## **Instructions**

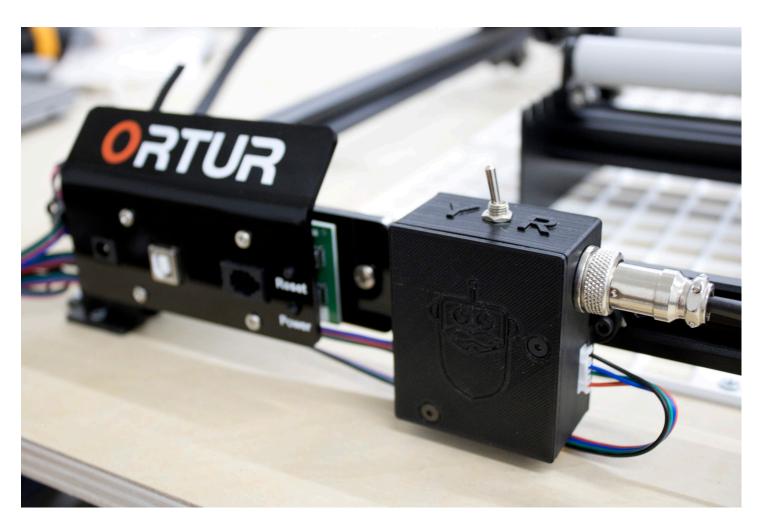
# **Ortur Compatible Y Axis Switcher**

**Installation and Setup Guide** 



#### **INTRODUCTION:**

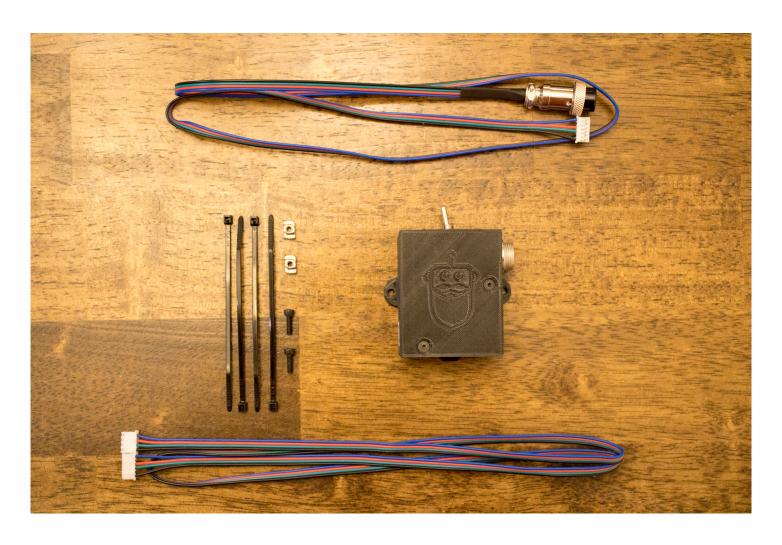
The following guide is for the installation and use of the Ortur Compatible Y Axis Switcher by Beard & Bot. Please follow each step correctly, and in order, for a successful installation of your Y Axis Switcher.



WARNING: Modifying your laser comes with risks. Please be careful and take basic safety precautions. Unplug your laser before working on it and wear proper protective equipment. Use care and caution when touching the electronics of your laser. I am not responsible if you break something on your laser while trying to modify it.

Now that the boring stuff is out of the way, this is an easy install so let's get started.

## **WHAT'S INCLUDED:**

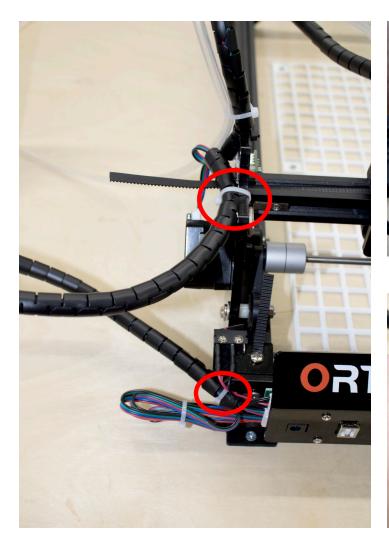


The following parts are included for installation:

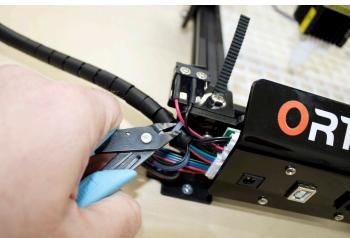
- 1 Y Axis Switcher
- 1 Rotary Cable
- 1 Y Axis Cable
- 2 T Nuts
- 2 10mm M3 Bolts
- 4 Zip Ties
- 1 2.5mm Allen/Hex Key



**1.** Cut the two zip ties that secure the wire loom by the controller and the Y Axis. Be sure not to cut the wires inside the wire loom.

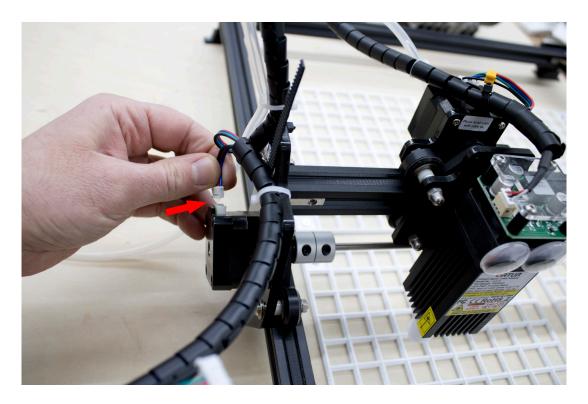




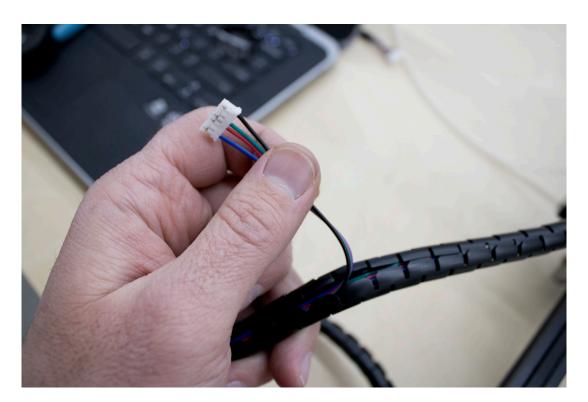




**2.** Gently unplug the Y Axis cable from the stepper motor.

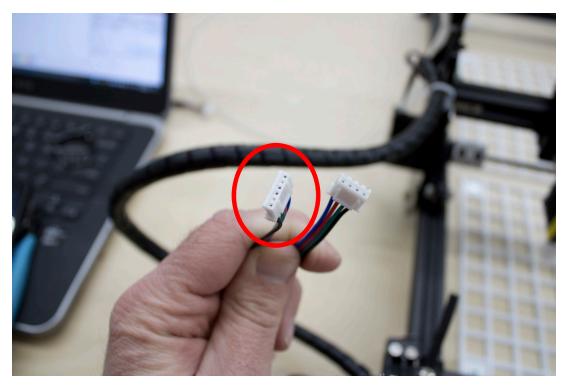


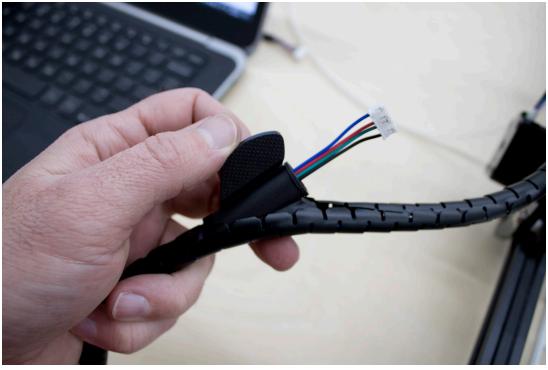
3. Carefully pull the cable out of the wire loom.





**4.** Take the new Y Axis Cable from the kit and using your wire loom tool that came with the laser, place the new Y Axis Cable in the wire loom. Make sure the 6 pin connector is going towards the stepper motor.







**5.** Take the two 10mm bolts and put them through the holes on the Y Axis Switcher case and then just barely start the two T Nuts on the bolts.



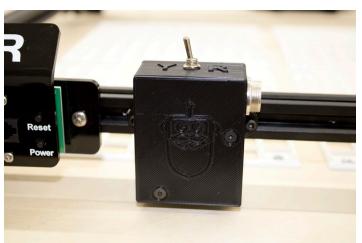


**6.** Hold the Y Axis Switcher to the front aluminum extrusion next to the controller and turn the T Nuts horizontal and then push the two T nuts into the slot. Use your 2.5mm Allen (Hex) Key to begin tightening the bolts. The T nuts should turn vertical as you tighten the bolts. Snug up the bolts, but don't over tighten them. The case is 3D printed and over tightening can crack the print.



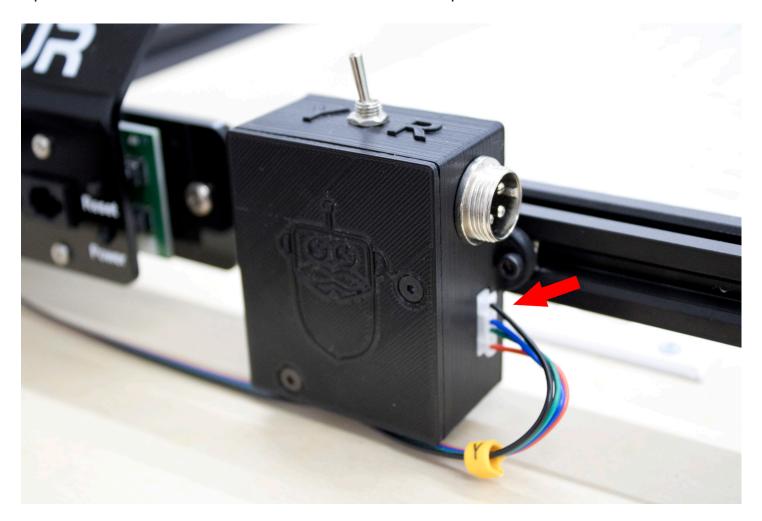


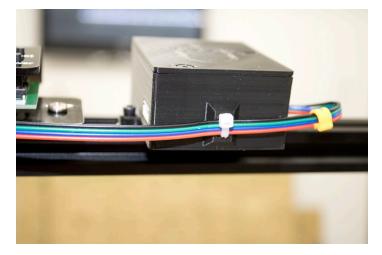






**7.** Plug the 6 pin end of the original Y Axis cable into the right side of the Y Axis Switcher. Use a zip tie in the slot at the bottom of the Y Axis Switcher to provide strain relief for the cable.

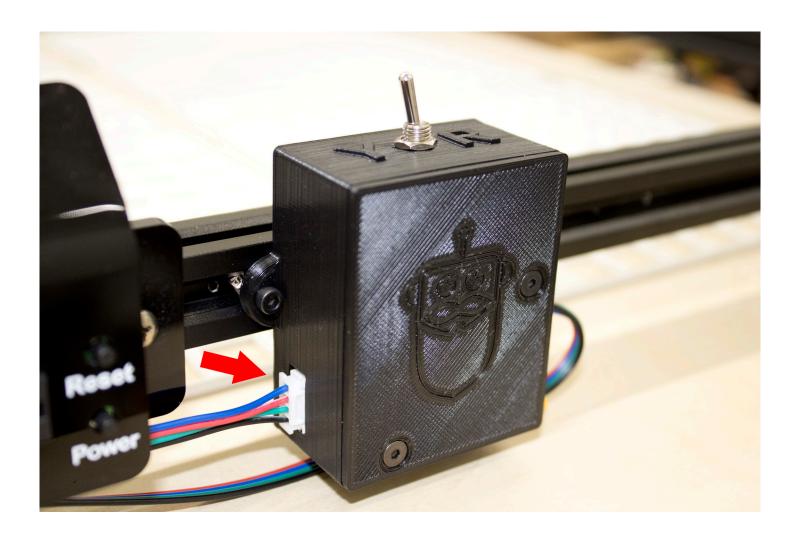








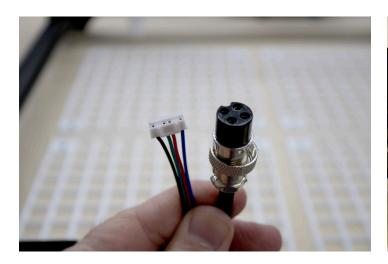
8. Plug the 4 pin end of the new Y Axis cable into the left side of the Y Axis Switcher.

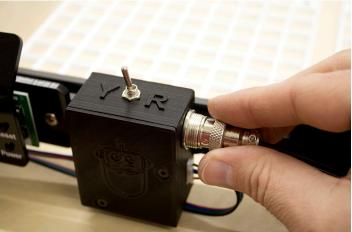


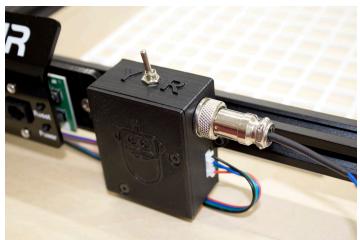
- **9.** Use two more zip ties to replace the ones we cut off the wire loom on the first step.
- 10. Use the last remaining zip tie to clean up any remaining wire slack.



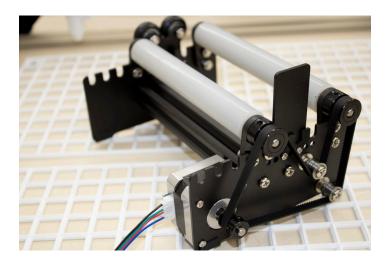
11. Use the Rotary cable to go from the 4 pin round connector on the Y Axis Switcher to the stepper motor on the rotary. If you need to remove the rotary, unplug the round silver aviation connector, not the connector on the stepper motor. It is designed to be unplugged and plugged back in without causing any damage. Take care to align the notch in the connector, it only goes in one direction, do not force it.







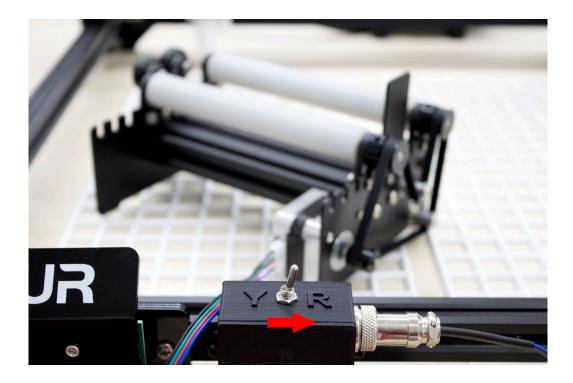




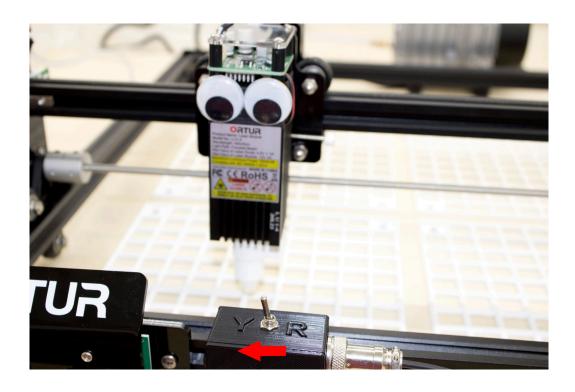


## **OPERATION:**

If you want to use the Ortur laser with the rotary attachment, make sure it is plugged into the Y Axis switcher then flip the switch to the right.



If you want to use the Ortur laser regularly, remove the rotary attachment and then flip the switch to the left.





## Instructions

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If you enjoy the Y Axis Switcher, please leave me a review on Etsy! If you feel it deserves any less than 5 Stars, please contact me first so we can address any issues that you may have experienced. Thank you for your purchase!

Thanks, Jonathan

Beard And Bot orders@beardandbot.com

