

Night Storm



NIGHT STORM USER'S GUIDE (REV. 3, JULY 2010)

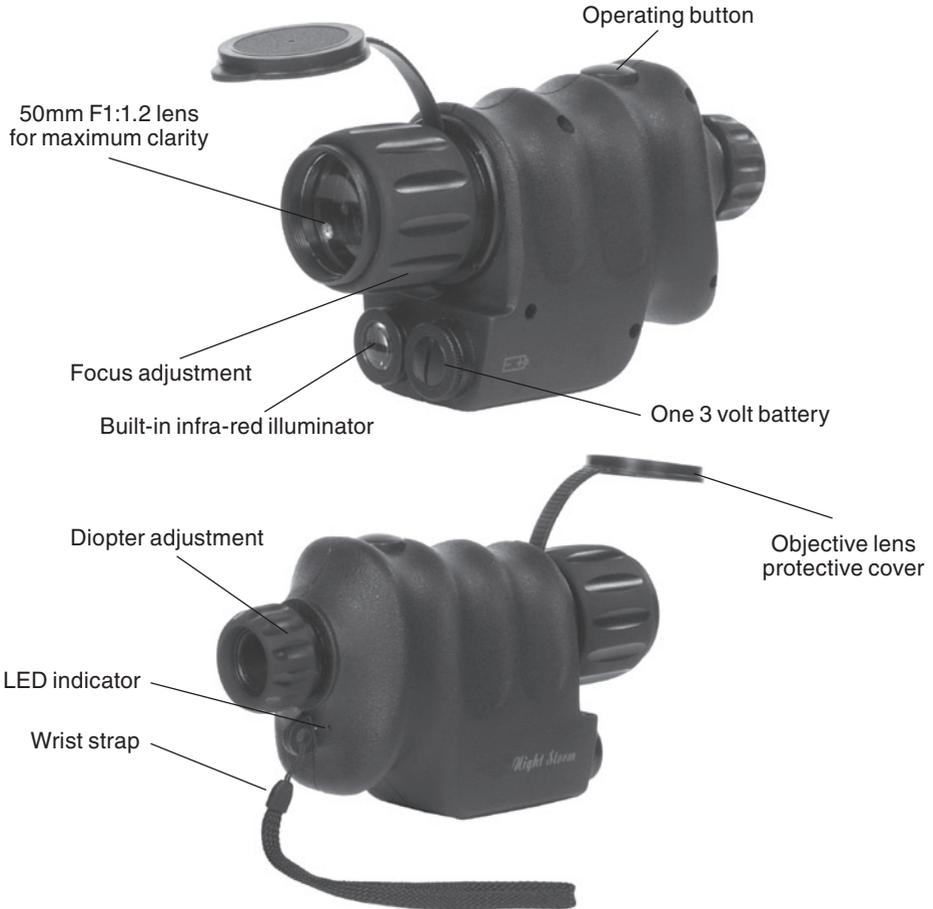
u s e r ' s g u i d e

Important Export Restrictions! Commodities, products, technologies and services contained in this manual are subject to one or more of the export control laws and regulations of the U.S. Government and they fall under the control jurisdiction of either the US Department of State or the US BIS-Department of Commerce. It is unlawful and strictly prohibited to export, or attempt to export or otherwise transfer or sell any hardware or technical data or furnish any service to any foreign person, whether abroad or in the United States, for which a license or written approval of the U.S. Government is required, without first obtaining the required license or written approval from the Department of the U.S. Government having jurisdiction. Diversion contrary to U.S. law is prohibited.



**AMERICAN
TECHNOLOGIES
NETWORK
CORP.**

Register your product warranty online at www.atncorp.com/warranty



OPTIONAL ACCESSORIES



CAMERA ADAPTER CA4
Item #ACMUCA04



INFRA-RED ILLUMINATOR IR450-B5
Item #ACMUIRB5

CAUTION:

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

The information in this manual furnished for information use only, is subject to change without notice, is not to be construed as a commitment by ATN Corp.

ATN Corp. assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

©2010 ATN Corp. All right reserved.

SPECIFICATIONS

Magnification	1.5x (Gen. 1+), 3.5x (2, 3, 4, Gen)
Intensifier tube	1+, 2+, CGT, HPT, 3, 3A, 3P , WPT and 4.
Lens system.....	50mm, F1:1.2
FOV.....	18°
Diopter adjustment	±5
Resolution.....	Varies according to tube & Generation
Power supply	One 3 Volt Lithium
Range of focus.....	3m to ∞
Controls	Digital
Battery Life	60 hours (Gen.2+, CGT); 50 hours (HPT, WPT, 3, 3A, 3P and 4)
Operating Temperature	-40°C to +50°C
Storage Temperature	-50°C to +70°C
Dimensions.....	195 x 50 x 90 mm/ 7.8"x2"x3.5"
Weight.....	0.6 kg / 1.3 lbs oz

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

FEATURES

- Great for hunting, camping, boating or surveillance
- Available IITs: 1+, 2+, CGT, HPT, 3, 3A, 3P, WPT and 4
- Superb 1.5x (Gen. 1+), 3.5x (2, 3, 4, Gen) lens system
- Standard total darkness technology
- Automatic brightness control
- Automatic shut-off system
- Built-in IR illuminator
- Manual focus
- Diopter adjustable eyepiece
- Rugged and versatile design
- Light weight and comfortable
- Waterproof and floating
- Single switch button operation
- Soft case

APPLICATION

The Night Storm Night Vision monocular is a complex optoelectronic system for individual use. The device consists of the objective lens assembly, eyepiece and the body. The body contains an image intensifier tube assembly with an integrated high voltage power source and the three volt battery housing. When installing the battery one should keep in mind that the polarity of the battery should coincide with the diagram on the body next to the battery housing cap.

Objective lens protective cover 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.

The scope is equipped with the Automatic Shut-off System. This system tracks when the scope is not used (the controls are not touched for 60 minutes continuous) and shuts the unit off automatically.

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

OPERATION

- Take the monocular out of the case.
- Install the battery into the housing with the polarity order shown on the device body. Battery Type: 3 Volt Lithium, #CR123A .
- The Night Storm has a single switch button operation.

1 GEN. MODEL:

- Press the button to turn the unit on with the protective lens cover still attached to the lens. The Infra-Red Illuminator will also automatically turn on. The green LED indicator represents the light intensifier tube and the IR Illuminator power.
- Press the button again to turn the unit off.

2+, CGT, HPT, WPT, 3, 3A, 3P, WPT AND 4 MODELS:

- Press the button to turn the unit on with the protective lens cover still attached to the lens. The green LED indicator indicates that the light intensifier tube power is on.
- Press the button again to turn the Infra-Red Illuminator on. The red LED indicator will light up instead of the green.
- Press the button for the third time to turn the unit off. The IR will also turn off automatically.
- **Do not turn the unit on in the daytime without the protective lens cap on.**

NOTE: You should see green glow in the eyepiece. You may notice a persistent green glow for up to five (5) minutes after you have turned the unit off. This is normal for the 1st Gen. Light intensifier tube.

- Observe the scene and adjust the diopter for optimal image clarity. Focus the front lens until the image and the grain are both sharp.
- 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 focusing for current observation distance. You should not have to readjust the diopter.
- The front lens should be readjusted as you view objects at different distances.

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

INFRA-RED ILLUMINATOR

Infra-red (IR) illuminators are common to night vision. The IR light enhances greatly the performance of the Night Storm while remaining almost invisible to a naked eye. Night Storm's built-in IR illuminator is located underneath the front lens, next to the battery compartment.

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.

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



USING THE CAMERA ADAPTER (OPTIONAL)

To use your Night Storm with a 35mm camera or camcorder you will need the following:

- 1) If you plan to use a camcorder, then your camcorder must have a MACRO feature. Most modern camcorders today have a MACRO feature built-in.
- 2) If you plan to use a 35mm camera, you will need a MACRO lens. If you don't have one, we advise that you contact your local camera store.
- 3) You may or may not need a STEP-UP or STEP-DOWN ring in order to adapt the camera adapter to your lens.

NOTE: The camera adapter comes with 37mm and 52mm threads. If you need other sizes your local camera store should be able to help.

- Remove the rubber eyecup from the Night Storm
- Screw the camera adapter onto the front of the lens on your Video camera's lens or your 35mm camera's lens.
- Loosen the three set screws on the camera adapter.
- Place the camera adapter over the Night Storm's eyepiece.
- Tighten the three set screws to fit snugly to the Night Storm's eyepiece
- You may need to focus the 35mm camera or video camera in combination with the Night Storm in order to get the sharpest possible image.
- We suggest that you find an open space to work in. Focus the Night Storm so that the scene is at its sharpest. For best results you should disable the auto focus (if any) on either the 35mm camera or the video camera and manually focus the 35mm camera or the video camera. Once the image is sharp, then simply adjust the Night Storm's front lens to change the focus.

**An important part to remember is that you are not taking a picture of an object that is far away from you, but you are actually taking a picture of the phosphorous screen of the Night Storm that is only 2-3 inches away.*



Camera adapter

CLEANING THE EYEPIECE

You may need to clean the eyepiece of the Night Storm from time to time in order to guarantee top performance. When you receive your Night Storm you should check for dust on the eyepiece of the unit.

First you will need to remove the eyepiece. To do that loosen the screw set that can be found on the base. Then unscrew the eyepiece counter-clockwise to remove it.

NOTE: *You do not have to remove the screws set completely, they are very small and easy to misplace.*

CAUTION: *Use only Photographic lens cleaning tissue on these surfaces. Be careful not to scratch or smudge any of these surfaces. When using compressed air to blow dust away, make sure to avoid inverting the can while spraying. This can cause frozen propellant to exit the can, which can cause serious problems with the glass and phosphor screen.*

WARNINGS AND CAUTIONS

- Always remember to turn the Night Storm off when it is not in use. If you do not plan on using your device for a period of more than 10 days, you should remove the batteries.
- **Keep lens cap/daylight filter on when not in use.**
- Avoid contact with dust, steam, and gas.
- The Night Storm is not harmful to the user or the environment.
- Do not disassemble except to clean the front lens and the eyepiece: **it will void your warranty.**
- Evaluate the scopes 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. Do not surpass ten minutes of testing.
- **Never point the Night Storm at a bright light source.** If the scope shuts off automatically after directing it at a bright light source, turn the unit off and wait 1 - 2 minutes before turning the unit back on.
- Adverse atmospheric conditions such as fog, smog, or haze and a lack of ambient light (moon or starlight) may diminish the effective viewing distance. All technical data for this unit was compiled in a controlled environment.
- 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

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. 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 after warranty repair to end-user/customer 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
American Technologies Network Corp.

North American Office

1341 San Mateo Avenue, South San Francisco, CA 94080
phone: 800-910-2862, 650-989-5100; fax: 650-875-0129

European Office

The following countries can use our toll free number:

00 800 9102-8620

Austria, France, Germany, Holland, Italy, Spain, Sweden, Switzerland

For other countries, please use

38 048-7770214 or 38 048-7770345

www.atncorp.com