

# **DELTA SCOPE**

# PATENT PENDING

# **OWNER'S MANUAL**

# **DELTA SCOPE WITH NAV LED**

Congratulations on the purchase of your new VISM® DELTA scope! The DELTA scope has a futuristic Delta shaped scope body design with Red & White Navigation LED Lights mounted at the front of the scope. The scope also features: Locking Quick Release Mount, Electronic Control Panel for operating the Dual Illuminated P4 Sniper Reticle/ NAV LEDs, and Backup Iron Sights.

Backed by a Lifetime Limited Warranty, the VISM® DELTA 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. Please follow all instructions carefully before initial use to experience the best performance.



#### 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 MOUNTING A SCOPE, IT MAY BE NECESSARY TO EMPLOY THE SERVICE OF A QUALIFIED GUNSMITH.

# **Focusing Your Scope**

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

Holding the DELTA 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. Please point a cleared firearm in a Safe Direction at all times.

- 2. Turning the Quick Focus Ring Counter-Clockwise ( $\circlearrowleft$ ) will extend the Ocular Lens outward, generally suitable for those who are far sighted. Turning the Quick Focus Ring Clockwise ( $\circlearrowright$ ) 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. Once the Ocular Lens reaches its outer limits of adjustment, be sure not to force it as doing so will cause damage to the eyepiece.

#### **Mounting the DELTA Scope**

The DELTA scope is equipped with a Quick Release Mount with an Auto-Locking Latch. To mount the Scope to a Weaver/ Picatinny/ MIL-STD 1913 type rail, move the Auto-Locking Latch located within the Quick Release Lever away from the pivot point and swing the Quick Release Lever to the forward (Open) position. Place the Quick Release Mount onto the optics rail, with the Recoil Lug placed into one of the cross slots on the optics rail. Move the Quick Release Lever rearward (Closed position) to secure/tighten the Quick Release Mount to the optics rail.

On the Left side of the Quick Release Mount is a Lock Nut and Allen Head Adjustment Screw. The Allen Head Adjustment Screw is used to adjust the rail mount tension. To adjust the rail mount tension, you must first loosen the Lock Nut Counter-Clockwise ( $\mathcal{O}$ ). Once the Lock Nut is loosened or removed, you can then use an Allen wrench to turn the Allen Head Adjustment Screw.

Turn the Allen Head Adjustment Screw Clockwise ( $\circlearrowright$ ) to make the rail mount tension Tighter, turn the Allen Head Adjustment Screw Counter-Clockwise ( $\circlearrowright$ ) to make the rail mount tension Looser.

To test the rail mount tension, open and close the Quick Release Lever while mounted on the optics rail. Make adjustments to the Allen Head Adjustment Screw until you get the proper rail tension. Once you have the rail mount tension properly adjusted, turn the Lock Nut Clockwise ( $\mathcal{O}$ ) to Lock the Allen Head Adjustment Screw in place.

### **Dismounting the DELTA Scope**

To remove the DELTA Scope from a rail, slide the Auto-Locking Latch located within the Quick Release Lever away from the pivot point and swing the Quick Release Lever to the forward (Open) position. You can then remove the Scope from the rail.

### **Elevation and Windage Adjustment Adjustments**

The DELTA scope is equipped with Elevation and Windage Adjustment Dials, which changes your reticles point of aim, relative to your rifles point of impact.

The Elevation Adjustment Dial is located under the Scope Body between the Scope Body and the Mount Base, and is responsible for the Up and Down movement of the reticle. The orientation for the Clockwise and Counter-Clockwise movement of the dial is referenced from looking from above the Scope Body down towards the Mount Base.

Turning the Elevation Adjustment Dial Clockwise (ひ) will move the Reticle Up (む), shifting the bullet point of impact Down (や).

• Turning the Elevation Adjustment Dial Counter-Clockwise (♥) will move the Reticle Down (♥), shifting the bullet point of impact Up (𝔅).

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 Windage Adjustment Dial, you will have to remove the Windage Adjustment Cap first. Turn the Windage Cap Counter-Clockwise ( $\circlearrowleft$ ) for removal. You will now be able to rotate the Windage Adjustment Turret in either direction to adjust the Reticles Left and Right movement.

- Turning the Windage Adjustment Dial Clockwise (♥) will move the Reticle Right (⇒), shifting the bullet point of impact Left (⇐).
- Turning the Windage Adjustment Dial Counter-Clockwise (𝕓) will move the Reticle Left (⇐), shifting the bullet point of impact Right (⇔).

The Elevation and Windage Adjustment Dials also feature Audible and Tactile Clicks which not only can you see and hear the Click adjustments, but you can feel them as well. Each Click moves the reticle point of aim a ½ MOA\* at 100 Yards. See the chart below to see the amount of movement of each click of the Adjustment Dials will move the reticle for your DELTA scope at various distances.

Elevation/Windage movement per click											
50 yards	100 yards	200 yards	300 yards	400 yards	500 yards						
<sup>1</sup> / <sub>4</sub> MOA	<sup>1</sup> / <sub>2</sub> MOA	1 MOA	1½ MOA	2 MOA	2½ MOA						

<sup>\*1</sup> MOA = 1.047 Inches at 100 Yards

Your VISM® DELTA scope is factory set with a Centered Reticle necessary for efficient sighting-in. If you have made any prior adjustments to the Elevation and Windage settings it may be necessary to recenter the reticle. Turn the Elevation Adjustment Dial in either direction until it comes to a complete stop. Next, turn the dial in the opposite direction, counting the number of clicks, until you have reached the limits of the adjustment range. Divide the number of clicks in half, and turn the dial that exact number of clicks back towards the center of the adjustment range. Repeat this procedure for the Windage Adjustment Dial. The reticle will now be centered.

# **Zeroing the Scope**

After you have completed the installation of your scope, it will be necessary to adjust the scope point of aim to match the rifles point of impact. This can be accomplished by 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 an accurate Zero. You must shoot your firearm at the range in order to confirm a 100% accurate Zero. Follow these steps to fine tune your scope adjustments:

- 1. Secure your firearm using a steady platform such as a rifle bench rest or sand bags.
- 2. Fire 3 to 5 carefully aimed shots at a target that is set to your desired Zeroing distance (100 yards is recommended).
- 3. Observe where the bullet grouping has 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.
- 6. Secure the Windage Cap when finished.

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

## **Electronic Control Panel**

The DELTA Scope is equipped with a Blue & Red Illuminated Reticle feature. The Illuminated Reticle is used when exterior lighting conditions are less than optimal. The Electronic Control Panel for the Illuminated Reticle is located on the top of the scope body. There are 5 brightness levels for the Illuminated Reticle.

- Holding the 🗘 Button for about a second will turn the Illuminated Reticle On.
- To adjust the brightness level of the Illuminated Reticle you simply press the  $\, \hat{U} \,$  Button to increase the brightness level of the reticle or press the  $\, \bar{V} \,$  Button to decrease the brightness level of the Illuminated Reticle.
- Holding BOTH 1 Button & J Button at the same time for about a second will cycle the Illuminated Reticle color from Red/Blue. The scope will remember each of the brightness settings for both colors.
- Quickly pressing BOTH T Button & J Button at the same time will turn the Illuminated Reticle Off.
- When the Illumination is turned back On, it will remember the last brightness setting used.
- Be sure the Illuminated Reticle is turned Off when not in use to preserve battery life.

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 a normal Black Reticle.

# **Navigation LED Lights**

The DELTA scope has an integrated White and Red LED Navigation (NAV) Lights. The LED NAV Lights do not replace a weapons mounted Tactical Flashlight, they are meant to supplement it. The Electronic Control Panel for the LED NAV Lights is located on the top of the scope body.

The LED NAV Lights allow the shooter the option to use to the lower powered LED light to move around in the dark without bumping into obstacles, without giving the shooters position away to an adversary, and also help maintain the shooter's night vision to better see in the dark.

The Red LEDs provides just enough lighting to maneuver and avoid obstacles. The Red LEDs affects the shooters eye the least in the darkness, preserving the shooter's night vision and their ability to see into the darkness with the naked eye. The shooter's pupils does not require as much time to recover/adjust to see into the darkness, compared to white lighting. The Red LEDs also limits the amount of light that an adversary can see from a distance compared to White lighting, avoiding detection for tactical purposes.

The White LEDs provides more lighting than the Red LEDs and helps with maneuvering and identifying targets in the dark in close confines/ indoors. They are used to see & identify obstacles and targets at closer ranges, without blinding the shooter.

- Press and Hold the Round Button with the letter "C" for about a second to turn the LED NAV Lights On.
- Holding Round Button with the letter "C" for about a second will cycle the LED NAV Lights color from Red/White.
- Tap the Round Button with the letter "C" to turn the LED NAV Lights Off.
- Be sure the LED NAV Lights are turned Off when not in use to preserve battery life.

# **Backup Iron Sights**

Rear Aperture Sight and a Front Sight with a fiber optic insert are included with the DELTA scope. They provide a backup aiming feature for seeing a wider field of view vs. looking through the scope or when you cannot see through the scope lens such as: when it's raining and the lenses have rain drops on them, scope lens are covered in mud or other debris.

#### **Battery Installation**

At the front of the Scope Body you will find two Battery Caps with a (-) and a (+) machined into the caps. When looking at the front of the scope (Objective Lens) the (-) Battery Cap is located on the Left side and the (+) Battery Cap is located on the Right side. Left and Right sides are referenced from looking at the front of the scope in the instructions below.

To avoid confusion, we recommend that you take only one Battery Cap off at one time. The Battery Caps are not interchangeable. A tip to remember is that the springs in the (-) Battery Cap and the spring inside the (+) battery compartments are for the negative (-) side of the batteries. The proper battery orientations are engraved onto each side of the battery compartments.



Remove the (-) Battery Cap (left side) by turning it Counter-Clockwise ( $\bigcirc$ ) and Remove the old battery and dispose of it properly. Replace it with a New 1.5V AA Battery, with the positive (-) side facing outward. Reinstall the Battery Cap by twisting it Clockwise ( $\circlearrowright$ ) until snug. You may have to push the cap down towards the threads, pushing against the spring in the (-) Battery Cap, for the cap to engage the threads.

Remove the (+) Battery Cap (right side) by turning it Counter-Clockwise ( $\circlearrowleft$ ) and Remove the old battery and dispose of it properly. Replace it with a New 1.5V AA Battery, with the positive (+) side facing outward. Reinstall the Battery Cap by twisting it Clockwise ( $\circlearrowright$ ) until snug. You may have to push the cap down towards the threads, pushing against the spring inside the (+) battery compartment, for the cap to engage the threads.

If after you replace the batteries and the Illuminated Reticle or LED NAV Lights do not turn On, make sure you have installed the (-) & (+) Battery Caps to their proper sides, batteries are properly inserted in the correct orientations, the Battery Caps are properly and securely tightened, or try another set of New AA Batteries.

Be sure that the Illuminated Reticle and the LED NAV Lights are turned Off when not in use to preserve battery life. If you are going to store your scope for a prolonged period of time it is best to remove both of the batteries to avoid leakage that can damage the scope.

#### **<u>Care and Maintenance</u>**

Your VISM® DELTA scope is shock proof, waterproof, and fog proof. 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.

Model Numb	er Body Color	Reticle	Magnification	Objective Lens Diameter	Eve Relief	Field Of View Feet @ 100 yrds			Lens Coating	~	Weight .oz
VDELP430	G Black	P4 SNIPER	4	30 mm	3.1	25.2	7.5	1⁄2 MOA	Green	6.7	18.2

### VISM® DELTA SCOPE SPECIFICATIONS





FOR TECHNICAL ASSISTANCE PLEASE CALL:

> 1-866-NcSTAR-8 (1-866-627-8278)

www.ncstar.com