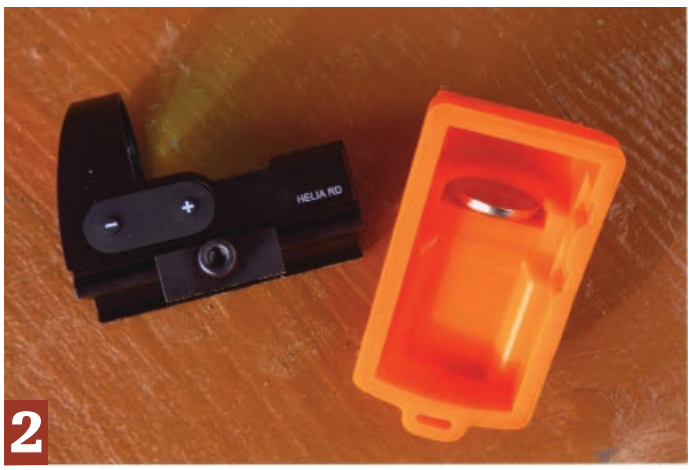
Kahles New Helia Red Dot Sight

The Austrian company's new red dot sight lives up to the mantra "red dots for quick shots," especially anywhere a shot must be taken at running game, and it's the top choice for a levergun.



ON THIS PAGE

1 Compact and lightweight, the Kahles RD was attached to the levergun using a Picatinny rail.

2 When not in use the red dot sight has a protective cover which has storage for a spare 2032 battery.

THE main advantages of a red dot sight are their compactness, light weight and unlimited field of view. It all began back in the mid-1970s when the Swedish company Aimpoint introduced a novel aiming device that soon became widely known as the Red Dot sight. With its short compact tube, long eye relief and illuminated dot reticle, the Aimpoint was as quick to see as a shotgun bead. But it was soon seeing widespread use on rifles and pistols as well as shotguns, and drew the attention of other makers of optical sights. Today, nearly every maker of scope sights, includes a red dot sight in their range.

The latest company to climb on the bandwagon is Kahles GmbH who have introduced an ultra-compact red dot sight made of aircraft quality aluminium alloy that measures 50mm long by 30mm wide has a height of 38mm and weighs a mere 42 grams. The red dot sight is mounted just like a scope, but since eye relief isn't critical, it offers plenty of latitude and can be mounted well forward.

Many red dot sights were designed for use on shotguns and are attached to vent ribs, but a compact, low-profile sight like the Kahles which sits in the lowest possible optical axis is equally at home on a levergun. The Kahles dovetail clamps over Weaver bases or a Picatinny rail. By removing the two screws used to hold the base on, you can exchange it for a another base to suit a different size dovetail.

Most red dot sights operate the same way: Light from the front passes through a a lens with a partially reflective coating on its back surface. A battery powered diode behind the lens emits a small, bright light that bounces off that lens and back into your eye. The red dot and target appear to be in the same plane, so your eye

ON THIS PAGE

3 Kahles Helia RD was mounted on a Marlin Model 336 in .307 Winchester and shot at 50 metres for accuracy.

4 Adjustment dials for windage and elevation are easy to read, clicks have a value off 15mm at 50 metres.

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need focus only on the target. The window size is 26x22mm.

The Kahles RD was designed specifically for driven game in Europe, a sport I once experienced at a Kahles seminar. It was carried out during winter in a forested area where light conditions were poor, and the low-powered scope with illuminated reticle was ideal. I top-scored with seven boars, all taken on the run from 50 to 80 metres. The Kahles electronic sight is 1x (no magnification) and has a 2-minute dot. A dot this large makes a lot of sense if the range is short or the light is poor.

A red dot sight works very well for short-range rifle shooting in brush and heavy timbered areas, but in many hunting situations the extra brightness of even a low-power scope works better, particularly one with an illuminated reticle.

The apparent size of a dot can vary with its brightness, a spring-loaded catch on the side of the Kahles is marked +/- to vary brightness to suit four different light conditions. It is good to have a wide range of brightness, especially on a hunting rifle that might be used in dim or very bright light. Power is supplied by a 2032 battery housed in a slot in the side of the unit. A spare battery is in the protective orange cap that comes with the sight. If the sight is motionless for three minutes, the brightness switches off and goes into standby mode.

Dot size is measured in minutes of angle. Many electronic sights offer a choice of dot sizes; a few even let you change reticles in seconds. Because there is no magnification, you want a big dot - at least 2 MoA for rifles and to my eye 3 MoA is better. Some hunters even swear by a 6-minute dot which makes a lot of sense if the bush is thick, the range is short or the light dim. You need a big dot because dots are measured against the target as it appears in the sight.

For poor light conditions, you want that red dot at its lowest setting as your eyes will have dilated to to absorb as much light as possible. A bright dot in dark bush has an adverse effect, it hides what's behind and a lot of what's around it. In right sunlight, however, you'll need to crank the dial to a high setting.

A red dot gives you plenty of latitude in eye placement. You needn't centre your eye behind a red dot sight. The dot will be visible even if your eye is some distance out of line. If you can dab that dot on target - no matter the dots apparent position in the window, you should hit it, at least at short

range. Some shooters believe that red dot sights are unsuitable for big game rifles because at long range parallax can cause serious aiming error. But the truth is, if your eye lines up with the middle of the lens, there is no parallax, because the dot is relative to the bore line.

On guns meant for use with iron sights, red dots speed up the shot. they are faster than irons because all you have to do is dab the dot on the target. They're faster than any scope because eye relief is much less critical and the dot stands out against dark backgrounds. Although parallax and reticle subtension limit their usefulness at long range, the Kahles RD with 2-minute reticle should be effective for big game out to 200 metres.

Windage and elevation are adjusted by using the small Allen key to rotate a small nut in the centre of a circular "clockface" on the top and side of the the unit to move the dots impact point right or left and up or down. Each click has a value of 15mm at 50 metres.

For testing Ken Harding obtained a Picatinny rail and clamped the Kahles RD Helia to his Marlin 336 in .307 Winchester. We shot it at a 50 metre target and five shot groups consistently measured just over or under one inch. Despite its compactness, the sight is not delicate. These days you simply can't equate ruggedness with weight; the lighter the sight, the less its inertia and the less apt it is to vibrate off the gun under recoil. The Kahles RD would be the logical choice for a .45-70 levergun like the Marlin or Winchester 1886 for hunting heavy cover in all weather. It doesn't fog and it doesn't leak.

Five shot groups at 50 metres measured just over or under one-inch.

The Kahles Rd may have been designed for hunting driven wild boars from a stand, but it would be just as effective for shooting Aussie pigs in lignum of thick brush. Another advantage: you can take it off a rifle and mount it on a handgun or shotgun receiver and get the same view. It's a good sight for slug guns. But whatever use you put it to, it will live up to kind of sight's reputation - " red dots for quick shots."