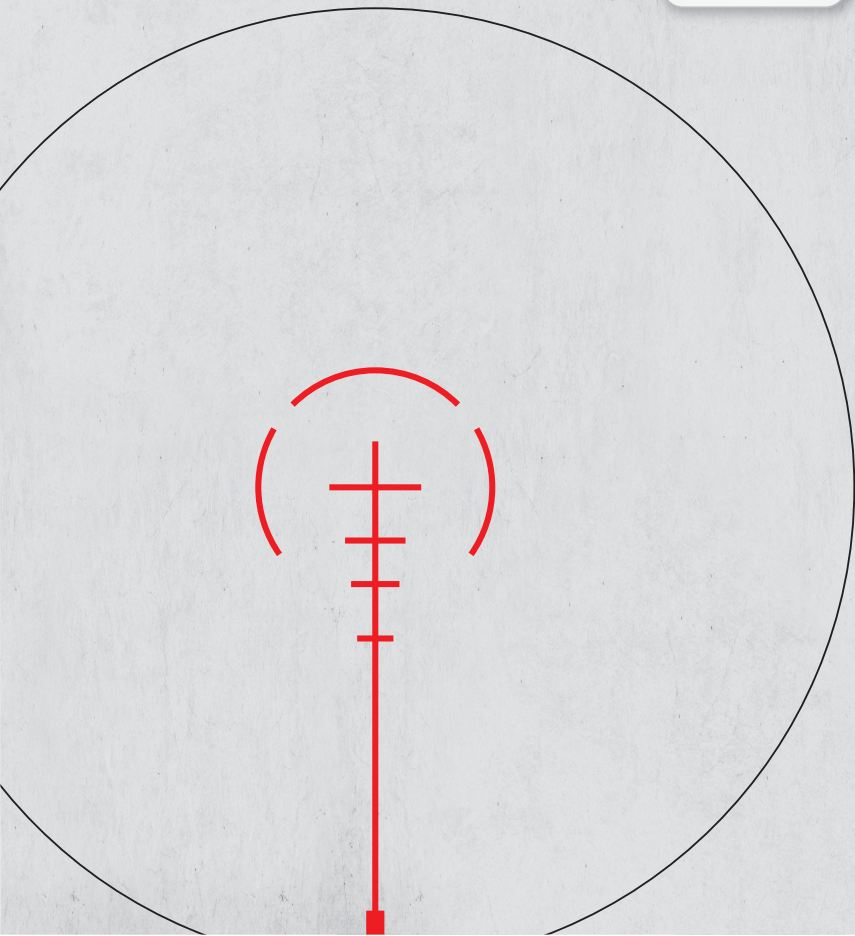


**VORTEX**

THE FORCE OF OPTICS®

**SPITFIRE® 3x**

**PRISM SCOPE**



## THE VORTEX SPITFIRE® 3X PRISM SCOPE

The perfect choice for the AR platform, the Vortex Spitfire® 3x prism scope combines a compact, prism-based design with the intuitive glass-etched EBR-556B reticle—providing vital speed, accuracy and versatility in close to medium range shooting scenarios.



## CONTROLS AND ADJUSTMENTS

### Battery Installation

Remove the battery compartment cover using a coin or screwdriver. Install and orient the CR 2032 battery so the positive side (+) faces upward, then replace the cover. When replacing the cover, be sure it is fully screwed down with the o-ring seal in place.



### Illumination Control

The reticle can be used without illumination. To activate the reticle illumination, rotate the illumination dial to the left or right. The dial shows both red and green numbers, indicating five levels of brightness. Rotate the dial so the number indicating the desired color and intensity faces the shooter.

**Note:** Be sure to turn the dial to zero when done shooting to avoid running the battery down prematurely.



Rotate dial to set the preferred color and intensity.

## PRISM SCOPE ADJUSTMENTS

### Reticle Focus

This Vortex Spitfire prism scope uses a *fast focus* eyepiece designed to quickly and easily provide a sharply focused reticle.

**To adjust the reticle focus:**

- Look through the scope at a blank white wall or up at the sky.
- Turn the eyepiece focus dial 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 out-of-focus reticle.



Adjust the reticle focus.

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

### Warning

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

## Windage and Elevation Adjustments

The Spitfire incorporates elevation and windage dials with audible clicks. Each small click will move the point of impact 1/2 Minute of Angle (MOA). 1/2 MOA will closely correspond to 1/8 inch at 25 yards, 1/4 inch at 50 yards, 1/2 inch at 100 yards and 1 inch at 200 yards.

### Adjust the settings

- Remove the dial covers.
- Use a coin or screwdriver to make the adjustments.
- Turn the adjustment dial in the appropriate direction as indicated by the arrows. Move the dials in the direction you wish the bullet's point-of-impact to change.



Elevation



Windage

Rotate the adjustment dial in the direction you wish the bullet's point-of-impact to change. For example, turning the turret counter-clockwise will move the point-of-impact up or to the right.

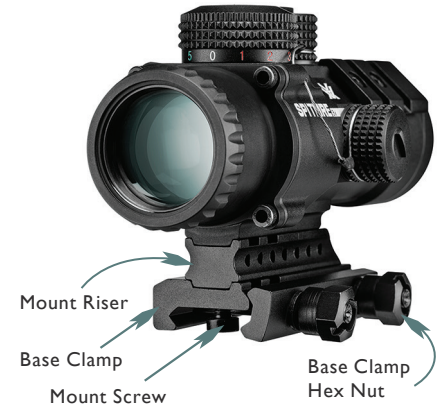
### Example

At a 50 yard sight-in distance, it will take four clicks of the dial to move the bullet's point-of-impact one inch.

## Mounting the Spitfire

Orient the Spitfire so the illumination dial faces shooter.

1. Loosen the two base clamp hex nuts and attach the Spitfire to the rail/base, making sure that recoil lugs are solidly seated in base grooves.
2. Checking that the mount fully engages the base, press the Spitfire down and forward, then tighten and torque the base clamp hex nuts.



**Note:** To prevent recoil injury, position it so that you have at least two inches of eye relief once the Spitfire scope is attached. Be sure you can see the full field of view through the scope before tightening down the mount.

### Recommended Torque

Base Clamp Hex Nuts 35–45 in/lbs

### Mount Heights

The Spitfire comes from the factory with a mounted height of 40.4 mm from the optic center to base surface. This is commonly referred to as a lower 1/3 co-witness height. If a lower 30 mm mounted height is desired, loosen the two mount screws then remove the base clamp and mount riser. Remove the mount riser and reinstall the base clamp with the shorter mount screws provided in the box using a non-permanent thread-locking compound when installing the screws.

## SIGHTING IN

### Bore Sighting

After mounting, an initial bore sighting of the Spitfire at short range (25–50 yards) will save time and money at the range. This can be done using a bore sighter according to the manufacturer's instructions, or by removing the bolt on some rifles and visually sighting through the barrel.

#### To visually bore sight a rifle:

1. Place the rifle solidly on a rest and remove the bolt.
2. Sight through the bore and center the target inside the barrel.
3. With the bull's eye centered in the bore, make windage and elevation adjustments until the center dot is aligned over the bull's eye.

### Final Range Sight-In

Final sight-in should be done at the range using the exact ammunition you expect to hunt or shoot with:

1. After the Spitfire has been bore sighted, fire a shot or two at your desired zero distance to check that you're roughly on target. *If necessary, adjust the dot to put you near the center of the target (see Windage and Elevation Adjustment on page 6).*
2. Fire a three-shot group as precisely as possible.
3. Using the center of this group as a reference, make any necessary adjustments for windage and elevation correction. Using arrows for reference, adjust dials in the direction you wish the group to move.
4. Fire a final three-shot group to confirm proper adjustment. Repeat as necessary.

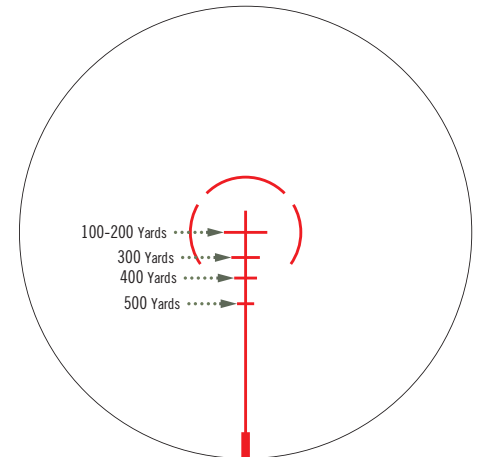
## SHOOTING WITH THE SPITFIRE

Your Spitfire 3x scope is equipped with the EBR-556B Enhanced Battle Reticle. Although this precision reticle has been designed around the popular 5.56x45 (.223 Remington) cartridge using a 55 grain bullet and 16-inch barrel, it can also be used effectively with many other cartridges and barrel lengths. Be aware that the more a cartridge varies in bullet drop from the 5.56 round, the greater the difference will be in the referenced yardage numbers.

The main crosshair intersection of the EBR-556B reticle is intended to be zeroed at 100 yards (see *Sighting In* on page 8). Due to the flat trajectory of the 5.56 round, this will allow the central crosshair to be used effectively from 0–200 yards.

**Note:** If you are using the center crosshair at 200 yards, maximum accuracy will be obtained by holding 3-inches (1.5 MOA) high on the desired target.

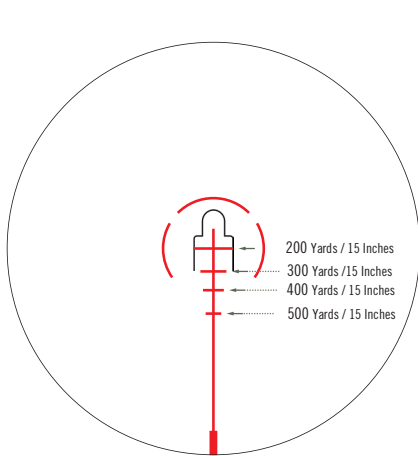
The three horizontal lines below the central crosshair will then provide 300, 400 and 500 holdover references.



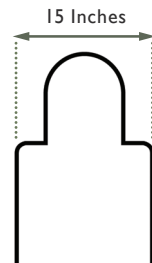
EBR-556B Reticle Holdover References

## Ranging

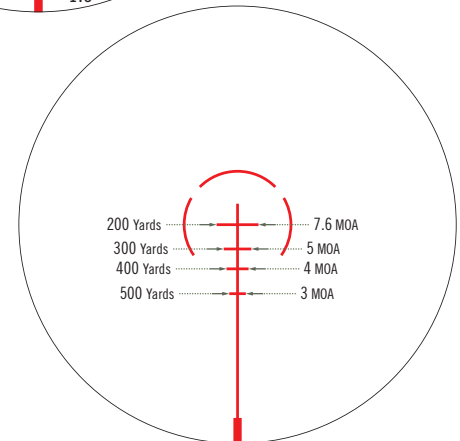
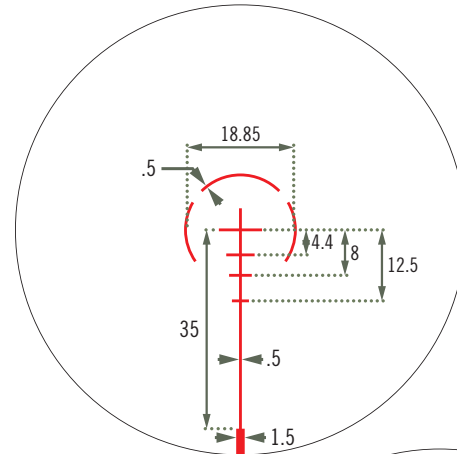
The EBR-556B reticle incorporates a simple ranging design. By matching an object of 15 inches in width (example, the shoulder width on a silhouette target) to the crossbar images, the approximate range can be determined.



Ranging Crossbars



## Reticle Subtensions



Subtensions are measured in MOA.

## ACCESSORY OPTIONS

The 3x Spitfire includes two Picatinny rails for mounting accessories such as lights, lasers and red dot sights.



Picatinny Rails.

If desired, rails can be removed.

## TROUBLESHOOTING

Please check the following before returning a scope for service:

### If the reticle does not illuminate:

- Is the battery dead? Replace.
- Is the battery installed correctly? Be sure the battery is oriented with plus sign facing upward.
- Is the battery cover loose? Be sure cover is snug and contact points are clean.

### If bullets are not grouping:

Be sure the crossbolt nut is tight. You should not be able to twist or move the Spitfire in any direction. Many times, problems thought to be with the scope are actually mount problems.

**Note:** For any issues not listed above, please view our online

### Troubleshooting Guide:

» [www.vortexoptics.com/content/troubleshooting](http://www.vortexoptics.com/content/troubleshooting)

## MAINTENANCE

### Cleaning

The Vortex Spitfire prism scope requires very little routine maintenance other than to periodically clean 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 such as the Vortex Lens Pen and FogFree Cleaning Kits.

- 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 are permanently lubricated, so no additional lubricant should be applied.

**Note:** Do not attempt to disassemble any components of the scope.

### Storage

Keep lens covers closed to protect the lenses when not in use.

- Remove the battery when putting in storage for extended periods.
- Avoid storage in direct sunlight or in any very hot location.
- Storage and use in extreme cold will shorten battery life.

## 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 Spitfire becomes damaged or defective, Vortex Optics will repair or replace the red dot at no charge to you.

Call Vortex Optics at 800-426-0048 for prompt, professional, and friendly service.

### Vortex Optics

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Middleton, WI 53562

[service@vortexoptics.com](mailto:service@vortexoptics.com)



**UNLIMITED  
UNCONDITIONAL**  
Lifetime Warranty

Visit [www.vortexoptics.com](http://www.vortexoptics.com) for more information. Canadian customers may visit [www.vortexcanada.net](http://www.vortexcanada.net) for customer service information.

**Note:** The VIP warranty does not cover theft, loss, or deliberate damage to the product.



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**#PS-SPITFIRE-3X-13A**

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