

Orion Electronic Imaging Eyepiece, Color Version

#8633

Thank you for your purchase of an Orion Electronic Imaging Eyepiece. The electronic imaging eyepiece will give you an opportunity to record and share your astronomical and terrestrial viewing experiences. It can also be used for classroom or telescope demonstrations where not everyone can get to the telescope's eyepiece for viewing. These instructions will help you use the imaging eyepiece. Please read them thoroughly.

WARNING! Do not aim your electronic imaging eyepiece at the sun without the use of a professionally made solar filter that completely covers the front of the telescope, or the camera may be permanently damaged.



Figure 1. The color electronic imaging eyepiece.

Examine Figure 1 and note the various parts of your electronic imaging eyepiece. Please note the eyepiece cord splits to provide both power for the eyepiece as well as output to a TV or VCR.

Powering the Electronic Imaging Eyepiece

Insert the supplied AC adapter into a 110-volt AC power supply. Attach the plug on the end of the adapter's cable into the power jack on the end of the eyepiece cord.

Connecting to a TV or VCR

Plug the "VIDEO IN" plug on the eyepiece cord into the "VIDEO IN" jack on your television or VCR. Consult your TV or VCR's manual for the location and operation of this jack.

Inserting the Eyepiece in a Telescope

For simplest operation, aim and focus the telescope at the object you wish to view using a regular telescope eyepiece first. Make certain that the object is centered in the eyepiece. Remove the regular eyepiece from the telescope. Take the dust cap off of the electronic imaging eyepiece and insert the barrel of the electronic eyepiece into the telescope's focuser or diagonal. Secure it in place with the thumbscrew on the focuser or diagonal. Then focus the image on the TV by using the telescope's focusing mechanism.

If you wish to use the electronic eyepiece with telescopes that require .965" eyepieces, unthread the black 1.25" adapter and use the .965" barrel underneath (Figure 1).

Removing the Focal Reducer

For your first uses of the imaging eyepiece, we recommend that you use the already attached focal reducer as it will give you a wider field of view. When you get more experience with handling and using the imaging eyepiece, you can remove the focal reducer if you want higher magnification.



Figure 2. The electronic eyepiece with focal reducer removed.

To remove the focal reducer, unthread the 1.25" adapter from the camera assembly. Then, unthread the focal reducer from the electronic eyepiece and place it aside. Re-thread the 1.25" adapter onto the electronic eyepiece (Figure 2). You can now replace the electronic eyepiece in the telescope. If you wish to use the camera without the focal reducer on telescopes that only accept .965" eyepieces, unthread the electronic eyepiece from the other components and insert it directly into the telescope's focuser or diagonal.

Electronic Imaging Eyepiece Operation

The electronic imaging eyepiece is automatically on whenever it has power. The eyepiece has auto-gain that will adjust to the level of the light going into the eyepiece. If the colors showing on the monitor are incorrect, you can adjust them by pressing the color balance button on the top of the electronic eyepiece. If you need to reset the color setting, you must remove the power connection and then reconnect.

 **ORION**
TELESCOPES & BINOCULARS
Providing Exceptional Consumer Optical Products Since 1975

Customer Support (800) 676-1343
Email: support@telescope.com
Corporate Offices (831) 763-7000
P.O. Box 1815, Santa Cruz, CA 95061

What to Expect

For almost all types of telescopes, the Moon and Sun (with a professionally-made full-aperture solar filter) and terrestrial objects can be viewed and recorded with the electronic imaging eyepiece. For telescopes of extremely long focal length (longer than 2000mm), the bright planets can be imaged with some detail. With very large aperture telescopes (12.5" or more), imaging of bright star clusters may be possible.

Specifications

CCD Camera size: 1/3 inch x 1/3 inch

Pixel Count: 640x580

Focal Reducer: 1.6x reduction

Power Source: 110-Volts AC to 9-volts DC with supplied adapter

Weight (w/o battery): 3 ounces

One-Year Limited Warranty

This Orion Electronic Color Imaging Eyepiece is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. If the product is not registered, proof of purchase (such as a copy of the original invoice) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Customer Service Department, Orion Telescopes & Binoculars, P. O. Box 1815, Santa Cruz, CA 95061; (800) 676-1343.



Customer Support (800) 676-1343
Email: support@telescope.com
Corporate Offices (831) 763-7000
P.O. Box 1815, Santa Cruz, CA 95061