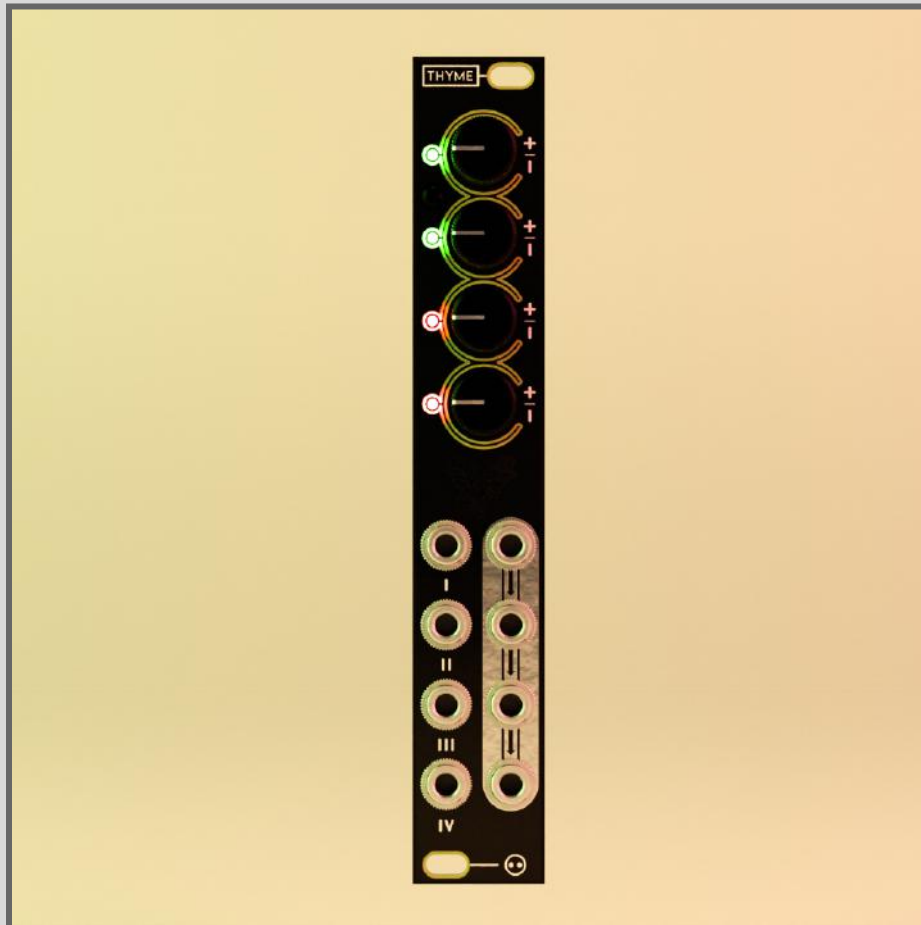# NO<u>H</u>

THYME - Build Guide

V1.0

Introduction-

This build document aims to help you with the assembly of the module. It is of an intermediate difficulty and is not recommended as a very first build.

It is highly recommended that you read through the entire guide once before starting with the assembly.

Soldering a module together is always a relaxing and gratifying moment when done properly, don't hesitate to take breaks when you feel you need to and double-check steps before progressing in your assembly.

Requirements-

To complete this build you need:

- A Soldering Iron and Solder
- Pliers and Side Cutters
- A Multimeter (optional but **extremely** recommended for testing continuity)
- Safety Glasses for assembly

Make sure you also take a look at the Bill of Material (BOM) to check whether you have all the required components to complete the build.

Printer Friendly Version-

To print this document on paper, the grey background might not be a good thing for the printer.

You can download and print **THIS VERSION** instead.

• Start by placing the keyed header, be mindful of its orientation and match it with the indication on the PCB.

• You can solder a pin on each side, check whether it sits flat on the PCB and solder the rest of the pins if it does.
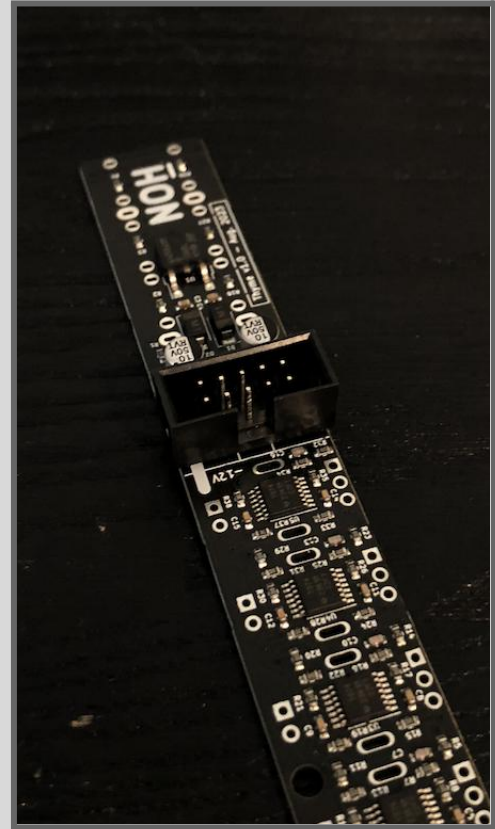
• Turn the PCB and mount the hex standoff and the LEDs but **DO NOT SOLDER ANYTHING.** Simply mount the LEDs on the PCB.

• If you want positive voltage to be **RED**, the shorter leg of the LEDs go in the square pads. If you want positive voltage **GREEN**, do the opposite, with the longer leg in the square pad.
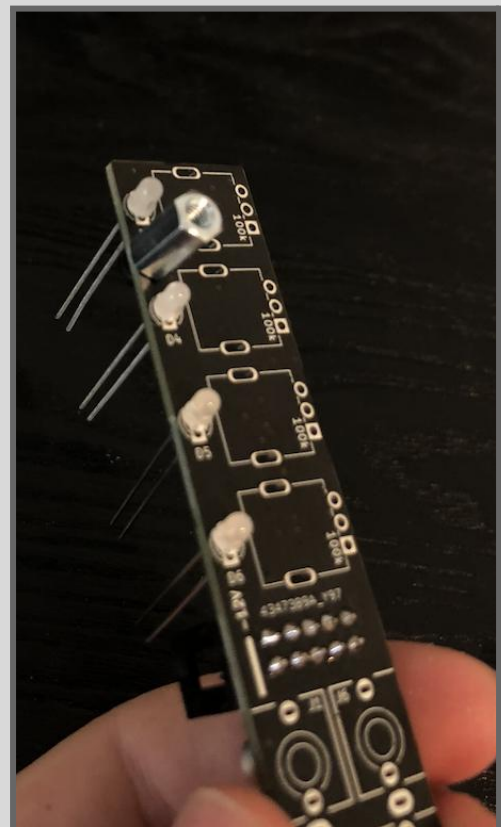
• Mount the jack sockets and the potentiometers, but again **DO NOT SOLDER ANYTHING YET.**

• **NB -** every jack socket shares a hole with another socket, as shown in the picture.

• If the potentiometers struggle to fit, you can flatten the mounting pins with pliers.
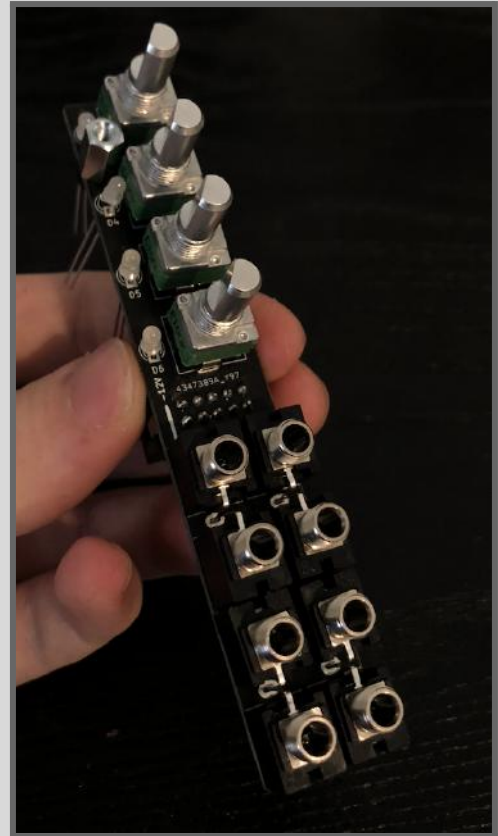
• Put the front panel, screw in the hex standoff and hand-tighten the nuts for each part **except the pots**. Be mindful that nothing has been soldered yet so components might disconnect or go out of place.
**DO NOT SOLDER ANYTHING YET.**

• Once you have verified that all the components sit flat on the PCB, you can solder everything **except the LEDs**.

• Always be **extremely** careful of where your soldering iron is when you solder, it should alway be oriented as far as possible from components on the board, as shown in the picture.
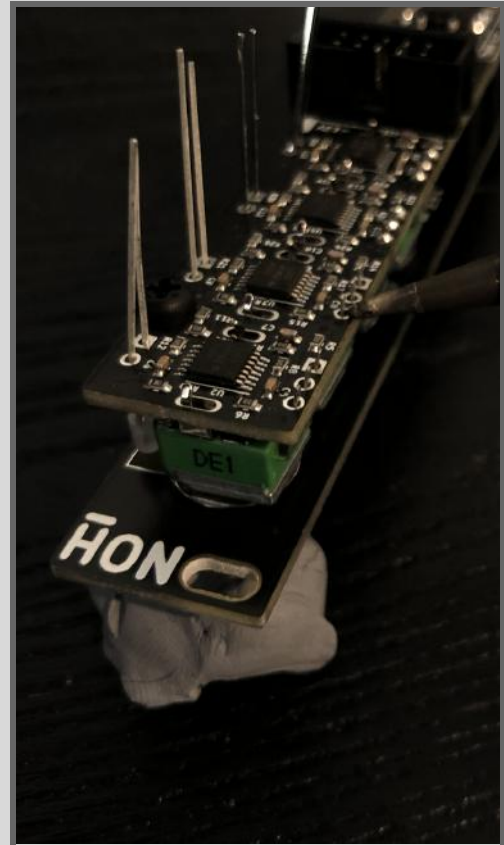
• To properly solder the LEDs in place, push one towards the front panel and solder **only one** pin of the LED.

• Then, reflow the pin (i.e. make the solder melt again) and while the solder is liquid use the leads to orient it correctly (**make sure you do not burn yourself as the reflowed lead will be hot**).

• Once you are happy with how the LED sits, remove the soldering iron and the LED will stay in place. You can then solder the second pin and clip the leads.

• repeat this process for all the LEDs.
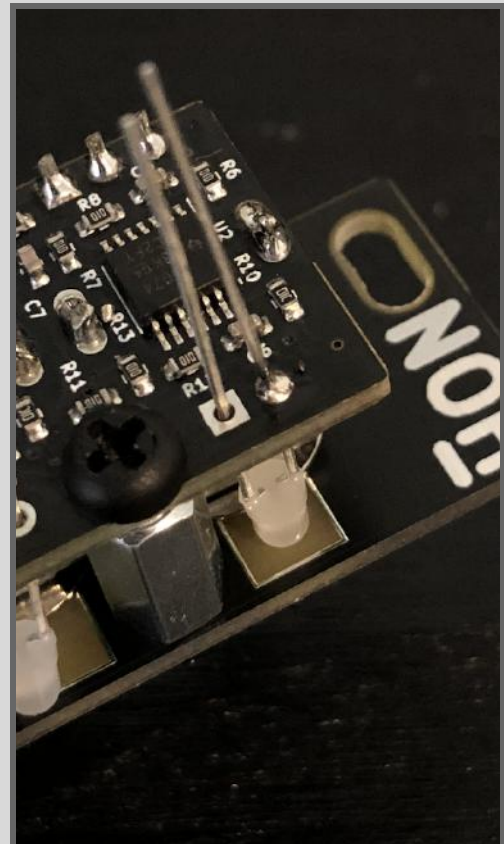
• Once everything is in place, you can tighten the nuts and put the knobs on the potentiometers. You have completed the assembly part of the build.

Inspection -

While the assembly might be finished, **it is not a good idea to plug power through before inspecting the module.**

• Start with a visual inspection, looking for any pins you forgot to solder, pins you soldered too much and shorted to other pins, or bad solder joints.

• Check the polarities of components where polarity matters (i.e. the power header and LEDs).

• Look for any damage on the board, specifically whether tracks or components got damaged.

• Finally, using a Multimeter, check for shorts between the power pins (12V to GND, 12V to -12V, and GND to -12V).

Conclusion -

This guide went through the assembly process of the module and what to be careful of when building it. If you haven't already, you can read the user manual to know what the power requirements are and how to operate it.

You can find this build guide, and other important documents regarding this module and others on the [NOH-Modular website](.).

I hope you'll find good and interesting use out of this module.