PRIMARY ARMS®

1-6X24 FIRST FOCAL PLANE SCOPE

WITH PATENTED ACSS® RAPTOR™ 7.62X39/300BLK RETICLE

PAT: goo.gl/2z62aS
MPN: PA1-6X24FFP-ACSS-RAPTOR-7.62
UPC: 8 18500 01324 2

THE 1-6X24 SCOPE

The ACSS (Advanced Combined Sighting System) 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 Raptor reticle increases first hit ratio and decreases time of engagement dramatically. It is a two-part reticle that allows you to be very fast from 0 to 200 yards, and very accurate from 300 to 600 yards.

ACHIEVING A CLEAR RETICLE PICTURE

Your 1-6X24 FFP scope comes with an adjustable diopter ring that must be set to match your eye. Located at the rear of the eyepiece, the diopter ring changes the focus of the reticle as you see it inside the scope. It does not change the focus of objects that you look at through the scope. Setting the diopter is the **critical first step** to successful precision shooting. You can set the diopter before you have even mounted the scope in its rings.

1. Turn the Power Ring to the highest setting, 6x, and point the scope at a bright, featureless background such as blue sky or a blank white wall.
2. With your head in position behind the scope's ocular lens, look at the wall or sky instead. If you look through prescription glasses when shooting, wear them now too. After 5 or 6 seconds, close your eyes.
3. Now open your eye, glance through the scope and immediately see if the reticle is sharp or blurry. If you notice that the reticle seems blurry at first and then suddenly sharpens, your eyes have focused on the reticle itself instead of looking **through** the scope. You must adjust the diopter ring and try again.
4. If the reticle was blurry, turn the diopter ring and repeat the process again. The process will take multiple adjustments. Each time you repeat the process, ask yourself if the reticle was sharper or more blurry than before. The final adjustments may be very fine. If your eyes get watery or tired, walk away for a bit and come back to this later.
5. Once the reticle appears sharp as soon as you glance through the scope, the diopter is set for your eyes. Everyone's eyes are slightly different, so the ideal adjustment changes from person to person. Many shooters will mark their correct diopter position with a little dab of paint or fingernail polish across the ring and the scope body, in case the ring gets turned accidentally later on. Others will apply electrical tape around the diameter of the ring to hold it in place.

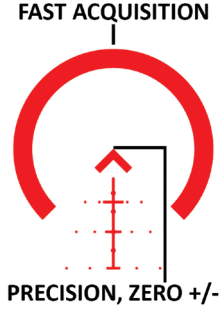
RETICLE ILLUMINATION

The illumination knob control on the left side of the scope is marked with numbers of increasing brightness from 1 to 11. The knob cap unscrews counter-clockwise, holding a CR2032 battery with the positive (+) side facing towards the cap. The windage turret cap on the opposite side holds a spare CR2032 battery inside. Reticle illumination at the lower settings is useful in low light situations like sunrise and sunset. At the higher settings reticle illumination provides a quick aiming point even in daylight, especially at low magnification.

GETTING TO KNOW THE ACSS RETICLE

Establishing Zero, or Dialing In Your Scope

Use the horseshoe for fast target acquisition and the chevron tip for precision. From a well-supported position using a bipod or sandbags, turn the power ring to maximum, and adjust your windage and elevation turrets to dial in your point of impact to the tip of the chevron at 50 yards. How high up or down you dial in relative to the chevron tip depends on your rifle and ammunition, as shown in the chart.

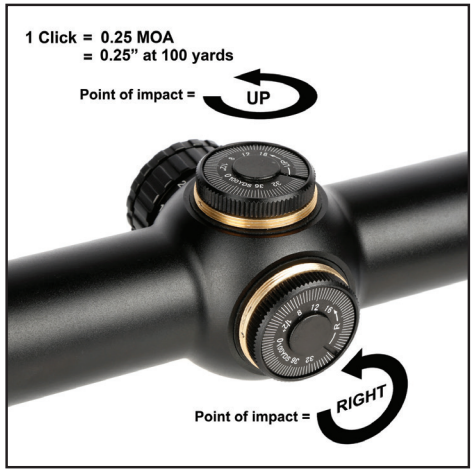


124gr 7.62 x 39 Ballistics
20” barrel, 2450 fps = 100 yard zero
16.3” barrel, 2400 fps = 50 yard zero
16.3” barrel, 2300 fps = 100 yard +1” zero
12.5” barrel, 2200 fps = 25 yard zero

300AAC Ballistics
BARNES 110gr TAC-TX FB 2350 fps 50 yard 0
BARNES 110gr TAC-X FB 2400 fps 50 yard 0
BARNES 110gr Tip TSX FB 2400 fps 100 yard 0
BARNES 110gr TSX FB 2400 fps 50 yard 0
BARNES 125gr Solid 2250 fps 50 yard 0
BERGER 110 Match FB 2360 fps 50 yard 0
BERGER 115 Match FB 2330 fps 50 yard 0
BERGER 125 Match FB 2300 fps 50 yard 0
HORNADY 110gr VMAX 2350 fps 50 yard 0
SPEER 110gr Spire 2450 fps 50 yard 0
WIN 125gr PSP 2400 fps 50 yard 0

ADJUSTING POINT OF IMPACT

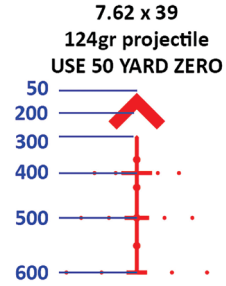
With the scope mounted on your rifle, the turret caps can be removed revealing finger adjustable turrets underneath. From a well-supported position using a bipod or sandbags, turn the power ring to maximum, and adjust your windage and elevation turrets to dial in your point of impact to the tip of the chevron. When sighting in your rifle, if your shots are hitting low, turn the elevation turret counterclockwise to bring the point of impact up. If your shots are hitting to the left, turn the windage turret counterclockwise to bring the point of impact right. Each turret click will change the point of bullet impact 0.25 minute of angle (MOA), roughly .125 inches at 50 yards distance or 0.25 inches at 100 yards distance. Please note that the ACSS Raptor reticle calibrated for 7.62x39/300BLK requires a 50 yard zero rather than a traditional 100 yard zero.

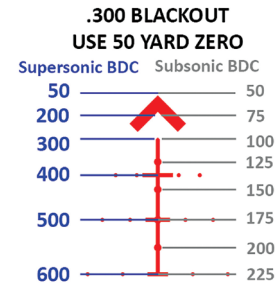


Once your rifle is sighted in, you can use a screwdriver or fingernail to turn the indicator dial set into the turret until the “0” matches up with a dimple machined into the turret cap threads. Turning this dial does not affect the point of impact and no clicks will be heard or felt. If you adjust the turrets later to compensate for wind or range, it will be easy to return your scope to your rifle’s original “zero”. Each white line represents 0.5 MOA. The numbers 8, 12, 16, 32, and 36 represent total adjustment in MOA. Thus, if you turn the elevation turret from “0” to “8” you will hear and feel the turret click 32 times, and your bullet will impact the target 8 inches higher than before at 100 yards distance.

GETTING TO KNOW YOUR BULLET DROP COMPENSATION (BDC)

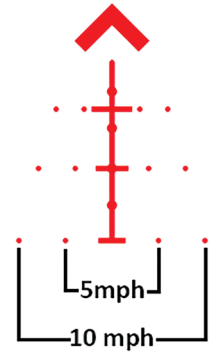
Gravity will affect your bullet’s trajectory (or path). The BDC starts at the tip of the chevron and finishes at the 600 yard mark, indicated by the lowest hash mark. Simply aim using the point in the reticle that coincides with the range to target. For targets at ranges between points you can split the difference. For example, for a target at 450 yards you should aim halfway between the 400 and 500-yard hash marks. Bullet trajectory for the common 220gr subsonic 300BLK loading corresponds to the dots along the BDC rather than the hash marks. We recommend that you establish a steady, supported position in order to utilize the BDC. Due to the First Focal Plane construction, the BDC will work properly at any magnification, but it is most easily seen and utilized at higher magnifications.





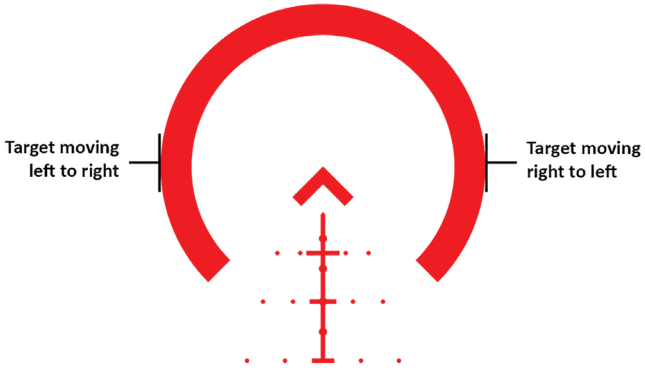
UNDERSTANDING THE WIND AND BULLET DRIFT

Notice the dots aligned with the BDC hash marks below the chevron. They are 5 mph and 10 mph wind marks. Wind will cause the bullet to drift left or right depending on wind direction. Understanding wind is important, as even a 2 mph wind at a 90 degree angle to the bullet’s path can cause the bullet to drift over 10" at 600 yards. 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 the center of the BDC. If you have a 20 mph wind, you would double the distance to the appropriate 10mph dot, and so on. The wind hold dots will work with the optic set to any magnification, but are most easily seen and utilized at higher magnifications.



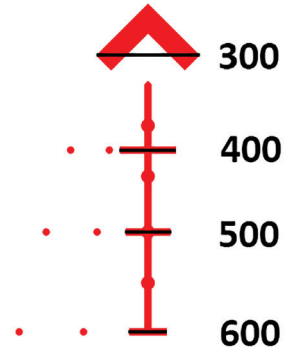
LEADING YOUR TARGET

The average target moves at 8.6 mph. The leading edge of the “horseshoe” section of the reticle is set for a target moving at a 90 degree angle to the shooter. Depending on the direction of the target’s movement, fire using the edge of the horseshoe instead of the center chevron. If the target is moving left to right, use the left edge of the horseshoe. If the target is moving right to left, use the right edge. This technique is best used from 100 to 300 yards and is highly effective on moving targets. Due to the first focal plane design of the scope, this technique can be used with the scope set to any magnification.



AUTO RANGING

Knowing the proper range to your target is crucial in order to use the right hold on the BDC. Auto ranging a standard 18" wide target horizontally is correlated with the BDC hash marks. The horizontal hash marks range estimate center mass on targets 18" wide, and predators or small game with an approximately 18" measurement from shoulder to hip. When using the BDC to auto range, simply fit the target’s width inside the BDC hash mark that matches it, and fire. All the math has been done.



For more information about how to use the ACSS reticle, please check out our YouTube video at https://youtu.be/u45IBEPVDus. Please type in the link exactly, it is case sensitive.

SPECIFICATIONS AND FEATURES

- Tube diameter: 30 mm
- Magnification: 1-6x
- Objective lens diameter: 24 mm
- Ocular lens diameter: 36 mm
- Exit pupil: 9 – 4 mm
- Eye relief: 4.0 in – 4.3 in
- Field of view:
  110 feet @ 100 yards at 1x
  19.3 feet @ 100 yards at 6x
- Click value: 0.25 MOA
- Total elevation adjustment:
  50 MOA
- Total windage adjustment:
  50 MOA
- Length: 10.7 inches
- Net weight: 18.8 oz.
  with lens covers
- Red reticle illumination
- Fast focus eyepiece
- First focal plane
- Waterproof
- Nitrogen purged
- Fog resistant
- Fully multi-coated
- 6063 aluminum
- Anodized matte black
- Uses one CR2032 battery
  (included)
- Flip up lens covers included
- Lifetime warranty

NOTES

PRIMARY ARMS®

WARRANTY

Your PA1-6X24FFP-ACSS-RAPTOR-7.62 is covered by the Primary Arms Lifetime Warranty. If a defect due to materials or workmanship, or even normal wear and tear, has caused your product to malfunction, Primary Arms will either repair or replace your product. You can find out more details at www.primaryarmsoptics.com.

Email: info@primaryarmsoptics.com
Phone: 713-570-1910
www.primaryarmsoptics.com