

ETX: «Your Personal Window to the Universe»

## 1 Link to: [Manual of Meade ETX-70AT](#)

## 2 Parts Listing

- ETX-70AT Astro Telescope with Autostar Hand Controller
- Field Tripod – Alt/Az alignment
- PC (Windows XP: UIA 32518)
- Meade Autostar Suit Version 5.53
- Thumb screws (two pieces). The telescopes fork mount is attached directly to the Tripod platform. Base House has two holds on the bottom plate.
- Bubble Water Level to get the base platform in horizontal plane
- Battery Compartment. Six AA-size batteries in the batteries holder (page 3 of manual)
- D = 70 mm (lens diameter), F=350 mm (focus length), 25 mm Eyepiece, 4 mm
- Eyepiece: Meade: 4mm; 6,4 mm; Astro 12mm; 26 mm; 40 mm (Tycho Brahe Observatory)
- Eyepiece: 8-24mm (adjustable) (Tycho Brahe Observator)
- Barlow Lens: 2X, 3X
- Eyepiece Holder 45 Erecting Prism (results in a fully correctly oriented image, for terrestrial observations)
- The image in 90 reflect light observation is reversed left for right
- Dust Cover (Remove the Dust Cover from the end of telescope tube).
- Dew Shield condense reducer.
- “USB-to-Serial Adapter Cabel”, which allow you to control your telescope from PC (Connected between AUX and USB).

## 3 Setup

- Power ON
- Press the «Speed/? Key (see page 3) to accept The Sun warning.
- Keep pressing the ENTER key until “Inntill/Lett” and press MODE (you are in Setup menu, see page 16)
- The selected observing site: Setup/Sted: Use the Scroll Down key until “Sted” (eng. “Site”) and press ENTER
- Select: Displays the currently selected observing site... (see page 20)
- Press MODE
-

## 4 Set Alt/Az Home Position



Telescope in “**Home Position**”: tube in the north direction and horizontal plane.

- Set the tripod on a flat level surface
- Use “Bubble Water Level” to get the “Tripod Base Platform” in horizontal plane
- Unlock the “Vertical Lock” (Altitude adjustment, pages 5 and 4) and set the telescope tube horizontal (altitude: 0 degrees), use the water. Tightening the screw when the tube is in horizontal position
- Set 25mm eyepiece in 90 Eyepiece Holder (page 3). Tighten the attachment thumbscrew to a “firm feel” only.
- Make sure that the flip-mirror control is in the “up” position (page 6)
- Turn the telescope horizontally (Azimuth adjustment) until it point north. “Horizontal lock” (pages 5 and 4) controls the manual horizontal movement of the telescope

How to find the direction to the north? Polaris can help us.

- Using the Big Dipper as a guide and find Polaris (page 32). Sight along the side of the telescope main tube and turn the tube and lining up with the Polaris.

- Unlock the “Vertical Lock” again and give the telescope an altitude of 39 degrees, use the “Declination (Dec) Setting Circle” (see pages 6 and 4) on left fork arm. Read the scale number and add 39 degrees (latitude of Lesbos is the altitude of Polaris, 39 degrees)
- Unlock the “Horizontal Lock” and move the telescope slightly back and forth to Polaris shows up in the eyepiece. Once Polaris is centered in the visual field, lock the Horizontal Lock. Then bring the tube back in horizontal position. Remember Polaris is the starkest star in this part of the sky.
- The you are ready to align the telescope,
- Go to “Quick Start Guide”, section, five

## 5 Quick Start Guide

- Set Home Position (section 4 or page 14-8 in the manual)
- Power: ON
- MODE or SPEED/?
- MODE: Enter the current date.
- ENTER: Enter current Time (24 hour clock (blank))
- ENTER: Daylight Savings: Yes
- ENTER: Easy
- ENTER: Set “Home Position” (don’t touch the telescope, You have already done it, the first step)
- ENTER: Slew to the first star to alignment. Use the Arrow keys to move the telescope until the star is visible and centered in the eyepiece. Press ENTER. Repeat procedure for the second alignment star. Pressing the SPEED/? key briefly changes the slew speed, which is shown for about two seconds on Autostar’s display (page 22)
- ENTER: Select Item/Object (page 16)

