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HURRICANE | LIGHTNING | FIREBALL
MANUAL

RESEARCH | DEVELOPMENT | PRECISION

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OVERVIEW

Hurricane:

The WULF Hurricane series of Rifle Scopes have been designed from the ground up to fit the needs of both Centrefire and Air Rifle shooters.

Broken down into two-second focal plane magnification ranges - 4.5-18x and 6.5-25x - that are equipped with robust 30mm tubes, tactical locking turrets, illuminated half mildot reticles with matching 0.1MRAD click values, and side focus down to 10 meters.

Lightning:

If you're looking for a lightweight, mid magnification Rifle Scope with side focus down to Air Rifle ranges, the WULF Lightning ticks all the boxes.

The 7-25x44 comes with a lightweight, 1-inch tube, a non-illuminated second focal plane half mildot reticle and 0.1MRAD tactical locking turrets.

The Lightning provides Hunters and Target Shooters with the perfect companion for their Air, Rimfire or Centerfire Rifle.

Fireball:

If you are looking for a partnership for your Air Rifle or Rimfire, the Fireball range from WULF has you covered.

Split into 3 magnification ranges starting at a 2-7x32 and headed by a 4-12x50, these quality entry-level optics come with a 1-inch tube, an adjustable objective down to at least 10 meters, a second focal plane half mil-dot reticle and fully multi-coated crystal lenses that provide the shooter with some of the best optics available at this price point.

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- Instruction Manual



RETICLE OPTIONS - THE BASICS

What is Focal Plane?

Focal Plane, is a term used to describe the internal location of the Rifle Scopes Reticle within the tube of the optic. Rifle Scopes are either described as being First Focal Plane (FFP) or Second Focal Plane (SFP). The WULF Hurricane, Fireball and Lightning Series all come in the Second Focal Plane configuration.

First Focal Plane Reticles

Where are First Focal Plane Reticles situated?

A First Focal Plane (FFP) Reticle can be found near the windage and elevation turrets in front of the image-erecting and magnifying lenses.

Please Note: FFP information is not applicable to these models.

Common Characteristics of FFP Reticles

A common characteristic of an FFP Reticle is that the Reticle itself will visually grow and shrink as you adjust the magnification of the scope. The main benefit of an FFP Reticle is that the Reticle subtensions or markings used for calculating range, hold offs, and calling wind are constant at all magnifications.

FFP Reticles are heavier at higher magnifications and finer at lower. As so, an FFP Reticle may not always be the best choice for certain disciplines.

Common Characteristics of SFP Reticles

If you were to deconstruct a Second Focal Plane Rifle Scope you would find the Reticle is situated near the Scope's eyepiece which is behind the image erecting and magnifying lenses. The strongest characteristic of this style of Reticle is the fact that it does not visually change in size when you change the magnification. The advantage of an SFP Reticle is that it always

maintains the same appearance so when increasing the magnification of the Rifle Scope you will not obstruct the target you are shooting at.

ADJUSTING YOUR RIFLE SCOPE

Reticle Focus Adjustment

Each WULF Rifle Scope uses a fast focus eyepiece designed to quickly and easily adjust the focus on the reticle.

To Adjust the Reticle Focus:

1. Look through the Rifle Scope at a plain/cloudy sky or a blank white wall.
2. Turn the eyepiece focus in or out until the Reticle is as crisp as possible.

Please Note: Try to make this particular adjustment quickly, as the eye will try to compensate for an out-of-focus Reticle.

Once this adjustment is complete, it will not be necessary to refocus every time you use the Rifle Scope. However, because your

eyesight may change over time, you should re-check this adjustment periodically.

WARNING:

DO NOT LOOK DIRECTLY AT THE SUN. THIS WILL CAUSE SEVERE DAMAGE TO THE EYE.

THE SUBTENSION SCALE: MRAD

Both units of measure (MOA) and milliradian (MRAD) are a way of measuring units of arc and are the most effective way of ranging or adjusting a Rifle Scope for bullet trajectory.

MRAD Adjustments

The Fireball, Hurricane and Lightning come with 0.1 MRAD clicks. There is 10 clicks to one full MRAD. One MRAD will subtend 3.6 inches at a distance of 100 yards. Each Rifle Scope, with its 0.1 MRAD clicks, will subtend as the following .36 inches at 100 yards/1cm at 100 meters, .72 inches at 200 yards/2cm at 200 meters, 1.08 inches at 300 yards/3cm at 300 meters, etc. They will come with precise audible clicks

making it easy for shooters to make their reticle adjustments when out in the field.

WINDAGE & ELEVATION ADJUSTMENTS



To make adjustments:

1. Turn the adjustment knob in the appropriate direction: Up/Down or Left/Right as indicated by the arrows.

Please Note: with the Fireball Series, turret caps must be removed before this step.

2. Following the directional arrows, turn the knobs in the direction you wish the bullet's point-of-impact to go to.

EXAMPLE:

WULF Lightning 7-25x44 with MRAD Adjustments:

With each click of the WULF Lightning 7-25x44 moving the point-of-impact 0.1 MRAD, four clicks will move the bullet's point-of-impact 1.44 inches at a 100 yard sight-in distance. At 100 meters, four clicks will move the point-of-impact 4 CMs.

IMAGE FOCUS AND PARALLAX CORRECTION

Both the Hurricane and Lightning come with a side focus knob, whereas the Fireball comes with an adjustable objective. Both systems are used to fine-tune the image focus. When the image is sharply focused, parallax error will also be eliminated.

Using the Side Focus and Adjustable Objective (AO):

1. Please make sure the Reticle is correctly focused.

2. Turn the side focus knob or AO until the target image is as sharp as possible. The yardage numbers referenced on the knob should closely match the actual yardage to the target but may not be exact. These are a rough guideline and these markings

compared to the image will alter depending on the shooter's eyesight.

3. Be sure to check for parallax error. This can be done by moving your head back and forth while looking through the Scope. The focus is correct if there is no apparent shift of the Reticle on the target. If you notice any shift, adjust the focus knob slightly until all shift is eliminated.

What is Parallax?

Parallax is a phenomenon that results when the target image does not quite fall on the same optical plane as the Reticle within the scope. This will then cause an apparent movement (shift) of the Reticle in relation to the target if the shooter's eye is off-centered. This can result in large bullet shifts. Correctly focusing the target image will allow it to fall on the same optical plane as the Reticle within the Rifle Scope.

Turret Rotation:

The Fireball, Hurricane & Lightning come with counter clock wise turret rotations which means the shooter will move the

point of impact up when adjusting the turret counter clock wise. In regards to the windage turret, the shooter will adjust the turret counter clockwise to adjust the point of impact to the right.

ADJUSTMENTS

Adjusting Magnification

To change your WULF Rifle Scope's magnification, turn the magnification ring to the desired level.

Illumination Adjustments

The WULF Hurricane uses a variable intensity reticle illumination system to aid in low light performance.

Please Note: Fireball & Lightning are Non-Illuminated

To activate the illumination, rotate the adjustment knob to a full number in either direction, 0 represents off. The illumination knob allows for 5 levels of brightness intensity and gives the shooter 2 colour choices.

BATTERY REPLACEMENT

Replacing the Battery for the Illuminated Reticle

1. Unscrew the outer cap with a plastic coin*
2. Remove the battery.
3. Replace with a new CR 2032 battery.
4. Re-install the outer battery cap and make sure the cap is finger tight.

INITIAL BORE SIGHTING AND ZERO

1. Mount your scope to your rifle adhering to the mount manufacturers recommended torque setting, ensuring both the windage and elevation turret screws are tightened and allow for click adjustment. We recommend using a Torque Wrench.

2. An initial bore sight of your scope can be completed by either removing the bolt from the rifle and sighting the target through your barrel or alternatively by using an optical collimator or laser bore sighter.

Initial bore sighting can also be achieved by mounting the scope to the rifle and firing an initial 3-shot group and then aligning the center of the reticle over this group.

3. Upon achieving Zero, fully loosen the screws and rotate the turret to the Zero mark and retighten.

If further elevation is required, we suggest using adjustable scope rings, for example the WULF 30mm 40 MOA Adjustable Scope Rings or a Picatinny Rail designed for your rifle with a minimum of 20 MOA.

MAINTENANCE

Cleaning:

The fully waterproof and fog proof lenses require very little maintenance other than periodically cleaning the exterior lenses to ensure your optics provide you with the best performance when out in the field.

The exterior of the Rifle Scope may be cleaned by wiping with a soft, dry cloth. When cleaning the lenses, be sure to use the correct products, such as a Fog Free cleaning solution and Lens Pens that are specifically designed for use on coated optical lenses. This will ensure your Scope's glass stays in the best possible condition.

Key Points:

- 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.
- Disassembling of the Rifle Scope will void warranty.

Please Note: Other than to remove the turret caps, do not attempt to disassemble any components of the Rifle Scope.

Storage:

If possible, avoid exposing your Rifle Scope to direct sunlight or any hot location for long periods of time.

WARRANTY

We know first-hand the importance of reliability and performance. Split seconds and hairline distances are common in our game and we need equipment that will consistently perform and last.

Our products are designed and manufactured to fulfill and exceed the demands of our users, and to withstand the elements, which is why we ensure each WULF item passes the strictest of quality controls.

However, we know that on the rarest of occasions things can go wrong which is why we offer the WULF Titanium Warranty on all our products under normal use.

NO QUESTIONS. NO COSTS. NO WORRIES.

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The WULF Titanium Lifetime Warranty does not cover loss, theft, deliberate damage or cosmetic damage that does not hinder the performance of the product.

Please refer to the dealer you purchased from for all warranty questions and issues.





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