

FC/FS Multi Flattener 1.04x Instruction Manual

Thank you very much for your purchase of the FC/FS Multi Flattener 1.04x. Before using this flattener, please read this instruction sheet carefully and use the flattener only as instructed.

◆ WARNING

1. Never view the Sun directly with any telescope. Intense light and heat of the Sun concentrated at the focal point will cause permanent vision loss.
2. Never position the telescope in the sun. The intense heat at the focal point can cause a fire.



◆ Specifications

Configuration ----- 1-group 2-element
 Diameter(MAX) x Total Length ----- 60mm x 40mm
 Thread Size at the telescope side ----- M55.9 x 0.75
 Weight ----- 110g
 Image Circle
 φ 44mm ----- FS-60CB, FC-76D, FC-100D, FC-50,
 FC-65, FC-76, FS-78
 φ 40mm ----- FC-100DL, FC-60, FC-100, FC-125,
 FS-102, FS-128, FS-152

◆ Features

FC/FS Multi Flattener 1.04x is constructed of two lens elements. By varying the refractive index between the lenses, high order curvature of the field can be reduced to 1/3 of the uncorrected curvature.

It also reduces the red and blue halos of the central image and produces sharper star images.

This flattener can be used for most models of the Takahashi FC/FS series doublet fluorite lens cells, including some older models. In addition, seven types of multi-CA rings are available separately so that the Multi Flattener can be used with the 14 models of FC/FS series.

◆ Multi CA Ring Data

Multi CA Ring	Suit Telescope	A
Multi CA Ring 60C	FS-60CB	87.5mm
Multi CA Ring 76	FC-76D, FC-76, FS-78	75.0mm
Multi CA Ring 100	FC-100D, FC-100	71.2mm
Multi CA Ring 50	FC-50	84.0mm
Multi CA Ring 65	FC-60, FC-65	78.0mm
Multi CA Ring 125	FC-100DL, FS-102, FC-125	69.2mm
Multi CA Ring 128	FS-128, FS-152	66.2mm

- ※ The value of "A" in the table is the value of the metal back distance for that particular telescope configuration.
- ※ Each telescope model is listed in the table.
- ※ Variations within the model can be accommodated, but the configuration of parts may be different as described in the various system charts.

◆ Upon use

Since the Multi Flattener 1.04x is designed for FC/FS series fluorite doublet lens systems, it can be used in most Takahashi doublet models, including the early FC series.

It is especially suitable with FC-50, FC-60, and FC-65, and in case of use with the FC-50, the RMS - SPOT is well corrected with 5 micron stars to the full size surrounding the RMS - SPOT.

However, the Multi Flattener is not suitable for use with either the SKY90 and FOA-60 because the state of aberration correction of these objective lenses differs from FC/FS type.

FC/FS Multi flattener 1.04x does not allow for the attachment of internal filters. Other adapters will be needed to attach internal filters.

(Note)

When used with certain Camera Angle Adjusters (CAA), the multi-flattener may on rare occasions be difficult to thread onto the CAA.

If this occurs, do not force the connection and contact your authorized Takahashi dealer.

