HD Audio Center

- ID# 930

Operation Manual

Introduction

The HD Audio Center is an excellent device for converting digital and analog audio sources. It allows for simultaneous conversion of a digital or an analog audio input to all digital and analog audio outputs. Featuring a sampling rate converter to 44.1 kHz ~ 192 kHz (up to 24-bit) output, supports LPCM 2CH audio, HDMI, USB Audio 2.0, Optical and Coaxial digital input/output.
For professionals, the Ti TPA6120A2 headphone amplifier, XLR (Low-noise Professional Balanced output) and 6.3mm headphone jack (3.5 mini-jack adaptor supplied) offer unparalleled audio quality. With a highly accurate PLL and low jitter reduction clock system and an OLED display and IR remote for controlling the device, the HD Audio Center is an incredibly useful tool for getting the most out of your audio devices.

Applications

- Audio format and sampling rate conversion
- Professional audio integration
- Mac/PC audio output to professional speakers/headphones
- Analog to digital or digital to analog audio conversion
- HDMI audio embedding or de-embedding

System Requirements

Input source equipment such as PC (USB) or DVD player with relevant connection cables and output to amplifier, active speakers or headphones

Features

Digital

- Supports 2 Channel LPCM HDMI, USB Audio 2.0, Optical, and Coaxial digital interface input/output
- All digital interface sampling rates up to 192 kHz, and resolution up to 24-Bit
- All digital interface can be SRC (Sampling Rate Converted) to 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz or 192 kHz output
- High accuracy PLL and low jitter reduction clock system

Analog

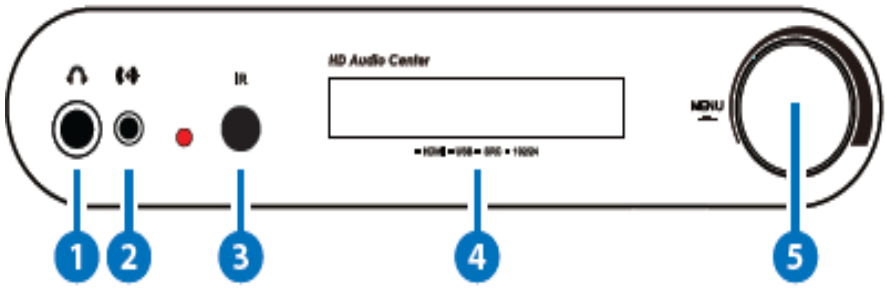
- Built-in Ti TPA6120A2 high quality headphone amplifier, and 6.3mm Phone jack output (3.5 mini-jack adaptor supplied)
- Supports Low-noise Professional Balanced XLR and RCA analog stereo output
- Supports RCA and 3.5mm phone-jack analog input and provides digital output sampling rates up to 192 kHz
- Total harmonic distortion – less than 100dB (-20dBFS)

Misc.

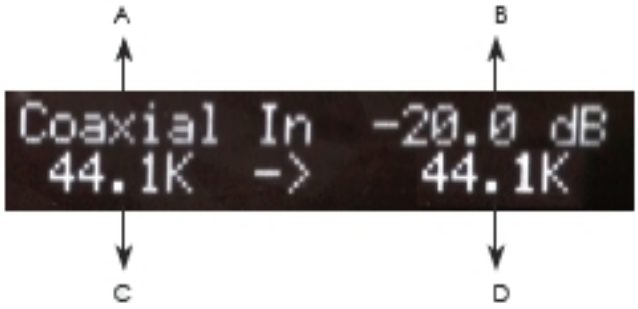
- Supports IR control
- High viewing angle OLED Display
- HDMI audio embedding or de-embedding

Operation Controls and Functions

Front Panel



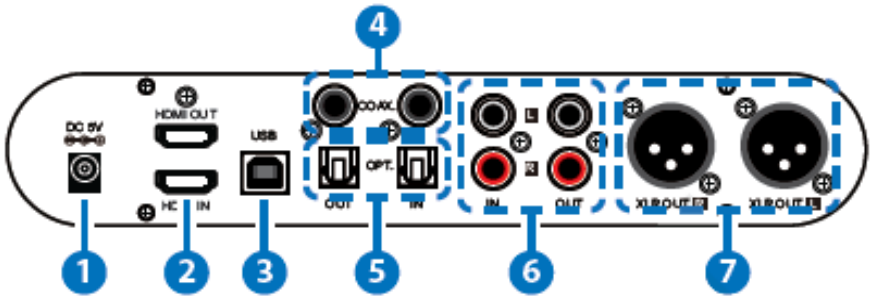
1. **6.3mm Phone Jack**: Connect to 6.3mm professional headphone set for user to enjoy the individual professional audio sound.
2. **3.5mm Front In**: Connect 3.5mm mini-jack cable to any audio equipment for stereo input audio signal.
3. **IR:** IR receiver window. Accepts the IR signal from the supplied remote control.
4. **OLED:** Displays the input/output selection, volume setting, sampling rate and audio channels



A. Input Source
B. Headphone Volume
C. Input sample-rate
D. Output sample-rate

5. **MENU/VOLUME Controller:** Turn to adjust the volume. Press inwards to enter into the menu and turn it to select the desire setting, press again to confirm the selection.
Note: The Volume and Mute functions only affect the headphone and line-out volume levels, all other outputs are not affected.

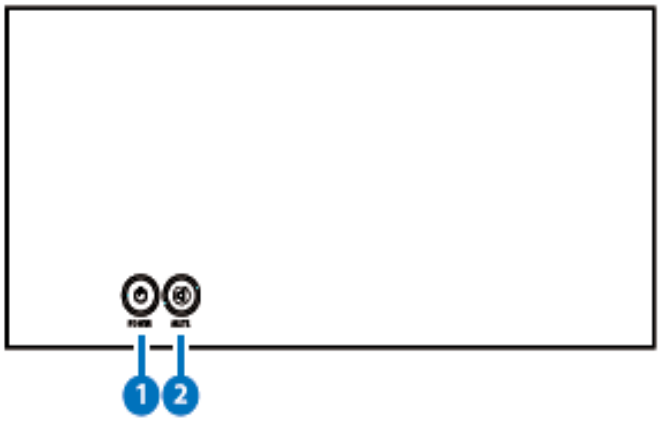
Rear Panel



1. DC 5V: Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.

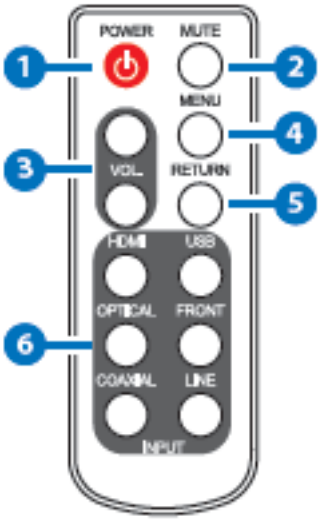
2. HDMI IN/OUT: Connect to an HDMI source such as a satellite box or DVD Audio player and output to an HDMI HDTV/monitor for display output.
3. USB: Connect to a PC/MAC source for USB audio signal input.
4. COAX OUT/IN: Connect the COAX IN to a coaxial digital audio input source such as set-top box or CD player and the COAX OUT to an amplifier or active speakers with a coaxial cable.
5. OPT. OUT/IN: Connect the OPT. IN to an optical digital audio input source such as a DVD/Blu-ray player or PS3 and the OPT. OUT to an amplifier or active speakers with an optical cable.
6. **L/R IN/OUT:** Connect the L/R IN to an analog stereo input source such as a CD player or media player and the L/R OUT to amplifier or active speakers with RCA jack cable.
7. **R/L XLR OUT (Balanced):** Connect to an amplifier with balanced XLR inputs or directly to professional balanced equipment with XLR cables.
Note:
HDMI Input Mode: In this mode, whatever audio input is selected will be routed to the HDMI output as well as all other outputs.
HDMI Bypass Mode: In this mode HDMI video and audio will always be routed to the HDMI output no matter what input is selected, whilst all other outputs will output the audio from the selected input. This function allows the user to have two distinct audio pathways throught the unit.

Top Panel



1. POWER: Press this button to switch on the device or set to standby mode.
2. MUTE: Press this button to mute or unmute the audio volume instantly.

Remote Control



1. POWER: *Press the button to turn On or to set the device to standby mode.*
2. MUTE: Press the button to mute or unmute the audio volume instantly.
3. VOL. Up/Down: Press these buttons to turn up or down on the output audio volume.

4. MENU: Press the button to enter into the menu selections then press the up/down buttons to select and press it again to confirm the selection.
5. RETURN: Press the button to return or exit the menu selection.
6. INPUT: Press these hot keys to switch the input sources instantly

1st LAYER	2nd LAYER
Source In (Source Selection)	HDMI In
	USB In
	Optical In
	Coaxial In
	Line In (L/R in)
	Front In
	Return
SRC Set (Sampling Rate Conversion Setup)	Bypass
	192kHz
	176.4kHz
	96kHz
	88.2kHz
	48kHz
	44.1kHz
	Return
HDMI TX Set (HDMI Output Setup)	Bypass
	Input
	Return
Display Set (Display Time Out Setup)	TimeOut 5s
	TimeOut 10s
	TimeOut 15s
	Return
HP Impedance (Headphone Impedance)	16 Ω
	32 Ω
	64 Ω
	200 Ω
	300 Ω
	600 Ω
	Return

1st LAYER	2nd LAYER
Line Out Set* (Headphone/Line Out Setup)	Fix Level
	Volume Level
	Return
Reset to Default	OK
	Return
Return	

Note: *This option is for the 6.3mm phone jack output port on the front panel. The 6.3mm port can be used either to headphone or as an line out*

Specifications

Input Ports	1×HDMI, 1×USB, 1×Coaxial, 1×Optical, 1×L/R, 1×Mini-jack in (L/R)
Output Ports	1×HDMI, 1×Coaxial, 1×Optical, 1×L/R, 1×L/R Balanced XLR, 1×6.3mm Headphone jack
Digital Audio I/O Support	LPCM 2CH
Stereo Audio I/O Level	2 Vrms+/-0.2
XLR Blanced I/O Level	4 Vrms+/-0.2
Headphone Impedance	16 Ω ~ 600 Ω
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±6 kV(contact discharge)
Power Supply	5 V /3 A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	138 mm (W)×223 mm (D)×50 mm (H)
Weight	680 g
Chassis Material	Aluminum
Silkscreen Color	Black
Power Consumption	15 W

Connection