

# **GUARDIAN**

1-8x Low Power Variable Optic User Manual GOG18SFP – Second Focal Plane Reticle



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

# **READ THIS FIRST!**

#### The Fast Focus Adjustable Ocular

Guardian 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,

which is fixed at 100 yards. Its only job is to keep the reticle sharp.

#### **WARNINGS:**

- 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.
- 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, or screws in reach of children or pets, to avoid the potential danger of swallowing.

### **Specifications**

Magnification: 1-8x

Objective Lens Diameter: 24mm

Main Tube Size: 30mm

Turrets: Exposed, push-pull locking system

Click Value: 0.5 MOA per click Parallax Free: At 100 yards

Illumination Brightness Setting: 11 levels Power Supply: 1x CR2032 3V Lithium battery

Shockproof: 1000G Waterproof: IPX7

Elevation/Windage adjustment range: +/- 60 MOA (Total 120 MOA)

Field of View: 111.0ft - 14.0ft

Eye Relief: 3.9 in Exit Pupil: 8.8- 2.6mm Weight: 16 oz (approx.)

## How to Install/Change the CR2032 Battery

Guardian features a side-mounted battery compartment located inside the illumination brightness knob. Remove the battery compartment cap by turning in counter-clockwise direction. 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 is equipped with 11 brightness settings. Rotate the brightness adjustment knob to select your desired brightness level, 1 is the dimmest and 11 is the brightest. Always select the lowest brightness setting that still provides good contrast against the target. Rotate the knob to "0" to shut down illumination and use the glass etched reticle in black. There are many shooting situations in which it may be preferable to use Guardian 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 30mm main scope body tube. Grasp the ring itself or the included throw lever to select any magnification from 1x through 8x, corresponding with the number engraved on the magnification ring.

#### **Parallax**

This sight has been carefully designed to be parallax free at 100 yards. At distances closer than 100 yards, parallax shift should be so minor that it is irrelevant. At distances significantly greater than 100 yards, some parallax may be observed.

# **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 0.5 Minute of Angle (MOA), approximately 0.5 inch at 100 yards, or 0.25 inch at 50 yards. 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. In order for the BDC reticle to work correctly, a 5.56 NATO round from a 16" barrel should be zeroed to the tip of the center chevron at 50 yards.

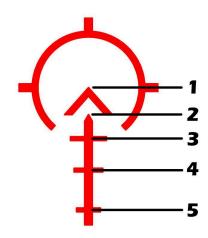
After making your adjustments, fire another 3-shot group to confirm the change in point of impact. Repeat as necessary.

#### Reticles

Guardian LPVOs are available in First Focal Plane (FFP) and Second Focal Plane (SFP) variants. This manual covers the SFP reticle, which will stay the same size relative to the optic's field of view regardless of magnification setting.

The SFP reticle provides bullet drop compensation and shoulder-to-shoulder ranging for targets 18.5" across, as shown in the diagram. Bullet drop compensation works best when shooting 55 grain M193 5.56 NATO ammunition from a 16" barrel, although 62 grain M855 ammunition will also be very close. Due to the SFP construction of this scope, the ranging and BDC features are only "true" and calibrated correctly when the scope is set to maximum 8x magnification.

# **Second Focal Plane**



- 1. 50 yard / 200 yard battle sight zero
- 2. 300 yard holdover, use width of chevron for ranging
- 3. 400 yard holdover, use width of hash mark for ranging
- 4. 500 yard holdover, use width of hash mark for ranging
- 5. 600 yard holdover

In addition, the width of the bars projecting from the outer ring in the SFP reticle can be used for ranging an 18.5" wide target at 100 yards.

#### 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 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 SERVICEABLE

DO NOT attempt to disassemble any components of the Guardian 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 Optics 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.