

NIGHT VISION DIGITAL BINOCULARS USER MANUAL

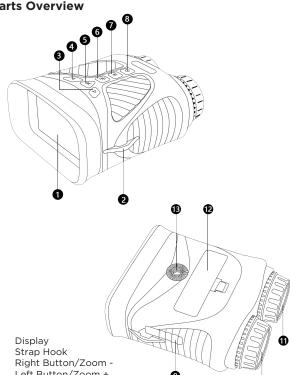




WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov.

This user guide is intended to provide you with guidelines to ensure that operation of this product is safe and does not pose risk to the user. Any use that does conform to the guidelines described in this user guide may void the limited warranty. Please read all directions before using the product and retain this guide for reference. This product is intended for domestic use only. It is not intended for commercial use. The is product is covered by a limited one-year warranty. Coverage is subject to limits and exclusions. See warranty for details.

Parts Overview



- 1.
- 2.
- 3.
- Left Button/Zoom + 4.
- 5. **OK Button**
- 6. IR Light Control Button
- 7. Menu/Mode Button
- Power ON/OFF 8
- 9. Type-C USB Port/Micro SD Card Slot
- 10. Focus Ring
- 11. IR Light
- 12. Battery Cover
- 13. Tripod

How To Use Night Vision Binoculars

BATTERY AND SD CARD INSTALLATION

Install Battery

• Remove the battery compartment cover cap, #12. Insert battery

Install Micro SD Card.

- Open the rubber cap covering the USB port and micro SD slot, and insert a micro SD card (up to 128 GB, class 10 or greater for best results with video files) into the micro SD slot (metal contacts facing down, see card icon right of slot for correct orientation).
- If you will only use the night vision binoculars for live viewing and do not wish to use it for photos/videos, the unit will function normally without a card.

MARNING: NEVER USE THIS DEVICE TO LOOK DIRECTLY AT THE SUN OR IN THE DIRECT PROXIMITY OF THE SUN. DOING SO MAY RESULT IN DAMAGE TO THE DEVICE OR PERMANENT LOSS OF VISION OR INJURY.

Using Your Night Vision Device:

- Press the power button (#8) for three seconds to turn on the night vision binoculars.
- 2. Look at the LCD viewing screen.
- Adjust the sharpness by turning the focus wheel in either direction until it becomes clear.
- Zoom up to 8x by pressing and holding the Left button (#4) until you reach your desired level. If you keep pressing the Right button (#3) you will zoom down to the default of 1x.
- When using the binoculars at night, the lens should automatically adjust to the brightness level. Tap the IR button (#6) to adjust the IR brightness from levels 1 to 3.

Setting Up Your Night Vision Device:

Pressing and holding down the Menu (#7) button will take you to the settings menu. Here you can set the photo resolution, video resolution, date, brightness and more. Use the Left(#4) and Right(#3) buttons to scroll through the settings and use the OK(#5) button to select. To exit the settings menu, press the Menu(#7) button.

Taking Photos

- When you power on the night vision binoculars, it will automatically start in Photo Mode. You should see the camera icon in the upper left corner of the LCD screen. If you do not see the camera icon, short press the Menu/Mode (#7) button until it appears.
- Adjust the sharpness by turning the Focus Ring (#10), and for nighttime use, adjust the brightness by pressing the IR button (#6).
- 3. Press the OK button (#5) to capture the image.

Taking Video

- With the power on, short press the Menu/Mode (#7) button until you see the video icon in the upper left corner of your screen.
- Adjust the sharpness by turning the focus ring (#10), and for nighttime use, adjust the brightness by pressing the IR button (#11).
- 3. Press the OK button (#5) to capture the video.

Using Playback Mode

- With the power on, press the Menu/Mode(#7) button until you see the playback icon in the upper left corner of your screen.
- The last file that has been saved will be displayed on the LCD screen. If it is a photo, the file suffix JPG will appear in the upper middle of the screen. For a video, the file suffix AVI will appear in the upper middle of the screen.
- 3. Use the Left and Right buttons to navigate through the saved files on your SD card.
- 4. Short press the Menu/Mode button to enter the menu of Delete, OK, or Cancel. Use the Left/Right button to navigate the choices and press the OK button to confirm.

Connect to a Computer

Files can be viewed and downloaded by connecting the night vision binoculars to a computer by USB while the binoculars are powered on.

Charging the Battery

The night vision binoculars battery can be charged by connecting to an AC adapter (not included) or to a computer using the dedicated USB cable supplied.

Specifications

Field of Application	Wildlife Observation, Hunting, Outdoors
Optical Magnification	4x
Digital Zoom	8x
Lens Diameter	43mm
Field of View	10
Image Sensor	CMOS
IR Illuminator Power/Wavelength	3W/850nm
Max. View Distance	300 meters / 328 yards
Photo Resolution	40M, 30M, 25M, 20M, 10M, 8M, 5M, 3M
Photo Format	JPG
Video Resolution	2.5K UHD, 1080 FHD, 1080P, 720P
Video Format	AVI
Display	3 inch IPS Screen
Storage	MicroSD card, up to 128GB
USB Port	Type USB-C
Battery	Rechargeable Lithium
Operating Temperature	-30 to 55 C / -22 to 131 F
Languages	English, Japanese, French, Spanish, Portuguese, German, Korean, Italian, Chinese, Russian, Arabic

Night Vision Basics

In dark situations, night vision devices provide an optical edge by allowing users to see the unseeable. Although this technology was originally developed for military use, night vision gear is now widely available and used for recreational activities like nocturnal wildlife watching, hunting, and navigating.

How does night vision work?

To see an object, our eyes collect and process the wavelengths of light from the visible light spectrum as they reflect off that object, but sometimes there is not enough visible light present for our eyes to work with and generate an image.

Traditional night vision devices that use image enhancement technology collect the dimmest visible light as well as light on the low end of the infrared spectrum to create images. The photons from both types of light collected by this type of night vision device then enter an internal tube where they first pass through a photocathode surface that converts these photons to electrons. These electrons then pass through a microchannel plate (MCP) that multiplies the number of electrons. The amplified electrons then hit a screen coated in phosphors, which light up to create a glowing image.

Digital night vision devices use a different process to generate images. Collected light is sent to a complimentary metal-oxide-semiconductor (CMOS) or charge-coupled device (CCD) sensor, which converts the photon information into a digital signal. This digital signal is then enhanced electronically before being transmitted to a display screen.

What is an IR illuminator?

Night vision devices often employ an IR illuminator to gather more information and "see" farther. Much like a flashlight, which functions on the visible light spectrum, an IR illuminator emits light on the infrared spectrum. This enhances the amount of infrared light reflected off objects that a night vision device can then pick

up and use to generate an image. The emitted infrared light cannot be seen by the naked eye. However, different devices use different wavelengths of light and those that use an 850nm wavelength will produce a faint red glow. This wavelength creates a longer illuminator range, but the devices that operate on a 940nm wavelength have no red glow and are completely undetectable.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or reletevision reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- --Reorient or relocate the receiving antenna.
- --Increase the separation between the equipment and receiver.
- --Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



© National Geographic Partners LLC.

All rights reserved. NATIONAL GEOGRAPHIC and Yellow Border Design are trademarks of the National Geographic Society, used under license.

© Explore Scientific, LLC. 1010 S 48th Street, Springdale, AR 72762 explorescientificusa.com | 866.252.3811 | All rights reserved. Made in China.