

## Binocular Sky Review: Levenhuk Sherman PRO 10x50

### Manufacturer's Specification

Weight (g)	980
Field of View (°)	6.5
Close Focus (m)	5
Eye Relief (mm)	21
IPD (mm)	60 - 70
Waterproof	Yes
Prism Type	Porro
UK Guarantee	Lifetime
Origin	China
Body Material	Aluminium Alloy and ABS
Armour Type	Full
Nitrogen Gas Filled	Yes
Prism Material	BaK-4
Prism Coating	Multi
Lens Coating	Fully multicoated
Eyecup Type	Twist-up



**Price: £124.95**

**Available from:** [Levenhuk UK](#)

### Initial Impressions

The first thing that struck me about this binocular is how well thought-out it is; an experienced user must have had significant input to the design. From the 3-position twist-up eye-cups and well-fitting tethered lens caps to the large lugs on the right eyepiece dioptre adjustment and knurled periphery of the mounting-bush cover, the Sherman PRO has been designed with practicality in mind. It feels very light and well-balanced.

The binocular is of Zeiss-type construction (i.e. the objective barrels screw into the prism housings). It is covered in a rubber armour, which is substantial enough to resist light knocks. The centre-focus is smooth throughout its range, which takes almost a full revolution of the focus wheel, thus easily enabling a precise focus to be



Large lugs aid the right eyepiece adjustment

attained. The large knurled lugs on the right eyepiece dioptre adjuster ring make it easy to adjust with thick gloves on without disturbing the eye-cup. The hinge is smooth and sufficiently tight so as not to accidentally slip once it is adjusted. There is minimal rocking of the eyepiece bridge under moderate pressure, but it did not change focus under normal use or when I held the binocular tight to my eye sockets or spectacles. I did not detect any focus lag due to nitrogen seals on the eyepiece barrels.

The multi-coatings appear to be evenly applied and reflect a small amount of light. There is no baffling or ribbing inside the objective tubes. The prisms appear to be mounted in proper cages. There is a very small opaque segment in each of the exit pupils, suggesting that the prisms are very slightly undersized, but not so much as to noticeably affect light throughput. I could not find any facility (e.g. eccentric rings on the objectives or accessible screws in the prism housing) for user-collimation.

The substantial padded nylon case, which has shoulder strap and belt loop and an internal pocket, is sufficient to keep the binocular clean and to protect it against the tribulations of reasonable use. The tethered plug-in type objective covers are a very good fit. They have – and need – notches in the rim to help remove them – and stay in when you take the binocular out of its case. They attach by a tight-fitting ring on the objective barrels. The ring can be rotated to prevent the covers flipping into place when you raise the binoculars to your eyes to view high altitude targets. The eyepieces have a very well-fitting one-piece two-cup rainguard-type cover which can be tethered to the strap on the left hand side and has a split-loop for the strap on the right hand side. Its flexible nature means that it does not restrict the IPD, so it can be used at any IPD setting. The strap is of good quality and has a padded neckband that is comfortable on a bare neck and unnoticeable over a thick jacket. It is also long enough to be used over thick winter clothing.

### Testing the Specifications

I was pleased to find that the effective aperture is the full 50mm and is not internally stopped as is sometimes the case with binoculars in this price bracket. Examination of reflections when a bright light is shone down the objective end confirms the multicoated spec. There are no grey segments in the exit pupils, confirming that the prisms are of high-index (BaK-4) glass. The minimum interpupillary distance is 54 mm. The eye cups are 46 mm diameter, so there is 8 mm between them at their closest and 14 mm at the specified minimum IPD of 60 mm; this latter spacing should accommodate the bridge of most noses. The objective lenses are recessed 12mm into their barrels, offering some protection against accidentally touching them. I found the full field of view is visible when observing with spectacles with the eyecups fully down. With



Knurled periphery mounting bush cover



Notches in the rim of the objective caps assist their removal

**... a lot to like  
about this  
binocular ...  
lightweight,  
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well-balanced...**

fully-corrected vision, the right eyepiece dioptre is set at zero, indicating that it is properly adjusted. I measured close focus at 7.3 m, and there is considerable “beyond infinity” focus at the other extreme, so the binocular should be usable without spectacles by people with moderate to severe myopia. It weighs 1052 g with lens caps and neck strap attached.

### Under the Stars

Collimation was spot on. The view is sharp over the central 60% of the field of view and is tolerable to about 80%. Some of this image degradation can be “focused out”, suggesting that it is due to slight field curvature. Vignetting at the edge was noticeable if I looked for it, but not obtrusive. Control of false colour (chromatic aberration) is extremely good, only becoming noticeable on high-contrast targets (e.g. the lunar limb) when they are well off-axis; it was not noticeable on first magnitude stars except at the extreme edge of the field of view. It is not as sensitive to eye-position as it is on some binoculars I have used. Colour rendition is good. The binocular is advertised as having no distortion, but I was pleased to find that there is a tiny amount of pincushion distortion: it is unobtrusive, but is sufficient to eliminate the nauseating “rolling ball” effect that can occur without it. Stray light is quite poorly controlled, probably due to the lack of baffling in the objective tubes: there was a large amount of flaring and spurious light from the Moon when it was just outside the field of view, but I could detect none from Arcturus or Vega.

“...how well thought-out this is ... designed with practicality in mind.”

Albireo (34 arcseconds) was easily split when it was in the middle of the field of view, but the split was not detectable from about 60% of the way to the edge; the diminution of image quality in the 60-80% zone was not apparent in daytime terrestrial use.

One very nice touch is the knurled rim of the mounting-bush cover, making it possible to remove the cover with gloved hands if you want to mount the binocular part-way through a session in cold weather.

I compared the brightness and colour correction of the Levenhuk to a Strathspey Marine (UO BM2) 10x50 and a Lunt Magnesium 10x50; the Levenhuk Sherman PRO is brighter than the BM2 but not as bright as the Lunt. This is most likely due to the coatings which, although good, reflect more light than the (significantly more expensive) Lunt. In the outer 40% of the field of view, the Levenhuk had better colour correction than both, but was not as sharp as either of them.

### Conclusions

As I mentioned in the introduction, there is a lot to like about this binocular. It is a more than adequate daytime performer but, as



The coatings (above) reflect a small amount of light, but more than a premium binocular (below)

with many binoculars, the more severe test of astronomical targets reveals the limitations of image sharpness across the field and the poor control of stray light. On the other hand, the colour correction in the outer part of the field of view is better than that in some premium binoculars.

I really liked its ergonomics – it feels good to use. It is lightweight, comfortable, well-balanced and the controls work just as they should. The multi-position eyecup stops could be slightly more positive, but they are adequate, and their multi-position nature makes it easy to “dial in” the best extension.

I see this as being a very good choice for someone who wants a significant step-up from an entry-level general-purpose binocular without breaking the bank. The lifetime guarantee suggests that Levenhuk has confidence in its product.

<b>Binocular Sky Ratings (/10)</b>	
Sharpness of Image	8
Size of usable field	5
Colour Correction	9
Control of stray light	5
Eye relief	10
IPD	9
<b>Overall Optical Quality</b>	<b>7.7</b>
Focus mechanism	10
Right eyepiece adjustment	10
Eye cups	10
Hinge	10
Armour	8
Weight and Balance	9
<b>Overall Mechanical Quality</b>	<b>9.5</b>
Case	7
Neck-strap	10
Objective caps	10
Eyepiece caps	10
<b>Value for Money</b>	<b>9</b>
<b>Overall</b>	<b>8.7</b>

[Click here](#) to see the **Levenhuk Sherman PRO 10x50** on the [Levenhuk](#) website

Stephen Tonkin  
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