



# VIPER<sup>®</sup> HD

RETICLE EYEPIECE



MRAD  
PRODUCT MANUAL

Rotate this ring to adjust the diopter setting.



Rotate this ring to fine tune the reticle orientation in uneven conditions.

## VIPER® HD RANGING RETICLE EYEPIECE

The Viper® HD Ranging Reticle's wide-angle eyepiece reveals the same excellent field of view you would see at the same magnification through the 20-60x zoom eyepiece, and the fixed power 33.5x magnification offers the highest level of resolution. Vortex's ranging reticle provides precise target range estimation.

This MRAD-based Viper® HD reticle can be used to estimate distances, call shots, and provide rapid MRAD corrections for stray shots. It will be most useful when used in conjunction with MRAD-based riflescopes.

## RANGING WITH THE MRAD RETICLE

MRAD measurements are very effective for ranging using simple formulas—knowing the size of the target or nearby object is essential.

$$\frac{\text{Target Size in Yards} \times 1000}{\text{Measured MRAD}} = \text{Range (Yards)}$$

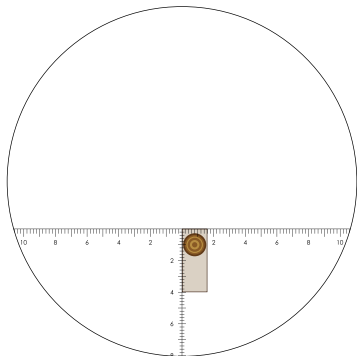
$$\frac{\text{Target Size in Inches} \times 27.8}{\text{Measured MRAD}} = \text{Range (Yards)}$$

$$\frac{\text{Target Size in Meters} \times 1000}{\text{Measured MRAD}} = \text{Range (Meters)}$$

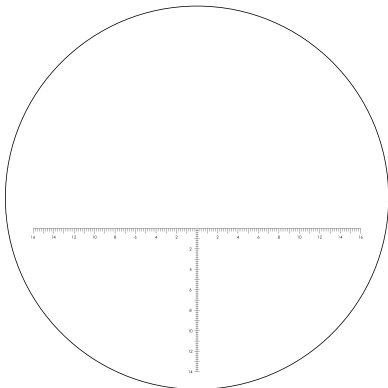
Be sure reticle is in focus before ranging. Using either the vertical or horizontal MRAD scale, place the reticle on the object of known dimension and read the number of MRAD spanned. Obtain maximum accuracy in ranging by calculating exact MRAD measurements. Estimate MRAD measurement in 1/10 MRAD increments if possible.

**Example:** Ranging a 6-foot target (2 yards) at 4 MRAD yields 500 yards.

$$\frac{2 \times 1000}{4 \text{ MRAD}} = 500 \text{ Yards}$$



Accurate measuring will depend on a very steady hold—be sure to use a high-quality tripod. Once you have an accurate MRAD reading, use the formula to calculate the distance



MRAD Reticle



## VIP WARRANTY

OUR UNCONDITIONAL PROMISE TO YOU.

We promise to repair or replace the product. Absolutely free.

- ▶ **Unlimited**
- ▶ **Unconditional**
- ▶ **Lifetime Warranty**

Learn more at [VortexOptics.com](http://VortexOptics.com)

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*Note: The VIP Warranty does not cover loss, theft, deliberate damage, or cosmetic damage not affecting product performance.*

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