



Cheshire Collimator (0.965", 1.25", 2.0")



agrif

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Summary

A simple Cheshire collimator, for aligning Newtonian telescopes. Comes in 0.965", 1.25", and 2.0" eyepiece sizes.

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A simple Cheshire collimator, for aligning Newtonian telescopes. Comes in 0.965", 1.25", and 2.0" eyepiece sizes. You can choose whether to print with or without an internal crosshair.

Also check out [other telescope stuff](#).

Printing

Ideally, the eyepiece is printed in black, with the white label glued on. This should maximize the contrast between the eyepiece and label. However, if you don't want to use the label or you just don't have black, any color works fine. I did mine in bright red.

Print the attached PDF at 100% scale, and cut out the crosshair or blank for your eyepiece size. Be sure to cut out the hole in the middle, too! Then glue it to the inside diagonal of the eyepiece. This gives you a handy reflection while collimating!

How to Use

For information on how to use this, see [this excellent introduction to telescope collimation](#) by Gary Seronik.

Creation

I made this because I couldn't find one made to fit my ancient 0.965" Tasco TR11. Along the way, I figured I might as well make a version for the more modern eyepiece sizes, as well.

[Source on OnShape.](#)

Model files



collimator-cross-0965.stl

📄 0.965" tubes, with plastic crosshair



collimator-nocross-0965.stl

📄 0.965" tubes, without plastic crosshair



collimator-cross-125.stl

📄 1.25" tubes, with plastic crosshair



collimator-nocross-125.stl

📄 1.25" tubes, without plastic crosshair



collimator-cross-20.stl

📄 2.0" tubes, with plastic crosshair



collimator-nocross-20.stl

☐ 2.0" tubes, without plastic crosshair

Other files



collimator-labels.pdf

☐ print at 100% scale, cut out, and glue onto focuser for a high-contrast backdrop!

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

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