



# Tiny Champion FPV Racing Drone Canopy



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## Summary

A drone canopy for acting as a canvas for customized looks on the TBS Podracer frame, inspired by dcl canopies

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## Warning

this canopy is meant for the looks, it is not designed to make your drone go faster (infact it adds a bit of drag and weight), and as its very tight inside, it is more likely to damage your stack in hard crash, than it is to protect your drone. It is mostly a canvas to paint/airbrush your drone into a little art project - not more. Drones with it **do** fly, but if you are looking towards improving the flight ability for your drone, this design is not it. There is parts that **will** break when you crash.

## History

I started this project during the pandemic, when tiny trainers became quite popular - at some point they became so popular, that I felt the one I built early on wasn't special anymore.

At the same time I really liked the look of the DCL frame, so I thought doing a tiny champion - a scaled down DCL style drone would be a bit more unique, so I designed a canopy that would work for me, already with the intent to learn how to customize it further with an airbrush.

The first one was a scaled down version of a previous project. Over the years I've built a few **tiny champions**, and whenever I posted a new one on social media people approached me about getting access to the canopy themselves.

I always declined, as this was quite personal to me.

When I recently suffered through some health issues which created a situation in which I didn't know if i'd ever be able to build (or fly) again, I started rethinking this.

luckily I regained enough control to build again. Still, I've decided that after upgrading to o3 last year, I'm not likely to build that many more tiny champions (o3 cams don't fit), which made the decision to publish the stl easier for me.

## How to print

I've printed this in a variety of materials, and I had printed it by a professional company on MJF printers too. I can recommend having it done in MJF in PA12-CF for example, but PAHT-CF and PETG have worked nicely on my bambulab x1c too.

no matter what orientation you print you will need support, I've printed the ones I printed myself oriented as they would sit on the drone frame, its a bit annoying to pull the support out, even when you use a layer of support material to make it easier, but I found the surface of the outside looking better this way.

## Compatibility

- **you need a TBS Source Podracer frame for the build** I've build on both 4" and 5" version
- this needs **a small 25.5mm AIO FC board** (incl esc), for some that I've used I had to file down the edges inside the canopy a bit, so there was space for the cables.
- the camera must be of a **nano** variety
- with a screw adapter, it is possible to screw in the discontinued caddx vista air unit for digital fun
- I've not tried to fit a walksnail air unit, please let me know if you did.
- o3 cameras DO NOT FIT

## Tips & Tricks

- I recommend sanding the canopy flat before painting it.
- Look through the other models I've published, there is a stand for it somewhere,
- there is an Podracer AIO from TBS, which when flying analog allows you to solder your rx and one of the smaller tbs VTX directly to the board, which makes it **easy** to get enough space within the frame
- I use props a size smaller than the frame to make it all fit.

## When building

- if you do a build, please post a make here, I want to see your creation, I gave you mine.

## Don'ts

- do not re-upload this to other platforms

## Model files

tiny-champion-v62.stl



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