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› Sky-Watcher AZ-GTi with SkyMax 102 User Manual

Sky-Watcher S21120

Sky-Watcher AZ-GTi with SkyMax 102 User Manual

Model: S21120 | Brand: Sky-Watcher

INTRODUCTION

The Sky-Watcher AZ-GTi is a versatile and portable Alt-Az Go-To tracking mount, ideal for both astronomical observation and time-lapse photography. Designed for ease of use and portability, it features Wi-Fi connectivity for control via a smartphone or tablet. This manual provides essential information for setting up, operating, and maintaining your Sky-Watcher AZ-GTi with SkyMax 102 telescope.

The SkyMax 102 Maksutov-Cassegrain optical tube included in this package offers excellent contrast and sharp views, making it suitable for observing planets, the Moon, and brighter deep-sky objects.

SETUP

1. Unpacking and Contents

Carefully unpack all components from the box. Verify that all items listed below are present and undamaged. If any items are missing or damaged, contact your Sky-Watcher dealer immediately.

- AZ-GTi Mount Head
- SkyMax 102 Optical Tube Assembly (OTA)
- Adjustable Aluminum Tripod
- Pier Extension
- Red Dot Finder
- Diagonal
- 10mm Eyepiece
- 25mm Eyepiece
- Battery Pack (1 Lithium Metal battery included)

2. Assembly

1. Attach the Tripod and Pier Extension:

Extend the tripod legs to a stable position. Securely attach the pier extension to the top of the tripod. Ensure all locking mechanisms are tightened.



Image: The Sky-Watcher AZ-GTi mount with the SkyMax 102 telescope, fully assembled on its tripod and pier extension.

2. Mount the AZ-GTi Head:

Attach the AZ-GTi mount head to the pier extension. Ensure it is firmly seated and secured with the provided locking screw. The mount head should be level.



Image: Close-up of the AZ-GTi mount head, highlighting its Go-To, Wi-Fi, Slow Motion, Time Lapse, Panoramic, and Freedom Find capabilities.

3. **Attach the SkyMax 102 OTA:**

Slide the dovetail bar of the SkyMax 102 OTA into the saddle of the AZ-GTi mount. Tighten the saddle clamp screws to secure the telescope. Ensure the telescope is balanced on the mount.



Image: The Sky-Watcher AZ-GTi mount with the SkyMax 102 telescope attached, viewed from a slightly different angle.

4. Install Red Dot Finder and Diagonal:

Attach the red dot finder to its designated bracket on the OTA. Insert the diagonal into the telescope's focuser, then insert an eyepiece (e.g., 25mm) into the diagonal. Secure with the thumbscrews.

5. Power Connection:

Insert the included Lithium Metal battery into the battery compartment or connect an external 12V DC power supply to the power port on the mount. Turn on the power switch.



Image: Detailed view of the AZ-GTi mount's control panel, showing the Hand Control port, Power port for external supply, and SNAP port for camera control.

OPERATING INSTRUCTIONS

1. Wi-Fi Connection and App Control

The AZ-GTi generates its own Wi-Fi signal. To control the mount, download the Sky-Watcher SynScan Pro app from your device's app store (iOS or Android).

1. Turn on the AZ-GTi mount.
2. On your smartphone or tablet, go to Wi-Fi settings and connect to the network named "SynScan_xxxxxx".
3. Open the SynScan Pro app. The app should automatically detect and connect to the mount.

2. Go-To Alignment

For accurate tracking and Go-To functionality, the mount requires alignment with the night sky.

- Ensure the mount is level.
- In the SynScan Pro app, select an alignment method (e.g., "Brightest Star Alignment" or "Two-Star Alignment").
- Follow the on-screen prompts to center the chosen alignment stars in your eyepiece.
- Once alignment is complete, the mount is ready for Go-To operations.

3. Celestial Tracking

After successful alignment, the AZ-GTi will automatically track celestial objects to keep them centered in your eyepiece as they move across the sky.

4. Time-lapse and Panoramas (SNAP Port)

The integrated SNAP port allows you to control a DSLR camera for time-lapse photography and panoramic shots. A compatible shutter release cable (not included) is required.

- Connect your DSLR camera to the SNAP port using the appropriate cable.
- In the SynScan Pro app, navigate to the camera control settings.
- Utilize the pre-programmed exposure settings (e.g., 60-second preset) or customize your sequence for time-lapse

or panoramic photography.



Image: An example setup showing a DSLR camera mounted on the AZ-GTi, illustrating its use for time-lapse and panoramic photography via the SNAP port.

5. Freedom Find Dual Encoders

This patented technology allows you to manually move the telescope without losing the mount's alignment. This is useful for quickly slewing to a new area or making fine adjustments without disengaging the motors.

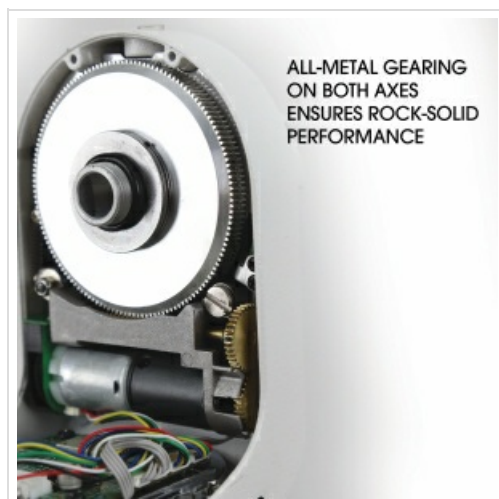


Image: An internal view of the AZ-GTi mount, showcasing its all-metal gearing on both axes, which contributes to precise performance and the Freedom Find feature.

MAINTENANCE

1. Cleaning Optics

Dust and debris on optical surfaces can degrade image quality. Use a soft brush or compressed air to remove loose particles. For stubborn smudges, use a specialized optical cleaning solution and a microfiber cloth, applying gentle pressure in a circular motion from the center outwards.

Caution: Never touch optical surfaces with bare hands. Avoid using abrasive materials or household cleaners.

2. Mount Care

Keep the mount head and tripod clean and dry. Wipe down surfaces with a soft, damp cloth. Avoid exposing the mount to extreme temperatures or humidity for prolonged periods.

3. Storage

When not in use, store the telescope and mount in a cool, dry place, preferably in their original packaging or a padded

carrying case to protect them from dust and impact.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Mount not powering on.	Low or dead batteries; incorrect power connection.	Replace batteries or ensure external power supply is correctly connected and functional.
Cannot connect to Wi-Fi.	Mount's Wi-Fi not active; incorrect network selected.	Ensure mount is powered on. Check Wi-Fi settings on your device to confirm connection to "SynScan_XXXXXX". Restart mount and device if necessary.
Go-To accuracy is poor.	Improper leveling; inaccurate alignment procedure; mount not balanced.	Ensure tripod is level. Re-perform alignment carefully, centering stars precisely. Balance the telescope on the mount.
Image is blurry or out of focus.	Focuser not adjusted; eyepiece not fully inserted; optics dirty.	Adjust the focuser. Ensure eyepiece is fully inserted and secured. Clean optics if necessary.

For further assistance, refer to the official Sky-Watcher SynScan Pro app documentation or contact Sky-Watcher support.

SPECIFICATIONS

Feature	Detail
Model Number	S21120
Product Dimensions	34 x 30 x 50 inches (assembled)
Item Weight	13.2 pounds
Payload Capacity	11 pounds
Optical Tube Length	12.25 Inches
Objective Lens Diameter	102 Millimeters
Telescope Mount Type	Altazimuth Go-To Mount
Focus Type	Manual Focus
Power Source	Battery Powered (1 Lithium Metal battery included)
Finderscope	Reflex
Manufacturer	Sky-Watcher
Country of Origin	China

WARRANTY INFORMATION

Sky-Watcher products typically come with a limited warranty covering defects in materials and workmanship. The specific

terms and duration of the warranty may vary by region and product. Please retain your proof of purchase for warranty claims.

For detailed warranty information, please visit the official Sky-Watcher website or contact their customer service department.

SUPPORT

For additional support, technical assistance, or to download the latest version of the SynScan Pro app, please visit the official Sky-Watcher website:

[Sky-Watcher Official Website](#)

You can also refer to the official Installation Manual (PDF) available online for more detailed setup instructions[Installation Manual \(PDF\)](#)

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question