

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 (replaces the sync button)
- Zip ties for use with the USB routing piece

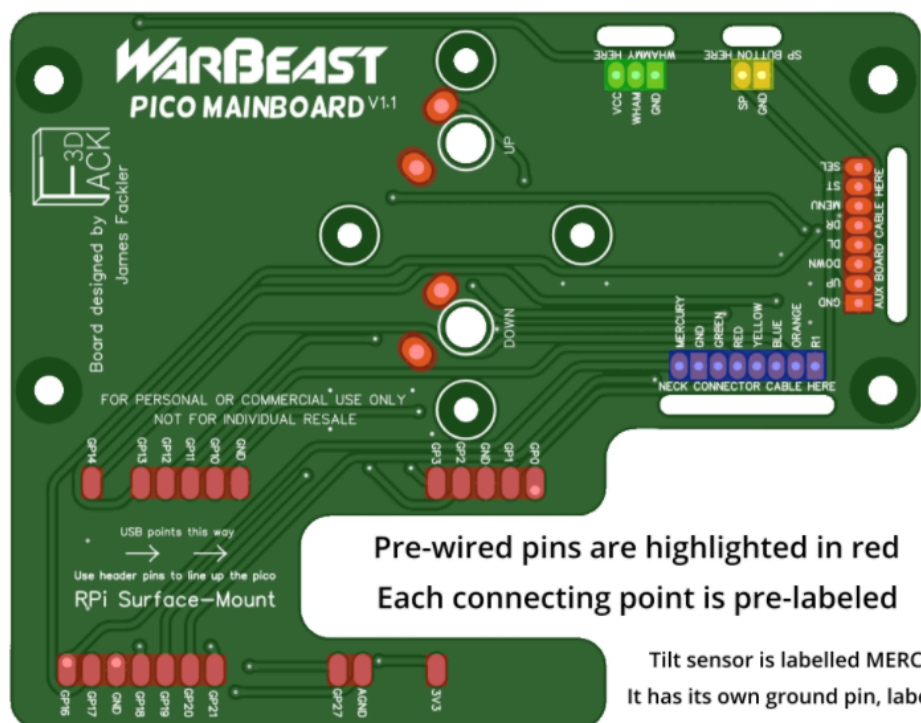
REQUIRED TOOLS:

- 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

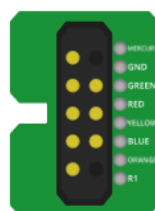
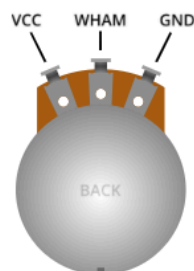
Each connecting point is pre-labeled

Tilt sensor is labelled MERCURY
It has its own ground pin, labelled R1

- Neck Connector

● Whammy Bar

Wrist-activated Star Power



Make sure each pin coming from the neck connector is matched with its respective input on the mainboard

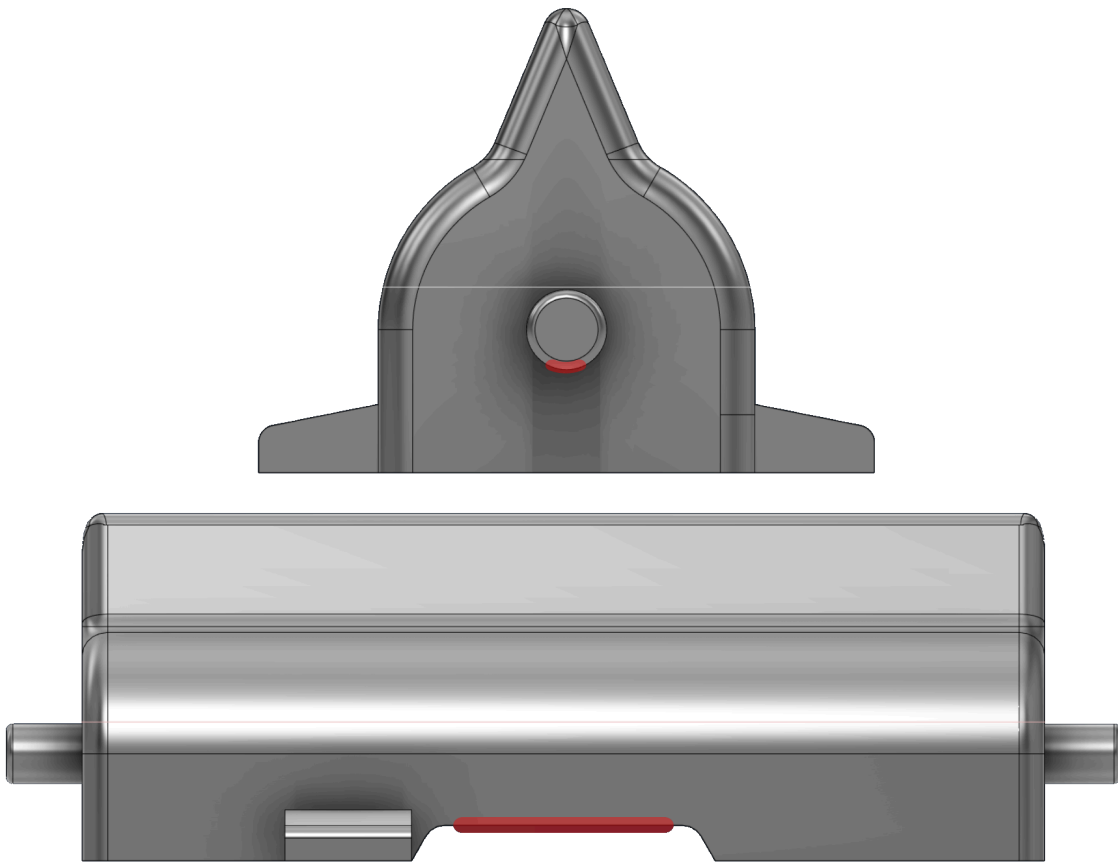
You can reuse the original wires coming from this board
Make sure the red wire is connected to SP, and the black wire is connected to GND on the mainboard



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.

ADJUSTING & FITTING THE STRUMBAR

The strumbar requires light filing on the **areas highlighted in red** for proper fitment, as 3D printed parts are not always perfect. If the strumbar pins do not fit into the bushings, file or sand a tiny bit off of the underside of the pin, and try again. Repeat until bushing rotates freely on both pins. Apply lube or grease to the pins, put the bushings on each side, flange facing outward, and slide the strumbar into place on the body.



The part of the strumbar that contacts the switches should 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!

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

Instruction guide written by: James Fackler

Last updated 2/5/2024