

# Exhaust<sup>v2</sup>

## Expander Module for the CubuSynth Engine V2



## Build Guide

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## Introduction

To help keeping track of the already placed components, print the BOM and cross out the parts you already soldered.

## Tools Required

- Soldering iron (+wire)
- side-cutter
- Nut wrench / driver M6, M8

Helpful, but not necessary:

- Digital Multimeter
- Helping (third) hand / PCB holder

## BUILD GUIDE

### STEP 1

#### Power header

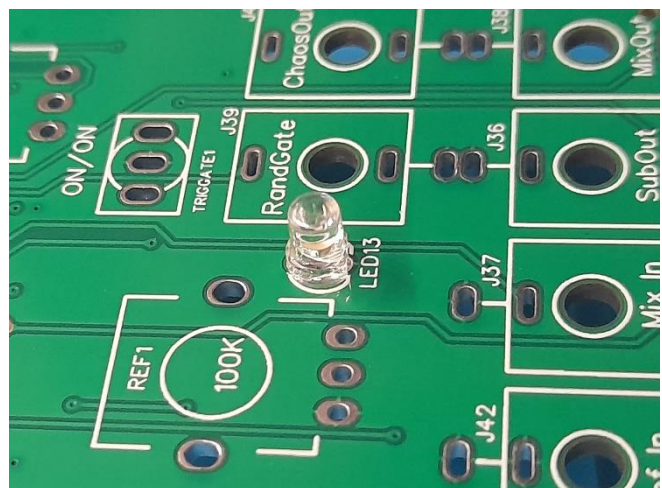
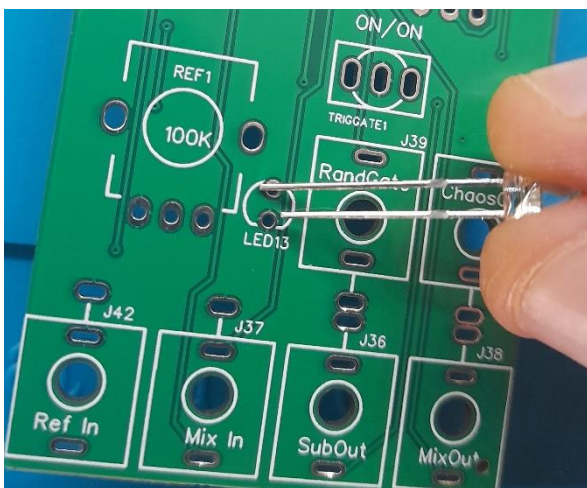
Turn around the board and place the Pin Header like shown below. Then solder from the other side.



### STEP 2

#### LED

For the LED the orientation is important! The longer leg goes in the upper hole, while the flat side of the LED points down. Solder it flush to the PCB.



**STEP 3**  
Controls

Now take the Potentiometers, Jacks and switches and put them in place as marked on the PCB but don't solder yet.

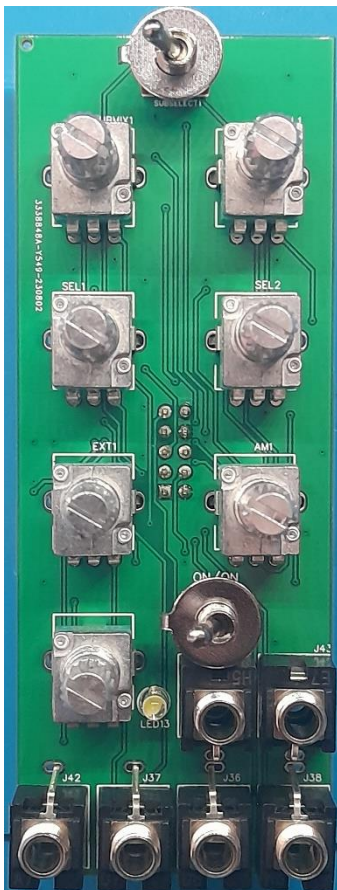
The switches should have one nut and one washer mounted like shown here.



Below you can see the placement of all controls.

When everything is in place, put the front panel on top, so all controls go into each corresponding hole of the panel. Make sure everything fits well.

Fit all nuts to the Potentiometers, Jacks and switches.  
Be careful when turning the board around, so that the components stay in place.  
Then solder everything.



**STEP 4**

## final check

Check your soldering. If you see shorts or bad solder joints, fix it up. Then check the power pins for shorts with your multimeter.

When everything looks fine, you can fit the Front panel on top again. Then place the knobs on the Potentiometers. For best results, turn all Potentiometers counter-clockwise and push on the knobs, so the marking points towards the left end of the surrounding circle.

To connect the module, plug in the 10pin Ribbon cable correctly to your CubuSynth Engine and the Exhaust while your rack is powered OFF! Make sure orientation is correct. (Red stripe down). Then turn on your case, and have fun patching!

Please understand that we can't guarantee for your DIY module to work. Nevertheless we will do our best to guide you through the build or to solve problems when needed.

In case there should be parts missing in your Full DIY kits contact us to ask for replacement /

If you have trouble with your build, you can contact us at the websites contact form or Mail:

cubusynth@gmail.com

To be able to identify mistakes in your build, please include quality pictures of your soldered PCBs, front+back.

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