



ATTENTIONS

This is a AstroSolar® PHOTO Film OD 3.8

HOW TO make your own **SOLAR FILTER** for Telescopes and Cameras

planeoptically correct mounting of BAADER AstroSolar® Photo Film 3.8 in self-made filter cell



What you need:

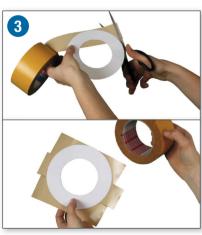
- Baader AstroSolar® PHOTO Film 3.8
- two sheets of white stiff cardboard
- pair of scissors
- · compass to draw circles
- Some pieces of "Kleenex"- tissue
- double-faced adhesive tape
- Paper glue





Do NOT use AstroSolar® Photo Film 3.8 for visual observation







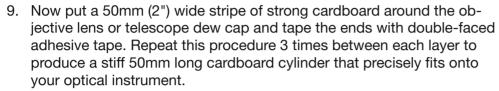
- Using the compass, draw two circles on pieces of stiff cardboard. The inner diameter should match the full aperture of the objective lens, the outer diameter should be 10cm (~4") larger. Cut the two disks from the cardboard.
- 2. In order to minimize the volume of air between the filter and objective lens, it is advisable to mount the ready made filter directly onto the tube of the telescope / binocular, rather than onto an additional dew cap. If the dew cap cannot be removed from your telescope, its outer diameter will provide the minimum size of the outer ring of your cardboard disk.
- 3. Cover one full face of each cardboard-ring with sticky tape. Cleanly cut away any inner and outer excess tape, so that only the two cardboard faces of both rings are covered with the sticky tape.
- 4. Stretch out a square piece of "Kleenex" or similar facial tissue flat on a hard, plane surface (a table) and secure the four corners of the tissue with clear adhesive tape. The tissue must be free of any wrinkles.
- 5. Cut a square piece of AstroSolar® Photo Film 3.8 a little larger than the outer diameter of the stiff cardboard rings.

 The Film must be mounted into the filter cell without any of the protective layers of plastic or paper. However, for cutting AstroSolar® Photo Film 3.8, always keep it protected between the included two sheets of protective layers (white silk paper and/or transparent or white plastic). This "sandwich" is easily cut without creasing the film or getting fingerprints on it. The latest version of AstroSolar® Photo Film 3.8 comes with protective layers already on both sides.
- 6. Gently place the cutout of AstroSolar® Photo Film 3.8 onto the flat tissue and secure the four corners with tape but do not stretch it! At this time carefully remove the protective layer facing upwards. AstroSolar® Photo Film 3.8 must not be put under tension in order to retain its precision optical property.





- 7. Hold one cardboard ring, with the sticky side facing downwards, 10 millimeters above the film and let it fall down onto the AstroSolar® Photo Film 3.8, so that the ring touches the film all around at the same time.
- 8. Turn over the cardboard ring with the film-covered side facing upward and lay it back down onto the Kleenex. **Now remove the second protective layer,** and then stick the second cardboard ring against the AstroSolar® Photo Film 3.8 with the other ring already attached to the bottom side. You have created a round film-holder with AstroSolar® Photo Film 3.8 cleanly and securely fastened, without creases and wrinkles but, most of all: without stressing the film!













10. Finally, securely glue the holder containing the AstroSolar® Photo Film 3.8 onto the 50mm cylinder while the cylinder is still mounted at the front end of your telescope.







Your homemade solar filter for visual and photographic use is now ready! Store it properly! **Do NOT use AstroSolar® Photo Film 3.8 for visual observation**

Important note: AstroSolar® Photo Film 3.8 is not authorized to be used for visual solar observation or production of solar viewers, it solely serves to achieve shortest possible exposure times for imaging the sun with digital cameras. For solar viewing with a telescope or binocular, inquire for AstroSolar Safety® Film 5.0. For direct solar viewing without additional optics, inquire for our ISO 12312-2:2015-11 certified eclipse shades equipped with AstroSolar® Silver/Gold Film.

Use AstroSolar® Photo Film 3.8 for...

