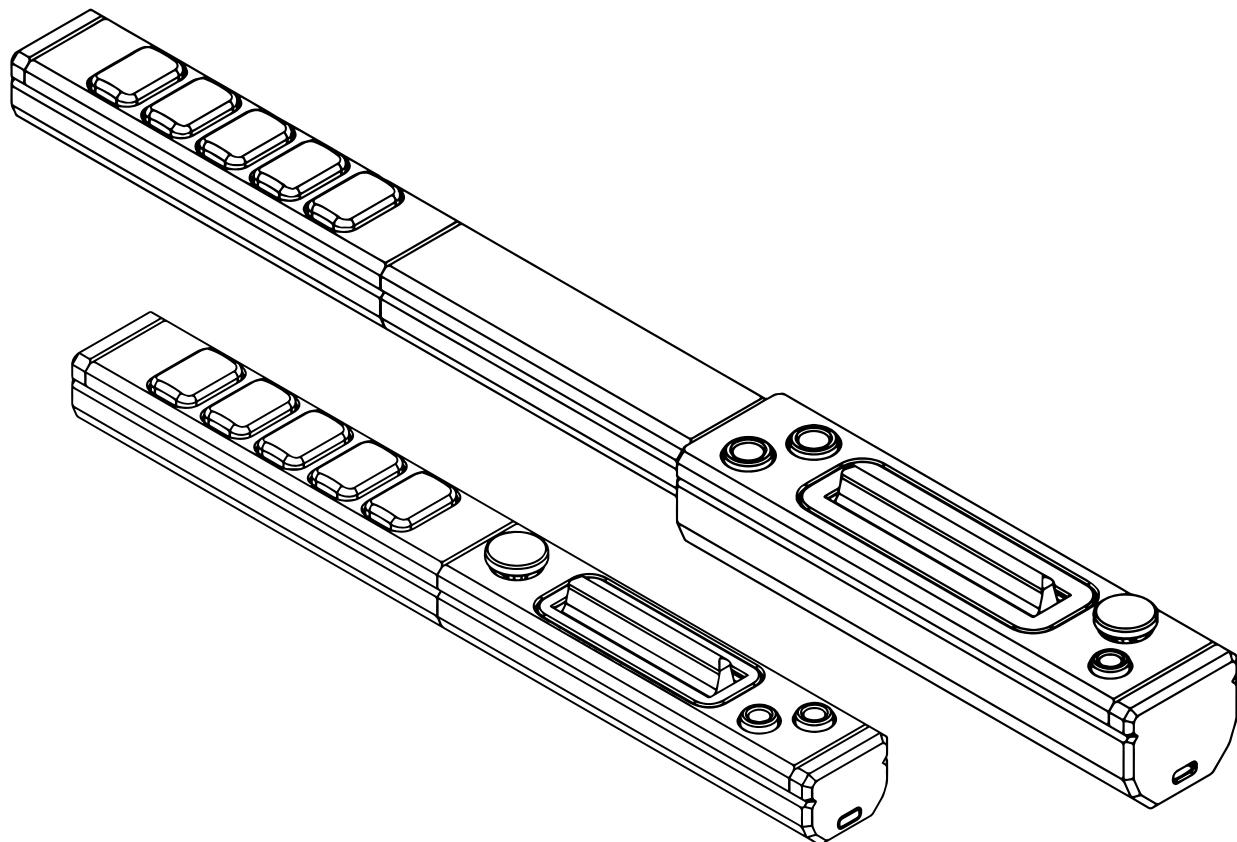


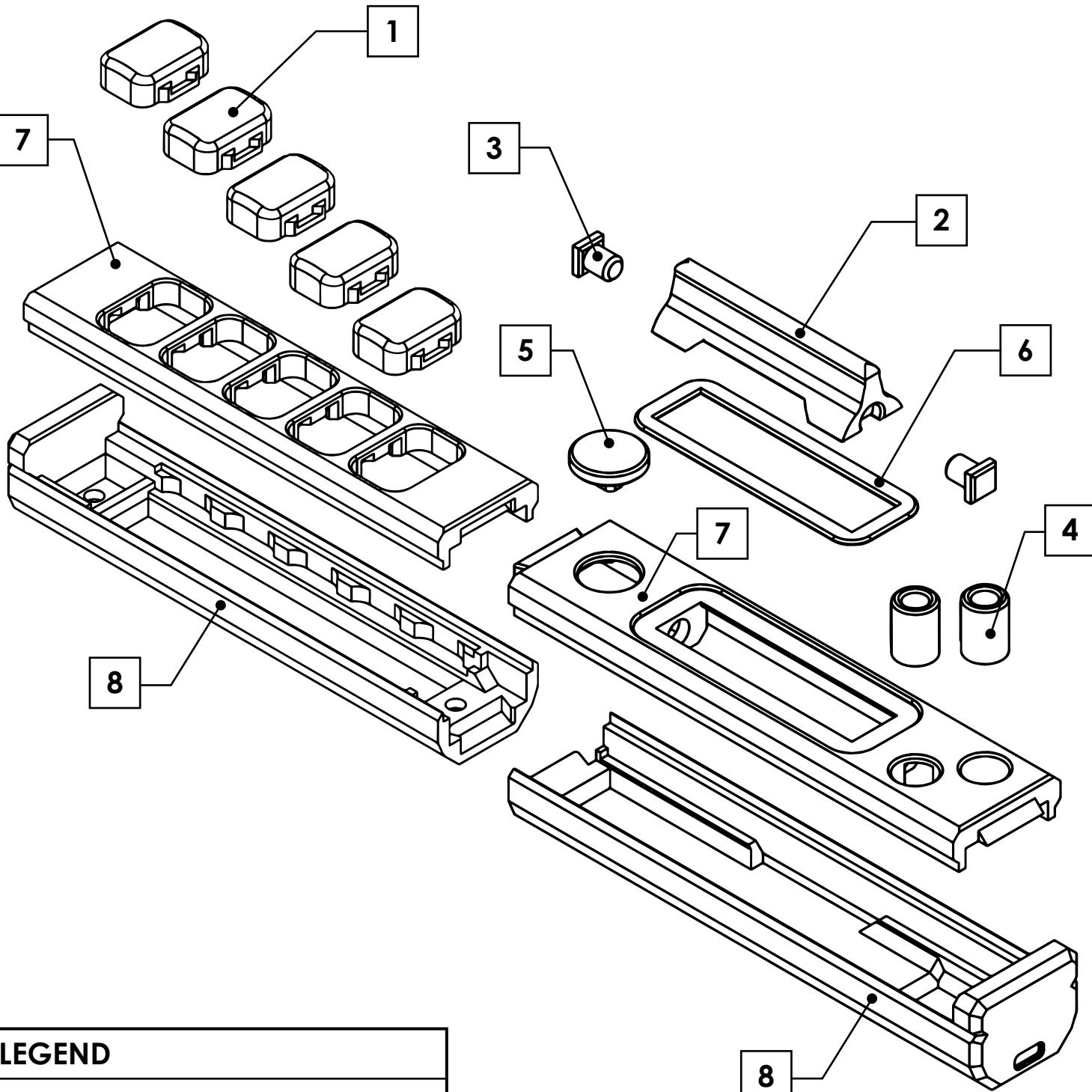
**OFFICIAL BUILD GUIDE**

— FOR —

*Polybar & Minibar*

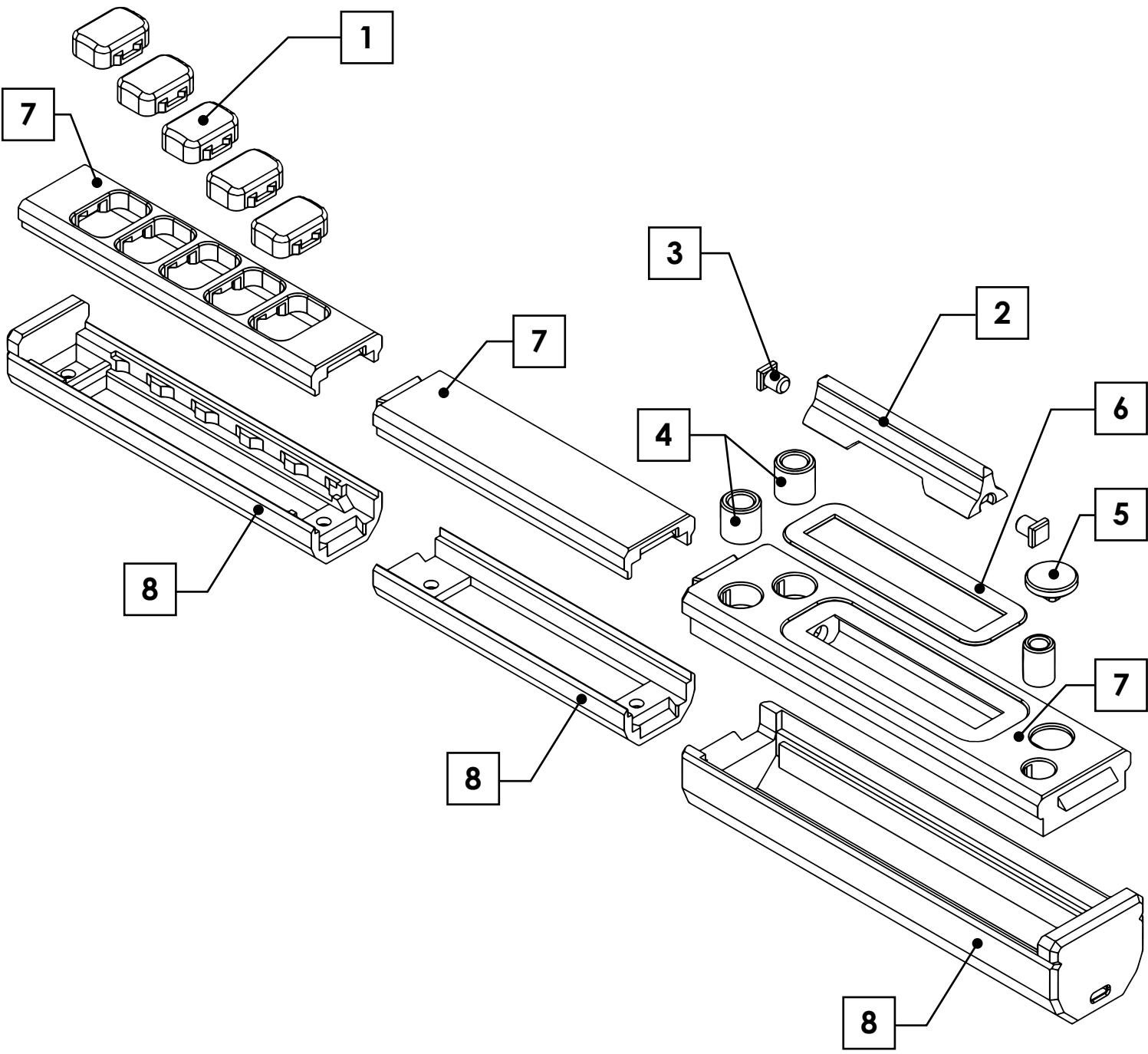
VERSION 5.0





### LEGEND

1. FRETS (INSERTS NOT SHOWN)
2. STRUM BAR
3. STRUM BAR PINS
4. START / SELECT BUTTONS
5. JOYSTICK
6. FACE PLATE
7. TOP SHELLS (FRET / STRUM)
8. BOTTOM SHELLS (FRET / STRUM)



## LEGEND

1. FRETS (INSERTS NOT SHOWN)
2. STRUM BAR
3. STRUM BAR PINS
4. START / SELECT BUTTONS
5. JOYSTICK
6. FACE PLATE
7. TOP SHELLS (FRET / EXTENSION / STRUM)
8. BOTTOM SHELLS (FRET / EXTENSION / STRUM)

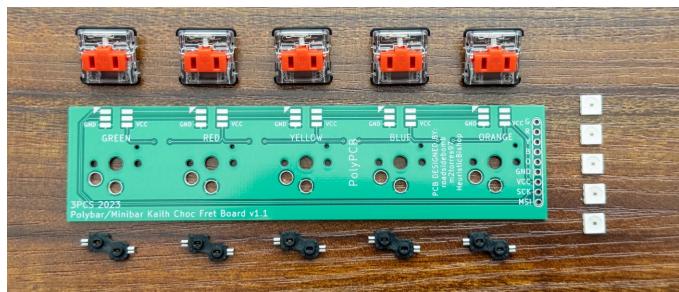
THANK YOU FOR DOWNLOADING THE POLYBAR PROJECT!  
THIS GUIDE WILL ASSIST YOU WITH ASSEMBLING YOUR GUITAR CONTROLLER.

YOU SHOULD HAVE A GENERAL UNDERSTANDING OF SOLDERING AND BOARD COMPONENTS AS THEY PERTAIN TO THIS PROJECT. THIS IS NOT A SOLDERING TUTORIAL, IT IS A TUTORIAL TO BUILD A CONTROLLER. IT IS ASSUMED YOU HAVE KNOWLEDGE ON SOLDERING/ELECTRONICS. IF YOU NEED AN IN DEPTH LOOK AT ANY SPECIFIC COMPONENT, WE RECOMMEND FINDING INFORMATION ONLINE THROUGH VIDEOS AND FORUMS FOR SPECIFIC PROBLEMS THAT MAY ARISE THAT MAY NOT SPECIFICALLY PERTAIN TO THIS PROJECT. FEEL FREE TO ASK QUESTIONS ON OUR DISCORD SERVER!

THE FOLLOWING PAGE CONTAINS A PARTS AND COMPONENTS LIST, AND SUPPLY OF ANY OF THESE PRODUCTS CAN VARY AT ANY TIME. IF YOU ARE ASSEMBLING THIS PROJECT AND NEED SUBSTITUTE COMPONENTS DUE TO SUPPLY ISSUES, ALL KICAD BOARD FILES ARE PROVIDED IN THE SOURCE ZIP.

JOIN US ON DISCORD IF YOU HAVE ANY QUESTIONS PERTAINING TO THIS PROJECT, OR ANY OTHER PROJECTS THAT ARE RELEVANT TO THIS TOPIC. WE ARE MORE THAN HAPPY TO HELP!

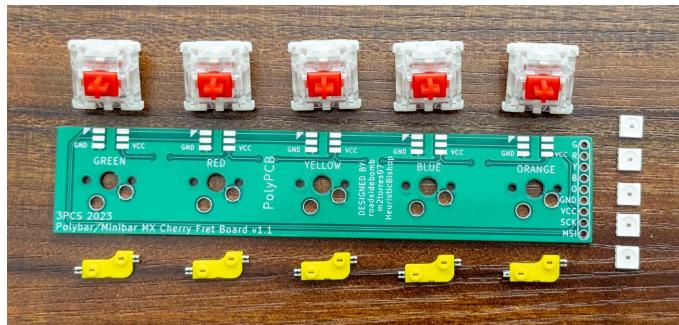
## KAILH CHOC FRET BOARD



## COMPONENTS SHOWN

5x KAILH CHOC SWITCHES  
5x DotStar ADDRESSABLE 5050 RGB LEDs  
5x KAILH CHOC HOTSWAP SOCKETS  
1x KAILH CHOC PolyPCB

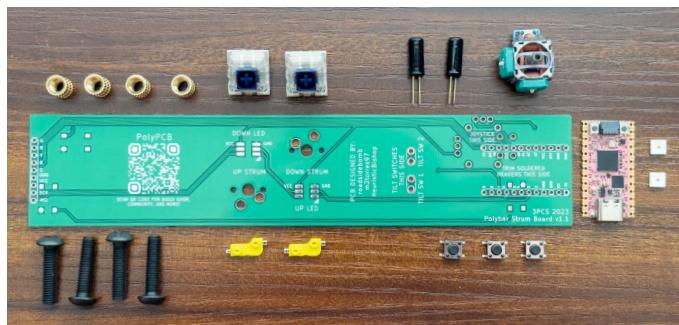
## MX CHERRY FRET BOARD



## COMPONENTS SHOWN

5x (ANY TYPE) MX CHERRY SWITCHES  
5x DotStar ADDRESSABLE 5050 RGB LEDs  
5x MX CHERRY HOTSWAP SOCKETS  
1x MX CHERRY PolyPCB

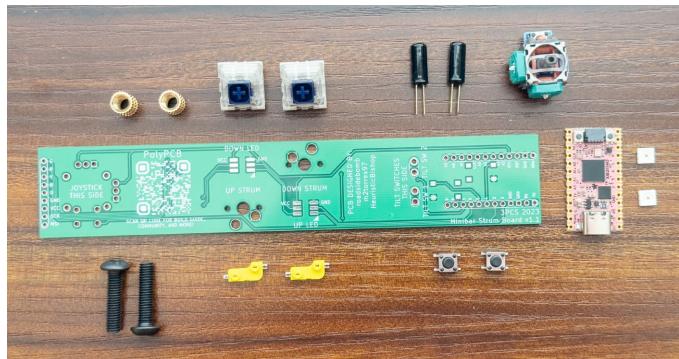
## "POLYBAR" STRUM BOARD



## COMPONENTS SHOWN

2x KAILH BOX NAVY SWITCHES  
2x MX CHERRY HOTSWAP SOCKETS  
2x DotStar ADDRESSABLE 5050 RGB LEDs  
3x 6x6x5 MICRO TACTILE SWITCHES  
4x M5x10x7mm THREADED INSERTS  
4x M5X20 BUTTON HEAD SCREWS  
1x ADAFRUIT KB2040 MICROCON.  
1x XBOX-STYLE JOYSTICK  
2x BALL TILT SWITCHES  
1x "POLYBAR" PolyPCB

## "MINIBAR" STRUM BOARD



## COMPONENTS SHOWN

2x KAILH BOX NAVY SWITCHES  
2x MX CHERRY HOTSWAP SOCKETS  
2x DotStar ADDRESSABLE 5050 RGB LEDs  
2x 6x6x5 MICRO TACTILE SWITCHES  
2x M5x10x7mm THREADED INSERTS  
2x M5X20 BUTTON HEAD SCREWS  
1x ADAFRUIT KB2040 MICROCON.  
1x XBOX-STYLE JOYSTICK  
2x BALL TILT SWITCHES  
1x "MINIBAR" PolyPCB

## COMPONENT LAYOUTS

G4



THE TOOLS SHOWN ABOVE ARE RECOMMENDED FOR BUILDING THE POLYBAR & MINIBAR. WHILE ALL OF THESE TOOLS AREN'T ABSOLUTLEY NECESSARY, IT WILL SAVE YOU SOME TIME AND HEADACHE IF YOU PLAN ON BUILDING MULTIPLE UNITS FOR FRIENDS AND FAMILY. YOU CAN BUILD THE POLYBAR & MINIBAR GUITARS WITH A BASIC SOLDERING KIT FROM ONLINE RETAILERS SUCH AS AMAZON OR WALMART.

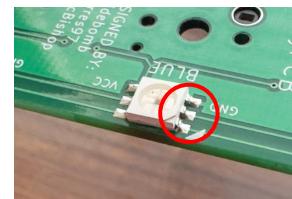
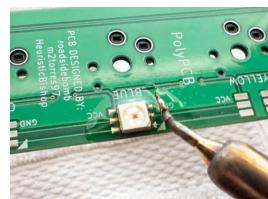
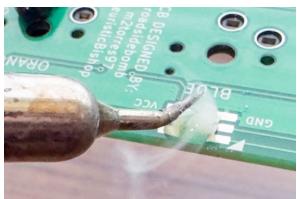
TOOLS SHOWN ABOVE IN NO PARTICULAR ORDER:

**SOLDERING IRON  
ROSIN CORE SOLDER  
SOLDERING FLUX  
FLUSH CUTTERS  
TWEEZERS  
HELPING HANDS  
MISC. WIRE**

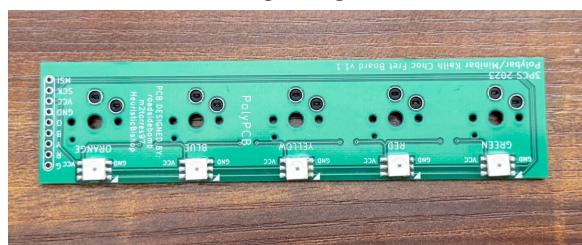
1. SOLDER YOUR HOTSWAPS TO THE BACKSIDE OF THE KAILH CHOC PCB. ENSURE THAT YOUR HOTSWAP SOCKETS ARE MOUNTED FLUSH, AND CONTINUE TO SOLDER ALL 5 SOCKETS TO THE BACK OF THE PCB.



2. PLACE AND SOLDER YOUR LEDs TO THE FRONT OF THE KAILH CHOC PCB. START BY PLACING AND MELTING A SMALL BALL OF FLUX ON EACH LED PAD, AND ALLOW THE FLUX TO COOL. PLACE THE LED MODULE ONTO THE BOARD AND MATCH THE DIRECTION OF THE ARROWS FOR PROPER ORIENTATION. ONCE PLACED, TIN YOUR SOLDERING IRON AND SWIPE YOUR IRON UP AND DOWN THE SIDE OF THE LED. IF DONE CORRECTLY, THE SOLDER WILL ATTRACT TO THE PADS ON THE LED/PCB AND CREATE A PROPER CONNECTION AS SHOWN IN THE RIGHT HAND IMAGE BELOW.



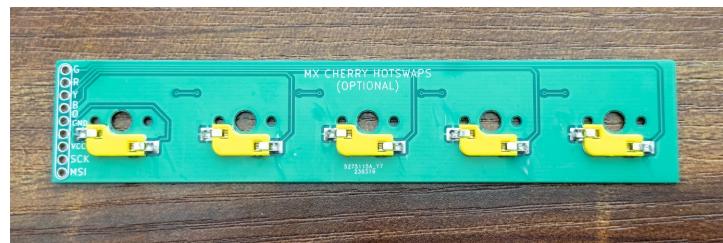
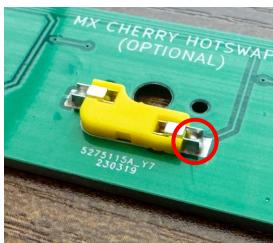
### ALL LEDs INSTALLED



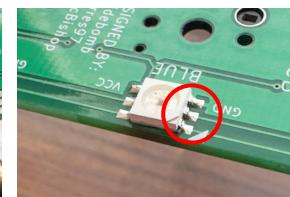
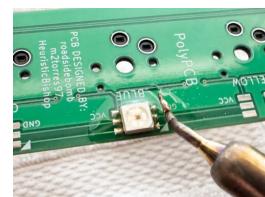
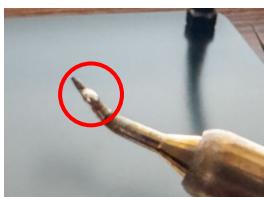
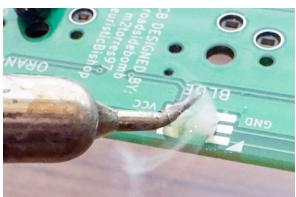
3. ONCE YOUR LEDs AND HOTSWAP SOCKETS ARE INSTALLED, INSERT YOUR KAILH CHOC KEYSWITCHES INTO THE HOTSWAP SOCKETS. YOU HAVE COMPLETED YOUR FRET BOARD!



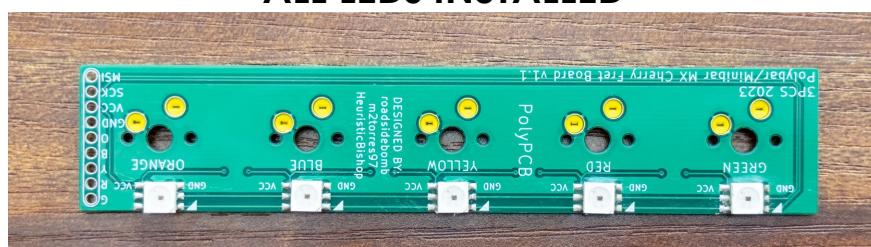
1. SOLDER YOUR HOTSWAPS TO THE BACKSIDE OF THE MX CHERRY PCB. ENSURE THAT YOUR HOTSWAP SOCKETS ARE MOUNTED FLUSH, AND CONTINUE TO SOLDER ALL 5 SOCKETS TO THE BACK OF THE PCB.



2. PLACE AND SOLDER YOUR LEDs TO THE FRONT OF THE MX CHERRY PCB. START BY PLACING AND MELTING A SMALL BALL OF FLUX ON EACH LED PAD, AND ALLOW THE FLUX TO COOL. PLACE THE LED MODULE ONTO THE BOARD AND MATCH THE DIRECTION OF THE ARROWS FOR PROPER ORIENTATION. ONCE PLACED, TIN YOUR SOLDERING IRON AND SWIPE YOUR IRON UP AND DOWN THE SIDE OF THE LED. IF DONE CORRECTLY, THE SOLDER WILL ATTRACT TO THE PADS ON THE LED/PCB AND CREATE A PROPER CONNECTION AS SHOWN IN THE RIGHT HAND IMAGE BELOW.



### ALL LEDs INSTALLED

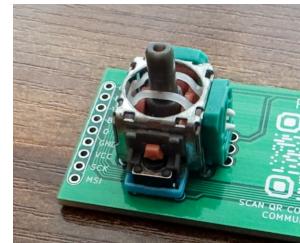
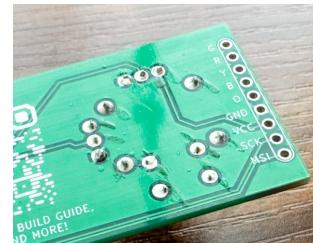
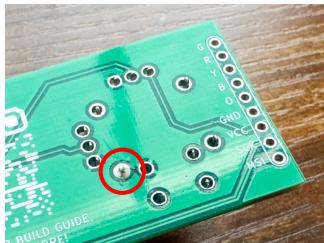
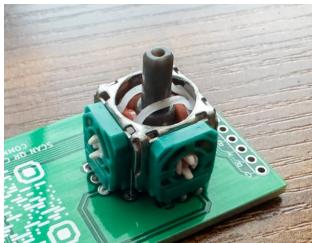


3. ONCE YOUR LEDs AND HOTSWAP SOCKETS ARE INSTALLED, INSERT YOUR MX CHERRY KEYSWITCHES INTO THE HOTSWAP SOCKETS. YOU HAVE COMPLETED YOUR FRET BOARD!

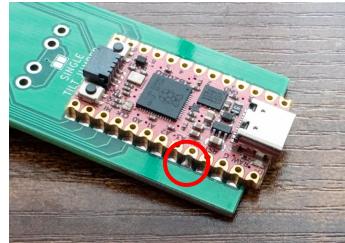
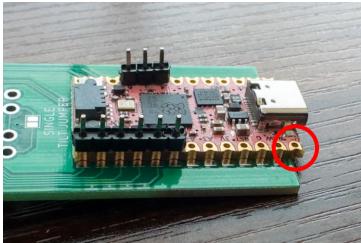


**NOTE!**  
DUE TO THE NATURE OF  
MX CHERRY KEYSWITCHES,  
THE MX CHERRY FRET INSERTS HAVE  
AN ANGLE TO THEM. ENSURE TO  
ORIENT THEM ALL THE SAME  
WAY DURING INSTALLATION.

1. BEGIN BY PLACING YOUR JOYSTICK ON THE FRONT OF THE BOARD, AND PINNING ONE VIA. CONFIRM YOUR JOYSTICK IS FLUSH AND PROPERLY SEATED, THEN CONTINUE TO PIN THE REST OF YOUR CONNECTIONS. YOUR JOYSTICK SHOULD LOOK LIKE THE RIGHT HAND IMAGE WITH ALL CONNECTIONS SECURE.



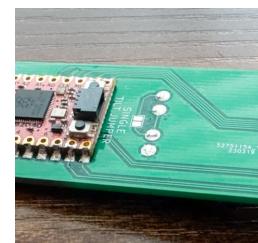
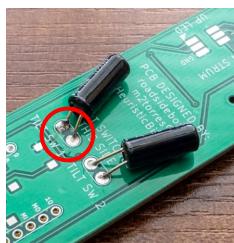
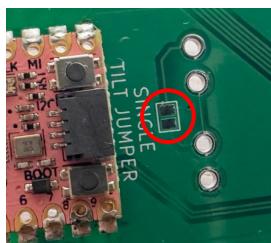
2. ROTATE YOUR PCB TO THE BACK SIDE, AND PLACE YOUR KB2040 ON THE END OF THE PCB. USING SOME SPARE HEADERS, LINE UP YOUR KB2040 AND PIN ONE OF THE CASTELLATION POINTS. REMOVE THE HEADERS, AND FINISH SOLDERING ALL CONNECTIONS. PLEASE NOTE THAT **D-** AND **D+** WILL NOT BE USED, AND SHOULD HANG OFF THE END OF THE PCB.



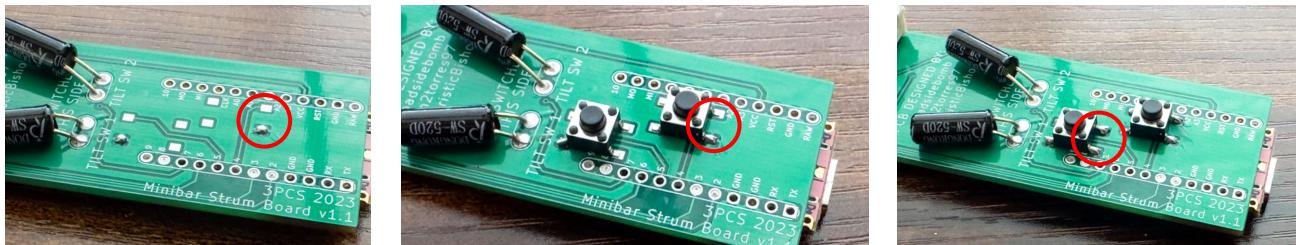
3. ON THE SAME SIDE AS THE KB2040, LOCATE THE MX CHERRY HOTSWAP SOCKET LOCATIONS AND PLACE TWO SOCKETS IN POSITION. SOLDER BOTH CONNECTIONS ENSURING A SNUG AND FLUSH FIT.



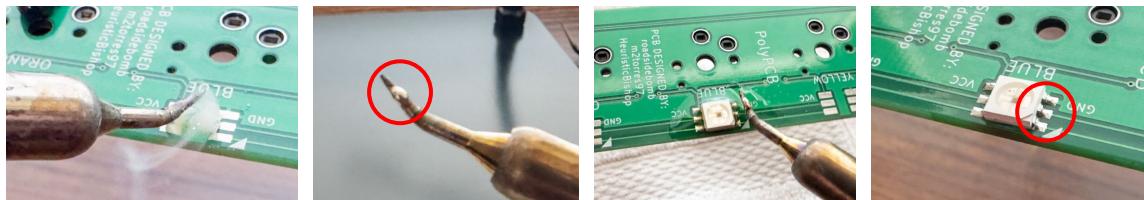
4. LOCATE THE TILT SWITCH VIAS, AND INSERT YOUR COMPONENTS. IF YOU ONLY WANT TO USE ONE TILT SWITCH, SOLDER THE JUMPER LOCATED ABOVE THE KB2040 ON THE BACK SIDE. OTHERWISE, ANGLE BOTH SWITCHES IN A V SHAPE TO PREVENT ACCIDENTAL ACTIVATIONS. SOLDER ALL FOUR CONNECTIONS, AND TRIM THE EXCESS CONNECTION ON THE BACKSIDE.



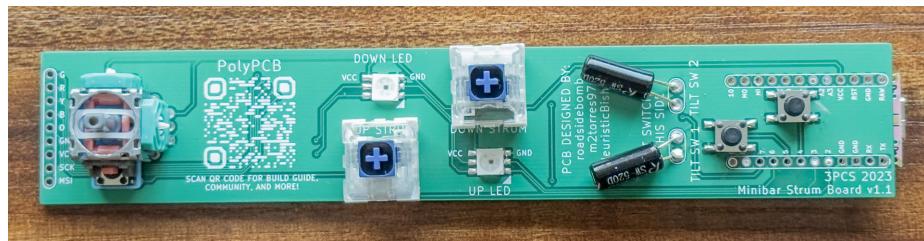
- 5.** BELOW THE TILT SWITCHES, LOCATE THE PADS FOR THE MICRO SWITCHES. BEGIN BY PLACING SOLDER ON ONE PAD, AND ALIGNING YOUR SWITCH IN THE CORRECT POSITION. ONCE SECURE, FINISHING SOLDERING THE REMAINING THREE PADS.



- 6.** PLACE AND SOLDER YOUR LEDs TO THE FRONT OF THE MINIBAR STRUM BOARD PCB. START BY PLACING AND MELTING A SMALL BALL OF FLUX ON EACH LED PAD, AND ALLOW THE FLUX TO COOL. PLACE THE LED MODULE ONTO THE BOARD AND MATCH THE DIRECTION OF THE ARROWS FOR PROPER ORIENTATION. ONCE PLACED, TIN YOUR SOLDERING IRON AND SWIPE YOUR IRON UP AND DOWN THE SIDE OF THE LED. IF DONE CORRECTLY, THE SOLDER WILL ATTRACT TO THE PADS ON THE LED/PCB AND CREATE A PROPER CONNECTION AS SHOWN IN THE RIGHT HAND IMAGE BELOW.



- 7.** INSERT THE KAILH BOX NAVY SWITCHES INTO THE HOTSWAP SOCKETS, AND YOUR MINIBAR STRUM BOARD PCB IS NOW COMPLETE!



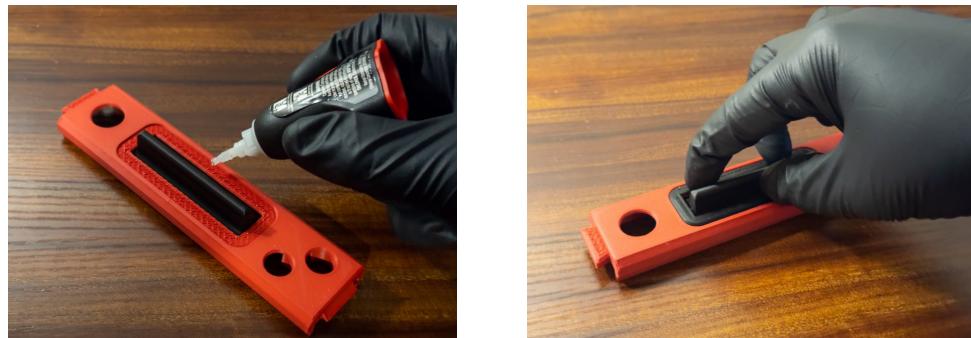
## PARTS REQUIRED FOR ASSEMBLY



1. BEGIN BY INSERTING THE STRUM BAR IN THE BACK OF THE STRUM SHELL. SLIDE THE STRUM BAR PINS INTO EACH SIDE OF THE STRUM BAR, ENSURING THE PINS ARE INSERTED AS FAR IN AS POSSIBLE. LOCATE THE STRUM BAR RETAINER CLIP POINTS, AND PUSH THE RETAINER CLIPS INTO THEIR RESPECTIVE POSITIONS. THE RETAINER CLIPS PREVENT THE STRUM PINS FROM WALKING BACK DURING PLAY.



2. USING YOUR FAVORITE QUICK DRY SUPER GLUE, APPLY GLUE TO THE FRONT SUPPORT WEBBING ON THE STRUM SHELL. APPLY YOUR FACE PLATE TO THE GLUED AREA, AND HOLD IT IN PLACE WHILE THE SUPER GLUE SETS IN PLACE.



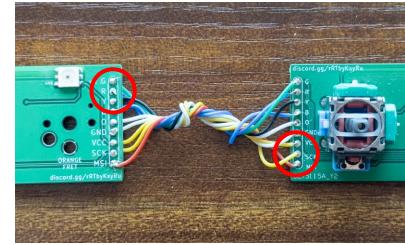
- 3.** USING TWEEZERS OR FLUSH CUTTERS, PLACE YOUR BRASS INSERTS ABOVE THE DESIGNATED HOLES. USING YOUR SOLDERING IRON, HEAT THE BRASS INSERT AND SLOWLY SLIDE THE BRASS INSERT INTO THE HOLE. ENSURE THAT THE INSERT IS LEVEL AND DOESN'T CREATE A PROTRUSION ON THE FRONT SIDE OF YOUR FRET SHELL. I RECOMMEND ADDING SOME SUPER GLUE TO THE INSERTS TO PREVENT THEM FROM PULLING BACK OUT.



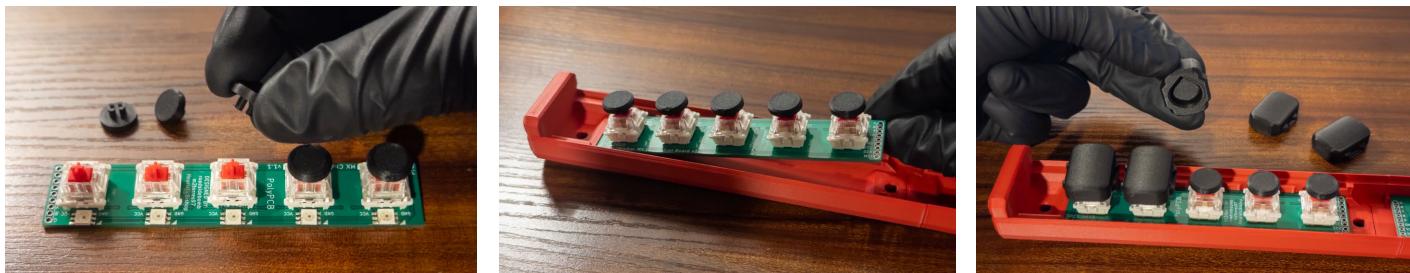
- 4.** PROCEED TO CONNECT THE DOVETAILS OF THE FRET AND STRUM SHELLS TOGETHER.  
**NOTE:** IT MAY FEEL LIKE THEY WON'T CONNECT, BUT PERSISTENCE IS KEY. THE TOLERANCE ON THESE PARTS IS VERY TIGHT TO PREVENT WARPING AND TWISTING OVER TIME.



5. NEXT, SOLDER BOTH PCBs TOGETHER WITH WIRE OF YOUR CHOICE. CONNECT THE RESPECTIVE POINTS (G, R, Y, B, O, GND, VCC, SCK, MSI) TO EACH EACH OTHER AS SHOWN IN THE IMAGE TO THE RIGHT. YOU MAY WANT TO TWIST YOUR WIRE, AND USE TAPE/GLUE TO HOLD THE WIRE DOWN WHEN PLACING THE BOARDS IN THE SHELLS.

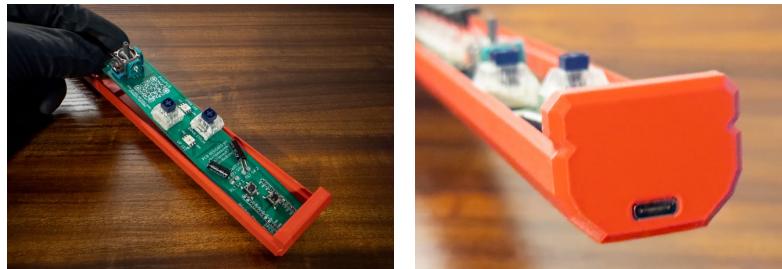


6. LOCATE YOUR FRET PCB, AND PLACE THE FRET INSERTS INTO THE SWITCHES. ONCE COMPLETE, SLIDE YOUR FRET PCB INTO THE APPROPRIATE TRAY IN THE FRET SHELL. PLACE YOUR FRETS ONTO THE FRET INSERTS, WITH THE ARROW POINTING TOWARD WHICHEVER SIDE YOU WILL PLAY ON. **NOTE:** THE FRETS MAY HAVE A SMALL BIAS TO TILT FURTHER TOWARD THE PLAYER DEPENDING ON PRINT SETTINGS. FLIP YOUR FRETS IF THIS BECOMES AN ISSUE.



**NOTE:** DUE TO THE NATURE OF MX CHERRY KEYSWITCHES, THE MX CHERRY FRET INSERTS HAVE AN ANGLE TO THEM. ENSURE TO ORIENT THEM ALL THE SAME WAY DURING INSTALLATION.

7. LOCATE YOUR STRUM PCB, AND SLIDE IT INTO THE TRAY IN THE STRUM SHELL. ENSURE THAT THE USB-C PORT IS EXPOSED AT THE BOTTOM OF THE STRUM SHELL.



**NOTE!**  
YOU MAY WANT TO  
APPLY A SMALL DAB  
OF GLUE TO SECURE  
YOUR PCBs.

8. INSERT THE BUTTONS INTO THE STRUM SHELL, AND HOLD/TAPE THEM IN PLACE WHILE INSERTING THE TOP SHELL AT A SLIGHT ANGLE INTO THE CONNECTION POINT AT THE BOTTOM OF THE MINIBAR. FINISH CLOSING THE SHELLS, MAKING SURE TO FULLY CLOSE THEM TOGETHER .



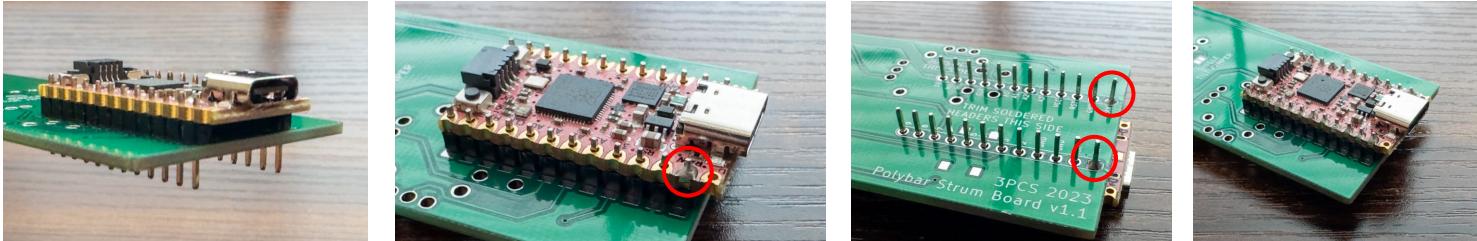
- 9.** FLIP THE MINIBAR OVER, AND INSERT THE TWO BUTTON HEAD CAP SCREWS. IF YOUR GLUE HAS NOT FULLY CURED, BE CAREFUL TO NOT OVERTIGHTEN THE SCREWS AND PULL THE BRASS INERSTS OUT OF THE PLASTIC SHELL. ONCE TIGHTENED, FLIP THE MINIBAR OVER AND INSERT THE JOYSTICK CAP. **NOTE:** THE TOLERANCES ARE VERY TIGHT ON THE JOYSTICK CAP, TO ENSURE THAT IT DOESN'T FALL OFF DURING FAST WHAMMY MOVEMENTS.



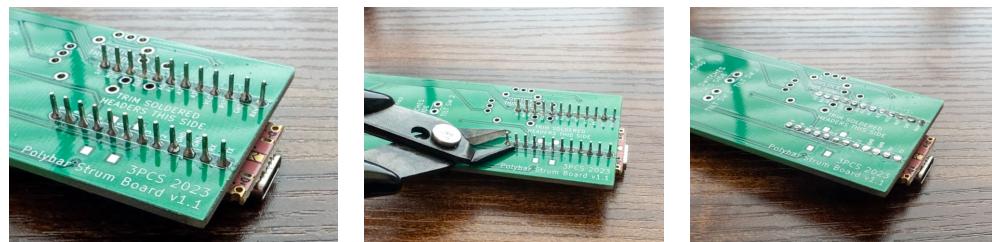
- 10.** YOUR MINIBAR IS NOW COMPLETE! PLUG YOUR GUITAR INTO YOUR COMPUTER, AND LAUNCH SANJAY900'S GUITAR CONFIGURATOR TOOL. YOU CAN MAP ALL INPUTS, ASSIGN LED COLORS, AND CALIBRATE YOUR WHAMMY JOYSTICK!



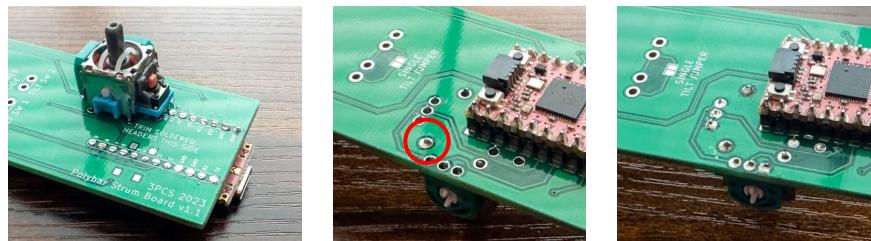
1. BEGIN BY PLACING THE KB2040 ON HEADER PINS ON THE REAR OF THE PCB. ENSURE THAT **D-** & **D+** ARE NOT CONNECTED TO THE HEADER PINS AND HANG OFF THE PCB. PIN TWO POINTS ON EACH SIDE OF THE HEADER PINS, AND ENSURE THE MICRO CONTROLLER IS PROPERLY ALIGNED ON THE PCB. FINISH PINNING ALL POINTS ON THE BOARD, AND CONTINUE TO THE NEXT STEP.



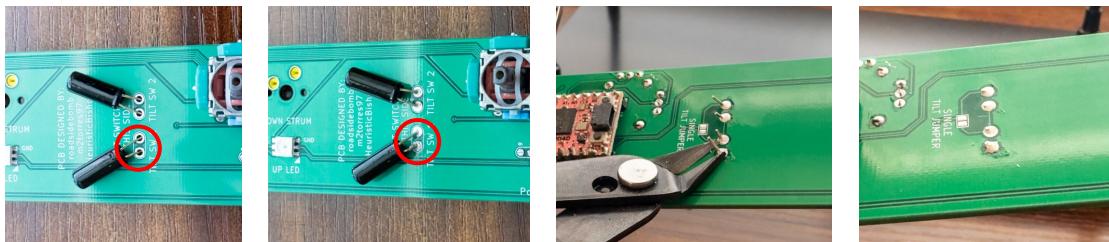
2. FLIP THE PCB TO THE BACK SIDE, AND TRIM THE HEADER PINS AS FLUSH TO THE PCB AS POSSIBLE. WHEN CUTTING THE PINS, MAKE SURE TO WATCH FOR FLYERS!



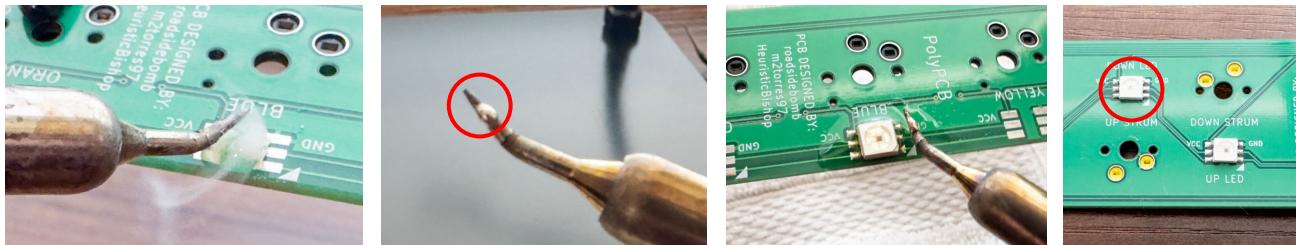
3. INSERT THE JOYSTICK INTO THE FRONT OF THE BOARD. PIN ONE VIA, AND ENSURE PROPER ALIGNMENT. FINISH SOLDERING THE REMAINING EXPOSED PINS, AND CONTINUE TO THE NEXT STEP.

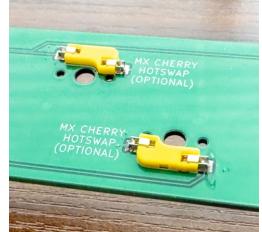


4. INSERT THE TILT SWITCHES INTO THE TWO LOCATIONS ON THE FRONT OF THE PCB. SOLDER THEM, ENSURING THEY ARE IN THE SHAPE OF A V TO PREVENT ACCIDENTAL ACTIVATIONS. FLIP THE PCB OVER, AND TRIM THE REMAINING PORTION OF THE SWITCHES.

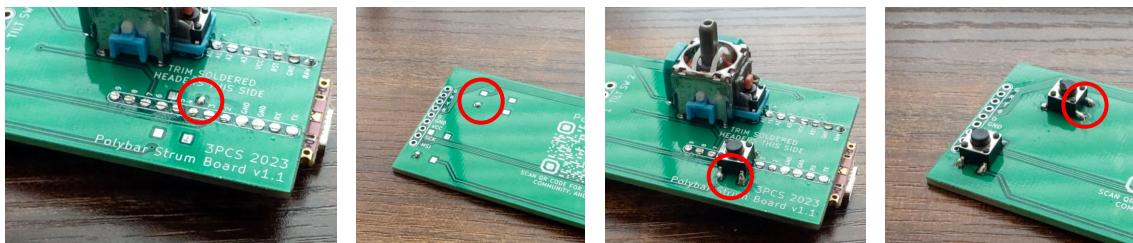


- 5.** PLACE AND SOLDER YOUR LEDs TO THE FRONT OF THE STRUM BOARD PCB.  
START BY PLACING AND MELTING A SMALL BALL OF FLUX ON EACH LED PAD, AND ALLOW THE FLUX TO COOL. PLACE THE LED MODULE ONTO THE BOARD AND MATCH THE DIRECTION OF THE ARROWS FOR PROPER ORIENTATION. ONCE PLACED, TIN YOUR SOLDERING IRON AND SWIPE YOUR IRON UP AND DOWN THE SIDE OF THE LED. IF DONE CORRECTLY, THE SOLDER WILL ATTRACT TO THE PADS ON THE LED/PCB AND CREATE A PROPER CONNECTION AS SHOWN IN THE RIGHT HAND IMAGE BELOW.

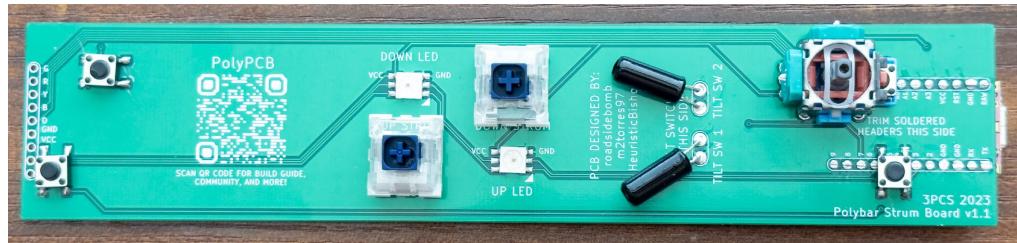


- 6.** ON THE SAME SIDE AS THE KB2040, LOCATE THE MX CHERRY HOTSWAP SOCKET LOCATIONS AND PLACE TWO SOCKETS IN POSITION. SOLDER BOTH CONNECTIONS ENSURING A SNUG AND FLUSH FIT.
- 

- 7.** BELOW THE TILT SWITCHES, LOCATE THE PADS FOR THE MICRO SWITCHES. BEGIN BY PLACING SOLDER ON ONE PAD, AND ALIGNING YOUR SWITCH IN THE CORRECT POSITION. ONCE SECURE, FINISHING SOLDERING THE REMAINING THREE PADS.



- 8.** INSERT THE KAILH BOX NAVY SWITCHES INTO THE HOTSWAP SOCKETS, AND YOUR POLYBAR STRUM BOARD PCB IS NOW COMPLETE!



## PARTS REQUIRED FOR ASSEMBLY



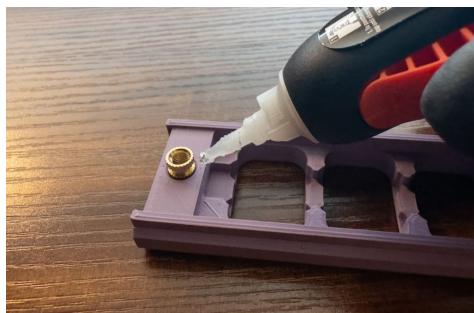
1. BEGIN BY INSERTING THE STRUM BAR IN THE BACK OF THE STRUM SHELL. SLIDE THE STRUM BAR PINS INTO EACH SIDE OF THE STRUM BAR, ENSURING THE PINS ARE INSERTED AS FAR IN AS POSSIBLE. LOCATE THE STRUM BAR RETAINER CLIP POINTS, AND PUSH THE RETAINER CLIPS INTO THEIR RESPECTIVE POSITIONS. THE RETAINER CLIPS PREVENT THE STRUM PINS FROM WALKING BACK DURING PLAY.



2. USING YOUR FAVORITE QUICK DRY SUPER GLUE, APPLY GLUE TO THE FRONT SUPPORT WEBBING ON THE STRUM SHELL. APPLY YOUR FACE PLATE TO THE GLUED AREA, AND HOLD IT IN PLACE WHILE THE SUPER GLUE SETS IN PLACE.



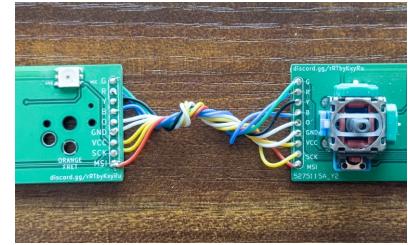
- 3.** USING TWEEZERS OR FLUSH CUTTERS, PLACE YOUR BRASS INSERTS ABOVE THE DESIGNATED HOLES. USING YOUR SOLDERING IRON, HEAT THE BRASS INSERT AND SLOWLY SLIDE THE BRASS INSERT INTO THE HOLE. ENSURE THAT THE INSERT IS LEVEL AND DOESN'T CREATE A PROTRUSION ON THE FRONT SIDE OF YOUR FRET SHELL. I RECOMMEND ADDING SOME SUPER GLUE TO THE INSERTS TO PREVENT THEM FROM PULLING BACK OUT.



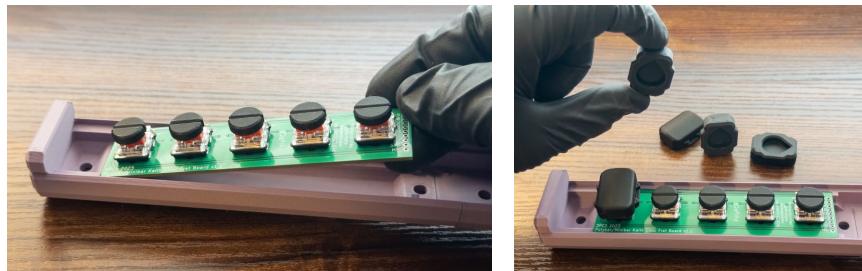
- 4.** PROCEED TO CONNECT THE DOVETAILS OF THE FRET AND STRUM SHELLS TOGETHER.  
**NOTE:** IT MAY FEEL LIKE THEY WON'T CONNECT, BUT PERSISTENCE IS KEY. THE TOLERANCE ON THESE PARTS IS VERY TIGHT TO PREVENT WARPING AND TWISTING OVER TIME.



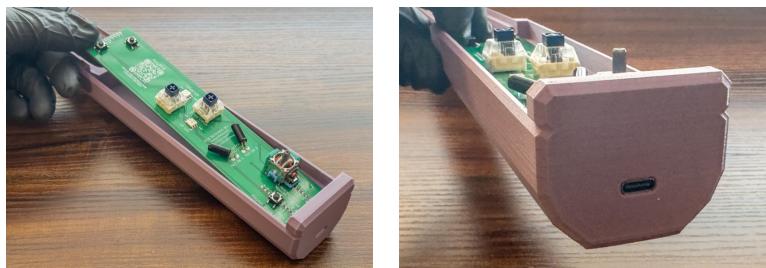
- 5.** NEXT, SOLDER BOTH PCBs TOGETHER WITH WIRE OF YOUR CHOICE. CONNECT THE RESPECTIVE POINTS (G, R, Y, B, O, GND, VCC, SCK, MSI) TO EACH EACH OTHER AS SHOWN IN THE IMAGE TO THE RIGHT. YOU MAY WANT TO TWIST YOUR WIRE, AND USE TAPE/GLUE TO HOLD THE WIRE DOWN WHEN PLACING THE BOARDS IN THE SHELLS.



- 6.** LOCATE YOUR FRET PCB, AND PLACE THE FRET INSERTS INTO THE SWITCHES. ONCE COMPLETE, SLIDE YOUR FRET PCB INTO THE APPROPRIATE TRAY IN THE FRET SHELL. PLACE YOUR FRETS ONTO THE FRET INSERTS, WITH THE ARROW POINTING TOWARD WHICHEVER SIDE YOU WILL PLAY ON. **NOTE:** THE FRETS MAY HAVE A SMALL BIAS TO TILT FURTHER TOWARD THE PLAYER DEPENDING ON PRINT SETTINGS. FLIP YOUR FRETS IF THIS BECOMES AN ISSUE.



- 7.** LOCATE YOUR STRUM PCB, AND SLIDE IT INTO THE TRAY IN THE STRUM SHELL. ENSURE THAT THE USB-C PORT IS EXPOSED TO THE BOTTOM OF THE STRUM SHELL.



**NOTE!**  
YOU MAY WANT TO  
APPLY A SMALL DAB  
OF GLUE TO SECURE  
YOUR PCBs.

- 8.** INSERT THE BUTTONS INTO THE STRUM SHELL, AND HOLD/TAPE THEM IN PLACE WHILE INSERTING THE TOP SHELL AT A SLIGHT ANGLE INTO THE CONNECTION POINT AT THE BOTTOM OF THE POLYBAR. FINISH CLOSING THE SHELLS, MAKING SURE TO FULLY CLOSE THEM TOGETHER .



- 9.** FLIP THE POLYBAR OVER, AND INSERT THE FOUR BUTTON HEAD CAP SCREWS. IF YOUR GLUE HAS NOT FULLY CURED, BE CAREFUL TO NOT OVERTIGHTEN THE SCREWS AND PULL THE BRASS INERSTS OUT OF THE PLASTIC SHELL. ONCE TIGHTENED, FLIP THE POLYBAR OVER AND INSERT THE JOYSTICK CAP. **NOTE:** THE TOLERANCES ARE VERY TIGHT ON THE JOYSTICK CAP, TO ENSURE THAT IT DOESN'T FALL OFF DURING FAST WHAMMY MOVEMENTS.



- 10.** YOUR POLYBAR IS NOW COMPLETE! PLUG YOUR GUITAR INTO YOUR COMPUTER, AND LAUNCH SANJAY900'S GUITAR CONFIGURATOR TOOL. YOU CAN MAP ALL INPUTS, ASSIGN LED COLORS, AND CALIBRATE YOUR WHAMMY JOYSTICK!

