

# M05-2



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**AMERICAN  
TECHNOLOGIES  
NETWORK  
CORP.**





## APPLICATION

MO5-2 is a top-notch night vision monocular. A power super fast lens system combined with a high resolution Gen.2 light intensifier tube gives the user an unparalleled bright image in a 2nd gen. night vision device. Easy one switch controls, 4x magnification and 450mw Infrared Illuminator for viewing in total darkness are just a few of the features this scope packs.

The MO5-2 Night Vision Monocular is a complex optoelectronic system for individual use. The device consists of an objective lens assembly, eyepiece and a body. The body contains 2nd Gen. image intensifier tube assembly with an integrated high voltage power source and a battery housing. When installing the battery one should keep in mind that the battery polarity should coincide with the diagram on the body next to the battery housing cap.

Objective lens protective cover is 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. The pinhole in the center of the protective cover allows a user to check an 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.

## FEATURES

- Rugged and versatile construction.
- All glass multi-coated lenses for superb clarity and brightness.
- Revolutionary F1.4 112 mm lens with amazing light transmission.
- Detachable, most powerful in the industry 450mw Infrared Illuminator with dedicated windage and elevation adjustments .
- Camera/camcorder adaptable for night time photography (optional camera adapter required).
- Weather Resistant.
- Two year warranty (optional extended warranty).

## SPECIFICATIONS

Total Darkness Technology .....	Standard
Magnification .....	4X
Intensifier Tube .....	High Res. 2nd Gen
Detection Range .....	200 m/yards
Recognition Range .....	150 m/yards
Lens System .....	5 elements, F1:1.4, 112 mm
FOV .....	9°
Diopter Adjustment .....	±5
Resolution.....	40 lp/mm
Power Supply.....	One 3 Volt Lithium
Range Of Focus.....	5m to Infinity
Controls .....	Direct
Battery Life.....	10-20 Hours
Operating Temperature .....	-40°C to +40°C
Dimensions.....	335 mm X 100 mm X 110 mm
.....	13" X 3.9" X 4.3"
Weight.....	1.58 kg/3.48 lbs

## OPERATION

- Take the monocular out of the case.
- Install the battery into the housing with the polarity order as shown on the scope. Battery Type: 3 Volt Lithium, #CR123A .
- Slide the switch to turn the unit on with 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. 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 for distance of the focus. You should not have to readjust the diopter.

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

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

- To turn the unit off slide the switch to OFF position .

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## **CAMERA ADAPTER (OPTIONAL)**

To use your MO5-2 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 MO5-2
- 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 MO5-2's eyepiece.
- Tighten the three set screws to fit snugly to the MO5-2's eyepiece
- You may need to focus the 35mm camera or video camera in combination with the MO5-2 in order to get the sharpest possible image.
- We suggest that you find an open space to work in. Focus the MO5-2 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 MO5-2'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 MO5-2 that is only 2-3 inches away.*

## **INFRA-RED ILLUMINATOR**

Infra-red (IR) Illuminators are common for night vision technology. The IR light greatly enhances the performance of your scope, while remaining almost totally invisible to the naked eye. In a dark environment, power up the scope and observe a scene with the IR off. Then observe the same scene with the IR on. Note the difference in illumination. 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 fix the IR Illuminator to the scope screw the fixation screw on the IR into the thread on the body.

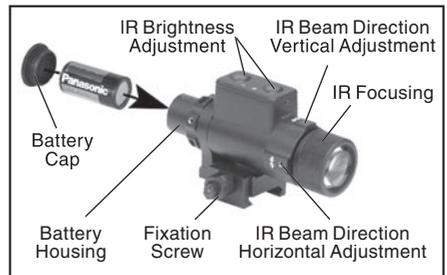
The IR illuminator control buttons are located on its side.

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 may notice that beam of IR illuminator might not shine directly in the middle of your viewing image. You can change the direction of the IR beam slightly in horizontal and vertical directions with rotation of small screws on the side of IR.



You can also change the position of the IR control panel fitting your needs. Undoing the small set screw on back of IR. Then use the included wrench to loosen back ring, Move the IR to its desired position/angle, retighten ring with wrench then retighten set screw.

## **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 filter on when not in use.
- The MO5-2 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 monocular 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 MO5-2 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.

## TROUBLESHOOTINGS

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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 cosine tic 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

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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 of 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

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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

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In order to validate the warranty on your product, ATN must receive a completed Product Warranty Registration Card for each unit. Please complete the form below and immediately mail it to our Service Center: ATN Corporation, 20 South Linden Ave., Suite 1B, South San Francisco CA 94080. Products qualifying for warranty repair will be either repaired or replaced within 10 business days of receipt of merchandise unless the customer is notified otherwise.

## OBTAINING WARRANTY SERVICE

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To obtain warranty service on your unit, 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.

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For customer service and technical support, please contact

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