Guide scope from a 6x30 finder scope: T2 adaptor

Higany

VIEW IN BROWSER

updated 5. 9. 2022 | published 5. 9. 2022

Summary

Turn your 6x30 finder scope into a compact guide scope!

Hobby & Makers > Mechanical Parts

Tags: astrophotography guidescope miniguidescope telescope zwo

Turn your 6x30 finder scope to a compact guide scope!
This adapter allows you to mount a (ZWO) camera with 12.5mm backfocus and a T2 thread to this 30mm finder scope.
I tested it with my SkwWatcher 6x30 finder scopes. The scope has a very short backfocus, but with this adaptor it is possible to focus it at infinity with a ZWO planetary camera.
A mini-Bahtinov mask is also included.
Print it in PETG with variable layer height (or 0.1mm) beause of the fine threads.
I spent quite a lot of time to dial in the correct thread sizes, at least it is fine with my 6x30 finders and ZWO planetary cameras.
The finder scope has a quite soft image, but PHD2, or SharpCap polar alignment tool works fine with it. A larger guide scope is better in terms of fainter guide stars or a few 0,1"s better guiding accuracy, but this 30mm one is much smaller and lighter, and very affordable, especially if you

need an extra, portable guide scope.
The focal length of mine is 123mm.

UPDATE: I added a version (V4) with a pocket for a 20*2.0mm BG38 UV/IR filter. These can be found on Ali for a few bucks, just simply glue in the filter. This helps A LOT to reduce the halos around bright stars.

Model files

adaptor_t2-finder-v3.f3d

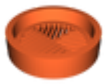
Fusion360 project

adaptor_t2-finder_v3.3mf

Prusa Slicer file. The V3 is the final version, V2 also works, but reaches focus further away

adaptor_t2-finder_v3.stl

Print this



bahtinov_finder30.stl

Bahtinov mask for 30mm finder

adaptor_t2-finder-v4.f3d

adaptor_t2-finder_v4.3mf

adaptor_t2-finder_v4_ir-cutholder.stl

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