

WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

INSTRUCTIONS:

CAUTION: BEFORE YOU BEGIN, ALWAYS MAKE SURE THE WEAPON IS UNLOADED AND SAFE TO HANDLE.

Congratulations on your purchase of a TRUGLO® EMINUS™ Series scope, designed specifically for accuracy and reliability on modern sporting rifles. EMINUS literally means "from a distance". Enjoy the power of an optic that can reach out to long ranges, with a full palette of intuitive and rock-solid controls.

MODELS:

EMINUS9 3-9 x 42mm Illuminated Reticle (TG8539TLR)

EMINUS16 4-16 x 44mm Illuminated Reticle, Side Focus (TG8541TLR)

EMINUS24 6-24 x 50mm Illuminated Reticle, Side Focus (TG8562TLR)

Each EMINUS model carries all of the features demanded on high-performance tactical riflescopes, and a comfortable user interface for fast and consistent control.

- Multi-coated lenses for enhanced clarity and contrast
- 30mm tube for increased turret adjustment range and increased brightness
- 1/4-MOA locking target turrets and MOA-based reticle for simplified adjustments, tracking, and holdover.
- One-piece (0-MOA) mount for a strong hold and ideal mounting position on modern sporting rifles
- Hardcoat anodized matte finish
- Nitrogen gas-filled / fog-proof construction
- Illuminated TacPlex Reticle (T.P.R.) for precision measurement (in MOA) without a crowded sight picture
- · Water-resistant and shock-resistant
- · Illuminated glass-etched reticle
- Leaf-spring turret control for positive and responsive click adjustments.
- Side-focus dial, 20yds $-\infty$ (TG8541TLR and TG8562TLR)
- Includes a 3 in, removable sunshade (TG8541TLR and TG8562TLR)

MOUNTING

To get the best performance from your scope, it must be mounted properly. If you are not familiar with the process of mounting a scope, it is strongly recommended that you seek assistance from a qualified professional.

Your EMINUS scope includes a one-piece (0-MOA) mount, specifically designed for mounting on modern sporting rifles with flat-top receivers utilizing standard 1913/Picatinny rails. If mounting on a rifle without a Picatinny rail (such as a traditional bolt-action hunting rifle), additional 30mm rings and bases will be needed. If primary shooting distances are at extreme long ranges, (beyond 800 meters) it is recommended to use a forward-canted one-piece Picatinny rail (+ 20-MOA angle for example), or 30mm rings with adjustable angle/offset.

- 1. Loosen the two mounting bolts on the bottom of the mount. Position the scope and mount on the railed receiver of the rifle. Move the scope and mount forward or backward to achieve proper eye-box position. The mounting bolts must fit into recoil grooves for proper mounting. Check eye relief at both the highest and lowest magnification settings to ensure proper maximum distance between the eye piece and the shooter's eye to avoid injury from heavy-recoiling ammunition.
- 2. After the proper rail position has been identified, push the optic forward slightly and carefully tighten the mounting bolts. DO NOT OVER-TIGHTEN. Recommended max torque is 20 in-lbs or 1.6 ft-lbs on standard rails. For additional security, a drop of non-permanent thread-locking fluid (such as blue Loctite® 242/243) can be added to the mounting bolts before final tightening.
- 3. Slightly loosen the screws on top of the mount (do not remove completely). Rotate the scope to align the reticle with gravity. It is recommended that two leveling instruments are used: (bubble level or similar leveling device) one on the receiver of the rifle, and another on the elevation turret of the scope. At this time, more precise eye relief adjustments can be made. Be sure the scope is mounted a sufficient distance from the shooter's eye/face to prevent contact under recoil. After proper level and position have been achieved, carefully re-tighten the screws. Tighten each screw the same amount (example: 1 turn) while alternating screws until tight. DO NOT OVER-TIGHTEN (recommended torque is 20 in-lbs or 1.6 ft-lbs). This ensures the optic is held firmly in all positions and is not torqued in any direction. NOTE: The mount is installed on the scope at an approximate level from the factory. Exact leveling should be confirmed on the rifle.





WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

ZEROING-OVERVIEW

After the scope and mount are installed correctly, the scope can be zeroed to the rifle. From the factory, the windage and elevation dials are aligned to the center of the scope. Initial bore-sighting is recommended to save time and ammunition during live-fire zeroing. Remove the bolt and use a bore-sighting laser or visually bore-sight by looking through the barrel and scope: sight a target through the bore, and adjust the alignment of the scope to the same position. Only minor adjustments should be needed. If major adjustments are needed, check the mounting of the scope. NOTE: Your click adjustments will appear to move backwards relative to the markings on the turrets in this process. WARNING: Always remove the laser bore sighter from the barrel after every use. Firing a round with an obstructed barrel will cause permanent damage to the gun and/or serious injury!

After bore-sighting, the scope is ready for live-fire zeroing. Only fire your rifle in a safe manner at an approved shooting location. Your TRUGLO s cope has precise windage and elevation adjustments with audible and tactile clicks. The recommended initial zeroing distance for your EMINUS scope is 100 yards—a user-friendly distance for minute-of-angle-based turrets and reticles. The target turrets are divided in angular increments, and not calibrated for any particular speed or projectile; any zeroing distance can be used. 100 yards is recommended for simplicity.

ZEROING -TURRET CONTROLS

EMINUS scopes are equipped with locking target turrets. This provides the advantage of target turrets that can accommodate adjustments and then return to a preset zero, as well as the ability to lock the turrets in place to prevent undesired movement. The rifle should only be fired with the turrets in the locked position. To unlock the turret, pull the turret outward (up on the elevation turret, right on the windage turret).

With the turrets in the unlocked position, adjustments can be made. Adjust turrets as needed to obtain the proper zero at 100 yds. Remember, each click is 1/4-MOA (approximately 1/4 in. at 100 yds, 1/2 in. at 200 yds, etc.) After each adjustment is made, push in on the turrets to lock them in place before shooting again. For each adjustment, using the average of a 3-shot group rather than a single shot is recommended.

EXAMPLE: If your shot (or shot group average) is 2 in. high and 1 in. left at 100 yards, adjust the elevation turret down (direction indicated on turret) 8 clicks, and the windage turret right (direction indicated on turret) 4 clicks to obtain the proper zero. Lock the turrets and shoot again to confirm.

After you have zeroed the point-of-aim of your scope to the point-of-impact, the turret caps will likely be in the incorrect position (indexed to any number other than zero) and will need to be indexed correctly. To "slip the caps" back to zero, first make sure the turrets are in the LOCKED (downward) position. Use the included hex wrench to loosen the screw on the end of each turret cap. Remove the screw completely, retaining the rubber washer. Pull the turret cap away from the scope to remove. Align the "0" mark to the indexing dot on the scope body and replace turret cap. The turret should NOT click when rotated, as the turret is in the locked position and only the external turret cap is moving. Re-tighten the screw on the cap to hold the cap firmly in place. DO NOT OVER-TIGHTEN. Do NOT apply thread locker to this screw.

FIRING SOLUTIONS

With the scope and caps now properly adjusted to zero, you will be able to hold or dial additional adjustments (bullet-drop, wind, etc.) into the optic as needed for a particular shot, and then return the optic back to your predefined zero.

EXAMPLE: If .308 168 gr. Hornady A-Max (2700 FPS, Ballistic Coefficient .475) drops 4.59-MOA at 300 yds with your rifle (zeroed at 100 yds) you could:

HOLD: 4.59 MOA (just above the large 5-MOA hash mark) below the center crosshair. The bullet will impact at this hold-over point. This must be done at maximum magnification.

or DIAL: 4.5 MOA up (18 clicks) on the elevation turret. Remember, the direction marked on the turret refers to the point-of-impact (POI). The crosshair will now be aligned to the temporary firing solution. With this method, magnification has no effect on POI and can be set at any level. However, maximum magnification is still recommended for accurate shot tracking. (Example: You see in the scope that the wind increased and moved the POI 2-MOA to the left. You can now hold or dial the windage adjustment.) Reset to zero after the shot is made.





WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

T.P. R. (TACPLEX RETICLE, MOA)

EMINUS Series scopes utilize an advanced reticle based on familiar duplex hunting reticles, but with MOA hashmarks optimized for MOA turrets, and illuminated reference marks to aide in holdover. The TacPlex Reticle combines the best features of tactical and hunting reticles, without crowding or over-complicating the visual space.

- 1.5-MOA (1-MOA for EMINUS24) heavy crosshairs point inward, helping the eye locate the center of the reticle quickly and easily.
- Center illuminated crosshair is 4-MOA with a 1-MOA margin for a 5-MOA center targeting box.
- A larger 10-MOA illuminated targeting box (5-MOA, each direction) aides in quick holdover approximation, leads, and target or distance measurement.
- The largest illuminated targeting box is 20-MOA wide (10-MOA each side) for continued holdover, lead, or size/distance approximation.
 Note: these hashes only extend below the center of the reticle.
- The illuminated reference marks are all 1-MOA tall and 1-MOA wide.
- Illuminated line thickness (interior crosshair & reference marks): .08-MOA (EMINUS24), 0.12-MOA (EMINUS16), 0.25-MOA (EMINUS9)
- Non-illuminated line thickness: .06-MOA (EMINUS24), 0.10-MOA (EMINUS16), 0.15-MOA (EMINUS9)
- 30-MOA (20-MOA for EMINUS24) total measurable width in each direction.

SECOND FOCAL PLANE

The reticle of the scope is positioned in the second focal plane. This means the reticle does not zoom or change sizes, and always fills the entire viewing area. Because the reticle size stays constant, the indicated subtension measurements apply only to the maximum magnification level of the optic—9x, 16x, or 24x, depending on model. Subtension measurements can be calculated at other magnifications, but for the best accuracy, the maximum magnification should be used. Magnification has no effect on the point-of-impact or turret adjustments.

hents cation

USING MOA

Minutes-of-angle (MOA) is a friendly system of angular measurement for shooters familiar with the English/customary system. For quick calculations, 1-MOA \approx 1 in. at 100 yds. (2 in. at 200 yds., 3 in. at 300 yds., etc.). Note: 1-MOA does not exactly equal 1 in. at 100 yds. This is an approximate value (within about 5%) for easy zeroing of the rifle. For complex or long-distance firing solutions, use precise calculations. Your EMINUS scope is calibrated in MOA and not in "inches at 100 yds." to ensure precision at all distances.

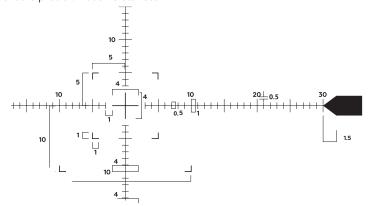
T.P.R. MOA SUBTENSIONS

The illustration shows the MOA subtensions built into the TacPlex Reticle. All measurements are shown in minutes-of-angle.

Because the EMINUS turrets are also in MOA, converting measurements is not needed. These measurements can be utilized for approximating holdover or for shot tracking and ranging.

The TacPlex Reticle is not dedicated to any load or caliber, and can be used for any round. The use of a DOPE (Data On Previous Engagement) card is suggested.

NOTE: The TPR on the 6-24x50 model extends to 20-MOA in each direction (not 30) to accommodate the field of view and remain properly calibrated at maximum magnification.



All measurements listed in MOA at maximum magnification.





WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

QUICK-ZOOM LEVER

EMINUS scope models come with a quick-zoom lever pre-installed. The lever increases torque on the zoom ring, making it easier to quickly adjust the magnification of the scope. To change the index location of the quick-zoom lever, loosen the setscrew, rotate the lever to the desired position, and tighten the setscrew. DO NOT OVER-TIGHTEN. Check the full range of motion of the lever to ensure motion is not impeded by the mount, receiver, or backup iron sight. To remove the quick-zoom lever, remove the flip-up cap on the ocular lens, loosen the setscrew, and slide the quick-zoom ring back over the ocular lens.

OPTIONAL SUNSHADE

The EMINUS 16 and 24 scope models include an optional threaded sunshade. Using the sunshade can reduce glare in bright, harshly lit environments, and reduce visible reflection from the objective lens.

To use the sunshade, first remove the flip-up cap from the objective (target) end of the scope. Turn the thread protector counter-clockwise to remove. Insert the threaded end of the sunshade into the threaded end of the scope. Carefully turn clockwise to attach. DO NOT OVER-TIGHTEN. If desired, replace the flip-up cap on the end of the sunshade.

ILLUMINATION CONTROL

Illuminated reticles come standard on many TRUGLO scopes including the EMINUS Series. The etched reticle can be illuminated in red, as well as used in black without illumination. Simply rotate the illumination control dial in either direction to select the desired brightness level. Always select the lowest brightness setting that provides good contrast against the target. The higher brightness settings should only be used in bright daylight (otherwise, the reticle may appear distorted). Turn the illumination system to the zero (off) position after use to conserve battery power.

On the EMINUS 16 and EMINUS 24 models, the illumination control knob is located on the same axis as the parallax/focus adjustment, but is still adjusted in the same manner.

CHANGING BATTERIES

EMINUS scopes use the common 3V CR2032 battery. Replacement batteries can be purchased in many retail locations or ordered from TRUGLO. The battery is located inside of the brightness adjustment dial. To change batteries, unscrew the battery cap (using a key, coin, or large flathead screwdriver). Remove the old battery and replace with a new CR2032 battery. The negative (-) side should face the scope tube and the positive (+) side should face the battery cap. Replace battery cap and screw firmly into place. DO NOT OVER-TIGHTEN.

FOCUS ADJUSTMENT - DIOPTER

Your EMINUS scope features a diopter adjustment to optimize the focus of the optic for individual vision. The diopter adjustment wheel determines the focus inside of the optic, ensuring the reticle is in sharp focus for maximum clarity and accuracy. Proper adjustment is based on individual eyesight, so will vary from one individual to another. Adjusting the diopter will marginally change the magnification of the optic. This will not have a significant effect on the subtension measurements of the reticle.

FOCUS ADJUSTMENT -PARALLAX SETTING

EMINUS 9 utilizes a fixed-focus that does not need to be adjusted. This focus is optimized at 100 yards. Objects viewed at extreme distances (far beyond 100 yards) may appear slightly less sharp than closer objects—this is normal for all fixed-focus scopes and does not effect the precision of the crosshairs nor the alignment of the scope.

EMINUS 16 and EMINUS 24 utilize a side-focus parallax adjustment. This adjustment should be set to the proper shooting distance to ensure accuracy. This setting minimizes parallax by positioning the focus of the reticle and focus of the target on the same visual plane. This adjustment is common on higher magnification scopes, and allows for increased precision at longer distances and higher magnifications. The parallax adjustment dial is numbered in yards as an approximate guide; fine-tuning of this dial may be needed to provide the best focus and/or minimum parallax at a given distance.





WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

MAINTENANCE AND CLEANING

Although your TRUGLO scope is very durable, it is a precision instrument and should be treated with care. When not in use, cover the objective and ocular lenses with the provided lens caps to prevent dust and debris from collecting on the lenses. It is recommended to store precision rifles and optics in a hard-sided case.

LENSES: If the lens becomes dirty, blow loose dust/dirt off the lens before cleaning. Use lens cleaning fluid and a soft cloth to dab at the surface to remove potentially abrasive bits of dirt or dust before applying more pressure. Be patient and clean in gradual stages. Too much pressure can grind abrasive debris into the lens, damaging the optical coating. The optical coatings are very durable and will last indefinitely as long as proper care is taken in the cleaning process.

EXTERIOR: The body of the scope and mount can be wiped down to remove dust, oils, fingerprints, etc. Solvents should not be used on any riflescope as they could potentially damage some components of your scope, including the finish of the scope, and the internal grease that keeps adjustment knobs turning smoothly.



TRUGLO, Inc. warrants this product to be free from original defects in materials and workmanship for as long as the product is owned by the original retail purchaser, subject to the limitations set forth herein. This warranty applies only to the original retail purchaser and requires the purchaser to supply a copy of the original proof of purchase (original sales receipt) at the time warranty service is requested. No additional warranty "registration" is required. If this product should malfunction or fail, contact us for a Return Merchandise Authorization (RMA) number. The RMA number should be clearly marked on the outside of the package. Please include a complete description of the problem, your name, address, telephone number and a copy of the original proof of purchase. All transportation, insurance, and freight charges associated with warranty service and repairs are the responsibility of the purchaser. Please include a check or money order in the amount of \$12.50 to cover processing and return postage. If an original defect is found by us, we will, at our option, repair, replace, or make appropriate adjustment. To contact us go to www.truglo.com or call 972-774-0300. This Limited Warranty does not apply to: (a) asserted defects caused by normal wear and tear of any part including knobs, camouflage finish, etc.; (b) asserted defects caused by modification, unauthorized service, accidents, neglect, misuse, abuse, improper maintenance, acts of Nature; (c) asserted defects involving subjective personal likes or judgments; (d) batteries; (e) electronic components; or (f) products purchased outside the USA.

The ELECTRONIC COMPONENTS in this product are warranted to be free of defects in materials and workmanship for THREE YEARS from the date of purchase. If during this three-year period, the electronic components should malfunction or fail, the above protocol should be followed. If an original defect is found by us, we will, at our option, repair, replace, or make appropriate adjustment.

THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY FOR THIS PRODUCT. WE DISCLAIM ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. WE SHALL NOT BE LIABLE IN TORT, INCLUDING NEGLIGENCE OR STRICT LIABILITY, AND SHALL HAVE NO LIABILITY AT ALL FOR INJURY TO PERSONS OR PROPERTY. OUR LIABILITY FOR FAILURE TO FULFILL ANY OBLIGATION UNDER THIS LIMITED WARRANTY OR ANY OTHER LIABILITY IN CONNECTION WITH THIS PRODUCT SHALL BE LIMITED TO THE AMOUNT OF THE PURCHASE PRICE RECEIVED BY US FOR THE PRODUCT. THE REMEDIES STATED IN THIS LIMITED WARRANTY ARE THE PURCHASER'S EXCLUSIVE REMEDIES AGAINST US REGARDING THIS PRODUCT. UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS AND REVENUES, INCONVENIENCE, OR INTERRUPTIONS IN OPERATIONS, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSSES OF ANY KIND. THESE LIMITATIONS AND DISCLAIMERS ARE NOT MADE BY US WHERE PROHIBITED BY LAW. SOME STATES PROHIBIT LIMITATIONS OF WARRANTIES AND THE PURCHASER MAY HAVE ADDITIONAL RIGHTS IN THOSE STATES.





WARNING: Serious bodily injury, death, or property damage can occur if this product is not installed and used properly.

