Vortex PST-14ST-A

Vortex Optics Viper PST Gen I 1-4x24 Second Focal Plane Riflescopes Instruction Manual

Model: PST-14ST-A

Product Overview

The Vortex Optics Viper PST Gen I 1-4x24 Second Focal Plane Riflescope is designed for precision and durability. It features a robust 30mm tube, advanced optical coatings, and an illuminated reticle for optimal performance in various conditions. This manual provides essential information for setup, operation, and maintenance.

Figure 1: Vortex Optics Viper PST Gen I 1-4x24 Riflescope, showing its compact and robust design.

Key Features

- **Second Focal Plane (SFP) Reticle:** Maintains the same visual size across all magnification levels, ideal for consistent aiming.
- **Tactical Turrets:** Exposed turrets for quick and precise adjustments.

- **TMCQ (MOA) Reticle:** Designed for accurate ranging and holdovers.
- **Extra-low Dispersion (XD) Glass:** Enhances resolution and color fidelity for crisp, sharp images.
- **Proprietary Coatings:** Multiple anti-reflective coatings on all air-to-glass surfaces for increased light transmission.
- **Customizable Rotational Stop (CRS):** Aids in returning to zero after temporary elevation corrections.
- **Illuminated Reticle:** Electronic illumination for improved visibility in low-light conditions, daylight visible.
- **Shockproof & Waterproof:** O-ring seals and argon gas purging ensure durability and performance in harsh environments.

Setup

Mounting the Riflescope

Securely mount the riflescope to your rifle using appropriate rings and bases. Ensure proper eye relief and alignment for comfortable and effective use. The scope is compatible with cantilever mounts.

Figure 2: The riflescope mounted, demonstrating proper positioning for optimal performance.

Eyepiece Focus Adjustment

To ensure a sharp reticle image, adjust the eyepiece focus. Look through the scope at a plain, bright background (like a wall or the sky). Rotate the eyepiece adjustment ring until the reticle appears crisp and clear. This adjustment is crucial for preventing eye strain and ensuring accurate aiming.

Illumination Battery Installation

The illuminated reticle requires a battery. To install or replace the battery, unscrew the illumination control knob. Insert the battery with the positive (+) side facing outwards. Replace the cap, ensuring it is securely tightened to maintain waterproof performance. The illumination control offers 10 brightness settings with "off" positions between each setting.

Zeroing the Riflescope

After mounting, zero your riflescope at your desired distance. This involves adjusting the elevation and windage turrets to align your point of aim with your point of impact. The turrets feature 1/2 MOA clicks for precise adjustments. The Customizable Rotational Stop (CRS) system allows for a reliable return to your established zero.

Operating the Riflescope

Magnification Adjustment

The magnification adjustment ring allows you to change the power from 1x to 4x. The ring has aggressive knurling for a secure grip and a short throw for quick adjustments. A fiber optic rod on top indicates the current magnification setting, visible even when behind the gun.

Figure 3: Labeled diagram of the riflescope, highlighting the magnification adjustment ring and other key components.

Reticle Details (TMCQ MOA)

The TMCQ (MOA) reticle is located in the second focal plane, meaning its apparent size remains constant regardless of the magnification setting. This allows for consistent subtensions for ranging, holdovers, and windage corrections. The reticle features a fine crosshair with hash marks for precise aiming, and an illuminated center dot for low-light visibility.

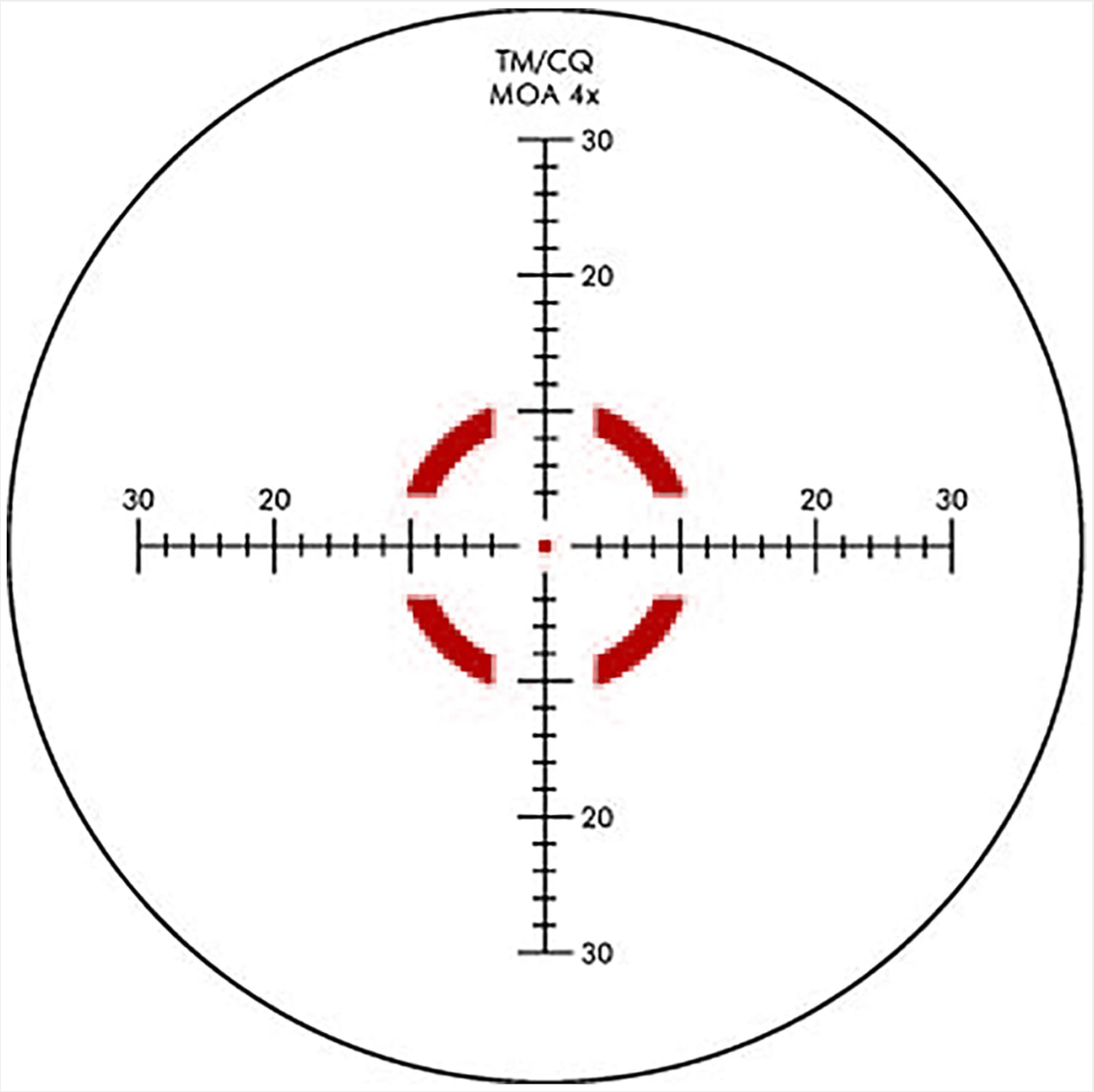


Figure 4: Detailed view of the TMCQ (MOA) reticle, showing its fine crosshair and measurement markings.

Maintenance

Cleaning the Riflescope

The riflescope's smooth finish makes it easy to clean. Use a soft, lint-free cloth to wipe down the exterior. For lenses, use a lens brush to remove dust, then a lens cloth with a specialized lens cleaning solution. Avoid using harsh chemicals or abrasive materials that could damage the coatings.

General Care

Store the riflescope in a dry, cool place away from direct sunlight. When not in use, ensure lens caps are in place to protect the optics. Avoid dropping or subjecting the scope to severe impacts, although it is designed to be shockproof.

Troubleshooting

- **Blurry Image:** If the reticle or image appears blurry, first check and adjust the eyepiece focus. Ensure the

eyepiece adjustment ring has not shifted due to recoil or accidental bumps.

- **Illumination Not Working:** Check the battery. Ensure it is correctly installed with the positive (+) side facing out and that it has sufficient charge.
- **Turret Adjustments Inconsistent:** Verify that the turret caps are securely tightened. For zero stop issues, ensure the shims are correctly installed and not causing excessive pressure or misalignment.

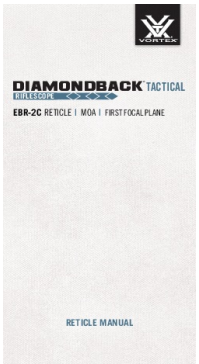
Specifications

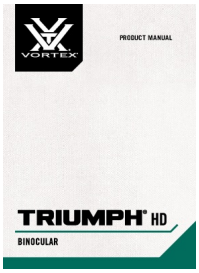
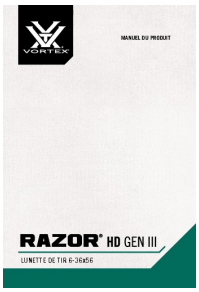
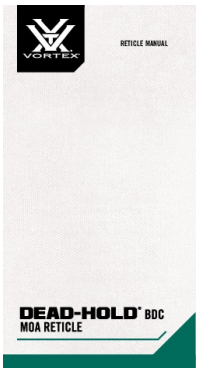
Feature	Detail
Brand	Vortex
Model Name	Viper PST 1-4x24 SFP Riflescope - Tactical Turrets - TMCQ MOA Reticle
Magnification	1-4x
Objective Lens Diameter	24 Millimeters
Eye Relief	4 Inches
Item Weight	11.2 ounces
Material	Aluminum
Color	Black
Reticle Type	TMCQ MOA
Mounting Type	Cantilever Mount
UPC	780456871293 875874002814

Warranty and Support

Vortex Optics offers an unlimited, unconditional lifetime warranty on this product. For any support needs, please refer to the official Vortex Optics website or contact their customer service directly.

Related Documents - PST-14ST-A

	Vortex Diamondback Tactical Riflescope EBR-2C MOA Reticle Manual A comprehensive guide to the Vortex Diamondback Tactical riflescope's EBR-2C MOA reticle. Learn about MOA subtensions, ranging formulas, elevation holdovers, windage corrections, and moving target leads to enhance your long-distance shooting accuracy.

	Vortex Razor HD Gen III 6-36x56 Riflescope Product Manual Comprehensive product manual for the Vortex Razor HD Gen III 6-36x56 Riflescope, detailing its features, controls, installation, mounting, sighting-in procedures, maintenance, troubleshooting, and VIP warranty information.
	Vortex Triumph HD 10x42 Binocular Product Manual Comprehensive product manual for the Vortex Triumph HD 10x42 binoculars, covering specifications, basic operation, accessories like the GlassPak harness, maintenance, and VIP warranty information.
	Vortex Micro3X Magnifier: User Manual and Mounting Guide Detailed user manual for the Vortex Micro3X Magnifier, covering installation, quick-release mount operation, height adjustments, focus, lens care, and the Vortex VIP warranty. Optimized for search engines.
	Vortex Razor HD Gen III 6-36x56 Riflescope Manual User manual for the Vortex Razor HD Gen III 6-36x56 riflescope, covering configuration, adjustments, mounting, and troubleshooting.
	Vortex Dead-Hold BDC MOA Reticle Manual A comprehensive guide to using the Vortex Dead-Hold BDC MOA reticle for accurate bullet-drop compensation and windage corrections in long-range shooting.