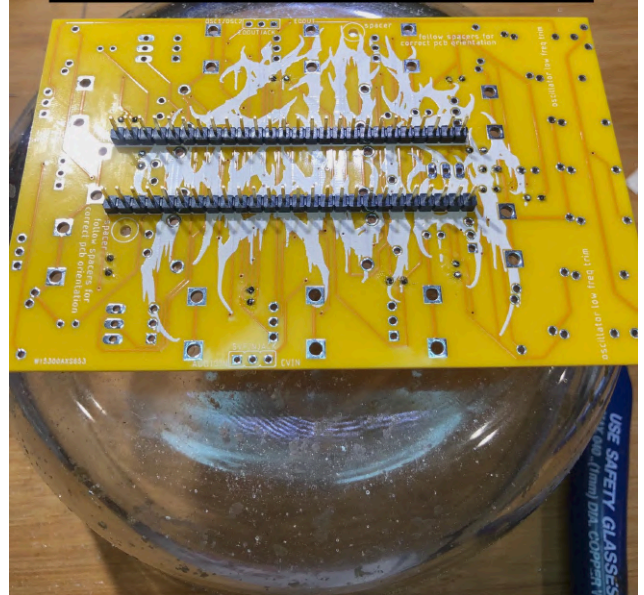


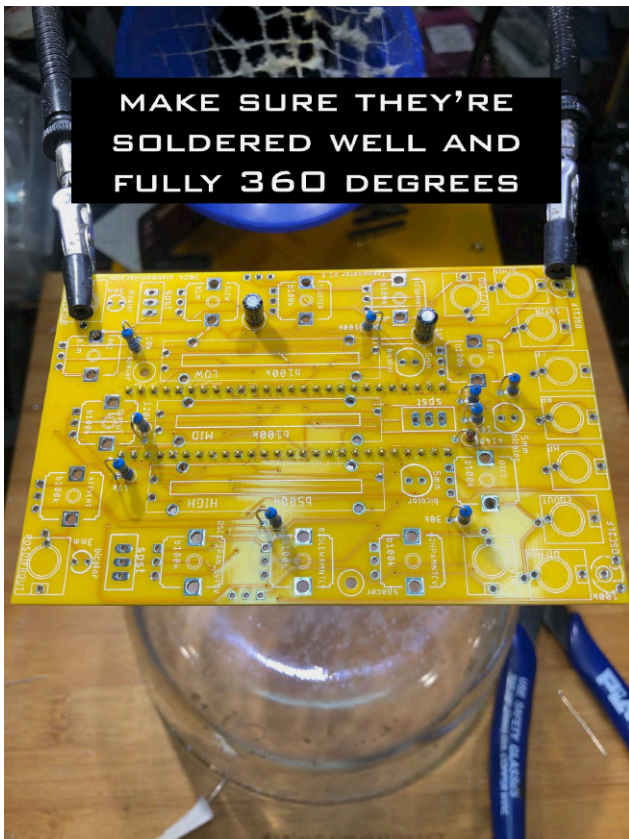
**TWO 26 PIN MALE HEADERS.
SOME KITS MIGHT COME WITH
TWO 10 PINS AND TWO 16
PINS**



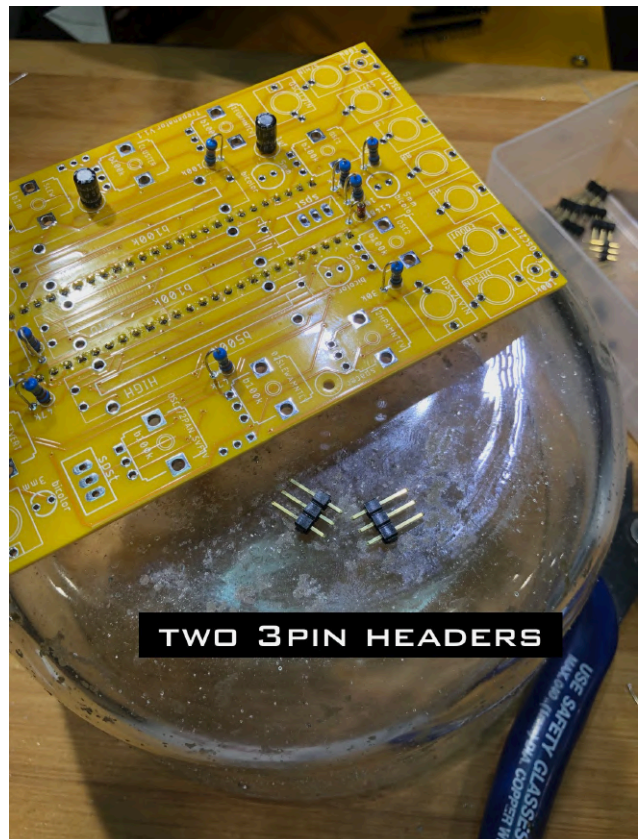
**TWO 26PINS
MAKE SURE YOU INSERT
THEM ON THE CORRECT
SIDE(SHORT END THROUGH
BOTTOM OF PCB)**



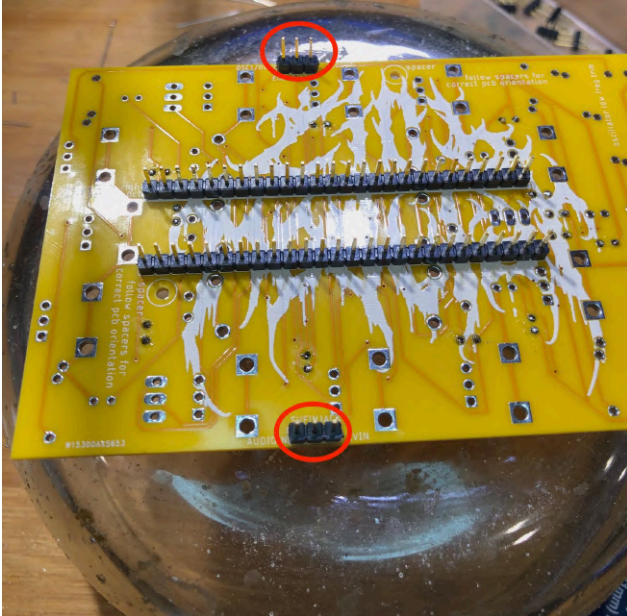
**MAKE SURE THEY'RE
SOLDERED WELL AND
FULLY 360 DEGREES**



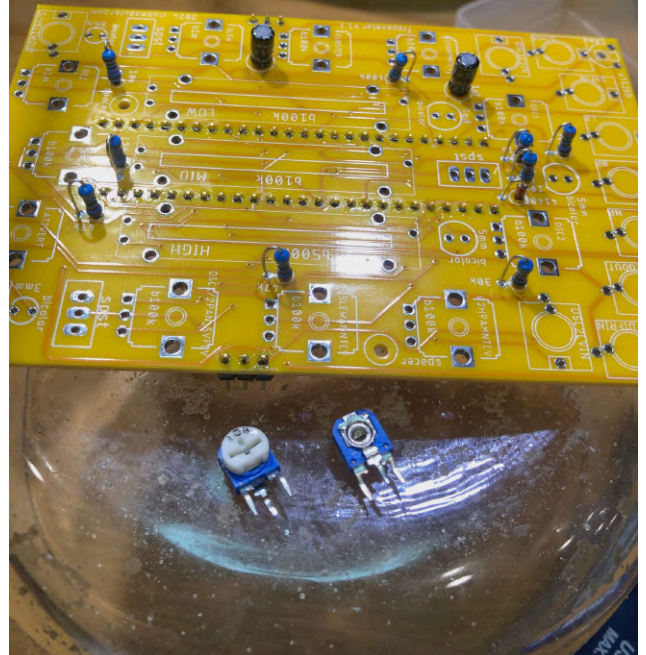
TWO 3PIN HEADERS



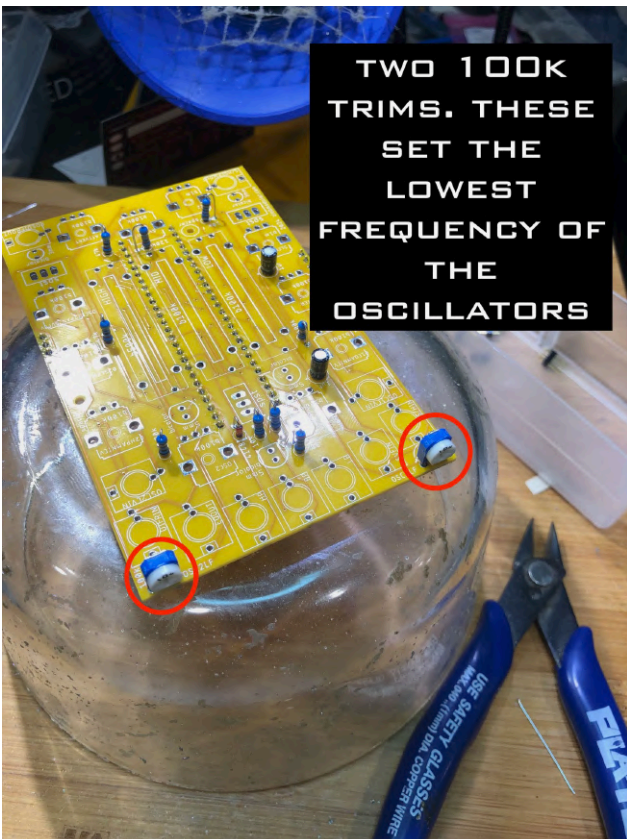
**TWO 3PINS
LIKE THE LONG HEADERS
THESE GO SHORT END
THROUGH BOTTOM OF PCB**



**TWO 100K SIDE TRIMS
CODE 104**



**TWO 100K
TRIMS. THESE
SET THE
LOWEST
FREQUENCY OF
THE
OSCILLATORS**



TWO 100K TRIMS



TWO 11MM SPACERS AND TWO M2 SCREWS. YOU HAVE TO INSTALL THESE BEFORE YOU PUT THE PANEL ON. YOU WILL SAVE THE OTHER TWO M2 SCREWS FOR CONNECTING THE MOTHERBOARD TO TOP PCB.



THE SCREW THROUGH THE TOP OF PCB
TOP OF PCB AND SPACER GOES BELOW. DO
NOT OVER TIGHTEN

SPACERS



NINE B100K POTENTIOMETERS
GENTLY SQUEEZE THE METAL CHASSIS
LEGS TOWARDS EACH OTHER. DON'T
OVERBEND THEY SHOULD FIT SNUGGLY
INTO THE PCB.

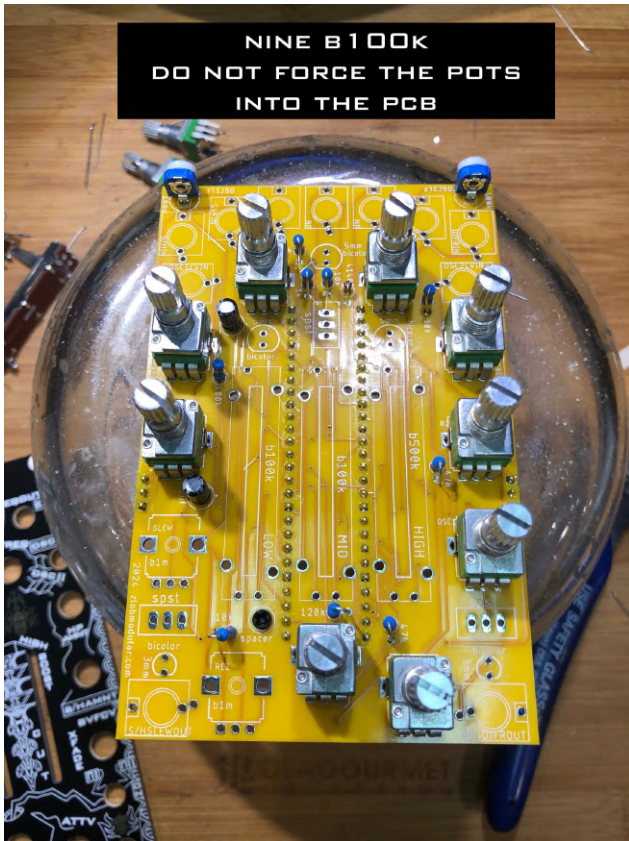
THE VALUE IS
WRITTEN ON THE
POTS. BE CAREFUL
TO READ WHICH
ARE B100K AND
WHICH ARE B1M



NINE B100K POTENTIOMETERS
GENTLY SQUEEZE THE METAL CHASSIS
LEGS TOWARDS EACH OTHER. DON'T
OVERBEND THEY SHOULD FIT SNUGGLY
INTO THE PCB.

THE VALUE IS
WRITTEN ON THE
POTS. BE CAREFUL
TO READ WHICH
ARE B100K AND
WHICH ARE B1M

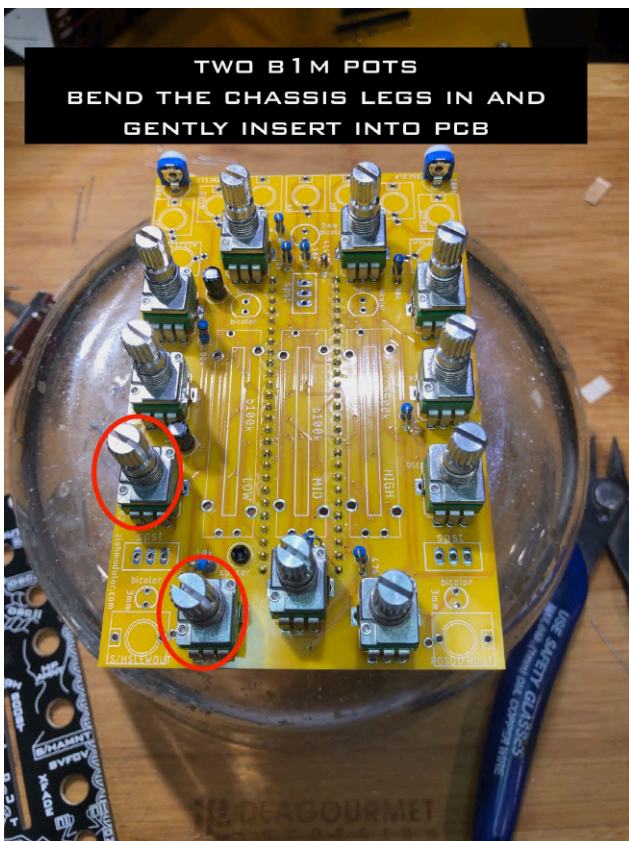
**NINE B100K
DO NOT FORCE THE POTS
INTO THE PCB**



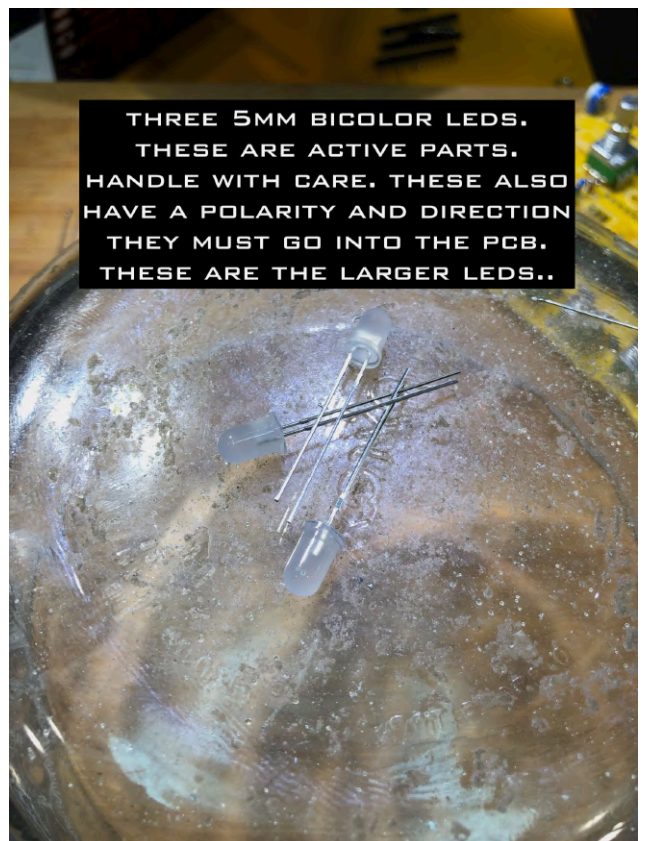
TWO B1M POTENTIOMETERS



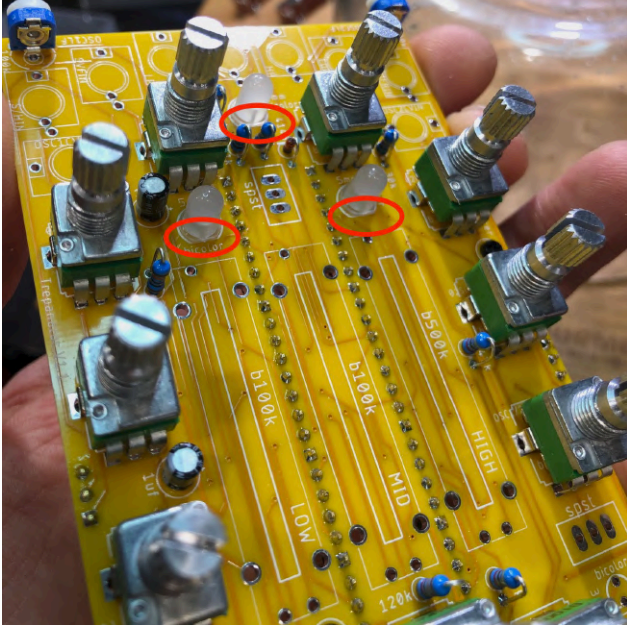
**TWO B1M POTS
BEND THE CHASSIS LEGS IN AND
GENTLY INSERT INTO PCB**



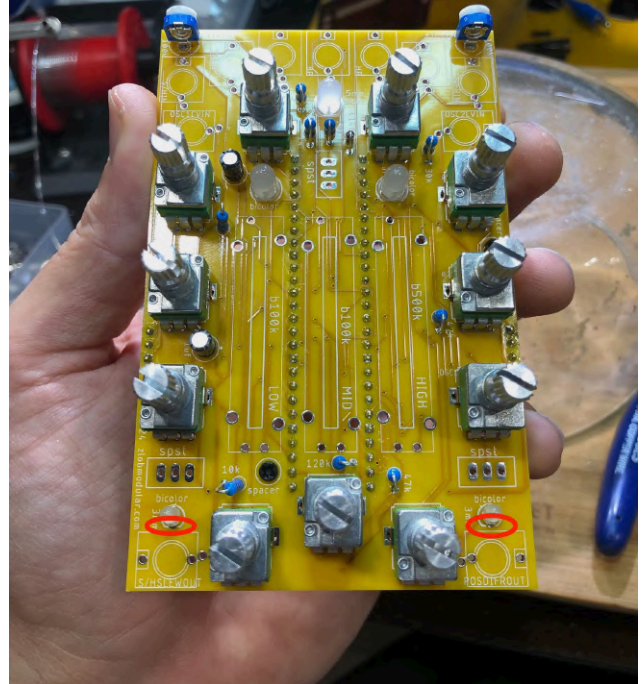
**THREE 5MM BICOLOR LEDs.
THESE ARE ACTIVE PARTS.
HANDLE WITH CARE. THESE ALSO
HAVE A POLARITY AND DIRECTION
THEY MUST GO INTO THE PCB.
THESE ARE THE LARGER LEDs..**



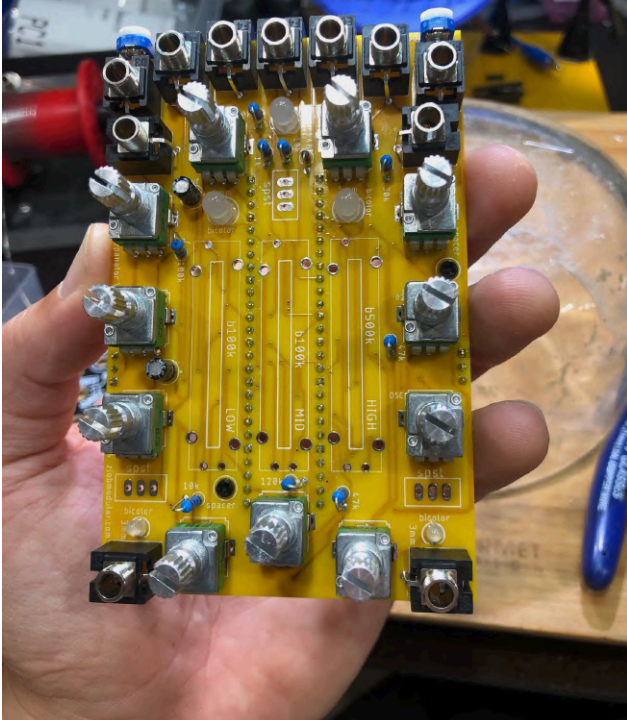
THESE MUST GO FLAT SIDE/SHORT
LEG/CATHODE DOWN. FOLLOW THE
SILKSCREEN.



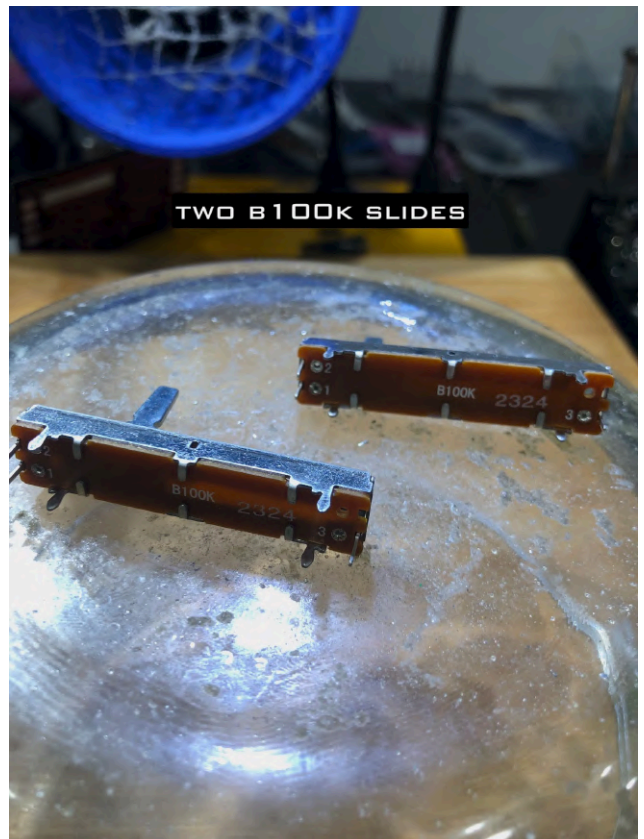
TWO 3MM BICOLOR LEDS. HANDLE
WITH CARE. ALSO SHORT LEG/FLAT
SIDE DOWN

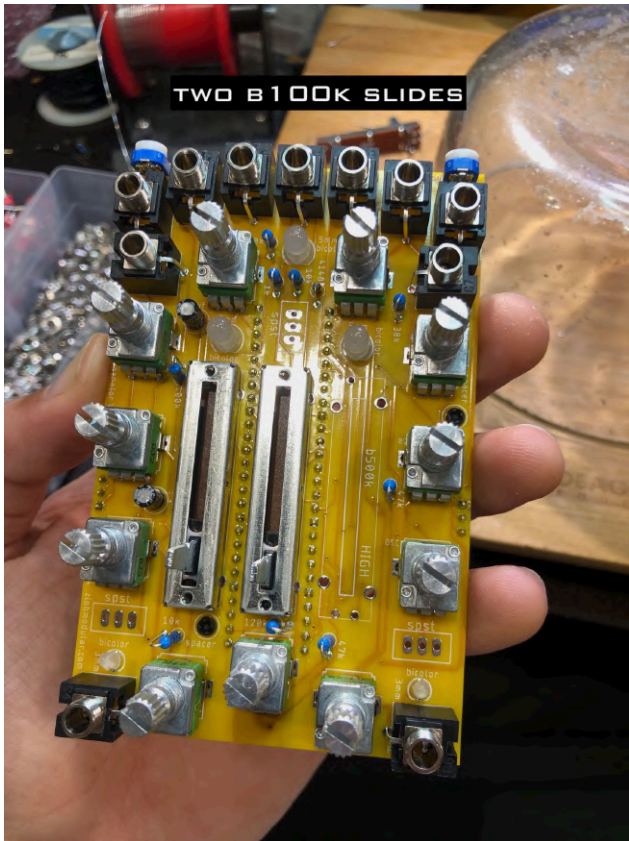


11 JACKS. INSERT CAREULLY INTO PCB.
MAKE SURE ALL 3 LEGS OF EACH JACK
IS POKING THROUGH THE PCB.



TWO B100K SLIDES





TWO B100K SLIDES



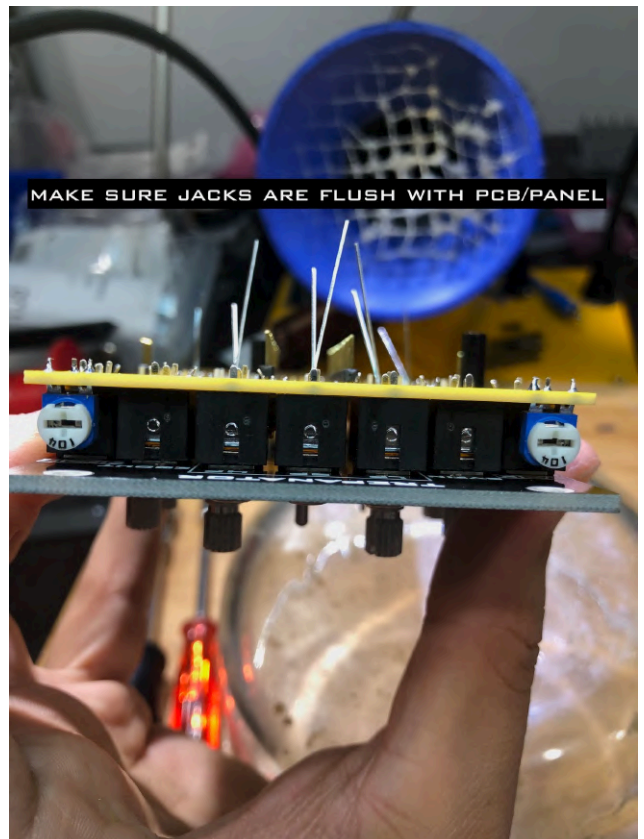
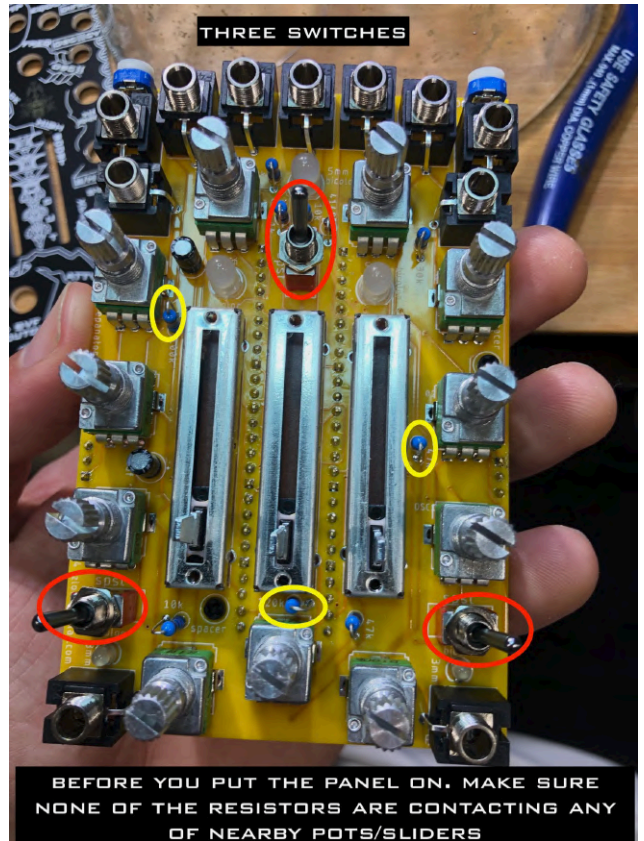
ONE B500K SLIDE POT



ONE B500K SLIDE

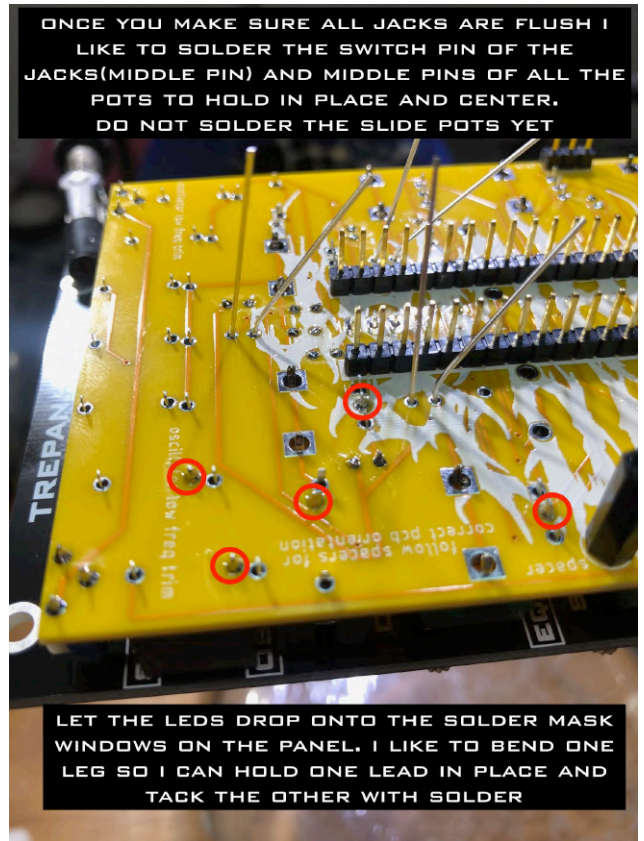


**THREE SWITCHES
MAKE SURE YOU PUT A NUT ON EACH
SWITCH BEFORE PUTTING INTO THE PCB.
YOU SHOULD HAVE 6 NUTS TOTAL**



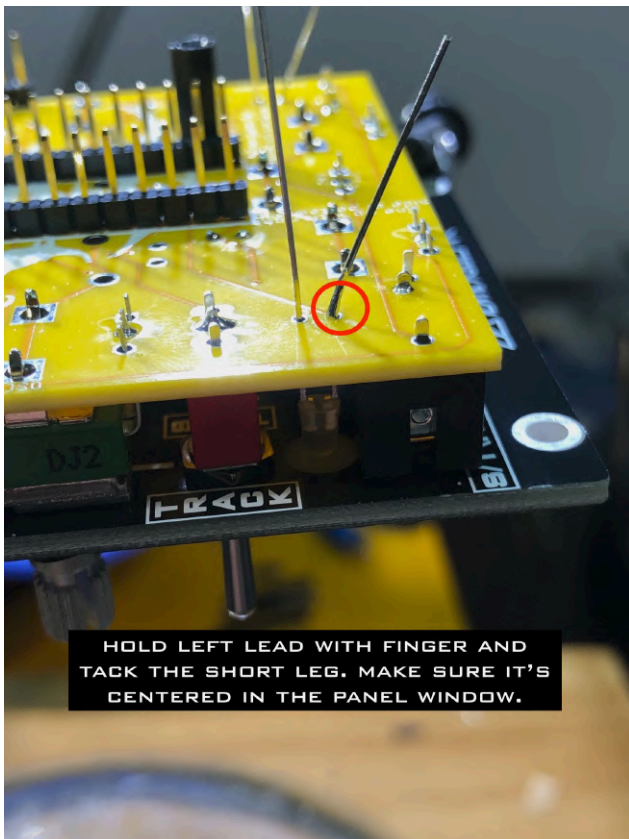


ALSO MAKE SURE POTS ARE FLUSH

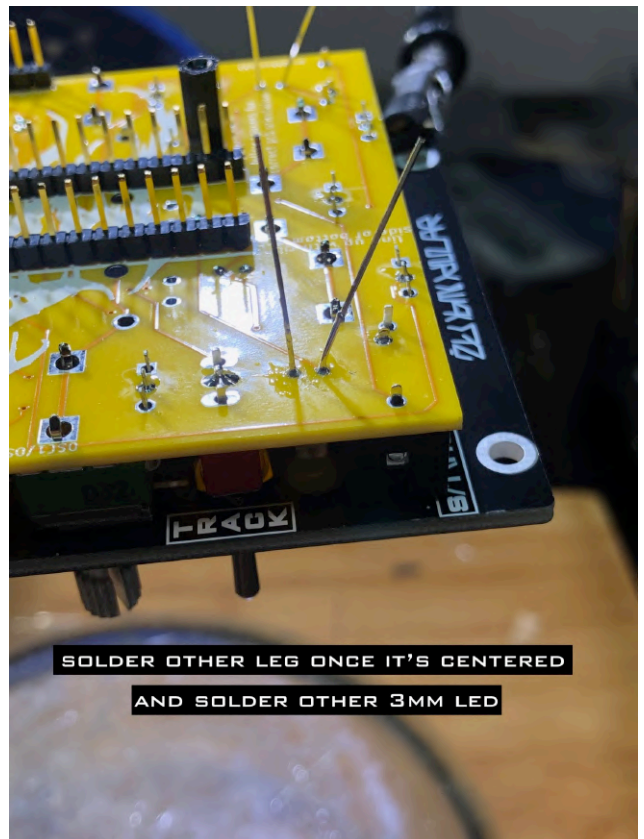


ONCE YOU MAKE SURE ALL JACKS ARE FLUSH I LIKE TO SOLDER THE SWITCH PIN OF THE JACKS(MIDDLE PIN) AND MIDDLE PINS OF ALL THE POTS TO HOLD IN PLACE AND CENTER. DO NOT SOLDER THE SLIDE POTS YET

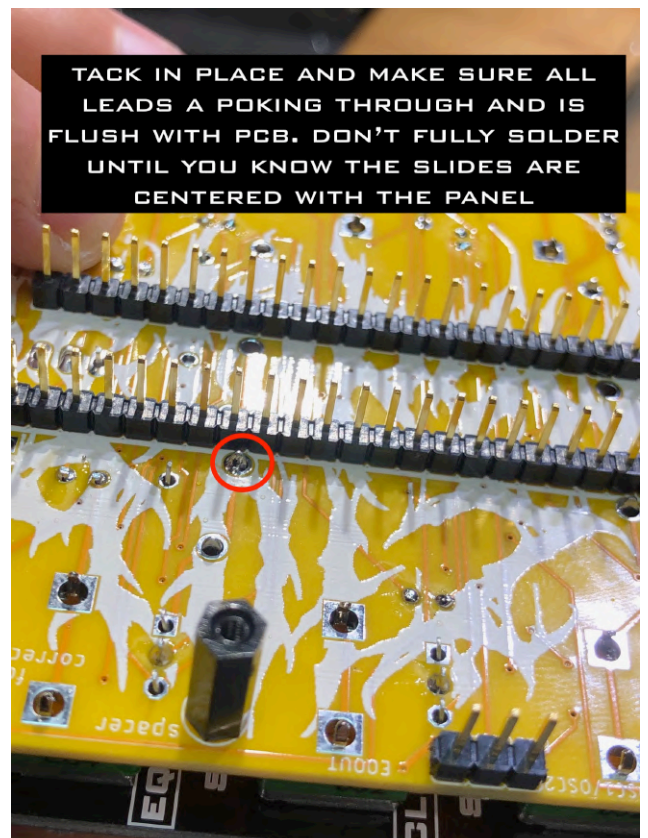
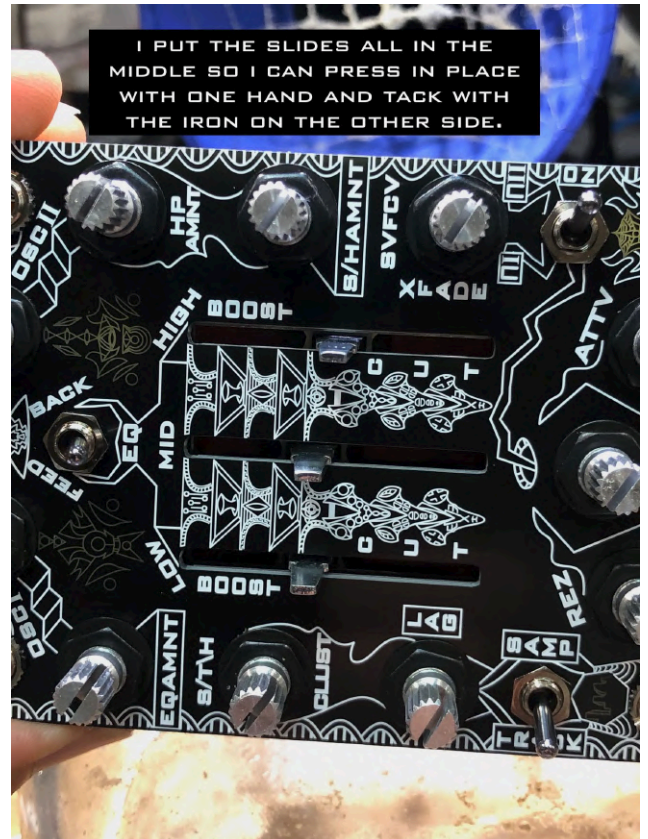
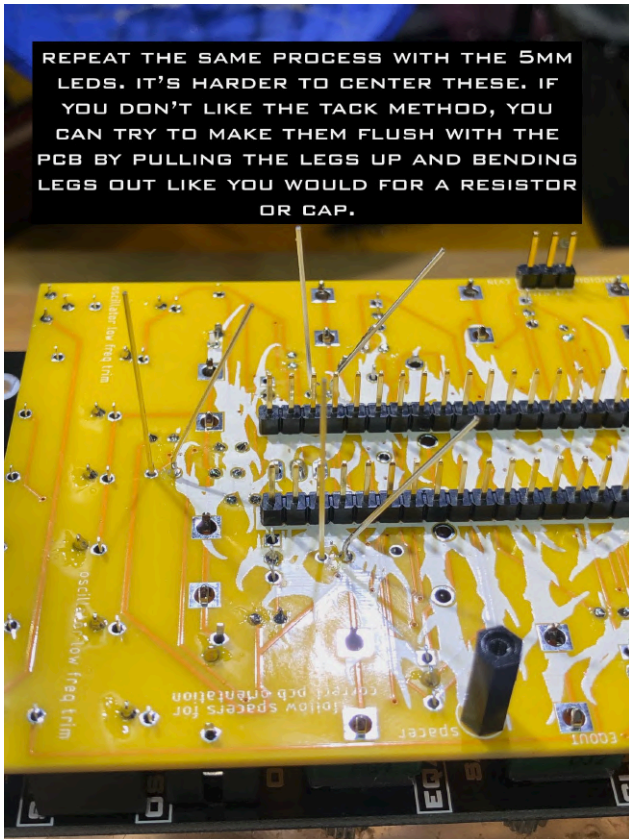
LET THE LEDS DROP ONTO THE SOLDER MASK WINDOWS ON THE PANEL. I LIKE TO BEND ONE LEG SO I CAN HOLD ONE LEAD IN PLACE AND TACK THE OTHER WITH SOLDER

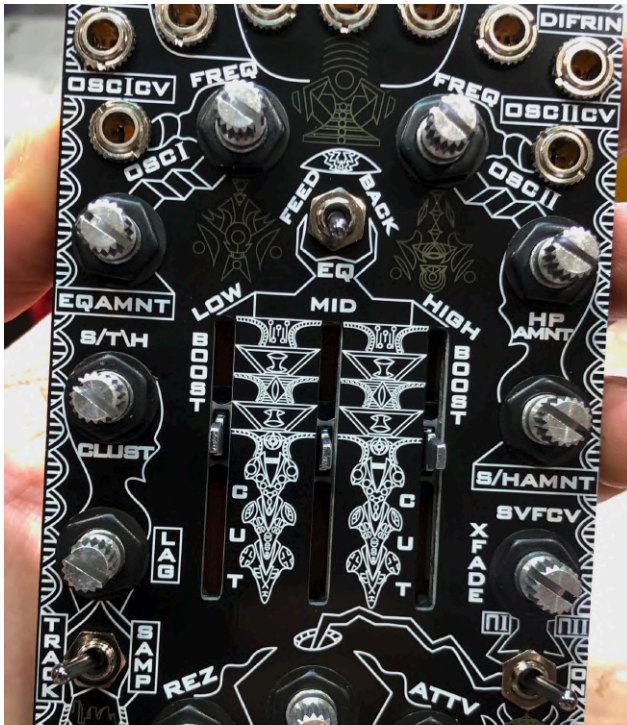


HOLD LEFT LEAD WITH FINGER AND TACK THE SHORT LEG. MAKE SURE IT'S CENTERED IN THE PANEL WINDOW.



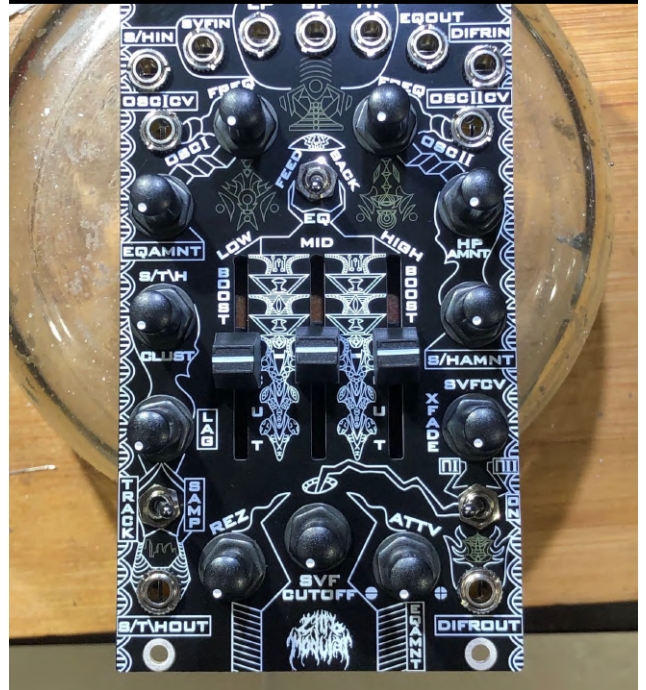
SOLDER OTHER LEG ONCE IT'S CENTERED AND SOLDER OTHER 3MM LED





MAKE SURE SLIDES ARE CENTERED AND REPEAT SAME PROCESS FOR OTHER 2 SLIDERS. SOLDER THE REST OF THE LEADS

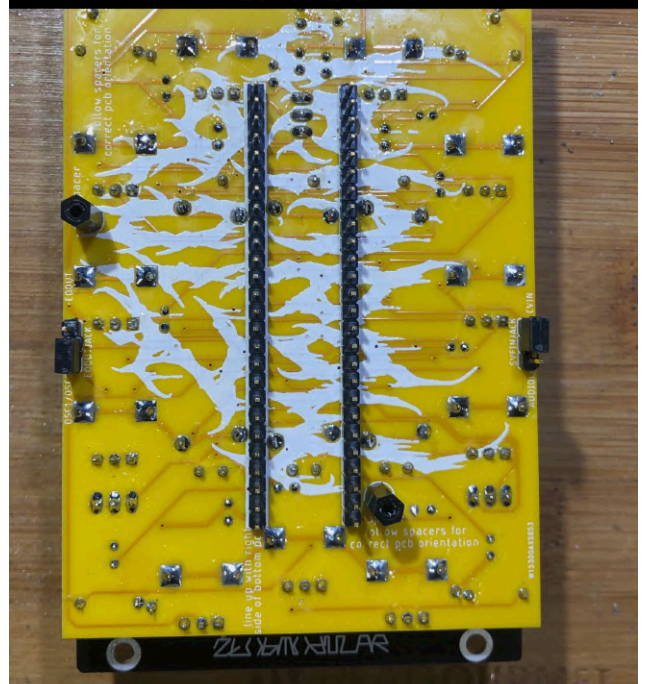
SOLDER THE REST OF THE LEADS, AND TIGHTEN ALL NUTS AND SLIDE ON KNOBS AND SLIDE CAPS. IT'S EASIEST TO LINEUP ALL THE KNOBS IF YOU PUT ALL POTS FULLY COUNTER CLOCKWISE



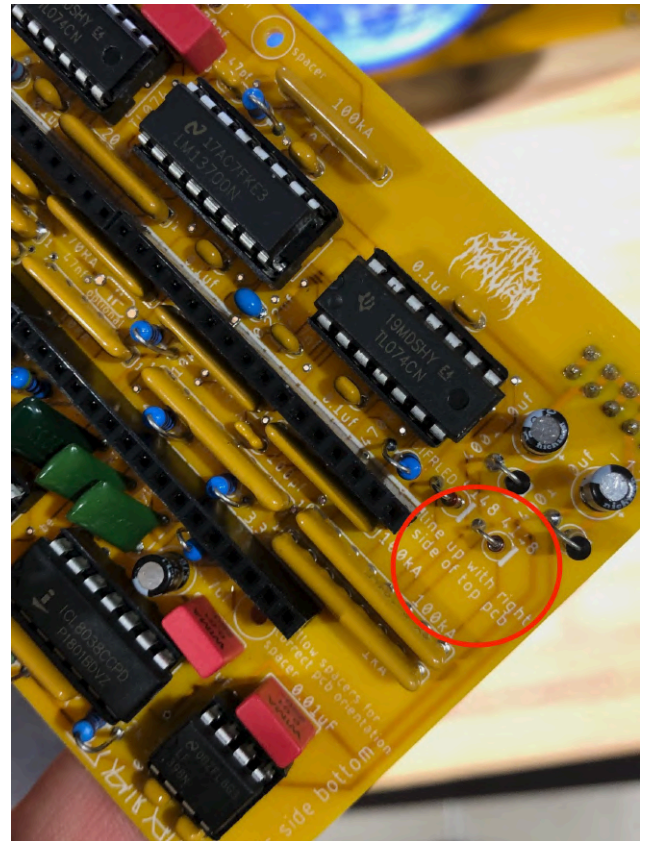
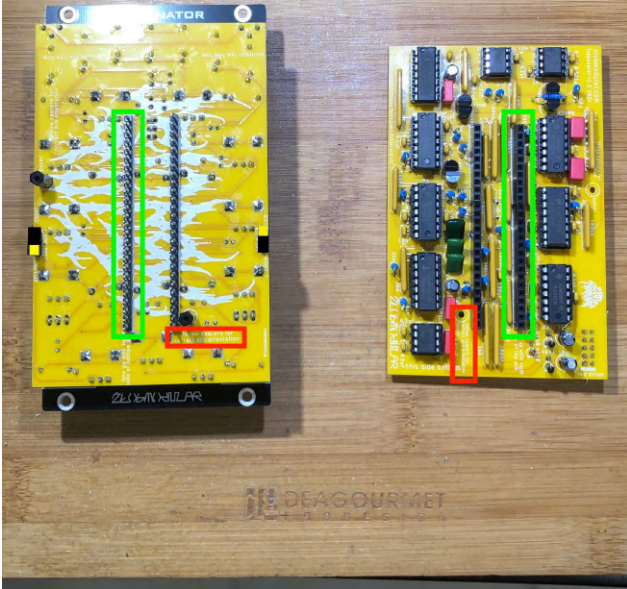
THIS IS THE STOCK JUMPER SETTING FOR THE MODULE. LEFT JUMPER UP SET TO EQ OUT AND RIGHT JUMPER SET DOWN FOR AUDIO IN TO THE SVF. REFER TO THE MANUAL FOR MORE INFO



THIS IS THE ALTERNATE JUMPER SETTING WITH LEFT JUMPER SET DOWN FOR OSC1/OSC2 OUTPUT AT THE EQ OUT JACK, AND RIGHT JUMPER SET UP FOR CV IN CONTROL OF THE SVF.



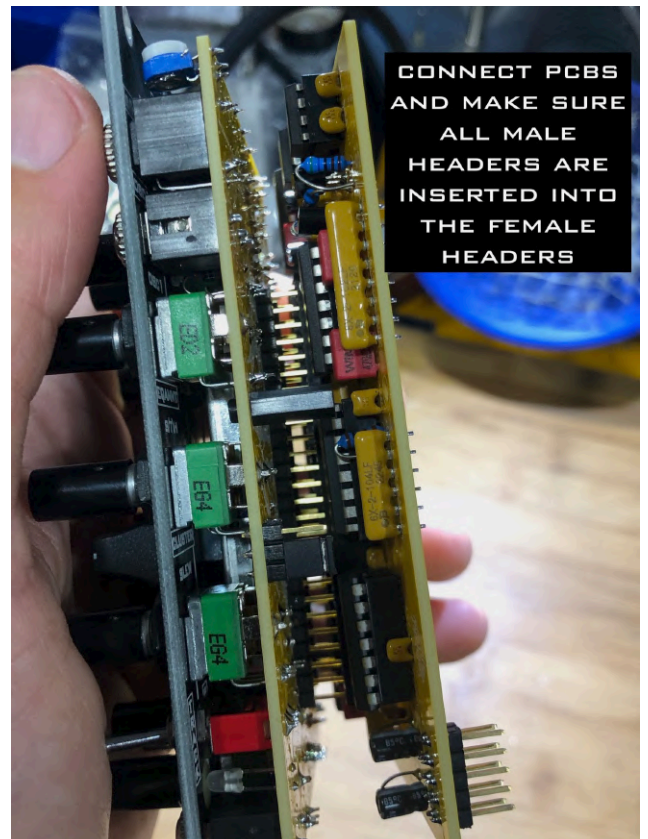
NOW TO CONNECTING PCBS, YOU MUST CONNECT THE PCBS ACCORDING TO HOW THE SPACERS LINEUP. CONNECT GREEN TO GREEN. INCORRECTLY CONNECTING PCBS CAN DAMAGE PARTS AND THE MODULE.

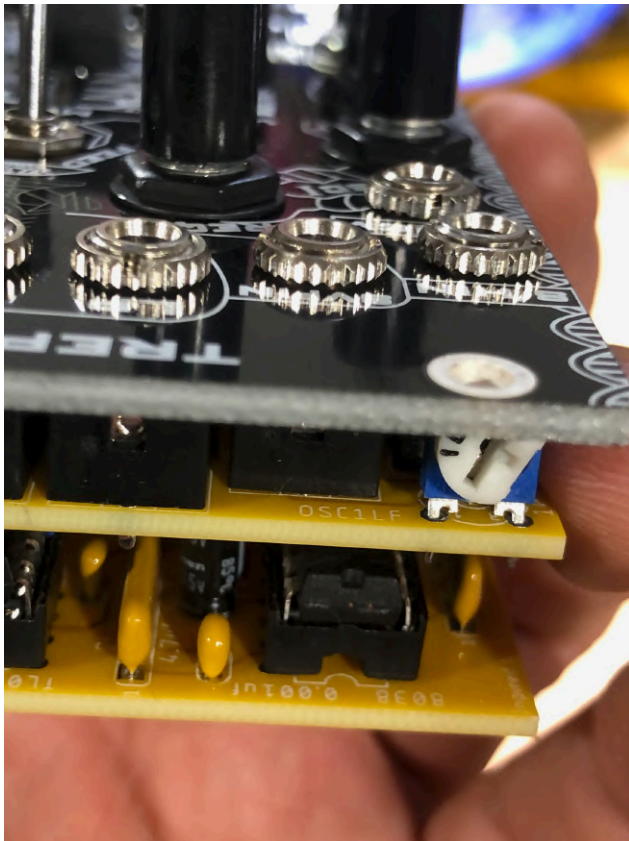


MAKE SURE SPACERS LINE UP



CONNECT PCBS AND MAKE SURE ALL MALE HEADERS ARE INSERTED INTO THE FEMALE HEADERS





Troubleshooting modules

1. Double check all resistors, caps, transistors, diodes, LEDs, and ICs are in the correct spot with proper orientation including chip legs sitting in sockets and all legs of parts are making it through the pcb.
2. Check for cold joints, solder bridges, not fully soldered joints, and cut traces on both sides of all pcbs. Reheat all suspect solder joints.
3. Double check all male and female headers are soldered well
4. If LEDs aren't lighting up replace LED and/or 3904 transistor or bad jack as a last resort.
5. If VCA isn't working check potentiometers are getting power and ground, replace 3906 transistor. Try switching out ICs(opamps and OTA). Make sure 100k trims are receiving +12v and -12v. Could also be a bad jack as a last resort.

Are active parts in correct orientation?

Diode: stripe facing correctly

LED: flat side matching with flat side of silkscreen

Electrolytic caps: positive side matching plus sign

Chips: notch/dot in correct direction, writing on chip reading left to right, all chip legs sitting securely in socket