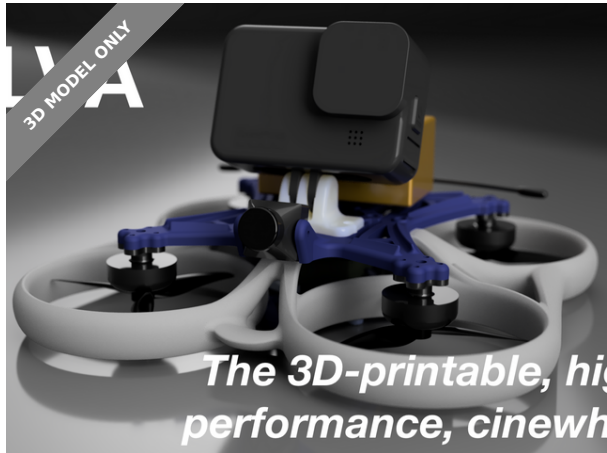
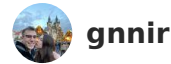




ÄLVA



[VIEW IN BROWSER](#)

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Summary

A high-performance, 3D-printable cinewhoop.

[Hobby & Makers](#) > [RC & Robotics](#)

Tags: [quadcopter](#) [drone](#) [cinewhoop](#) [betaflight](#) [lwpla](#)

Welcome to ÄLVA! A high-performance, 3D-printable cinewhoop.

ÄLVA has been designed to be a functional, high performance 3" cinewhoop which is easy and simple to build, but also has excellent flying characteristics and is functional. Combining lightweight construction, with durable design, ÄLVA is capable of flying for up to 8 minutes (on a 1250mAh 6S battery pack), and can be used for safely performing tasks an 'off-the-shelf' cinewhoop would normally do!

Here are some of the design features:

- Lightweight construction (using LW-PLA, can weigh less than 250g)
- Durable design*
- Flexible choice of electronics
- Print whole design in PLA (or material of your choice)
- Easy construction; build with as few as 3 parts
- Thermal management (electronics are isolated from the plastics)

- GoPro capable (or similar HD camera payload)
- Full assembly and build manual
- Open-source: remix it with the source files

*Just remember, it's still 3D printed from PLA - a hard crash is going to break every 3D-printed component. However, in the testing and prototyping phases I took multiple crashes and hard-landings with no serious damage to the printed parts.

Please also note, a comprehensive 25 page manual is included with this model, however it will not download if you press 'download all model files'. Scroll to the bottom of the 'Files' page to find the PDF build and assembly guide! Updates:

11/12/22: A Printables member kindly recommended that a taller guard design would accommodate larger motors with a 5 mm shaft (rather than the M2 T mount system). The new part is called “**Ale's Guards (30.6 mm motors)**”, which means these guards should accommodate motors up to a maximum height of 30.6 mm (with M2 12x12 mm mounting).

Some DVR footage for you:

Happy flying!

Model files

 **Frames** 3 files

 **frame-v3-45mm.stl**

 **frame-v3-5-mm.stl**

 **frame-v3-4-mm.stl**



Mounts

3 files



tbs-nano-mount.stl



go-pro-mount.stl



antennae-mount.stl



Files for Carbon Frame

4 files



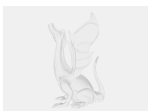
cf-cam-mount.stl



cf-frame.stl



cf-gopro-mount.stl



cf-frame.dxf



base-plate.stl



landing-foot-screwhead-guard.stl



guards.stl



ales-guards-306-mm-motors.stl

Other files



alva-manual.pdf

☐ A comprehensive build and assembly manual

[Find source .stl files on Thingiverse.com](https://www.thingiverse.com)

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