

THE EQUATORIAL PLATFORM

A USER'S GUIDE

SET UP

1) Set the Platform on a hard surface with the wide end facing north. Then shim the Platform as needed so it is level and sits solidly on the ground. The three (or four) "feet" on the bottom of the Platform can all be screwed in and out to help with leveling.

2) Polar alignment for visual use is easy. After the Platform is leveled, make sure its center line points roughly toward Polaris. See the illustration on the next page. During the day a compass can be used, taking care to allow for the true-north/magnetic-north offset for your location.

Quick and accurate polar alignment can also be done with our Polar Alignment Tool.

For astrophotography, more accurate polar alignment can be achieved with the standard "star-drift" method, as with any equatorial mount.

3) Note that, although the Platform is built to work leveled at a certain latitude, it can be used at other latitudes by simply shimming up the north or south end the appropriate number of degrees. For example, a Platform built for 40 degrees latitude can be used at 37 degrees by shimming up the SOUTH end 3 degrees. For 43 degrees the NORTH end would be raised up 3 degrees.

4) Now remove the ground board from your Dobsonian telescope and mount the scope on the Platform. You are ready to go. (Some Platforms do not require removal of the groundboard.)

TRACKING

1) Plug 12V DC power from a car battery or porta-pac into the control panel, using the supplied power cord. (Skip this step if you have the Built-in Battery option.) Plug in the hand control.

2) Turn on the RA motor (using the "off-on" switch on the control panel) and you are tracking!

3) The hand control offers you a two-speed slew in RA. To *slightly* speed up or slow down the tracking, just push the appropriate button. This slew is particularly useful for photographic guiding. For a *faster* slew, again push the appropriate button and, *while holding it down*, also push the opposite button. This gives you a slew rate useful for centering objects visually, especially at higher powers. If you have the Cordless Slew Control option, check the separate instructions for its use.

4) With Dual-axis Platforms, the DEC buttons on the hand control offer a similar two-speed slew for centering objects.

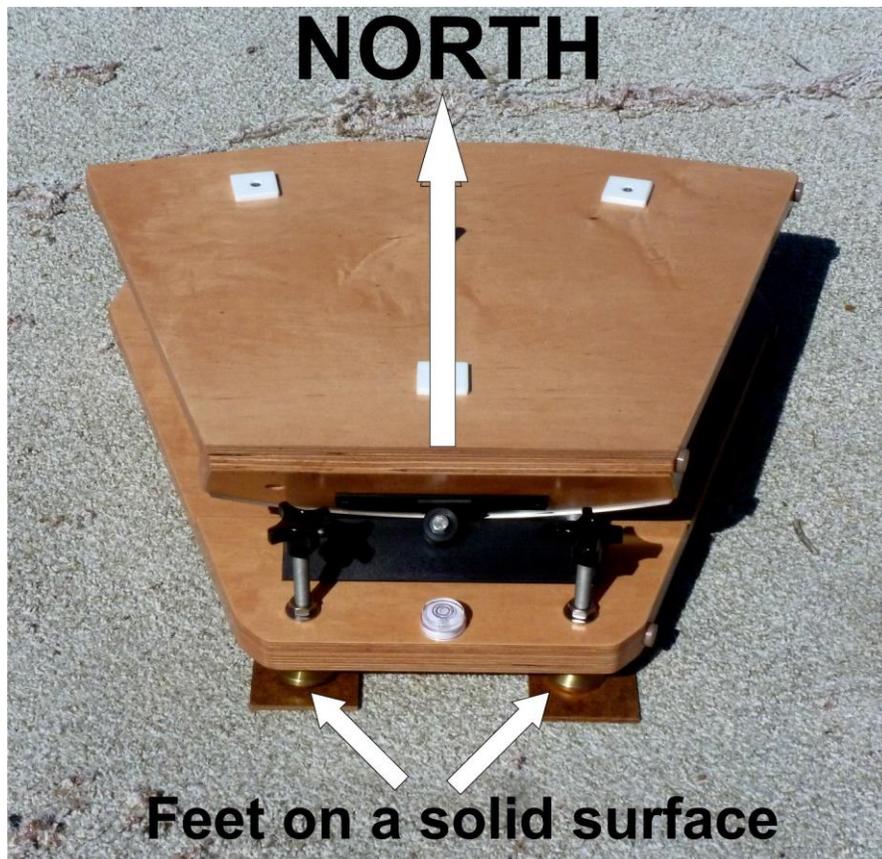
5) Setting the tracking rate:

A) The "RATE" button on the control panel gives you the choice of a lunar or sidereal tracking rate. The LED will show you which is functioning. Just push the "RATE" button to switch from one to the other.

B) If you observe that the tracking rate is too fast or too slow, that rate can be permanently changed by the following procedure:

1. Turn on the drive. Using a crosshair eyepiece, center a star in the field of view.
2. Then push the "ADJ" button on the control panel, so that the associated LED starts blinking.
3. Wait one or two minutes, then re-center the star on the crosshairs using the RA slew buttons on the hand control.
4. Then push the "ADJ" button once again. The LED will stop blinking and the drive motor will immediately adjust its rate. This procedure can be repeated if necessary. The "wait" time in step 3 can be much longer if you are making very fine adjustments of the tracking rate.
5. **CAUTION:** make sure you have good polar alignment before changing the tracking rate, since alignment errors can look like tracking errors.

6) At the end of the tracking run, the Platform's drive roller will harmlessly slip on the curved foot. To reset the Platform for another tracking run, simply slide the upper half of the Platform (with the telescope on) back over the rollers by pulling on the NW corner as shown below. There is a handy "no-slip" surface or a handle under that corner to grip.



FINAL INSTRUCTIONS

1) Two other functions are possible at the control panel:

- A) If you hold the "RATE" button down *while* turning the drive on, the RA motors will revert to a "fundamental" tracking rate. From there you can set the exact tracking rate you need by following the procedure detailed on the previous page.
- B) If you hold the "ADJ" button down *while* turning the drive on, the RA motors will both reverse themselves. This is handy if you want to use the Platform in the southern hemisphere.

2) **CAUTION**

- A) DO NOT switch the Platform drive on and off rapidly! Wait at least 10 seconds between switching it on and off. Otherwise damage can result to the computer chip.

3) **MAINTENANCE**

- A) Keep your Platform as clean and dry as practical.
- B) Occasionally clean the metal surfaces of the curved "feet" that rest on the Platform bearings. Also, keep a film of oil on the black steel bearings to prevent rust.
- C) The fine finish on the wood surfaces of the Platform can be maintained by periodically waxing or polishing the Platform. Either an auto wax or furniture polish can be used.

Equatorial Platforms
15736 McQuiston Lane
Grass Valley, CA 95945
530-274-9113
tomosy@nccn.net