# **DCT-15**

# USB Audio Converter with Optical

**Operation Manual** 



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#### Safety Precautions

Please read all instructions before attempting to unpack or 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 module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- > Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide

# Revision History

Version No	Date	Summary of Change
V1	20100607	Preliminary Release
VR2	20110511	<b>ID Material Change</b>

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#### 1. Introduction

The DCT-15 USB Audio Converter with Optical is a powerful device for your audio outputting needs. It is designed to be compatible with most modern devices thanks to its use of USB and Optical ports and is intelligently designed to receive power over a USB connection; this optical output can also be linked with an amplifier or sound system that has SPDIF inputs. Don't forget about the R/L jacks because they can be linked to a display or to speakers to simultaneously output stereo audio. The DCT-15 USB Audio Converter with Optical is your best choice when you want to enjoy high quality sound.

#### 2. Applications

- High performance audio output
- Digital to analog audio conversion
- USB to audio conversion

#### 3. Package Contents

- Audio Box
- Operation Manual

## 4. System Requirements

PC or laptop with USB cables and/or another source input such as a DVD player with an optical cable. Output to an amplifier or active speaker with optical and RCA cables.

#### 5. Features

- USB 2.0 compatible
- USB audio device class specification v1.0 Compatible
- USB High performance 16-bit Stereo, 48/44.1 kHz sampling rate for audio playback
- Optical sampling rate supports up to 192 kHz, 24bit
- Low power consumption

#### 6. Specifications

Input Port Optical and Mini USB
USB Sampling Frequency 48/44.1KHz / 16 bits
Optical Sample Frequency Up to 192 kHz / 24 bits
Output Port Optical (48kHz) and R/L

ESD Protection Human body model: ± 8kV (air-gap discharge)

± 6kV (contact discharge)

Dimensions (mm) 90 (W) x 120 (D) x 25(H)

Weight(g) 250

Chassis Material Aluminum

Silkscreen Color Black

Operating Temperature  $0^{\circ}\text{C} \sim 40^{\circ}\text{C} / 32^{\circ}\text{F} \sim 104^{\circ}\text{F}$ Storage Temperature  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} / -4^{\circ}\text{F} \sim 140^{\circ}\text{F}$ 

Power Consumption 1W

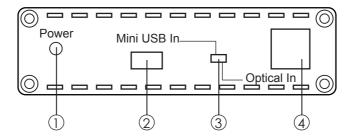
Relative Humidity 20 ~ 90% RH (non-condensing)

#### 6.1 Input Audio Reference Level

Input Reference Level/Freq	Output	Level	T.H.D+N	Freq Response	SNR	Crosstalk
OPTICAL OdBFS	L/R	2.1±0.05 Vrms	0.01%↓	0±1 dBrA	>80dB	<-80dB
1 KHz	OPT 48KHZ	0dBFS	0.01%↓	0±0.5dBFS	>90dB	<-90dB

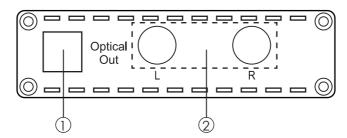
#### 7. Operation Controls and Functions

#### 7.1 Front Panel



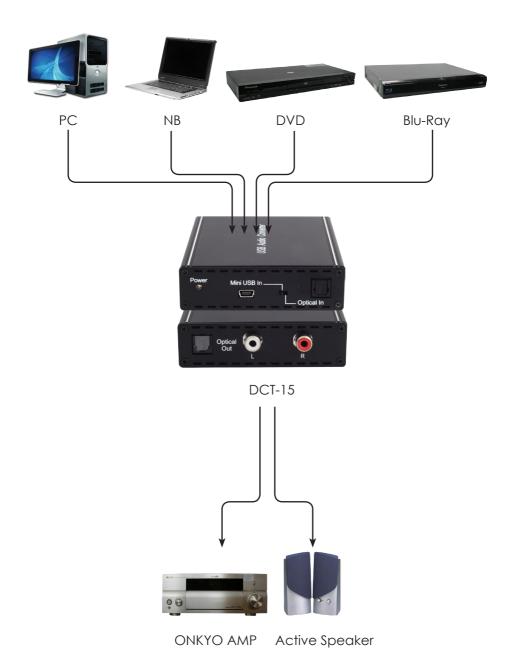
- ① Power LED: This red LED will turn on when the device is connected with the power supply.
- 2 Mini USB In: This slot is where you connect the input audio source or the power supply with a USB cable from a PC or notebook.
- 3 USB & OPTICAL Switch: This switch allows the user to choose the input audio source from either the USB port or from the Toslink socket.
- OPTICAL IN: This slot is where you connect the input audio source from a
   DVD player, PS3 etc, with an optical cable.

#### 7.2 Rear Panel



- ① OPTICAL OUT: This slot is where you connect the amplifier or speaker with optical cable for audio output.
- 2 L/R OUT: These slots are where you connect the speaker with RCA cables for audio output.

## 8. Connection and Installation



# **Acronyms**



Acronym Complete Term

USB Universal Serial Bus

