Instruction for iOptron®
AccuAligning™ Polar Scope
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iOptron’s AccuAligning™ Polar Scope, together with its Quick Polar Alignment process and application, provides an accurate and fast polar alignment for an equatorial mount. The dark field illuminated dial makes the polar alignment simple and easy and it can be done just in minutes.

iOptron Polar Scope #3330 can be used for SkyTracker™ camera mount and ZEQ25GT™ equatorial mount (illumination LED required).

Tool needed: 1.5mm Allen wrench

Polar Scope Parts Name:

- Objective lens
- Reticle illumination inlet
- Lock ring
- Eyepiece

♦ Eyepiece: Adjustable, for reticle focusing
♦ Objective lens: Adjustable, for object focusing
♦ Locking ring: Lock the objective lens tube
♦ Reticle illumination inlet: Threaded hole for LED illuminator

Installation

1. Before installing the polar scope onto the mount, face the polar scope to a bright source, such as the sky (but not the SUN) or a lamp from distant. Adjust the Eyepiece to focus the reticle pattern. Then point the polar scope to a distant object and look through the eyepiece. If you can not see the distant object clearly, the polar scope is not focused for your eyesight. Release a few turns of the Lock ring. Turn the Objective lens until the image is focused. Retighten the Lock ring.

2. The Polar Scope Dial has been divided into 12 hours along the angular direction with half-hour tics. Make a mark on Polar scope body to indicate where 12 o’clock are located.

3. Retreat ZEQ25GT Tension Adjuster few turns. Turn Gear Switch 90 degree to OPEN position to disengage the worm and gear. Caution: the mount will rotate freely along R.A. axis.

4. Rotate the mount along R.A. axis 90 degree and LOCK the worm and gear by turning Gear Switch 90 degree.

5. Remove Polar Scope Cover. Pull off the DEC Axle Cover.
6. Remove a protection tape on polar scope LED inlet. Insert the polar scope into the scope housing. Make sure 12 o’clock mark is face up (you may use the seam on the DEC body as a reference). Push the polar scope all the way in. The polar scope will be tight fitted into the scope house.

7. Thread in illuminating LED, with a black plastic washer.

8. Set the mount on a tripod and set it to zero position, as indicated in ZEQ25GT manual. Connect the LED cable. Turn the LED light on using the hand controller if it is not turned on. Look through the polar scope eyepiece to check if the 12 o’clock is on top. Pull the polar scope out a litter and rotate it to adjust 12 o’clock position if it is not at the top.

9. Secure the scope using a 3mm set screw (need a 1.5mm Allen wrench). Do not over tighten it or you’ll distort the polar scope aluminum tube.

10. Place the DEC axle Cover back.