



## Leatherwood® / Hi-Lux™ Optics



### TAC-DOT ELECTRONIC SIGHT INSTRUCTIONS

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**CONGRATULATIONS!** You have just purchased one of our Tac-Dot Electronic tactical dot sight. It is one of the best Red Dot sights built today.

Versatile...Simple...Easy...and Reliable all describe the Tac-Dot reflex type red dot sight from Hi-Lux Optics. Here is a sight that is right at home on a variety of firearms - AR style rifles, most any big game rifle, shotguns, and handguns, even on modern muzzleloading big game rifles.

The 1x Tac-Dot measures less than 2 1/2 inches in length, and weighs a mere 2.1 ounces, adding absolutely no discernible weight to whatever gun this sight is mounted on. The simple integral clamp type mount allows this sight to be locked onto a picatinny rail/base or Weaver style base in just seconds, and the single stout Allen head torque mounting screw can be cinched tight for rock solid mounting of the Tac-Dot sight. This sight is waterproof for use in any weather, and its shockproof construction can take on just about any environment and stand up to years of recoil.

Sighting the Tac-Dot is easy, with windage and elevation screw adjustments that can be accessed without having to remove caps. The heads of these adjustment screws are recessed slightly, to prevent bumping or rubbing them against something that could change alignment. The 1x magnification eliminates parallax problems, plus there's no need to focus, and the eye relief is somewhat unlimited allowing this sight to be used whether it's mounted just 5 inches from the shooter's eye or mounted on a handgun held out 18 to 20 inches from the eye.

With just a little practice, target acquisition can be extremely fast, and once the sight alignment has been tweaked, the 4 MOA red dot reticle does not have to be centered in the lens. The firearm is sighted to hit where the dot is on the target...whether the dot is high...low...right...or left of center in the lens when getting on the target quickly. Great for hunting running game and taking a quick, on target, shot.

The Tac-Dot sight features fully multi-coated optics for maximum light transmission. The brightness of the dot automatically adjusts to the brightness or dimness of the light. It comes with protective cover.

With your Leatherwood®/Hi-Lux™ Tac-Dot sight, you get Quality, Precision and Ruggedness at a price that doesn't break your budget. The Tac-Dot sight is built to meet the wants and needs of American shooters.

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# SECTION 1: SPECIFICATIONS AND BASIC DEFINITIONS

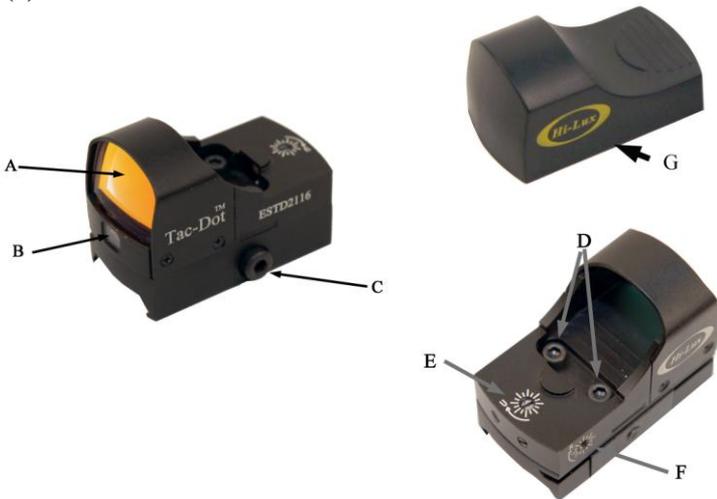
## (1) SPECIFICATIONS:

Model	Power	Obj. (mm)	F.O.V.@ 100 Yds (Feet)	Eye Relief (Inch)	Length (Inch)	Weight (O.Z.)	Exit Pupil Range In Variable mm	E/W Adju. MOA
ESTD2116	1X	21x16	30X22	Unlimited	2.5	2.1	N/A	N/A

## Remarks:

The adjustments for both Elevation and Windage are 50 MOA per revolution. The total adjustments for both Elevation and Windage are 160 MOA - with 80 MOA on each side from the center. A special illumination circuit is designed to control the illuminated dot size in a consistent shape and size. The dot size is 4 MOA. However the dot size may change a little, depending on the brightness of the dot. The Tac-Dot light sensor will control the brightness of the dot automatically based on the light situation, where the Tac-Dot sight is used.

## (2) BASIC DEFINITIONS:



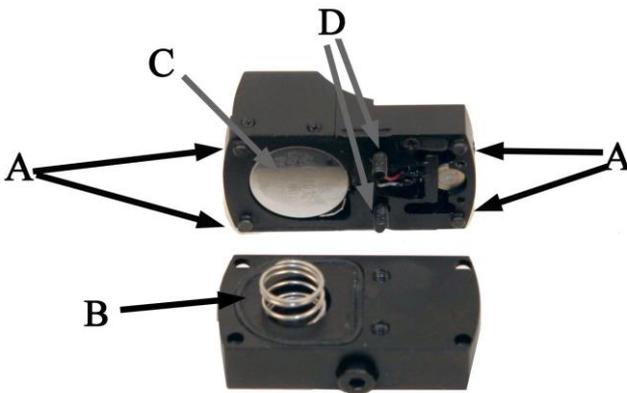
**A.** Lens; **B.** Light Sensor; **C.** Base Locking Screw; **D.** Two Small Locking Screws; **E.** Elevation Adj. Screw; **F.** Windage Adj. Screw; **G.** Protective Cover;

## SECTION 2: MOUNTING YOUR TAC-DOT SIGHT

As there is no set eye relief for the Tac-Dot sight, you can install the sight at any position of the gun you feel comfortable. Set the rail onto the base. Align and seat the cross-bolt of the mount into the crosscut groove of the base. Tighten locking cross-bolt with the bigger wrench provided. Please do not over tighten the locking screw.

**WARNING: NEVER LOOK AT THE SUN WITH THIS PRODUCT, OR EVEN THE NAKED EYE. YOU COULD PERMANENTLY DAMAGE YOUR EYES.**

## SECTION 3: INSTALLING BATTERY



**A.** Four guide pins; **B.** Battery holding spring; **C.** CR2032 3V Lithium Battery; **D.** Two small hardened locking screws;

When your Tac-Dot red dot becomes dim or does not light at all, you need to replace the battery. The Tac-Dot electronic sight is powered by a 3V “coin style” CR2032 lithium battery (C). Unscrew the two small locking screws (D) to separate the upper and lower sections, and insert the battery positive (“+”) side up, with bottom/negative side against battery spring. Align the four guide pins (A) and reconnect the top section back, retighten the two small hardened locking screws (D). Once you have installed the new battery, the red dot will go on automatically. Please keep the Tac-Dot Sight cover on while you are not using the Tac-Dot Sight to save the battery life.

## SECTION 4: ZEROING

Once the Tac-Dot sight cover is removed, the red dot will be on automatically. The brightness of the dot will be adjusted automatically by the light sensor depending on

the level of the light around you. The brighter the environment you are in, the brighter the red dot you will see. The adjustments for both Elevation and Windage are 50 MOA per revolution. The total adjustments for both Elevation and Windage are 160 MOA - with 80 MOA on each side from the center. A special illumination circuit is designed to control the illuminated dot size in a consistent shape and size. The dot size is 4 MOA. However the dot size may change a little, depending on the brightness of the dot. When you finish using the Tac-Dot sight, make sure to put the protective cover back on to turn off the power.

With the scope mounted and with the protective cover removed, rest the gun on a solid support. Sight along the barrel and aim at a target 25 to 50 yards away. Sight through your red dot sight and use the windage and elevation adjustments to align the lighted dot with the target as seen along the barrel. You should fire a test shot to determine the point of impact of your gun. If you did not hit the center of the target, then you can make the adjustments of either elevation or windage in the direction you want to move the point of impact.

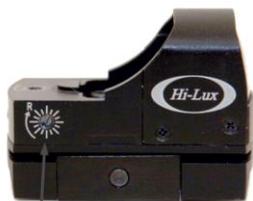
### Elevation Adjustment:



Elevation Adj Screw (E)

Use the screwdriver that comes with the Tac-Dot sight to adjustment the elevation. Turning the adjustment screw clockwise will move the point of impact **UP**. Turning the elevation adjustment screw counterclockwise will move the point impact **DOWN**. The adjustment is calibrated in Minutes of Angle (MOA). Each scale mark is about 3.12 MOA.

### Windage Adjustment:



Windage Adjustment Screw (F)

Use the screwdriver that comes with the Tac-Dot sight to adjustment the windage. Turning the adjustment screw clockwise moves the point of impact to the **RIGHT**. Turning the windage adjustment screw counterclockwise moves the point of impact to the **LEFT**. The adjustment is calibrated in Minutes of Angle (MOA). Each scale mark is about 3.12 MOA.

### Fine Adjustment Scale Plate:

The Tac-Dot sight comes with a scale plate as the picture indicated. Use the small screwdriver, pushed through the center of the scale plate, as the picture shown, to

make the precise adjustments in the direction you want to move the point of impact. One scale mark on the plate is 1 MOA  $\approx$  1 inch at 100 yards  $\approx$  2.9 cm at 100 meters.



Scale Plate



## Elevation and Windage Adjustment Chart:

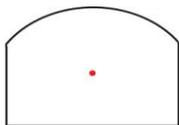
The following chart will help you understand how to calculate the correct amount of adjustments. Each MOA adjustment will have a different inch drop at different ranges. One minute of angle is very close to 1 inch at 100 yards. At 50 yards one MOA is close to half an inch. At 25 yards, one MOA is close to 0.25 inches.

Range	1 Full Revolution of Elevation	1 Hash Mark of the Elevation
25 yards	12.5 Inches	0.75 Inches
50 yards	25 Inches	1.5 Inches
100 yards	50 Inches	3.0 Inches
Range	1 Full Revolution of Windage	1 Hash Mark of the Windage
25 yards	12.5 Inches	0.75 Inches
50 yards	25 Inches	1.5 Inches
100 yards	50 Inches	3.0 Inches

**WARNING:** ALL SHOOTING SHOULD BE DONE AT AN APPROVED RANGE, OR SAFE AREA. EYE AND EAR PROTECTION IS RECOMMENDED.

## SECTION 5: RETICLE IN USE

### Tac- Dot Reticle:



There is a red dot in the center of the reticle. The dot size is about 4 MOA. The Tac-Dot Sight does not have any magnification, so there is no set eye relief for this sight. You can mount the sight on the rifle at any distance from your eye that is comfortable for you to shoot. The red dot size is not controllable.

## SECTION 6: MAINTAINING YOUR RIFLESCOPE

Your scope, though amazingly tough, is a precision instrument that deserves reasonable and cautious care. For normal maintenance:

- A. Do not attempt to disassemble or clean the scope internally.
- B. The external optical surfaces should occasionally be wiped clear with the lens cloth provided or an optical quality lens paper.
- C. Keep the protective lens cover in place when the scope is not in use.
- D. Remove any external dirt or sand with a soft brush so as to avoid scratching the finish.
- E. Wipe the scope with a damp cloth, followed by a dry cloth.
- F. Then go over the metal portions of the scope with a silicon treaded cloth in order to protect the scope against corrosion.
- G. Store the scope in a moisture-free environment.
- H. Avoid storing the scope in a hot place, such as the passenger compartments of a vehicle on hot days. The high temperatures could adversely affect the lubricants and sealants. A vehicle's trunk, a gun cabinet or a closet is the preferred storage locations.
- I. Never leave the scope where direct sunlight can enter either the objective or the eyepiece lens. Damage may result from the concentration of the sun's rays (burning glass effect).

**WARNING: UNNECESSARY RUBBING OR USE OF A COARSE CLOTH MAY CAUSE PERMANENT DAMAGE TO LENS COATINGS.**

## **SECTION 7: LIMITED LIFETIME WARRANTY**

**Hi-Lux, Inc.** warrants its products against defects arising from faulty workmanship, or materials, for the lifetime of the **original purchaser**. Any attempt to alter, dismantle or change the standard specifications of the products, will make this warranty null and void. This warranty is made to the **original purchaser** of the goods including all international sales, and applies only to the products purchased through our authorized distributors or dealers. The international warranty is subject to approval from our authorized distributor or us directly. Warranty obligation is limited to the repair or replacement of any product returned to **Hi-Lux, Inc.**, which is determined by the manufacturer to have defects arising from faulty workmanship, or materials that adversely affect the satisfactory operation of the product. It should be noted that on items containing an etched glass reticle that the occasional appearance of some small particles is common and not a warrantable repair. **We only have a one-year warranty for the electronic components that are contained on the products.** **Hi-Lux, Inc.** reserves the right to request proof of purchase and purchase date. To guarantee warranty service, the enclosed warranty form must be completed and returned within ten (10) days of purchase to establish all warranty rights between you, the original purchaser, and **Hi-Lux, Inc.** We assume no liability for any incidental or consequential damages, or incidental expenses. Some

states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. No warranties are made, or are authorized to be made, other than those expressly contained herein. To file a claim under this warranty, please contact the Customer Service Department of **Hi-Lux, Inc.** at (310) 257-8142 to obtain a Return Authorization number (RA number). After receiving your RA number, please mark the number on the outside of the package; enclose the defective item with a brief explanation of the problem. Please be sure to include your name, address and phone number. Failure to obtain a RA number may result in either refusal upon delivery, or lengthy delays for warranty repairs and service required for the item returned to us. All returns are to be shipped prepaid direct to Hi-Lux, Inc. including a check or money order in the amount of \$19 to cover postage and handling regardless of purchase date.

**Attn.:** Warranty & Service Dept.

**Hi-Lux, Inc.**

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Website: [www.hi-luxoptics.com](http://www.hi-luxoptics.com)

In the event of a non-warranty repair, you will receive an estimate prior to any work being done. This warranty gives you specific legal rights and you may have other rights, which vary from state to state. As defined by federal law, this is a limited warranty.



*We lead the way™*