he fact that Nikko Stirling dub their flagship range of super-scopes with the Diamond nametag immediately infers that they're the real gems of the optics world. It also prepares you for the pricetags that they command - after all, diamonds don't come cheap!

In fact, the 10-50xzoom magnification model I've been testing for the last few months is probably one of the most expensive scopes I've ever handled. But while I was initially sceptical about its £546 asking price being relevant for airgunning, the many hours' field testing I've

lets you hone-in to a millimetre precise point on your target, two built-in rangefinding systems, incredible optical quality and a reticle that's so special it's deployed by specialist NATO forces!

You can take it as read that the 'usual' scope componentry is the very best you can get on a riflescope. Guaranteed 100 percent waterproof, fogproof and shockproof, the Japanese-made Nikko boasts camera-quality lensware that's been ground and honed using state-of-the-art, computer controlled machinery and the whole process has been

completed by multi-coating all the lens elements for the best possible clarity.

The green tinted lenses not only boast a level of image sharpness that you could cut your finger on, but they also allow practically all the light that goes into them...to come out of the other side!

The Nikko's high level of light transmission means you can shoot in lighting levels in which you'd have normally given up - and the Diamond's over-size, 30mm tube ensures your aiming eye gets to see the best sight picture through those incredible optics. Mind you, that's just as well really - because this super stretch model comes with a magnification factor over five times that of 'normal' scopes!

The serrated ring behind the quickfocus eye-piece allows ultra-fast zooming between 10x power and 50x - yes, fifty

JOHN MARRIOTT sights in on the amazing NIKKO STIRLING 10-50 X 60 DIAMOND super-zoom

undertaken have proved it's worth every hard-earned penny.

Okay, clearly this is a scope for the serious airgunner - after all, it costs the price of a decent precharged pneumatic... and at nearly twice the price of a top-end springer!

But this Nikko Diamond is more than just a scope - and I'm not referring just to its extraordinary 47cm length and 1.1 kilo weight! It's got a magnification range that

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Above left: The MOA target turrets give micro-precision zeroing. Above right: The specially-coated optics of the Nikko boost the brightness of the sight picture. times! - and with a magnification that high you need all the brightness you can get!

Although specialist hunters will want to deploy this scope - in conjunction with its range-finding abilities, it's ideal for longrange sniping - Nikko have unashamedly aimed their flagship optic at target shooters.

Protruding from the huge saddle are two target-style, numbered turrets which allow finger-friendly, in-the-field adjustments - and as on all the best target scopes, these provide 1/8 MOA click-stops for a super-precise zero.

During my tests, I've extensively used these turrets for dialling-in zero at various shooting distances The procedure is simple, zero-up at your favourite range (say 30 metres) and set the turrets to '0' (by slackening off the grub screws and repositioning the turret sleeve to show nought).

Then, move the firing point nearer and farther - I go in five-metre increments - and work out to what 'number' on the turret you have to dial in order for the pellets to strike dead centre of the cross-hair at each different range.

With so much power, even at the 'bottom' end, parallax adjustment (P/A) is very necessary - but this has the advantage of offering a range-finding facility once you've focused the scope to your eye's dioptre.

This takes seconds; you point the scope to a clear sky (but *not* the sun) and twist the serrated, quick-focus eye-piece ring until the reticle looks sharp. Job done though when actually shooting with the scope set above 10x, you'll need to finetune the image's focus by correcting parallax.

snaps into focus...and then read off the range shown on the circumference of the wheel. It couldn't be easier!

Once you know the range, you have plenty of options to calibrate your pellet's trajectory to your aim-point.

You can allow hold-over by placing the cross-hair above (or below) your target though when you're in the 20x to 50x magnification range, this starts to get tricky. So you could choose to 'dial in' a new zero on the top turret by referring to notes that you have already predetermined. I used this method quite a lot during my test period; with a 30 metre



Unlike some cheaper scopes, the Nikko's gimbal system is very positive and always returns the point of impact to where it should be - though you have to remember which way to rotate the turrets or you'll end up being a complete turn out!

On the Nikko, P/A is taken care of via a 90mm diameter wheel on the left side of the scope. Pre-calibrated and adjustable (via grub screws) for individual eyesight, you simply rotate this until the image

zero, I dialled to '+1' (8 clicks) for 35 metres and '+3' (24 clicks) for 40 metres though these figures will vary according to your rifle's power, scope mounts and choice of ammo brand.



10-50 x 60 - a very special scope, indeed!

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However, the Nikko Diamond gives you a third option for aiming - and that's courtesy of its fantastic NATO reticle!

As you can see from my sight picture illustrations, when you peer down the Nikko, you clap eyes on a very special cross-hair indeed-though 'cross-hair' it is anything but; it's more like I o o k i n g through a submarine's periscope!

This Diamond model is equipped with a NATO range-finding reticle - as used by specialist NATO forces and, quite simply, it elevates the Nikko into a league of its own.



At first glance, it looks complicated - but once you familiarise yourself with it, you'll find it worth its weight in gold, both as an aiming aid and a range-finding one.

To help you understand this quite unique reticle, I've covered it in a more detailed way in the panel opposite -but for ultra precise shooting, it's quite superb.

You'll certainly need to have a steady stance when on 30x power or more because the amount you wobble will 'appear' to be magnified to a much greater degree than with standard field scopes - but as you can see from the 50x illustration left, when cranked to the higher powers, your target looms very large indeed!

Though you'll need to invest in 30mm 'high'

Left: At 50x power, the target looms large! This is the sight picture you'd see when shooting a knock-down at 35 metres!

Below: The 10-50 magnification ring and quick-focus eyepiece.



mounts, the Nikko is supplied with everything you need to hone up your marksmanship skills; screwon lens caps, Allen keys, calibrated P/A wheel, lens cloth and instructions.

It might seem a lot to pay for an airgun scope, but if you want everything in your favour when you line up on target, then the Nikko is worth its weight in gold...or even diamonds!

THE NATO RETICLE

THE NIKKO'S UNIQUE reticle is based on the principle of Minutes of Angle (MOA) - a trigonometric function that's used when referring to scope cross-hairs and what they cover.

Roughly, 1 MOA is equivalent to 1 inch at 100 yards, or a quarter-of-an-inch at 25 yards - so a graduated reticle which has two lines that are 4 MOA apart would effectively represent 1 inch at 25 yards.

This is the basis of the NATO reticle - and the various MOA calibrations are shown in the diagram below and corresponding reference table in figure 1 underneath.

Knowing these, it's then possible to work out their actual size equivalent at various ranges. As most people work in metric these days, I've shown these figures in figure 2 (bottom) - and although they apply to the Nikko when set on 10x magnification, you can adjust them for other magnification as explained in the 'note' at the bottom of the table.

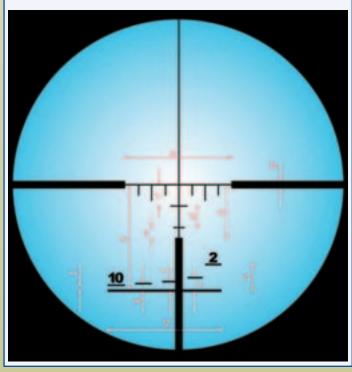


FIGURE 1: NATO RETICLE REFERENCES – SIZES EXPRESSED AS MINUTES OF ANGLE													
Reference	а	b	С	d	е	f	g	h	i	j	k	I	m
MOA	40	20	8	8	4	40	47	10	5	3.4	2.5	2	2

FIGURE 2: NATO RETICLE REFERENCES – SIZES EXPRESSED AS MILLIMETRES AT VARIOUS RANGES (MTRS)													
Range (mtrs)	а	b	С	d	е	f	g	h	i	j	k	1	m
10	116	58	23	23	12	116	137	29	15	10	7	6	6
15	175	87	35	35	17	175	205	44	22	15	11	9	9
20	233	116	47	47	23	233	274	58	29	20	15	12	12
25	291	146	58	58	29	291	342	73	36	25	18	15	15
30	349	175	70	70	35	349	410	87	44	30	22	17	17
35	408	204	82	82	41	408	479	102	51	35	25	20	20
40	466	233	93	93	47	466	547	116	58	40	29	23	23
45	524	262	105	105	52	524	616	131	66	45	33	26	26
50	582	291	116	116	58	582	684	146	73	49	36	29	29

NOTE: These figures apply when target viewed at 10x magnification. For different magnifications, divide figures by one-tenth of magnification.

(i.e. for 50x mag, divide by 5; for 40x mag, divide by 4; for 30x mag, divide by 3; and for 20x mag, divide by 2.)









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