Alternative Keyboard for Calisto 2 and a half

This deals with alternate A & B parts for the Calisto 2 and a half to accommodate the Dierya DK63 keyboard, which is still pretty widely available.

These parts started as the A & B parts for the DK63N that the original Calisto II used, but the DK63 is slightly wider and deeper than DK63N, and much taller, and also has a more complex profile.
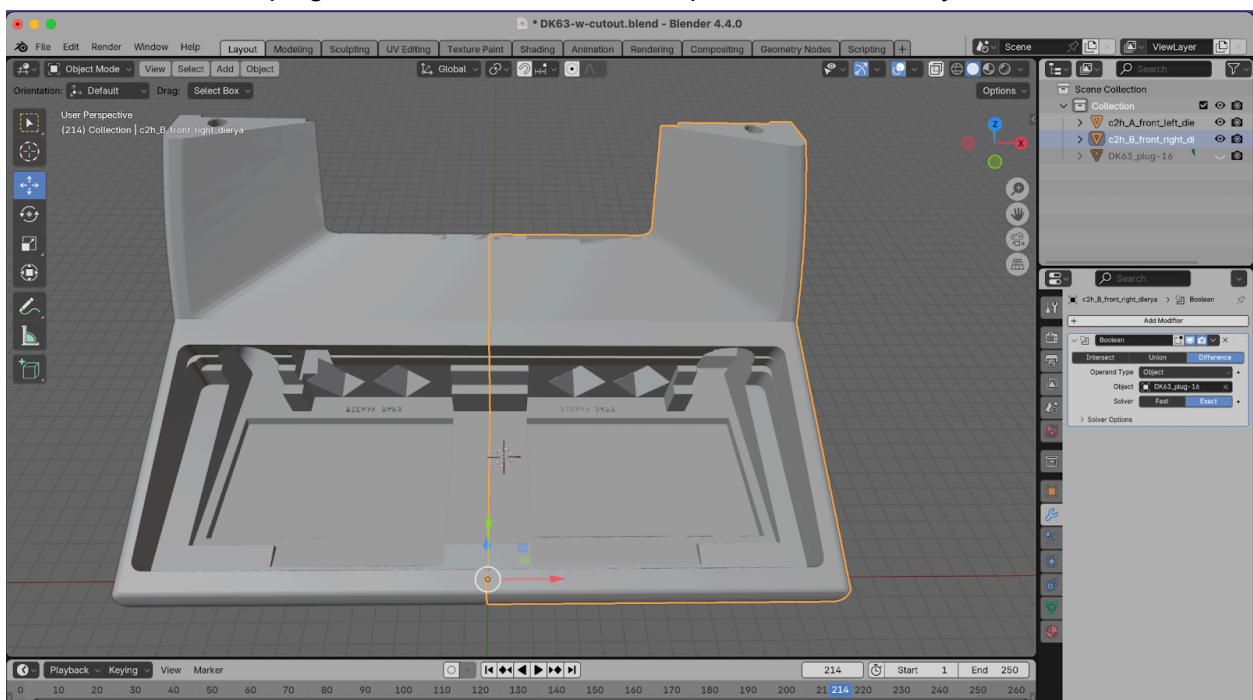
A "plug" roughly matching the DK63 was made in OpenSCAD.
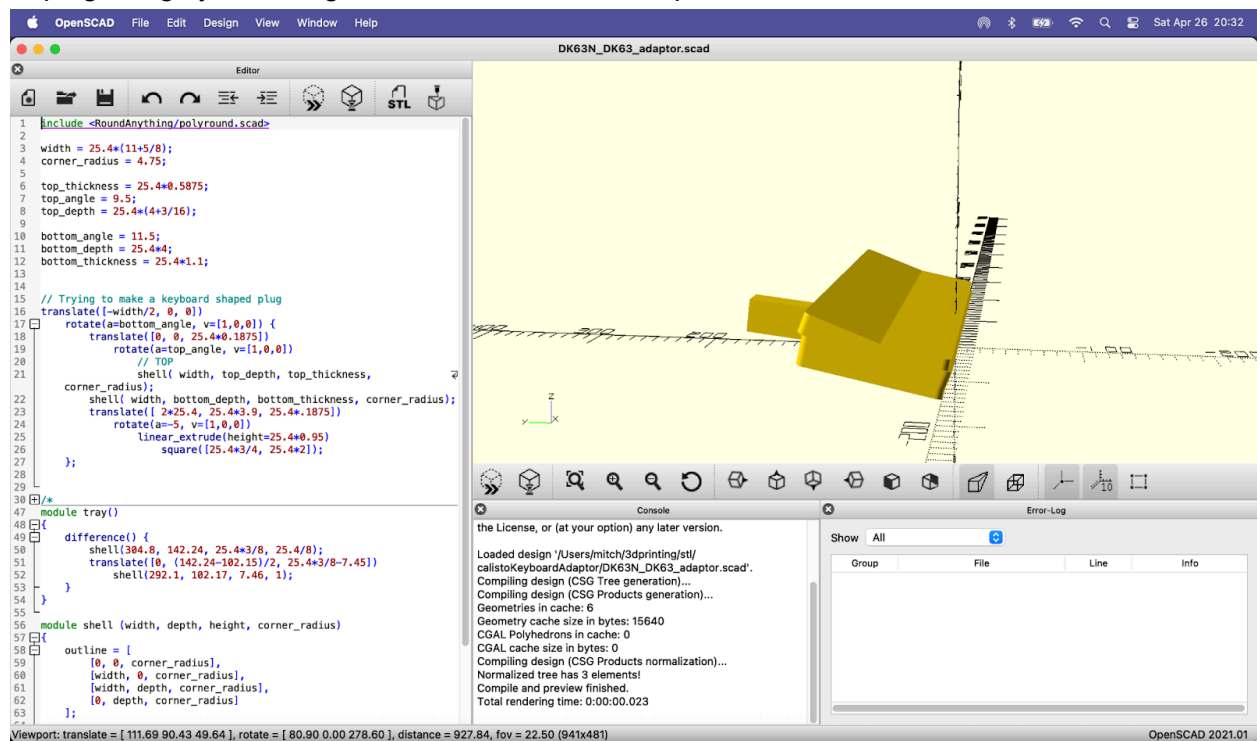
The original parts were then imported into Blender
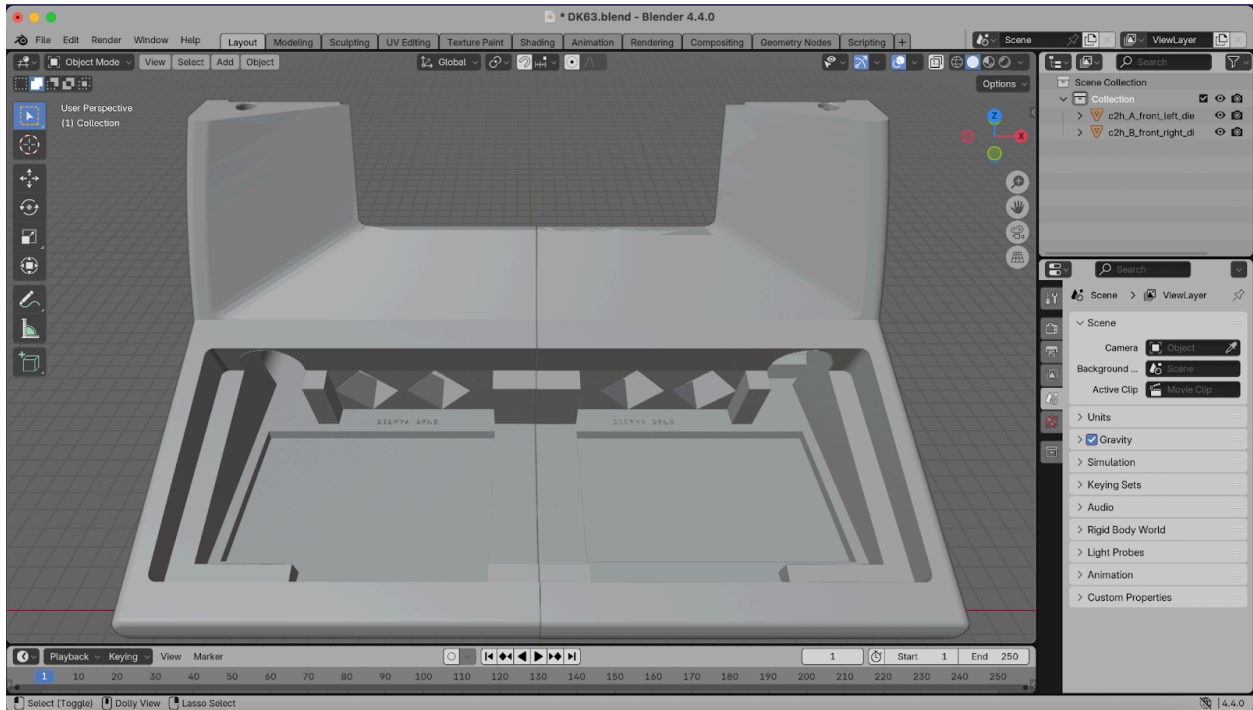
Then the STL of the plug was used to *cut out* the shape for the newer keyboard.

This took a while because I'm not very good at OpenSCAD, and a complete noob at Blender, but after over a dozen plug designs, and printing 10 iterations I have something that works

reasonably well.   It's not quite as polished as the original design, but the ugliness is hidden once assembled.

Notes on printing and assembly

Part A

Supports

The cutout for the keyboard cable could probably use supports,but every time I've tried the result is awful, and the support material is difficult or impossible to remove. Without support the worst is that the roof looks a little messy when printed on my Prusa Mini. Your results may vary based on the printer. I did enable supports around the rounded parts of the base, and those came off fairly easily.

Infill and layer height

Using 10% infill and 0.2mm layer height seemed fine on this part, and cut down on both printing time and material. With 2 or 3 walls and 4 or 5 top and bottom layers, it turned out pretty well. I used adaptive cubic infill, though I'm not sure it matters.

Part B

Supports

Supports on part B were pretty much the same as recommended in the original printing guide. I added supports around the rounded parts of the base, and that seemed sufficient.

Infill and layer height.

Here I found that 15-20% infill helped make the archway for the SD card reader a little sturdier. When I printed it at 10%, the archway broke off while I was trying to cut the supports for the retaining clip. I used super glue to repair it, but it seems very flimsy and delicate. My next iteration used 15%, and the archway did okay, though it still seemed delicate and eventually broke.   Again I used adaptive cubic infill patterns.

0.2mm layer height gave pretty good results this time as well.

Assembly

The top and front holes in the sides of both parts have relatively thin walls relative to the keyboard well. I've never had them fail, but if you use a more brittle filament (Silk, Matte, etc.), then it's possible they might fail on peg insertion. Try to be gentle with those pegs especially.

User Perspective
(214) Collection | c2h_B_front_right_dierya