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Vortex VPR-M-05BDC

Vortex Optics Viper Riflescope Instruction Manual

Model: 6.5-20x44 Deadhold-BDC (MOA) | Brand: Vortex

Introduction

This manual provides detailed instructions for the proper setup, operation, and maintenance of your Vortex Optics Viper 6.5-20x44 Deadhold-BDC (MOA) Riflescope. Designed for long-range, predator/varmint, and target applications, this riflescope features premium optics and robust construction to ensure reliable performance in various conditions.

Figure 1: The Vortex Viper 6.5-20x44 Deadhold-BDC (MOA) Riflescope, showcasing its sleek black finish and objective lens.

Key Features

- **Optical System:** Premium, fully multi-coated, extra-low dispersion lenses for excellent resolution and color fidelity. XR coatings enhance light gathering capability.
- **Construction:** Built on a 30mm main tube with a hard anodized finish, providing a rugged and tough

riflescope.

- **Lens Protection:** Armortek coating protects the lenses from scratches, oil, and dirt.
- **Turrets:** Capped reset turrets allow quick re-indexing to zero after sighting in.
- **Parallax Adjustment:** Side knob parallax adjust for quick and easy adjustments with visible range numbers.
- **Eyepiece:** Fast focus eyepiece for quick and easy reticle focusing.
- **Magnification Control:** MAG-Bar allows rapid, easy changes in magnification.
- **Weatherproof:** O-ring sealed and argon purged for fogproof and waterproof performance.
- **Reticle:** Dead-Hold BDC (MOA) reticle, ideal for hunting or shooting at varying ranges where estimating hold-over is a concern. Second Focal Plane design.

Figure 2: Rear view of the riflescope, highlighting the magnification adjustment ring and eyepiece.

Setup

Mounting the Riflescope

The Vortex Viper riflescope is designed for a Weaver Mount system. Ensure proper mounting to your rifle using compatible rings and bases. Securely fasten the riflescope to prevent movement during recoil, which can affect accuracy.

Initial Adjustments

1. **Eyepiece Focus:** Adjust the fast focus eyepiece until the reticle appears sharp and clear. This is crucial for accurate aiming.
2. **Magnification:** Use the MAG-Bar on the magnification adjustment ring to set your desired power. The range is from 6.5x to 20x.
3. **Parallax Adjustment:** Rotate the side knob parallax adjust to eliminate parallax error at your target distance. Range numbers are visible for reference.

Figure 3: Diagram of key components of the riflescope, including the Fast Focus Eyepiece, MAG-Bar, Elevation Turret, Side Focus Dial, Reticle Focus, Magnification Adjustment Ring, Windage Turret, and Objective Lens.

Operating the Riflescope

Elevation and Windage Adjustments

The riflescope features capped reset turrets for precise adjustments. Each click of the turret represents 1/4 MOA (Minute of Angle) of adjustment. To make adjustments:

1. Remove the turret cap.
2. Pull up the turret knob to disengage the locking mechanism.
3. Rotate the knob to make the desired adjustments. The clicks are tactile and audible for precise control.
4. Once adjustments are made, push the turret knob down to lock it in place.
5. To re-index the turret to zero after sighting in, pull up the turret knob, rotate it until the '0' aligns with the indicator mark, and then push it back down.

Figure 4: Detailed view of the elevation and windage turrets, showing the pull-up mechanism for adjustment and zero-reset.

Dead-Hold BDC (MOA) Reticle

The Dead-Hold BDC (MOA) reticle is a Second Focal Plane (SFP) reticle. This means the reticle's size appears constant regardless of the magnification setting. The hashmarks on the reticle provide quick reference points for bullet drop compensation (BDC) and windage corrections at various distances.
To effectively use the BDC reticle, it is recommended to:

- Familiarize yourself with your specific ammunition's ballistic data.
- Practice at various ranges to understand the holdover points for your setup.
- Use the provided reticle manual (if applicable) or online ballistic calculators from Vortex to determine precise holdover values for different distances and environmental conditions.

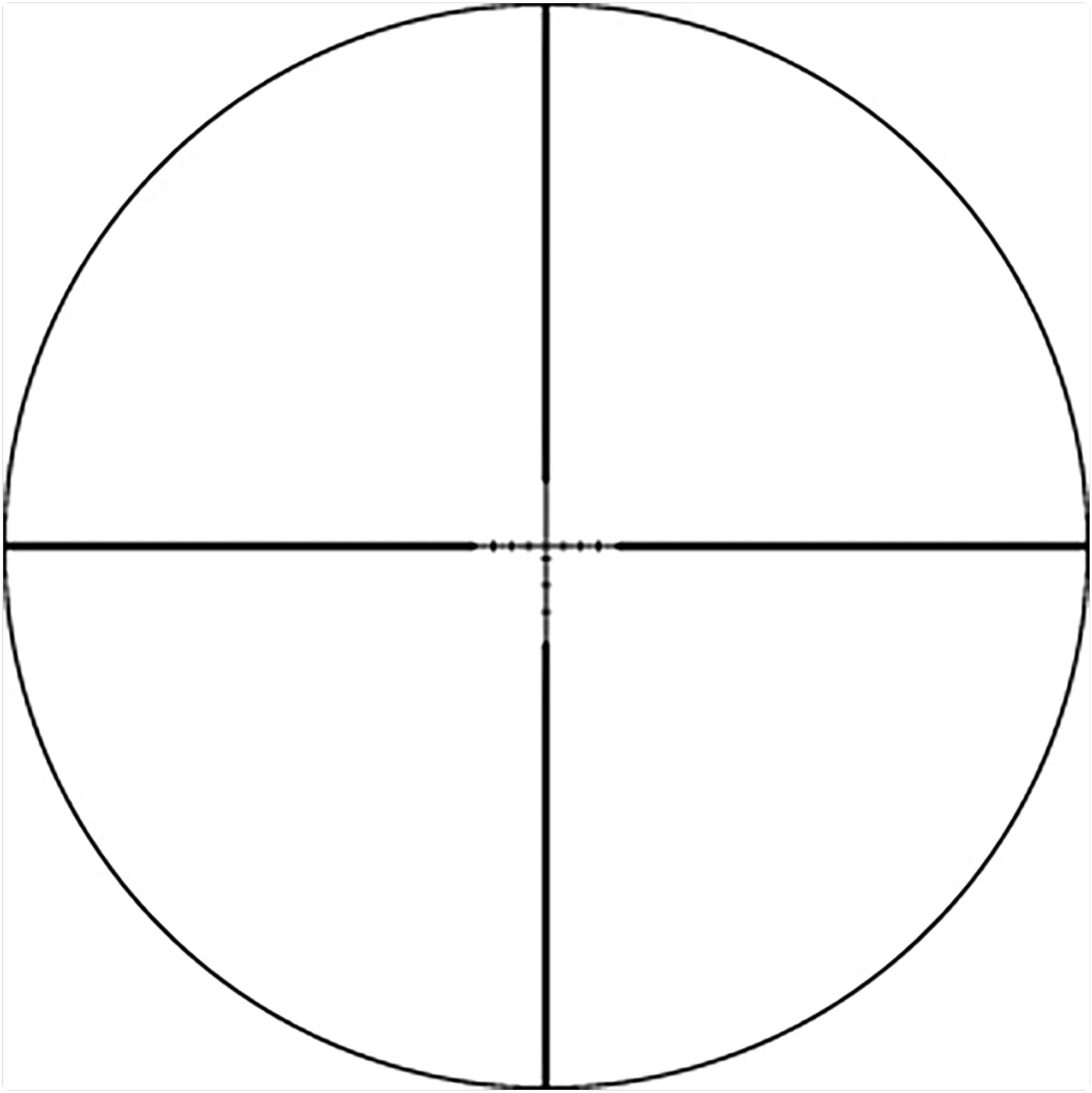


Figure 5: Diagram of the Dead-Hold BDC (MOA) reticle, showing the main crosshairs and the bullet drop compensation hashmarks below the center.

Maintenance

Cleaning the Lenses

For best optical performance, keep the lenses clean. Use a soft brush or compressed air to remove loose debris. For smudges or fingerprints, use a clean microfiber cloth and a lens cleaning solution. Avoid using harsh chemicals or abrasive materials.

Cleaning the Body

Wipe the riflescope body with a soft, damp cloth. For stubborn dirt, a mild soap solution can be used. Ensure all moisture is wiped away before storage.

Storage

Store the riflescope in a cool, dry place. If storing for extended periods, consider using a desiccant pack to absorb moisture. Always replace lens caps to protect the optics.

Troubleshooting

If you encounter issues with your riflescope, consider the following common solutions:

- **Blurry Image:**
  - Adjust the fast focus eyepiece for reticle clarity.
  - Adjust the side parallax knob for target clarity at different distances.
  - Ensure lenses are clean and free of debris or smudges.
- **Inaccurate Shots/Zero Shift:**
  - Verify that the riflescope is securely mounted to the rifle. Loose mounts are a common cause of inaccuracy.
  - Ensure turret knobs are fully pushed down and locked after adjustments.
  - Check for any physical damage to the riflescope or rifle.
- **Fogging:**
  - Internal fogging is rare due to argon purging. If it occurs, contact Vortex support.
  - External fogging can be wiped away with a clean cloth.

For persistent issues, refer to the warranty and support section for contact information.

Specifications

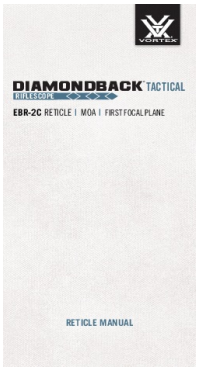
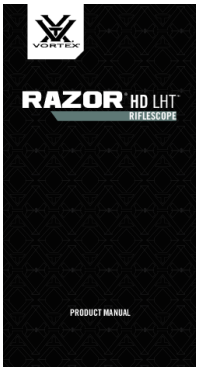
Attribute	Value
Brand	Vortex
Model Name	Vortex Optics Viper 6.5-20x44 PA SFP Riflescope - Dead-Hold BDC MOA Reticle
Model Number	VPR-M-05BDC
UPC	875874001213
Magnification (Minimum)	6.5x
Magnification (Maximum)	20x
Objective Lens Diameter	44 Millimeters
Reticle Type	Dead-Hold BDC MOA
Focal Plane	Second Focal Plane (SFP)
Eye Relief	3.1 Inches
Field Of View	17.4 Feet
Item Weight	2 Pounds
Material	Aluminum
Color	Black
Mounting Type	Weaver Mount

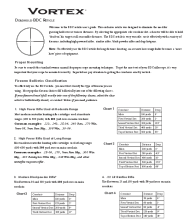
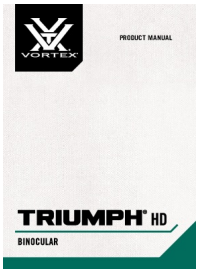
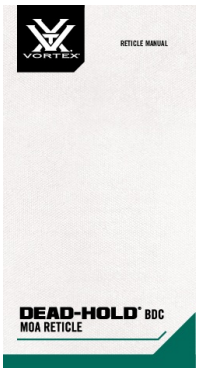
Attribute	Value
Country of Origin	United States

Warranty and Support

Your Vortex Optics Viper Riflescope is covered by an **Unlimited, Unconditional Lifetime Warranty**. This means that if your product ever becomes damaged or defective, Vortex will repair or replace it at no charge to you. This warranty is fully transferable and does not require a receipt or registration.
For warranty service or technical support, please contact Vortex Optics directly through their official website or customer service channels. They are committed to standing behind their products and ensuring customer satisfaction.

Related Documents - VPR-M-05BDC

	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 Razor HD LHT Riflescope Product Manual Comprehensive product manual for the Vortex Razor HD LHT Riflescope, covering specifications, features, mounting, adjustments, maintenance, and troubleshooting. Learn how to properly set up, use, and care for your riflescope.

	[Vortex Deadhold BDC Reticle User Guide for Precision Shooting] Comprehensive guide to the Vortex Deadhold BDC reticle, detailing firearm classifications, setup, range estimation, and ballistic charts for accurate long-range shooting.
	[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 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.