



MAVEN[®]

MAVEN RS4.2 RIFLESCOPE

Thank you for purchasing a Maven™. Included here are instructions for getting your riflescope ready for your next adventure. Rig it up, get out there, then let us know all about your journey. We love hearing your stories as much as we love making great products. Keep us in the loop at stories@mavenbuilt.com.

PARTS OF THE RIFLESCOPE:

- | | |
|---|----------------------|
| A. Diopter (focus) adjustment | F. Illumination Dial |
| B. Magnification (zoom) adjustment ring | G. Objective end |
| C. Elevation adjustment turret | H. Ocular end |
| D. Windage adjustment turret | I. Turret Cap Tool |
| E. Parallax adjustment | |



GETTING STARTED:

FOCUSING THE RETICLE:

Turn the diopter adjustment ring clockwise until it stops. While looking through the scope at a solid, light background (white wall, blue sky, etc.), slowly twist the diopter adjustment counter-clockwise until the reticle is clear and focused.

CHANGING THE MAGNIFICATION:

Your scope has a variable power, allowing you to see a large field of view (FOV) at lower magnifications or more detail at higher magnifications. To decrease the magnification, turn the magnification adjustment ring toward the lowest setting. To increase magnification, slowly rotate the zoom ring away from the lowest setting until the desired power is reached.



Diopter/focus adjustment



Magnification adjustment

ILLUMINATION ADJUSTMENT / BATTERY REPLACEMENT:

RS4.2 riflescopes come with multi-brightness illumination. The illumination battery (CR2032) is already installed and located on the Illumination Dial. Before use follow the steps below to open the cover and remove the pull tab to activate the battery.

To install the battery or remove insert:

1. Remove the Illumination Dial cover by turning the outer-most portion of the dial counter-clockwise (A). Remove pull tab (B).
2. Place a new CR2032 battery, making sure to place the "+" side out.
3. Replace the illumination dial cover by turning cover clockwise, taking care not to overtighten.



ACTIVATING ILLUMINATION:

1. Starting at the "•" position below R1, rotate the illumination knob clockwise (C) for red and counter-clockwise for green, and continue to rotate until desired illumination is achieved.
2. Each brightness level is separated from the next by an "•" (OFF) position.

Note: Turn off when not in use to conserve battery. Illumination automatically turns off after 3 hours.

PARALLAX ADJUSTMENT:

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Adjusting the side parallax enables you to move the reticle into the same focal plane as the target object, reducing the optical illusion of reticle movement. This is especially useful for longer shots or when shooting positions vary based on terrain and conditions.

RAPID PARALLAX ADJUSTMENT:

The approximate parallax-free distances are printed on the parallax adjustment turret. Turn the parallax adjustment until the index point equals the estimated or ranged distance to the target.

PRECISE PARALLAX ADJUSTMENT:

Set the magnification to the maximum setting. Turn the parallax adjustment until the target image appears at its sharpest. Move your head slightly side to side. If the reticle appears to move relative to the target, adjust the parallax until the reticle and the target image remain steady.



INSTALLING THE SCOPE:

To ensure alignment, safe eye-relief, and the best performance of the scope, have a competent gunsmith mount the scope on your preferred firearm. If you choose to mount the scope yourself, use high quality rings designed specifically for your firearm and follow all torque settings recommended by the ring manufacturer or a competent gunsmith.

Note: Over-torquing the ring screws is a known cause of erratic shot placement and may damage the scope.

CENTERING (OR RE-CENTERING) THE RETICLE:

The reticle is shipped in the mechanical center of the travel range. You can verify or re-align the reticle by turning the desired turret (elevation or windage) counter-clockwise until it stops (when adjusting the elevation turret be sure to disengage the lock by pulling the turret away from the turret base until it clicks into place). Slowly twist the turret clockwise while counting the total number of clicks. Once you have reached the mechanical stop on the far end, turn back counter-clockwise half the number of the total clicks counted. This will place the reticle in the mechanical center for that direction of travel. Repeat for the second turret if desired.

INITIAL ALIGNMENT OF THE SCOPE TO THE RIFLE:

Bore sighting your rifle before going to the range can save time and money. Use a quality bore sight laser or other tool specifically designed for use with your make and caliber of firearm. Follow the manufacturer's instructions.

ADJUSTING THE RETICLE (ZEROING):

Whether bore sighting or sighting in with live shots at the range, you will need to adjust the reticle to be “zeroed in” with your firearm.

VERTICAL ADJUSTMENT ZEROING (ELEVATION):

1. For a shot that is too low or too high, remove the top cap using the included turret tool and slide the elevation turret off the scope.
2. Flip the elevation turret over, this will function as a tool to zero your reticle.
3. Slide the turret down the elevation mechanism until it rests against the bottom of the turret base, rotate in either direction until vertical zero is achieved. Each click will move the relative position of the reticle as indicated on your scope turret. MOA: 1 click = $1/4$ MOA or MIL: 1 click = 0.1 MRAD.
4. Remove turret and locate the zero-stop pin (A) in the zero-stop ring. Rotate ring clockwise until the pin stops just above the number 1 marker.
5. Replace the turret right side up with the 0-mark aligned with the with the position

Continued on next page.



indicator, zero stop pin, and the inner groove on the inside of the turret cap. Once seated replace the top cap.

HORIZONTAL ADJUSTMENT (WINDAGE):

For a shot that is too far to the left, remove the windage cap, then turn the knurled knob of the windage turret (on the right side of the scope) in the direction of R (counter- clockwise). Each click will move the relative position of the reticle as indicated on your scope turret. MOA: 1 click = $\frac{1}{4}$ MOA or MIL: 1 click = 0.1 MRAD



For a shot that is too far to the right, make the same adjustments, but turn the turret clockwise.



ELEVATION ADJUSTMENT NORMAL OPERATION:

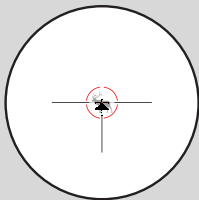
After zeroing the windage turret in the previous step the zero stop is set. The RS4.2 features a locking windage. To dial, lift the turret until it clicks into place (1), rotate the turret to your desired adjustment (2), lock the turret into place by pushing the turret towards the base until it clicks into place. The turret has indicators for three revolutions.

FOCAL PLANES:

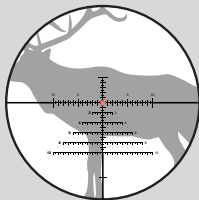
Our riflescopes come in two varieties of focal planes: first focal plane (FFP) and second focal plane (SFP). This describes where the reticle sits in relation to the magnification mechanism and describes how the reticle reacts (or doesn't) to a change in magnification.

FIRST FOCAL PLANE:

The FFP is the newest style of modern hunting reticles and is the preferred focal plane for long-distance shooting. When adjusting the magnification, the reticle zooms with the magnification level and increases/decreases in size throughout the magnification range. Because the reticle changes at the same proportion, all subtensions units are displayed correctly regardless of the magnification setting. The example below illustrates how the reticle changes at different magnifications.



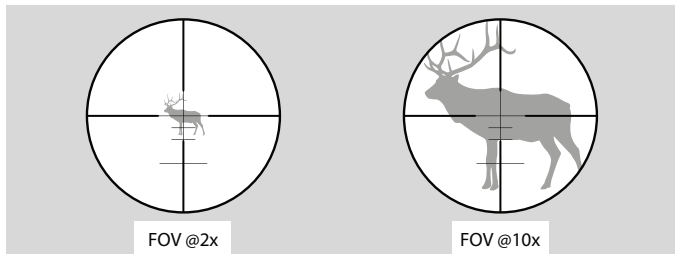
FOV @1x



FOV @10x

SECOND FOCAL PLANE:

The SFP reticle style is what most people are familiar with. When adjusting the magnification, the reticle stays the same size throughout the entire magnification range. Because the holdover subtensions are only correct at one magnification level (typically max power), holdover increments will need to be recalculated at lower magnifications. The example below illustrates how the reticle doesn't change at different magnifications.



HOW SFP SUBTENSIONS ARE CALCULATED:

See mavenbuilt.com FAQ for more information on how to calculate subtensions for SFP reticles.

ADDITIONAL INFO AND CARE:

RINGS & BASES: Use high quality rings and bases designed specifically for your firearm.

TORQUE: Always follow the ring manufacturers recommendations on torque when mounting the scope. Exceeding 18in/lbs of torque when tightening the rings may crack or damage the tube of the scope.

STORAGE: Prior to storage, ensure your scope is clean and dry. Place in a dark well-ventilated area for best result. If storing in a gun safe, ensure there is desiccant or a dryer in place to control humidity.

CLEANING: Keep the entire optic as free of dust and debris as possible. Remove as much dust and dirt as possible from the lenses with a blower or bristle brush similar to the one included in our Lens Cleaning Kit. Canned air is not recommended. Optical grade cleaning solution may be used to aid in this process. Do not use household glass cleaners as these may remove coatings.

CAUTION

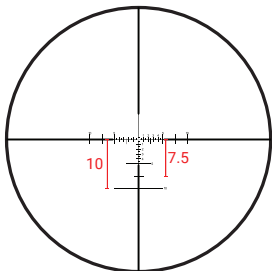
-Rifle scopes should not be used to look at the sun or any other bright light - this can permanently damage your eyes.

-Always maintain proper eye-relief (the distance from the scope to your eye) when mounting the scope. Failure to provide adequate eye-relief may result in injury caused by the scope striking the user's head/eye during rifle recoil.

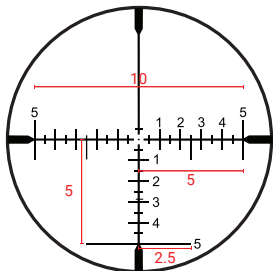
BATTERY SAFETY AND WARNINGS:

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate. Even used batteries may cause severe injury or death. If ingested call a local poison control center for treatment information.
- This device uses CR2032 coin cell battery with a nominal battery voltage of 3v.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Ensure the batteries are installed correctly according to polarity (+ and -).
- Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries. Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

SHR-MIL RETICLE



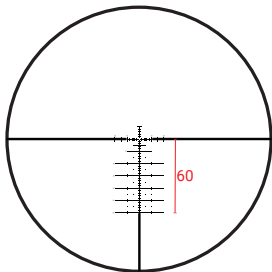
@ 5x



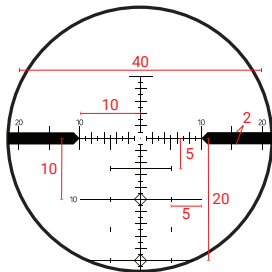
@ 30x

Subtension Dimensions (MIL)

MOA-2 RETICLE



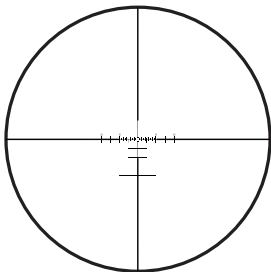
@ 5x



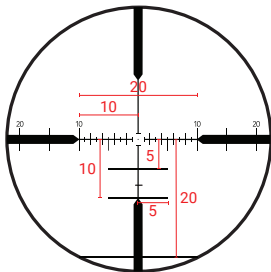
@ 30x

Subtension Dimensions (MOA)

SHR-W RETICLE



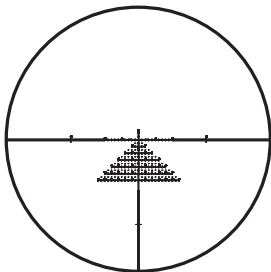
@ 5x



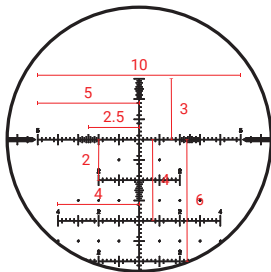
@ 30x

Subtension Dimensions (MOA)

CFR-MIL RETICLE



@ 5x



@ 30x

Subtension Dimensions (MIL)

UNCONDITIONAL LIFETIME WARRANTY:

Maven optics are made with a commitment to you, our customer. All Maven optics come with an unconditional lifetime warranty*. If your optic becomes damaged or is at all defective contact us immediately for repair or replacement. We don't care where or when you bought it or if it was your fault or not – if it says Maven, we will take care of it.

*Warranty does not cover loss, deliberate damage, or cosmetic damage that does not hinder product performance.

Call us at 800-307-1109 or email us at: customerservice@mavenbuilt.com with any questions.

For warranty/service repairs please visit: mavenbuilt.com/warrantyreturns.

To ensure the fastest and easiest processing of any warranty return, please register your Maven optic. Jump on mavenbuilt.com/warranty-registration to get registered quickly and easily.





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