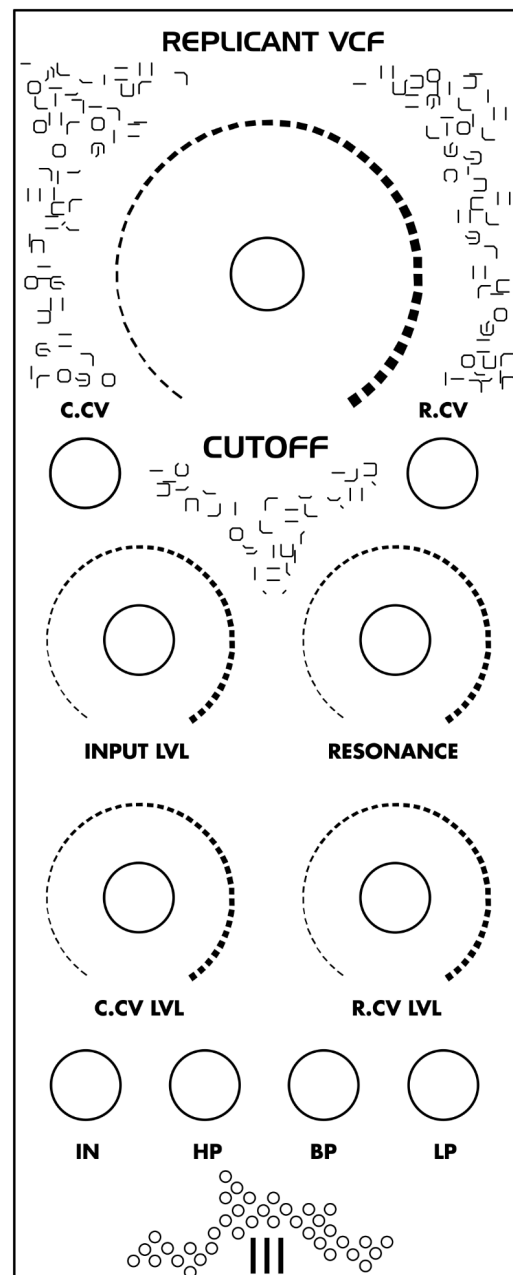


Tre Modular - Replicant VCF

DIY Assembly Guide (High)

Thank you for choosing Tre Modular.

In this guide, we will walk you through the process of assembling your very own Tre Modular - Replicant VCF module.



Before You Begin:

This guide assumes a basic soldering proficiency, so if you're new to the craft, consider practicing on a spare PCB to build confidence.

Always adhere to proper soldering techniques, work in a well-ventilated space, and handle electronic components with care to ensure the longevity and optimal performance of your Replicant VCF.

Ensure you have all the necessary components listed in the Bill of Materials. Familiarize yourself with the provided component list, and if any questions arise, don't hesitate to ask at support@tremodular.com.

BOM (Bill of materials):

Capacitors:

10uf 50v (electrolytic) - x2
1uF (film) - x1
100n (104) - x8
1.5nF (film) - x2
560pf (561) - x3
100pf (101) - x2
180pf (181) - x1

Diodes:

1N4148 - x1
1N4002 - x2

Transistors:

2N3904 - x1

Resistors:

510r - x3
1K - x3
2k2 - x1
3K - x3
5k6 - x1
10K - x3
11K - x2
15K - x1

20K - x1
22K - x1
24K - x1
30K - x3
33K - x3
47K - x2
100K - x4
150K - x1
1M5 - x1

IC`s:

TL074 - x2
TL072 - x1

Potentiometers:

B100K - x3
B10K - x2
100K Trimpot x1

Connectors:

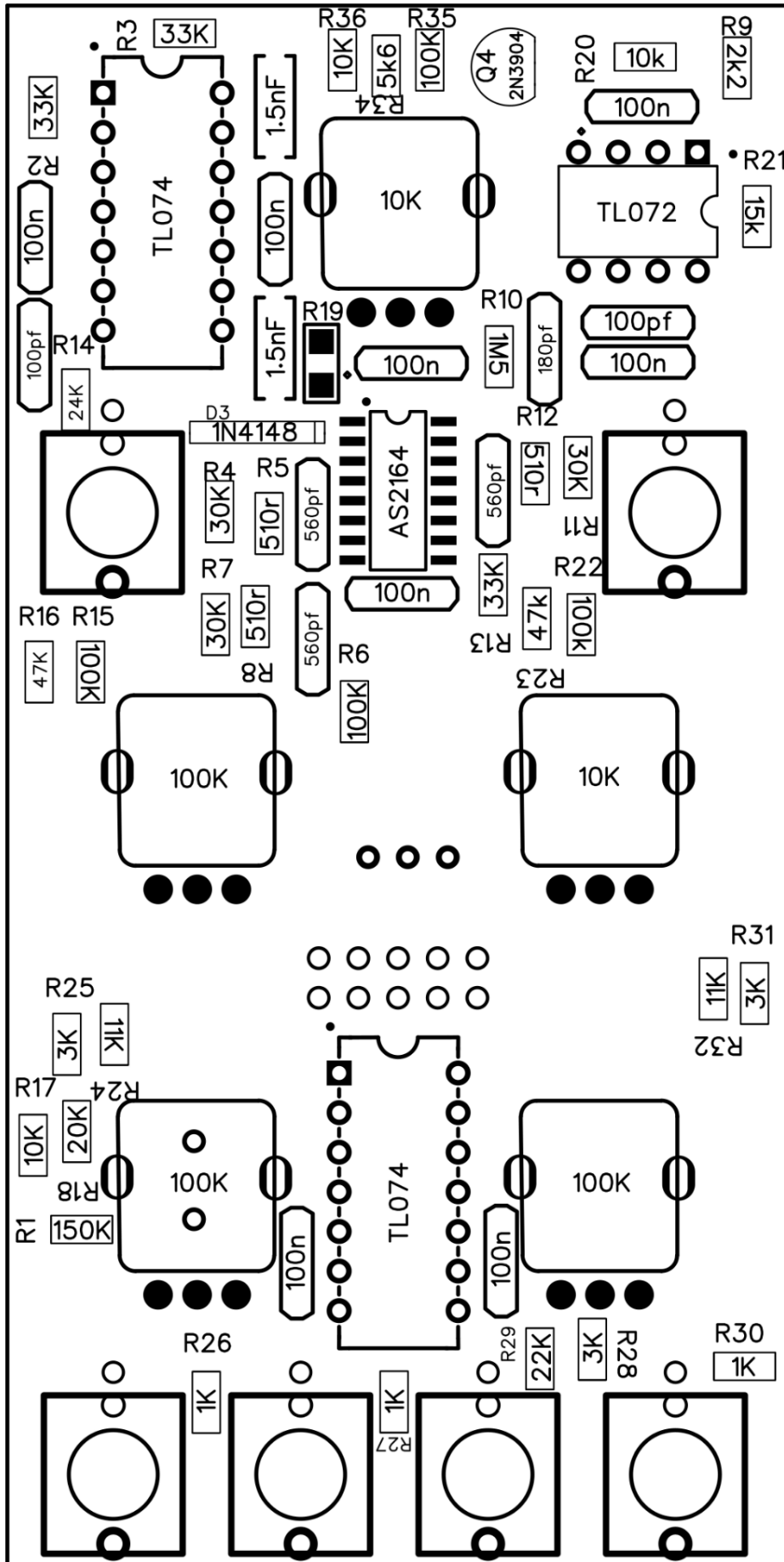
IDC-2.54-2X5P - x1

Jack sockets:

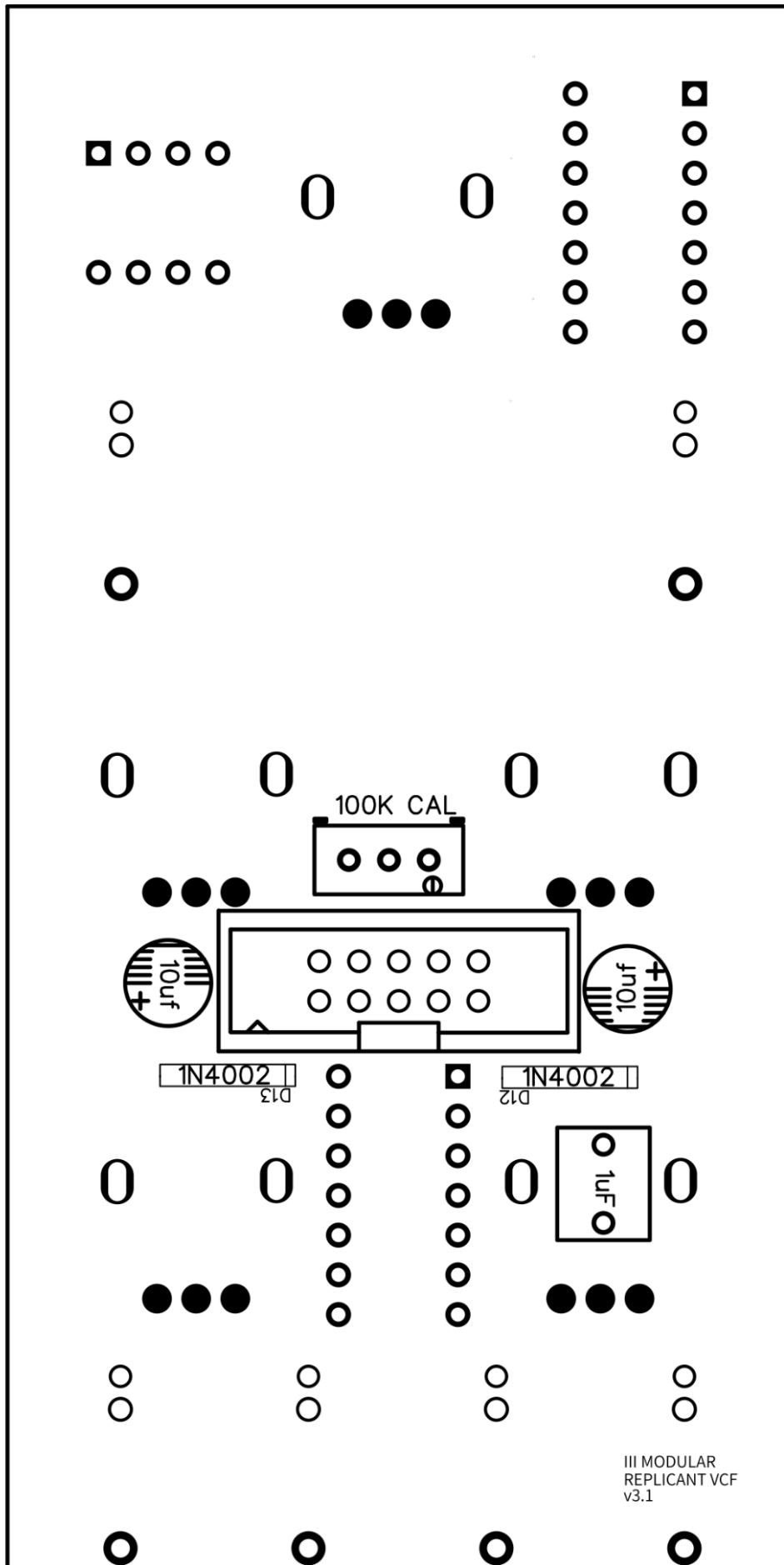
Mono Switched x6

Legend:

Front:



Back:



Assembly Guide:

Step 1: Identify and Sort Components

Organize the components into groups based on their types: resistors, capacitors, diodes, potentiometers, connectors, and jack sockets.

Step 2: Diodes (Front)

Insert and solder 1N4148 diode according to the legend.

Ensure correct orientation, referring to the diode's polarity.

Step 3: IC sockets

Place and solder IC sockets onto the PCB.

Step 4: Transistor

Place and solder the 2N3904 transistor in its designated location.

Step 5: Capacitors (Front)

Solder the capacitors onto the designated positions on the PCB according to legend.

Step 6: Resistors

Resistors are placed vertically.

Refer to the legend for resistor placement.

Start with the lowest resistance value and continue soldering resistors in ascending order, referring to the BOM and legend for values and placement.

For easier soldering, when a resistor is placed on the PCB, bend the leg closest to the resistor's body to keep it in place, and then solder the other leg. Once this is done, straighten the bent leg and proceed with soldering it in place.

Step 7: Diodes (Back)

Insert and solder 1N4002 diodes according to the legend.

Ensure correct orientation, referring to the diode's polarity.

Step 8: Trimpot

Solder the Trimpot into its designated spot. Start by soldering one pin and reflow the solder if it is not aligned. If everything is aligned, proceed to soldering the rest of the pins.

Step 9: Capacitors (Back)

Solder capacitors onto the designated positions on the PCB according to legend.

Ensure correct orientation of 10uf electrolytic capacitors, referring to the capacitors polarity.

Step 10: Connectors

Solder the IDC connector (Power connector) into its designated spot. Start by soldering one pin and reflow the solder if the connector is not aligned. If everything is aligned, proceed to soldering the rest of the pins.

Step 11: Potentiometers and Jack Sockets

Insert all potentiometers and Jack sockets into their positions on the PCB. Put on the front panel and fasten it. Ensure they align properly and then solder everything in place.

Step 12: IC`s

Place IC`s into the sockets. Be cautious of the orientation.

Step 13: Final Inspection

Double-check your work against the BOM and legend.

Visually inspect your solder joints for bridges or cold joints.

Ensure all components are securely attached to the PCB.

Step 14: Installation and Tuning

Power off your Eurorack system.

Connect the power cable, ensuring correct polarity.

Power on your Eurorack system.

Connect filters high pass output to your sound system. Turn the frequency knob all the way to the right. Turn the calibration trimpot until the filter's output goes nearly silent.

Connect filters low pass output and check if everything works properly.

Insert the module into an available slot in your rack and secure it in place.

Enjoy!

Additional Information:

For any additional questions or support, please contact Tre Modular at support@tremodular.com.

Happy patching!

