

# USB/Optical to Analog Audio Converter - ID# 887



## Operation Manual

## Introduction

The 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. The R/L jacks can be linked to a display or to speakers to simultaneously output stereo audio. The USB Audio Converter with Optical is your best choice when you want to enjoy high quality sound.

## 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

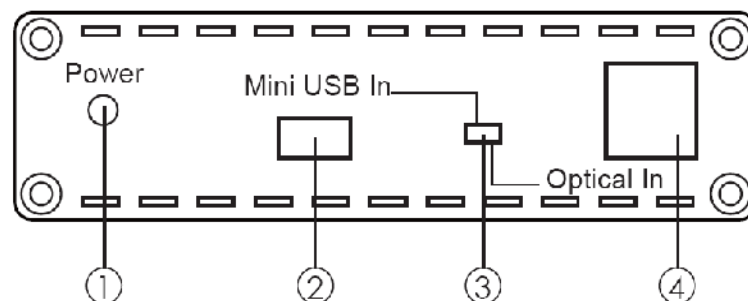
## Applications

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

## 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.

## Operation Controls and Functions Front Panel



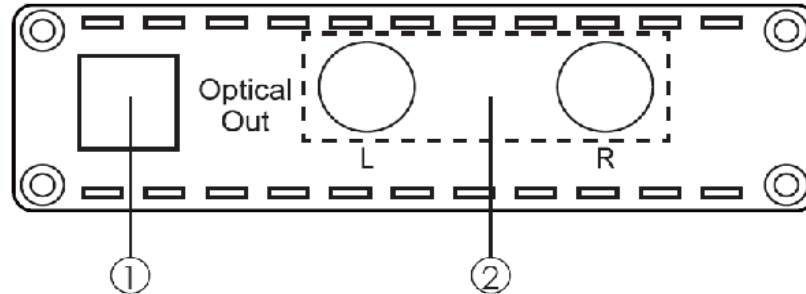
**1 Power LED:** This red LED will turn on when the device is connected with the power supply.

**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.

**4 OPTICAL IN:** This slot is where you connect the input audio source from a DVD player, PS3 etc, with an optical cable.

## 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.

## Specifications

|                                 |                                                                                                |
|---------------------------------|------------------------------------------------------------------------------------------------|
| <b>Input Port</b>               | Optical and Mini USB                                                                           |
| <b>USB Sampling Frequency</b>   | 48/44.1KHz / 16 bits                                                                           |
| <b>Optical Sample Frequency</b> | Up to 192 kHz / 24 bits                                                                        |
| <b>Output Port Optical</b>      | (48kHz) and R/L                                                                                |
| <b>ESD Protection</b>           | Human body model: $\pm 8\text{kV}$ (air-gap discharge)<br>$\pm 6\text{kV}$ (contact discharge) |
| <b>Dimensions(mm)</b>           | 90 (W) x 120 (D) x 25(H)                                                                       |
| <b>Weight(g)</b>                | 250                                                                                            |
| <b>Chassis Material</b>         | Plastic                                                                                        |
| <b>Silkscreen Color</b>         | Black                                                                                          |
| <b>Operating Temperature</b>    | $0^{\circ}\text{C}\sim 40^{\circ}\text{C}$ / $32^{\circ}\text{F}\sim 104^{\circ}\text{F}$      |
| <b>Storage Temperature</b>      | $-20^{\circ}\text{C}\sim 60^{\circ}\text{C}$ / $-4^{\circ}\text{F}\sim 140^{\circ}\text{F}$    |
| <b>Power Consumption</b>        | 1W                                                                                             |
| <b>Relative Humidity</b>        | 20 ~ 90% RH (non-condensing)                                                                   |

### Input Audio Reference Level

| Input Reference Level/Freq | Output       | Level                 | T.H. D+N | Freq Response   | SNR   | Crosstalk |
|----------------------------|--------------|-----------------------|----------|-----------------|-------|-----------|
| OPTICAL<br>0dBFS<br>1KHz   | L / R        | $2.1\pm 0.05$<br>Vrms | 0.01%    | $0\pm 1$ dB/A   | >80dB | <-80dB    |
|                            | OPT<br>48KHZ | 0dBFS                 | 0.01%    | $0\pm 0.5$ dBFS | >90dB | <-90dB    |

## Connection

