



Planetary Gears Fidget Spinner



LV3D

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Summary

Print-in-Place Helical Gear Fidget

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Fidget Spinner with Planetary Gearbox (Double Helical Gears)

Description:

A stylish fidget spinner combined with a functional planetary gear system. It features six planet gears rotating around a central sun gear, all enclosed in a ring with internal teeth. The gears are **double helical**, which ensures smooth and quiet operation — no bearings required.

Ideal as a tech gadget, educational model, or just a fun and tactile fidget toy.

Print Recommendations:

- Layer height: **0.16 mm**
- Perimeters: **2x**
- First layer compensation: **-0.1 mm**
- Seam position: **random**

- XY outline compensation: **-0.02 mm**
- Make sure the **print bed is properly degreased** (e.g., with IPA)
- Due to tight tolerances, **some post-print freeing of parts may be required**
- **If you don't have perfectly calibrated filament profile (flow) decrease it slightly.**

Note:

Prints in one piece — no assembly needed!

For even smoother spinning, you can add a few drops of oil to the gears.

Model files



fidget-spinner-helical-gear.stl

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