

TACTICAL SCOPE SERIES

INSTRUCTIONS

TACTICAL SCOPE SERIES

Congratulations on the purchase of your NCSTAR Tactical Scope Series Scope! The Tactical Scope Series of Scopes give you many great scope choices with many popular scope features.

Backed by a Lifetime Limited Warranty, your NCSTAR Scope will provide you with years of reliable service. This Owner's Manual will help you understand all of the features of your new scope. Follow all instructions carefully before initial use to experience the best performance.

Tactical Scope Series Features



- 1. Ocular Lens
- 2. Quick Focus Ring
- 3. Elevation Adjustment & Cap
- 4. Windage Adjustment & Cap
- 5. Objective Lens



- 6. Rheostat Knob for Illuminated Reticle (SEC430G & SEC3942R)
- 7. Battery Cap (SEC430G & SEC3942R)
- 8. Magnification Ring (SC3942B & SEC3942R)

Mounting Your Scope

- **❖ CAUTION:** BE SURE THAT YOUR FIREARM IS UNLOADED AND POINTED IN A SAFE DIRECTION. PRACTICE SAFE FIREARMS HANDLING PROCEDURES AT ALL TIMES.
- ❖ NOTE: IF YOU ARE UNFAMILIAR WITH THE PROCESS OF SCOPE MOUNTING IT MAY BE NECESSARY TO EMPLOY THE SERVICE OF A QUALIFIED GUNSMITH.

Choosing a proper ring type and height is essential to successfully mounting this scope to your firearm. Be sure to follow the Manufacturers Installation Instructions of the scope rings and base that you choose.

Mounting your scope as low as possible on the firearm will help to achieve optimum cheek weld and a comfortable, consistent shooting position. Use the lowest rings possible while ensuring that no part of the scope is in contact with any part of the firearm. Also, be sure that you can operate all features of the scope, and that all parts of the firearm function normally without interference from the scope.

Once you have the scope mounted in the rings (before final tightening) it is necessary to adjust the position to allow for Maximum Eye Relief and reticle leveling. Slide the scope as far forward as possible in the rings. While viewing through the scope in a normal shooting position move the scope back towards your eye until a Full Field of View is achieved while ensuring that the scope will be a safe distance from your eye when the firearm recoils. Without disturbing the Eye Relief setting aim

the reticle at a plumb line. Align the vertical cross hair of the reticle with the plumb line by rotating the scope within the rings. Once you are satisfied with your scopes setting and placement tighten the rings evenly and securely according to the Manufactures Specifications. Be sure not to over tighten the rings, as doing so can cause permanent damage to the scope.

Focusing Your Scope

❖ CAUTION: VIEWING THE SUN WITH THIS SCOPE OR ANY OTHER OPTICAL DEVICE CAN CAUSE PERMANENT INJURY TO THE EYE INCLUDING BLINDNESS

For compact tactical scopes with the quick focus ring feature, follow these next instructions:

Holding the scope at the proper distance from your eye, in order to achieve a Full Field of View, the reticle should appear sharp and clear. If not, it will be necessary to adjust the focus by turning the Quick Focus Ring.

- 1. Make quick glances through the eyepiece at a featureless bright surface such as a white wall, or the open sky.
- 2. Turning the Quick Focus Ring counter-clockwise will extend the Ocular Lens outward, generally suitable for those who are far sighted. Turning the Quick Focus Ring clockwise will draw the Ocular Lens inward, generally suitable for those who are near sighted.
- 3. Fine tune your adjustments until the reticle appears sharp and clear. If the Ocular Lens reaches its outer limits of adjustment, be sure not to force it as doing so will cause damage to the eyepiece.



For compact tactical scopes with the adjustable ocular bell housing focus feature, follow these instructions:

Just in front of Ocular Bell Housing you will find a knurled ring that is the Lock Ring. With scope models with Variable Magnification, the Lock Ring will be located between the Ocular Bell Housing and the Magnification Ring.

- 1. This Lock Ring loosens by turning the Lock Ring Clockwise. With the Lock Ring loosened, you can then turn the Ocular Bell Housing to adjust the Reticle Focus.
- 2. Make quick glances through the eyepiece at a featureless bright surface such as a white wall, or the open sky.
- 3. Turning the Ocular Bell Housing Counter-Clockwise will extend the Ocular Lens outward, generally suitable for those who are far sighted. Be careful to not turn the Ocular Bell Housing too far out, as it can come free from the scope body, breaking the O-Ring nitrogen seal. Don't go more than 3 to 4 full revolution Counter-Clockwise from the factory position.

- 4. Turning the Ocular Bell Housing Clockwise will draw the Ocular Lens inward, generally suitable for those who are near sighted.
- 5. Fine tune your adjustments until the reticle appears sharp and clear.
- 6. When you have finished with your adjustment, turn Lock Ring Counter-Clockwise until it firmly butts up with the front edge of the Ocular Bell Housing. This will lock the Ocular Bell Housing in place.

Windage and Elevation Adjustment Dials



Your NCSTAR scope is equipped with Elevation and Windage Adjustment Dials which change your scopes point of aim relative to the bullet point of impact on a target for a specific range. The Elevation Adjustment Dial is located on top of the Turret Body, and is responsible for the up and down movement of the reticle. The Windage Adjustment Dial is located on the right side of the Turret Body, and is responsible for the left and right movement of the of the reticle. To access the Adjustment Dials simply twist the protective caps off counter-clockwise.

On the top of each Adjustment Dial you will notice that there are arrows indicating direction of movement.

Turning the Elevation Adjustment Dial counter-clockwise will shift the bullet point of impact up, and turning it clockwise will shift the bullet point of impact down.

Turning the Windage Adjustment Dial counter-clockwise will shift the bullet point of impact right, and turning it clockwise will shift the bullet point of impact left.

The Elevation and Windage Adjustment Dials also feature Audible and Tactile Clicks which not only can you see and hear the adjustments, but you can feel them as well. Each Click moves the reticle point of aim ¼ MOA* at 100 Yards. The chart below represents the amount of movement of each click at various distances.

Elevation/Windage movement per click							
100 yards	ards 200 yards 300 yards 400 yards 500 yards						
1/4 MOA	½ MOA	3/4 MOA	1 MOA	1¼ MOA			

*1 MOA = 1.047 Inches at 100 Yards

Zeroing your Scope

After you have completed the installation of your scope it will be necessary to adjust the scopes point of aim to match the bullet's point of impact on a target. This can be accomplished using several methods, but we recommend the use of a Bore Sighting Device to save time and ammunition. Using a Bore Sighting Device will ensure that your shots land "on paper". Follow the Manufacturer's

Instructions for the Bore Sighting Device that you choose in order to achieve the best results. You are now ready to finalize your Zero.

- ❖ CAUTION: ALWAYS BE SURE TO REMOVE THE BORE SIGHTING DEVICE BEFORE SHOOTING LIVE AMMUNITION. FAILURE TO DO SO CAN CAUSE DAMAGE TO YOUR FIREARM OR INJURY TO YOURSELF AND THOSE AROUND YOU.
- ***** CAUTION: 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.

Bore Sighting alone is not sufficient enough to ensure and accurate Zero. You must shoot your firearm at the range in order to confirm an accurate Zero. Follow these steps to fine tune your scope adjustments:

- 1. Secure your firearm using a steady platform such as a bench rest or sand bags.
- 2. Fire 3-5 carefully aimed shots at a target that is set to your desired Zeroing distance (100 yards is recommended).
- 3. Observe where the bullets have struck the target and make adjustments to the Elevation and Windage settings as necessary until your point of aim matches your point of impact.
- 4. Continue with this process until you have achieved your desired level of accuracy.
- 5. Your scope is now Zeroed to your firearm at the distance that you have chosen.

It is important to remember that many factors can affect the accuracy of your scopes zero including ammo make/model, temperature, humidity, elevation, distance, angle, and other conditions. Changing ammunition brands can affect accuracy as well.

Illuminated Reticle

The SEC430G & SEC3942R are Compact Tactical Scope models that have the Illuminated Reticle feature. There is a white dot as an Indicator Mark on the top of the turret body.



For these specific models the reticle can be illuminated in Red with multiple brightness levels. If you look closely at the top of the knob you will notice a series of numbers. "0" represents the OFF position. If you turn the knob in either direction the reticle will be illuminate in Red. There is 7 brightness levels, "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 dusk and dawn. When the illumination is turned OFF the reticle will appear as the normal Black Reticle. Be sure the Rheostat Knob is set to the "0" position when not in use to preserve battery life.

Battery Installation

The SEC430G & SEC3942R models are Illuminated Reticle scopes; they are the only scope models in the Tactical Series that have a CR2032 battery in the rheostat.



- 1. The Battery compartment is located within the Rheostat Knob.
- 2. On the 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 the other hand.
- 3. Remove the old battery and dispose of it properly. Replace it with a new 3 volt Lithium Battery type **CR2032** only. Place the Battery in the Battery compartment with the Positive "+" terminal facing out. Twist the Battery cap back on to the Rheostat Knob and hand tighten. Avoid using tools (such as pliers) to perform this procedure as this may cause damage to the unit.

Care and Maintenance

Your NCSTAR Tactical Scope Series 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 or a lens cloth. 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 UNFAMILIAR WITH ANY OF THE PROCEDURES IN THIS MANUAL, ALWAYS SEEK THE HELP OF A QUALIFIED PROFESSIONAL TO AVOID DAMAGE TO YOUR SCOPE AND YOUR FIREARM.

Tactical Scope Series Specifications

NON-ILLUMINATED SCOPE MODELS:

MODEL NUMBER	RETICLE	MAGNIFICATION	TUBE DIA.	OBJECTIVE DIA. (mm)	FOV (FEET @ 100 YARDS)	EYE RELIEF (in)	EXIT PUPIL (mm)	Weight (oz.)	LENGTH (in)	CLICK VALUE	LENS COATING
SC430B2	P4 SNIPER	4X	1"	30 mm	26.2'	3.0"	7.5 mm	9.2	8.7"	1/4 MOA	BLUE
SC632B	P4 SNIPER	6X	1"	32 mm	26.2'	3.0"	5.4 mm	9.2	7.7"	1/4 MOA	BLUE
SC2628B	P4 SNIPER	2X - 6X	1"	28 mm	37.8' - 12.6'	2.4" - 3.2"	14 - 4.7 mm	8.7	6.9"	1/4 MOA	BLUE
SC3942B	P4 SNIPER	3X - 9X	1"	42 mm	18.2'	2.0" - 2.2"	14 - 4.7 mm	11.3	7.9"	1/4 MOA	BLUE
SCA420B	PLEX	4X	0.75"	20 mm	26.2'	2.5"	5 mm	3.3	7.9"	N/A	BLUE

ILLUMINATED RETICLE (RED) SCOPE MODELS:

MODEL NUMBER	RETICLE	MAGNIFICATION	TUBE DIA.	OBJECTIVE DIA. (mm)	FOV (FEET @ 100 YARDS)	EYE RELIEF (in)	EXIT PUPIL (mm)	Weight (oz.)	LENGTH (in)	CLICK VALUE	LENS COATING
SEC430G	P4 SNIPER	4X	1"	30 mm	26.2'	2.5"	7.5 mm	8.5	6.7	1/4 MOA	GREEN
SEC3942R	P4 SNIPER	3X - 9X	1"	42 mm	37.7' - 12.5'	3"	14 - 4.7 mm	12.1	7.5	½ MOA	RUBY

SCOPE MODEL FEATURES:

ITEM NUMBER	Reticle Quick Focus Ring	Ocular Bell Housing Reticle Focus	Ocular Bell Housing Lock Ring	Illuminated Reticle (RED)	Rheostat with CR2032 Battery	MOUNT INCLUDED
SC430B2	Χ					NONE
SC632B	Χ					NONE
SC2628B		X	X			NONE
SC3942B		X	X			NONE
SCA420B		Х	X			%" DOVETAIL RINGS
SEC430G		X	X	Χ	X	NONE
SEC3942R	Χ			X	X	NONE

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FOR TECHNICAL ASSISTANCE CALL: 1-866-NcSTAR-8 (1-866-627-8278)

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