

Use and Care of your

Jason

FINE QUALITY TELESCOPE

STEPS IN OBSERVING

A steady mount is important. Whether your telescope is equipped with a table tripod or floor tripod, be certain that it is set up so that it is steady and comfortable for you to use. Due to the very powerful magnification, any slight movement while viewing will cause the image being viewed to become distorted or out of focus.

For viewing, start focusing by extending the drawtube all the way out using a slightly spiral motion.

On models equipped with rack and pinion gears, simply turn the focusing knob until the tube is fully extended. Then, for celestial viewing, insert the diagonal prism into the drawtube. The diagonal prism allows you to observe objects high in the sky comfortably.

Some models are equipped with more than one eyepiece. Use the lower power eyepiece first. Beginners tend to use their most powerful eyepieces too much. Low power is preferable when viewing large areas of the sky and when trying to locate a faint object. A more powerful eyepiece can be used after an object has been located. Higher power is needed for seeing fine de-

tail and detecting dim objects. However, as you increase magnification, remember that the field of view gets smaller and objects tend to lose sharpness.

Eyepieces simply slip into the diagonal prism if it is being used, or into the end of the drawtube when the diagonal prism is not in use.

With the drawtube fully extended, aim your telescope at the moon or other bright object and slowly close the drawtube until the object comes into rough focus. The drawtube must be closed slowly. Remember that your Jason telescope is a powerful instrument and it may be difficult to focus at first. However, after you have gained some experience with your telescope, focusing will become easy.

On models equipped with a finderscope, adjust the finderscope so that the cross hairs coincide with the object seen in the center of the field of the main scope. Then, once set, it will aid you in locating distant objects that your more powerful scope lens would have difficulty finding.

A word about conditions for observing. Local conditions always put a limit on what can be observed. Dim objects can become

lost in the glow of city lights. Rising warm air can cause an object to become distorted. Turbulence in the air may also cause objects to become distorted. Strangely enough, the clearest night is not always the best for observing. A slightly hazy sky with relatively still air is preferred.

ACCESSORIES

Some Jason telescope models include the following accessories which will add to your viewing pleasure:

Erecting Prism: An erecting prism turns the field right side up for earth bound viewing. Normally all objects appear upside down in a celestial telescope. The erecting prism is inserted in the end of the drawtube.

Barlow Lens: The Barlow lens is a 2x attachment and doubles the magnification of each of the eyepieces of your telescope. For example, when used with a 50x eyepiece, the magnification becomes 100x. The Barlow lens is inserted into the drawtube, and fits only the more advanced models.

Solar Filter: This is for viewing sunspots and other solar phenomenon. The filter may

be threaded into the smaller end of the eyepiece. Please use caution when viewing the sun. Do it for short periods of not more than a minute or two at a time and NEVER without a filter.

CARE OF THE TELESCOPE

Dust, moisture and sudden and extreme changes of temperatures are your enemies. When not in use, keep the ends of your telescope covered and never allow fingers to touch the optical surfaces.

Optical tissues and the moisture of your breath may be used to clean the lens. A camel's hair brush will remove dust and lint.

Avoid jars and jolts. With the proper care in handling and use, your Jason telescope should remain in perfect condition even after protracted use. With care, you will enjoy it for years to come.

A WORD OF CAUTION: High magnification limits the amount of light that reaches the eye. Therefore, a loss of clarity is always to be expected as power gets higher. A small telescope cannot give the same brightness and clarity as an observatory instrument. Don't expect too much.

Your Jason telescope will give you the finest view—for its size—that any instrument can give.

ENJOY YOUR JASON TELESCOPE

It is fun to know the heavens and world around you. The earth and sky offer you a whole realm of wonders to be explored.

With your Jason telescope, you will be able to observe and enjoy many of nature's wonders.

Nature also has provided a fascinating micro-world of plants and animals to be explored. You will enjoy observing this mysterious field with a precision Jason microscope available at your dealers.

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SPECIAL INSTRUCTIONS FOR

MODEL #311 JASON 280x60 "CONSTELLATION" TELESCOPE

INSTRUCTIONS FOR ASSEMBLY:

1. Remove tripod from the box and extend legs to the desired length. Tighten the thumb screws on legs so they are steady and secure. This is very important as the slightest motion of the legs will badly distort the image.

2. Carefully place the telescope tube into the mounting assembly. Line up the holes on the side with screws and tighten enough to hold tube securely; do not fasten too strongly as this will cause undue strain.

3. All lenses and accessories fit easily into the drawtube and can be readily inserted.

4. The finderscope mounts on the left side of the telescope tube. If it is not already mounted, remove screws, place finderscope over the holes you see on the tube. Replace the screws, being certain that they are tightened securely.

ACCESSORIES:

The Model #311 Jason telescope is packed with several accessories that will add to your viewing convenience and pleasure. Therefore, before using your telescope it will be well to spend a moment studying these accessories:

Diagonal Prism: The diagonal prism permits comfortable viewing of objects high in the sky. It allows you to look down into the telescope and see the sky without bending. The diagonal prism may be inserted into the drawtube itself. One of the ocular lenses is then inserted directly into the prism.

Sun Filter: This filter is provided for safe viewing of sunspots and other solar phenomenon. The filter may be threaded into the smaller end of each of the eyepieces. Use caution when viewing the sun -- do it for short periods of not more than a minute or two, and never without the filter. The sun filter is screwed to the end of one of the ocular lenses, and should be removed for any viewing other than solar.

1.5x Erecting Lens: This unusual extra serves a dual function: the most important one is to convert the visual image right side up. (Celestial telescopes always present an upside-down image, which is satisfactory in viewing the heavens, but not suitable for viewing landscapes.) Its second function is to increase the magnifying power by 50 %. Thus when it is used with the 15 mm ocular lens the maghifying power becomes 70x. The erecting lens is attached to the drawtube itself and the ocular lens is then slipped into the erecting lengs. Use of the erecting lens is not recommended with the 5 mm or 10 mm eyepieces because it too severely limits the incoming light to render a clear image.

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2x Barlow Lens: This Barlow lens is a 2x attachment which doubles the magnification of each of the eyepieces of your telescope. The exact magnification increase is listed below in the discussion of lenses. The Barlow lens is inserted directly into the drawtube and the ocular lenses can then be inserted into it. (The Barlow lens should NOT be used in conjunction with either the diagonal prism or the 1.5x erecting lens. The source of light will not render any adequate view if these accessories are used in combination.)

Finder Scope: The finder scope will aid you in locating distant objects that your more powerful scope lens would have difficulty finding. Adjust the finder scope so that the cross hairs coincide with the object seen in the center of the field of the main scope. Then, once set, it will aid you in locating distant objects.

HOW TO USE:

You must first select the proper lens for viewing. In general, it is much better to select a lower-power lens to begin with. Your Jason telescope is packed with a choice of 3 lenses, each of which may be combined with a Barlow lens -- thus giving you a choice of 5 powers as follows:

	with diagonal prism	with Barlow lens
5 mm. lens	140x	280x
10 mm. lens	70x	140x
15 mm. lens	47x	94x

Having previously adjusted the finderscope, you may now use it to locate the celestial body which you wish to view. The moon would be a good beginning choice. It will also be well to begin your viewing by using the diagonal prism, which should be inserted directly into the tube. You should then insert the 15 mm lens to commence viewing at a magnification of 47 times.

To focus, turn the focusing knob until the drawtube is fully extended. Then, placing your eye to the lens, slowly close the drawtube until the object comes into focus. As stated, it is easier to use your 47x eyepiece first. You can then switch to the more powerful eyepiece and add the 2x Barlow lens for greater magnification. However, high magnification limits the amount of light that reaches the eye. Therefore, a loss of clarity is always to be expected when you increase the magnification.

Exercise care in viewing. Remember that a telescope is used for viewing distant objects. It cannot, and should not, do the work of binoculars. This telescope is made primarily for celestial viewing and will not produce a satisfactory image of any object which is not at least one mile away.

ENJOY YOUR JASON TELESCOPE:

It is fun to know the world around you. With your Jason telescope, plus a little study and patience, you will be able to observe many of nature's wonders. The more you pursue your studies the more you will enjoy the telescope. Be sure, too, to read the accompanying little booklet on its care.

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