

- 8HP Eurorack Module
- Designed in E.U.



# Shakmat Archer's Rig Building Guide

# Thank You for purchasing a Shakmat DIY Kit!

We spare no effort in our packaging process to prevent any mistakes or missing parts. In this document as well, we tried our best to describe the assembly process in the most practical and comprehensive way. Therefore, we strongly advised you to follow the steps as described in this guide :)

If by any chance there is a missing or damaged part in your kit, feel free to contact us at [shakmat.com/support](https://shakmat.com/support)

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# Content

## Pack 1

3x 8 pin female headers  
3x 8 pin male headers  
1x 2x8 pin power header  
3x Tactile switches  
4x Metal potentiometers  
9x Jack mono

## Pack 2

6x Amber LED  
1x Amber LED push button  
2x White LED push button  
1x Green LED push button  
9x Jack nuts  
4x Potentiometer nuts  
2x M3 metal screw  
1x 7 segments display  
3x Tactile switch caps

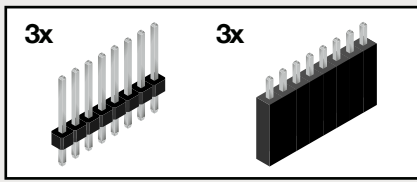
## Pack 3

1x Top PCB  
1x Bottom PCB  
1x Front panel

## Loose parts

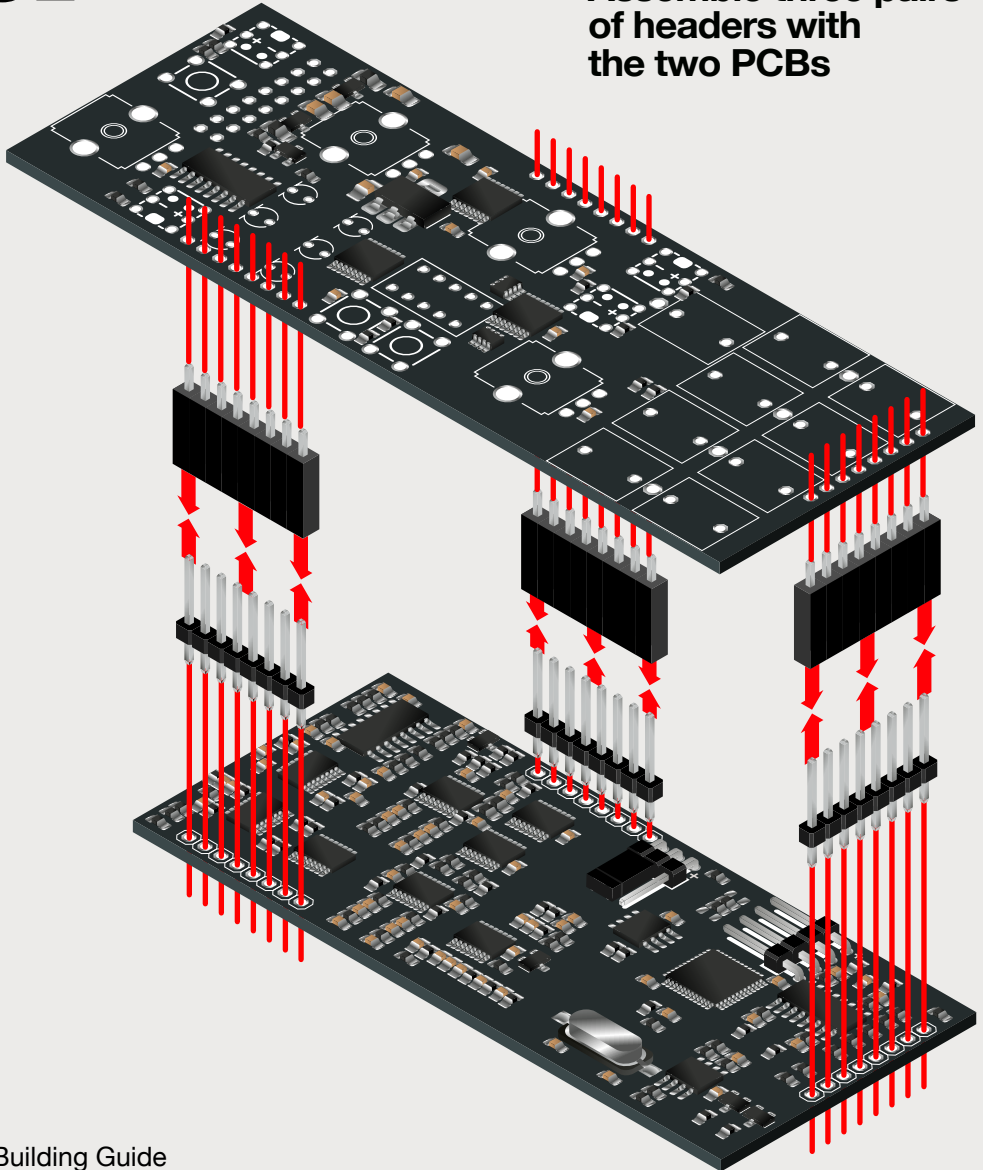
1x 16x16 power cable  
4x Potentiometer caps  
1x User manual

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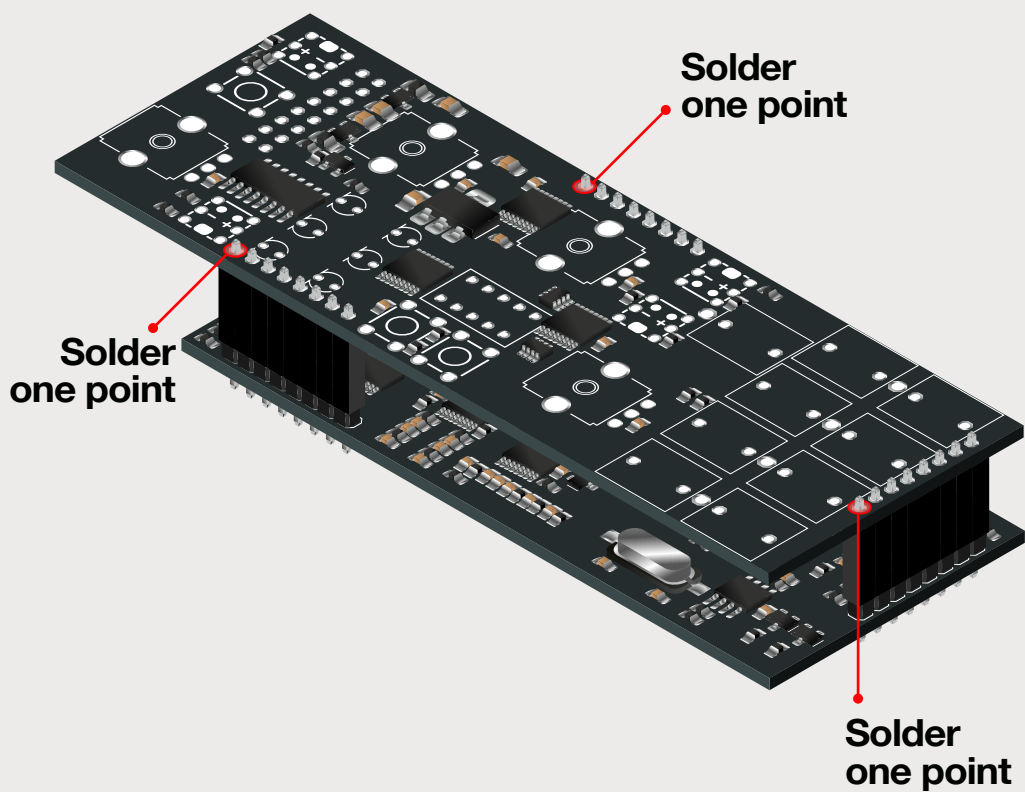
# 01

**Assemble three pairs of headers with the two PCBs**



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# 02

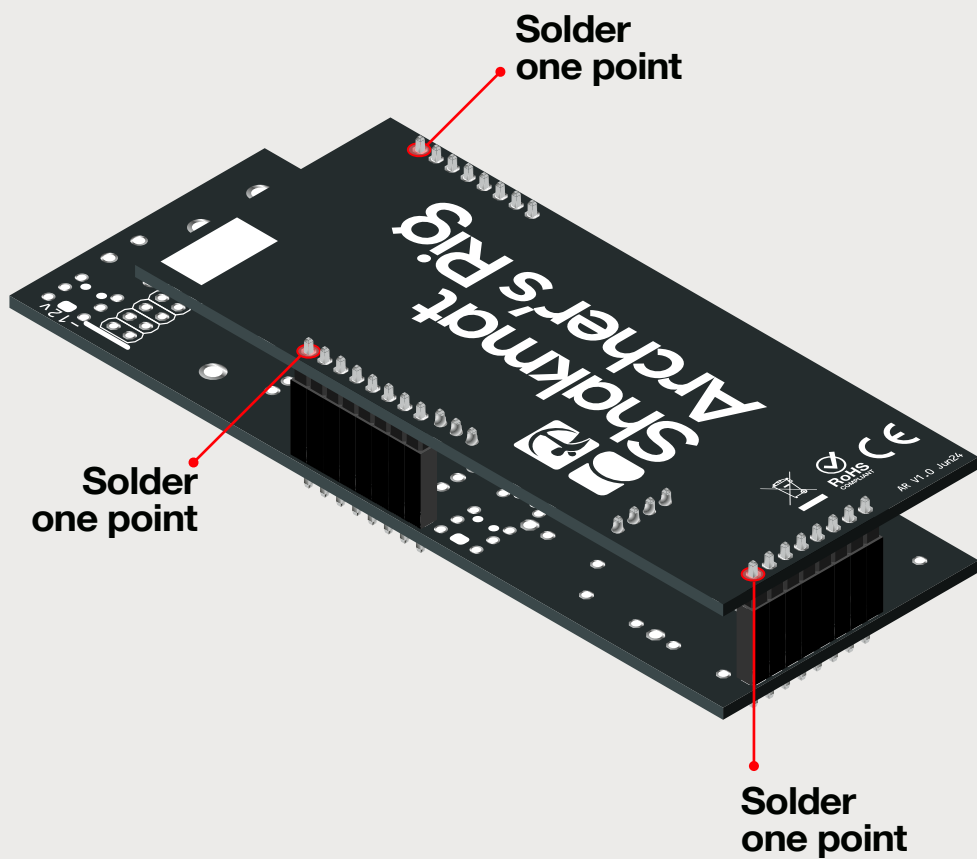


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# 03

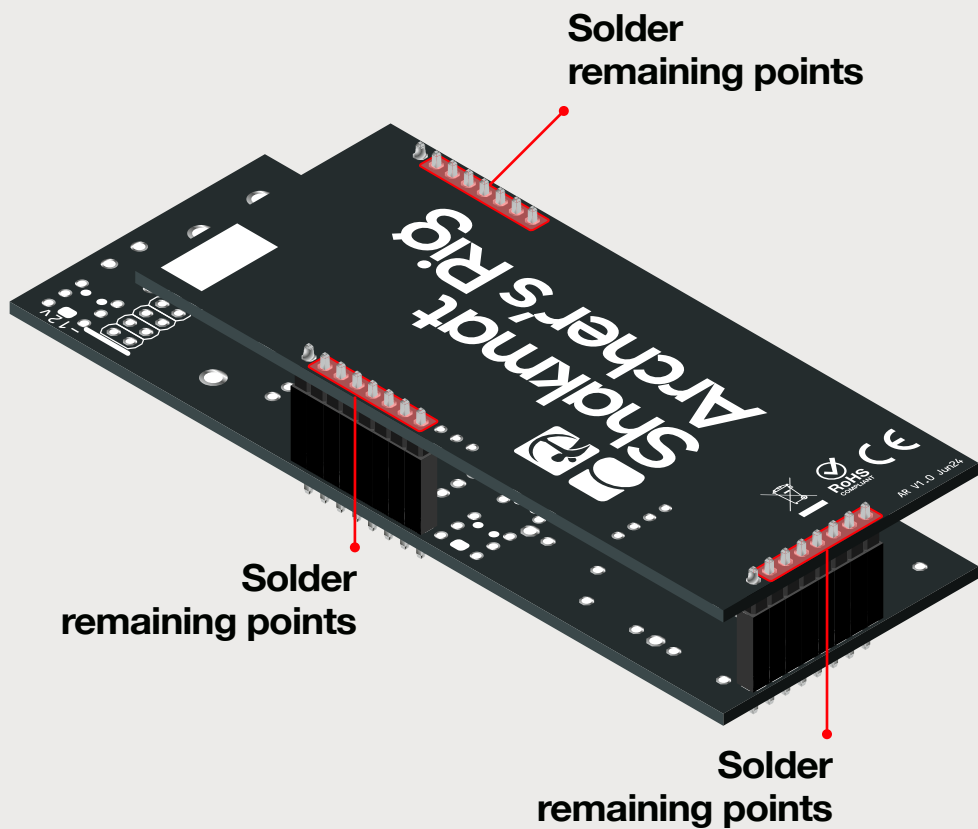
Flip the PCBs

Check PCBs parallelism!



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# 04

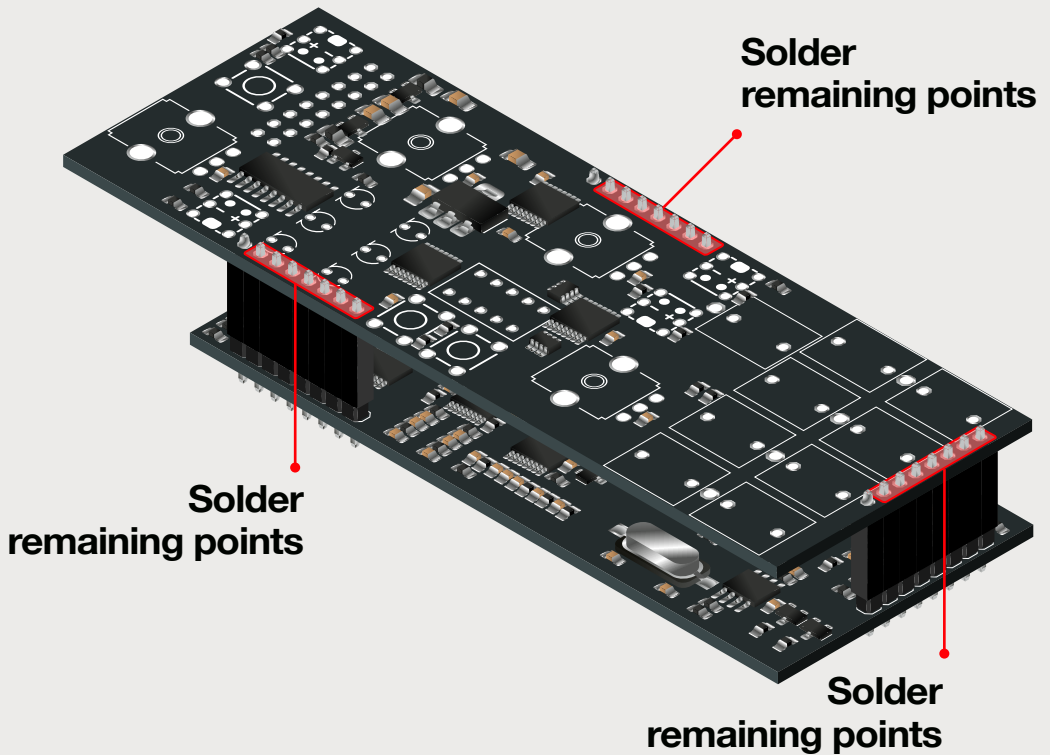


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# 05

Flip the PCBs

Check PCBs parallelism!

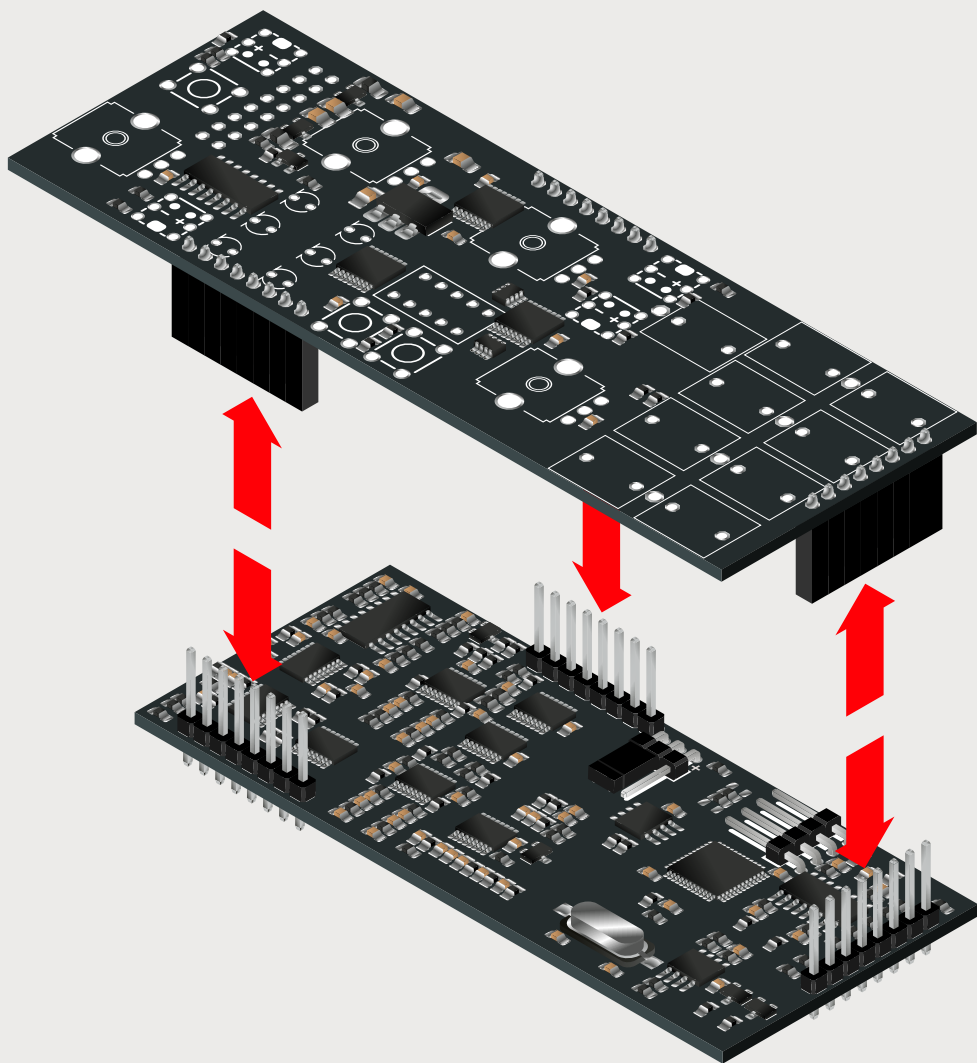


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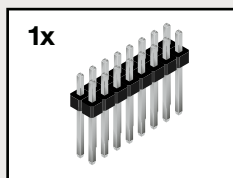


# 06

## Separate the two PCBs Reserve the bottom PCB

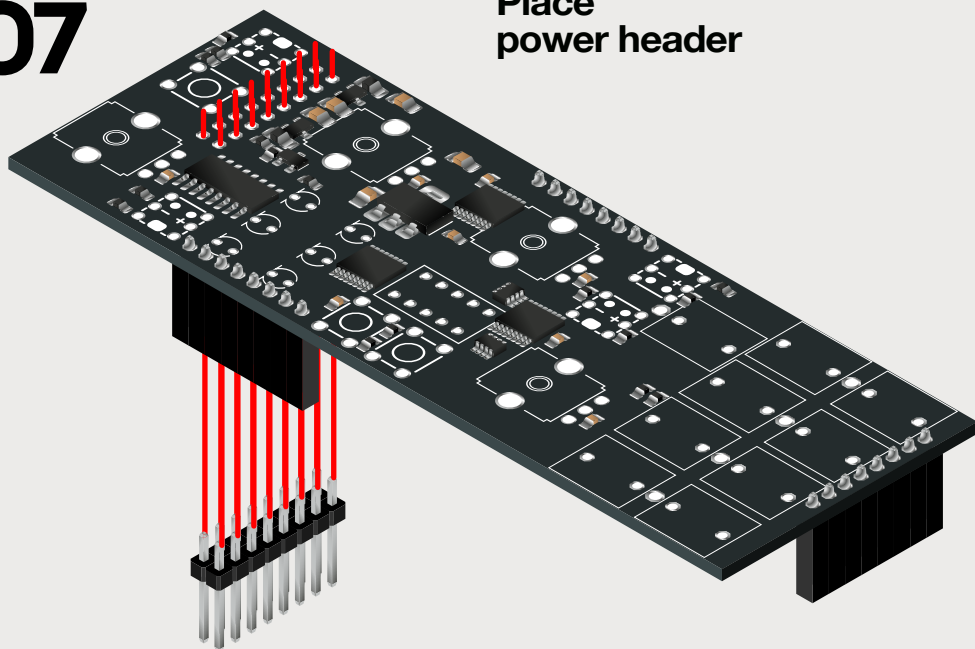


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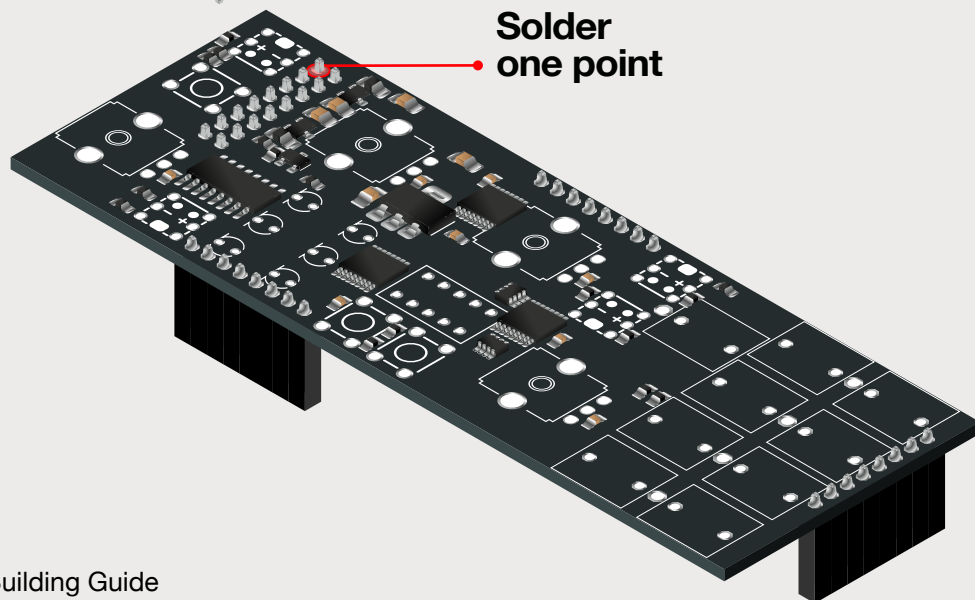


07

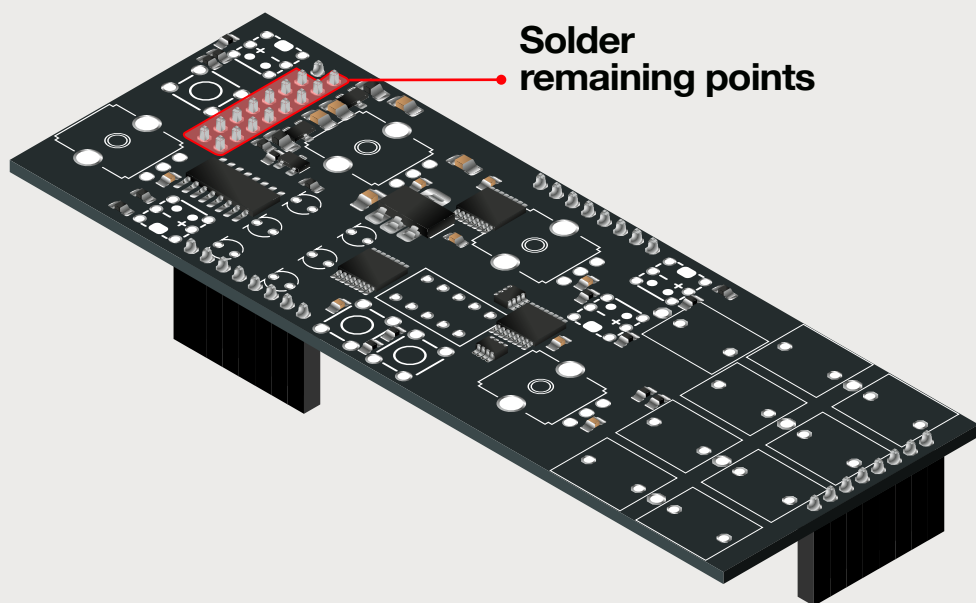
Place  
power header



Solder  
one point

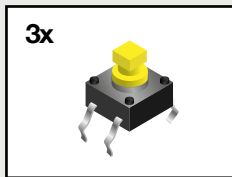


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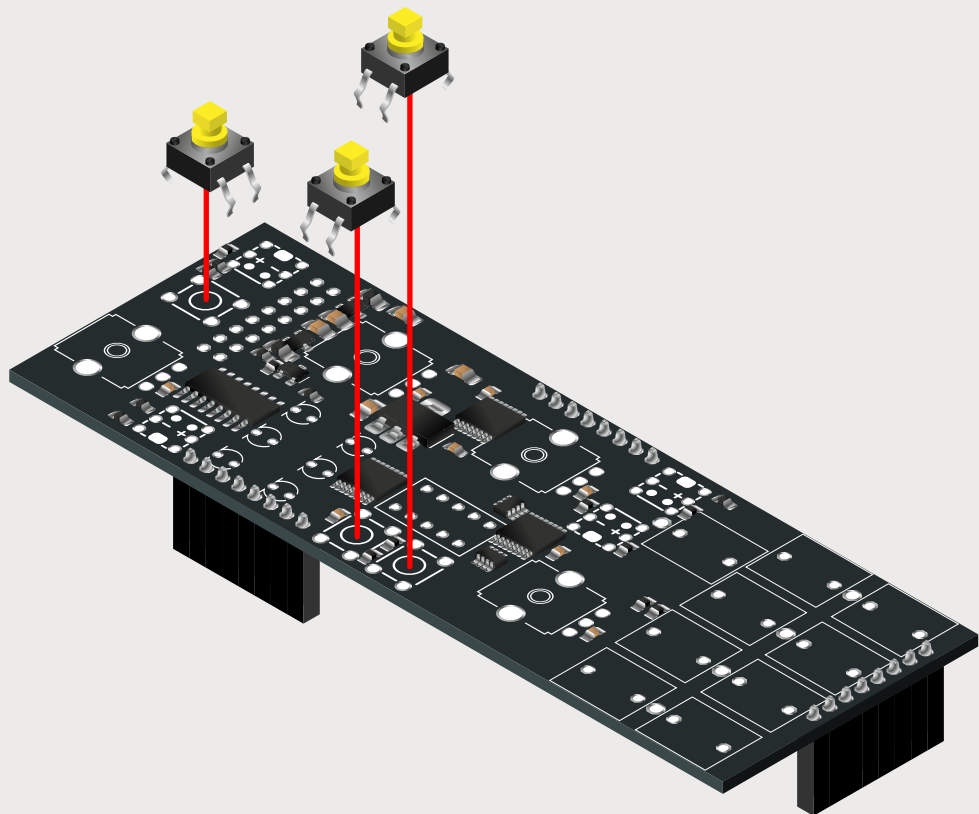


Solder  
remaining points

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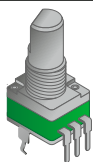


# 09 Place 3 switches but do not solder!



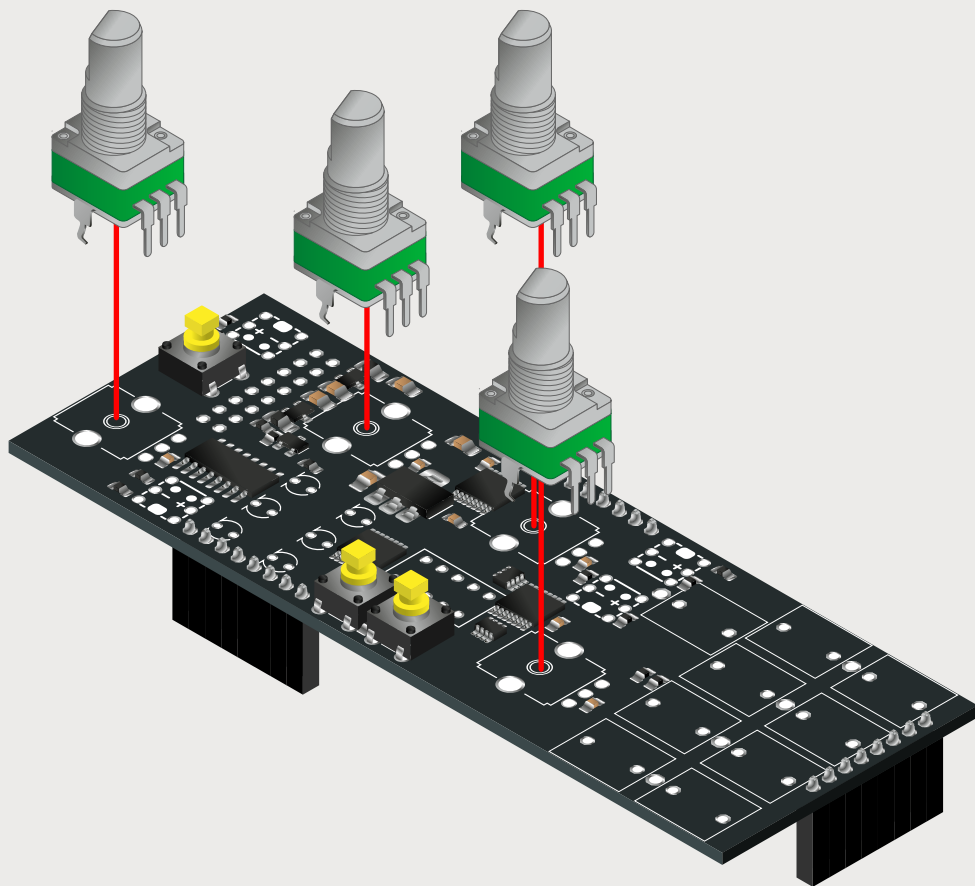
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4x



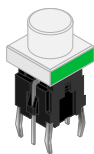
10

Place 4 potentiometers  
but do not solder!



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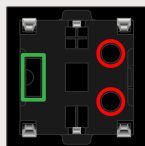
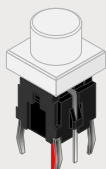
1x



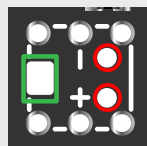
11

## Place 1 green LED push button but do not solder!

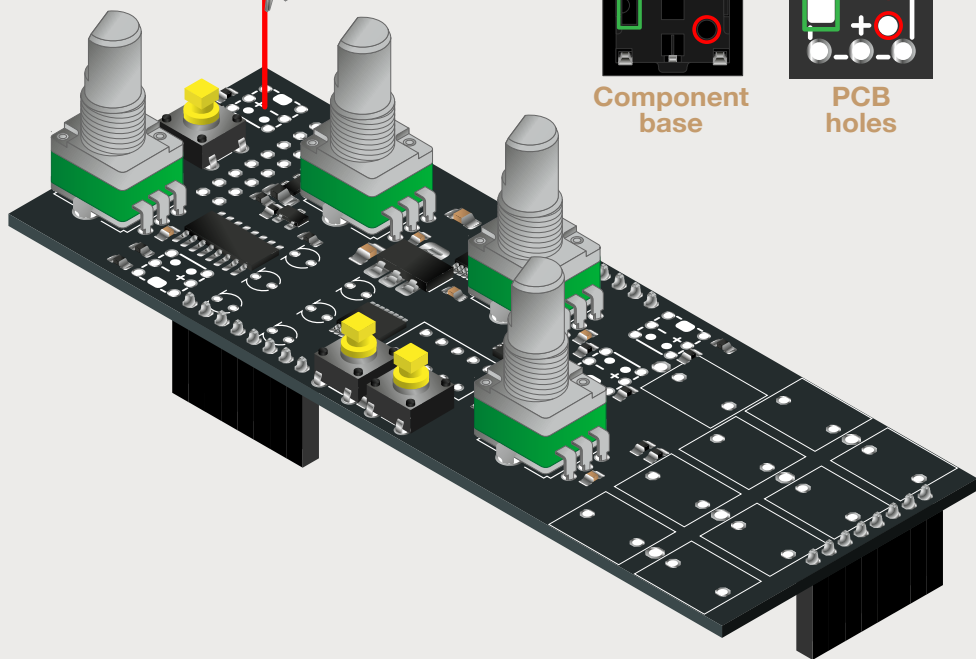
As the buttons embed an LED, you must pay attention to the orientation. The three holes on the PCB have to match the three mouldings on the base of the component as shown below:



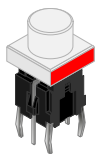
Component base



PCB holes

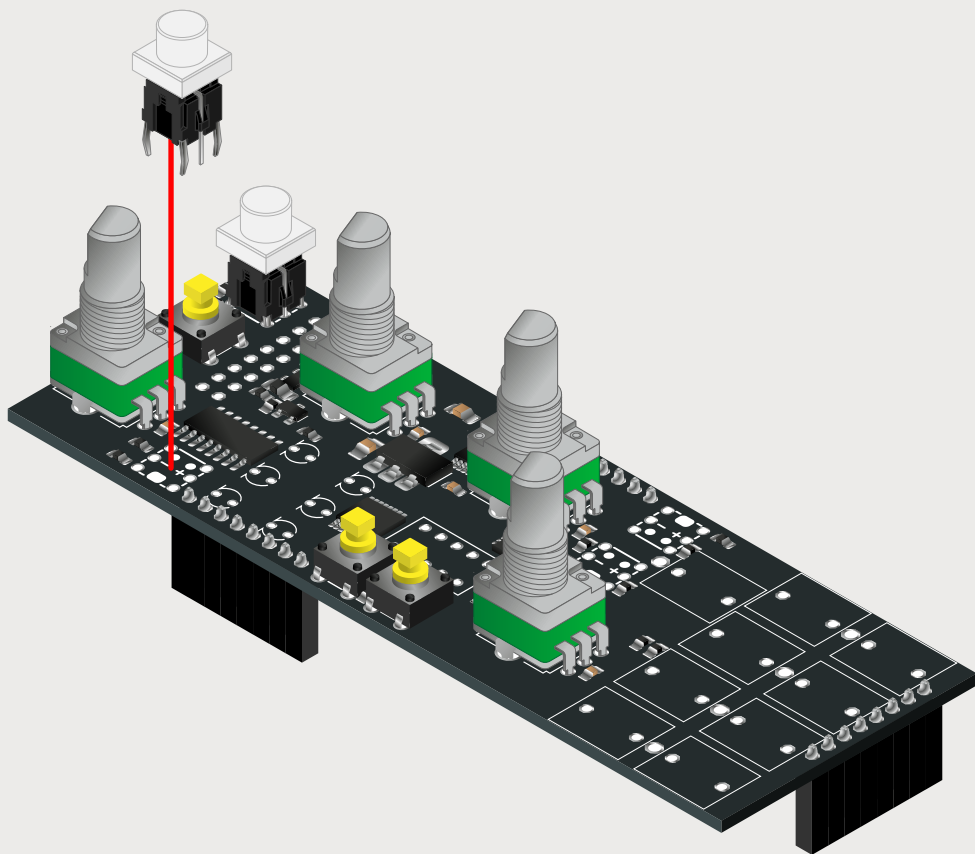


1x

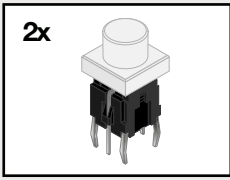


12

Place 1 amber LED push button  
but do not solder!

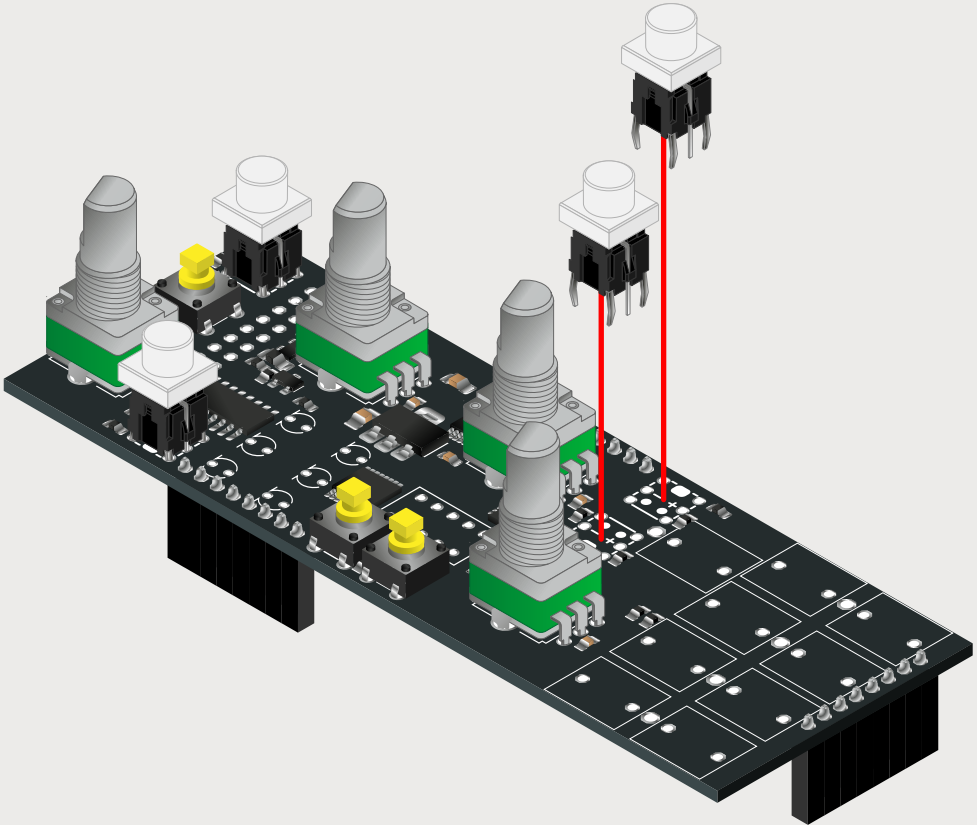


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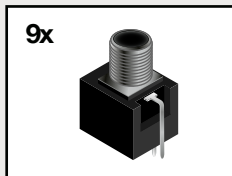


# 13

Place 2 white LED push button but do not solder!

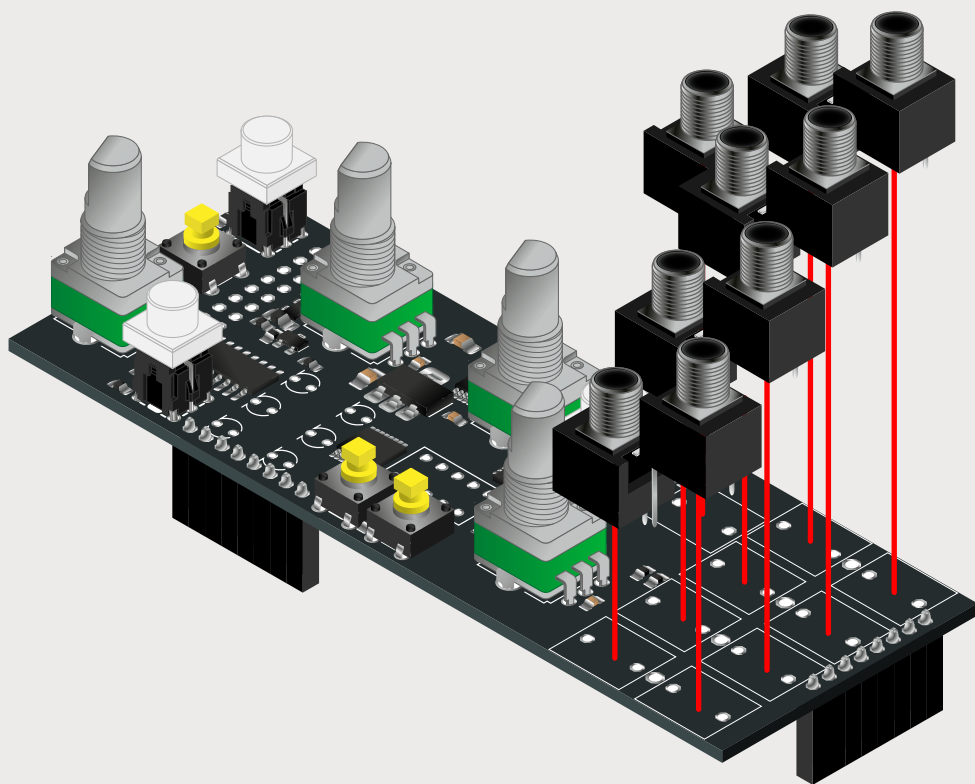






# 14

**Place 9 jack  
but do not solder!  
First & second row share holes  
for one of their pin.**



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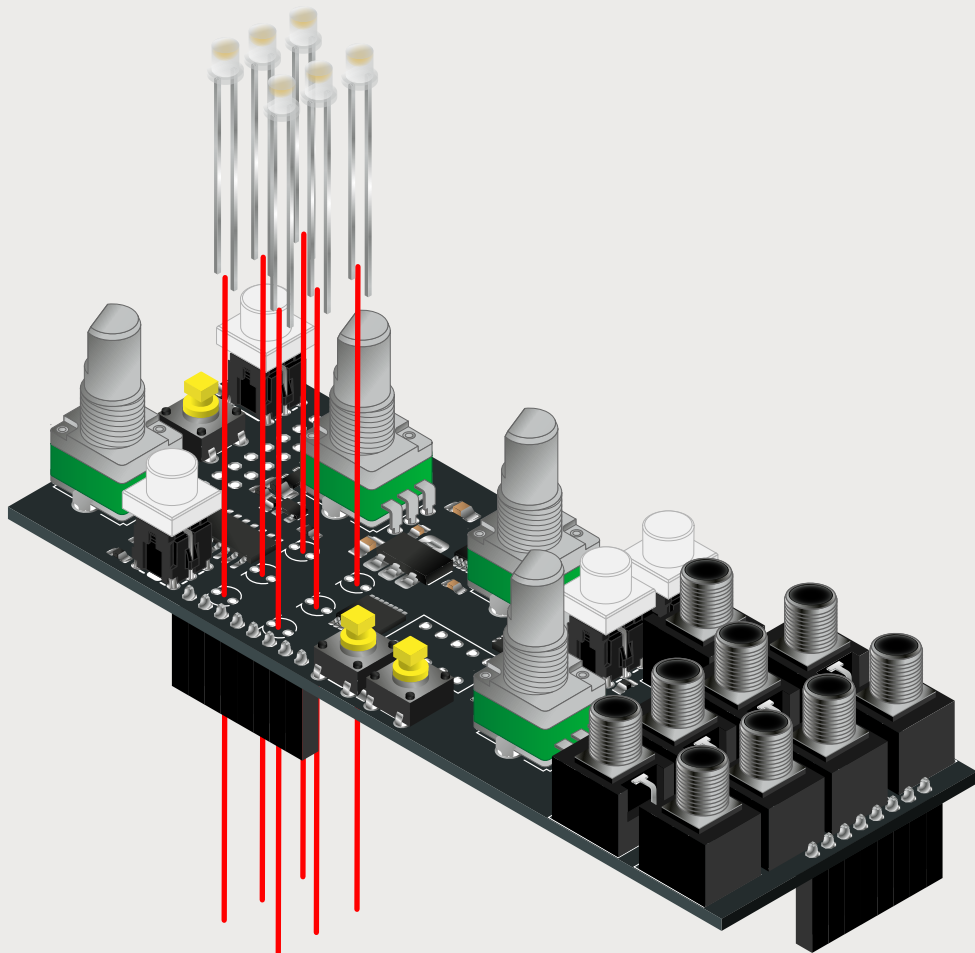
6x



LED polarity

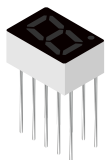
15

Place 6 amber LED  
but do not solder!

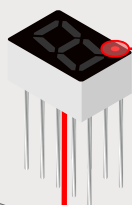


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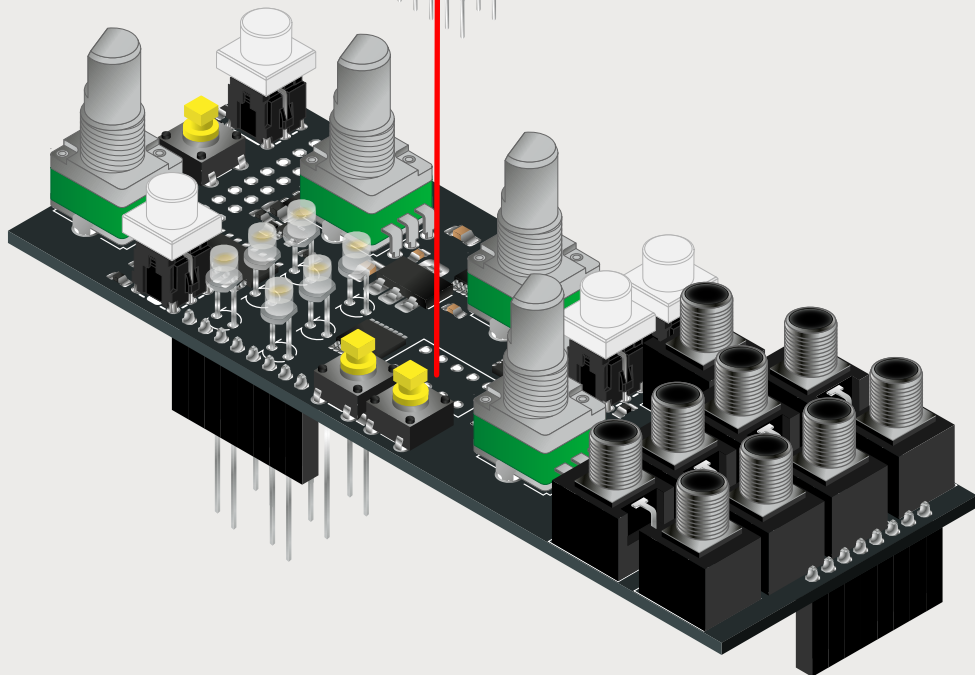
1x



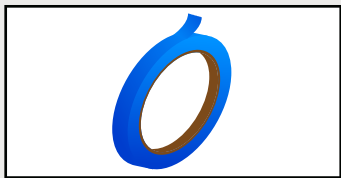
# 16 Place the 7 segments display but do not solder!



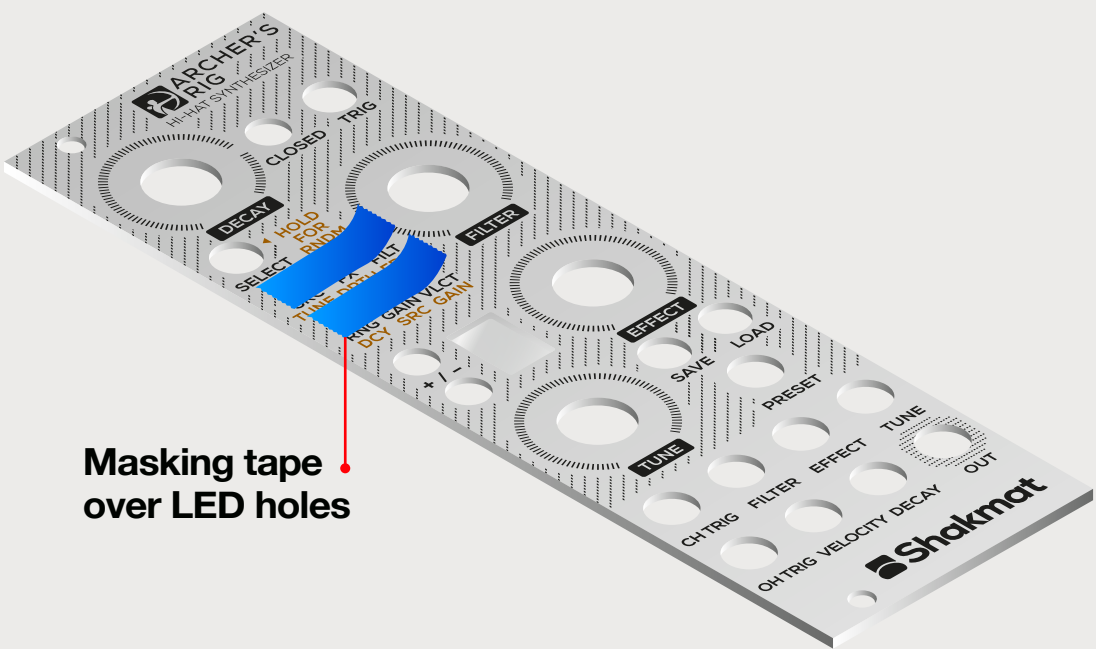
• Dot on displays should be at the bottom



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# 17

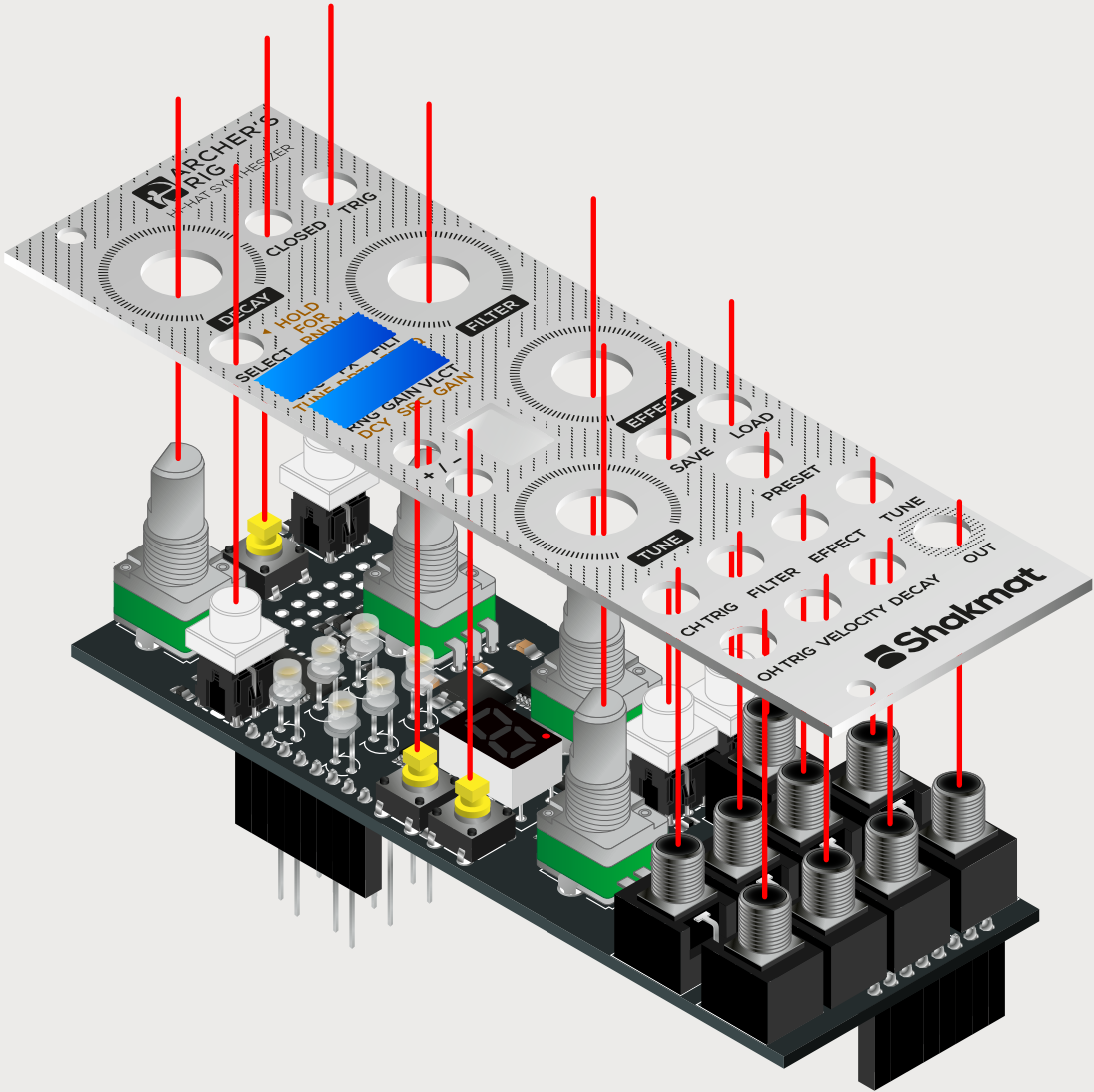


Masking tape  
over LED holes

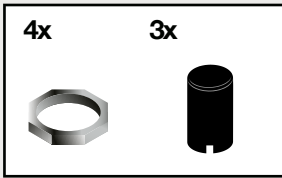
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# 18

## Place front panel on the populated PCB

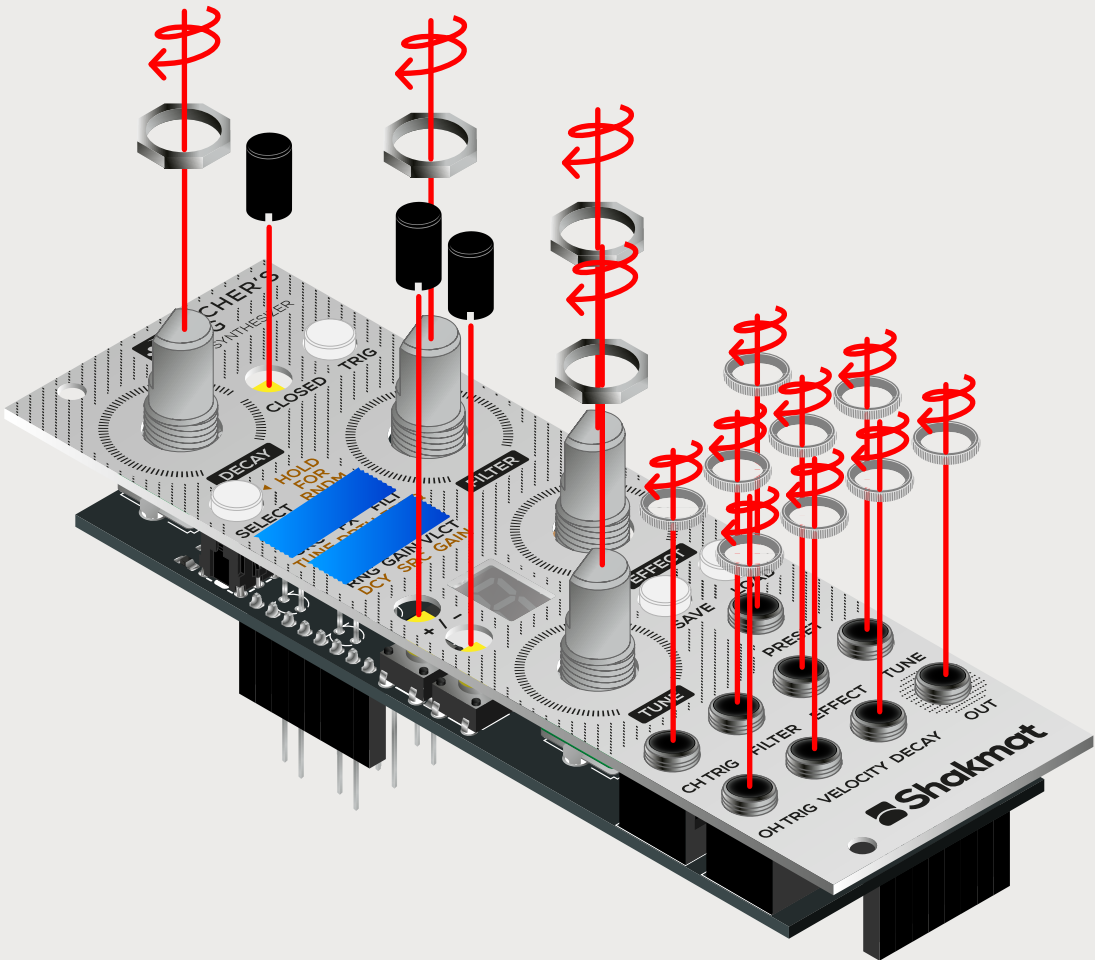


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# 19

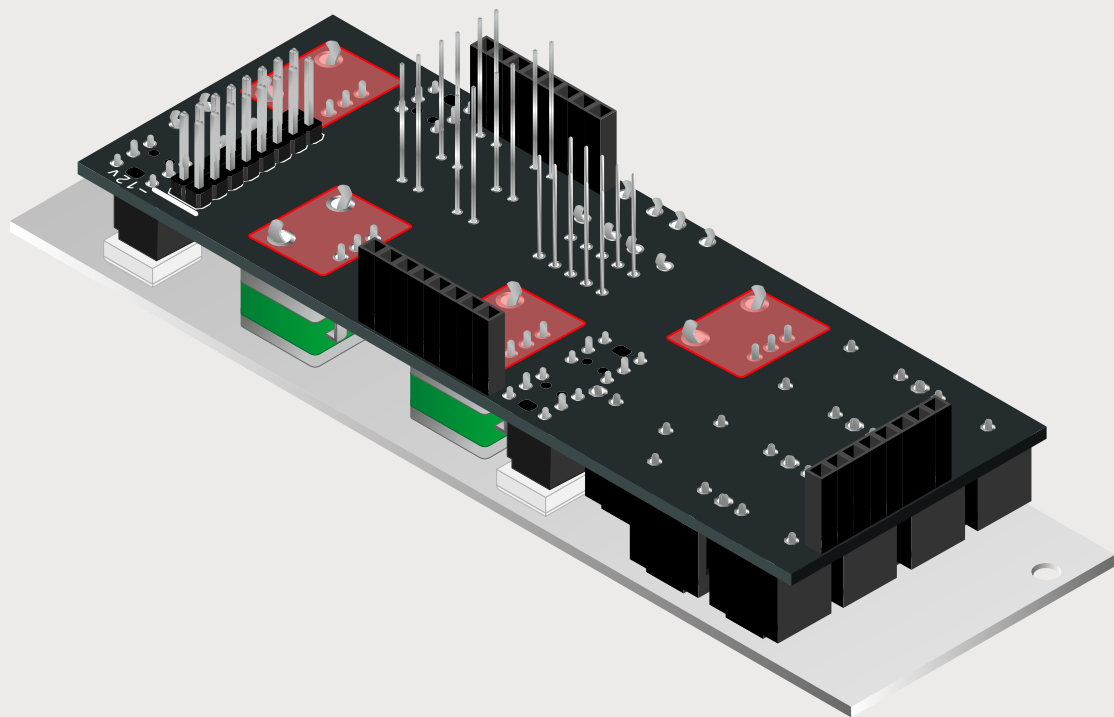
**Tighten 4 hex nuts & 9 knurled nuts  
Push down three button caps**



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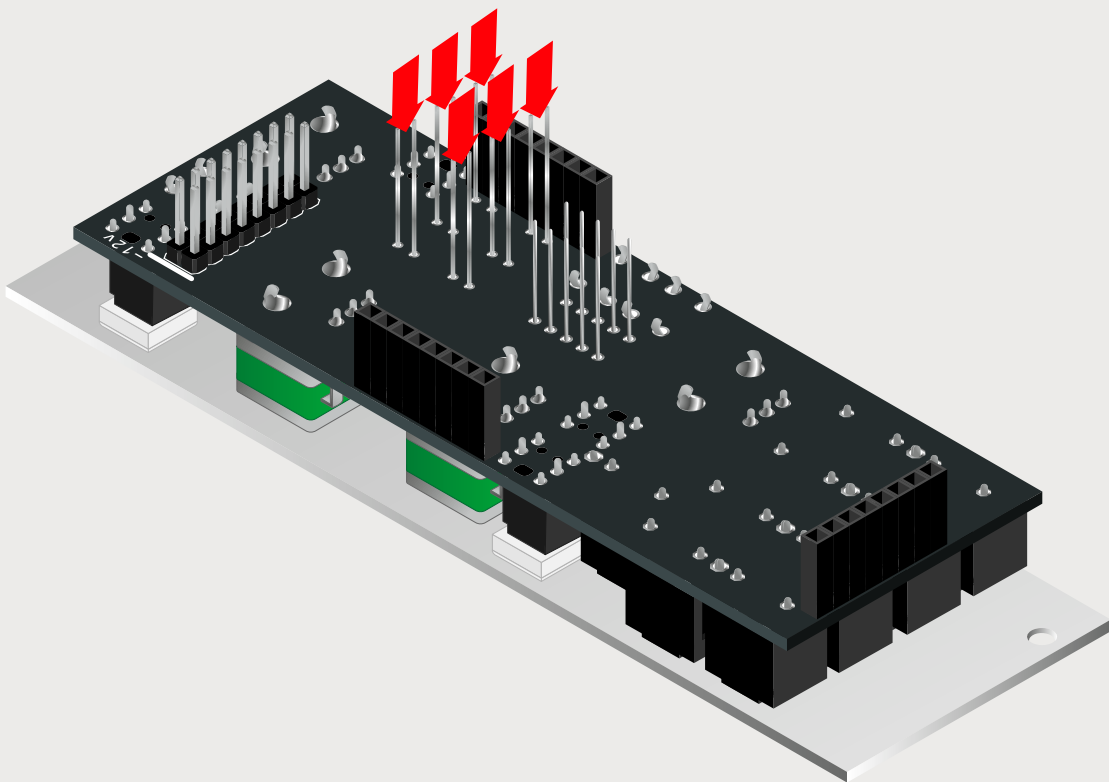
# 20

Check that the 4 potentiometers are still well-sited through the PCB, then solder them.



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# 21 Push each LED through the front panel until it sticks to the masking tape.

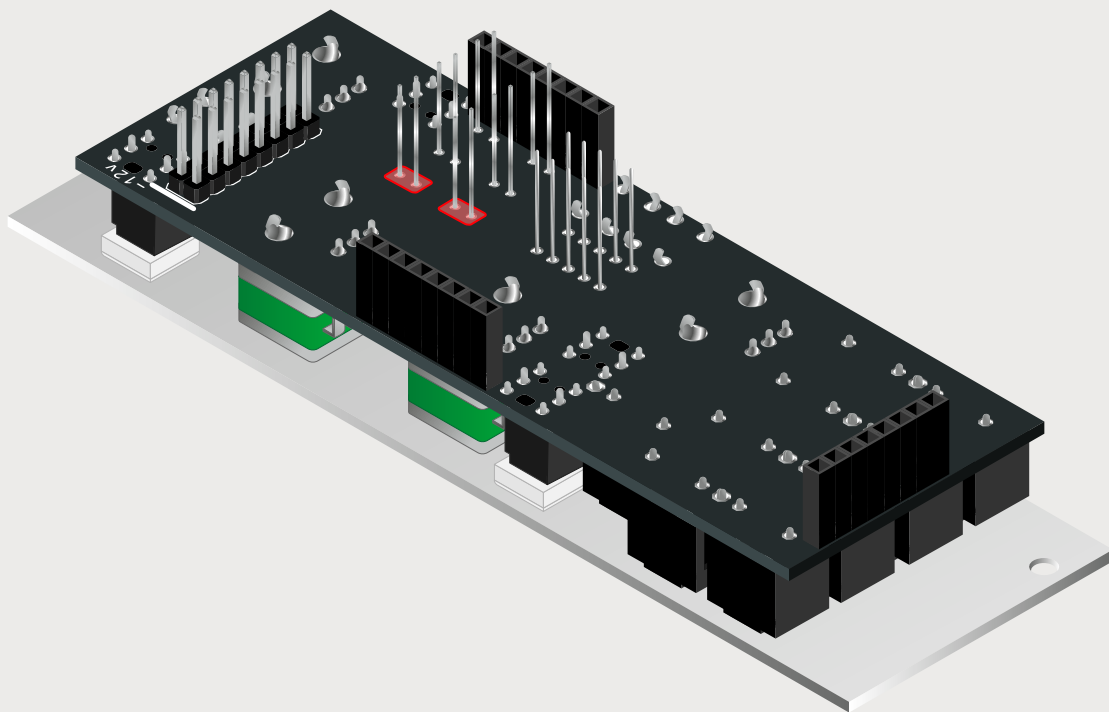


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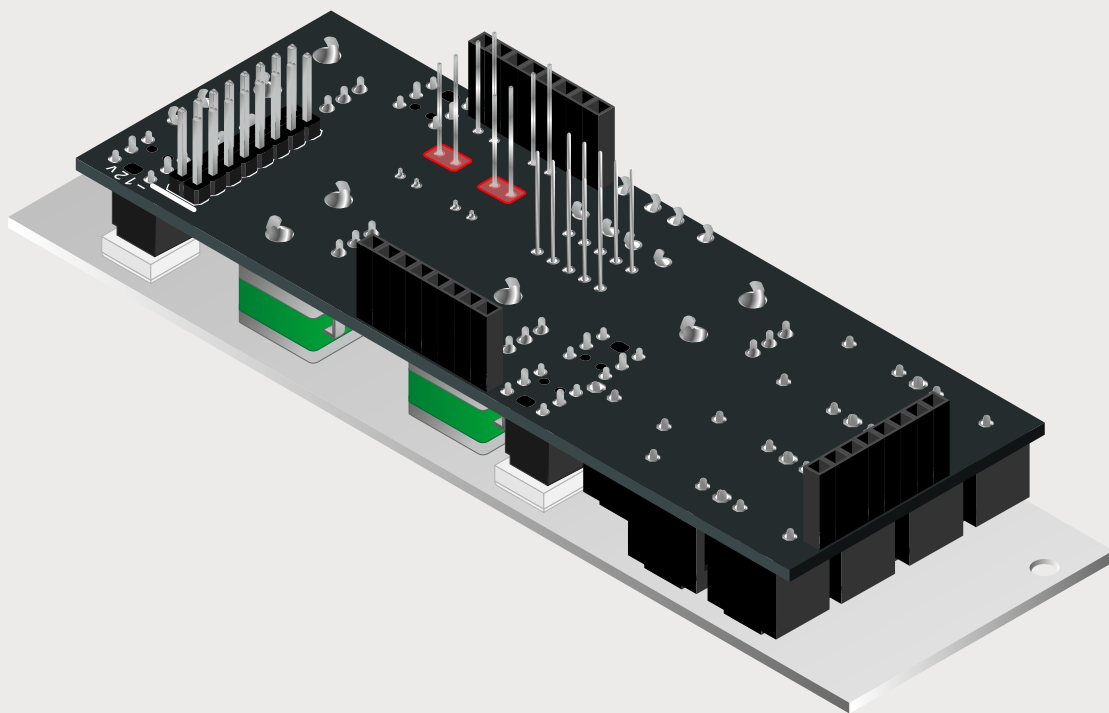
# 22

**Solder the first column of LEDs  
and cut off the excess legs.**



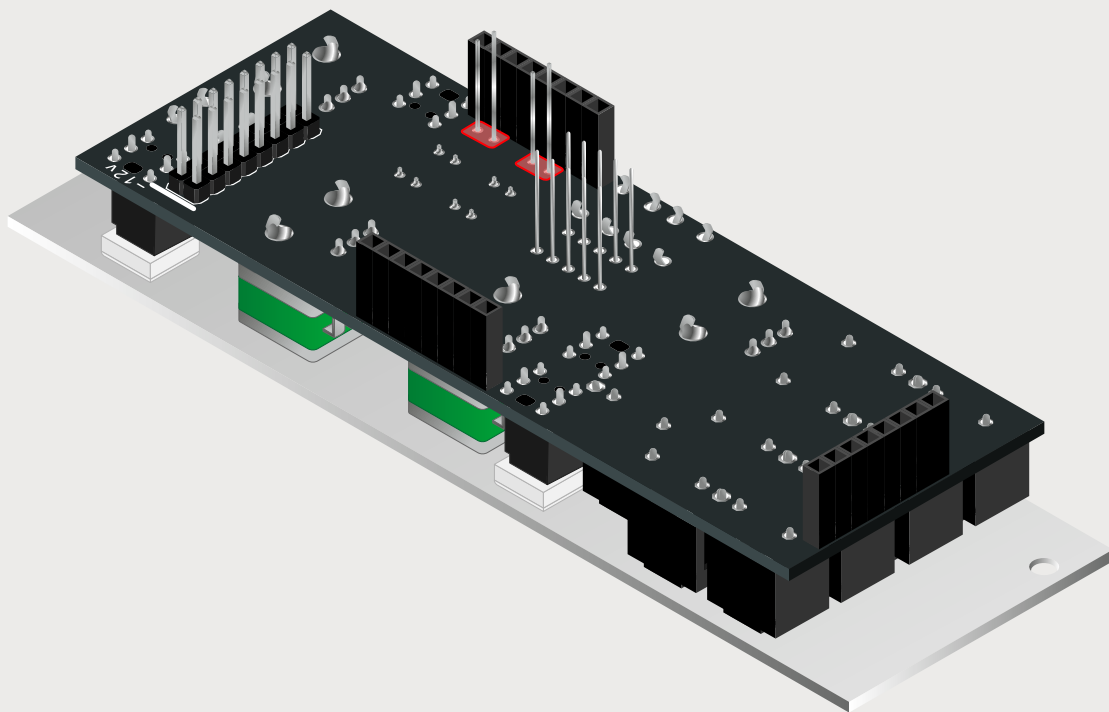
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# 23 Solder the second column of LEDs and cut off the excess legs.



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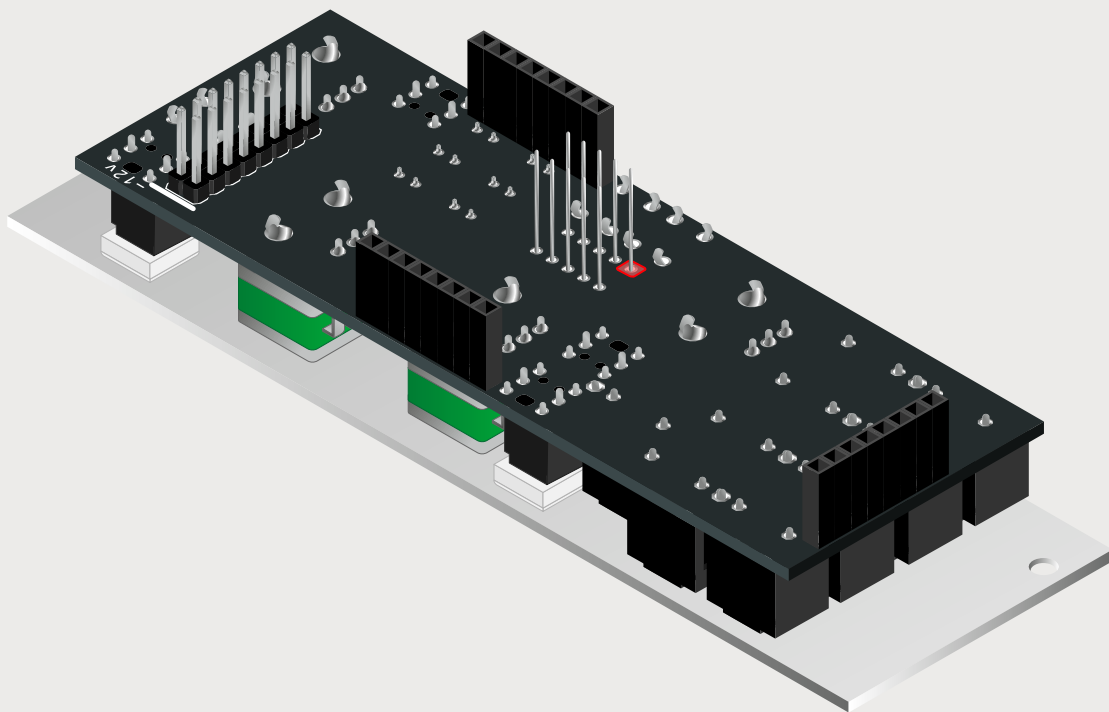
# 24 Solder the third column of LEDs and cut off the excess legs.



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# 25

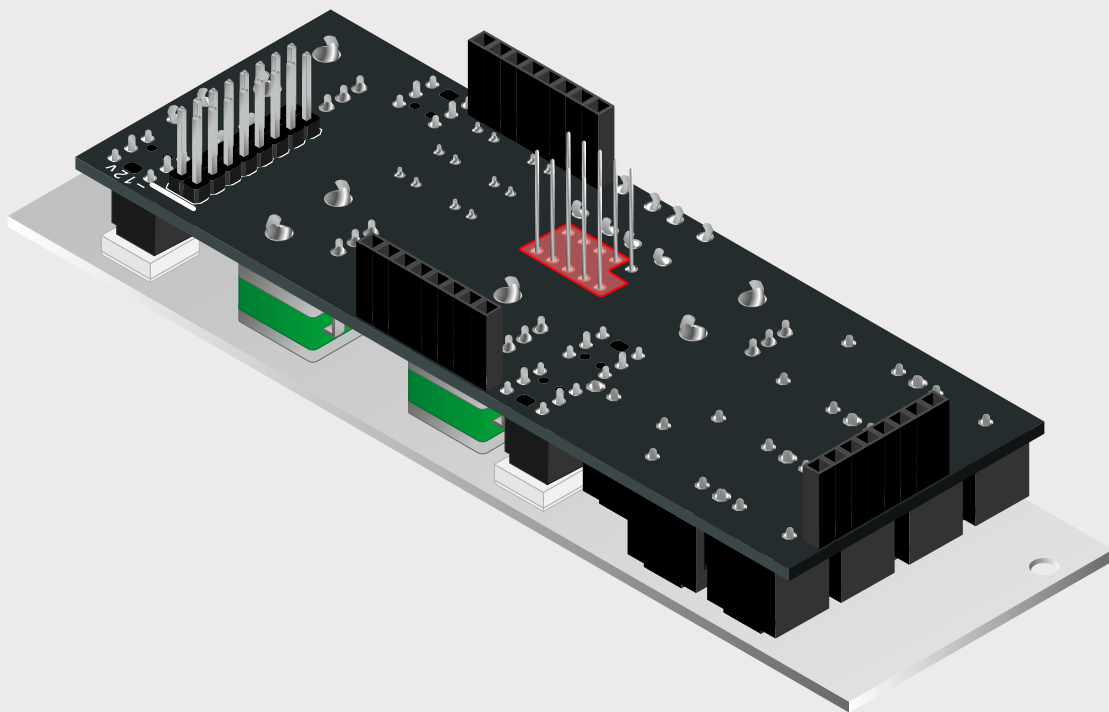
Check that the 7 segments display  
lays flat on the front panel window,  
then solder one leg



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# 26

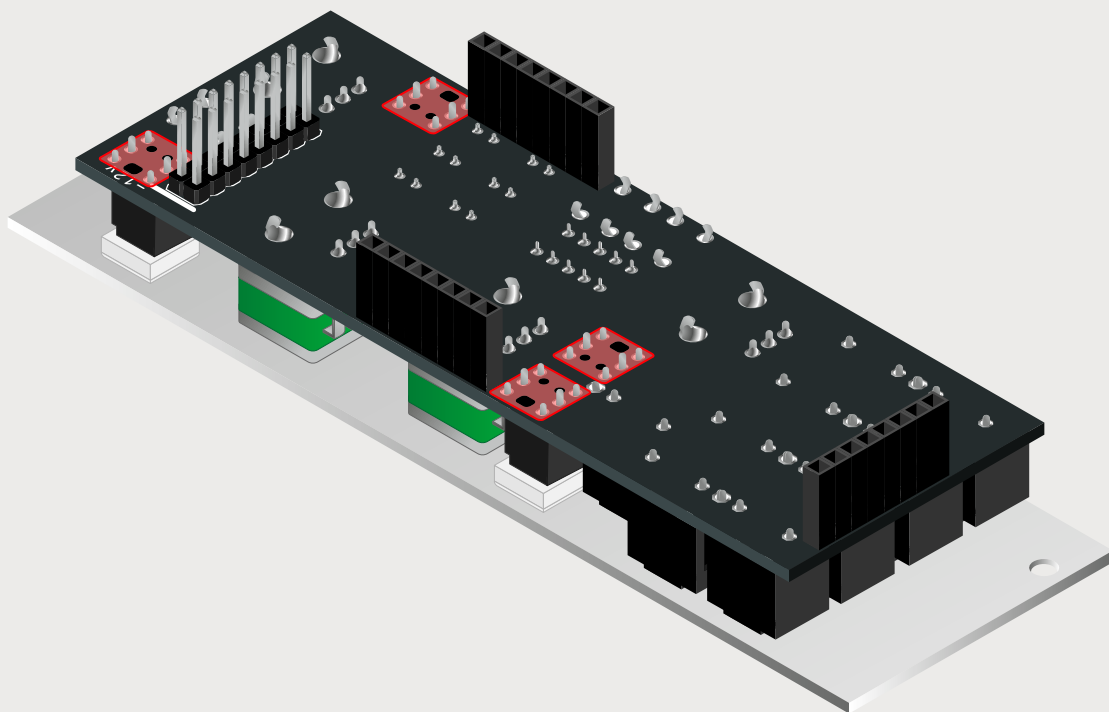
Check the alignment of the display through the front panel window, correct it by reheating the previously soldered point, if necessary, then solder the remaining legs and cut off the excess.



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# 27

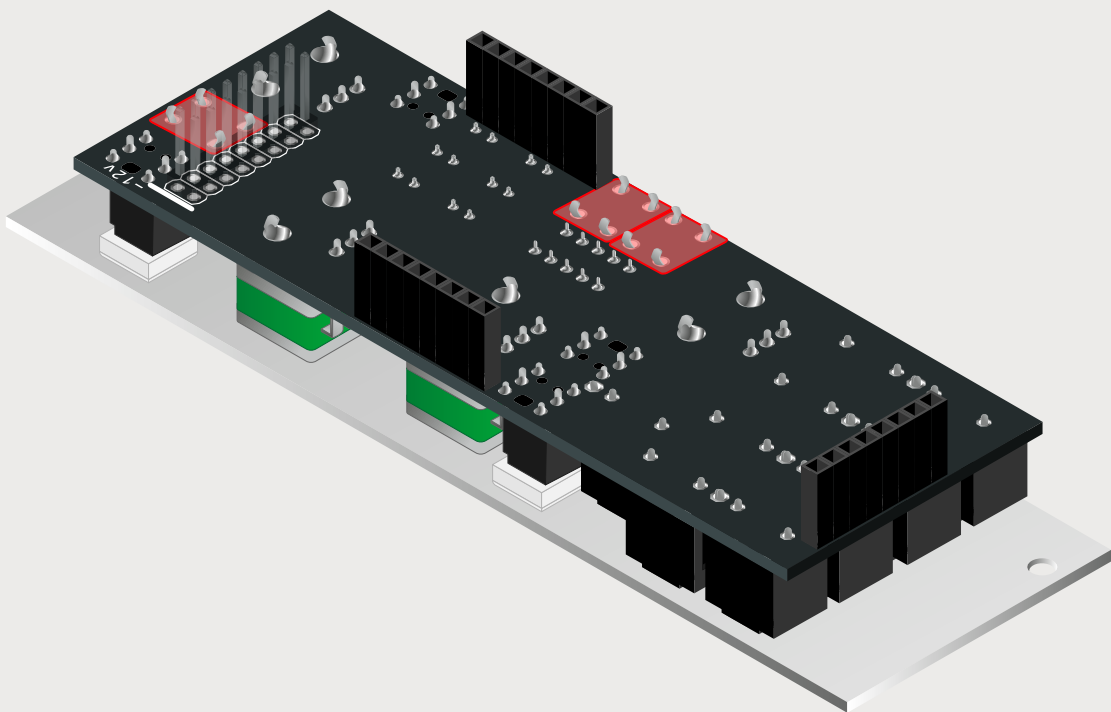
Check that the 4 LED push buttons click well, then solder them.



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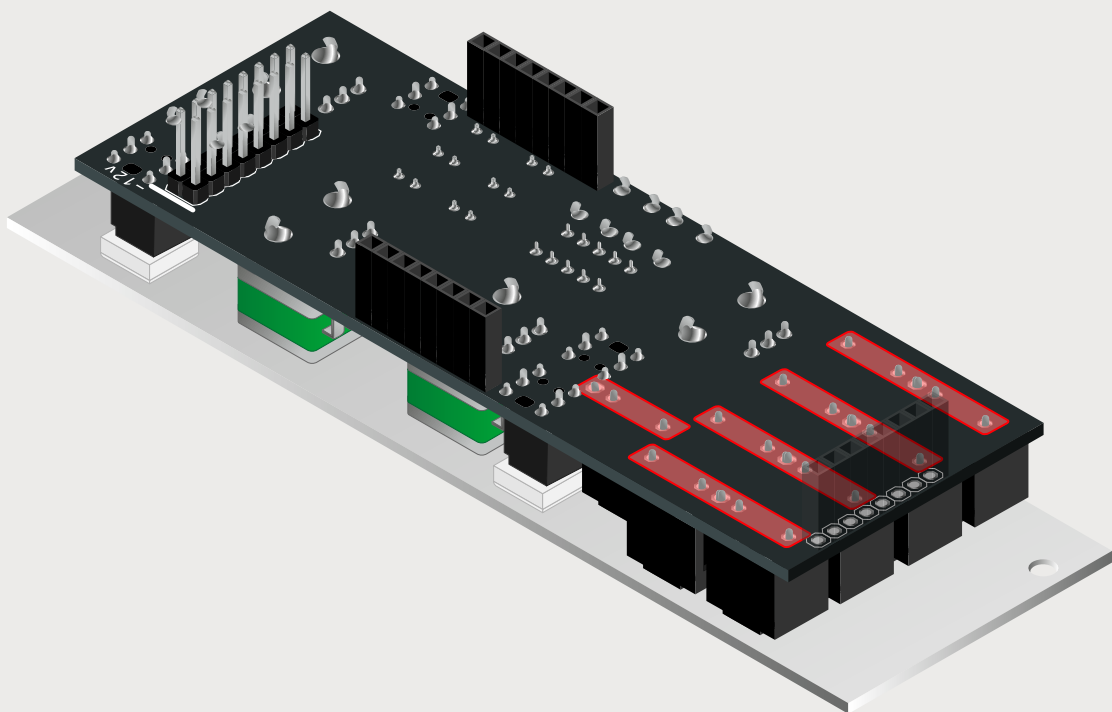
# 28

Check that the 3 push buttons click well, then solder them.



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# 29 Solder 9 jack connectors.

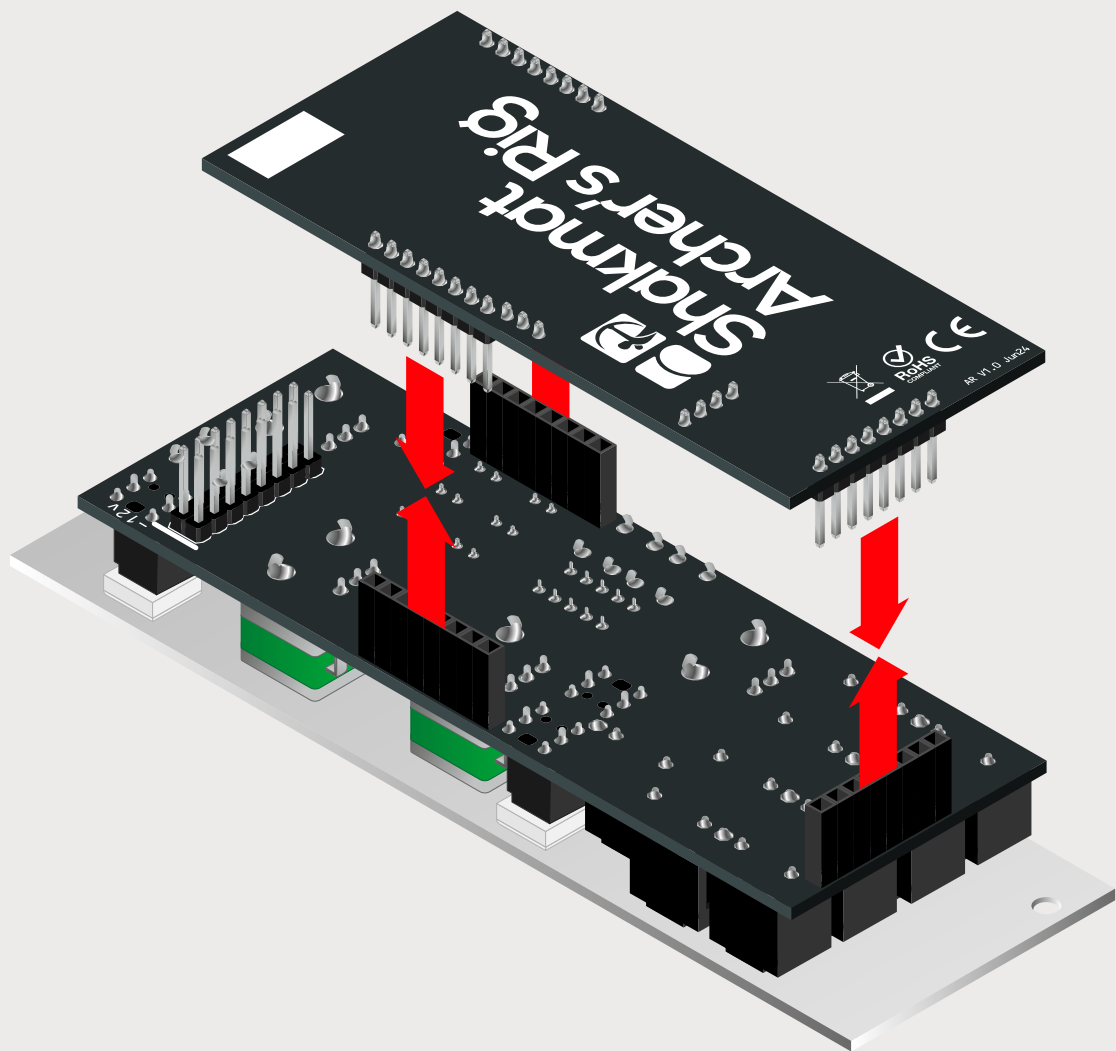


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# 30

## Assemble the two PCBs together

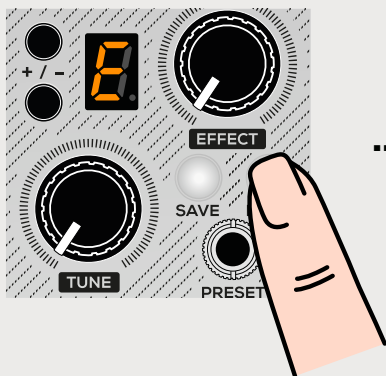


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**Power up your Archer's Rig while pressing the Closed & Trig buttons.**



**Confirm  
by pressing Load**



**Wait**



**Make sure no jacks are inserted,  
then press Save to confirm**



**Congratulations,  
you're done!**