Sky-Watcher S20595

Sky-Watcher Star Adventurer GTI Mount Kit

User Manual

Product Overview

The Sky-Watcher Star Adventurer GTi is an advanced equatorial mount designed for portable and lightweight astrophotography. It features full GoTo performance, precise tracking rates (lunar, solar, and sidereal), and a robust 11-pound payload capacity. This mount is ideal for capturing deep space objects, the Moon, and planets with DSLR or mirrorless cameras, small astrographs, or compact telescopes.
Key features include a built-in illuminated polar scope for accurate alignment, Wi-Fi for smartphone control, and SNAP shutter control for DSLR cameras. Its compact design ensures both high performance and portability for astrophotographers on the go.

What's in the Box

Your Sky-Watcher Star Adventurer GTI Mount Kit includes the following components:

- Star Adventurer GTi full GoTo mount head
- Star Adventurer GTi tripod with pier extension
- Built-in polar scope with illuminator
- Counterweight bar
- 5 lb. counterweight

Assembly and Setup

Follow these steps to assemble your Star Adventurer GTi Mount Kit:

1. **Set up the Tripod:** Extend the legs of the tripod to a stable position on a level surface. Ensure all leg locks are securely fastened.
2. **Attach the Pier Extension:** If using, thread the pier extension onto the top of the tripod. Tighten securely.
3. **Mount the GTi Head:** Place the Star Adventurer GTi mount head onto the pier extension or directly onto the tripod. Secure it using the locking mechanism.
4. **Install the Counterweight Bar:** Insert the counterweight bar into its designated port on the mount head.

5. **Attach the Counterweight:** Slide the 5 lb. counterweight onto the counterweight bar and secure it with the locking screw. Adjust its position later for proper balance.
6. **Attach Your Equipment:** Secure your camera, lens, or telescope onto the V-style dovetail clamp on the mount head. Ensure it is firmly attached.
7. **Balance Your Setup:** Adjust the position of the counterweight and your imaging equipment until the mount is balanced in both Right Ascension (RA) and Declination (DEC) axes. This is crucial for accurate tracking.

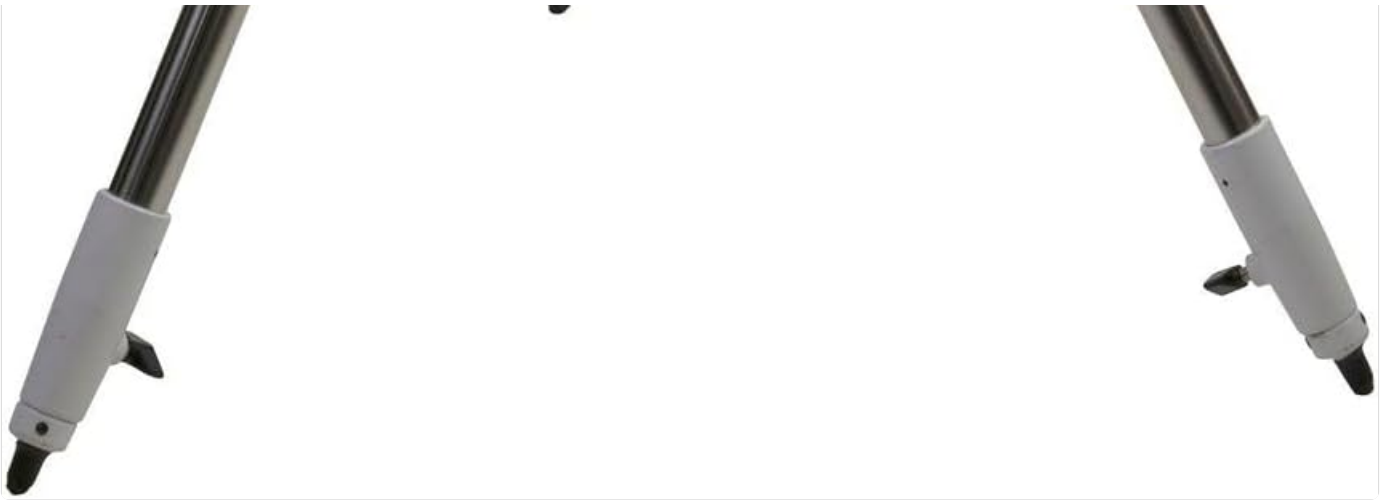

Figure 1: The Sky-Watcher Star Adventurer GTI Mount Kit fully assembled, showing the mount head, counterweight, tripod, and pier extension.

Initial Setup and Alignment

Polar Alignment

Accurate polar alignment is essential for successful astrophotography. The Star Adventurer GTi features a built-in illuminated polar scope for precision alignment in equatorial (EQ) mode.

- Locate Polaris (Northern Hemisphere) or Sigma Octantis (Southern Hemisphere) through the polar scope.
- Use the mount's altitude and azimuth adjustments to align the reticle in the polar scope with the position of the celestial pole as indicated by your chosen polar alignment method (e.g., using the SynScan Pro app).
- Ensure the polar scope illuminator is active for clear visibility in dark conditions.

Smartphone Control and Wi-Fi Connection

The Star Adventurer GTi can be controlled wirelessly via Wi-Fi using the free Sky-Watcher SynScan Pro app (available for iOS and Android).

1. Download and install the SynScan Pro app on your smartphone or tablet.
2. Power on the Star Adventurer GTi mount.
3. On your mobile device, connect to the Wi-Fi network broadcast by the mount (usually named "SynScan_xxxxxx").
4. Launch the SynScan Pro app and follow the on-screen prompts to connect to the mount and begin your GoTo alignment procedure.

Operation

GoTo Functionality

Once polar aligned and connected via the SynScan Pro app, the GoTo feature allows the mount to automatically slew to and track celestial objects. Select your desired object from the app's database, and the mount will move to its coordinates.

Tracking Rates

The Star Adventurer GTi supports multiple tracking rates to accommodate various celestial targets:

- **Sidereal Rate:** For tracking stars and deep-sky objects.

- **Lunar Rate:** For tracking the Moon.
- **Solar Rate:** For tracking the Sun (***use appropriate solar filters on your telescope/lens for safe observation***).

Payload Capacity

The mount has an 11-pound (approximately 5 kg) payload capacity. Ensure your total equipment weight (camera, lens/telescope, accessories) does not exceed this limit for optimal performance and tracking accuracy.

SNAP Shutter Control

The mount includes a SNAP port for controlling the shutter of your DSLR camera. This feature can be programmed via the SynScan Pro app, allowing for automated exposure sequences for astrophotography.

Dual-Position Counterweight

The Star Adventurer GTi features a dual-position counterweight system, which is particularly useful for achieving proper balance when operating at low latitudes.

Care and Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the exterior surfaces of the mount and tripod. Avoid using abrasive cleaners or solvents.
- **Storage:** When not in use, store the mount in a clean, dry environment, preferably in its original packaging or a padded case, to protect it from dust and moisture.
- **Handling:** Always handle the mount with care. Avoid dropping or subjecting it to harsh impacts, as this can affect its precision components.
- **Battery Care:** If using batteries, remove them during long periods of storage to prevent leakage and damage to the electronics.

Troubleshooting

Problem	Possible Cause	Solution
Poor Tracking Performance	Inaccurate polar alignment, unbalanced payload, overloaded mount.	Re-do polar alignment carefully. Ensure equipment is perfectly balanced. Reduce payload if it exceeds 11 lbs.
GoTo Inaccuracy	Poor polar alignment, incorrect time/location settings in app, insufficient star alignment points.	Verify polar alignment. Check and correct time/location settings in the SynScan Pro app. Perform a multi-star alignment.
Wi-Fi Connection Issues	Mount not powered on, incorrect Wi-Fi network selected, interference.	Ensure mount is powered on. Select the correct "SynScan_xxxxxx" Wi-Fi network. Try restarting both the mount and your mobile device.
Counterweight Insufficient	Payload is too heavy or poorly distributed for the included counterweight.	Ensure payload is within the 11 lb limit. Adjust counterweight position. If necessary, consider an additional counterweight or a heavier counterweight.
Polar Scope Cover Falls Off	Loose fit or design.	Handle with care. Consider a small piece of tape or a rubber band for a more secure fit if it's a persistent issue.

Technical Specifications

Model Number	S20595
Product Dimensions	44 x 9 x 13 inches (assembled)
Item Weight	26 pounds (total kit)
Maximum Height	44.5 Inches
Payload Capacity	11 pounds (approx. 5 kg)
Tracking Rates	Sidereal, Lunar, Solar
Connectivity	Built-in Wi-Fi, USB, Autoguider Port, SNAP Shutter Control
Polar Scope	Built-in with illuminator
Manufacturer	Sky-Watcher USA
Country of Origin	China

Warranty and Support

For detailed warranty information, please refer to the documentation included with your purchase or visit the official Sky-Watcher website. Warranty terms and conditions may vary by region.

If you encounter any issues or require technical assistance, please contact Sky-Watcher customer support through their official website or authorized distributors. Keep your purchase receipt and product serial number (if applicable) ready when contacting support.

Sky-Watcher Official Website: www.skywatcherusa.com