



GUARDIAN LR

5-25x56 Long Range Optic User Manual

GOG525FFP-RD – First Focal Plane Reticle, Red Illumination

GOG525FFP-GN – First Focal Plane Reticle, Green Illumination



Thanks for choosing Gideon Optics. This short manual will help you understand the features of your new optic, how to change the battery, and how to use it.

Battery Warning

Reese's Law, 16 CFR 1263

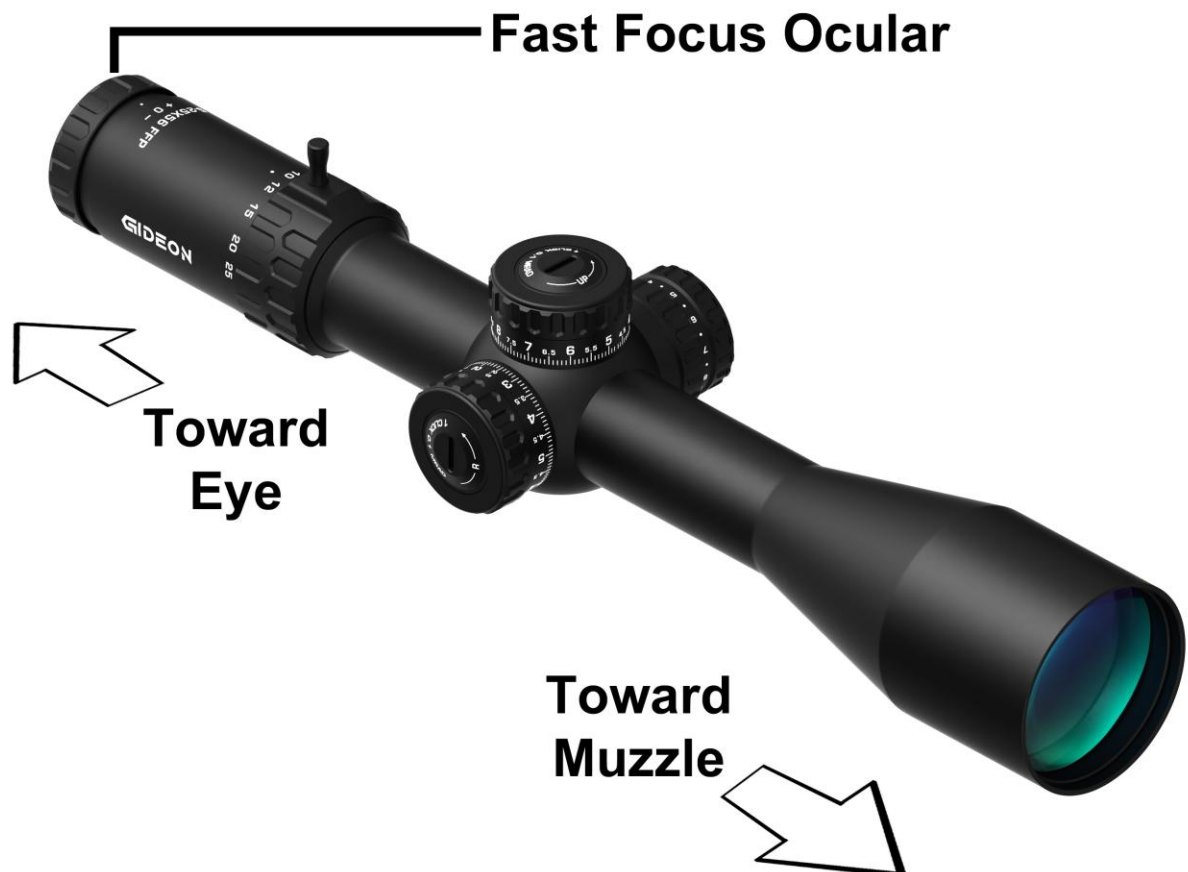
- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Battery Type: CR2032
- Nominal battery voltage: 3V
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above the 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.

READ THIS FIRST!

The Fast Focus Adjustable Ocular

Guardian LR features an adjustable ocular lens. This is the lens closest to your eye when looking through the optic, and its job is to make the reticle crisp and sharp for a wide variety of eyes, since everyone's eyesight is slightly different. New in the box, the lens will be turned all the way to the right for shipping purposes. To set the ocular for your eye, look through the optic while pointing it at a blank space of wall or a blue sky, and turn the ocular ring until the reticle appears as sharp as possible. If you wear prescription glasses or contact lenses when you shoot, wear them when you adjust the fast focus ocular as well.

NOTE: The adjustable ocular lens does not affect the optic's parallax setting. Its only job is to keep the reticle sharp.



WARNINGS:

1. DO NOT observe the sun directly while looking through the optic. The lens coatings are not dark enough to prevent damage to your eyes if you look directly at the sun.
2. Never put this product in a place close to a heat source or a place of high temperature for an extended period of time, like an oven. If you want to change colors, please use the air-dry variants of Duracoat / Cerakote or simple spray paint.

3. Never leave the optic, mounts, batteries or screws in reach of children or pets, to avoid the potential danger of swallowing.

Specifications

Magnification: 5-25x

Objective Lens Diameter: 56 mm

Main Tube Size: 34 mm

Turrets: Locking, Resettable

Elevation Turret: Quick Return to Zero

Click Value: 0.1 MRAD per click

Parallax Setting: Adjustable, 10 yards - Infinity

Illumination Brightness Setting: 12 levels

Illumination Colors: Red or Green

Power Supply: 1x CR2032 3V Lithium Battery

Shockproof: 1000G

Waterproof: IPX7

Elevation/Windage Adjustment Range: +/- 12.5 MRAD (Total 25 MRAD)

Field of View at 100 Yards: 24.0 ft – 5.0 ft

Eye Relief: 3.74 in

Exit Pupil: 7.0-2.25 mm

Weight: 36.6 oz (approx.)

How to Install/Change the CR2032 Battery

Guardian LR features a side-mounted battery compartment located inside the illumination brightness knob. Using a non-marring flat blade tool, turn the battery cap counter-clockwise to access the battery compartment. Remove the old CR2032 battery and replace with a new 3V CR2032. The “+” side should face outwards, away from the scope body. Replace the battery compartment cap by turning it clockwise. Be careful not to cross-thread to avoid damage to the threads. To avoid stripping out the battery compartment cap, do not over torque it. There is no torque spec on the battery cap, just stop turning when it no longer turns easily.

Brightness Adjustment

Guardian LR is equipped with 12 brightness settings. Rotate the brightness adjustment knob to select your desired brightness level, 1 is the dimmest and 12 is the brightest. An “OFF” detent is located between each brightness level for ease of use. Always select the lowest brightness setting that still provides good contrast against the target. Rotating the knob to any “OFF” detent between brightness settings will shut down illumination, allowing you to simply use the reticle in black. There are many shooting situations in which it may be preferable to use Guardian LR with illumination turned off (such as shooting at white targets in bright sunlight).

Reticle illumination is best used in low-light situations, although the maximum setting is visible in daylight. If too much reticle brightness is selected compared to the ambient light, a bloom or glow will appear around the reticle area. The best amount of illumination is a brightness setting that provides good contrast against the target area, allowing for a quick but precise sight picture.

Changing Magnification

The magnification ring is located between the fast focus ocular and the 34mm main scope body tube. Grasp the ring itself or the included throw lever and rotate the magnification ring to select any magnification from 5x through 25x, corresponding with the number engraved on the magnification ring.

Parallax

Guardian LR features a “side focus” style adjustable parallax ring located between the illumination knob and the scope body. The ring is marked with distances between 10 yards and infinity. If you know your distance to target, simply turning to the number matching your yardage will get parallax close enough to make good hits. To double check parallax at any distance, wiggle your head side to side just a little bit while looking through the optic, without moving the rifle. If the reticle’s position on the target moves when you move your head, parallax is imperfect. For best precision, adjust parallax until the reticle’s position on target does not change when your eye moves side to side behind the optic.

Elevation/Windage Adjustment

To lock the turrets in their positions and prevent unwanted adjustment from bumping them, press the turrets in, towards the optic body. To make adjustments for zeroing or dialing for wind and distance, pull the turrets away from the scope body. The arrows engraved on the turrets indicate the point of impact shift. Therefore, if your shots are hitting low, turn the elevation turret on the top of the optic counter-clockwise to bring bullet impact UP. If your shots are hitting to the left, turn the windage turret on the right side of the optic counter-clockwise to bring bullet impact RIGHT.

Guardian’s elevation and windage turrets feature audible and tactile clicks. Each click will move the point of impact about 0.1 Milliradians (MRAD or MIL), approximately 0.36 inches at 100 yards, or 1 cm at 100 meters. For zeroing and precision shooting, always select the lowest illumination brightness setting that still provides good contrast against the target to help the reticle be as crisp and sharp as possible.

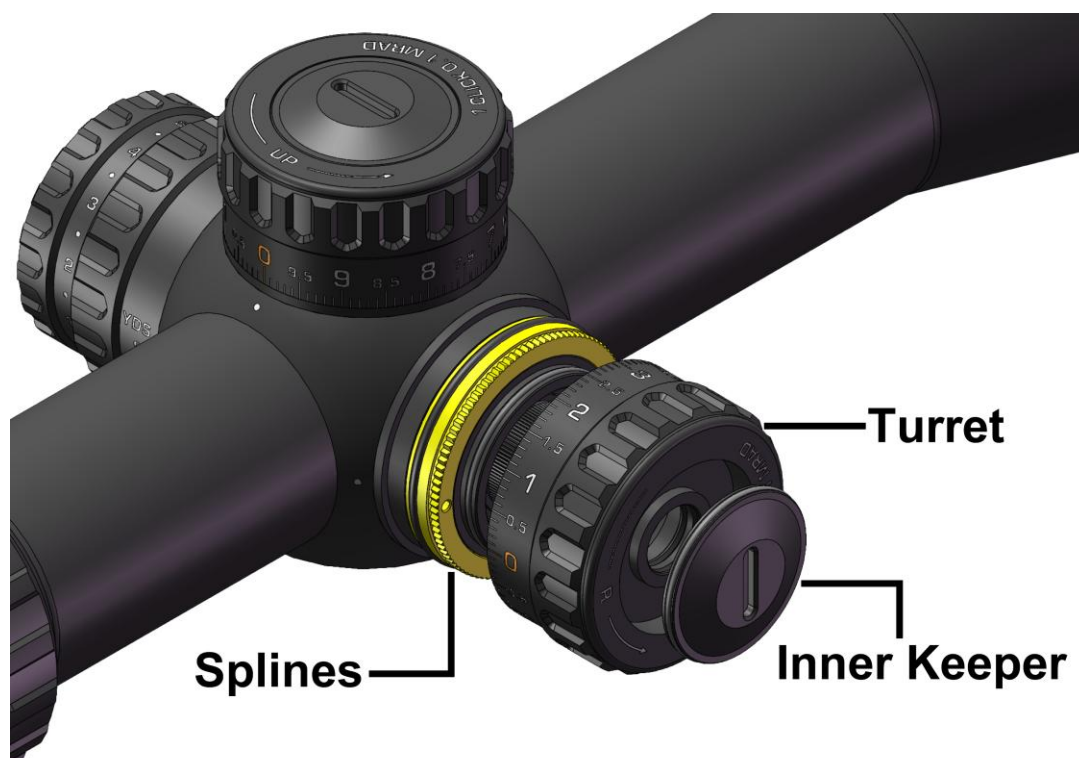
Zeroing

Please note that the reticle comes from the factory “centered” in the middle of its adjustment range. Only minor windage and elevation adjustments should be required to zero. If significant adjustments appear necessary, please make sure the sight is properly mounted.

After properly mounting the optic to the firearm, fire a 3-shot group and observe the point of impact using an average of the group. Initial zeroing at shorter ranges is recommended before fine-tuning the optic for longer ranges. Zeroing at extremely short distances (20 yards or closer) will likely not provide a true zero at longer ranges due to the angle created by the optic’s centerline height over bore. After making your adjustments, fire another 3-shot group to confirm the change in point of impact. Repeat as necessary.

Windage Turret: Resetting Turret Zero Indication

Once you have sighted in your rifle at your chosen distance, it is important to reset the windage turret to read “0”, so you can easily navigate further adjustments to compensate for wind and always quickly return to your original setting. With the turret pressed towards the scope body in the locked position, use a screwdriver or coin to turn the inner keeper counter-clockwise until it can be removed. Then pull the turret straight away from the scope body without twisting it, and it will pop right off. Line up the “0” marking on the turret with the corresponding engraved dimple on the scope body, and press the turret back on. You may need to wiggle around a bit to get the splines to align correctly. A moderate amount of pressure is all that’s needed and once you have achieved correct alignment the turret will pop back on relatively easily.



Elevation Turret: Quick Return To Zero

Guardian LR's elevation turret features an optional quick return to zero mechanism. While engaging targets at vastly different distances it is sometimes useful to be able to quickly return elevation to your initial sight-in zero. Then you can engage another target at a different distance using reticle holdovers, or begin a new physical elevation adjustment via dialing the turret.

After sighting in your rifle, remove the inner keeper and turret as with the windage knob shown above. Underneath you will find a grooved aluminum ring with a vertical line engraved on it and the words "Zero scale line". Line up the vertical line with the engraved dot on the scope body, and place it over the pin mounted to the splines.

You should be able to turn the ring counter-clockwise easily, but when turning clockwise it should physically stop when the zero scale line aligns with the scope body dot. Correct alignment is shown in the diagram below.



Now replace the turret to read "0" as with the windage turret, tighten the inner keeper in place, and the elevation turret is configured. When using the quick return to zero, you'll notice that the turret does not stop at "0" but travels 5 MRAD beyond it, to the "9.5" marking. **This is intentional, there is nothing wrong with the optic.** The design is configured this way because there are circumstances in which you might want to dial beyond "0" for a "hold under" situation.

The presence of the quick return to zero mechanism does limit total elevation travel in the UP direction to a certain extent, depending on where the internals of the optic are positioned when your rifle is zeroed. Long distance shooters desiring the entire internal travel of the elevation turret may wish to remove the grooved aluminum ring and forgo the quick return to zero mechanism.

Reticle Subtensions

Guardian LR 5-25x features a first focal plane (FFP) reticle which will stay the same size relative to the optic's field of view regardless of magnification setting. Therefore the subtensions described below will be valid for range estimation and holdover shooting at all magnifications. Range estimation and holdover shooting are much easier at high magnification but the reticle is never "wrong" at any magnification.

Main crosshair:

The reticle is generally divided into 1 MRAD sections, subtended by 0.2 MRAD hash marks. Between 4 and 8 MRAD horizontally the hash marks double, to just .1 MRAD between each hash mark, equivalent to the turret click adjustment value. The center dot is only 0.05 MRAD in diameter. Thickness of the reticle itself is 0.03 MRAD. Measuring from the centerline of the crosshair, tall hash marks measure 0.2 MRAD and short hash marks 0.1 MRAD. For larger measurements just use the entire tall hashmark above and below the crosshair, doubling the measurement to 0.4 MRAD.

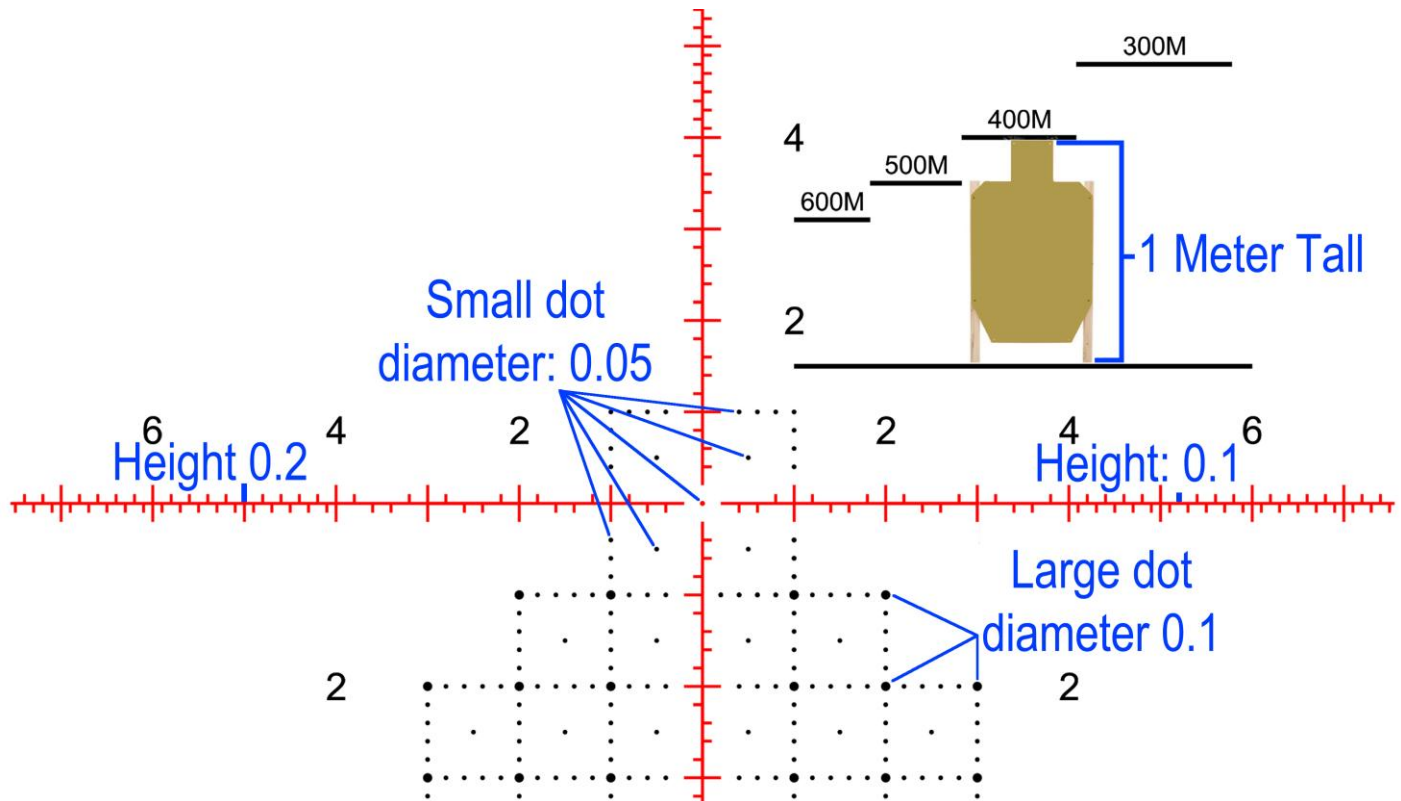
Holdover grid:

Underneath the crosshair is a holdover grid useful for engaging targets at a variety of distances without having to physically adjust the turrets. The grid is divided into boxes measuring 1 MRAD each, made of large dots 0.1 MRAD in diameter, with smaller dots measuring .05 MRAD in diameter, positioned at 0.2 MRAD intervals. One more dot is placed in the exact middle of each box, 0.5 MRAD from each "wall" of the box. Navigation numbers are placed 1 MRAD outside the holdover boxes marking distance down from center all the way down to 14 MRAD.

There is a small gap of one "missing" dot in each holdover box just after 8 MRAD down, where reticle illumination of the main crosshair ends, to help visual navigation of this complex reticle.

Large Stadia:

The large stadia are thick guide lines that draw your eye to the center of the optic so you can find the thin crosshair more easily at low magnifications. They all extend out to 24 MRAD from center. The three thicker guide lines measure 0.75 MRAD in width, and the thinner line above center measures 0.25 MRAD in width.



Quick Ranging:

Vertical and horizontal quick ranging is located to the upper right of reticle center. Vertical measurement is 1.0 meters (or 39 inches). Looking through the optic, place the bottom of any object approximately 1 meter tall along the bottom line. Note which top line aligns most closely with the top of the 1 meter tall target, from 300 to 600 meters. The diagram above depicts a target 400 meters away. If the target size doesn't line up perfectly with any of the lines, they can still be used as a quick reference to make an approximation. For example if the top of the target shown above lined up halfway between the 400M and 500M lines, the target would be about 450 yards away.

Horizontal measurement is 50 centimeters (or 19.6 inches). While not as precise as the vertical quick ranging, it's useful when you can see the width of an object but not its full height. Looking through the optic, align the width of the target with the top lines labeled 300M-600M to estimate distance. Again you can use these lines as a starting point for estimation—for example a target too wide for the 500M line but not wide enough to line up with the 400M is somewhere around 450 meters away.

Maintenance

CLEANING THE LENSES

Blow away any dust or grit on the lens surfaces before wiping the lenses. Gently wipe the lenses clean with a soft and dry cloth. Glass cleaner is fine to use but keep harsh solvents and other gun cleaning chemicals away from the lenses.

STORAGE

If possible, Guardian LR should be stored in a cool and dry place. Remove the battery from the battery compartment if the optic is to be stored for an extended period of time.

NOT USER SERVICABLE

DO NOT attempt to disassemble any components of the Guardian LR optic. There's nothing in there you can fix. Disassembling the optic will void the warranty.

Limited Lifetime Warranty

Your Gideon Optics product is guaranteed for life against manufacturer defects or accidental breakage. If your product fails to function during normal and intended use, Gideon Optics will repair or replace it at our discretion, following evaluation by our service team. Cosmetic damage is not considered a covered "failure"—for example, if your optic is scratched and/or dented and has the finish rubbed off of it but still functions correctly, then it still works. Intentional abuse is likewise not covered—leave the torture tests to the guys on YouTube. Refinishing a Gideon Optic will not void the warranty provided you used an air dry type coating only. Do not put optics in ovens to "cure" a custom finish. In the event that a refinished optic must later be returned, you will receive a standard optic with black finish in exchange.