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.
POWERFUL 4X OR 6X MAGNIFICATION
SUPERIOR QUALITY MULTI-COATED ALL GLASS OPTICS
“SINGLE-ELEMENT” ADJUSTABLE FRONT FOCUS
NITROGEN-PURGED FOR RESISTANCE TO INTERNAL FOGGING
MIL-DOT RETICLE
CRISP-CLICK PRECISION WINDAGE AND ELEVATION ADJUSTMENTS
TARGET TURRETS
AUTOMATIC BRIGHTNESS CONTROL
TACTICAL RAIL ENABLING MOUNTING OF IR ILLUMINATOR OR IR LASER
LOW BATTERY INDICATOR
TACTICAL DIGITAL REMOTE CONTROL
WATERPROOF AND SUBMERSIBLE TO 66 FEET FOR 1 HOUR
PELICAN HARD CASE, BATTERIES, USER GUIDE, NV INSTRUCTIONAL VIDEO AND ALL NECESSARY MOUNTING HARDWARE ARE INCLUDED
INCLUDED MOUNT FOR PICCATINY OR 7/8” WEAVER-STYLE RAIL (M4/M16/AR-15 CARRY HANDLE MOUNT – OPTIONAL)
UNIT ACCEPTS EITHER, (1) 3V CR123A OR (1) AA BATTERY
DAY TIME COVER WITH IR FILTER
TWO YEAR WARRANTY

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

ATN Mars Night Vision Weapon scopes - the world's largest line of professional night vision sights – has a new flagship – the ATN MARS X4 and ATN MARS X6. Inspired by ATN’s quest for technical perfection and named after the Roman God of War, the ATN MARS NV riflescopes represent the absolute latest in the world of night vision equipment. Similar to all ATN Aries scopes the ATN MARS features only the purest grades of heavy glass and computer-aided optical designs to create multi-element, high-speed, multi-coated lenses for ultra-fast light transmission and resolution beyond current military standards. All optical lenses on the MARS scopes are individually fitted and calibrated to achieve optimum performance.

SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>MARS 4X</th>
<th>MARS 6X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation</td>
<td>2nd+, 3rd, 4th</td>
<td></td>
</tr>
<tr>
<td>Lens of system</td>
<td>F1:1.5</td>
<td>F1:2.0</td>
</tr>
<tr>
<td>Magnification</td>
<td>4X</td>
<td>6X</td>
</tr>
<tr>
<td>FOV</td>
<td>9 deg.</td>
<td>6 deg.</td>
</tr>
<tr>
<td>Range of focus</td>
<td>10 m to ∞</td>
<td>25 m to ∞</td>
</tr>
<tr>
<td>Eye Relief</td>
<td></td>
<td>45mm</td>
</tr>
<tr>
<td>Exit pupil</td>
<td></td>
<td>7mm</td>
</tr>
<tr>
<td>Diopter adjustment</td>
<td></td>
<td>-6/+2</td>
</tr>
<tr>
<td>Windage &amp; elevation</td>
<td>120MOA</td>
<td>80MOA</td>
</tr>
<tr>
<td>Adjustment step size</td>
<td>1/4MOA</td>
<td>1/6MOA</td>
</tr>
<tr>
<td>Power supply</td>
<td>one 3V (CR123A) or 1.5V (AA)</td>
<td></td>
</tr>
<tr>
<td>Battery Life</td>
<td>60 hours (Gen.2+), 50 hours (Gen.3 and Gen. 4) (3V)/30 hours (Gen.2+), 25 hours (Gen.3 and Gen. 4) (1.5V)</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +50°C</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-50°C to +70°C</td>
<td></td>
</tr>
<tr>
<td>Waterproof</td>
<td>20m for 1 hour</td>
<td></td>
</tr>
<tr>
<td>Reticle</td>
<td>Red or Amber On Green</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>235x90x95mm</td>
<td>295x95x100mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.3kg</td>
<td>1.55 kg</td>
</tr>
</tbody>
</table>

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

PREPARATION FOR OPERATION

Before getting started make sure to follow these steps:
- Install the battery into its housing with the polarity order shown on the main body of the unit. The CR123A battery used with adapter. Install adapter first, then CR123A. AA battery used without adapter.
- Switch on the scope with the protective lens cover still attached to the lens.
- Make sure that the green luminance of the light intensifier tube is present.
- Observe the scene, and adjust the diopter and/or lens 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.
MOUNTING

The ATN Night Vision Riflescopes Mounting System allows to change the position of the riflescope flexibly on the weapon in relation to a shooter in combination with the fixed positions already available on the weaver rail. For this purpose in the base of the mounting bracket there is a rail with a fixing projection. There are three grooves in the mounting bracket for mounting this rail. Besides it is possible to change the position of the riflescope additionally by 1/3 of inch. For doing this one needs to about-face the rail.

To change the position of the riflescope on the weaver rail additionally follow the steps mentioned below:
1. Unscrew the two screws, which attach the rail to the mounting bracket.
2. Take the rail out of the groove.
3. About-face the rail in case of necessity.
4. Place the rail into another groove.
5. Fix the rail with the two screws.

Note: If the rail is not taken out easily, screw up tight one of screws into the threaded aperture in the middle of a fixing projection of the rail. Continue rotation of the screw. Thus the screw will push out a rail from a groove.

The scope can be mounted onto the Weaver rail using optional A.R.M.S.#19 ACOG mount.
1. Remove the standard ATN Mounting System from the scope. Unscrew the two mounting screws, which attach the ATN Mounting System to the body of the scope.
2. Mount the A.R.M.S.#19 mount onto the scope with two mounting screws.
3. Slightly loosen the fixing levers of mount.
4. Place the scope on the weaver rail of the firearm.
5. Tighten the fixing levers of A.R.M.S. mount.

CONTROL

To turn the device on, rotate the Operation Switch from the OFF position to the desired operation mode.
Operation Switch has following positions/modes:
OFF - the device is off;
ON – the device is on;
STB - the device can be used with the Remote Control.

REMOTE CONTROL

Attach the Remote Control cable to connector on the bottom of the body of device. Place the Remote Control on the weapon, suit your shooting style best and grip. Fix the Remote Control in this position with a montage strap.

To turn the scope on push the button of remote control. Keep pressed button when observing scene. The scope is turned off immediately after releasing remote control button.

FOCUSING

To focus the scope you need to adjust the diopter first. Simply turn the diopter clockwise until it stops. Then concentrate on any object and slowly turn the diopter back counter clockwise until the grain in the image is sharp.

You scope has ability to focus either long range or short.
Focus the front lens by rotating the knob until the image and the grain are...
both sharp. When you are in the low-light conditions and the daylight filter is off you may focus the front lens to receive a sharp image, the diopter should not be adjusted.

**NOTE:** The front lens should be readjusted for viewing objects at different distances.

**AUTOMATIC BRIGHTNESS CONTROL SYSTEM**

The device has a built in Automatic brightness control. This control automatically adjusts the brightness of Image Intensifier Tube to the optimal level.

**PROTECTIVE SYSTEM**

The automatic highlight protective system analyzes light exposure with the sensor. If the level of light exposure exceeds allowable the red indicator will lights on. If high light exposure is kept more than 10 seconds the device automatically will off.

**NOTE:** The automatic highlight protective system and automatic brightness control system do not protect a sight from damage by bright light sources (a fire, headlights of the automobile, lanterns, etc.). Do not point the device at a bright light source.

**IR ILLUMINATION**

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 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, and like any light source it may loose its effectiveness over a great distance.

To fix the IR illuminator to the riflescope use the picatinny rail of the scope. 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.

**LOW BATTERY INDICATOR**

When red LED on left side of the field of view starts blinking it is time to change your battery.

**RETICLE**

Your scope has an Electronic reticle with two color and 5 degrees of brightness of illumination for each color. The knob of brightness adjustment reticle and color select is located on the top of the body of the scope. On the knob there are marking with color of illumination of reticle.

Mil dot reticle is a reliable means of determining distances to targets, establishing leads for moving targets, and for alternate aiming points for windage and elevation holds.

Dots are spaced in one mil (milliradian) increments on the crosshair. A distance to target can be calculated using the mil formula, that is based on the size of the object being targeted.

Look through the scope, and bracket the object between dots.
The space between dot centers subtends one milliradian (mil). One mil subtends 3.6 inches at 100 yards or 36 inches at 1,000 yards. To use this system effectively you must know the size of the target. By measuring the height or width of a known (or approximately known target size) in mil-radians using the reticles, the target distance can be calculated as follows.

\[ R = \frac{1000 \times h}{m} \]

Military shooters are trained to know that the common male torso is 39 inches from crotch to top of head. This is very close to exactly one meter. This formula then becomes \( R = \frac{1000}{M} \) for a one meter target size.

All of the following formulae are equivalent to the one above for estimating range.

\[ R = \frac{25.4 \times h}{m} \]
\[ R = \frac{27.78 \times h}{m} \]
\[ R = \frac{333.3 \times h}{m} \]

**WINDAGE AND ELEVATION**

The vertical and horizontal adjustments for the scope can be achieved by turning the elevation and windage adjustment mechanisms (remove dust caps first). Each click equals 1/4 inch at 100 yards (Mars x4) or 1/6 inch at 100 yards (Mars x6). When reaching the maximum range of rotation do not use force.

**WARNINGS AND CAUTIONS**

- Always remember to turn off the scope when it is not in use. If you do not plan on using your scope for a period of more than 10 days, you should remove the batteries.
- Keep lens cap on when not in use.
- Avoid contact with dust, steam, and gas.
- The scope are not harmful to the user or the environment.
- Do not disassemble: it will void your warranty.
- Evaluate the scopes function by looking through it in a lit environment with the lens cap put on. Never use in daylight without the daylight filter lens cap on. Do not surpass ten minutes of testing.
- Never point the scope 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. 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 your dealer or other authorized service representative for service instructions.

Q: Dark spots on screen.

S: This may be dust on the lens, please clean according to instructions. They may also be Cosmetic blemishes in the intensifier tube which are a by-product of the manufacturing process. This is normal and will not affect the life or performance of the unit.
Q: Image not clear.
S: Adjust diopter ring. If problem persists, increase viewing distance
Q: Fixed-pattern noise in a honeycomb shape.
S: Usually a cosmetic blemish characterized by a faint honeycomb-type pattern. This usually occurs when viewing very bright lights.
Q: A pattern of dark thin lines which look like chicken wire.
S: Turn on illuminator, if purchased. If illuminator doesn’t brighten image, replace batteries. If problem persists, contact ATN for service instructions.

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 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

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, please contact our Customer Service department and request an RMA number. Once you have received your RMA # please mark this # on the outside of the shipping box and 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. Packages that do not have an RMA # clearly marked on the outside of the package will be delayed in being processed.
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**  
phone: 44(0)870-0111286, fax: 44(0) 845-3349142  
The following countries can use our **toll free number 00 800 9102-8620**  
Austria, France, Germany, Holland, Italy, Spain, Sweden, Switzerland

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

©2008 ATN Corporation