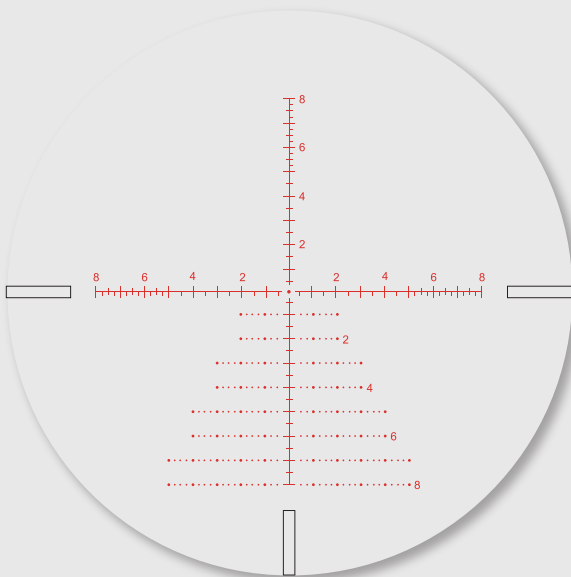
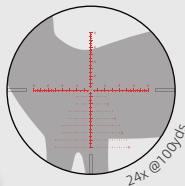
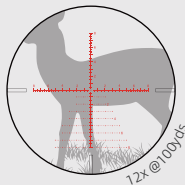
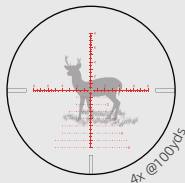


VCT-20A MIL SFP RETICLE

The VCT-20A reticle is designed for precision rifle series competition and other long-range shooting applications with accurate ranging capability.

Etched glass VCT-20A reticle all illuminated w/ digital lines dots & 11 levels illumination, easy for the shooter to identify and engage the target at a substantial distance. Besides, by using the dots or hash marks as reference points, the shooter can quickly and accurately estimate the distance to the target and adjust for bullet drop and windage.

For VCT-20A reticle, the suspension is valid at 20x.

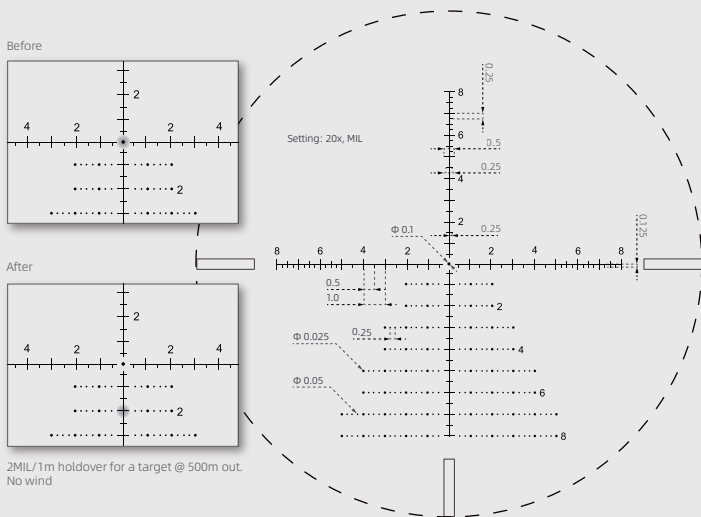


Red indicated illuminated portion of the reticle

COMPENSATION BULLET DROP

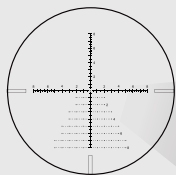
Holdover refers to the technique of adjusting the aim of a firearm to compensate for the effect of gravity on the bullet's trajectory. Bullet drop is the decrease in bullet height as it travels through the air. The shooter can use the MIL markings on the reticle to calculate the bullet drop. The MIL 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 $2 \times 50\text{cm} = 1\text{m}$ 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.



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.

HOW TO MEASURE TARGET HEIGHT



To use the VCT-20A 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 VCT-20A Reticle to measure the target in mils.

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

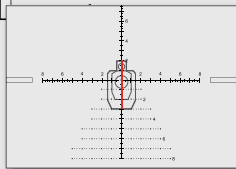
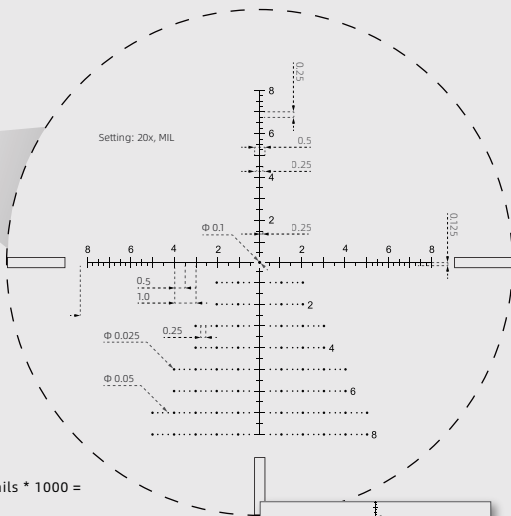
If the height of target is in Inches, then the formula should be:

Height of Target (inches) / mils * 27.78 = Distance to Target (yards)
(1 inch \approx 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)

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

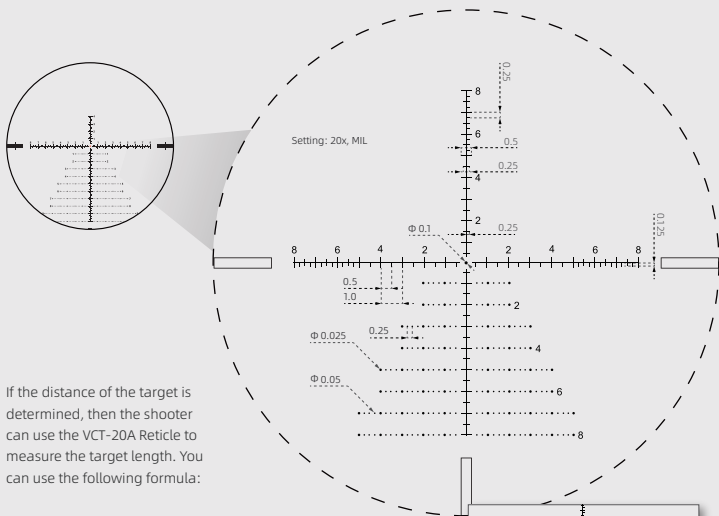
5.91ft = 70.9 inches

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)

HOW TO MEASURE TARGET LENGTH



If the distance of the target is determined, then the shooter can use the VCT-20A Reticle to measure the target length. You can use the following formula:

$$\text{Distance to Target (yards)} / 1000 * \text{Mils} = \text{Length of Target (yards)}$$

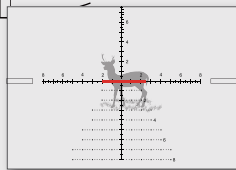
$$\text{Distance to Target (yards)} / 27.78 * \text{Mils} = \text{Length of Target (inches)}$$

(1 inch ≈ 0.0277778 yards)

This formula works equally well with meters, but don't mix meters and yards:

$$\text{Distance to Target (meters)} / 1000 * \text{Mils} = \text{Length of Target (meters)}$$

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

$$400 \text{ (meters)} / 1000 * 4.5 \text{ MIL} = 1.8 \text{ (meters)}$$

$$437 \text{ (yards)} / 1000 * 4.5 \text{ MIL} = 2.0 \text{ (yards)}$$

$$437 \text{ (yards)} / 27.78 * 4.5 \text{ MIL} = 70 \text{ (inches)}$$