

Kahles Helia CL 3-9x42



Kahles Helia CL 3-9x42 mm Rifle Scope With Multizero

By NRA Staff

While a scope sight greatly increases the probability of hitting a target at extended range, that capability creates problems of its own—namely, range estimation and the determination of the proper scope zero at the target distance. Having patented a trajectory compensating scope with a vertically moving reticle more than 100 years ago, Kahles, the world's oldest riflescope manufacturer, arguably has had as much experience in this arena as anyone. Knowing that many modern hunters are now equipped with small but accurate laser rangefinders, Kahles sidestepped the issue of range estimation altogether and instead developed a solution to permit rapid, pinpoint shifts of scope zero to hit dead on at multiple distances: the Multizero system in its Helia CL scopes with 1" tubes.

The CL scopes (CL for "compact" and "light") replace Kahles' American Hunter line, and feature improvements such as an 18-percent larger ocular lens for a wider field of view, and upgraded AMV multicoatings. Optical and mechanical quality is all you'd expect from a top-quality European optic, with tack-sharp, virtually distortion-free lenses, nitrogen purging to prevent fogging and full waterproofing to a depth of 13 ft. Other features include a black-anodized one-piece tube, side parallax focus, and a rubber-coated fast-focusing eyepiece. The 3-9x42

mm scope, which we received for testing, and the 3-10x50 mm both feature click adjustments of 1 cm at 100 meters, or slightly over 1/3" at 100 yds., while the 4-12x52 mm model has more conventional 1/4-minute clicks. Our scope came with a 4A reticle, which has thickened plex-type wires in the three o'clock, six o'clock and nine o'clock position, and a thin wire in the 12 o'clock position. Also available is a standard plex reticle. An interesting feature of these scopes is the Reticle Placement Indicator (RPI), a small silver button visible in the top of the elevation turret. An excessively high or low position of the RPI when the scope is zeroed shows that the reticle is considerably offset in relation to the central axis of the scope—a less-than-ideal situation optically, and an indicator of a scope-mounting problem.

The feature of primary interest, however, is the novel Multizero system. Here's how it works. The top of the elevation turret is marked with the letters A, B and C, and has a rotating center disk, marked with an arrow, that can be turned with a special key. The scope is shipped with the arrow on the center disk set to A; this is the normal mode allowing the full elevation adjustment of about 58 m.o.a. At this setting, the rifle is zeroed at the shortest range at which it will be used (usually 100 yds). Once this zero is set, the turret's center disk is turned to



the B marking. This disengages the internal clutch that locks the turret to the elevation spindle. At this point, the turret turns freely, with no click stops. The turret is turned counterclockwise until it stops, and the turret's center disk turned to the C marking. This re-engages the turret with the spindle, and also prevents the elevation turret from turning any farther counterclockwise, setting the base zero. One full clockwise turn of elevation adjustment remains, however, with the elevation clicks re-engaged—enough to zero most modern center-fire rifles out to 500 to 600 yds.

The rifle is then zeroed for the next zero range—in our example, 200 yds.—in the normal way (but with the elevation turret disk still set to C). Once this second zero is set, a 1/16" punch is used to turn the bottom, independently rotating index ring until the notch on its circumference is aligned with the arrow at the base of the turret. Next, the rifle is zeroed at a third distance—most likely 300 yds.—and the next index ring on the turret is similarly aligned to the mark on the turret base. Zeroing may be done at two additional distances, such as 400 and 500 yds., with the two remaining index rings aligned in the same manner. Thus, at the end of the process, one merely turns the elevation turret all the way counterclockwise to return to the 100-yd. zero, and then clockwise to visually align the appropriate index ring to reacquire the zeroes for 200, 300, 400 or 500 yds.

Besides being used to zero one load at different distances, the Multizero system may also serve to zero several different loads, with different bullet weights and/or muzzle velocities, at one or more ranges. This probably sounds more complex than it is, but in any event, all the zeroing and changing from A to B to C is done only once. In the field, all one does is establish the range of the target, and then turn the elevation turret

until the notch on the appropriate ring is centered on the arrow on the turret base. Our test scope, mounted on an accurate target rifle, did not disappoint. Optical quality was excellent, click adjustments were precise and repeatable, and the Multizero feature, zeroed at 100, 150, 200, 250 and 300 and tested at a local 300-yd. range, was highly effective. One of the prime virtues of the system is speed. In only a second or two, the proper zero for a new target distance could be acquired—much less time than is needed to mentally calculate scope adjustments and then count the proper number of clicks on the elevation turret. About the only improvement we could suggest would be some sort of highly visible color in the index marks in each index ring.

The Helia CL 3-9x42 mm is a first-class riflescope with a variety of desirable features, most notably the novel Multizero system, which eliminates the need for visual holdover, or click counting, once the distance to the target is known.