Extender 1.7XR

Instruction Manual

Thank you very much for your purchase of the Extender 1.7XR.
The Extender 1.7XR can extend the focal length of the FOA-60 and at the same time it can better correct the center aberration. In addition, it can correct the edge aberration, making the field practically flat.
In order to use your telescope to its highest possible capabilities, please read this instruction manual very carefully and familiarize yourself with all of the functions that your telescope offers.

All products have been strictly inspected before shipment. If there is anything wrong with your products when unpacked, please contact your authorized Takahashi distributor for proper care.

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Warning & Caution

⚠ WARNING

WHEN THE TELESCOPE IS DIRECTED TO THE SUN, ITS LIGHT AND HEAT ARE BOTH INTENSE AND DANGEROUS. NEVER TRY TO VIEW THE SUN. DOING SO WITHOUT PROPER EQUIPMENT MAY CAUSE PERMANENT BLINDNESS.



Specifications

FOA-60 + Extender 1.7XR

Configuration	2-group 2-element + 2-group 4-element
Effective Aperture	60mm
Effective Focal Length	900mm
Effective Focal Ratio	1:15.0
Image Circle	ϕ44mm (100% illuminated)
	ϕ88mm (reference)

Attaching the Extender 1.7XR

The Extender 1.7XR with 2-group 4-element can be installed in between the main tube and the focuser unit, unlike conventional types. The Extender 1.7XR can extend the focal length and at the same time it can better correct the center aberration. In addition, it can correct the edge aberration, making the field practically flat.

This can extend the focal length of the FOA-60 to 900mm (f/15.0), offering highest optical performance of all Takahashi optical systems. Over the full range of the visible light transmission, it can produce images of 99% Strehl ratio across the field of a DSLR camera.

It is very compact, and with its long focal length and flat field it is well-suited to take magnified images of the corona or the prominence in the total eclipse. With almost no vignetting, it is also suited for imaging lands as a super telephoto lens.

For accessory connections, please refer to the system chart.

1. At first, remove the main tube. Holding the focuser unit and the tube, turn them counter-clockwise to separate them.

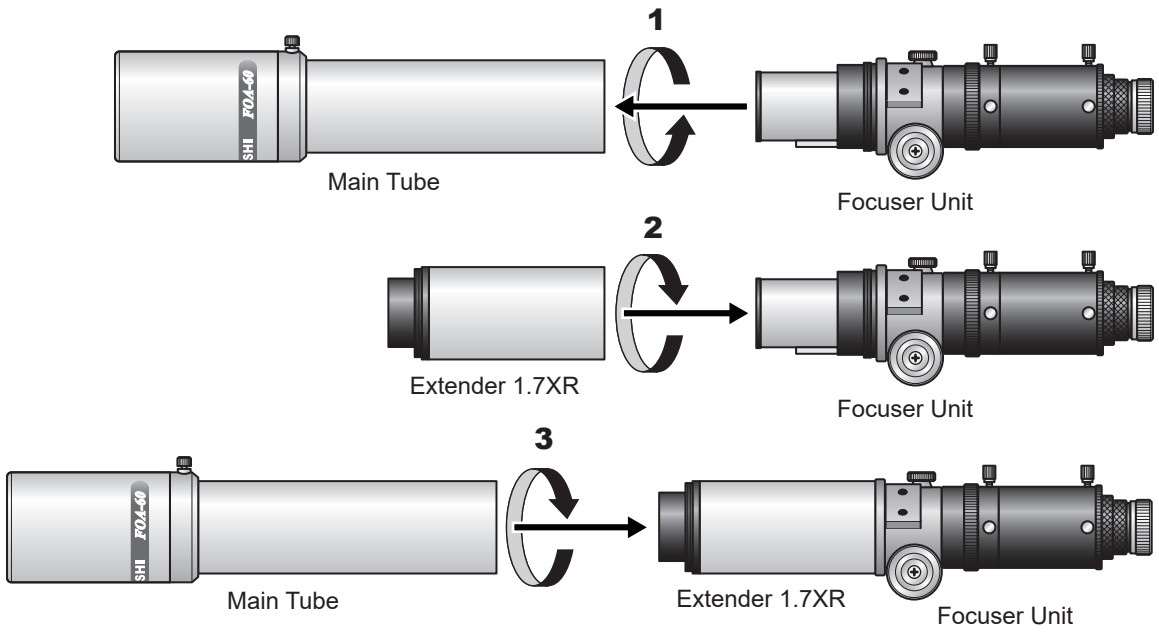
2. Attach the Extender 1.7XR to the focuser unit by turning it clockwise until attached. Be careful not to attach it crooked or slanted to the focuser unit.

3. Then, attach the tube onto the Extender 1.7XR by turning it clockwise.

(Note)

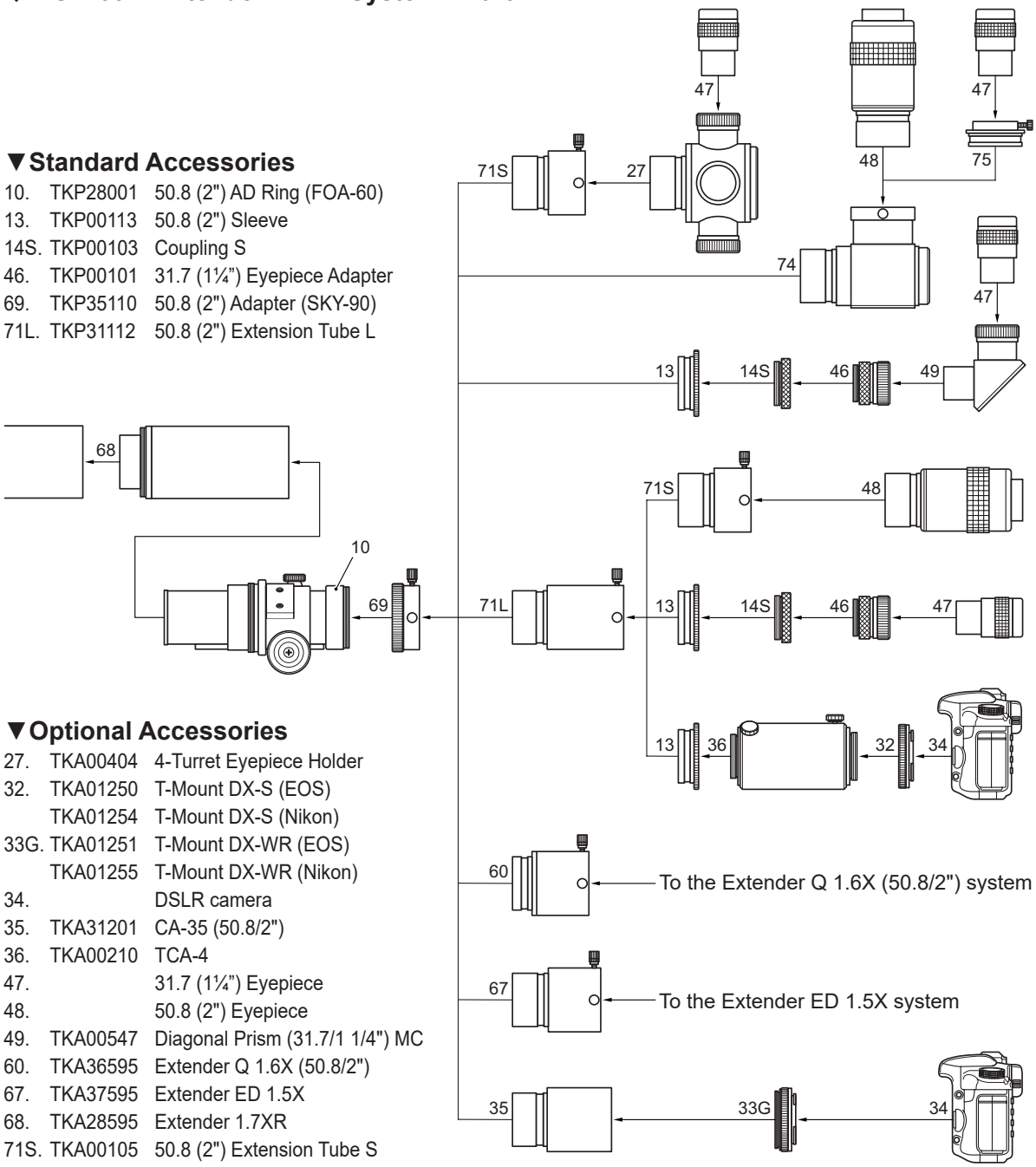
Be careful not to touch the focuser handle. When the excess pressure is applied to the focusing handle, the focusing will not be performed smoothly.

When the main tube and the focuser unit are too tight and can not be removed, have two people hold these parts, turning them with even power to remove.



System Charts

◆ FOA-60 + Extender 1.7XR System Chart



▼Standard Accessories

10. TKP28001 50.8 (2") AD Ring (FOA-60)
13. TKP00113 50.8 (2") Sleeve
14S. TKP00103 Coupling S
46. TKP00101 31.7 (1¼") Eyepiece Adapter
69. TKP35110 50.8 (2") Adapter (SKY-90)
71L. TKP31112 50.8 (2") Extension Tube L

▼Optional Accessories

27. TKA00404 4-Turret Eyepiece Holder
32. TKA01250 T-Mount DX-S (EOS)
TKA01254 T-Mount DX-S (Nikon)
33G. TKA01251 T-Mount DX-WR (EOS)
TKA01255 T-Mount DX-WR (Nikon)
34. DSLR camera
35. TKA31201 CA-35 (50.8/2")
36. TKA00210 TCA-4
47. 31.7 (1¼") Eyepiece
48. 50.8 (2") Eyepiece
49. TKA00547 Diagonal Prism (31.7/1 1/4") MC
60. TKA36595 Extender Q 1.6X (50.8/2")
67. TKA37595 Extender ED 1.5X
68. TKA28595 Extender 1.7XR
71S. TKA00105 50.8 (2") Extension Tube S
74. TKA00543 Diagonal Mirror (50.8/2")
75. TKA00111 Adapter (DM) 31.7 (1¼")

(Note) Some DSLR cameras cannot be attached.
31.7/50.8 stands for 31.7mm/50.8mm.