# PRIMARY ARMS



## TRIJICON

### ACOG® 4X32 SCOPE

WITH RED/GREEN DUAL ILLUMINATION ACSS® AURORA™ RETICLE



**Trijicon**°



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The "Advanced Combined Sighting System" combines Bullet Drop Compensation, Range Estimation, Wind Holds and Moving Target Leads in one easy to use system.

The Trijicon ACOG uses a Pechan prism design resulting in a very compact scope. Due to this design, when viewed at certain angles and distances the reticle may appear canted (tilted to the left or right). Each individual scope has been checked for correct reticle presentation and illumination. The ACOG should be mounted on a rifle and viewed using the correct eye relief, and the reticle will appear in its proper alignment.

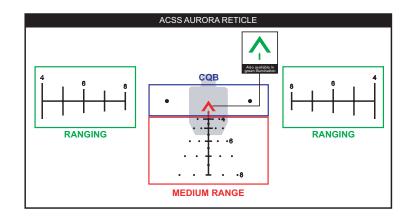
Thread locker is recommended on the screws which attach the ACOG to your receiver. You can find more about mounting the scope in the manufacturer's user manual.

Your new scope qualifies for Trijicon's limited lifetime warranty. If you have any questions, please email or call:

info@primaryarmsoptics.com 713-344-9600 primaryarmsoptics.com

### GETTING TO KNOW THE ACSS AURORA RETICLE

ACSS is a giant leap forward in reticle design that utilizes bullet drop compensation correlated with range estimation, wind holds, and moving target leads in one simple to use system. The ACSS Aurora reticle is calibrated in meters rather than yards. It is a two-part reticle that allows you to be very fast from 0 to 300 meters and very accurate from 400 to 800 meters.

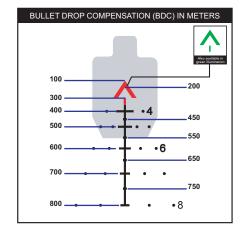


#### **BULLET DROP COMPENSATION (BDC)**

Gravity will affect the bullet's trajectory (or path). The BDC starts at the tip of the chevron and finishes at the 800 meter mark indicated by the number (8). We recommend you establish a steady shooting position in order to utilize the BDC.

#### **ACHIEVING CLEAR PICTURE**

The reticle details may appear small when not looking at the ranges they are set for, beyond 300 meters. When shooting at those ranges, we advise you to do so from a well supported position.

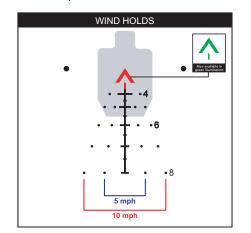


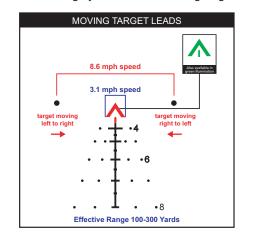
#### UNDERSTANDING THE WIND AND BULLET DRIFT

Notice the dots aligned with the BDC marks below the chevron. They are 5 mph (8 kph) and 10 mph (16.1 kph) wind marks. Wind will cause the bullet to drift left or right depending on wind direction. For a wind blowing from your left to your right, aim using the appropriate dot on the right side. For a wind blowing right to left, use the left side dot. You can use the dots as a starting point in different conditions. For example, if you have approximately a 2.5 mph wind, you would hold half-way to the dot nearest to the center of the BDC. If you have a 20 mph wind, you would double the distance from the appropriate 10 mph dot, and so on.

#### **LEADING YOUR TARGET**

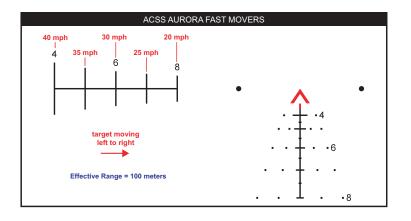
The outer tips of the chevron serve as moving target leads for targets moving at 3.1 mph (5 kph) at a 90 degree angle to the shooter. Lead dots on each side of the chevron are set for targets moving at 8.6 mph (13.8 kph). For a target moving left to right, use the left side moving target lead. If the target is moving right to left, use the right side moving target lead. This technique is best used from 100 to 300 meters, and is highly effective on moving targets.





### LEADING FAST MOVING TARGETS

The ranging bars located to the left and right of the center chevron can be used as moving target leads for fast moving targets traveling at roughly a 90-degree angle to the shooter. These leads are most effective at target ranges around 100 meters



#### DIALING IN FOR YOUR BARREL LENGTH AND AMMUNITION

Using a bipod or sandbags, preferably on a bench or in the prone position, adjust your turrets to dial in your point of impact to the chevron tip. Each click is 0.5 MOA, or 1/2 inch at 100 yards (13.7 mm at 100 meters).

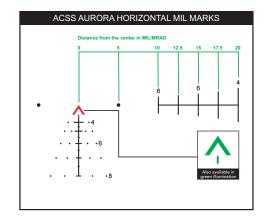
Your point of impact will vary depending on type of ammunition, barrel length, and altitude above sea level. Locate your ammunition type in the chart below. Match your barrel length with your altitude above sea level, and zero your scope at the distance indicated. Plus (+) and minus (-) numbers indicate desired bullet impact in inches above or below the point of aim. For example, a shooter with a 16" barrel shooting M193 55gr ammo at 2000 ft above sea level needs to sight in 0.5" high at 100 meters.

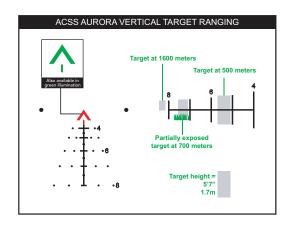
ER stands for the Effective Range of the Aurora's BDC marks. Beyond the ER distance, bullet flight diverges from the BDC markings by 0.5 MIL or more. While hits are still certainly possible on larger targets, precision shooting at smaller targets beyond ER range is more difficult. After initial sight-in, we recommend fine tuning point of impact at distances of 400-600 yards to maximize precision throughout the BDC.

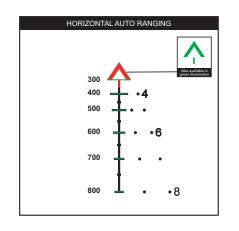
| M855 62gr    |                                 |                                 |                                 |                                 | M193 55gr                               |                                 |                                 |                                 |                                 |
|--------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
|              | Sea Level                       | 1000 ft.                        | 2000 ft.                        | 3000 ft.                        |   | Sea Level                       | 1000 ft.                        | 2000 ft.                        | 3000 ft.                        |
| 14.5" Barrel | 50 meter zero<br>ER 700 meters  | 50 meter zero<br>ER 700 meters  | 100 meter +1"<br>ER 800 meters  | 100 meter zero<br>ER 800 meters | 14.5" Barrel                            | 50 meter zero<br>ER 500 meters  |
| 16" Barrel   | 100 meter +.5"<br>ER 800 meters | 100 meter +.5"<br>ER 800 meters | 100 meter zero<br>ER 800 meters | 100 meter25"<br>ER 800 meters   | 16" Barrel                              | 100 meter +.5"<br>ER 500 meters | 100 meter +.5"<br>ER 500 meters | 100 meter +.5"<br>ER 600 meters | 100 meter +.5"<br>ER 500 meters |
| 18" Barrel   | 100 meter zero<br>ER 800 meters | 100 meter zero<br>ER 800 meters | 100 meter5"<br>ER 800 meters    | 100 meter -1"<br>ER 800 meters  | 18" Barrel                              | 100 meter zero<br>ER 700 meters | 100 meter zero<br>ER 700 meters | 100 meter zero<br>ER 800 meters | 100 meter zero<br>ER 700 meters |
| 20" Barrel   | 100 meter zero<br>ER 800 meters | 100 meter zero<br>ER 800 meters | 100 meter75"<br>ER 800 meters   | 100 meter -1"<br>ER 750 meters  | 20" Barrel                              | 100 meter zero<br>ER 700 meters | 100 meter25"<br>ER 700 meters   | 100 meter zero<br>ER 800 meters | 100 meter zero<br>ER 800 meters |
| M262 77gr    |                                 |                                 |                                 |                                 | 7.62 NATO / .308 WIN                    |                                 |                                 |                                 |                                 |
|              | Sea Level                       | 1000 ft.                        | 2000 ft.                        | 3000 ft.                        | 50 meter zero                           |                                 |                                 |                                 |                                 |
| 14.5" Barrel | 50 meter zero<br>ER 500 meters  | 175 grain Sierra Match King at 2500 fps |                                 |                                 |                                 |                                 |
| 16" Barrel   | 50 meter zero<br>ER 600 meters  | 50 meter zero<br>ER 700 meters  | 50 meter zero<br>ER 800 meters  | 50 meter zero<br>ER 800 meters  | 168 grain Sierra Match King at 2600 fps |                                 |                                 |                                 |                                 |
| 18" Barrel   | 50 meter zero<br>ER 700 meters  | 50 meter zero<br>ER 800 meters  | 50 meter zero<br>ER 800 meters  | 100 meter zero<br>ER 800 meters | M80 specification at 2700 fps           |                                 |                                 |                                 |                                 |
| 20" Barrel   | 100 meter +1"<br>ER 800 meters  | 100 meter +.5"<br>ER 800 meters | 100 meter zero<br>ER 800 meters | 100 meter25"<br>ER 800 meters   | Effective Range 800 meters              |                                 |                                 |                                 |                                 |

#### **HOW TO RANGE YOUR TARGET**

Knowing the proper range to your target is crucial in order to use the correct hold on the BDC. Vertical range estimation ladders start 10 MIL/MRAD from the tip of the chevron, extending in 2.5 MIL increments out to a total of 20 MIL from center. Combined with the moving target lead dots, they can be utilized for fast milliradian-based range estimation techniques.







The vertical ladder marks are calibrated to range a target measuring 5'7" tall (1.7 meters). Place the bottom of the target at the bottom of the vertical hash mark and measure upwards to match its height with the appropriate mark to find the range. For targets that are partially obscured, for example targets located in tall grass, place the central dividing line halfway up the target and range using the part of the target you can see. The vertical hash marks can also be utilized as a good starting point to make more intelligent decisions about range. For example, a full target measured from the central dividing line will double the indicated range, and a target with an apparent size in between two ranging lines will be located approximately halfway between their indicated ranges.

Horizontal ranging is correlated with the bullet drop compensation marks, calibrated to match a 19" (48.3 cm) wide target at the range indicated. Simply match up the width of the target to the appropriate BDC mark and you are already using the correct holdover to fire accurately (assuming no need to shift left or right due to wind).



# TRIJICON®

### ACOG® 4X32 SCOPE

WITH RED/GREEN DUAL ILLUMINATION ACSS® AURORA™ RETICLE

| MANUFACTURER PART NUMBER | UPC             | FINISH      |
|--------------------------|-----------------|-------------|
| TA31-R-AURORA            | 7 19307 31286 9 | MATTE BLACK |
| TA31-G-AURORA            | 7 19307 31287 6 | MATTE BLACK |

You can find more details at www.primaryarmsoptics.com

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