MACE WINDU **ECO** CHASSIS INSTALL GUIDE

Chassis designed by Goth3Designs

Install Guide by Sabers Forever
November 2022

This guide will provide you with a visual index of the saber parts, along with assembly instructions for the "Mace WIndu" Goth3Designs **ECO Chassis**

You will need to posses basic soldering skills and an understanding of how to read wiring diagrams in order to complete this installation.

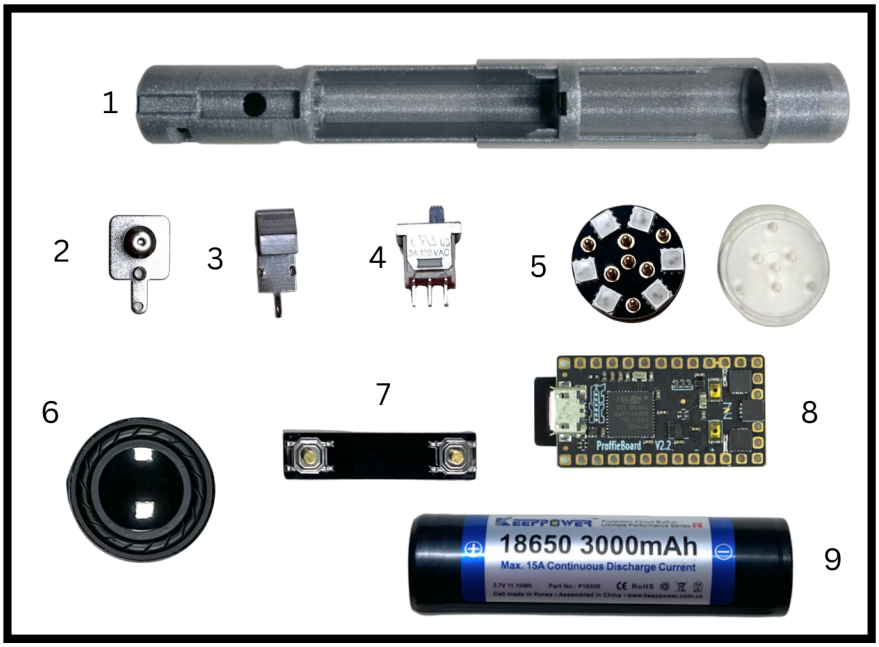
Please note: ALL IMAGES ARE PROVIDED FOR VISUAL REFERENCE ONLY.
THE PHOTOGRAPHS ARE NOT SHOWN AT A 1:1 SCALE.

STEP 1 - Test fitting

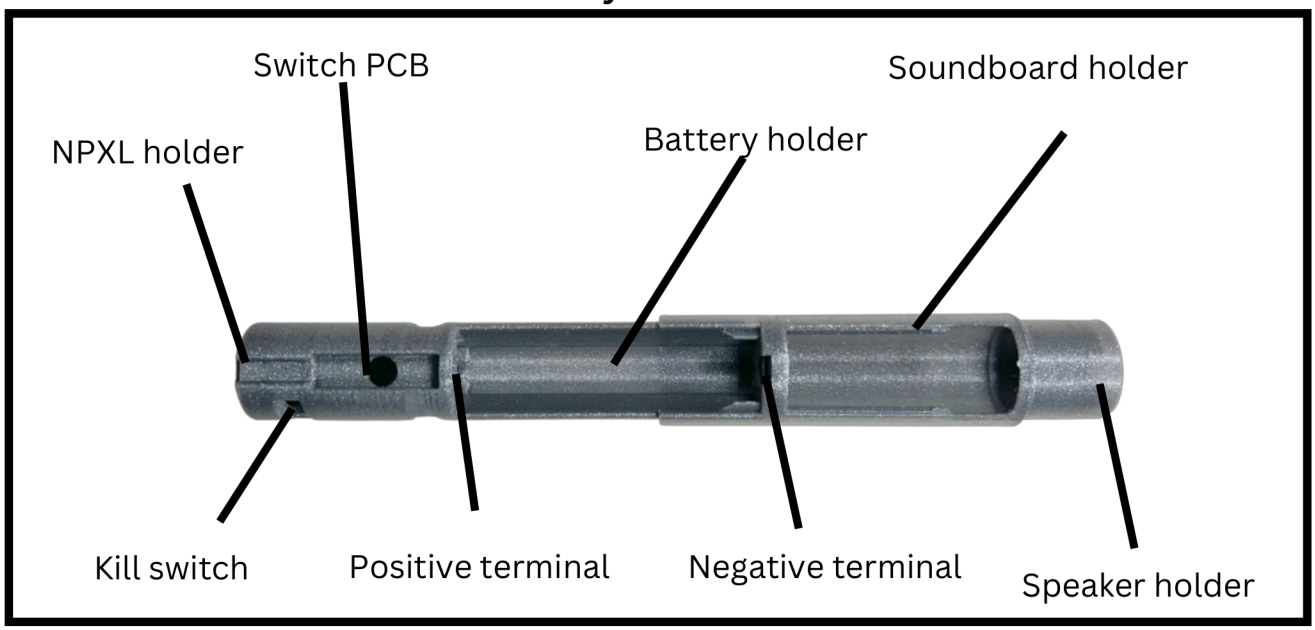
The Install kit will come with the following components.

Install Kit

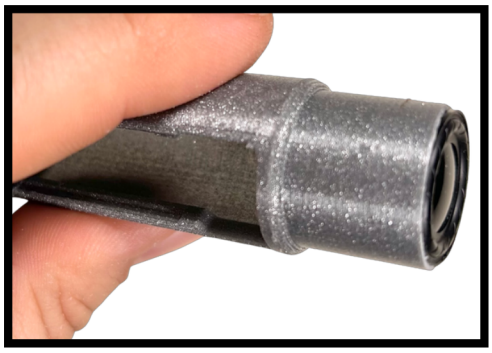
1. Chassis
2. Positive terminal
3. Negative terminal
4. Kill switch
5. ECO NPXL + Cover
6. 25mm speaker
7. Switch PCB
8. Proffieboard
9. 18650 Li-Ion Battery

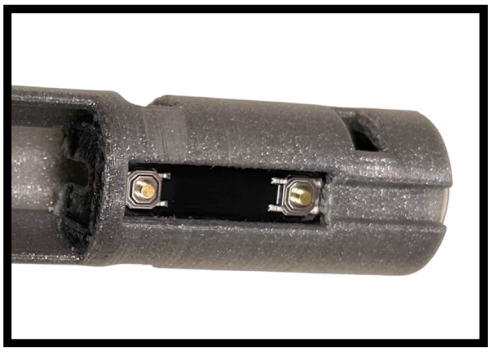


Anatomy of the chassis



Test all of the individual components. If something is too tight, use your best judgment on if the chassis or the component should be altered. For example, the NPXL PCB is easy to sand/file, where as the speaker holder might only need the lip of the holder chamfered.



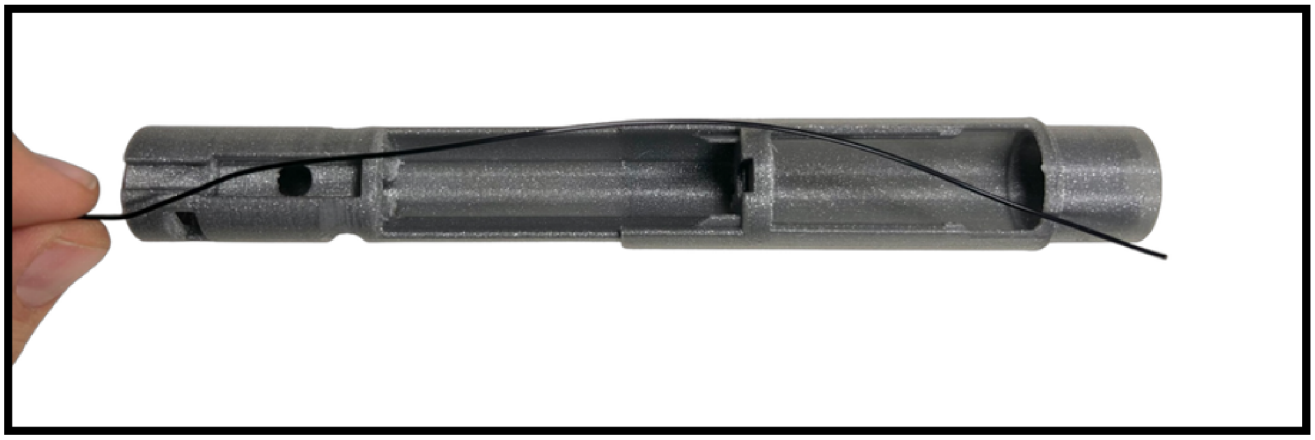


Make sure not to press anything into the chassis that you wont be able to get out. The negative terminal has barbs on it that will prevent you from being able to remove it. You may want to wait to push a component like that in before soldering it. Examine your parts!

PART 2 - Parts prep and soldering

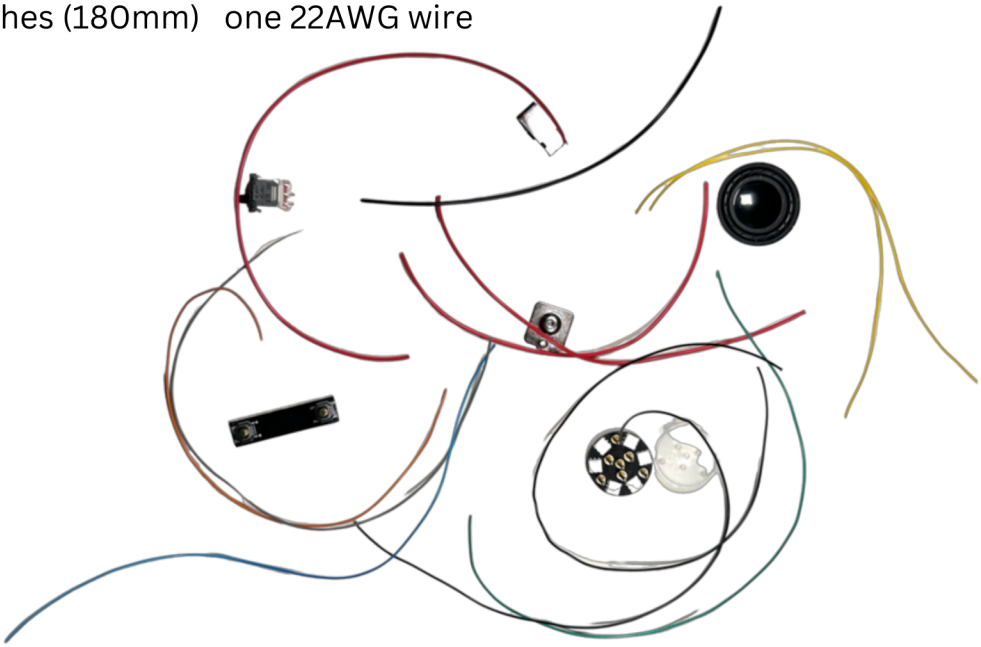
The following section will provide insight on soldering the wire leads to the components and recommended wire paths on certain parts. Wire color is not critical but to avoid confusion, it is recommended to use different color wire to identify where it is coming from when connecting each component to your chosen soundboard.

Roughly measure out wire by running wires from where components will sit and where they will need to connect to the soundboard, give yourself some extra length but not too much, the wires need to sit within a small space without pinching or being pulled as the sound board is set into its final position.



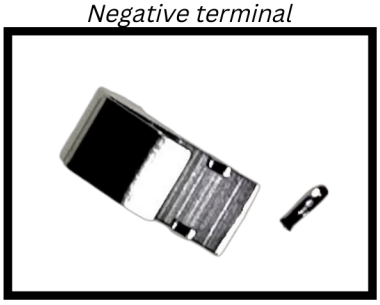
If you are unsure about wire lengths, below are recommended quantity, gauge and lengths for each component. Extra length is accounted for, so if you cut a little short, it wont be a problem.

NPXL - 7 inches (180mm)	two 22AWG wire and one 28AWG
Switches - 7 inches (180mm)	three 28-32AWG wire
Speaker - 6 inches (150mm)	two 28AWG wire
Negative - 5 inches (125mm)	one 22AWG wire
Positive - 5 inches (125mm)	one 22AWG wire
Kill switch - 7 inches (180mm)	one 22AWG wire



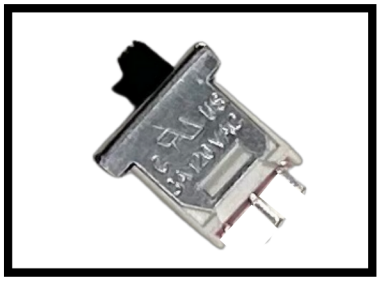
First remove the legs from the negative and positive terminal. Remove only one leg from the kill switch completely. It is recommended to remove a little less than half the length of the other two legs.

Negative terminal

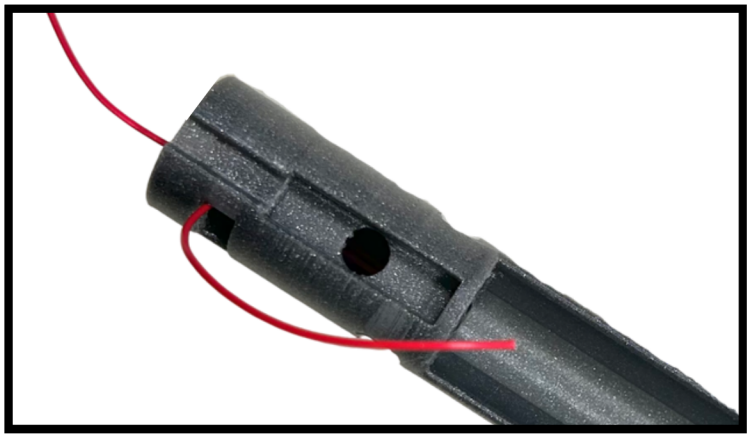


Positive terminal

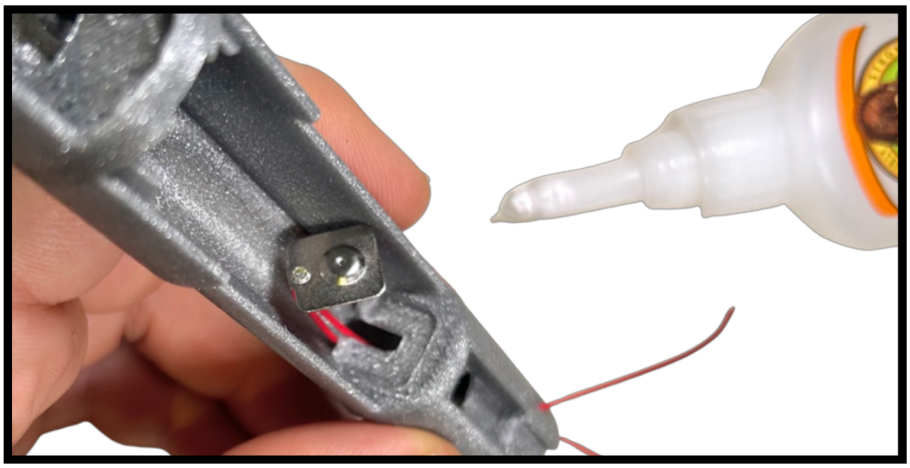
Kill switch



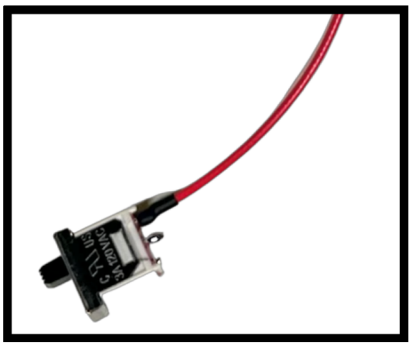
Solder two 22awg wire to the back of the positive terminal. One wire is for the NPXL connector while the other is going to the kill switch. Run the wires through the hole in the chassis and send the two wires out the respective holes.

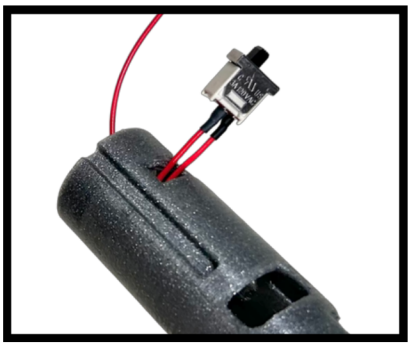


Glue the Positive terminal into place and let the glue set up. It is recommended to use Crazy glue or E6000.



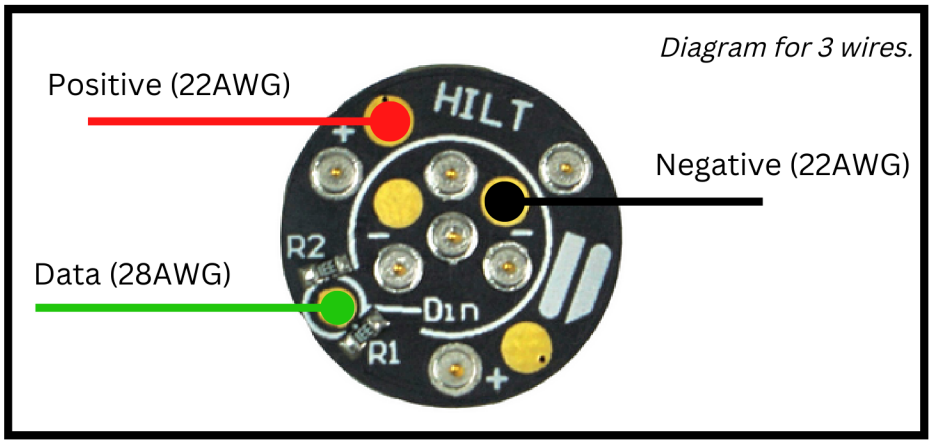
Solder one 22awg wire to one of the kill switch legs. This wire will lead to the soundboard. Feed the wire through the killswitch hole and down to the soundboard holder. Solder the wire leading from the positive terminal to the other leg of the kill switch. Press/glue the kill switch in place.

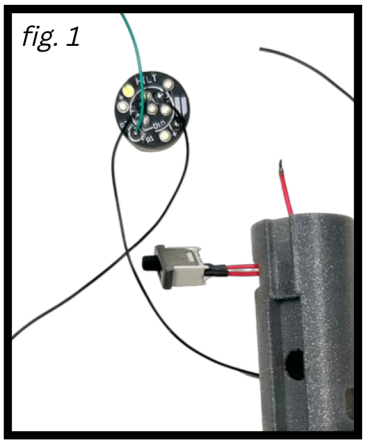




For the ECO NPXL It is recommended to use heavy gauge wire for the positive and negative wires(22AWG) and thinner(28-32AWG) for the data line.

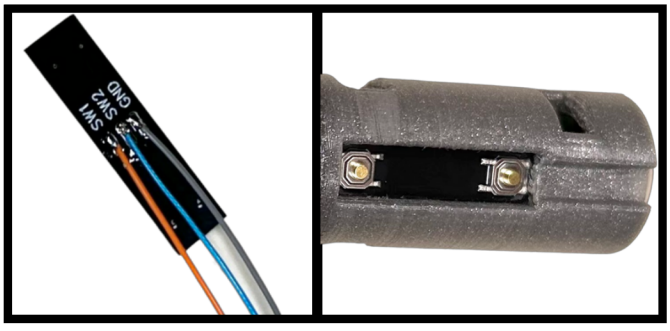
Alternatively, you could double up on the wire and add two negatives and/or two positives with 28AWG wire. I personally like to use 1 Positive and two negatives as seen in 'Fig. 1"



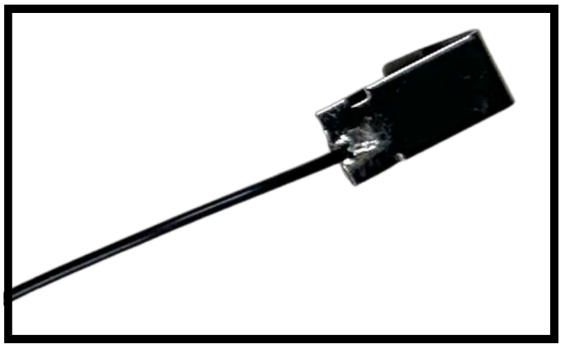


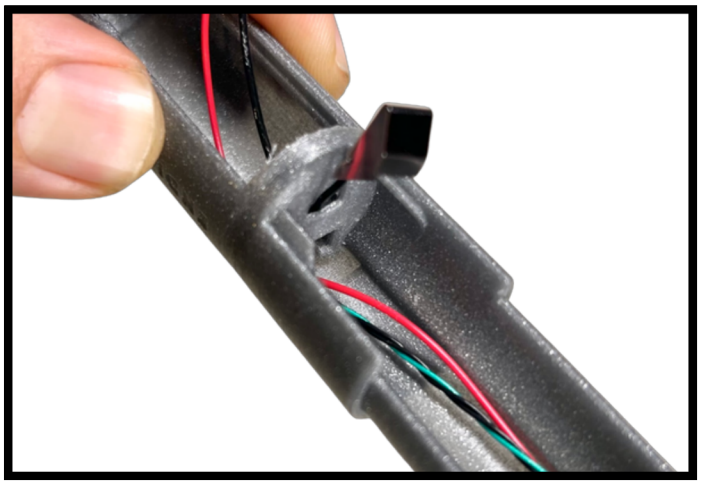
Place the NPXL in the chassis and run the wires down through the chassis and out where the soundboard holder.

Solder three 28awg wires to the back of the switch PCB. Feed the wires through the hole in the switch PCB area of the chassis and down through the chassis to the soundboard holder. You can chose to glue the PCB in place or use double stick tape. Tape will allow easy maintenance if needed ever.



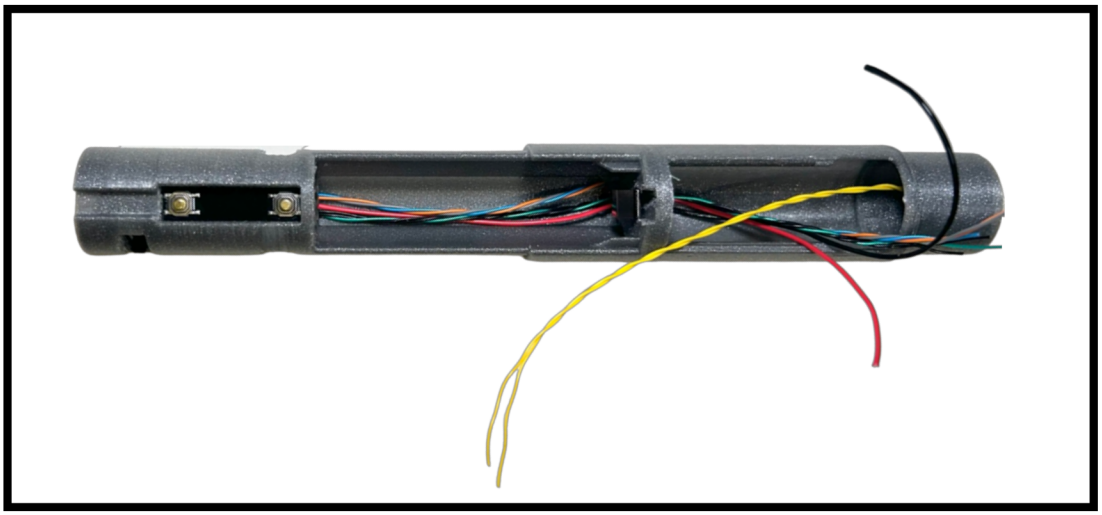
Solder one 22awg wire to the back of your negative terminal and feed the wire through the slot in the chassis. Press down firmly to seat the terminal into the chassis.





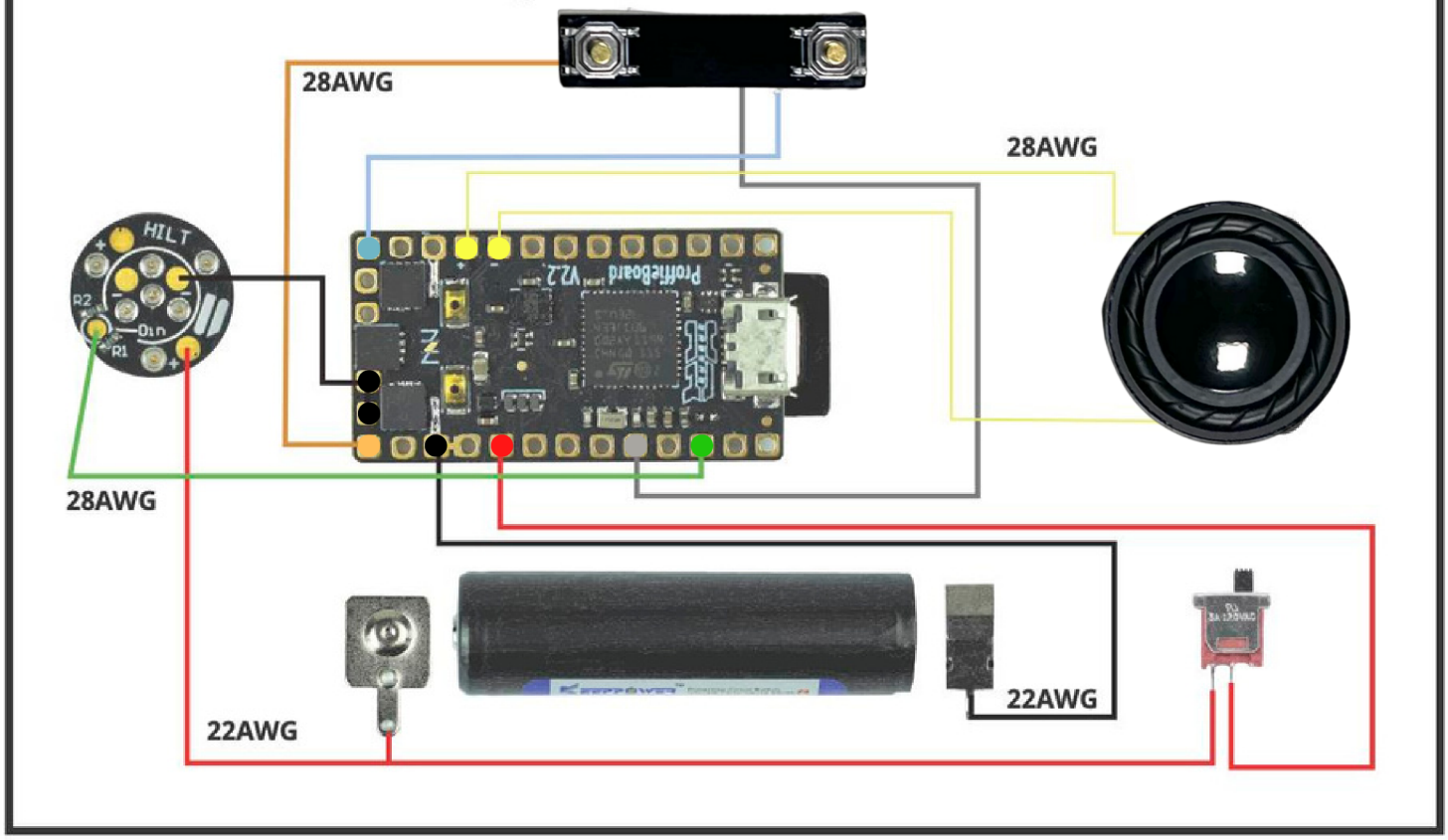
Solder two 28awg to the speaker. One wire on each side. You can choose to glue in the speaker now or later after you can confirm it is working.

Your chassis should now look like a mess of wires.

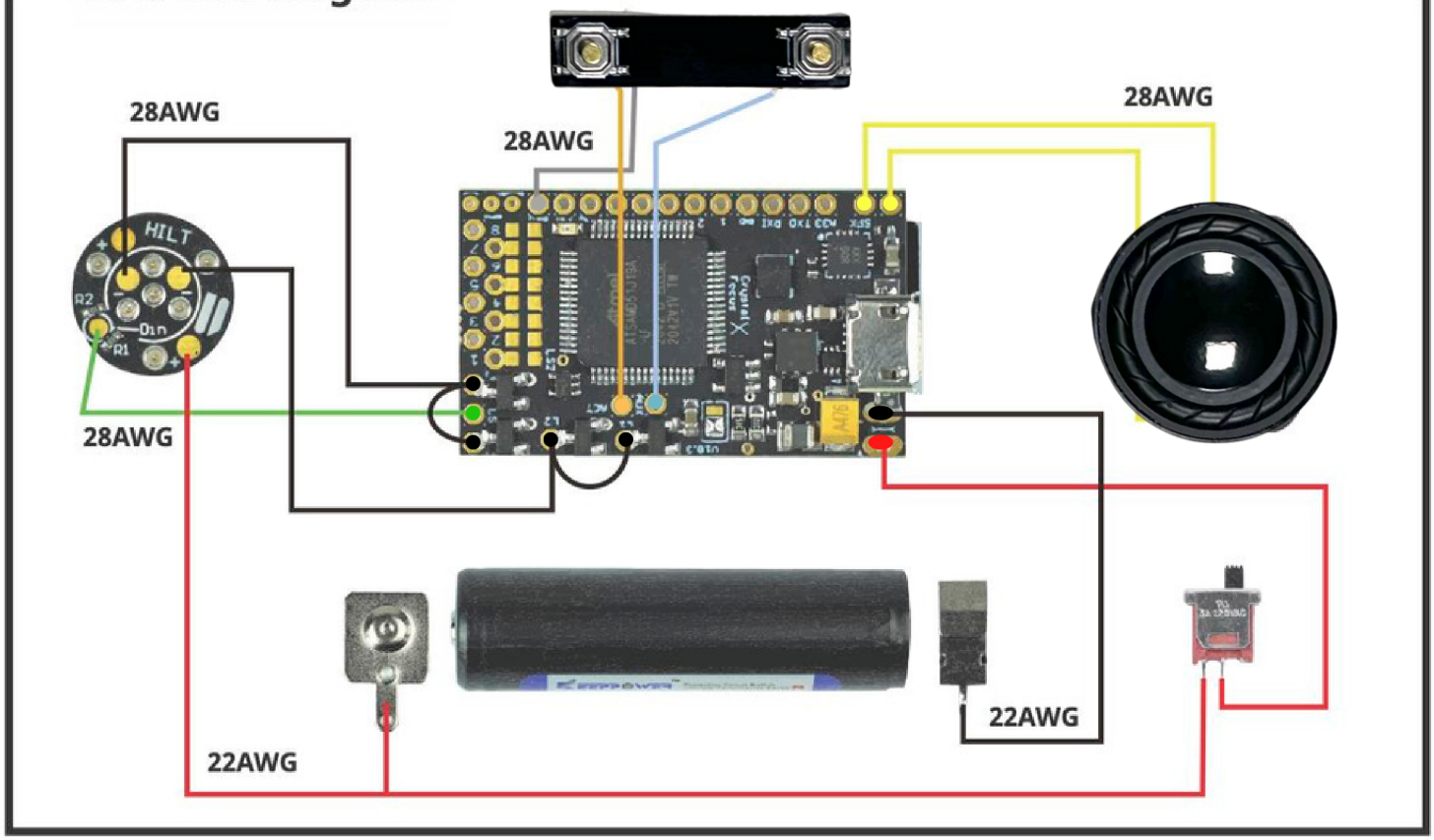


You are now ready to start soldering the wires to the soundboard. Depending on which soundboard you chose will determine the wiring diagram you should follow.

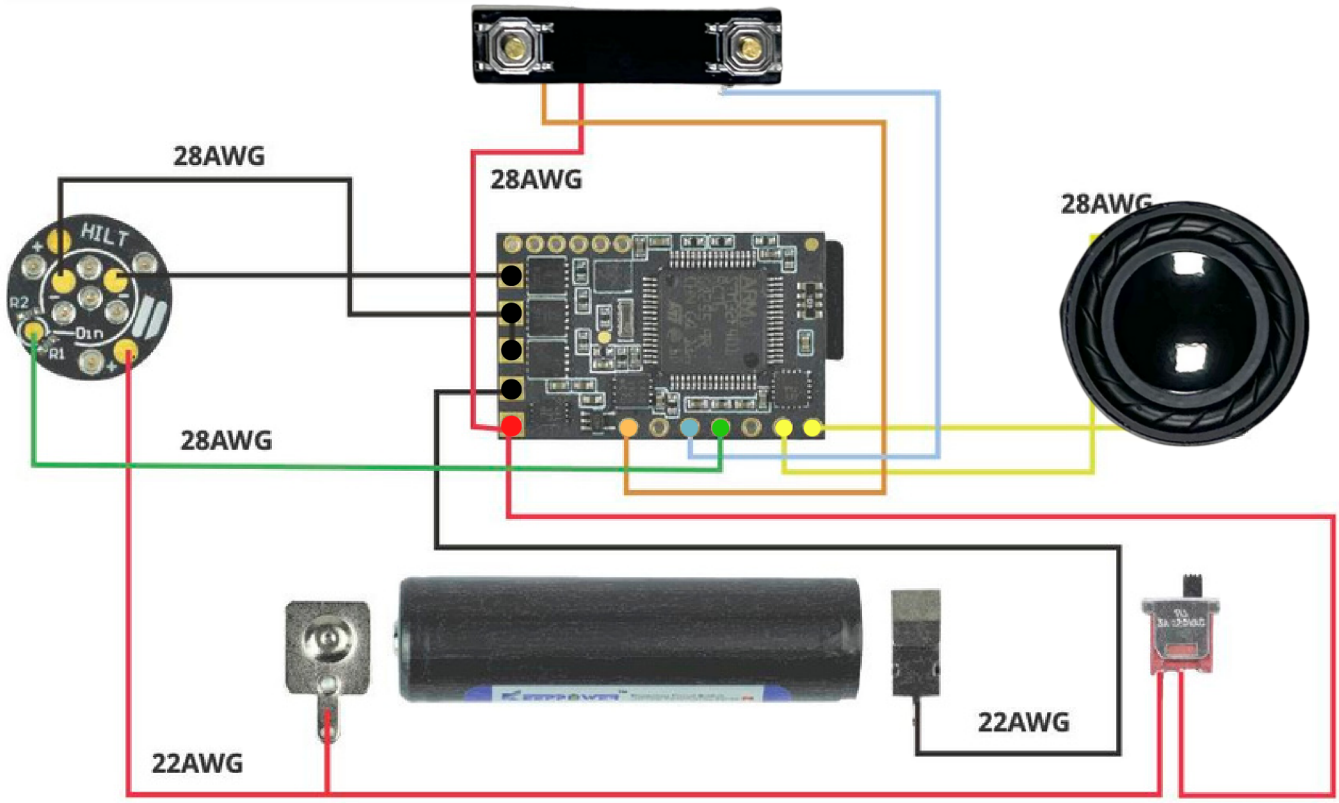
Proffieboard wire diagram



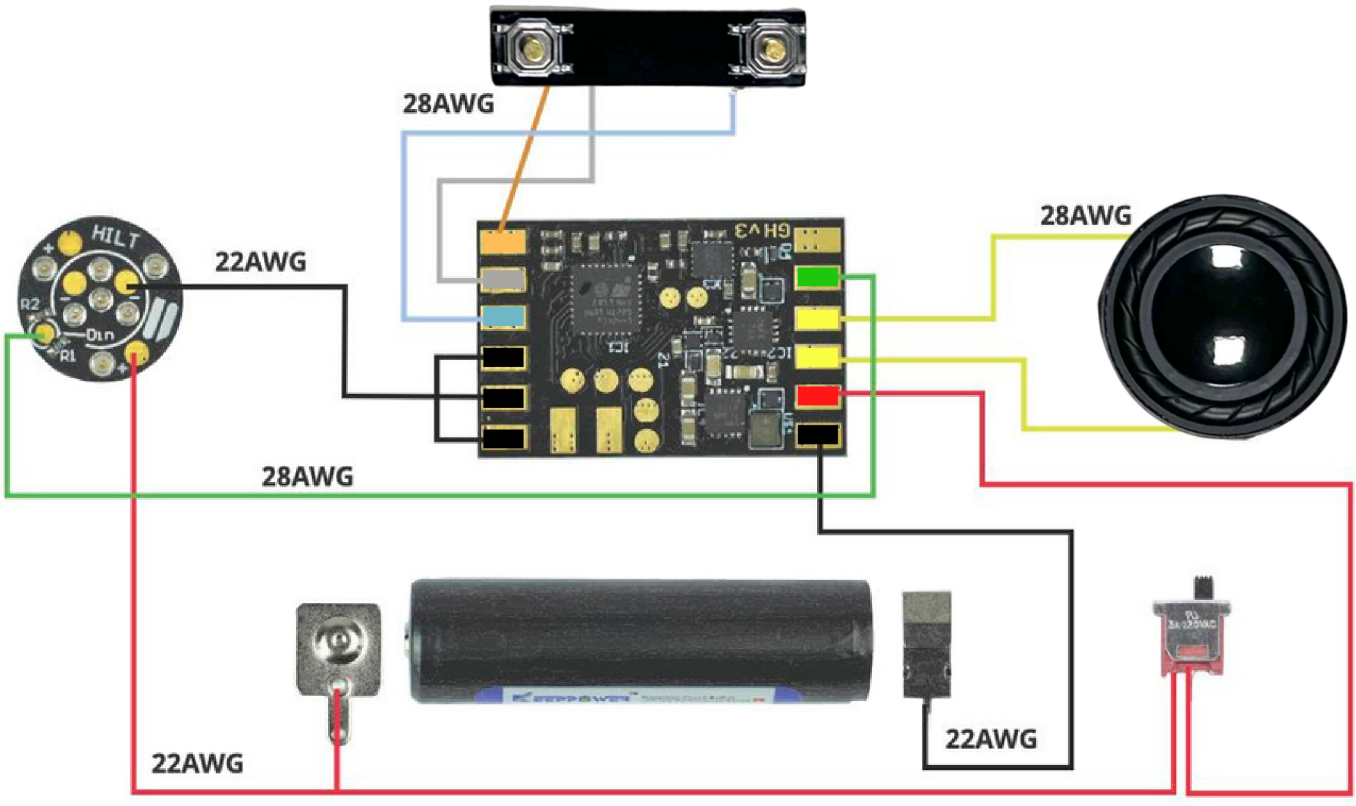
CFX wire diagram

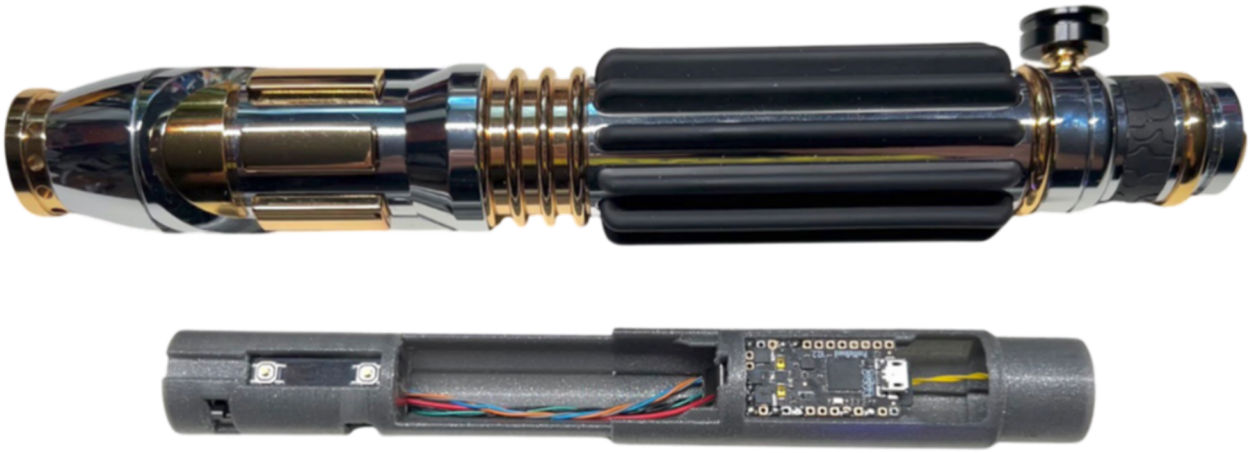


Verso V2 wire diagram



Golden Harvest V3 phase 4 wiring diagram





Congratulations on completing the installation of your saber!
We hope you had much success with this guide.

May the force be with you.