

# TACTICAL 3-RAIL SIGHTING SYSTEM

## KEY FEATURES

The **3-RAIL SIGHTING SYSTEM** is a new generation of modular tactical sighting systems. The unique sighting system mount that encompasses a magnified scope, allows the shooter to mount many different accessories directly to the scope for quick and easy access.

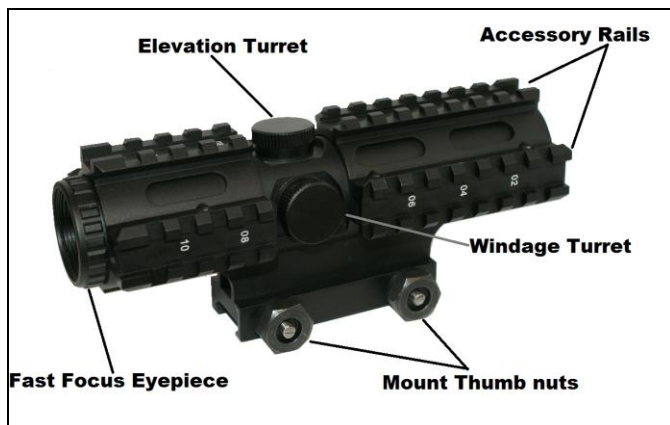
You can mount a secondary sight (red dot/ reflex sight), laser targeting, and a tactical flashlight directly to the scope. The scope has the rail space on the sighting system mount for a wide variety of accessories.

Keeps the weight of the accessories closer to the center balance of the firearm, avoiding the front heavy barrel feel of all the accessories mounted at the front end of the barrel.

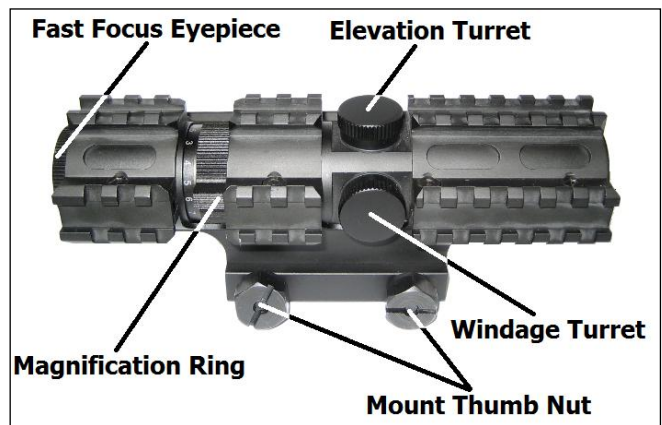
Fits virtually any Weaver and Picatinny rails, making it possible to fit onto a wide variety of firearms.

NcSTAR scopes are also backed by our Lifetime Limited Warranty. We trust that you will receive many years of enjoyment and service from your new 3-Rail Sighting System Scope.

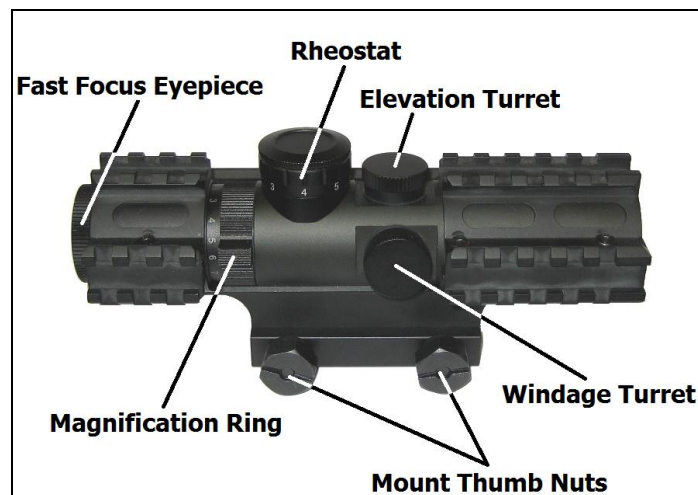
For optimum performance, please follow all of the procedures in this owner's manual very carefully.



**Fig. 1 – Fix Magnification models**



**Fig.2- Variable Magnification models**



**Fig. 3 - Illuminated Reticle & Variable Magnification models**

## **MOUNTING PROCEDURE**

Your scope mount is the link between your firearm and your optics. It is very important to have a solid connection between the two in order to ensure proper function of all the components. You should place your firearm on a secure platform, such as a gun vise, before performing any of the following procedures.

- ❖ **CAUTION: CAREFULLY FOLLOW ALL OF THE MOUNTING PROCEDURES. FAILURE TO DO SO CAN CAUSE DAMAGE TO YOUR SCOPE OR FIREARM**
- ❖ **CAUTION: BE SURE THAT YOUR FIREARM IS UNLOADED AND POINTED IN A SAFE DIRECTION. PRACTICE SAFE FIREARM HANDLING PROCEDURES AT ALL TIMES.**

## **MOUNTING THE SCOPE TO THE WEAVER/PICATINNY RAIL**

Follow these mounting instructions:

1. Begin by loosening the Thumb Nuts (counter-clockwise) on the right side of the mount.
2. With the Mount Thumb Nuts loosened, the Mount Rail Clamp should slide out wider from the base mount. This will allow you to place the scope onto a Weaver or Picatinny rail. You want to position the scope, so that when you have your firearm shouldered with a proper cheek weld you have the scope set the proper distance from your eye. Positioning the scope with the proper eye relief will give you a full field of view through the scope.
3. Once you have the scope properly positioned on your firearm, slide the Mount Rail Clamp against your firearm's optics rail. Begin tightening the Thumb Nuts (clockwise) against the Rail Clamp to secure the scope to the firearm.
4. Check and verify that the scope is firmly secured and properly mounted onto your firearms optic rail. Check to see if the scope is position correctly on the firearm's rail, so when it's shouldered that the scope is at a comfortable distance from a proper cheek weld and that you have a full field of view through the scope.

## **LEVELING YOUR RETICLE**

With the scope mounted onto your firearm, you may have to adjust the scope in the three rail mounting system to be plumb and level with the firearm.

If you have to adjust the scope, secure the rifle in a rifle rest, making sure the firearm is plumb and level in the rifle rest. The use of a torpedo or bubble level can help with leveling the firearm and the scope's reticle.

To adjust the scope inside the three rail mount, you will have to loosen all the Allen head bolt screws securing the upper rail mount from the lower base mount. With all the screws loosened, turn the scope until the reticle is plumb and level with the firearm. The three rail mount has enough clearance to allow the scope to be turned in either direction to help with leveling the reticle. When you have the scope properly leveled you can tighten each screw evenly until the scope is securely mounted inside the upper and lower three rail mount.

## **FOCUSING YOUR SCOPE**

Your 3-Rail Sighting System Scope is equipped with a Fast Focus eyepiece on the rear of the ocular lens easily distinguished by the serrated ring (Fig. 4). Once your scope is properly mounted you can focus your reticle to ensure a clear and crisp image.

1. Hold your firearm and look through your scope in a comfortable position to where you can see a full field of view through the scope.
2. Make quick glances through the eyepiece at a featureless, flatly lit area such as a wall or open sky.



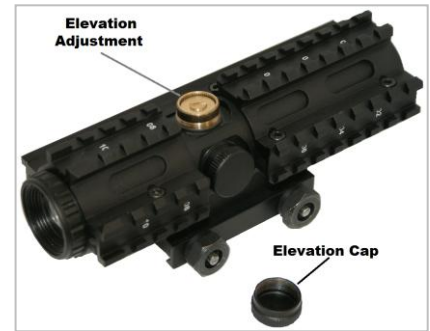
**Figure 4**

3. Spinning the eyepiece counter-clockwise will extend the eyepiece outward (generally suitable for those who are far sighted). Spinning the eyepiece clockwise will bring the eyepiece back into the ocular lens housing (generally suitable for those who are near sighted)
4. Fine tune your adjustments until the reticle appears clear and sharp. Once the eyepiece reaches the outer limits of adjustment, be sure not to force it so as not to ruin the integrity of the seals.

## **ZEROING YOUR SCOPE**

Your 3-Rail Sighting System Scope is equipped with adjustable turrets for Windage and Elevation. To access the Elevation adjustments remove the Elevation Cap on top of the scope by twisting it counter-clockwise (Fig. 5).

Twisting the Elevation adjuster counter-clockwise move the point of impact up and twisting the Elevation adjuster clockwise will move the point of impact down. Replace the Elevation Cap once you have made all necessary adjustments.



**Figure 5**



**Figure 6**

The Windage adjuster is located on the right side of the scope. To access the Windage adjustments remove the Windage Cap on right side of the scope by twisting it counter-clockwise. (Fig. 6).

Twisting the Windage adjuster counter-clockwise will move the point of impact to the right, and twisting the Windage adjuster clockwise will move the point of impact to the left.

NOTE: Each click of adjustment changes the point of impact (where the bullet strikes the target) by the amount shown on the chart below.

Windage/Elevation inches of movement per click				
50 yards	100 yards	200 yards	300 yards	400yards
1/4"	1/2"	1"	1 1/2"	2"

We recommend the use of a bore sighting device to save time and ammunition when zeroing your scope. These tools will help you get on paper much quicker. Follow all of the instructions set by the manufacturer of your bore sighting device very carefully. Once you have achieved a relative zero by way of bore sighting, it is still necessary to shoot your firearm to ensure an accurate zero.

❖ **CAUTION:** Always be sure to **REMOVE** the bore sighting device from your firearm before shooting live ammunition. Failure to do so can result in damage to your firearm, or injury to yourself and those around you.

With some firearms it may not be possible to use a bore sighting device. In this case it will be necessary to use a more traditional method of zeroing.

❖ **WHEN OPERATING ANY TYPE OF FIREARM ALWAYS USE PROPER EYE AND EAR PROTECTION. BE SURE TO USE YOUR FIREARM IN AN AREA THAT IS PERMISSIBLE UNDER LOCAL, STATE, AND FEDERAL LAW.**

1. From a steady rest position (such as a shooting bench) fire three to five rounds at a 100 yard target.
2. Observe where the bullets have struck the target and adjust windage and elevation as necessary until your point of aim matches your point of impact. Remember, at 100 yards each click of adjustment will move the crosshairs of the scope roughly  $\frac{1}{2}$ ".
3. Your firearm and scope are now zeroed for 100 yards. To change the zero distance of your scope you can adjust the Elevation and Windage turrets as needed according to the ballistics of the cartridge load you are using

## **MAGNIFICATION ADJUSTMENT**

For **3-RAIL SIGHTING SYSTEM** scope models with a Variable Power Magnification Ring (Fig. 2 & 3), the Magnification Ring is located directly in front of the eyepiece. By turning this ring you can quickly and easily choose the desired magnification level. Lower levels of magnification provide you with a wider Field of View, while higher levels of magnification provide you with a closer view of your target.

## **BATTERY INSTALLATION**

For **3-RAIL SIGHTING SYSTEM** Scopes equipped with an **Illuminated Reticle** (Fig. 3), the scope will come with a battery pre-installed from the factory. To replace the battery follow these simple steps:

The Battery Compartment is located within the Rheostat Knob on top of the Scope Body.

On top of the Rheostat Knob you will notice a thin cap. To remove this cap grasp it firmly with one hand, and twist it counter-clockwise while holding the Rheostat Knob firmly in place with your other hand.

Remove the old battery, and dispose of it properly. Replace it with a new 3 volt Lithium Battery Type CR2032 only. Twist the battery cap back on the Rheostat Knob and hand tighten. Avoid using tools (such as pliers) to perform this procedure as this may cause damage to the Illumination System.



## **ILLUMINATED RETICLE**

For **3-RAIL SIGHTING SYSTEM** Scopes equipped with an **Illuminated Reticle** (Fig. 3), the Reticle can be illuminated in Blue for use when exterior lighting conditions are less than optimal. Control of the illumination is achieved by simply rotating the Rheostat Knob in one direction or the other.

If you look closely at the side of the Rheostat Knob you will notice a Dot on the left side of the rheostat knob and a series of numbers. The 'Dot' will indicate the current position of the rheostat knob, "0" represents the Off position. If you turn the knob in either direction the reticle will illuminate blue. The illumination reticle can be set to 7 levels of intensity, "1" being the dimmest and "7" being the brightest. Adjust the brightness level as needed in accordance with the surrounding conditions. The illumination will increase reticle visibility, especially during dawn and dusk. This illuminated scope is not intended for use in total darkness. When the illumination is turned off the reticle will appear as normal, with Black reticle lines. Be sure that the Rheostat Knob is set to the "0" position when not in use to preserve battery life.

## **CARE AND MAINTENANCE**

Your 3-Rail Sighting System scope is shock proof and waterproof. However, you should never try to take it apart or clean it internally. The exposed optical lens surfaces will perform their best if they are routinely cleaned with a lens brush and the lens cloth provided with your scope. For a deep cleaning, you can also use high grade camera lens paper and camera lens cleaning solutions. Never use any other type of materials or solvents other than those designed specifically for optical lenses to avoid damaging your scope. Clean the outer portion of the lens cavity first with cotton swabs, clearing as much debris and dust as possible. Then, gently clean the lenses using a circular motion starting in the center and ending at the edges. Do not rub the lenses continually; simply wipe in short circular patterns. Maintain the exterior surfaces of the scope by removing dirt or sand by using a soft brush or a soft, dry cloth. You can also use a silicone treated cloth to restore luster and protect the scope against corrosion. Be careful not to touch any of the lenses with the silicone cloth. It is not necessary to lubricate any part of the scope as all of the moving parts, such as the turrets and the fast focus eyepiece, are permanently lubricated. When not in use, always store your scope in a dry place with the lens caps on to prevent scratches to the lenses.

**❖ If you are not sure about any of the procedures in this manual, always seek the help of a qualified professional to avoid damage to your scope and your firearm.**

## **SCOPE SPECIFICATIONS**

### **Fixed Power Magnification Scope Models**

Item #	Reticle types	Magnification	Tube Diameter	Objective Diameter	Field of View (ft. @ 100 yds)	Eye Relief (in.)	Exit Pupil	Weight (oz.)	Length (in.)	Click Value @ 100 yards	Lens Coating
SC3RSM432B	Mil-Dot	4X	34mm	32mm	24.9ft	3.1 in.	7mm	21.27 oz	6.9 in	½ MOA per click	Blue
SC3RSP432B	P4 Sniper										
SC3RSR432B	Range Finder										

Maximum Windage & Elevation: ±70 MOA, Parallax free (at what distance): 100 yards, Mount: Weaver style

### **Variable Power Magnification Scope Models**

Item #	Reticle types	Magnification	Tube Diameter	Objective Diameter	Field of View (ft. @ 100 yds)	Eye Relief (in.)	Exit Pupil	Weight (oz.)	Length (in.)	Click Value @ 100 yards	Lens Coating
SC3RSM2732G	Mil-Dot	2X - 7X	34mm	32mm	38.3ft - 12.7ft	3.0 in.	16mm - 4.6mm	19.5 oz	6.9 in	½ MOA per click	Green
SC3RSP2732G	P4 Sniper										
SC3RSR2732G	Rangefinder										
SC3RSM3942G	Mil-Dot	3X - 9X	44mm	42mm	36.7ft - 12.0ft	2.0 in.	9.3mm - 3.1mm	26.6 oz	7.1 in	½ MOA per click	Green
SC3RSP3942G	P4 Sniper										
SC3RSR3942G	Rangefinder										

Maximum Windage & Elevation: ±70 MOA, Parallax free (at what distance): 100 yards, Mount: Weaver style

### **Illuminated Reticle & Variable Power Magnification Scope Models**

Item #	Reticle types	Magnification	Tube Diameter	Objective Diameter	Field of View (ft. @ 100 yds)	Eye Relief (in.)	Exit Pupil	Weight (oz.)	Length (in.)	Click Value @ 100 yards	Lens Coating
SEC3RSM2732G	Mil-Dot	2X - 7X	34mm	32mm	38.3ft - 12.7ft	3.0 in.	16mm - 4.6mm	19.3 oz	6.9 in	½ MOA per click	Green
SEC3RSP2732G	P4 Sniper										
SEC3RSR2732G	Rangefinder										
SEC3RSM3942G	Mil-Dot	3X - 9X	44mm	42mm	36.7ft - 12.0ft	2.0 in.	9.3mm - 3.1mm	26.3 oz	7.1 in	½ MOA per click	Green
SEC3RSP3942G	P4 Sniper										
SEC3RSR3942G	Rangefinder										

Maximum Windage & Elevation: ±70 MOA, Parallax free (at what distance): 100 yards, Mount: Weaver style