BLK Combat Reticle
User Guide

Dear PFI Customer,

Thank you for purchasing this product. Please read these instructions carefully and completely for the best performance and safety. Do not discard this manual and keep in a safe place for future reference. We hope that you are completely satisfied with your new optic. Please let us know if we can better assist you in any way.

For product support, please visit our website at www.RapidReticle.com or reach us via email at customerservice@RapidReticle.com or contact us directly at (909) 599-0928.

We appreciate your support and look forward to providing all of our customers with the finest and highest performing optical products.

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Introduction

The BLK Combat Reticle by Pride Fowler Industries, Inc® has been designed specifically for US Optics® for the .300BLK and 7.62x39 weapon systems. This reticle compensates for both supersonic and subsonic ammunition and provides other critical ballistic information that will reduce engagement time and maximize the performance of the weapon system.

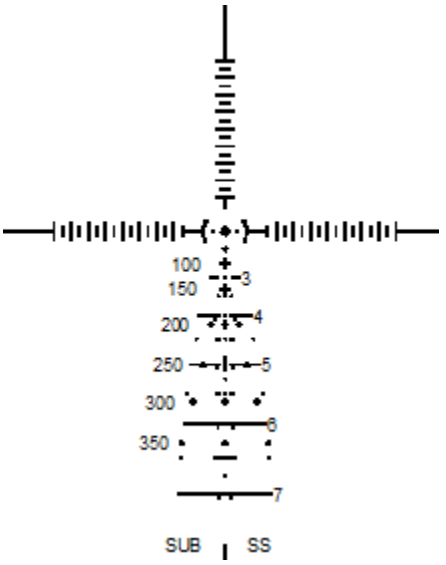
The BLK Combat Reticle will provide ballistic drop data, ranging on 9”/18” objects (Rapid Ranging), Mil-ranging, wind holds out to 10mph, and impact guidance for low magnification utilization (Rapid Guide).

Understanding the Reticle

The BLK Combat Reticle has been designed to accommodate a variety of ammunition and offer several key features to range targets. Due to the innovative first focal plane design, all ballistic holds are true throughout the entire magnification range.

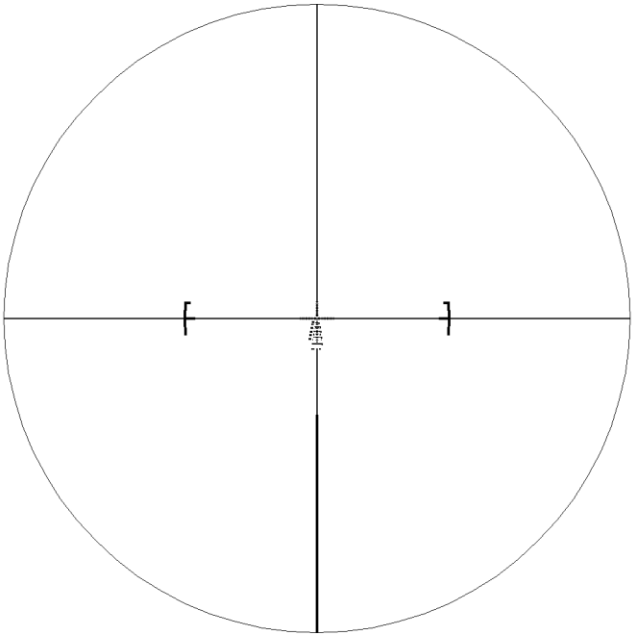
The right set of numbers offer ballistic holds for supersonic ammunition and is designated by "•". Starting with the center of the reticle, the initial ballistic hold is 50 yards on center. 100 yards is the first cross below center. Thereafter, each holdover is indicated by numbers "3" through "7". 200 yards is approximately half the distance between the 100 and 300 yard holdover. The reticle is further broken down into 50 yard increments which are indicated by the crosses between each of the numbered holdovers.

The left set of numbers are designed for subsonic ammunition and are indicated by "+" on the main vertical stadia line. The center is also the 50 yard hold. The subsonic holdovers are in 50 yard increments up to 350 yards.



Reticle at 6x

Due to the first focal plane design, the reticle will be reduced in size at lower magnification. Because lower magnification is intended for use with closer targets, It is unnecessary for the longer distance holds to be visible. The Rapid Guide feature offers impact guidance for closer targets. The bolded center post at the bottom of the reticle offers a lateral guide while the bolded arcs on either side of center offers a vertical impact guide.



Reticle at 1x

Compatible Ammunition

- .300BLK: 110-130gr, B.C. 0.29-.350 @ 2200-2300 fps
- .300BLK: 208-225gr, B.C. 0.629-0.648 @ 990-1050 fps
- .300BLK: 150gr JSP, B.C. 0.331 @ 2000 fps
- 7.62x39: 122-124gr, B.C. 0.480 @ 2400fps
- Other ammunition can be used that produce similar ballistic coefficients

Zeroing and Adjusting the Scope

After mounting the optic to the weapon system, the scope must be zeroed properly in order to function as designed. The ammunition that will be used should be determined prior to zeroing. Since there are many variations of ammunition that can be used, it is highly recommended that once the user determines which ammunition performs the best, that the user utilizes that particular ammunition on a consistent basis to ensure maximum performance and accuracy.

Although there are many ways to zero an optic, PFI recommends that the weapon zeroed at 25 yards initially in order to locate the impact point. Once the impact point is located, coarse adjustments can be made in order to bring the impacts near the center of the reticle by rotating the adjustments accordingly.

The adjustments on the RR-Evolution-BLK are set to ¼ MOA per click which is equivalent to ¼" at 100 yards. Furthermore, each click is also equivalent to ½" at 200 yards (1/4 x 2), ¾" at 300 yards (1/4 x 3), 1" at 400 yards (1/4 x 4), etc. At 50 yards, each click is equivalent to 1/8" (1/4 x ½).

When the point of impact (POI) is located, move to a target at 50 yards and fire the rifle 2 or three times. Rotate the turrets accordingly to move the POI to the center of the reticle. Once there is a consistent group (1/2 to 1 MOA), the optic is zeroed at 50 yards.

There are many factors that affect the ballistics of a bullet including wind, elevation, wind, and humidity. Because of these factors, it is recommended that the user determine approximately the furthest distance the shooter intends to engage targets. Once the furthest distance is determined, the user should fine tune the impacts for that distance with the corresponding hold in the reticle. Although any additional adjustments will offset the reticle at closer distances, by utilizing these instructions, the longer distance impacts will be more precise. There will be a small deviation for closer targets comparatively, which will allow the user to maximize the performance of the weapon system.

If it is intended that both supersonic and subsonic ammunition will be utilized for the same platform, zero the scope with the ammunition that will be used most often. After switching ammunition, record the number of elevation adjustments needed to zero the other ammunition for 50 yards. This number should be a constant number of adjustments to make when switching between ammunition. Recording this number will enhance the versatility of the platform. Typically, this number should be approximately 1.5 to 2 MOA.

Rapid Ranging

Ranging 9” and 18” Objects

The BLK Combat Reticle can be used to range known-sized targets with the Rapid Ranging feature. All ranging will correspond with the numbers on the right side. When shooting with subsonic ammunition, range the object with right side data and use the appropriate subsonic hold for that distance. In this case, 9” and 18” will be ranged using various markings within the reticle.

When using higher magnification, 9” and 18” objects can be clearly ranged using ranging devices within the reticle. For 50, 100, and 200 yard targets, all ranging will be done with the main stadia lines and the center arcs.

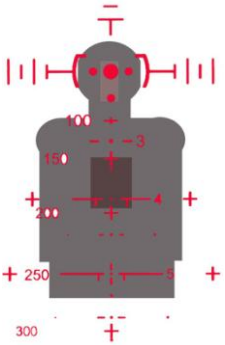
For 9” objects, 9” objects will fill the center arcs at 100 yards. At 200 yards, a 9” object will cover the space between the dots on either side of the center dot. At 50 yards, the 9” object will exceed the width of the arcs to the vertical ticks on either side.

For 18” objects at 100 yards, the object will take the space between each vertical tick on either side of the center arcs. At 200 yards, 18” objects will be between the arcs.

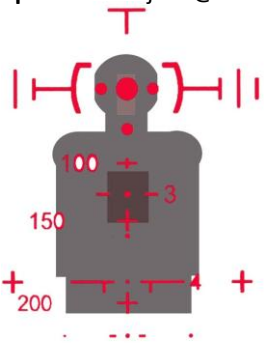
For all other distances beyond 200 yards, each holdover has spacing and down ticks for ranging. The space in the middle of each holdover represents 9” at that particular distance. The down ticks on either side of the spaces in center represent 18” at that distance.

We will be using humanoid figures for our examples which feature 9” heads and 18” shoulders. Please see the following diagrams on the next page for ranging examples.

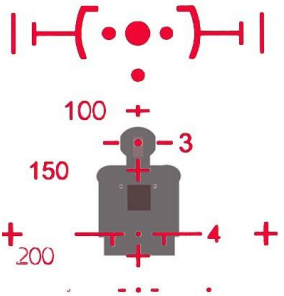
Example 1: 9” object @ 100 yds



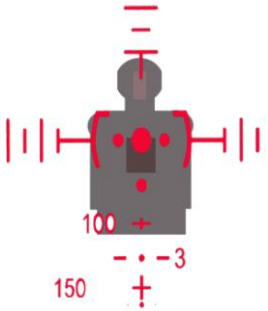
Example 2: 9” object @ 200 yds



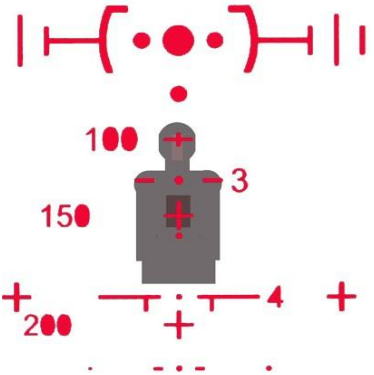
Example 3: 9” object @ 300 yds



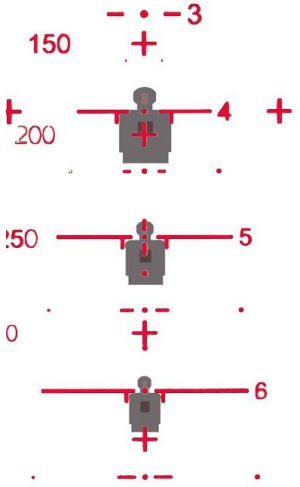
Example 4: 18” object @ 200 yds



Example 5: 18” object @ 300 yds



Example 6: 18” @ 400-600 yds



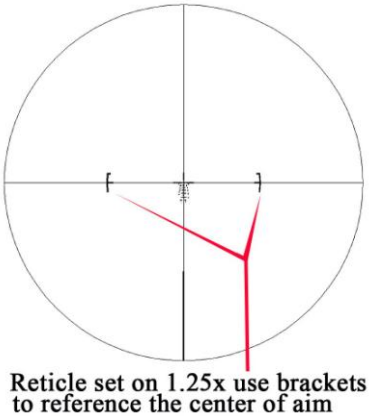
Rapid Guide and Ranging at Low Magnification

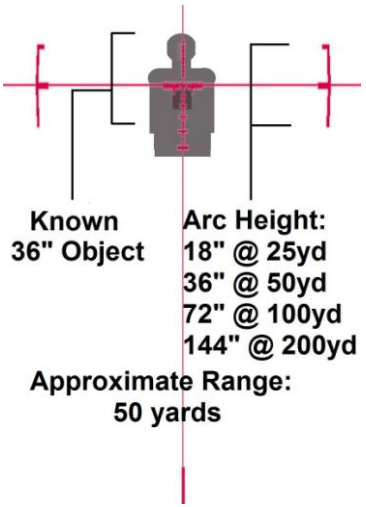
Rapid Guide is an enhancement that will give impact guidance at low magnification. When on low power, the main reticle is not always clearly visible even though all holdovers remain the same due to the first focal plane design. Because it is not necessary to have a clear view of the entire reticle when low magnification is used, the Rapid Guide assists with point of impact guidance.

When the optic is set on low magnification, 72MOA arcs will appear which offers elevation guidance. The bold bottom post will also appear which offers lateral guidance for impacts. Close targets lined up with the arcs and center post will have the same impacts as those with higher magnification without loss to the field of view.

The 72MOA tall arcs are equivalent to 72" @ 100 yards, 36" @ 50 yards, and 18" @ 25 yards. Objects with known heights can be compared to the arcs to determine an approximate range. For example, the leg of a deer can be assumed to be 36". When compared to the arcs, if the leg is half the height of the arcs, the approximate distance of the deer is 100 yards since the arcs are 72" @ 100 yards and half of 72" is 36". If the same leg is at the full height of the arc, then the deer would be at approximately 50 yards.

Image 1: Rapid Guide for low magnification **Image 2**: Ranging with Rapid Guide





Ranging with Mils

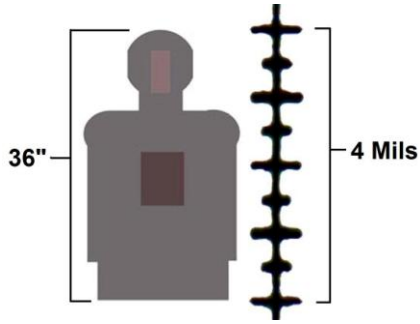
Also featured on the main stadia lines are Mil markings used for calculating approximate range for known-sized objects. One Mil is equivalent to one full length tick to the next full length tick. Between each full length tick is a ½ Mil mark.

Calculating a targets range using Mils requires a formula. The formula for a **yards** calculation is as follows:

Approximate Distance = (Known target size) ÷ [(number of Mils object covers) x 3.6] x 100

EXAMPLE:

In this image, our target is a known 36". According to the Mil scale, the object is about 4 Mils tall.



Therefore, using our formula, we can approximate the distance as follows:

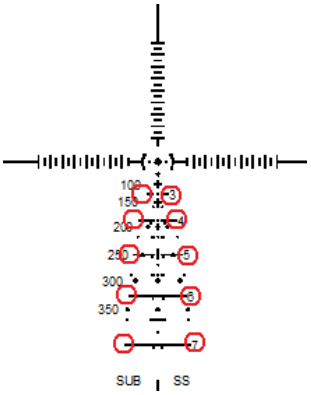
Known Target Size = 36"
Number of Mils = 4

= 36" ÷ (4 x 3.6) x 100 = 36 ÷ 14.4 x 100 =

250 yards

Wind Holds

Use the following instructions for utilizing the wind holds included in the RR-Evolution-BLK reticle. These holds will assist in approximating impacts with wind deviations. At the end of each holdover line is approximately 10mph for supersonic ammunition.



For example, if there is a left to right 10mph cross wind with a stationary target, hold the right end of the holdover on the target.

These wind holds can also be used to lead running targets as well. If there is zero wind conditions, and the target is running left to right at 10mph, lead the target by holding the left end of the holdover on the target.

For a 5mph wind or lead, hold at approximately the half the distance of the holdover to the right or left of center.

For more information about PFI products and services, see the PFI Website at http://www.RapidReticle.com.

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