

# presentation-notes

Tim Anderson

TODO Finish Website & Mirror Presentation Notes TODO Gather Raw Data for Presentation

Prices Ali Express for Keycap Price Digikey for Hardware Cost Collect Info & Tutorial Sources for

## Who Am I?

Tim Anderson

- <https://github.com/mcdviii>
- <http://aberrent.online>

I work in manufacturing as a machine operator for a local furniture manufacturer. I tinker with electronics & free software on my free time.

## Why would you want or need this?

### Benefits of Ergo keyboards

While browsing around looking at these ergonomic keyboards I see a recurring question: "Why would you need/want that." It seems like a fair question. I imagine in the eyes of an uninitiated it would seem like RGB lighting on a personal computer: expensive, showy & unnecessary. But I would argue there are real health benefits to using a proper ergonomic keyboard.

### My personal reasons

1. I consider my hands to be my greatest physical asset, aside from what's floating around in my skull.

### History of Typewriter According to Matt Addereth

### Other relatable reasons (Programmers, emacs pinky)

1. Only a normie would use an OEM keyboard!

## RSI Injuries & How to Avoid Them

- I am not a doctor! I just searched causes for RSI issues! Don't shoot me!

Ulnar deviation

## Notable Mentions

### Kinesis Advantage2



- Advantages:
- Disadvantages: \$320.00 USD
- Open Source: No

**ErgoDox**

**Let's Split**

**Atreus**

**Signum (Troy Fletcher)**

**Other Dactyl Variations**

**Ergo Dactyl**

**Lightcycle Dactyl**

**Dactyl Manuform**

## **What is the Dactyl Keyboard?**

**History or Background**

**Matt's Clojurcon Youtube Video**

**Matt's Reasons for making the design**

**Dactyl was Written in Clojure with the Help of OpenSCAD**

**Reasons for Choosing Dactyl**

- Kinesis Advantage form factor
- Open Source
- Looked like the most comfortable design
- Also looked hella cool

## **Dactyl Project**

**My Reasons for Building by Hand Instead of Purchasing**

- At the time there were none being manufactured
- Sense of self-satisfaction
- Building my own helps me to improve the project by contributing personal improvements back (Open Source)
- I already own a 3D printer
- Screw paying someone else >\$300, I'll just build my own!
- One year later joke

## **Build Overview**

**Shell/Case**

**Switches & Keycaps**

**Hardware**

**PCB & Wiring**

**Firmware**

**How Does it Work?**

- Explain matrix positions

**Challenges**

- Which way to wire the diodes
- How the keyboard is controlled by the MC (key matrix)

## **Where To Buy**

- I have no affiliation or experience with the following. YMMV!

**MassDrop**

- Crowd sourced limited manufacturing.

**ErgodoxEZ**

**OhKeycaps.com**