

SKELESCOPE™

REFLECTOR TELESCOPE WITH TABLE TOP TRIPOD



SK-100 INSTRUCTION MANUAL

CARSON®

TABLE OF CONTENTS

Introduction	2
Box Contents / Visual Key Diagram	3
Telescope Assembly	4-5
• Setting up Your Telescope	
• Attaching Tripod Legs to Mount	
• Attaching Telescope to Mount	
• Attaching Eyepieces	
Using the Telescope	5-7
Calculating Power	7
Care and Maintenance of Your Telescope	8
Specifications	8
Warnings	9
Customer Service	9
Warranty Information	9-10

Congratulations on your purchase of a Carson SK-100 SkeleScope™ telescope. This telescope features an easy-to-use design that is perfect for beginning astronomers looking to explore the wonders of outer space and the world around them. Please read this manual carefully to ensure that you assemble and use your telescope correctly. When used properly, your Skelescope™ telescope should provide years of exciting observations of space and terrestrial objects alike.

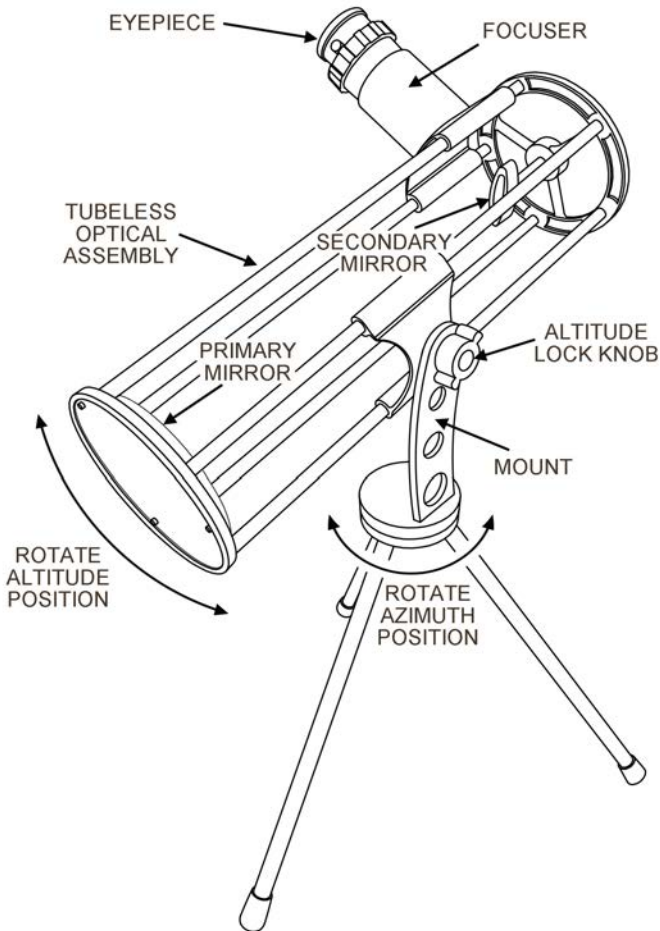
IMPORTANT: DO NOT USE YOUR SKELESCOPE™ TELESCOPE TO LOOK AT OR NEAR THE SUN! DOING SO WILL CAUSE INSTANT AND PERMANENT EYE DAMAGE.

BOX CONTENTS

- Tubeless optical assembly
- Tabletop tripod with mount
- 10mm Kellner eyepiece (1.25" O.D.)
- 25mm Kellner eyepiece (1.25" O.D.)

Please unpack your telescope carefully and make sure that all accessories are included in the box.

VISUAL KEY DIAGRAM



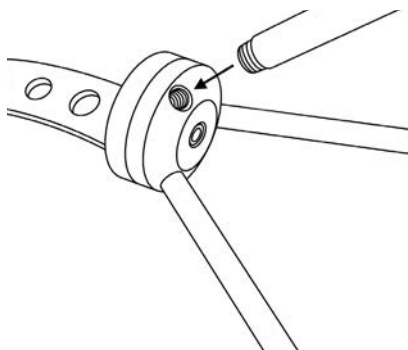
TELESCOPE ASSEMBLY

Setting Up Your Telescope:

- Carefully remove the components from the box.

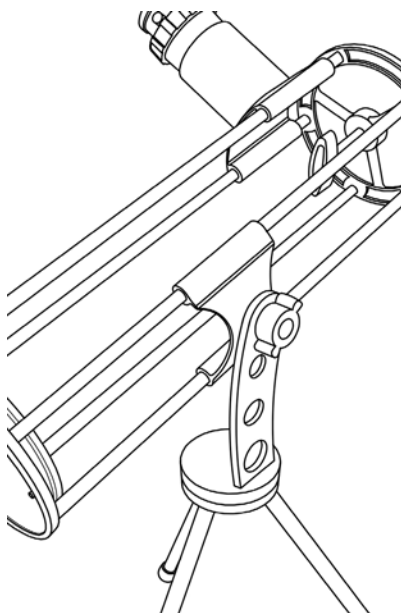
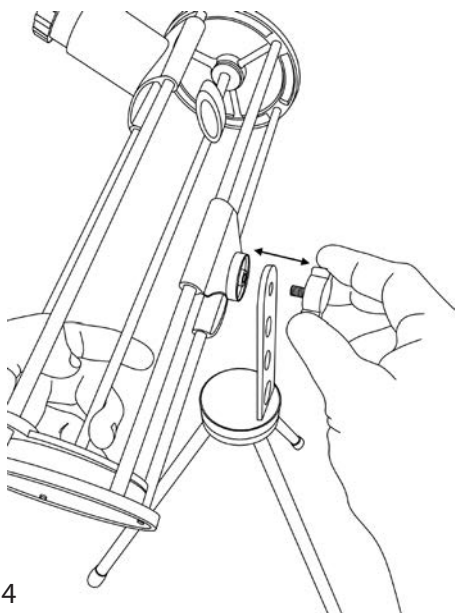
Attaching Tripod Legs To Mount:

- Twist each tripod leg into corresponding holes in mount.
Do not overtighten.
- Rotate rubber feet so that the flat portion is flush to the table.



Attaching Telescope To Mount:

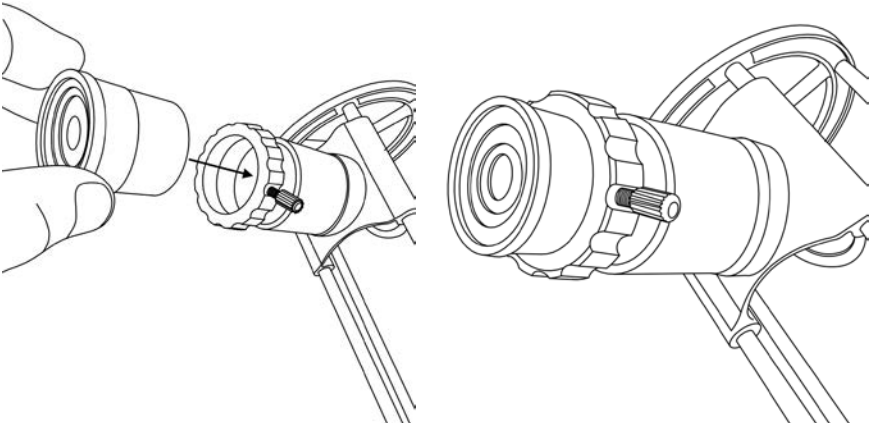
- Remove altitude lock knob.
- Align top hole in mount with screw hole in mounting bracket. Make sure eyepiece is pointing upward.
- Insert altitude lock knob through top hole in mount and screw into hole in mounting bracket until secure. Do not overtighten.



TELESCOPE ASSEMBLY CONT.

Attaching Eyepieces:

- Loosen thumbscrew in focuser.
- Select an eyepiece and insert into focuser.
- Tighten thumbscrew to secure eyepiece in place. Do not overtighten as it may damage eyepiece.
- Make sure to loosen thumbscrew before removing eyepieces from focuser.



USING THE TELESCOPE

Once you have properly assembled your telescope you are ready to start using it. Please refer to the visual key diagram while reading these instructions.

First, place your telescope on a stable surface. Make sure all rubber feet on tripod are rotated so the flat section is flush to the surface.

- Remove the rubber dust cover from the primary mirror and set aside.
- Insert the desired eyepiece. It is best to use the lowest power eyepiece (the Kellner 25mm eyepiece) at first. This allows for a wider field of view making it easier to locate objects. Once the viewing object is visible, focused and centered in the field of view you can switch the eyepiece to the higher magnification.
- To locate an object using the telescope, first loosen the altitude lock knob allowing the telescope to rotate freely along both axes.

USING THE TELESCOPE CONT.

- Aim the tubeless optical assembly at your desired target by rotating the azimuth position left or right. Look through the eyepiece at the desired target, and make altitude adjustments by moving the tubeless optical assembly vertically by hand. When the altitude direction is aligned, you may retighten the altitude lock knob.
- Once the object is centered in the field of view, turn the focuser until the image is clear and sharp.
- For best results, position your eye as close as possible to the eyepiece lens. This is especially important when using the higher power 10mm eyepiece.
- Replace dust cover on primary mirror when not in use.

There are many conditions that may affect your ability to focus or observe celestial objects clearly.

- Brightly lit areas (light pollution) will make it difficult to see faint objects in the sky. It will also make it difficult for your eyes to adjust to the dark. You should try and find a dark area and allow your eyes to adjust to the dark before making observations. Using a red filtered flashlight to view charts and your telescope components is recommended to preserve your night sight. The best viewing conditions are when the sky is inky black.
- Hazy skies, pollution, clouds and moisture can all affect the clarity of your viewing image.
- Due to the tubeless construction of this telescope, the primary and secondary mirrors are exposed to possible dust, debris and fingerprints. Be careful to avoid touching these mirrors and exposing them to excessive debris. Refer to the Care and Maintenance section of this manual for instructions on how to clean your telescope. Always replace the dust cover over primary mirror when not in use.
- Avoid touching the eyepiece or optical assembly while looking through the telescope. The vibrations caused by this contact will cause the object you are looking at to move. You should also make sure that the surface you place your telescope on does not vibrate or move as this will also cause your viewing object to move.
- You should avoid setting up your telescope inside a room looking through an open window. The difference in air temperatures may result in a blurry image.

USING THE TELESCOPE CONT.

- Viewing through a closed window might also result in a distorted image due to the varying densities of window glass.
- Avoid viewing objects that are low on the horizon. Objects that are higher up in the sky will appear much sharper.
- Sudden changes in temperature may cause condensation to appear on the optical components of the telescope. It is best to set up your telescope ahead of time and then wait while the telescope adjusts to the new temperature before using it.

CALCULATING POWER

The magnification of a telescope depends on both the focal length of your telescope as well as the eyepiece you use. There is a simple formula you can use to determine the magnification you are using at any given time. Simply divide the focal length of the telescope by the focal length of the eyepiece. There are two possible magnification settings for your SK-100 telescope:

$$\text{Power} = 360\text{mm} / 25\text{mm} = 14.4\text{x}$$

$$\text{Power} = 360\text{mm} / 10\text{mm} = 36\text{x}$$

CARE AND MAINTENANCE

- The primary mirror and secondary mirror must remain precisely aligned in order for this telescope to work properly. Avoid dropping or jarring the telescope, or moving the mirrors by hand.
- Always replace dust covers and lens caps and store in box when not in use. This will minimize the amount of dust and debris that gets into your telescope.
- Cleaning should be performed only if absolutely necessary. Be careful to avoid touching the internal mirrors and exposing them to excessive debris. In the event that these mirrors become dirty, first use compressed air to remove dust and debris. If any debris or fingerprints remain, use a soft lens cloth or cotton balls with very light pressure and warm water to remove them. A mixture of water and dish soap may be used to remove any stubborn debris. Be careful not to scrub the surface of the mirror or use any abrasive material, harsh chemicals or solvent as this may damage the surface of the mirror.
- If dew collects on the optics of your telescope or moisture condenses on the optics, remove all accessories and place the telescope in a dry, dust free environment and point the telescope downward. This should help eliminate the moisture.
- Do not attempt to take apart your telescope to clean it.

SPECIFICATIONS

Optical Design:	Reflector
Aperture:	76mm
Focal Length:	360mm
Eyepiece 1:	Kellner 25mm
Magnification 1:	14.4x
Eyepiece 2:	Kellner 10mm
Magnification 2:	36x
Weight:	1.3 lbs.

WARNINGS

- Never use this telescope to look directly at or near the sun. Viewing the sun can cause instant and irreversible eye damage.
- Always supervise children when using this telescope.
- Do not leave telescope unattended at any time. Untrained adults or children may not be familiar with the correct operating procedure.
- Do not point the telescope at the sun even when you are not looking through it. This will cause internal damage to the telescope.
- Handle this telescope with care. Rough handling might knock the internal optical components out of alignment.

CUSTOMER SERVICE

We will be happy to help you with any problems you may experience while using your telescope.

Please call our toll-free customer service line at 1-800-967-8427.

WARRANTY INFORMATION

- This Carson product is warranted to be free from defects in material and workmanship for a period of one year from date of purchase. During this period Carson will, at its option and without charge, either repair any part or assembly of parts found to be defective in material or workmanship, or replace this Carson product with a Carson product of comparable value and condition, subject to the limitations and exclusions noted herein. This warranty extends to the original purchaser only and is not assignable or transferable. It shall not apply to any product that has been subject to misuse, abuse, negligence or accident, or to any defects or damage directly or indirectly caused by the use of unauthorized replacement parts and/or service performed by unauthorized personnel. This warranty gives you specific legal rights, and you may also have other rights which could vary from state to state. Some states do not allow limitations on the life of an implied warranty and/or do not allow excluding or limiting incidental or consequential damages. If so, the above limitations or exclusions may not apply to you.

WARRANTY INFORMATION CONT.

- Provide proof of purchase. A receipt or other dated proof of purchase must be included with merchandise being returned for a warranty claim to be processed. Call or write for authorization. Before returning any product for a warranty claim, a Return Authorization (RA) number must be obtained. No merchandise will be accepted without an RA, and failure to obtain an RA will prevent or delay processing of the warranty claim. To obtain an RA call 631-963-5000, or write to Carson Warranty Service, 2070 5th Avenue, Ronkonkoma NY, 11779 with a description of the problem. Include your name, address and telephone number. Package the return carefully. Shippers will not reimburse for damages due to insufficient packaging, even if the merchandise is insured. Print the RA number prominently on the top of the package. Prepay shipping. Insure the package. Send it to Carson Warranty Service, 2070 5th Avenue, Ronkonkoma NY, 11779. Merchandise must be shipped prepaid. Carson will not accept merchandise C.O.D.

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