



# STEINER 3x-12x-56mm Military Scope User's Manual

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#### Introduction

STEINER is one of the largest manufacturers of high-quality optics in the world. STEINER products represent the highest level of precision and technology. They are field-tested and combat proven and designed to withstand the toughest conditions and rigors of daily use in the field.

This STEINER Military Riflescope will deliver precision accuracy and performance at short and long ranges in the field or on the range. It is ideally suited for tactical, military and law enforcement operations.

This manual outlines the basic operation and maintenance of the scope.

#### **Eyepiece Focusing**

The eyepiece can be focused so that the reticle appears sharp and black to your eyes. Adjusting the focus is quick and easy to do. Just follow this procedure.

- 1. Point the scope at the sky or a plain wall and take a quick glance through the scope. If the reticle appears sharp and black, no further adjustment is necessary.
- 2. If not, use quick glances through the scope while rotating the focus ring until the reticle pattern is sharp and clear.

**NOTE:** Do not look through the eyepiece as you turn the focus ring. Your eyes will adjust to the out-of-focus condition.

#### **Parallax/Focus Adjustment**

Parallax is the apparent movement of the reticle in relation to the target when the eye is not directly in line behind the center of the scope. Images from different distances focus in front of or behind the scope's reticle. Parallax is more noticeable with higher magnification scopes and scopes with a larger objective lens.

To use the parallax/focus adjustment, rotate the knob on the left side of the adjustment turret until the numeral corresponding to the known target distance lines up with the reference mark. If the distance is unknown, rotate the adjustment knob until the target image is sharply focused. When the scope is set parallax-free for the distance you are viewing, you should be able to move your eye sideto-side or up and down without seeing the reticle move appreciably in relation to the target.



#### **Windage / Elevation Adjustment**

The windage and elevation knobs are designed for precise adjustment. The dials are calibrated so that 1 click = 0.1 mRAD.

The windage knob, located on the right side of the tube, is calibrated for up to 5 mils of adjustment left and right. Adjustments are indicated by detents and audible clicks.

Hard stops at both ends of the adjustment range prevent shooters from getting lost on the dial.

For shooting at extreme distances, the elevation knob offers up to 19.5 mils and two



full revolutions of adjustment. The first revolution or 100 clicks are indicated by white scale on the knob. On the second revolution (101 to 195), a small elevation Rotation Indicator pops out at the base of the turret to remind the shooter to use the second scale indicated by grey numbers on the dial.

This riflescope is shipped from the factory with the optical center set below center. Without tapered bases the initial sight-in or bore-sighting will likely produce an initial point of impact considerably high. Because of the Zero Stop feature, as shipped from the factory the scope has no immediate capability for downward point of impact adjustment.

STEINER offers this riflescope with a choice of windage/ elevation knobs that offer both Clockwise and Counterclockwise adjustment. Use the following procedure whenever you need downward point of impact adjustment:

1) Turn the elevation adjustment knob clockwise to "0".

(Steps 2-5 below are for scopes with <u>clockwise</u> windage/elevation adjustment. For counter-clockwise knobs, just reverse the indicated direction.)

- 2) Use the hex wrench supplied with the scope to loosen the set screws on the elevation adjustment knob located just under the top of the knob.
- 1 to 10 to 1
- 3) Pull up slightly on the adjustment knob to the second white hash mark on the turret. Turn the knob clockwise slightly more than the number of mils needed to achieve zero.
- 4) Retighten the set screws. Adjust the elevation down the required amount.
- 5) Once the elevation adjustment is complete, once again loosen the two set screws and reset the knob to "0". With the screws loose, push down firmly on the knob until it is fully seated on the turret base and then retighten the set screws.

NOTE: When retightening set screws on elevation knob, maintain pressure on the top of cap to ensure proper seating of adjustment dial. If the knob is removed, it is possible to rotate the Rotation Indicator actuator, which controls the elevation rotation indicator pin, to a position which will prevent full rotation of the knob when reinstalled.

If the knob locks up in the middle of the two turns, the Rotation Indicator actuator is out of position. When this occurs, return the knob to zero, loosen the set screws and remove the cap exposing the actuator. Rotate the actuator fully counter-clockwise until it stops against the adjacent plate. The Rotation Indicator pin will be retracted. Reinstall the knob and turn it to zero before retightening the set screws.



#### **Illuminated Reticle Adjustment**

The STEINER Military Riflescope features an illuminated reticle that makes it easier to see the reticle in low light conditions. The intensity of the illumination is controlled by the rotary illumination switch located on the left side of the adjustment turret. The switch has 11 intensity levels and a "battery saver" position in between each level that turns off the illumination. The "Off" positions at the minimum and maximum ranges turn the circuit off completely and should be use when the scope is not in use. Each level also has a detent to prevent unintended changes during use.

The reticle is powered by a 3-volt lithium cell battery #CR2450. To install a new battery, simply unscrew the battery cap on the rotary switch and install the new battery flat side (+) up. It is advisable to remove the battery for long term storage (over a month).

#### **Mounting the Scope**

This riflescope requires 34mm rings. STEINER recommends using high-quality, solid steel rings and bases. Quality components ensure that your scope will remain safely and securely mounted, and will provide the maximum accuracy. Read the manufacturer's directions regarding the installation of mounts and rings.

#### Accessories

STEINER offers a range of accessories including anti-reflective devices for this scope. The objective lens is designed to accommodate standard anti-reflective devices, sunshades, filters and other accessories that fit a 63mm objective.

#### **Care & Maintenance**

This STEINER Military riflescope is fully waterproof and fogproof. To protect the objective and ocular lenses, it comes equipped with flip-up scope caps. In the event that the lenses are subjected to dust, dirt or mud, follow these steps to clean and protect the lens surface. Failure to remove grit before final cleaning is sure to damage lens coatings.

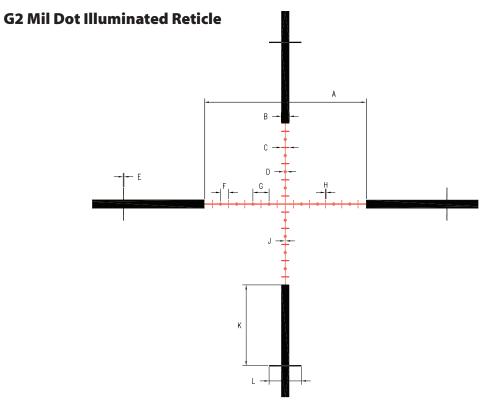
Coarse dirt/debris must be removed from the lens surface. The most convenient way to clean a lens surface is to use a Lens Pen. Position the scope so particles will fall away from the lens, and then use the Lens Pen or soft brush to gently whisk away the debris, while blowing on the lens to dislodge the particles. For heavy dirt, like dried mud, use a spray of clean water or lens cleaning fluid to remove the dirt.

Your STEINER riflescope will provide a reliable performance given reasonable care and treatment. All moving assemblies are permanently lubricated. Only occasional cleaning of the outside of the scope and the exterior lenses is required.

Never disassemble your scope. Disassembly by anyone other than our factory will void the warranty. If you have any other problems with the STEINER riflescope, return it to the factory for repair.

For further information, please visit our web site at www.steiner-military.com.



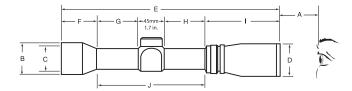


## **Reticle Subtensions:**

Units	Α	В	C	D	E	F	G	Н	J	K	L
mRad	10	0.5	0.5	0.2	0.06	.5	1	0.06	0.06	5	2
in/100 yd.	36	1.8	1.8	0.72	.22	1.8	3.6	.22	.22	18	7.2
cm/100 m	100	5.0	5.0	2	0.6	5	10	0.6	0.6	50	20

## **Specifications:**

Magnification	3x - 12x	Diopter Setting	+2 to -3
Objective Size	56mm	Reticle	G2 Mil-Dot
Tube Diameter	34mm	Elevation Adjustment Knob	Resettable to "0" w/wrench
Field of View @100 (m/y)	10.4 - 2.80 / 11.3 - 3.06	Windage/Elevation Adjustment	1 cm (0.10 mRAD)
Eye Relief (mm/in.)	96 - 77 / 3.7 - 3.0	Elevation Range @ 100 m	195 cm (19.5 mils)
Exit Pupil (mm/in.)	16.4 – 4.5 / 0.64 – 0.17	Windage Range @ 100 m	± 48cm (4.8 mils)
Twilight Factor	13.79– 26.25	Parallax /Focus Adjust. Knob	Turret Mounted, Rotary
Length (mm/in.)	395 / 15.5	Parallax /Focus Adjustment	50 m to Infinity
Weight (grams/oz.) with caps	1,030 / 36.3	Operating Temperature	-25° / +63°C
Battery	CR2450	Illumination	Rotary Digital Control



# **Scope Dimensions:**

Α	В	C	D	E	F	G	H	1	J
Optimum Eye	Objective End	Clear	Ocular End Dia.	Scope	Scope	Scope	Scope	Scope	Scope
Relief	Dia. (mm)	Objective Dia.	(mm)	Dimension	Dimension	Dimension	Dimension	Dimension	Dimension
High-Low		(mm)		(mm/in.)	(mm/in.)	(mm/in.)	(mm/in.)	(mm/in.)	(mm/in.)
(mm/in.)	63.7	56	42.6	395 / 15.5	117 / 4.6	48 / 1.8	91 / 3.5	94/3.7	184 / 7.2
96-77									
3.77 - 3.03									

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