

Herschel Wedge - Safety and Usage

(Short instructions - read before use!)



A Herschel Wedge Solar Prism is a professional tool for the serious Amateur, and delivers the absolute finest true white light high-resolution and high-contrast views possible from your telescope. The first surface uncoated reflective design results in a pure white light view, with no selective filtration, permitting you to see solar detail in the natural color or to permit further selective filtration in any wavelength desired. The solar disk will be seen against a jet-black background with granulation, spot detail and fine contrasts that you never imagined.

As with any solar viewing system (including glass or solar film objective solar filters), the Herschel Wedge Solar Prism requires responsible handling. Herschel wedge prisms have been used for many years, and are quite safe if some care and precautions are always observed. Be sure to read and understand all precautions before placing the prism into use. If you have any questions or doubts, please contact the manufacturer - **Baader Planetarium** (www.baader-planetarium.de).

There are two versions of the "Herschel Wedge" available. **Herschel Wedge "V"** is mainly for visual observing. It contains the 2" housing equipped with herchel 23→prism, 2" eyepiece clamp and 2" nosepiece. Built in is a ND = 3.0 neutral density filter.

Herschel Wedge "P" is equipped like Herschel Wedge "V" but has additionally three more neutral density filters (D=1,8 or 0.9 and 0.6) to be used in exchange of the ND=3.0 filter for reaching the shortest possible exposure time at every magnification for eyepiece projection photography.

Precautions:

1. For visual use: NEVER remove the build-in 1:1000 (D=3) neutral density filter. The filter comes already pre-mounted from the factory at the front of the 2" eyepiece holder, and is fixed into the holding cell. Important: Before each and every use, check to ensure that the filter is in place and securely mounted in the prism (not loose, cracked, or broken).
2. ONLY FOR EXPERIENCED USERS: for photographic use you can remove the build-in D=3 filter to hold one of the other neutral density filters (D=1,8 or 0.9 or 0.6) These are delivered only with Herschel Wedge "P" (but are available separately too) for reaching the shortest possible exposure time in combination with the "Solar Continuum Filter". BE CAREFUL! NEVER USE THE HERSCHEL WEDGE COMPLETELY WITHOUT FILTERS! This may perhaps destroy your (digital-) camera or hurt your eye!
3. The "Baader Cool Ceramic tile" renders the output beam harmless to the touch or sight. Please ensure the ceramic screen is intact before each use, and encourage onlookers not to poke at or insert any objects into the heat cage.
4. Never leave the telescope outside unattended during use (a requirement for any solar viewing with any solar filtration device).
5. Prior to using any long accessories (barlows, etc) please first check and ensure that they do not protrude so far as to contact the internal filters. This will prevent the possibility for damage to the filter.

General Use:

1. As supplied, the prism is ready for visual use, a ND=3.0 neutral density filter is built in.
2. A polarizing filter must also be used on the eyepiece to provide variable adjustment of brightness (the Herschel prism is partially polarizing). By rotating the eyepiece, you can easily adjust the brightness of the solar image to your taste.
3. Only use the Herschel Solar Prism with refracting telescopes. Reflecting telescopes may be damaged by the concentrated energy at the secondary mirror.
4. When using auxiliary optics (barlows, telecompressors, etc), always place them into the beam behind the Herschel Wedge - not ahead of the Herschel. Any optic placed ahead of the Herschel would be exposed to unfiltered solar energy and most likely will be damaged by the potential heat buildup.



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