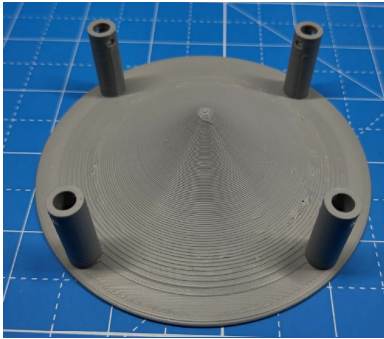


# Satellite 1 Modular Enclosure

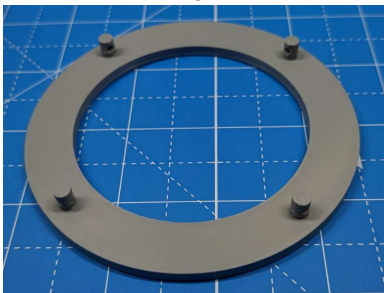
Here is a design for a modular enclosure with a universal speaker mount. This is based on the original design by FutureProofHomes <https://github.com/FutureProofHomes/Satellite1-Enclosures> and their great team.

It consists of 6 parts.

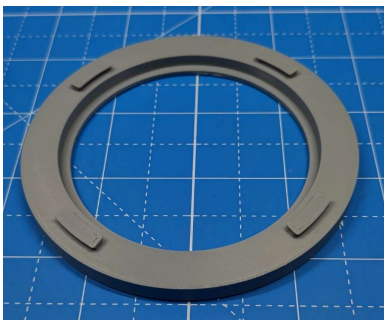
1. The Speaker Stand. This design uses filament as a locking mechanism



2. Stand Lock Ring with holes for filament locking



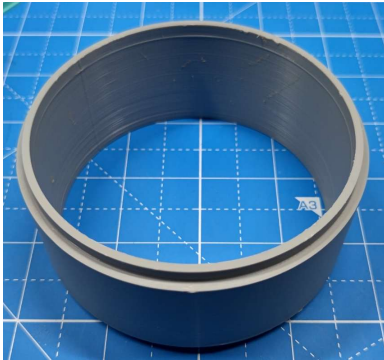
3. Chamber Base



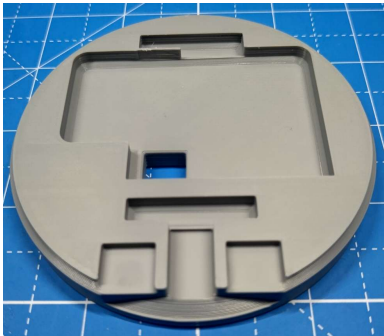
4. Chamber Mount Ring



5. Chamber Body. In can be mounted either way with the mount ring.

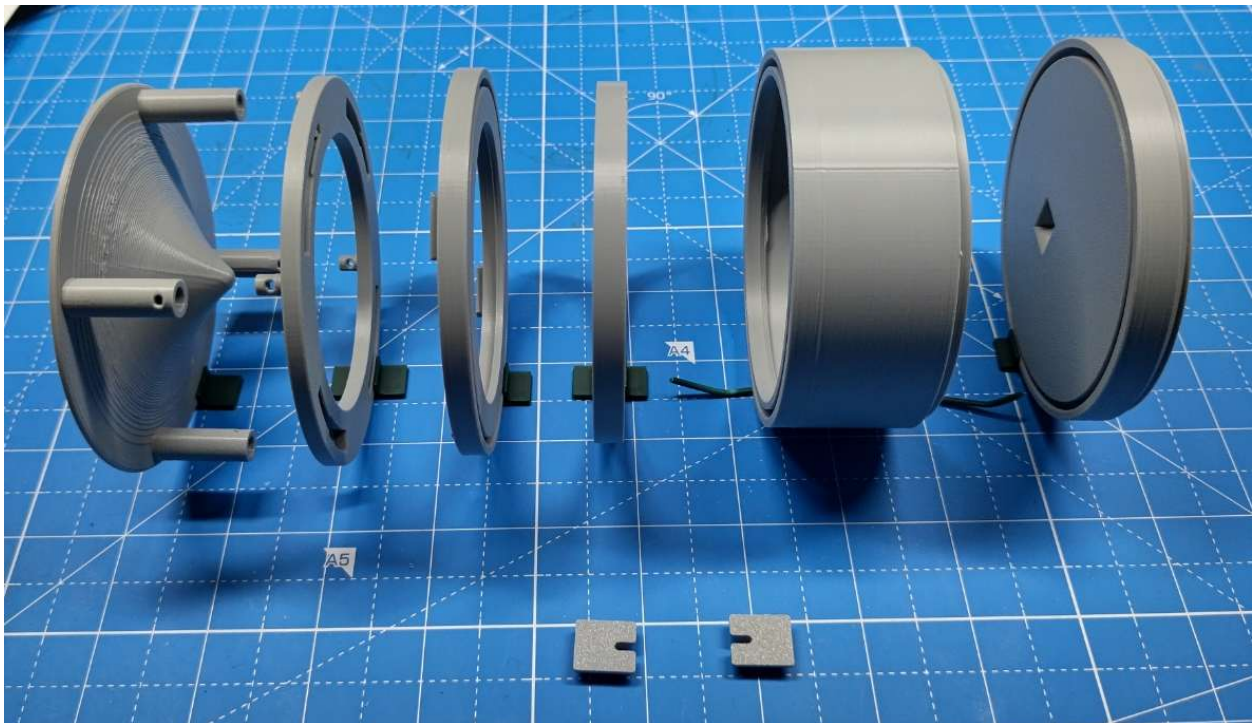
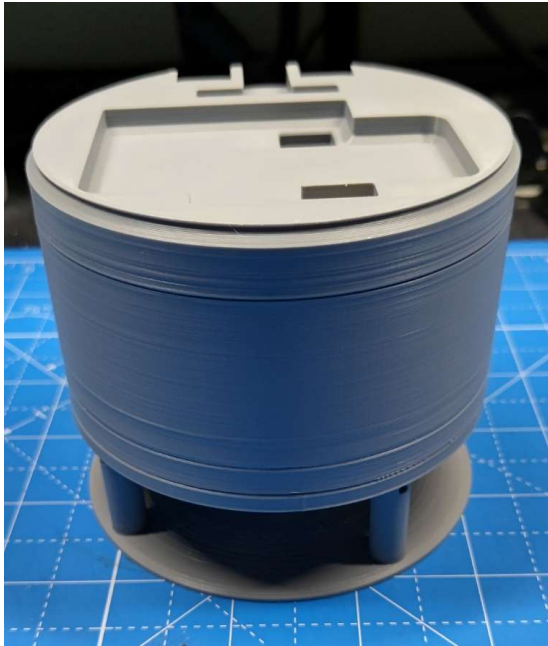


6. Chamber Top. If using the audio jack on the Satellite 1 then this is the only part that needs to be printed. It has a solid bottom (except for mount ring) allowing it to sit on a flat surface.

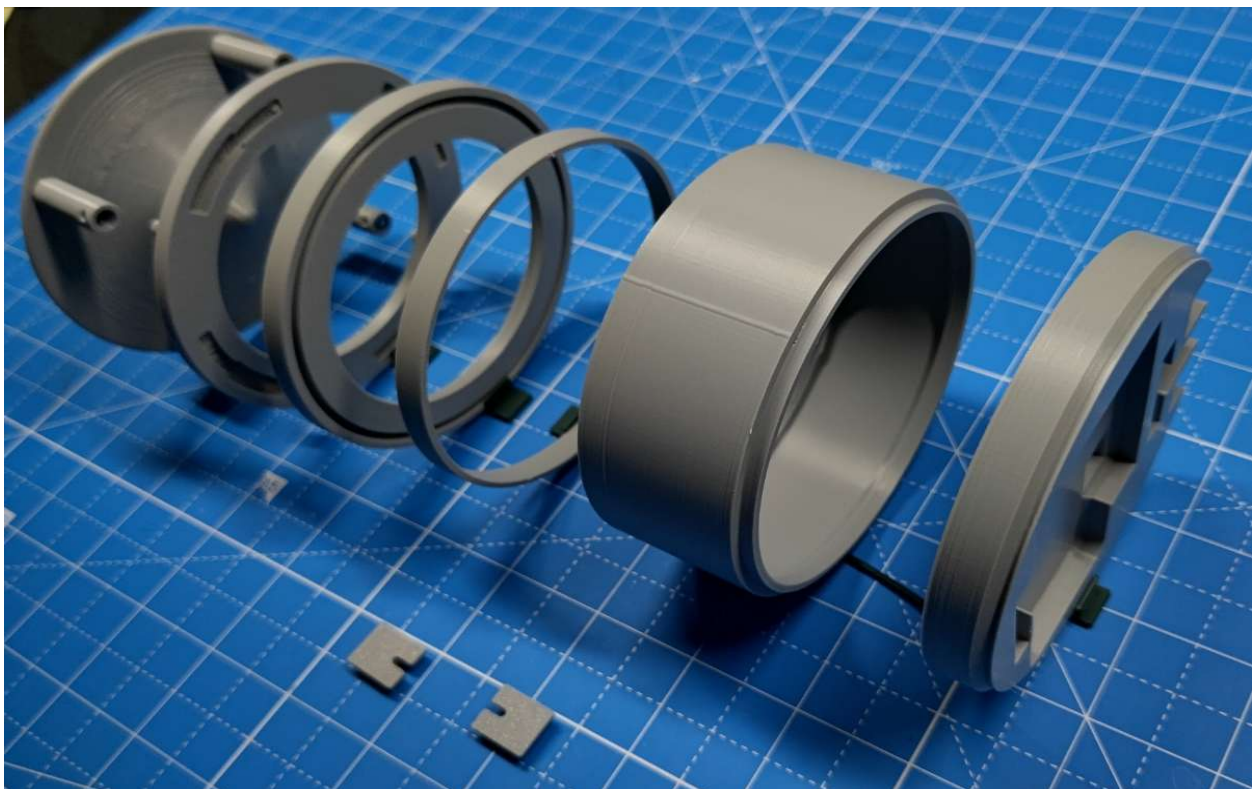
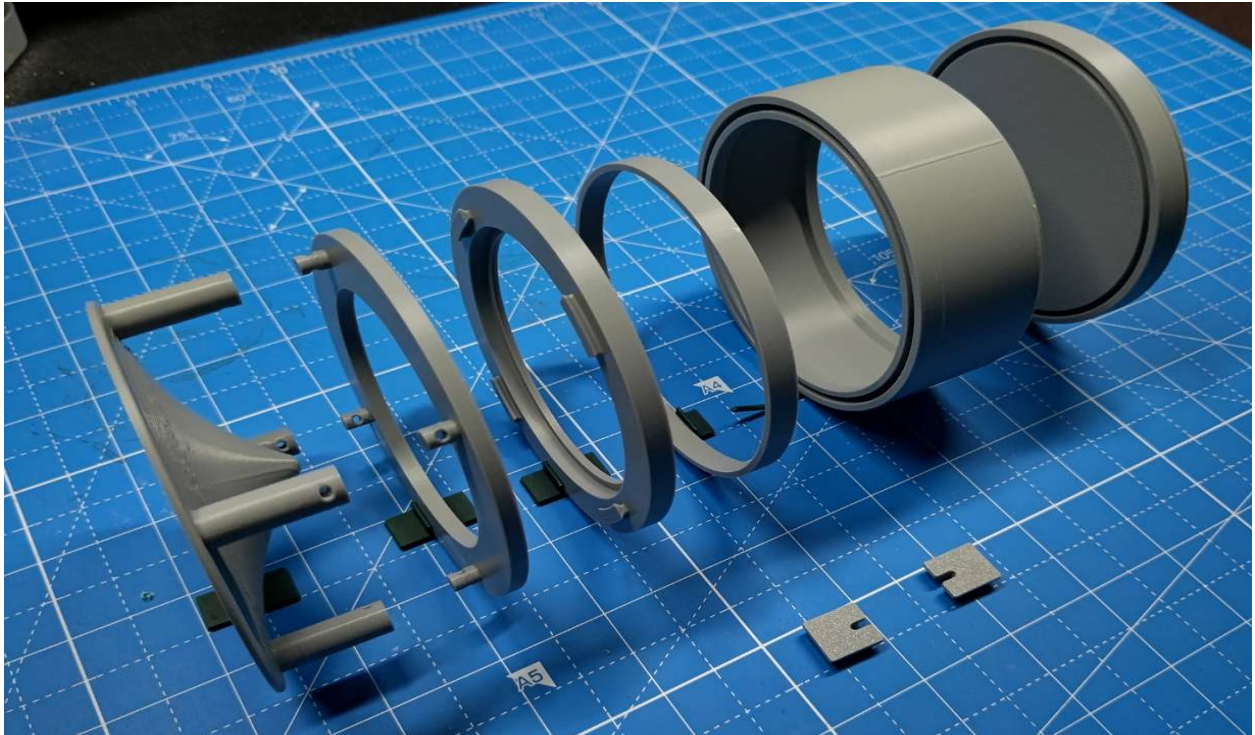


Use the original UFO Cap on top.

Assembled enclosure. All parts are pressed together and filament inserted into speaker stand holes.



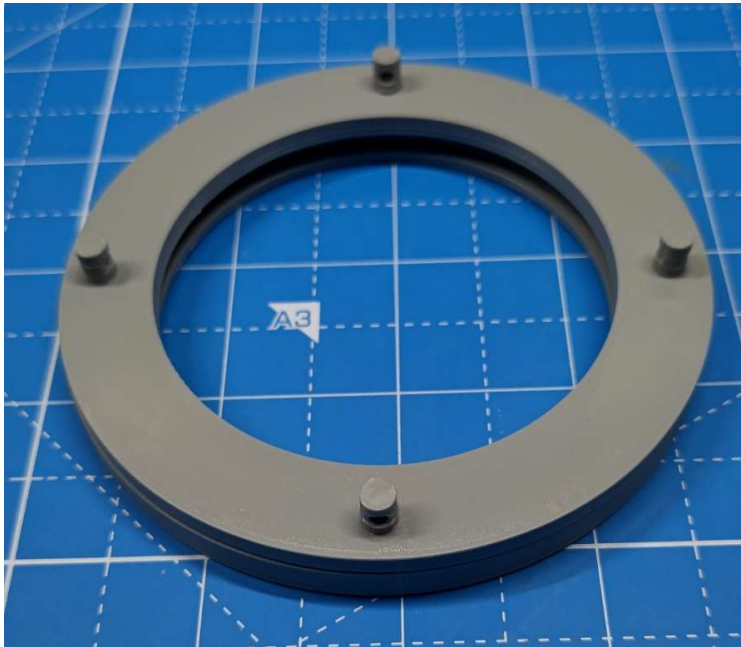




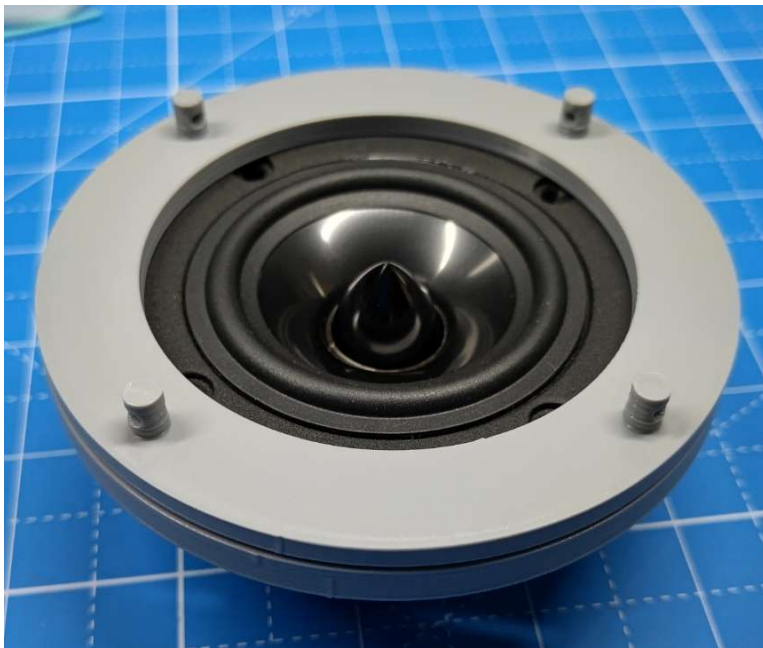
There is an additional file for capping the cutout for the speaker wire. Using two (one on each side of chamber top) should seal off the Satellite 1 from the sound below.

## Speaker Mount

Speaker mount. Notice the gap between the two parts.

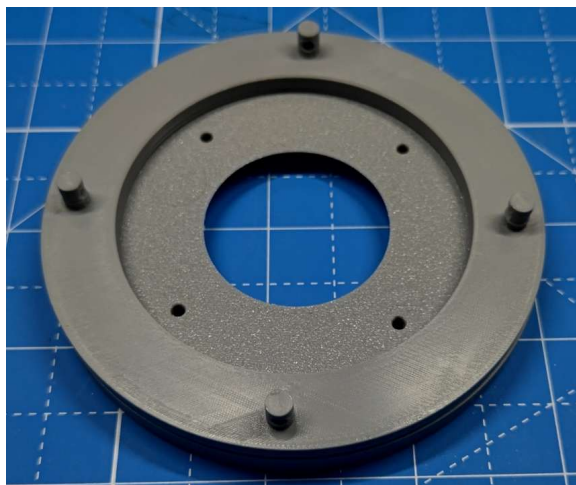
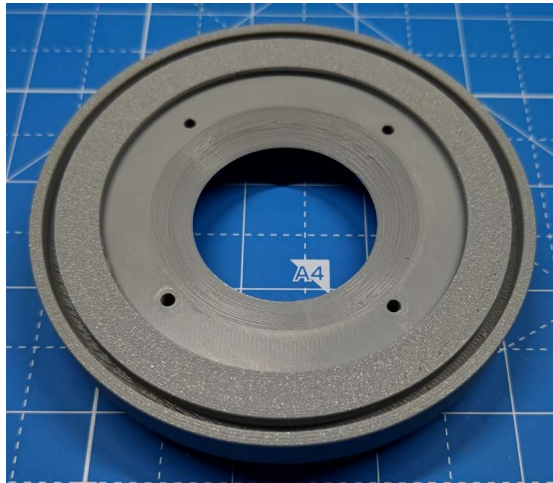


A Dayton Audio RS75-4 speaker mounted.





An example of a mount for a speaker (work in progress). This is for a DAEX25FHE-4 it mounts between the Speaker Lock Ring and Chamber Base.



## Files

The files are located on GitHub at <https://github.com/CyberGWJ/Home-Assistant/tree/main/Satellite%201/Modular%20Chamber%20Enclosure>.

There are STL and STEP files for all parts.

NOTICE: The Chamber Body and Speaker Stand have Fusion 360 files. These are included because these STLs can be dynamically created. By modifying the “ChamberHeight” parameter the Chamber Body will adjust to the updated height. The Speaker Stand cone height can be modified by changing the “ConeHeight” parameter.

## Printing

PLA was used to print all parts. No supports or brims are needed and STL are in the correct orientation. Some tolerances are tight so settings and material may affect assembly.

If printing a Speaker Stand with a cone height less than 25 mm a smaller layer height is needed. In the picture above a layer height of .12 was used.