

# Orion® Variable Polarizing Filter

#5560 1.25" Version

#5562 2" Version

The Orion variable polarizing filter reduces the amount of light entering your eyepiece from your telescope. You can dim the view when observing a bright object, such as the Moon or a planet. The variable polarizing filter will not change the color of the object being viewed, and will prevent eye fatigue and loss of night vision.



**Figure 1.** Assembling the 1.25" Variable Polarizing Filter.

## Assembly

The 1.25" variable polarizing filter comes in two halves; the upper half, with the knurled ring, and the lower half, with the logo. To assemble, simply thread the lower half into the upper half until it is finger tight (Figure 1). The top ring of the filter should now turn freely without unthreading the two halves. You can look through the filter at a source of light while turning the ring to see the effect it has in reducing light. To separate the two halves, hold the filter by the knurled ring on the upper half and unthread the lower half. The 2" variable polarizing filter comes already assembled in its case.

To use the filter in a telescope, simply thread the assembled filter into any telescope eyepiece that accepts 1.25"(for #5560) or 2" (for #5562) filter threads, such as any Orion eyepiece. Thread the filter into the eyepiece until it is finger tight.

You may also "stack" other filters by threading them into the bottom of the variable polarizer.

## Using the Polarizing Filter

Insert the eyepiece with the filter attached into the telescope and focus the image. If the image is too bright or too dark, then remove the eyepiece and rotate the ring on the filter a small amount. Don't turn it too much, as the filter goes from its maximum light transmission to its minimum transmission in just a 1/4 turn of the ring. Re-insert the eyepiece and check the image again. Repeat this process until you have the desired level of brightness.

## Terrestrial Viewing

The variable polarizing filter can be used during the day to reduce sunlight glare from lakes, oceans, or window glass. Simply unthread the lower half from the upper half of the filter and thread either half into a eyepiece. Once the eyepiece is returned to the telescope and focused, rotate it in the focuser to reduce glare. You will not be able to reduce overall brightness by using only one filter, but you will be surprised at how much control you have over reflected light.

## Cleaning & Maintenance

When not in use, the variable polarizing filter should be kept in its original padded case. Given proper care and storage, the filter

should last a lifetime. Should the filter need cleaning for any reason, use the following directions to clean the filter without damaging it.

Any quality optical lens cleaning tissue and optical lens cleaning fluid specifically designed for multi-coated optics can be used to clean the glass surfaces of your filter. Never use regular glass cleaner or cleaning fluid designed for eyeglasses.

Before cleaning with fluid and tissue, blow any loose particles off the surface with a blower bulb or compressed air. Then apply some cleaning fluid to a tissue, never directly on the optics. Wipe the lens gently in a circular motion, then remove any excess fluid with a fresh lens tissue. Oily fingerprints and smudges may be removed using this method. Use caution; rubbing too hard may scratch the glass.

## Specifications

Filter Material: Polarized optical glass

Coatings: Coated with MgF<sub>2</sub> to reduce reflections

Maximum Transmission: 40%

Minimum Transmission: 1%

Housing: Anodized aluminum

## One-Year Limited Warranty

The Orion Variable Polarizing Filter is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. If the product is not registered, proof of purchase (such as a copy of the original invoice) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Customer Service Department, Orion Telescopes & Binoculars, 89 Hangar Way, Watsonville, CA 95076; (800) 676-1343.

**Customer Support (800) 676-1343**

**E-mail: support@telescope.com**

**Corporate Offices (831) 763-7000**

**89 Hangar Way, Watsonville, CA 95076**

  
**ORION®**  
**TELESCOPES & BINOCULARS**  
*Providing Exceptional Consumer Optical Products Since 1975*