

## Convert the iEQ45/iEQ45 Pro from EQ to AZ

1. Remove the iEQ45/iEQ45 Pro mount from a pier or tripod and make sure it is positioned upright.
2. Remove Polar Scope Cover.



3. Remove the Polar Scope from the mount RA axis:
  - 3.1. *If you have an iEQ45/8406, iEQ45/8407 or earlier version iEQ45 Pro, you may just simply hold the polar scope and turn it counterclockwise (CCW) to unthread the polar scope from the RA axis.*



- 3.2. *If you have the latest iEQ45 Pro mount which locks the polar scope with locking screws, please follow the steps below:*

- (1) Release two set screws on bubble level ring to remove the bubble level.



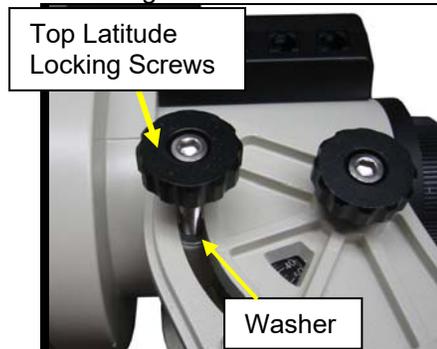
- (2) Unthread the cover ring



- (3) Release two set screws that hold the polar scope and pull it out from the mount.

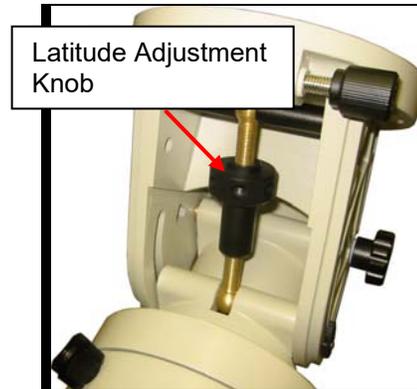


4. Lay down the mount head and unscrew top two (2) Latitude Locking Screws (**Figure 1**). Keep two metal washers in a safe place which will be needed when converting the mount back to EQ mode.



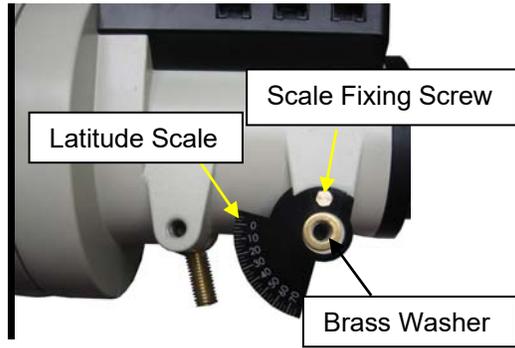
**Figure 1**

5. Remove Latitude Adjustment Lever. Turn the Latitude Adjustment Knob until it separates the top and bottom latitude posts (**Figure 2**). Remove the other two Latitude Locking Screws to separate the mount head from the EQ base.



**Figure 2**

6. Remove the Latitude Scale, which is secured onto the mount with a Fixing Screw, as shown in **Figure 3**. Do not break the plastic scale. These parts are needed when converting the mount back to EQ mode.



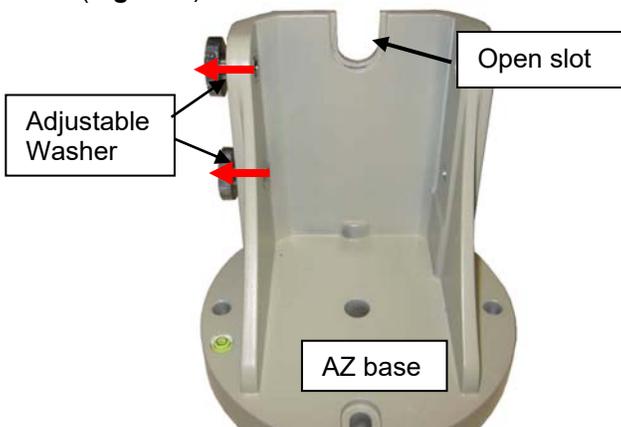
**Figure 3**

7. Thread Vertical Locking Nut onto the top brass latitude post of the mount (**Figure 4**).



**Figure 4**

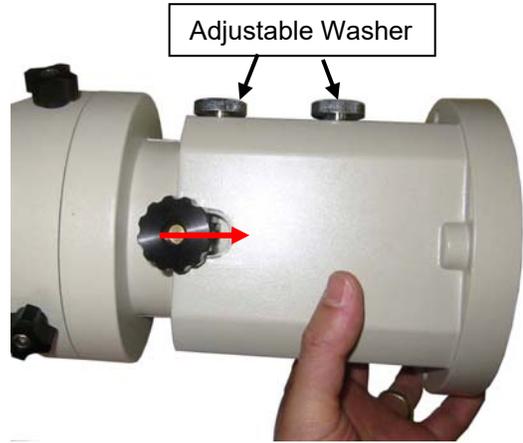
8. Retract two Adjustable Washers on the AZ base (**Figure 5**).



**Figure 5**

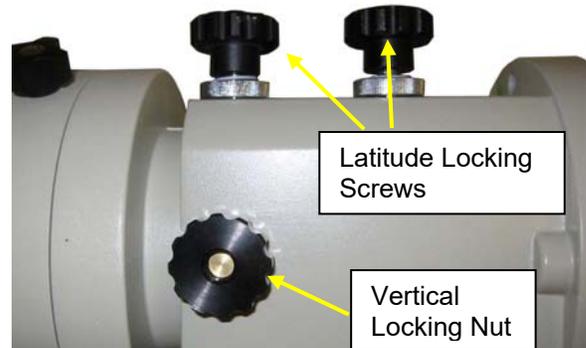
9. Place the AZ base onto the mount head with Vertical Locking Nut placed in the open slot on AZ

base (**Figure 6**). Be careful that the mount will be bottom heavy.



**Figure 6**

10. Align the mounting holes on the AZ base to the Latitude Locking Screw holes on the mount head. Insert 4 Latitude Locking Screws into them. Tighten the Adjustable Washers. Loosely tighten 4 Latitude Locking Screws. Tighten the Vertical Locking Nut. Then tighten the Latitude Locking Screws.



**Figure 7**

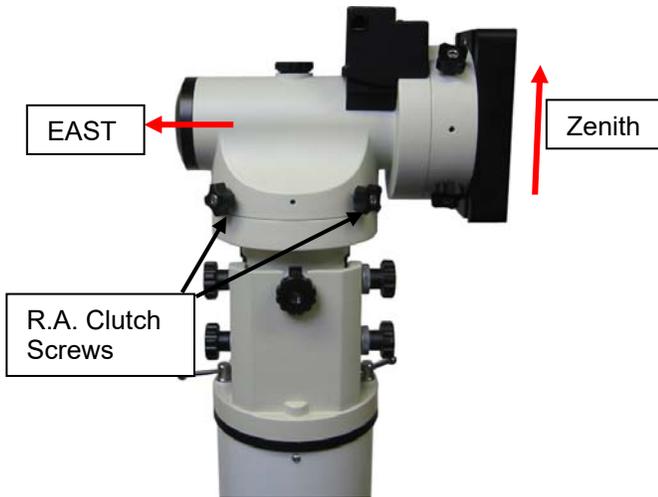
11. Replace the Polar Axis Cover with the one with a spirit bubble level, if it does not have one.



**Figure 8**

12. Install the mount onto the pier/tripod top. Level the mount by adjusting the tripod legs or pier feet. Use the spirit bubble level on the Polar Axis Cover.

13. Attach your telescope onto the mount. Add counterweight(s) to balance the scope. You may do a rough torque calculation to determine the CW quantity and position. Or if you're using in EQ mode -- mark the position. The mount can only hold a light payload without counterweight(s). Double check the leveling of the system.
14. Release four R.A. clutch screws. Adjust the mount so that the CW shaft is pointed to East and the telescope is on the West side of the mount. Adjust the telescope to point to Zenith. This is "Zero Position" for operating in AZ mode.



**Figure 9**

15. Connect the hand controller, DEC cable and power supply and turn the mount on.
16. Set the hand controller by following the iEQ45 initial set up for time and site information. Set the mount to ALT-AZI mode. Power the mount OFF/ON to complete the mode switching.



**Figure 10**

17. Use "**One Star Align**" to correct any initial misalignment. Or use "**Select and Slew**" to a known star, loosen the AZI (RA) and ALT(DEC) clutch/screws, push the mount to center the star in the eyepiece, relock the clutch/screws. Now your mount is ready to go.

Updated 5.20.2018  
 www.iOptron.com  
 support@iOptron.com