

# BALLISTICS AIMING SYSTEM® (BAS) MANUAL

#### SHOOTER RESPONSIBILITY STATEMENT

It is the shooter's responsibility to verify the aiming points by practicing at the actual distances they are intended for before shooting at live game

# **Power Selector Setting**

The Boone and Crockett and LR Varmint Hunter reticles provide you with two different power selector positions, indicated by large and small triangles located within the magnification level indicators on the power selector ring. These are provided to allow you to calibrate the reticle's hold points to the cartridge you are using. The reticle assumes bullets of similar spitzer shape will be used throughout

Before using the Boone and Crockett or LR Varmint Hunter reticles, determine which of the indicators on the power selector will correctly tune the reticle for your caliber, bullet weight, and muzzle velocity.

## **BOONE AND CROCKETT RETICLE CARTRIDGE LIST**

GROUP A			
Loads with 35-46 inches of drop at 500 yards			
when a	zeroed at 200 yards.		
Caliber	Bullet Wt. (gr.)	Velocity (fps)	
223 Remington	40	3800	
22-250 Remington	55	3650	
243 Winchester	100	2900	
6mm Creedmoor	105	2960	
25-06 Remington	120	3200	
25-06 Remington	130	3000	
257 Roberts	117	2945	
6.5 Creedmoor	143	2700	
270 Winchester	130	3050	
270 WSM	150	3120	
280 Remington	140	3000	
7mm Rem. Mag.	150	3050	
30-06 Springfield	150	3000	
300 Wby Mag	180	3100	
300 Win Mag	180	2950	
300 WSM	180	2950	
338 Win Mag	200	2950	
338 RUM	250	2900	
Zero Distance: 200 Yards Power Selector Setting: Large Triangle			

	GROUP B	
Loads with 47-58 inches of drop at 500 yards when zeroed at 200 yards.		
Caliber	Bullet Wt. (gr.)	Velocity (fps)
260 Remington	120	2850
6.5x55 Swedish	129	2750
30-06 Springfield	180	2700
308 Winchester	150	2850
308 Winchester	165	2700
303 British	150	2700
270 Winchester	150	2850
375 H&H	270	2700
375 H&H	300	2600
338 Win Mag	225	2800
338 Win Mag	250	2700
Zero D	listance: 200 Yards	

Power Selector Setting: Small Triangle

GROUP C			
Loads with less than 35 inches of drop at 500 yards when zeroed at 200 yards.			
Caliber	Bullet Wt. (gr.)	Velocity (fps)	
270 WSM	130	3275	
300 WSM	150	3300	
300 Win Mag	150	3300	
7mm WSM	140	3225	
7mm STW	140	3325	
7mm RUM	140	3450	
7mm RUM	160	3250	
30-378 Wby Mag	180	3400	
300 RUM	180	3400	
270 Wby Mag	130	3200	
7mm Rem Mag	150	3100	
300 Wby Mag	150	3375	
Zero Distance: 300 Yards			

Power Selector Setting: Large Triangle

# Boone and Crockett<sup>™</sup> Big Game Reticle

The Boone and Crockett Big Game Reticle enables the shooter to confidently make effective shots on big game animals out to 500 vards

#### DETERMINE POWER SELECTOR SETTING AND ZERO DISTANCE Refer to the "Power Selector Setting" section to determine which of the indicators on the power selector will

correctly tune the reticle for your caliber, bullet weight, and muzzle velocity.

Once you have determined which triangle is correct, remember that you must set the power selector to this position when using any of the below-center hold points on the Boone and Crockett Big Game reticle.

# 200 vd 400 vc 450 vd 500 yr 10 mph shif

Reticle Feature Hold Point (Distance from Center)	MOA with Large Triangle (Max Magnification)	MOA with Small Triangle
300 Yard	2.19	2.74
400 Yard	4.80	6.00
450 Yard	6.26	7.83
500 Yard	7.82	9.78

Note: When using a cartridge in Group C (see "Power Selector Setting" section) and sighting-in at 300 yards, add 100 yards to all of the above hold points.

# SIGHTING-IN

The Boone and Crockett Big Game reticle is sighted-in by zeroing the center crosshair at either 200 yards (Group A and B), or 300 yards (Group C). See your riflescope manual for instructions on zeroing.

#### AIMING

If your load falls into Groups A or B and you are zeroed at 200 yards, aiming with the hold points below center will compensate for bullet drop at 300, 400, 450, and 500 yards. If your load falls into Group C and you are zeroed at 300 yards, the hold points will compensate for bullet drop at 400, 500, 550, and 600 yards

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of the first and second hold points may be used as 10 mph wind compensators. To of 10 mph, aim with the edge of the correct hold point for the distance of the shot.

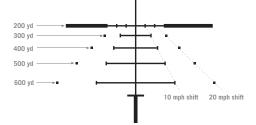
# LR Varmint Hunter<sup>™</sup> Reticle

The LR Varmint Hunter reticle allows shooters to make solid hits at longer ranges on varmints

# DETERMINE POWER SELECTOR SETTING AND ZERO DISTANCE

Refer to the "Power Selector Setting" section to determine which of the indicators on the power selector will correctly tune the reticle for your caliber, bullet weight, and muzzle velocity.

Once you have determined which triangle is correct, remember that you must set the power selector to this position when using any of the below-center hold points on LR Varmint Hunter reticle.



Reticle Feature Hold Point (Distance from Center)	MOA with Large Triangle (Max Magnification)	MOA with Small Triangle
300 Yard	1.81	2.26
400 Yard	4.13	5.16
500 Yard	7.02	8.78
600 Yard	10.63	13.3

#### Note: When using a cartridge in Group C (see "Power Selector Setting" section) and sighting-in at 300 yards, add 100 yards to all of the above hold points.

#### SIGHTING-IN

The LR Varmint Hunter reticle is sighted-in by zeroing the center crosshair at either 200 yards (Group A and B), or 300 yards (Group C). See your riflescope manual for instructions on zeroing.

#### AIMING

If your load falls into Groups A or B and you are zeroed at 200 yards, aiming with the hold points below center will compensate for bullet drop at 300, 400, 500, and 600 yards. If your load falls into Group C and you are zeroed at 300 yards, the hold points will compensate for bullet drop at 400, 500, 600, and 700 yards.

## WIND COMPENSATION

The LR Varmint Hunter reticle offers 10 and 20 mph hold points. The left and right edges of the 300, 400, 500, and 600 hold points may be used as 10 mph wind compensators. The additional hold points offset from the left and right edges of the 300, 400, 500, and 600 hold points may be used as 20 mph wind compensators

### RANGE ESTIMATION

The LR Varmint Hunter reticle offers a range estimator between the lowest aiming point and bottom picket. Proper range estimation requires your power selector ring to be positioned on the large triangle

Determine whether a target is 300 yards or closer by fitting the target (for targets roughly 7 inches in height) in the space between the lowest aiming point and bottom picket. If the target is larger than this space, it is closer than 300 yards. If it is smaller, then it is farther than 300 yards.

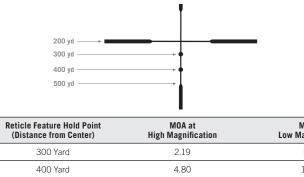
# Creedmore<sup>®</sup> Reticle

The Creedmoor Reticle enables the shooter to confidently make effective shots on big game animals out to 500 vards

#### DETERMINE ZERO DISTANCE

First, determine the appropriate ballistics group based on your cartridge. This will determine the distance at which you will need to zero the rifle.

STANDARD LOADS: Between 35 and 45 inches\* of drop at 500 yards with a 200 yard zero.



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Examples -	Zoro a	+ 200	varde.
Examples -	zero a	τ 200	yarus:

500 Yard

Hornady 6.5 Creedmoor 143g ELD-X 2700FPS Hornady 6.5 Creedmoor 129g SST 3050FPS Hornady 6mm Creedmoor 105gr BTH 2960FPS

HIGH VELOCITY LOADS: Less than 35 inches\* of drop at 500 yards with a 200 yard zero

### Example - Zero at 300 vards

Hornady 6.5 Creedmoor 95g V-MAX 3300FPS.

\*Many loads other than 6.5 Creedmoor and 6mm Creedmoor are useable with the Creedmoor Reticle. Select your zero distance based on the drop values described above, or compare your bullet's trajectory to the values listed under the diagram at the beginning of this section.

The Creedmoor Reticle is sighted-in by zeroing the rifle at either 200 yards (Standard Loads), or 300 yards (High Velocity Loads). Sight in using the center crosshair. This can be done at any magnification setting. See your riflescope's manual for instructions on zeroing.

If your load falls into Standard Loads and you are zeroed at 200 yards, aiming with the hold points below center will compensate for bullet drop at 300, 400, and 500 yards. If your load falls into High Velocity Loads and you are zeroed at 300 yards, the hold points will compensate for bullet drop at 400, 500, and 600 yards. When aiming with the below-center hold points, the riflescope must be at the highest magnification.

# UltimateSlam Ballistic Reticle

The UltimateSlam reticle allows muzzleloader and shotgun shooters to make solid hits and clean kills at longer ranges.

The Leupold Ballistics Aiming System provides you with three different power selector positions, indicated by 2 pellets, 3 pellets, and a shotgun shell. These magnification settings allow you to calibrate the reticle's hold points to the load you are using. The reticle assumes polymer-tipped sabots will be used throughout.





Reticle Feature Hold Point (Distance from Center)	MOA with 3 Pellet Magnification	MOA with Shotgun Shell Magnification	MOA with 2 Pellet Magnification
150 Yard	1.84	2.20	2.75
200 Yard	4.00	4.79	5.97
250 Yard	6.80	8.14	10.14
300 Yard	10.00	11.97	14.92

## DETERMINE POWER SELECTOR SETTING AND ZERO DISTANCE

Refer to the "Power Selector Setting" section to determine which of the indicators on the power selector will correctly tune the reticle for your caliber, load, and muzzle velocity.

Once you have determined which indicator is correct, remember that you must set the power selector to this position when using any of the below-center hold points on the UltimateSlam reticle Zero your muzzleloader or shotgun at 100 yards (this can be done at any magnification setting) using the center crosshair of the reticle. See your riflescope manual for instructions on zeroing.



250 vd

300 vd



GARTRIDGE LIST			
	GROUP A		
Loads with 30-42 inches of drop at 500 yards			
when	zeroed at 200 yards.		
Caliber	Bullet Wt. (gr.)	Velocity (fps)	
17 Rem Fireball	25	4000	
222 Remington	40	3600	
223 Remington	40	3800	
22-250 Remington	50	3800	
22-250 Remington	55	3680	
220 Swift	50	3750	
223 WSSM	55	3850	
243 Winchester	58	3750	
243 Winchester	75	3400	
6mm Remington	75	3400	
6mm Creedmor	105	2960	
25-06 Remington	100	3200	
25-06 Remington	120	3000	
270 Winchester	130	3050	
270 WSM	130	3200	
270 Wby Mag	130	3200	
7mm Rem Mag	150	3100	
300 Win Mag	180	3100	
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Zero Distance: 200 Yards Power Selector Setting: Large Triangle

	GROUP B		
	Loads with 43-55 inches of drop at 500 yards when zeroed at 200 yards.		
Caliber	Bullet Wt. (gr.)	Velocity (fps	
222 Remington	50	3150	
222 Remington	53	3300	
223 Remington	55	3250	
6mm Creedmoor	105	2960	
243 Winchester	100	2900	
257 Roberts	117	2900	
6.5mm Creedmoor	143	2700	
270 Winchester	150	2850	
280 Remington	150	2890	
7mm Rem Mag	175	2850	
30-06 Springfield	125	3140	
30-06 Springfield	150	2910	
Zero D	istance: 200 Yards		

GROUP C			
Loads with less than 30 inches of drop at 500 yards when zeroed at 200 yards.			
Caliber	Bullet Wt. (gr.)	Velocity (fps)	
17 Rem Fireball	20	4250	
204 Ruger	32	4225	
204 Ruger	40	3900	
220 Swift	40	4200	
22-250 Remington	40	4150	
243 Winchester	55	3900	
243 WSSM	55	4050	
7mm STW	140	3325	
7mm RUM	140	3450	
30-378 Wby Mag	180	3400	
300 RUM	180	3400	
Zero Distance: 300 Yards			

Power Selector Setting: Large Triangle

50	3800	
55	3680	WIND COMPENSATI
50	3750	The left and right edges o
55	3850	correct for a wind speed o
58	3750	

10A at agnification
5.77
12.66

20.62



26-34 inches of drop at 300yds Muzzleloader w/150gr Charge

35-42 inches of drop at 300yds 12 Ga Slug Shotgun

• 46-51 inches of drop at 300yds Muzzleloader w/100gr Charge or

# SIGHTING-IN

The UltimateSlam reticle should be sighted-in at 100 yards. Once sighted-in, the scope must be set to the appropriate magnification based on your caliber, load, and muzzle velocity to properly use the ballistic compensation feature.

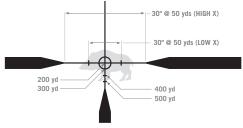
## AIMING

The top of the center circle serves as a 50 yard hold point, while the bottom of the circle serves as a 150 yard hold point. The hold points below circle center represent aiming points for 200 and 250 yards, and the top of the bottom picket will be the aiming point for 300 vard shots.

Shooting at extended ranges using a muzzleloader or shotgun should only be performed under controlled circumstances

# **Pig-Plex® Ballistic Reticle**

The Pig-Plex Reticle is specifically designed for hog hunting applications. It features a centralized circle for quick target acquisition on fast moving targets.



Reticle Feature Hold Point (Distance from Center)	MOA at High Magnification	MOA at Low Magnification
300 Yard	4.5	11.9
400 Yard	8.6	22.8
500 Yard	12.6	33.4

# SUBTENSION AND MAGNIFICATION

The Pig-Plex reticle has 30" bracketing features specifically designed for measuring pigs. Please note, subtensions will change with the magnification.

## SIGHTING-IN

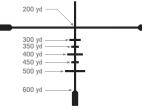
The Pig-Plex reticle is sighted-in by zeroing the center crosshair at 200 yards. See your riflescope manual for instructions on zeroing.

# BRACKETING

The two marks along the horizontal crosshair immediately outside of the center circle represent a measurement of 30" at 50 yards on low magnification. The distance between the left and right pickets (from the inside edge of the heavy lines) represents a measurement of 30" at 50 yards on high magnification. This can be used as a benchmark to judge whether the length of a game animal is greater than or less than 30" at 50 vards.

# **AR Ballistic Reticle**

The AR Ballistic reticle is primarily designed to match a variety of .223 Rem or .308 loads.



Reticle Feature Hold Point (Distance from Center)	MOA (Max Magnification)
300 Yard	2.9
350 Yard	4.5
400 Yard	6.2
450 Yard	8.1
500 Yard	10.1
600 Yard	14.6

## SUBTENSION AND MAGNIFICATION

The AR Ballistic reticle will measure (subtend) correctly when the riflescope is set to the highest available magnification. Please note, subtensions will change with the magnification

## SIGHTING-IN

The AR Ballistic reticle is sighted-in by zeroing the center crosshair at 200 yards. See your riflescope manual for instructions on zeroing.

## AIMING

The AR Ballistic reticle is designed to match the drop of a variety of common .223 Remington loads, especially a 62 grain FMJ bullet with a muzzle velocity of 3020 FPS. Other loads will also match closely, but we recommend comparing your trajectory to the subtensions on the table above.

Once the AR Ballistic reticle is sighted-in at 200 yards, the hold points below the center crosshair represent aiming points for 300 yards, 350 yards, 400 yards, 450 yards, 500 yards\*, and the top of the bottom picket is the aiming point for 600 yard\* shots.

\*Loads may vary in drop at 500-600yds due to differences in ballistic coefficient and muzzle velocity. Because of this, it is recommended to test your load's performance at these distances before relying on these hold points

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