

FAK3D Warbeast Arduino Kit Installation Guide

I/O on the mainboard is labeled for what component they belong to, but this guide will add a little more detail in terms of wiring and some other tips for installing your brand new kit.

KIT INCLUDES:

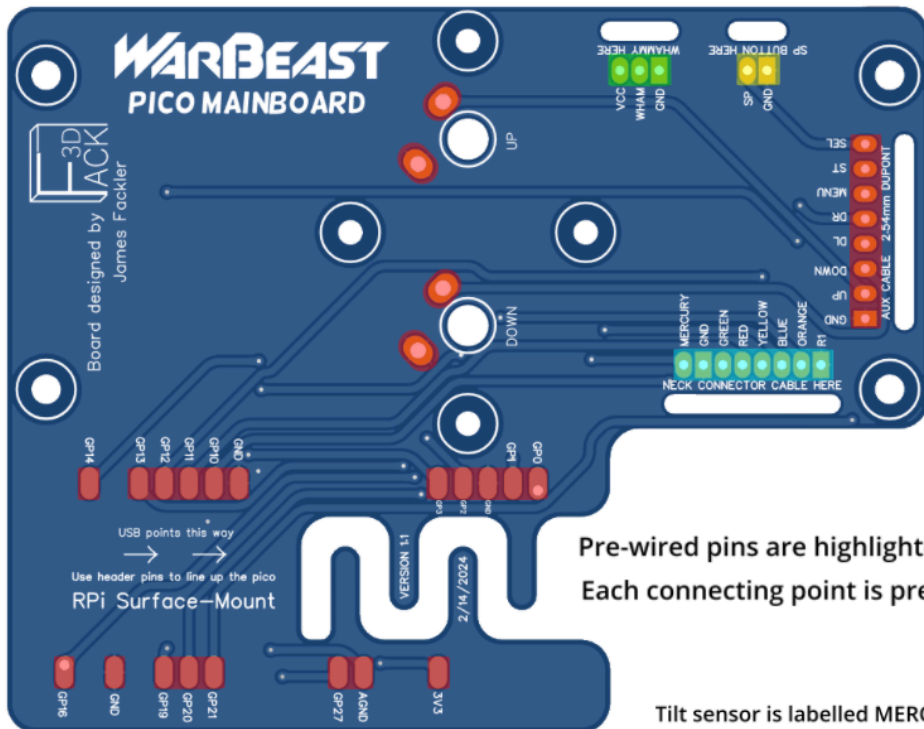
- Pre-assembled mainboard & D-pad board
- 10ft braided micro USB cable
- 3D printed replacement strumbar
- 3D printed USB routing piece pre-installed (replaces the sync button)
- Zip ties for use with the USB routing piece

REQUIRED TOOLS:

- Wire strippers (if needed)
- Soldering iron
- T-10 Torx for body screws and PH1 Phillips for internal screws

[MODELS ARE AVAILABLE TO DOWNLOAD AND REPRINT ON MY GITHUB IF YOU MESS SOMETHING UP]
IF YOU DON'T HAVE A 3D PRINTER, CONTACT ME THROUGH ETSY AND I CAN SEND YOU A REPLACEMENT
– <https://github.com/JamesF302/OpenSource-Warbeast-Arduino-Project> –

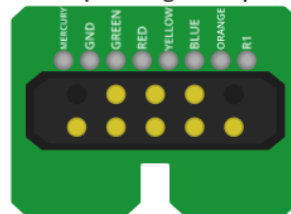
WIRING DIAGRAM & DOCUMENTATION



Pre-wired pins are highlighted in red
Each connecting point is pre-labeled

Tilt sensor is labelled MERCURY

It has its own respective ground pin, labelled R1

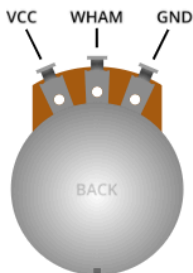


Make sure each pin coming from the neck connector is matched with the identical input on the mainboard.

You can reuse the original wires coming from the star power button.
Make sure the red wire is connected to SP, and the black wire is connected to GND on the mainboard.



- Neck Connector
- Whammy Bar
- Wrist-activated Star Power



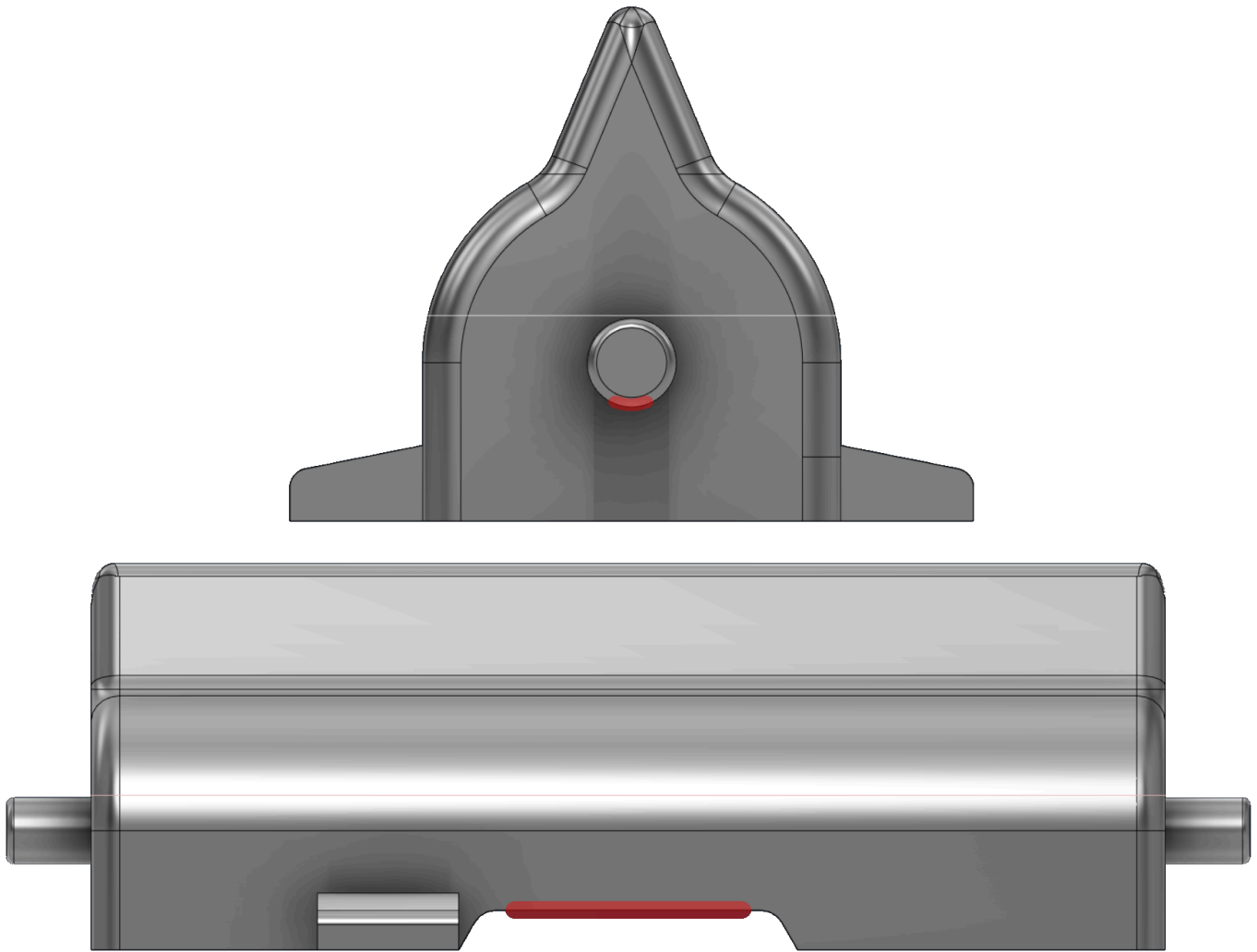
The oval-shaped cutouts in front of the solder pads are for strain relief, the cable must be woven through the cutout in order to add extra reinforcement, and to prevent the cable from breaking at the solder joints if accidentally pulled.

It's not completely necessary to do this, but definitely recommended.

There are two variants of neck connectors I know of. If your connector is different from the one pictured, look for the pinout on the connector or use a multimeter to determine which wire goes to what input. Unfortunately I could not document that type of connector.

ADJUSTING & FITTING THE STRUMBAR

The strumbar may require light filing on the **areas highlighted in red** for proper fitment, as 3D printed parts are not always perfect. The pins on the strumbar should fit fine without any work, but if the bushings don't rotate smoothly, you will have to file off a small bit of material on the underside of the pin.



The part of the strumbar that contacts the switches may have to be lightly filed until the switches neither depress nor space away from the switches. You will need to put on/take off the strumboard a few times in order to get the distance right.

Be **very** careful, as taking too much material off will add play in the strumbar!

PROGRAMMING YOUR GUITAR

Download and run Sanjay900's Guitar Configurator to program your guitar.

Link: <https://github.com/Santroller/guitar-configurator/releases>

Program the guitar and test it. If everything works, you're all done!

Please contact me if you have any problems with this kit. Thank you, and enjoy your new Arduino Warbeast!

NOTE: You are only eligible for a re-printed strumbar if you have purchased the kit!

updated 2/22/2024 at 8:17pm