Celestron 71198-CGL

Celestron Cometron 7x50 Astronomy Binoculars

User Instruction Manual

Model: 71198-CGL | Brand: Celestron

Introduction

Get ready to explore the night sky like never before with the Celestron Cometron 7x50 Binoculars—the perfect entry point for beginner astronomers and casual skywatchers. Whether you're scanning the sky, catching a glimpse of a passing comet, or enjoying daytime views of distant landscapes, these versatile binoculars deliver bright, crisp images with ease. With large 50mm objective lenses, the 7x magnification offers a steady image and a wide 6.6° angular field of view, ideal for tracking comets or scanning large portions of the sky. Multi-coated optics enhance light transmission and image contrast, while BK7 prism glass provides bright, sharp views across the field. The traditional Porro prism design offers excellent depth perception and a rich, three-dimensional image quality—perfect for both sky and earth viewing. Built with comfort in mind, the Cometron binoculars feature rubberized grips, fold-down eyecups for eyeglass wearers, and a close focus distance of 26.2 feet (8 meters) for detailed views of nearby subjects. They’re lightweight and portable, making them a great companion for spontaneous stargazing, camping trips, and outdoor events. The Cometron 7x50 is tripod-adaptable, giving you the flexibility to attach it to a standard tripod for added stability during long observation sessions. Discover a new perspective on the universe with the Celestron Cometron 7x50 Binoculars—where powerful performance meets beginner-friendly design.

What's Included

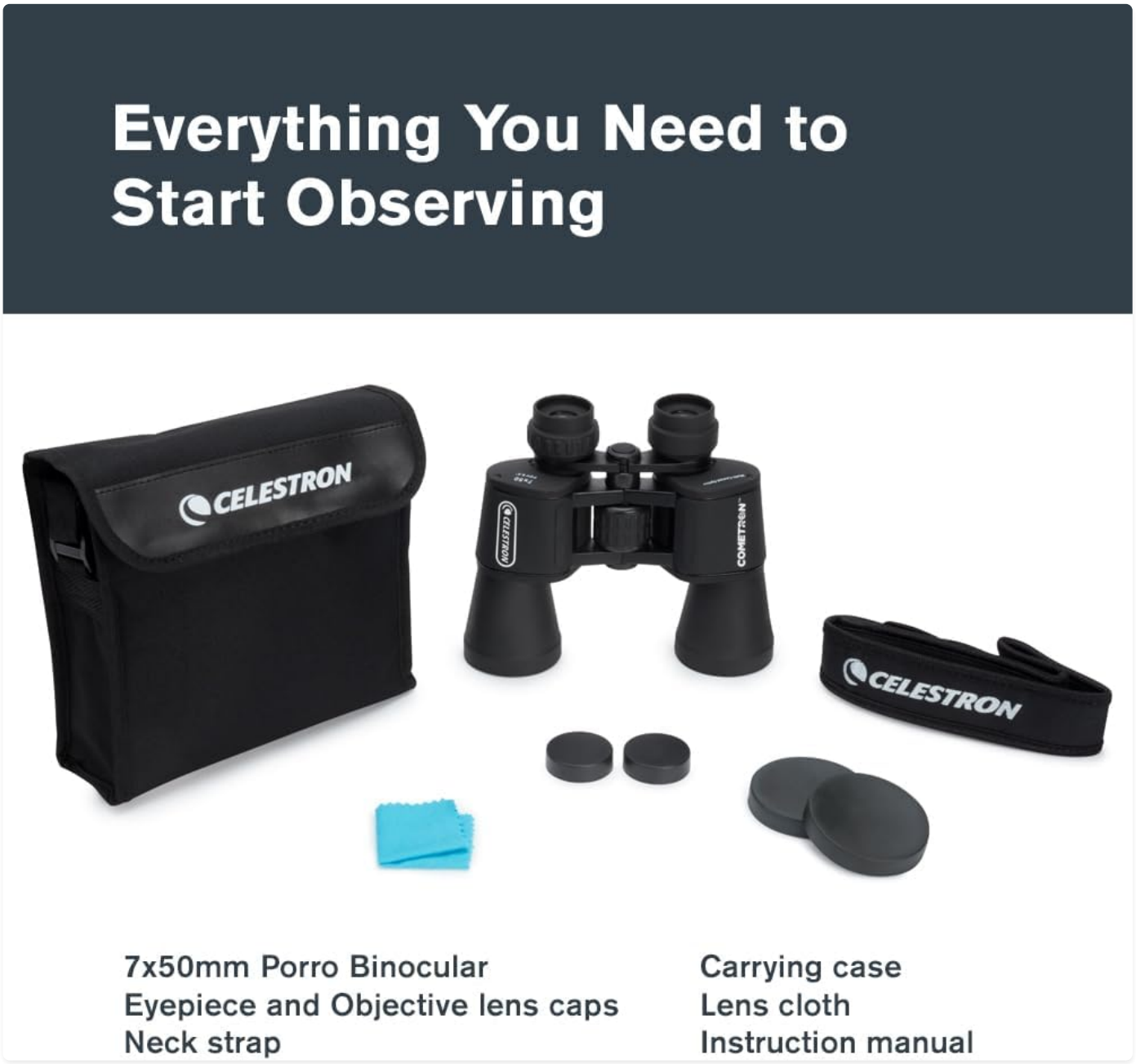

Image: All items included in the Celestron Cometron 7x50 Binoculars package.

- Cometron 7x50 Binoculars
- Soft Carrying Case
- Neck Strap
- Objective Lens Caps
- Eyepiece Caps
- Lens Cloth
- Instruction Manual (this document)

Setup

1. Adjusting Interpupillary Distance (IPD)

The interpupillary distance is the distance between the centers of your pupils. To set the IPD, hold the binoculars in your normal viewing position. Grasp each barrel firmly and move the two halves closer or farther apart until you see a single, clear circle of view. This adjustment is crucial for comfortable and effective viewing.

Image: Adjusting the interpupillary distance of the binoculars.

2. Focusing the Binoculars

1. Choose an object about 50 yards (45 meters) away.
2. Cover the right objective lens (the large front lens) with your hand.
3. Look through the binoculars with your left eye and rotate the center focus wheel until the image is sharp.
4. Now, cover the left objective lens with your hand.
5. Look through the binoculars with your right eye and rotate the right eyepiece diopter ring until the image is sharp. Do not use the center focus wheel for this step.
6. Your binoculars are now adjusted for your eyes. Focusing for other distances can now be done by simply turning the center focus wheel.

Image: Highlighting the 7x magnification and 50mm objective lenses.

3. Adjusting Eyecups

The Cometron 7x50 binoculars feature fold-down eyecups. If you wear eyeglasses, fold down the eyecups to bring your eyes closer to the eyepiece lenses, providing a wider field of view. If you do not wear eyeglasses, keep the eyecups in the up position for proper eye relief.

Operating the Binoculars

Daytime Viewing

These binoculars are excellent for terrestrial observations. Their wide field of view and 7x magnification make them suitable for birdwatching, scenic viewing, and general outdoor use. The close focus distance of 26.2 feet (8 meters) allows for detailed observation of nearby subjects.

Image: Demonstrating the wide field of view, suitable for both sky and terrestrial observation.

Nighttime Stargazing

The large 50mm objective lenses gather ample light, making these binoculars ideal for astronomy. They provide bright, crisp views of the moon, star clusters, and even comets. The 7x magnification offers a stable image, reducing shake during handheld observations.

Using with a Tripod

For extended viewing sessions or to achieve maximum stability, the Cometron 7x50 binoculars are tripod-adaptable. They feature a built-in tripod adapter socket. A binocular tripod adapter (not included) is required to mount the binoculars onto a standard photographic tripod.

Image: Binoculars shown mounted on a tripod for stable viewing.

Maintenance and Care

Cleaning the Lenses

When cleaning the lenses, use the included lens cloth or a soft, lint-free cloth. For stubborn smudges or dirt, use a specialized optical lens cleaning fluid. Apply a small amount of fluid to the cloth, not directly to the lens, and gently wipe in a circular motion. Avoid using abrasive cloths or harsh chemicals, as these can damage the optical coatings.

Storage

Always store your binoculars in the provided soft carrying case when not in use. Ensure lens caps are in place to protect the objective and eyepiece lenses from dust and scratches. Store in a cool, dry place, away from direct sunlight and extreme temperatures.

Water Resistance

The Celestron Cometron 7x50 binoculars are water resistant, meaning they can withstand light splashes or rain. However, they are not designed for submersion in water. If they get wet, wipe them dry with a clean cloth as soon as possible.

Troubleshooting

Blurred Image

- Ensure both the center focus wheel and the right eyepiece diopter are correctly adjusted for your eyes. Refer to the "Focusing the Binoculars" section.
- Check for condensation or dirt on the lenses. Clean as per the "Maintenance and Care" section.

Double Image

- Adjust the interpupillary distance (IPD) until you see a single, merged image.
- If the problem persists after adjusting IPD, the binoculars may require professional collimation.

Difficulty Seeing in Low Light

- Ensure objective lens caps are fully removed.
- Verify that the eyecups are correctly positioned for your viewing preference (folded down for eyeglasses, up for no eyeglasses).
- Allow your eyes to adapt to the dark for optimal night vision.

Specifications

Feature	Detail
Brand	Celestron
Model Number	71198-CGL
Magnification	7x
Objective Lens Diameter	50 mm
Angular Field of View	6.6°
Close Focus Distance	26.2 feet (8 meters)
Prism Type	Porro Prism (BK7 Glass)
Optical Coatings	Multi-Coated
Water Resistance	Yes
Tripod Adaptable	Yes
Product Dimensions	9 x 8 x 3 inches
Item Weight	2 pounds

Image: Detailed dimensions and weight of the binoculars.

Warranty and Support

Warranty Information

Your Celestron Cometron 7x50 Binoculars are covered by a Celestron Limited Lifetime US Warranty. This warranty covers defects in materials and workmanship for the lifetime of the product for the original owner. Please refer to the official warranty document for full terms and conditions.
For detailed warranty information, you can refer to theOfficial Warranty (PDF).

Customer Support

For technical assistance or any questions regarding your binoculars, please contact Celestron's US-based expert tech support. Contact information can typically be found on the Celestron official website or within the product packaging.
An additional resource is the User Manual (PDF) for further details.

Related Documents - 71198-CGL

	Celestron Cometron FirstScope 76 Tabletop Telescope Quick Setup Guide A comprehensive quick setup and alignment guide for the Celestron Cometron FirstScope 76 tabletop telescope, including instructions for assembly, finderscope alignment, and initial celestial observation of the Moon.
	Celestron SkyMaster Binoculars User Manual and Care Guide A comprehensive guide for Celestron SkyMaster binoculars, covering setup, focusing, eyecup adjustment, tripod compatibility, maintenance, cleaning, safety warnings, and warranty information.
	Celestron Astro Fi Telescope Instruction Manual Explore the night sky with the Celestron Astro Fi Telescope (Model #22204). This detailed instruction manual provides clear, step-by-step guidance on assembly, alignment, operation via the SkyPortal app, and smartphone astrophotography. Perfect for beginners and enthusiasts looking to discover celestial wonders.
	Celestron Omni AZ 102 Instruction Manual Comprehensive instruction manual for the Celestron Omni AZ 102 telescope, covering assembly, setup, operation, and safety guidelines.
	Celestron StarSense Explorer LT 127AZ Quick Setup Guide A comprehensive guide to setting up and using the Celestron StarSense Explorer LT 127AZ telescope, including assembly, alignment, and app integration for celestial observation.
	Celestron Travel Scope 60 Instruction Manual Comprehensive instruction manual for the Celestron Travel Scope 60 telescope, covering assembly, setup, operation, and observing tips. Includes parts list, alignment guide, and software information.