



robaux

LL8

Assembly Guide

These assembly instructions will help you build your Robaux LL8. All necessary components are included in this kit.

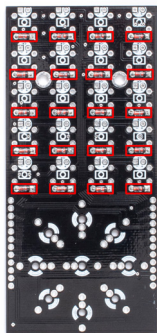
You will need the following tools: soldering iron, wire cutter and solder. Also a desoldering pump and a screwdriver.

Read the instructions carefully and follow the steps in the correct order. Robaux wishes you lots of fun building the Tripot module.



1 Diodes

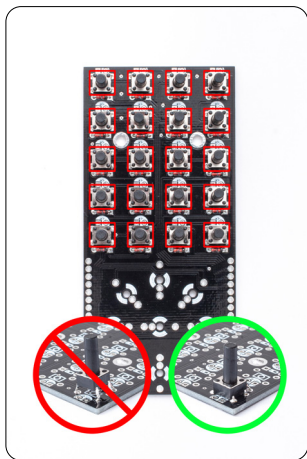
Start with the Control Board and solder the 20 diodes to the board as shown in the picture. Please pay attention to the polarity!





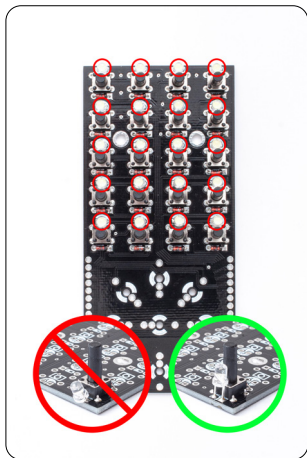
2 Tact Switch

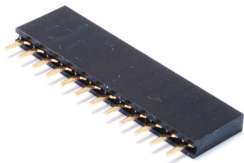
Now insert the 20 tact switches and solder them to the board. Attention! The switches must be soldered directly to the board, there must be no space between the board and the switch.



3 LEDs

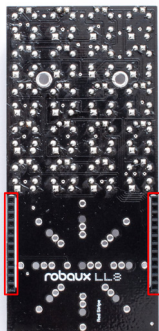
Solder the 20 LEDs so that the edge of the LEDs lies straight on the housing of the tact switch. Pay attention to the polarity of the LEDs. The long leg goes into the + hole, the short leg into the - hole.





4 Header

Turn the board over and solder the two headers as shown in the picture.



5 Standoff

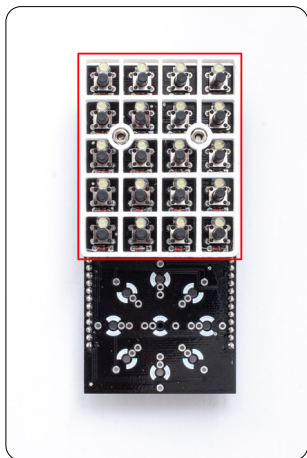
Now screw the bolts into the board. The longer male bolt is inserted through the board from below and screwed to the smaller female bolt from above.





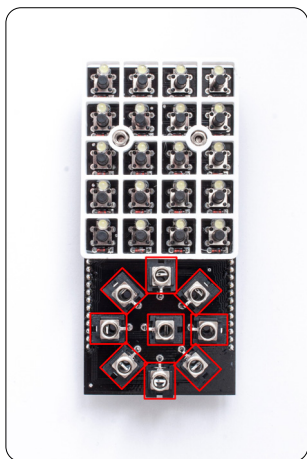
6 Frame

Now carefully plug the frame onto the board.



7 Thonkiconn

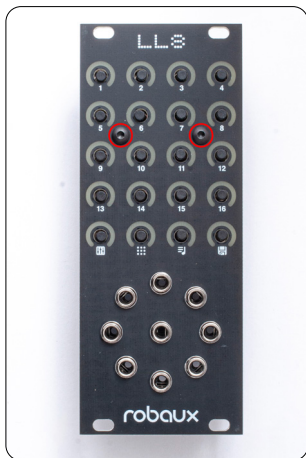
Plug the nine Thonkiconn sockets onto the board as shown in the picture. **Attention! Do not solder them yet.**





8 Screws

Now place the panel on the board and screw it with the two black screws.



9 Knurled Nuts

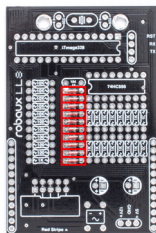
Use the knurled nuts to tighten the jacks on the front panel. When everything is screwed tight and all components are aligned, you can solder the sockets.





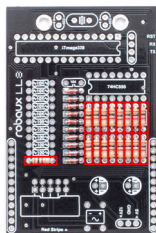
10 Diodes

Now pick up the mainboard and solder the ten diodes to the board as shown in the picture. Please pay attention to the polarity!



11 Resistor 1K

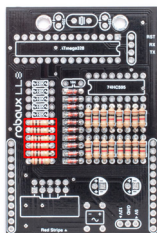
Now solder the 1K resistors to the board. You can recognize the resistors by their color code brown, black, red, gold.





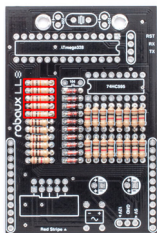
12 Resistor 100

Now solder the five 100 resistors to the board. You can recognize the resistors by their color code brown, black, brown, gold.



13 Resistor 10K

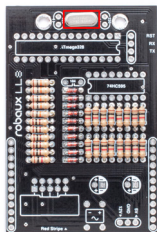
Now solder the five 10K resistors to the board. You can recognize the resistors by their color code brown, black, orange, gold.





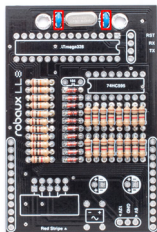
14 Crystal

Now solder the 16MHz crystal as shown in the picture.



15 Capacitor 220

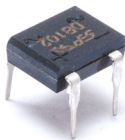
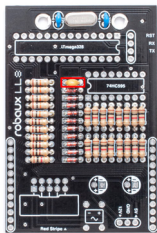
Now solder the two 220 capacitors to the board as shown in the picture.





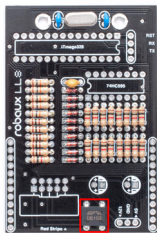
16 Capacitor 104

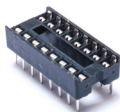
Now solder the 104 capacitor to the board as shown in the picture.



17 Rectifier

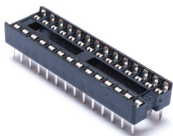
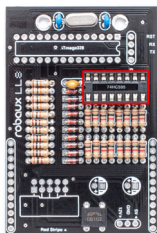
Now it's time for the rectifier. Solder this to the PCB as shown in the picture. Note that the - and + symbols on the board match the symbols on the rectifier.





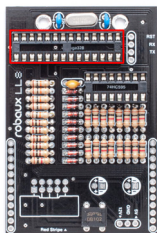
18 IC Socket 16

Solder the IC socket 16 to the board. It is easiest to solder first only the outer pins and then the remaining ones.



19 IC Socket 28

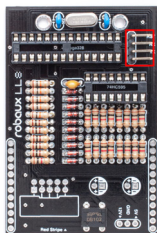
Solder the IC socket 28 to the board. It is easiest to solder first only the outer pins and then the remaining ones.





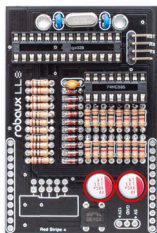
20 Pins

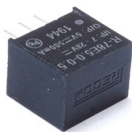
Place and solder the Male Pin Headers as shown in the picture. It is the shorter pins of the pin header that you are soldering.



21 Capacitors

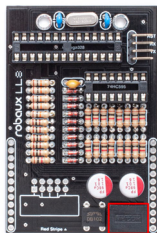
Now solder the two Electrolytic Capacitors to the board as shown in the picture. Please pay attention to the polarity of the Capacitors. The red mark must match the mark on the PCB.





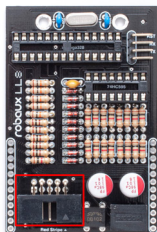
22 Step Down

Now solder the step-down adapter as shown in the picture.



23 Power Socket

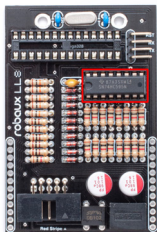
Solder the power connector to the board.





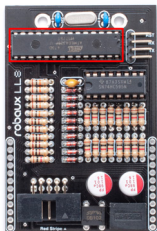
24 Shift Register

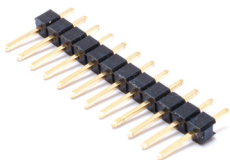
Now plug the Shift Register onto the socket. Make sure that the IC points to the left.



25 ATmega

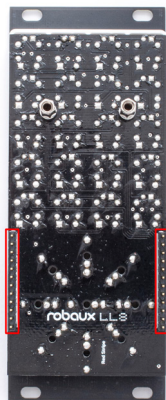
Now plug the ATmega onto the socket. Make sure that the IC points to the right.





26 Pins

Take the control board and put the pins on the headers.



27 Skrew

Now plug the main board onto the pin headers. First screw the two boards together and then solder the pin headers. And that's it, your Lil Eight is ready!

