Align the Polar Scope to RA axis

Connect the power and hand controller, turn the mount on. Rotate the mount head to the left side. Center the polar scope crosshairs onto a point object. Rotate the mount head 180 degree in R.A. If the polar scope crosshairs does not stay in the same place, the Polar Scope is not aligned well to the mount RA axis. To adjust it:

1. Remove the bubble level from the polar scope by releasing two bubble level set screws.

2. Remove the Polar Scope illumination LED

3. There are three Reticle Adjustment Screws on the side of the Polar scope, as shown in the following photo.

(1) Bring the object half the distance to the center by adjusting the reticle adjustment screws. Loose one screw first, then tighten the other screw(s). Only loose/tighten one screw at a time and very small amount of turn each time to avoid the reticle totally lost its position. It may take a few minutes to familiarize yourself with the screws that move the polar scope in the appropriate direction. PLEASE do not over tighten the setting screws. (2) Rotate the mount 180 degree to bring the mount back to the left side. If you are lucky enough, the object will stay in center of the polar scope. Otherwise, repeat Step 1 to further move the object to the center. After few times, the object will stay in center when the mount is flipped from right to left.
Rotating Polar Scope 12 O’clock Mark

4. Remove 3 screws that hold the Cable Management Input Panel

5. Pull the Panel out a little and use a hex wrench to loosen two Polar Scope locking screws (maybe one) that hold the Polar Scope in place

6. Rotate the Polar Scope while look through the Polar Scope to make sure 12 o’clock is at the top. You need to make sure that the mount I sat zero position.

7. Retighten the Polar Scope locking screws.

8. Perform the test listed in Align the Polar Scope to RA axis to make sure the Polar Scope is staying aligned with the RA axis.

Adjust Polar Scope 12 O’clock Position (so it can be aligned to Bubble Level indicator.)

If the 12 o’clock is a little misaligned to the bubble level indicator, you can adjust it by rotating the reticle, which may be a very tedious practice. Or you can just leave it as is and just by eyeballing the 12 o’clock position. To adjust it, follow Steps 1,2,4, and 5, then

9. Pull out the polar scope

10. Unthread objective lens and eyepiece

11. Thread on the LED.

12. Evenly loosen three reticle adjustment screws that locking the reticle in place.

13. Use a pair of tweezers to rotate the reticle and align the 7:30 of the dial to the LED outlet. You may connect the cable and power it on to assist the alignment.

14. Evenly tighten the reticle set screws

15. Insert the polar scope back to mount. Make sure the mount is leveled and at zero position. You may use Telescope Motion→Searching Zero Pos. to find the zero position. Turn the polar scope to make the 12 on top. You may use a vertical line such as a corner of a wall as the reference to align the 6-12 line of the reticle. Tighten the polar scope locking screws to fix the polar scope on the mount.

16. Secure the Input Panel to reveal three polar scope reticle adjustment screws on the polar scope.

17. Align the Polar Scope to RA axis

Adjust the Objective Lens Focus

18. Follow Steps 1,2,4, 5 and 9, then aim the polar scope to an distant object. Loosen the objective locking ring and turn the objective lens to adjust the focus to your eyesight. Relocking the locking ring.

19. Follow Rotating Polar Scope 12 O’clock Mark to insert the polar scope back.

20. Follow Align the Polar Scope to RA axis to center the Polar scope.