

**saxon**

High quality optics

# Instruction Manual

saxon Grandeur Brass Telescope



**WARNING!**

- Do not use the telescope to look at the sun without an appropriate solar filter. Looking at or near the sun can result in irreversible eye damage.
- Do not use your telescope to project an image of the sun onto any surface. The internal heat build-up from the projection can damage the telescope and any accessories attached to it.
- Your telescope is a precision optical instrument and should be handled with care at all times.
- Make sure no screws are loose before using your telescope.
- Do not drop or shake your telescope as such impacts may damage or misalign the optics in your instrument.
- Children should always have adult supervision when using the telescope.

# Setting up your saxon Grandeur Brass Telescope

There are 5 components in your telescope:

- A. Optical tube assembly with alt-azimuth mount
- B. 3 x legs
- C. 3 x brass bolts with dome nuts and red fiber washers
- D. 1 x accessory tray
- E. 1 x finderscope
- F. 2 x finderscope brackets with rings
- G. 4 x knurled thumbscrews
- H. 6 x adjustment screws

## Instructions

1. Remove all parts from the box and place them on a flat surface.
2. Locate the tripod legs and loosen the tripod leg knobs. Pull the legs until it is fully extended and then retighten knobs. Place the extended legs on a soft, flat surface such as on the carpet or on a blanket.
3. Remove the dome nuts from each of the bolts and slide the red fiber washer into the bolt.
4. You will need to attach the tripod legs to the alt-azimuth mount. To do so, align the holes of the tripod legs with the holes in the mount. Secure each leg by inserting the bolt with washer into the hole, and secure with a washer and nut. Tighten the bolts.

When attaching the tripod legs to the mount, make sure the hinged brass plates on each leg is facing inward. You will need to attach the accessory tray to these plates later.

5. Once all three tripod legs are fitted, slowly spread them outwards, making sure it is stable.
6. Attach the accessory tray to the tripod legs by threading the screw and washer at the top of the tray and securing with a washer and wing nut. The plates on the tripod legs will fit under the accessory tray when attached.

7. Tighten the bolts holding the legs to the mount using a spanner or a pair of pliers. Ensure the dome nuts are covered in cloth to prevent damage to the surface.

## Attaching your accessories

1. Locate the finderscope and two finderscope brackets with rings. Position the brackets on the tube so that the holes in the base of the brackets line up with the holes on the tube. Insert the knurled thumbscrews into the holes and tighten securely.
2. Loosen the six adjustment screws located in the finderscope bracket rings as you will need them to cradle the finderscope. Hold the finderscope in the middle of the two rings and tighten the screws to lock the finderscope in place.

Do not overtighten the screws as you may scratch the surface of the finderscope.

3. Remove the dust blockade cap from the focuser and loosen the lock screws. Locate the diagonal and slide the chrome barrel of the diagonal in the focuser. Tighten the screws to hold the diagonal in place.
4. Locate the eyepiece. Loosen the lock screws and slide the chrome barrel of the eyepiece into the focus tube. Tighten the screws to hold the eyepiece in place.
5. Remove the dust cap on the optical tube before viewing.

## Operating your telescope

### *Positioning your telescope*

You can position your telescope to your desired angle by moving the optical tube up and down in altitude, or left to right in azimuth.

To move the telescope in the azimuth direction:

1. Make sure that the azimuth lock knob is loosen by turning it counter-clockwise and holding the telescope by the mount.
2. Adjust the optical tube to point towards your desired object.
3. Retighten the azimuth lock knob to ensure the telescope stays in position.

To move the telescope in the altitude direction, flip the altitude lock lever down, take hold of the end of the optical tube and move the tube or down as desired. Once adjusted, flip the lever up to lock the optical tube in place.

### ***Aligning your finderscope***

To align your finderscope, locate a distant object in the daytime and center it in a low power eyepiece in the telescope. Look through the finderscope and take notice of the position of the same object.

Without moving the main telescope, turn the adjustment thumbscrews located around the finderscope bracket until the crosshairs of the finderscope are centered on the alignment object.

### ***Finding objects***

Loosen the altitude and the azimuth lock knobs then move the telescope to your desired viewing point. Look through the finderscope and adjust the telescope until the object appears in the field of view. Tighten the altitude and azimuth lock knobs.

To center the object in the eyepiece, rotate the fine adjustment ring located on the altitude slow motion rod assembly.

### ***Focusing your telescope***

To focus your telescope, simply turn the focus knob located directly below the eyepiece until the image in the eyepiece is sharp.

To focus on an object that is:

1. Further than the one you are currently observing – Turn the Focus Knob clockwise
2. Closer than the one you are currently observing – Turn the Focus Knob counter-clockwise

Ensure that the Focus Knob is not handled roughly as this may result in the focusing mechanism being damaged.

# Caring for and cleaning your telescope

To ensure your telescope performs at its best, regular maintenance of your telescope is recommended.

Remember to replace the dust cap over the end of the telescope whenever it is not in use. This will prevent dust from settling on the mirror or lens surface.

You must take care when cleaning the mirror or lens surface, and to only do so with the appropriate cleaning tools. We recommend using a combination of the following:

- A soft brush made from camel hair
- A can of pressurized air to remove dust
- Optical cleaning solution and a soft cloth
- Special lens paper

If dust has built up on the optics, remove it with a brush or a can of pressurized air. Spray at an angle to the glass surface for approximately two to four seconds. Then, use an optical cleaning solution and a soft cloth to remove any remaining debris. Low pressure strokes should go from the center of the lens or mirror to the outer portion. Ensure that you do not rub in circles.

You can use a commercially made lens cleaner or mix your own. A good cleaning solution is isopropyl alcohol (60%) mixed with distilled water (40%).

Clean the eyepieces with the special lens paper. Handle the eyepieces with care and avoid touching the optical surface.

You may experience dew build-up on the optics of your telescope during an observing session. You must remove the dew to continue observing. You can do so by using a hair dryer on low setting or by pointing the telescope downwards until the dew evaporates.

If moisture condenses on the inside of the optics, remove the accessories from the telescope. Place the telescope in a dust-free environment and point it downwards. This will remove the moisture from the optical tube.

To maintain the brass components of your telescope, wipe them down with hot, soapy water and a soft lint-free cleaning cloth. Wipe down again with warm water and dry thoroughly.

Avoid using highly abrasive scrubbing cloths, metal-bristled brushes, or steel wool; these will scratch the surface of the brass.

To prevent tarnishing, apply a thin coating of mineral oil to a soft cloth and wipe the brass components thoroughly. Do not overcoat your brass as it may cause smudging.

Regular cleaning and polishing with a soft cloth will help keep your brass accents clean and shiny.

## saxon Grandeur Brass Telescope Specifications

<i>Specifications</i>	
<i>Optical design</i>	Refractor
<i>Aperture</i>	80mm
<i>Focal length</i>	900mm
<i>Focal ratio</i>	F/11.3
<i>Focuser diameter</i>	1.25"
<i>Eyepieces</i>	Plossl 25mm
<i>Barlow lens</i>	N/A
<i>Finderscope</i>	6x30
<i>Diagonal</i>	90°, 1.25"
<i>Mount type</i>	Alt-Azimuth
<i>Accessory tray</i>	Yes
<i>Tripod</i>	Mahogany Hardwood