

## **Instructions:**

### **Introduction**

The following instructions are for the M4-62 Reticle. We are working on the instructions for the T1- Reticle and will post as soon as possible. Please understand that the instructions for the M4-62 Reticle and T1-Reticle will be very similar in many aspects. If you understand how to use the M4-62 Reticle you will be able to use the T1-Reticle.

The 1.1-10x30 FSO, with its proprietary PATENT PENDING T1 front focal plane reticle, was designed to be extremely versatile and allow you to engage targets from very close distances to the maximum effective range of modern carbine sporting rifles in day/low light environments. The FSO features a dual-purpose reticle. The #1 priority of the FSO is speed on target at close range engagements. This is accomplished by using the horseshoe portion of the reticle on 1x with two eyes open. In this mode, the FSO will perform like a red dot gun sight. For long-range engagements or accuracy at any distance, increasing the magnification and use the aiming dots maximize precision. The FSO also is compatible with night vision systems, such as the PVS-22, to allow for effective use in low light environments.

Very Important When Mounting the FSO, Do Not Overtighten the Scope Rings.

### **Zeroing**

1. Adjust scope to 6x or higher
2. Focus reticle; use rear ocular focus ring.
3. Rough zero @ 25 yards. Adjust point of aim point of impact to be approximately 2.5 inches low at 25 yards.
4. Move the target to 100 yards.
5. Fine tune zero at 100 yards use the dot in the center of the horseshoe, adjust the point of aim point of impact on the center dot at 100 yards.
6. Once the reticle is zeroed at 100 yards all aiming adjustments for point of aim point of impact for all distances should be made on the reticle. NO NEED TO ADJUST THE W/E TURRETS.

### **How To Use The Reticle**

**Please note that the reticle in this scope is in the front focal plane, therefore the RULE OF TEN" ranging system described below will accurate at any magnification setting.**

### **The Horseshoe:**

For close range snapshots to 200 yards, set the scope at low power. The horseshoe will appear very small on the target. (Similar to a red dot.) Please be advised at very close distances (due to offset) your point of impact will be near the bottom of the horseshoe. See photo below.



The long-range precision portion of the reticle will get very small and not be usable at low magnification. As the distance to the target increases the target will appear smaller and the horseshoe will resemble a circle on the target. At 200 yards, the horseshoe reticle will bracket a man size target shoulder to shoulder. The bullet point of impact will be just below the dot in the center of the horseshoe. See photo below.



### **Snap Shooting**

The #1 priority of this scope/reticle is speed and accuracy during close-range engagements. To maximize speed and accuracy, set the scope to 1x and sight with both eyes open. Turn on the illumination and adjust to the required brightness for low light environments. On low magnification, the horseshoe reticle works like a red dot gun sight. The horseshoe reticle is very fast for snapshots, on moving targets, and out to 200 yards on chest-size targets.

### **Illumination**

The illumination is not bright enough to be seen in bright sunlight. To compensate for this at close range, increase the magnification to make the horseshoe appear larger, thereby making it easier to see/faster to use.

The FSO uses CR2032 Lithium Batteries. The illumination turret has 3 levels of brightness in red or green. There is an "Off" position between each illumination setting.

### **Ranging**

#### **The Window:**

The hollow center of the horseshoe is called the window. The horseshoe's window is 10 MOA (size of a head at 100 yards). The window will equal 20 inches at 200 from the top of a man's head to the bottom of the sternum. At 300 yards the window will equal 30 inches from the top of a man's head to his belt line. With proper zero, the bullet will hit from the dot in the center of the horseshoe at 100 yards to the second dot at the bottom of the horseshoe at 300 yards. At close

range, put the horseshoe on the man (appears as a dot) as the range increases center the man in the window. This will allow hits on torso-sized targets from 0-300 yards very quickly. At very close distances, the bullet will impact near the second dot at the bottom of the horseshoe (at very close distances, be aware of the required holdover/offset.)

**The Mil Dots:**

The horizontal mil dots to the left and the right of the horseshoes serve as anti-canting guides and also, may be used for milling. The first horizontal mil dots to left and right of the horseshoe are 4 mils from the center dot. The vertical mil dots can be used for milling on a vertical plane.

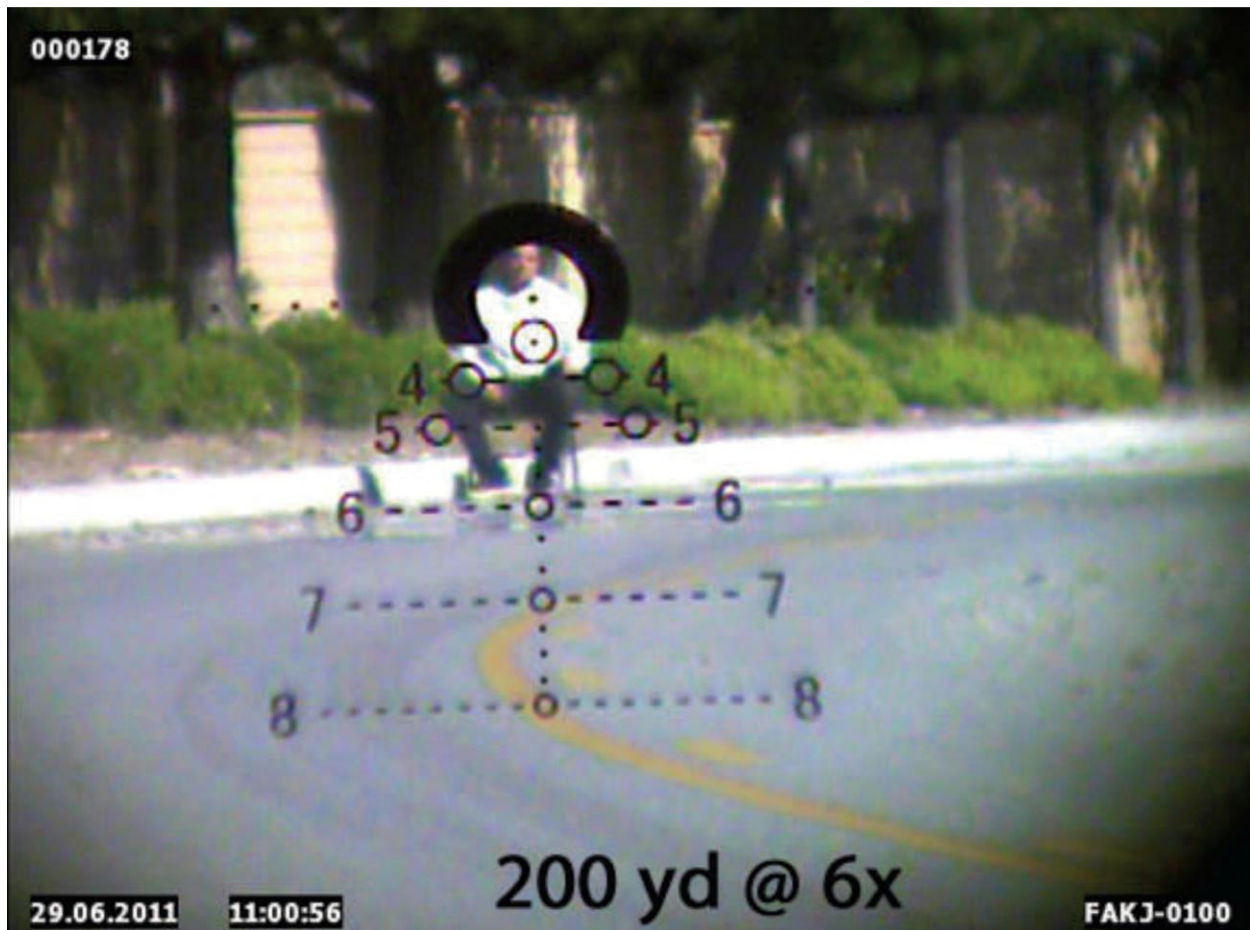
**How to Use a 10 inch Ranging Circle:**

The window is used for fast ranging on a head-size target at 100 yards. See photo below.



20 inches at 200 yards (approximately shoulder-width). Half the window equals 10 inches at 200 yards (head-size). See photo below.





30 inches at 300 yards (approximately half of a man's body length).

**Use the Horseshoe Window as a Ranging Circle:**

As described above, the window of the horseshoe is to be used as a ranging circle on a man's head at 100 yards.

Half of the window will range a man's head at 200 yards.

At 200 yards the horseshoe window will be the width of a man shoulder to shoulder or from the top of the head to approximately the bottom of his sternum.

At 300 yards the horseshoe window will be from the top of a man's head to his waist line.

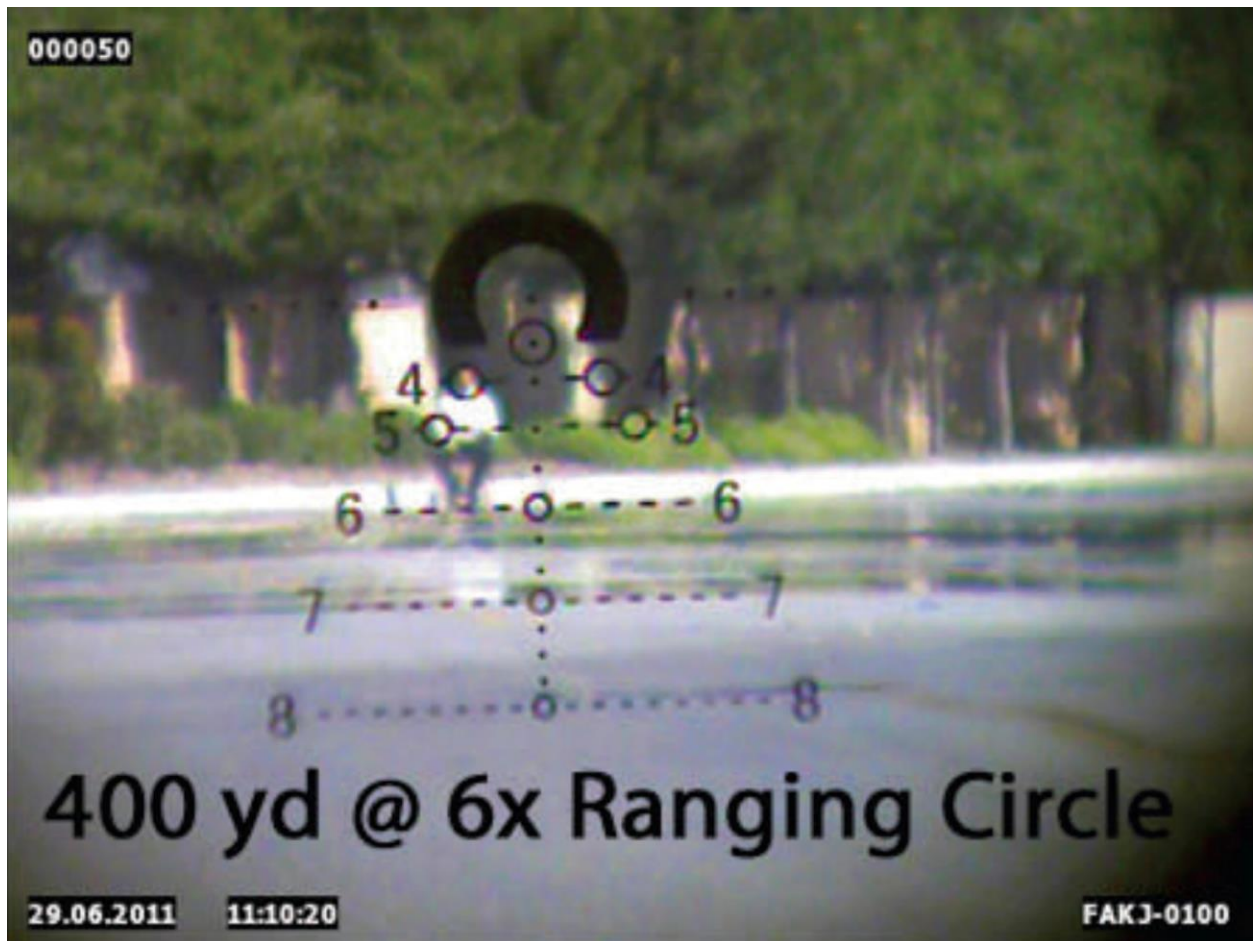
**Using the Hollow Circles for Ranging:**

The inside diameter of all of the circles in the reticle equal 10 inches (a head at the given distance).

The first ranging circle in the center of the open end of the horseshoe ranges a man's head at 300 yards. See photo below.



Directly below the horseshoe, to the left and right of the aiming dot on the center line, the ranging circles (labeled No. 4) range a man's head at 400 yards. See photo below.



Also, below the horseshoe, to the left and right of the aiming dot, the ranging circles (labeled No. 5) range a man's head at 500 yards. See photo below.





#### **The Aiming Dots:**

As the magnification of the scope is increased, the aiming dots will come into clear view. The aiming dots extend downward from the center of the window. See photo under "Horizontal Lead Lines".

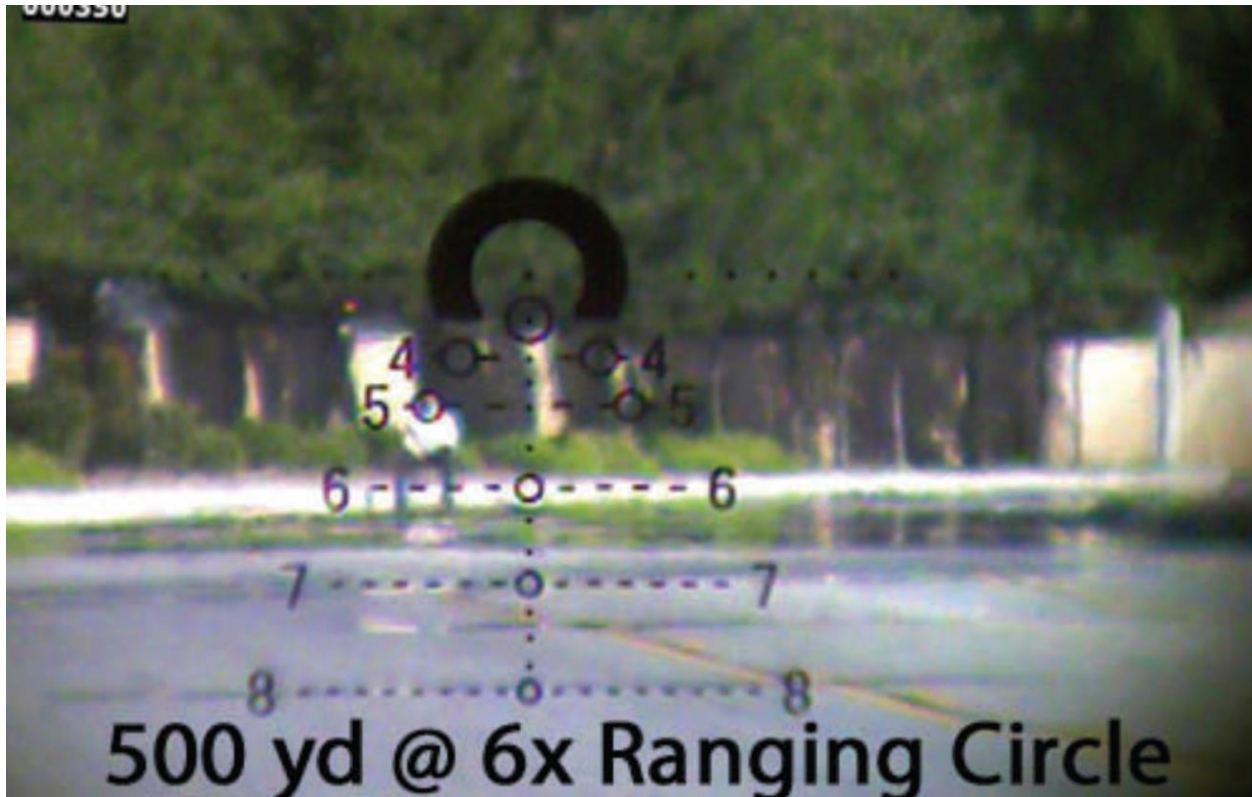
The first aiming dot is 1 MOA; it is the aiming point for precision shooting from 0 to 250 yards. All other aiming dots after the dot in the center of the horseshoe are .5 MOA.

#### **Horizontal Lead Lines:**

Starting at 400 yards to the left and right of the aiming dots along the center line are a series of horizontal dashes with a gap between each dash. The dashes and the gaps equal 10 inches (approximately either half frontal body width or full body width viewed sideways) at the given distance. When adjusting for point of impact the solid horizontal dashes are referred to as clicks and the gaps are referred to as half clicks. Please watch reticle tutorial video for more detailed information.

Once the distance to the target has been determined using the ranging circles, or the 10 inch horizontal gaps and dashes, follow the horizontal lead lines to the center aiming dot. This will be the aiming point for that distance. (See photo below.) This photo shows ranging on a man's shoulders (20 inches) at 500 yards and aiming at his chest.





The instructions above were using pictures from the M4-62 reticle in the Norden Performance CRS (Combat Rifle Scope). These instructions will provide you with a working knowledge of the T1-Reticle provided in the GRSC FSO (Full Spectrum Optic). For more definitive information on how to use the T1-Reticle please watch the T1-Reticle tutorial. (LINK TO COME)

### **Summary**

Advantages of the GRSC 1.1-10x30 FSO (Full Spectrum Optic) with the T1-Reticle. Most experienced shooters will agree that the fastest reticles for close to mid range shooting situations are circle or dot type reticles. At low magnification, the 5 MOA thick horseshoe of the T1-Reticle provides the speed of a big dot for the close range and of a circle at mid-range distances. Increasing the magnification provides a fast, simple ranging system (RULE OF TEN") with precision aiming points out to 1200 yards on a chest-size target. The illuminated reticle provides illumination for various shooting environments. The 1.1-10X30 FSO will prove to be extremely versatile in modern sporting rifles.