# **INSTRUCTION MANUAL**

# **Orion**<sup>®</sup> Mars Filter Set

#5591



Figure 1. The Orion Mars Filter Set

The Orion Mars Filter Set allows you to view our second closest celestial neighbor in exceptional detail. Specifically designed to ferret out resolution of Martian polar regions, highland mountain ranges, and expansive mare flatlands, the Orion Mars Filter Set is an invaluable tool for any planetary viewer with an interest in the red planet.

### **Using the Mars Filter Set**

To use the Mars filter set you will need to thread a single filter into a 1.25" eyepiece that can accept threaded filters. Simply thread the filter into the eyepiece barrel until it is finger tight. Although not necessarily recommended for viewing Mars, you may also try "stacking" multiple filters by threading another into the bottom of the first.

After threading a filter into the eyepiece, place the eyepiece into your telescope's focuser and bring it into focus. You should now be able to observe Martian landscape features in detail.

### **Using the Filters**

The following paragraphs can be used as a guide to what features each filter will accentuate.

**Mars Filter:** An excellent multi-purpose filter for viewing all features of Mars. Polar caps stand out prominently. Landscape features like mare and highland mountain ranges are easily separated and resolved. Polar hazes and cloud cover become visible.

**No. 82A Blue Filter:** A great polar cap filter. Crisp, sharp views of the Martian icecaps seem to pop out of the eyepiece. Atmospheric clouds resolve extremely well with this filter.

**No. 21 Orange Filter:** This filter excels at improving contrast of mare landscapes as well as bringing out polar region detail. Intermittent surface dust clouds become easily visible with this filter.

#### **Care and Storage**

When not in use, your filters should be kept in its original foamlined case. Given proper care and storage, the filters should last a lifetime. Should a 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 the 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 filter glass. Do not remove the filter glass from its housing for cleaning.

## **One-Year Limited Warranty**

This Orion Mars Filter Set 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.

This warranty specifically does not cover abuse, modification, mishandling, self-repair, or normal wear and tear (including mold growth).

If the product is not registered, proof of purchase (such as a copy of the original invoice) is required. 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.



#### Customer Support (800)676-1343 E-mail: support@telescope.com

Corporate Offices (831) 763-7000 89 Hangar Way, Watsonville, CA 95076