



FIRSTSCOPE INSTRUCTION MANUAL

CELESTRON SUPPORTS THE NATIONAL PARK FOUNDATION
IN ITS MISSION TO PRESERVE AMERICA'S NATIONAL PARKS



FIRSTSCOPE
Model #22025

WHAT'S IN THE BOX

We recommend saving your telescope box so it can be used to store the telescope when it is not in use. Unpack the box carefully as some parts are small. Use the parts list below to verify that all parts and accessories are present.

PARTS LIST



Fig. 1

! SOLAR WARNING

Never look directly at the Sun with the naked eye or with a telescope unless you have the proper solar filter. Permanent and irreversible eye damage may result.

Never use your telescope to project an image of the Sun onto any surface. Internal heat build-up can damage the telescope and any accessories attached to it.

Never use an eyepiece solar filter or a Herschel wedge. Internal heat build-up inside the telescope can cause these devices to crack or break, allowing unfiltered sunlight to pass through to the eye.

Do not leave the telescope unsupervised, especially when children or adults unfamiliar with the correct operating procedures of your telescope are present.

ASSEMBLING YOUR TELESCOPE

THE MOUNT & TELESCOPE TUBE

Your FirstScope's mount and telescope tube are fully assembled. Simply remove the telescope and mount from the box and set it on a stable surface, such as a table or picnic bench. Be sure to use a support that allows you easy access to the eyepiece as you move the telescope around the sky.

Your FirstScope's altazimuth mount was designed to rotate smoothly up, down, left or right with just a gentle push from your fingers, making it easy to track celestial objects as they appear to drift across the night sky.

The tension in the up and down direction is adjustable to accommodate different weights of eyepieces. Turning the knob counter-clockwise decreases the tension making it easier to move, while turning the knob clockwise increases tension. Set the tension at a comfortable level so the telescope will not move downward in response to gravity.

Unlike fixed targets on the ground, astronomical targets appear to move across the sky. This is caused by Earth's rotation. When you look at a celestial target in your telescope, such as the Moon or a planet, it will appear to slowly drift across the field of view of your eyepiece. In order to keep the object centered in the field of view, you will have to nudge the mount in altitude and azimuth.

THE EYEPIECES

The FirstScope comes with two eyepieces, one low power (20 mm eyepiece) and one higher power (10 mm eyepiece). Whenever you set up your telescope, always start with the 20 mm eyepiece. Once you have your target centered in the 20 mm eyepiece, you can switch to your higher power 10 mm eyepiece to get a more detailed view.

Note that because your telescope is designed for astronomical use, images of terrestrial objects will appear upside-down. This is perfectly normal.

To install an eyepiece:

1. Loosen the two silver setscrews on the focuser and pull out the small plastic dust cap.
2. Insert the silver barrel on the bottom of the eyepiece into the focuser.
3. Tighten the two setscrews to secure the eyepiece.
4. To see the sharpest image possible, you need to focus the eyepiece. To focus, look through the eyepiece and slowly turn the focusing



Fig. 2

YOUR FIRST ASTRONOMICAL OBSERVING SESSION

THE MOON

Now you are ready to take your telescope out at night and do some real observing!

Let's start with the Moon. The Moon takes about one month to go through a complete phase cycle, from New Moon to Full Moon and back again. Try observing it at different points during this cycle.

While you can observe the Moon any time it is visible in the night sky, the best time to view it is from two days after a New Moon up to a few days before a Full Moon. During this period, you will be able to see the most detail in craters and lunar mountain ranges. Consult a calendar to find out when the next New Moon will be.

1. With a clear view of the Moon, set up your telescope with the 20 mm eyepiece.
2. Roughly point the telescope toward the moon by sighting down the length of the tube.
3. Look through the 20 mm eyepiece. Gently turn the focus knobs to adjust the sharpness of the image.

CONGRATULATIONS! YOU HAVE NOW OBSERVED YOUR FIRST CELESTIAL OBJECT!

To get a closer view of the Moon, replace the 20 mm eyepiece with the 10 mm eyepiece. It will give you more magnification, making the Moon appear much larger. You may need to adjust the focus knobs when you change eyepieces to ensure you are getting the sharpest image.

You can view many other celestial objects, such as planets, star clusters and nebulae using this same basic technique.

For more tips for astronomical observing please visit
ExploreTheSky.com

There you will find comprehensive tips to help you get the most from your new telescope including:

- How to observe the planets
- How to locate and observe stars, double stars, star clusters
- How to observe deep-sky objects such as nebulae and galaxies
- How to choose a good location for astronomical observing
- How to evaluate sky conditions

CELESTRON TWO YEAR LIMITED WARRANTY

A. Celestron warrants your telescope to be free from defects in materials and workmanship for two years. Celestron will repair or replace such product or part thereof which, upon inspection by Celestron, is found to be defective in materials or workmanship. As a condition to the obligation of Celestron to repair or replace such product, the product must be returned to Celestron together with proof-of-purchase satisfactory to Celestron.

B. The Proper Return Authorization Number must be obtained from Celestron in advance of return. Call Celestron at (310) 328-9560 to receive the number to be displayed on the outside of your shipping container.

All returns must be accompanied by a written statement setting forth the name, address, and daytime telephone number of the owner, together with a brief description of any claimed defects. Parts or product for which replacement is made shall become the property of Celestron.

The customer shall be responsible for all costs of transportation and insurance, both to and from the factory of Celestron, and shall be required to prepay such costs.

Celestron shall use reasonable efforts to repair or replace any telescope covered by this warranty within thirty days of receipt. In the event repair or replacement shall require more than thirty days, Celestron shall notify the customer accordingly. Celestron reserves the right to replace any product which has been discontinued from its product line with a new product of comparable value and function.

This warranty shall be void and of no force or effect in the event a covered product has been modified in design or function, or subjected to abuse, misuse, mishandling or unauthorized repair. Further, product malfunction or deterioration due to normal wear is not covered by this warranty.

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Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Celestron reserves the right to modify or discontinue, without prior notice to you, any model or style telescope.

If warranty problems arise, or if you need assistance in using your telescope contact:



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celestron.com
2835 Columbia Street • Torrance, CA
90503 U.S.A.
Telephone: 800.421.9649
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NOTE: This warranty is valid to U.S.A. and Canadian customers who have purchased this product from an authorized Celestron dealer in the U.S.A. or Canada. Warranty outside the U.S.A. and Canada is valid only to customers who purchased from a Celestron's International Distributor or Authorized Celestron Dealer in the specific country. Please contact them for any warranty service.