JustBoom Amp HAT

DEV-14318

The JustBoom Amp HAT is a high-quality audio amplifier designed specifically for the Raspberry Pi. Digital-to-analog conversion is also included with the Amp HAT, so no external sound cards or DACs are required. Simply stack the plug-and-play add-on board (HAT) onto your Raspberry Pi A+, B+, 2B or the new 3B, and it will be ready to use immediately.

JustBoom designed the Amp HAT to be simple to install and use. With no soldering required and all the mounting hardware already provided, this product is suitable for both beginners and seasoned professionals alike. Just connect your Amp HAT to a set of passive speakers, and you can be up and running quickly, enjoying flawless, high-quality audio playback within minutes. Also included is an optional IR receiver to allow remote control operation of your Raspberry Pi Amplifier.

Featuring a Class-D power amplifier chip with built-in 192kHz/32-bit DAC, for a peak power output of 2 x 55 watts, the JustBoom Amp HAT outputs audio over two speaker cable connector blocks that accept anything up to 14 AWG cable and will provide crystal-clear audio to either 4 or 8 ohm passive speakers. The Amp HAT uses the I²S interface for its audio input, which reduces CPU load on the Raspberry Pi compared with USB solutions. It is also designed to back-power the Raspberry Pi over the 40-pin GPIO header, meaning you only need a single power supply for the entire system.

Note: To power this HAT you will need to pick up the Global Power Supply or possess one capable of powering the HAT.

Features

- Full high-quality audio — 192kHz / 32-bit
- 2 x 55 watt peak output at 8 ohms (2 x 30 watt RMS)
- Includes both a DAC and power amplifier — just connect to your passive speakers
- Back-powers the Raspberry Pi over the GPIO (with full HAT-compliant protection) at 2.5A, so only one power supply is required for the whole system.
- Plug-and-play compatibility for ease of use
- Hardware and software volume control from your Raspberry Pi
- Onboard hardware jumpers for configuring mute and gain settings (jumpers could optionally be changed with switches)
- Mute/enable with GPIO22 (this can be overridden by using jumper J4)
- No soldering required
- Optional IR receiver included in package
- Unused GPIO pins still accessible via unpopulated extension header
- Full driver support in Raspbian / NOOBS
- Compatible with OSMC / Max2Play /RuneAudio / Volumio / Moode / PiCorePlayer / PiMusicBox / OpenELEC and others