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› Sky-Watcher AZ-GTi with SkyMax 127 – Modular Go-To Alt-Az Tracking Mount for Time-lapse and Panoramas – Wifi Enabled App Controlled User Manual

Sky-Watcher S21130

Sky-Watcher AZ-GTi with SkyMax 127 Instruction Manual

Model: S21130

1. INTRODUCTION

Thank you for choosing the Sky-Watcher AZ-GTi with SkyMax 127. This versatile instrument combines a powerful Maksutov-Cassegrain telescope with an advanced, portable Go-To Alt-Azimuth mount. Designed for both visual astronomy and astrophotography, the AZ-GTi offers precise tracking, Wi-Fi control, and features like time-lapse and panorama capabilities, making it an ideal companion for observers and photographers on the go.

The AZ-GTi mount is engineered for portability, weighing just 8.6 pounds, and boasts an 11-pound payload capacity, accommodating various optical tubes and DSLR cameras. Its integrated Wi-Fi signal allows seamless control via your iOS or Android device using the SynScan Pro app for celestial tracking or the SynScan PTZ app for photographic applications.

The included 127mm SkyMax Maksutov-Cassegrain optical tube delivers exceptional contrast and high magnification, making it particularly well-suited for detailed observations of the Moon and planets. With its robust construction and user-friendly features, the Sky-Watcher AZ-GTi system provides a comprehensive solution for exploring the night sky and capturing stunning images.

2. WHAT'S IN THE BOX

Please ensure all the following components are present in your package:

- Tripod
- Pier Extension
- AZ-GTi Mount
- SkyMax 127 Optical Tube Assembly (OTA)
- Red Dot Finder
- Diagonal
- 10mm Eyepiece
- 25mm Eyepiece



Image: Complete Sky-Watcher AZ-GTi with SkyMax 127 telescope system, showing the optical tube, mount, and tripod.

3. SETUP AND ASSEMBLY

3.1 Tripod and Pier Extension Assembly

1. Extend the tripod legs to a stable height and secure them.
2. Attach the pier extension to the top of the tripod. Ensure it is securely fastened to provide a stable base for the mount.

3.2 Mounting the AZ-GTi Head

1. Carefully place the AZ-GTi mount head onto the pier extension.
2. Secure the mount head using the locking mechanism on the pier extension. Ensure it is tight and stable.



Image: The AZ-GTi mount head with the SkyMax 127 optical tube attached, viewed from the side.

3.3 Attaching the Optical Tube

1. Locate the dovetail bar on the SkyMax 127 optical tube.
2. Slide the dovetail bar into the saddle on the AZ-GTi mount head.
3. Tighten the saddle clamp screws to secure the optical tube firmly. Ensure the telescope is balanced on the mount.

3.4 Installing Accessories

1. Attach the Red Dot Finder to its designated slot on the optical tube.
2. Insert the diagonal into the focuser of the optical tube.
3. Insert either the 10mm or 25mm eyepiece into the diagonal.

3.5 Powering the Mount

The AZ-GTi mount can be powered by AA batteries or an external 12V power supply. Ensure batteries are correctly inserted or the external power supply is connected to the designated power port on the mount.



Image: Close-up view of the AZ-GTi mount's control panel, showing the hand control port, power input, and SNAP port.

4. OPERATING THE AZ-GTi SYSTEM

4.1 Wi-Fi Connectivity and App Control

The AZ-GTi generates its own Wi-Fi signal for wireless control. Download the Sky-Watcher SynScan Pro app (for celestial tracking) or SynScan PTZ app (for time-lapse/panoramas) from your device's app store.

1. Power on the AZ-GTi mount.
2. On your smartphone or tablet, connect to the Wi-Fi network broadcast by the AZ-GTi (e.g., "SynScan_XXXXXX").
3. Open the SynScan Pro or SynScan PTZ app and follow the on-screen instructions for connection and alignment.



Image: Icons illustrating the key features of the AZ-GTi mount: Go-To, Wi-Fi connectivity, Slow Motion, Time Lapse, Panoramic photography, and Freedom Find technology.

4.2 Go-To Alignment and Celestial Tracking (SynScan Pro)

For accurate celestial tracking and Go-To functionality, perform a proper alignment using the SynScan Pro app. The app will guide you through a 1-star, 2-star, or 3-star alignment process. Once aligned, the mount will automatically track celestial objects as they move across the sky.

4.3 Time-Lapse and Panorama Photography (SynScan PTZ)

The AZ-GTi is equipped for advanced photography modes. Connect your DSLR camera to the mount's SNAP port using an appropriate shutter release cable (not included). The SynScan PTZ app allows you to program sequences for time-lapse videos and panoramic images, automating camera movements and shutter releases.



Image: A DSLR camera attached to the AZ-GTi mount via an L-bracket, demonstrating its capability for time-lapse and panoramic photography. Camera and L-bracket are not included.

4.4 Freedom Find Dual Encoders

The AZ-GTi features Sky-Watcher's patented Freedom Find dual encoder technology. This allows you to manually move the telescope to a new position without losing the mount's alignment. After manually slewing, the mount will automatically resume tracking from the new position, maintaining Go-To accuracy.

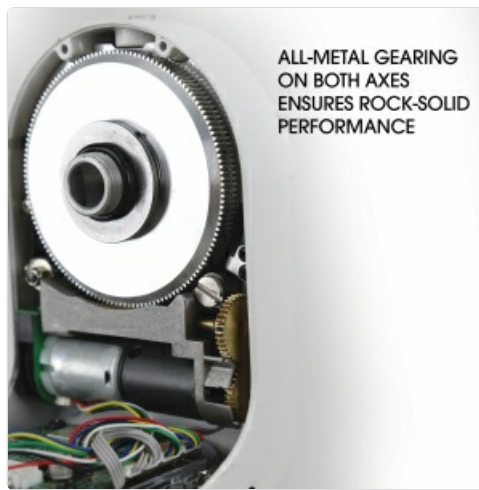


Image: Close-up view of the all-metal gearing inside the AZ-GTi mount, highlighting its robust construction for precise performance.

5. MAINTENANCE

Proper maintenance will ensure the longevity and optimal performance of your Sky-Watcher AZ-GTi system.

5.1 Cleaning Optics

- Use a soft, lint-free cloth or a specialized optical cleaning brush to remove dust from the telescope's lenses and mirrors.
- For stubborn smudges, use a small amount of optical cleaning fluid applied to a clean optical cloth. Never apply fluid directly to the lens.
- Avoid touching optical surfaces with bare hands.

5.2 Mount Care

- Keep the mount clean and free of dust and debris. Use a dry, soft cloth to wipe down surfaces.
- Avoid exposing the mount to extreme temperatures or humidity.
- Do not attempt to lubricate internal gears or components unless specifically instructed by Sky-Watcher support.

5.3 Storage

When not in use, store the telescope and mount in a dry, dust-free environment. It is recommended to use the original packaging or a padded carrying case for protection during storage and transport.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your AZ-GTi system.

Problem	Possible Cause	Solution
Mount does not power on.	Low or dead batteries; incorrect power supply connection; faulty power cable.	Replace batteries; ensure external power supply is correctly connected and functional; try a different power cable.
Wi-Fi signal is not detected or connection fails.	Mount not powered on; Wi-Fi module issue; interference.	Ensure mount is powered on; restart the mount and your smart device; try connecting in an area with less wireless interference.

Problem	Possible Cause	Solution
Go-To accuracy is poor or tracking is inconsistent.	Inaccurate alignment; unbalanced telescope; loose connections; mount not level.	Perform a more precise alignment procedure (e.g., 3-star alignment); ensure the telescope is properly balanced on the mount; check all connections for tightness; ensure the tripod is level.
Telescope image is blurry or out of focus.	Focuser not adjusted; eyepiece not fully inserted; atmospheric conditions.	Adjust the focuser knob until the image is sharp; ensure the eyepiece is fully seated in the diagonal; wait for more stable atmospheric conditions.
Mount makes unusual noises during operation.	Overloaded mount; internal obstruction; worn gears.	Ensure payload does not exceed 11 lbs; check for any external obstructions; if noises persist, contact Sky-Watcher support.

7. SPECIFICATIONS

Feature	Detail
Product Dimensions	34 x 30 x 50 inches (86.36 x 76.2 x 127 cm)
Item Weight	18 pounds (8.16 kg)
Model Number	S21130
Batteries	1 Lithium Metal battery required (included)
Manufacturer	Sky-Watcher
Country of Origin	China
Optical Tube Length	15 Inches (38.1 cm)
Eyepiece Lens Description	Super 10mm and 25mm eyepieces
Objective Lens Diameter	127 Millimeters
Telescope Mount Description	Altazimuth Mount
Focus Type	Manual Focus
Power Source	AA/12V
Finderscope	Reflex

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Sky-Watcher website or contact their customer service directly. Keep your proof of purchase for any warranty claims.

Official Sky-Watcher Website: www.skywatcherusa.com

