



Playing MP3's (and other types) on your ESP32 from an SD Card

🕒 June 3, 2020 👤 XTronical 📁 Audio, Uncategorized 💬 18

How to play MP3's and other file formats on your ESP32 from an SD Card. All you need to know to make a simple music player. Code shown in video is below.

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Links:

Github page for the library used : <https://github.com/schreibfaul1/ESP32-audioI2S>

Affiliate links for the items shown: Clicking these costs you the same price but gives me a small commission, please consider supporting this channel by using them 😊

MAX98357A : <https://amzn.to/3eovdrd>

(You will need two of these for stereo sound)

ESP32 : <https://amzn.to/2Xzhc3k>

Breadboards: <https://amzn.to/2THZTVy>

Speakers : <https://amzn.to/2zBhK0F>

16Gb SanDisk SD card : <https://amzn.to/2XH1sLA>

SD Card Reader, note this is the only one I could quickly find that said it supported 3.3v and it's for the normal size SD cards not Micro, you could always by a micro one and do my hack

<https://amzn.to/2ApOppK>

The Demo Code

```
1 // will play many audio file formats, mp3,aac,flac etc.
2 // See github page : https://github.com/schreibfaul1/ESP32-audioI2S
3
4 #include "Arduino.h"
5 #include "Audio.h"
6 #include "SD.h"
7 #include "FS.h"
8
9 // Digital I/O used
10 #define SD_CS      5
11 #define SPI_MOSI    23    // SD Card
12 #define SPI_MISO    19
13 #define SPI_SCK     18
14
15 #define I2S_DOUT     25
16 #define I2S_BCLK     27    // I2S
17 #define I2S_LRC      26
```

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```

23 digitalWrite(SD_CS, HIGH);
24 SPI.begin(SPI_SCK, SPI_MISO, SPI_MOSI);
25 Serial.begin(115200);
26 if(!SD.begin(SD_CS))
27 {
28   Serial.println("Error talking to SD card!");
29   while(true); // end program
30 }
31 audio.setPinout(I2S_BCLK, I2S_LRC, I2S_DOUT);
32 audio.setVolume(15); // 0...21
33 audio.connecttoFS(SD, "/Amaze.mp3");
34 }
35
36 void loop()
37 {
38   audio.loop();
39 }
40
41

```

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18 COMMENTS



Cemoi

SEPTEMBER 16, 2020 AT 8:34 AM

Thank you very much for this post.
Working good with .mp3 files.
But not working with .wav files.
What can be the reason?



XTronical ☆

OCTOBER 18, 2020 AT 6:20 AM

Sorry for late reply, real life work has been very busy and I missed this comment. I imagine it's the library that has a problem. Although WAV's are the simplest files to play. I did have issues with AAC files. I would try different WAV's, i.e. different sample rates and stereo/mono and see what happens for them.



Sam

OCTOBER 15, 2020 AT 8:18 PM

Is there any way to pull the "audio.connecttoFS(SD, "/Amaze.mp3");" part out of the setup block and into its own function? Basically so I can have multiple files that play on different button presses. Something like this:



XTronical ☆

OCTOBER 18, 2020 AT 6:28 AM

Yes, just put it where you want it to play. I am working on a new library to make all this simpler. Out sometime after Christmas



Ash

DECEMBER 1, 2020 AT 1:00 PM

Hi, I have tried the same setup and code for single speaker with MAX98357A Mono amplifier. But only noise is coming out. I have tried both .mp3 and .wav file. But it's not working. I have tested micro sd card module which is working fine. Could you help how to play mp3 using single speaker with single MAX98357A module ?