GRAVITIS

SOLAR FILTER INSTRUCTIONS

ASTROSNAP FILTER MODEL

www.absoluteeclipse.com

TECHNICAL DETAILS

AstroSnap Silver-Black Polymer Film

Metallic coating outside surface & absorptive material within the substrate.

Blocks 99.999% of solar energy for safe visual and photographic use.

IMPORTANT SAFETY

- **Check the solar filter for damage before each use**
- The filter must be **FIRST in line** between the sun and the instrument. Do not use a filter behind any lens
- Truss design telescopes must **NOT** be used without covering the open tube section. Sunlight entering from the side will reflect off the mirror and damage the solar filter
- **Secure the filter properly** (See mounting instructions)
- Do not leave the instrument unattended where a child or inexperienced adult could point it at the sun without the filter properly attached
- Keep the finder scope covered if not equipped with a proper solar filter
- Point the instrument away from the sun when attaching and removing the solar filter
- Do not place the filter up against a smaller instrument. The end of the tube will damage the filter

USAGE NOTES

Normal Appearance: When looking through the focusing tube without an eyepiece, there may appear to be small defects in the coating that are not seen when observing through the eyepiece. This is normal and is not a coating defect or safety concern.

Ghosting: "Ghosting" can occur due to internal reflections. If this is a problem, simply tilt the filter slightly.

Heat Warning: The filter might get hot when in use due to direct sun rays. Use extra care when removing from the instrument.

Pinholes: Pinholes and minor surface scratches are common in polymer solar filters. A "bright" pinhole in the coating may cause "ghosting" due to scattered light. If this is seen during observation, the pinhole(s) should be blocked out. Block out any pinholes on the inside surface facing telescope. Hold the filter 1-2 feet in front of a 50-100W soft white light bulb. Blocking can be done using a fine-point felt marker. There is no danger if a few pinholes or minor scratches are present. The touch-up(s) will not lessen the optical performance. Small pinholes need not be blocked if not causing an image problem.

MOUNTING

If your filter is too loose, it can be custom-fitted using the extra felt. If the paper backing is difficult to remove, dampen it with water or alcohol using a wet sponge or fine spray mist. Peel backing off slowly. Let dry if necessary before installing on the inside of the cell. Extra felt can be added over any existing felt. Test fit before removing the backing and permanently installing the felt.

We cannot exchange for another size if the felt is installed.

TIPS

- Allow the instrument and filter to equalize to the outside temperature for at least 15 minutes
- If possible, do not view over pavement or buildings. Viewing over grass or water will help avoid heat currents that will degrade the image
- Cover dark-colored instruments with a light-colored cloth

CLEANING

Silver-Black Polymer Film: Loose dust can be blown off with up to 15 PSI. Clean with Isopropyl (rubbing) alcohol and a soft tissue. Do not use a cloth. It's best to mist the filter with a spray versus soaking the tissue. Use a 3-inch or larger circular wad of tissue and lightly rub across the surface using long strokes. Lightly wipe dry with fresh dry tissue.

Note: The polymer is more susceptible to small surface scratches, so extra care should be taken. Surface scratches will not compromise the safety.

WARRANTY

Silver-Black Polymer Film: 10 years. A limited liability warranty from defects in material and workmanship covers all filters. This warranty does not apply if, in the judgment of GRAVITIS, the product fails to be safe due to shipping damage, damage from improper handling or storage, abuse or misuse, or has been used or maintained in a manner not conforming to product's instructions or has been modified in any way.

Meet the Transmittance Requirements of ISO 12312-2: 2015

Manufactured by
JAXY OPTICAL INSTRUMENT CO.,LTD
Address: 3rd/F, No.13 Building, Xuefeng West Road,
Beiyuan SI-Park, Yiwu City, Zhejiang, China.