

Astromania 51634

Astromania 9x50 Illuminated Finder Scope Instruction Manual

Model: 51634

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your Astromania 9x50 Illuminated Finder Scope. This finder scope is designed to assist in locating celestial objects for astronomical observation, offering 9x magnification and a 50mm objective lens for bright views. It features a double crosshair reticle with adjustable red LED illumination to enhance visibility in low-light conditions.



Image 1.1: The Astromania 9x50 Illuminated Finder Scope mounted on a telescope.

2. SETUP AND ASSEMBLY

2.1 Components Overview

Familiarize yourself with the main components of your finder scope:

- **Objective Lens:** The front lens that gathers light.
- **Eyepiece:** Where you look through to view objects.
- **Finder Scope Tube:** The main body of the scope.
- **Mounting Bracket:** Secures the finder scope to your main telescope.
- **Adjustment Screws:** Used for aligning the finder scope.
- **Compression Spring:** Provides tension for alignment screws.
- **Red LED Illuminator:** Provides illumination for the reticle.

Image 2.1: Key components and design features of the finder scope.

2.2 Mounting the Finder Scope

1. Identify the finder scope shoe on your main telescope.
2. Slide the finder scope's mounting bracket into the telescope's finder shoe. Ensure it is securely seated.
3. Tighten any retaining screws on the finder shoe to prevent movement.

Image 2.2: The robust mounting plate and examples of compatible finder scope shoes.

2.3 Battery Installation for Reticle Illumination

The illuminated reticle requires an L1131F battery (not included).

1. Locate the red LED illuminator on the side of the finder scope.
2. Unscrew the cap of the illuminator.
3. Insert the L1131F battery with the positive (+) side facing the LED end of the illuminator.
4. Screw the cap back on securely.



Image 2.3: Battery installation for the red LED illuminator.

3. OPERATION

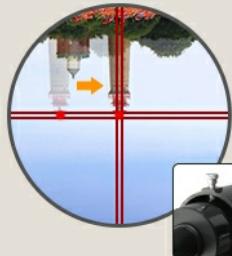
3.1 Initial Alignment of Finder Scope

Before observing, the finder scope must be aligned with your main telescope. This procedure is best performed during daylight hours on a distant, stationary object.

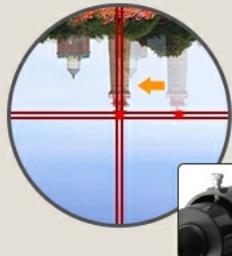
1. Insert a low-power eyepiece into your main telescope.
2. Point the main telescope at a distant object (e.g., a tree top, a distant building) at least a quarter-mile away. Center the object in the main telescope's field of view.
3. Look through the finder scope's eyepiece. The object you centered in the main telescope should be visible.
4. Use the two adjustment screws on the finder scope bracket to move the finder scope's view until the same object is centered on the crosshairs. One screw adjusts vertical alignment, the other adjusts horizontal alignment.
5. Once the object is centered in the finder scope, re-check the main telescope's view to ensure the object is still centered. Repeat adjustments if necessary.

Image 3.1: Double adjustment design for precise alignment.

How to Center the Target Star?



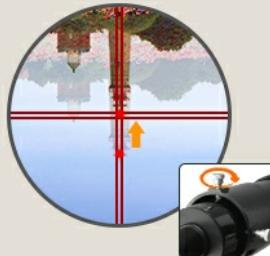
Rotate clockwise to center the target



Rotate counterclockwise to center the target



Rotate counterclockwise to center the target



Rotate clockwise to center the target



How to find your object ?

1. Insert an eyepiece into the telescope and point the telescope at an object that is at least a quarter-mile away.
2. Look through the finder scope. Is the object centered in the finder scope's field of view? If not, fine adjustment of the finder scope's alignment screws will be needed to center it on the crosshairs.
3. Once the target object is centered on the crosshairs of the finder scope, look again in the telescope's eyepiece and see if it is still centered there as well.
4. If it isn't, repeat the entire process, until the image appears in the center of the field of view.

Image 3.2: Visual guide for centering a target object.

3.2 Focusing the Finder Scope

The finder scope features an adjustable objective lens for focusing.

1. Point the finder scope at a distant object.
2. Rotate the objective lens (the front part of the scope) clockwise or counter-clockwise until the image appears sharp and clear.
3. Once focused, you can use the lens lock ring to secure the objective lens position.

Image 3.3: Quick and easy focusing mechanism.

Please Note for a Precise Focusing :

In some cases it might be necessary to adjust the objective's position significantly to achieve sharp images for very distant objects.

If you notice that you do not get the desired sharpness in the original position (1) or after the first few rotations, just continue rotating the objective cell moving it further away (2), if necessary close to the end of the tube's thread (3). At least then, you should be able to achieve a complete and precise sharpness in the entire field of view. Subsequently, all you have to do is fix this position with the locking ring (4).

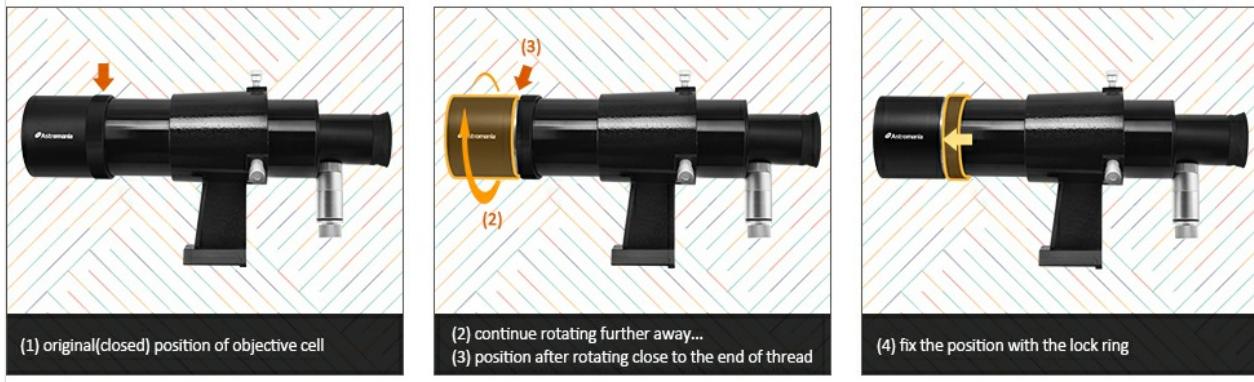


Image 3.4: Guide for precise focusing.

3.3 Using the Illuminated Reticle

The red LED illumination helps make the crosshairs visible against dark skies.

1. To turn on the illumination, rotate the knurled knob on the exposed end of the illuminator clockwise.
2. Continue rotating the knob to adjust the brightness of the crosshairs.
3. To turn off the illumination, rotate the knob counter-clockwise until it clicks off. Always turn off the illuminator when not in use to conserve battery life.

Image 3.5: Illuminated double crosshair design.

4. MAINTENANCE

4.1 Cleaning Lenses

Proper care of the optical surfaces is essential for maintaining image quality.

1. Use a blower or compressed air to remove any loose dust or particles from the lens surfaces. Avoid wiping dry lenses, as this can cause scratches.
2. Apply a small amount of professional lens cleaning liquid to a clean cotton swab or lens paper. Do not apply liquid directly to the lens.
3. Gently wipe the lens in a circular motion, starting from the center and moving outwards.
4. Use a fresh, dry piece of lens paper to wipe off any excess liquid.



Cleaning Lenses

Use a blower or compressed air to blow off any loose particles on the lens. Apply some professional lens cleaning liquid on the cotton swab, do not apply it directly on the optical element. Wipe the lens gently in a circular motion, and then wipe off the excess liquid with a new lens paper.

Simple Assembly



The finder scope will fit into a large range of holders: Skywatcher, Celestron, Vixen, Orion, GSO and many other makes have compatible finder scope shoes.



Image 4.1: Lens cleaning procedure.

4.2 Storage

When not in use, store the finder scope in a clean, dry environment. Use the provided dust caps to protect the objective and eyepiece lenses from dust and moisture.

5. TROUBLESHOOTING

- Issue:** Image appears blurry or out of focus.
Solution: Adjust the objective lens by rotating it until the image is sharp. Refer to Section 3.2 for detailed focusing instructions.
- Issue:** Reticle illumination is not working.
Solution: Check if the L1131F battery is correctly installed with the positive (+) side facing the LED. Ensure the illuminator knob is rotated clockwise to turn it on. If the issue persists, replace the battery.
- Issue:** Finder scope is not aligned with the main telescope.
Solution: Re-perform the alignment procedure as described in Section 3.1, using a distant, stationary object during daylight. Ensure the adjustment screws are tightened sufficiently after alignment.

6. SPECIFICATIONS

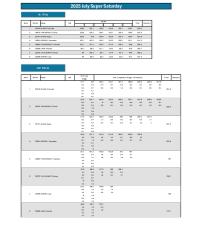
Feature	Specification
Magnification	9x
Objective Lens Diameter	50 mm
Optical Design	Achromatic
Reticle	Double Crosshair, Illuminated (Red LED)

Illuminator Battery	L1131F (not included)
Focus Type	Manual Focus (Objective Lens)
Product Dimensions	10 x 2.59 x 2.75 inches
Item Weight	1.23 pounds (19.7 ounces)
Model Number	51634

7. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact Astromania customer service directly. Contact details can typically be found on the manufacturer's official website or through your retailer.

Related Documents - 51634

	<p>Kaboodle Kitchen 900mm Pantry Assembly Instructions</p> <p>Step-by-step guide for assembling and installing your Kaboodle 900mm pantry cabinet, including hardware lists, tools required, and care instructions.</p>
	<p>Haier AB50S2PC1FA Cassette 5kW Air Conditioner Quick Reference Guide</p> <p>This document provides a quick reference guide for the Haier AB50S2PC1FA Cassette 5kW air conditioner. It details features, benefits, specifications, dimensions, installation, power requirements, and warranty information for this compact, ceiling-mounted unit.</p>
	<p>Kailani 52" Indoor Ceiling Fan Owner's Manual & Installation Guide Prominence Home</p> <p>Comprehensive owner's manual and installation guide for the Prominence Home Kailani 52-inch Indoor Ceiling Fan (Models #51634, #51635, #51636). Includes safety instructions, assembly steps, operating procedures, troubleshooting, and warranty information.</p>
	<p>2025 July Super Saturday Shooting Competition Results</p> <p>Comprehensive results from the 2025 July Super Saturday shooting competition, detailing performance across Air Rifle, Air Final, Benchrest, and Prone disciplines with participant rankings and scores.</p>
	<p>PIKO Neuheiten 2023: Modellbahn-Highlights im Maßstab H0</p> <p>PIKO präsentiert sein umfassendes Sortiment an neuen Modelleisenbahnprodukten für 2023 im Maßstab H0. Entdecken Sie detailgetreue Dampf-, Elektro- und Diesellokomotiven sowie eine breite Palette an Personen- und Güterwagen.</p>

