



# **CROSSFIRE® II**

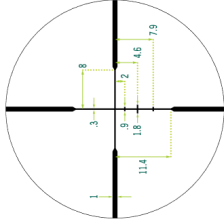
**RIFLESCOPE**

**STRAIGHT-WALL BDC RETICLE | MOA  
SECOND FOCAL PLANE**

**RETICLE MANUAL**

### STRAIGHT-WALL BDC RETICLE

This exclusive Vortex® reticle is designed for straight-wall cartridges such as .450 Bushmaster, .350 Legend, and .45-70 Government—minimizing the need for guessing bullet holdover at long distances. By selecting the appropriate reticle hashmark, you will also have a reliable bullet-drop reference for distances out to 300 yards.



**Note:** This Vortex® rifle scope uses a Second Focal Plane reticle design, and the listed BDC yardages will be valid at the highest magnification.

### USING THE STRAIGHT-WALL RETICLE FOR BULLET-DROP COMPENSATION

To most effectively utilize your reticle, go to [lrbc.vortexoptics.com](http://lrbc.vortexoptics.com) and use our Long-Range Ballistic Calculator (LRBC) to determine the bullet drop for your rifle and load combination.

See below for an example of how to use the LRBC with a rifle chambered in .450 Bushmaster using Hornady FTX 250 grain ammunition. Once in the LRBC, use the following data:

- Calculator: Standard
- Units: Standard
- Max Distance: 400 yards
- Increments: 10 yards

#### AMMUNITION FIREARM ENVIRONMENT

Load Type: Custom	Zero Range: 1000 yds.	Humidity: 78
Caliber: 0.452	Sight Height: 1.8	Temperature: 59
Ballistic Coefficient: 0.21	Barometric Pressure: 29.53	
Muzzle Velocity: 2200	Incline Angle: 0	Wind Speed: 0
Weight: 250	Wind Angle: 0	Altitude: 0

**Note:** Be sure to set the Environment data to your specific area as this will have an effect on the accuracy of the bullet drop data.

**Note:** If the ballistic data for your ammunition is not listed on the box, visit the ammunition manufacturer's website or contact the manufacturer for this data.

Click on the calculate button at the bottom of the page. Once on the results page, you can name your calculation for your specific rifle/load combination. Select the MOA option under Display Fields.

#### .450 Bushmaster

Bullet Weights: 250 grains, Muzzle Velocity: 2200  
Moderate Ranges: 100-310 yards

Aiming Reference	Range	Bullet Drop (MOA)
Center Crosshair	100 yds.	0
1st Hashmark	150 yds.	1.8
2nd Hashmark	210 yds.	4.7
3rd Hashmark	260 yds.	7.7
Top of Bottom Post	310 yds.	11.2

*Ballistics assume 16" barrel length, 1:16" RH Twist*

**Note:** With the increments set to 1.0 yards, the Bullet Drop results may not perfectly align with the reticle subdivisions of 2 MOA, 4.5 MOA, 7.8 MOA, and 11.4 MOA. Values in tables have been rounded to the nearest value.

#### Tables for Other Straight-Wall Cartridges

##### .350 Legend

Bullet Weights: 150 grains, Muzzle Velocity: 2325  
Moderate Ranges: 100-340 yards

Aiming Reference	Range	Bullet Drop (MOA)
Center Crosshair	100 yds.	0
1st Hashmark	150 yds.	1.5
2nd Hashmark	230 yds.	4.9
3rd Hashmark	280 yds.	7.6
Top of Bottom Post	340 yds.	11.4

*Ballistics assume 16" barrel length, 1:16" RH Twist*

##### .45-70 Government

Bullet Weights: 325 grains, Muzzle Velocity: 2050  
Moderate Ranges: 100-300 yards

Aiming Reference	Range	Bullet Drop (MOA)
Center Crosshair	100 yds.	0
1st Hashmark	150 yds.	2.0
2nd Hashmark	200 yds.	4.6
3rd Hashmark	250 yds.	7.7
Top of Bottom Post	300 yds.	11.2

*Ballistics assume 16" barrel length, 1:16" RH Twist*

**Note:** Due to the tremendous differences in currently available loads, the numbers listed here should only be viewed as representative samples.

Vortex Optics believes strongly in responsible, ethical hunting and a word should be said about long-range shooting at game. Although reticles like the Vortex® Straight-Wall BDC can make long distance shots much easier, there are still many other variables, such as wind, affecting every shot. It is important for hunters shooting at long distances to learn their effective range, particularly in windy conditions, and to not shoot beyond those distances at game. Please be responsible—the keys are knowing your rifle, ammunition, and your own abilities!



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