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Vortex DFST-MRD3-E

Vortex Defender-ST Enclosed Solar Micro Red Dot Sight Instruction Manual

Model: DFST-MRD3-E

1. Introduction

The Vortex Defender-ST Enclosed Solar Micro Red Dot Sight is designed for rapid target acquisition and reliable performance in various conditions. Its fully enclosed design protects the emitter from environmental elements, ensuring durability and consistent operation. This manual provides essential information for the proper setup, operation, and maintenance of your Defender-ST red dot sight.

2. Product Overview

2.1 Key Features

- **Enclosed Design:** Protects the emitter from dust, rain, and impact.
- **Aspherical Lens:** Provides a large viewing window for fast target acquisition and a wide field of view.
- **Fast-Rack Textured Front:** Enhances grip for racking the slide off any surface.
- **Multi-Reticle Options:** Offers 3 reticle choices (3 MOA dot, 32 MOA circle, and 3 MOA dot with 32 MOA circle).
- **Brightness Settings:** 12 levels, including 10 for daylight and 2 for night-vision compatibility.
- **Solar Auto D-TEC Technology:** Extends battery life by automatically drawing power from solar or battery sources based on light conditions.
- **Motion-Activated:** Features a 10-minute auto-shutoff to conserve battery.
- **Side-Load Battery:** Allows for easy battery replacement without removing the sight.
- **Durable Construction:** Made from 7075 aluminum housing, waterproof, fogproof, and shockproof.

2.2 Components

The Vortex Defender-ST includes the following components:

- Vortex Defender-ST Enclosed Solar Micro Red Dot Sight

- Picatinny Mount
- Custom Tool
- Rubber Cover
- Most Common Mounting Screw Sets
- CR2032 Battery
- Lens Cloth
- Glock MOS Plate
- Extended Torx T-10 Bit

Figure 1: Labeled components of the Vortex Defender-ST Red Dot Sight.

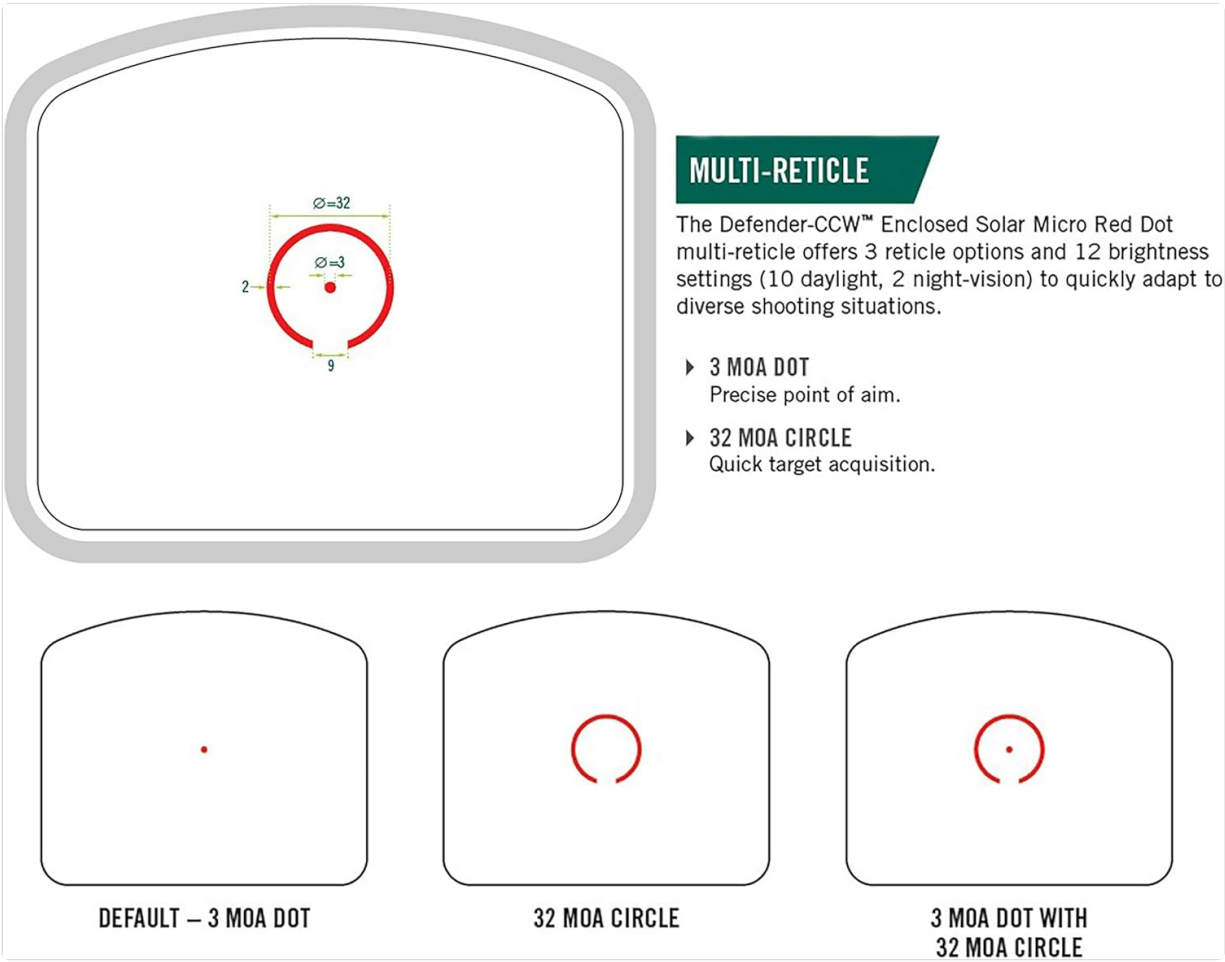

Figure 2: Contents included in the Vortex Defender-ST packaging.

3. Setup

3.1 Battery Installation

1. Locate the battery cap on the right side of the sight.
2. Use the provided custom tool or a suitable coin to unscrew the battery cap counter-clockwise.
3. Insert the CR2032 battery with the positive (+) side facing up.
4. Replace the battery cap and tighten it clockwise until snug. Do not overtighten.

3.2 Mounting the Sight

The Defender-ST is compatible with a DeltaPoint Pro footprint. Use the appropriate mounting screws and plate for your firearm.

1. Ensure your firearm is unloaded and safe.
2. Select the correct mounting plate (e.g., Picatinny Mount, Glock MOS Plate) and screw set for your firearm.
3. Attach the chosen mounting plate to your firearm according to the firearm manufacturer's instructions.
4. Place the Defender-ST sight onto the installed mounting plate.
5. Secure the sight to the plate using the appropriate screws from the provided screw sets. Apply thread locker if recommended by your firearm or mount manufacturer. Tighten screws to the recommended torque specifications.

4. Operating Instructions

4.1 Power On/Off

- **To Power On:** Press either the '+' or '-' button.
- **To Power Off:** Press and hold the '-' button for 3 seconds.

4.2 Brightness Adjustment

The Defender-ST has 12 brightness settings (10 daylight, 2 night-vision).

- Press the '+' button to increase brightness.
- Press the '-' button to decrease brightness.

4.3 Reticle Selection

The sight offers three reticle options: 3 MOA dot, 32 MOA circle, and 3 MOA dot with 32 MOA circle.

- To cycle through reticle options, press and hold both the '+' and '-' buttons simultaneously for 3 seconds.

Figure 3: Available reticle patterns for the Defender-ST.

4.4 Zeroing (Windage and Elevation)

Adjustments for windage and elevation are located on the side and top of the sight, respectively. Each click typically represents 1 MOA (Minute of Angle).

- **Elevation Adjustment:** Use the custom tool or a flathead screwdriver to turn the elevation turret (marked 'U' for Up) on top of the sight. Turning clockwise moves the point of impact down; counter-clockwise moves it up.
- **Windage Adjustment:** Use the custom tool or a flathead screwdriver to turn the windage turret (marked 'R' for Right) on the right side of the sight. Turning clockwise moves the point of impact left; counter-clockwise moves it right.

Figure 4: Windage adjustment location on the Defender-ST.

5. Maintenance

5.1 Cleaning

Keep the lenses clean for optimal performance. Use the provided lens cloth or a soft, lint-free cloth.

- Gently brush away any loose dirt or debris from the lenses.
- Apply a small amount of lens cleaning solution to the cloth, not directly to the lens.
- Wipe the lenses in a circular motion, starting from the center and moving outwards.
- Clean the housing with a soft, damp cloth as needed.

5.2 Battery Replacement

Refer to section 3.1 for detailed battery installation instructions. Replace the CR2032 battery when the reticle dims or fails to illuminate.

6. Troubleshooting

- **Reticle Not Illuminating:** Check if the battery is correctly installed and has sufficient charge. Ensure the plastic separator tab has been removed.
- **Reticle Appears Distorted/Fuzzy:** This can sometimes be due to astigmatism. Try adjusting the

brightness settings. If the issue persists, consult an eye care professional.

- **Loss of Zero:** Ensure all mounting screws are tightened to the manufacturer's recommended torque specifications. Check for any loose components on the firearm or mount.

7. Specifications

Feature	Specification
Model Name	Defender-ST Enclosed Solar Micro Red Dot Sight
SKU	DFST-MRD3-E
Reticle Type	Multi-Reticle (3 MOA Dot / 32 MOA Circle)
Reticle Color	Bright Red
Brightness Settings	12 (10 Daylight, 2 Night-Vision)
Battery Type	CR2032
Eye Relief	Unlimited
Magnification	1x
Length	1.8 inches
Width	1.3 inches
Height	1.2 inches
Item Weight	1.6 Ounces
Material	7075 Aluminum
Compatible Devices	Firearms with Picatinny Rail (DeltaPoint Pro footprint)
Mounting Type	Picatinny Mount (included)

8. Warranty & Support

8.1 VIP Warranty

The Vortex Defender-ST is backed by the Vortex Unlimited, Unconditional, Lifetime, VIP Warranty. This is a fully transferable promise to repair or replace your item if it becomes damaged or defective. This warranty does not cover loss, theft, deliberate damage, or cosmetic damage that does not hinder the product's performance.
For warranty service or support, please visit the official Vortex Optics website or contact their customer service directly.

For more information, visit: Vortex Optics Official Website