APERTURA

Binoviewer User's Manual

WARNING: Never look directly at the Sun with the naked eye or with this optic. Permanent irreversible eye damage can result.

What's Included

- Binoviewer
- Protective Hard Case
- Dust cover (3x)

Binoviewer Specifications

SKU	Optical Path Length (mm)	Barrel size (in)	Nosepiece Thread Size (mm)	Clear Aperture (mm)	Weight
APT-BVIEW	0	1.25	M28.5x0.6	17.3mm	1lb 8.6oz

Overview

The Apertura Binoviewer uses a telecentric optical system that divides the incoming light into two independent optical paths, one for each eyepiece. The system splits the available light rather than the field of view, so if you close one eye you will still see the full field through the remaining eyepiece. This design maintains true 1× magnification and parfocality across compatible optical systems without the need for additional corrective lenses or magnifiers that are often required with conventional binoviewers. Interpupillary distance adjustment is forgiving, and the linear split path design does not require unusually tight alignment tolerances.

Parts of the Binoviewer

1. 1.25” nose piece
2. Interpupillary Distance Adjustment
3. Eyepiece Clamps
4. Diopter (focus) Adjustment

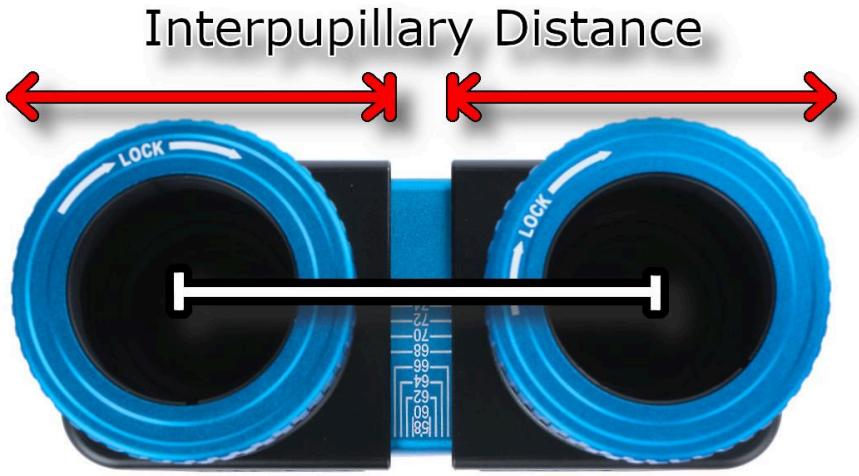
How to Use

Eyepieces

It is important to use two matching eyepieces with any binoviewer. Eyepieces in the 15-20mm are a good place to start with most systems. The Apertura 20mm Plossl, 15mm SWA are good eyepieces to consider. We do not recommend the Apertura Panorama eyepieces with this binoviewer as wide field eyepieces typically are very sensitive to eye placement and can cause “blackouts” when looking around the field of view, if the observer is not extremely critical of head and eye placement.

Interpupillary Distance

The distance between the two eyes varies from person to person. Binoviewers account for this with an adjustable mechanism. The Apertura binoviewer uses a sliding mechanism with markings. These markings allow multiple users to use the same pair of binoviewers in succession with rapid adjustability. When properly setting the interpulmonary distance, it's a simple process of adjusting the binovier width in or out until the image seen by both eyes merges into a single image, rather than two offset or overlapping images.



Focusing

There are two initial focus adjustments that need to be made for the binoviewer, the telescope and the diopter adjustment. The diopter adjustment is an independent focus adjustment for the right eyepiece of the binoviewer. First the telescope needs to be focused. This is performed just like normal, however the right eye is closed or covered and the telescope is focused using only the left eyepiece. Then, the left eye is closed or covered and the right eyepiece is focused using the diopter adjustment. Some fine adjustments might be desirable after the initial focus adjustments have been made.

Newtonian Telescope

Insert the binoviewer into the focuser and secure it, just like a normal eyepiece. If your telescope has a 2” focuser it will need a 2” to 1.25” adapter in order to attach the Apertura Binoviewer.

The image will be correct and erect when using this binoviewer in a Newtonian telescope. This allows the Newtonian to easily be used for terrestrial viewing too. Something that is not easily achievable with other means.

Refractor or Cassegrain (SCT)

A 1.25” or 2” diagonal mirror or prism can be used with Cassegrain telescopes and refractors. Attach the diagonal to the telescope, then insert the nosepiece of the binoviewer into the diagonal mirror.

Warranty

The Apertura Absolute Warranty provides two years of coverage against product defects. After the initial two-year warranty expires, this product qualifies for Apertura's Three-Year Accident Replacement Program. In addition, the Apertura Absolute Warranty is transferable! It is important to keep your original receipt and the product's original boxes and packaging, should you need to make a claim.