The compact Vortex SPARC® red dot lends itself to a variety of firearm platforms—including AR-15s, shotguns, and pistols. The modular three-piece base offers four separate mounting heights for customization.

(Shown on Short Riser)
SPARC Specifications

Waterproof: Yes
Fogproof: Nitrogen gas purging
Shockproof: Yes
Eye Relief: Unlimited
Dot Size: 2 MOA
Dot Color: Red
Illumination:
  - Variable 10-position intensity
  - Night vision compatible mode
Parallax: Parallax free past 50 yards
Magnification: 1x
Weight: 5.2 ounces (without base)
Length: 3 inches
Objective Diameter: 22 mm
Ocular Diameter: 22 mm

Adjustment Specifications

Windage: 90 moa
Elevation: 90 moa
Per Rotation: 45 moa
Per Click: 1 moa

Included Accessories:
- 2x Magnifier
- Tall Riser
- Short Riser
- Riser Shim
- (2) CR 2354 Batteries
- Hex wrench

Available Accessories:
- ARD filter

Red Dot Adjustments

Battery Installation

Use a coin to remove the battery compartment cover. Install one CR 2354 battery so the “+” lettering faces outward and replace the cover.

When replacing the cover, be sure it is fully screwed down.

Note: The typical life of the CR 2354 battery depends on dot intensity setting.

Red Dot Average Operating Time

<table>
<thead>
<tr>
<th>Mode of Operation</th>
<th>Normal</th>
<th>Night Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Brightness</td>
<td>120 hours</td>
<td>4200 hours</td>
</tr>
<tr>
<td>Minimum Brightness</td>
<td>3400 hours</td>
<td>4600 hours</td>
</tr>
</tbody>
</table>

1300 hour average operating time

Powering Up

To activate the illuminated dot press and release the Power button. While in night vision compatible mode, the illuminated dot will not be visible unless a night vision device is being used (see page 6).

To deactivate the illuminated dot, press and hold the Power button for five seconds.

Note: If you forget to turn the SPARC off after use, it will automatically shut down in six hours.
Brightness Adjustments

The Vortex SPARC red dot sight offers 10-position variable illumination. Dot brightness may be increased or decreased by using the appropriate button:
• Tapping the top button increases brightness.
• Tapping the lower button decreases brightness.

Using with a Night Vision Device

If you are using the SPARC with a night vision device (not included), pressing the NV mode button will activate the night vision compatible mode. To deactivate the night vision mode and return to the standard daytime mode, simply press the NV mode button one more time.
• The SPARC automatically returns to your previously selected daytime brightness level.

Activating the night vision compatibility mode will automatically set the dot brightness to the lowest level, which is necessary when using the SPARC with a night vision device. While in this mode, the Brightness Up / Brightness Down buttons will yield two brightness levels.
• The SPARC automatically returns to the previously selected brightness level when you return to the night vision compatible mode.

Note: While in night vision compatible mode, the red dot will not be visible unless a night vision device is being used.

Windage and Elevation Adjustments

The Vortex SPARC 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, two inches at 200 yards, three inches at 300 yards, etc.

Adjusting the settings

The windage and elevation dial covers have a raised bar which may be used to adjust the dials. You may also use a coin or screwdriver to make your adjustments.

1. Remove the dial covers.
2. Turn the adjustment dial in the appropriate Up/Down or Left/Right direction as indicated by the arrows. Move the dials in the direction you wish the bullet’s point of impact to change.

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.
Magnifier
The SPARC red dot includes a removable 2x magnifier which may be used for longer distance shooting. To attach the magnifier, thread it into the eyepiece end of the scope. Use the focus dial to adjust for sharpest image.

Mounts for the SPARC
To get the best results from the Vortex SPARC red dot, proper mounting is essential. Although not difficult, the correct steps must be followed. If you are unsure of your abilities, it would be best to use the services of a qualified gunsmith.

The SPARC can be mounted on a variety of platforms using various combinations of the included risers and shim.

- **Extra-High Mount Height** (40 mm)
  Use the tall riser and riser shim to provide lower 1/3 co-witness on flat top AR-15 rifles.

- **High Mount Height** (37 mm)
  Use the tall riser alone to provide absolute co-witness on flat top AR-15 rifles.

- **Low Mount Height** (18 mm)
  Use the short riser alone for most applications other than flat top AR-15 rifles.

- **Low Mount Height** (21 mm)
  Use the short riser with the shim to add additional height if needed.

Vortex recommends using a thread locker compound to ensure attachment screws do not loosen under use.

- When changing mount risers, use the included hex wrench to loosen or tighten the four screws attaching the mount riser to SPARC body.
- When using the riser shim, install between mount riser and body of SPARC. It will also be necessary to use the longer attachment screws when the shim is being used.
**Mounting the SPARC**

If your firearm is not already equipped with one, install an appropriate Weaver or Picatinny type base and attach per manufacturers instructions. These may be readily purchased at most firearms dealers.

1. Attach the SPARC to the base rail, making sure it is solidly seated in the base groove. In order to prevent recoil injury, position the SPARC so you have at least four inches of eye relief once attached. Because the SPARC has unlimited eye relief, the scope can be mounted further away if desired.

2. Check to see that the clamp is fully down and hooked around the outside of the base.

3. Press SPARC down and forward toward the muzzle and firmly tighten the clamp screw using the hex wrench.

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

---

**Sighting in**

**Bore Sighting**

After mounting, an initial bore sighting of the SPARC 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 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 the SPARC 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 7).

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**

The key thing to remember when shooting with the SPARC red dot is to keep both of your eyes open! This will allow you to take full advantage of the SPARC’s ability to get on target very quickly.

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

The SPARC has less than one inch of parallax inside of 50 yards and is parallax free beyond 50. This means that eye placement is not critical — if you can see the dot on your target, you’ll hit there.

**MAINTENANCE**

**Cleaning**

The SPARC 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 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 red dot.

**Storage**

Use the included lens cover to protect the SPARC 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.

**TROUBLESHOOTING**

Please check the following before returning the SPARC 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 “+” lettering facing the cover.
- Is the battery cover loose? Be sure cover is snug and contact points are clean.
- Is the SPARC in night vision compatible mode? Press the NV mode button to return to standard daytime mode.

*If the red dot is not accurate:*

Be sure all mount screws are tight. You should not be able to twist or move the SPARC 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 at [http://www.vortexoptics.com/content/troubleshooting](http://www.vortexoptics.com/content/troubleshooting).
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 SPARC 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
2120 West Greenview Drive
Middleton, WI 53562
service@vortexoptics.com

Visit www.vortexoptics.com for more information. Canadian customers may visit www.vortexcanada.net for customer service information.

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