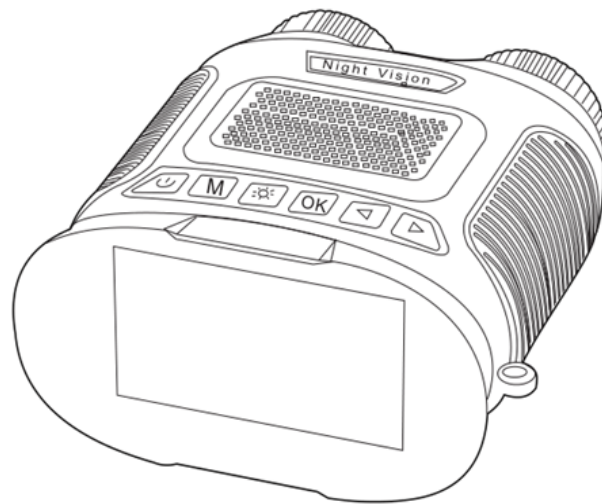


# ONMAX™

## SPORT OPTICS



NVB4X24IR  
Digital Night Vision Scope

**Safety**

Before using your OMAX product, please read the following safety precautions carefully to avoid causing damage to the device or injury to yourself or others.

**Use only 3.7V 18650 lithium-ion batteries.** Use of other batteries may cause damage to the device or injury to yourself or others.

**Turn off power if the instrument exhibits unusual or dangerous behavior** such as emitting smoke or unusual odors. These can be indications of electrical problems, in which case the instrument should be disconnected from any power source if safe to do so. Other indicators can be a loud buzzing sound or crackling. Contact OMAX to report such behavior.

**Do not use around flammable liquids or gases.** Electric instruments can ignite flammable substances which could result in an explosion or fire.

**Avoid use in wet environments.** Electrical components of the instrument can discharge when exposed to water, potentially resulting in damage to the instrument, or injury to yourself or others.

**Do not dismantle.** Dismantling will void the warranty and can result in damage to the instrument, and potential exposure to dangerous materials or electric current.

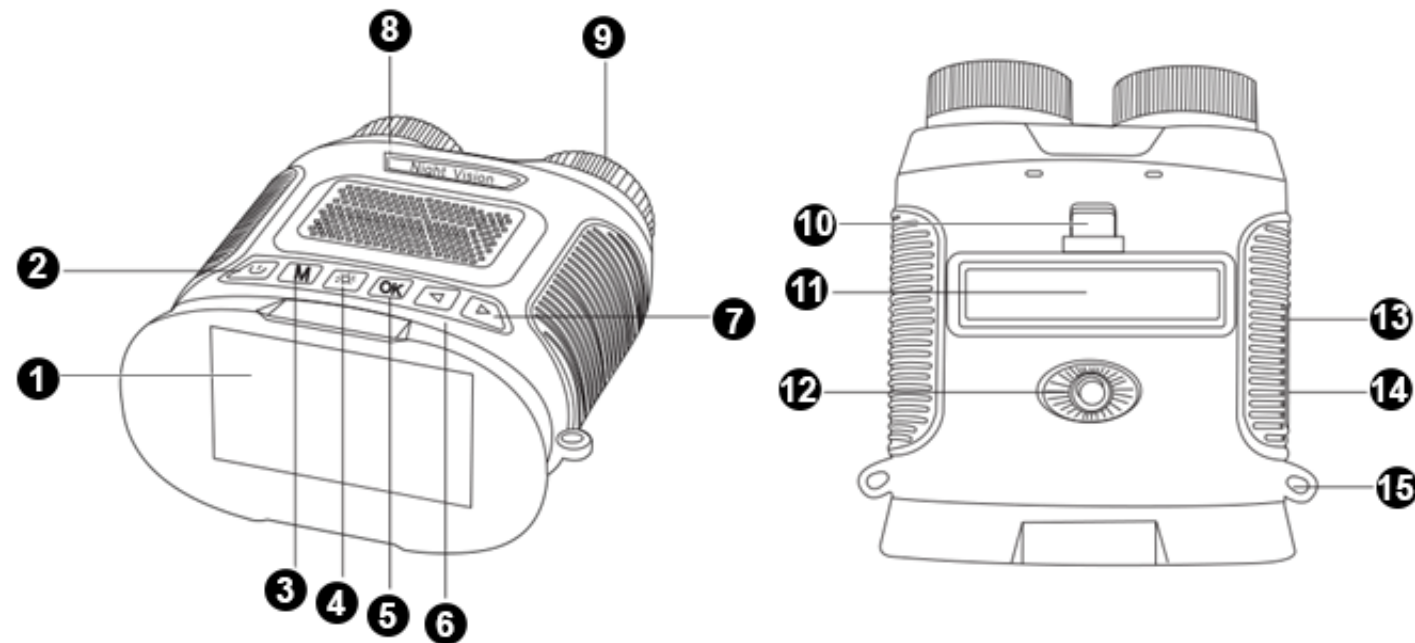
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**Notices**

OMAX reserves the right to change specifications of the product at any time without notice. Continuous efforts are made to improve performance and reliability, which can result in changes to design and compatibility. Please contact OMAX for any concerns regarding such changes.

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1	Viewing Screen	9	Infrared Lamp
2	Power Button	10	Battery Cover Tab
3	Menu/Mode Button	11	Battery Compartment
4	Exposure Mode Button	12	Tripod Port
5	OK Button	13	USB-C Port
6	Left Arrow Button	14	MicroSD (TF) Card Slot
7	Right Arrow Button	15	Strap Bracket
8	Focus Ring		

## 1. Preparation

### 1.1 Battery Installation

**Important: only use 3.7V 18650 rechargeable lithium-ion batteries.**

Do not remove the battery compartment cover while the device is powered on. Ensure the device is powered off before proceeding.

To open the battery compartment, press the battery cover tab toward the battery compartment, then lift outward to remove the cover. Positive and negative terminals are labeled inside the compartment. Orient the battery's positive and negative terminals with the compartment's terminals. Once the battery is seated, replace the compartment's cover.

### 1.2 The I/O Panel

The I/O (Input/Output) panel consists of a USB-C port and a MicroSD card slot. The panel is located on the scope's right grip. To access it, pull the tab on the left side of the protective cover.

### 1.3 Charging the Battery

To charge the battery, use the supplied USB cable with a USB power source or charging adapter. Attach the cable's USB-C plug into the I/O panel's USB-C port. Insert the cable's Type-A connector into a charging adapter's USB port. Plug the charging adapter into an AC outlet to begin charging. An image of a charging battery will appear on the scope's viewing screen showing the charging status. When the status reaches full capacity, the charging cable can be disconnected.

### 1.4 Recording Media

This device uses MicroSD media (also called TransFlash or TF) for recording photos and videos. MicroSD cards up to 32GB may be used to record and store files. In order to ensure proper performance, only cards with speed class 10 should be used.

To insert a MicroSD card, align the card with the card slot so that the card's smaller end with the metal contacts are facing the slot, and the printed surface of the card is facing up. Gently push the card into the slot. Be careful not to force the card, as this could result in damaging the card and jamming the slot. When the card is fully inserted, there should be a click.

To remove the MicroSD card, push the card inward to activate the release. The card will partially eject so it can be pulled out. Do not remove the card while the device is recording, as this will result in loss of data.

## 2. Operation

This NVB series night vision scope uses a highly-sensitive digital imaging sensor to display live video on a viewing screen. The scope can use ambient light and its built-in infrared lamp to view and record in settings with little to no light. The rear of the scope consists of a viewing screen and a control panel, while the front of the scope consists of an objective lens and an infrared light source.

### 2.1 The Control Panel

The control panel is located on the top of the device, above the screen. There are six buttons which control power, switch recording and exposure modes, capture images, and manage the device's settings.

### 2.2 Powering On/Off

To power on the scope, press and hold the power button for approximately 2 seconds. Once the screen displays an image, you can release the button. To power off the device, press and hold the power button for approximately 2 seconds. Once the screen begins to turn off, you can release the button.

### 2.3 Focusing

While the night vision scope is powered on, a live image will be displayed on the viewing screen. To control focus, adjust the focus ring located on the front left of the scope. Rotating the ring clockwise will focus closer while rotating the ring counter-clockwise will focus farther.

## 2.4 Exposure Modes

This device has three exposure modes including a standard exposure mode and two night vision modes. When using the standard mode, the IR filter cap should be closed to limit the amount of natural infrared light reaching the camera's sensor. To switch to night vision mode, press the exposure mode button once. The live image will change from color to monochrome, and the camera sensor's sensitivity will be increased. This mode can be used in dim lighting to maximize brightness. Press the exposure mode button once more to enable the infrared lamp. When using the infrared lamp, the lens' IR filter cap must be opened to allow the infrared light to enter. This mode can be used in complete darkness since the infrared lamp generates light which can be detected by the camera sensor.

## 2.5 Exposure Value




The scope uses automatic exposure compensation to adjust image brightness. It is possible to offset the automatic exposure using the Exposure Value (EV) setting. The current setting is displayed on the bottom right of the viewing screen. The default setting is EV-A. By pressing the right arrow button, the EV setting can be incrementally adjusted from EV-1 to EV-9 with EV-9 decreasing exposure by the largest factor. Pressing the left arrow button will adjust the EV setting to increase the exposure.

## 2.6 Digital Zoom

This device has a digital zoom function which can increase the magnification by up to 8X. The current magnification is displayed on the bottom right of the viewing screen to the left of the battery power indicator. To use the zoom feature, press and hold the left arrow button to increase the zoom level, or the right arrow button to decrease the zoom level. While either arrow button is held, a blue bar will be displayed on the right side of the screen showing the zoom level.

## 2.7 Changing Recording Modes

The mode button can be used to switch recording modes. Photo mode will be set by default. Press the mode button once to switch to Video mode. Press the button once more to switch to Playback mode. One more press will return to Photo mode. Each mode can be identified by the icon displayed in the top left corner of the screen.

	Photo Mode
	Video Mode
	Playback Mode

## 3. The Settings Menu

To access the scope's settings menu, press and hold the menu/mode button for approximately 2 seconds. Use the left and right arrow buttons to navigate through the settings. Press the OK button to display the options for the selected setting. TUse the arrow buttons to

### Photo Size

This sets the size of photos captured. Image scaling is done through interpolation. Sizes include:

- 3M (2368 x 1328)
- 5M (2992 x 1680)
- 8M (3760 x 2112)
- 10M (4208 x 2368)
- 20M (6128 x 3456)
- 25M (6736 x 3792)
- 30M (7328 x 4128)
- 40M (8000 x 4752)

### Timer

This sets the delay before an image is captured after pressing the capture button. Options include:

- Off
- 2s Timer
- 5s Timer
- 10s Timer

### Burst Shot

This mode will capture a 3 images when the capture button is pressed instead of 1.

### Video Size

This sets the resolution of recorded videos. Options include:

- 2.5K UHD (2560 x 1440, 30fps)
- 1080FHD (1920 x 1080, 30fps)
- 1080P (1440 x 1080, 30fps)
- 720P (1280 x 720, 30fps)

### Loop Recording

When recording video, this mode will record for a time up to the set duration. After the set duration has lapsed, video will continue to record, but will overwrite the previously recorded data. Available options include:

- 1 Minutes
- 2 Minutes
- 3 Minutes
- 5 Minutes
- 10 Minutes

### Video Rate

This sets the speed at which video is recorded. Video recorded in "slow" mode will play back at a reduced speed. Video recorded in "fast" mode will play back at an accelerated speed.

## Time Stamp

When enabled, the current date and time will be imprinted on recorded photos and video.

## Screen Brightness

This setting adjusts the brightness of the screen. The brightness level ranges from 1 to 8.

## Screensaver

This sets the amount of time before the screensaver engages due to inactivity. Available options are:

- Off
- 1 Minutes
- 2 Minutes
- 3 Minutes

## Auto Power Off

This sets the amount of time before the device powers off due to inactivity. Available options are:

- Off
- 1 Minutes
- 3 Minutes
- 5 Minutes

## Language

This sets the language displayed . Options include English and Chinese.

## Format

This will format an inserted MicroSD card. This process will erase all existing data on the card.

## Date/Time Set

This allows you to set the current date and time. Use the OK button to cycle through year, month, day, hour, and minutes. The left arrow button will increase the value, and the right arrow button will decrease the value.

## Restore Default

This will restore the device's factory default settings.

## Version

This displays the device's current firmware version.