

FIRST light

See an interactive 360° model of these binos at www.skyatnightmagazine.com/AdventBinos



Opticron Adventurer 10x50 binoculars

Get crisp, bright views without having to spend a fortune

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VITAL STATS

- **Price** £59
- **Optics** Multicoated
- **Aperture** 50mm
- **Magnification** 10x
- **Prisms** Bak-7
- **Angular field of view** 6.6°
- **Focusing** Zeiss centre focus
- **Eye relief** 19mm
- **Interpupillary distance** 57-72mm
- **Weight** 846g
- **Supplier** Opticron
- **www.opticron.co.uk**
- **Tel** 01582 726522

SKY SAYS...

These binoculars are comfortable to use, well balanced and great value for money

A pair of 10x50 binoculars offers a good compromise of light-gathering, magnification and weight, and thanks to balancing these three things so well they're considered to be a good choice for astronomy. Opticron's Adventurer series includes a pair of 10x50s at a competitive price. For £60 you get the binoculars, a soft and lightly padded nylon case, a neckstrap, a tethered two-cup rainguard for the eyepieces, tetherable 'plug-in' caps for the front lenses, a microfibre cleaning cloth and a generic instruction leaflet.

The binoculars themselves have stippled rubber armour, which will give you a secure grip even when wearing gloves. The hinge, focus wheel and right-eyepiece dioptre ring all move smoothly, with enough uniform resistance to make them easy to adjust but not liable to inadvertently slip. The minimum interpupillary distance is 55.5mm and there's 12mm between the eye-cups at this distance, so it should fit most people's faces.

The unusual objective caps have split tabs built in to them. This allows the caps to be threaded onto the strap, making them easy to store while keeping them close to hand at the same time. Although they can be dislodged by rough handling, in normal astronomical use we found that they remained securely and conveniently in place.

When you hold the binoculars up to the light, the exit pupils appear perfectly round, although they

each have the four grey segments that indicate the prisms are of low-index glass. This can lead to a slight dimming of the edge of the field of view in wide-angle binoculars, but you're unlikely to find this to be problematic – it's hardly noticeable and it's a simple matter to move a target object from the periphery to the centre of the view.

We focused the binoculars and found that the image was crisp over the central three-quarters of the field of view and was tolerable except for the outer five per cent or so. The images from each side merged immediately, showing that collimation was well within acceptable tolerances. There is some pincushion distortion. It's not obtrusive but enough to prevent the nauseating 'rolling ball' effect that can occur without it. Control of false colour was very good on axis, but a bright Moon showed colour when the limb was even slightly off-axis. First magnitude stars only showed false colour near the edge of the field.

Reflections

These binoculars are described as being multicoated. This usually means that the outer surfaces of the objective lenses and eyepieces are coated but the prisms are not. This was confirmed by the spurious reflections we saw when a gibbous Moon was just outside the field of view. However, we could find no spurious reflections when the bright star Vega in Lyra was in a similar position. ▶

BRIGHT AND SHARP IMAGES

Modern budget binoculars usually have their apertures stopped down internally, sometimes by 20 per cent or more. It's done in an attempt to sharpen the image but the extra sharpness comes at the cost of some image brightness. We were delighted to find that this is minimal with the Opticron Adventurer: we measured the effective aperture as 47mm.

As expected, the images were pleasingly bright with no apparent reduction in crispness. In fact, it was

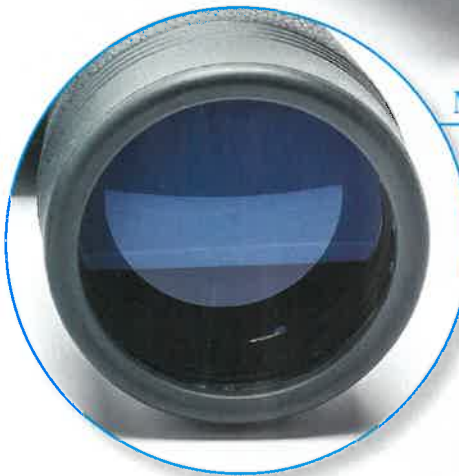
remarkable how large the sharp region of the field of view remained during the test. This not only helps you identify and split double stars, but also makes it easier to see detail in some extended objects. An example of this was when we observed the Andromeda Galaxy and saw not only that the core was brighter, but that one edge of it seemed to have a slightly more abrupt cut-off in brightness than the other, indicating the presence of the dust lane.





TRIPOD ATTACHMENT

Although these binoculars are easily light enough to be held by hand, you'll be able to see fainter objects and split closer double stars if you mount them. Underneath a screw-in cover at the end of the hinge, the Opticron Adventurer has a standard 1/4-inch Whitworth mounting bush for a tripod adaptor L-bracket.



MULTICOATING

The coating on the eyepieces and the objective lenses has none of the tell-tale blotching that indicates shoddy workmanship. It gives equal reflectivity over the whole surface of each lens, suggesting that the coating has been evenly applied. The lens surfaces only minimally reflect a bright white light, showing that the coating is effective.



EYE RELIEF

The good eye relief (the distance from the eyepiece to where you place your eye) means that you can easily use these binoculars with spectacles when the eyecups are folded down. The cups are made of a soft rubber that's comfortable against the face when they're folded up for use without spectacles.

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TETHERED EYEPIECE CAPS

To help provide maximum protection for the eyepieces, the caps on the Opticron Adventurers fit securely, are tethered to the neck strap – so they're always to hand – and are linked with a flexible bridge so they can be used at any interpupillary distance. All of which increases the chances of you using them more often.

NECK STRAP

The neck strap is of far better quality than you usually find in this class of binoculars. Although it isn't padded, the 30mm-wide webbing was good enough for the binoculars to be slung around a bare neck for over an hour without becoming uncomfortable.



SKY SAYS...

Now add these:

1. Horizon 8115 heavy-duty tripod
2. L-mount bracket
3. Opticron ROR fluid and lens cloth kit

► Although sky conditions were never ideal during the testing period, we still enjoyed what these binoculars could show. Albireo was our first target and, with the binoculars mounted, we could split it into its two components, their colour contrast obvious over all but the outer 10 per cent of the field of view. The nearby Dumbbell Nebula appeared as a tiny rectangular cloud, while the Andromeda Galaxy took the form of an oval glow, densest in the middle, that extended across one-third of the field of view.

The two distinct condensations of stars in the Perseus Double Cluster were immediately obvious, as was the chain of stars that leads to the nearby Musclemans Cluster, which was easily discernible. Kemble's Cascade was indistinct, appearing as a hazy line with a brighter central star and a cluster

(NGC 1502) at the end. We estimated the limiting stellar magnitude to be about +8.5 in the less than ideal transparency.

These binoculars are comfortable to hold and well-balanced. They're good value for money and a good choice for both newcomers to binocular astronomy and for casual users. **S**

VERDICT

BUILD & DESIGN	★★★★★
EASE OF USE	★★★★★
FEATURES	★★★★★
FIELD OF VIEW	★★★★★
OPTICS	★★★★★
OVERALL	★★★★★