

SPECIFICATIONS	24021	24021WP	24022	24022WP	24024	24027	24057
Generation	1	1	1	1	1	1	2+
Visual Magnification, x	2	2	3	3	1	4	3
Objective Lens, mm	24	24	42	42	24	50	50
Resolution, lines/mm	36	36	36	36	36	36	41
Angular Field of View	30°	30°	20°	20°	30°	15°	14.5°
Viewing Range*, m	200	200	250	250	150	300	800
Eyepiece Adjustment, dptr.	±4	±4	±4	±4	±4	±4	±4
Operating Voltage, V	3	3	3	3	3	3	3
Built-in IR Illuminator, m	100	100	100	100	100	100	100
Tripod mount, inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Operating Time, hour	20	20	20	20	20	20	40
Temperature Range	-22°F ~ +104°F / -30°C ~ +40°C						
Maximum Humidity, %	93	93	93	93	93	93	93
Grade of water-resistance	-	IPX6/IPX7	-	IPX6/IPX7	-	-	IPX4
Length, inch/mm	5.6/142		6.4/162		5.6/142	7.5/191	8.2/208
Width, inch/mm	3.2/82		3.2/82		3.2/82	3.4/87	3.4/86
Height, inch/mm	2.4/60		2.4/60		2.4/60	2.4/60	2.4/60
Weight, oz/kg	13.4/0.38		17.6/0.5		13.4/0.38	21/0.6	21/0.6

* Maximum distance at which a human figure can be recognized under ideal viewing conditions; defined as clear conditions (no fog, dust etc.) under the light of a 1/4 moon (5x10⁻⁶ lux minimum).



PACKAGE CONTENTS

Your NVMT night vision scope comes with the following:

- One Carrying Case
- Lens Cap / Hand Strap
- Photo / Video Camera Adapter *
- This User's Manual
- Warranty Registration Card

* Optional

For improvement purposes, design of this product is subject to change.

OVERVIEW

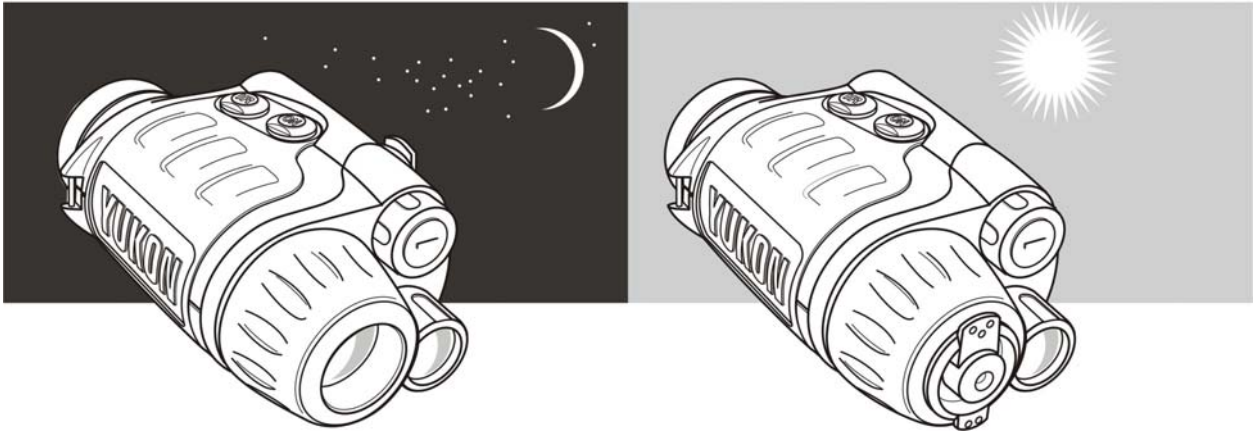
Your NVMT starlight night vision scope is a professional specification night vision device designed to provide enhanced viewing in all low light conditions including total darkness.

The NVMT is a passive starlight device; it does NOT require any artificial light source, although an artificial infrared light will greatly enhance the scope's effectiveness in all facets of operation. NVMT is constructed using an electro-optical intensifying tube contained in a water-resistant composite housing. The entire unit is rugged enough for extreme field conditions but damage may occur if the scope is mishandled.

The NVMT is entirely self-contained and can operate for up to 20 hours (40 hours for NVMT Gen. 2+) on CR123A battery at temperatures ranging from -22°F to +104°F (-30°C to +40°C).

Your NVMT scope is ideal for a variety of professional and recreational uses including the following:

- Wild life observation
- Astronomy
- Boating
- Search and rescue
- And many other activities...



WARNINGS AND PRECAUTIONS

Your NVMT night vision scope was designed to provide many years of reliable service. To ensure that you get the most enjoyment out of your NVMT always obey the following Warnings and Precautions:

- Do not point the NVMT towards any light source greater than 1 lux (such as car headlights) for an extended period of time. Our NVMT utilizes an internal flash protection system, which minimizes potential damage, but long-term exposure to bright lights can damage the unit. Any such damage may void your warranty.
- Your NVMT was designed to be self-contained. Do not open the body of the scope or otherwise attempt to service this device.
- The replacement of eyepiece and objective lenses in the 24021WP and 24022WP models is prohibited: this may cause depressurization of the device.
- Always store the NVMT in a dry, well-ventilated room. Keep the NVMT away from any heating and air conditioning vents or other heating devices, direct sunlight, and moisture.
- Avoid dropping or otherwise shocking the unit. Although designed for rugged outdoor use, the NVMT incorporates a sophisticated optical system which could be damaged in extreme cases of misuse.
- Clean optical parts (lenses) with professional lens cleaning supplies designed for use with multicoated optics.
- Clean the exterior of your NVMT with a soft, clean cloth.

Damage to this device from failure to observe these warnings may void the NVMT's warranty!

BATTERY INSTALLATION

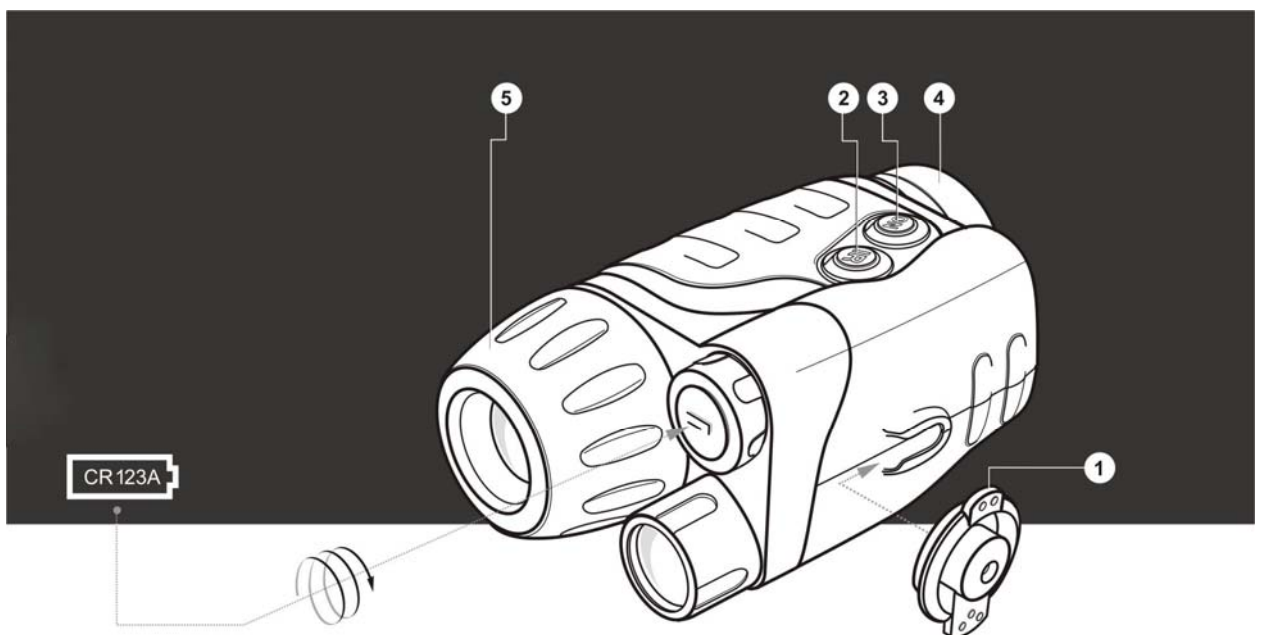
Your NVMT runs on one battery - CR123A. To install, unscrew the battery compartment cover, insert the battery into the battery compartment so that the positive (+) and negative (-) terminals of the battery match the markings inside the compartment, replace the battery cover carefully. Do not overtighten.

USE AND TESTING

Your NVMT operates using one battery - CR123A. Make sure it has been installed according to instructions found in the battery installation section of this manual.

- If you wish to test your night vision device in a lighted area, be sure the lens cap is in place prior to pressing the "ON" button. The lens cap has a pinhole opening to admit a small amount of light for testing purposes.
- Move into a dark area before activating the NVMT light amplifier.
- Remove the lens cap (1) and fasten it to the body as shown in the picture.
- Activate the device by pushing the "ON" button (3).

- If the subject to be viewed is in a completely dark area, including lowlight shadow areas, activate the infrared illuminator by pressing the “IR” Button (2) located next to "ON" button.
- Direct your NVMT device at an object at a distance approximately 100 yds. Adjust the eyepiece and objective lens diopter setting to focus the unit by rotating the eyepiece (4) and objective lens (5).
- After the adjustment, do not rotate the eyepiece irrespective of the distance and other conditions.
- Direct your NVMT device at the subject to be viewed and adjust the final focus by rotating the objective lens (5) focusing ring until the image quality is optimal.
- The green LED indicates that the light amplifier unit is on. The red LED indicates that the IR illuminator is on.
- Do not store your NVMT when any of the indicators are lit. When you finish using your NVMT device, turn off the entire unit including the IR illuminator and light amplifier. Return the lens cap to the objective lens.



CAUTION!

Your NVMT can be used in extreme cold. However, when the unit is brought back into a warm environment, you **MUST** wait approximately 2-3 HOURS before using the unit again. Failure to do so may result in damage as a result of condensation accumulating on the internal circuitry of the unit.

MAINTENANCE

Maintaining the NVMT is simple:

- Clean the lens with professional lens cleaning supplies intended for use with multicoated optics.
- Blow any dust or dirt off the lenses using dry, compressed air.
- Clean the NVMT housing with a soft, clean cloth.

STORAGE

Always store the NVMT (in its case) in a dry, well-ventilated area away from heating/air conditioning vents (or other heating devices). Temperature should be +10°C. Humidity should not exceed 70%.

Remove the battery if the device is to be stored for longer than 2 months.

TROUBLESHOOTING

The scope will not turn on...

Check that the battery is installed properly. Install the battery according to the (+) and (-) polarity, ensuring that the markings on the battery and battery compartment correspond with one another. Check the battery contact to ensure it is clean and free of corrosion; if necessary, clean the contact. Make sure that the external contact lug is not broken. If necessary, replace the battery as it may be depleted. Also, be sure that the power is in the “ON” position when trying to turn on the scope.

Distinct black dots appear on the screen...

These dots are minor cosmetic blemishes resulting from tube production processes and do not interfere with the reliability or performance of the scope.

The scope flickers, flashes or “snows”...

The scope may flicker or flash when used in a bright environment; to correct this, place the cap over the objective lens and enter a dark environment. The scope will restore itself to a natural functioning state in several minutes or hours, depending on how long the scope had been exposed to the light. The scope may flicker for the first several seconds of use, even when in a dark environment, before the scope corrects itself and functions properly.

The scope may “snow” for several minutes after being exposed to a bright light source (daylight, a car's headlights, fire, etc.) even if being operated in complete darkness.

The image is not focused...

Adjust the focus of the eyepiece and the objective (see Use and Testing). Check that the lenses are not foggy or dusty; if they are, carefully clean the external surfaces of lenses with a soft cotton fabric. Replace the battery if the total battery charge is less than 2.0 V.

When the unit is brought into a warm environment from a cold one, condensation may appear on the internal lenses; you must wait two hours before using the unit.

Visibility decreases or disappears...

Bright light sources, such as headlights, may cause visibility to decrease or disappear and the image to flicker. Turn the power off and turn the scope away from the light source; visibility will restore itself in several minutes.