

## **RETICLE MANUAL**

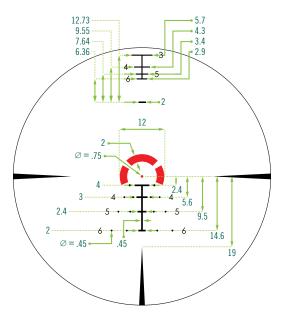


## **EBR-8 MOA RETICLE**

Our exclusive EBR-8 MOA first focal plane, glass etched, illuminated reticle facilitates rapid shooting from point blank out to 600 yards with popular .223/5.56mm and .308/7.62mm loads.

This reticle also can be used with a wide variety of other calibers and loads using the BDC hashmarks.

### Subtensions



### **MOA Subtensions**

The EBR-8 MOA reticle is based on Minute of Angle (MOA) subtensions. MOA is an angular unit of measurement used to account for bullet drop, wind corrections, and range estimation. 1 MOA will correspond to 1.047" for each 100 yards.

## **First Focal Plane Reticles**

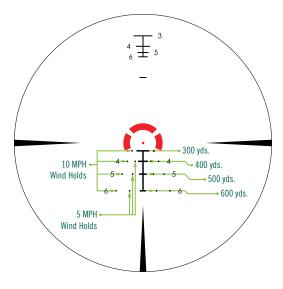
In first focal plane riflescopes, the reticle's listed MOA subtensions are valid at all magnification levels. This means the shooter can use the magnification level most appropriate for the situation and still have effective holdover and windage reference marks. This is valuable in high-stress situations as the shooter does not have to remember to set the scope to one particular magnification or do additional math to get valid holdovers – an action necessary with second focal plane reticles.

MOA values are correct on all magnifications.

### Using the Reticle for Bullet Drop Compensation

Most rifles will work well zeroed at 50/200 yards using the center dot. Consult the riflescope product manual for the sight-in procedure. For most popular 5.56/.223 loads and .308/7.62mm loads, the center dot will then provide good accuracy from 20 to 220 yards.

Use the lower hashmarks when aiming at targets farther than your zero distance. See the corresponding target ranges for the hashmarks listed on page 5.



### STANDARD BULLET DROP FOR .223/5.56MM LOADS

.223/5.56mm, 60 gr., 3050 FPS Muzzle Velocity (Main crosshair zeroed at 50/200 yds.)			
HASHMARK	SUBTENSION	DISTANCE	BULLET DROP
Zeroed	-	200 yds.	0"
1st	2.4 MOA	300 yds.	7.5"
2nd	5.6 MOA	400 yds.	23.5"
3rd	9.5 MOA	500 yds.	49.7"
4th	14.6 MOA	600 yds.	92.7"

### STANDARD BULLET DROP FOR .308/7.62MM LOADS

# .308/7.62mm, 168 gr., 2650 FPS Muzzle Velocity

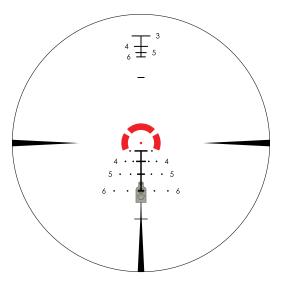
(Main crosshair zeroed at 50/200 yds.)

HASHMARK	SUBTENSION	DISTANCE	BULLET DROP
Zeroed	-	200 yds.	0"
1st	2.4 MOA	285 yds.	7.2"
2nd	5.6 MOA	385 yds.	22"
3rd	9.5 MOA	485 yds.	47.4"
4th	14.6 MOA	600 yds.	92"

**Note:** Bullet Drop Compensating (BDC) reticles are designed to get rounds on target quickly. Distances will be approximate, and will change depending on the gun, load, and environmental conditions. Using the MOA values for each hashmark you can figure out exactly where your specific load will line up with each hashmark. You are not limited to using a .223/5.56mm or .308/7.62mm. The EBR-8 reticle is a first focal plane reticle, therefore all the hashmarks will be true throughout the entire magnification range.

The EBR-8 MOA reticle makes it easy to quickly select the correct bullet-drop reference. If the shooter prefers to dial for bullet drop using the Elevation Turret, knowing the bullet drop in MOA will allow for much easier adjustments.

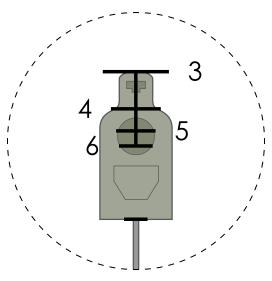
If shooting a known range, use the hashmarks that correspond to your ammo's ballistics. Each hashmark from the center dot represents 100 yards, with common .223/5.56mm loads.



Elevation correction at 600 yards and no wind (.223/5.56mm round)

# RANGING

The ranging feature at the top of the reticle can be used to range a silhouette target. The horizontal lines correlate to the width of the shoulders of a silhouette target (18" across and 40" tall) at each distance. Place the horizontal hashmark at the target's base. With the firearm supported, look at the top of the target to see which reference line the target aligns with. The 3, 4, 5, and 6 indicate the range in hundreds of yards.

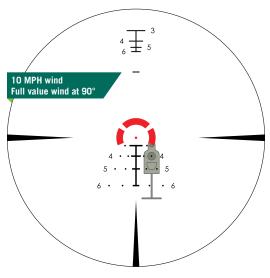


Ranging a 300 yard target

### Wind Correction

Using the reticle for effective windage holds requires thorough knowledge of your weapon system's ballistic performance under varying conditions, and experience in reading wind. As a bullet drops, it is important to learn a particular weapon's windage corrections in MOA. Always hold the reticle into the wind when correcting for wind drift.

Each wind dot represents a 5 MPH crosswind hold for its respective distance.



Windage correction at 400 yards and 10 mph crosswind.

# CUSTOM BULLET DROP TABLES

**Muzzle Velocity:** 

HASHMARK	SUBTENSION	DISTANCE	BULLET DROP
Zeroed	_		
1st	2.4 MOA		
2nd	5.6 MOA		
3rd	9.5 MOA		
4th	14.6 MOA		

#### AMMO:

Muzzle Velocity:			
HASHMARK	SUBTENSION	DISTANCE	BULLET DROP
Zeroed	_		
1st	2.4 MOA		
2nd	5.6 MOA		
3rd	9.5 MOA		
4th	14.6 MOA		

### AMMO:

**Muzzle Velocity:** 

Zeroed –   1st 2.4 MOA   2nd 5.6 MOA   3rd 9.5 MOA
<b>2nd</b> 5.6 MOA
3rd 9.5 MOA
<b>JIU</b> J.J WION
<b>4th</b> 14.6 MOA

#### AMMO:

**Muzzle Velocity:** 

HASHMARK	SUBTENSION	DISTANCE	BULLET DROP
Zeroed	_		
1st	2.4 MOA		
2nd	5.6 MOA		
3rd	9.5 MOA		
4th	14.6 MOA		



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