

best value-for-money BINOCULARS



Cliff Dorse and Suretha van Rooyen contemplate the array of binoculars on offer.

In the 2006 review (*Africa – Birds & Birding* 11(6): 59–63), we compared 36 pairs of binoculars from 11 manufacturers across the price spectrum. This time we thought we'd limit the selection to products under R10 000, given that this sector of the market has seen the greatest change during the past four years. I hoped this would reduce our workload but, although the number of manufacturers fell to nine, we were presented with 38 pairs of binoculars to review. We didn't attach the neck straps to the binoculars as this adds considerably to the time taken to set up each pair and repack them afterwards; as a result, the weights given exclude neck straps, which weigh up to 70 grams for the larger, padded straps (constituting about 10 per cent of the weight of the binoculars).

As before, panel members scored each pair of binoculars on a scale from one

IN THE FOUR YEARS since *Africa – Birds & Birding* conducted its first binocular review, there has been little change at the top end of the market, but significant developments have taken place in the less expensive models.

Peter Ryan and a panel of birders review models costing less than R10 000. If your birding is suffering because of an old pair of binoculars, there's never been a better time to upgrade.

PHOTOGRAPHS BY PETER RYAN

to five for optical quality, robustness, handling and appearance. The last three categories were then pooled to give a score for 'feel'. The panel members' scores were averaged out to provide ratings for the optics and feel for each model. I measured closest focus distance and the speed of the focus action (quantified as the number of turns of the focus wheel it takes to go from five metres to infinity: 0.3 to 0.4 is about ideal. More than this and you spend too long cranking the focus wheel, but much less and you can struggle to find the correct focus point.) Optical quality combined crispness, brightness, colour rendition, field of view, depth of field, chromatic and spherical aberration, and sharpness at the edge of the image.

The results table is, hopefully, self explanatory. It follows the same format as that used in the 2006 article and the follow-up in 2008 (*Africa – Birds & Birding* 13(1): 56–57), with the binoculars being listed in descending order of recommended retail price. Value was estimated by relating the retail price to the overall score, taking cognisance of the cost and quality of binoculars at the top end of the market. Scores were standardised by

checking values for models evaluated more than once to try to ensure consistency between reviews.

Porro-prism and compact models

Roof-prisms dominated the offerings. Only eight pairs of binoculars were either the old-fashioned porro-prism design or compact binoculars with objective lenses less than 30 millimetres across. Porro-prisms tend to be larger and heavier than roof-prisms and most are less robustly built. Their external focusing also makes them much harder to seal ▽



PENTAX DCF NV 10x36



NIKON ACTION EX 8x40

against the elements. The three pairs under review all had acceptable optics and one pair (Nikon's Action EX 8x40) has a solid feel with rubber armour that suggests it will withstand a knock or two. Nikon claims it is waterproof to a one-metre depth for up to five minutes, the same rating it gives for its Monarch roof-prism models, but we didn't put this to the test. If you enjoy the porro-prism design, then this is probably the best bet, but if you are driven largely by price, at R1 799 I would suggest saving up a bit longer for a roof-prism.

The compact models suffer from a narrow field of view, which makes it harder to locate your subject, and they have small exit pupils that limit the amount of light reaching your eyes. They come in both roof- and porro-prism designs. In the latter, the prisms bend inwards rather than outwards, resulting in the objective lenses being very close together. Like their larger cousins, they are more prone to shocks than are roof-prisms, and they are not waterproof. Their main advantage is that they are small, light and relatively inexpensive.

Compact roof-prisms offer better robustness, but suffer the same optical limitations as compact porro-prisms and come at a price not dissimilar to that of full-size roof-prism models. If you want a small, compact pair of binoculars, have a look at the Redfield Rebel, which offers solid optical quality and exceptional close focusing at a bargain-basement price. Its only drawbacks are the rather obtrusive individual

eyepiece adjuster and the perhaps too-rapid focusing action.

Roof-prisms

The 30 pairs of roof-prism binoculars reviewed ranged in price from R1 600 to R7 600. Rather than breaking this down by price category, they are discussed in descending order of total score.

The three Kowa models fared best overall. The 8x42 received rave reviews in 2008 and it came out tops in this survey, closely followed by Kowa's 10x42 and 8x32 models. Although they are positioned at the upper end of the price range, they offer performance and quality close to that of binoculars more than twice their price. The individual eyepiece adjustment isn't lockable and the objective covers are rudimentary, but these are minor quibbles. If you have R5 000 to R7 000 to spend, you'll struggle to find better binoculars. Two-thirds of the panel opted for a Kowa as their model of choice.

Lynx was the next best manufacturer. Like Kowa, Lynx wasn't included in the 2006 survey, but this omission was remedied in 2008, when we reviewed models from their #44, #45 and #50 series (as well as the compact #22 series). This time, their new #46 series scored best, with a sleek, open-hinge design and bright, crisp optics that brought the 10x42 in fourth and the 8x42 fifth overall. The #44 series also didn't disappoint, with all three featuring in the top 10 binoculars overall. They offer excellent value for money in the R3 500 to R4 500 price range and also featured prominently in the panel's top choices.

Rounding out the top 10 models in terms of overall score were the Leupold

Mojave 8x42 and the Nikon Monarch 8x42. Leupold provided a good cross-section of products for the 2006 review, but only the Mojave for this survey. It is an attractive, compact and relatively lightweight pair of binoculars that ranked eighth overall. It also sports an open-hinge design and was the first choice of one panel member. The main drawback was its relatively poor close focus and slow focus action. Nikon's Monarch 8x42 (ninth overall) and 10x42



LYNX #46 842 8x42

(13th) provide good value for money, although they have suffered from problems with their screw-up eyepieces in the past. The flagship 10.5x45 Monarch didn't feel much larger than a 10x42 and had good optical quality, but the central steel rod detracts from the open hinge design, and it scored 18th overall.

The Vortex Viper, the most expensive pair on offer, ranked 11th overall. The extra-low dispersion glass accounts for the high price, but any advantage it conferred didn't show under the test viewing conditions. Although quite attractively styled, it is rather heavy and the test model appeared to have a problem with its individual eyepiece adjustment mechanism. Its cheaper stable-mate, the Diamondback, is even heavier, with finely grooved rubber armour that is likely to trap dirt, and ranked 20th. CPC is the budget range produced by Vortex, but neither model won over the panel, despite their competitive prices. ▽



KOWA 10x42

MODEL	OPTICS	FEEL	VALUE	COST (R)*	MASS (g)	TYPE	CLOSEST FOCUS (m)	WATER-PROOF	RAIN-GUARD	OBJ COVER
Vortex Viper 10x42	★★★★	★★★★	★★☆	7 599	690	R	1.8	Y	Y	Y
Nikon Monarch 10.5x45	★★★★	★★★★☆	★★☆	6 999	730	R	2.7	Y	Y	Y
Kowa 10x42	★★★★☆	★★★★☆	★★★★☆	6 755	720	R	2.1	Y	Y	Y
Kowa 8x42	★★★★☆	★★★★☆	★★★★★	5 985	700	R	2.2	Y	Y	Y
Bushnell Legend 10x42	★★★★☆	★★★★☆	★★☆	5 499	690	R	2.6	Y	Y	Y
Kowa 8x32	★★★★	★★★★☆	★★★★★	5 472	550	R	1.7	Y	Y	Y
Leupold Mojave 8x42	★★★★☆	★★★★☆	★★★☆☆	5 150	640	R	3.0	Y	Y	N
Lynx #46 1042 10x42	★★★★	★★★★☆	★★★★☆	4 498	650	R	1.9	Y	Y	N
Lynx #46 842 8x42	★★★★	★★★★☆	★★★★☆	4 275	655	R	1.9	Y	Y	N
Lynx #44 1042 10x42	★★★★	★★★★☆	★★★★☆	4 190	640	R	2.3	Y	Y	Y
UltraOptec EDX 10x42	★★★★☆	★★★★☆	★★☆	3 999	665	R	3.0	Y	Y	N
Lynx #44 842 8x42	★★★★	★★★★☆	★★★★☆	3 933	630	R	2.4	Y	Y	Y
UltraOptec EDX 8x42	★★★★☆	★★★★☆	★★☆	3 899	680	R	2.9	Y	Y	N
Pentax DCF CS 8x42	★★★★☆	★★★★	★★★★	3 599	640	R	2.4	Y	Y	Y
Vortex Diamondback 10x42	★★★★☆	★★★★☆	★★★	3 599	725	R	2.3	Y	Y	Y
Nikon Monarch 10x42	★★★★	★★★★	★★★★☆	3 399	610	R	2.2	Y	Y	Y
Lynx #44 832 8x32	★★★★	★★★★☆	★★★★★	3 335	550	R	1.5	Y	Y	Y
Kamakura AM5 10x42	★★★★☆	★★★★	★★★★☆	3 250	620	R	2.2	Y	Y	Y
Kamakura AD7 8x42	★★★★☆	★★★★	★★★★☆	3 100	700	R	2.2	Y	Y	Y
Nikon Monarch 8x42	★★★★	★★★★	★★★★★	2 999	620	R	2.2	Y	Y	Y
Pentax DCF LV 9x28	★★★	★★★	★★★	2 999	360	COM R	2.4	Y	N	N
CPC Ranger Pro 10x42	★★★	★★★	★★☆	2 999	755	R	2.8	Y	Y	Y
Kamakura AD7 8x32	★★★★	★★★★	★★★★★	2 850	630	R	1.5	Y	Y	Y
Pentax DCF NV 10x36	★★★★	★★★★	★★★★★	2 699	650	R	2.7	Y	Y	Y
UltraOptec OH 10x42	★★★★☆	★★★★	★★★★☆	2 599	715	R	1.6	Y	Y	Y
UltraOptec OH 8x42	★★★★☆	★★★★	★★★★☆	2 499	715	R	1.9	Y	Y	Y
Bushnell Nature View 8x42	★★★★☆	★★★★☆	★★★★	2 499	735	R	3.8	Y	Y	Y
Nikon Sporter EX 10x50	★★★	★★★★☆	★★★★☆	2 199	820	R**	5.3	Y	Y	Y
CPC Moonraker 10x42	★★★	★★★★☆	★★★★	1 999	645	R	2.4	Y	Y	Y
Kamakura 8x28	★★★	★★★★☆	★★★★	1 850	405	COM R	2.5	Y	N	N
Nikon Sporter EX 8x42	★★★	★★★★☆	★★★★	1 799	670	R**	4.8	Y	Y	Y
Nikon Action EX 8x40	★★★	★★★	★★★★	1 799	850	P	3.2	Y	Y	Y
Redfield Rebel 8x32	★★★★☆	★★★★☆	★★★★☆	1 590	520	R	1.3	Y	Y	N
Nikon Travelite V 9x25	★★★	★★☆	★★★★	1 299	255	COM P**	3.2	N	N	N
Nikon Action 10x50	★★★	★★☆	★★★★	1 099	920	P**	7.3	N	N	N
Nikon Sportstar EX 10x25	★★	★★☆	★★★	999	290	COM R**	2.6	Y	N	N
Nikon Action 8x40	★★★	★★☆	★★★★	899	740	P	4.8	N	N	N
Nikon Sprint IV 8x21	★★☆	★★☆	★★★★	599	240	COM P**	3.1	N	N	N

R = roof-prism
P = porro-prism
COM R = compact roof-prism
COM P = compact porro-prism

*The prices shown in this table were correct as at the end of June 2010 – they are intended as a guide only and we cannot take into account import currency fluctuations and retail price increases.
**Not suitable for eye-glass wearers.



The panel

We had the same panel that reviewed binoculars in 2006, plus a couple of newcomers. As before, they were asked to select their personal preference from the range on offer.

CLIFF DORSE

Birder and conservationist
Kowa 10x42

GENEVIEVE JONES

Ornithologist
Lynx #46 10x42

PETRUS KRITZINGER

Medic with extensive Antarctic experience
(and closet gadget freak)
Kowa 8x42 or Lynx #44 8x32

LILLY POULSOM

Wildlife artist and birder
Kowa 8x42 or Lynx #44 8x42

PETER RYAN

Birder and ornithologist
Kowa 8x32

SURETHA VAN ROOYEN

Birder and conservationist
Leupold Mojave

Pentax's DCF NV 10x36 came in 12th overall. The 36-mm objective provides a nice compromise in terms of size and light-gathering ability between the standard 32 and 40–42 mm models, and is also available as an 8x36. Nikon offers its Monarch range in 8x36 and 10x36 models; although these were unfortunately not offered for review, other reports suggest they are well worth a try. The Pentax's predecessor (the DCF HS reviewed in 2006) was only shower-proof, but Pentax has addressed this deficiency. Elegant and lightweight, it appears to offer excellent value for money. My only concern is whether it will withstand rigorous field use. The larger Pentax DCF CS 8x42 is equally acceptable, but it is more expensive and found slightly less favour with the panel, ranking 15th.

The three Kamakura models on offer had similar scores: 14th (AD7 8x32), 16th (AD7 8x42) and 17th (AM5 10x42). The AD7 series, which includes a 10x42 model, is very similar to Lynx's #44 series at an even better price, so offers great value for money. The new AM5 series is lighter and, again, the only concern would be its robustness. This certainly isn't a worry for Bushnell's Legend 10x42, which has a proven track record and gives the impression

that you could use it for hammering in nails. But it does feel somewhat cumbersome and ultimately the optics did not impress for the price. The budget Bushnell Nature View 8x42 seems quite insubstantial by comparison, as do the two Nikon Sporter EX models. Although the optics of all three were adequate, birders would probably be better served by spending a little more money on a sturdier model.

In the 2006 survey, UltraOptec was one of the surprise packages. Most of the misgivings we had about the quality of finishing have been addressed, and this time four models were on offer. The EDX range has high-quality extra-low dispersion glass at a substantially cheaper price than any other manufacturer, but the styling is unlikely to be to everyone's taste. The OH (open-hinge)



ULTRAOPTEC EDX 8x42

range is more conventional in appearance, although the locking pin on the individual eyepiece adjustment mechanism is not well situated. I also found the field of view to be not entirely flat, but these binoculars offer great value given their relatively low price and they are definitely worth considering.

Testing binoculars is a bit like a wine tasting – after a while, the individual models start to blur together. Reviewing 38 pairs in a single sitting is a big ask. The panel worked hard to ensure their scores are comparable, but there is inevitably some subjectivity in the assessments. Ultimately, there is no substitute for testing them yourself. Before you buy, it is imperative to check that your chosen binoculars suit your personal requirements. □