

Luke Fisher  
Open Source 3D Fabrication

### 3D Printed Oscillator Enclosure

For my final research project I chose to create an enclosure and knobs for a CMOS oscillator. My reasoning for this was I felt like it was a solid way to combine multiple interests I have (3D printing, electronics, sound) into a single project. I originally wanted to create a custom made PCB, but I quickly realized that I did not have enough time to do that. Plus, my actual project would have just covered it up. In total I only had to print the box itself twice, which is nice because for such a small object it took up close to 4 hours to print. The process which required the most trial and error was the knobs, in total I think I printed close to 25+ knobs, each set with different designs and openings. Even so, along with the case, I had to drill slightly larger holes to get everything to fit properly.

Although far from refined, I really like my little oscillator guy, and I feel like the majority of the problems that remain once completed were those that could only be realized after the fact. So, if I were to print another enclosure I would feel confident that I could make it perfect (for this situation).