# DSV-1

# Altitude-Azimuth Telescope Mount User Manual



DESERT SKY ASTRO PRODUCTS Phoenix, AZ, USA

#### **Your New Mount**

Thank you for choosing Desert Sky Astro Products. Please take some time to familiarize yourself with its features. Read user manual before using mount.



- 1) Base plate.
- 2) Base plate setscrew.
- 3) Azimuth friction knob.
- 4) Altitude assembly setscrew.
- 5) Altitude friction knob.
- 6) Handle.
- 7) Handle hub setscrew.
- 8) Handle hub.
- 9) Handle hub end screw.
- 10) Dovetail clamp knob.

- 11) Dovetail clamp end screw.
- 12) Dovetail clamp.
- 13) Dovetail clamp setscrew.

### **Package contents**

The shipping box contains a fully assembled DSV-1 mount and one each 3/16" and 5/32" hex wrench. Other items may be present in the box depending on your specific order.

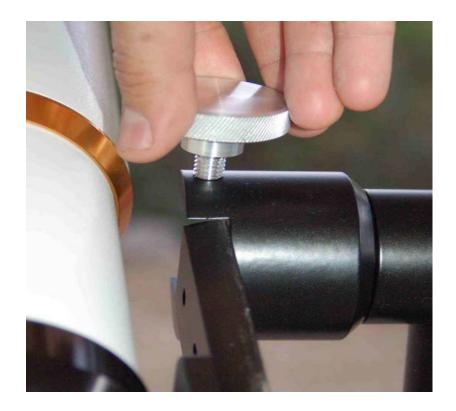
## Attaching mount to a tripod

The mount attaches to a tripod (sold separately) by threading the tripod's mounting screw onto the mount's mounting socket. Make sure the mounting screw and the mounting socket are the same size to avoid damaging the mount thread. The image below shows a DSV-1 being attached to a surveyor style tripod.



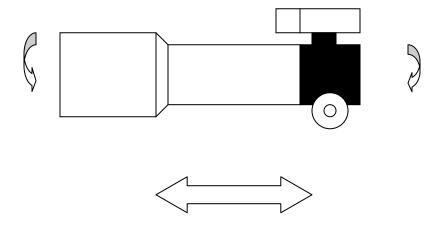
#### Attaching a telescope

Recommended Optical tube sizes are Refractors up to 90mm f/7, Schmidt Cassegrain up to 8" and Maksutov Cassegrain up to 6". Recommended payload is up to 15lb. The telescope must be equipped with a Vixen-compatible dovetail plate for use with the DSV-1. Install on the telescope the accessories you plan to use during the observing session (i.e. star diagonal, finder and eyepiece) before attaching the telescope. To attach the telescope, slide the dovetail plate into the dovetail clamp of your mount, as shown in the image below.



#### **Balancing the telescope**

It is very important to balance the scope on both axes, especially on altitude. The friction mechanism inside the mount will compensate for imbalance within some limits, but balancing the telescope properly will provide the smoothest operation and stability at all pointing positions. Make sure the tripod and the mount are level. After attaching the telescope, set it so that the optical tube is level. Loosen the altitude knob as needed to allow easy rotation of the altitude axis. Tighten the dovetail knob just enough to prevent the dovetail from disengaging the dovetail clamp but still allowing the dovetail bar to slide. Hold telescope while performing these steps. Slide the telescope back or forward on the dovetail clamp as needed until it does not tend to tip front or back.



Once the scope is balanced, tighten the altitude and azimuth knobs to obtain the desired motion firmness.

#### Changing eyepieces and accessories

If you have balanced the optical tube correctly, the mount will hold its pointing position when switching between lightweight eyepieces. In any case, it is recommended to hold telescope when changing eyepieces or accessories to prevent the telescope from suddenly tipping front.

#### **Mount Care**

Store mount protected from the elements. If the mount becomes wet or soiled during use, wipe water or dirt with clean lint-free cloth and allow it to dry indoors. All bearings and mechanical surfaces have been lubricated at manufacture and do not require further lubrication during use.

#### Warranty and service

Your mount is guaranteed to be free of material and workmanship defects for one year from date of original purchase. Within this period of time, Desert Sky Astro Product will repair or replace defective components at its discretion. Abuse, accidental damage and third party modifications & repairs are not covered by the warranty. To obtain service, call 602-550-4331 or email <a href="mailto:desertskyastro@cox.net">desertskyastro@cox.net</a> to make return arrangements.

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