

Night Owl Optics

NIGHT VISION



NOB3X-DG

Digital Night Vision Binocular
with Image Capture and
Video Recording

Instruction Manual

1-915-633-8354

www.nightowloptics.com

CONTENTS

BEFORE USE 4

Care and maintenance	4
Warning	4
Introduction	5

PRODUCT AT A GLANCE 5

Package contents	5
Product overview	6
Specification	7
Status icons	8
Quick reference	9-10

GETTING STARTED 11

Installing the batteries	11
Installing the microSD card	12
Removing the microSD card	12
Memory card and USB connection	13

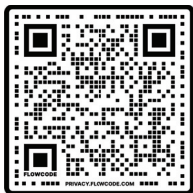
BASICS 14

Power on	14
Adjusting the interpupillary distance	14
Eyepiece focus	15
Objective lens focus	15
Taking photos	15

Video recording	15
Adjusting the infrared intensity	16
Zoom	17
Frame rate	17
Screen brightness	18
Power down	18
Infrared intensity and battery consumption	18

PLAYBACK AND SYSTEM SETTINGS 19

Scrolling the menu with the buttons	19
Viewing photos	20
Playing back the video	21
Set date and time	22
Select the display language	23



Follow this link
for more
Night Owl Optics videos

BEFORE USE

Please read this instruction manual carefully before using this device, and retain it for future reference.

Care and maintenance

- Do not drop.
- Keep the device dry and protect it from water and humidity.
- Do not store in extreme high or low temperature.
- Do not expose to or store in dusty, dirty areas. This may cause damage to the moving parts.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the device. Wipe it with a clean soft cloth.
- Blow away any dust and particles on the lenses and window. Clean these only with moistened soft lint-free cloth.

Warning

- Do not aim the device at the sun as this may damage the image sensor.
- Remove batteries for storage. Do not leave batteries installed for extended storage.
- Do not mix new and old batteries or different types of batteries.
- It is normal for this device to get warm when using for a prolonged period of time.
- Do not insert batteries in reversed polarities when not in use.

Introduction

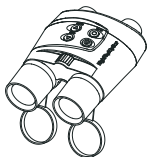
The Night Owl Night Vision Binocular and Video Recorder allows you to view objects and capture photo and video images in the dark. The high intensity infrared beam enables visibility as far as 120m (~131 yards) in complete darkness. The adjustable frame rate and infrared intensity features, plus the 2x digital zoom, offer night vision capability across a range of low light and dark environments. All stored media is black and white. **Note:** The nighttime color spectrum is black and white only.

Familiarize yourself with this night vision binocular before using it. Follow the steps in the manual (see *BASICS* section, starting p.14). After a photo/video is captured, play it back and check to ensure it has been properly recorded.

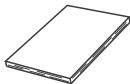
PRODUCT AT A GLANCE

Package contents

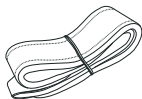
Night Vision
Binocular and
Video Recorder



User Manual



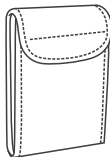
Strap



Lens Cloth



Pouch



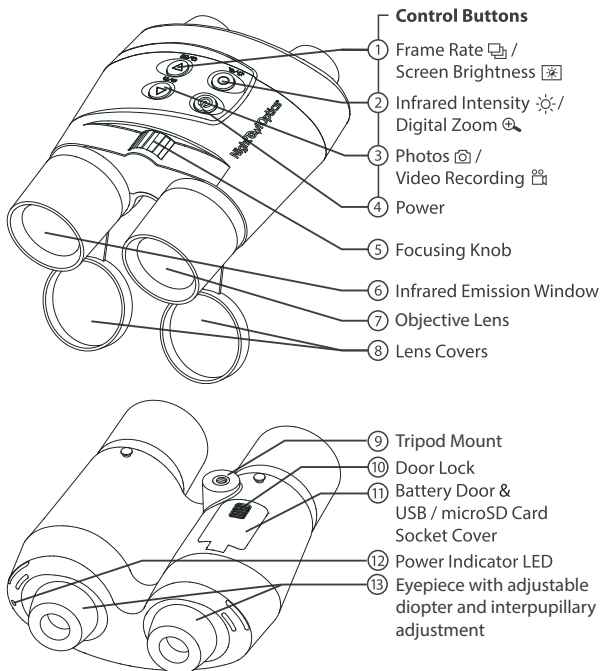
USB Cable



microSD card
w/Adapter



Product overview



Specification

Objective	Focal length : f=38.0 Aperture : F 1.0 Field of view : 7.3°
Eyepiece	Dioptric compensation : -4.0~+2.0D
Infrared range	Approximately 120m (~131 yards)
microSD card	8GB * included (accept up to 32GB)
Sensor Type	CMOS
Maximum video capturing resolution	640 x 480 pixels (VGA)
Magnification	3x
Zoom	2x (Digital)
Battery	2 x CR123A
Weight	Approximately 15.3 oz (435.4 grams) with batteries

* 1GB=1,000,000,000 bytes. Actual capacity may vary. Some capacity is used for memory maintenance and other functions and is not available for storage.


Status icons

Recording indicator

Video recording

Recording time

Frame rate

 30 30 fps

 15 15 fps

 8 8 fps

Infrared intensity

 High

 Medium

 Low

 Off

 **AUTO** Auto

Image capture (photos)

Digital zoom

X2 2x digital zoom

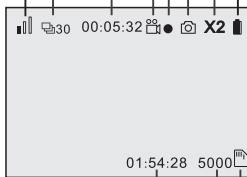
Battery level

 High

 Medium

 Low

 Replace battery



Video time remaining

SD card status

 Card installed

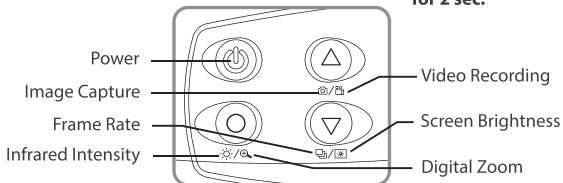
 No card

Remaining photos

Quick Reference












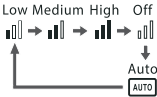




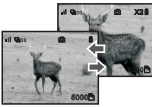




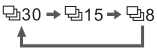





↓ : Press

⇓ : Press and hold for 2 sec.



Function	Control Button	Description	Display
On/Off		Press and hold for 2 seconds to turn power on or off. The device will enter sleep mode after 5 minutes of non-operation (except on video recording mode).	
Focusing		Focus each eyepiece independently ① until the icons on the screen are sharp & in focus, then ② adjust the objective until your target is in focus.	
Taking photos		Press to capture image.	

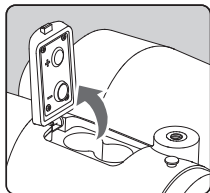
Quick Reference

Function	Control Button	Description	Display
Video recording	  	<p>Press and hold  for 2 seconds to start recording. You will see  on the screen.</p> <p>Press  again to stop recording. The Night Vision Binocular will start a new file every 10 minutes.</p>	
Infrared intensity	  	<p>Press  to adjust the IR intensity.</p>	<p>Low Medium High Off</p> 
Digital zoom	  	<p>Press and hold  for 2 seconds to trigger 2x digital zoom. Press-and-hold again for 2 seconds to resume.</p>	
Frame rate	  	<p>Press  to adjust frame rate.</p>	
Screen brightness	  	<p>Press and hold  to switch between high or low brightness. Release to confirm.</p>	

Before you start using the Night Vision Binocular and Camera/Video Recorder, make sure the batteries and microSD card are installed properly.

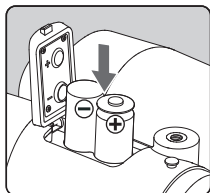
GETTING STARTED

Installing the batteries



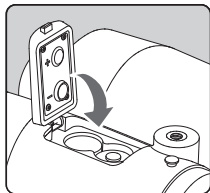
Open the battery door

Open the battery door by sliding the door lock in the direction as shown by the arrow.



Insert batteries

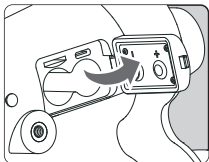
Insert 2 CR123A batteries into the battery compartment in their correct polarity positions.



Close the battery door

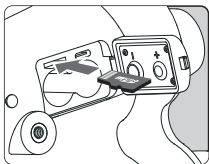
Close the battery door and slide the door lock in the direction as shown by the arrow.

Installing the microSD card



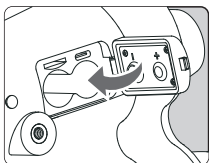
Open the cover

Flip open the USB and memory card cover. Do not detach the cover.



Insert the card

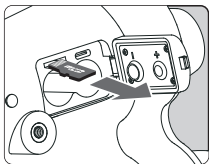
Place a microSD card in the memory card slot, with the metal contacts facing down. Then push card until it clicks in place.



Close the cover

Close the cover in its original position.


Removing the microSD card

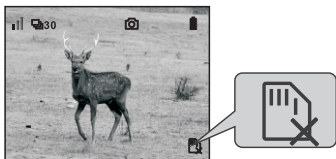


Remove the card

Gently push the microSD card in. It will then release itself from the slot.

If microSD card is not installed, user cannot enter viewing or capture modes from the menu

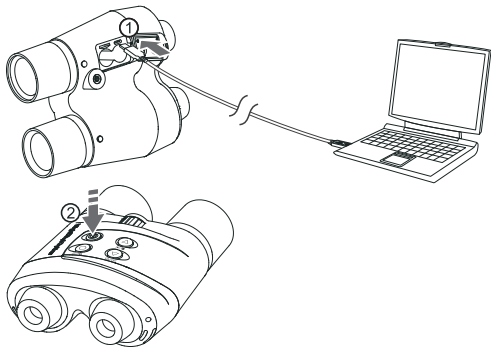
Without a microSD card in the device, the “no microSD card” icon  will be displayed.



Memory card and USB connection

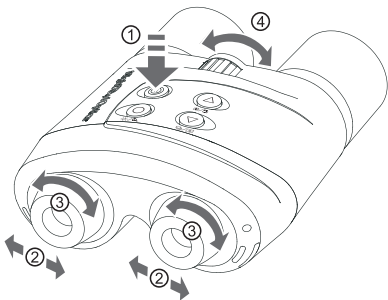
The saved images can be transferred to a computer from the removable memory card or via USB cable.

Turn the device off and then connect the USB cable as shown below. When the device is turned on again, the computer will automatically detect the microSD card.




Do not remove the memory card while the device is transferring or accessing data. Doing so may result in loss of all data, or damage to the memory card or the device. The manufacturer or retailer shall not be liable for any lost data or other indirect, incidental or consequential damages.

BASICS

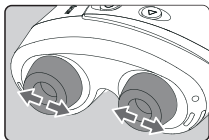


1. Power on



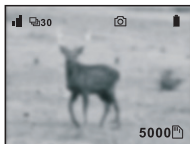
Press and hold  for 2 seconds to turn on or off.

2. Adjusting the interpupillary distance



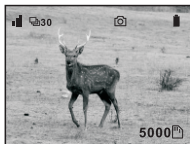
Slide the eyepieces together or apart to align with your individual eye position.

3. Eyepiece focus



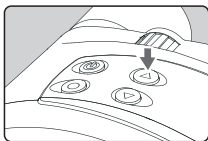
Focus each eyepiece independently until the icons on the screen are sharp and in focus.

4. Focusing the objective



Rotate the objective lens until the target image is seen sharp and in focus.

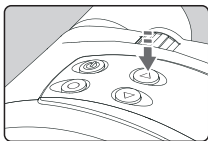
Taking photos





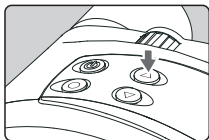
Press **(A)** to capture image.
The image will be saved on the micorSD card.

NOTE: Bottom right corner indicates remaining photo capacity.

Video recording

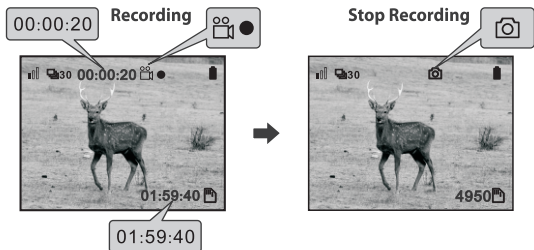


Press and hold **(A)** for 2 seconds to start video recording.
The icon on the screen will change from  to , and the timer on the bottom left corner will start.

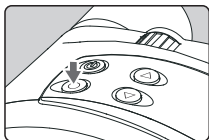


Press  to stop recording.


The device will start a new file every 10 minutes.



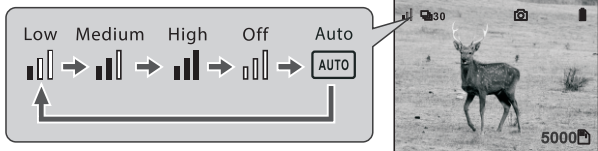
Adjusting the infrared intensity (IR intensity)



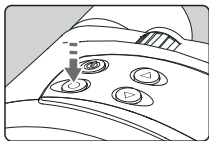
There are 4 IR modes available: low, medium, high and IR off.



Press  once to change to the next level of intensity.

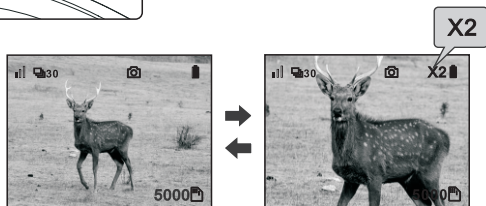
Tip: The further the object, the higher the IR intensity required.



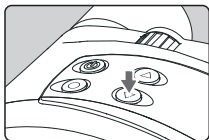
Zoom




Press and hold  for 2 seconds to trigger the 2x digital zoom. Press and hold  for 2 seconds to disengage zoom.



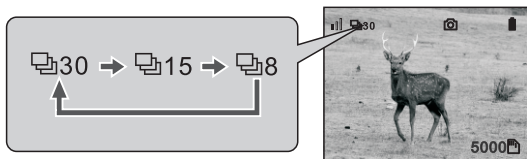
Frame rate (frames per second)



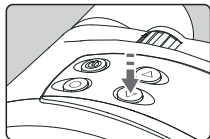
There are 3 frame-rate modes available: 30 fps, 15 fps and 8 fps are attached in cyclic order.

Press  once to change frame rate and cycle through to the next.

Tip: Use lower frame rate for darker conditions or more distant objects.

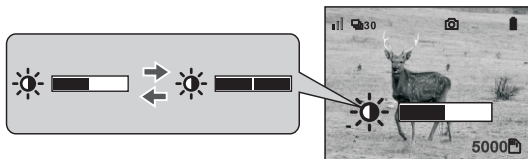


Screen brightness

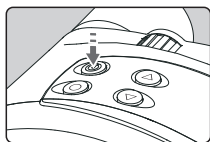


Press and hold ☀ to toggle between dim and bright screen.

In high ambient light environment, use low brightness setting.



Power off



Press and hold ⏻ for 2 seconds to turn off.

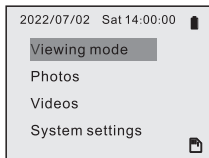
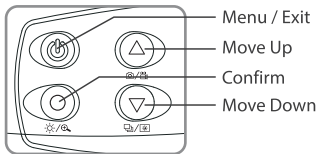
The device will enter sleep mode when left idle for 5 minutes; press any button to resume operation. The device will turn off automatically after 5 minutes in sleep mode.

Infrared intensity and battery consumption





There are 3 levels of infrared (IR) intensity and an IR-off mode. The default setting at power-up is low. Press Ⓞ once to cycle through from low to medium to high intensity and IR-off. Start at IR-low intensity and increase as required for the best illumination without overexposing the image. A higher IR intensity is needed for viewing in darker environments or for more distant targets. More battery power is consumed at higher IR intensities. 2 brand new alkaline batteries can power continuous operation for approximately 60 minutes.

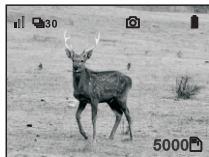
PLAYBACK AND SYSTEM SETTINGS

Scrolling the menu with the buttons



Select Item

Press  to display menu screen.
Select an item using the  and  buttons.
Press  to confirm.

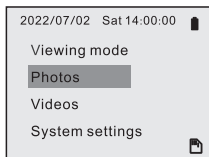


Return to Night vision mode




Press  to return to the Viewing mode.

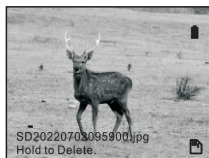
Viewing photos

Press  to display menu screen.





Enter Photos

Use  and  to select the “Photos” tab and press  to playback the first image.



Select image

Use  and  to select an image.

The icon on the bottom right corner shows the image number being viewed and the total number of images stored.

Press  to return the menu.



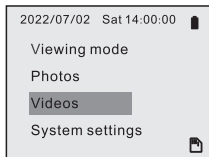
Deleting an image being viewed

Press and hold  for 2 seconds.




Press  to confirm.

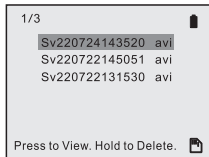
Playing back the video

Press  to display menu screen.







Enter video viewing


Use  and  to select the "Video" tab and press  to enter the video directory.

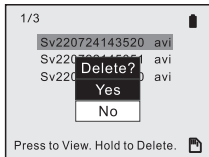


Select video viewing


Use  and  to select the video file, press  to view.

Press  to freeze a frame while viewing and press it again to resume.

Press  to go back.




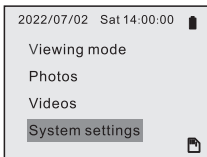
Deleting a video

At the video directory, select the video you want to delete, press and hold  for 2 seconds.




Press  to confirm deletion.

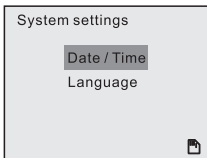
Setting date and time

Press  to display menu screen.






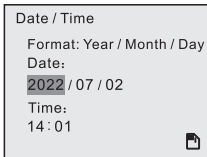
Enter System settings

Use  and  to select the "System settings" tab, then press .






Select Date/Time




Use  and  to select the "Date/Time" tab, then press .

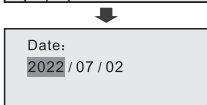
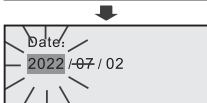


Set the date and time

Use  and  to select an item, press  to confirm selection.

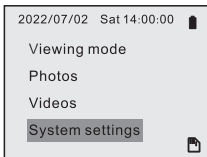
The item will start flashing.

Use  and  to increase or decrease the number, press  to confirm.






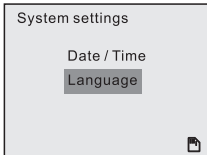
Selecting the display language

Press  to display menu screen.






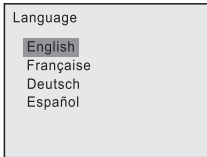
Enter System settings

Use  and  to select the "System settings" tab, then press .






Enter Language

Use  and  to select the "Language" tab, then press .



Select the interface language

English is set by default, use  and  to select the desired language, then press .

One-Year Limited Warranty

The NOB3X-DG binocular is warranted against defects in materials and workmanship under normal use for one year from the date of purchase to the original owner.

Damage due to neglect, accidental damage or misuse of this product is not covered under this warranty. Decisions regarding abuse or misuse of the product are made solely at the discretion of the manufacturer.

Proof of Purchase is required to make a claim under this warranty. Liability under this warranty is limited to replacing or repairing, at our option, the NOB3X-DG returned, shipping cost prepaid, to Night Owl Optics.

To return your binocular for service, please first contact us for a Return Authorization (RA) Number.

NOTICE TO CUSTOMERS OUTSIDE THE U.S.A.

This warranty may vary in other countries; check with your distributor for details.

Warranty does not cover shipping costs to or from the U.S.A.



Keep this device out of the reach of children.

1120 Alza Drive, El Paso, TX 79907

800-444-5994

Warranty Service:

service@nightowloptics.com

www.nightowloptics.com

Night Owl Optics

Copyright© Night Owl Optics®, 2022

All rights reserved, including the right to reproduce this manual, or parts thereof, in any form. Night Owl Optics® is a registered trademark of Night Owl Optics.