

Orion Declination Bracket for StarShoot Compact Astro Tracker

#4803



Corporate Offices: 89 Hangar Way, Watsonville CA 95076 - USA
Customer Support: www.OrionTelescopes.com/contactus

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The Declination (Dec) Bracket accessory provides fine control of declination when the StarShoot Compact Astro Tracker (CAT) is used in equatorial mode, i.e., with the StarShoot CAT mounted on the Equatorial Base, for tracking the night sky. The Dec Bracket's adjustable clutch lets you make coarse movements in declination, and its fine-tuning control knob allows incremental movement of your telescope or camera. See **Figure 1**.

One great benefit of the Dec Bracket is that it allows polar alignment with your camera already attached to the StarShoot CAT (**Figure 2**). You do not have to back out or remove the Polar Scope after polar alignment is completed. This way there is less risk of accidentally moving the tripod after completing the polar alignment procedure – for example when attaching the Ball Head Mount or the camera. Any such movement would ruin the polar alignment and require repeating the procedure.

The Declination Bracket also allows the use of heavier camera and lens combinations, or even a small telescope, because the optional Counterweight and Shaft can be attached to the Declination Bracket to counterbalance the load. Without such counterbalancing a heavy payload could put stress on the StarShoot CAT's motor and result in poor sky tracking. What's more, adding the Counterweight and Shaft increases the StarShoot CAT's payload capacity from 6.6 lbs. to 8.8 lbs. **Figure 3** shows the Declination Bracket and Counterweight and Shaft attached to the StarShoot CAT.

Attaching the Declination Bracket and Camera

To attach the optional Declination Bracket to the StarShoot CAT just slide it into the StarShoot CAT's saddle, then tighten the Saddle Lock Knob to secure it in place. Then attach your camera to the padded declination platform's 1/4"-20 post by turning the Camera Attachment Knob clockwise to thread the post into the 1/4"-20 receptacle on the bottom of your camera until tight.



Figure 1. Features of the Declination Bracket for StarShoot CAT



Figure 2. Polar alignment of the StarShoot CAT can be performed with the Dec Bracket installed.

Other Configurations of the Declination Bracket

Mounting your camera on the Dec Bracket will limit how the camera can be oriented for framing a shot. For this reason, some may elect to attach the Ball Head Mount included with the StarShoot CAT to the declination platform via its 1/4"-20 post, then attach the camera to the Ball Head Mount (**Figure 4**). To do this you will need to install a 3/8" to 1/4" thread adapter (sold separately) in the bottom of the Ball Head Mount, since it has a 3/8" socket. Using the Ball Head Mount in this way puts the camera up higher, which means you must be sure to counterbalance the load appropriately with the optional Counterweight and Shaft.

Alternatively, you can remove the declination platform completely to reveal a 3/8" mounting post to which you can attach the Ball Head Mount and camera, if you want more freedom of movement and positioning than is afforded by the declination platform (**Figure 5**). To remove the declination platform you will need a 5mm Allen wrench to remove the two socket head cap screws that couple it to the dovetail bracket (**Figure 6**).

Specifications

Dimensions:	6" x 3.5" x 4.3"
Weight:	1.2 lbs.
Bracket:	Vixen-style, anodized aluminum
Camera mounting:	1/4"-20 post



Figure 3. The combination of the Dec Bracket and optional Counterweight and Shaft allows proper counterbalancing of telescope or camera payloads.

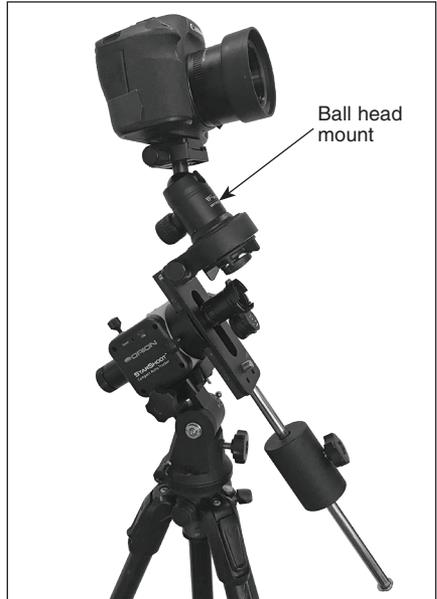


Figure 4. Mounting the Ball Head Mount to the declination platform allows greater freedom for pointing the camera.



Figure 5. The declination platform can be removed and replaced with the Ball Head Mount.

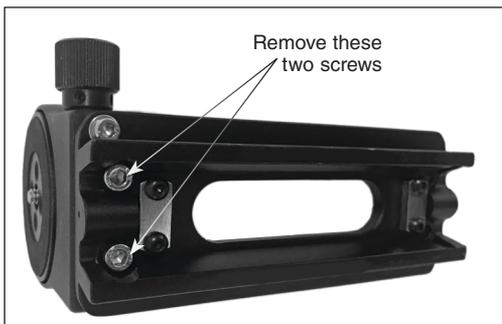


Figure 6. Remove the two socket head cap screws indicated with a 5mm Allen wrench to remove the declination platform.

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