Operating Instructions Series 5000™ ED APO Refractor Optical Tubes



Fig. 1: 80mm ED APO OTA with 2" series 5000 enhanced diagonal.

Introduction

Series 5000 ED APO are true three-element apochromatic refractors that are virtually free of chromatic aberration (color fringing), providing pinpoint star images.

A Series 5000 APO is the ideal companion for your larger Schmidt-Cassegrain, Ritchey-Chrétien, or Newtonian scope. When piggybacked, a Series 5000 APO is the ideal wide-field photography scope when guided by the primary instrument and doubles as a guide scope for the primary telescope. It also makes an ideal lightweight and portable scope for flawless visual observing.

Features

- FAST FOCAL RATIO: At f/6 (80mm) and f/7.5 (127mm), the focal ratio of these scopes is ideal for wide field astrophotography.
- PREMIUM ED GLASS: Meade uses the finest Japanese FCD1 ED (Extremely Low Dispersion) glass. This glass is created to achieve a very small change in refractive index with different wavelengths of light. This makes it the perfect choice for a fast, high performance optical design like the Series 5000 APOs.
- FULLY MULTI-COATED LENSES: Meade broadband multicoated lenses ensure maximum light transmission.
- TRUE ED APOCHROMATIC TRIPLET: A true triplet optical design guarantees the textbook color correction you expect from a premium APO.
- FULLY EXTENDABLE DEW SHIELD/SUN SHADE: An essential accessory built-in to the design for your convenience.
- MACHINED ALUMINUM CRAYFORD STYLE FOCUSER: Superior focuser means smooth and repeatable focusing with no image shift. Accepts 1.25" & 2" accessories.
- AIR-SPACED OBJECTIVE LENS: The precision air-spaced triple element ED objective lens focuses red, green, and blue wavelengths to the exact same point
- ADJUSTABLE LENS CELL: Allows collimation of lenses if necessary.
- MOUNTING BRACKET: (80mm only): Allows mounting on a wide verity of Meade and non-Meade German Equatorial Mounts and almost all photo tripods.

Using the Focuser Assembly

Insert an eyepiece into the focuser assembly and tighten the focuser thumbscrew.

To focus the eyepiece, turn the focuser wheels in or out. If you have a 2 inch eyepiece, remove the 1.25" eyepiece holder from the focuser assembly by loosening holder thumbscrew. Slide the 2 inch eyepiece into the focuser and tighten with the eyepiece locking screw.

The focuser has both a lock knob and a tension adjustment knob. The first lock prevents the draw tube from moving in and out. The second lock locks the focuser knob, thereby locking a focus position into place. Experiment with these knobs to discover which adjustments are comfortable with your viewing style.

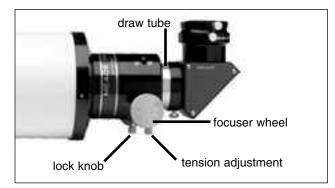


Fig. 2: The tension adjustment and lock knobs.

If you have a question concerning use of the Meade SERIES 5000 ED APO REFRACTOR, call the Meade Instruments Consumer Solutions Department at (800) 626-3233. Consumer Solutions hours are 8:00 AM to 5:00 PM, Pacific Time, Monday through Friday.

Specifications

Optical Tube Assembly (OTA)

Optical Design
Optical Diameter

Telescope Dimensions (L x W x H)

Focal Length; f/ratio

Dew Shield Optics Focuser

Weight (OTA only)

Weight (OTA with Series 5000 Diagonal)
Part Number - Standard / with Diagonal

UPC Code - Standard UPC Code - with Diagonal

80mm

3-element Apochromatic Refractor

80mm (3.1") 15" x 4.9" x 4.9" 480mm; f/6

Built-in Extendable Fully Multi-Coated

Machined Aluminum Crayford

6.2 lbs. 7.2 lbs.

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127mm

3-element Apochromatic Refractor

127mm (5")

33.3" x 6.125" x 6.125"

952.5mm; f/7.5 Built-in Extendable Fully Multi-Coated

Machined Aluminum Crayford

15.6 lbs. 16.6 lbs.

0575-00-01 / 0575-00-02

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Meade Limited Warranty

Every Meade telescope and telescope accessory is warranted by Meade Instruments Corporation ("Meade") to be free of defects in materials and workmanship for a period of ONE YEAR from the date of original purchase in the U.S.A. and Canada. Meade will repair or replace a product, or part thereof, found by Meade to be defective, provided the defective part is returned to Meade, freight-prepaid, with proof of purchase. This warranty applies to the original purchaser only and is non-transferable. Meade products purchased outside North America are not included in this warranty, but are covered under separate warranties issued by Meade international distributors.

RGA Number Required: Prior to the return of any product or part, a Return Goods Authorization (RGA) number must be obtained from Meade by writing, or calling (800) 626-3233. Each returned part or product must include a written statement detailing the nature of the claimed defect, as well as the owner's name, address, and phone number.

This warranty is not valid in cases where the product has been abused or mishandled, where unauthorized repairs have been attempted or performed, or where depreciation of the product is due to normal wear-and-tear. Meade specifically disclaims special, indirect, or consequential damages or lost profit which may result from a breach of this warranty. Any implied warranties which cannot be disclaimed are hereby limited to a term of one year from the date of original retail purchase.

This warranty gives you specific rights. You may have other rights which vary from state to state.

Meade reserves the right to change product specifications or to discontinue products without notice.



WARNING!

Never use a Meade° Telescope to look at the Sun! Looking at or near the Sun will cause instant and irreversible damage to your eye. Eye damage is often painless, so there is no warning to the observer that damage has occurred until it is too late. Do not point the telescope or its finder at or near the Sun. Do not look through the telescope or its finder as it is moving. Children should always have adult supervision while observing.

