



LN-SPRS-4

SPECIAL PURPOSE RIFLESCOPE 4X

OPERATOR'S MANUAL

IMPORTANT: Please read this manual in its entirety prior to using this device!

IMPORTANT INFORMATION:

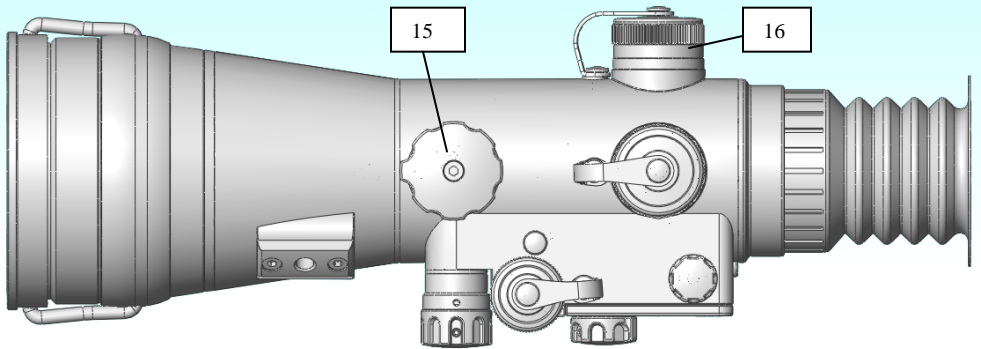
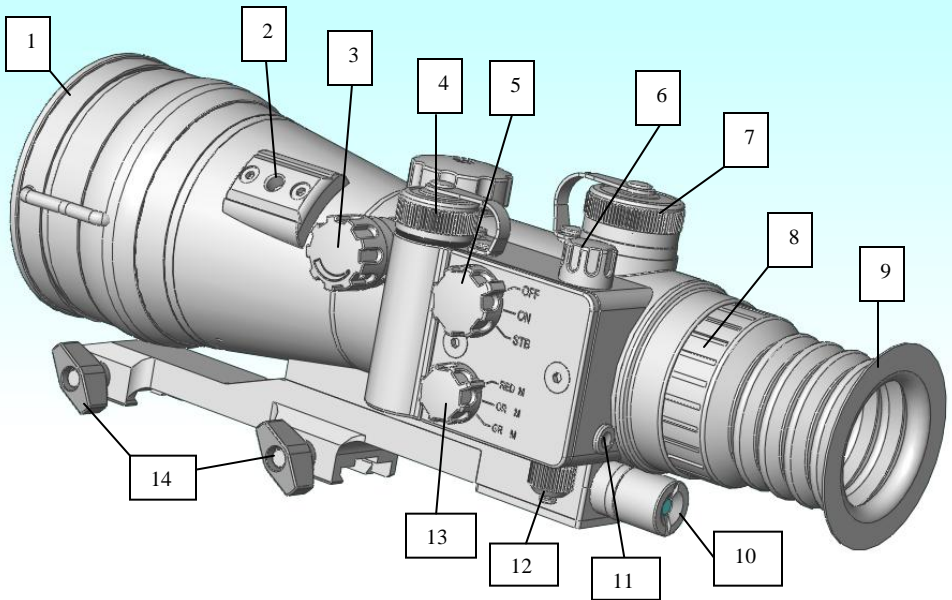
NEVER:

1. Intentionally turn on the unit without protective lens cover during daylight or in a well-lit area
2. Take precautions not to allow direct projected light into the objective lens (automobile headlights, flashlight beams, laser beams)
3. Try to disassemble the unit by yourself or by anyone who is not an authorized Luna Optics technician. Doing so may result in injury and void the warranty.
4. Leave the battery inside the unit during particularly hot weather, overnight or for long periods of time – the battery may overheat and leak or corrode, which will render the unit inoperable and will void the warranty repair
5. Submerge the unit into water

TECHNICAL SPECIFICATIONS:

Image Intensifier Type.....	ITT / L3 Omni-VIII / ICT RC
Typical Image Resolution.....	64-72lp/mm
Typical FOM.....	1,700
Typical Luminous Sensitivity.....	2,000 μ A/lm
Typical SNR.....	26
Image Gain.....	Manual, Variable
Image Magnification.....	4.0x
Field Of View.....	10°
Viewing Distance.....	600m (1,926ft) at ¼Moon
Focusing Distance.....	10m (33ft) - ∞
Objective Lens.....	f 1.5/110mm
Reticle Type.....	Illuminated MIL-DOT
Reticle Colors.....	RED/ORANGE/GREEN
Reticle Adjustments (1 click).....	1/3" at 100yds
Recoil.....	ITT tube (5.56NATO), L3 tube (7.62NATO), ICT RC tube (.50BMG)
Power.....	1x3V Lithium (CR123), or 1xAA type
Operation time.....	30hrs (CR123) / 10hrs (AA)
Dimensions.....	273mm x 97mm x91mm (10.7" x 3.8" x 3.6")
Weight.....	1,180g (2.6lbs)
Operating Temperature.....	-30°C / +50°C (-22°F / 122°F)

LN-SPRS-4, SPECIAL PURPOSE RIFLESCOPE



Glossary:

- 1 – Protective Lens Cover with IR Filter**
- 2 – Accessory (IR) Mounting Plate**
- 3 – Manual Gain Control**
- 4 – Battery Compartment Cover**
- 5 – Power Selector (ON/OFF/STB)**
- 6 – Reticle Illumination Control**
- 7 – Reticle Elevation Adjustment**
- 8 – Eyepiece Focusing Ring**
- 9 – Rubber Eyecup**
- 10 – Moisture Control Cartridge**
- 11 – Light Indicator**
- 12 – Remote Output**
- 13 – Reticle Color Selector**
- 14 – Weapon Mount (Weaver Mount shown)**
- 15 – Distance Focus Control**
- 16 – Reticle Windage Adjustment**

INSTALLING THE BATTERY:

Your night vision unit operates on one 3V Lithium battery, also known as 123type. It is also possible to operate this unit on one standard AA-type battery by removing the internal spacer in the inside of the **Battery Compartment Cover (4)**. Please note that when unit is operating on a single AA-type battery, the operating time will be reduced compared to the 3V Lithium battery (*see technical specifications*).

To install the battery, remove the **Battery Compartment Cover (4)**. Install the battery with + side going in first. Once the battery is inside, replace the cover.

Your night vision scope is equipped with a battery **Light Indicator (11)**, which lights up **green** during scope operation. When the battery power decreases, this indicator will turn **red**, indicating it may be time to change the battery. Please note that even if the indicator is red – it is safe to operate the scope until the battery completely discharges.

TURNING THE UNIT ON AND OFF:

Your night vision unit has a 3-Mode ON/OFF/Standby Selector (5), which combines the function of turning the unit ON and OFF, as well as putting the unit in a Standby Mode (only operable with the optional Remote Control Pad attached). To turn the unit ON, first raise the Protective Lens Cover (1) up (**ONLY IN THE DARK!**) and rotate the Power Selector (5) down one turn to the ON position. The Light Indicator (11) will turn green. Look through the Rubber Eyecup (9) – you should see the green glow. Even if the image is not yet sharp, the unit is operating. To turn the unit OFF, flip the Power Selector one dial back (up) to the OFF position. The green glow will disappear immediately indicating the unit is OFF. Always replace the Protective Lens Cover (1) after the unit is turned off and no longer is in use.

FOCUSING THE UNIT:

To obtain the sharpest image, you must first rotate the Eyepiece Focusing Ring (8) in either direction, until you decide at what diopter setting the image is at its best. Next, rotate the Distance Focus Control (15) until the image is at its sharpest. You may have to repeat the process again, until the image is sharp and clear. Once the clear image is obtained, you no longer

need to adjust the Eyepiece Focusing Ring, just rotate the Distance Focus Control to adjust to the distance of the object you are viewing.

OPTIONAL INFRARED ILLUMINATOR:

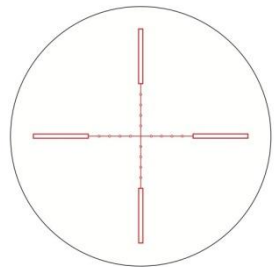
The LN-SPRS-4 scope features a Generation-3 Image Intensifier Tube which has enough light gathering ability to function outdoors without the help of an Infrared Illuminator. It may however be beneficiary to purchase an extended range IR illuminator for shooting in particularly dark conditions (cloudy night, thick forest) or small game hunting. An Infrared Illuminator will provide additional light, invisible to the naked eye and is especially useful in very dark conditions allowing you to better identify targets and also see what is behind the target. Mounting the optional IR illuminator is easy and takes only seconds, as the scope has a special Accessory Mounting Plate (2) already built-in.

For distances up to 300m (324yds) you may purchase an extended range LED IR illuminator (Model LN-EIR2) by contacting your dealer, or e-mailing us at: info@lunaoptics.com (please indicate the model number of the unit (LN-SPRS-4)). You may also see the list of our online retailers by visiting our website at: www.lunaoptics.com and clicking on “Where to Buy” section.

When using the infrared illuminator it is important to remember that like a regular flashlight, as the distance increases, the intensity of the infrared light fades away.

ADJUSTING THE RETICLE:

Your night vision unit is equipped with a collimated RETICLE, which can be seen in the center of the field of view. To turn the reticle on, rotate the Reticle Illumination Control (6). As you rotate the Switch clockwise, the reticle will turn on. Further rotation of the Illumination Control (6) will cause the brightness of the reticle to increase.



The reticle color can be changed from RED to ORANGE to GREEN via the Reticle Color Selector (13)

The reticle is also equipped with Windage (Horizontal) Adjustment (16) and Elevation (Vertical) Adjustment (7). The Windage Adjustment turret is located on the side of the scope and the Elevation Adjustment turret is on the top of the scope. To adjust the turrets, remove the covers by turning them counterclockwise and rotate the turrets click-by-click to the desired reticle position, while looking into the eyepiece. One click on each turret represents 1/3" adjustment at 100yds.

ZEROING THE SCOPE:

Attach the LN-SPRS-4 scope securely onto the weapon with help of the supplied Weapon Mount (14). Set the weapon on a solid base, or bipod. Remove the Windage and Elevation turrets covers. **If sighting during the day, please remember to keep the protective lens cover (1) on at all times!** If sighting at night or in dark conditions (hours of dusk or dawn) slide the Protective Lens Cover on top or bottom of the scope and then turn the scope to the ON position. **Do not zero the scope during sunny and particularly bright light conditions even with cover on.**

Set the reticle illumination to a comfortable level. View the position of the reticle through the rubber eyecup. If the reticle is not in the center of the image, move it to the center by adjusting (rotating) the scales of horizontal and/or vertical adjustments (11). Once the reticle is in the center of view, align the weapon with the target, so that the target is in the middle of the cross section of the reticle. Make the control shot. Observe the bullet impact on the target and, if necessary, make additional corrections via Windage and Elevation adjustment turrets. If necessary, repeat the shots until you can see the correlation between adjusting the scales and the bullet impact. Once finished, replace the covers and (if sighting at night) close the protective lens cover. Do not forget to switch the unit to the OFF position.

USING OPTIONAL REMOTE CONTROL:

Your scope is equipped with capability to utilize optional Remote Control Pressure Pad. When so equipped, unit can be turned ON/OFF by a pressure pad connected to the scope via special flexible cord. To connect the Remote Control Pad, remove the Remote Output Cover (12) by unscrewing it counterclockwise. Attach the cord paying attention to the exact connection layout (similar to attaching S-Video cable). Then affix the Pressure Pad onto the weapon where it can be accessed comfortably with the palm during operation.

HUNTING WITH NIGHT VISION RIFLESCOPE:

This device can be adapted to various weapon calibers for hunting at night (where allowed by law) or during the hours of dusk and dawn where natural light is too low to clearly see the target with a daylight scope. Please take time to learn your state and local laws and regulations concerning hunting with night vision equipment. You may get information by accessing this site: <http://www.huntinfo.org/> or by contacting your local authorities. Luna Optics cannot be held responsible for misuse or violation of any state or local laws concerning the purchase and use of night vision riflescopes.

TROUBLESHOOTING:

1. Unit does not turn on:
 - a) Please check if the battery is inserted according to the polarity
 - b) Please make sure the battery is good
 - c) You may be turning the unit on in a very dark area with the lens cover still on the unit
 - d) You may have turned the unit on in a very well lit area without the lens cover and the unit has shut off for protection – immediately turn off the unit and do not turn it back on until you are in the dark condition.
2. Unable to obtain sharp and clear image:
 - a) You may need to repeat the process of rotating the Eyepiece Focusing Ring (8) and Distance Focus Control (15) several times until you get a good feel of it
 - b) You may be viewing an object that is too close – the minimum focusing distance is approximately 10m or 33ft
 - c) You may have dirty objective or ocular lens – you may clean them with lens cleaning solution and a soft lens cleaning cloth
3. There are black dots (specs) in the field of view:

THIS IS NORMAL – BLACK DOTS ARE MICROSCOPIC PARTICLES INSIDE THE TUBE AND RESULT FROM THE TUBE MANUFACTURING PROCESS, WHICH IS NEVER COMPLETELY SPEC-FREE

WARRANTY INFORMATION:

Your night vision riflescope is guaranteed to be free of manufacturing defects for a period of two (2) years from the date of purchase. One exception is the Intensifier Tube, which is guaranteed for one (1) year. Please refer to the enclosed warranty card for complete warranty details.

NOTES:

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