



# DCT-1

## Optical to Analog Audio Converter



**Operation Manual**



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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	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.

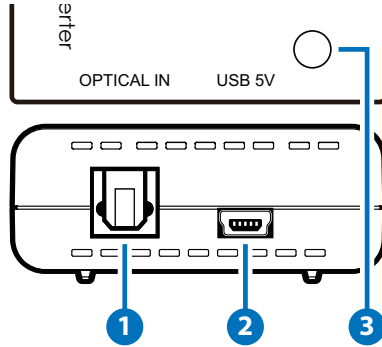
## 5. FEATURES

- 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.*

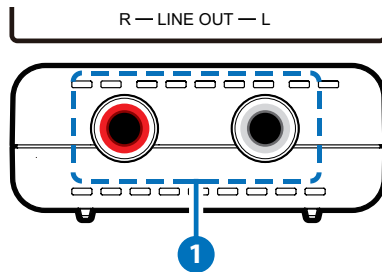
## 6. OPERATION CONTROLS AND FUNCTIONS

### 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.

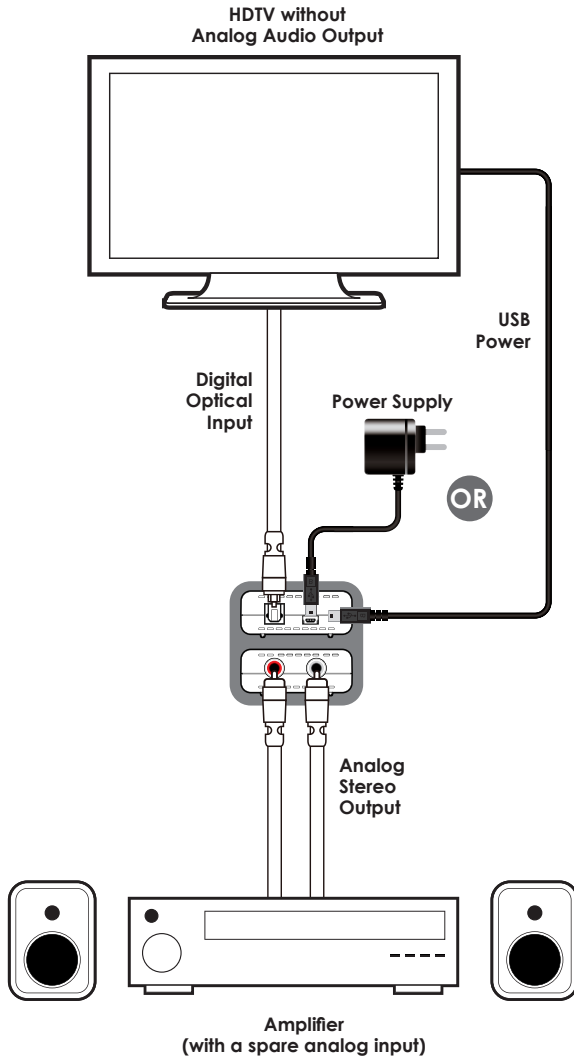
### 6.2 Rear Panel



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



## 7. CONNECTION DIAGRAM





## 8. SPECIFICATIONS

<b>Input Port</b>	1×Optical
<b>Output Port</b>	1×L/R (2×RCA)
<b>Power Supply</b>	Powered by USB bus
<b>Output Level</b>	2 Vrms +/-10%
<b>THD+N</b>	< 0.01 %
<b>Frequency Response</b>	<+/-1 dB
<b>SNR</b>	> 80 dB
<b>Crosstalk</b>	<-80 dB
<b>Dimensions</b>	55 mm (W)×80.5 mm (D)×22.5 mm (H)
<b>Weight</b>	40 g
<b>Chassis Material</b>	Plastic
<b>Silkscreen Color</b>	White
<b>Operating Temperature</b>	0 °C~40 °C/32 °F~104 °F
<b>Storage Temperature</b>	-20 °C~60 °C/-4°F~140 °F
<b>Relative Humidity</b>	20~90 % RH (non-condensing)

## 9. ACRONYMS

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





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