



OWNER'S MANUAL

HoVR® 1-8x24 MM
RIFLESCOPE

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Record the riflescope serial number below for future reference:

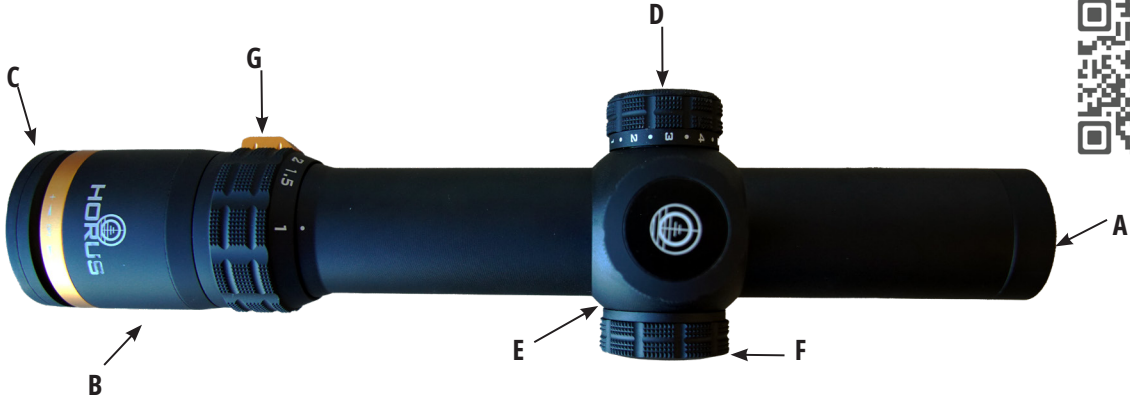
**WARNING!**

Make sure that your rifle is not loaded before proceeding. Reconfirm that the chamber is empty if you stop the procedure then resume later.

**WARNING!**

HVRT Corp. does not authorize the export of these items outside of the United States of America. Riflescopes and accessories listed within, are controlled for export by the Department of Commerce under the Bureau of Industry and Security Export Administration Regulations (15 CFR, Parts 730-774). To export these products outside of the United States of America, you must comply with the regulatory agency’s license and documentation requirements.

Product specifications, features, appearances and information subject to change without notice. For the latest updates and information regarding our products, visit www.horusvision.com.



- A:** Objective/Objective Lens
- B:** Eyepiece
- C:** Fast-Focus Eyepiece
- D:** Illumination Adjustment
- E:** Elevation Adjustment
- F:** Windage Adjustment
- G:** Power Zoom Ring

DOWNLOAD THE FREE
HORUS BALLISTICS
APP!



Unscrew caps to access
windage and elevation
adjustments.



WARNING!

To avoid permanent eye damage or blindness, do not look directly at the sun or other extremely bright lights through the riflescope.

FOCUSING THE RETICLE

There is one user-adjustable optical setting on this HoVR® riflescope. The reticle focus is used for setting the reticle focus to match your particular vision. If you plan to wear vision correction when shooting, then set this focus while wearing your corrective lenses.

Note: All Horus Vision riflescopes are factory set for average eye strength, so this adjustment may not be necessary

Reticle Focus Adjustment

Horus Vision riflescopes have a fast focus eyepiece without any locking mechanism. Turn the rubber ring on the end of the eyepiece clockwise until the reticle is out of focus, then turn it counter-clockwise until the sharpest reticle image is achieved. The friction-fit design maintains the focus once set.

1. Set the power zoom ring at the highest magnification.
2. Look through the riflescope eyepiece at a light colored background, such as a white wall to eliminate background clutter. Determine if the reticle is clear and in focus instantly when you look through the eyepiece. Be aware that staring at the reticle for more than two seconds during this process will cause your eye to compensate, resulting in a false indication of reticle focus. Look away for a few seconds then retry for best results. You are looking for a sharp, crisp and well defined reticle image.
3. If adjustment is necessary, follow the steps outlined for the type of Horus Vision riflescope you have. Due to the way the human eye focuses, best results are usually obtained by turning the eyepiece inward until the reticle is slightly blurred, then moving it outward until sharp focus is obtained. Refer to Figure 1.



Figure 1: Reticle Focus

that you fine-tune the focus in either direction, on a target at 100 to 200 yards. Use a target of medium value such as light tan or gray, rather than white, for best results. A properly focused reticle will remain sharp for extended periods.

ILLUMINATION ADJUSTMENT

The HoVR® 1-8x24 mm Riflescope is equipped with an illuminated reticle. The illumination can be used to make the reticle more visible in low light situations. The intensity of the illumination is externally adjustable, with brightness settings 1-10 for varied conditions. See Figure 2.

If the reticle tends to fade in and out of focus, or you are experiencing eye strain with extended shooting sessions, that is an indicator that the reticle is not properly focused for your eye. Once you have achieved the best focus, using the method above, it is recommended

A standard CR2032 battery is required for the use of this function. Battery life will highly depend on illumination duration and settings. Install the battery with the positive (+) side up. Remember to turn off the illumination to preserve battery life when the optic is not in use. The illumination can be turned off by turning the adjustment to a non-numbered position.

Figure 2: Illumination Adjustment



ELEVATION AND WINDAGE VALUES

When making elevation and windage adjustments, you need to know how much the impact will move with each click. Scope adjustments are an angular system of measurement and do not move in a linear value. (e.g., 1 MRAD=3.6" at 100 yards, etc.). Depending on the model, your riflescope is going to have click values as follows:

- HoVR® riflescopes with Mil-Radian adjustments are calibrated in 1/10th MRAD clicks, and based on 1 mil=3.6" at 100 yards.
- HoVR® riflescopes with MOA adjustments are calibrated in 1/4 (0.25) MOA increments. They provide true MOA measurements, where a MOA is 1.047" at 100 yards.



WARNING!



Make sure that your rifle is unloaded prior to installing any Horus Vision riflescope or accessory. Recheck the chamber if you stop the procedure and resume later.

INSTALLING THE RIFLESCOPE

FAILURE TO PROPERLY INSTALL THE RIFLESCOPE MAY CAUSE EQUIPMENT AND/OR PERSONAL DAMAGE WHICH CAN RESULT IN EQUIPMENT FAILURE OR DEATH RESPECTIVELY.

Note: Please take time to record your serial number on the inside front cover of this booklet. It can then be easily referenced for your online Warranty Registration. Once the scope has been installed, you may not be able to read the serial number, as your rings/mounts may cover it.

Ring and Base Selection

Your riflescope and rifle are only as good as the link between them. The mounting of your riflescope is as important as the bedding of the rifle's action to the stock. To ensure the highest level of performance, the following steps in the mounting procedure must be followed as described.

We recommend purchasing premium bases, rings and one-piece mounts for a solid and precise installation. Please use the following guidelines to select the proper mounting solutions for your rifle.

- A high quality ring and base combination using a 1913 Mil. Std. type rail is recommended for field use and/or high-recoil applications.
- Under no circumstances do we recommend the use of turn-in style rotary/dovetail-type ring and base designs, especially those equipped with windage adjustment.

Mount Installation

Note: Follow all mounting instructions provided by the ring manufacturer. Damage caused by incorrect mounting is not covered by the scope warranty.

Attaching the Base to the Action

Once you have determined that the base-to-action mating is acceptable, install the base to the action, torquing the mounting screws to the manufacturer's specifications.

Attaching Rings to Base

Clean/degrease the inside of the rings and then clean the outside of the scope tube before installing in the rings.

Install the rings on the base per the manufacturer's specifications using the proper torque on the locking mechanism. Avoid positioning the rings where they will make contact with the adjustment assembly, the objective bell section, or the power zoom ring on the riflescope body. Apply forward pressure to the ring while tightening it in place to keep the cross bolt on the ring in firm contact with the forward surface of the cross slot in the base.

Mounting the Riflescope

1. For initial fitting of the riflescope to the rifle, set the Horus Vision riflescope to the highest magnification. Place the riflescope in the lower portion of the rings as far forward as possible. Install both ring tops. Tighten ring top screws with just enough tension to hold the riflescope where positioned, while still allowing smooth movement fore and aft and rotationally.
2. Hold the rifle in your normal shooting position with the riflescope positioned fully forward in the rings, preferably while adjusted to maximum magnification. Place your head as far forward on the stock as you might position it in field use. Slowly move the riflescope back just to the point where the full field of view is obtained. It is recommended to mount the riflescope at this position with as much eye relief as possible (3.5" - 4") or slightly forward to ensure maximum eye relief. See Figure 3.



WARNING!



With hard-recoiling rifles, serious injury or even death can result from eyepiece impact with the shooter during the recoil process when discharging the firearm. Be certain that your installation provides sufficient eye relief for the recoil generated by your rifle before shooting the firearm. NOTE: Give special attention to this warning when shooting uphill and/or from a prone position. These shooting conditions can dramatically reduce eye relief. PLEASE maintain maximum eye relief when shooting heavy recoiling and/or magnum firearms.

LEVELING THE RETICLE

For precision shooting, the reticle and the rifle need to be squared, or plumb, to each other. Any out-of-square condition can cause sighting errors and will be magnified at longer distance.

Reticles in all Horus Vision scopes are confirmed plumb with the flat surface on the bottom of the adjustment saddle. See Figure 4.

You can use pin gauges, a sliding sine bar or flat shims to align the flat surface with the top of the scope rail. To level the reticle using a plumb line, follow the three steps that follow.

1. Level the rifle on a steady rest such as sandbags or a stable shooting rest. This can be accomplished with a bubble level attached to the riflescope base, or on a flat section of the action.



Figure 3: Eye relief

2. Use a plumb line or some other known plumb vertical line at a distance from the rifle where you can see it clearly through the riflescope. A distance of 100 yards is recommended, but good results can often be obtained as close as 50 yards.
3. Center the reticle on the plumb line and rotate the riflescope in the rings until the vertical line of the reticle is parallel with the plumb line. Recheck the rifle level and adjust the reticle position as needed. When both the rifle and the reticle are plumb, tighten all ring top screws evenly until the riflescope is secure in the rings. Recheck the rifle and reticle one more time for plumb, adjust as needed, then torque the screws to the recommended torque settings. Your Horus Vision riflescope is now properly mounted.



Figure 4

ESTABLISHING A SIGHT-IN ZERO

A quick way to get your first shot on target with a new installation is to first bore sight the riflescope. A simple yet reliable method is by looking through the bore at a round, high contrast target, approximately 5"– 6" in diameter, that can be seen clearly with the naked eye at either 25, 50 or 100 yards/meters, yet is small enough to "float" in the center of the rifle bore when viewed through the opened action.

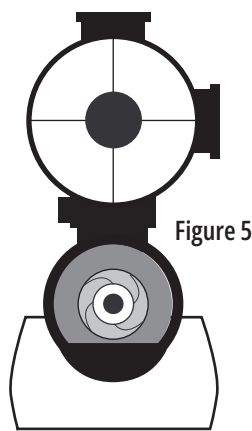


Figure 5

1. Ensure that the rifle is unloaded and the chamber is empty. Remove the bolt, place the rifle on a steady rest.
2. Looking through the bore from the action end, center the round target downrange so that it is floating in the center of the bore, then adjust the elevation and windage adjustments until the reticle is centered on the target while the target is still centered in the bore. See Figure 5.

3. If you feel confident in the bore sighting, proceed to live firing at 25, 50 or 100 yards/meters. To aid in the sight-in process, be sure your sight-in target is large in size, and offers a contrasting color (i.e., white). After confirming point of impact, proceed to step four. Note: if you have sighted in at 25 yards/meters, you will need to move the adjustments four times more than you would with a 100 yard/meter sight-in. If you sighted in at 50 yards/meters, you will need to move the adjustments two times more than you would with a 100 yard/meter sight-in. If the first shot isn't on target, recheck your bore sighting and/or move to a 25 yard/meter sight-in distance.
4. Without changing the adjustments, move the rifle to center the reticle on the target. Carefully turn the windage and elevation adjustments without moving the rifle, until the reticle is aligned on the center of the bullet hole from that first shot on the target.
5. Fire at least a three-shot group at the desired close-range zero distance, then fine-tune your zero as needed.

CARING FOR YOUR RIFLESCOPE

With proper care your Horus Vision riflescope will give you many years of dependable service. Be sure to use your lens covers whenever you are not using your riflescope.

Cleaning the Riflescope Exterior

Clean the riflescope body with a clean cloth lightly moistened with clean water or alcohol. Do not use strong solvents. While cleaning your rifle, be sure to protect your riflescope's lenses by installing the covers that came with the riflescope (or equivalent covers). Ammonia-based bore solvents can destroy the coating on the glass. Avoid spilling gun cleaning solvents anywhere on the riflescope.

In the event of submersion in mud, sand, dirty or salt water, flush the outside of the riflescope with clean water to remove encrusted material and salt. If your riflescope came with screw-on adjustment covers, install them before flushing with water. Wipe the outside metal surfaces dry with a soft cloth then proceed to the step below.

Cleaning Lenses

We recommend using an optics cleaning kit to care for the lenses on your riflescope. The kit should contain an ultrasoft brush, microfiber cloth and cleaning solution.

With the lens facing down to allow the debris to fall away from the surface, remove loose dirt and dust with compressed air and/or a lens brush. Do NOT use high-pressure compressed air from cans (such as found in office supply stores). They can, and have, been known to destroy lens coatings. If there is grit stuck to the lens that won't come off with the compressed air or a brush, flushing the surface with alcohol or distilled water will prevent that grit from being rubbed into the glass by the cleaning swabs.

Using a soft, clean, lint-free cotton swab or lens cleaning cloth, and lens cleaning fluid applied to the swab, clean the lens starting in the center, working to the outside in a circular motion. Make only one pass to the edge where the glass meets the metal. Once you reach the edge of the lens, do not re-use that swab as it will often contain abrasive grit that will scratch the surface. Start over in the center with a new swab and repeat the process until the glass is clean. Use a very small amount of cleaning solution for the last pass to prevent streaks.

Long Term Storage

Keep the riflescope in a cool, dry, dust-free location.

For a list of frequently asked questions, video instruction, information on service and on Horus Vision accessories, visit www.horusvision.com.

LIMITED LIFETIME WARRANTY

Congratulations on your purchase of a Horus Vision product. As provided herein, Horus Vision warrants (the "Limited Warranty") to its original purchasing customer and permitted transferees (collectively, a "Customer") that manufactured products (the "Product" or Products," as the context so requires) sold by Horus Vision will be free from defects in material or workmanship for the intended use and under normal conditions for lifetime of the product from the date of sale of such Product to the initial Customer. Date of sale shall be established by the initial Customer's purchase receipt or by the products serial number if purchased directly from Horus Vision.

Remedies

If Customer believes that a Product is defective and covered by this Limited Warranty, Customer must notify Horus Vision in writing within 30 days of its discovery of the defect, at which time Customer will receive a Return Merchandise Authorization ("RMA") number. The Customer's notice must identify the Product, including by serial number, and contain a detailed description of the alleged defect. The method of such notification must be by completing an RMA Request Form at www.horusvision.com or by telephone at (866) 568-2926. All returns must be accompanied by an RMA number and a purchase receipt.

Horus Vision will investigate warranty claims in good faith and with reasonable promptness. If Horus Vision determines that the Product is defective and covered by this Limited Warranty, Horus Vision will, at its option, either repair or replace the defective Product. Horus Vision may, at its option (a) send a replacement Product to Customer, (b) repair or replace Product on-site, or (c) require Customer to ship the Product to Horus Vision's authorized service facilities. This Limited Warranty does not include the cost of Customer's removal, shipment or reinstallation of Product, which shall all be at Customer's risk and expense. The foregoing are Customer's sole and exclusive remedies for any defect in any Product.

This Limited Warranty may be transferred to a transferee, provided adequate documentation can be provided to establish date of purchase to Horus Vision as set forth above.

Exclusions

This Limited Warranty does not apply to: (a) damage caused by accident, abuse, misuse, negligence, general wear and tear, extreme temperatures, flood, fire, earthquake or other external or extraordinary causes; (b) damage caused by using or operating the Product outside the permitted or intended uses described by Horus Vision; (c) damage caused by the failure to properly install, maintain

and operate the Product in accordance with Horus Vision's recommendations; (d) damage caused by service (including repairs and modifications) performed by anyone other than Horus Vision; (e) any Product that has been modified; (f) any Product that has had its serial number altered or removed; (g) the inability of Customer to use the Product; (h) cosmetic damage, including but not limited to scratches and dents; (i) any accessories such as lens caps, straps and cases; and (j) any batteries, or damage directly or indirectly caused by batteries.

Limitations

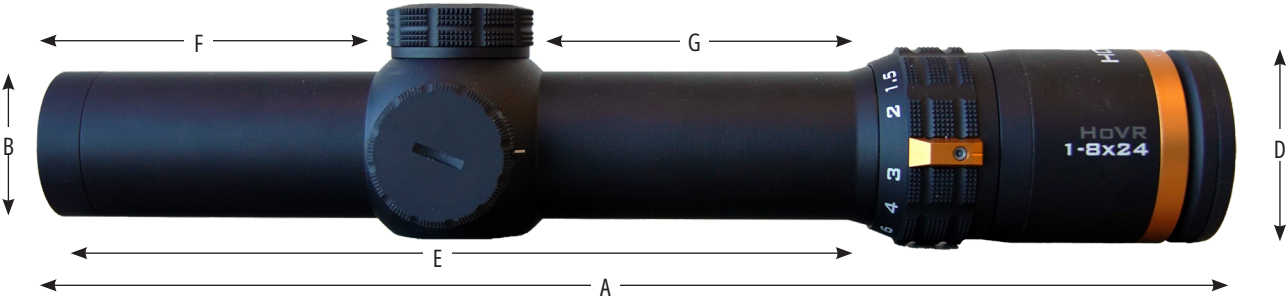
This Limited Warranty is given in lieu of all other warranties, express or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. Horus Vision is not responsible for direct, indirect, special, general, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal or equitable theory, including but not limited to loss of use; loss of revenue; loss of actual or anticipated profits (including loss of profits on contracts); loss of the use of money; loss of anticipated savings; loss of business; loss of opportunity; loss of goodwill; loss of reputation; or any other indirect or consequential loss or damage howsoever caused. Please note that some states and countries do not allow the exclusion or limitation of certain types of damages or claims, so the foregoing limitations may not apply to every Customer. In states or countries where permissible, Horus Vision limits the duration of all implied warranties to the period of this Limited Warranty.

General

This Limited Warranty grants specific legal rights. Customer may also have other rights which vary from state to state (or by country). This Limited Warranty may not be transferred by Customer, except as provided above. No person is authorized to make any modification, extension or addition to this Limited Warranty except an authorized agent of Horus Vision. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired. This Limited Warranty shall be governed by the laws of the State of Idaho, USA, without regard to any conflict of law provisions or the United Nations Convention on Contracts for the International Sale of Goods. Horus Vision reserves the right to discontinue manufacture of any Product or change Product materials, design or specifications without notice.

Be sure to register your warranty at www.horusvision.com/warranty

SPECIFICATIONS



A. Overall Length @ 0 Diopter	267 mm/ 10.5"	Weight	584 g/20.6 oz	Click Value	0.1 mrad /0.25 MOA
B. Objective Outer Diameter	24 mm	Illumination	Illuminated - Red	Eye Relief	83-104 mm/3.26-4.1"
C. Tube Diameter	34 mm/1.33"	Elevation	Capped, Setable	Exit Pupil Diameter	1x: 9.2 mm
D. Eyepiece Outer Diameter	43 mm		zero		8x: 3.0 mm
E. Mounting Length	187 mm/7.3"	Windage	Capped	Diopter Range	+/-2
F. Front Mounting Length	R: 73 mm/2.87"	Focal Plane	First	Field of View	1x: 105.8 ft
G. Rear Mounting Length	F: 66.7 mm/2.62"	Magnification Range	1-8x		8x: 13.2 ft
		Objective Lens Diameter	24mm		1x: 35.3 m
		Internal Adjustment Range			8x: 4.4 m
			Elevation: 29 MRAD		
			Windage: 29 MRAD		

Be sure to register your warranty at www.horusvision.com/warranty



**Customer Service,
Technical & Warranty**

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