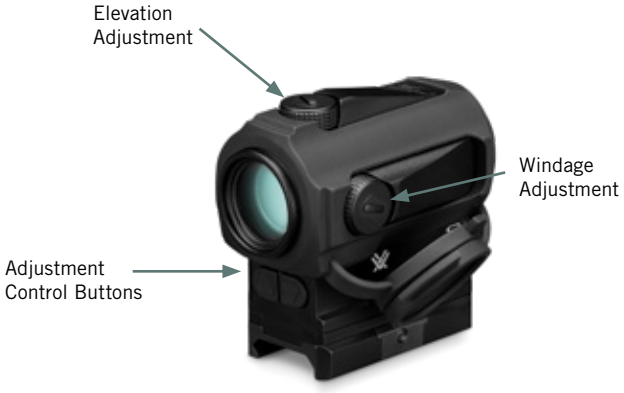
VORTEX®

SPARC® AR

RED DOT



Dual Use: Shooting Tactical / Hunting

Patent Pending

Images in this manual may vary from actual product.

THE SPARC® AR RED DOT SIGHT

The rugged, armored SPARC® AR with daylight-bright red dot and built in mount is designed to be the ideal companion for the AR platform. Get on target fast with the SPARC® AR.

RED DOT ADJUSTMENTS

Battery Installation

Remove the battery compartment cover. Install one AAA battery so the "+" lettering faces inward and replace the cover. When replacing the battery cap, be sure it is fully tightened.

Powering Up

To turn the SPARC® AR on, press the UP button. To turn the SPARC® AR off, press and hold the DOWN button for five seconds.

NOTE: If you forget to turn off the SPARC® AR, it will automatically shut down in approximately 12 hours.

Press the UP button to turn the illuminated dot on.
Hold the DOWN button for five seconds to turn off.

Brightness Adjustments

The SPARC® AR red dot sight offers twelve variable illumination settings – the lowest two settings being ultra-low for use with night-vision equipment. Adjust the dot brightness by tapping the appropriate UP or DOWN adjustment control button.

Typical Battery Life

The SPARC® AR uses a AAA battery. The typical battery life depends on the brightness intensity setting of the dot.

DOT COLOR	APPROXIMATE BATTERY LIFE AT BRIGHTNESS SETTING 6
Bright Red Dot	50,000 Hours

Windage and Elevation Adjustments

The SPARC® AR red dot incorporates elevation and windage dials with audible clicks. Each small click will move the point-of-impact one Minute of Angle (MOA). 1 MOA will closely correspond to one inch at 100 yards, 1/2 inch at 50 yards, 1/4 inch at 25 yards, etc.

Example

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

Adjust the elevation and windage settings:

- Remove the turret caps. If needed, the battery cap may be used as a tool to loosen and tighten the turret caps.
- Use the raised bars on the turret caps, coin or screw driver 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 Adjustment

- Remove the turret cap and turn the inner screw counter-clockwise to adjust the bullet's point-of-impact up; turn the inner screw clockwise to adjust bullet's point-of-impact down.

Windage Adjustment

- Remove the turret cap and turn the inner screw counter-clockwise to adjust the bullet's point-of-impact to the right; turn the inner screw clockwise to adjust windage bullet's point-of-impact to the left.

Mounting the SPARC® AR Red Dot

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® or Weaver® style rail/base. If needed, these may be purchased at most firearms dealers.

1. Attach the unit to the rail/base with the illumination dials facing away from the muzzle, toward the rear of the gun.
2. Make sure the mount is solidly seated in the base groove. In order to prevent recoil injury, position the Red Dot so you have at least four inches of eye relief.
3. Be sure the base clamp is hooked around the outside of the rail/base.
4. Press the Red Dot downward and forward toward the muzzle. Then, firmly tighten the base clamp bolt using the hex wrench.

Position the Red Dot so you have at least four inches of eye relief.

NOTE: It is a good practice to regularly re-check all mounting screws (including spacer attachment screws) to be sure they haven't loosened under field conditions.

Mount Height Options

The SPARC® AR Red Dot can be mounted at two heights, lower 1/3 co-witness and absolute co-witness. To mount it at lower 1/3, mount the sight as received. The optic center will be 40mm above the base surface. To mount for absolute co-witness you can remove the 3mm base shim. The optic center at absolute co-witness will be 37mm above the base surface.

To change the mount height, loosen and remove the four base screws and remove the base clamp along with the 3mm shim. Reinstall the base clamp with the four shorter screws supplied with your Red Dot.

SIGHTING IN

Bore Sighting

After mounting, an initial bore sighting of the SPARC® AR Red Dot 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 to visually sight 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 illuminated dot is also centered over the bullseye.

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 bore sighting the Red Dot, 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 SPARC® AR

The key thing to remember when shooting with the SPARC® AR Red Dot is to keep both of your eyes open! Shooting with both eyes open allows you to take full advantage of your peripheral vision to get on target very quickly. Eye placement is not critical. As long as you can see the dot, you'll hit your target!

NOTE: If using an optional magnifier for distance shooting, you may find it easier to shoot with one eye closed due to the increased magnification.

TROUBLESHOOTING

Please check the following before returning the Red Dot for service.

If the red dot does not illuminate:

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

If bullets are not grouping:

- Be sure all mount screws are tight. You should not be able to twist or move the Red Dot in any direction. Many times, problems thought to be with the scope are actually mount problems.

NOTE: Our **Troubleshooting Guide** is available online at **http://www.vortexoptics.com/content/troubleshooting.**

MAINTENANCE

Cleaning

Your Red Dot will require very little routine maintenance other than periodically cleaning the exterior lenses. If desired, the exterior 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 VTX Lens Pen and Fog Free 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 Red Dot.

Storage

Use the included lens cover to protect the lenses when not in use.

- Remove the battery before 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.

VIP WARRANTY

OUR UNCONDITIONAL PROMISE TO YOU.

We promise to repair or replace
the product. Absolutely free.

- **Unlimited**
- **Unconditional**
- **Lifetime Warranty**

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

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