CUTLASSES GLOOP

FOUR PLAYHEAD LOOPER

Eurorack DIY Kit
Build Instructions

OVERVIEW

For the most recent version of this document please visit
https://www.thonk.co.uk/shop/cutlasses-gloop

Follow the github link below for firmware files, update instructions and user manuals.

https://github.com/cutlasses/GloopResources/tree/main

This document has hi-res images. ZOOM IN for a closer look

All Thonk kits are sold under our standard Terms and Conditions - http://www.thonk.co.uk/faq/

DIY INSTRUCTIONS

This document gives detailed instructions that assume you have purchased a complete kit from www.thonk.co.uk. It also assumes no previous knowledge of electronics. To learn to solder try https://youtu.be/lpkkfK937mU and the **Adafruit guide to excellent soldering** – http://bit.ly/1l77tF4

Watch and understand that whole YouTube video! If you're not achieving the results shown in the video then you need to buy new tools or seek advice. **You will not end up with a working module otherwise.**

TOOLS REQUIRED

Soldering iron, masking tape, and diagonal cutters AKA snips AKA side-cutters. A Digital Multimeter is always helpful for checking for bad solder joints and continuity. Thonk sell a range of inexpensive tools here - http://bit.ly/1jxqF3n

SOLDER JOINTS

Your solder joints should look like those shown as 'OK' below, they should have that neat conical shape on BOTH sides of the PCB. If they don't look the same on both sides then stop! Work out why from the soldering guides linked and don't continue until you are getting those results.

This isn't just OCD talking, you are very likely to end up with a destroyed, damaged or defective unit if you're not hitting that standard.
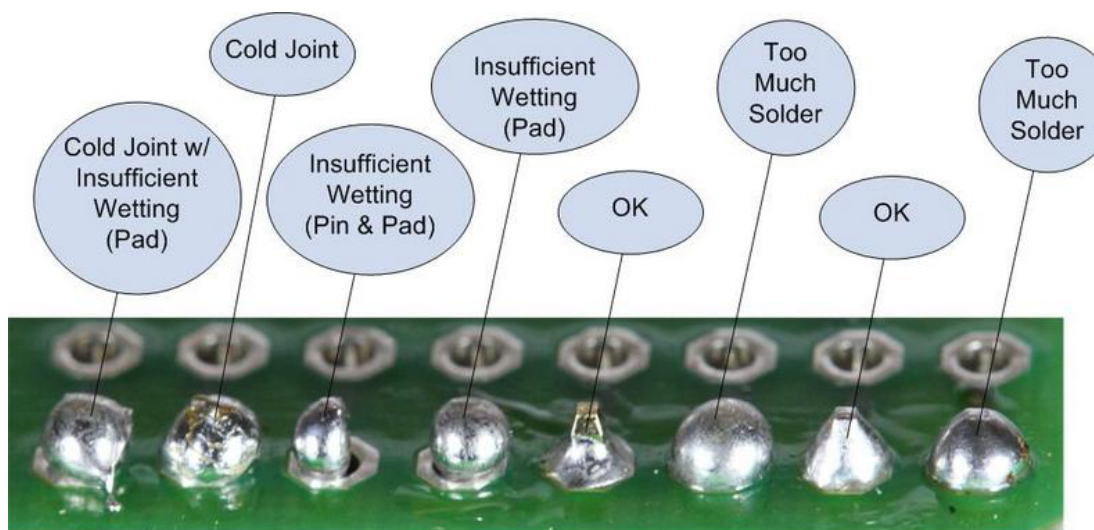
This photo is from the **Adafruit guide to excellent soldering** - and is reproduced under an Attribution-Sharealike creative commons license - http://creativecommons.org/licenses/by-sa/3.0/

GLOOP BUILD INSTRUCTIONS

PLEASE NOTE

Follow these instructions carefully and take good care and attention while building your kit. The large amount of pre-soldered components populating the PCB means you'll need to be **accurate with your solder iron placement and extra careful how you feed in your solder**. We recommend using solder that you're familiar with and that will flow easily. If you create any solder bridges, they could potentially be very hard to remove.
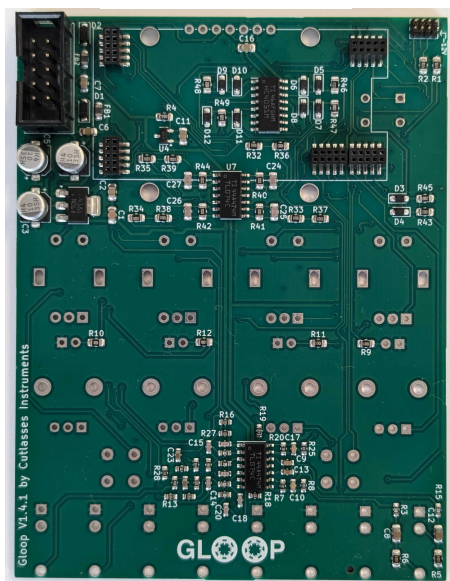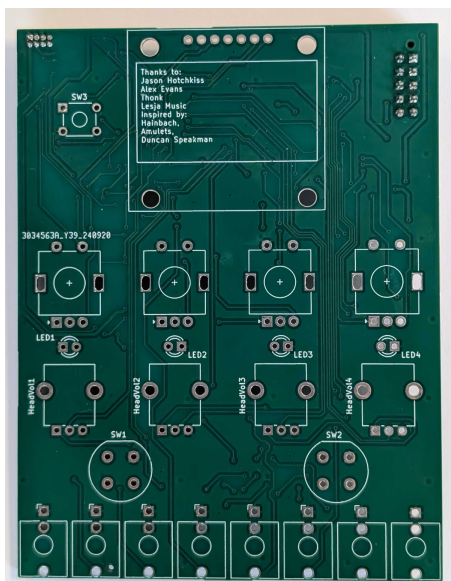
1.

Your Thonk kit includes one PCB and one panel as pictured, as well as all the necessary parts to build the module.

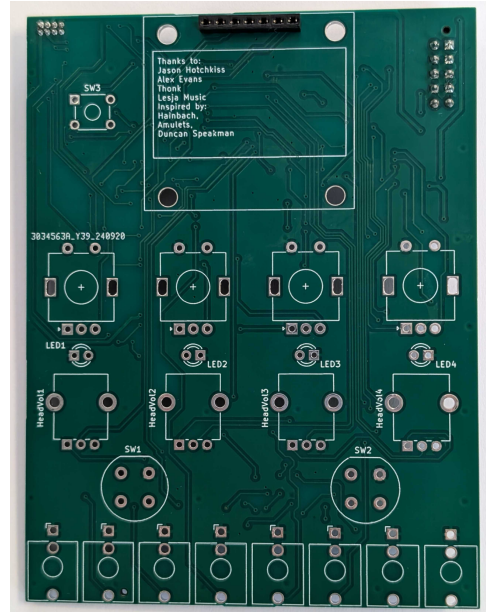**Front of PCB**   **Back of PCB**

2.

First locate the low profile 7 pin female header and place in the position shown on the opposite side to the pre soldered components.

Solder just one joint first and reflow as necessary to ensure the socket is flush against the PCB as pictured.
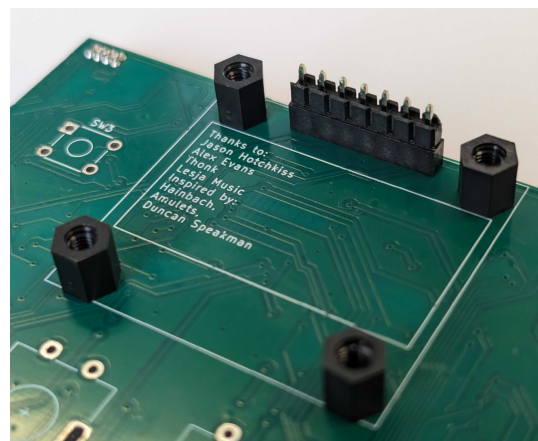

3.

Place the four 6mm standoffs into the positions shown and secure on the back of the PCB with the four nylon nuts.
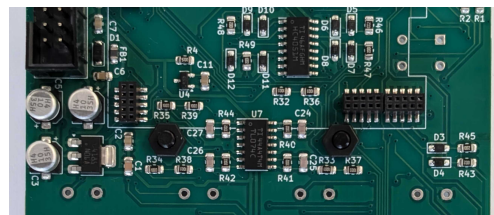
Then insert the low profile 7 pin male header into the socket as pictured.
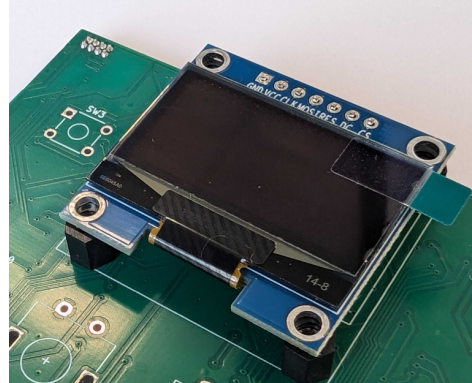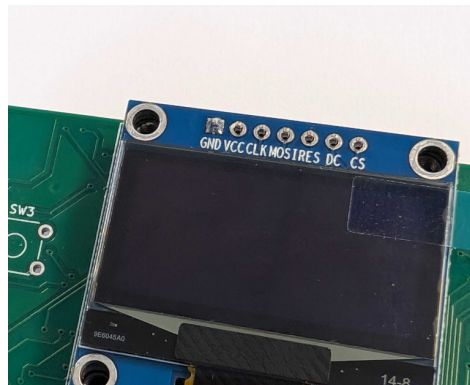
4.

Next place the OLED screen onto the pin header sitting flat on the standoffs.

DON'T SOLDER YET.

5.

Solder just one joint on the socket pins and reflow if necessary to ensure the OLED screen is flush against the standoffs

When you're happy with the positioning of the OLED screen solder the remaining joints.

You can then remove the protective film from the screen.
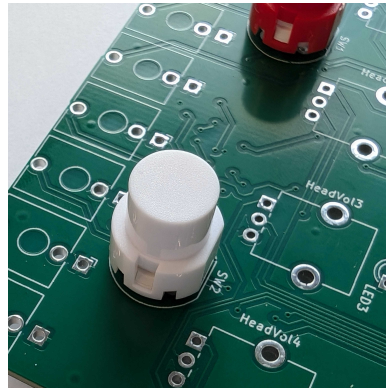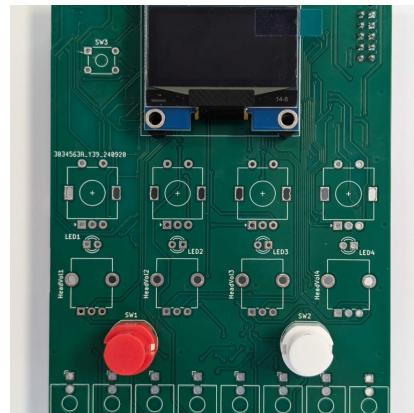
6.

Next place the large red and white buttons.

IMPORTANT - these buttons are polarised which means they must be placed following the correct orientation.

One side of the button has a flat edge - this flat edge must match up with the flat outline on the PCB.
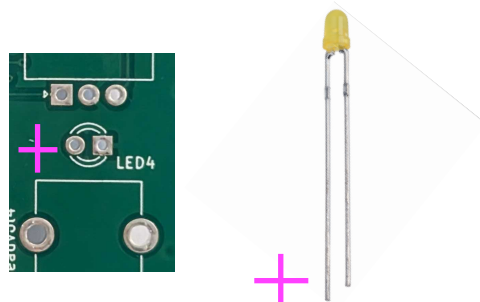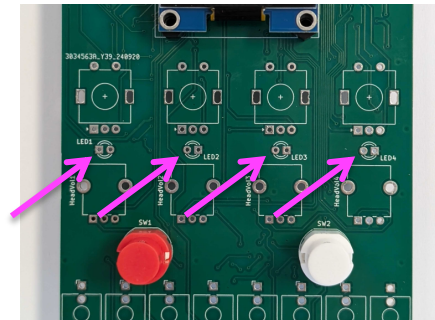
DON'T SOLDER YET.

7.

Next place the four yellow LED's into the positions pictured.

IMPORTANT – the LEDs are polarised - they must be placed in the correct orientation.

The long leg is positive and must be placed into the round pad, while the short leg is negative and must be inserted into the square pad.

Be aware that LED 1 has the square pad on the opposite side from the other 3 LEDs
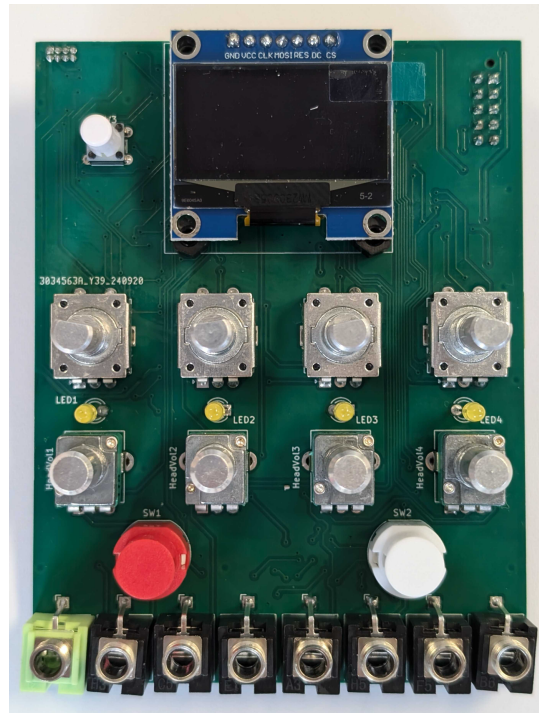
DON'T SOLDER YET.

8.

Place the jacks, tact switch and switch cap, four pots and four encoders onto the PCB as pictured.

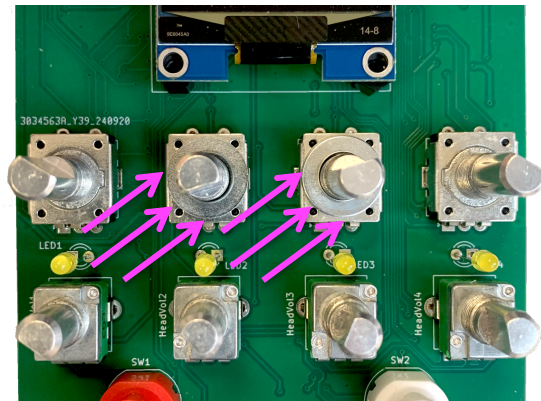Note that you will have 7 black jack sockets and one green.

The green jack socket must be placed in the left most position as pictured.
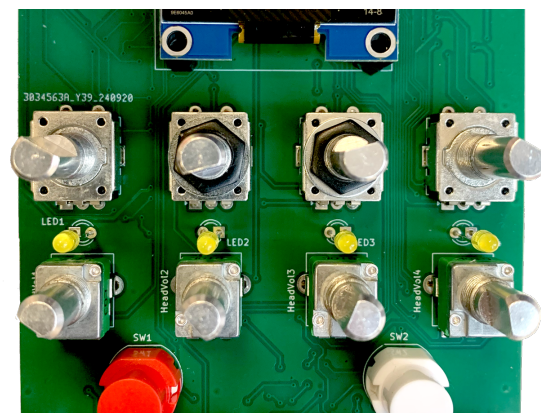
DON'T SOLDER YET.

9.

Find the washers and nuts from your kit bag and first place 3 washers on each of the two middle encoders.

Then additionally screw one nut onto each of the encoders as pictured.

You should have 4 nuts remaining for the next step.
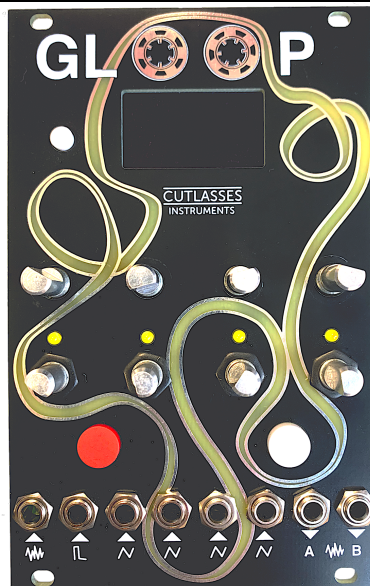
DON'T SOLDER YET.

10.

Ensure the tact switch is pushed securely into the PCB, then place the panel onto the components and secure it by placing nuts on the jacks, bottom row of pots.

Poke the LEDs through their panel holes.

DON'T SOLDER YET.

11.

First solder just one joint on each of the larger red and white buttons. Ensure these buttons are sitting flush to the surface of the PCB and can be pressed smoothly from the front.

Reflow and adjust if necessary, then solder the remaining three joints on each button.

12.

Double check that the remaining parts are all sitting flat against the PCB and then go ahead and solder the small tact switch, the jacks, pots and the encoders.

Double check the LED's are poking through their holes and then solder those in place before clipping the excess LED legs.
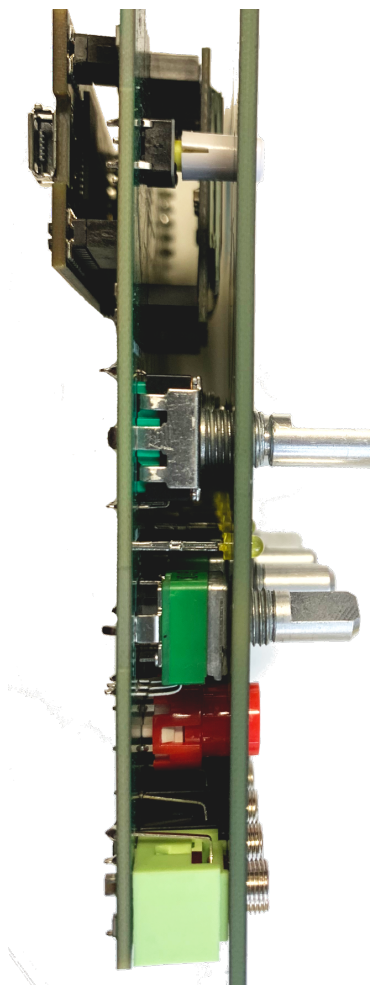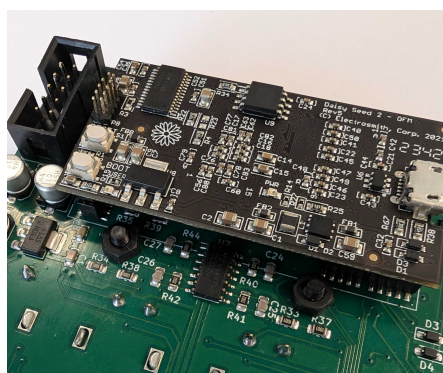
13.

Push the four silver knobs onto the encoders and four white knobs onto the volume pots.

14.

Now take your Daisy Seed 2 DFM board from the kit bag and connect it to the back of the PCB as pictured.

Boards from Thonk are already programmed with the most recent firmware at the time of kitting.
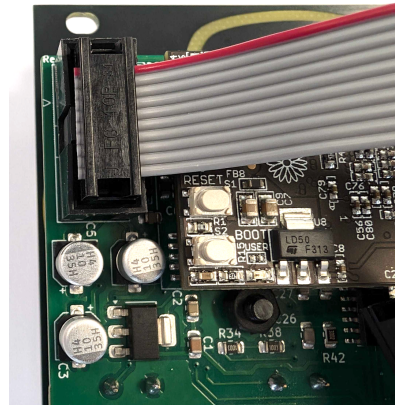
15.

Attach the ribbon cable to the back of the module as shown following the correct orientation of the red line.

The module is now complete!

Before use, the module should be calibrated following the instructions in the user manual.

Click the link below to find the user manual and other info on the Thonk website.

https://www.thonk.co.uk/shop/cutlasses-gloop

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