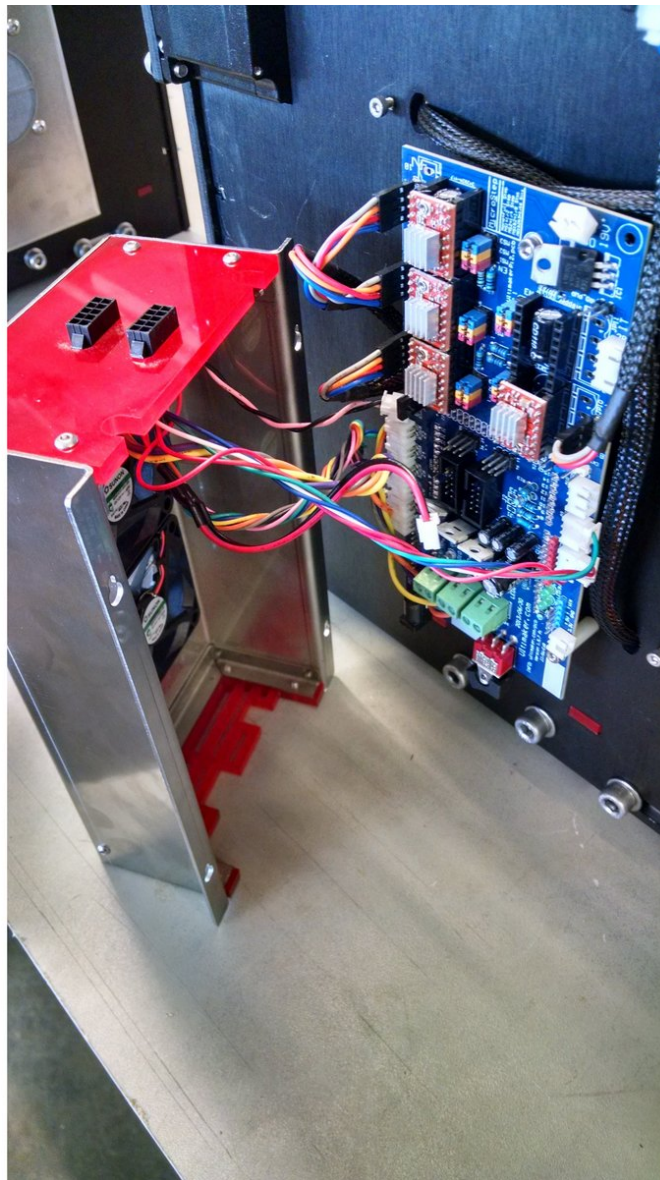




Attaching a Fourth Axis

This guide summarizes how to install a rotary axis to BoXZY.

Written By: Mary Poppins

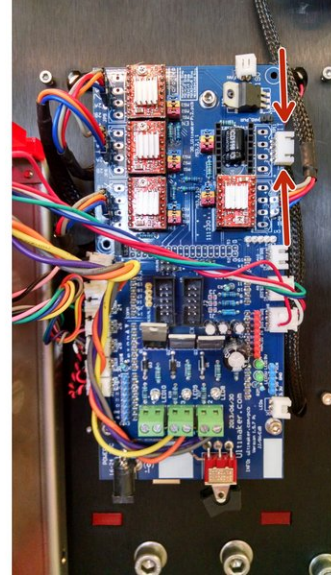




PARTS:

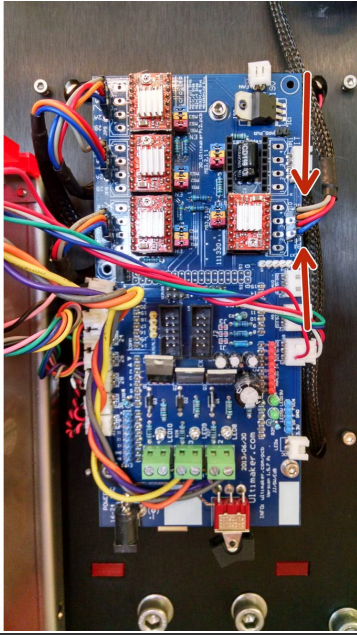
- [Rotary Axis](#) (1)
-

Step 1 — Accessing the Electronics Board



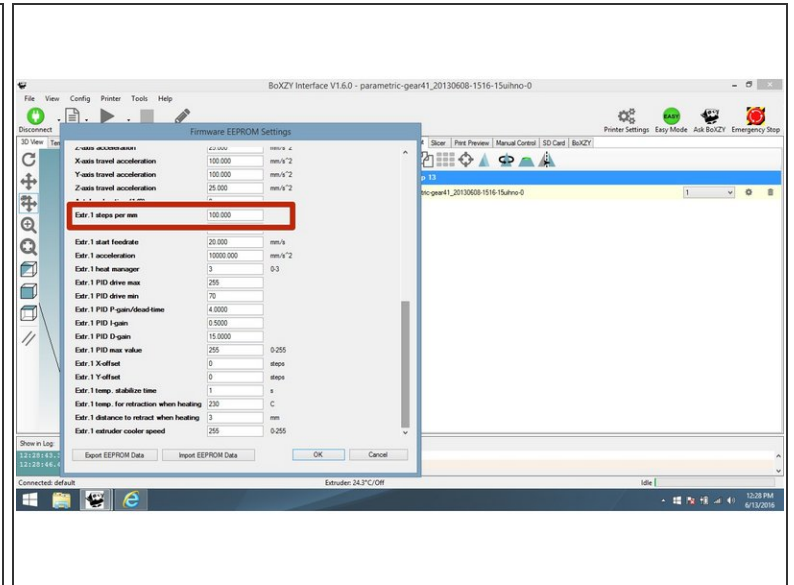
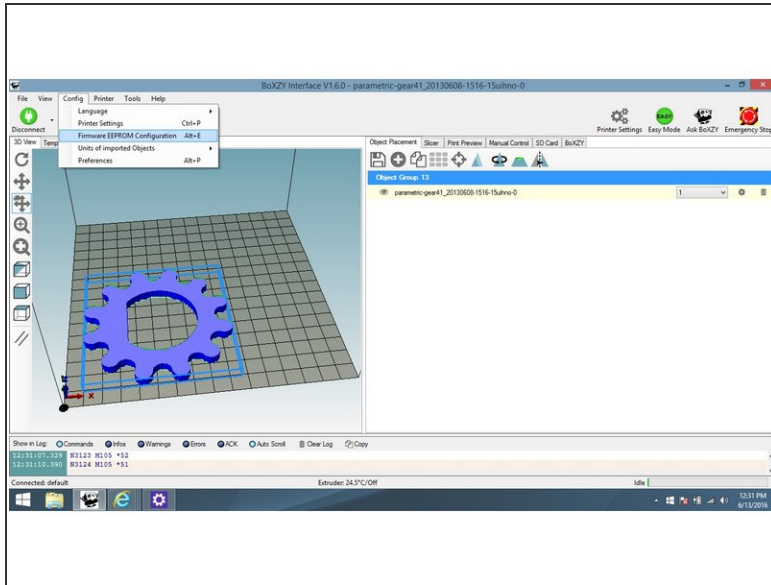
- You will begin by unbolting the back cover to access the electronics board. Make sure that all power is off before beginning this process.
- To begin, unscrew the bolts on the back cover and remove it by lifting the cover upwards and towards you. Be sure to remove the cover slowly to avoid tearing the wires.
- You will need to disconnect the fan's wire plug at the top of the board. It's the black and red cord at the very top. Disconnect it by firmly pulling on the white plug. Once you have disconnected that wire, you can set the cover to the side to give you room to work.
- You can find more detailed instructions on how to access the electronics board [here](#).
- You can find a board wiring diagram [here](#).

Step 2 — Modifying the Board



- Once the cover has been removed, unplug the filament drive motor, indicated by the red arrows in the first picture. Plug your rotary axis into these prongs.
- You can find a detailed drawing of the circuit board [here](#).

Step 3 — Setting Stepper Rate



- You will need to scale the EEPROM settings to reflect the size of the cylinder you are working on. You can access the EEPROM settings under the "Config" tab at the top of your interface.
- The setting that affects stepper control is "Extr. 1 steps per mm." It is indicated by the red square in the third picture.
- You will need to set your steps per mm before milling any item. If you do not adjust the settings before **every** job, you will not achieve the proper cut.