Operating Instructions

Omegon® MiniTrack pole finder

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Omegon® MiniTrack

Thank you for choosing the MiniTrack pole finder. Using this product, you can quickly and easily align your MiniTrack mount with the north celestial pole - the foundations for successful astrophotography.

1. Getting to know your pole finder

1. Eyepiece with adjustable viewfinder unit
2. Three adjusting screws at 120 degree intervals
3. Polarscope
4. Pole finder lens

Figure 1: Polarscope

2. Mounting

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2.1 Mount the separate pole finder bracket #61415 to the MiniTrack. Video instructions for this can be found here: https://youtu.be/DbfIXXauxh4

2.2 Place the pole finder in the bracket and check that it is securely held.

3. Aligning the pole finder on the mount

You can complete the next steps during the day once you have installed the pole finder on the MiniTrack.

3.1 Place the MiniTrack on your tripod and point the mounted polarscope towards a distant object, such as a church tower, chimney or pylon.

3.2 Look through the pole finder optics and adjust the viewfinder until the object is in focus.

3.3 Centre the object in the middle of the pole finder and turn the pole finder 180 degrees in its bracket.

3.4 Observe how far the object has moved from the crosshair. This drift occurs because the pole finder is not yet exactly aligned with the MiniTrack's rotational axis.

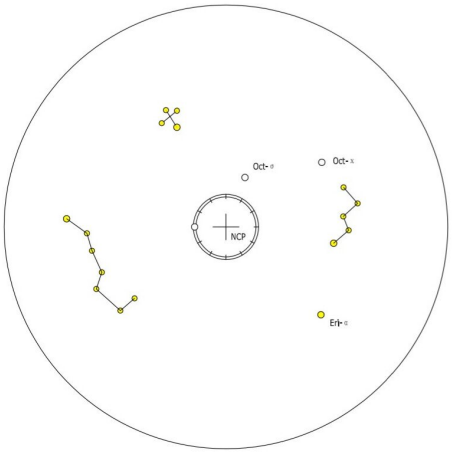
3.5 Use the hex key and move the object half way towards the middle of the crosshair using the three adjusting screws.

3.6 Centre the object in the middle of the crosshair by moving the tripod and turn the pole finder 180 degrees. Has the object moved from the centre again? If so, repeat steps 3.5 and 3.6 until the object no longer drifts from the centre.

4. Aligning the mount with the north celestial pole

Note: There are different methods for aligning the mount with the pole. We are describing the method which uses the images on the reticule.

4.1 Orient the mount towards the North until you see the Pole Star in the pole finder. Adjust the focus using the viewfinder if necessary.



4.2 Find the images of the constellations Cassiopeia and the Plough in the pole finder, if you are in the Northern hemisphere, the Southern Cross and Achernar for the Southern hemisphere.

4.3. Using the naked eye, pinpoint the same constellations and memorise their current positions.

Figure 2: Reticule plate with images

4.4 Look through the polarscope and rotate it until the positions of the images in the pole finder correspond with the current position of the constellations.

Note: As you are looking through a miniature telescope, you are not seeing the real constellations in the sky, but only their images on the transparent reticule plate and a restricted visual field around the polar region. You, therefore, need to compare the actual view of the constellations with the pole finder's position.

4.5 Adjust your tripod's azimuthal and vertical axes until the Pole Star is located within the circle at the centre of the crosshair. Your mount is now aligned with the northern celestial pole. In the Southern hemisphere, Sigma and Chi Octantis should be aligned with their images.

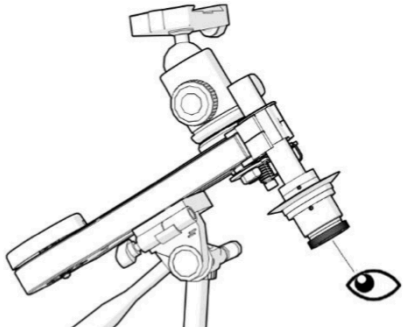


Figure 3: Aligning the MiniTrack with the Pole

Note: An equatorial mount can also be aligned using a smartphone pole finder app. A selection of apps can be found in the Play Store or App Store.