

# ATN NVB8X

NIGHT VISION BI-OCULAR



MANUAL (NVB8X) REV. 2 - JUNE, 2015

## *u s e r ' s g u i d e*

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Register your product warranty online at [www.atncorp.com/warranty](http://www.atncorp.com/warranty)



## CAUTION:

**THIS PRODUCT CONTAINS NATURAL RUBBER LATEX WHICH MAY CAUSE ALLERGIC REACTIONS.**

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# SPECIFICATIONS

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Magnification.....	8x
Intensifier tube .....	Gen. 2 or Gen.3
Field of view .....	6.5°
Range of Focus .....	20 m to infinity
Power Supply .....	3 volt, Lithium
Battery Life (CR123A type) .....	50 hours
Operating Temperature .....	-40°C to +50°C
Storage Temperature .....	-50°C to +70°C
Dimensions .....	212 x 150 x 133 mm (8.4" x 6" x 5.3")
Weight.....	1.7 kg (3.75 lbs)

\* ATN reserves the right to change the above specifications at any time without notice

# FEATURES

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- Available IITs: 2+, CGT, HPT, WPT™, 3 and 3A
- Multi-coated all-glass optics
- Detachable Long Range Infrared Illuminator
- Built-in Flood Infrared Illuminator
- Adjustable Interpupillary Distance
- Rugged and versatile design
- Water and fog resistant
- Tripod Mountable
- Easy to use digital controls
- Limited Two-Year Warranty

# APPLICATION

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The NVB8X is a powerful long rang night vision bi-ocular. Incredible 8x magnification provides the user high resolution and clarity over extended ranges. They are waterproof and can withstand the rigors of almost any environment. The NVB8X will give you the range and clarity that other bi-oculars simply can not touch.

The NVB8X is available with a wide range of image intensifier options to meet a wide array of specification requirements.

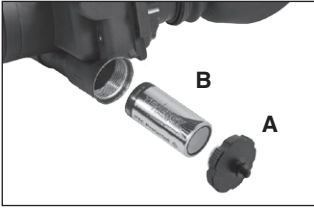
The NVB8X is a complex optoelectronic system for individual use. The device consists of the objective lens assembly, eyepiece and the body. The body contains a image intensifier tube assembly with an integrated high voltage power source and the battery housing.

Objective lens protective cover (not shown) is intended to protect the objective lens from dust and scratches. It also will act as a daylight filter, allowing you to test the scope in daylight or other bright light situations. The pinhole in the center of the protective cover allows the user to check the operation ability of the device in daylight conditions.

**NOTE:** Do not test the scope in daylight conditions even with the daylight filter/lens cap on for more than ten (10) minutes.

# BATTERY INSTALLATION

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Install standard CR123A batteries as follows:

1. Unscrew the battery cap (A).
2. Insert CR123 battery (B), observing the polarity as indicated.
3. Replace the battery cap and screw cap hand tight.

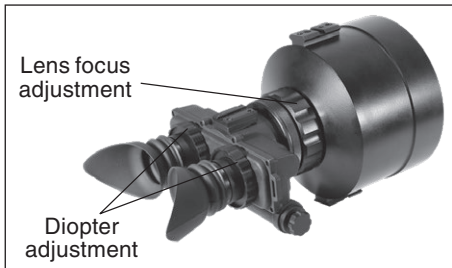
# OPERATION

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- Take the NVB8X out of the case.
- Install the battery into the housing with the polarity order as shown on the scope. Battery Type: 3 V, Lithium, CR123A .
- To turn on the device rotate switch once clockwise. Turn the unit on by the protective lens cover still attached to the lens. **Do not turn the unit on in the daytime without the protective lens cap on.** You should see green glow in the eyepiece.
- Observe the scene and adjust the diopter for optimal image clarity.
- You may now enter a dark environment or simply shut the lights off in order to darken the room.
- Next, remove the lens cap/daylight filter. Adjust the front lens for the distance of the focus. You should not have to readjust the diopter.
- To turn the unit off, rotate switch counter clockwise to initial position.

# FOCUSING

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To focus the NVB8X, first you will need to adjust the diopter. Simply turn the diopter clockwise until it stops. Then, while looking through the diopter at an object, slowly turn the diopter back counter clockwise until the grain in the image is sharp.

**NOTE:** We suggest that you focus the diopter during daylight with the filter on.

Next focus the front lens until the image and the grain are both sharp. When you are in low-light

conditions and the daylight filter is off, you may focus the front lens to receive sharp image, the diopter should not be adjusted.

**NOTE:** The front lens should be readjusted as you view objects at different distances.

# INFRA-RED ILLUMINATOR

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Infra-red illuminators, or IR illuminators, are common to night vision. The IR light greatly enhances the performance of the NVB8X while remaining almost totally invisible to the naked eye.

The NVB8X has a short range IR built in for map reading and close up viewing and an attachable IR for longer range viewing.

To turn on map reading IR rotate the ON/Off switch one switch beyond the on position. It is important to remember that the IR illuminator is simply an infra red light source, and like any light source, it may lose its effectiveness over a great distance.

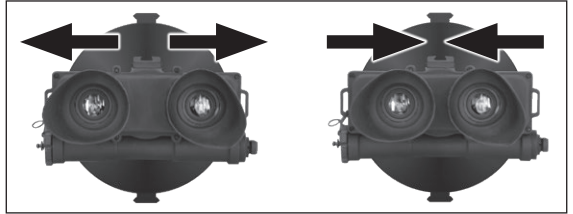
To turn the IR off, rotate switch back one position.

**NOTE:** The IR will automatically turn off when the unit's power is turned off.



## INTERPUPILLARY DISTANCE

Adjusts for distance between eyes by sliding the eyepieces either together or apart so each eye can observe the entire field at the same time.



## 850 MW INFRA-RED ILLUMINATOR

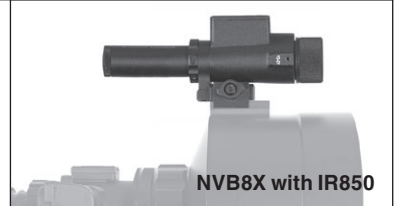
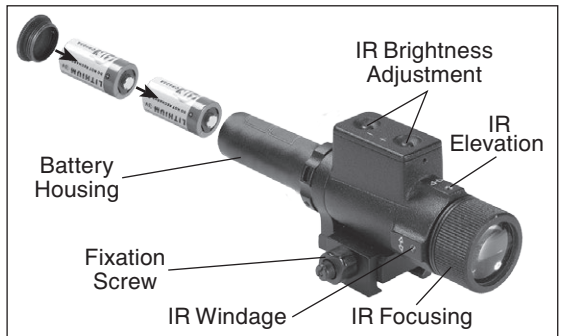
Infra-red (IR) Illuminators are common for night vision technology. The IR light greatly enhances the performance of your device, while remaining almost totally invisible to the naked eye. In dark environment, power up the scope. Now, find a scene and examine it without the IR on then with IR powered up. Note the difference in illumination. It is important to remember that the IR illuminator is simply an infra red light source it may lose its effectiveness over a great distance.

For installation of the IR illuminator onto the bi-ocular use the picatinny rail.

The IR illuminator control buttons are located on its side. To switch the Digital IR illuminator on/off press "+" and "-" buttons simultaneously. When the IR illuminator is switched on you can see the green LED lit. By pushing the buttons "+" and "-" you may adjust the IR brightness.

The IR beam is focusable to change the field of coverage. To change the beam width slightly turn the IR lens.

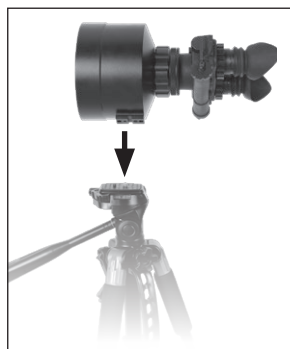
You could change the IR control panel fitting your needs. The wrench included into the set should be used for weakening the fixing nut located on the IR. Rotate the IR placing at in the most convenient position. Tighten the nut with the wrench to fix the new position.



# TRIPOD MOUNTING

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NVB8X is tripod mountable. You can mount NVB8X on tripod with 1/4" thread mount.



# STORAGE AND CARE

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- If the device is not to be used for extended period of time (more than 10 days) remove the battery.
- Avoid touching lenses. If fingerprints or traces of dirt or dust appear, clean their surface with a Photographic lens cleaning tissue.
- Keep lens cap/daylight filter on when not in use.
- The NVB8X is not harmful to the user or the environment.
- Do not disassemble except to clean the front lens and eyepiece: **it will void your warranty.**
- Evaluate the scope function by looking through it in a lit environment **with the daylight filter lens cap on. Never use in daylight without the daylight filter lens cap on.**
- **Never point the NVB8X at a bright light source.**
- Adverse atmospheric conditions such as fog, smog, or haze and a lack of ambient light (moon or starlight) may diminish the effective viewing distance.
- If you use the rubber eyecaps for a long period of time, you may suffer skin inflammation. If you develop any symptoms, consult a doctor immediately.

# TROUBLESHOOTING

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**Q:** Flashes, flickers, or clicking occur while operating

**S:** If it occurs within the first five minutes of inserting new batteries, it is normal and the device will resume normal operation soon thereafter. If it occurs for more than 10 minutes, contact for service instructions.

**Q:** Dark spots on screen.

**S:** These are either cosmetic blemishes in the intensifier tube or dust particles.

**Q:** Screen becomes darker than at previous use.

**S:** Replace batteries. If problem persists, contact your dealer or other authorized service representative for service instructions.

**Q:** Image not clear.

**S:** Adjust objective lens, and/or the eyepiece.

# 2 YEAR PRODUCT WARRANTY

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of 2 (two) years from the date of purchase. In the event a defect that is covered by the foregoing warranty occurs during the applicable period stated above, ATN, at its option, will either repair or replace the product, and such action on the part of ATN shall be the full extent of ATN's liability, and the Customer's sole and exclusive remedy. This warranty does not cover a product (a) used in other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than ATN without prior written consent of ATN; (d) special order or "close-out" merchandise or merchandise sold "as-is" by either ATN or the ATN dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of ATN. ATN shall not be responsible for any defects or damage that in ATN's opinion is a result from the mishandling, abuse, misuse, improper storage or improper operation, including use in conjunction with equipment which is electrically or mechanically incompatible with or of inferior quality to the product, as well as failure to maintain the environmental conditions specified by the manufacturer. **CUSTOMER IS HEREBY NOTIFIED THAT OPERATION OF THE EQUIPMENT DURING DAYLIGHT HOURS OR UNDER ANY EXCESSIVE LIGHT CONDITIONS MAY PERMANENTLY DAMAGE THE INTERNAL COMPONENTS OF THE UNIT AND SAID DAMAGE WILL NOT BE COVERED UNDER THIS WARRANTY.** This warranty is extended only to the original purchaser. Any breach of this warranty shall be waived unless the customer notifies ATN at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

## LIMITATION OF LIABILITY

ATN will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. ATN's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by ATN to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party of legal entity outside ATN and the Customer; ATN's obligations under this Agreement extend solely to the Customer. **ATN's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to ATN by the customer or customer's dealer. ATN shall not, in any event, be liable for special, indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability or any other theory of liability.**

## PRODUCT WARRANTY REGISTRATION

In order to validate the warranty on your product, ATN must receive a completed Product Warranty Registration Card for each unit or complete warranty registration on our website at [www.atncorp.com](http://www.atncorp.com). Please complete the included form and immediately mail it to our Service Center: ATN Corporation, 1341 San Mateo Avenue, South San Francisco, CA 94080.

## OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, End-user must notify ATN service department by calling **800-910-2862** or **650-989-5100** or via e-mail **service@atncorp.com** to receive a Return Merchandise Authorization number (RMA).

When returning please take or send the product, postage paid, with a copy of your sales receipt to our service center, ATN Corporation at the address noted above. All merchandise must be fully insured with the correct postage; ATN will not be responsible for improper postage or, missing or damaged merchandise during shipment.

When sending product back, please clearly mark the RMA# on the outside of the shipping box. Please include a letter that indicates your RMA#, Name, Return Address, reason for service return. Contact information such as valid telephone numbers and/or e-mail address and proof of purchases that will help us to establish the valid start date of the warranty. Product merchandise returns that do not have an RMA listed may be refused or a significant delay in processing may occur.

Estimated Warranty service time is 10-20 business days. End-user/customer is responsible for postage to ATN for warranty service. ATN will cover return postage/shipping to continental USA end-users/customers after warranty repair only if product is covered by aforementioned warranty. ATN will return product after warranty service by domestic UPS ground and/or domestic mail. Any other requested, required or international shipping method the postage/shipping fee will be the responsibility of the end-user/customer.



For customer service and technical support, please contact

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**[www.atncorp.com](http://www.atncorp.com)**