



RITON

1 PRIMAL

4-16X44 RIFLESCOPE



RITON

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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.

Here at Riton 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.

"RITON WAS BUILT OUT OF THE BELIEF THAT A PERSON'S HARD-EARNED DOLLAR SHOULD BUY QUALITY OPTICS AND THE BEST SERVICE AT EVERY PRICE POINT."

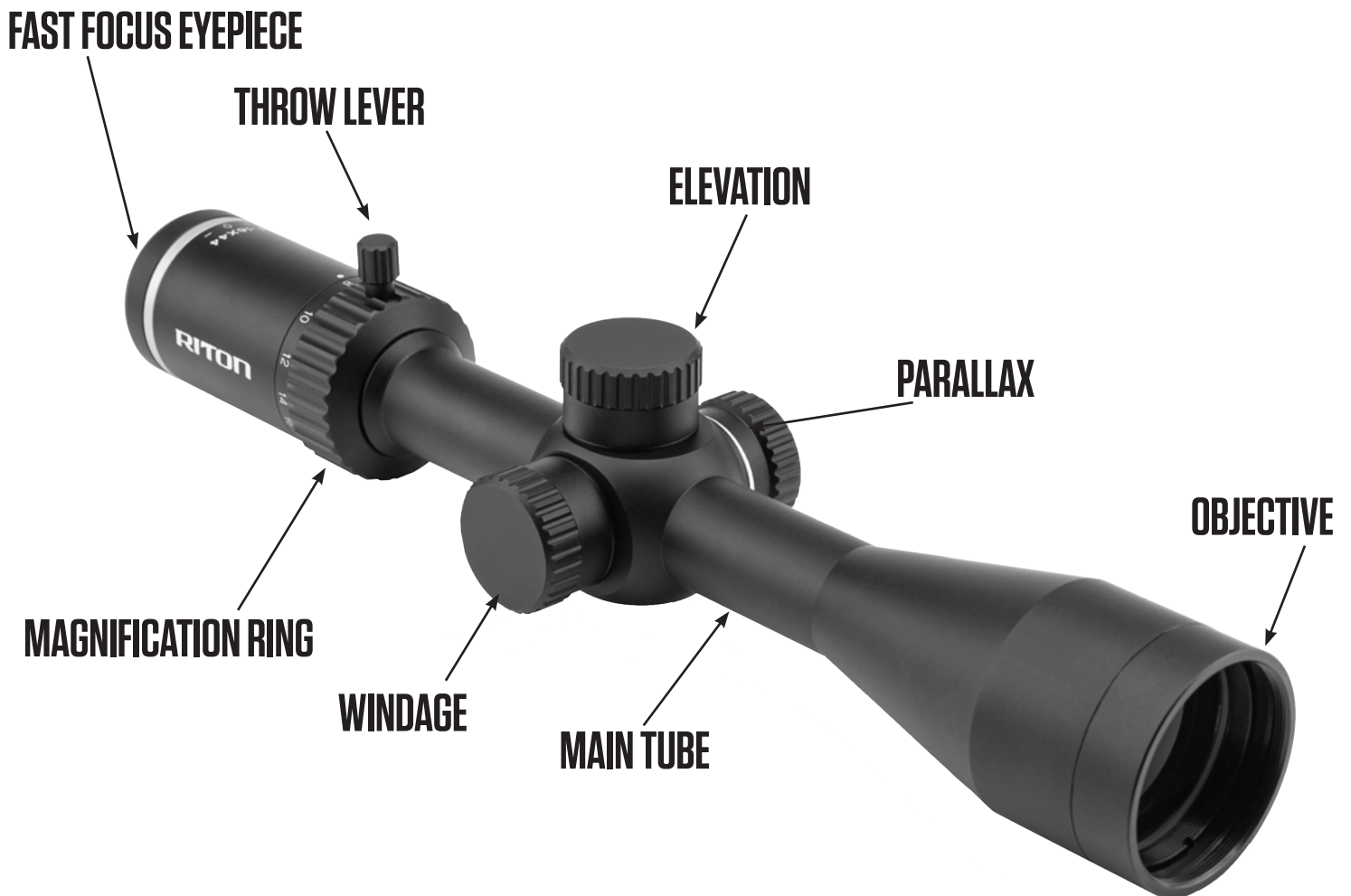
1 PRIMAL 4-16X44

OPTIC SPECIFICS

The 1 Primal 4-16×44 is the absolute best value hunting optic out there. This high performance, affordable riflescope features an integrated throw lever for ease of magnification adjustment and capped, zero resettable turrets to put you right on target every time. The 1 Primal 4-16×44 also utilizes Riton HD glass, providing for an optimal Field of View (FOV) with a crystal-clear picture.

DETAILED PRODUCT FEATURES:

- / Featuring Capped, Zero Resettable Turrets
- / Integrated Removable Throw Lever
- / 1/4 MOA Windage and Elevation Adjustment
- / Fast-Focus Eyepiece
- / Assembled in EP-Level Clean Room
- / 100% Waterproof, Fog Proof and Shockproof (tested up to 1200 G's)



TECHNICAL SPECIFICATIONS



MAGNIFICATION:	4-16
PARALLAX ADJUSTMENT:	10-Infinity
TUBE DIAMETER:	1 Inch
OBJECTIVE LENS DIAMETER:	44mm
FOCAL LENS POSITION:	Second Focal Plane
LENS COATING:	Fully Multi-Coated, Full Wide Band, Waterproof Coated, Low Light Enhancement
RETICLE:	RUT
FIELD OF VIEW AT 100 YDS:	24.1ft-6.3ft
MATERIAL:	6061-T6 Aircraft Grade Alluminum
EYE RELIEF:	3.9in/100mm
EXIT PUPIL:	Low 11mm - High 2.8mm
CLICK VALUE AT 100 YDS/MM:	1/4"
ADJUSTMENT RANGE:	80 MOA
MOUNTING LENGTH:	5.5in/140mm
LENGTH:	12.87in/327mm
WEIGHT:	22oz/623g

EXPLANATION OF MINUTE OF ANGLE (MOA)

MOA unit of arc measurements are based on degrees and minutes. There are 360 degrees in a circle and 60 minutes in a degree for a total of 21,600 minutes (MOA) in a circle. A minute of angle will subtend 1.05 inches at a distance of 100 yards.

ADJUSTING YOUR SCOPE

Use the chart below to determine the clicks needed to adjust your point of impact. The chart below is based on 1/4 MOA adjustments.

100 YARDS	200 YARDS	300 YARDS	400 YARDS	500 YARDS
.25 IN	.50 IN	.75 IN	1IN	1.25 IN

*Graduations can be calculated at additional distances beyond 500 yds.



For more information on MOA and MRAD, scan the QR code above for an in depth video from Riton University



SECOND FOCAL PLANE (SFP) RETICLE

The reticle in your Riton riflescope is a Second Focal Plane (SFP). SFP reticles are placed behind the magnification lens. The advantage of a SFP reticle is that it always maintains the same appearance. Shooters using reticle hash marks should be aware that the listed subtensions used for estimating range, holdover, and windage correction are at the maximum magnification.

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.

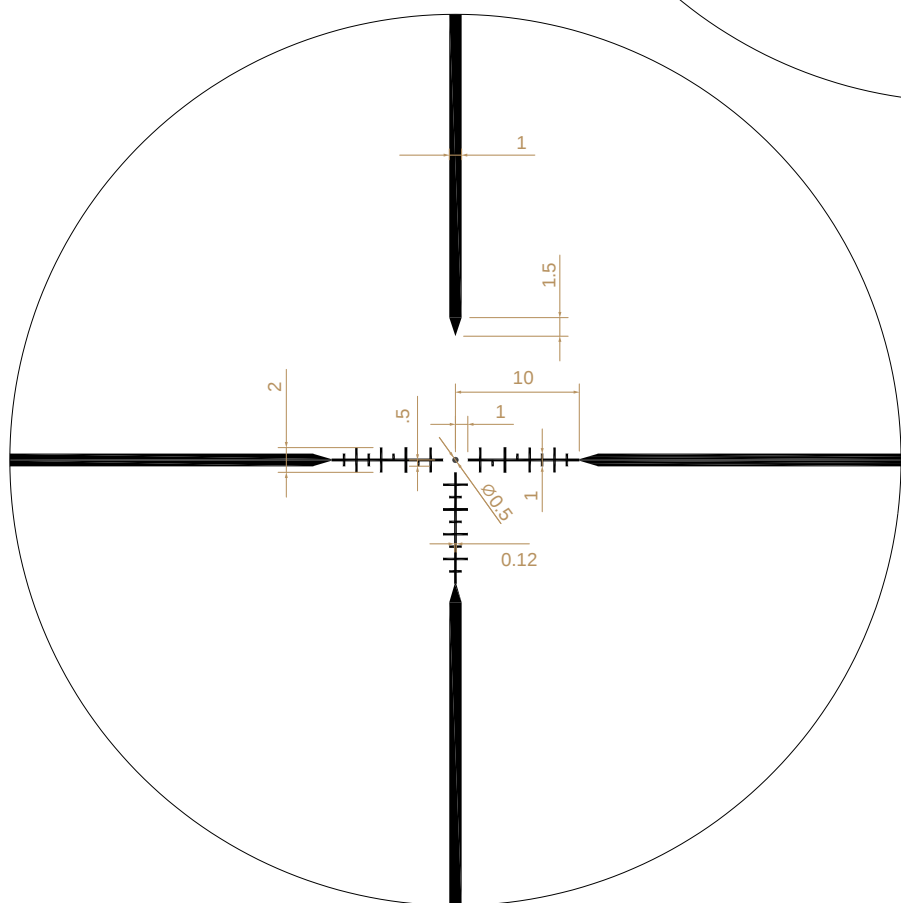
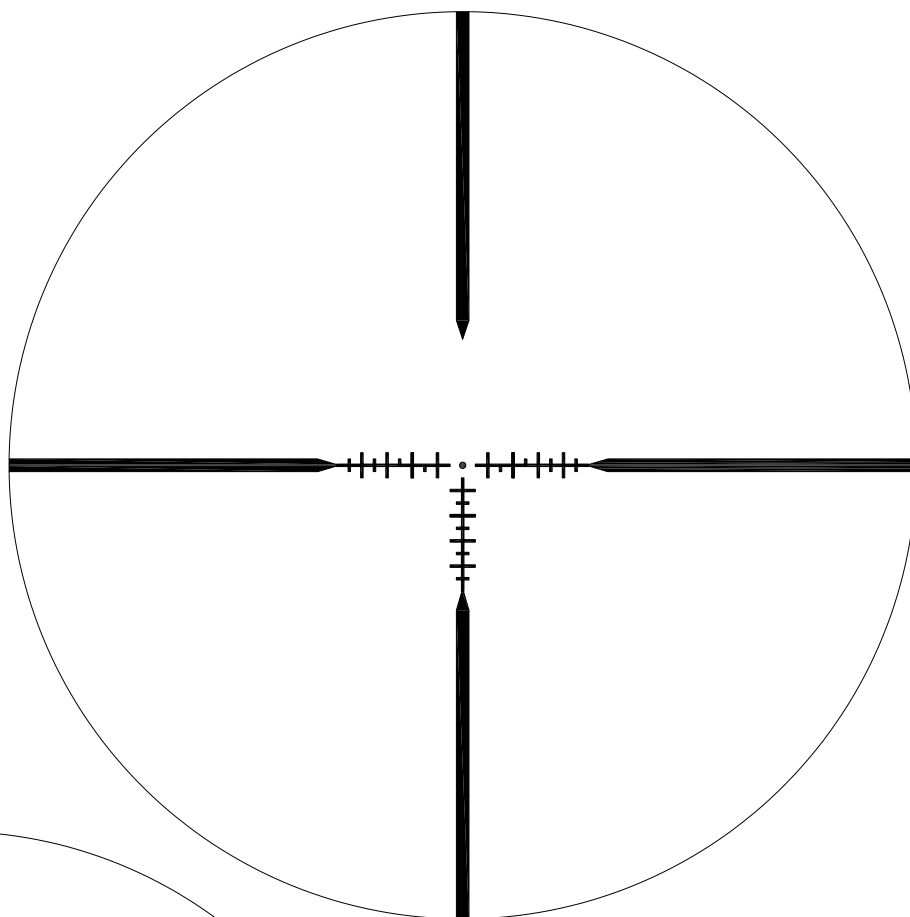


For more information on First Focal Plane and Second Focal Plane, scan the QR code above for an in depth video from Riton University



RETICLE INFORMATION

The Riton 1 Primal 4-16x44 is equipped with the Riton RUT 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:

1. Look through the scope on max magnification (16 power) at a blank white wall or white paper
2. 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.



For more information on Parallax, scan the QR code above for an in depth video from Riton University

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:

1. Dial turret one direction until it will no longer rotate.
NOTE - Do not force the turret past it's stopping point.
2. 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.



SETTING THE ZERO RESET 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 RESET TURRETS AFTER YOUR RIFLE IS SIGHTED IN:

1. Loosen the screw from top of turret and take off the turret knob.
2. With provided allen wrench loosen 2 outer screws on shim found in box .(shim is small blk disk with hole in the middle)
3. Hand threaded shim onto turret post and dial it down till it stops. (no tools nessecery for this step, just hand tighten)
4. Tighen two outer shim screws with provided tool. NOTE: scews just need to be snug, DO NOT over tighen.
5. Put the turret knob back on with zero line aligned with indicator mark and tighten top scerw.



For more information on Zero Stop Turrets, scan the QR code above for an in depth video from Riton University



MOUNTING YOUR RITON RIFLESCOPE

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

TO MOUNT YOUR RITON RIFLESCOPE:

1. Mount the bottom ring halves or mount on the mounting base of your rifle.
2. 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.
4. 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.



For more information on Mounting, scan the QR code above for an in depth video from Riton University

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.
3. 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.
4. 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.
2. 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.
4. 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:

1. 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.
2. 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.



For more information on Bore Sighting and Zeroing your scope, scan the QR code above for an in depth video from Riton University

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 PROMISE 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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