

## Stereo 20W Class D Audio Amplifier - MAX9744

PRODUCT ID: 1752

IN STOCK

1

ADD TO CART

1-9

10-99

100+

ADD TO WISHLIST

DESCRIPTION

TECHNICAL DETAILS



## DESCRIPTION

Pump up the volume with this 20W stereo amplifier! This slim little board has a class D amplifier onboard that can drive 2 channels of 4-8 ohm impedance speakers at 20W each. Power it with 5-12VDC using the onboard DC power jack and plug stereo line level into the 3.5mm stereo headphone jack and jam out with ease. Since it's class D, it's completely cool-running, no heat sinks are required and it's extremely efficient - up to 93% efficiency makes it great for portable or battery powered rigs.

We like the MAX9744 amplifier at the heart of this board because it's very easy to use, but it also has *both analog and digital* volume control capability. Use a single 1KΩ pot (we include one) to adjust volume analog-style. Or hook it up to your favorite microcontroller and send I2C commands to set 64-steps of volume amplification.

Some great stats about the MAX9744:

- Power from 4.5V-14V DC voltage
- Up to 93% efficient (88-93% typical)
- 20mA quiescent current (or put into shutdown for 1uA quiescent)
- Up to 29.5dB max gain
- Use DC or AC coupled line-level input, up to 3Vpp
- Filterless Spread-Spectrum Modulation Lowers Radiated RF Emissions from Speaker Cables
- 20W Stereo Output (4Ω, VDD = 12V, THD+N = 10%)
- Low 0.04% THD+N
- Integrated Click-and-Pop Suppression
- Short-Circuit and Thermal-Overload Protection

We took this lovely chip and wrapped it up into a breakout for you, with polarity-protection, jacks and terminal blocks, i2c level shifting, and a spot to solder in a volume pot.

Each order comes with one MAX9744 breakout board with all surface-mount parts fully assembled and tested. We also include 3 x 2pin and 1 x 3pin terminal blocks, a 470uF power filter capacitor and 1KΩ trim pot. To use this board, a little soldering is required to attach the terminal blocks and other components, but its fairly easy and expect it should take less than 15 minutes. [Check out our detailed tutorial for assembly instructions and overall usage](#)

**Note:** The terminal blocks included with your product may be blue or black.

---

## TECHNICAL DETAILS

Dimensions (without 0.1" header or terminal blocks):

- Length: 54mm / 2.1"
- Width: 41mm / 1.6"
- Height: 2mm / .08"
- Weight: 11g

[Datasheets, PCB files, Fritzing object and more in the tutorial!](#)



---

## LEARN



### [Adafruit 20W Stereo Audio Amplifier - MAX9744](#)

Blast your tunes with a high-efficiency class D amplifier



### [3D Printed 20w Amplifier Box](#)

Build an audio project that pumps 20 watts of power with the MAX9744 stereo amplifier.



### [Ride & Rock - DIY Bike Stereo System with 20W Speaker](#)

Play tunes while you cruise in style



### [Overwatch Prop Gun: Lucio's Blaster Pt. 1](#)

Lights, music, and sound effects prop circuit design



### [Overwatch Prop Gun: Lucio's Blaster Pt. 2](#)

Part 2: Lights, music, and sound effects prop circuit integration



## MAY WE ALSO SUGGEST...



12V 5A switching power



Stereo 3.7W Class D Audio



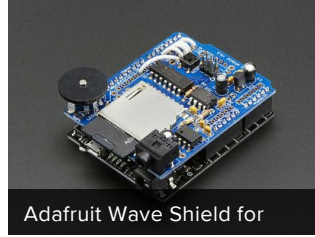
Stereo 2.8W Class D Audio



3.5mm Stereo to RCA



Stereo 2.1W Class D Audio



Adafruit Wave Shield for



Stereo 3.5mm Plug/Plug



Right-Angle 3.5mm Stereo



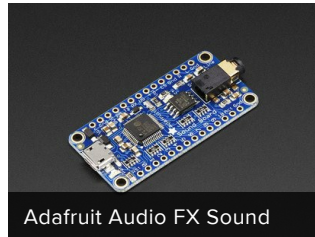
ADS1115 16-Bit ADC - 4



Adafruit I2S Stereo Decoder



Adafruit Audio FX Mini



Adafruit Audio FX Sound

## DISTRIBUTORS [EXPAND TO SEE DISTRIBUTORS](#)

- [CONTACT](#)
- [SUPPORT](#)
- [DISTRIBUTORS](#)
- [EDUCATORS](#)
- [JOBS](#)
- [FAQ](#)
- [SHIPPING & RETURNS](#)
- [TERMS OF SERVICE](#)
- [PRIVACY & LEGAL](#)
- [ABOUT US](#)

*"The Analytical Engine weaves algebraic patterns, just as the Jacquard loom weaves flowers and leaves" - [Ada Lovelace](#)*



