BASTL
INSTRUMENTS

# KASTLE 2 - Assembly Guide

bastl-instruments.com


## INTRODUCTION

This guide explains how to build the KASTLE 2 from Bastl Instruments.

This kit is well-suited for beginners. However basic soldering skills and the ability to recognize electronic components will be helpful. If you've never soldered before, start with this tutorial (see especially *The Ideal Solder Joint* on page 18).

The kit includes high-quality lead-free solder to make the job easier.

The KASTLE 2 uses a single PCB and all components are packed in separate bags.

Refer to the Bill of Materials below for a complete list.

## BILL OF MATERIALS

| Component | Quantity |
|---|---|
| Kastle 2 PCB | 1 |
| Potentiometer B100k 25KQ/W | 7 |
| Switch 2MS1T2B3M2QE SPDT Toggle Vertical | 1 |
| Battery Holder 3xAA JST PH | 1 |
| Button Cap 1RBLK Black 5mm Round | 2 |
| Screw M3x6mm ISO7380 Black Metal | 4 |
| Screw M2.5x8mm DIN 965A Metal | 2 |
| Spacer M3x5x8mm IA Metal | 4 |
| Kastle 2 Plastic Spacer | 1 |
| Enclosure Kastle 2 FX Top PCB | 1 |
| Enclosure Kastle 2 Plastic Case Shell | 1 |
| Cable Jumper Male to Male | 10 |

## BEFORE STARTING THE KIT

### Tools Required:

- Temperature-controlled soldering iron (ideally 65 W+)
- Phillips screwdriver
- Allen key (included in the kit)
- 3D printed key 5 mm (included in the kit)
- Protective eyewear

We recommend working in a clean, well-lit, and well-ventilated area to avoid accidents and to prevent losing small components. Before proceeding, review this guide carefully to ensure you understand all the steps.

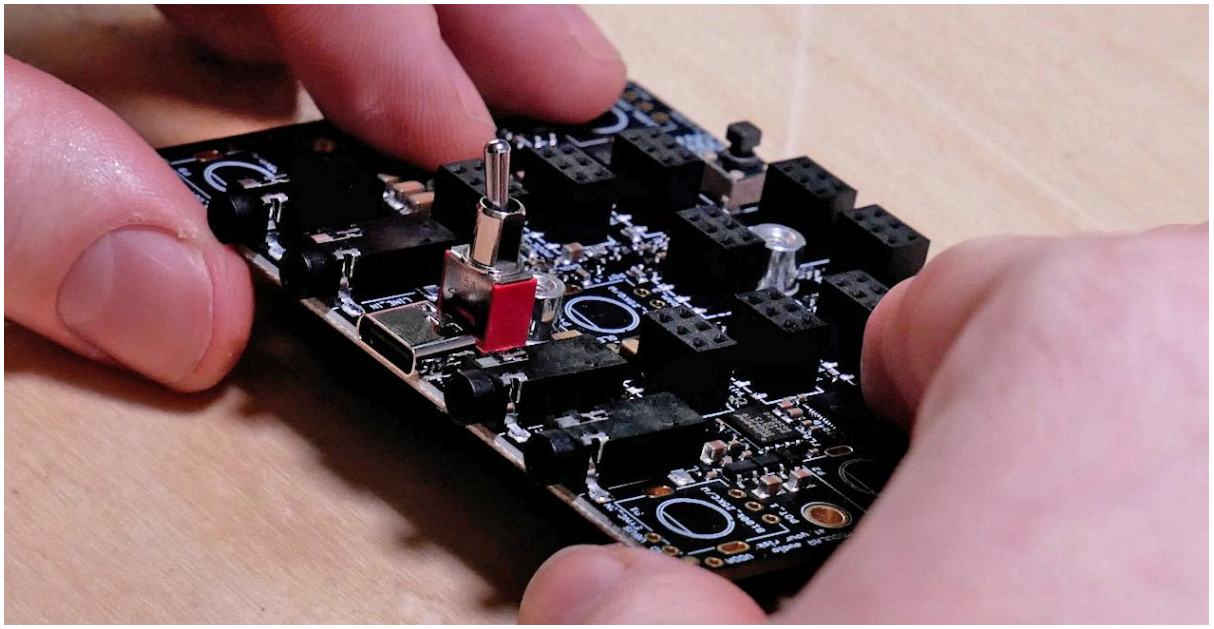
# ASSEMBLY INSTRUCTIONS

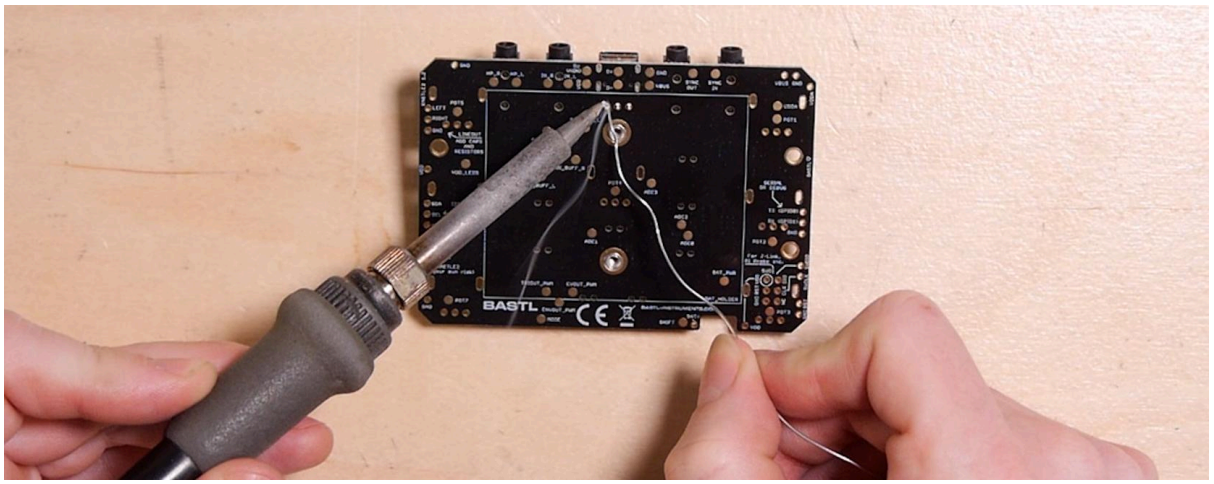
## 1. Installing the Switch

Place the **switch** in its designated position on the PCB and solder it securely. Ensure it is fully pressed down against the board before soldering.

As for any part, you can apply this **pro tip:**

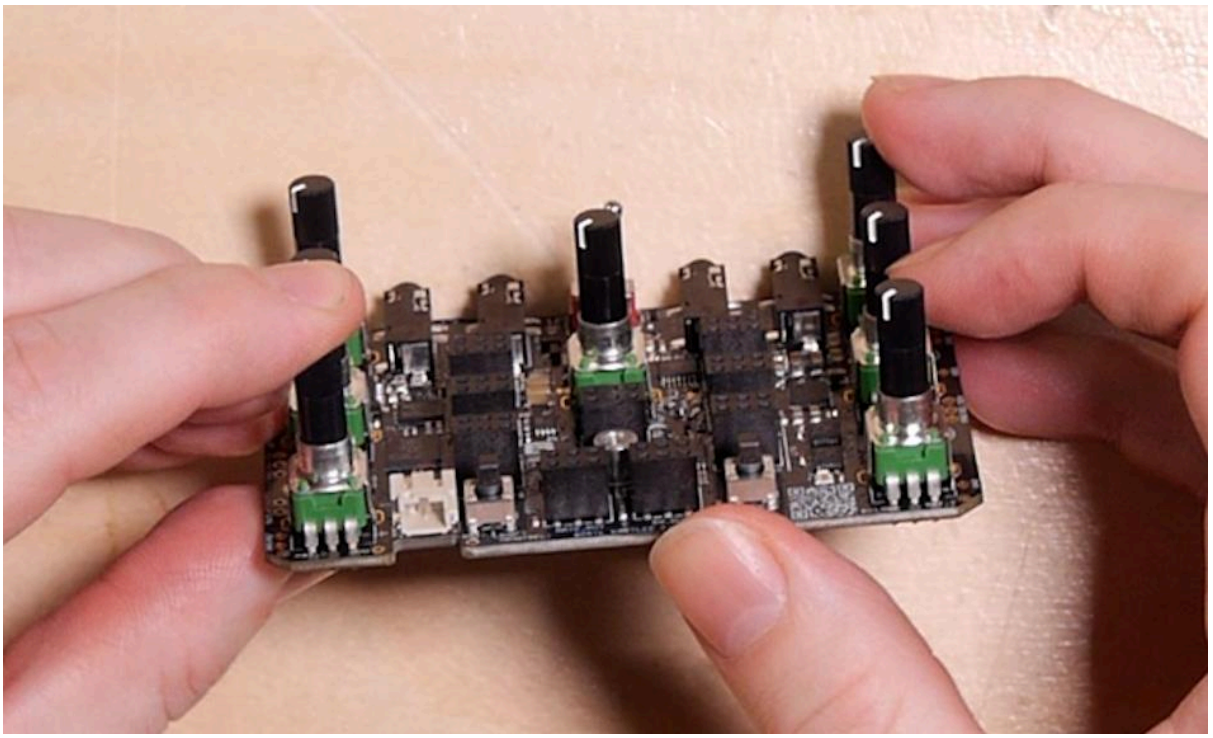
- Solder only **one pin** first.
- Check for any **gap** between the jack and PCB.
- **Re-heat** and push down if needed.
- Once aligned, solder all remaining pins.





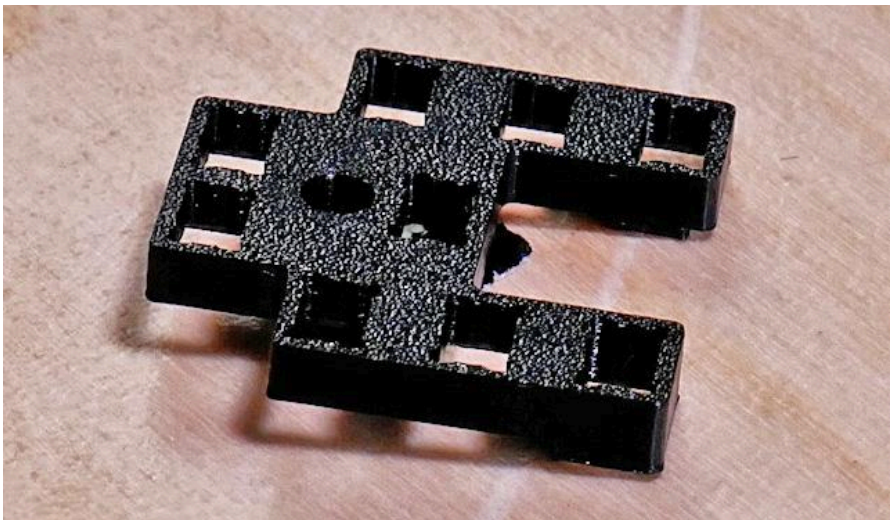
## 2. Installing the Potentiometers

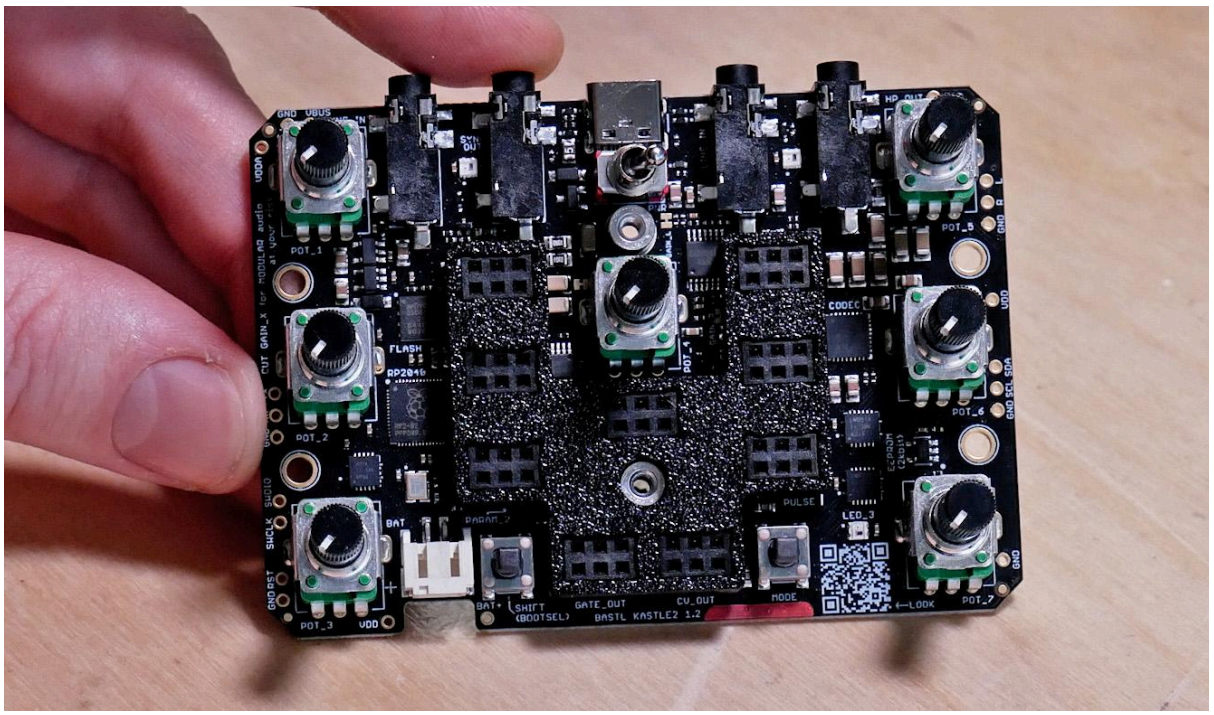
Insert all seven **potentiometers** into their respective positions on the board. Before soldering, make sure they are aligned straight and fully seated. Again, use the same “one-pin first” alignment method as with the switch.



## 3. Attaching the Plastic Spacer

Identify the plastic spacer and check the orientation first. The **flat** side of the spacer must be facing **upward** (according to the pictures). Push the plastic spacer onto the board as shown in the next images.

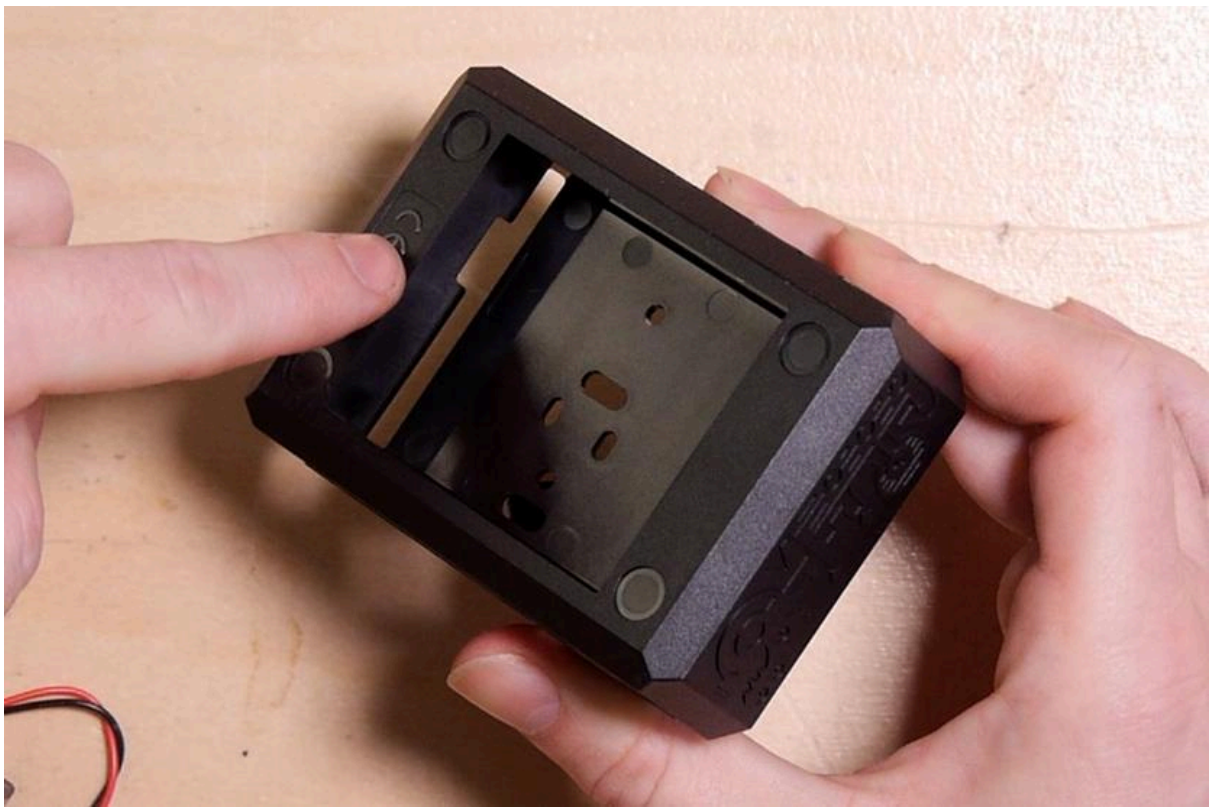


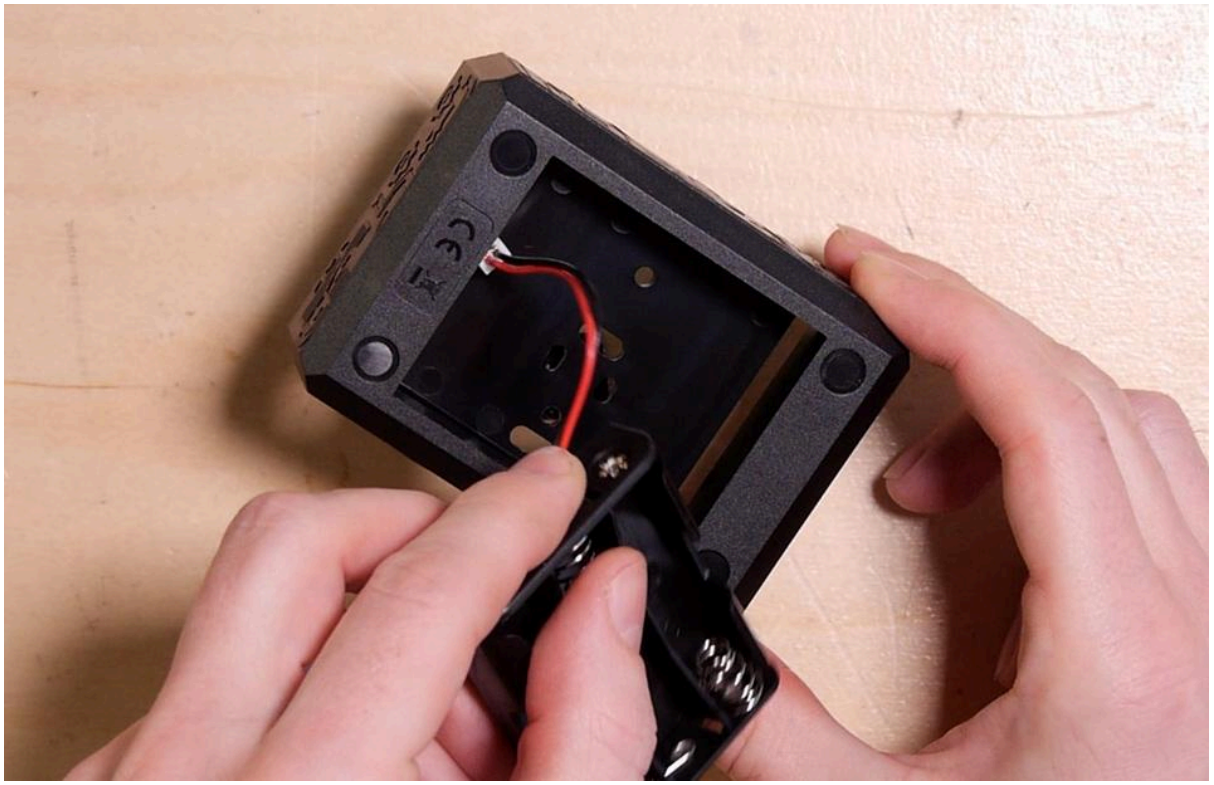



You’re done with the soldering process

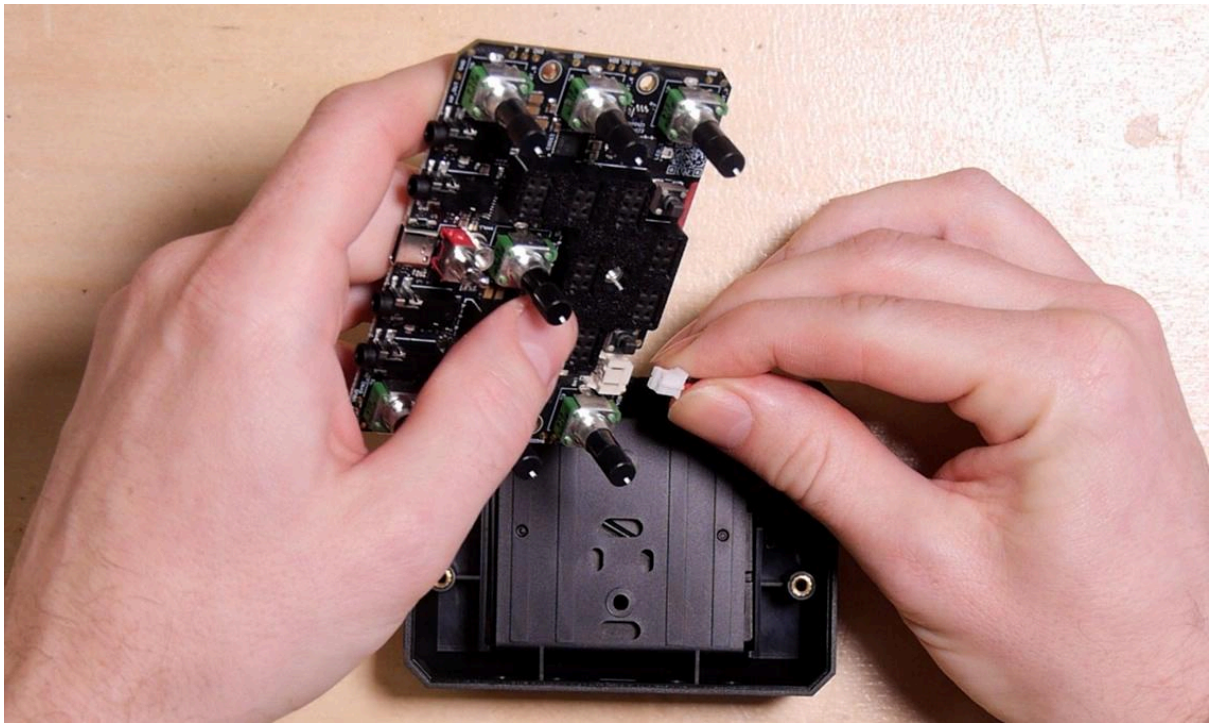
## 4. Installing the Battery Holder & Enclosure

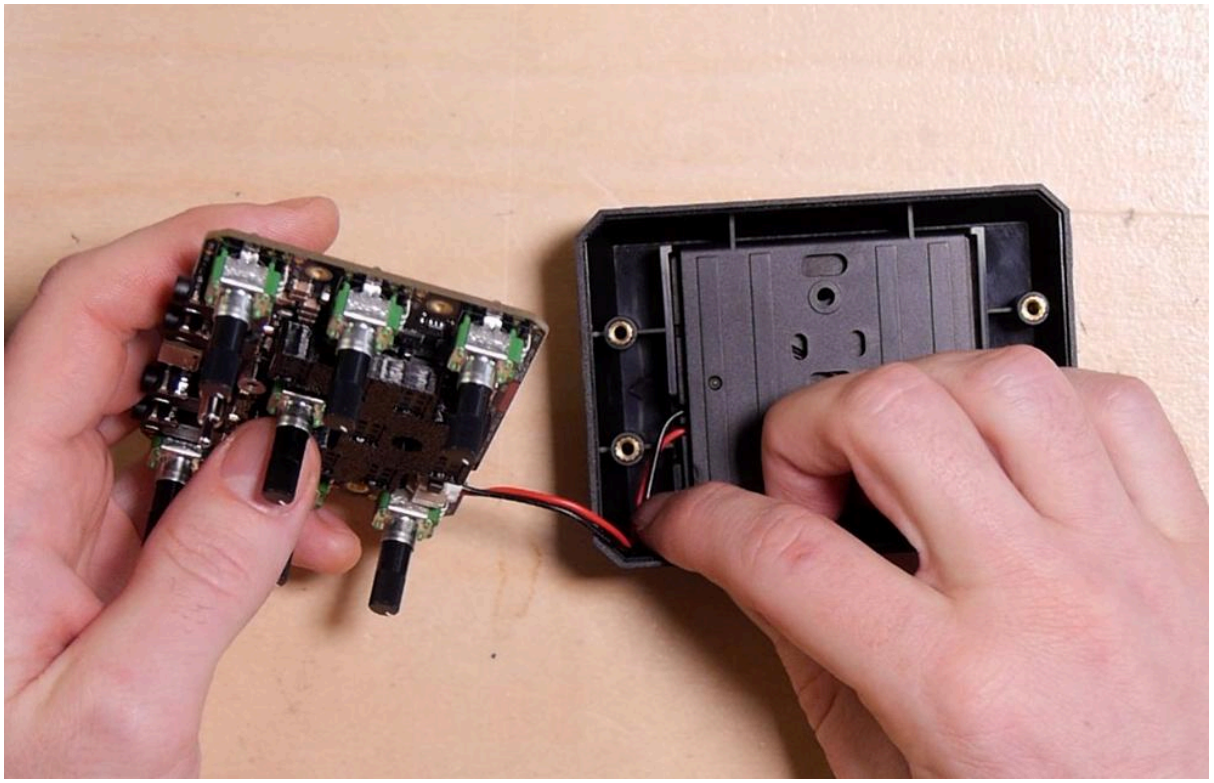
Prepare the **battery holder** by threading its wire through the designated hole in the enclosure.





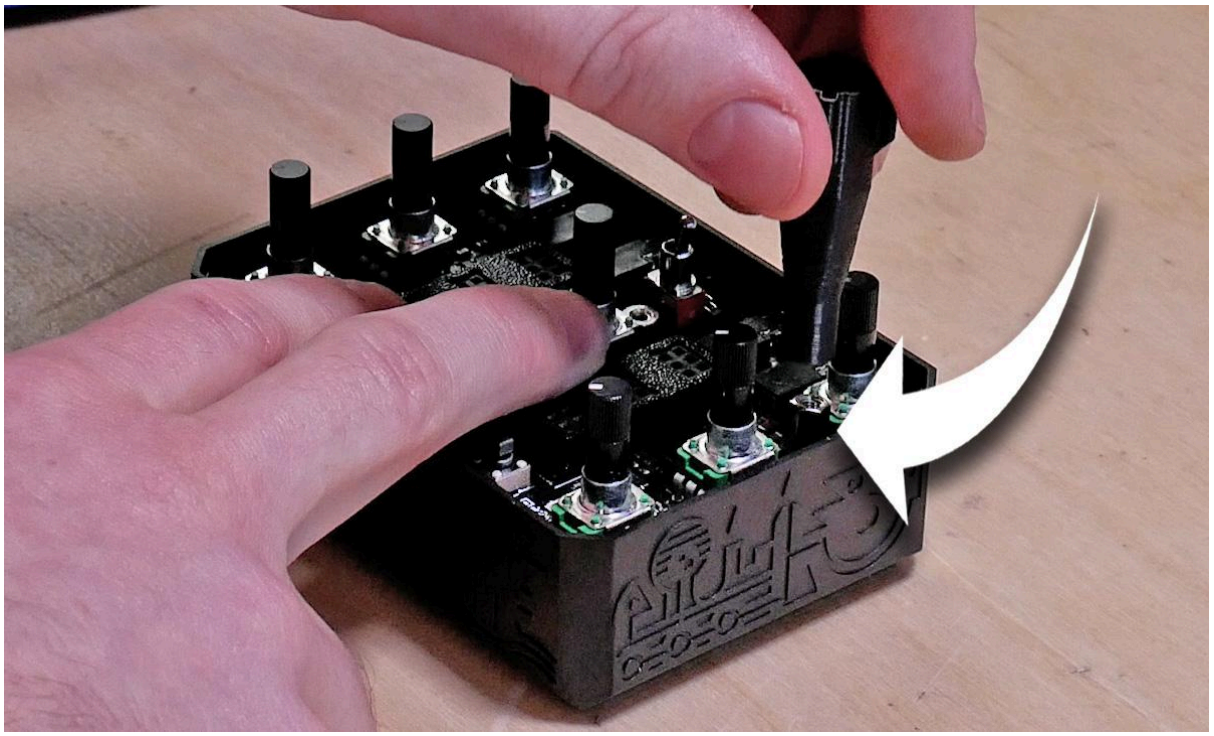
Connect the battery holder wire to the PCB, ensuring that the marked line on the plastic connector is facing upward. Gently bend the cable into the corner of the enclosure to prevent damage during assembly.





## 5. Securing the PCB and Battery Holder

Carefully insert the PCB into the enclosure by aligning it with the holes for the jacks and USB port. Once in place, it should fit snugly within the enclosure. Once you're done, attach the four metal **spacers** to the PCB by using the included 3D printed tool.

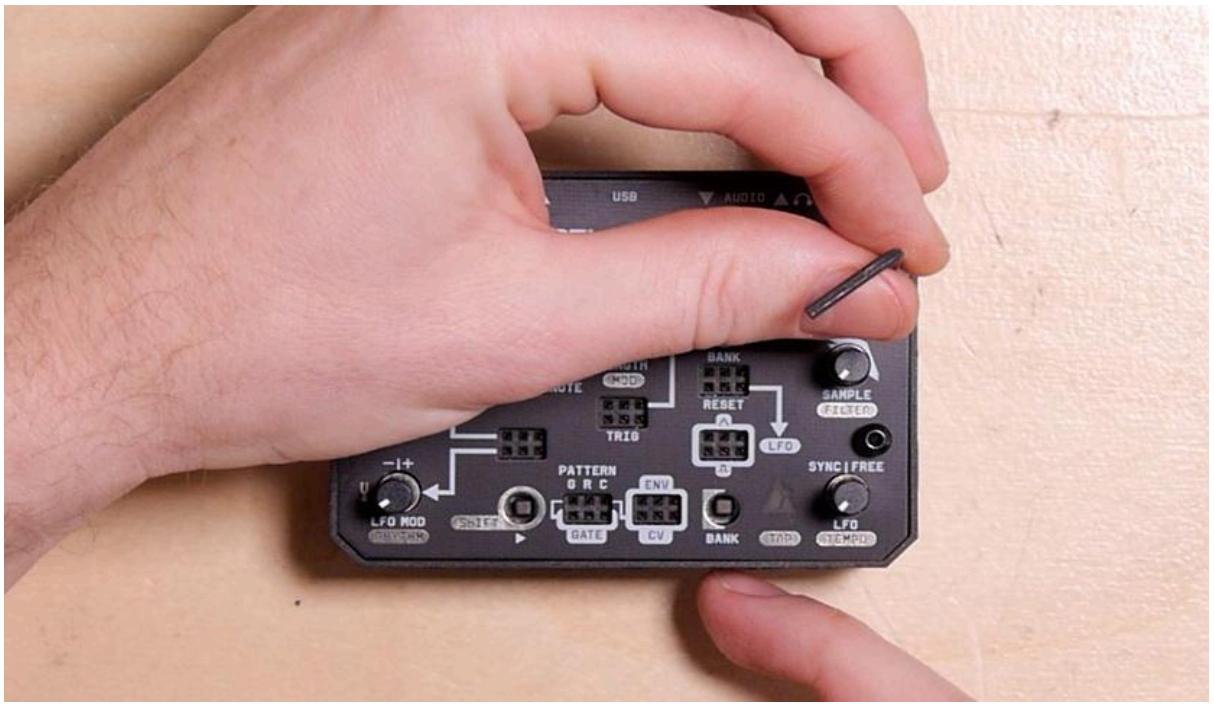


Flip the unit over and secure the battery holder and PCB using two **screws** by using the screwdriver.

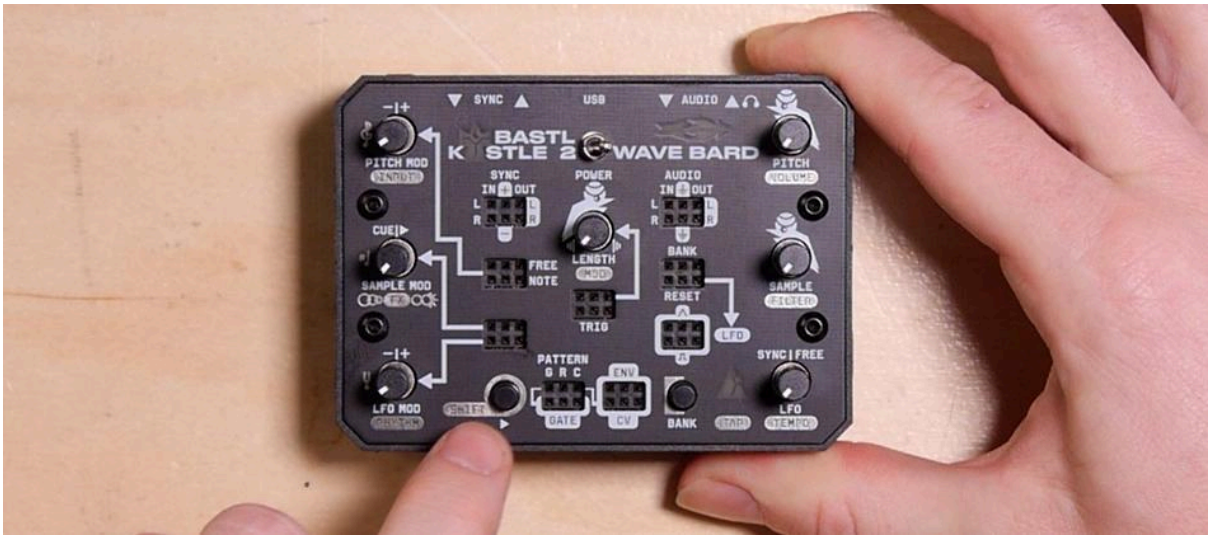
## 6. Final Assembly

### Button Caps

Place the front **faceplate** onto the enclosure and fasten it with the four **black screws** by the allen key included in the kit, but don't tighten the screws fully yet.



Fit the black **button caps** onto the buttons and press them down until they click into place.


Once the caps are secured, tighten the black screws.

## COMPLETION

Congratulations! Your Kastle 2 is now fully assembled and ready to use.

Enjoy making music with your Kastle 2!

Check our website for manual download and more info about the Kastle2: **https://bastl-instruments.com/instruments**

## TROUBLESHOOTING

If you run into any issues, you can contact us here: diy@bastl-instruments.com

We also offer a repair service for DIY builds.