

Helmet Mounted Night Vision (HD)



User Manual

Developed for



SURVEILLANCE



OUTDOOR



HUNTING



BOATING



1. Long press the open button for about 3 seconds, you can realize the switch.
2. Adjust the eyepiece diopter for visual clarity. when the words on the screen look very clear, this position is suitable for your eyes.
3. Adjust the front of the photosensitive lens, can make the observed picture clearer.
4. Each button function, there is a long press and short press the difference.
5. At the bottom, there is a tripod interface for convenient external tripod attachment.
6. When combined, this unit forms a binocular that creates a 3D effect and widens the field of view. When used individually, it is more lightweight.



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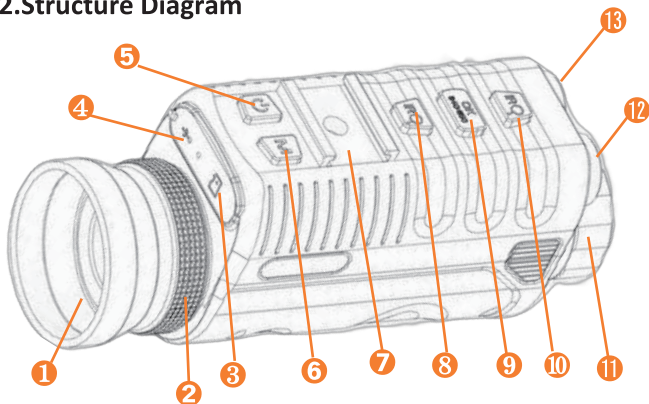
1.Introduction

Thank you for purchasing the head-mounted night vision. Before use, please read this user manual carefully and keep it safe. Familiarizing yourself with the operating instructions and technical specifications in the manual will help you have a better experience. We hope our product brings you joy. To improve your experience, we will update the product based on consumer feedback. Please note that there may be slight differences between the manual and the actual product, so please refer to the actual product. We apologize for any inconvenience this may cause.

You can use the night vision to take pictures and videos, day or night. When the machine is turned on, the video and photos in the machine can be transmitted to the computer and network platform through type-C wire, or the content of SD card can be directly read through the card reader and transmitted to the computer and network platform.



2.Structure Diagram



1.Eyepiece Cover	8.Digital zoom reduced /Infrared Light Dimming
2.Eyepiece Adjustment Wheel	9.Confirm Button
3.MicroSD Card Slot	10.Digital zoom magnification /Infrared Light Intensify
4.USB port	11.Objective Focus Knob
5.On/Off button	12.850nm Infrared Light
6.Mode button	13.940nm Infrared Light
7.Helmet Bracket Slot	

3.Button Operation Statement



[POWER]	1.Turn on or turn off the night vision device (long press for 3 seconds) 2.When the screen is on, shortly press to make the screen enter the sleep state. The machine will still work as usual. Press any button again to exit the sleep state.
[MODE]	1.Click the [M] button to switch between Photo, Video, and Playback Mode. 2.In photo and video mode, long press [M] button to enter the system menu, long press again to exit the System Menu. 3.In the System Menu Mode, click the [M] button to return to the previous menu.
[850/940/OK]	1. In video mode: Click to start recording, click again to stop recording. 2. In photo mode: Click to take a photo. 3. In playback mode: Click to play the video, click again to stop video playback. 4. In system menu mode, click the OK button to confirm the current selection. 5. In photo and video mode, press and hold the OK button to switch the infrared light.

3.Button Operation Statement



[⊕ IR]	1.In video mode: Click to turn on or enhance the infrared light. Long press to zoom in digitally. 2.In camera mode: Click to turn on or enhance the infrared light. Long press to zoom in digitally. 3. In playback mode/system menu mode: Click to act as an upward option.
[⊖ IR]	1. In video mode: Press to turn off or reduce the IR light. Long press to zoom out digitally. 2. In photo mode: Press to turn off or reduce infrared light. Long press to zoom out digitally. 3. In playback mode/system menu mode: click to have the downward option function.

4.Package Contents

1x Night Vision Device

1x SD Card (Optional)

1x Packaging Bag

1x Screwdriver

1x USB Cable

1x Cloth

1x User Manual



5.Basic Setup and Function

5.1 Inserting the SD card

1.Insert the micro-SD card into the micro-SD card port and push until it locks in place.

2.To remove the installed micro-SD card, please push the card inward and it will come up.

*Tip :If the machine cannot read the SD card normally, it is recommended to format the SD card with this machine. If it still doesn't read properly after formatting, try using a new micro-SD card.

5.2 Turn On/Off

Hold the [⏻] button for 3-4 seconds to turn on the night vision device and enter the observation mode.

Hold the POWER button for 3-4 seconds again to turn off the night vision device.



5.3 Scenery Observation / Taking Photos

On the observing (photo shooting) mode, the icon will appear in the upper right corner of the screen. At this time, press the [OK] button to take a picture.

Adjust the eyepiece until the icons and text on the screen are clear, indicating that the eyepiece is in the correct position. Align the object to be observed and focus through the screen. You can then adjust the objective lens focusing knob for the clearest image. In low light conditions, turn on the auxiliary infrared light and adjust the brightness for easier observation. Our professional infrared light lens ensures uniform infrared light projection over long distances, making it highly effective for observing objects in the dark.

5.4 Video Recording

Press the [MODE] button and select the Video Mode. The icon  will appear in the top right corner of the screen.

Press the [OK] button to start recording video.

When the small red dot flashes means that the video is being recorded, and press the [OK] button again to stop recording.



5.5 ▶ Playback/File View

Press the [M] button and select Playback Mode, like the following images. You may then toggle through your saved.

photos/videos with the **【+IR】** / **【-IR】** buttons.

5.6 File Deletion

In Playback Mode, long press the [MODE] button to enter the following mode. Use the **【+IR】** / **【-IR】** buttons to select [Delete] / [Protect] , and press [OK] to confirm the selection. Press the [MODE] button to cancel current the selection.。

5.7 Videos and Photos Protection

In playback Mode, long press the [MODE] button. If you want to protect the image you are viewing. Use the **【-IR】** / **【+IR】** buttons to select [Protect] or [Unlock protection], and press the [OK] button to protect the portrait.



5.8 Adjust the Focus

Select the target/reference object, then slowly rotate the Objective Focus Knob **11** to find a clear point.

5.9 Use the Zoom function.

In the Video Mode/ Photo Mode, press **[+IR]** / **[-IR]** button to select digital zoom.

5.10 Use Infrared Light

This built-in infrared device can be used in complete darkness.

Long press the OK button to switch between different infrared lights.

If you want to see further, it is recommended to use 850nm infrared light.

If you want to hide, it is recommended to use 940nm infrared light.

Press the [IR] button to activate the infrared light. Select brightness between levels 1 and 4.

5.11 Transferring Files

1. Remove the SD card and use an SD card adapter to access pictures or videos.
2. Connect to the computer via a USB cable to access pictures or videos.



5.12 NVG40 PRO Compass Function

The NVG40 PRO features a compass function, allowing you to easily understand your orientation at any time. After powering on, please follow the on-screen prompts to place the device horizontally and press the OK button to calibrate; calibrating the device when it is not in a horizontal position may cause some errors. You can also recalibrate through the menu settings under Electronic Compass - Initialize.

5.13 NVG40 PRO Gyroscope stabilization feature

This device has a gyroscope anti-shake function. When this function is activated, an anti-shake indicator will appear on the display, making it more comfortable for your eyes during observation. It is important to note that this function is not compatible with the digital zoom function and NV mode. When you need to activate the digital zoom function or NV mode, you must disable the anti-shake function.

5.14 NVG40 PRO Night Vision Enhancement Mode

By pressing the M key twice in quick succession, you can enter or exit NV mode. In NV mode, night vision capability is significantly enhanced, and it is not advisable to use NV mode during the day. By pressing the key three times in quick succession, you can enter or exit the picture-in-picture mode, which will magnify the object in the center of the screen by four times, making it easier for you to observe fine details.



5.15 NVG40 PRO WIFI CONNECTIVITY



IOS



ANDROID

1. Scan the QR code and download the APP
2. When turning on the night vision, long press the [M] key to enter the menu, select "WIFI" → then select "ON", check the SSID and WPA2.
3. Open the "Roadcam" app, click on "Add Camera"→"Next", find the "SSID" number of the night vision device in the WIFI account, enter the WPA2 password to complete the connection. Once connected, open the Roadcam APP.
4. In the app, you can take photos and record videos, simply exit to end. You can also long press the [M] Key on the night vision device to exit the WIFI.

6.Menu Operation



6.0 System Menu Settings

[System Menu Interface] In the photographing and video mode, long press the [MODE] button to enter the system menu, Use the [ IR] and [ IR] buttons to select up and down options, press the [OK] button to confirm the selection, press the [MODE] button to cancel the current selection and return to the previous menu.

You can set the parameters of the machine according to your needs.

There is a menu for the "Default Setting" in the machine, it can restore the device into the factory settings. and if you feel that the effect after setting is not as good as the original setting, you can restore the factory Settings in the system menu.

7.Specification



Model	Project	NVG40 PRO
1	Optical magnification	1x
2	Digital magnification	6x
3	Illumination infrared wavelength	850NM/940NM dual infrared switchable
4	Visible range of weak light	1m~∞ under natural starlight
5	video resolution	4K 3840*2160
6	Photo image resolution	42M 8704*4896
7	Display resolution	454*454
8	Camera size/type	1/2.7" CMOS
9	Field of view	Storage 45.8°×25.8°(screen display25.8*25.8)
10	850NM infrared light power	3W/4 gears manual dimming
11	940NM infrared light power	3W/4 gears manual dimming
12	color day/night	Full color/black and white/green/brown
13	Battery category	Rechargeable lithium battery
14	Operating Voltage	3.5V -5.4V
15	USB interface	TYPB-C
16	focus adjustment	Objective lens focusing
17	camera function	yes
18	Video recording function	yes
19	Screen brightness adjustment function	yes
20	Lighting brightness adjustment function	yes
21	Photo, video, and playback functions	yes
22	Time setting function	yes
23	WIFI	Yes
24	compass	Yes
25	camera function	Yes
26	Video recording function	Yes
27	Screen brightness adjustment function	Yes
28	Lighting brightness adjustment function	Yes
29	Photo, video, and playback functions	Yes
30	Time setting function	Yes
31	Enhance night vision mode	Yes

7.Specification



Model	Project	NVG40
1	Optical magnification	1X
2	Digital magnification	4X
3	Illumination infrared wavelength	850NM/940NM dual infrared switchable
4	Visible range of weak light	1m~∞ under natural starlight
5	video resolution	1080P 1920*1080
6	Photo image resolution	8M 3840*2160
7	Display resolution	454*454
8	Camera size/type	1/2.9" CMOS
9	Field of view	Storage 45.8° × 25.8° (screen display 25.8°*25.8°)
10	850NM infrared light power	3W/4 gears manual dimming
11	940NM infrared light power	3W/4 gears manual dimming
12	color day/night	Day (true color)/Night (black and white)
13	Battery category	Rechargeable lithium battery
14	Operating Voltage	3.5V~5V
15	USB interface	TYPB-C interface
16	focus adjustment	Objective lens focusing
17	camera function	yes
18	Video recording function	yes
19	Screen brightness adjustment function	yes
20	Lighting brightness adjustment function	yes
21	Photo, video, and playback functions	yes
22	Time setting function	yes
23	WIFI	No
24	compass	No
25	camera function	Yes
26	Video recording function	Yes
27	Screen brightness adjustment function	Yes
28	Lighting brightness adjustment function	Yes
29	Photo, video, and playback functions	Yes
30	Time setting function	Yes
31	Enhance night vision mode	No

8. Q & A



Q: When the machine crashes, how do you restart it?

A: For the NVG40 model, simultaneously press the [⏻] and [M] buttons to shut down, then restart normally. For the NVG40 PRO model, simply long-press the [⏻] button to shut down, then restart normally.

Q: How to activate the super night vision mode?

A: NVG40 does not have a super night vision mode; NVG40 PRO can quickly start the super night vision mode by pressing the [M] button twice, exit by pressing [M] button twice again, or access through the menu.

Q: How to enable the picture-in-picture mode?

A: NVG40 does not have a picture-in-picture mode; NVG40 PRO can quickly start the picture-in-picture mode by pressing the [M] button three times, exit by pressing M three times again, or access through the menu.

Q: How to adjust the brightness of the display screen?

A: In the system menu settings, there is a "Brightness" setting ranging from 1 (lowest) to 5 (highest). Please note that adjusting the brightness on NVG40 may cause the screen to briefly go black for a few seconds.

Q: Does the machine work in complete darkness?

A: Yes, you can use infrared light without the need for moonlight or starlight. Is the machine suitable for daytime use? Yes, our night vision device can record videos and take photos during the day as well.

8. Q & A



Q: Why can't the device be read when connected to a computer?

A: Ensure to power on the night vision device when connecting to a computer.

B: Some USB cables only support charging and not data transfer; use the original USB cable provided. Why can't the SD card be read properly when inserted? Try formatting the SD card on the device, if issues persist, consider replacing it with a high-quality SD card. Avoid using SD cards larger than 256GB, it is recommended to use a 32GB card.