Wonder binoculars from China: Hawke Frontier ED 8x43 & 10x43

Translation of a review originally published in Linnut magazine in 2009



Measured weights ca. 780/760g. Warranty 10 years

Last year, we began to hear rumors from the US and England about new Chinese ED binoculars that, according to enthusiastic first users, offered image quality comparable to the first-tier models of traditional quality brands. I'll believe it when I see it is a typical Finnish way of relating to such news, and I must plead guilty to a certain patronizing attitude initially, at least until the chorus of voices lauding these binoculars started to include persons whose opinions and expertise I had learned to trust. Thus, I asked to get them for testing as soon as Fotofennica in Helsinki began importing them in January of 2009.

When you hold the Hawkes in your hands, you can immediately tell that when designing these binoculars, the Chinese engineers must have first dissected a few Swarovski and Zeiss binoculars. There is especially obvious resemblance to the Swarovski EL series. Like the Swarovski, the body of the binocular is open-bridged, and with the exception of the black metal bridges, armored with green rubber. Under the tubes, there are comfortable shallow thumb indents, and the surface that comes into contact with your palms is contoured for better grip. Unlike the top European models, there is a handy threaded receptacle for a tripod adapter provided under the front hinge cap.

The specified fields of view for the Frontier ED's are very wide at 142/113m/km. I did not check the true field of view for the 10x model, but for the 8x it fell somewhat short of the specification. I measured it at approximately 135m/km, which is still a respectable figure for an 8x binocular.

Both binoculars can close-focus to less than two meters. Focus gearing is slower than in most top binoculars, and especially when working at close distances, your fingers are in for a workout. However, from ten meters to infinity they already go rather quickly. In warm temperatures, the focus wheel turns smoothly, but in freezing temperatures the lubrication in the mechanism stiffens, and focusing at -15 °C

was extremely difficult. The importer has given feedback about this to the European importer, [but at the time of this translation in 2012, the issue has not yet been addressed].

The Hawkes work rather well with eyeglasses. I measured the eye-relief as 14.5mm for the 8x and 13mm for the 10x model, and as this measurement is taken from the eyecup rim, it means that the relief should be enough for a majority of users getting to see the full field. There is also enough focus travel past infinity to allow use by strongly myopic people without glasses. The diopter is finely adjustable without unnecessary steps limiting your setting. The twist-out eyecups feel solid and have one intermediate click-stop position between in and out.

The binoculars are specified as waterproof and nitrogen-filled. Supplied accessories include a semi-hard case not particularly suited to field use, a padded neoprene carrying strap long enough for most NBA players and a pair of objective lens covers you will lose on your first trip to the field. The eyepiece rain guard is a bit better, but a little too tight-fitting.

Optical performance

If I have sounded somewhat less than enthusiastic describing the usability features and especially the accessories of these binoculars, when it comes to the optics and image quality, by contrast, these binoculars are very good indeed. Their resolution, both through a 3x booster and the unaided eye, was top notch, and the view through the booster was very clean and contrasty, even resembling that of telescopes. With a measured resolution of 5.7 line pairs/mm at 10m distance the Hawke Frontier ED 8x43 shared the top spot among the 8x binoculars I have measured, and the10x43 also got very close to the best tens I have ever tested. Moreover, both binoculars had almost identical performance in the left and right binocular tubes, which is not a given by any means and speaks well of the quality of assembly.

Also in the field, the image of these binoculars was extremely sharp and easy to view. Good correction of chromatic aberration, which is the purpose of utilizing ED glass, is readily visible in the image as excellent color rendition and high contrast, and the image was notably pure and vibrant. It is also apparent that high-quality multicoatings are used. The prisms have phase correction coatings, but their mirror surface is silver coated rather than utilizing the most modern dielectric coatings. Nevertheless, the image is subjectively very bright, roughly equal to Swarovski's (original) EL series and only a little behind the level of Zeiss FLs or Leica's Ultravid HDs.

The color balance of the image is very natural with only very slight yellow bias visible. Viewing against the sun or other very bright light sources, the performance was also nearly faultless. The only notable problem was a halo-like effect surrounding the view outside of the actual image circle under these extreme light conditions. It might bother sensitive viewers, but does not influence the image itself. The sharp area around the image center is rather wide, but the far edges of the image are relatively soft. For their edge resolution, I would classify them as average, which puts them in the same group with many expensive name-brand binoculars whose marketing literature claims "sharp to the edge" excellence.

Conclusion

The Chinese engineers really have managed to manufacture a binocular that is optically first-rate. During the test period, I often thought that if this binocular would carry a well-established brand name and a price tag to match, I would not suspect anything at least on the basis of the image quality, but would conclude that the new binocular is a worthy addition to the competitive markets. Overall, the only notable shortfalls of these binoculars are the excessively stiff focusing in very cold weather and the rather slow focus ratio. Only time will tell how well the Hawkes will be able to withstand the famously rough handling of Finnish hard-core birders, but there is nothing in their appearance, handling or specifications that would give reason to doubt their durability either. Especially for their price, the Hawke Frontier EDs are an excellent product. Highly recommended.

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