



FF110 APO

■ User Manual

WARNING

DO NOT LOOK AT SUN THROUGH TELESCOPE.
IT WILL CAUSE IRREVERSIBLE DAMAGE TO YOUR EYE.

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English

Please read this user manual carefully
before using the product.

The FF110 APO is an OTA with an aperture of 110mm, a focal length of 766mm, and a native focal ratio of F7.0. It is designed for both visual observation and astrophotography.

The telescope features a quadruplet optical lens design (three elements in the front and one in the rear), including one piece of ED glass, which can effectively reduce chromatic aberration, and supports 44mm full-frame imaging. With its self-flattened design, after attaching the imaging accessories, users can directly use it for shooting after the OTA is in focus. (The effective back focus is measured from the M54-M48 imaging interface flange. Focus can be achieved when the total rear connection length is between 42 mm and 73 mm).

The retractable dew shield helps reduce overall length and improves portability. The entire lens tube is manufactured using high-quality CNC machining and paint finish, and it also includes an internal baffle to effectively suppress stray light.

On the handle bar of FF110 APO, it has a finder base slot. Besides, there are two finder bases on both sides of the focuser. This allows flexible adjustment of the finder scope position without disassembly and provides additional options for attaching other astronomical accessories. The tube rings feature CNC-machined thumb screws and a clamshell opening design, enabling tool-free installation and removal.

The FF110 APO comes with a 3-inch rack-and-pinion dual-speed focuser offering 1:10 fine adjustment, along with a built-in 360° field rotator at the rear for precise framing. It includes a 300mm standard Vixen dovetail plate with 1/4" and 3/8" screw holes for direct tripod mounting.

The rear interface of the FF110 APO includes both 2-inch and 1.25-inch adapters, enabling compatibility with a wide range of astronomical accessories.

The FF110 APO comes standard with a photographic extension tube, which includes M48*0.75 and M54*0.75 adapters. It also features a built-in 2-inch filter thread for easy attachment of filters.

FF110 APO Specifications:

Aperture size: 110mm
Focal length: 766mm
Focal ratio: F7.0
Objective lens: Quadruplet air-spaced APO (including one ED glass)
Image circle: 44mm

Maximum allowable optical path length (with the focuser fully retreated):
Imaging Mode:
73mm (from the base of M48×0.75 male thread)
91mm (from the base of M54×0.75 male thread)

Visual Mode:
132mm (from the end of 1.25" eyepiece holder)
142mm (from the end of 2" eyepiece holder)

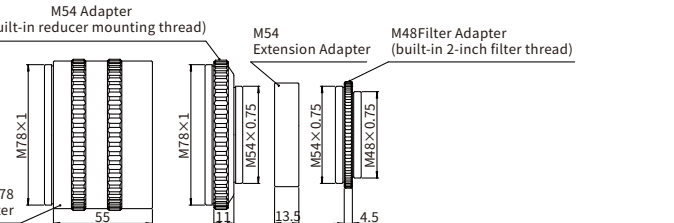
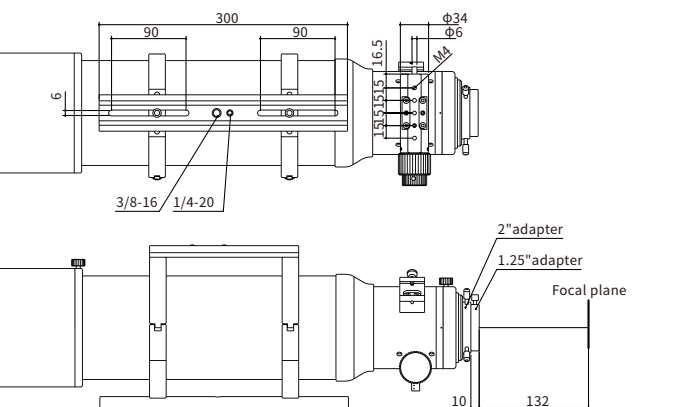
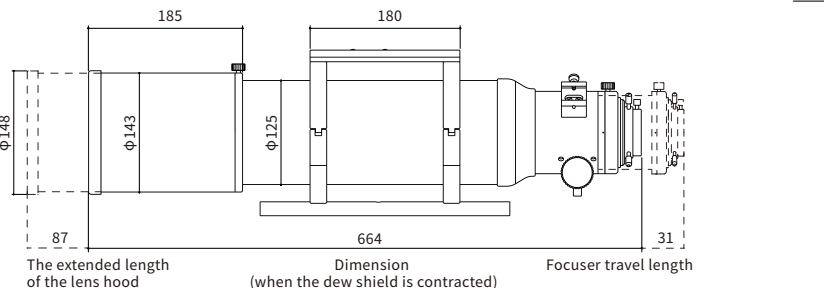
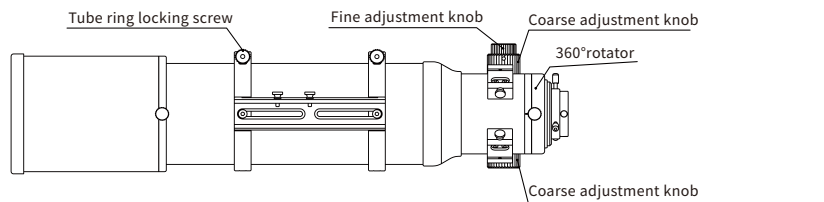
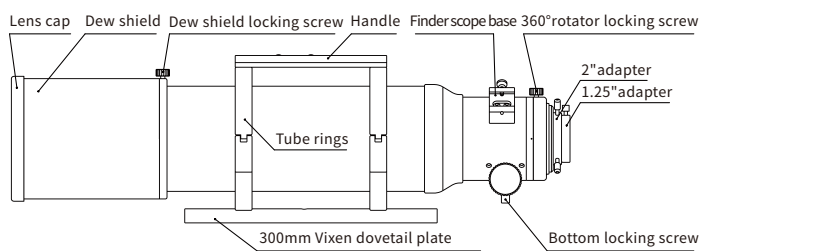
Minimum allowable optical path length (with the focuser fully extended):
Imaging Mode:
42mm (from the base of M48×0.75 male thread)
60mm (from the base of M54×0.75 male thread)

Visual Mode:
101mm (from the end of 1.25" eyepiece holder)
111mm (from the end of 2" eyepiece holder)

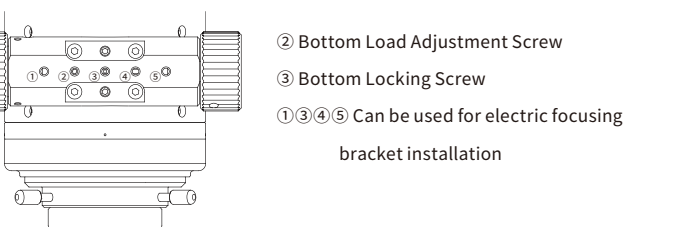
Total length:
664mm (including 1.25" adapter as dew shield contracted)
751mm (including 1.25" adapter, fully stretched)
728mm (including the photographic extension tube as dew shield contracted)
815mm (including the photographic extension tube, fully stretched)

Net weight: 5.74kg
Gross weight (including tube ring&dovetail plate): 6.76kg
Rear-end thread type:
(1) M78 x 1- 55MM Extension Adapter
(2) M78 x 1 - M54 x 0.75
(3) M54 x 0.75 - M54 x 0.75
(4) M54 x 0.75 - M48 x 0.75 (with built-in M48 × 0.75 filter thread)

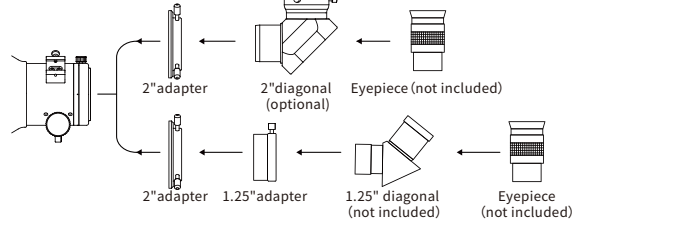
Product Overview and Dimensional Diagram



The Locking Screw Position Diagram

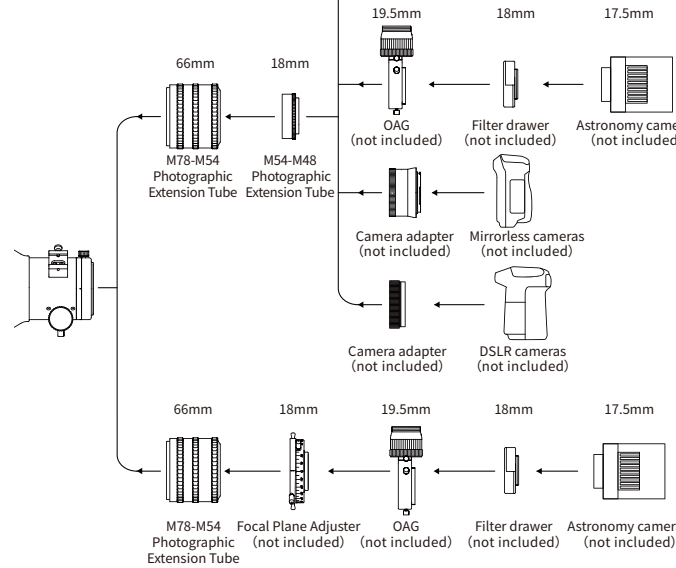


Visual Mode

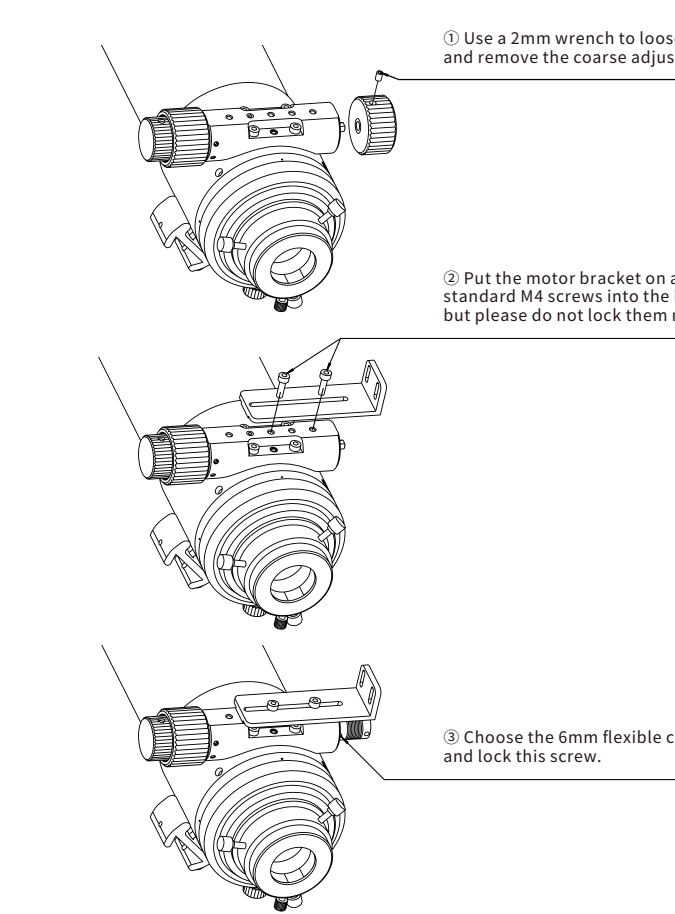


Imaging mode

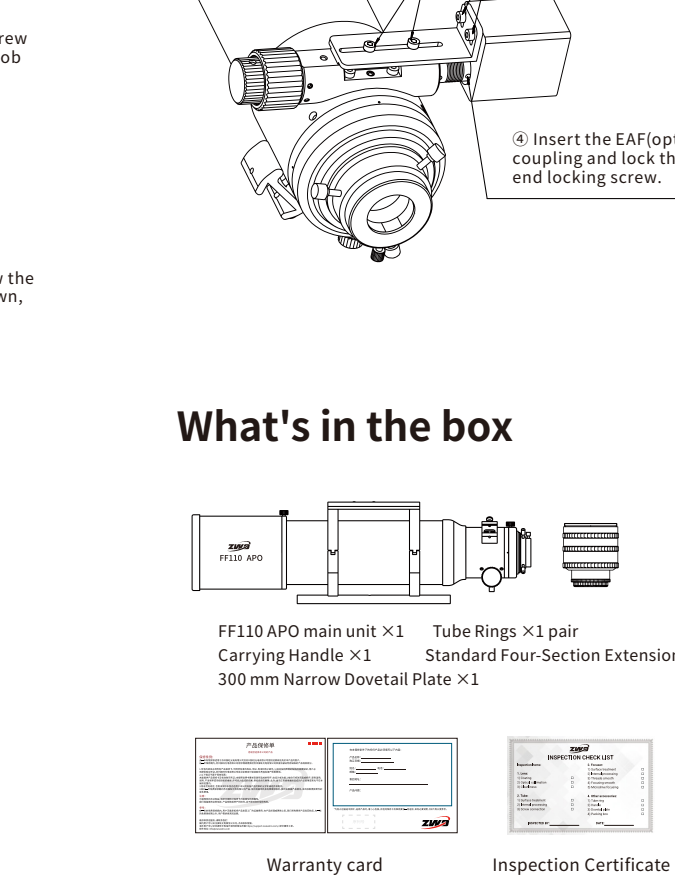
The effective focus range of the telescope rear-end connection is from 42 mm to 73mm (from the M54 to M48 photographic adapter).



Steps of Installing EAF



What's in the box



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