

NIGHT COUGAR XT

NIGHT VISION GOGGLES



NIGHT COUGAR XT OPERATOR'S MANUAL (REV. 2, OCTOBER 2010)

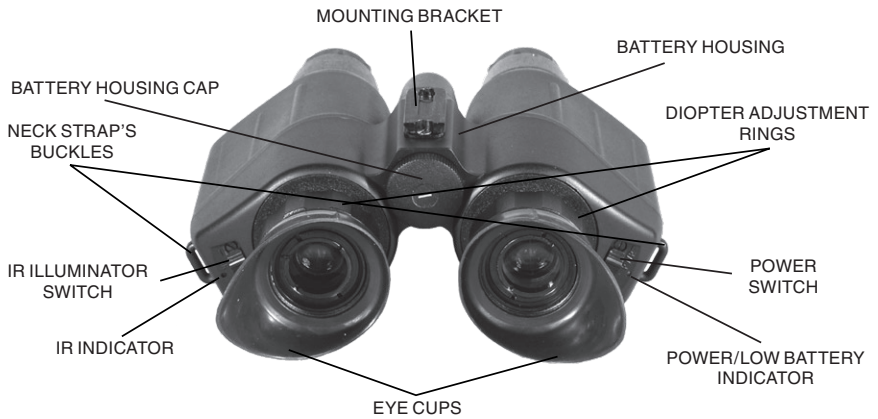
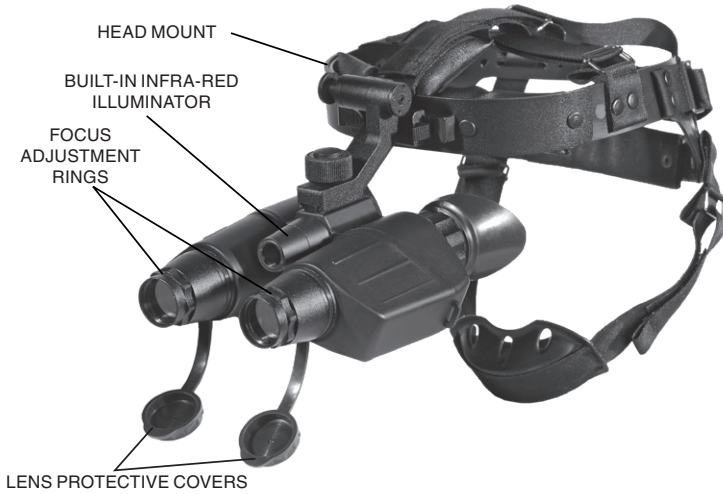
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Register your product warranty online at www.atncorp.com/warranty



SOFT CARRYING CASE



NECK STRAP



CAMERA-ADAPTER
Item # **ACMUCA01**
(optional)

CAUTION:

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

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SPECIFICATIONS

Magnification	1X
Lens System	35 mm; F1:1.4
Field of view	20°
Range of Focus.....	0.25 m to infinity
Diopters	±5
Power Supply.....	3 V Lithium (CR123A)
Battery Life.....	10-20 hours w/o IR illuminator
Operating/ Storage Temperature	-40°C to +50°C/-50°C to +70°C
Dimensions.....	155x65x150 mm (6.1" x 2.6" x 5.9")
Weight.....	0.55kg (1.21 lb)

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

FEATURES

- Rugged fiberglass reinforced plastic construction
- All glass multi-coated lenses for superb clarity and brightness
- F1.4 lens with amazing light transmission
- Manual focus
- Adjustable eyepiece
- The Night Cougar infra-red illuminator was designed to let you see even in total darkness
- Light weight and comfortable
- Weather resistant
- Two-Year Warranty

APPLICATION

The Night Cougar XT is a light weight dual eye/tube goggle system that is comfortable to wear and easy to use. Powered by two high quality 1st Gen.+ light intensifier tubes and using fast precision optics the Night Cougar XT has one of the clearest and brightest images available in a 1st Gen. goggle.

Combine all of the above with a built in infrared illuminator that lets you see in total darkness and you will be on your way to exploring even the darkest of places.

The Night Cougar XT goggle system is a complex optico-electronic system for individual use. The device consists of an objective lens assembly, eyepieces and a body. The body contains two 1st Gen.+ image intensifier tubes assembly with an integrated high voltage power source and the three volt battery housing.

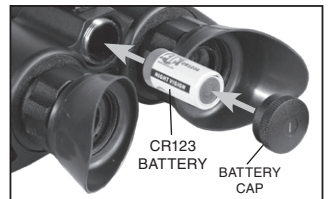
Objective lens protective covers are intended to protect objective lens from dust and scratches. It also will act as a daylight filter, allowing you to test the scope in daylight or other bright light situations.

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

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

If the batteries start losing voltage the LED near the power switch starts to pulse and it is time to change your batteries.



OPERATION

PREPARATION FOR OPERATION

For checking the device in daytime conditions or in a light room:

1. Make sure the battery is installed as indicated on the Night Cougar XT body.

2. Make sure the lens cap is attached to the front lens.
3. Turn on the device by sliding the switch. After this you can start observing scene through the oculars. The greenish-lit screen of the image tube means that the device is working normally. When the goggles is on, the LED indicator near the power switch lights.
4. Direct the Night Cougar XT at an object located 10-20 yards/m from you and obtain a sharp image by turning eyepieces.
5. Turn off the device by sliding the switch again.

CAUTION: *Never use your night vision device in daylight areas without the lens cover on! Never direct the lens to the bright light!*

OPERATIONS IN THE DARK CONDITIONS

CAUTION: *Bright sources such as light of fire, headlights, searchlights, etc. can damage the Night Cougar XT. Avoid exposing the Night Cougar XT to these types light sources.*

For start the operations in dark conditions:

1. Make visual estimation of the illumination level in the viewing area is less than 1 lux (late twilight sky conditions).
2. Remove the front lens cap and place it over the lens housing.
4. Slide the switch. A green glow will appear in the eyepiece (after a slight delay).
5. Observe the scene and adjust focus.

FOCUSING

To focus the Night Cougar XT, first you will need to adjust the diopters. 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.*

IR ILLUMINATOR OPERATION

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

The Night Cougar XT goggles have a built in IR with indicator "ON" light. To turn the IR on slide the IR switch in ON position. To turn the IR off slide the IR switch in OFF position.

NOTE: *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.*

SHUT-DOWN OPERATIONS

1. Slide the power switch in OFF position to turn the Night Cougar XT off. The green of the image intensifier tube glow will fade to black.
2. Replace the protective cap on the front lens.



FLIP-UP HEADSET

A. FITTING THE HEAD MOUNT

Adjust the head mount first before attaching the NV unit to it.

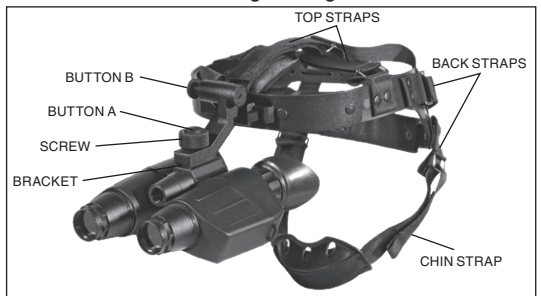
1. Loosen all the straps and place the head mount on your head.
2. Fit the head mount to your head size. Tighten the back straps and fixate it with Velcro tape.
3. Then secure the top straps. This one is rather tight so you might need to remove it from your head, when you are adjusting the straps.
4. And last you will need to tighten the chin strap.



B. GOGGLES INSTALLATION AND ADJUSTMENT

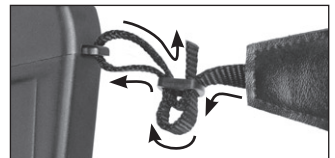
Now you are ready to mount the NV goggles onto head mount.

1. Remove the already adjusted head mount from head.
2. Loosen the screw, push the button A and insert the bracket of the Night Cougar XT to the rail of the head mount.
3. Place the head mount with NV unit onto your head.
4. You might want to adjust the vertical position of goggles over your eyes and angle of tilt of looking axis. The straps of headgear can be readjusted for it. Then tighten the straps until the headgear fits firmly.
5. Move the unit along the rail for eye relief adjustment. Tighten the screw for fixing in position.



NECK STRAP INSTALLATION

Pass the end of the strap through the goggles strap mount eyelet from the bottom. Then pass it through the strap's buckle as shown. Pull the strap to take up any slack and make sure the strap will not loosen from the buckle.



CAMERA-ADAPTER (OPTIONAL)

This adapter attaches to the Night Cougar XT eyepiece to collect imagery from the Night Cougar XT.

To use your Night Cougar XT with a 35 mm 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 37 mm and 52 mm threads. If you need other sizes your local camera store should be able to help.

Remove the rubber eyecup from the Night Spirit.

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 Spirit's eyepiece.

Tighten the three set screws to fit snugly to the Night Spirit's eyepiece

You may need to focus the 35 mm camera or video camera in combination with the Night Cougar XT in order to get the sharpest possible image.

We suggest that you find an open space to work in. Focus the Night Cougar XT 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 Cougar XT's front lens to change 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 a phosphorous screen of the Night Cougar XT that is only 2-3 inches away.*

STORAGE AND CARE

- 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 filters on when not in use.
- The Night Cougar XT is not harmful to the user or the environment.
- Do not disassemble except to clean the front lenses and eyepieces: it will void your warranty.
- Evaluate the device 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 Night Cougar XT 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 eyecups 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 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.



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