

# Installing Ergodox-style Legs on Iris (Rev 6) Keyboard

## Background

- The Iris keyboard comes with 3D-printable models for a middle layer that supports ErgoDox tenting legs.
- There are several models on Thingiverse for printing your own tenting legs. However, most of these legs screw into the middle layer and rely on friction alone (tightness of joint) to keep them in position. The legs sometimes slip if you put too much downward pressure on the keyboard
- The ErgoDox tenting legs use a toothed "hirth joint" to provide a much more secure attachment between the leg and case.
- This model uses a printed hirth-joint-style toothed leg, and a toothed washer that can be glued in to the middle layer. However (partly due to the constraints of 3D printing—or, at least, my 3D printer), this comes at the expense of adjustment variability—the leg can only be adjusted to one of the discrete positions rather than being infinitely-variable.

## Preparation

- Parts:
  - 3D-printed middle layer from "Iris PE Middle Layer - Ergodox Tent Kit" model (2: left, right)
  - Ergodox-style toothed legs (6)
  - Toothed printed washers (6)
  - M3 nuts (6)
  - M3 screws, 16mm or longer (6)
- Tools
  - Hex wrench (Allen key) or hex driver suitable for M3 screw (2.5mm)
  - Krazy glue



You should dry-fit everything **before** glueing.

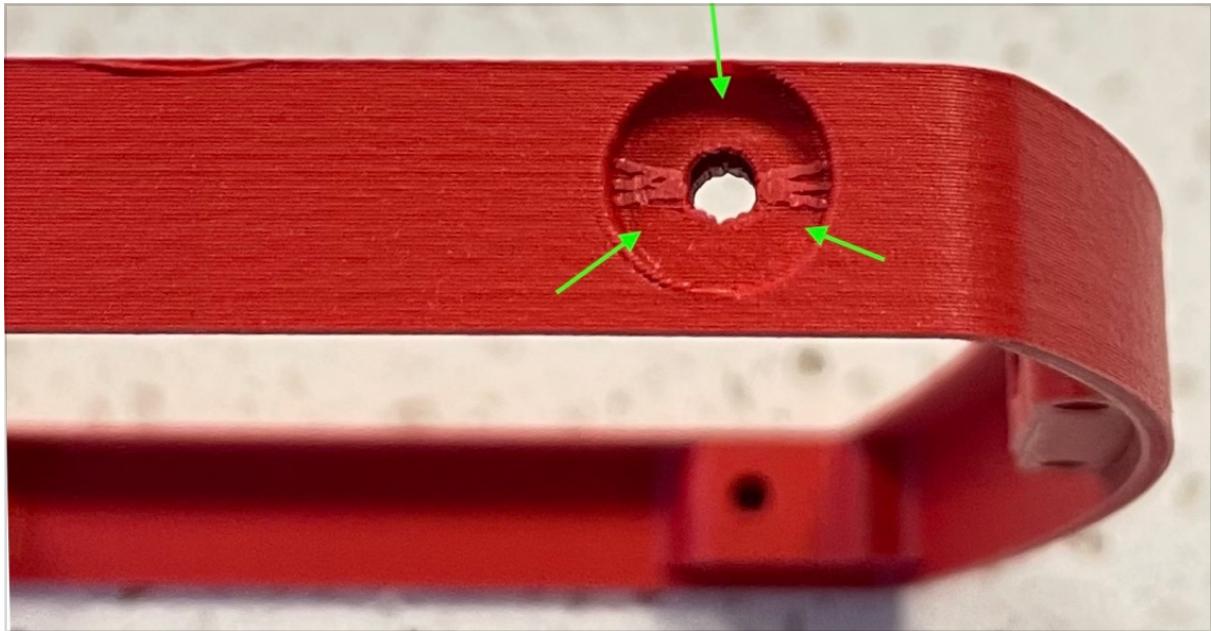
## Installation

For each of the three leg slots:

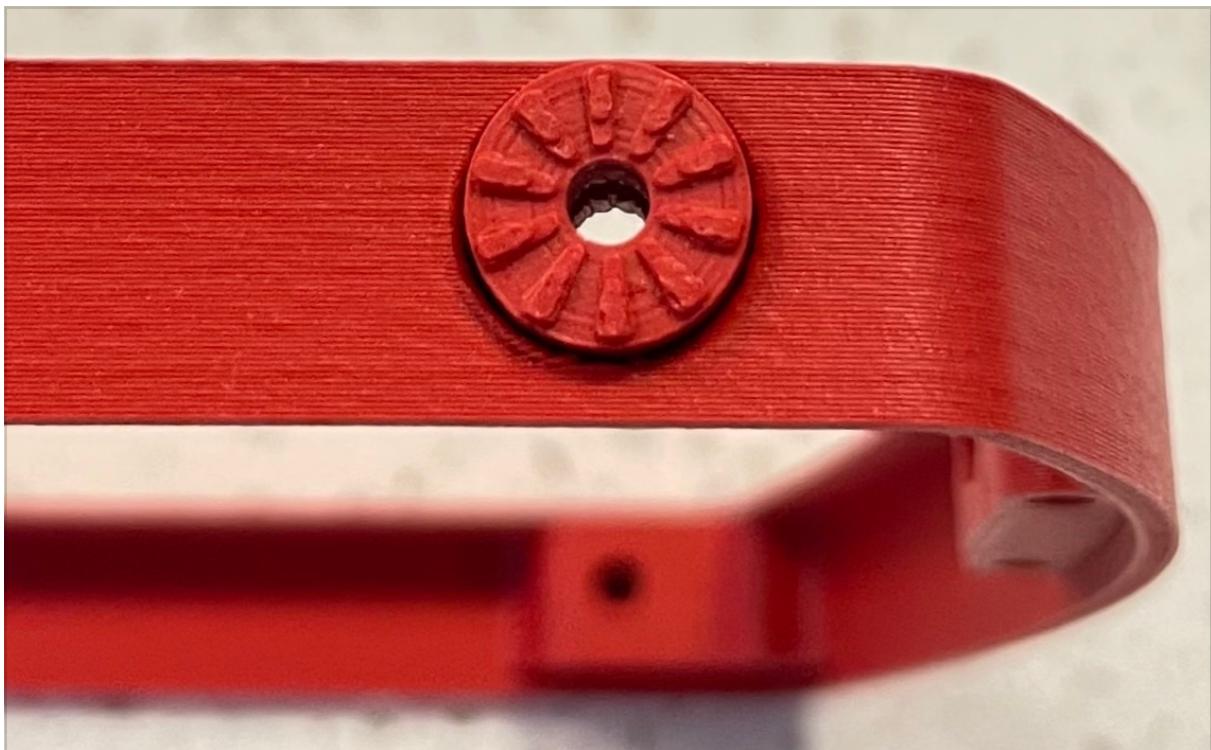
1. Install M3 nut (pointy-side down) into slot, from the bottom.
2. Place small amount of Krazy glue (or your preferred PLA adhesive) around each leg indentation. (Don't overdo it, or you might inadvertently glue screw into hole.)
3. Place printed toothed washer into leg indentation on side of middle layer
4. Place screw through toothed leg and through washer (toothed sides meshed together). Thread into nut.
5. Tighten screw to ensure washer, nut, and leg are all aligned. Leave tightened until glue dries completely.



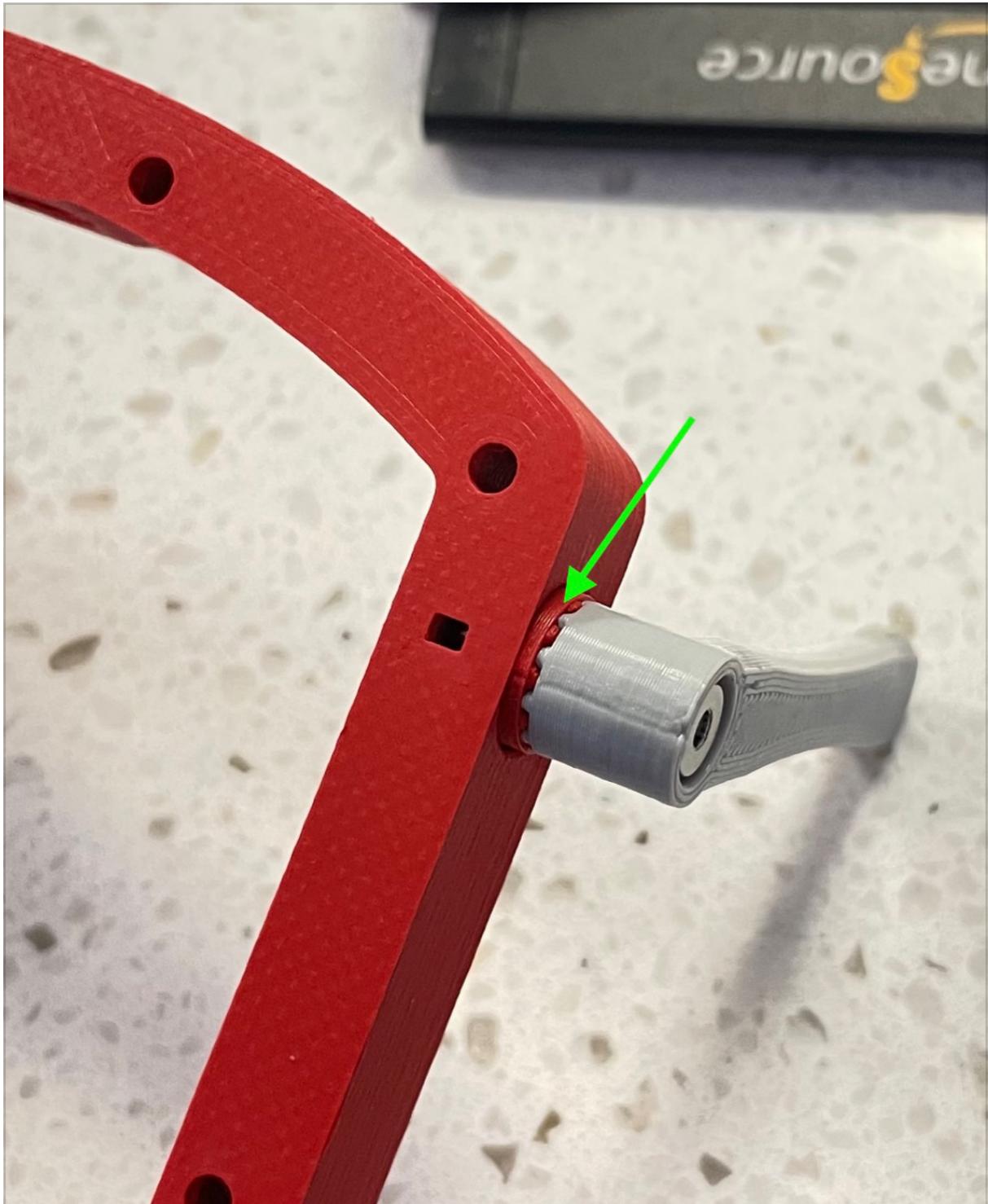
Install a nut into each slot.



Add some glue around outer edge of indentation hole. Don't overdo it, or you might inadvertently glue screw into hole.



Add washer into indentation.



Immediately tighten leg on to washer to ensure correct alignment. Allow glue to dry completely before removing.

After drying, you can loosen screw and adjust leg to your preference.

## Notes and Attributions

- These parts were remixed from several project on Thingiverse, including :
  - [Ergodash-Case\\_Single Thumb by WizardData](#)
  - [Lily58 ergonomic keyboard case by viorels](#)