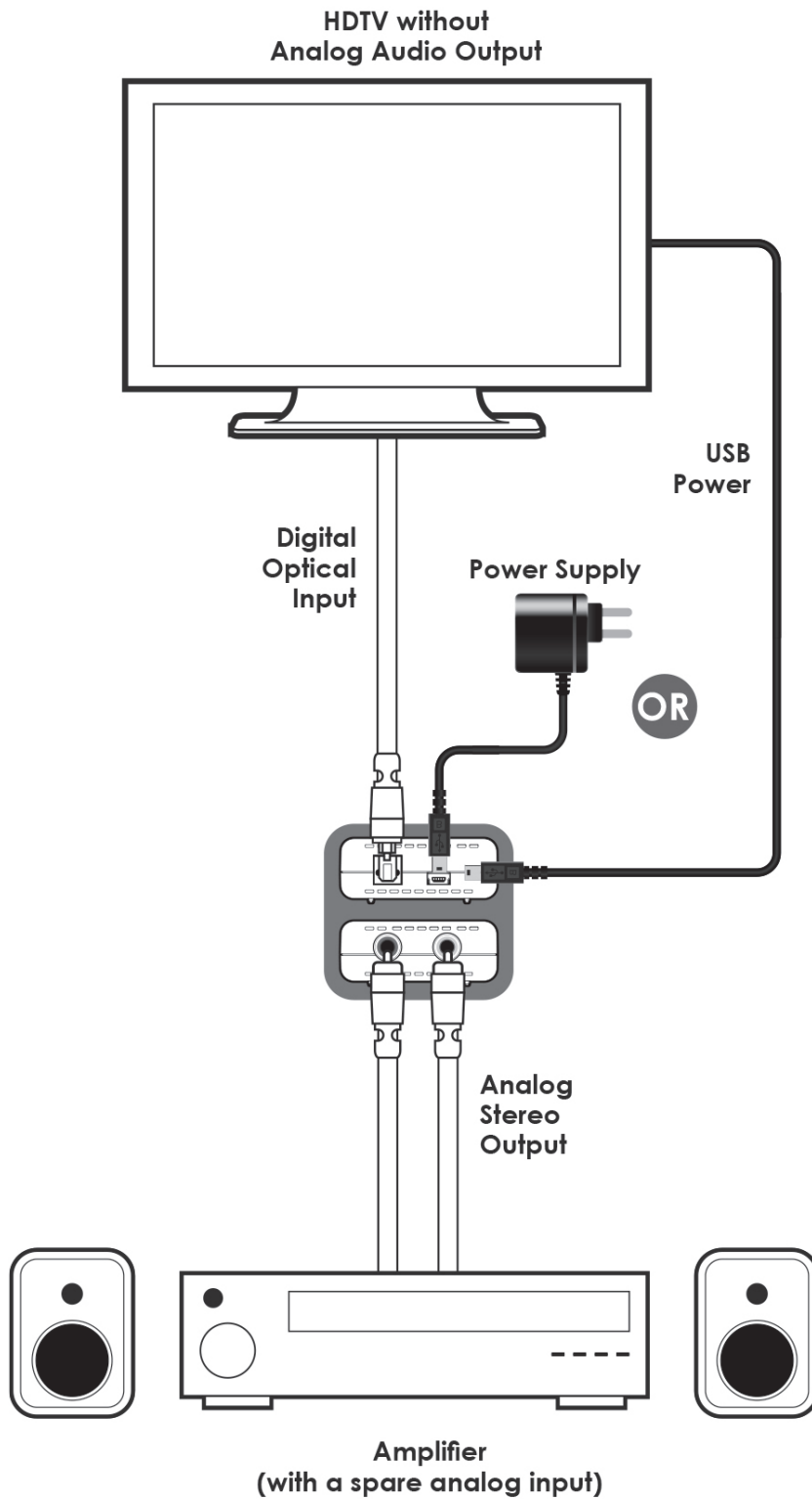
- 1 R/L LINE OUT: Connect the R/L analog audio output to the input of your Amplifier or audio system.

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7. CONNECTION DIAGRAM



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8. SPECIFICATIONS

Input Port	1xOptical
Output Port	1xL/R (2xRCA)
Power Supply	Powered by USB bus
Output Level	2 Vrms +/-10%
THD+N	< 0.01 %
Frequency Response	< +/-1 dB
SNR	> 80 dB
Crosstalk	< -80 dB
Dimensions	55 mm (W)x80.5 mm (D)x22.5 mm (H)
Weight	40 g
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)

9. ACRONYMS

ACRONYM	COMPLETE TERM
DAC	Digital to Analog Converter
RCA	Audio Connector (Radio Corporation of America)
S/PDIF	Sony/Philips Digital Interconnect Format
SNR	Signal-to-noise Ratio
THD	Total Harmonic Distortion
USB	Universal Serial Bus

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