



iOptron[®] Precision AZ/EQ Base Instruction Manual

Product #3328

iOptron precision adjustable azimuth/equatorial (AZ/EQ) base is designed for SkyHunter™ GOTO mount, SkyGuider Pro and SkyTracker Pro tracking mount. The base has a built-in bubble level. It accepts Vixen-type dovetail bar. The altitude adjustment range is from 0° to 90°.

Assembly Terms



- 1 - Dovetail saddle
- 2 - Dovetail saddle locking lever
- 3 - Azimuth locking lever (X2)
- 4 - Azimuth adjustment knob (X2)
- 5 - Bubble lever
- 6 - Altitude adjustment knob
- 7 - Altitude locking lever
- 8 - Latitude scale (SH and SGP, 0° ~ 50° and 40° ~ 90°)
- 9 - Latitude mark (indicates the latitude number)

Latitude Scales

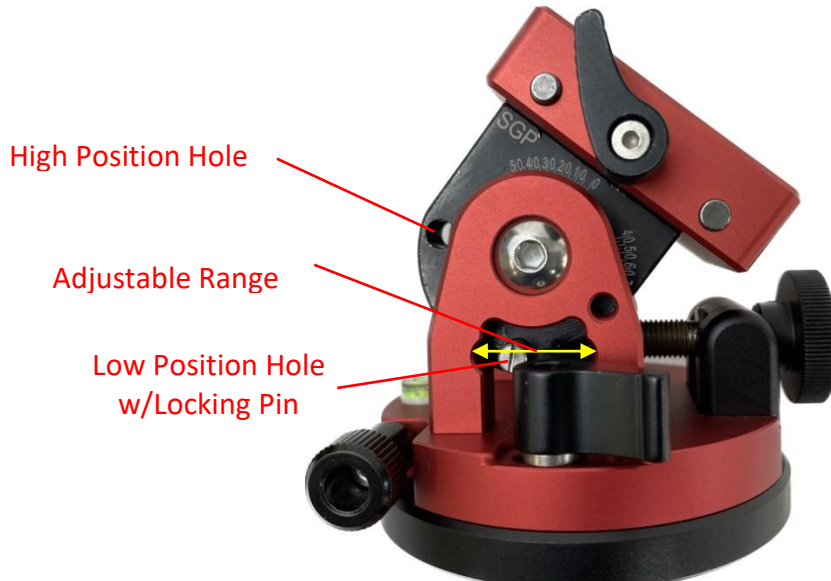
The AZ/EQ base has two sets of latitude scales laser marked on each side of the base. **SH** is for SkyHunter, as shown in left photo. **SGP** is for SkyGuider Pro & SkyTracker Pro, as shown in right.



Each scale has two adjustment ranges: **Low Latitude Range** $0^{\circ} \sim 50^{\circ}$ and **High Latitude Range** $40^{\circ} \sim 90^{\circ}$. The low latitude range for **SH** is the high latitude for **SGP**, *vice versa*. Please check your local latitude number and the mount you'll attach onto it.

Switch Latitude Range

The AZ/EQ base latitude range can be switched depends on your latitude. There are two range position holes on the dovetail saddle yolk and a locking pin, as shown below.



The **lower position hole** is for low latitude range of SGP (high latitude range of SH)

The **higher position hole** is for high latitude of SGP (low latitude range of SH)

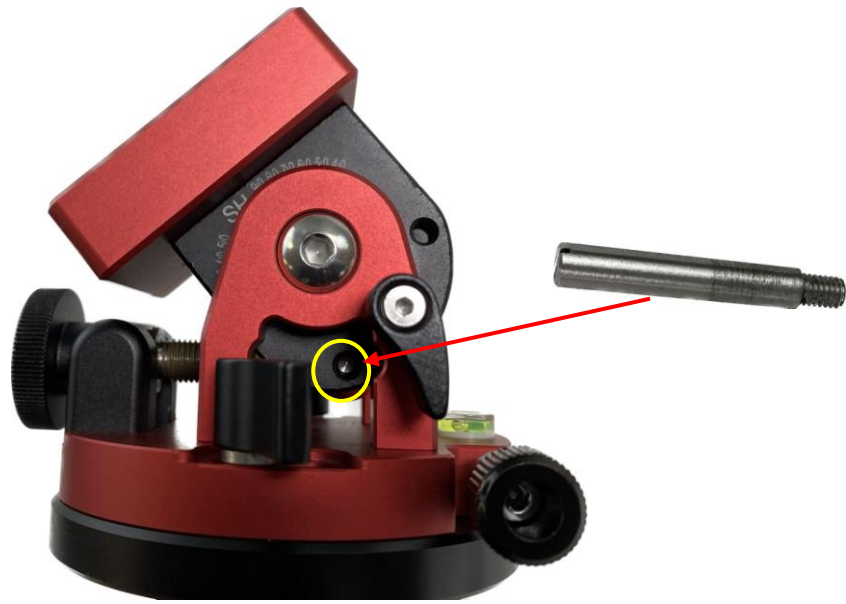
The **adjustable range** is limited by the locking pin and the side frame.

Here is the procedure to switch the latitude range, using from lower position to higher position as an example:

1. Loosen Altitude Locking lever;
2. Turn the Altitude Adjustment Knob so that the Azimuth Locking Lever does not block the locking pin;
3. Use a small screw driver to fully retreat the locking pin;



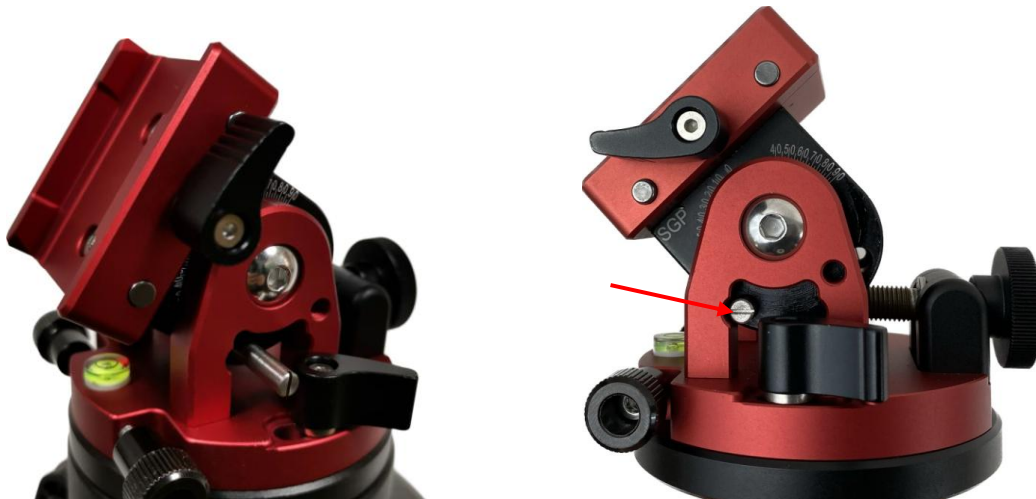
4. Push from the threaded hole on the other side to push the Locking Pin out;



5. Now you can adjust the mounting block. Turn the mount block so the higher position hole on the yolk is aligned to the hole on the brass altitude adjuster;

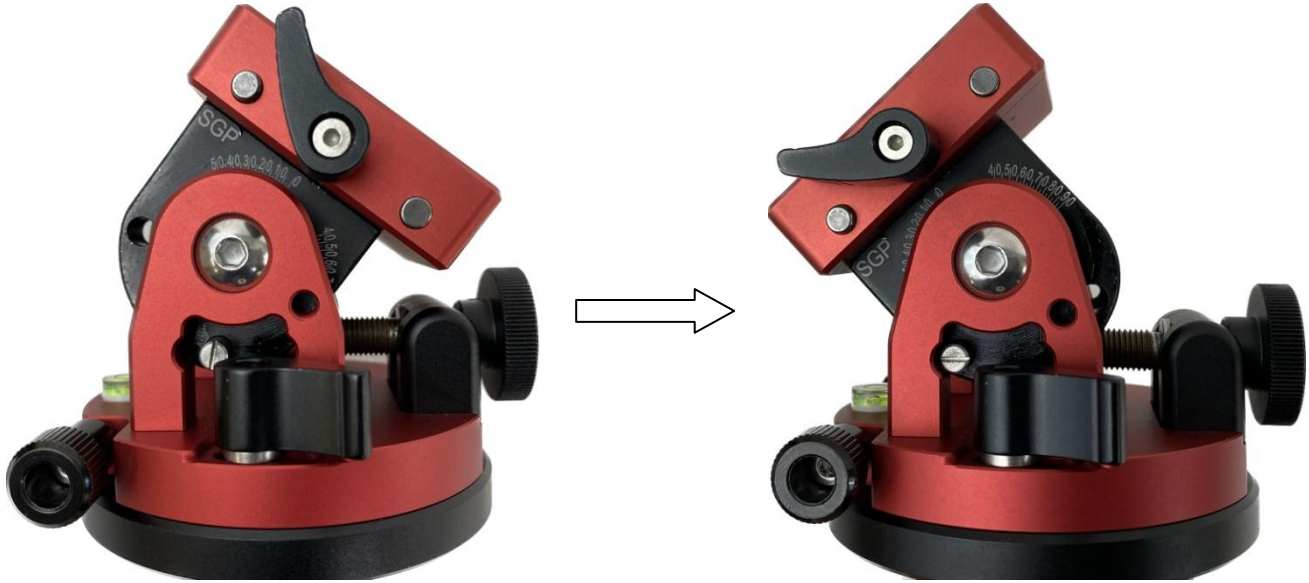


6. Insert the Locking Pin. You may need to slightly turn the altitude adjustment knob and push the brass adjuster while push the locking pin into the hole;



7. Fully tighten the Locking Pin.

Now you've changed the AZ/EQ base from **SGP** low latitude range to **SGP** high latitude range.



Attach a Mount

The AZ/EQ base has a 3/8"-16 threaded hole on the mounting base. It can be threaded onto any tripod with a 3/8" threaded post.

- Attach the AZ/EQ base onto a tripod and secure it.
- Slide the mount dovetail bar into the AZ/EQ base dovetail saddle. Tighten the saddle locking lever.
- To adjust the mount in azimuth, loosen two azimuth locking levers first. Then adjust the azimuth by turning one azimuth adjustment knob while retreat the other one. Locking the azimuth levers when done.
- To adjust the mount in altitude, loosen altitude locking lever first. Then turn the altitude adjustment knob to adjust the altitude. To minimize the backlash during final adjustment, it is recommended to perform the fine adjustment only from one direction.

TIP: all the locking levers are ratchet levers. If any of them were blocked, you can lift the lever and turn it.



Mounting Examples



SkyGuider Pro at 35 degree



SkyGuider Pro at 57 degree



SkyHunter at 0 degree



SkyHunter at 42 degree



SkyHunter at 90 degree (AA)