

# Riflescope 3-9x40

In the event that you should require service for your Nikon RIFLESCOPE, please send it directly to:  
 Nikon Service  
 6420 Willshire Blvd, Suite 100  
 Los Angeles, CA. 90048-5501  
 1-800-Nikon SV.

**Manufacturer: NIKON VISION CO., LTD.**  
 3-25, Futaba 1-chome, Shinagawa-ku, Tokyo 142-0043, Japan

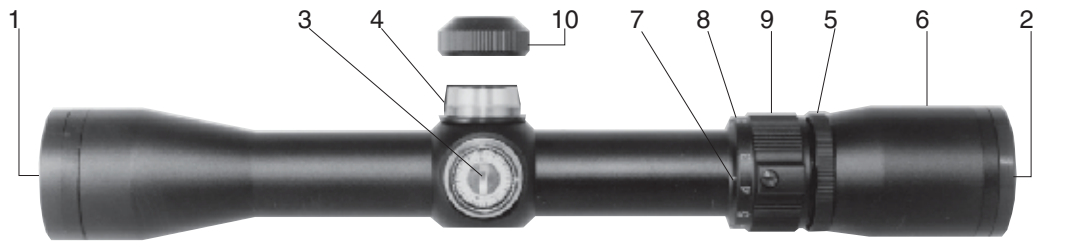
Congratulations on your choice of the Nikon Riflescope 3-9x40. Your new scope is the finest example of Nikon's rugged and durable construction and precision bright optics; important qualities for a serious shooter's riflescope.

Whether you use your scope for hunting or for target shooting, the procedure for mounting is identical. A set of high-quality steel mounting rings which have a standard diameter of 25.4 mm (1 in) are required to mount the scope. Follow the ring manufacturer's instructions for mounting procedures. After mounting the scope on your rifle, follow the procedures for reticle alignment.

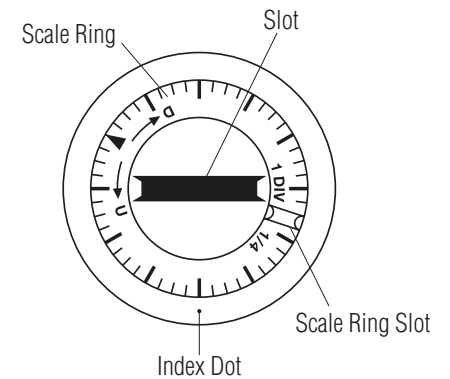
**Caution**

- (1) Do NOT look at the sun through the riflescope. It will permanently damage your eye. This precaution applies to all optical devices, such as cameras and binoculars.
- (2) The riflescope is effectively sealed against moisture and dust. You may use your scope safely either in the rain or in dusty climates. To preserve the appearance of the scope, we recommend that it be dried and cleaned prior to storage. Use a soft cloth for cleaning metal surfaces and use photographic lens tissue to clean the scope's lenses.

**1. Nomenclature**



Magnified Figure of Elevation Adjustment



**Fig. 1-2**

- 1 Objective lens    3 Elevation adjustment    5 Eyepiece Lock Ring    7 Power Index Dot    9 Power Selector Ring  
 2 Eyepiece lens    4 Windage adjustment    6 Eyepiece adjustment    8 Power Scale    10 Cap for adjustment

**2. Specifications**

Model	3-9x40	
Actual Magnification	3x-9x	
Objective Diameter	(mm) (in)	40 1.57
Exit Pupil*	(mm) (in)	13.3-4.4 0.52-0.17
Eye Relief*	(mm) (in)	91.4-89.9 3.6-3.5
Field of View at 100m/100yds*	(m) (ft)	11.7-3.8 35.1-11.4
Tube Diameter	(mm) (in)	25.4 1
Objective Tube Diameter	(mm) (in)	47.3 1.86
Eyepiece Outside Diameter	(mm) (in)	39.3 1.55
Length	(mm) (in)	313 12.3
Weight	(g) (oz)	395 13.6
Adjustment Graduation	(MOA)**	1 click = 1/4"
Maximum Internal Adjustment (Elevation & Windage)	(MOA)**	80
Parallax Setting	(m) (yards)	91.44 100
Structure	Waterproof (up to 2m for 5 minutes) and Nitrogen Gas Purged	

\* (at minimum magnification)-(at maximum magnification)  
 \*\* MOA=Minute of Angle

**3. Instructions**

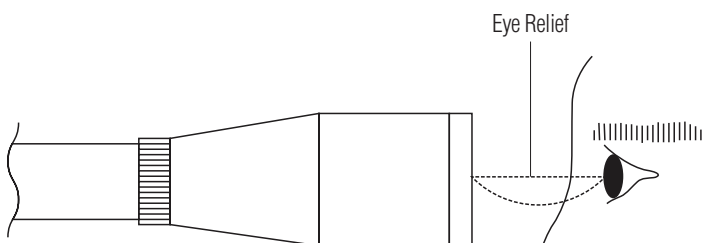
**(1) Focusing**

- 1 Look through the eyepiece with your eye positioned about 10cm (4 in) away from the eyepiece lens (Fig. 3-1), and you will see the Standard BDC reticle (Fig. 3-2) or BDC Active Target reticle (Fig. 3-3). Be sure your eye is positioned within proper alignment and proper eye relief, otherwise the view will "black out".
- 2 Point the objective end of the scope at the sky (do NOT point at the sun) or at a plain unpatterned wall. Loosen the lock ring. Turn the eyepiece adjustment counter-clockwise and then turn it clockwise until the reticle appears sharp.
- 3 Finally, without moving the eyepiece adjustment, turn the eyepiece lock ring as in Fig. 3-4 to the end so that the eyepiece adjustment will be firmly locked.

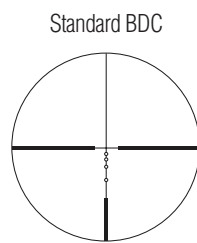
**The lock ring must be firmly tightened to ensure an air-tight seal.**

**(2) Magnification**

- The Riflescope 3-9x40 has a variable magnification from 3 to 9x. To change powers, just rotate the power selector ring until the desired magnification appears adjacent to the power index dot.



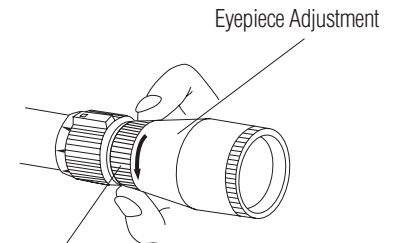
**Fig. 3-1**



**Fig. 3-2**



**Fig. 3-3**



**Fig. 3-4**

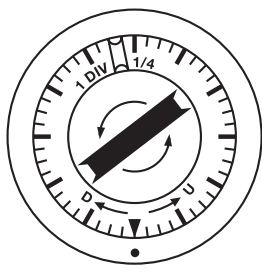


Fig. 3-5

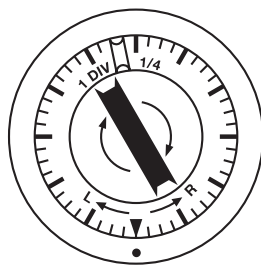


Fig. 3-6

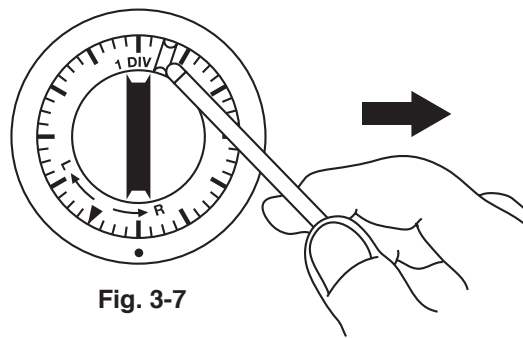


Fig. 3-7

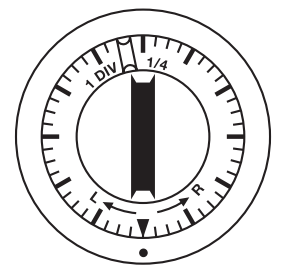


Fig. 3-8

## (2) Adjustment of the riflescope

Sighting through the riflescope, align the rifle with your aiming point on the target and shoot a trial round. If the bullet does not hit the aiming point, adjust the elevation and windage, as follows:

- If the bullet hits under the aiming point, turn the elevation adjustment (counter-clockwise) using a coin, etc. in the direction of the arrow marked "U" for up (Fig. 3-5). If the bullet hits high, turn adjustment (clockwise) in the direction of the arrow marked "D" for down.
- If the bullet hits to the right of the aiming point, turn the windage adjustment (clockwise) in the direction of the arrow marked "L" for left (Fig. 3-6). If the bullet hits to the left of the aiming point, turn adjustment (counter-clockwise) in the direction of the arrow marked "R" for right.
- After the reticle has been adjusted to the point of impact, insert the tip of a screwdriver into the slot of the scale ring and rotate the scale ring so that the "▼" is lined up with the index dot. (Fig. 3-7, Fig. 3-8)

### Note:

- The windage and elevation scales of the Riflescope 3-9x40 are calibrated in division of 1/4 minute of angle with a click at intervals of 1/4 minute of angle (one division)
- When adjusting the reticle to the point of aim, remember that one minute of angle equals approximately one inch (2.54 cm) at 100 yards (91.44 m). Therefore, if the impact point is two inches (5.08 cm) low and one inch (2.54 cm) right at 100 yds (91.44 m) Parallax Setting, you should adjust two minutes of angle up and one minute of angle left. In case of 50 yds (45.72 m) Parallax Setting, the adjusting value is double. In the case of 75 yds (68.58 m) Parallax Setting, the adjusting value is 1.5 times.

## Maintenance

### (1) Lens cleaning

To remove dirt or fingerprints, soak gauze or lens cleaning paper (silicon-free paper sold at camera retailers) with a small quantity of absolute alcohol (available from drugstores) and lightly wipe off the affected areas.

Wiping with a handkerchief or leather may damage the lens surface and is not recommended.

Dust may scratch the lens surface or corrode the lens.

Brush dust off using a soft oil-free brush.

### (2) Scope exterior

Use a soft dry cloth to wipe off any dirt or fingerprints that might accumulate. It is not necessary to oil the scope's surface.

### (3) Windage/elevation adjustments

These adjustments are permanently lubricated. Do not attempt to lubricate them. Cover them with the caps supplied, except when adjusting them, to keep out dust and dirt.

### (4) Eyepiece adjustment

This adjustment is permanently lubricated. Do not attempt to lubricate it.

### (5) Power selector ring

No lubrication is required for the power selector ring. Do not loosen or remove the screws in power selector ring.

## Waterproof models:

The Riflescope 3-9x40 is waterproof, and will suffer no damage to the optical system if submerged or dropped in water to a maximum depth of 2 m (6 ft 6 in) for up to 5 minutes.

### The Riflescope 3-9x40 offers the following advantages:

- Can be used in conditions of high humidity, dust and rain without risk of damage.
- Nitrogen-filled design makes it resistant to condensation and mold.

### Observe the following when using the Riflescope 3-9x40:

- As the unit does not have a perfectly sealed structure, it should not be operated nor held in running water.
- Any moisture should be wiped off before adjusting movable parts (Elevation/Windage knob, eyepiece, etc.) of the riflescope to prevent damage and for safety reasons.

To keep your riflescope in excellent condition, Nikon Vision recommends regular servicing by authorized dealer.

## Utilizing the BDC Reticle

Thank you for choosing the Nikon BDC reticle riflescope. The BDC reticle is designed to compensate for the trajectory of your firearm. Regardless of the particular style of BDC reticle you have, the position of the circles are based upon an average trajectory for some of the more popular projectiles and cartridges on the market based upon the intended use of the scope itself.

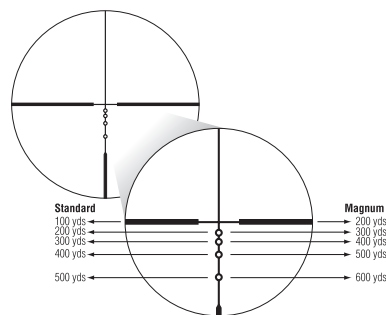
Please note that the reticle is based upon ballistic information and may or may not meet the same results for you as there are many variables that come into play such as:

- Actual Velocity (Ammunition manufacturers' information in regards to muzzle velocity may or may not match the velocity your firearm produces. The best way to determine the actual muzzle velocity for your firearm is to use a chronograph).
- Temperature
- Humidity
- Altitude
- Barometric Pressure
- Condition and inherent accuracy of the firearm
- The mounting system and how true it positions the scope to the centerline of the bore

### Standard BDC

The standard BDC reticle is designed for use with either of the following cartridge categories. Please note that we highly recommend polymer tipped bullets for long range shooting as they are more aerodynamic and tend to provide a flatter trajectory.

**Standard Velocity** – Cartridges with a muzzle velocity of approximately 2,800 feet per second. We recommend that you zero the firearm at 100 yards with standard velocity cartridges, this would provide bullet drop compensation for 200, 300, 400 and 500 yards using the respective ballistic circles as shown in the figure to the right.



**Magnum Velocity** – Cartridges with a muzzle velocity of approximately 3,000 feet per second. We recommend that you zero the firearm at 200 yards with magnum velocity cartridges, this would provide bullet drop compensation for 300, 400, 500 and 600 yards using the respective ballistic circles as shown in the illustration.

Please note that your firearm may or may not match the information listed for bullet drop based upon the variables listed in the beginning of this section.

**What if the cartridge you are shooting does not fall into any of the categories? NO PROBLEM, just go to Nikon Spot On Ballistic Match Technology Program website (NikonSportOptics.com/SpotOn) and you can match your exact cartridge to the reticle. In fact, even if your cartridge does fall into one of the categories, we highly recommend that you check out the Spot On website as it will provide exact yardages that each circle represents, providing unparalleled ballistic data for long range shooting.**

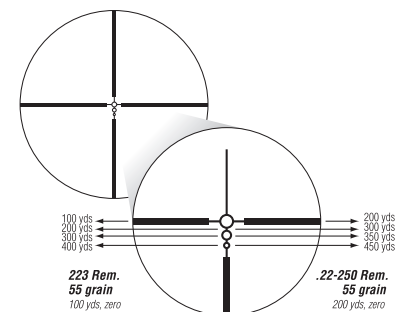
If you have further questions regarding the Spot On Technology please visit the website: <http://spoton.nikonsportoptics.com/spoton/questions.html>

## BDC Active Target Reticle

The BDC Active Target reticle was designed specifically for hunting coyote, fox and other predator, especially when calling those animals. The open circle design allows you to bracket the animal for fast target acquisition as predators are constantly on the move.

The reticle is designed around 2 of the most popular varmint cartridges, the .223 Remington and the .22-250 Remington using 55 grain polymer tipped bullets.

**Note: When initially zeroing the BDC Active Target reticle we highly recommend using a round or circular bulls-eye type target versus a diamond style. Your eye will naturally center the circle type target making it easier to zero the firearm.**



BDC Active Target Reticle

When using the .22-250 Remington, we recommend that you zero the firearm at 200 yards, using the center circle. The reticle would then provide bullet drop compensation for 300 (bottom of the center circle), 350 yards (center of second circle) and 450 yards (center of third circle) using the respective ballistic circles as shown right.



[NikonSportOptics.com/SpotOn](http://NikonSportOptics.com/SpotOn)

The Spot On website has been designed to provide accurate information that matches the ballistics of whatever projectile you are shooting directly to the reticle. Please note that you should verify that your set up matches the information provided in this manual or the Spot On program before venturing into the field. The only way to truly verify the information is by actual shooting. Again, the variables listed above may or may not affect the results. Note: It is imperative that the reticle be level in relation to the firearm. If the reticle is canted, even just a few degrees, it can cause the shot to drift off the centerline of the point of aim. There are many commercial leveling devices on the market, but the one that we find to be the most accurate in leveling the reticle is a plum bob. Use a bubble level to make sure the firearm is level, then look through scope at an appropriately placed plum bob and align the reticle accordingly. Please also note that all Nikon BDC reticles were originally designed to be used on the **highest magnification**. Since changing the magnification changes the position of the circles in relation to the target, the distances listed along with each of the illustrations are at the highest magnification. The center crosshair does not change with magnification as it is placed in the optical center of the scope. The benefit of the Spot On program is that it calculates the distance that each circle represents at every magnification.