

Ø ANTUMBRA

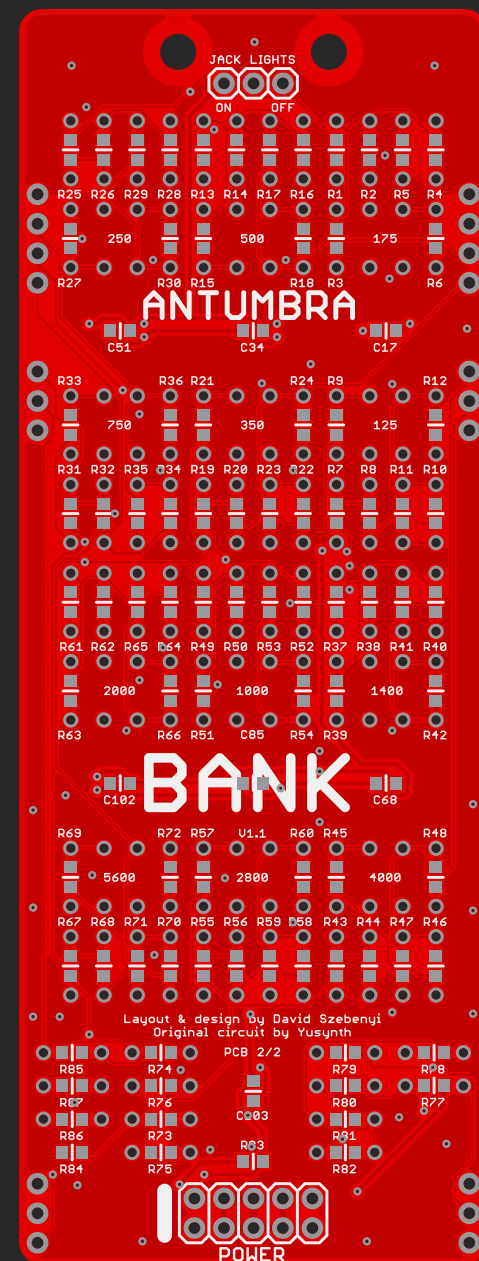
BANK

BUILDING INSTRUCTIONS

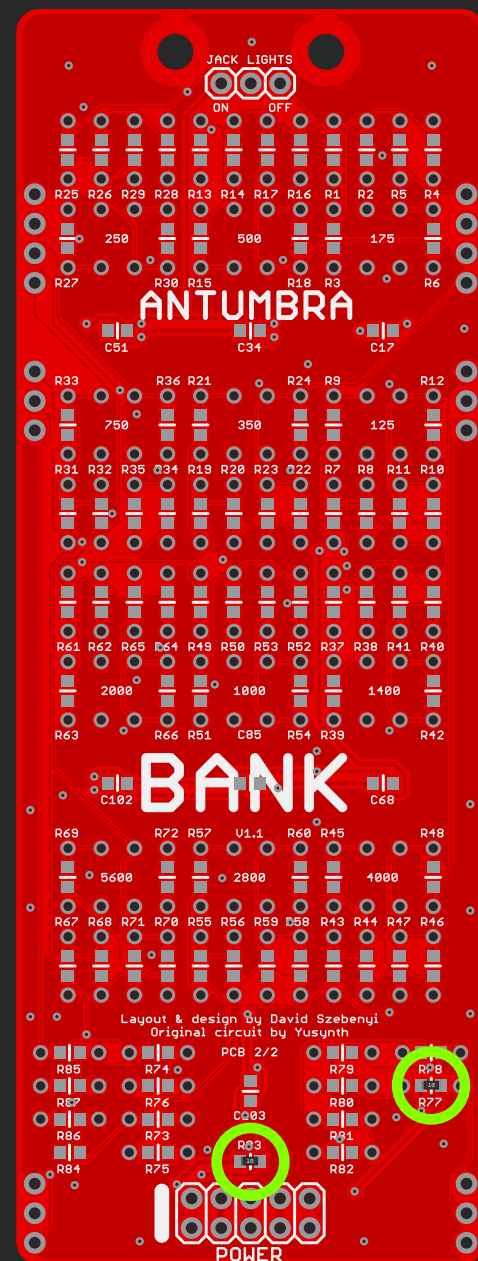
PCB V1.0

01. BUILD NOTES

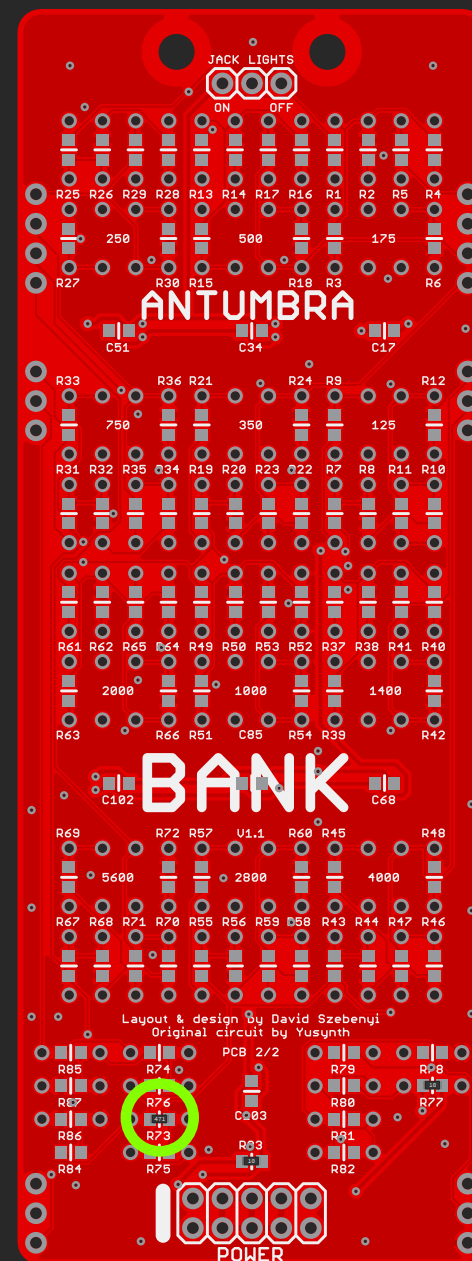
Before you start building look through the build manual so that you'll be familiar with the building process and you won't run into any surprises! :)



00



01



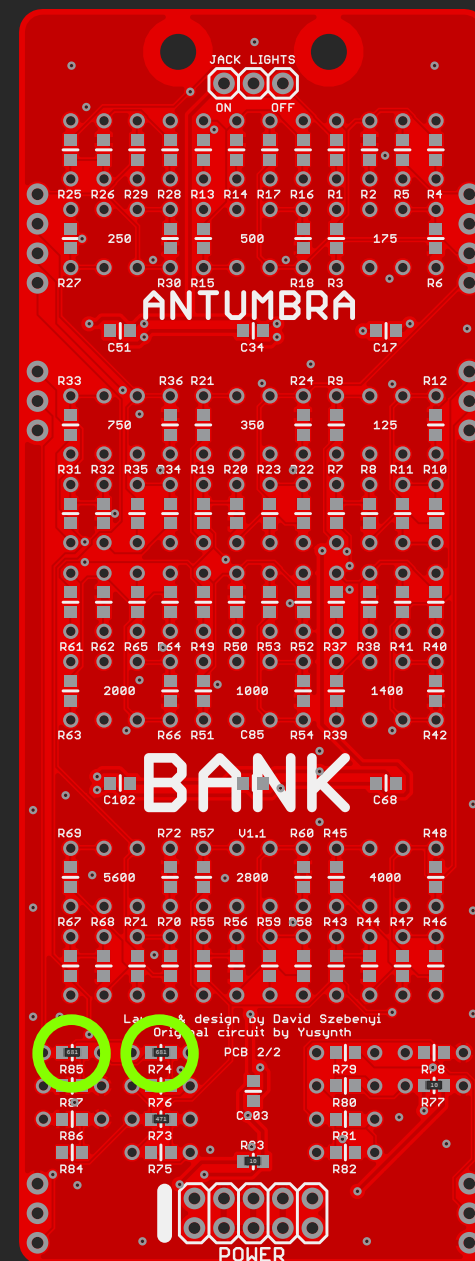
02

02. BUILD

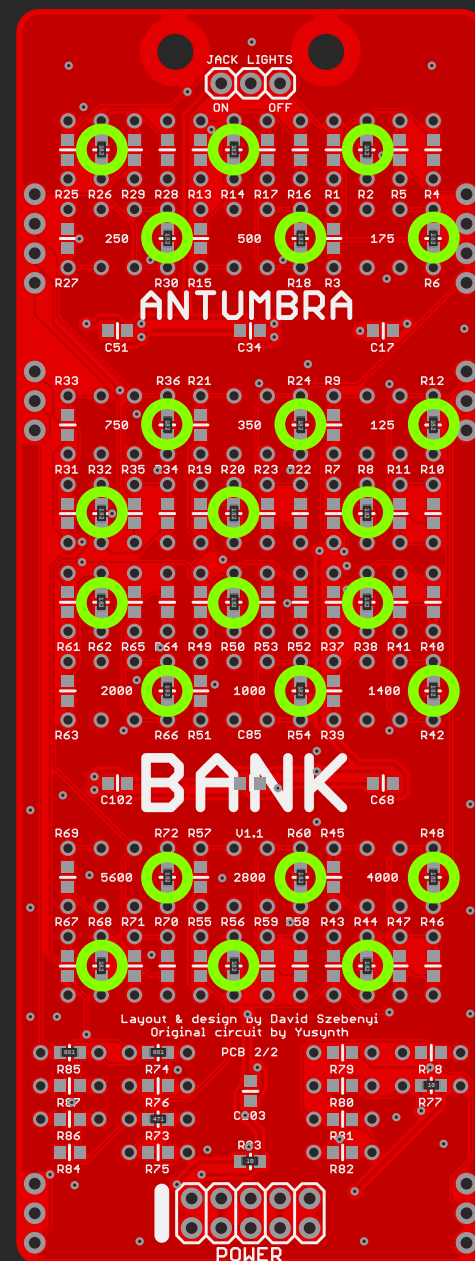
00. Orient the PCB as seen on the left

01. Solder the two 10 ohm resistors

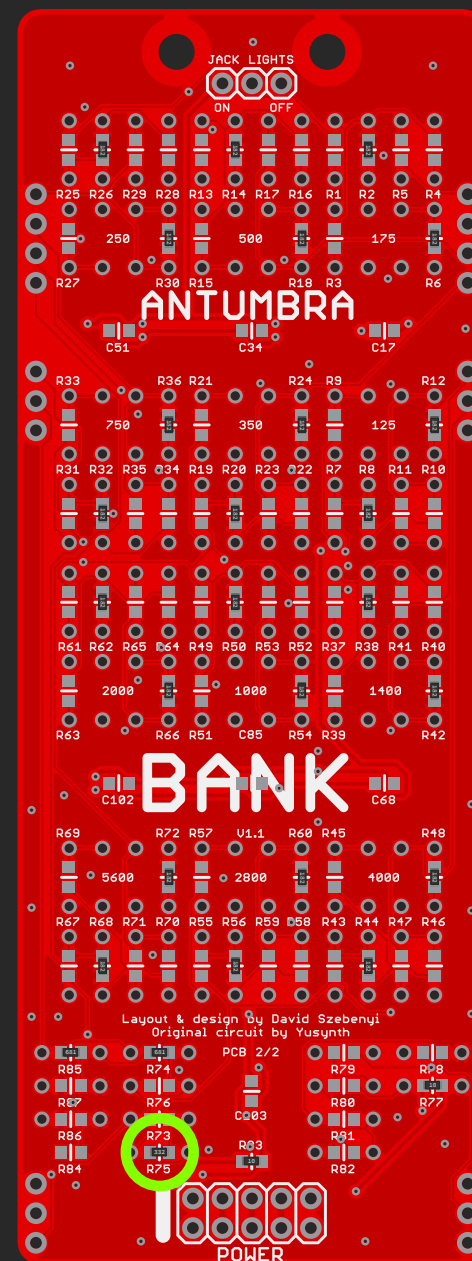
02. Solder the single 470 ohm resistor



03



04



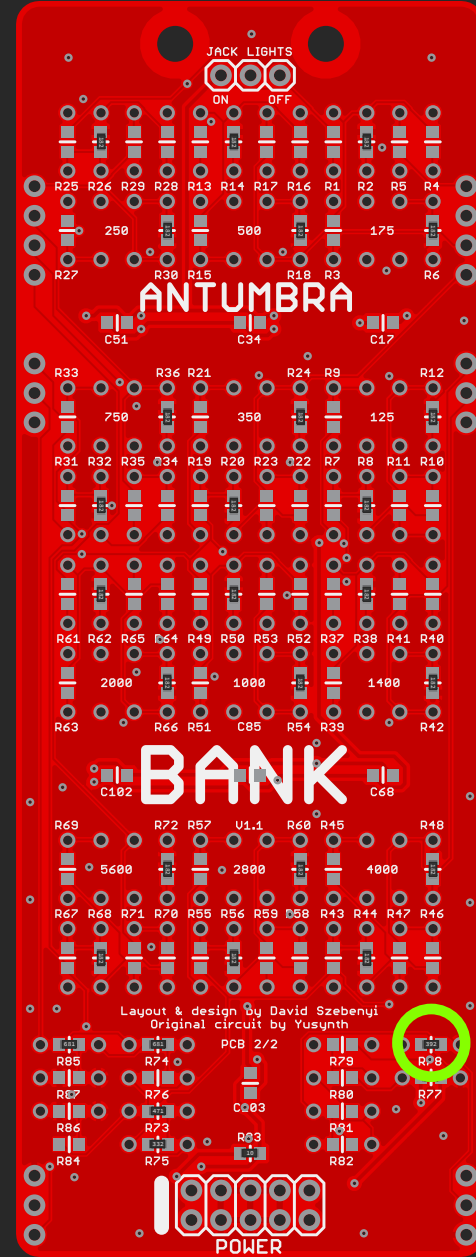
05

02. BUILD

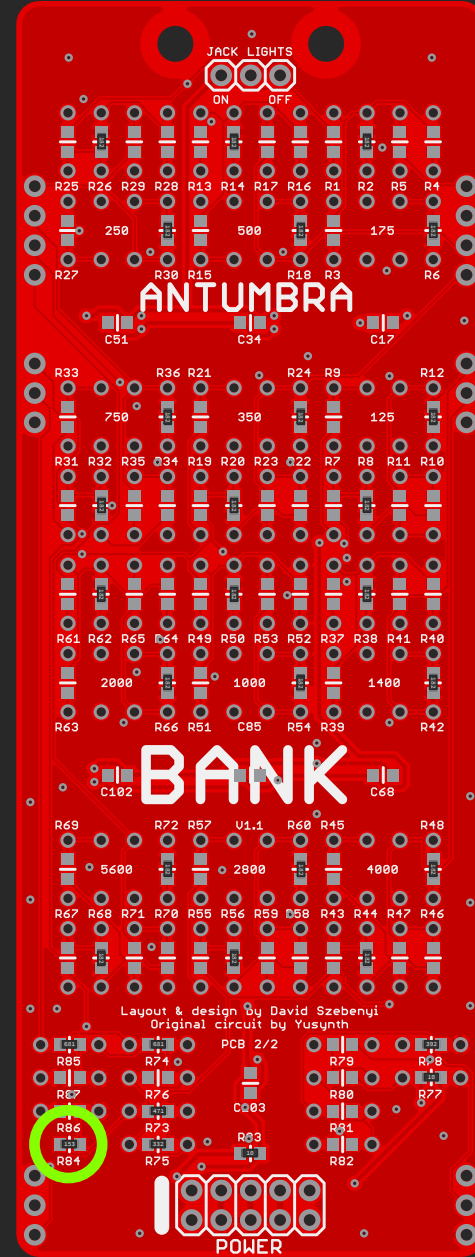
03. Solder the two 680 ohm resistors

04. Solder the $24 \times 1.8k$ resistors

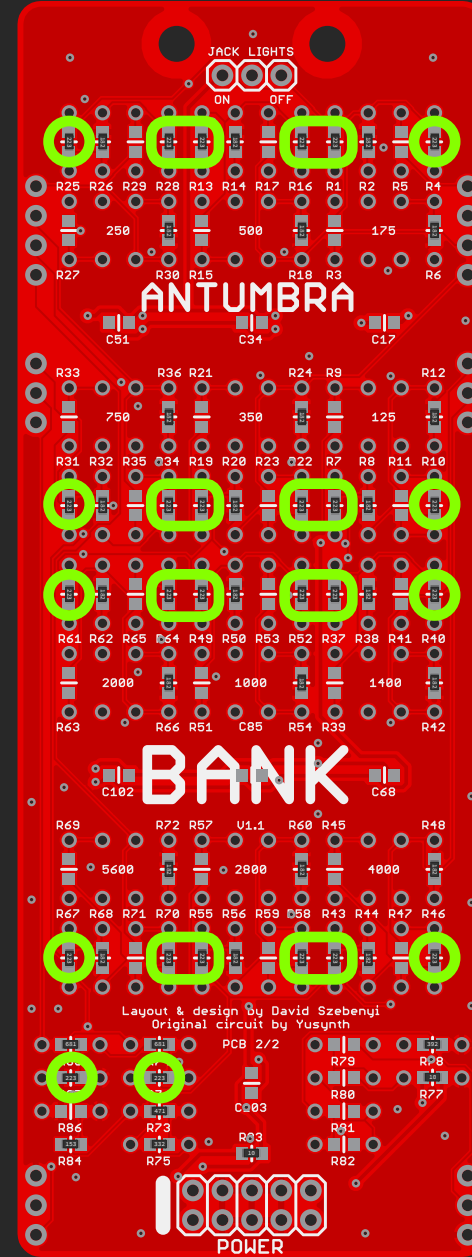
05. Solder the single 3.3k resistor



06



07



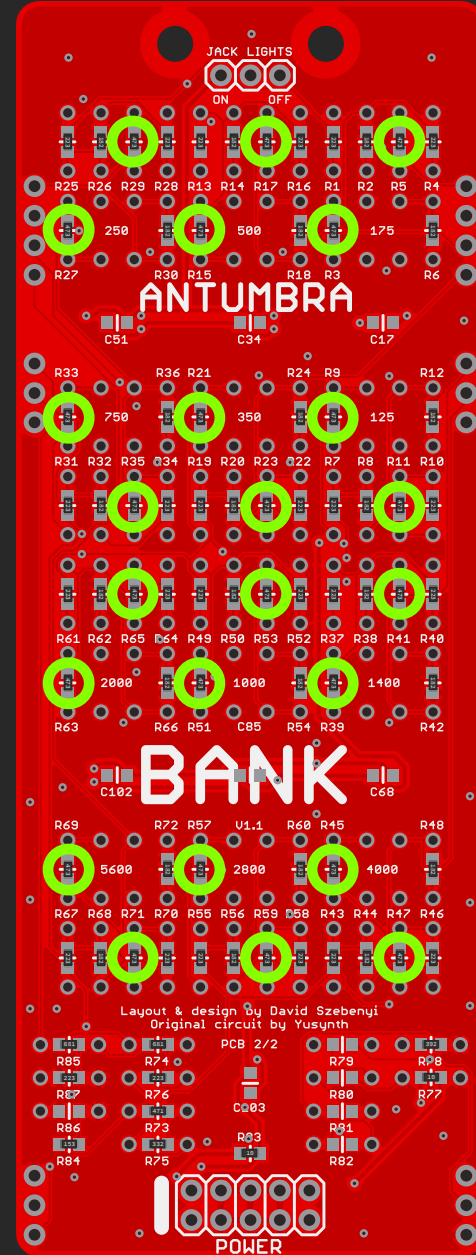
08

02. BUILD

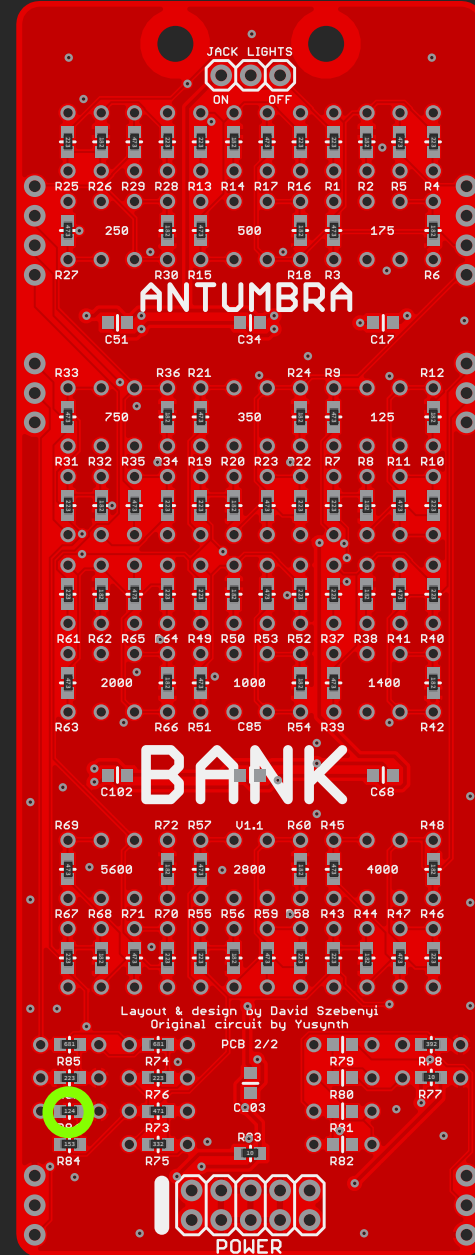
06. Solder the single 3.9k resistor

07. Solder the single 15k resistor

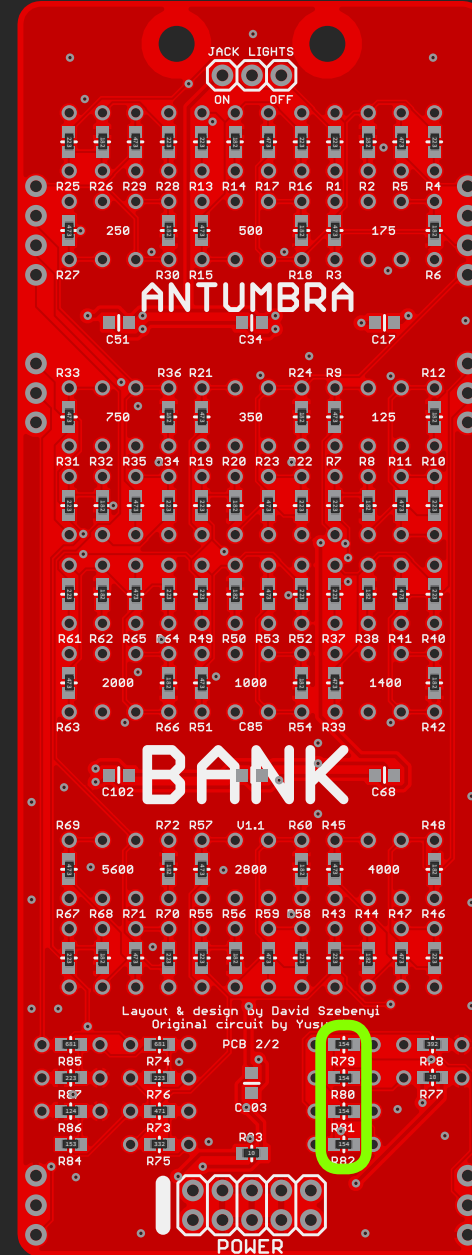
08. Solder the 26 × 22k resistors



09



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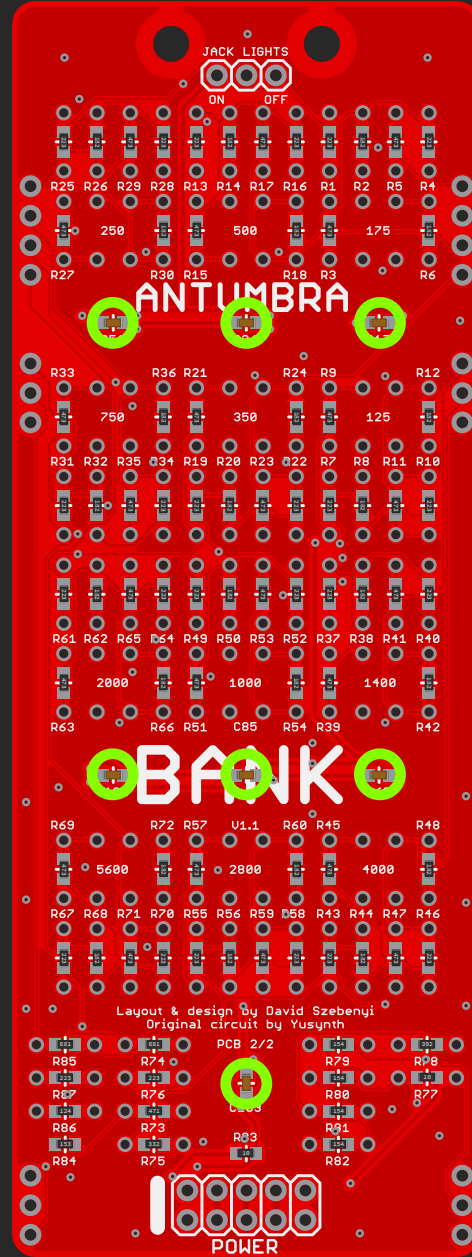
11

02. BUILD

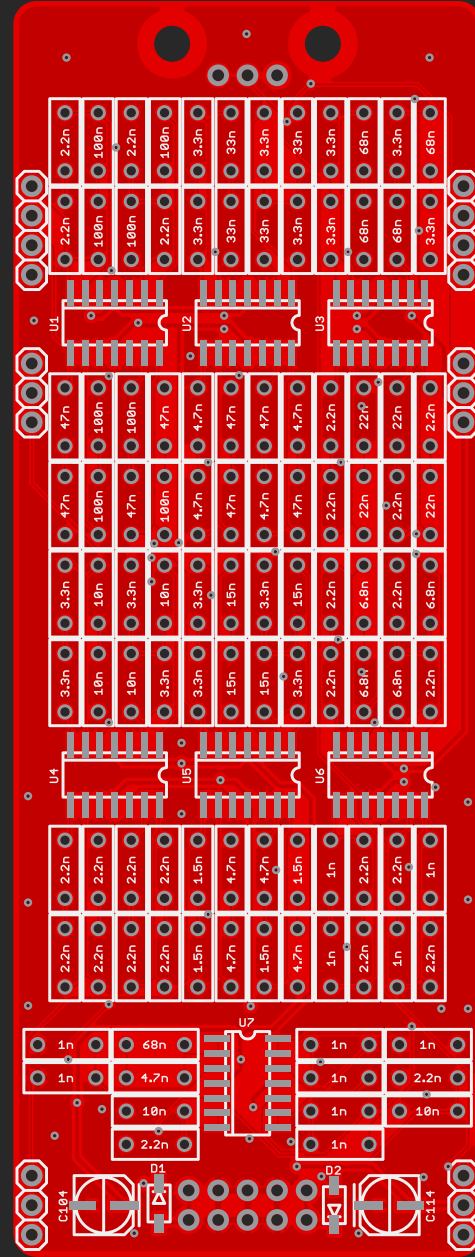
09. Solder the $24 \times 47k$ resistors

10. Solder the single 120k resistor

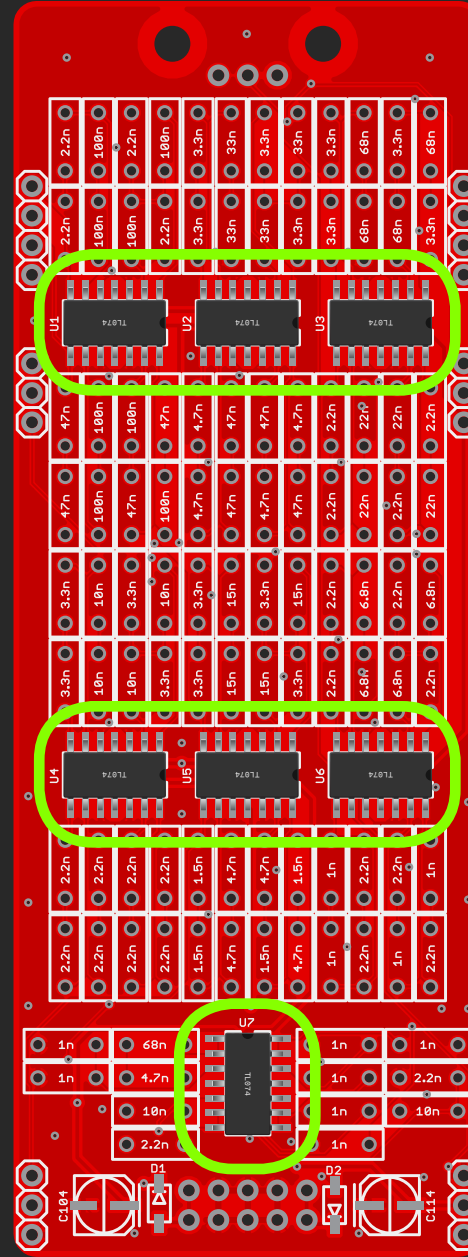
11. Solder the $4 \times 150k$ resistors



12



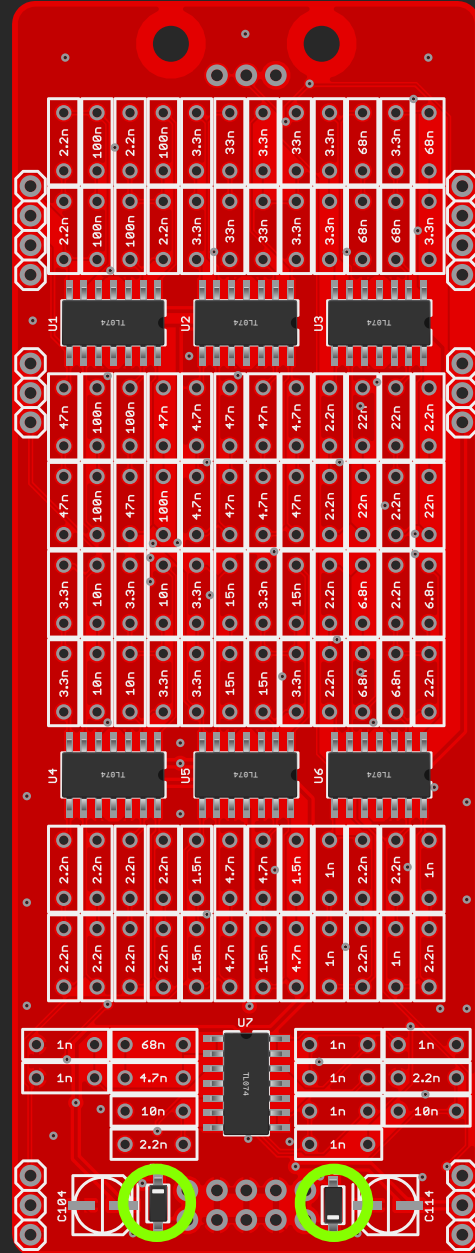
13



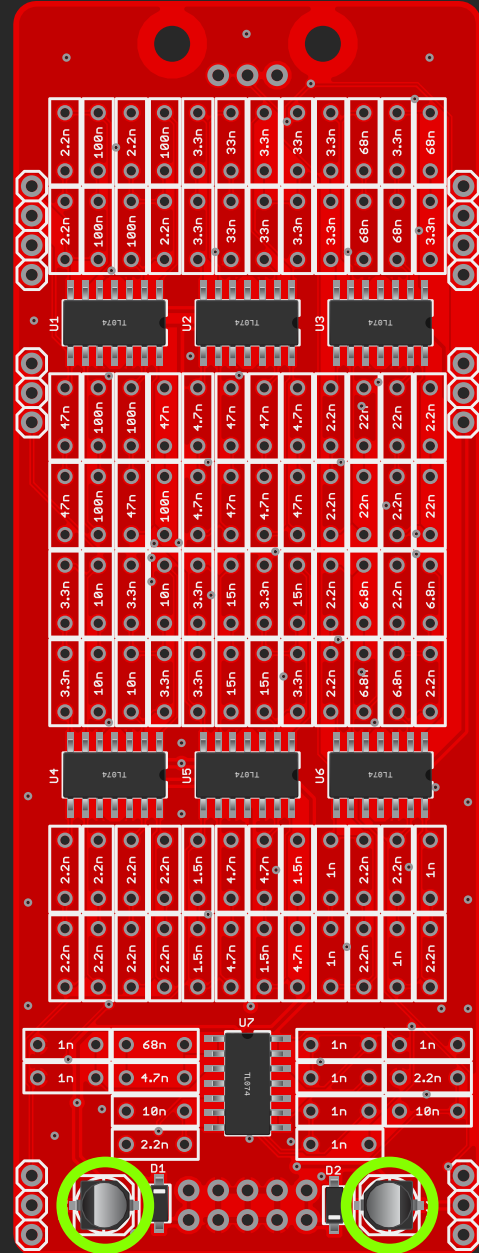
14

02. BUILD

12. Solder the $7 \times 100\text{nF}$ capacitors
13. Turn the board around, and orient it as on the left
14. Solder the $7 \times \text{TL074}$ ICs
(Check the orientation of the ICs!)



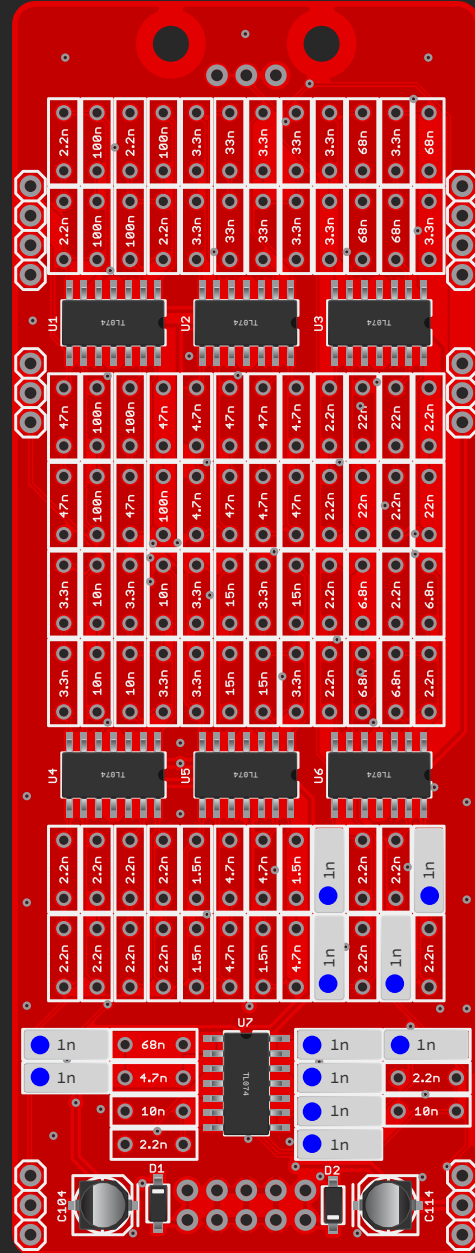
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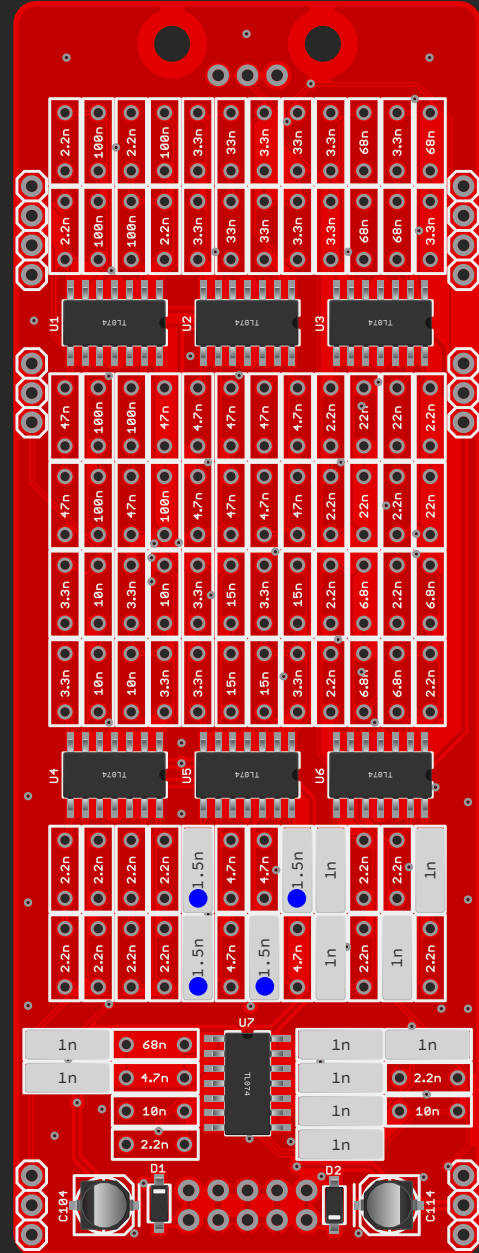
16

02. BUILD

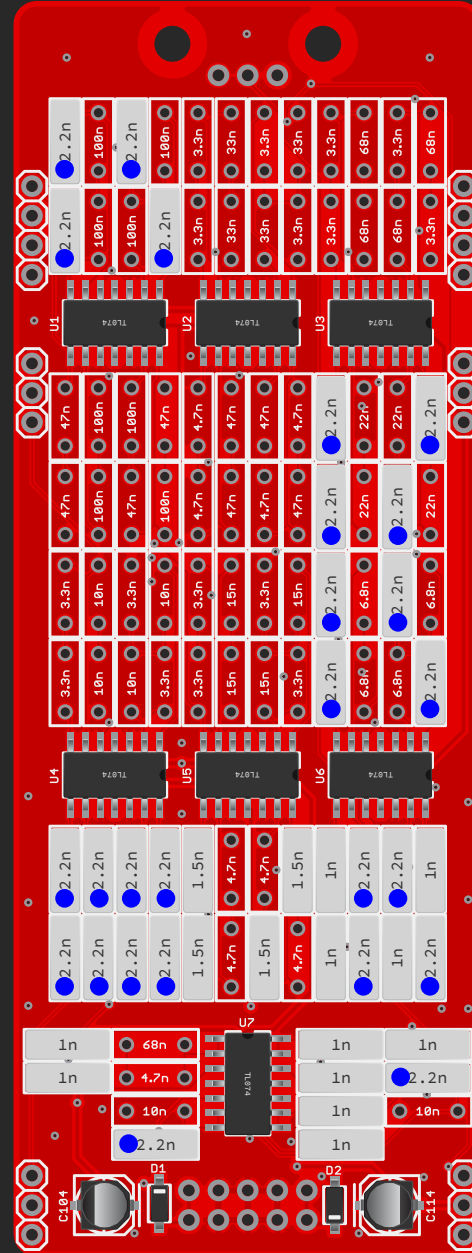
15. Solder the two diodes
(Orientation matters, check the marking on the diodes and the PCB)
16. Solder the two 10uF electrolytic capacitors
(Orientation matters! Match shape with PCB drawing)



17



18



19

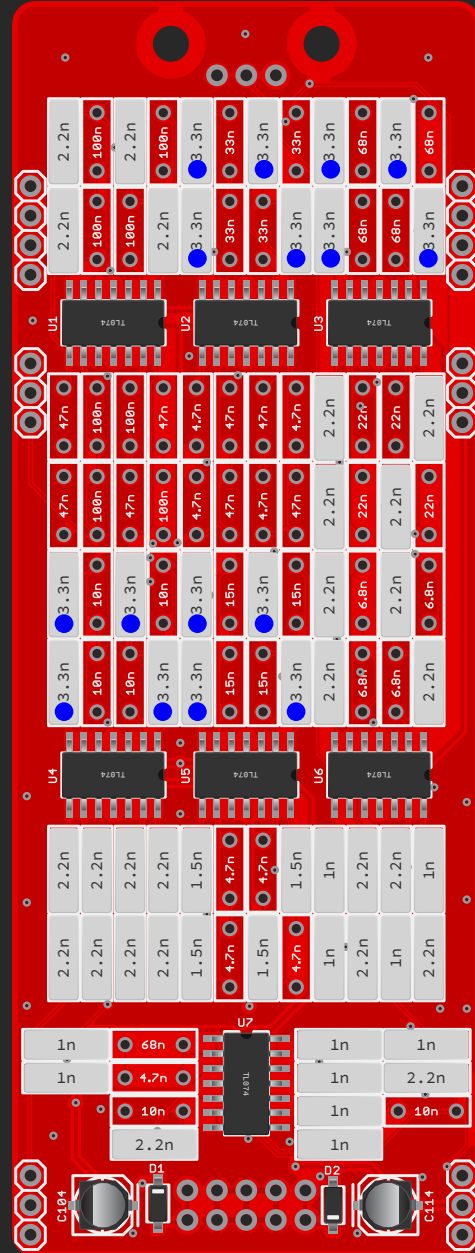
02. BUILD

For the following part (for the box capacitors) it's suggested not to solder all capacitors one-by-one, rather place all of them, then put some tape over them, from top to bottom, then flip the board and solder all of them in one go.

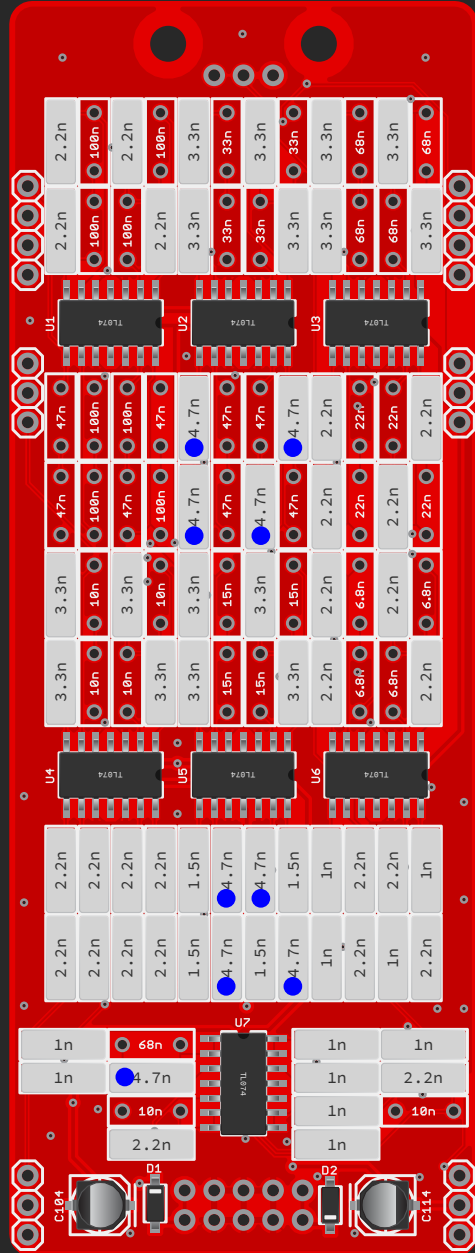
17. Solder the $11 \times 1\text{nF}$ capacitors

18. Solder the $4 \times 1.5\text{nF}$ capacitors

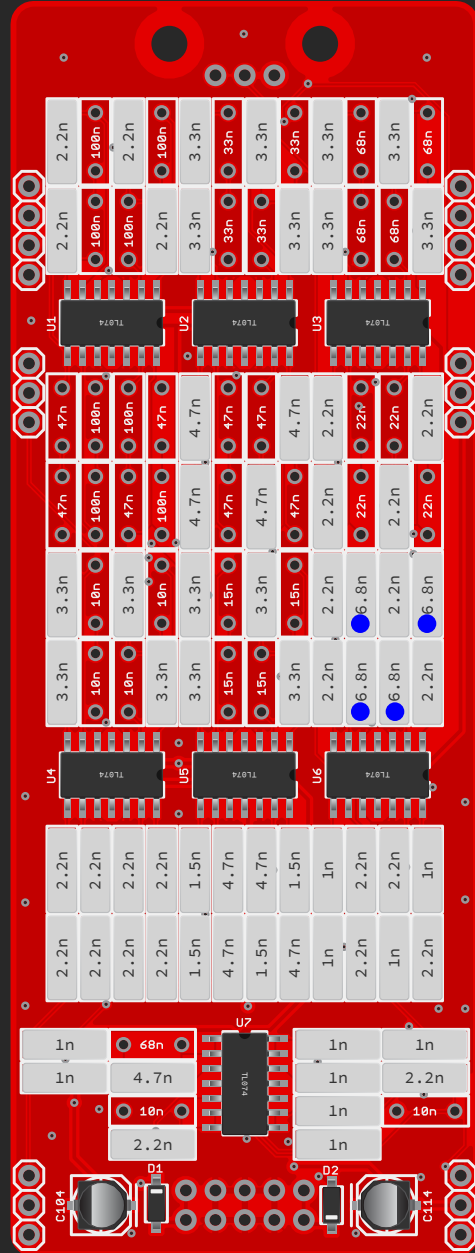
19. Solder the $26 \times 2.2\text{nF}$ capacitors



20



21



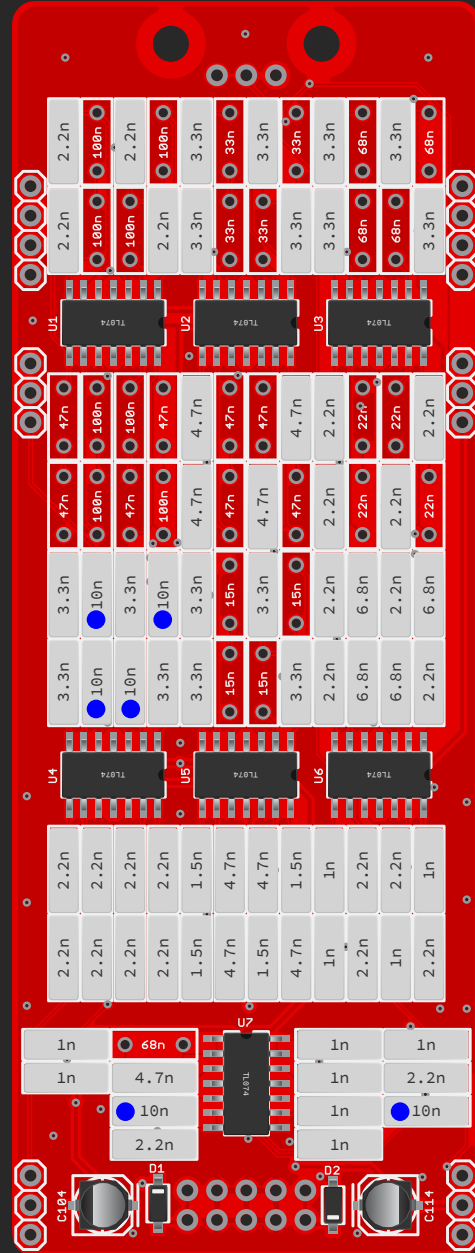
22

02. BUILD

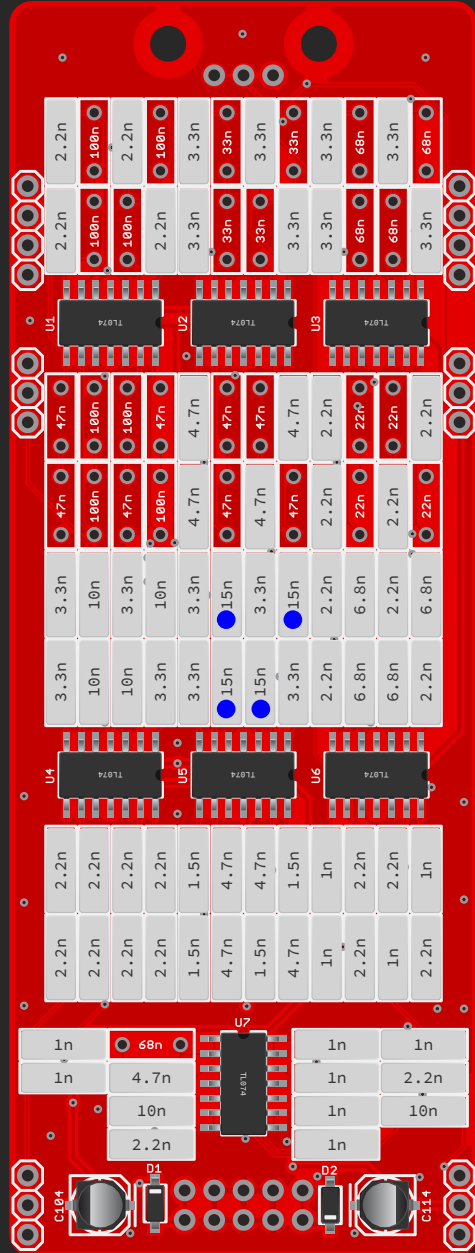
20. Solder the $16 \times 3.3\text{nF}$ capacitors

21. Solder the $9 \times 4.7\text{nF}$ capacitors

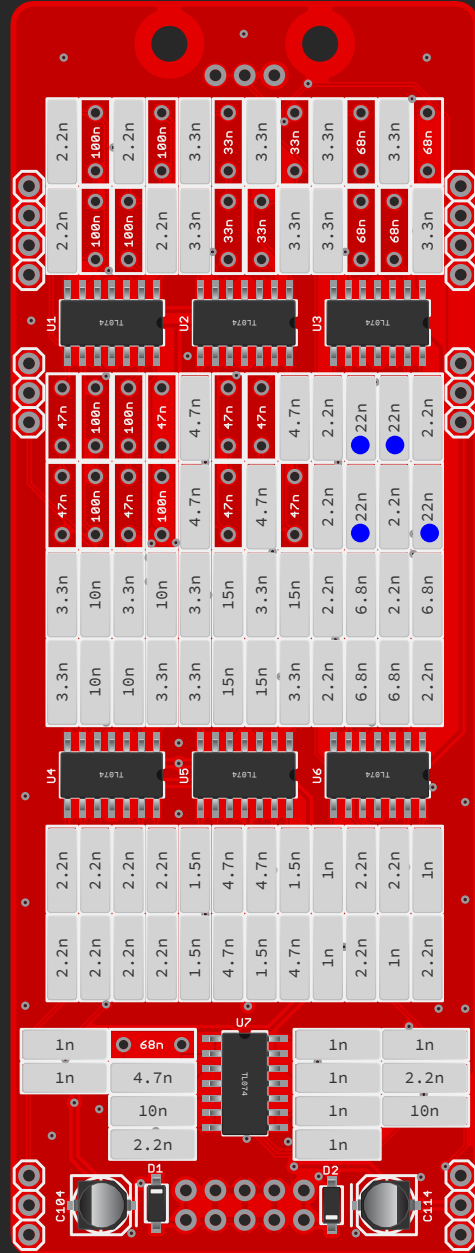
22. Solder the $4 \times 6.8\text{nF}$ capacitors



23



24



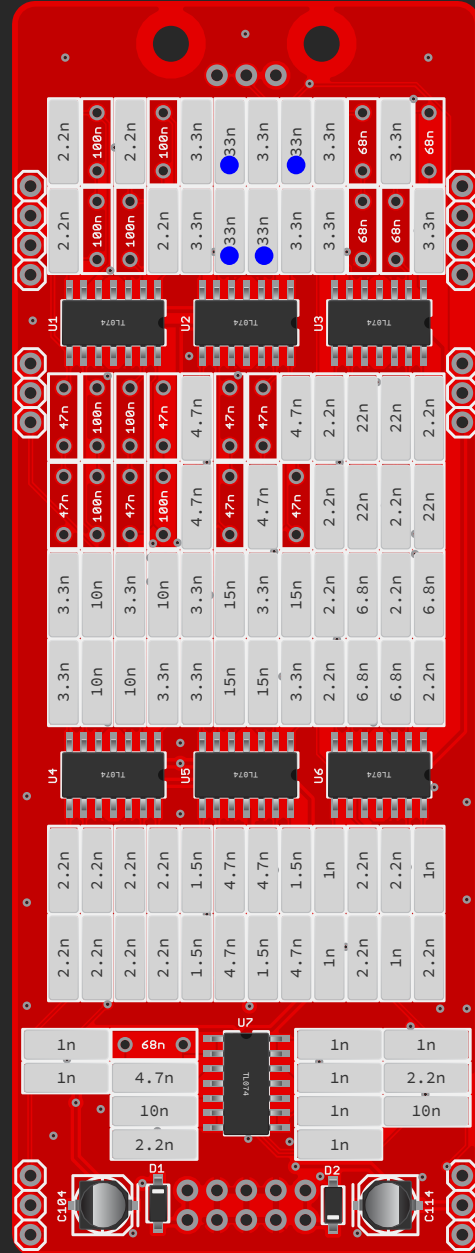
25

02. BUILD

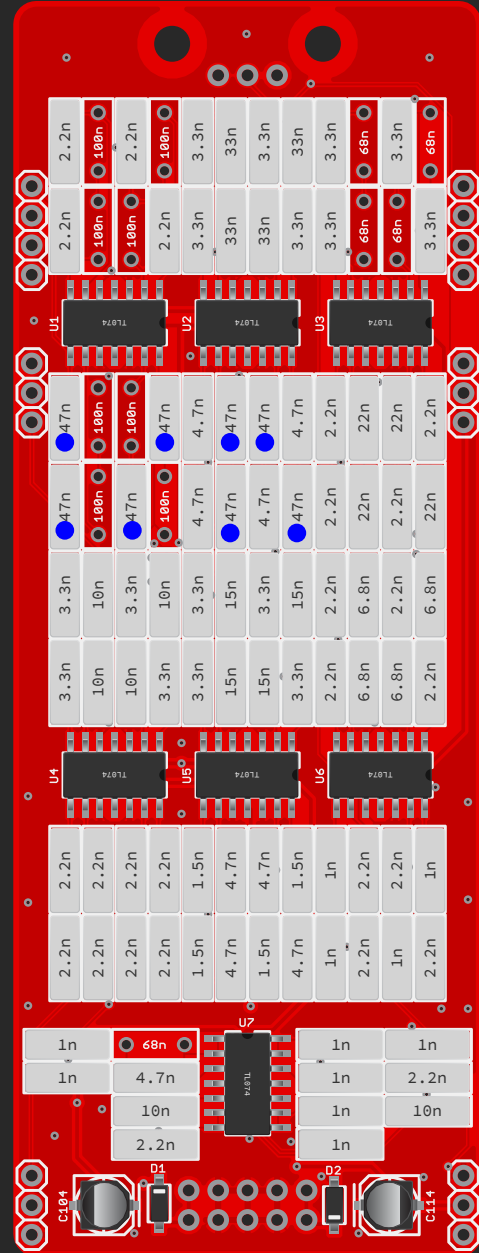
23. Solder the 6 × 10nF capacitors

24. Solder the 4 × 15nF capacitors

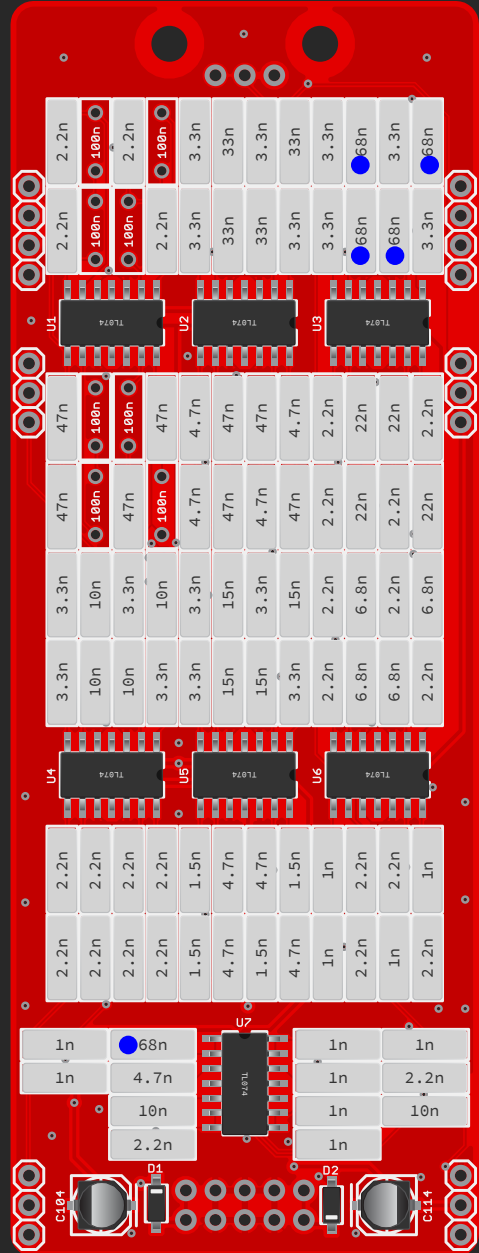
25. Solder the 4 × 22nF capacitors



26



27



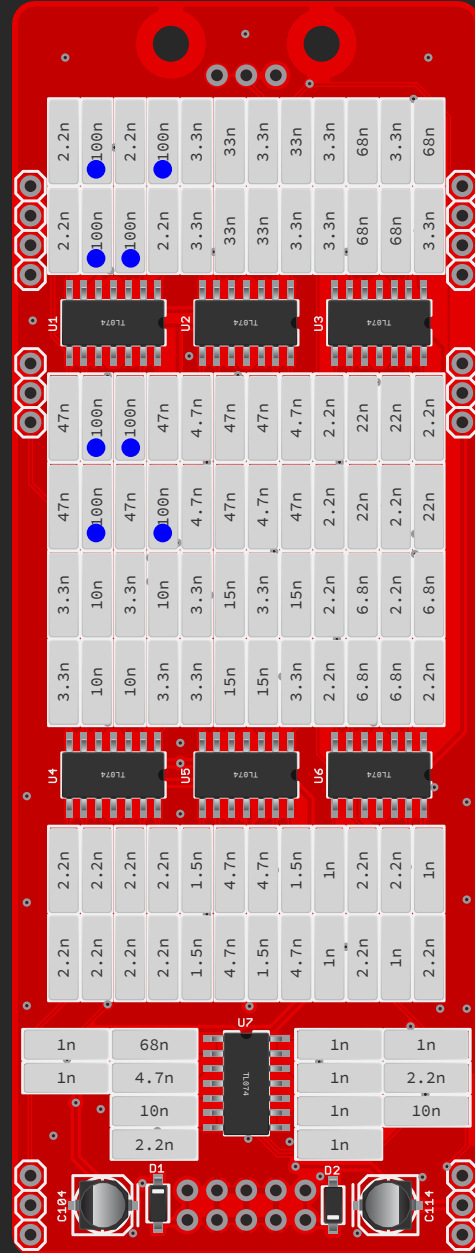
28

02. BUILD

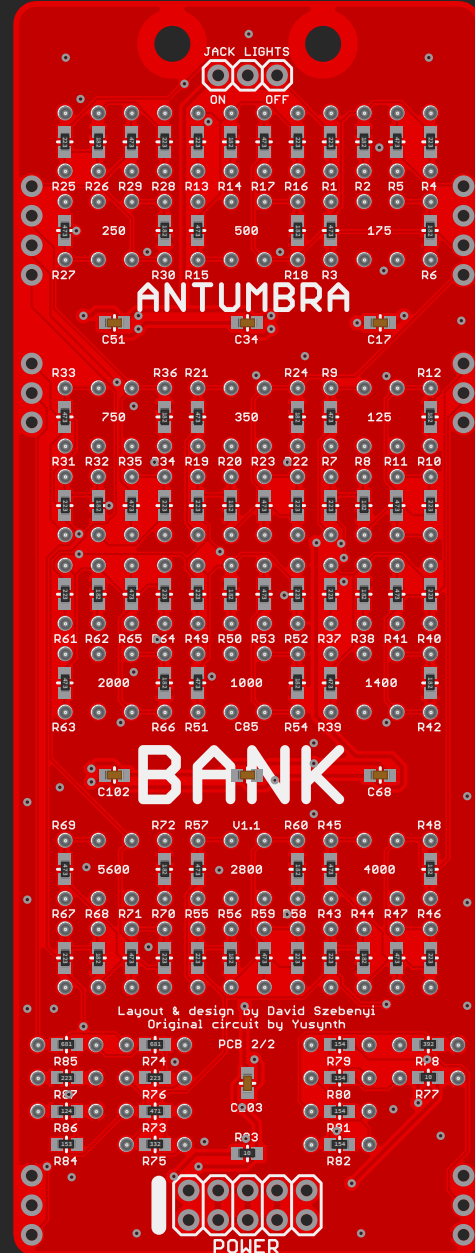
26. Solder the 4 × 33nF capacitors

27. Solder the 8 × 47nF capacitors

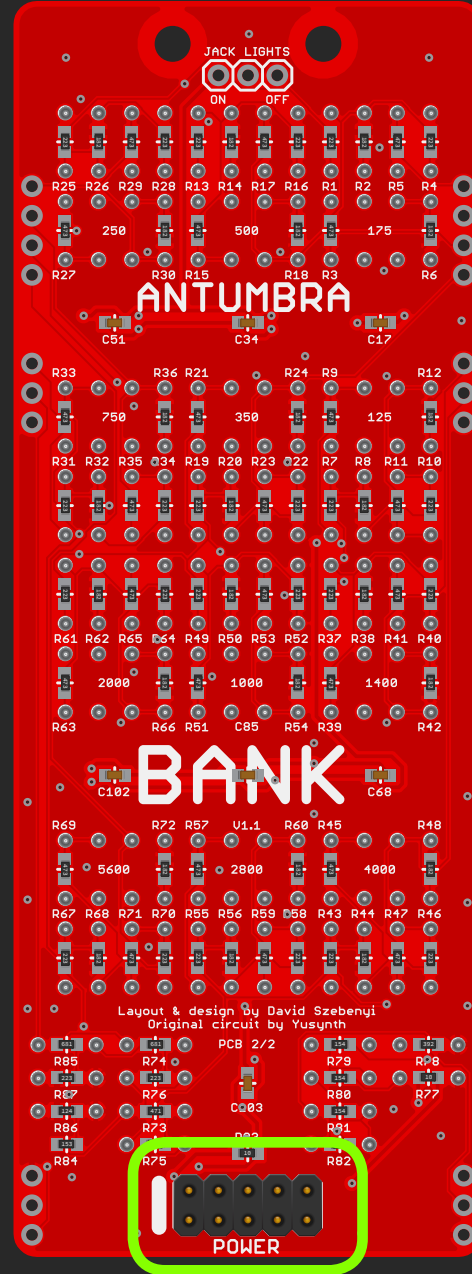
28. Solder the 5 × 68nF capacitors



29



30



31

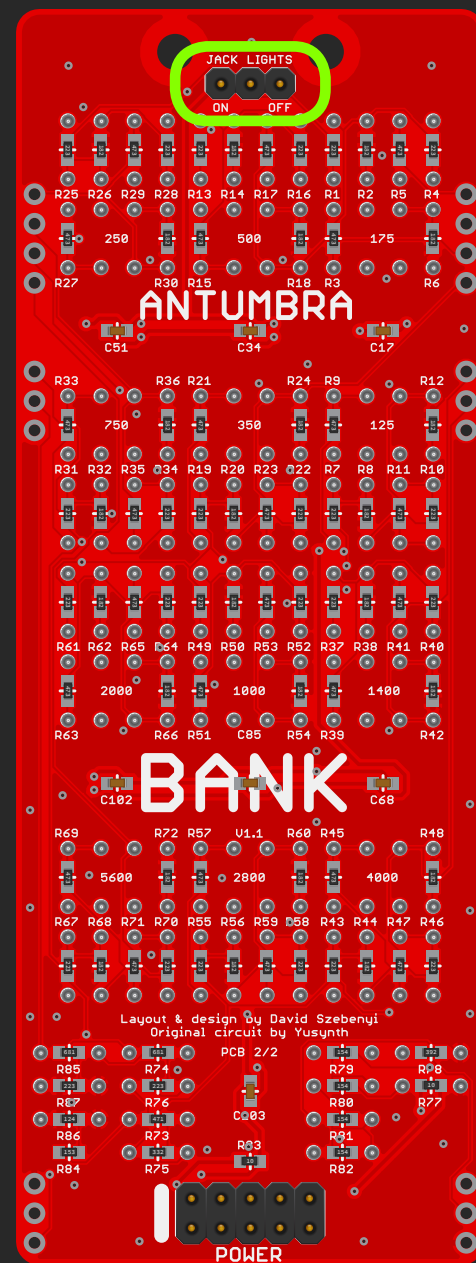
02. BUILD

29. Solder the $8 \times 100\text{nF}$ capacitors

If you didn't solder the box capacitors, now is the time!

30. Flip the board again

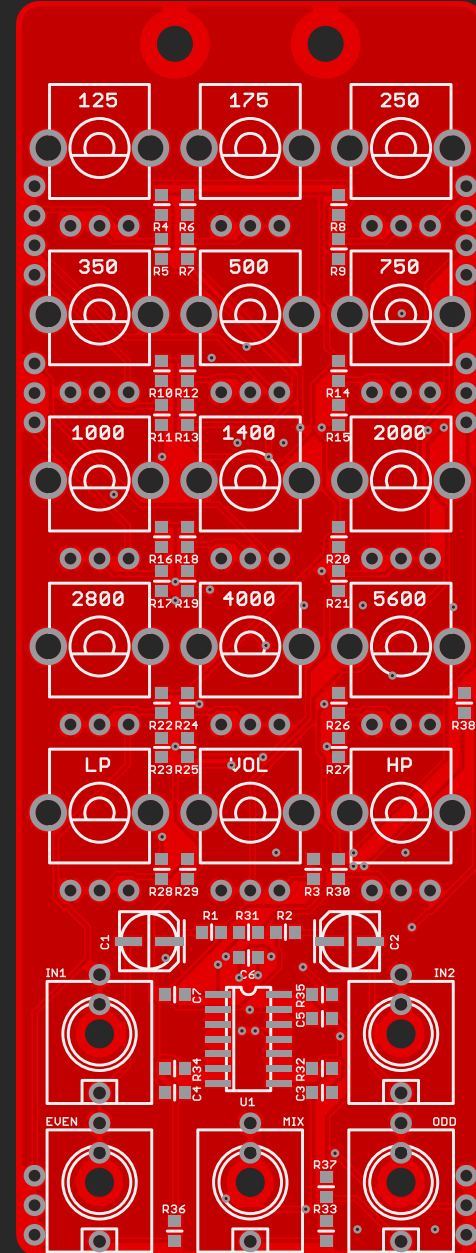
31. Solder the 2x5pin power header



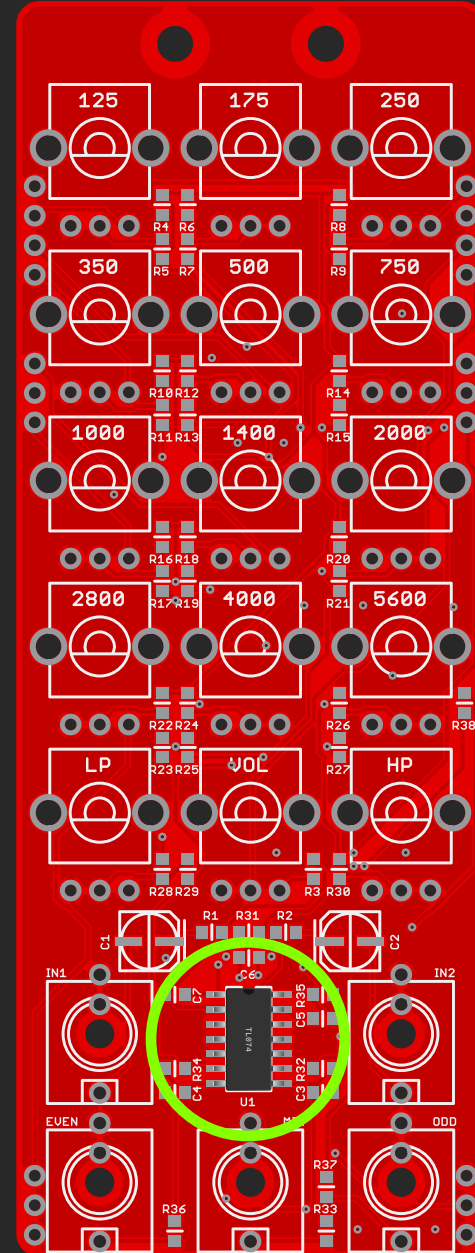
02. BUILD

32. Solder the 1x3pin header

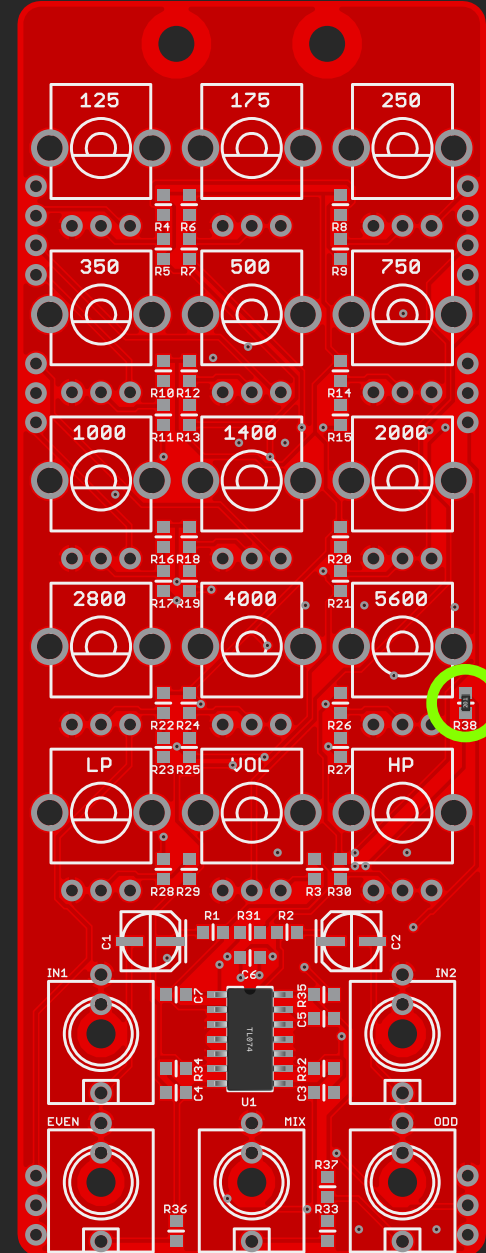
You are done for now with board 2



00



01



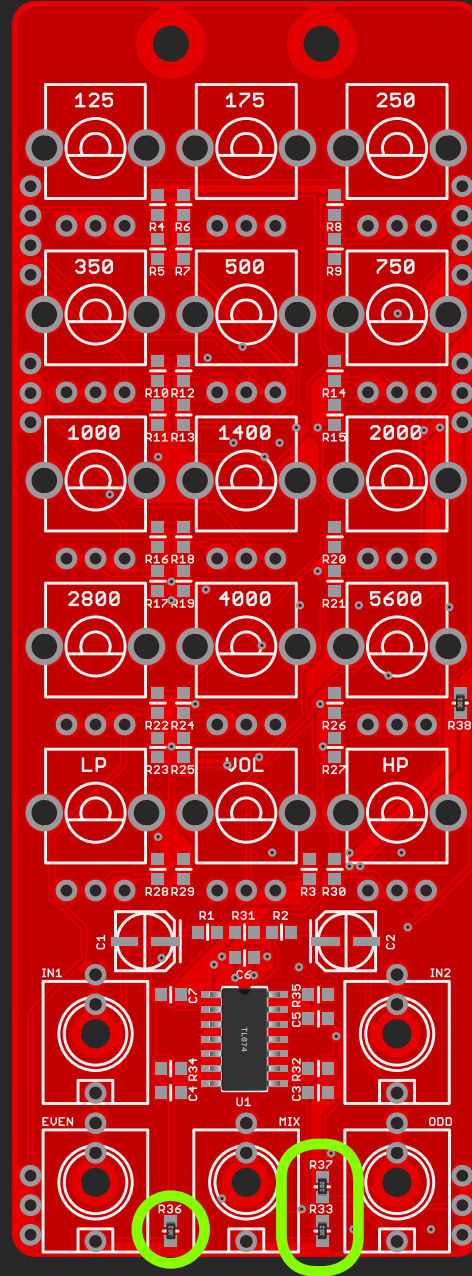
02

02. BUILD

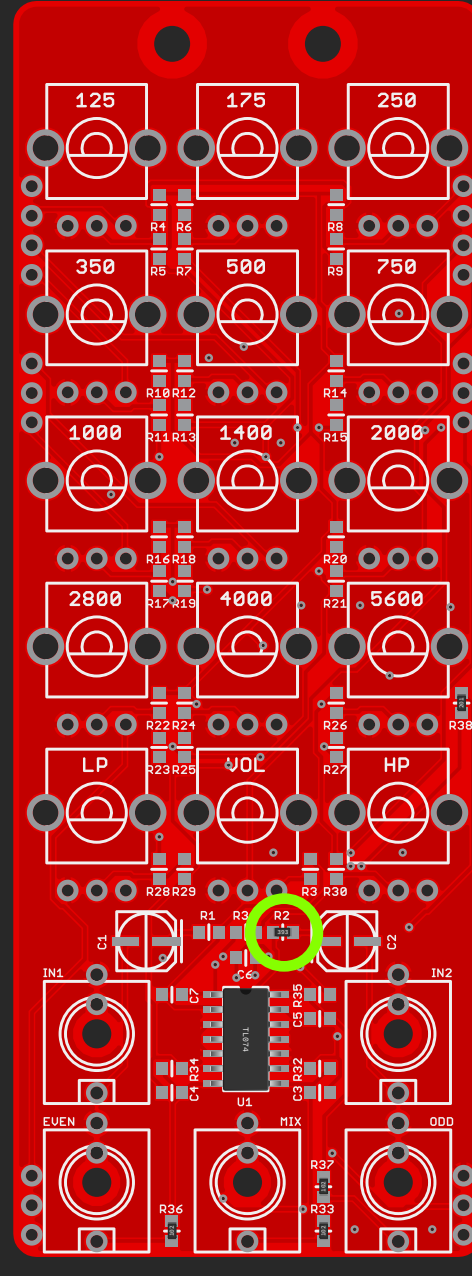
00. Orient the PCB as seen on the left

01. Solder the TL074 in place
(Oriented to the top)

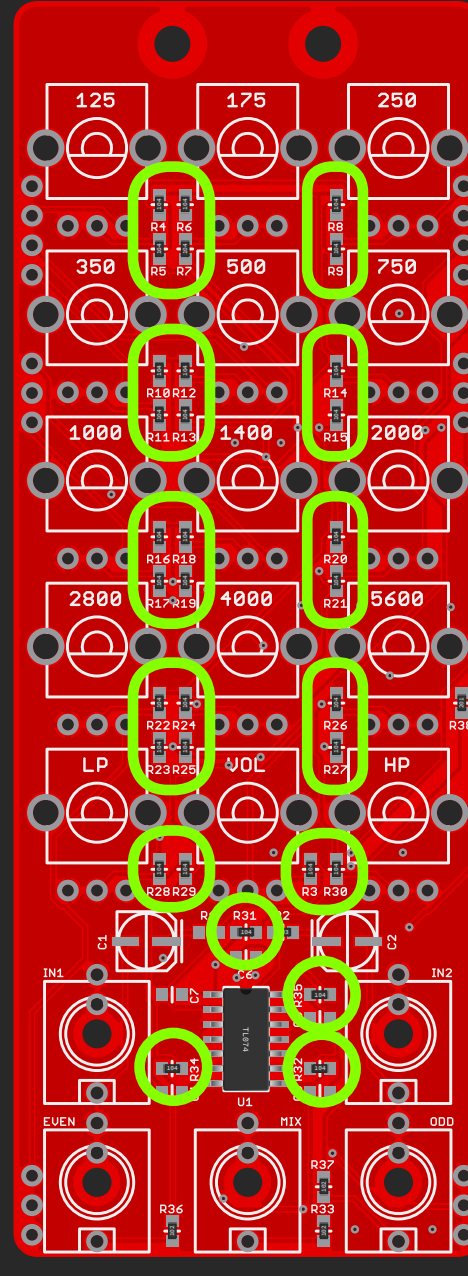
02. Solder the 68 ohm resistor in place
This is for the jack LEDs



03



04



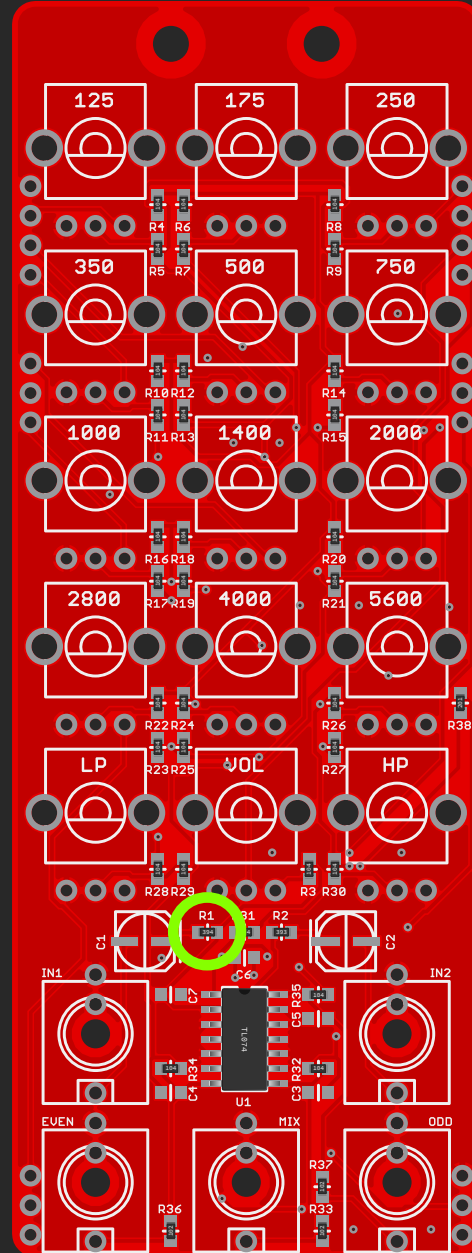
05

02. BUILD

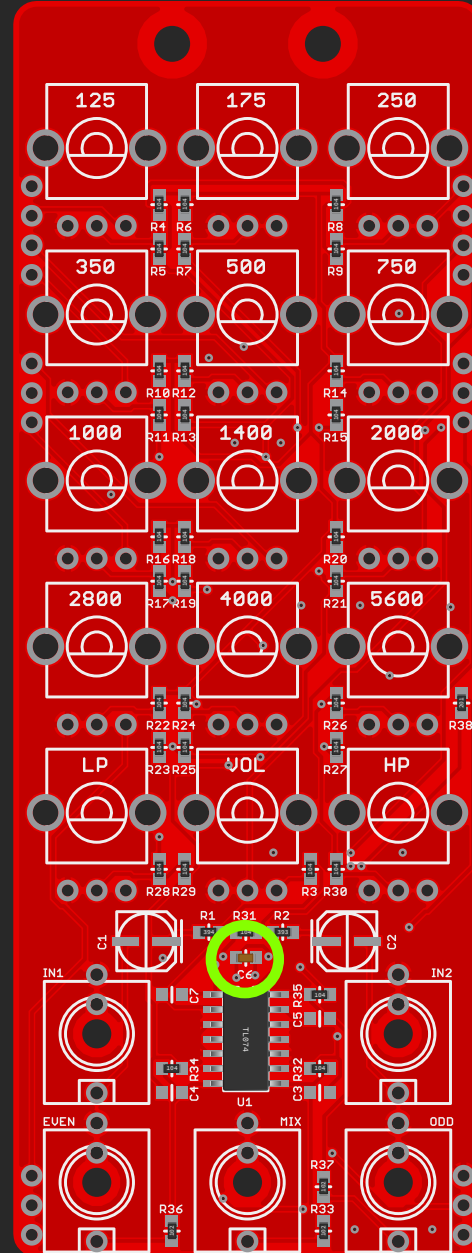
03. Solder the three 1k resistors

04. Solder the single 39k resistor

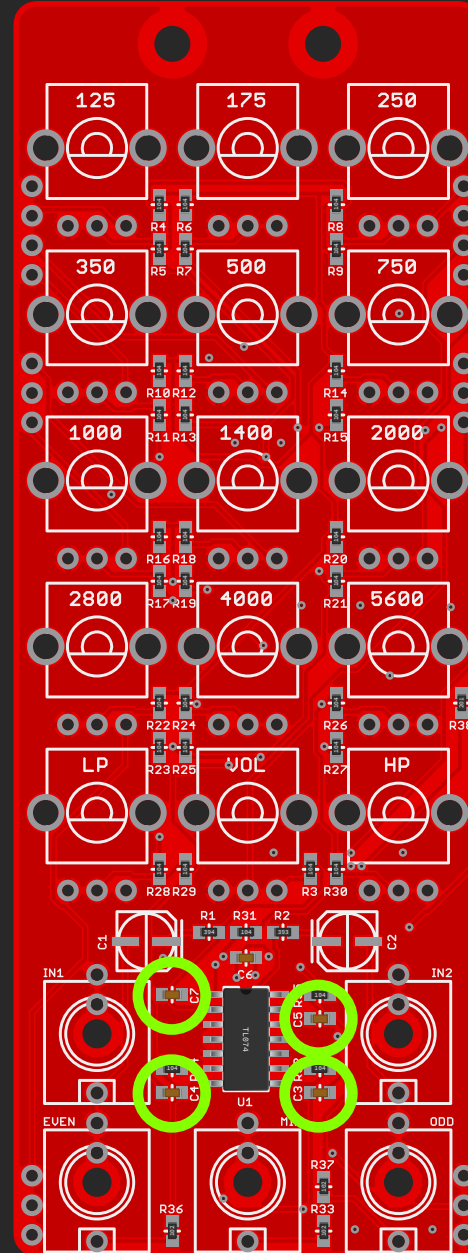
05. Solder the 32 × 100k resistors



06



07



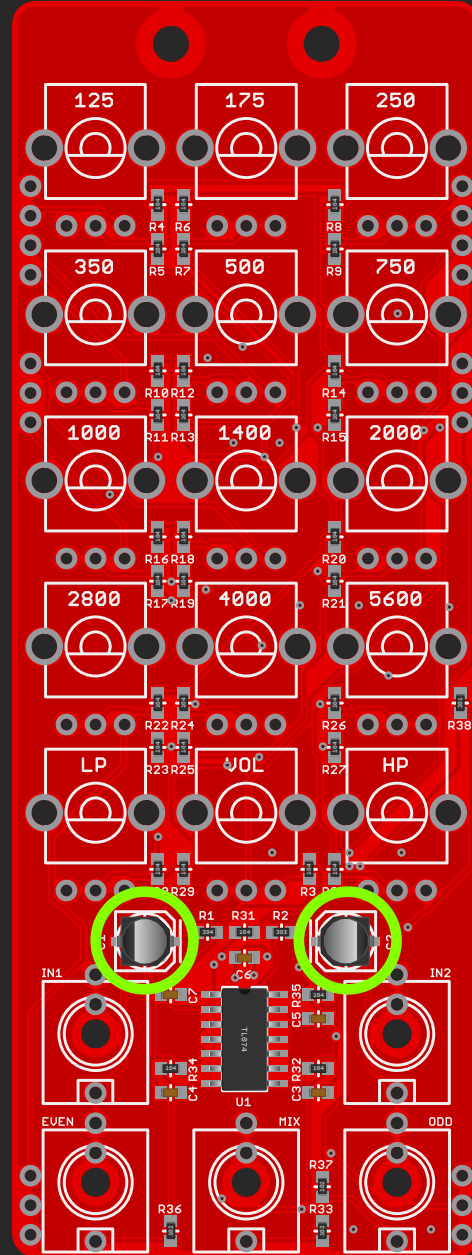
08

02. BUILD

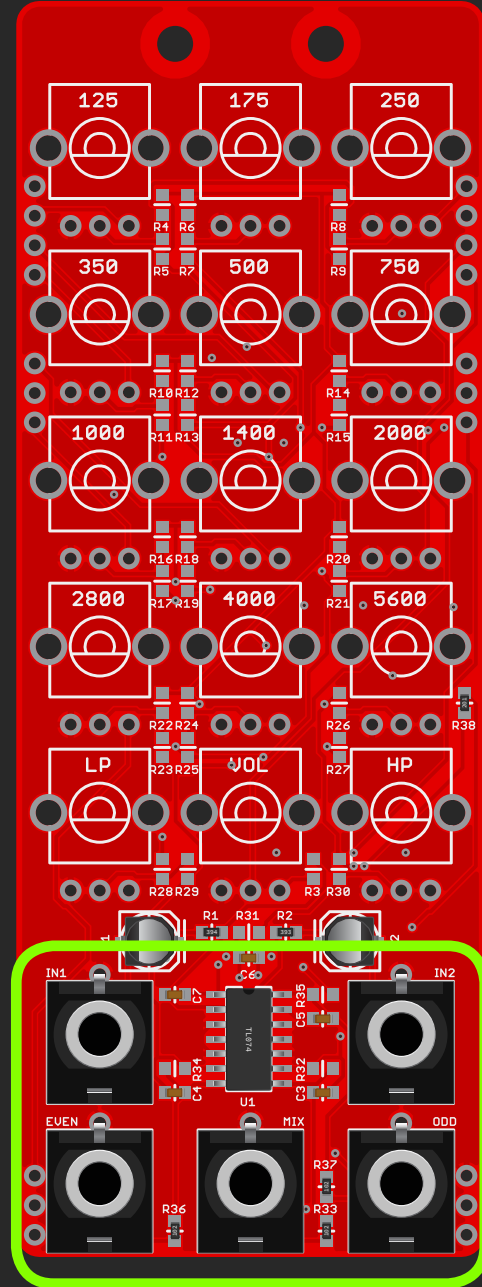
06. Solder the single 390k resistor

07. Solder the single 100nF capacitor

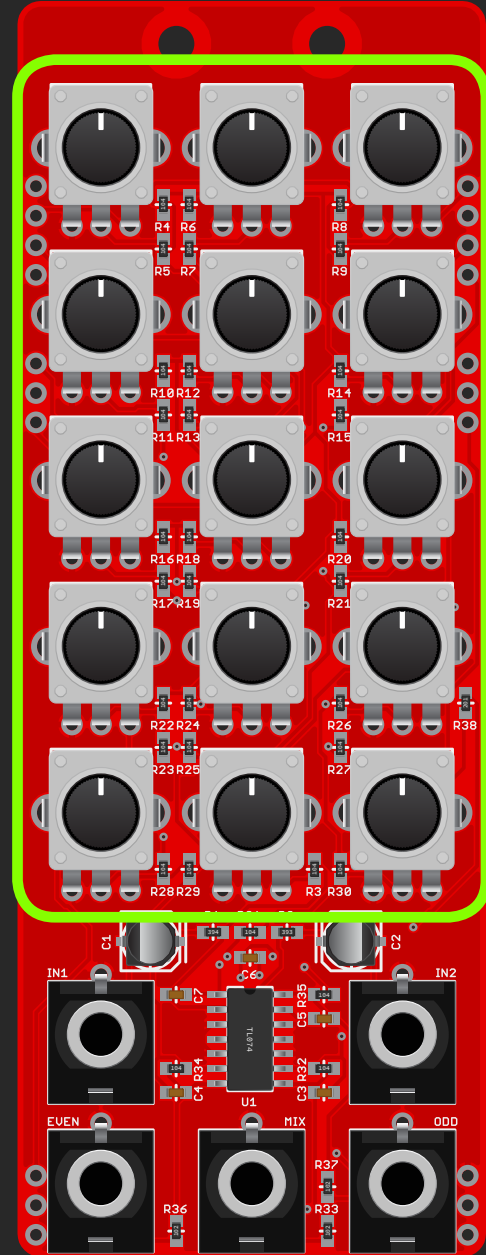
08. Solder the 4 × 22pF capacitors



09



10



11

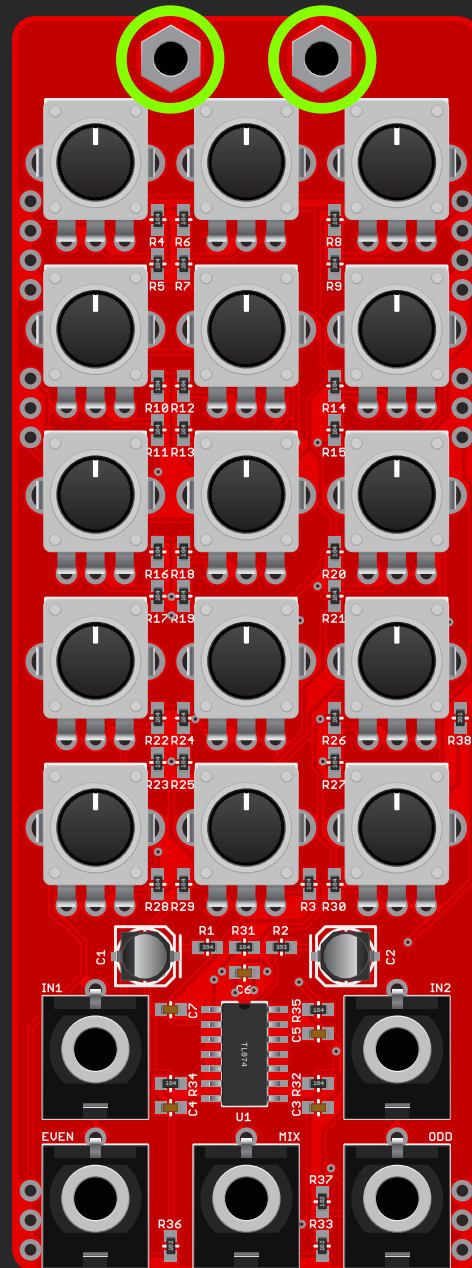
02. BUILD

09. Solder the two 10uF electrolytic capacitors
(Orientation matters! Match shape with PCB drawing)

DO NOT SOLDER FOR THE NEXT STEPS!

10. Place the five jacks

11. Place the 15 × A10k potentiometers



12



13



14

02. BUILD

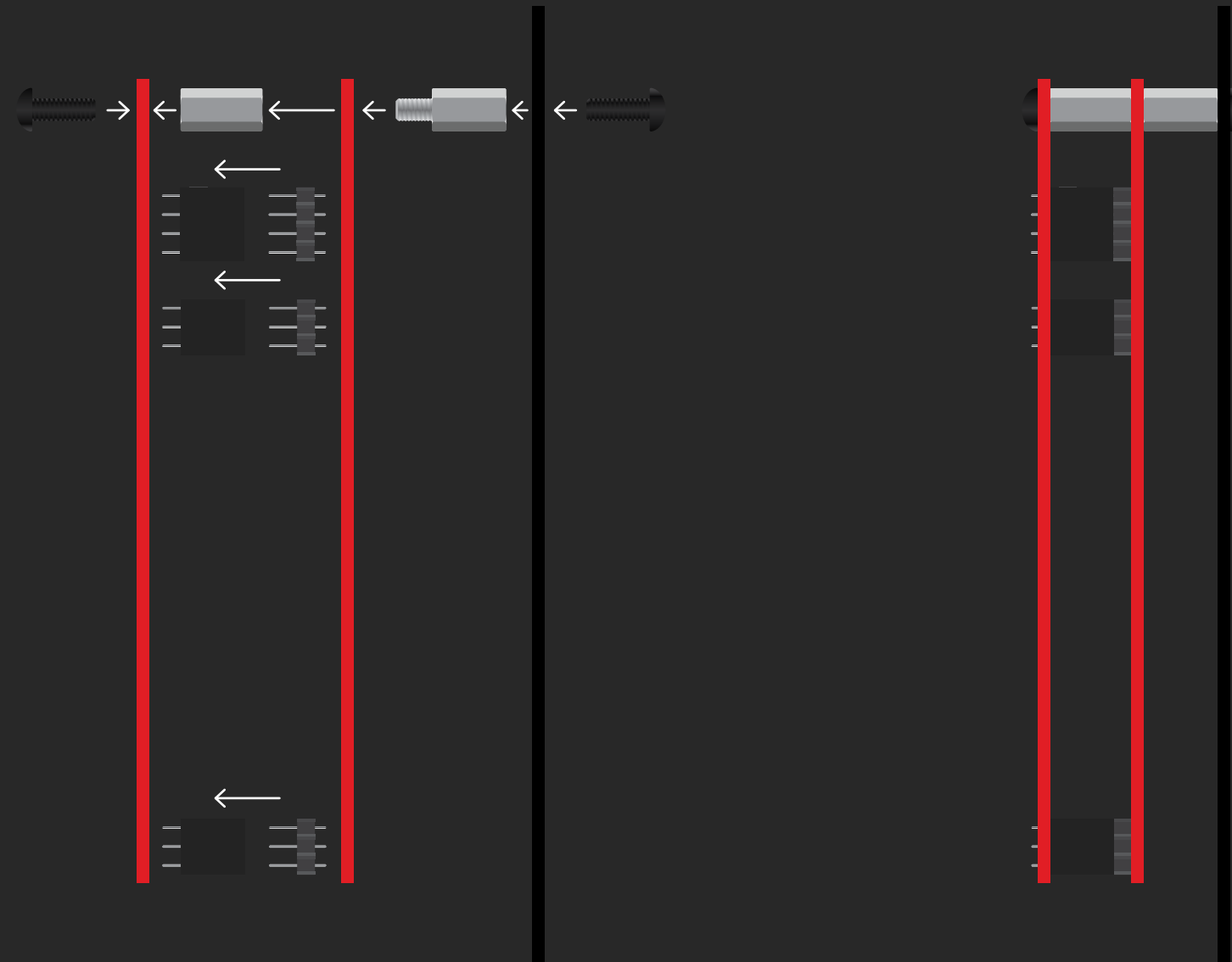
12. Place the 10mm spacers

Now put on the panel, screw in the screws in the spacers, align all pots and jacks as you like them. It's suggested to put the nuts on the jacks too to hold them in place. Now solder all the pots and jacks on the back of the board.

13. Flip the board

14. Solder the SMD LEDs

Check the orientation! (illustrated)



02. BUILD

Now to assemble the two boards, put the male headers in the female headers, add the spacers and tighten them, then solder the headers on both sides. Make sure that the two boards fit tightly.



BANK is designed by David Szebenyi under Antumbra.
Original circuit design by Yusynth (www.yusynth.net)

www.antumbra.eu

Manual by David Szebenyi (www.aman.hu)

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