Control the volume of your JustBoom board using gestures with Flick

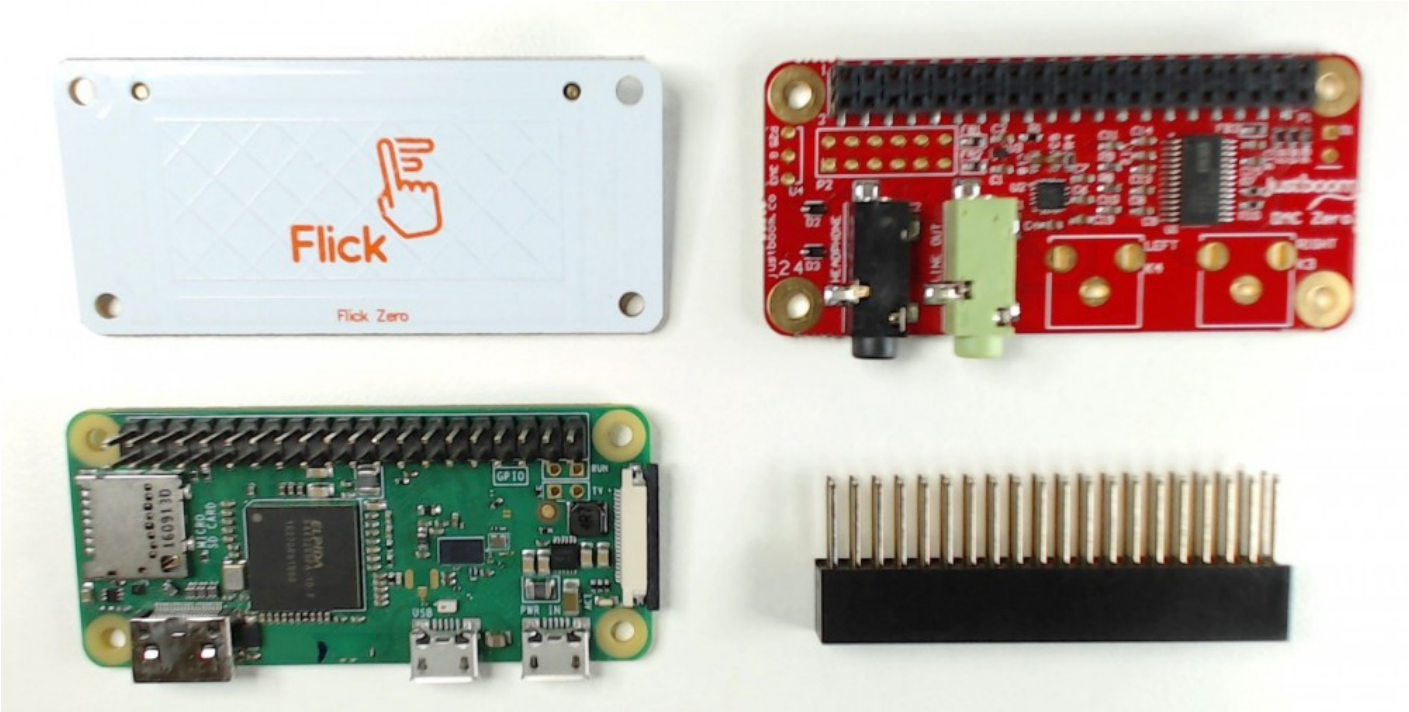
In this article we are going to show you how to setup a JustBoom DAC Zero and a Flick Zero stacked onto a Raspberry Pi Zero so that you can control the volume of the audio board via the Wheel gesture.

A clockwise gesture will increase the volume whilst a counter clockwise gesture will decrease it.

Putting everything together

This assembly doesn't require any soldering and will just be a question of stacking the boards on top of each other.

Note that you will only be able to use the JustBoom DAC Zero without the RCAs installed otherwise you will need a very long stacking header.



Parts for this project

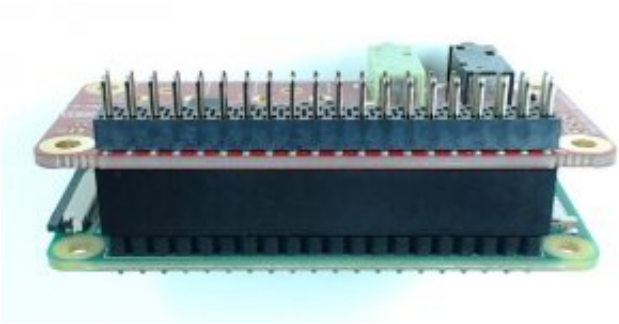
- Raspberry Pi Zero W with pre-soldered header
- JustBoom DAC Zero
- Flick Zero
- Stacking header P/N 03173

To put the various boards together you will need to place the stacking header on the Raspberry Pi Zero.

Remember that should you purchase a Raspberry Pi Zero without a pre-soldered header the first step will be for you to solder the 20x2 header on the board.

Don't worry if your header doesn't exactly look like the one in the picture, the important thing is that the metal part is at least 1cm tall to allow for both boards to be stacked together.

Once the header is in place you will need to install the JustBoom DAC Zero so that the stacking header passes through and sticks out on the top side of the audio card as shown in the picture.



Finally, place the Flick Zero on top of everything else.

Note that this assembly doesn't fit any of our cases and should you want this to be a bit more permanent you will also need to add spacers to keep the boards nicely leveled between them.

Configuring the OS

This article has been specifically written to work on Raspbian but other operating systems based on Raspbian like JustBoom Player should also work.

Follow our guide for Raspbian on our JustBoom website then download and configure the code for Flick.

Remember that in order to run the *flick-volctrl* you will have to install the python-alsaaudio library.

Run the following command to do so:

Run the script

So that you can see the effect of the script it is nice to have two SSH sessions running at the same time. In one you will run an instance of *alsamixer* and in the other you will run *flick-volctrl*.

In one of the SSH sessions run:

In the other run the the Flick script:

If all has been properly configured you should see the slider of the Digital volume control going up and down as you do a clockwise or counter clockwise Wheel gesture on the Flick Zero.

Tips

How to run the script at boot

If you want the script to run every time you start your Pi then you will need to add

to */etc/rc.local. U*se nano to edit the file by running

and add the line above just before the *exit 0* line. Save and restart the OS for the changes to take place.

Where can I find additional information about setting up Flick

Check our main article should you need more information about getting started with Flick.