

Celestron Travel Scope 70 DX

Celestron Travel Scope 70DX Portable Refractor Telescope Instruction Manual

Brand: Celestron | Model: Travel Scope 70 DX

1. INTRODUCTION AND OVERVIEW

The Celestron Travel Scope 70DX is a compact, portable refractor telescope designed for observing distant landscapes during the day and celestial objects like the Moon and stars at night. It features fully coated glass optics and a 70mm aperture for brighter, sharper images. This telescope is designed for ease of use, making it suitable for beginners and families.

Key features include:

- **Bright, Sharp Views:** Fully coated glass lenses and a 70mm aperture provide clear views of both terrestrial and celestial targets.
- **Beginner-Friendly:** Quick setup and straightforward operation.
- **Portable Design:** Lightweight and includes a custom backpack for easy transport and storage.
- **Versatile Eyepieces:** Comes with 20mm and 10mm eyepieces for varied magnification.
- **Imaging Capabilities:** Includes a smartphone adapter and Bluetooth shutter release remote for capturing photos and videos.
- **Educational Software:** Free download of Starry Night astronomy software and SkyPortal app.



Image 1.1: The Celestron Travel Scope 70DX with included accessories, showcasing its compact and portable nature.

2. WHAT'S IN THE BOX

Your Celestron Travel Scope 70DX package includes the following components:

- Optical tube
- Mount/tripod (preassembled)
- 20mm eyepiece
- 10mm eyepiece
- Erect image diagonal
- 5x24 finderscope
- Smartphone adapter
- Bluetooth shutter release button
- #58 Green Glass Moon Filter
- SkyPortal app (download access)
- Starry Night Basic Edition (download access)
- Instruction Manual

- Backpack

Everything You Need to Start Observing

Store your entire telescope kit in the included travel backpack

- 70mm (2.8") refractor
- Mount and full-height tripod
- Two eyepieces (20mm & 10mm)
- Smartphone adapter
- Bluetooth remote
- 2x Barlow lens
- Moon filter
- 45° erect image diagonal
- 5x24 finderscope
- Starry Night software download



Image 2.1: All included accessories for the Celestron Travel Scope 70DX, neatly organized.

3. SETUP INSTRUCTIONS

The Celestron Travel Scope 70DX is designed for quick and easy assembly without the need for tools.

3.1 Tripod and Optical Tube Assembly

1. Unfold the tripod legs and extend them to your desired height. Ensure the tripod is stable on a flat surface.
2. Attach the optical tube to the tripod mount. This typically involves a single screw or quick-release plate.
3. Secure the optical tube firmly to prevent movement during observation.



Image 3.1: The Celestron Travel Scope 70DX fully assembled and ready for use.

3.2 Finderscope Attachment

The 5x24 finderscope helps you locate objects before viewing them through the main telescope. Attach it to the designated bracket on the optical tube.

3.3 Eyepiece and Diagonal Installation

1. Insert the erect image diagonal into the focuser of the telescope.
2. Insert your chosen eyepiece (e.g., 20mm for wider views, 10mm for higher magnification) into the diagonal.

3.4 Smartphone Adapter and Bluetooth Remote

The smartphone adapter allows you to attach your phone to an eyepiece for digiscoping. The Bluetooth remote helps capture shake-free images.

Easy to set up and use

Set up in seconds—no tools required—
and start observing right away.



Image 3.2: A smartphone attached to the telescope eyepiece using the included adapter, ready for capturing images.

3.5 Setup Overview Video

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Video 3.1: An official Celestron video providing an overview of the Travel Scope 70DX, including its components and basic assembly.

4. OPERATING INSTRUCTIONS

4.1 Focusing the Telescope

To achieve a clear image, use the focus knob located on the focuser tube. Turn the knob slowly until the image appears sharp. For astronomical observations, slight adjustments may be needed as objects drift across the field of view.

4.2 Using Eyepieces and Barlow Lens

The telescope comes with two eyepieces: a 20mm eyepiece for lower magnification and a wider field of view, and a 10mm eyepiece for higher magnification and more detailed views. The included 2x Barlow lens doubles the magnification of any eyepiece it's used with.

- **20mm Eyepiece:** Provides 20x magnification. Ideal for general viewing and locating objects.
- **10mm Eyepiece:** Provides 40x magnification. Useful for more detailed observations of the Moon and planets.
- **2x Barlow Lens:** When used with the 20mm eyepiece, it provides 40x magnification. With the 10mm eyepiece, it provides 80x magnification.



Image 4.1: Illustration of 20x and 40x magnification using different eyepieces.

4.3 Using the Moon Filter

The #58 Green Glass Moon Filter is designed to dim the bright light of a full or nearly full moon, making observations more comfortable and allowing for better detail perception. Screw the moon filter onto the bottom of your chosen eyepiece before inserting it into the diagonal.



Image 4.2: A moon filter attached to an eyepiece, used to reduce lunar glare.

4.4 Installing an Astronomical Filter Video

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Video 4.1: An official Celestron video demonstrating the correct procedure for installing an astronomical filter onto an eyepiece.

4.5 Using Starry Night Software and SkyPortal App

Your purchase includes a free download of Celestron's Starry Night astronomy software and access to the SkyPortal planetarium app. These tools can help you identify celestial objects, plan observing sessions, and learn more about the night sky.

Moon Filter

dims the bright light of a full moon to a more comfortable level



Image 4.3: Starry Night software and SkyPortal app interfaces, designed to enhance your stargazing experience.

5. MAINTENANCE

Proper maintenance will ensure the longevity and optimal performance of your telescope.

- **Cleaning Optics:** Use a soft, lint-free cloth specifically designed for optical lenses. Avoid touching the lens surfaces with your fingers. For stubborn smudges, use a specialized optical cleaning solution sparingly.
- **Storage:** Always store the telescope and its accessories in the included backpack when not in use. This protects the optics from dust and physical damage. Store in a dry, cool environment.
- **General Care:** Avoid exposing the telescope to extreme temperatures or humidity. Do not overtighten knobs or screws.

6. TROUBLESHOOTING

Here are some common issues and their potential solutions:

- **Image is blurry:** Adjust the focus knob slowly until the image is sharp. Ensure the correct eyepiece is securely inserted.







- **Difficulty locating objects:** First, ensure the finderscope is properly aligned with the main telescope. Practice during the day by aiming at a distant, stationary object. Use the lowest magnification eyepiece (20mm) to locate objects, then switch to higher magnification (10mm or with Barlow) for detailed views.
- **Shaky image:** Ensure the tripod legs are fully extended and locked, and placed on a stable surface. Avoid touching the telescope tube unnecessarily during observation.
- **No image visible:** Check that all lens caps are removed from both the main optical tube and the finderscope. Ensure the eyepiece is correctly inserted into the diagonal.

7. SPECIFICATIONS

Feature	Specification
Brand	Celestron
Model Name	Travel Scope 70 DX Portable Telescope with Smartphone Adapter
Item Model Number	22035
Optical Tube Length	17 Inches
Objective Lens Diameter	70 Millimeters
Eye Piece Lens Description	Barlow (20mm, 10mm eyepieces included)
Telescope Mount Description	Altazimuth Mount
Focus Type	Manual Focus
Finderscope	5x24 Finderscope
Product Dimensions	17 x 15 x 52 inches (assembled)
Item Weight	3.3 pounds
Power Source	Battery Powered (for Bluetooth remote, 1 CR2032 included)
Date First Available	August 3, 2019

8. WARRANTY AND SUPPORT

The Celestron Travel Scope 70DX comes with a **2-Year US Warranty**. For any questions or assistance, unlimited support is available from Celestron's US-based expert team. Please refer to the contact information provided in your product packaging for support details.

	<p>Celestron Travel Scope 70 DX Quick Setup Guide</p> <p>A comprehensive guide to setting up and using your Celestron Travel Scope 70 DX telescope, including instructions for assembly, smartphone adapter, Bluetooth remote, finderscope alignment, and observing the Moon. Covers safety instructions and product specifications.</p>
	<p>Celestron EclipSmart Travel Solar Scope 50mm Refractor Telescope Instruction Manual</p> <p>This instruction manual provides detailed guidance on assembling, using, and safely observing the Sun with the Celestron EclipSmart Travel Solar Scope 50mm Refractor Telescope. It covers parts identification, assembly steps, focusing, solar warnings, and information on solar phenomena like eclipses and sunspots.</p>
	<p>Celestron Travel Scope Instruction Manual: Models #21035 & #21038</p> <p>Comprehensive instruction manual for Celestron Travel Scope telescopes (Models #21035, #21038). Covers assembly, operation, telescope basics, astronomy, maintenance, specifications, and warranty. Ideal for terrestrial and casual astronomical viewing.</p>
	<p>Celestron AstroMaster Telescope User Manual and Guide</p> <p>Comprehensive guide to setting up, using, and observing with Celestron AstroMaster series telescopes, covering assembly, celestial observation, and accessories.</p>
	<p>Celestron PowerSeeker 127EQ Quick Setup Guide</p> <p>A comprehensive quick setup guide for the Celestron PowerSeeker 127EQ telescope, covering assembly, alignment, and first observations.</p>
	<p>Celestron Advanced VX Instruction Manual</p> <p>This instruction manual provides comprehensive guidance for the Celestron Advanced VX telescope mount and its associated optical tube assemblies, covering assembly, setup, operation, features, and safety precautions for astronomical observation.</p>