

Minimalist Passive Speaker for Smartphones NO SUPPORTS

gabri991

VIEW IN BROWSER

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Summary

Hello Everyone!!! I present you my second attempt withTinkercad. I designed a simple Passive Speaker for Smartphones!

Gadgets > Audio

Tags: amplifier audio speaker smartphones passivespeaker

Hello everyone!

I’m excited to share my passive smartphone speaker, modeled in Tinkercad!

After chatting with a few coworkers about practical 3D designs, I decided to create a simple, easy-to-print **Minimalist Passive Smartphone Speaker**. It’s a clean rectangular design with a few custom tweaks to maximize functionality:

- **Acoustic Voronoi Flanks:** The short sides feature a Voronoi pattern to let sound waves resonance naturally and pass through.
- **Universal Fit:** The top slot is wide and deep enough to accommodate most smartphones, even with their cases on.

- **Elevated Internal Base:** Includes a small internal ledge so the phone sits securely without blocking or muffling the bottom speakers.

I’ve physically printed and tested it, and it works fairly well!

Print Settings

- **Material:** PLA / PETG
- **Layer Height:** 0.20 mm
- **Walls / Perimeters:** 4 (recommended for best sound reflection)
- **Top/Bottom Layers:** 5
- **Infill:** 20% Gyroid (adjusting the infill density/pattern will alter the acoustic resonance!)
- **Supports: NO SUPPORTS NEEDED.**

Orientation Tip: I recommend printing it standing on one of the Voronoi flanks, as this orientation minimizes overhangs. I printed mine without supports to avoid post-processing; there was a tiny bit of bridging sag at the top slot, but slows down overhang speeds to keep it super clean!

This is one of my very first Tinkercad projects, so any feedback, prints, or suggestions to help me improve my skills are greatly appreciated!

If you like the model, please consider leaving a like, a photo of your print, or a 5-star rating!

Model files



passivespeaker.3mf



speakerpassivo.stl

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