WARNING!
Do not operate this device until you are familiar with the contents of this manual. Keep this manual in a safe place for future reference.

This Night Vision Device should only be used during night or low light conditions. It contains a light-sensitive image intensifier tube that can be damaged if exposed to excessive light. To prolong tube life and avoid damage, do not turn the unit on in daylight without the protective cover.

This Night Vision Device is equipped with a built-in IR illuminator that can be seen by other Night Vision Devices when it is turned on. Use this feature with caution.

This device will not show the difference between colored lights. It produces only a green viewing image. When color differentiation is needed, verification with unaided eyes is recommended.

All Image Intensified Devices require some light to operate such as moonlight or ambient starlight. Night vision devices will not penetrate smoke, fog, rain, or heavy snowfall. Cloud cover and tree shadows will reduce the effectiveness of this device.

Do not operate this Night Vision Device in a potentially explosive environment near gasoline fumes or other volatile materials. This is a high voltage electrical device.

Do not disassemble, puncture, recharge, or expose the battery to fire or high temperature. Doing so may result in an explosion and resulting chemical burns. When the device is not in operation for a prolonged period, remove the battery from the device and keep it separately in a cool and dry place.

TABLE OF CONTENTS
Technical Specifications 3
General View 4
Description 4
1. Battery Installation 5
2. Controls 6
3. Lens Replacement (optional) 6
4. Head Mount Attachment 7
Night Vision Characteristics 9
Maintenance 11
Troubleshooting 12
Warranty 13
Limitations of Liability 14
Acceptance Certificate 15

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Image Intensifier</th>
<th>Generation 1+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution (Center)</td>
<td>40 lp/mm</td>
</tr>
<tr>
<td>Magnification</td>
<td>1x (3x optional)</td>
</tr>
<tr>
<td>Lens System</td>
<td>26mm f1.2</td>
</tr>
<tr>
<td>FOV @1000 yards</td>
<td>30°</td>
</tr>
<tr>
<td>@1000 meters</td>
<td>2059'</td>
</tr>
<tr>
<td>Range of Focus</td>
<td>25 cm to infinity</td>
</tr>
<tr>
<td>Detection Range</td>
<td>410’ / 125 m</td>
</tr>
<tr>
<td>Recognition Range</td>
<td>328 / 100 m</td>
</tr>
<tr>
<td>Dioptr Adjustment</td>
<td>+4 to -4</td>
</tr>
<tr>
<td>Weather Resistant</td>
<td>Yes</td>
</tr>
<tr>
<td>Camera/ Camcorder</td>
<td>Adaptable</td>
</tr>
<tr>
<td>IR Illuminator</td>
<td>Yes</td>
</tr>
<tr>
<td>Battery Type/Life</td>
<td>N type (x2) / 40 hours</td>
</tr>
<tr>
<td>Dimensions</td>
<td>4.9” x 4.4” x 2.3”</td>
</tr>
<tr>
<td>Weight</td>
<td>17 oz / 482 grams</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>40°F to 113°F</td>
</tr>
<tr>
<td>Warranty</td>
<td>1 year</td>
</tr>
</tbody>
</table>

GENERAL VIEW

D-2MV is the only Generation 1+ enhanced goggle equipped with a built-in photocell that guards the unit against bright light exposure. This lightweight unit offers true-stereo depth perception and features built-in IR and fully adjustable headgear. The unique wide exit pupil design eliminates the need for interpupillary adjustment. The optional 3x lens kit can turn D-2MV into an extended range binocular.

DESCRIPTION

Fig. 1

1. Body
2. Eyepiece
3. Dioptr Adj.
4. Front Lens
5. Focusing Ring
6. IR Illuminator
7. ON/OFF Switch
8. Decorative Cover
9. Battery Compartment
10. Lens Cover
11. IR Illuminator ON/OFF Switch
OPERATION

Please make sure that the lens covers are on before switching the D-2MV on in high light conditions.

1. Battery Installation
The D-2MV has common body (1) (fig. 1), which contains two image intensifiers and the battery compartment. The lenses (4) (fig. 1) and the eyepiece assemblies (2) (fig. 1) are joined by threaded connections.
To insert batteries:

Remove the battery compartment cover

Insert batteries (positive terminal inside)

Place back the cover

2. Controls
The D-2MV has an ON/OFF push switch (7) (fig. 1). To switch on the unit, push switch (7). To switch it off, push it again. If you want to switch on the IR illuminator, push switch (11).

3. Lens Replacement (optional)
Follow the same procedure to replace 80mm f1.6 lenses with 26mm f1.4 lenses.

4. Head Mount Attachment

To attach the D-2MV to the Head Mount:
1. Remove the decorative cover.
2. Turn screw (1) (fig. 2) counter clockwise until it stops.
3. Press button (2) (fig. 2); insert the mounting adapter into the slot and release button.
4. Move the D-2MV along the sledge to the most comfortable position and tighten screw (1).
5. Adjust head strap for maximum comfort.
6. To flip-up, press the rotation enable button (fig. 2) and move the D-2MV to the top position.
NIGHT VISION CHARACTERISTICS

Monochromatic Image
Night Vision Devices produce a monochromatic image. You will not be able to see any differentiation between colors. In particular, red and green lights will both appear green. Take care to verify color differences with unaided vision. Exercise extreme caution when operating aircraft, ground vehicles, or marine vessels while using night vision equipment.

Color Sensitivity
Night Vision Devices are more responsive to red and white lights than green or blue lights. Because of this, distant red and white lights may appear closer than green or blue lights. Exercise extreme caution when using these lights for navigation. Periodically verify the distances to these lights with your unaided eyes.

Extreme Darkness
Night Vision Devices are effective under most dark conditions including overcast starlight. They are not practical in an extremely dark environment such as in a tunnel where there is no natural ambient light. Without sufficient ambient light, the operator may notice pinpoint-size sparkles (scintillation or noise) in the image area. These sparkles are small amounts of energy generated inside the image intensifier that strike the phosphor screen and are an indication that the device is working.

Contrast Reversal
Night Vision Devices detect light that cannot be seen by the human eye. This light is often referred to as being in the near-infrared light spectrum. The existence of this light and the manner in which it reflects is not normally visible to the naked eye. For this reason, objects that normally appear lighter than their surroundings may appear dark against a light background. In addition, the output image of the Night Vision Device is dependent on the reflective quality of the objects the operator sees in the viewing area. Objects that appear light during the day but have a dull surface may appear duller when viewed through a Night Vision Device. All of these factors must be taken into account when utilizing a Night Vision Device for observation or navigation purposes.

Depth Perception
Night Vision does not present normal depth perception. Use extreme caution when using a Night Vision Device where reliance upon depth perception is important.

Fog and Rain
Night Vision Devices are very responsive to reflected ambient light; therefore, fog or heavy rain can reflect too much light toward the Night Vision Device and may seriously degrade its performance.

Honeycomb
This is a faint hexagonal pattern throughout the image area. This effect is more noticeable under high light conditions. Do not be concerned - the honeycomb effect is an inherent characteristic of all high-amplification night vision systems that incorporate a microchannel plate in the intensifier.

NIGHT VISION CHARACTERISTICS

Sunlight
Night Vision is sensitive to light and must be stored away from direct contact with bright light sources of any kind.

WARNING!
Improper care or unauthorized maintenance can damage device and may result in warranty nullification.

MAINTENANCE

Optics
Always clean the optics with a suitable optical cleaning cloth. Do not use detergents or excessive moisture to clean any part of the Night Vision Device.

Battery/Battery Compartment
Any Night Vision Device that is to be stored for a long or undetermined amount of time must have the batteries removed.

Moisture
The Night Vision Device is water resistant. No warranties or guarantees apply to a Night Vision Device that has been submerged in water. Take great care when using any night vision in a wet environment as the image intensifier tube is sensitive to moisture.

Salt Water
If the Night Vision Device is exposed to a salt water environment, wipe it off with a clean cloth slightly dampened with fresh water and dry it thoroughly. Take special care of the optics as noted above.
**WARRANTY**

The D-2MV is covered by a limited 1 year warranty from time of sale. The warranty is valid only for the original purchaser.

The manufacturer warrants its products to be free from defects in material and workmanship during the warranty period. If the product proves to be defective during this period, the manufacturer will repair the original product or replace it with a like product at the sole discretion of the manufacturer.

This limited warranty does not cover:
1. Any product on which the serial number has been defaced, modified, or removed.
2. Any product that has experienced deterioration or malfunction from: accidents, misuse, neglect, fire, water, lighting or other acts of nature, unauthorized product modification or failure to follow instructions supplied with the product, repair or attempted repair by anyone not authorized to do so, use of supplies or parts not meeting manufacturer’s specifications, normal wear and tear, and/or extreme wear and tear caused by battlefield conditions or other extreme environments.

Customer is hereby notified that operation of this device during daylight hours or under excessive light conditions may permanently damage internal components and said damage will not be covered under this warranty.

No other warranties, expressed or implied, are valid without an agreement in writing provided by the manufacturer.

All shipping involved in warranty work/repair is the sole responsibility of the purchaser.

**LIMITATIONS OF LIABILITY**

Night Optics USA, Inc. 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 this product are the sole responsibility of the Customer. Night Optics USA, Inc.‘s sole responsibility is limited to providing the products and service outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by Night Optics USA, Inc. 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 Night Optics USA, Inc. and Customer; Night Optics USA, Inc.’s obligations under this Agreement extend solely to the Customer. Night Optics USA, Inc.’s liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to Night Optics USA, Inc. by the Customer or the Customer’s dealer. Night Optics USA, Inc. 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 breach of warranty, a breach of agreement, negligence, strict liability, or any other theory of liability.

**ACCEPTANCE CERTIFICATE**

Night Vision Goggle/Binocular D-2MV conforms to manufacturer’s specifications.

Serial # ___________________

Date of Sale  ___________________,

Signature: ___________________