

BerryBak™

User Manual

2X50W HDMI AUDIO EXTRACTOR AMPLIFIER

HEV250

HDMI Amplifier

One Product, Multiple Audio Applications

HDMI 2.0 Audio Extractor
Bluetooth Audio Amplifier
4K HDMI to HDMI Splitter
Remote Controller Learning

The HEV250 serves as a powerful HDMI audio extractor, capable of extracting audio signals from your set-top box, game console, or Blu-ray player. Integrated with QCC3034 Bluetooth module so it doubles as a Bluetooth audio amplifier, allowing wireless audio connections for home audio, desktop audio, and bookshelf speakers. With its 3.5mm line signal output channel, it can even serve as a headphone amplifier.

Moreover, the HEV250 offers HDMI splitting capabilities, featuring two HDMI 2.0 output interfaces. Besides, the HEV250 supports remote control functionality, allowing you to use any compatible remote controller to control its operations after the learning process.



HDMI 2.0 Audio Extractor for Home Theater



QCC3034 Bluetooth v5.0 Supporting aptX HD



Digital Solution TASS768 I2S AMP Stereo 50W



Headphone Amplifier 3.5mm Socket for Line Signal Output



HDMI to HDMI 1-2 Splitter for Multiple Display/TV support



USB Type-C for PD Power DC20V, 3-5A



Remote Control Integrated with Infrared Controller Learning Circuit



USB Type-A Discharging Port DC5V, 2.4A



Aluminum Housing Plug-N-Play Terminals Easy Operation



Data Rate Up to 6Gbps Up to 4Kx2K@60Hz



Supporting 3D and HDR 8/10/12-bit Color Depth

RoHS

Visit the website below for additional information:
www.berrybak.com

HDMI Audio Extractor & Bluetooth Amplifier HEV250

PRODUCT SPECIFICATIONS

Basic Information	
Device Type	HDMI Audio Extractor + HDMI to HDMI 1-2 Splitter Stereo 50W Bluetooth Amplifier (TAS5768)
Input	HDMI; Bluetooth v5.0 aptX HD
Output	2 x HDMI; Speaker Output (2x50W MAX)
HDMI Ver	HDMI 2.0, Compliant with HDMI2.0b, HDMI1.4
HDCP Ver	Compliant HDCP2.3, HDCP2.2 and HDCP1.4
Data Rate	Up to 6Gbps
Resolution	Up to 4Kx2K@60Hz; 3D and HDR, 8/10/12-bit Color Depth
Weight	191g (Including the antenna)
Dimension	103mm (L) x 100mm (W) x 32mm (H) (Antenna Not Included)

Electrical Specifications

Number of Channels	2
Recommended Load Impedance	40ohm (Typical)
Nominal Power Requirement	2x50W @ 1kHz, THD+N=10%, 24V, 40hm 2x40W @ 1kHz, THD+N=10%, 20V, 40hm
Operating Voltage	DC 12V - 24V, DC 20V (Typical)
Idle Power	1.92W
Efficiency	89% (@40hm, DC20V, 1/2 Full Power)

Audio Performance

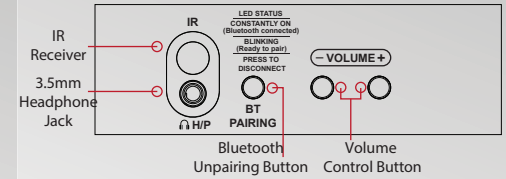
SNR	104.71 dB (HDMI In) 102.35 dB (Bluetooth In)
THD+N	0.028% (HDMI In) 0.013% (Bluetooth In)
Output Noise Level	68.18uV (HDMI In) 76.73uV (Bluetooth In)

PACKAGE CONTENTS

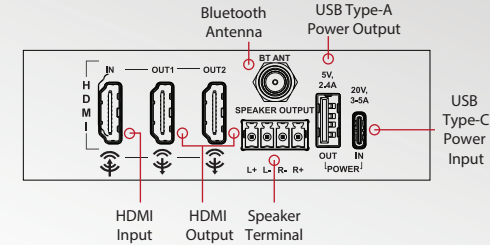
- 1 x BerryBak HEV250 HDMI Audio Extractor & Bluetooth Amplifier
- 1 x HDMI Cable 50cm
- 1 x Quick Datasheet
- 1 x Pluggable 3.81mm-4Pos Connector
- 1 x External Bluetooth Antenna

PRODUCT OVERVIEW

Front View



Rear View



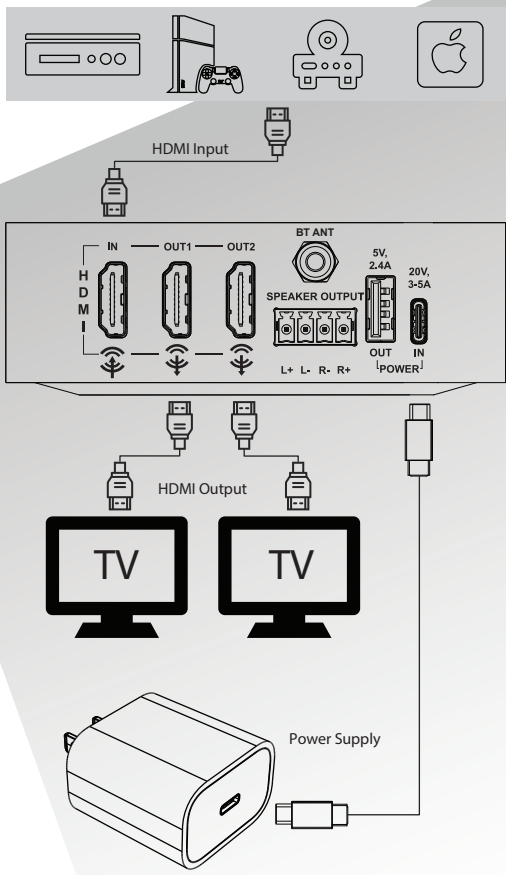
QUICK SETUP

- HDMI Input:** Connect HDMI output of your set-top box, games console and Blu-ray player to the HDMI input interface of HEV250.
- HDMI Output:** Use an HDMI cable to connect the HDMI output of the HEV250 to a monitor or TV. The HEV250 is designed with two HDMI output ports for signal splitting or repeating, providing flexibility in your setup.
- Speaker Output:** Connect pluggable terminal block cable into HEV250 from the speaker.
- Power Input:** Connect a 20V, 3-5A PD power adapter to the USB Type-C port for power input.
- Bluetooth Input** Pair with your device to play streaming music from your phone or PC.
- Power Output:** Connect USB Type-A cable into HEV250 for DC5V power output.
- Headphone Output:** Connect 3.5mm headphone jack into the headphone output connector.

FUNCTIONALITY DESCRIPTIONS

1. Power Supply

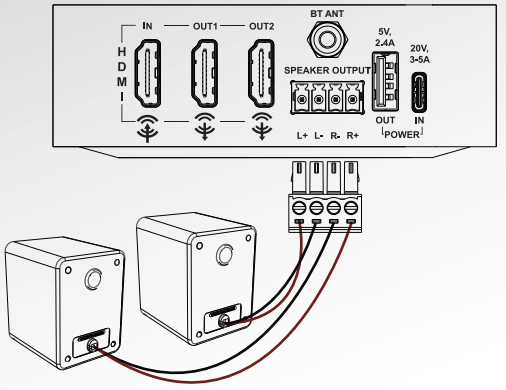
The HEV250 is designed to be compatible with USB Type-C PD power, offering you a seamless and efficient power solution. A 20V, 3-5A USB Type-C PD power adapter is required. When paired with a 100W PD adapter, the HEV250 delivers a maximum output power of 2x50W. To facilitate easy power connection, the HEV250 features a USB Type-C port conveniently located on its rear panel. This allows for a hassle-free power setup, ensuring that you can enjoy uninterrupted audio performance without any complicated wiring.



Note:
 1. Bluetooth name can be changed for mass order before shipment. Please send us an email or leave us a remark to inform us with wanted Bluetooth name after purchasing related service.
 2. Bluetooth LED will blink when Bluetooth is searching and will be constant lit when paired successfully.
 3. Supported audio formats: aptX, aptX HD, aptX LL, SBC, and AAC

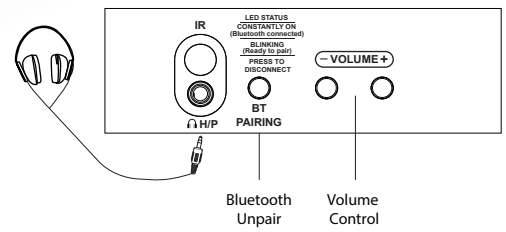
4. Speaker Output

Connect with passive speakers for audio output. A pluggable 3.81mm-4Pos connector is included in the package for your easy connection. Take note of the correct polarity as indicated on the label. It is important to ensure the positive (+) wire is connected to the positive (+) terminal and the negative (-) wire is connected to the negative (-) terminal to maintain proper phase alignment.



5. Headphone Output

For a personalized and immersive listening experience, the HEV250 features a convenient 3.5mm headphone output port located on the front panel.



6. Volume Control & Bluetooth Unpair Button

There are two buttons on the HEV250 for volume control.

To ensure convenient operation for customers, the HEV250 features a dedicated button that allows you to easily cancel Bluetooth pairing. When Bluetooth is currently connected to your device, simply long press the Bluetooth unpair button on the HEV250. When the Bluetooth LED transition from a constant light to blinking, it indicates that the Bluetooth pairing has been successfully canceled.

Scan this QR code for video tutorial.

7. Remote Controller Learning

To provide you with the utmost convenience, the HEV250 is equipped with an infrared receiver module, allowing for remote control functionality. Additionally, the HEV250 supports infrared remote controller learning, which means you can use any compatible remote controller from your home to control the HEV250.

Here's how to set it up:

- 1) Find an infrared remote controller that you would like to use with the HEV250.
- 2) While the HEV250 is powered off, simultaneously hold down the Volume Up and Volume Down buttons on the front panel.
- 3) While still holding the buttons, power on the HEV250. Keep holding the buttons until the volume control LEDs on the front panel start blinking. This process usually takes about 5 seconds.
- 4) Point the remote controller at the infrared (IR) module of the HEV250 and press the "Volume Up" button on the remote controller. When the volume control LEDs on the HEV250 turn on, it indicates that the learning process is in progress. Once the LEDs transition from constantly on to blinking, it means that the "Volume Up" function has been successfully learned.
- 5) Repeat the instructions for the "Volume Down" and "Mute/Unmute" functions. Point the remote controller at the HEV250's IR module and press the corresponding buttons on the remote to teach the HEV250 these functions. The volume control LEDs will indicate the learning progress.
- 6) After successfully learning all three functions (Volume Up, Volume Down, Mute/Unmute), the volume control LEDs will be constantly on. Please power off and then power on the HEV250 to complete the setup process.

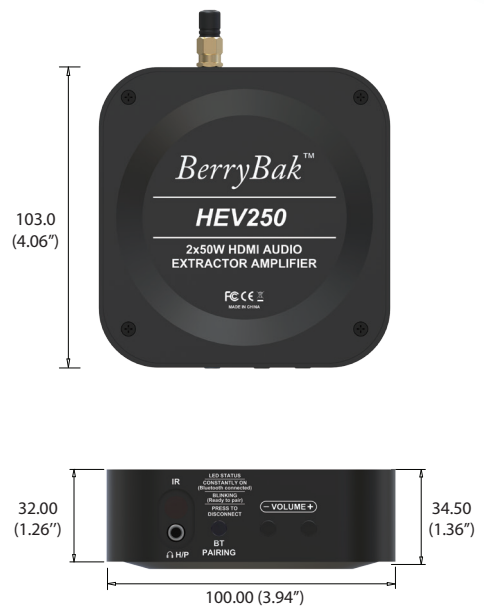
Once the learning process is complete, you can use the remote controller you selected to conveniently control the HEV250, adjusting the volume and

8. USB Type-A Discharging

The HEV250 features a dedicated DC5V, 2.4A USB Type-A discharging port on its rear panel, allowing you to conveniently charge your devices. Connect your device to this discharging port through a USB cable when the HEV250 is powered on for quick charging.

HEV250 3D DIMENSION

Unit: mm / inch



Service and warranty

Service of BerryBak products should only be carried out by authorised service agents. If service is required, the equipment should be securely packaged and returned, preferable using original packing to your dealer. Please enclose a note with your name, address, telephone number, and a brief description of the reason for the return.

If you require service outside the warranty period, please do not hesitate to contact your dealer.

The distributor guarantees a product lifecycle more than 5 years for all standard products. We provide a one-year free warranty for customer's benefit. The distributor warrants this product to be free from defects in materials and workmanship for two years. During the warranty period, the distributor will repair or replace (at the distributor's discretion) this products, or any defective part, if it is found to be defective due to faulty materials, workmanship or function.

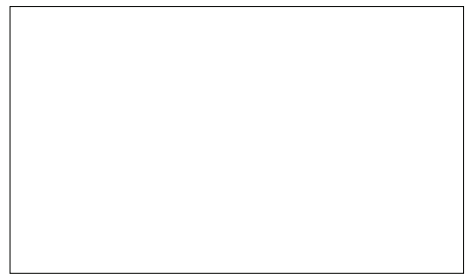
Legal statement

The distributor reserves the right to make changes, changes, correction, modifications, and improvements to BerryBak products and/or the documents at any time without notice. Customers should obtain the latest relevant information before placing orders.

Purchasers are solely responsible for the choice, selection, and the use of BerryBak products and the distributor assumes no liability for application assistance or the design of purchaser's product.



Authorised distributor:



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