A Collection of Solar Finder Designs

Compiled by Matthias, DD1US, updated Nov 29th 2014

The subsequent selection is a pure listing of information which was gathered from Internet. It is certainly not complete nor does the listing want to imply any ranking of the designs. If someone finds additional designs please send it to me and I will be happy to include it. Please make sure that no copyrights are violated when building your own finder.

#1 Sun finder for Telrad base from Tom Wideman



Sun Finder for Telrad Base from Tom Wideman

I got a little tired of the rather inaccurate method of using the telescope's shadow to align with the sun for solar observation. Based upon a product I saw at TSP (vendor and manufacturer unknown), I made a Sun Finder to fit the Telrad base. This not only provides a convenient mounting, it also guarantees that the Telrad has been removed prior to solar observation (failure to remove or protect the Telrad will result in a burned reticle).

I glued the Sun Finder together out of Lexan, painted it black, and used wood pieces (held to the bottom piece with small screws) to make the attachment points, slightly tapered like the attachment points on a Telrad. A 1/16" hole was drilled at the front, and after aligning the scope with the sun, a paper hole reinforcement was placed around the projected dot at the back. Now, I simply slew my scope until the projected dot is centred, and the sun is right in the center of the eyepiece.

NOTE:

If viewing the sun, take appropriate precautions! Use a solar filter and make sure your finder scope is capped or removed.

<u>#2 Kendrick sun finder</u>



Fits over your Telrad and also fits most finder scopes. A small hole on the front plate of the Sun Finder (in between the two larger holes in the photograph) projects a pinpoint of light against the edge of the finder if you are off center from the sun. Your telescope is manoeuvred until the pinpoint of light is properly centred on the back plate of the Sun Finder. A pin on the back plate, not clearly seen in this photograph, can be adjusted to accurately collimate your sun finder. When the sun's pinpoint image is projected onto this point you are assured accurate Solar alignment. Finding the sun literally takes only a few seconds when using the Sun Finder. The Sun finder can be left on permanently on you Telrad as it does not affect it's night time performance. The blue foam pad protects the Telrad's delicate film reticle from being damaged by the Sun.

#3 Meade ETX solar finder



Simplicity itself to fit and use, the ETX solar finder fits directly over the front of the standard Meade®ETX viewfinder. Lock it into place with the two nylon thumbscrews, and in seconds your ETX is fitted with a safe solar finder.

Your crosshairs are safe from burning through as the solar finder fits like a cap covering the optical finder lens completely. Point the scope in the general direction of the sun and the stainless steel mast will cast a vivid shadow onto the engraved front face - simply steer the telescope and make the shadow disappear and the instrument is pointing directly at the sun! Fits many other finders with lens cell barrels smaller than 32.5mm diameter. Observing the sun is dangerous and can cause permanent blindness. The solar finder must only be used in conjunction with a safe solar viewing energy rejection filter.

It was sold by RotherValleyOptics and by Astro-Engineering. .

#4 TeleVue Sol-Searcher



"I can't find the Sun!" Sounds funny. However, the Sun is tricky to find in a properly filtered telescope, and you don't ever want to chance a direct gaze, let alone a magnified image of it. Sol-Searcher is the safe and easy way to find the Sun. It is absolutely safe since you don't look through Sol-Searcher, you look at it. The aperture acts as a "pinhole" which projects an image of the Sun on to the 1/4" translucent "screen." This screen can be viewed from either side. Simply move your scope until the Sun's image is centered on the screen and the Sun will be in the eyepiece's field of view. The Sol-Searcher attaches to the mount ring slot of every Tele Vue telescope (or to the rear cell slot in the Tele Vue Ranger). For use with telescopes other than Tele Vue, mount the Sol-Searcher using #10-32 screws, or if necessary, attach with Velcro (not supplied).



#5 Sun Spotter Solar Filter for Telrad

Sun Spotter Solar Filter for Telrad which was published by IslandEyepiece. It is a great accessory to turn your Telrad into a Sun Spotter. It is a quick & simple way to line up on the Sun. This well-made solar filter slips on, then locks in place. It is promoted to be completely safe and sets up your scope in seconds.

#6 Helio Pod Solar Finder Model HP-1



Helio Pod Solar Finder Model 1 from Dynapod. This ingenuous solar finder mounts easily on almost any size telescope and provides a simple but accurate finder for solar viewing. Saddle mount won't mar telescope tubes, adjustable elastic attachment cord. Comes with instructions.

#7 Helio Pod Solar Finder Model HP-2 and HP-2-B



Helio Pod Solar Finder Model 2 and Model 2 Big from Dynapod. Model 2 mounts easily on telescopes up to 10" diameter, model 2 B mounts on telescopes up to 16" diameter. It is also a a simple but accurate finder for solar viewing. Saddle mount won't mar telescope tubes, adjustable elastic attachment cord.

#8 Astro Engineering Universal Solar Finder



A safe and accurate solar finder that easily attaches (permanent or temporary) to all telescopes large or small. Anyone who has used a solar observation filter or made observations by the eyepiece projection method knows the frustrations of accurately pointing an instrument at the sun. This cleverly designed finder has two collimatable targets: one permanently fixed, and the other magnetic and repositionable. The finder has a universal mounting platform (identical to the one supplied with the Easy-Aim Red dot finder AC544) with self-adhesive strips for permanent attachment. The kit is also supplied with a Velcro strap for quick temporary fitting to a wide range of instruments. Though compact enough for the smallest scopes, it is precise enough to point even long focal length telescopes accurately. Perfect for use with all Coronado MaxScopes.

#9 Homebuilt solar finder



Another Solar finder to be attached instead of a Telrad to the Telrad base. I am sorry not having the reference to the builder of this finder available. If you know it please let me know and I will be happy to add this information.

<u>#10 Homebuilt Solar finder</u>



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#11 Solar finder based on Baader Astro Solar film

This solar searcher can be built by using a normal searcher and attaching a Baader Astro Solar Filter foil in front of its objective. The example above is a 8x50mm finder and was sold by Teleskop-Service in Germany.

#12 Large add-on solar finder LX



This Large add-on solar finder converts your optical view finder into a solar finder. Simplicity itself to fit and use, the solar finder (LX) fits directly over the front of any viewfinder with a front lens barrel between 50 to 63mm diameter inclusive. Lock it into place with the single nylon thumbscrew and in seconds your scope is fitted with a safe solar finder. Your crosshairs are safe from burning through as the solar finder fits like a cap covering the optical finder lens completely. Point the scope in the general direction of the sun and a small image of the sun a couple of millimetres in diameter will appear on the projection screen - simply steer the telescope and centre the bright dot in the circle-sight and the instrument is pointing directly at the sun! The insert (top right) in the picture shows the rear of the projection screen seen from the eyepiece end of the telescope. This finder was sold by Astro-Engineering.

#13 Solarfinder from Astro Service Center



This low cost Solarfinder made from stainless steel is attached to the telescope by adhesive strips. It was sold in Germany by Astro-SC. It is a simple design but should work very well.

#14 Solar finder with clever automatic alignment



This solar searcher can also be built yourself. It will adjust itself parallel to a tube as the base rests on two tubes itself. Once attached and aligned a crosshair will be sketched on the white screen and in the future the alignment is very simple and fast. It was designed by Hannes Hase-Bergen and called SonFin.



#15 Solar Finder by Robert Pudlo

This solar finder was built by a friend of mine, Robert Pudlo. It is milled from a thin aluminium plate and then folded. This is based on a very simple but efficient design. The front hole should be made a bit smaller in the future.

#16 KAYEM Solar finder



This simple device from Richard Knisely-Marpole is available from him in black or white. The 45° screen at the end of the tube makes viewing easy. It can be fitted into a standard 50mm finder mount as shown in the picture above.

#17 Kendrick Sun Finder



This sun finder device from Kendrick attaches to the solar filter on the front of the telescope. The finder target is visible from both, the front and back side of the filter, making centring the sun easy from either end of the telescope. The finder is attached to the solar filter with a double sided adhesive foam tape. It is available stand-alone but meanwhile also a version of the solar filter with an integrated sun finder is offered by Kendrick.

If you find further designs please let me know and I will add them to the list.

Best regards

Matthias

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