

Connection overview

PCB

N_SH
N_YL
N_GN
N_BK
N_WT

connect to

Neck cavity shield
Neck pickup upper coil start
Neck pickup upper coil finish
Neck pickup lower coil finish
Neck pickup lower coil start

color

black
yellow
green
black
white

B_SH
B_YL
B_GN
B_BK
B_WT

Bridge cavity shield
Bridge pickup upper coil start
Bridge pickup upper coil finish
Bridge pickup lower coil finish
Bridge pickup lower coil start

black
yellow
green
black
white

Tip_GN
Ring_BK
Sleeve_BK
9V+
9V-
Bridge

Audio jack tip
Audio jack ring
Audio jack sleeve
Battery positive
Battery negative
Bridge ground

green
black
black
red
black
black

Volume 1
Volume 2
Volume 3

Pot A250K / A500K pin 1
Pot A250K / A500K pin 2
Pot A250K / A500K pin 3 + housing

orange
red
brown

HiCut 1
HiCut 2
HiCut 3

Pot A250K / A500K housing
Pot A250K / A500K pin 2
Pot A250K / A500K pin 3

orange
red
brown

BassCut 1
BassCut 2
BassCut 3

Pot C500K / B500K pin 1
Pot C500K / B500K pin 2
Pot C500K / B500K housing

orange
red
brown

PCB fit test



Illustration 1: remove knobs on all three pots. Unscrew the nuts of the three toggle switches and push toggle switches into the electronics compartment.

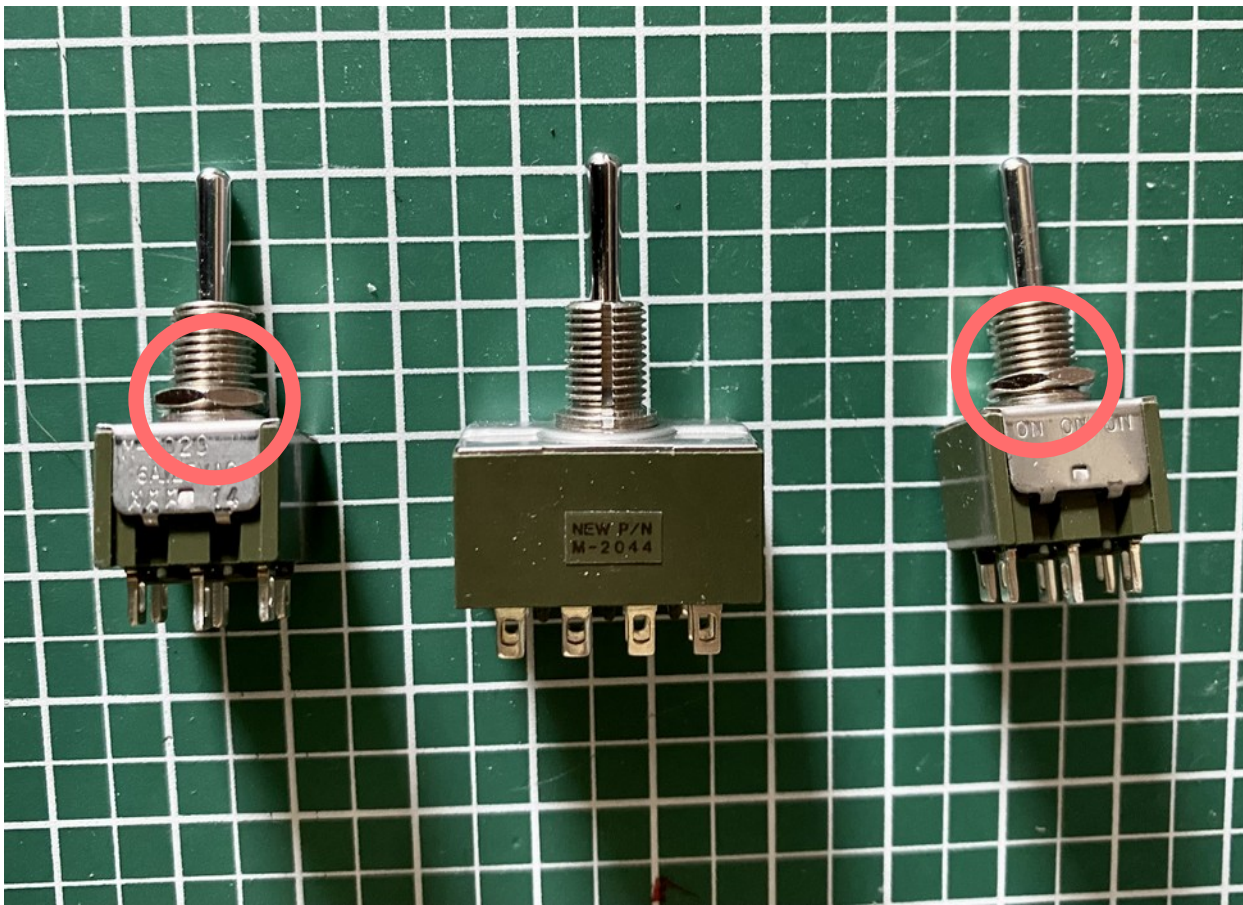


Illustration 2: screw one nut on each of the smaller 2PDT switches

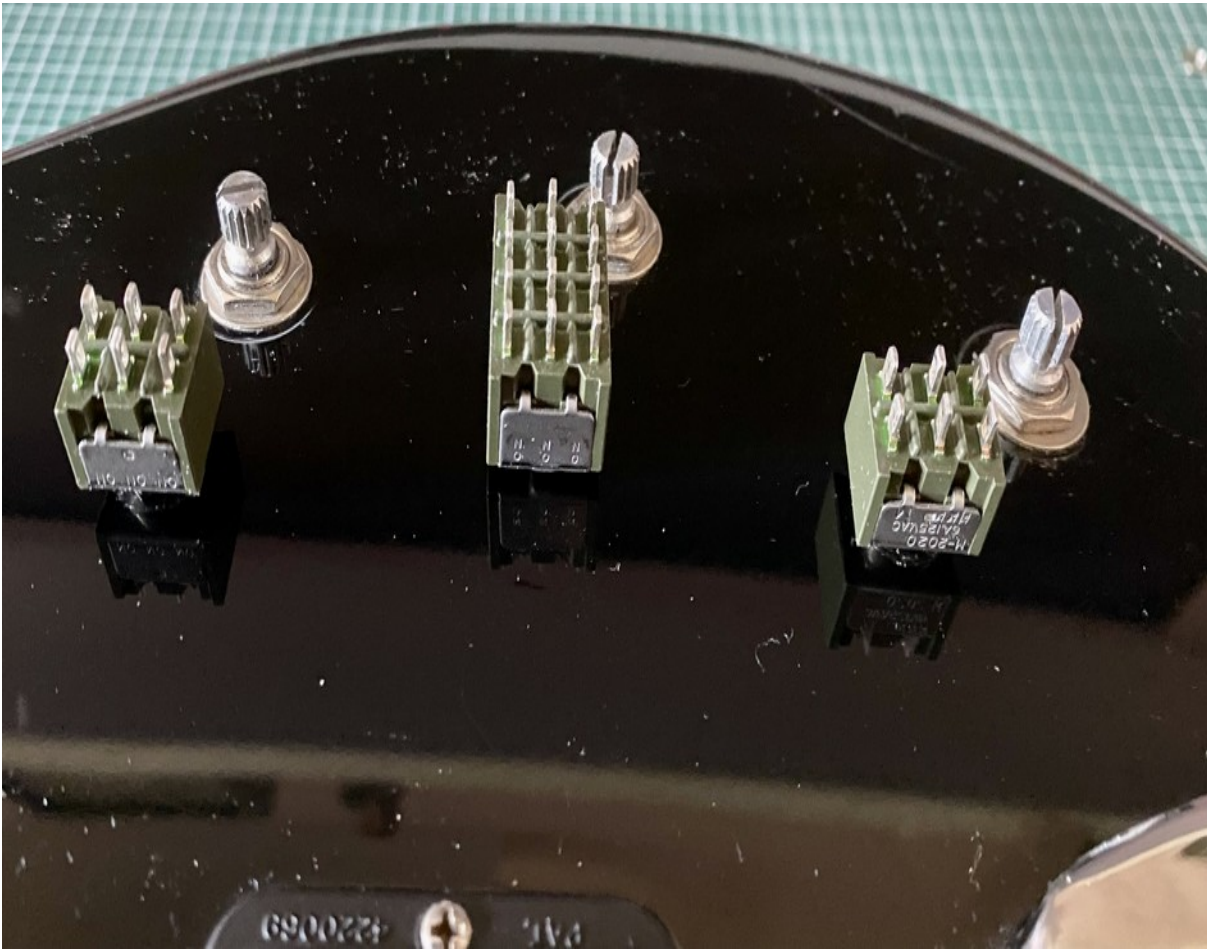


Illustration 3: stick toggle switches into the holes on the front

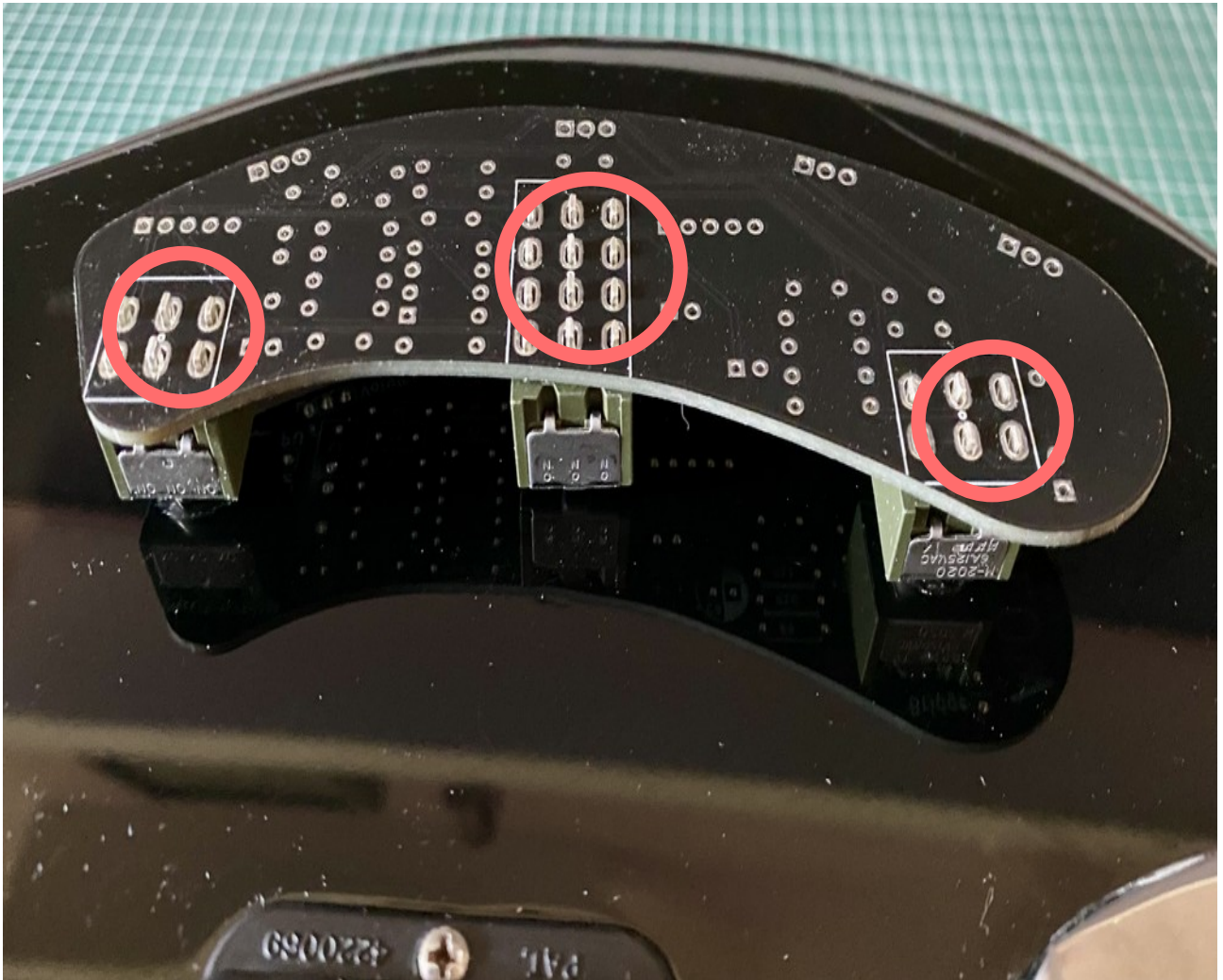


Illustration 4: arrange PCB on toggle switch pin, make sure the toggle switch pins align with corresponding PCB cutouts.

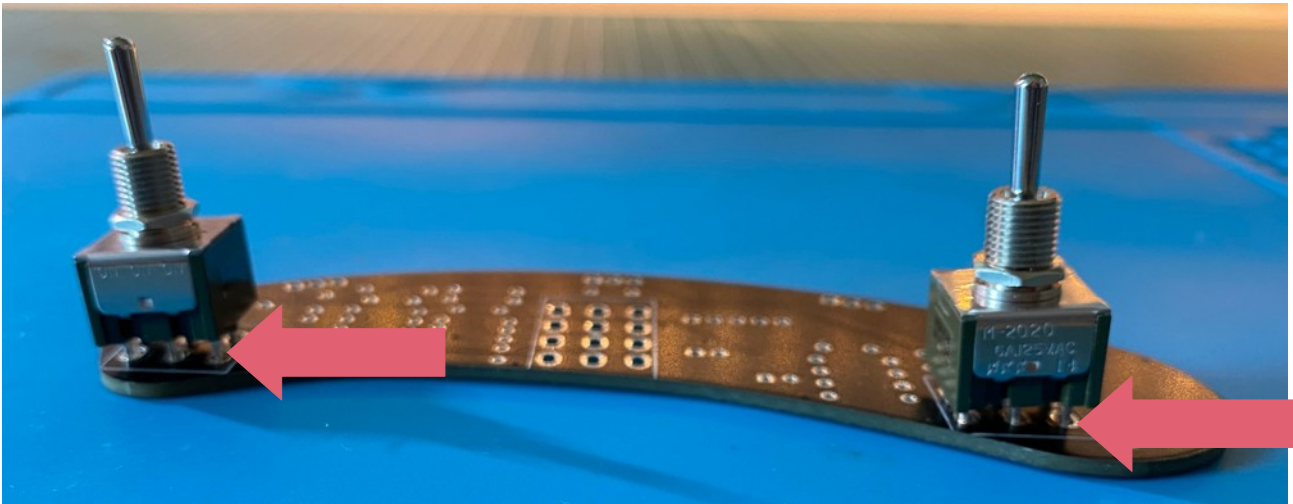
If it looks like picture above, GLOW will most likely fit your bass.

I do not give any guarantee or take any responsibility for any changes or damage you do to your instrument. Please keep in mind that this is not a simple procedure or easy reversible modification.

**GLOW is provided as is. There is no warranty.
You proceed on your own risk.**

Assembly

switches



*Illustration 5: Lay PCB on a flat surface, with “GLOW” logo and silkscreen prints to the bottom. Stick 2 x 2PDT toggle switches into cutouts on PCB. Solder a single connection to one of the pins on each toggle switch from the top with the **PCB still flat on the surface**. There should be a distance of about 2-3mm between switch bottom and PCB. After soldering, carefully bend the switch to a upright position, if needed.*

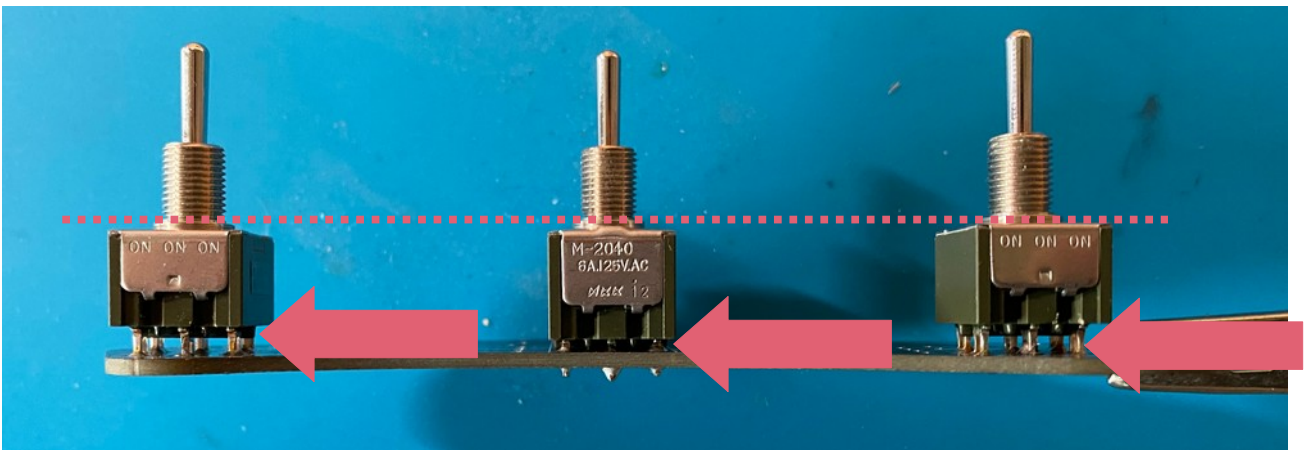


Illustration 6: solder middle switch flush to the PCB, without any additional distance. Make sure the switches point up straight. Ideally the top surfaces of the switches align

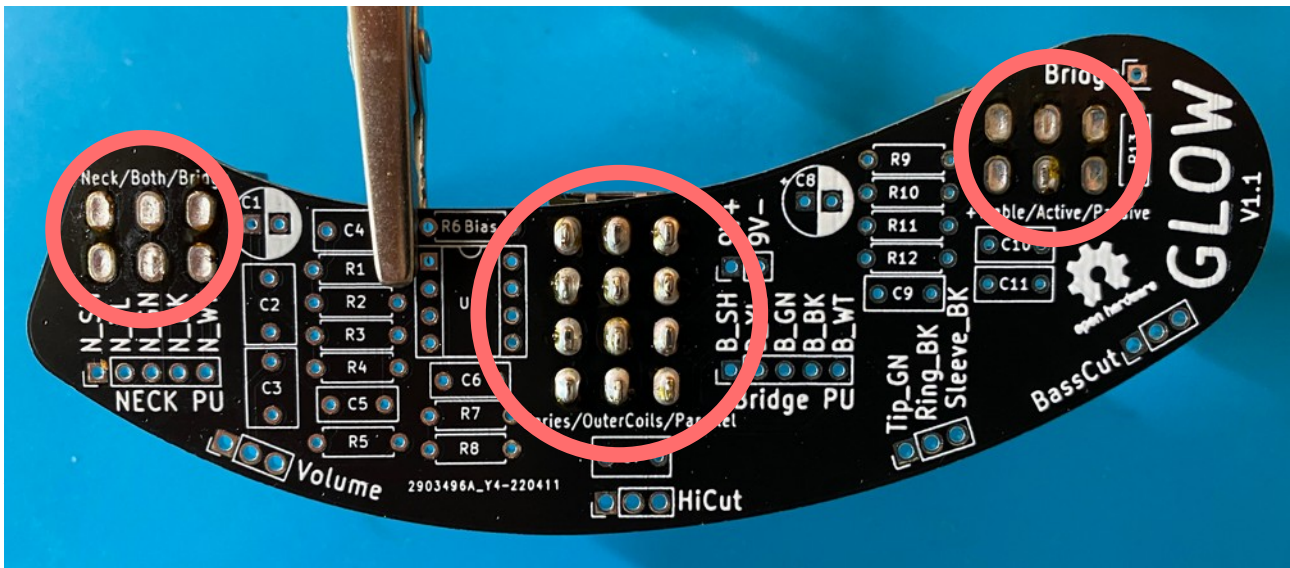
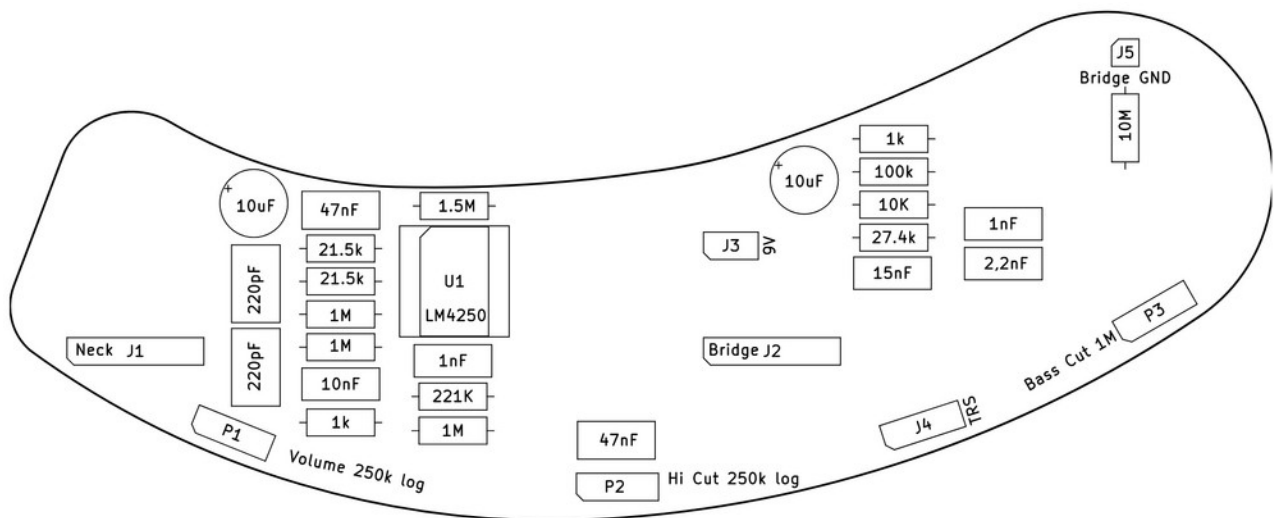


Illustration 7: Solder remaining connections from the other side of the PCB.

Components



Solder smallest components first. Start with Resistors R1 to R13. Afterwards socket U1, solder capacitors C1 to C11 last.

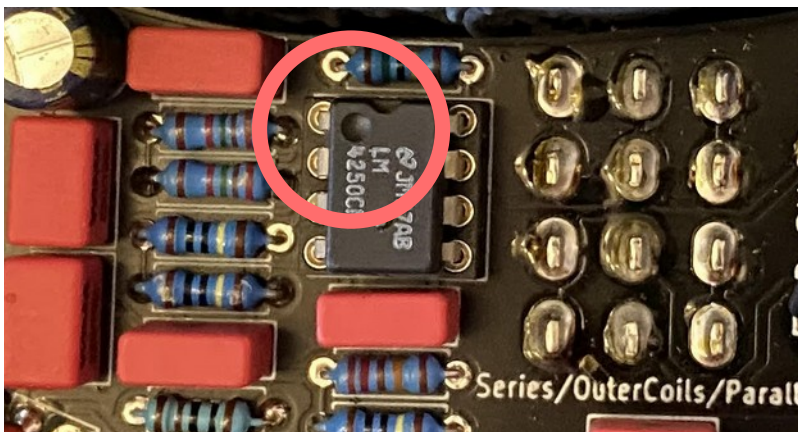


Illustration 8: gently push op amp into socket U1, with indent pointing upwards

V1.1 Fix

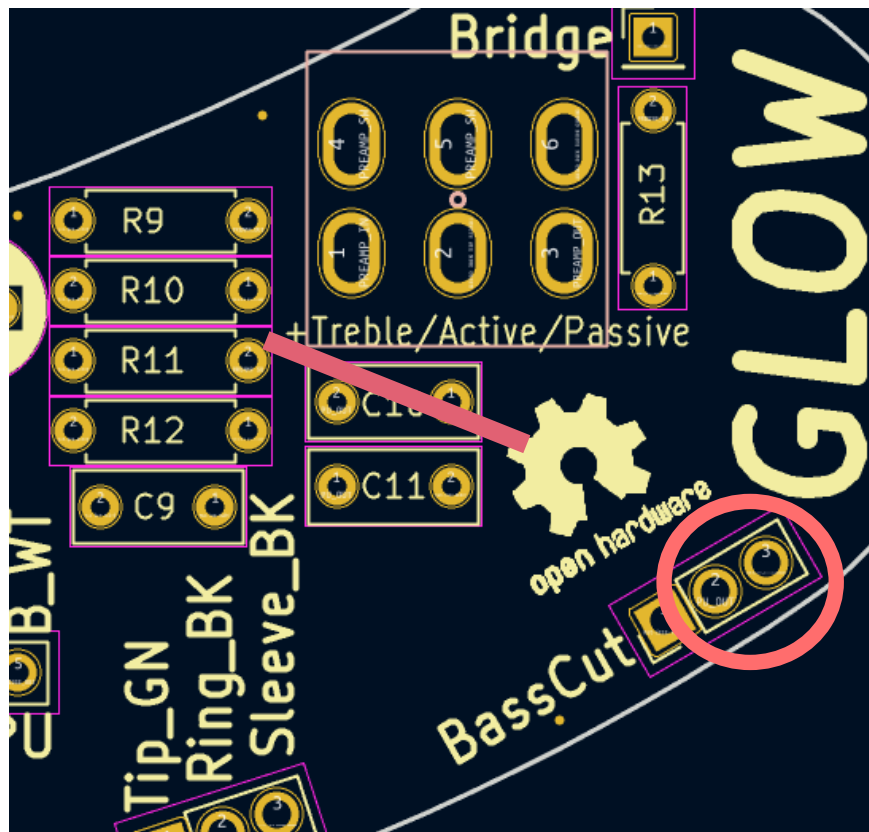


Illustration 9: **GLOW Version 1.1, 1nF Cap C10 needs to be soldered to BassCut Pin 2 and 3**



Illustration 10: solder C10 to alternate position BassCut 2,3. Connect wires afterwards.

Pots

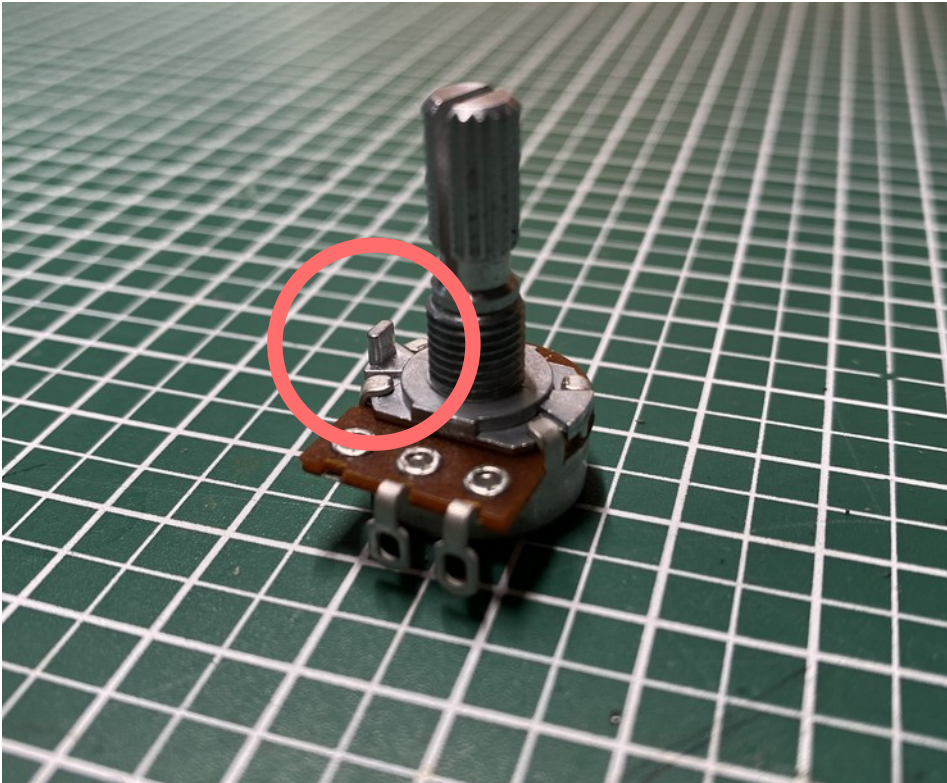


Illustration 11: use pliers to break of orientation pin

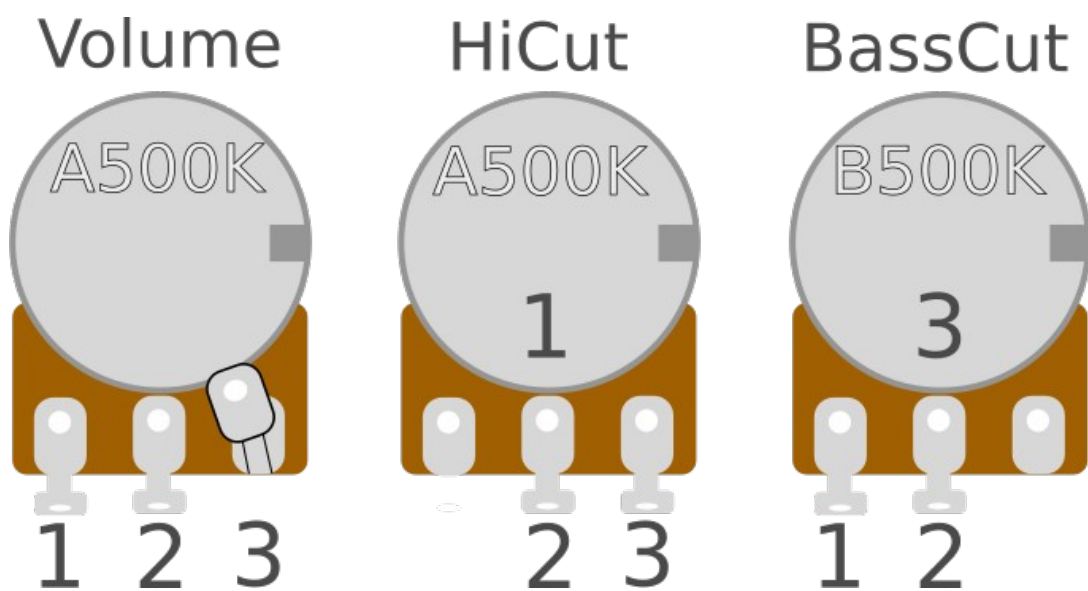
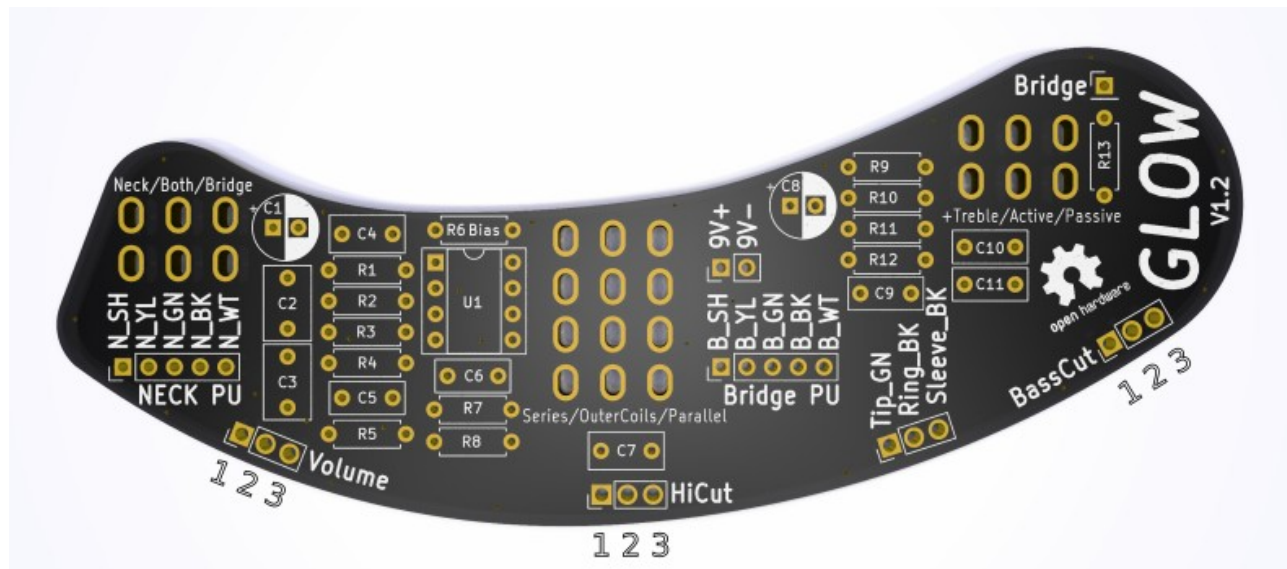


Illustration 12: Prepare pots as shown in image above. Prepare housing with sand paper to allow solder so bond to surface.



Illustration 13: solder wires to pots. Twist wire as shown.

Note: Recommended Bourns PDB181-GTR pots with 3/8 NEF (9.525mm) diameter thread might not fit the holes of the previous pots. In this case, carefully drill holes to 10mm. Use painters tape on the outside to prevent scratches and chipping of the paint.

Preparation

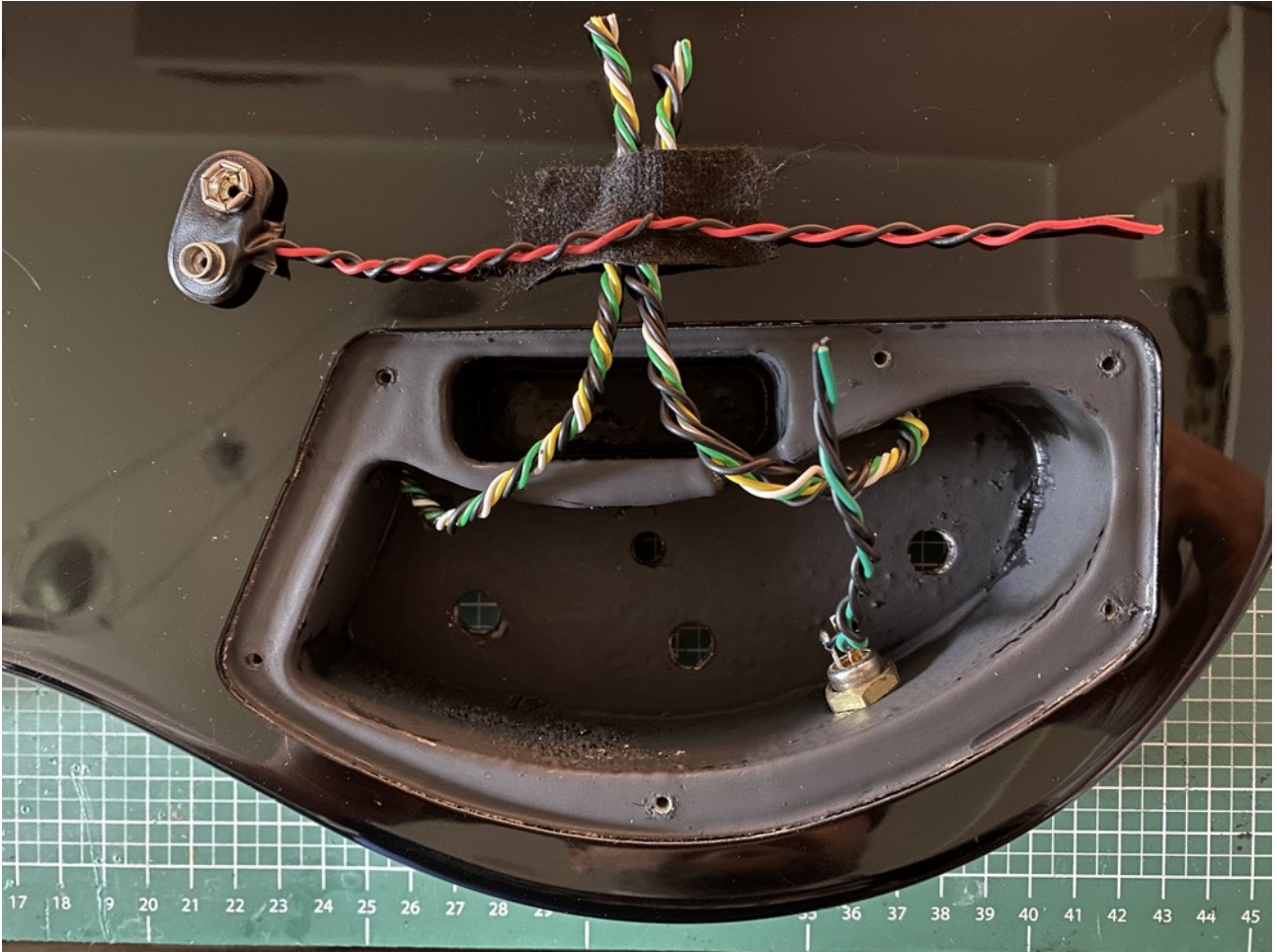


Illustration 14: remove toggle switches and pots from housing. Cut wires at appropriate lengths. Desolder black battery connector wire from audio jack, solder a black wire to (now unconnected) terminal on audio jack

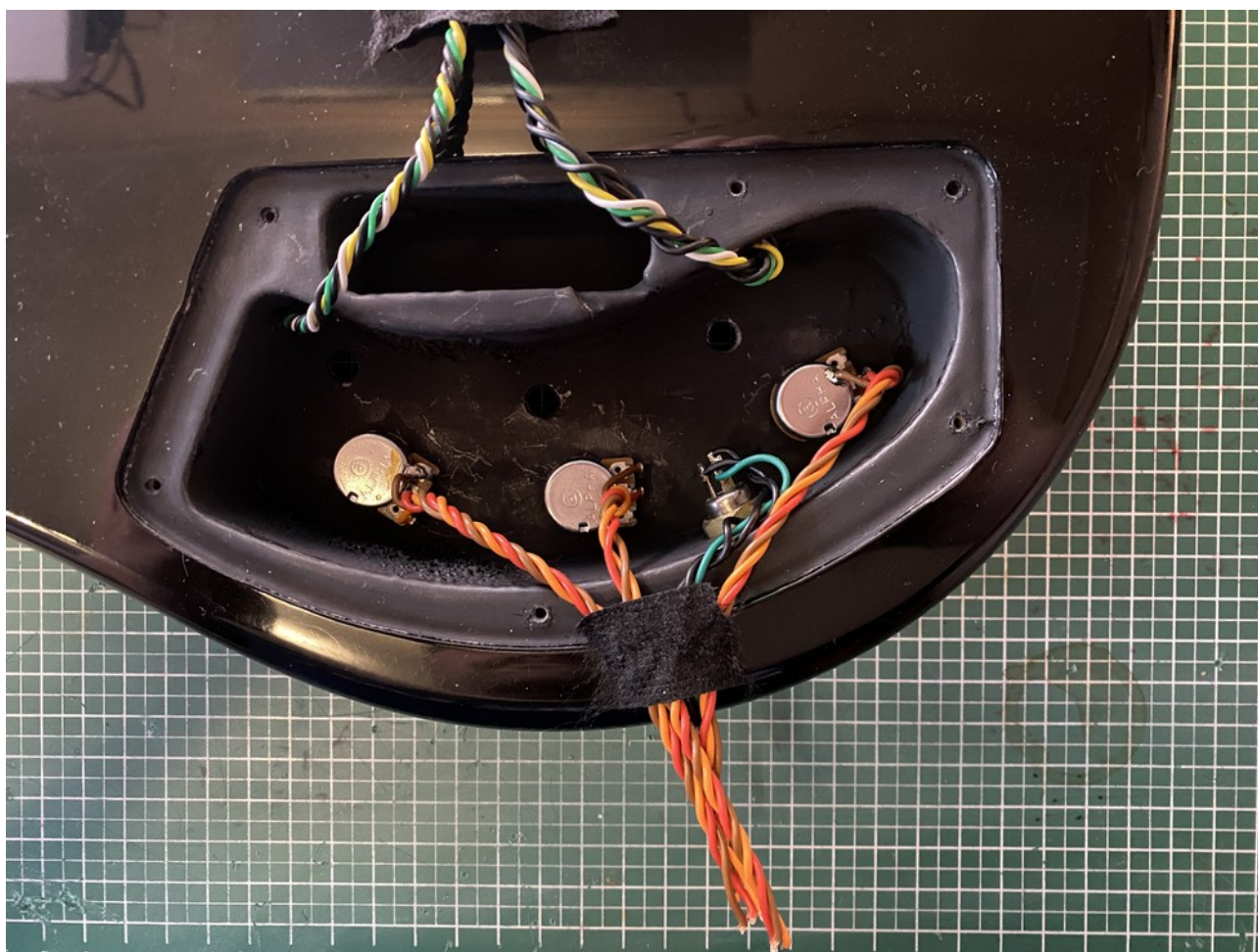


Illustration 15: Mount Volume, HiCut and BassCut pot to body. Fix nut tightly.

Final assembly



Illustration 16: Firmly push GLOW toggle switches into holes. Put on switch threads. Screw nuts tight. It is okay to bend the PCB to a certain degree. Solder pot wires in order 1, 2, 3 starting from left. Solder all other wires to corresponding terminals on GLOW PCB.

Enjoy!