MODEL #	26015T	26016T
Magnification, x	2.5	3
Objective lens diameter, mm	50	60
Image intensifier tube, generation	1	1
Resolution, lines/mm	35	35
Field of view, deg	13	11
Detection range, m/yds*	200/219	200/219
Minimum focus range, m/yds	5/5	5/5
Diopter setting, D	±3	±3
Battery type/ Voltage	2 AA batteries** / 3V	
Estimated battery life w/out IR under +20°C/68°F, hour	70	70
Eye relief, mm	45	45
Operating temperature range	-30°C to + 40°C / -22°F to +104°F	
Water intrusion rating	IPX4	IPX4
Dimensions:		
Length, mm/inch	270/10.6	307/12
Width, mm/inch	90/3.5	90/3.5
Height, mm/inch	100/3.9	100/3.9
Weight, kg/oz***	≈1.0/35.2	

# ENGLISH

\* In natural night conditions, quarter

- moon. \*\* We recommend using Alkaline
- We recommend using Analine batteries as they have a longer life. Weight may vary based on the type of weapon mount. The SENTINEL comes assembled in different scope/mount combinations to accommodate rifles with top rails or side mounting plates.

#### THE SENTINEL KIT INCLUDES THE FOLLOWING:

- SENTINEL Riflescope
- Protective carrying case
- Remote control
  Operating manual
- Warranty card

The SENTINEL is a complex electro-optical device designed using innovative technology. It is strongly recommend to read and follow carefully all the instructions before using the scope.

For improvement purposes, design of this product is subject to change.

### DISTINGUISHING FEATURES OF THE SENTINEL

- Two-color range finding reticle
- High quality image and resolution
- High magnification, 2.5x or 3x
- Close observational range of focus 5 meters (5 yards)
- Lightweight and extremely durable titanium body
- Built-in high-power PULSE non-hazardous IR illuminator with beam focus
- Incremental reticle brightness adjustment
- IPX4 rating against water intrusion
- Precision internal windage/elevation adjustment
- Ergonomic design
- Quick power-up
- Vertical positioning of the battery ensures uninterrupted power supply when shooting
- Remote stabilized power supply
- ECLIPSE protective flip-up objective lens cover
- Weaver MIL-STD-1913 rail
- Protective carrying case
- Remote control with secure attachment
- Photo and video adaptable

Warning: Failure to follow the instructions and guidelines outlined in this instruction manual can cause damage to the scope, and it will void any applicable warranty.





### **OPERATING INSTRUCTIONS**

The SENTINEL night vision riflescope is intended for observation and shooting at dusk or during nighttime hours. It is a passive starlight device, and in most conditions does not require an artificial or IR light source. The scope is built with a high performance Gen1 image intensifier tube. The built-in IR illuminator enhances a viewing ability in environments of absolute darkness. Power supply, with the voltage stabilization, works up to 70 hours using 2 AA batteries. Low batteries do not affect aiming ability. Additional remote stabilized power supply was designed for optimized power consumption, which ensures a consistent aiming point in conditions of continuous power draw or drop in temperature.

The SENTINEL is a universal night vision scope, which is ideal for night observation and hunting.

### USING THE SENTINEL

The SENTINEL was designed to provide many years of reliable service. To ensure longevity and performance, it is necessary to follow all procedures and guidelines outlined in this manual.

#### Warning:

The SENTINEL is not recommended for use with cartridges producing recoil rating higher than 3700 joules or calibers in excess of 7.62/.300. The manufacturer's warranty will be voided if damage is caused by caliber cartridges greater than 7.62/.300, hand made cartridges or shooting from a smooth-bore barrel.

- Do not remove the lens cap in a lit area if the scope has been activated or if the eyepiece is emitting a green glow.
- Exposure to bright light can damage the image intensifier tube (IIT).
- Do not remove the objective lens cover in a lit area immediately after using the scope. It will stay activated for 20 minutes after the unit has been turned off.
- The scope has an IPX4 water resistance rating. It is water resistant and can be used in inclement weather conditions.
- Do not attempt to repair or disassemble the scope!
- Clean the scope's optical surfaces only if necessary, and use caution. Remove dust and sand by blowing air across the optic surface, then apply lens cleaning fluid for multi layered optics onto a soft cloth or tissue and wipe carefully. Do not pour any fluid, including alcohol, onto the lenses directly.
- The scope can be used in temperatures ranging from -30°C to +40°C. However, when it is brought indoors from cold temperatures, wait 3-4 hours before using the unit.
- Consult a qualified gunsmith if there is difficulty attaching the scope firmly to a rifle or if there is uncertainty about the right type of mount. The weapon mount can be deformed or destroyed by shooting with a riflescope that is not mounted correctly.

• Regular maintenance of the scope will help keep the device free from malfunctions and untimely wearing of parts and connectors.

Failure to observe these warnings will void the manufacturer's warranty.

# **BATTERY INSTALLATION**

- Turn the knob of the battery compartment cover 90° counterclockwise (1) to match the red dot on the knob with the red dot on the battery compartment cover.
- Remove the cover by raising it by its lug.
- Slide in two AA batteries so that the "+" and "-" match the polarity on the inner side of the cover; rechargeable AA batteries may be used.
- Close the cover of the battery compartment cover and turn the knob of the cover 90° clockwise.



# **OPERATING THE SENTINEL**

Warning: It is strongly recommended to test and operate the SENTINEL in dark conditions or at night time.

- Install the batteries according to the directions in the section entitled "BATTERY INSTALLATION".
- Enter a dark environment.
- Remove the objective lens cap by sliding it up on top of the objective lens (2).
- Activate the scope by turning the power switch to the "ON" position (3); the indicator will turn green.
- A red indicator means that batteries are low and the scope will be working with the IR illuminator turned on for 30 more minutes.
- Select the color of the reticle, green or red, by pushing the button (5).
- Adjust the reticle brightness by rotating the switch (4).
- Please select an object of observation at a distance of approximately 100 meters (about 110 yards) away.

- Set up the objective focus ring knob (6) to be aligned with the mark "100"; it will become tighter as it reaches the mark, which is normal.
- Focus on the selected object by rotating the eyepiece ring (7).
- If needed, turn on the IR illuminator (8) by turning the switcher (3) to the "IR" position. IR red LED indicator lights up.
- Rotate the IR illuminator lens ring until the IR illuminator beam is focused.
- If after all the settings are completed and the image is still not clear, despite the distance and conditions do not rotate the eyepiece ring (7). Refocus by turning the objective lens ring (6) only and adjusting the IR illuminator (8) beam focus.
- To turn off the SENTINEL, simply turn off the scope and close the cover over the objective lens.
- After mounting the scope onto a rifle for the first time, zero it by following the instruction in section SIGHTING OF THE SENTINEL.

# Note: The SENTINEL and its IR can be activated using the remote control.



#### SIGHTING IN THE SENTINEL

Warning: Be sure to follow proper safety instructions provided by the weapon manufacturer or vendor.

To test the scope in a lighted area, protect the intensifier by keeping the lens cover over the objective lens of the scope. Regardless of being in the "ON" or "OFF" position, the IR illuminator will not have any effect in a lighted environment.

Note: The sighting of the scope should be performed under the same environmental and temperature conditions as the ones that the scope will be exposed to during its use.

In case when the aiming point (the center of the reticle) does not match the center of target, adjust by turning the windage/elevation knobs (11) RIGHT & UP until the aiming point (the center of the reticle) matches the center of target.

Take 3-4 control shots trying to be as accurate as possible aiming at the center of the target.

Examine the results. If the results are noticeably skewed to one of the sides from the center, adjust by turning the windage/elevation adjustment knobs RIGHT & UP as needed. Repeat control shots until the aiming point matches the center of target. Remember: one click equals 20 mm (3/4 inch) at a distance of 100 meters (110 yards).

## **RETICLE AS A RANGEFINDER**

The range finder reticle in your SENTINEL was designed to assist you in determining the range of your target.

The range can be determined using marks (chevrons) on horizontal line as well as bars on vertical line of the reticle.

Note: To utilize this feature, the SENTINEL needs to be sighted at 50 meters (55 yards).

#### HORIZONTAL SCALE

If a 0.5 meter (1.6') wide target fits between the two closest center marks on the horizontal line of the reticle, the target is 50 meters (55 yards) away.

If the same target fits between the marks located just beneath the horizontal line of the reticle, the target is 100 meters (110 yards) away.

If the same target fits between the marks located above the horizontal line of the reticle, the target is 25 meters (27 yards) away. Please see a drawing below.

#### VERTICAL SCALE

The four short horizontal bars are located on the main vertical line. If a 0.5 meter (1.6') high target fits between the top marks and the bottom mark right below the horizontal line, the target is 25 meters (27 yards) away.

The other two horizontal bars on the vertical line correspond to 50 meters (55 yards) and 100 meters (100 yards) accordingly.

Note: If the determined range is 100 meters (110 yards), aim at the center of the target using the horizontal bar below the center crosshairs.

Note: It is possible to select the color of the reticle of the SENTINEL.

Red is best when used in clear viewing conditions. Green is preferable for use when viewing is obscured.



Picture: Target Size .5m - Distance 100m/110y

# USE OF THE REMOTE-CONTROL CONSOLE

The Sentinel is supplied with a remote-control console. The console has three buttons:

1) "ON" button (13) turns on/off the riflescope (fixed when pressed).

2) "IR" button (14) - turns on/off the built-in IR Illuminator (fixed when pressed).

3) **"Quick start" button (15)** - quick start-up of the riflescope and IR illuminator (the device works only when the button is kept pressed). After this button is released, the riflescope turns off, IR Illuminator and reticle go out, but tube's residual green glow remains for some time afterwards.



# INSPECTION

It is recommended to inspect the SENTINEL before each use for:

- Body condition; cracks, deep dents and corrosion are not acceptable.
- Check that the scope is firmly attached to the rifle.
- Objective lens, eyepiece and IR illuminator condition; cracks, finger marks, dirt, water drops and other stains are not acceptable.
- Make sure not to use depleted batteries or batteries that show stains of electrolyte, salt or acid leaks; these conditions may result in damage to the scope.
- Check that the power switches (3) and the reticle brightness knob (4) are functioning normally.
- Check that the objective lens ring (6) and the eyepiece ring (7) are movable.

# MAINTENANCE

It is recommended that technical maintenance should be performed on the SENTINEL at least 2 times a year; tasks for technical maintenance include:

To clean the exterior of the scope of dust, dirt and moisture using a dry tissue with a few drops of gun oil or similar substance applied.

To clean the electrical contact lead located in the battery housing using pure alcohol.

To examine the lenses of the eyepiece, objective lens and IR illuminator and blow off sizable particles of sand and dust; clean the lenses only if necessary.

Do not pour liquids directly onto the lens surface when cleaning; apply solution to a clean, dry cloth and then proceed to clean the lens.

Warning: Please use extreme caution when handling hazardous substances, such as alcohol.

# THE SENTINEL MAGNIFIER LENS 2.5x50

The NVRS magnifier lens attachment accessory (#29091) helps increase magnification of the SENTINEL with an objective lens diameter of 50mm up to 1.75 times. Screw the magnifier lens onto the objective lens of the scope according to the instruction manual for the "NVRS 2.5x50 Doubler". Sight in the scope after the magnifier lens is attached due to movement of the reticle.

# ADDITIONAL WEAVER MIL-STD-1913 RAILS

The SENTINEL has an additional Weaver rail (12) on the left side of the body. With the help of this mount it is possible to install:

- The Yukon IR Flashlight with mount (# 29072);
- The Yukon Directional Microphone with NVRS adapter (# 27022).

### STORAGE

Always keep the scope in its carrying case in a dry, well ventilated space. Storage temperature should not be below  $\pm 10^{\circ}$ C ( $\pm 50^{\circ}$ F), and humidity no higher than 70%. Remove the batteries if the scope will not be used for more than 1 month.

#### TROUBLESHOOTING

Listed below are some potential problems that may occur when using the SENTINEL. Carry out the recommended checks and troubleshooting steps in the order listed. Please note that the table does not list all of the possible problems. If the problem experienced with the scope is not listed, or if the suggested action meant to correct it does not resolve the problem, please contact the manufacturer.

Problem	Possible cause(s)	Corrective action
The riflescope	The batteries have	Reinstall the batteries
does not turn on.	been installed incorrectly.	with the correct polarity
		orientation.
	The total battery charge	Install fresh batteries.
	is less than 2.0 V.	
	Oxidized contact points in the	Clean the battery compartment,
	battery compartment due to	focusing on the contact points.
	"leaky" batteries or contact	
	points becoming exposed to	
	a chemically reactive solution.	
The red reticle is blurred	The eyepiece is not adjusted	Adjust the eyepiece according
and can not be focused	correctly.	to the instructions in the "OPERATING THE
with the eyepiece.		SENTINEL" section.
With a crisp reticle image,	The eyepiece is not adjusted	Adjust the eyepiece according
the image of the target	correctly.	to the instructions in the
at least 30m away		"OPERATING THE
is blurred.		SENTINEL" section.
With a crisp reticle image,	Dust and moisture are covering	Clean the lens surfaces with a
the image of the target	the	soft cotton tissue or cloth.
at least 30m away	outside optical surfaces.	
is blurred.	Condensation collects on the	Let the unit dry by leaving it in
	inside of the objective and the	a warm environment for 4
	eyepiece lenses, or is on the	hours.
	optical surfaces of the electronic-	
	optical converter, and may be	
	caused by the scope fogging	
	due to a rapid change in	
	temperature; for example, when	
	the scope is brought from a	
	cold into a warm environment.	
Distinct black dots or	The dots are cosmetic	No need to take corrective
specks	blemishes resulting from IIT	action

on the screen while the image is focused. The scope or the IR do	production processes and do not interfere with the reliability or performance of the scope; the size of the dots are specified in the technical requirements for IIT's and the scope itself. The scope was activated by	or return the scope. Turn off the scope and the IR
not turn off via the "ON/OFF" switch on the scope.	remote control.	by using the remote control.
The displacement of the reticle while shooting.	The scope is not mounted securely.	Check that the scope is firmly attached to the mount and make sure that the same type and caliber bullets are being used as when the scope was initially sighted in; if the scope was sighted in during the summer, and is now being used in the winter, or vice versa, a small displacement of the aiming point is possible.
The scope does not focus.	Wrong settings.	Adjust the scope according to the instructions in the "OPERATING THE SENTINEL" section and check the eyepiece and objective lens condition; if necessary, clean the lenses of dirt, dust, condensation, frost, etc. to prevent fogging in cold weather and apply a special anti-fog solution.