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# THANK YOU FOR CHOOSING RITON OPTICS.

We know that you have many options and we are thankful for selecting Riton as your optics provider.

As a company founded by Law Enforcement and Military Veterans, we take our commitment to service seriously. We have an unwavering passion for offering high quality optics at the industry's most competitive prices and matched by incredible service. You will see the difference in everything we do because we are different, and we developed this company to be exactly that so that you, the consumer, get everything you deserve. If you are ever in need of additional information or assistance, please contact us. We are here to continually serve you as a valued partner.

# **X7 CONQUER 4-32X56**

Optic Specifics The X7 Conquer 4-32x56 is Riton's top of the line optic with enhanced features including a 34mm tube, advanced zero stop turrets, and First Focal Plane (FFP), Riton Illuminated Precision Shooting Reticle. The X7 Conquer 4-32x56 riflescope represents the pinnacle of optical engineering with an unparalleled feature set and the industry's most competitive price point.

#### DETAILED PRODUCT FEATURES:

- Advanced Turret System with Riton R7 Zero Stop Turrets
- Aircraft Grade Aluminum with Rugged Design Ready for the Toughest Environments
- 100% Waterproof, Fog proof and Shockproof (tested up to 1200 G's)
- 1/10 MRAD Fingertip Windage and Elevation Adjustment
- Fast-Focus Eyepiece
- · Assembled in EP-Level Clean Room



# Technical Specifications



Magnification: 4-32

Parallax Adjustment: Side, 15-infinity yards

Tube Diameter: 34mm

Objective Lens Diameter: 56mm

Focal Lens Position: First Focal Plane

Lens Coating: Fully Multi-Coated, Full Wide Band, Waterproof

Coated, Low Light Enhancement

Reticle: PSR Illuminated Reticle

Field of View at 100 yds: 27-3.4'

Material: 6061-T6 Aircraft Grade Aluminum

Weight: 37oz/1049g

Length: 15in/ 381mm

Eye Relief: 90mm/3.5"

Exit Pupil: Low 7 - High 1.6mm

Click Value at 100 yds/mm: 0.1 MRAD

Adjustment Range: 31MRAD

Mounting Length: 187mm/7.37"

Turret Type: R7 Zero Stop Turrets

# Explanation of Milliradians (MRADs)

Mrad unit of arc measurements are based on the radian. A radian is the angle subtended at the center of a circle by an arc that is equal in length to the radius of the circle. There are 6.283 radians in all circles and 1000 milliradian in a radian for a total of 6283 milliradians (mrads) in a circle. An mrad will subtend 3.6 inches at a distance of 100 yards. Riton riflescopes with mrad adjustments use .1 mrad clicks which subtend .36 inches at 100 yards, .72 inches at 200 yards (2 cm at 200 meters), 1.08 inches at 300 yards (3 cm at 300 meters), etc.



	100 Yards	200 Yards	300 Yards	400 Yards	500 Yards
1/10 MRAD	.36 IN	.72 IN	1.08 IN	1.44 IN	1.80 IN

<sup>\*</sup>Graduations can be calculated at additional distances beyond 500 yds.

# First Focal Plane (FFP) Reticle

The reticle in your Riton riflescope is first focal plane (FFP) and is located in front of the image erecting and magnifying lenses. With the reticle in this position, the reticle is magnified along with the viewing image. The advantage of this type of reticle is the size of the reticle stays the same size in relationship to the size of the target. This allows for all subtentions on the reticle to be the same at any power.

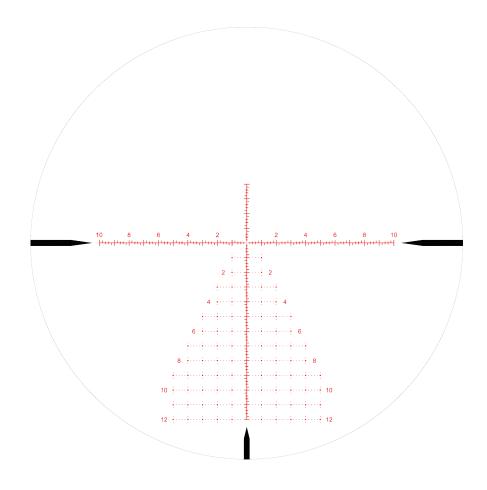
#### TO CHANGE MAGNIFICATION:

Simply turn the magnification ring to the desired magnification level. Lower powers offer a wider field of view while higher powers offer a zoomed in focused view.



# Reticle Information

The Riton X7 3-24x56IR is equipped with the Riton Illuminated PSR reticle.



# Fast Focus Eyepiece

The Riton fast focus eyepiece is designed to quickly and easily adjust the focus on the rifle-scope's reticle.

#### TO ADJUST THE RETICLE FOCUS:

- Look through the scope on max magnification at a blank white wall or white paper
- Turn the eyepiece in or out until the reticle image is as crisp as possible.





# Explanation of Parallax

Parallax describes a situation where the focal plane of the object in the scope is offset from the reticle. If you have parallax, you have an optical illusion that must be corrected. Parallax should not be confused with focus. Parallax compensation changes neither the focus of the reticle nor the focus of the image; it simply moves the planes at which these two objects are in focus so that they share the same plane.

#### TO ADJUST THE PARALLAX:

- 1. Set your fast focus eye piece for your eye. Look at a blank backdrop and turn your eye piece in and out until you have a crisp sharp reticle.
- 2. Look through scope and place cross-hair on target. Move your head around without leaving exit pupil. Does the cross hair move or become fuzzy or blurry?
- 3. If the cross-hair moves or is blurry, adjust side parallax until sight picture is crystal clear.



# Illumination System

The variable intensity reticle illumination system aids in low light situations.

#### TO ACTIVATE THE ILLUMINATION:

1. Pull out the adjustment knob then rotate in either direction.

Note - The illumination knob allows for 6 levels of brightness intensity.



#### TO CHANGE BATTERY:

- 1. Unscrew the outer cap.
- 2. Remove the battery.
- 3. Replace with a new CR2032 battery with positive side out.
- 4. Re-install the battery cap and be sure to tighten fully.



## Mechanical Zero

Your Riton riflescope is pre-set from the factory with the reticle in the center of the adjustment ranges.

#### TO FIND FACTORY ZERO:

- Dial turret one direction until it will no longer rotate.
   NOTE Do not force the turret past it's stopping point.
- Dial turret opposite direction counting how many MOA it turns.
- 3. Divide that total number of MOA in half and dial to that number for your factory zero.
- 4. Complete this procedure for both windage and elevation dials to approximately center the reticle.







# Mounting Your Riton Riflescope

Always use high quality rings or mount that match your optic's main tube diameter.

#### TO MOUNT YOUR RITON RIFLESCOPE:

- Mount the bottom ring halves or mount on the mounting base of your rifle.
- Place the riflescope on the bottom ring halves and loosely install the upper ring halves so that your riflescope is able to move between rings.
- 3. Before tightening the scope ring screws, adjust for maximum eye relief to avoid injury from recoil.
- Tighten the scope rings per the torque specs of the rings or mount

Note - If using Riton scope rings or mount, the recommended torque specs are 45 in/lbs for the base and 18 in/lbs for the top halves of the rings.









# Eye Relief and Reticle Alignment

# TO SET A PROPER EYE RELIEF AND RETICLE ALIGNMENT:

- 1. Set the riflescope magnification to the highest setting.
- 2. Slide the riflescope as far forward as possible in the rings.
- While looking through the riflescope in a normal shooting position, slide the riflescope back towards your face, paying attention to the field of view. Just as the full field of view is visible, stop the movement of the riflescope.
- Without disturbing the front-back placement, rotate the riflescope until the vertical cross-hair exactly matches the vertical axis of the rifle. Use of a reticle leveling tool, a weight hung on a rope, or bubble levels to help with this procedure.
- 5. After aligning the reticle, tighten and torque the ring screws down per the manufacturer's instructions.













# **Bore Sighting**

Bore sighting is a preliminary procedure to achieve proper alignment of the scope with the rifle's bore. Initial bore sighting of the riflescope will decrease the amount of time and ammunition you need to use at the range.

This can be done by using a mechanical or laser bore sighter according to the manufacturer's instructions or by removing the bolt and sighting through the barrel on some rifles.

#### TO BORE SIGHT YOUR RIFLESCOPE:

- 1. Place the rifle solidly on a rest and remove the bolt.
- Sight through the bore at a target approximately 50 yards away.
- 3. Move the rifle and the rest until the target is visually centered inside the barrel.
- With the target centered in the bore, make windage and elevation adjustments until the reticle cross-hair is also centered over the target.

Note - If a laser bore sighting or any other similar device inside the bore was used, it must be removed before firing. An obstructed bore can cause serious damage to the gun and possible injury to the shooter.

# Zeroing the Scope

#### IMPORTANT SAFETY CHECKS:

- · Always check your weapon and surroundings for safety.
- Follow all weapon manufacturer safety guidelines.
- Always shoot from a solid rest using consistent and proper form.
- Be sure that your target is level to aid in accurate sight-in process.

#### TO ZERO THE SCOPE:

- Start sight-in process from 25 yards, from solid rest fire
   3-shot group, ensuring that you fire at same spot each time.
   Use grid lines on target to center and level your cross-hairs.
- After the first 3-shot group, make adjustments to bring bullet impact to center of target you're shooting at. Repeat this process at 100 yards and you will have accurate 100 yard zero.

Note - Scope graduations are 1/4 MOA. Scope turrets are marked with direction of bullet impact change. At 100 yards a 1/4 MOA scope adjustment will move bullet impact 1/4 inch in direction adjusted. At 25 yards that same 1/4 MOA adjustment will be 4 times smaller, so 1/4 MOA adjustment at 25 yards will move bullet impact 1/16 of an inch.

# Setting The Zero Stop Turrets

By zeroing the rifle at 100 yards, the shooter can calculate how many clicks of adjustment are needed for different distances or wind conditions.

# TO SET ZERO STOP TURRETS AFTER YOUR RIFLE IS SIGHTED IN:

- Loosen the 3 screws from outter edge of turret and take off the turret knob.
- 2. Put the turret knob back on with zero line aligned with mark below the turning knob.
- 3. Tighten the 3 screws to lock it in.







# Troubleshooting

Problems thought to be associated with the scope are often actually mount problems. Take time to ensure the mounts are tight to the rifle and that scope is secured and doesn't twist or move in the rings. Confirm that correct base and rings are being used and in the proper orientation. Be sure to torque rings per manufacturer's specs.

Keep in mind there are many issues that can cause poor bullet grouping. Always utilize a solid rest and maintain good shooting technique. Have a qualified gunsmith look over your rifle to be sure all things are in working order. See that the action and barrel are properly cleaned. Some rifles and ammunition don't work well together, try different ammunition and see if accuracy improves.

# Riton Warranty

As a part of the Riton Promise we believe in providing you with the best possible service, including the industry's best warranty. The quality of our products makes this the best warranty you'll likely never have to use; however, as hunters and outdoorsmen and women, we know that bad things sometimes happen to even the most cautious.

#### **OUR WARRANTY IS SIMPLE:**

- No proof of purchase or registration required for your Riton products.
- Lifetime warranty regardless of original purchaser.
- All warranty replacements will receive a brand-new product off the shelf. We will not ever replace the product with a repaired or refurbished product.
- Replacement product will be shipped within 48 hours of receiving and approving your return.
- Loss, theft and/or deliberately worn and damaged products are not covered. Warranty is VOID if damage results from unauthorized repair
  or alteration.



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