

# Drift Alignment Procedures

1. Roughly polar align your scope (point the polar axis at the North Star). Have the drive ON and set to Sidereal tracking rate.
2. Using an illuminated reticule eyepiece, center a star that's very close to zenith. Rotate the eyepiece so the crosshairs are parallel to the scope's axes (check this by looking through the eyepiece at the star and nudging the scope (or pressing one of the N/W/E/S buttons on the hand control) along one of the axes – the star should appear to move parallel to the crosshairs).
3. Let the scope track the star for several minutes and watch for drift\*. *If the star drifts North, your polar axis is pointing too far West.* If it drifts South, the polar axis is pointing too far East. Adjust the azimuth on your mount accordingly.
4. Point the scope at a star on the eastern (or western) horizon, say 10 to 15 degrees above the horizon. Let the scope track the star for several minutes and watch for drift\*. *If the star drifts North, the polar axis is pointing too high* (too low for a western star). If it drifts South, the polar axis is aimed too low (too high for a western star). Adjust the altitude on your mount accordingly.

I usually perform the above steps with just the reticule eyepiece for the first go-around. Usually takes me 10 minutes or so. Then I repeat with a 3X Barlow in (this really magnifies the drift), watching for drift over a period of five to ten minutes. If I'm looking for a really, really accurate alignment I repeat the Barlow'd steps. I'm usually aligned within 30 to 45 minutes. After you become accustomed to your scope's altitude and azimuth adjustments, you'll have it down to a half hour or so as well.

Hint: Determine direction of drift by nudging the scope North – if it looks like the star moves toward the crosshairs, it's drifting North