



**GRIFFIN OPTICS DIVISION**  
**1-10x28 MIL-R**  
**OWNERS MANUAL**



**GRIFFIN  
ARMAMENT**



# GRIFFIN OPTICS DIVISION 1-10x28 MIL-R

## INSTALLATION & MAINTENANCE GUIDE



FAILURE TO READ AND UNDERSTAND THIS MANUAL  
 PRIOR TO USE MAY RESULT IN INJURY OR DAMAGE

### WELCOME

Griffin Armament® has been satisfying customers for nearly two decades with innovative and cutting edge sound suppressor technology.

Founded by two brothers and former Army snipers, Griffin Armament knows what precision shooters want; accuracy, durability, and consistency above all else. Our optics are designed, developed, and tested in Wisconsin. Our commitment to quality, performance, and value are pillars of our company and why our products are sought after by discerning consumers.



### DISCLAIMER

Neither the manufacturer nor reseller from whom you received the product(s) are responsible for any improper use or resulting damage. Firearms and their accessories can be dangerous if not handled correctly, and it is the user's own responsibility to understand this manual and product for safe operation. If there are any unanswered questions, Griffin's experienced customer service team will gladly assist at (262)-200-0003.

Still have questions? Check out our [video channel](#) for an in-depth briefing on all products and accessories.

### PRODUCT SYNOPSIS

The Griffin 1-10x28 MIL-R provides users with a highly functional advanced target engagement optic for use in all light conditions and at a variety of ranges, at an affordable price.

This optic features a glass-etched MIL-R reticle that allows ranging of known-sized targets out to 1000m. Mils afford the capability to input ballistic come ups for shooters who know the ballistics of their cartridges. Additionally, the push-pull locking/unlocking turrets afford zero stop and eliminate windage zero loss if used.

The Griffin 1-10x28 MIL-R is a second focal plane optic that utilizes 1/10th MRAD adjustment increments for precise optical adjustments and has 24 brightness settings with 24 power-off positions in between for use in low light conditions.



### SPECIFICATIONS

Model	1-10x28 SFP
Magnification	1-10x
Objective Diameter	28mm
Eye Relief	90mm (3.5 in)
Exit Pupil	8.8mm - 2.5mm
Field of View (Degrees)	23.0° - 2.3°
Field of View (m/100m)	40.7m - 4.0m
Field of View (ft/100yds)	122ft - 12ft
Tube Size	34mm
Adjustment Graduation	1/10 MRAD
Max Elevation Adjustment	≥28 MRAD
Max Windage Adjustment	≥14 MRAD
Dioptric Fast Adjust	≥ ±2 Diopters
Parallax Setting	137M
Turret Style	Exposed Push/Pull Locking
Coating	FMC
Reticle	Glass-Etched
Reticle Focal Plane	2nd
Illumination	24 Levels (Off Setting In Between)
Shockproof	1000G
Waterproof	IPX7
Length	275mm (10.8 in)
Weight	730g (25.75oz)







**CLEAR THE FIREARM PER MANUFACTURER'S  
MANUAL BEFORE PERFORMING MODIFICATIONS**

## INSTALLATION TIPS



The Griffin 1-10x28 MIL-R is ready to use right out of the box with the included CR2032 battery. The sight is sold as a standalone unit or as a bundle with a standard 34mm Griffin Precision Mount™ (GPM™) cantilever scope mount (QD and standard mounts available).

To install the battery, unscrew the battery cap located at the end of the brightness power adjustment knob. Insert the included CR2032 battery with the positive (+) terminal facing out. Screw the battery cap back on and finger tighten until snug. **DO NOT overtighten the battery cap.**

To mount the optic to your scope mount, follow manufacturer instructions ensuring that the reticle is leveled and the scope has proper eye relief in the final mounted position. For the Griffin GPM mount, remove the 3 screws on each side holding the two top clamps onto the mount and remove the top clamps. Rest the optic in to the cradle of the optic mount and replace the top clamps. Reinstall the clamp screws, confirm level, and tighten to 20 in/lbs. **Ensure your optic is perfectly level prior to fully tightening the clamps.**

To mount your GPM™ scope mount using the Griffin “QD” GPM mount, loosen the QD knobs until you can fit the mount over picatinny rail. Seat the mount forward against the rail while tightening the thumb knobs until snug and no further clicking of the knobs occurs.

## ZEROING

We recommend zeroing this optic at 100m, and consulting our illustrated graphic listed on page 10 for optical calibration. In the event the shooter uses ballistic data to engage targets, we strongly recommend the use of a chronograph to confirm actual velocity as each manufacturer and SKU of ammunition, as well as each individual barrel varying by manufacturer and length will change velocities which are critically linked to ballistic data.

- 1) Fire a 3-shot group and find the center of the group.
- 2) Use the mil scale to determine the required adjustment value.
- 3) Pull the knob/turret upward or outward away from the optical tube to unlock the turret. Input the required adjustment value in the direction you need the bullet impact to move. (Turrets are directionally marked counter-clockwise indicating up and right on the corresponding knobs.) Each click/hash mark is a 1/10th MRAD adjustment. If you run out of windage, remove the windage knob by removing the screw-slotted knob retainer. Pull the knob off, reset the knob to zero, reinstall the knob retainer, pull to unlock the knob, input additional adjust as required.
- 4) Once adjustments are made, fire another 3-shot group to confirm zero. Repeat steps 1 - 4 as necessary until you are precisely zeroed to recommended elevation @100m.
- 5) Once zeroed, remove both knob retaining screws, reset windage to zero, reinstall windage knob, ensuring windage knob is fully depressed and locked. Reinstall windage knob retaining screw.
- 6) Referring to images on page 6, secure the zero-stop limiting ring from the optic's shipping box (this is zipper bagged and inserted in a slot in the foam box insert). The bottom of the ring has a small groove that should be placed over the pin pretruding from the brass turret housing. The ring should be rotated clockwise to a stop, such that the zero line indicates center of the turret housing.
- 7) Aligning zero on the elevation turret with center and the zero-stop line on the zero-stop ring, reinstall the elevation turret by placing it over the turret housing and pressing downward until the o-ring allows the turret to insert to the down and locked position.
- 8) Reinstall turret retaining screw. **Your optic is now zeroed and the knobs are set to zero.**





FAILURE TO PROPERLY MOUNT YOUR OPTIC MAY CAUSE DAMAGE TO YOURSELF OR YOUR FIREARM

## REINSTALLING WINDAGE KNOB (VERBIAGE LISTED ON PAGE 5)



DO NOT LOOK THROUGH THE OPTIC AT BRIGHT SOURCES OF LIGHT (E.G. DIRECT SUNLIGHT)

## INSTALL OR REPLACE BATTERY

- 1) Using a high-quality CR2032 battery can extend battery life significantly over a cheaper option. **Do NOT use a rechargeable battery.**
- 2) Unscrew the battery cap at the end of the brightness power/ adjustment knob.
- 3) Remove the old battery from the battery housing.
- 4) Install the new battery by pressing it into the battery housing of the optic with the positive (+) side facing out.
- 5) Re-install the battery cap by screwing it onto the optic and tightening fingertight. **Do NOT overtighten battery cap.**



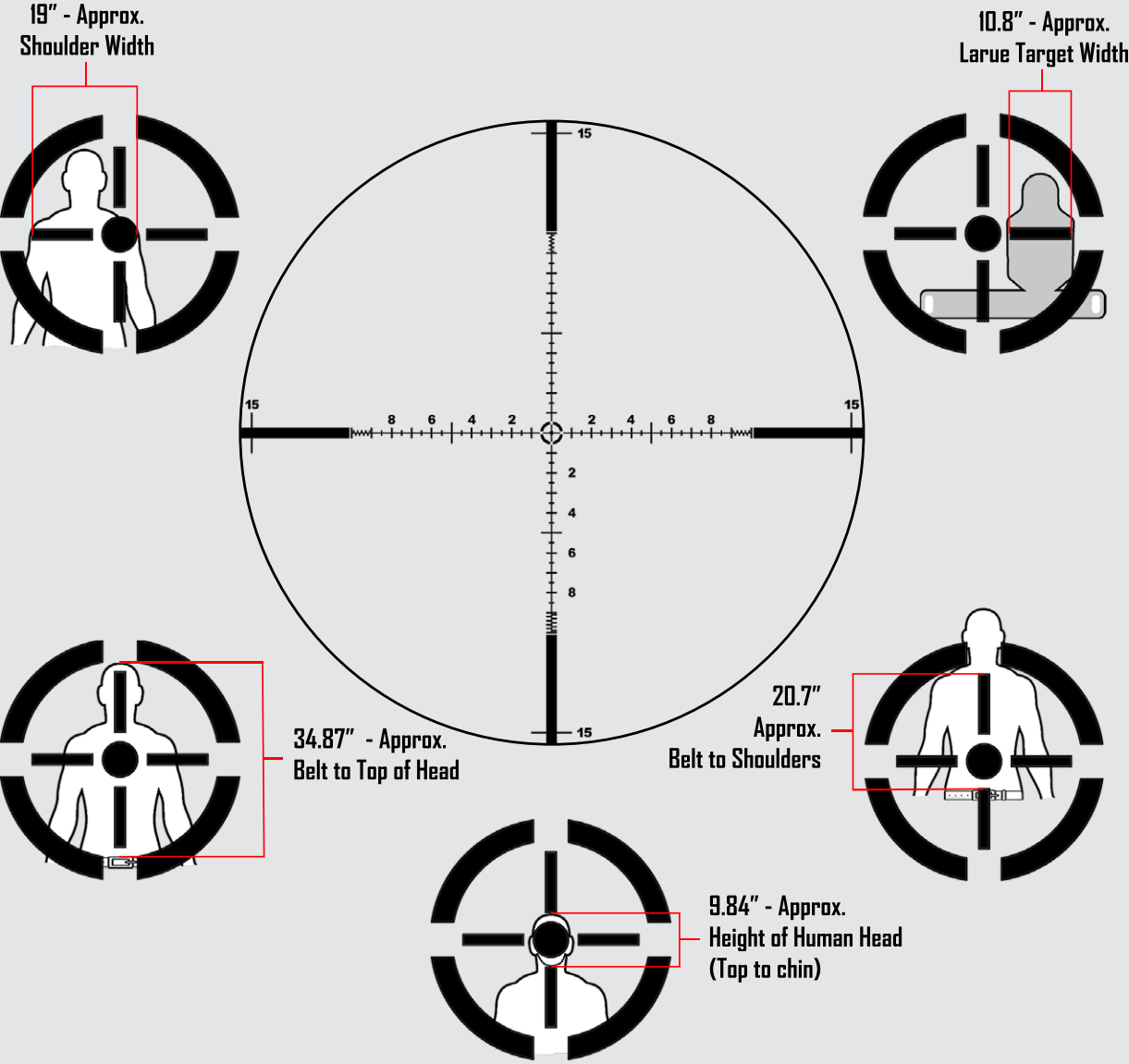
## CLEANING AND MAINTENANCE

- 1) Begin by blowing off debris from lenses using air pressure. This is ideally done with a camera lens rubber bulb blower tool (as shown).
- 2) Follow up with camera lens brush to dislodge debris, brushing and blowing back and forth (repeating steps 1 - 2 as needed) until all debris is clear.
- 3) Finish with spraying a lens cleaner on a microfiber towel or use a pre-moistened lens cleaning wipe (as shown) and wiping off lenses with a clean microfiber towel or suede polishing tip of a lens pen (as shown at left of pen).
- 4) Close lens covers, and brush down body to remove any dirt or debris and wipe external body clean. It is of great importance to always use lens covers whenever possible.





**NOT FOR CONSUMER USE**  
**RANGING FEATURES (MILITARY & LAW ENFORCEMENT APPLICATION)**

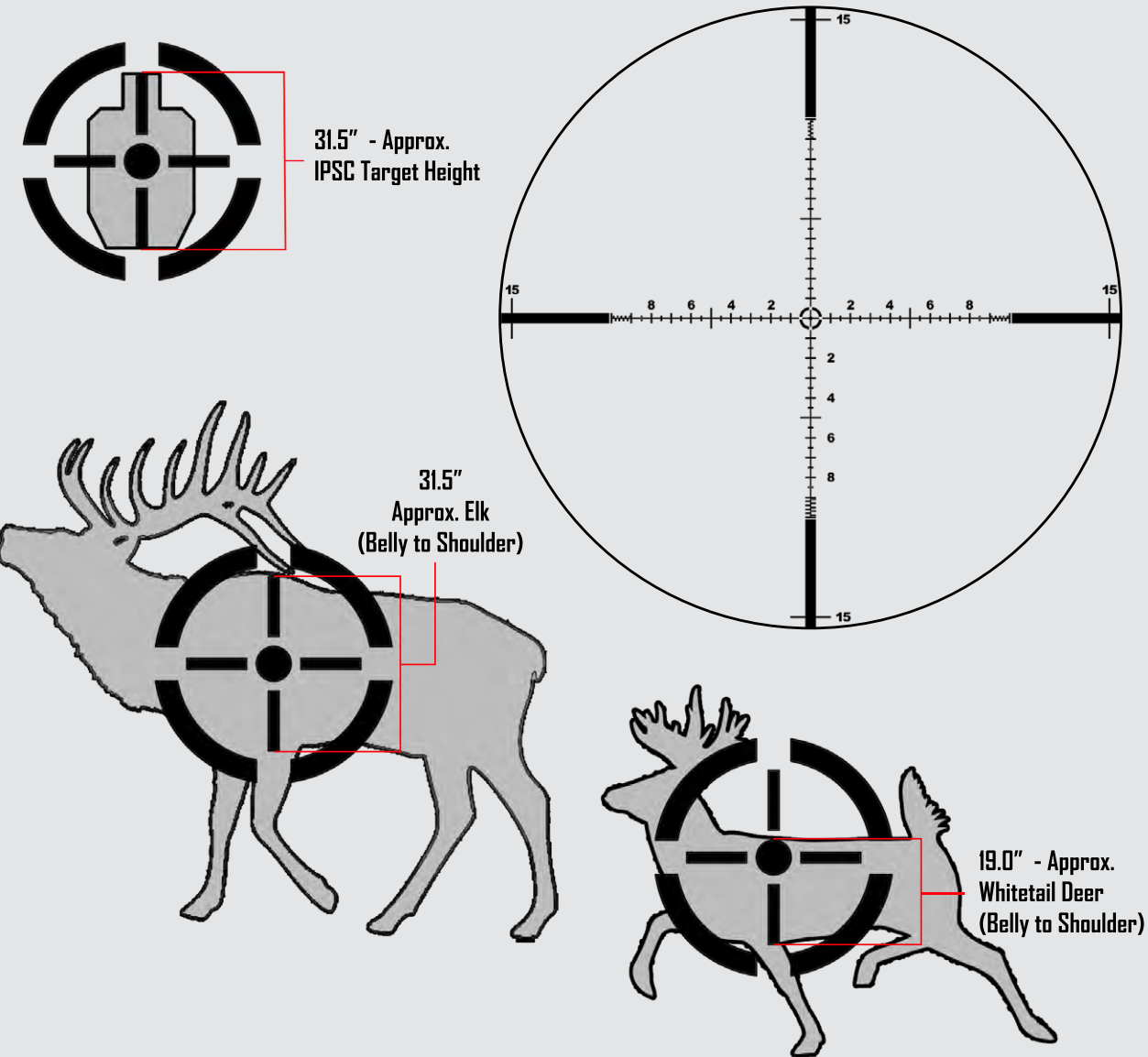


Features bracketed in red while at power equates to the corresponding distance to the target in 100's of meters.

For example: If power ring indicates 5x when known size feature is bracketed using corresponding geometry on the reticle (shown above) the distance to the target is 500m.

**Important note:** See page 10 for optical calibration process to ensure proper ranging performance.

**RANGING FEATURES (CONSUMER, SPORT SHOOTING, COMPETITION & HUNTING USE)**



Features bracketed in red while at power equates to the corresponding distance to the target in 100's of meters.

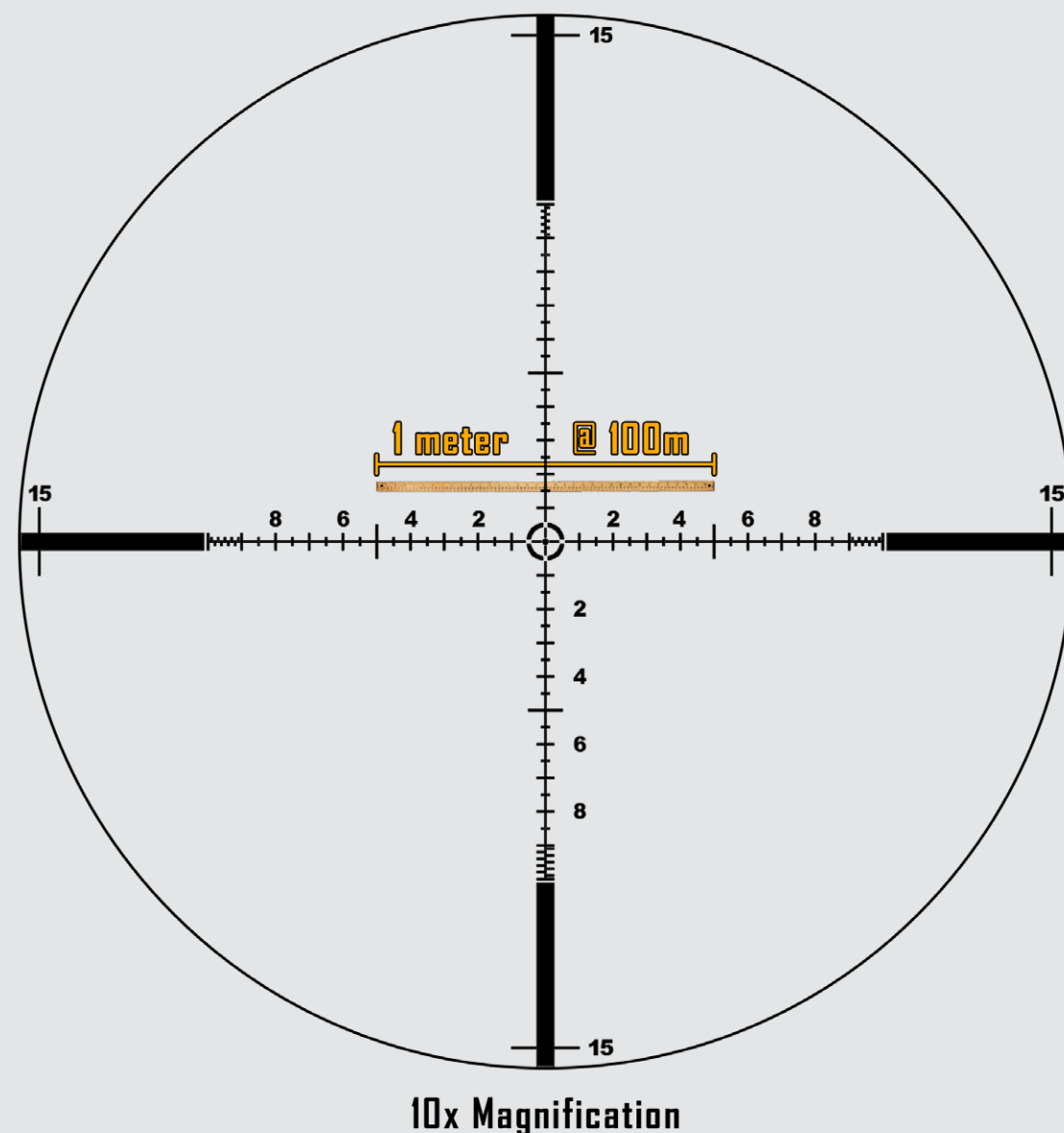
For example: If power ring indicates 5x when known size feature is bracketed using corresponding geometry on the reticle (shown above) the distance to the target is 500m.

**Important note:** See page 10 for optical calibration process to ensure proper ranging performance.



## OCULAR FOCUS CALIBRATION FOR 100% ACCURATE RANGING

Ocular focus of the diopter should be adjusted such that a 1m object (meter stick) at 100m distance while at 10x power subtends 10 mil when viewed in relation to the reticle. This will ensure proper performance of ranging features as well as correct optical magnification throughout the power range.



**NOTE:** Mils are only correct size at 10x power, ocular calibration must be conducted at 10x power as described above.

## WARRANTY STATEMENT

### OPTIC PRODUCT LIFETIME LIMITED WARRANTY

Subject to the limitations outlined below, Griffin Armament will repair or replace free of charge any optical product we manufacture for 2 years (electronics) and lifetime for mechanical. This warranty is unlimited in duration and covers at Griffin Armament's sole discretion, service, repair, and/or replacement of damaged products caused by normal use. Any repair not covered by the warranty will be billed at a maximum of 30% of current MSRP for a comparable optical product

### LIMITATIONS

Griffin Armament's warranty does not cover loss, normal wear, damage to our product or the host weapon system resulting in whole or in part from abusive or negligent use, unauthorized modifications, or neglect. Finish wear is cosmetic and is not covered by this warranty. Any repairs to the unit made necessary by the above mentioned factors may be invoiced to the owner at a maximum of 30% of current MSRP for the most comparable product. In all cases refer to the product manual for product limitations prior to using a Griffin Armament product. Warranty is subject to change without notice.

### SOCIAL MEDIA

To learn more about Griffin Armament® and the kit we provide, please visit us on the web at [www.GriFFinArmament.com](http://www.GriFFinArmament.com) or keep track of our social media pages:

Instagram



Facebook



YouTube



Rumble







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