





## THE VORTEX® VIPER® PST 1-6x24 RIFLESCOPE

At Vortex<sup>®</sup>Optics, the need for high-performance, precision optics is the driving force behind all that we do. We carefully build Viper<sup>®</sup> PST riflescopes to provide shooters with the ultimate short and medium range tactical riflescope.



Dual Use: Shooting Tactical / Hunting US Patent 8,166,696 US Patent 7,937,879



## **RIFLESCOPE ADJUSTMENTS**

## **RETICLE FOCUS ADJUSTMENT**

Vortex Viper PST riflescopes use a fast focus eyepiece designed to guickly and easily adjust the focus on the riflescope's reticle. To adjust the reticle focus:



1. Look through the riflescope at a blank white wall or up at the sky.

2. Turn the evepiece focus knob in or out until the reticle image is as crisp as possible.

Note: Try to make this particular adjustment quickly, as the eye will try to compensate for an outof-focus reticle.

Rotate ring to adjust the reticle focus.

Once this adjustment is complete, it will not be necessary to re-focus every time you use the riflescope. However, because your eyesight may change over time, you should re-check this adjustment periodically.

### WARNING

Looking directly at the sun through a riflescope, or any optical instrument, can cause severe and permanent damage to your eyesight.

## THE SUBTENSION SCALE: MOA OR MRAD

Depending on which version you have purchased, your Viper PST riflescope will feature adjustments and reticles scaled in MOAs or MRADs. If you are unsure of which scale is used, reference the top of the adjustment turret.



If the adjustment is in MOAs, the turret will display the trave per click in MOA.



If the adjustment is in MRADs, the turret will display the travel per click in MRAD.

Both minute-of-angle (MOA) and milliradian (MRAD) unit of arc scales are effective when ranging or adjusting riflescope for bullet trajectory.

## **MOA ADJUSTMENTS**

A minute of angle will subtend 1.05 inches at a distance of 100 vards. Viper PST 1-6x24 riflescopes with MOA adjustments use  $\frac{1}{2}$ minute clicks which subtend .52 inches at 100 yards / 14.6 mm at 100 meters, 1.04 inches at 200 yards / 29.2 mm at 200 meters, 1.56 inches at 300 yards / 43.6 mm at 300 meters, etc.

## **MRAD** ADJUSTMENTS

An MRAD will subtend 3.6 inches at a distance of 100 yards. Viper PST 1-6x24 riflescopes with MRAD adjustments use .2 MRAD clicks which subtend .72 inches at 100 yards / 2 cm at 100 meters, 1.44 inches at 200 yards / 4 cm at 200 meters, 2.16 inches at 300 yards / 6 cm at 300 meters, etc.



#### Windage and Elevation Adjustments

The Viper PST 1–6x24 riflescope incorporates precision finger adjustable elevation and windage dials with audible clicks.

#### To make adjustments:

- 1. Remove outer caps.
- 2. Turn the adjustment dial in the appropriate direction Up/Down or Left/ Right indicated by the arrows.
- 3. Move the dials in the direction you wish the bullet's point-ofimpact to change.

Elevation Adjustment Dial



Adjustment Dial

## **EXAMPLES:**

#### **MOA** Adjustments

With each click of the Viper PST moving the point-of-impact  $\frac{1}{2}$ MOA, it will take two clicks of the knob to move a bullet's point-ofimpact 1.05 inches at a 100 yard sight-in distance. At 100 meters, two clicks will move the point of impact 29.1 mm.

#### **MRAD** Adjustments

With each click of the Viper PST moving the point-of-impact .2 MRAD, two clicks will move the bullet's point-of-impact 1.44 inches at a 100 yard sight-in distance. At 100 meters, two clicks will move the point-of-impact four centimeters.

#### Variable Power Adjustment

To change the magnification, turn the magnification ring to the desired level.



#### **Parallax Adjustment**

The Viper PST 1-6x24 riflescope is non-adjustable for parallax correction and is set from the factory to be parallax-free at 100 yards [90 meters].

At distances under 100 yards, parallax error is less than 1 inch. At distances over 100 yards, parallax error is minimal; using good consistent shooting form and cheek weld will prevent problems with parallax error.

#### **Illumination Adjustment**

This riflescope uses an illuminated central dot to aid in low light performance. The ten Illumination intensity levels will vary from bright to very low intensity. An off click between each level allows the shooter to turn the illumination off and return to a favored intensity level with just one click.

#### **Battery Replacement**

To change the battery, unscrew outer cap with a coin. Remove the battery and replace with a new CR 2032 battery.





#### Indexing Turrets after Sight-in:

- While holding the elevation turret cap firmly between thumb and forefinger to prevent any rotation, use the 2 mm hex wrench to loosen and remove the central screw on top of cap.
- Carefully lift the turret cap straight up and off of the turret body.
- Re-install the cap, turning so that the "O" mark aligns with the reference dot on the turret body.
- Re-tighten the central screw while holding the turret cap firmly between thumb and forefinger to prevent rotation.
- Repeat the same procedure on the windage turret if desired.





Re-install the cap, aligning "O" mark.

After making this adjustment, the turret cap's zero mark will correspond with the chosen zero on the rifle.

## Maintenance

## Cleaning

The Viper PST riflescope requires very little routine maintenance other than periodically cleaning the exterior lenses. The exterior of the scope may be cleaned by wiping with a soft, dry cloth.

When cleaning the lenses, be sure to use products that are specifically designed for use on coated optical lenses.

Be sure to blow away any dust or grit on the lenses prior to wiping the surfaces.

Using your breath, or a very small amount of water or pure alcohol, can help remove stubborn things like dried water spots.

#### Lubrication

All components of the Viper PST are permanently lubricated, so no additional lubricant should be applied. If possible, avoid exposing your Vortex riflescope to direct sunlight or any very hot location for long periods of time.

*Note:* Other than to remove the turret caps, do not attempt to disassemble any components of the riflescope. Disassembling of riflescope may void warranty.



# VORTEX

## THE VIP WARRANTY

We build optics based on our commitment to your absolute satisfaction. That's why Vortex products are unconditionally guaranteed and we make this Very Important Promise to you—a Very Important Person.

Rest assured that in the event your riflescope becomes damaged or defective, Vortex Optics will repair or replace the riflescope at no charge to you. Call Vortex Optics at 800-426-0048 or e-mail *service@vortexoptics.com* for prompt, professional, and friendly service.

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Visit *www.vortexoptics.com* for more information.

The VIP Warranty does not cover loss, theft, deliberate damage or cosmetic damage that does not hinder the performance of the product.





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