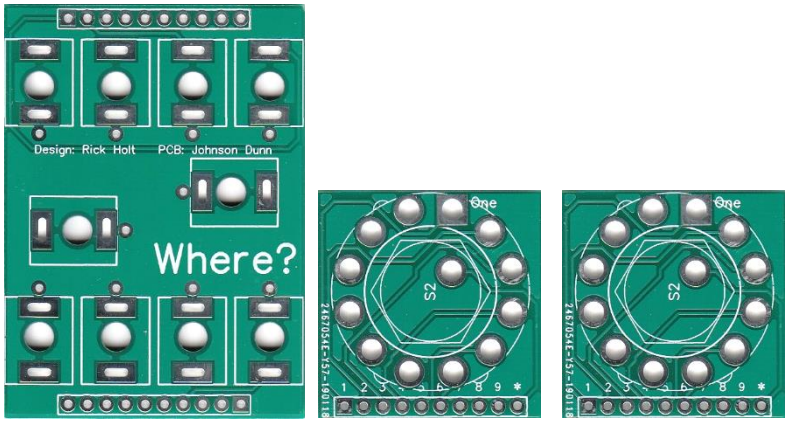
FREQUENCY CENTRAL

Build documentation for:

WHERE?

Where? is a two channel device with feel-good clunky rotary switches that take 4 inputs and routes them to 1 output , or takes 1 input and routes that to 4 different outputs, enabling both manual and performance led switching and signal routing on the fly. This saves you from having to pull cables mid patch, reducing fumbling and keeping you in the flow of the beat!



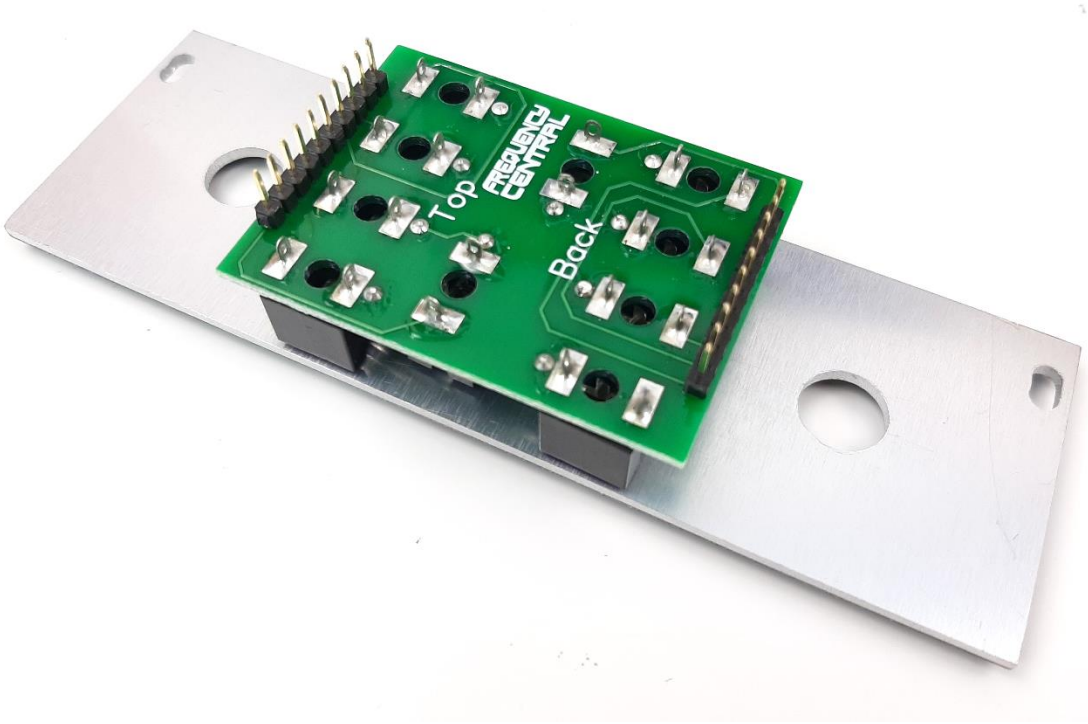
Bill of Materials

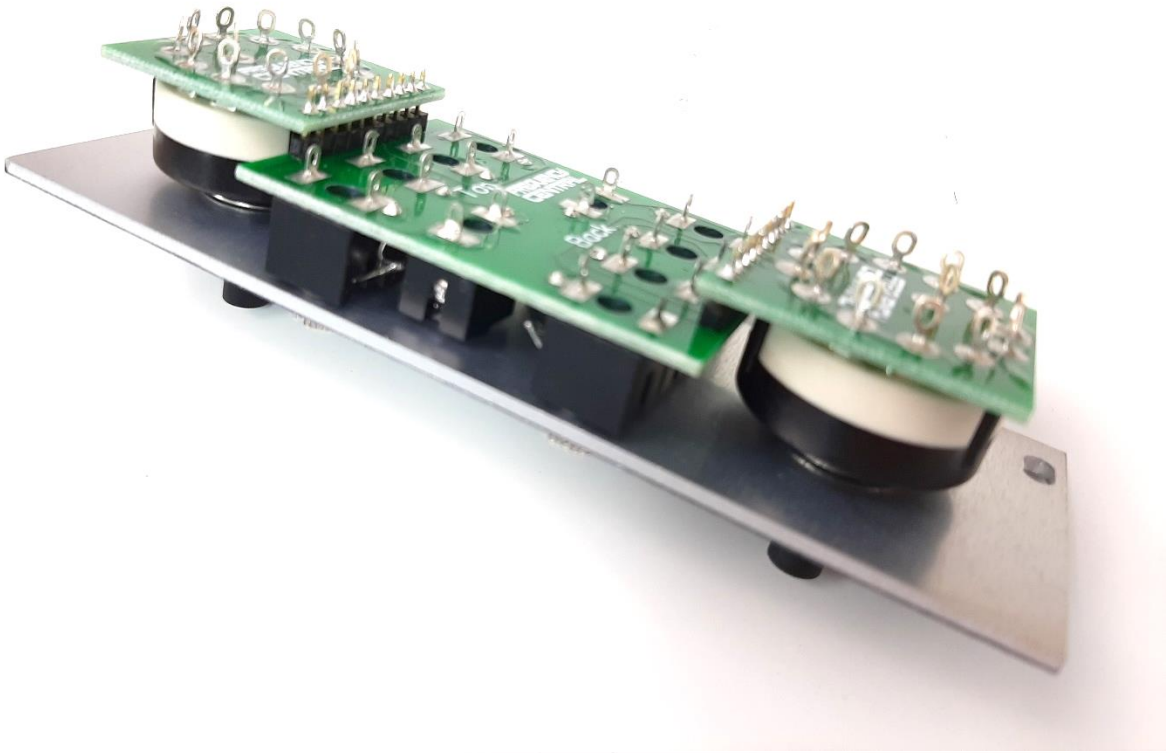
You will notice that all of the components listed below are also hyperlinks to where I buy each specific part from. You can also use the hyperlinks to find out more about what each component looks like. If you want to know even more, Google is your friend.

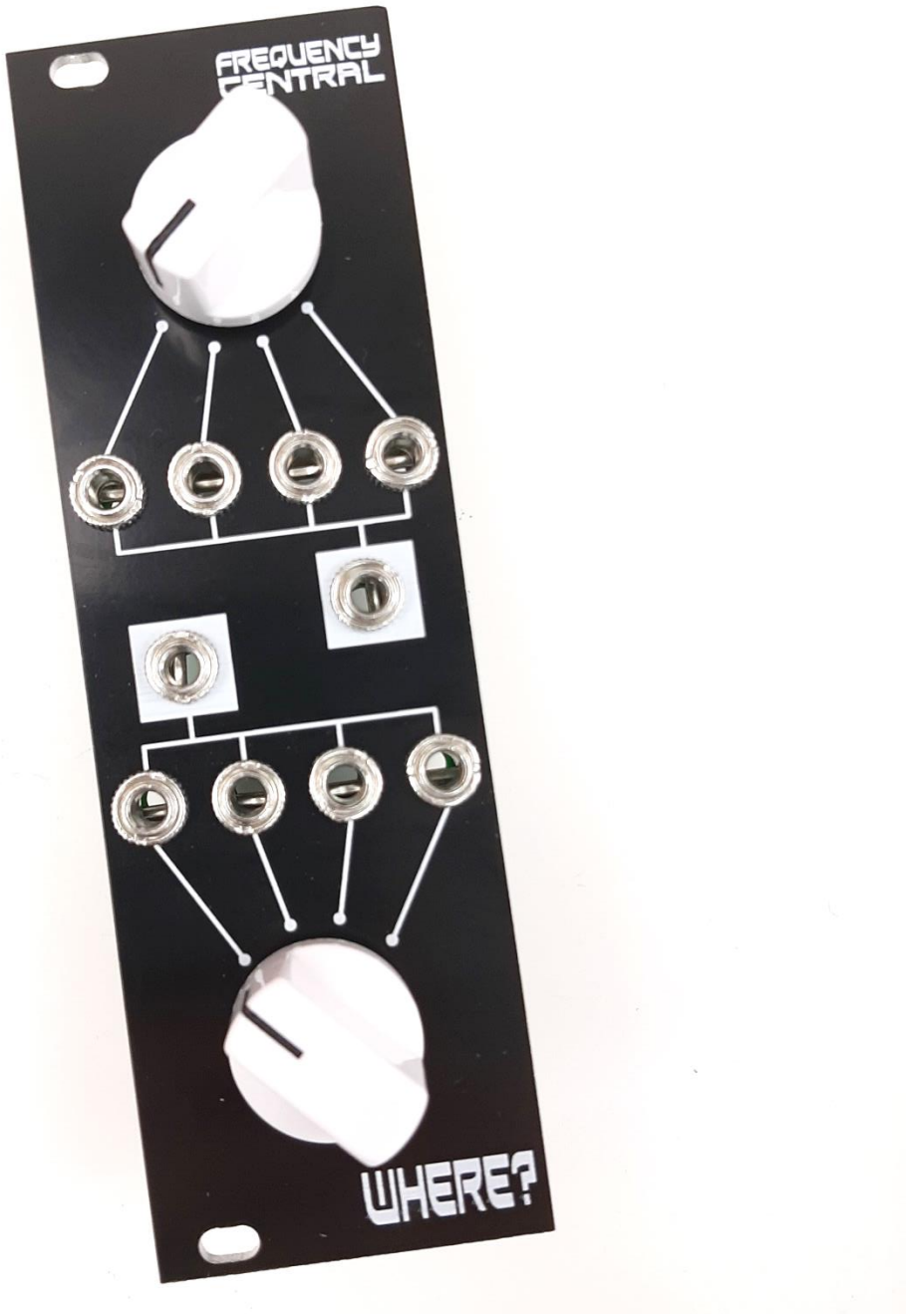
Rotary switch x 2 3.5mm socket x 10 Male 40 pin header Cut to size

1. Fit the rotary switches to their PCBs. You will see that the lugs of the switches are numbered, match up lug 1 with lug 1 of the PCB. Solder.
2. The 1P12T rotary switches needs to be adjusted to be a 1P4T rotary switch. Remove the mounting nut and the washer, below them you will find another washer with a small flange at 90°, the inner part of the switch has a number of slots, drop the flange into the slot marked 4, then waggle the switch to make sure you're getting 4 positions.

3. Place all sockets on the main PCB, making sure the ground tabs line up with the PCB's ground pads, then place the panel over them. This will assure that the sockets are correctly positioned. Flip the whole lot over and solder the sockets into place. Don't forget to ground the sockets to the PCB using cut off resistor legs.
4. Cut male headers to size and solder them into place. Make sure that they stick out of the bottom of the PCB.
5. Mount the main PCB to the panel using the associated nuts.
6. Fit the rotary switch assemblies to the panel, making sure that the headers on the main PCB pass through the pads on the rotary PCBs. Solder into place.







Troubleshooting

Not all DIY builds work first time. The vast majority of build issues are down to soldering inconsistencies. This is far more likely than a bad IC, for example. The first step of successful troubleshooting should always be to reflow all soldering to eliminate any dry joints (bad connections) or solder bridges (short circuits). This is also an opportunity to closely inspect your work – you might find some unsoldered pads for example. This is not an exhaustive troubleshooting guide, but should address 95% of build issues.

RDH 21/10/20

http://www.frequencycentral.co.uk/