

## MEADE 114-EQ-DH

# Meade 114-EQ-DH 4.5-inch Equatorial Starfinder Reflecting Telescope

Instruction Manual

Model: 114-EQ-DH | Brand: MEADE

## INTRODUCTION

Welcome to the world of amateur astronomy with your new Meade 114-EQ-DH 4.5-inch Equatorial Starfinder Reflecting Telescope. This instrument is designed to provide clear and crisp views of celestial bodies, featuring a superb, hand-figured parabolic primary mirror made from low-expansion, fine-annealed Pyrex glass. It offers both manual observation for beginners and an advanced electronic motor drive system for precise tracking.

This manual will guide you through the assembly, operation, and maintenance of your telescope, ensuring you get the most out of your stargazing experience.

## WHAT'S IN THE BOX

Upon unpacking, please verify that all components listed below are present:

- 114EQ-DH 4.5-inch reflecting telescope optical tube
- Equatorial tripod
- 3x Barlow lens
- Eyepieces (various magnifications)
- Starfinder motor and handbox controller
- Battery pack (requires 8 AA batteries, not included)



Image: The Meade 114-EQ-DH telescope fully assembled on its equatorial mount and tripod, showing the main optical tube, finderscope, and motor drive unit.

## SETUP AND ASSEMBLY

Follow these steps to assemble your telescope:

1. **Tripod Setup:** Extend the tripod legs to a stable height and secure them. Ensure the equatorial mount head is level.
2. **Mounting the Optical Tube:** Carefully attach the telescope optical tube to the equatorial mount using the provided rings and screws. Ensure it is securely fastened.
3. **Attaching the Finderscope:** Mount the finderscope onto its bracket on the main optical tube. Align it with the main telescope later during initial observation.
4. **Installing Eyepieces:** Insert the desired eyepiece into the focuser. For initial setup, start with the lowest power eyepiece (highest focal length).
5. **Motor Drive Installation:** Attach the Starfinder motor drive unit to the equatorial mount. Connect the handbox controller to the motor drive.
6. **Battery Installation:** Insert 8 AA batteries into the battery pack and connect it to the motor drive system.

## OPERATING YOUR TELESCOPE

### Manual Observation

For terrestrial viewing or initial celestial exploration, you can use the telescope manually. Unlock the clutches on the equatorial mount to move the telescope freely along both axes (Right Ascension and Declination). Once your target is in view, lock the clutches to hold its position.

### Starfinder Motor Drive System

The electronic Starfinder motor drive system enhances your viewing experience by automatically tracking celestial objects as they move across the sky. This feature is particularly useful for extended observations.

- **Power On:** Ensure batteries are installed and the motor drive is connected. Turn on the power.
- **Handbox Control:** The handbox remote control allows you to adjust the telescope's position and tracking speed.
- **Tracking:** Once aligned and a celestial object is centered, activate the tracking function. The motor will move the telescope at a sidereal rate to keep the object in your field of view.

- **Speed Control:** The motor can operate at seven different speeds, allowing for fine adjustments and precise tracking of various celestial phenomena.
- **Finding Objects:** The handbox assists in locating celestial bodies by guiding you through a series of questions about your location and the desired object.

## MAINTENANCE

Proper maintenance will ensure the longevity and performance of your telescope:

- **Optics Cleaning:** Use only specialized optical cleaning solutions and microfiber cloths designed for telescope lenses. Avoid touching the mirror or lenses with bare hands.
- **Dust Protection:** Always replace lens caps and dust covers when the telescope is not in use to prevent dust accumulation.
- **Storage:** Store the telescope in a cool, dry place, away from direct sunlight and extreme temperature fluctuations.
- **Battery Care:** Remove batteries from the motor drive if the telescope will not be used for an extended period to prevent leakage.

## TROUBLESHOOTING

- **Blurry Images:** Ensure the focuser is properly adjusted. Check eyepiece cleanliness. High-power eyepieces may appear fuzzy if atmospheric conditions are poor or if the telescope is not perfectly collimated. Consider using lower power eyepieces with the Barlow lens for better clarity.
- **Object Drifts Out of View:** Verify that the motor drive is powered on and tracking is engaged. Ensure the equatorial mount is properly aligned with the celestial pole. Check battery levels in the motor drive.
- **Motor Drive Not Responding:** Check battery connections and ensure batteries are fresh. Verify all cables are securely connected between the handbox, motor, and battery pack.
- **No Autostar Controller:** Please note that this specific model, the 114-EQ-DH, comes with a basic electronic controller for tracking and movement, not the advanced Autostar GoTo system. The product image may sometimes depict a different model or an accessory not included with this specific package.

## SPECIFICATIONS

| Feature                 | Specification                             |
|-------------------------|-------------------------------------------|
| Model Name              | 114-EQ-DH                                 |
| Objective Lens Diameter | 11.43 Centimeters (4.5 inches)            |
| Primary Mirror          | Parabolic, Pyrex Glass                    |
| Telescope Mount         | Equatorial Mount                          |
| Focus Type              | Manual Focus                              |
| Power Source            | Battery Powered (8 AA batteries required) |
| Finderscope             | Reflex                                    |
| Item Weight             | 34 Pounds (approx. 15.4 kg)               |
| Package Dimensions      | 44.4 x 16.2 x 9.8 inches                  |

## WARRANTY AND SUPPORT

Warranty information for your Meade 114-EQ-DH telescope is typically provided with the product packaging or can be found on the official Meade Instruments website. Please retain your proof of purchase for warranty claims.

For technical support, spare parts, or further assistance, please contact Meade Instruments customer service directly. Refer to their official website for the most current contact information.

## 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

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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