SHEPHERD SCOPES

a Division of Salvo Technologies

DRS - DUAL RETICLE SYSTEM

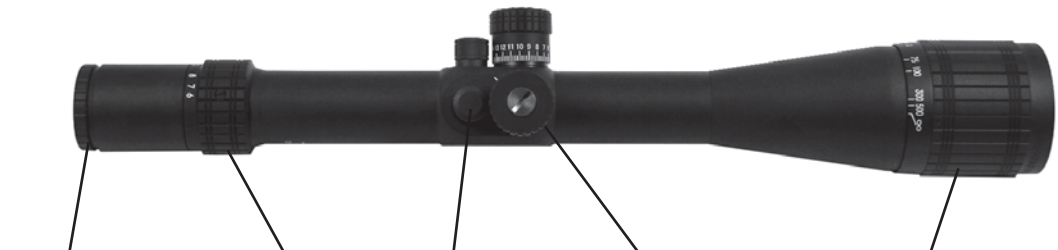
RIFLESCOPE INSTRUCTION MANUAL

DRS Sniper Series

Shepherd DRS Riflescope

Shepherd's Dual Reticle System (DRS) Scopes are the fastest, easiest, and most reliable scopes, built to last a lifetime. The patented reticle system makes this the only scope with dual, independently adjustable reticles which allows for one reticle to be a point of reference for the other. This means you have a visual verification of the original zero and of elevation and wind-age adjustments. The static crosshair in the rear focal plane (RFP) reticle, combined with the unique front focal plane (FFP) reticle that maintains its accuracy as you adjust magnification, gives you quick target acquisition at any range. Shepherd's FFP reticle combines range finding and drop compensation, allowing you to easily match your target to the appropriate circle – just Fit and Fire.

Identifying Your Shepherd DRS Scope



6-24x50 S-Series

Fast Focus Eyepiece Adjustment

Turn the eyepiece knob counter-clockwise until it is fully out. Look through the scope at a blank, light colored wall. Slowly turn the eyepiece knob clockwise until the reticle is in focus. As you turn the knob, look away every few seconds so your eye does not adjust to the reticle. When the reticle is clear and sharp with a quick glance, the eyepiece is set to your eye.

Parallax Adjustment

The parallax adjustment is used to focus the target image. Aim the scope at the target and rotate the objective focus ring to match the target's range. The crosshair should stay on target even if you move your eye or head slightly. If the crosshair shifts in relation to the target, make slight adjustments until the crosshair stays on target.

Turret Adjustment

The FFP turrets can be indexed after zeroing the scope (page 7). Remove the turret knob screw, pull off the turret knob, rotate the knob so the "0" will line up with the index line on the scope, push the knob back down, and replace the turret cap screw. Repeat this process for the other large turret knob.

Mounting the Scope

Mount the scope into 34mm scope rings on the rifle leaving the top half of the rings loose enough to allow the scope to slide forward and back. Start with the scope as far forward in the rings as possible and with the scope at its highest magnification. Assume a proper shooting position and adjust the scope to get a full field of view with a sharp edge. This will ensure that the scope is at the proper eye relief.

Secure the rifle on sand bags or a gun rest and level it. Without moving the rifle, rotate the scope until it is level. This can be done with a bubble level set on top of the elevation knob. Tighten the scope rings in a crisscross pattern one to two turns at a time to ensure a firm, even grip on the scope that will not induce torque on the tube or tilt the crosshair.

WARNING: Do not over-tighten any of the scope ring screws as you may cause damage to the scope body or the mounts. Such damage would not be covered under warranty. Be gentle and torque to no more than 20 lb-in.

Bore Sighting

Bore sighting the scope will ensure that the scope is mounted properly to retain full erector travel. This can be done by following the manufacturer's instructions for a laser bore sighter, or by following the instructions below to bore sight visually.

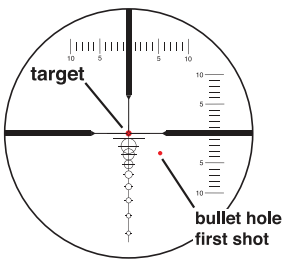
Remove the bolt (for ARs, separate the lower receiver first) and set the rifle up on sand bags or a gun rest. With a target about 50 yards away, look through the bore and adjust the rifle until the target appears centered in the barrel.

Now look through the scope. The scope should be aligned to the weapon so that the center of the reticle is within a 4-inch circle on the target from your aiming point. If you are not within a 4-inch circle, you may need to shim or adjust your scope rings so that the scope is better aligned with your weapon's barrel. When the scope is aligned as closely as possible to the barrel, it is ready to be zeroed.

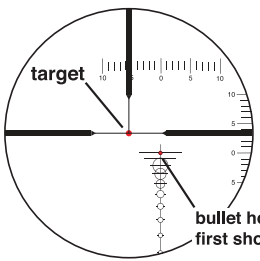
How to Zero a Shepherd One-Shot Zero Scope

The Shepherd DRS with its patented dual reticle system is the only scope where you can see the reticle move. One reticle acts as a point of reference to the other. There are three easy steps to zeroing in your riflescope.

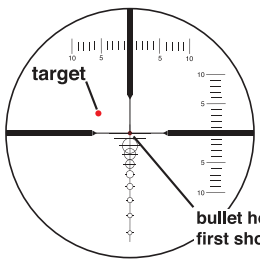
STEP 1



STEP 2



STEP 3



1. Fire a shot from a solid rest and note where the bullet impacted the target.

2. Hold the crosshairs on the target and rotate the large knobs to move the small zero circle of the front reticle until it is centered on the bullet hole.

3. Now turn the small knobs to move the center of the crosshair just above the circles. That's it, the scope is now zeroed!

Centering the Erector Tube

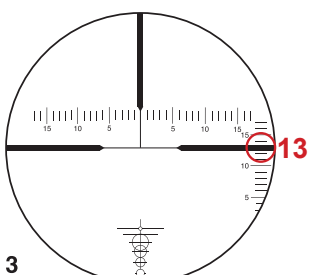
Your Shepherd DRS scope comes centered from the factory. If the scope was set-up on one rifle and you want to move it to another, it is a good idea to re-center the erector inside the scope to maximize the full range of adjustment.

1. Adjust the scope magnification so that you can clearly see the MOA tick marks on the top and right side of the front reticle. Remove the turret caps.

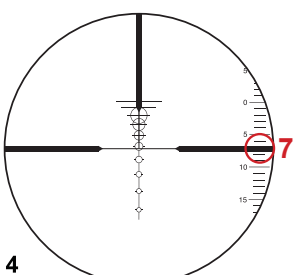
2. Turn the large elevation knob clockwise until it stops. Do not overturn knob.

3. Look through the scope at the MOA tick marks on the right, write down the number at the horizontal crosshair. (Note: the numbers used on these pages are for example only)

4. Now turn the knob all the way counter-clockwise until the reticle stops moving and record that number.



STEP 3



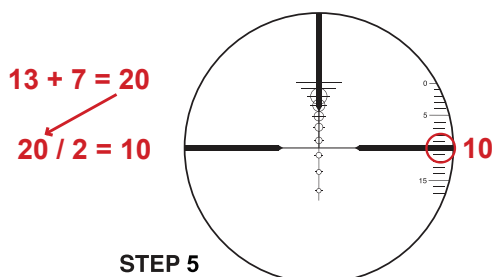
STEP 4

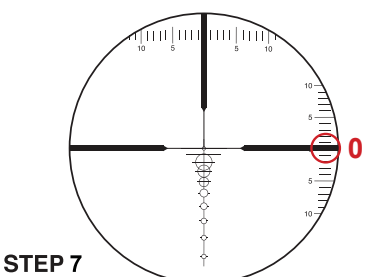
5. Add the two numbers, and divide by two. Using the small knob, move the crosshair to the new number. (Note: the numbers used on these pages are for example only)

6. To check that your new number was correct turn the large knob clockwise again and it should stop on or close to the number you got in step 5.

7. Turn the large knob counter-clockwise until the 0 tick mark is centered on the crosshair. The elevation is now centered.

8. Repeat steps 1-7 using the windage knobs and the MOA numbers at the top of the reticle.



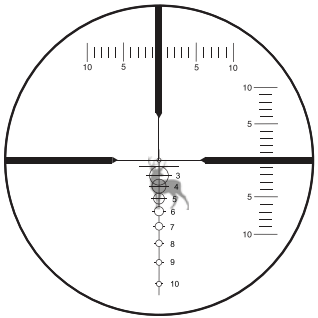


Range Finding and Bullet Drop Compensating with the DRS

The Shepherd DRS is a fast, easy approach to passive range finding. The idea was conceptualized over 35 years ago and is still as effective and simple as it was in the first prototype.

For quick range finding, there are a series of circles (or squares in the DRS Mil Dot) in the first focal plane reticle that are based on a specific target size at distances. Reticles are available in 9", 18", and 24" stadia circle. As long as you know the approximate size of the target you can use the circles to find its range.

COMMON TARGET SIZES	
DEER	18" FROM SHOULDER TO BRISKET
ELK / LARGE GAME	24" CHEST AREA / 18" FROM NOSE TO BACK OF HEAD OR 3/4 OF BODY MASS
COYOTE	9" CHEST AREA / 18" STANDING, FROM GROUND TO TOP OF BACK
PRARIE DOG	STANDING ADULT 9" LONG / HALF OF 18" CIRCLE
MILITARY	SILHOUETTE TARGET IS 18" - 20" ACROSS THE SHOULDERS



As an example, let's say there is a deer standing 400 yards away from a hunter. Using the series of decreasingly smaller circles, match the chest area of the deer in the circle that fits. The number beside that circle is the range, in this case 4. By using the circles, the scope is automatically compensating for the bullet drop. Just Fit and Fire - it's that simple!

The shooter can also use the riflescope to range other objects. If you have a deer that fits the 600-yard circle and his rack covers 6 MOA spaces in the scope you simply multiply [6 (for the yards) x 6 (for the MOA spaces)] and get the number 36. Therefore, the buck has a 36 inch rack.

The calculation also works in the other direction. Say the shooter has a known target that is 30" and that target covers 6 MOA spaces. If you divide the target size of 30" by the 6 MOA you will get 5. Therefore that target is at 500 yards. The shooter can then put the 500 yard circle on the target and fire. The system has been designed with the range finding circles set on the same focal plane as the target. This means that as you zoom in and out the circles increase and decrease proportionally. They are always accurate!