

Red-Dot Finders or Unity Finders and Finderscopes

To observe an object with a telescope you need to position the object in the telescope's field of view (FOV). Red-Dot Finders or Unity Finders and Finderscopes help you do that. If you are using a GoTo telescope a rough alignment may be sufficient to place an object in the telescope's FOV but if you are using a manually operated telescope some sort of finder is essential.

Red-Dot or Unity (1x) Finders

- ▲ Provide an unmagnified view.
- ▲ Very large FOV.
- ▲ Used to center the telescope on a naked eye object.
- ▲ Many red-dot finders are flimsy. Select a well built one!



Finderscopes

- ▲ Magnified view (usually 8x or 10x).
- ▲ Typical aperture is 50mm.
- ▲ Used to center the telescope more accurately on a naked eye object.



Telrad

Telrad – The King of Unity Finders

- ▲ Rugged, last forever.
- ▲ Large and easy to look through.
- ▲ May not fit on some telescopes.
- ▲ Has a distinctive bullet reticle.
- ▲ Use a QuikFinder on smaller telescopes.



QuikFinder



Right Angle

Finderscopes

- ▲ Most are "corrected" to show the sky with a naked eye orientation.
- ▲ Straight-through and right-angle types.
- ▲ Many have an illuminated reticle. Very handy when the sky is dark and helps to accurately center an object.



Straight Through

Do I need just one Finder?

Many astronomers use a unity finder and a finderscope. They use this technique to put a dim object in their FOV:

1. Start with your longest focal length eyepiece to provide the largest FOV.
2. Select a naked eye star and use the unity finder to center the star.
3. Use the finderscope to center the star more accurately.
4. Use the finderscope or the telescope to star-hop to the object of interest.



The Albuquerque
Astronomical Society