

SkyGuider Pro Polar Scope Alignment (May 15, 2017)

This instruction is for SkyGuider Pro polar scope alignment. The tools needed are 2.5mm and 1.5mm hex key wrench.

Polar Scope Parts Name:



- Eyepiece: Adjustable, for reticle focusing
- Objective lens: Adjustable, for object focusing
- Locking ring: Lock the objective lens tube
- Reticle illumination inlet: hole for LED illumination
- Reticle Adj. Screws: 3 M2 set screws that secure the reticle in place

How to align polar scope optical axis to mount RA axis:

If you are suspecting that the polar scope may be misaligned, you may check it by putting a star in the center of the polar scope reticle cross hairs and rotating mount's RA axis. If the star stays in the center of cross hairs, the polar scope is aligned to the mount's RA axis.

In the event the polar scope optical axis needs to be adjusted, you can do this procedure at night while pointing at Polaris, or any bright star. However, it is probably easier to do it during the daytime using a distant point, such as a flag pole or top of a building a couple of hundred yards away, as your target.

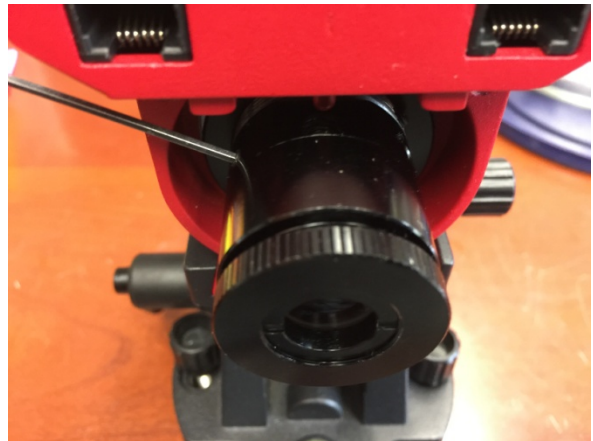
1. Mount the SkyGuider Pro onto a tripod.
2. Release RA Clutch Disk slightly so the polar scope can be rotated.



3. Remove polar scope cover and base.



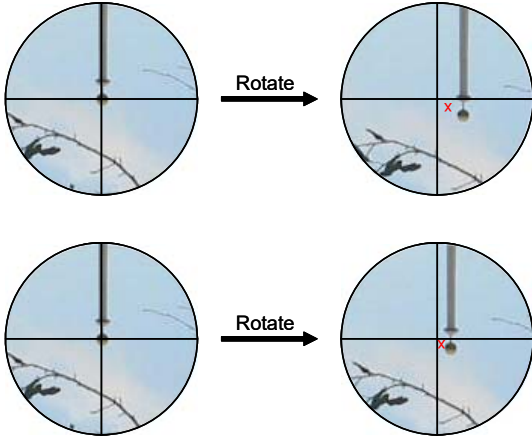
4. Rotate the polar scope so that the 12 o'clock mark is leveled on the right side. Adjust the AZ base in altitude and azimuth to center the object on to the cross hairs.
5. Rotate the mount 180 degree to bring the 12 o'clock mark to the left side.
6. Bring the object half the distance to the center by adjusting the reticle adjustment set screws using a 1.5mm hex key. Keep in mind that the image in the finder is inverted. Loose one screw first, then tighten the other screw(s). Only loose/tighten one screw and small turns at a time to avoid the reticle lost its position. It may take a few minutes to get familiar with the screws that move the polar scope in the appropriate direction. **PLEASE do not over tighten the setting screws (you'll break the reticle holder or reticle).**



7. Adjust the AZ base in altitude and azimuth to center the object.
8. Rotate the mount 180° to bring the 12 o'clock mark back to the right side. If you are lucky enough, the object will stay at the center of the polar scope. Otherwise, repeat Steps 4 - 6 to further move the object to the center.

Center the object

Bring the object
half the distance
to the center



9. After few times, the object will stay in center when the mount is flipped from right to left.