

OLD VERSION ASSEMBLY GUIDE - v1



Google Home Mini Speaker Housing (with Swappable Faceplates)

Preface:

This model is a simple way to upgrade the aesthetic of your Google Home Mini speaker.

My main goal when designing this was to make assembly as straightforward as possible while maintaining ease of access to the Google Home Mini. That is why I chose to use lots of magnets in this build and only a handful of screws. Once fully assembled, the Google Home Mini can be easily accessed by simply detaching magnetic panels and removing a single screw. That said, I know gluing dozens of magnets can be tedious, so I would consider releasing a version that uses more screws and fewer magnets if there is enough interest.

As far as I can tell, all of the Google Home/Nest Mini speakers should have the same dimensions and should fit this model. If yours does not fit, please reach out to me and I am happy to adjust the clamp tolerances for a better fit.

Note that there are two Front Plate files. One is plain, and the other has a radial cut-out pattern. Choose whichever one appeals to you!

See below for printing and assembly instructions. PLEASE READ EVERYTHING.

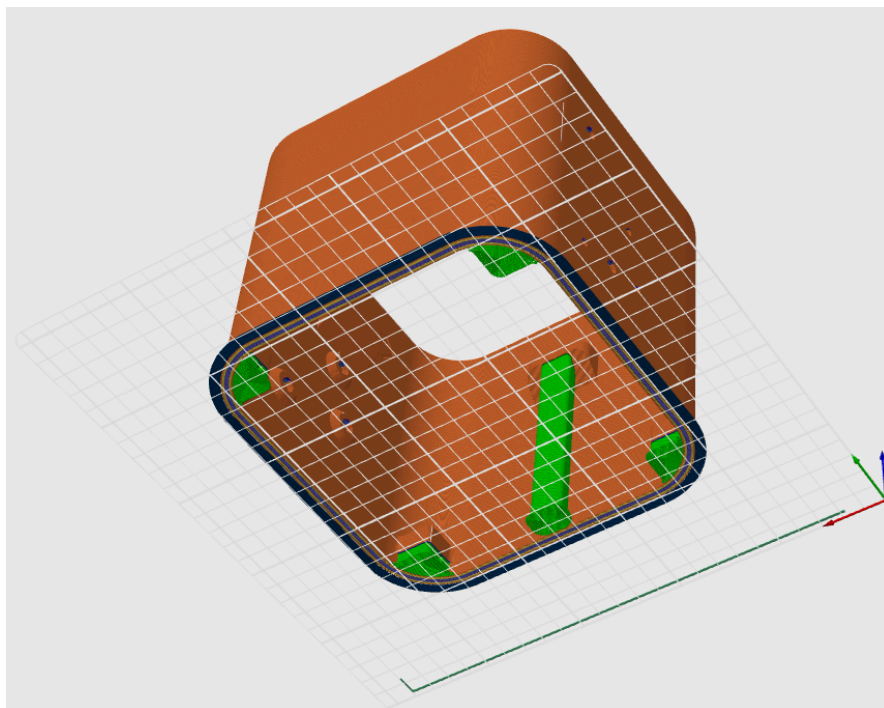
Printing:

Unless otherwise specified below, I used the following settings to print all of the parts:

- 15% gyroid infill
- 0.2mm layer height
- 3 walls
- No supports
- Print all models in the default orientation of their respective STLs.
- The tolerances should already provide a snug fit for all of the parts, but you may need to play with the horizontal expansion settings in your slicer if the parts are not fitting together well.

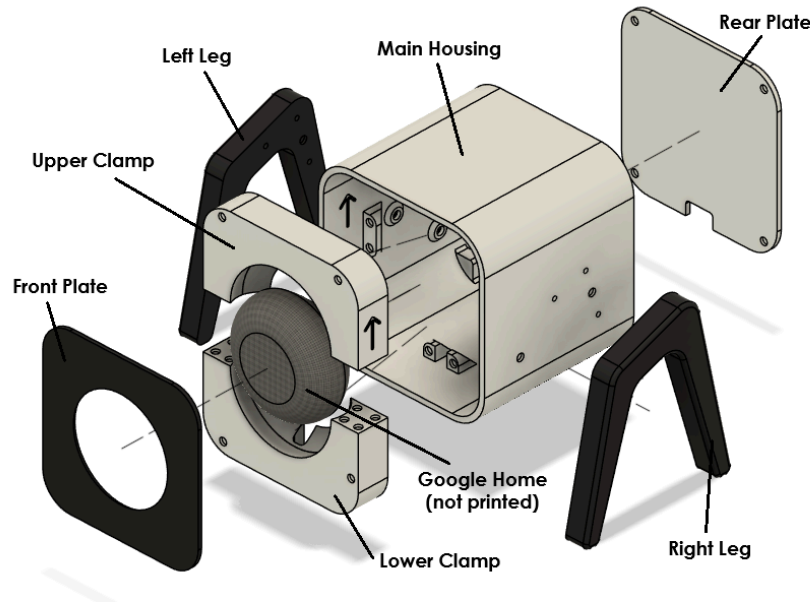
Additional Print Settings and Orientation Notes:

- Main Housing:
 - Will need support in five locations. This is a view from the bottom to show where the supports need to go. I would suggest painting on the supports in each of the five locations to prevent them from auto-generating in other areas where they are not needed.



- Front Plate:
 - If you would like the texture of your buildplate to be visible/facing outward when assembled, print with the default orientation of the STL.
- Rear Plate:
 - Again, if you would like the texture of your buildplate to be outwardly visible, print with the default orientation of the STL.
- Right and Left Legs:
 - 3-4 walls and 30% infill for extra rigidity.

Assembly:



Non-Printed Parts Required:

- 52x magnets (6x2mm)
 - I used [these](#)
- 7x Socket Head M4 12mm screws
 - I have [this set](#)
- Super glue (to secure magnets)
- Hot glue (optional)

Steps:

1. Super glue all magnets into all holes. I have used hot glue in the past but it is more prone to fail over time. Heat can also reduce the strength of magnets, so I would recommend super glue over hot glue. Make sure you get the polarities right so that all parts properly connect to each other as seen in the exploded view above.
 - Note that the cluster of three countersunk screw holes on either side of the interior walls of the Main Housing are for the leg screws and NOT for magnets.
 - Note that the magnets that connect the legs to the outside of the Main Housing are optional, they just make alignment a little easier when screwing the legs into place.
2. Using 6 of the 12mm M4 socket head screws (3 for each leg), screw the legs onto the main housing.

3. Clamp your Google Home Mini speaker between the Upper and Lower Clamp pieces so that the power cable slot of the Google Home lines up with the cable slot found in the Lower Clamp.
 - The mute switch cut-out (also on the Lower Clamp) should help make alignment easy.
 - Ensure that the UP arrows on the Upper Clamp are pointing upward.
4. Feed the power cable of the Google Home through the Main Housing (from the back) and plug it into your Google Home.
5. Slide the Google Home clamp assembly into the front of the Main Housing. The magnets should lock everything in place.
 - The UP arrows should once again confirm that your orientation is correct.
6. Using the final 12mm M4 socket head screw, screw the Main Housing into the Google Home clamp assembly. Use the screw hole located at the top of the interior of the Main Housing.
7. The Front and Rear Plates can now be snapped into place on the front and rear of the Main Housing.
 - Ensure the power cable of the Google Home feeds through the cable cut-out on the bottom of the Rear Plate.
8. (Optional) There is a small slot on the bottom of each foot of each leg where a thin strip of hot glue can be placed to provide some extra grip to keep the whole thing from sliding around on slippery surfaces. I have mine on the back of a toilet and this step has proven to be very effective.

Overall Dimensions:

- H8.125in x L6.9in x W5.625in

Additional Notes:

- The pictured model was printed on my Bambu Lab P1P using Bambu Matte Black and Matte White filament.
- This model is not for commercial use. If you are interested in selling your 3D prints of my models, please refer to my [Patreon!](#)
- If you like this design, consider leaving a tip! I'm a university student, so anything helps!
 - <https://www.paypal.me/theprintedplanter>