



PRODUCT MANUAL

SPITFIRE™ AR

1X PRISM SCOPE

SPECIFICATIONS

MAGNIFICATION	1x
OBJECTIVE LENS DIAMETER	25mm
RETICLE	DRT MOA
RETICLE COLOR	Bright Red/Bright Green
EYE RELIEF	3.8"
FIELD OF VIEW	79.0' @ 100 yds.
ADJUSTMENT GRADUATION	1/2 MOA
TRAVEL PER ROTATION	30 MOA
MAX ELEVATION ADJUSTMENT	120 MOA
MAX WINDAGE ADJUSTMENT	120 MOA
PARALLAX SETTING	Parallax Free
LENGTH	4.5"
WEIGHT (W/BATTERY)	11.2 oz.
BATTERY TYPE	AAA

Images are for representation only.
Product may vary slightly from what is shown.

SPITFIRE™ AR PRISM SCOPE

When fast target acquisition in tight spaces is mission-critical, the Spitfire™ AR delivers with precision and competitive speed. Designed for close-quarters engagements – with a prism preferred by shooters with astigmatism – it offers 1x magnification and an etched reticle for rapid, accurate shots...with or without a battery. Compact, lightweight, and built to thrive in high-pressure shooting environments, the Spitfire™ AR keeps you focused on your next move without slowing you down.



BASIC OPERATION

Battery Installation

Remove the Battery Compartment cover. Install one AAA battery so the “+” side faces inward and replace the cover. When replacing the cover, be sure it is fully tightened with the O-ring seal in place.

Powering Up

To Turn the Spitfire™ AR On/Off:

Press the up or down button to turn on the illumination.

Press and hold the up and down button for three seconds to turn illumination off.



Power / Illumination Buttons

Illumination Adjustments

The Spitfire™ AR prism scope offers 12 brightness settings, the lowest two settings being ultra-low for use with night-vision equipment. Adjust the brightness by tapping the up or down button.

Illumination Color Adjustments

Illumination is available in both bright red and bright green colors. To change between colors, press and release both the up and down buttons simultaneously.

Auto Dim/Auto-Shutoff

If the brightness setting is at level 8 or higher, and there is no button push for two hours, the Spitfire™ AR will automatically dim to brightness level 6. If no activity occurs after an additional 12 hours, the unit will shut down. Pushing either the up or down button will return the unit to the previous brightness and color setting.

Reticle Focus

The Spitfire™ AR prism scope uses a fast-focus eyepiece designed to quickly and easily provide a sharply focused reticle.

To Adjust the Reticle Focus:

1. After mounting the sight, point the sight at a blank white wall or up at the sky.
2. Starting with the fast-focus eyepiece all the way in, glance through the optic. If the reticle is not in focus, rotate the eyepiece out counter clockwise slightly, and look through the optic again.
3. Repeat this process until the reticle is in sharp focus.

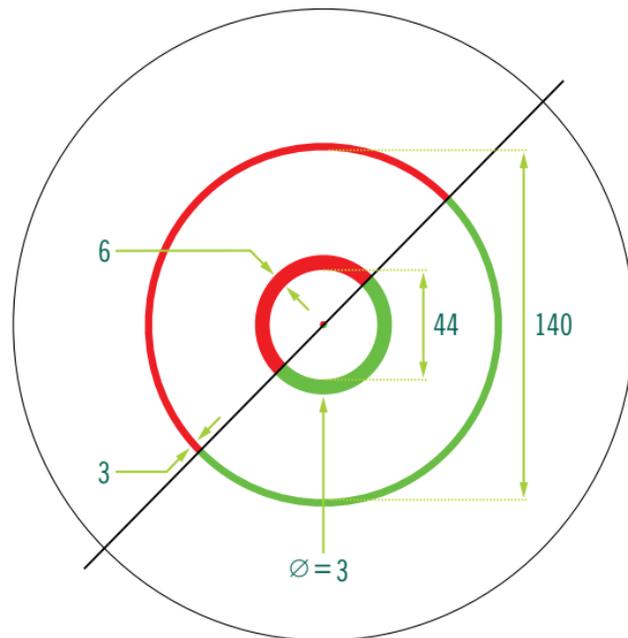


Note: Make this adjustment quickly as your eye will try to compensate for an out-of-focus reticle.

Once this adjustment is complete, it will not be necessary to refocus every time you use the scope. However, because your eyesight may change over time, you should recheck 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.

DRT MOA Reticle Subtensions



Reticle subtensions are measured in MOA.

Windage and Elevation Adjustments

The Spitfire™ AR prism scope features dial adjustments and a reticle scaled in Minute of Angle – MOA. 1 MOA will always subtend 1.047" for each 100 yards of distance. Your optic will have 1/2 MOA clicks. Each click moves your point of impact roughly 1/2" at 100 yards, and 1/8" at 25 yards.

To Adjust the Settings:

1. Remove the turret caps.
2. Turn the elevation or windage turrets in the appropriate direction as indicated by arrows. Rotate the turrets in the direction you wish the bullet's point of impact to go.
3. After sighting in, realign the zero numbers on the turret dials. See pages 10-11.

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

CONTROLS AND ADJUSTMENTS

To get the best results, proper mounting is essential. Although not difficult, the correct steps must be followed. Your firearm will need to be equipped with a Picatinny style rail/base. If needed, this may be purchased at most firearm dealers.



Crossbolts **Mount Riser**

1. Loosen the base crossbolts and attach the Spitfire™ AR to the rail/base with the Windage Turret facing toward the gun's left.
2. Make sure the recoil lugs are solidly seated in the base groove by pushing the optic forward, towards the end of the muzzle.

Note: It is good practice to regularly recheck all mounting screws to be sure they haven't loosened under field conditions.

SIGHTING IN

Bore Sighting

After mounting, an initial bore sighting at short range (25–50 yards) will save time and money at the range. Do this by 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 bullseye 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. We recommend using a 50 yard zero for best results with the DRT MOA reticle.

1. After the Spitfire™ AR prism scope has been bore sighted, fire a three-shot group as precisely as possible to determine an average point of impact to correct from. This will also help you establish the firearm system's accuracy potential.
2. Adjust the turrets to correct for any offset in your point of impact. Be sure to read page 8 prior to adjusting.
3. Fire another three-shot group to establish another average point of impact. This procedure may be repeated as many times as necessary until your point of impact and your point of aim are in the same place, and you have achieved a perfect zero.

Note: Vortex® does not recommend the use of a weighted gun vise, as it can put extreme stress on the gun, stock, dot, and mount. It is best practice to use a combination of sandbags or a bipod and sandbags. Letting your weapon recoil naturally also provides consistency from shot to shot.

Indexing Turret Dials

After Completing the Final Sight-In:

- While holding the elevation turret cap firmly between thumb and forefinger to prevent rotation, use the hex wrench to loosen and remove the central screw on the top of the cap. Be careful to not misplace the o-ring.
- Carefully lift the turret cap straight up and off the turret body.
- Reinstall the cap, turning so the “0” mark aligns with the reference dot on the scope body.
- Reinstall the central screw while holding the turret cap firmly between thumb and forefinger to prevent rotation. Be sure the o-ring is in place.
- Repeat the same procedure on the windage turret if desired.

Optional 5.56mm BDC Dial

A 5.56mm BDC turret dial is included with your Spitfire™ AR. This dial is marked in yards rather than MOA and will provide reasonable accuracy with many popular loads for the AR-15 rifle. For reference, the BDC dial very closely matches a 60-grain bullet (.265 G1 BC) @ 3000 fps or the M855 62 grain bullet (.307 G1 BC) @ 2850 fps. Each numeral on the dial corresponds to 100-yard increments, with the dial spanning a range from 100 to 700 yards. Rifle should be zeroed at 100 yards, and dial installed with the numeral 1 lined up with dot indicator on body of Spitfire™ AR (see “Indexing Turret Dials” for additional dial installation instructions). To use BDC turret, simply turn turret counter-clockwise until numeral shown matches the yardage you are shooting and use the center dot to aim. After shooting, remember to turn dial back to the 100-yard mark.

MAINTENANCE

Cleaning

Your Spitfire™ AR prism scope requires very little routine maintenance other than periodically cleaning the exterior lenses. The optic's exterior may be cleaned by wiping with a soft 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 Spitfire™ AR are permanently lubricated, so no additional lubricant should be applied.

Note: Other than removing the Battery Compartment cover and turret caps, do not attempt to disassemble any components of the Spitfire™ AR. Disassembly may void warranty.

TROUBLESHOOTING

Red Dot Does Not Illuminate

If the dot does not illuminate, please check the following before returning the dot for service:

- Is the battery dead? Replace the battery.
- Is the battery installed correctly? Be sure the battery is oriented with the "+" facing inward.
- Is the battery cap loose? Be sure cover is snug and contact points are clean.

Mounting Screws Coming Loose

- Check to make sure that the mounting screws were torqued to proper specifications. Be sure to check that the screws that hold the optic base to the optic are torqued to 12 in-lbs with thread locking compound and that the bolt holding the optic base to the firearm is torqued to 20 in-lbs without thread locking compound. Included screws come with pre-installed thread locking compound. It is recommended that a thread locking compound be re-applied if the red dot has been re-mounted more than two times. Thread locking compound is recommended to ensure the screws do not back out under recoil. Ensure the correct screws are being used.

Bullets Are Not Grouping

- Be sure the crossbolts and screws attaching the optic to the mount are tight. You should not be able to twist or move the Spitfire™ AR in any direction. Many times, problems thought to be with the dot are actually mounting problems.
- Be sure the optic is orientated correctly, with the up and down Illumination Buttons facing the user.

Note: For any issues not listed above, please view our online Troubleshooting Guide at VortexOptics.com/troubleshooting.com

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***Note:** The VIP® Warranty does not cover loss, theft, deliberate damage, or cosmetic damage not affecting product performance.*

For the most up to date manual visit **VortexOptics.com**



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