



## **Sporter 3-12X44 Rifle Scope**

**INSTRUCTIONAL MANUAL**

## SPORTER 3-12X44



The Sporter rifle scope series features a close focus distance of just 10 yards, making it versatile for a wide range of

shooting scenarios. Whether you're punching paper at short range with a springer or waiting in the blind for the perfect

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shot at a ten-point buck, the Sporter rifle scope delivers outstanding performance.

The Sporter series utilizes reinforced lens mounts to withstand the unique oscillating recoil impulses of spring piston air rifles and punishing magnum caliber center fire rifles

The Sporter scope features a Fast Focus Eye Adjustment to easily adapt to your eyesight. Every lens is polished to

photographic quality for exceptional clarity and light-gathering capability. They are fully multi-coated with our proprietary DiamondTuff14 coating to maximize light transmission.

These scopes deliver brightness, sharpness, and clarity that rival the best optics on the market. Built to meet the exacting standards of hunters and target shooters, this is a scope that performs when it matters most.

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## SECTION 1

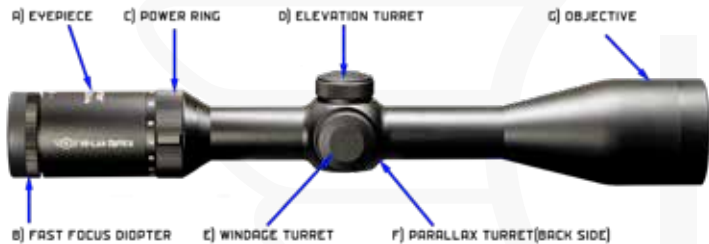
### SPECIFICATIONS AND BASIC DEFINITIONS

| Model      | Power | Obj.<br>(mm) | F.O.V.@<br>100 Yds | Eye<br>Relief | Length | Weight<br>(oz) | Exit Pupil<br>Range | Tube<br>Size |
|------------|-------|--------------|--------------------|---------------|--------|----------------|---------------------|--------------|
| SPG312X44D | 3-12x | 44           | 34.5' - 9.7'       | 3.5"          | 13.5"  | 17             | 14.6 - 3.6          | 1"           |
| SPG312X44M | 3-12x | 44           | 34.5' - 9.7'       | 3.5"          | 13.5"  | 17             | 14.6 - 3.6          | 1"           |

All air-glass surfaces are fully multi-coated with DiamondTuff14 for optimal light transmission. The Elevation and Windage click adjustment value is 1/4 MOA.

There is at least 60 MOA of Adjustment Travel - 30 MOA in all directions from the center of the tube.

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## SECTION 2

### ADJUSTING THE FAST FOCUS EYEPiece AND RHEOSTAT

Fine-tuning the eyepiece is a crucial procedure that can significantly optimize the optic's performance.

#### DIOPTR ADJUSTMENT

The diopter, often referred to as the fast focus eyepiece, serves to bring the reticle into focus. Altering the diopter setting causes marginal movement in the eyepiece lens, which can subtly influence the optic's magnification. Keep in mind that the diopter offers an overall adjustment range of  $\pm 3$ . If you require strong corrective

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lenses, this might impact the reticle's sharpness when viewed through your eye.

To calibrate the diopter for your vision, hold the scope approximately 3.5 inches from your eye and gaze through the eyepiece at a plain, evenly illuminated surface such as a wall or the sky. Adjust the diopter inward or outward until the reticle appears crisply focused.

Lastly, point the scope towards the sky or a uniform surface to confirm that the reticle remains in sharp focus.

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## SECTION 3

### ELEVATION AND WINDAGE TURRETS

The Sporter 3-12X44 scope turrets are calibrated in MOA units. For reference, 1 MOA corresponds to 1.047 inches at a distance of 100 yards. Each click moves the point of impact 1/4 MOA in the direction specified on the turret.

Turning the elevation turret counter clockwise will move the point of impact up. Turning the windage turret counter clockwise will move the point of impact right. Turning either turret clockwise will move the point of impact in the opposite direction.

Within a single revolution, there are 60 clicks, translating to a total

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adjustment of 15 MOA per complete turn.

### **TURRET RE-INDEXING**

After zeroing your rifle, you can reindex the turrets to align the "0" mark on the turret with your rifle's zero.

First, back out the 2 screws located on the top of the elevation or windage turret.

Gently pull the turret away from the scope body and align the "0" mark on the turret with the line positioned on the turret block.

Lastly, tighten the set screws to "finger-tight" or to a torque setting of 3 inch-pounds.

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## SECTION 4

### MOUNTING YOUR SCOPE

To achieve the best accuracy from your rifle, the scope must be mounted properly. You should use a high-quality mount with bases designed to fit your particular rifle.

To mount the scope:

- A. The scope should be mounted as low as possible without touching either the barrel or the receiver.
- B. Prior to tightening your scope rings, look through the scope in your normal shooting position. Adjust the scope (either forward or backward) until you find the farthest point forward (to ensure maximum eye relief) that allows you to see a full field of view.

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- C. Rotate the scope in the rings until the reticle is plumb and the elevation turret is on top.
- D. Tighten the mounting screws to 15 inch-pounds of torque.

**WARNING:** AVOID OVER-TIGHTENING THE RINGS. WE RECOMMEND TIGHTENING SCOPE RINGS TO NO MORE THAN 15 INCH LBS OF TORQUE.

OVER TIGHTENING THE RINGS WILL DAMAGE THE SCOPE, AFFECTING PERFORMANCE OR RENDERING IT INOPERABLE.

BE SURE THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD. ITS REARWARD MOTION WHEN THE RIFLE RECOILS MAY INJURE THE SHOOTER.

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## SECTION 5

### RESETTING THE SCOPE TO OPTICAL CENTER

The elevation and windage adjustments on the Sporter 3-12X44 are preset to the optical/mechanical center at the factory. For all new scopes, you do not need to reset the erector unit to optical and physical center for the scope. However, if you are mounting a scope that was previously zeroed on another rifle, you should reset the scope's internal adjustment prior to zeroing on the new rifle.

Centering the Elevation and Windage adjustments to optical center will maximize the total range of internal adjustment. If the erector unit inside the scope is not centered, the Elevation and Windage adjustments will not give equal travel in all directions.

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To regain the full adjustment range, you need to recenter the adjustments as following:

- (1) Turn the Windage adjustment all the way clockwise until the turret stops turning. **DO NOT FORCE ANY CLICKS!**
- (2) Turn the Elevation adjustment all the way clockwise until the turret stops turning. **DO NOT FORCE ANY CLICKS!**
- (3) Turn the Windage and Elevation Turrets 120 clicks counter clockwise. We recommend splitting the clicks evenly. IE, 20 clicks Windage CCW, 20 clicks Elevation CCW and so forth until 120 clicks have been made for EACH TURRET.
- (4) Now the scope should be approximately in the optical/mechanical center. At optical center, there is about 30 MOA of total adjustment for elevation and windage.

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## SECTION 6

### BORESIGHTING YOUR RIFLE SCOPE

Boresighting can be done either manually, or with a laser boresighting device.

To bore sight manually:

- A. It is necessary to be able to see through the bore from the breech end. In the case of a bolt action, this usually means removing the bolt.
- B. Place the firearm on sandbags or a sturdy rest.
- C. Look through the bore and center the target.
- D. Without disturbing the rifle, look through the eyepiece of the

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Sporter scope. Adjust the Windage and Elevation turrets to position the reticle on the center of the target. Remember, the reticle will move in the opposite of the direction of the point of impact.

- E. Turn the Windage adjustment turret clockwise to move the reticle right and counter-clockwise to move the reticle left.
- F. Turning the Elevation adjustment turret clockwise raises the reticle, while turning the turret counter-clockwise lowers the reticle.

If a large amount of adjustment is required to align the reticle, make approximately one-half of the Windage correction, then approximately one-half of the required Elevation correction. Finish by applying the balance of Windage and Elevation correction.

If you can't see through the bore then it will be necessary to use

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some type of bore-sighting device. When using a bore-sighting device, follow the instructions provided with the bore-sighting device.

NOTE: If your mounting system allows for external adjustments of the scope, the gross adjustments should be made in the mount and then the final adjustments will be made with the scope's internal adjustment.

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## SECTION 7

### ZEROING YOUR SPORTER SCOPE

**DANGER:** IF A BORE SIGHTING COLLIMATOR OR ANY OTHER BORE OBSTRUCTING DEVICE WAS USED; IT MUST BE REMOVED BEFORE PROCEEDING. ANY OBSTRUCTION CAN CAUSE SERIOUS DAMAGE TO THE GUN AND PERSONAL INJURY TO YOU AND OTHERS NEARBY.

- A. We recommend sighting in at 50 yards or 100 yards for most centerfire rifles. You can zero at 10 yards with an air rifle.
- B. From a rested position, fire three rounds at the target.
- C. Observe the center of the group on the target and adjust the Windage and Elevation turrets as needed to bring the point of aim to point of impact.

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- D. Repeat Step B & C until you are satisfied with the zero setting.
- E. Once the scope has been zeroed, you can re-index the turret to line up with the adjustment indicator arrow. You can reference Section 3 for more details.

The Sporter Scope adjustments are calibrated in Minutes of Angle (MOA). Each click of the adjustment changes bullet impact at 100 yards by 1/4 MOA (approximately 1/4" @ 100 yards).

To calculate the exact value each click moves the point of impact at distances, use the following formula:

$$\text{Adjustment Click Value (in.)} = ((\text{Distance to Target in Yards} / 100) * 1.047) / 4$$

Example: You are shooting at a 200 yard range.

Divide 200 by 100 which equals 2.

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Multiply the result by 1.047 and you get 2.094 inches. Thus at 200 yards, each click will move the point of impact 0.52".

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

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## SECTION 8

### 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 with the microfiber lens cloth provided or an optical quality lens wipe.
- C. Keep the protective lens covers in place when the scope is not in use.
- D. Remove any external dirt or sand with a soft brush so as to

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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 threaded 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 compartment 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 9

### DIAMONDTUFF GUARANTEE

Hi-Lux, Inc. warrants its products against defects arising from faulty workmanship or materials, for the lifetime of the product. Normal wear and tear, accidental or intentional misuse, and theft are not covered under this warranty policy. After one year, optical components may need to be serviced as part of general optic care. Such services are not warrantable.

Any attempt to alter, dismantle or change the standard specifications

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of the products, will make this warranty null and void. This warranty is made to the original purchaser of the goods, and applies only to the products purchased in the United States. The warranty is transferable.

Warranty obligation is limited to the repair or replacement of any product returned to Hi-Lux, Inc. that 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, which the occasional appearance of some small particles is common and not a warrantable repair. Hi Lux provides a two-year warranty for the electronic components that are contained on the products.

Hi-Lux, Inc. reserves the right to request proof of purchase and

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purchase date. Hi Lux assumes no liability for any incidental or consequential damages, theft, 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. 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.

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All returns are to be shipped prepaid direct to Hi-Lux, Inc. including a check or money order in the amount of \$21 to cover postage and handling. Additional fees will be applied to all returns from outside of the United States.

Attn.: Warranty & Service Dept.

Hi-Lux, Inc.

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Torrance, CA 90505

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E-Mail: [techservice@hi-luxoptics.com](mailto:techservice@hi-luxoptics.com)

[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

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rights and you may have other rights, which vary from state to state.

As defined by federal law, this is a limited warranty.



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