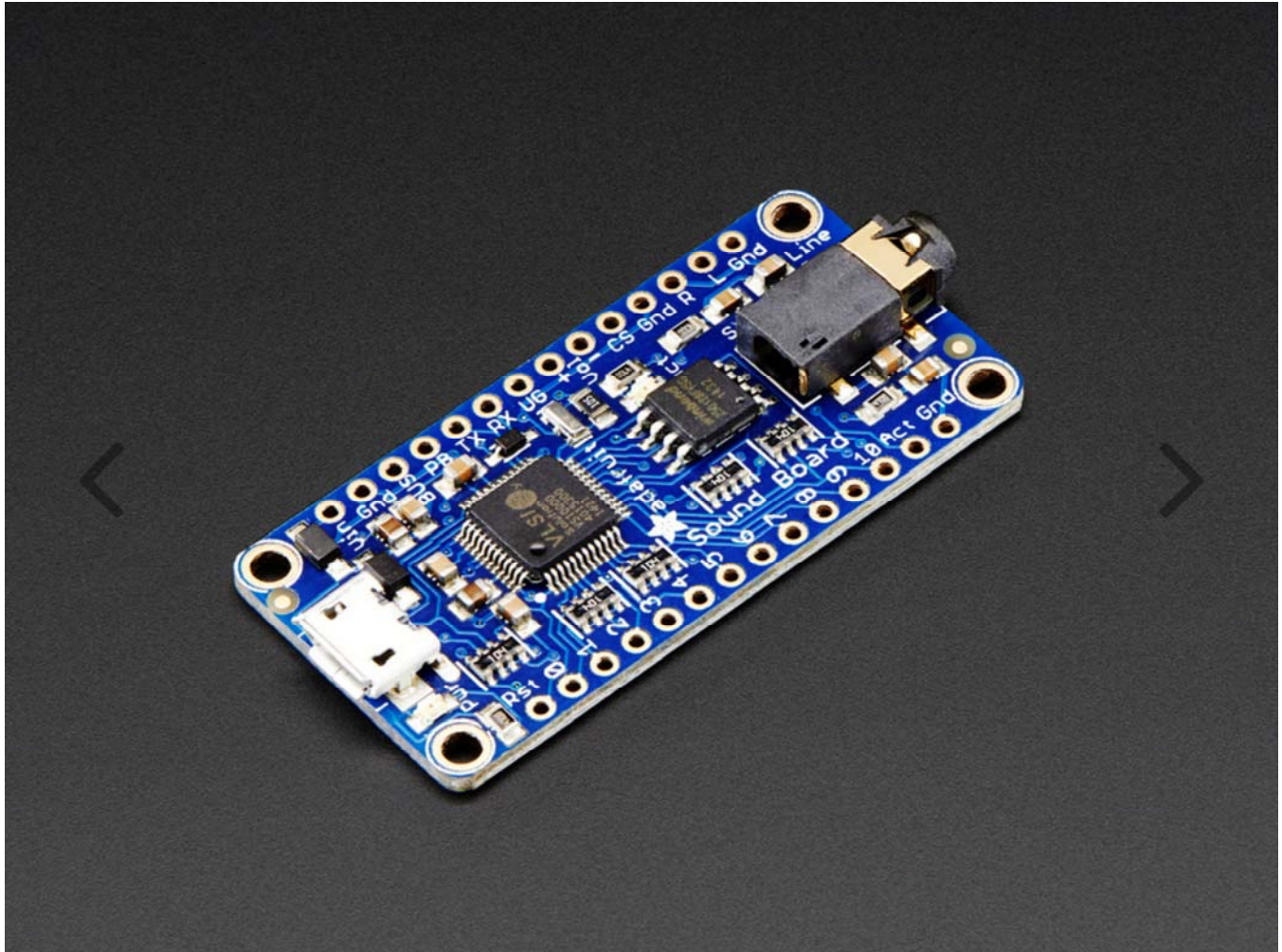# Adafruit Audio FX Sound Board – WAV/OGG Trigger with 16MB Flash

PRODUCT ID: 2220

DESCRIPTION   −

Would you like to add audio/sound effects to your next project, without an Arduino+Shield? Or maybe you don't even know how to use microcontrollers, you just want to make a sound play whenever you press a button. What about something that has to be small and portable? You are probably feeling a little frustrated: it's been very hard to find a simple, low cost audio effects trigger that is easy to use and does not require any programming

UNTIL NOW!

Don't get me wrong, I love the MP3 Music Maker shield, and our Wave Shield is a dependable classic. But you still need to get an Arduino involved. There's all sorts of tricks with ISD chips or recordable greeting cards, but they never sound any good. So after a lot of engineering and tinkering we've come out with the Adafruit Sound Board, the fastest way to add audio effects to a project! We think this is the best sound board for props and costumes!

The Sound Board has a lot of amazing features that make it the easiest thing ever:

- No Arduino or other microcontroller required! It is completely stand-alone, just needs a 3 to 5.5VDC battery
- Small – only 1.9" x 0.85"
- Built in storage – yep! you don't even need an SD card, there's 16MB of storage on the board itself. Good for ~15 minutes of compressed stereo, and maybe a couple minutes of uncompressed stereo. Double that if you go with mono instead of stereo. If you don't need as much space, we also have a 2MB version.
- Built in Mass Storage USB – Plug any micro USB cable into the Sound Board and your Windows computer, you can drag and drop your files right on as if it were a USB key
- Compressed or Uncompressed audio – Go with compressed Ogg Vorbis files for longer audio files, or uncompressed WAV files
- High Quality Sound – You want 44.1KHz 16 bit stereo? Not a problem! The decoding hardware can handle any bit/sample rate and mono or stereo

- 11 Triggers – Connect up to 11 buttons or switches, each one can trigger audio files to play
- Stereo line out – Headphones, powered speakers or even wire up one of our amplifiers to make loud sounds. We also have a version with built-in stereo speaker amplifier
- Five different trigger effects – by changing the name of the files, you can create five different types of triggers which will cover a large range of projects *without* any programming

What do we mean by trigger effects? Well, depending on your project you may need to have audio play in different ways. We thought of the five most common needs and built it into the Sound Board so you just rename the file to get the effect you want. See the product tutorial for more details

1. Basic Trigger – name the file Tnn.WAV or Tnn.OGG to have the audio file play when the matching trigger pin nn is connected to ground momentarily
2. Hold Looping Trigger – name the file TnnHOLDL.WAV or .OGG to have the audio play only when the trigger pin is held low, it will loop until the pin is released
3. Latching Loop Trigger – name the file TnnLATCH.WAV or .OGG to have the audio start playing when the button is pressed momentarily, and repeats until the button is pressed again
4. Play Next Trigger – have up to 10 files play one after the other by naming them TnnNEXT0.WAV thru TnnNEXT9.OGG. Will start with #0 and each one on every momentary button press until it gets through all of them, then go back to #0
5. Play Random Trigger – just like the Play Next trigger, but will play up to 10 files in random order (TnnRAND0.OGG thru TnnRAND9.OGG) every time the button is pressed momentarily

The sound board is designed to be simple: it does not have polyphonic ability, can't play MP3's (MP3 is patented and costs $ to license, so this board uses the similar but not-patented OGG format, there's tons of free converters that will turn an MP3 into OGG), isn't reprogrammable or scriptable, and you can't have any other kind of trigger type. However, there's a good chance the project you want to make will work great.

We designed this board specifically for people who wanted to make props, costumes, toys, and other small portable projects. Check out the tutorial for all the powering options, you can power from 3-5VDC so a 3xAAA battery pack or a LiPoly battery will work well. You can even use our LiPoly backpack to fit on top for an all-in-one rechargeable effects board

Technical Details

22mm x 48mm x 6mm / 0.9" x 1.9" x 0.2"
Weight: 4.7g