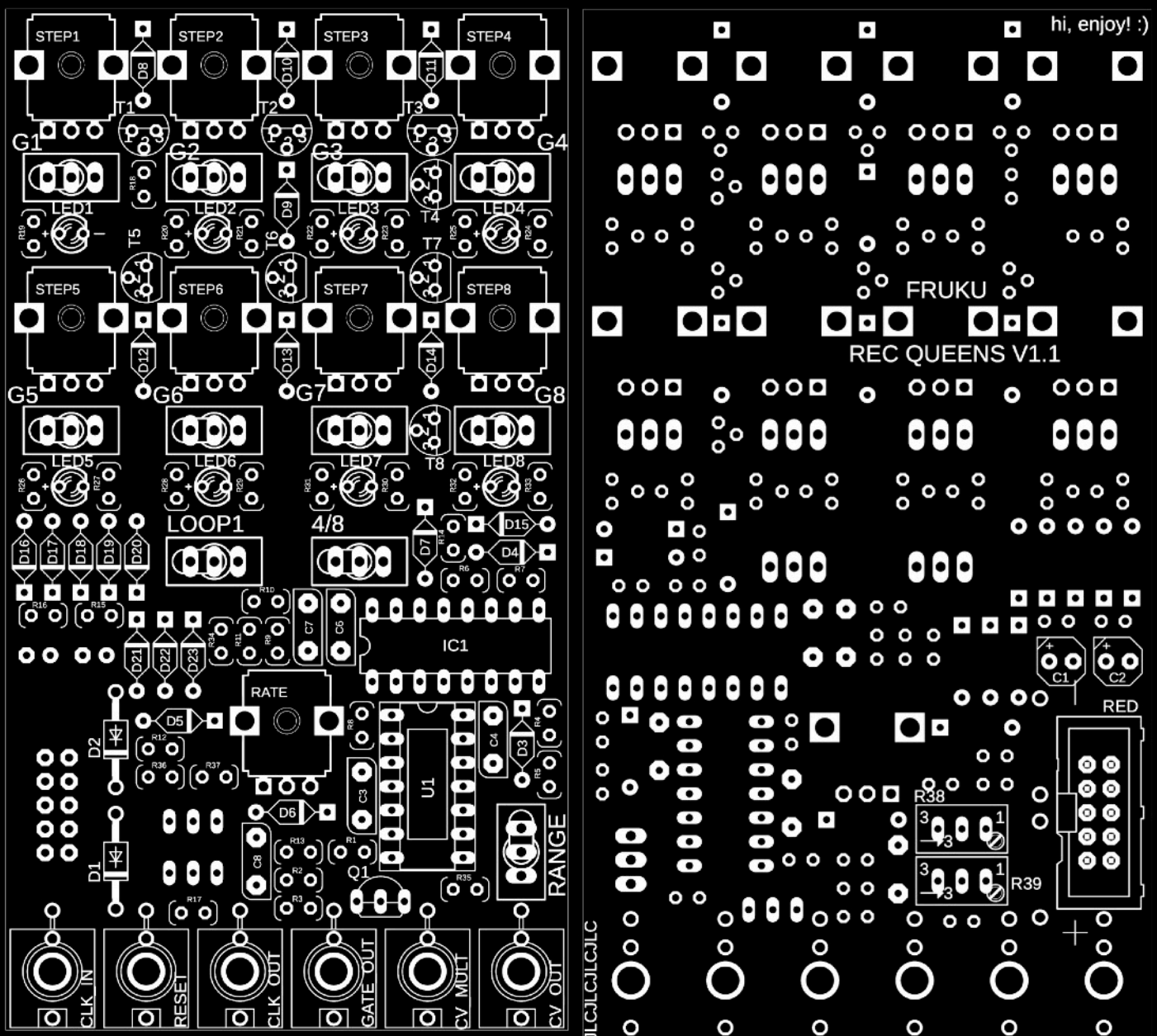


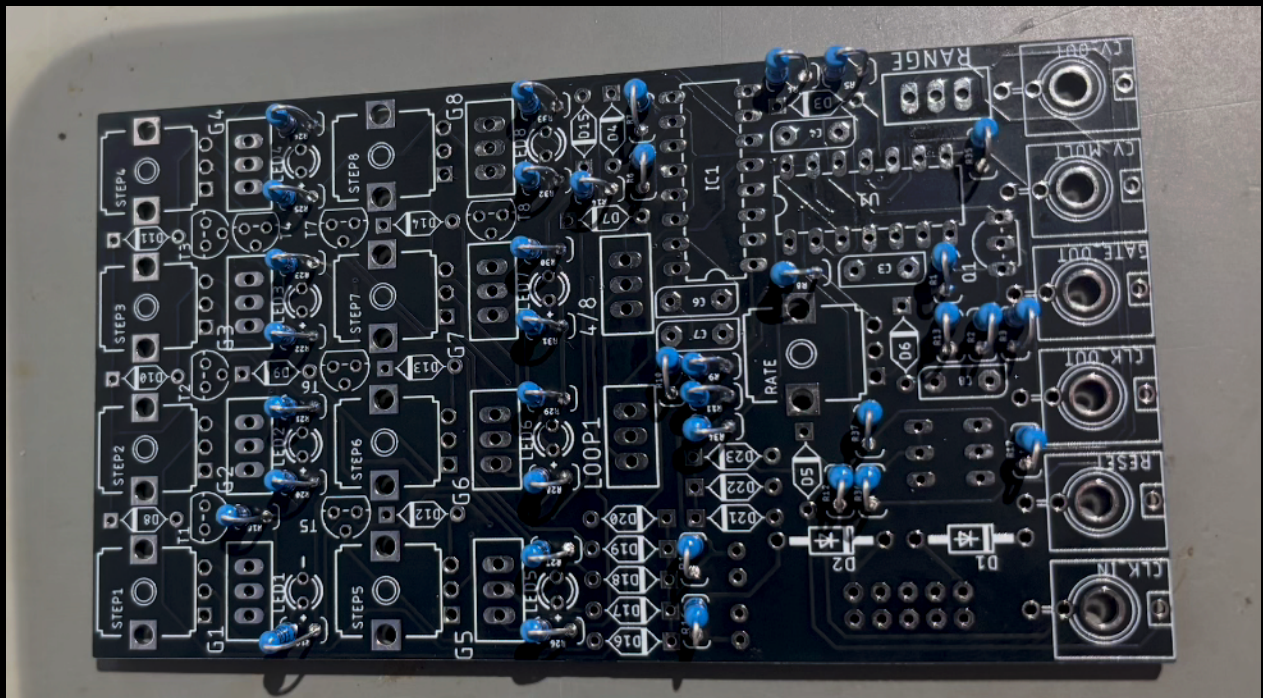
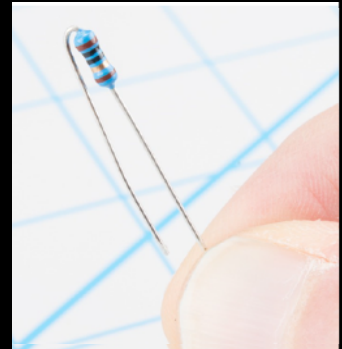
PCB for reference:



/// Resistors

Start with soldering the resistors, these need to be placed “**standing up**”. Make sure the “bend” is as **low** as possible (see picture). The values of the resistors are written on the tape. If you are unsure, use a Multimeter to check the value. Check the **BOM** file, there you will find which resistor values correspond to the part numbers written on the PCB.

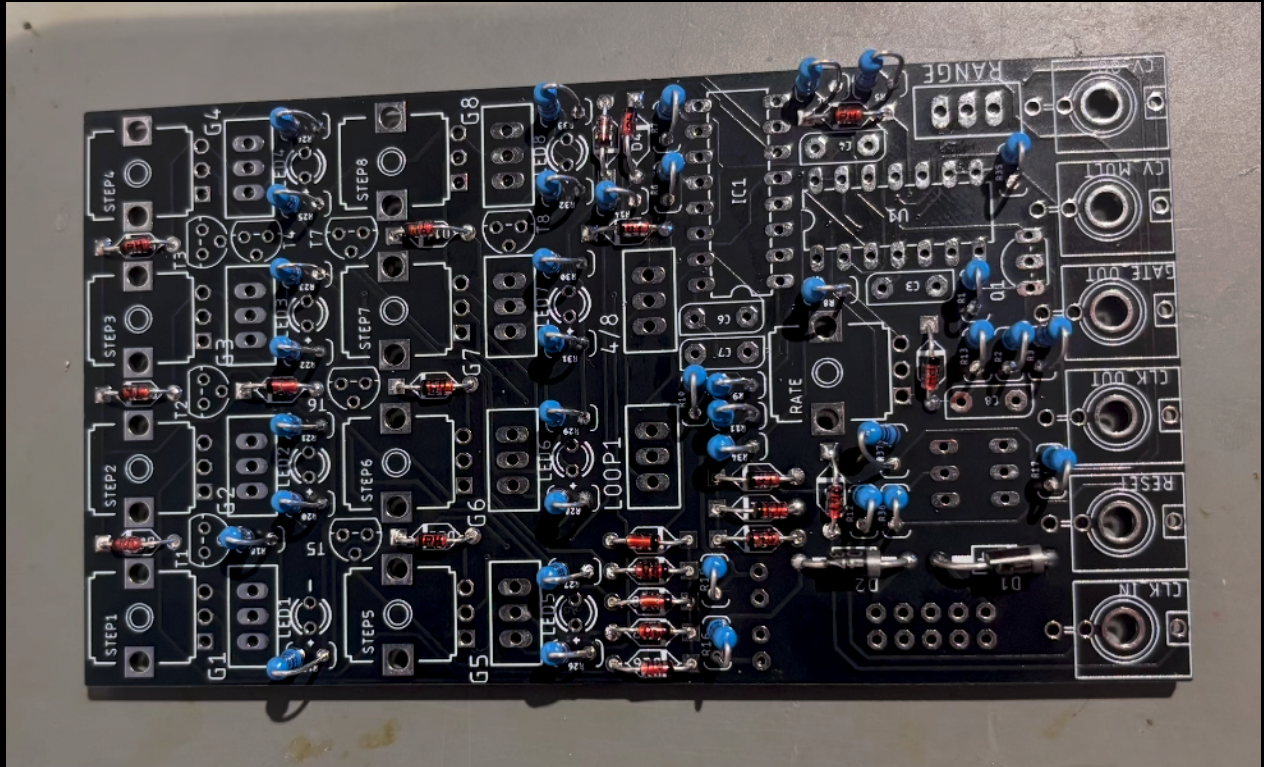
After soldering the resistors your board should look like this:



/// Diodes

Now solder the diodes, look at the **BOM** for the values and placements. Diodes are **polarized** so please take notice of the **positive** and **negative** side.

After soldering the diodes your board should look like this:

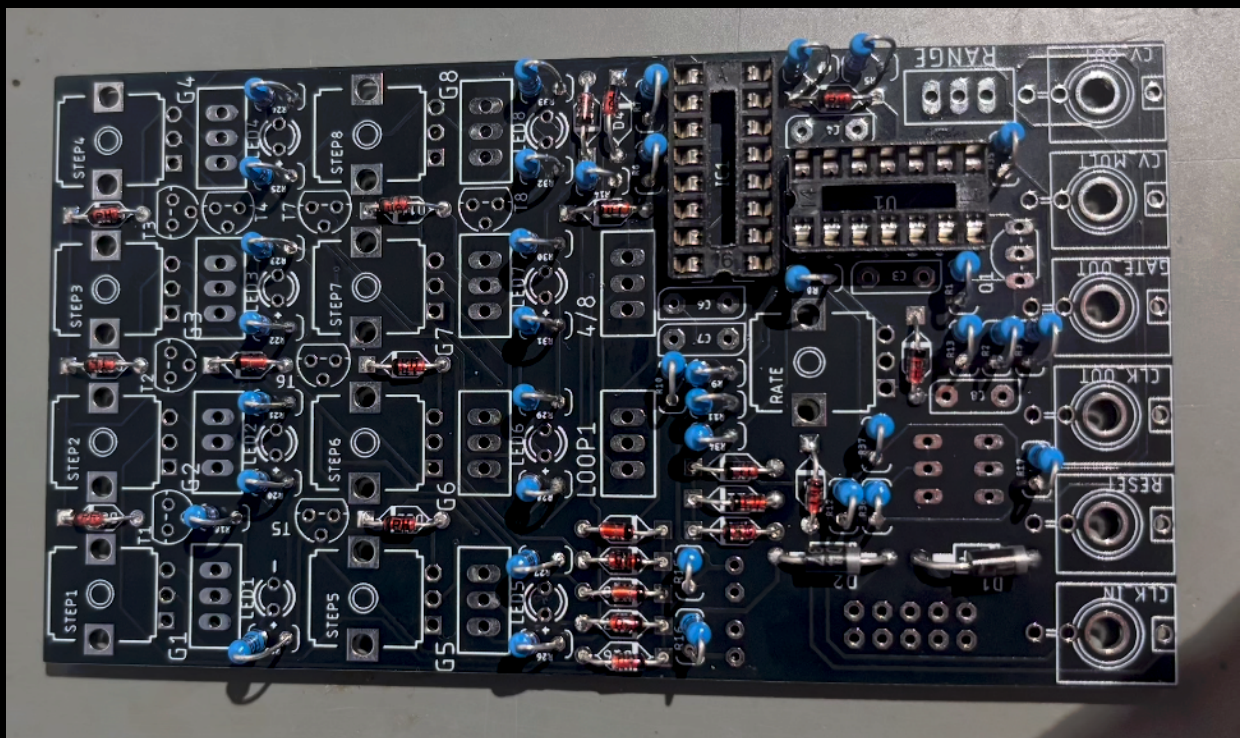


/// IC Sockets

Solder the 14 pin IC socket to **U1**. Take care to orientate it properly. The **notch** on one end should match the silkscreen on the PCB. First solder just 2 opposite pins and check if the socket is aligned flat to the PCB. If not, slightly press down on the socket and reheat the pins, the socket should slide into place. Now solder all remaining pins. Leave the IC **out** for now.

Repeat this step for **all** the IC sockets.

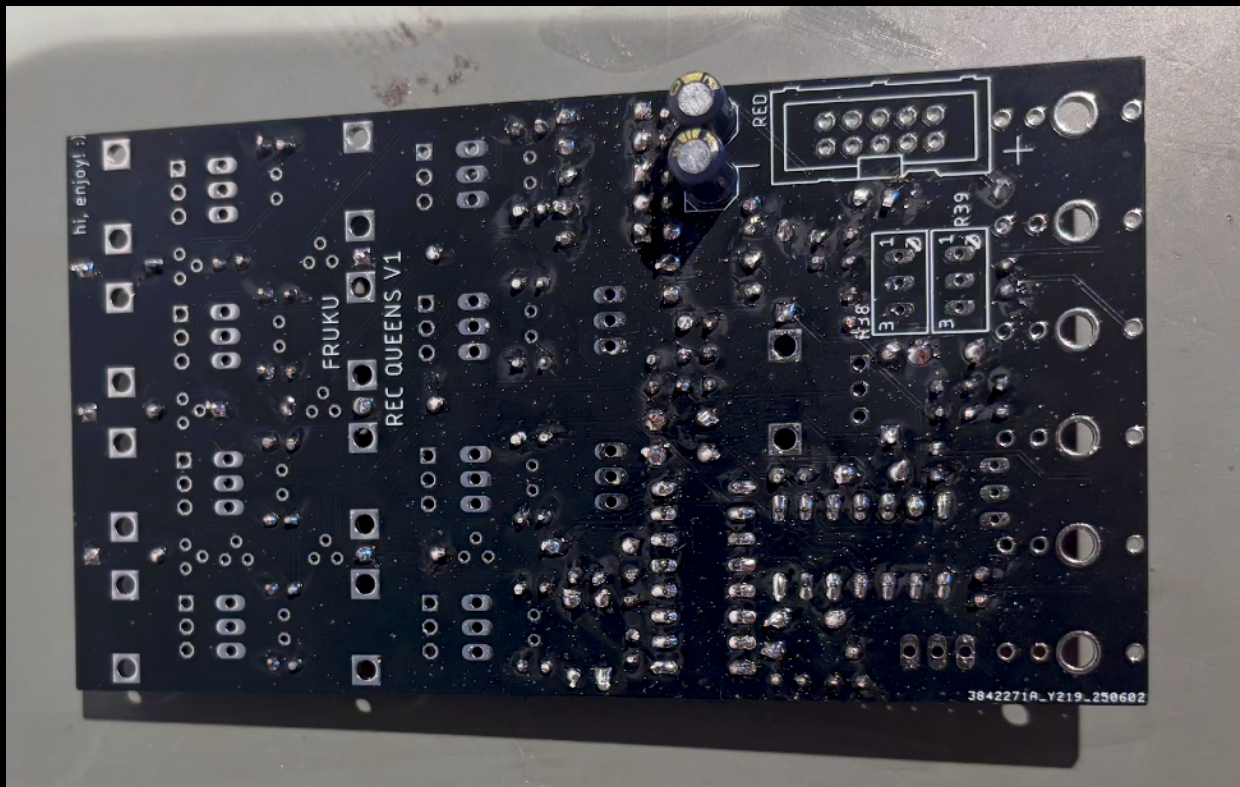
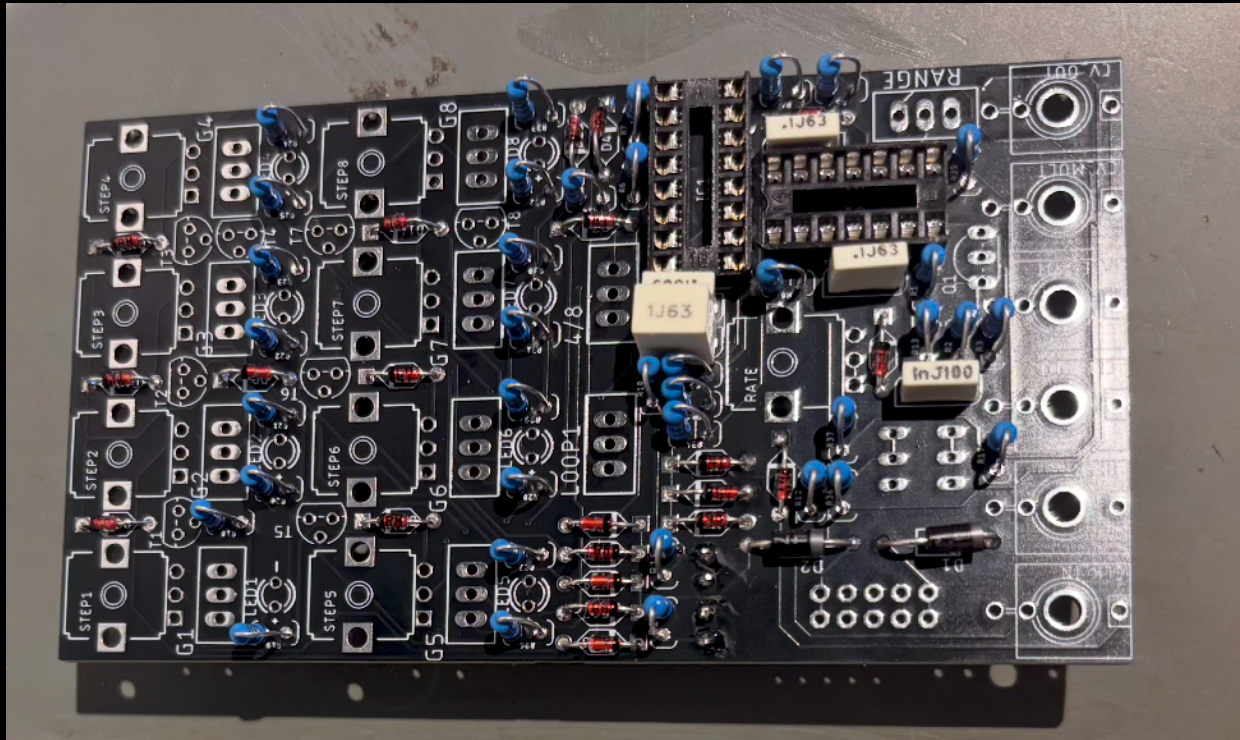
After soldering the IC sockets your board should look like this:



/// Capacitors

Now solder the capacitors, look at the **BOM** for the values and placements. Please take notice of the **positive** and **negative** side with the **electrolytic** capacitors. The electrolytic capacitors need to be placed on the **bottom** side of the PCB.

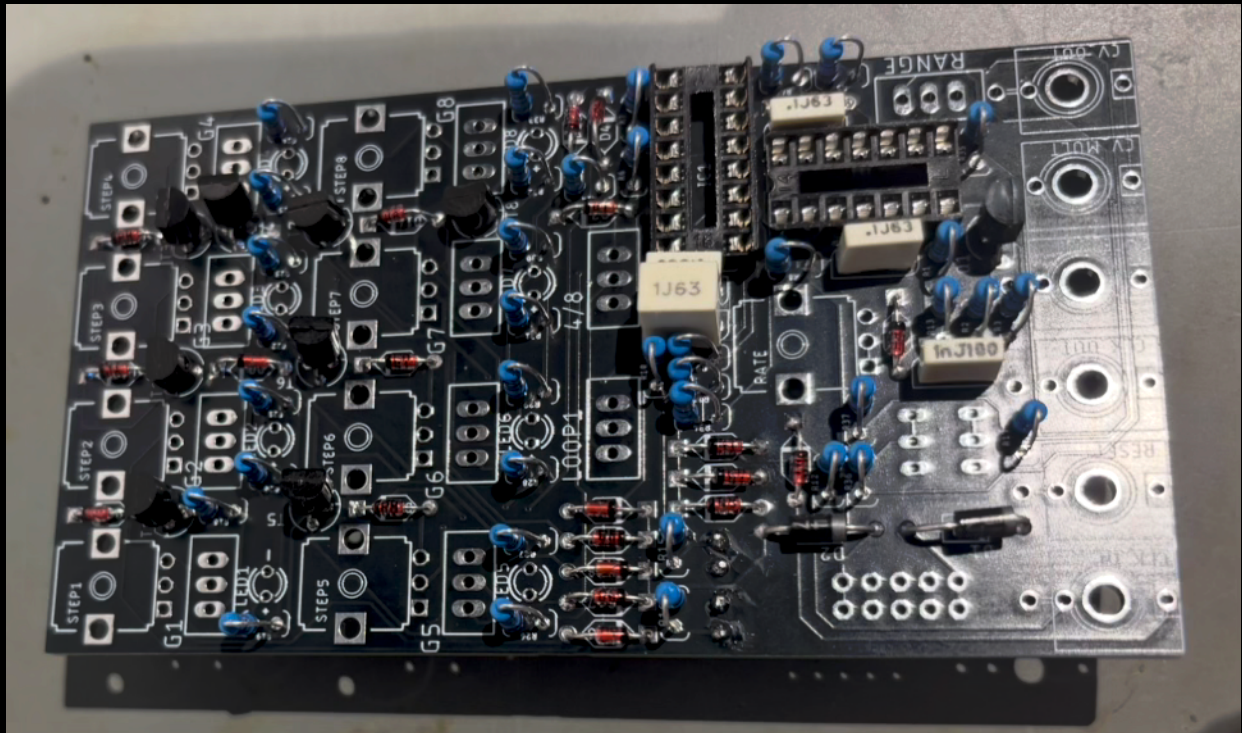
After soldering the capacitors your board should look like this:



/// Transistors

Now solder the transistors, look at the **BOM** for the values and placements. Please take notice of the **orientation**, the transistor part should match the silkscreen on the PCB.

After soldering the transistors your board should look like this:

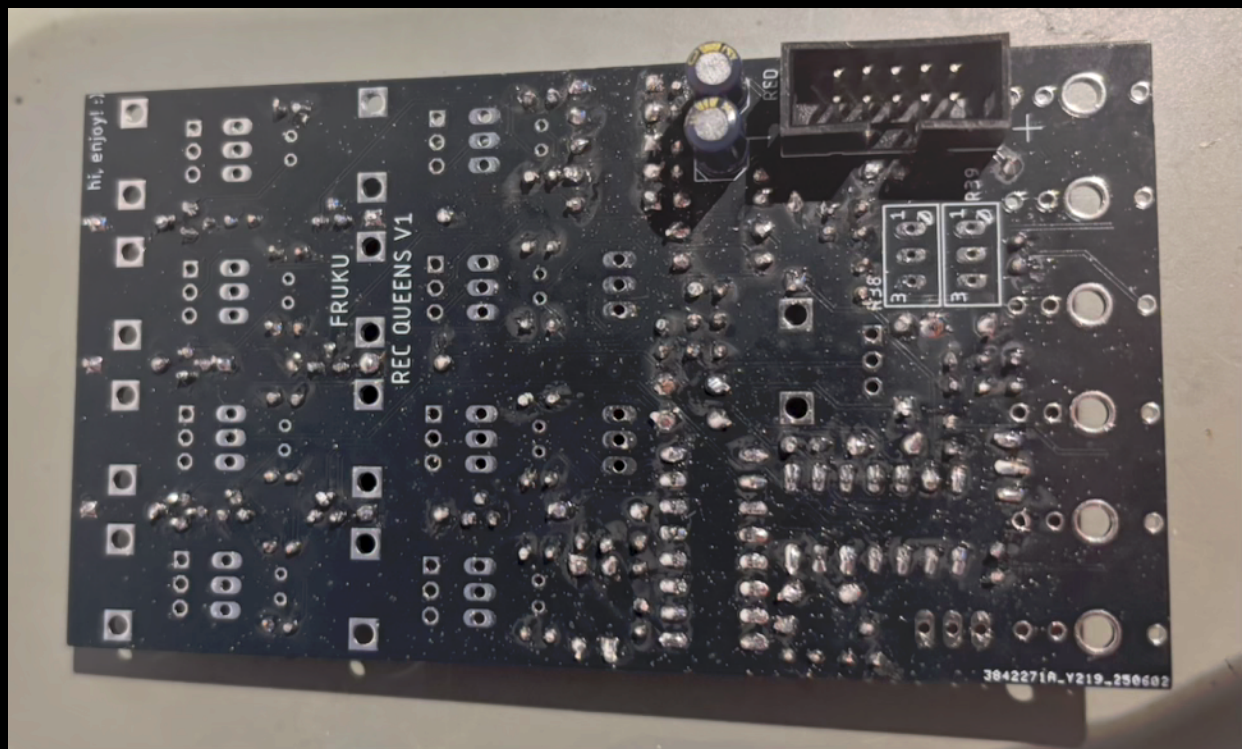


/// Power Header

Insert the 10 pin shrouded power header into place. This part also has an **orientation**: the open side. Make sure the part matches the silkscreen on the PCB.

Solder one pin and check if the header is aligned flat to the PCB. If not, slightly press down on the header and reheat the pin, it should slide into place. Now solder all remaining pins.

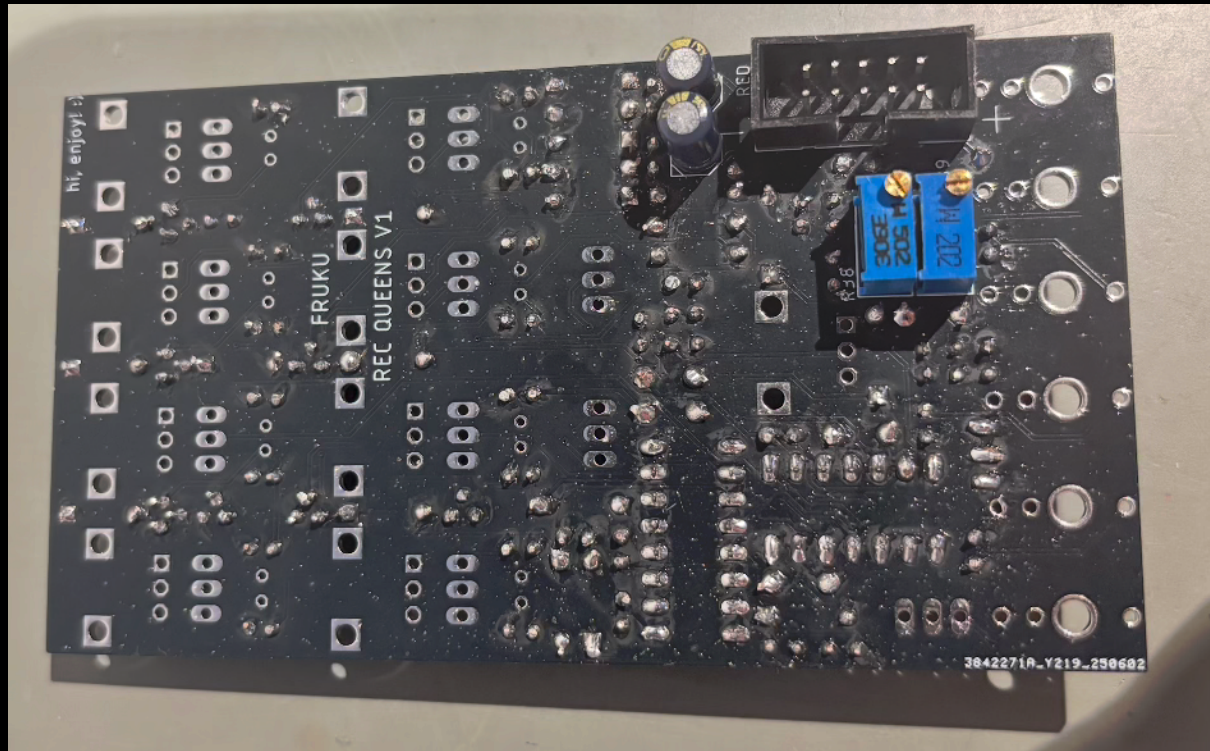
After soldering the power header your board should look like this:



/// Trimmer Potentiometers

Now solder the trimmer potentiometers to the **back** of the PCB, look at the **BOM** for the values and placements. Please take notice of the **orientation**, the trimmer potentiometer part should match the silkscreen on the PCB.

After soldering the trimmer potentiometers your board should look like this:

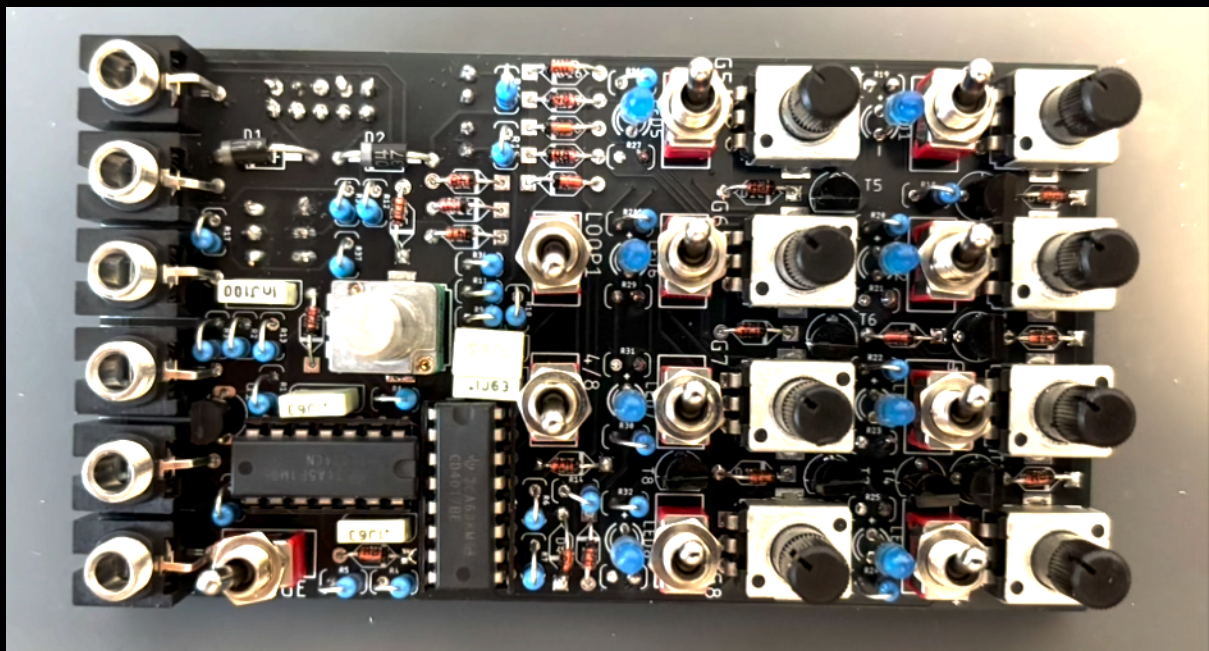


/// Potentiometers, Jack Sockets, Switches & LEDs

Flip the PCB and insert the potentiometers into the PCB, also insert the jack sockets and switches (leave one nut mounted on each switch) also place the LEDs (beware of the **orientation** of the LEDs), **Do not** solder yet! Now place the front panel over the potentiometers, jack sockets and switches and use one or two nuts from the potentiometers and jack sockets to hold the front panel in place. Push the LEDs up and into the holes in the front panel, then bend their legs so they won't slide down.

Now solder the potentiometers, jack sockets, switches and LEDs.

After soldering the potentiometers, jack sockets, switches and LEDs your board should look like this: (front panel removed)



/// IC

Take the ICs out of the foam. Usually the ICs don't have their legs bend far enough to fit in the socket, so bend the legs to **90** degrees using a **flat** surface.

Then insert them while taking care that the **notch** matches the IC **socket** and **silkscreen** on the PCB. Press the ICs firmly into the socket.

/// Knob

Turn the rate potentiometer fully **CCW** and place the knob. Then push it down, while holding the back of the PCB.

Depending on the type of knobs you might need to tighten them with a screwdriver, the type of knobs that need to be tightened have a small screw on the side. Please be careful to **not** over tighten the small screw.

/// Testing

As a last check, look over the PCB and check the soldering, check for shorts and polarity.

Insert the power cable and connect it to your modular system.

Turn on the power. Check if nothing blows! If all is well, proceed: **Patch** :)

/// Trimming

To make sure that our sequencer's maximum CV level is dialed in correctly, grab a multimeter and connect it to the CV output. With all the sequencer's potentiometers set fully clockwise, adjust the trimmer for the active voltage range until the meter reads the correct value (either 2.5 V or 5 V, depending on the "RNG" switch position).

/// Troubleshooting

If the module does not work, check the **orientation** of the ICs, electrolytic capacitors and diodes. Check your **soldering**. It should be perfect, like in this picture:



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