



Dobsonian Telescope Altitude Bearing



kozmicid

[VIEW IN BROWSER](#)

updated 6. 4. 2023 | published 6. 4. 2023

Summary

Altitude bearings for a small Dobsonian telescope.

[Learning](#) > [Physics & Astronomy](#)

Tags: [thingiverse](#)

Altitude bearings for a small Dobsonian telescope. This design includes mounting holes to screw onto the side of a wooden cradle for the optical tube. The bearing diameter is 150mm; width is 25mm. Light sanding of the bearing surfaces might be needed to remove print artifacts.

UPDATE 6/29/2018: I added photos of the finished mount, and added the following parts:

- A clip to attach a 7/8" velcro strap to the box
- Sleeves for the azimuth bearing. These are designed for 1/2" plywood, one painted and the other laminated with formica. They fit in a 1/2" hole and accommodate an 8mm screw.

Other info: The entire mount is made of 1/2" plywood except for the feet on the ground board. The diameter of the azimuth bearing is 16". The formica-faced bearing rides on three teflon furniture glides 5mm thick. The sleeves are designed to be slightly thinner than the furniture glides, so

that the weight of the scope is entirely on the glides. The action in both azimuth and altitude is very smooth.

The scope is a 6" f/8 homemade scope with a mirror I ground myself. The mirror tests to better than 1/8 wave.

UPDATE 7/1/2018: Updated the bearing and the bearing cradle with screw slots instead of holes to make it easier to adjust the position of the bearing and cradle on the finished mount. Added a hub insert that can be used to precisely align the center of the bearing with the edge of the telescope cradle. All dimensions are the same as before; the only change is the configuration of the screw holes. Wish I'd done this on the original. It would've made assembly a lot easier.

Print Settings

Printer Brand:

Anet

Printer:

A8

Rafts:

No

Supports:

No

Resolution:

0.25 mm

Infill:

20%

Category: Physics & Astronomy

Model files

altitude_bearing.stl

strap_clamp_v3.stl

altitude_bearing_v2.stl

strap_clip.stl

ground_board_bearing_v3.stl

altitude_bearing_cradle_v1.stl

hub_insert_v1.stl

altitude_bearing_cradle_v2.stl

altitude_bearing_cradle_v3.stl

ground_board_bearing_v2.stl

[Find source .stl files on Thingiverse.com](#)

License

This work is licensed under a
Creative Commons (4.0 International License)



Attribution

- ✖ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition