

# Manual

## CaK-Module

Congratulations and thank you on your purchase of a Lunt Solar Systems solar filter! The Lunt Solar Systems are a new generation of solar viewing instruments utilizing the most current technologies to provide the highest quality contrast and resolution in their class.

### Warning

There are inherent dangers when looking at the Sun thru any instrument. Lunt Solar Systems has taken your safety very seriously in the design of our systems. With safety being the highest priority we ask that you read and understand the operation of your telescope or filter system prior to use. Never attempt to disassemble the system. Do not use your system if it is in some way compromised due to mishandling or damage. Please contact our customer service with any questions or concerns regarding the safe use of your instrument.

**Never look at the Sun with your naked eye or with a telescope that is not specifically designed to do so. Permanent and irreversible eye damage may result!**

**Never leave the solar telescope unsupervised while pointed at the Sun. People who are not familiar with the correct operating procedures of the system may inadvertently replace the diagonal not being aware of the integrated safety features of it.**

**The Lunt Solar filter/telescopes are not interchangeable with competitor products.**

### Handling

A Lunt Solar Systems solar filter houses many optical elements that are all pre-aligned and fixed at the factory. There are no user serviceable parts inside the filter. The filter module should never be taken apart. This will not only void your warranty leading to costly repairs, it can only serve to further damage the instrument and compromise its safety.

As with any precision optical instrument the filter should be kept in as low a humidity area as possible. With proper handling and care the filter should last a lifetime.

### What am I looking at?

Not only in H-alpha, also in the wavelength of Calcium-K the sun will show you many interesting events. Because deeper layers of the solar surface are observed in the blue Calcium-K light than in the red H-alpha light, other details emerge in this Ca-K wavelength. But the Ca-K wavelength is at the edge of the visible light spectrum for human eyes. Observers in their younger years can often see numerous things, but with increasing age less and less can be seen in this wavelength. However, all details could be captured photographically. Therefore, the Ca-K telescopes and modules from Lunt Solar Systems are optimized primarily for photography.

### The CaK Module

The Ca-K Modules are designed to retrofit your astronomical telescope up to 4" (100 mm) aperture for observing the sun in the Calcium-K wavelength during the day. The Modules are alternatively installed in star diagonals or straight extension tubes for 2" focusers. These diagonals and extension tubes are equipped on the eyepiece side with a reception for 1.25" eyepieces and a T2-connection for cameras. Put the Module in the 2" focuser of your telescope, that's all - observing the sun in Ca-K light can't be easier.

IR and UV protection, narrowband filters with <2.4 Angstrom bandwidth, and blocking filters are complete integrated in the compact Modules.

The Modules are available with B600 blocking filter for telescopes up to 540 mm focal length, B1200 up to 1080 mm, B1800 up to 1620 mm, and with B3400 up to 3060 mm focal length. Because of the large size of the B3400, this version can only be delivered in extension tube with 2" connections on both sides.

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