

A new scope from **King Optics**

The distinctive fluted black body of the King Optics Canada Highlander II scope.



by senior correspondent John Dunn

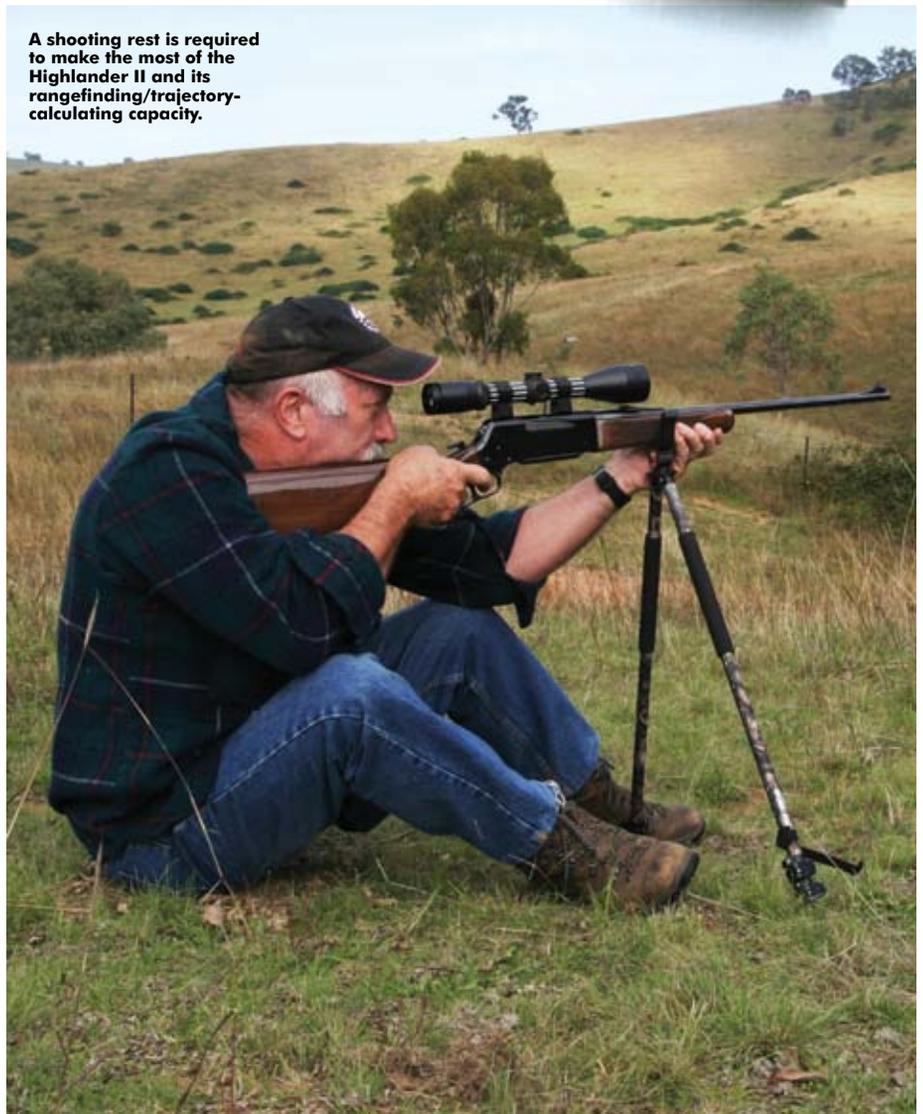
It's always nice to be able to look at new products, so when Nick Vournazos from Tezniek Australia rang me towards the end of 2011 and asked if I'd like to have a look at a new line of telescopic sights his company was importing, I certainly jumped at the opportunity. I was fairly busy at the time, so it wasn't until January that a couple of review scopes turned up in the mail. The package contained two scopes: a top-of-the-line long-range Presidential Series Highlander II scope in 3.5-12x50 and a Back Country Series scope in 3-9x42, plus a couple of sets of mounts, all made by King Optics of Canada (KOC).

KOC wasn't a name I had heard before, but a quick check on their website at www.kingoptics.co provided some basic information about the company and what they stand for. According to their site, the company has 40 years' experience in the optics industry. Situated at Catalone in Nova Scotia, KOC employs around 600 people, and apart from scopes, the company offers a range of other outdoor products including binoculars, spotting scopes and outdoor wear. All scopes in their range are designed, engineered, hand-crafted and assembled in Canada.

Mounts

Two sets of mounts were supplied for review: one for a 25.4mm (1") tube and the other for 30mm. Both were designed to be used in conjunction with a Weaver-style rail or bases. Made from lightweight alloy with a black anodised finish, they come with an appropriate Allen key and a spare screw. Each ring has four screws and carries the King Optic Company logo of a lion with a crown inside a circle. >

A shooting rest is required to make the most of the Highlander II and its rangefinding/trajectory-calculating capacity.



A new scope from King Optics

Where most mounts these days tend to have rounded contours, the KOC mounts are distinctly angular in appearance, no doubt to set them apart from other similar offerings. They also differ from other mounts, in that the locking nut that secures them to the base has a hexagonal head, which allows the use of a small spanner. Alternatively, it can be tightened by using the supplied Allen key as a lever slipped through a couple of transverse holes in the nut.

The Presidential Long Range Series Highlander II 3.5-12x50

There are two scopes within this series: the 3.5-12x50 supplied for review and a straight 6x50. Both come from the factory in a zipped Cordura bag and each is fitted with flip-up lens protectors on both the ocular and objective lenses.

The feature that immediately sets the Highlander II apart from all other scopes is the fluted body - an eye-catching black with white stripes on the review scope, though a silver scope with black flutes is also available. At the time of writing, the KOC offerings are the only fluted body scopes in the industry. The tube walls are also thicker; at 3.5mm, they are at least twice as thick as the industry standard of 1.75mm. The 30mm scope body is of monotube construction, machined from a billet of 6061-T6 aircraft-grade aluminium.

For anyone who is interested, there is a post on YouTube that shows the scopes being subjected to a variety of over-the-top abuses, which include being bashed into a tree and run over by a vehicle. At the end of it all, the scope is refitted to a rifle and shoots a very neat group on the range to show that none of the hard knocks has affected its ability to keep on shooting exactly where it's pointed. While the clip probably needs to be taken with a grain or two of salt, I have no doubt the scope *is* built to last and would certainly survive any of the normal knocks or bumps it might



The review scope mounted on a Browning lever-action in .270 Winchester. Notice the flip-up scope covers that are included with the scope.

receive in the field in unscathed condition.

The lenses are made in Austria, and are multicoated on both sides with a green film that also includes UV protection on external surfaces. The erector lenses, the reticle and all other internal parts of the scope are housed in a helicoid tube that is fixed (glued) inside the scope body to ensure it remains centred at all times. All threads are sealed with a locking compound to ensure they remain tight and the scope is nitrogen filled to make it fog and waterproof.

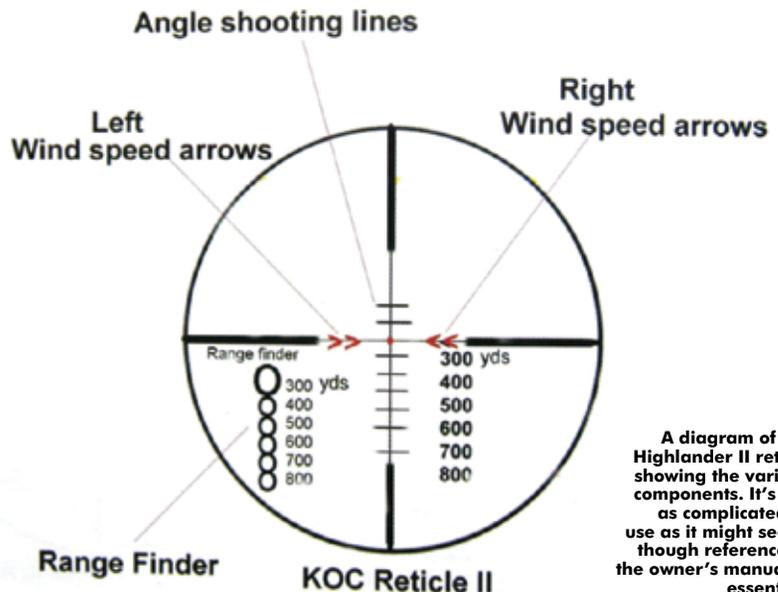
The scope has three turrets. Two provide conventional windage and elevation adjustments in quarter-MOA clicks, while the third houses a rheostat and battery for the illuminated reticle.

The Highlander II is a designated long-range hunting scope, made for use on deer-size and larger game at ranges of 300 yards

and beyond. While that's a long way for the majority of hunters' needs, there are many areas and hunting circumstances where such shots are the norm. For instance, in 2010, I shot an Alaskan Dall sheep ram at a laser-ranged distance of 290 yards. My guide considered that to be a very reasonable distance for a Dall to be taken at. The same bloke hunts sika deer in New Zealand, where cross-valley shots may stretch out to 400m or so. Here in Australia, there are growing numbers of sambar deer hunters who take their animals at extended distances across the expanses of large gully systems. These are the sorts of situations this scope was designed for.

The KOC II reticle

The KOC II reticle is somewhat different to conventional reticles and while it may look



A diagram of the Highlander II reticle showing the various components. It's not as complicated to use as it might seem, though reference to the owner's manual is essential.



The KOC mounts supplied for review.

A new scope from King Optics

a little complicated at first, it's not when you know how to use it. A detailed instruction manual is provided with the scope and like it or not, you will have to read it if you want to make the most of what the scope has to offer.

While the reticle is essentially a duplex-style design with the heavy outer bars all hunters are familiar with, it also has other features built into it that are designed to deliver four different functions in the field. This includes elevation, rangefinding, two aiming points for estimated wind drift from either the right or left, and two aiming points when shooting at steep up or downhill angles.

Elevation

While most variable scopemakers recommend that their scopes be sighted-in at the highest magnification rating, the Highland II's manual stipulates that this scope must be sighted-in at 6x - the magnification at which the reticle is designed to calculate distance and bullet trajectory. The centre of the reticle is a 200-yard aiming point and the scope should be sighted-in at that range or 3" high at 100 yards. Below the centre, there are marked aiming points from 300 out to 800 yards.

Rangefinding

In the bottom left quadrant of the reticle, there is a vertical line of different diameter circles. With the scope set on 6x, these are designed to calculate distances of 300 to 800 yards as marked. The range is calculated by covering the target animal with one of the circles. For deer the size of fallow and rusa (about the same size as American whitetail), one of the circles should cover the animal from back line to belly. For larger species such as buffalo or scrub bull (moose or elk size animals), the circle should cover the neck. Once the range is determined, the



The objective bell and its markings.

shooter then cranks the magnification up to whatever they require and then uses the corresponding vertical aiming point below the centre of the reticle to take the shot.

Wind drift

On each of the horizontal arms of the reticle, there are two arrowheads pointing towards the centre. These designate hold-off points for crosswinds of 15kph (inside arrows) and 25kph (outside arrows), as estimated by the shooter.

Uphill/downhill shooting lines

These are located on the vertical arm above the centre of the reticle and are designed to take the guesswork out of the amount of hold-under required when shooting at game on steep uphill or downhill angles. The bottom line represents the aiming point for a slope of 30 degrees, while the top one is for 60 degrees. According to the manual, their placement in the reticle is determined by the calculated trajectory of a bullet having a velocity of 2900fps, shooting at a target at 200 yards.

The illuminated reticle

The centre of the reticle incorporates a small illuminated dot. Turned off under normal bright light conditions, it can be illuminated by turning the rotating switch in the left turret of the scope to any one of the 11 brightness levels available. The reticle comes into its own when ambient light levels are low in the prime hunting times of first and last light.

Range testing

The scope was mounted on a brand-new

Browning Light Weight lever-action rifle in .270-calibre using the KOC mounts supplied in conjunction with a pair of Warne-made Weaver bases. Initial sighting-in was done at 25m, then at 100m, with the group centred 3" high as per the manual's instructions.

Turning the power adjustment ring and both the windage and elevation turrets was initially quite hard. This eased as the test proceeded, but they nonetheless remained very firm. To me, this indicated that the chances of the scope settings being accidentally changed were limited - a plus in my book. When I later looked at the illuminated reticle, I found that it was also quite hard to turn, requiring a very firm grip to make it move.

When switching from one magnification to another, it's important to re-adjust the diopter ring on the rear of the ocular lens to ensure the sight-picture remains clear. This is much more easily turned than the other adjustment rings.

Reticle adjustments were positive and direct, with the changes readily felt as a 'click'. Light transmission under a range of daylight conditions was excellent, the sight-picture clear and the reticle obvious, even in the shadows of the early morning and late afternoon. Eye relief seemed to be fairly critical, especially at 12x, but no more so than it would be with any other piece of optical gear cranked up to its highest setting.

Field-testing

Prior to the opening of the 2012 New South Wales fallow deer season, I spent quite a bit of time ranging both deer and cattle on



The windage and elevation turrets are clearly marked and click-adjustable in quarter-MOA increments.



A new scope from King Optics

some private property I hunt over. To test the reliability of the ranging circles in the reticle, I checked the results obtained on individual animals against the read-outs on a brand-new Bushnell Elite 1600 ARC laser rangefinder.

On many occasions, I ranged different animals from 300 out to 600 yards, trying to ensure each was as close as possible to whole 100-yard increments (300, 400, 500 and 600). According to the read-out on the Bushnell rangefinder, the largest deviation I obtained between the two systems was just 20 yards at 600 yards. King Optics spent two years field-testing the scope to ensure the ranging capacity of the reticle before it was released and it shows in the consistency it delivers.

After a few of my hunting friends looked through the scope, they commented that the reticle seemed a bit 'cluttered', the inference being that it could take some time to find the centre of the reticle in a rushed situation. For the bulk of general hunting situations, I reckon that's a valid criticism. However, for the longer range shooting the scope was designed to cater for, it doesn't really matter. At extended ranges, any shots taken will be from a rested shooting position and very deliberately aimed at

stationary animals. Under those circumstances, time is unlikely to be a critical factor, neither is a busy reticle.

Overview

The Highlander II is a well-designed and sophisticated piece of optical equipment that is designed for some very specific applications. It goes a long way towards simplifying the processes of accurate longer range shooting, and those who have a need for the technology it utilises will no doubt appreciate the benefits it offers. At around \$2700, the unit doesn't come cheaply, nor would you expect it to, especially when you consider that you only get what you pay for. But given the ongoing growth of interest in longer range shooting, I have no doubt these scopes will find their niche in the marketplace.

King Optics scopes come with a limited lifetime warranty that's applicable to the original purchaser only. Here in Australia, should anything go wrong with a KOC scope, it will be replaced free of charge. That's no small commitment to the integrity of the products, especially when you consider the replacement cost of a scope such as the Highlander II.

Finally, though scopes such as the

Highlander II are designed for some fairly specific applications, all KOC scopes can be used on all types of firearms. That includes air rifles, which are notoriously tough on conventional scopes. To me, that clearly demonstrates just how confident the manufacturer and importers are in the product. It will be interesting to see how they fare in the marketplace, but I reckon they'll do alright.

For more information, visit www.tezник.com.au ●

Specifications

Manufacturer: King Optics Canada Ltd
Model: Presidential Series Highlander II
Distributors: Tezник Pty Ltd
Magnification: 3.5-12x50 (tested), 6x50
Field of View/100m: 10.5- 2.6m
Exit Pupil: 14-4.17mm
Parallax: 100m
Reticle: Etched glass with illuminated dot
Windage Range: +3 MOA
Elevation Range: +25 MOA
RRP: \$2700