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› Sky-Watcher Star Adventurer 2i Pro Pack – Motorized DSLR Night Sky Tracker Equatorial Mount for Portable Nightscapes, Time-Lapse and Panoramas – Wi-Fi App Camera Control – Long Exposure (S20512)

Sky-Watcher S20512

Sky-Watcher Star Adventurer 2i Pro Pack Instruction Manual

Model: S20512

1. INTRODUCTION

The Sky-Watcher Star Adventurer 2i Pro Pack is a high-precision, portable celestial tracking platform designed for astrophotography and nightscape imaging. It transforms almost any standard photographic tripod into an equatorial mount, enabling long-exposure photography of the night sky. Its compact size and lightweight design make it ideal for travel, while its robust all-metal gears support a significant payload capacity.

2. WHAT'S IN THE BOX

The Sky-Watcher Star Adventurer 2i Pro Pack includes the following components:

- Latitude (EQ) base
- Dec bracket
- Ball head adapter
- Counterweight kit
- Polar Scope Illuminator



Image: Overview of the Sky-Watcher Star Adventurer 2i Pro Pack components.

3. SETUP GUIDE

3.1. Powering the Unit

The Star Adventurer 2i requires Lithium Metal batteries for operation, providing complete portability without the need for external power. Alternatively, it can be powered via a 5V USB port for extended use.

3.2. Mounting to a Tripod

The unit is designed for integration with existing photographic tripods. It includes a 3/8" to 1/4-20 adapter, ensuring compatibility with virtually all camera tripods.



**INCLUDED 3/8" TO
1/4-20 ADAPTER MAKES
STAR ADVENTURER
COMPATIBLE WITH
VIRTUALLY ALL
CAMERA TRIPODS**

Image: The 3/8" to 1/4-20 adapter for tripod compatibility.

3.3. Attaching Camera and Accessories

Depending on your setup, you can attach your camera directly using the ball head adapter for wide-field astrophotography and nightscapes. For heavier loads, such as a camera with a telescope, utilize the included Dec bracket and counterweight kit to ensure proper balance and stability.



PERFECT FOR
ASTRONOMICAL
VIEWING AND
ASTROPHOTOGRAPHY

OTA, Camera and tripod are not included.
Not all accessories ship with all packages,
please check product description to see
which accessories are included.

Image: Examples of camera and telescope setups with the Star Adventurer 2i.

3.4. Polar Alignment

Accurate polar alignment is crucial for effective tracking. The Deluxe Equatorial base assists in positioning the Star Adventurer 2i at the correct angle. The built-in polar scope allows for precise alignment with Polaris (North Star) in the Northern Hemisphere or Sigma Octantis in the Southern Hemisphere.

BUILT-IN POLAR SCOPE FOR PRECISE ALIGNMENT



Image: View through the built-in polar scope for precise alignment.

4. OPERATING INSTRUCTIONS

4.1. Tracking Modes

The Star Adventurer 2i offers multiple pre-programmed tracking rates to suit various astronomical and photographic needs. These modes are selected via a dial on the unit:

- **Sidereal Rate (Star Mode):** For tracking stars and deep-sky objects.
- **Lunar Tracking:** For tracking the Moon.
- **Solar Tracking:** For tracking the Sun (*use appropriate solar filters for safety*).
- **Time-Lapse:** For creating time-lapse sequences.
- **Nightscape:** Optimized for night sky landscapes.
- **Eclipse:** Specific mode for eclipse photography.
- **Slow Motion:** Directional controls for precise targeting.

MULTIPLE PRE-PROGRAMMED RATES FOR:

- CELESTIAL TRACKING
- LUNAR TRACKING
- SOLAR TRACKING
- TIME-LAPSE



Image: Control dial with various pre-programmed tracking modes.

4.2. Wi-Fi and App Control

The Star Adventurer 2i features built-in Wi-Fi, enabling control via Sky-Watcher's free SAM Console app on your smartphone. This allows for convenient remote operation and setting adjustments.

SLOW-MOTIONAL
DIRECTIONAL CONTROLS
FOR PRECISE TARGETING

CHOOSE HEMISPHERE
OR TIME LAPSE

DSLR INTERFACE FOR
AUTOMATIC
SHUTTER CONTROL

PORT FOR OPTIONAL
EXTERNAL AUTO GUIDER

PORT FOR EXTERNAL 5v USB POWER



Image: Ports and controls, including Wi-Fi indicator and power input.

4.3. DSLR Interface and Auto Guider

The unit includes a DSLR interface for automatic shutter control, allowing for precise long-exposure imaging. A port for an optional external auto guider is also available for enhanced tracking accuracy, particularly for very long exposures or high-magnification setups.

5. MAINTENANCE

To ensure the longevity and optimal performance of your Sky-Watcher Star Adventurer 2i, follow these maintenance guidelines:

- **Cleaning:** Keep the unit clean and free from dust and debris. Use a soft, dry cloth for cleaning the exterior. Avoid using harsh chemicals or abrasive materials.
- **Battery Care:** If using AA batteries, remove them if the unit will not be used for an extended period to prevent leakage. Ensure fresh, high-quality batteries are used for reliable operation.
- **Storage:** Store the unit in a dry, cool place, away from direct sunlight and extreme temperatures. The original

packaging or a padded case is recommended for protection during storage and transport.

- **Moving Parts:** Periodically check all screws and connections to ensure they are secure. The internal gears are pre-lubricated; avoid disassembling the unit unless performed by a qualified technician.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your Star Adventurer 2i.

6.1. Power Issues

- **Unit does not power on:** Ensure fresh Lithium Metal batteries are correctly installed, or that the 5V USB power source is properly connected and functioning.
- **Erratic motor behavior:** This can sometimes be caused by loose internal connections or dust. If experiencing erratic motion, ensure all external connections are secure. If the issue persists, contact customer support.

6.2. Tracking Problems

- **Poor tracking accuracy:** Verify that polar alignment is precise. Even slight misalignments can lead to star trailing in long exposures. Re-perform polar alignment carefully.
- **Unbalanced setup:** Ensure your camera and lens/telescope setup is perfectly balanced on the mount, especially when using the counterweight kit. An unbalanced load puts strain on the motor and gears, affecting tracking performance. Adjust the counterweight position until the setup remains stable at any angle.

6.3. Wi-Fi Connectivity Issues

- **Cannot connect to Wi-Fi:** Ensure the Star Adventurer 2i's Wi-Fi is enabled. Remember that the unit creates its own Wi-Fi hotspot; you need to connect your smartphone directly to this network, not your home Wi-Fi.

6.4. SNAP Port (Shutter Control) Not Working

- **Shutter cable connection:** Ensure the shutter release cable is securely connected to both the Star Adventurer 2i's SNAP port and your camera's remote shutter port.
- **Cable integrity:** Inspect the cable for any damage. A damaged cable can prevent proper communication.

7. SPECIFICATIONS

Feature	Detail
Product Dimensions	13.9 x 9.6 x 6.3 inches
Item Weight	7 pounds
Model Number	S20512
Batteries Required	Lithium Metal batteries
Manufacturer	Sky-Watcher
Country of Origin	China
First Available	January 15, 2019

8. WARRANTY INFORMATION

For detailed warranty information regarding your Sky-Watcher Star Adventurer 2i Pro Pack, please refer to the official Sky-Watcher website or the documentation provided with your purchase. Warranty terms and conditions may vary by region.

9. CUSTOMER SUPPORT

If you require further assistance, technical support, or have questions not covered in this manual, please contact Sky-Watcher customer support. You may also find additional resources, including a comprehensive user manual, on the official Sky-Watcher website.

Note: An official User Manual (PDF) is available for download from the manufacturer.

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