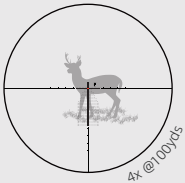
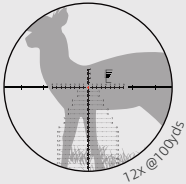
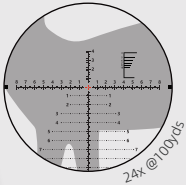
VEC-MBR MIL FFP RETICLE

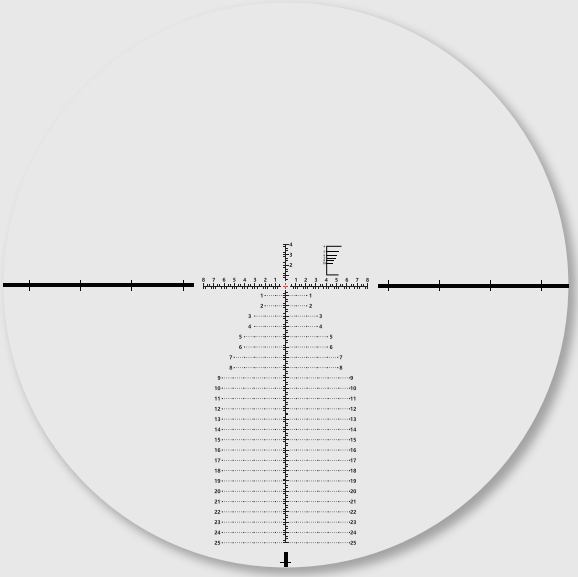
The VEC-MBR reticle consists of two parts. On the right side of the reticle, there's a small fast ranging reticle designed with a wide aspect ratio of width to height (0.5:1). By horizontally aligning the width of the target or vertically aligning the height of the target, an approximate distance can be obtained.

The main part of the reticle is designed with a Christmas-tree style FFP (First Focal Plane) MIL scale, providing further precision in your shooting. It features an illuminated center cross and dot with digital lines and dots. The reticle is designed with MIL markings, which are used to measure the distance to the target and adjust the point of aim. It is suitable for long-range shooting, hunting, and tactical applications. It provides a clear and crisp image of the target and allows for quick and precise adjustments.







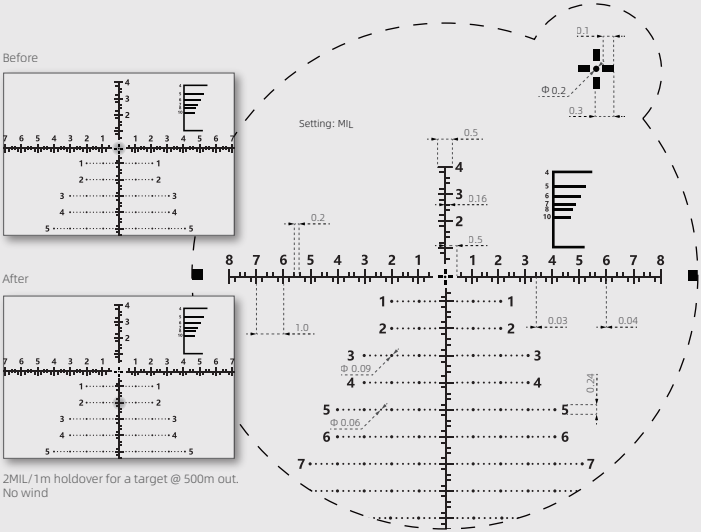


Red indicated illuminated portion of the reticle

COMPENSATION BULLET DROP

Holdover refers to the technique of adjusting the aim of a firearm to compensate for the effect of gravity on the bullet's trajectory. Bullet drop is the decrease in bullet height as it travels through the air. The shooter can use the MIL markings on the reticle to calculate the bullet drop. The MIL markings on the vertical axis represent the distance in MILs between each hash mark. The horizontal axis represents the windage adjustment.

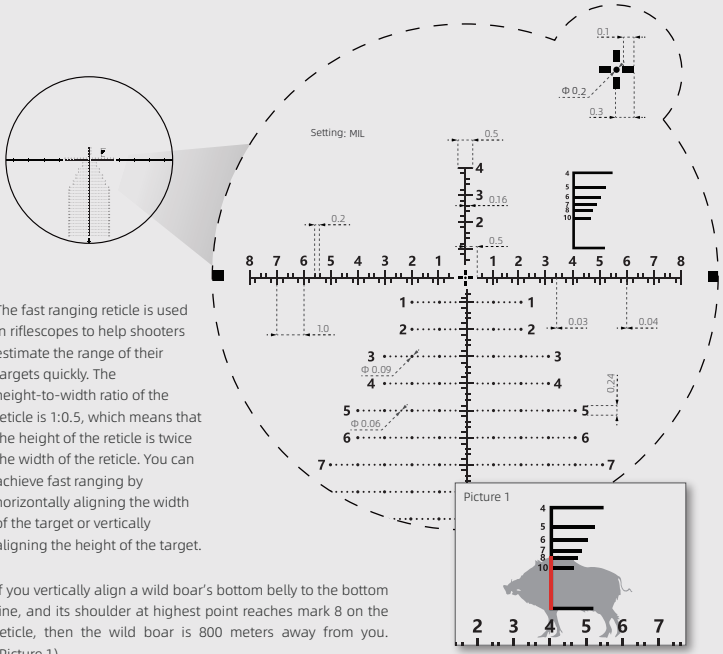
For example, under no wind condition, after zeroing your scope at 100m, if you know your target is at 500m and your ammo has a 1m bullet drop at that distance, you will need to use 2MIL holdover point. Here is how you get the 2MIL: since 1MIL equals 10cm at 100m, 50cm at 500m, and then 2MIL equals 2 x 50cm =1m at 500m, you need to hold the 2MIL drop point to compensate for the 1m bullet drop, thus bring the aim point to line up with the bullet's point of impact.



2MIL/1m holdover for a target @ 500m out.
No wind

When it comes to wind correction in shooting, there are three key factors to keep in mind: the flying time of the bullet, the velocity and direction of the wind, and the ballistics coefficient (BC) of the bullet. By taking into account these three factors, a shooter can make the necessary adjustments to account for wind drift and achieve accurate shots even in challenging conditions.

FAST RANGING

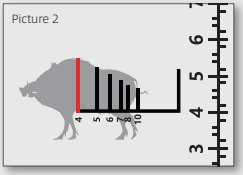


The fast ranging reticle is used in riflescopes to help shooters estimate the range of their targets quickly. The height-to-width ratio of the reticle is 1:0.5, which means that the height of the reticle is twice the width of the reticle. You can achieve fast ranging by horizontally aligning the width of the target or vertically aligning the height of the target.

If you vertically align a wild boar's bottom belly to the bottom line, and its shoulder at highest point reaches mark 8 on the reticle, then the wild boar is 800 meters away from you. (Picture 1)

If you rotate the scope, and align the wild boar's bottom belly to the vertical line, and its shoulder at highest point reaches mark 4 on the reticle, the range to the wild boar is 400mx2=800m. (Picture 2)

Red indicates the height of a wild boar's bottom belly of the target



Red indicates the height of a wild boar's bottom belly of the target

x:y = 0.5:1

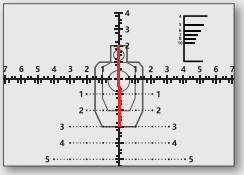
HOW TO MEASURE TARGET HEIGHT & LENGTH

To use the VEC-MBR Reticle for ranging, the shooter first needs to know the height of the target in question. Once the height of the target is determined, the shooter can use the VEC-MBR Reticle to measure the target in mils.

Height of Target (yards) / mils * 1000 = Distance to Target (yards)

If the height of target is in Inches, then the formula should be:
Height of Target (inches) / mils * 27.78 = Distance to Target (yards)
(1 inch ≈ 0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:
Height of Target (meters) / mils * 1000 = Distance to Target (meters)



Red indicates the height of the target

If the height of an adult male is 5.91ft, and measures 5Mils across the reticle, that is:
Distance to Target (yards) / 27.78 * Mils = Height of Target (inches)

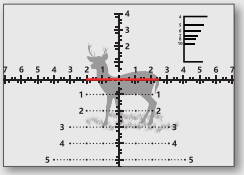
5.91ft = 70.9 inches
70.9 (inches) / 5 mil x 27.78 = 394 (yards)
2.0 (yards) / 5 MIL x 1000 = 394 (yards)
1.8 (meters) / 5 MIL x 1000 = 360 (meters)

If the distance of the target is determined, then the shooter can use the VEC-MBR Reticle to measure the target length. You can use the following formula:

Distance to Target (yards) / 1000 * Mils = Length of Target (yards)

Distance to Target (yards) / 27.78 * Mils = Length of Target (inches)
(1 inch ≈ 0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:
Distance to Target(meters) / 1000 * Mils = Length of Target (meters)



Red indicates MILs of the target in reticle

If the Distance to Target is 400m, and the target measures 4.5Mils across the reticle, then the target length is:

400 (meters) / 1000 * 4.5 MIL = 1.8 (meters)
437 (yards) / 1000 * 4.5 MIL = 2.0 (yards)
437 (yards) / 27.78 * 4.5 MIL = 70 (inchs)

Measure the object in yards to find the distance in yards, and use meters to yield distances in meters.