

IR LASER ZERO TARGETS

SIMPLIFY THE ZERO PROCESS // ESTABLISH A MORE PRECISE ZERO

Zeroing IR lasers has always been difficult and time consuming. Our patent pending Zero Targets have three features that make zeroing easier and more precise:

- 1. The ½ inch reflective square at the middle of the target (point of aim) will illuminate dramatically when the IR laser is positioned directly at the center of the target. This indicates proper (exact) POA.
- 2. The **approximate impact area** for zero distances of 100m, 200m, and 300m (using the constant offset method, which we generally recommend) are indicated by three circles that are printed onto the target.
- 3. The **zero adjustment grid** is designed to match the laser's adjustment increments so that 1 click on the laser's adjustors = 1 square on the target. On this particular target, the grid squares are each 1 cm.

INSTRUCTIONS FOR USE

Our IR Zero Targets are set up specifically for your laser and the mount position that you're using. They account for both horizontal and vertical offset of the laser AND ballistics (M4/ M16/ AR15). To use the targets:

- Identify the appropriate impact area. We have done some ballistic calculations to help you APPROXIMATE the proper point of impact at 25m for 100m, 200m, and 300m zero ranges. The circles indicate where rounds should hit at 25m for a rifle zeroed at the indicated distance. This means, for example, that if you normally zero your rifle at 200m, you want your rounds to land in the GREEN circle. If you zero at 100m, rounds should impact in the ORANGE circle. For a 300m zero, rounds should impact in the BLUE circle.
- 2. Place the target at 25m. These targets are designed for use on a 25m range.
- 3. On an outdoor range, zero at dusk. Variations in light conditions can have a huge impact on just about everything we do under goggles. Very dark conditions, for instance, can intensify the 'bloom' caused by a laser dot and make it difficult to establish point of aim. You can zero once it's completely dark, but experience has taught us that dusk generally provides the best conditions.
- 4. **Get a good, steady firing position.** Because the reflective square is so small, it can be difficult to maintain point of aim. The benefit of the small square, though, is that we get tight groups for making zero adjustments. To get a steady position, you may need a backpack, sandbags, etc. for bracing the weapon. You might also consider a bench or some other way to shoot from a supported kneeling or sitting position. Getting a good prone position while wearing a goggle can be challenging for some.
- 5. **Align the laser on the reflective square.** Point of aim (the laser dot) should be on the reflective square. When it is, the bloom of the laser will increase *dramatically*. You will know when you're on the square. The best way we've found to get on the square is to start with the laser directly below it and slowly move the laser upward on the target until you see the laser reflect.
- 6. **Shoot a group.** We recommend 5 round groups, but 3 is sufficient. Marksmanship fundamentals are critical, even when we're using lasers. Tight groups are needed to make good adjustments.
- 7. **Adjust the laser as necessary.** The grid squares on our targets are 1cm, which corresponds with almost every IR laser on the market. Read your manual, but lasers are typically designed to adjust **1cm per click at 25m**. That means that each square on our target should = 1 click on your laser. Note, however, that we have observed A LOT of variation in the actual adjustment of lasers.
- 8. **Repeat steps 4 -7 until rounds are in the appropriate circle.** Be patient and get it as close to perfect as possible. Adjustments on lasers is not as fine as we would like so, if you can't be perfect, always err toward the center of the target.





Remember that these targets are designed to APPROXIMATE zero at each indicated distance. Once you've completed the process with our target, we highly recommend that you conduct live fire zero at your actual zero distance (i.e. 200m). If you have to make adjustments at that distance, it may be a good idea to shoot our 25m target again and note the point of impact. You can then confirm zero on the 25m range by shooting a fresh target and ensuring that point of impact remains in your recorded spot.

