



CDB-6HP

HD Audio Amplifier



Operation Manual

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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
RDV1	16/03/16	Preliminary release



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1. INTRODUCTION

This USB to Headphone Audio Converter is a simple but smart device and no external power is required. It allows you to connect your PC/laptop to a set of analog headphones or other analog audio destination devices for delivery of superior audio quality. This compact HD audio product supports LPCM 2.0 audio with a maximum sampling rate of 384kHz/24-bit and utilizes a direct-coupled amplifier, for better frequency response and to avoid signal loss, providing higher audio quality than is typically delivered by a standard PC/laptop's headphone output. This unit connects to your PC/laptop using any available USB 2.0 (or higher) port (Windows and Mac OSX compatible).

2. APPLICATIONS

- High-resolution audio playback
- Improved audio quality from laptops for presentations or entertainment

3. PACKAGE CONTENTS

- HD Audio Amplifier
- Driver Disk
- Operation Manual

4. SYSTEM REQUIREMENTS

- Audio source equipment such as PC/Mac/laptop with an available USB port. (Windows XP, Vista, 7, 8, 8.1, 10 (32 & 64-bit) or Apple OSX version 10.6.4 and later)
- Analog audio receiving equipment such as headphones, audio amplifiers or powered speakers.

5. FEATURES

- Output HD audio from your PC/laptop to headphones
- Superior USB audio processor (XMOS U8A) supporting sample rates up to 384kHz/24-bit
- Superior DAC engine (TI PCM5101A) which supports up to 384kHz for digital to analog signal conversion
- Direct-coupled amplifier for better frequency response and to avoid signal loss
- Simple operation and compact design
- No external power required

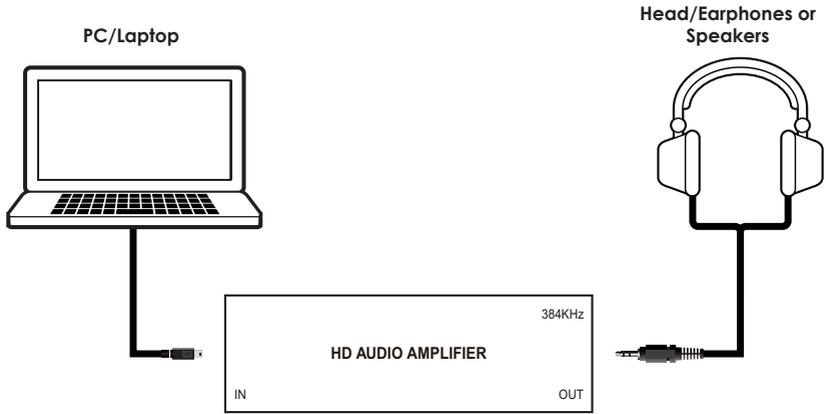
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Panel Description



- 1 USB IN:** Connect to computer source equipment with an available USB port such as a PC/Laptop (Windows and Mac Operating Systems are compatible).
- 2 POWER LED:** This LED will illuminate RED to indicate the unit is on and receiving power from the USB connection.
- 3 Headphone OUT:** Connect to headphones, powered speakers or an amplifier via 3.5mm headphone plug for analog audio output.

7. CONNECTION DIAGRAM





8. SPECIFICATIONS

Input Ports	1 x USB 2.0 (Type B)
Output Ports	3.5mm headphone jack
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
Chassis Material	Aluminum
Silkscreen color	Black
Dimensions	81mm × 22.5mm × 25mm (W×H×D) [Case Only]
Operating Temperature	0°C~40°C/32°F~104°F
Weight	54g
Storage Temperature	-20°C~60°C/-4°F~140°F
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	0.5W

USB Audio Specification	
USB Audio Class	USB Audio 2.0
Format Support	LPCM 2.0: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz, 384kHz
OS Support	Windows XP, Vista, 7, 8, 8.1, 10 (32 & 64bit) / OSX 10.6.4 and above

Audio Specification						
	Output Sample Rate	Output Level	THD+N (A-Weight)	Frequency Response	SNR	Crosstalk
USB 0dBFS/1kHz	384kHz	160mW at 16ohm	<0.01%	±1dB	>80dB	<-80dB



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