

JustBoom DAC Zero - Product Description

The JustBoom DAC pHAT is a plug and play, high resolution, digital-to-analogue converter for the Raspberry Pi Zero.

We've designed the JustBoom DAC pHAT to be simple to install and use. With no soldering required and all the mounting hardware already provided you can be up and running and enjoying flawless high quality audio playback within minutes. This product is suitable for absolute beginners and seasoned professionals alike. Just connect your DAC HAT to a set of powered speakers or an audio amplifier and you can be up and running quickly, enjoying flawless high quality audio playback within minutes of setting up this Raspberry Pi HAT. We also include an optional IR receiver to allow remote control operation of your Raspberry Pi.

Includes a 384kHz/32 bit DAC chip with hardware volume mixing as well as a 138mW headphone amplifier. Outputs are line level over RCA and headphone amplified over 3.5mm jack cable. The HAT uses the I2S interface for its audio input which reduces CPU load on the Pi Zero compared to USB solutions. It is also powered directly from the GPIO header so no extra cables or power supplies are required to connect to the Raspberry Pi.

Use cases

- Battery powered portable high definition audio player

Features

- 32 bit high quality audio at 384kHz
- Includes both a DAC and headphone amplifier
- Line-level RCA and headphone amplified 3.5mm jack outputs
- Plug and play compatibility for ease of use
- Hardware volume control from your Raspberry Pi
- No soldering required
- Powered by the Raspberry Pi GPIO header
- Compatible with Raspberry Pi Zero
- Mounting hardware included
- Optional IR receiver included in package
- Fully HAT compliant
- Full driver support in Raspbian / NOOBS

Technical Information

- Texas Instruments PCM5121 Audio Dac 32 Bit, 384 Khz. Please note that due to Linux driver restrictions, max frequency is limited to 192kHz
- Texas Instruments TPA6132A2 headphone amplifier - 138mW

- Fully integrated hardware volume mixing via “alsamixer” or any ALSA compatible application
- Optional Vishay TSOP4838 IR receiver included in package (solder yourself if required)
- 112db SNR and -93db THD for best-in-class audio
- Advanced ESD protection on both headphone and RCA outputs