



USER MANUAL FOR

1x18 NIGHT VISION HD HELMET MOUNTED

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Product Description



[Name] Head-mounted digital night vision device[Model] NVG10

[Performance characteristics]

• This product can be used day and night, the optical magnification is 1 times, and the digital magnification is 3 times.

• To achieve a better night vision effect, the machine is set to black and white mode.

With low illuminance, all black and no light, using LED lighting, you can observe a 200m target.
Power supply: This machine uses a 18650 large capacity rechargeable lithium battery.
Working hours: It can be used for 3 hours when WiFi and infrared lights are turned on, and it can be used for 5 hours when only WiFi is turned on.

• This machine comes with WiFi, which can communicate with the APP installed on the mobile device, and realize the functions of recording and taking pictures in the APP.

• This machine comes with a rack interface, which can be matched with different bucket racks through different interface conversions. Suitable for various helmets of different specifications.

• This product adopts 1080P ultra-low illumination detector.

• This product is the best auxiliary tool for human vision extension.

[Usage notice]

• Night vision device is a precision optoelectronic instrument used to observe targets at night. Can work in very low light.

The night vision device is equipped with infrared lighting, suitable for use in pure dark environment.
When the auxiliary lighting is turned on in a dark environment, the brightness of the auxiliary lighting source can be adjusted appropriately according to the distance of the observed object. The night vision device uses a low-illuminance detector. When the environment has a certain light source (such as street light, moonlight), it is not necessary to turn on the auxiliary light source, and only need to adjust the focal length of the objective lens to make the observation clear.



1-Battery cover 3-Hanger 5-Diopter handwheel 7-Focusing handwheel 2-Infrared light 4-Objective lens cover 6-Eye mask

7



8-Down button 9-Up button 10-Świtch key

[Install the battery]

Unscrew the battery cover 1, take a usable battery (18650 battery with sufficient power), insert the negative electrode of the battery into the battery compartment, screw the battery cover in place, press the power button 9 , the internal display screen lights up, indicating the battery installation Correct; if there is no display on the display, please confirm whether the battery cover is screwed in place and whether the battery has sufficient power, and then start the test until the machine works normally.

[Precautions]

The battery specifications must meet the requirements.

The battery needs to have sufficient power. When installing, pay attention to the positive and negative directions of the battery. Failure to screw the battery cover in place will cause the machine to work abnormally.

[Turn on]

• Remove the objective lens cover 4.

• Click the power button ,View from 6 eyepieces Look,see the display inside the machine.The



screen lights up,Display as shown on the right Icon, the machine enters the normal working state. Icon description:

- 1 WiFi status
- 2 Infrared light status
- 3 North Arrow
- 4 System time
- 5 Battery level
 - **J**

[Shutdown]

No matter what state the machine is in, press and hold the power button (3 seconds) to shut down the machine.

[Scenery observation]

• Remove the protective cover of the objective lens, in the observation state, aim the objective lens at the scene to be observed, and watch the display screen from the eyecup 6.

• a) Adjust the diopter handwheel 5 to make the text icons on the screen clearest;

• b) Adjust the objective lens focusing handwheel 7 to make the observed scene the clearest.

• The instrument will automatically fine-tune the brightness of the display according to the average brightness of the scene in the center of the screen.

Up key 8# , digital zoom can be realized, and the digital image magnification range is 1~3 times.
When the ambient light is bright, it is

recommended to turn off the infrared light to save battery power.
When the ambient light is bright, it is recommended to turn off the infrared light to save battery power.

(Precautions)

Do not block anything in front of the infrared light.

[Menu operation]

Most function settings are performed in the menu.
 Long press the up button for 2~3 seconds, release the button, and the menu appears.

• On the interface where the menu appears, long press the up button for $2\sim3$ seconds, release the button, the menu will disappear

In the menu operation, the up and down keys are used to control the selection cursor bar to move between the menu items. When the selection cursor bar is located in a menu item, press the ON key to confirm the selectio



[Screen brightness adjustment]

• In the observation state, press the up key 5# and hold for 3 seconds to release the key to enter the menu interface. The up and down keys can control the cursor to move up and down.

 Light up the "LCD Brightness Adjustment" menu item, press the ON key to confirm, in the pop-up submenu, move the cursor with the up and down keys , and use the ON key to select the desired value.Long press the up button to exit the menu.
 The screen brightness is between 1~9, the value 9 is the brightest.



[Infrared light adjustment]

When observing the scene, if the light is very dark and the scene cannot be clearly observed, you can turn on the infrared light for auxiliary lighting.
Press 9# for a long time, the logo "IR OFF" at the lower left corner of the screen changes to "IR ON", indicating that the infrared light has been turned on. At this time, press the down button once, the logo will change to "IR 1", and the number 1 means the current infrared. The brightness level of the light is level 1, keep pressing the key , the number will cycle between 0~3, level 3 is the brightest

• Long press the key and the logo in the lower left corner changes to "IR OFF", it means that the infrared light has been turned off.

[Precautions]

Do not block any objects in front of the infrared light. Infrared light consumes a lot of power, please keep it off when not in use.



[Digital zoom]

• When the instrument is under observation, digital zoom operation can be performed.

• Press the up button once, and the screen will zoom in to 2 times. Each time you press it, the digital zoom will cycle between 1 and 3, and the maximum value is 3.

• The digital magnification is displayed in the lower left corner of the screen.



[Display color switching]

• When the machine is in the observation state and the infrared light is off, the display color can be changed.

• Press the down button , the display color will switch between black and white and green.





[WiFi on and off]

• The status of WiFi on and off is displayed in the status bar in the lower left corner, as shown in the figure below, the status with a red slash is the WiFi off state.

• In the menu, move the selection cursor bar to the "WiFi" menu item, press the on button to confirm the selection, and enter the WiFi setting sub-menu, as shown in the figure below, move the selection cursor bar to the desired menu item, and press the on button Confirm, the setting is complete.



[Date and time setting]

•Select "Date/Time" in the menu interface and press the power button to enter the date/time setting submenu

•On button Control the selection cursor bar to move among the setting items.

• Up and down keys Change the parameter value of the cursor bar position. Press the on button

to place the selection cursor at the last position, and press the on button again to exit the date/time setting submenu.



[Automatic shut-down]

• Select "Auto power off" in the menu interface, and press the power button to enter the submenu of automatic power off settings.

• The option "Off" means that the machine will not shut down automatically.

• The options "3 minutes", "5 minutes" and "10 minutes" mean that the machine will automatically shut down if there is no operation within the set time.



	1 Minute			
	2 Minutes			
	3 Minutes			
Langua	ye			
Brightness				
T Default Setting				
	< V >	1/2		

[language settings]

• Select "Language Setting" in the menu interface, and press the power button to enter the language setting submenu.

• The supported languages of this machine are as follows:Simplified Chinese, Traditional Chinese, Italian, Japanese, Russian, English, French, Spanish, Portuguese, German.





Component Description

[Restore default settings]

- Select "Default Settings" in the menu interface and press the power button to enter the default setting submenu.
- If you select the "OK" option, the machine will restore the default settings.





[Basic parameters]

Туре	ltem	Parameter value
Optical performance	Magnification	1x
	Objective lens aperture	17.5mm
	Field of view	24° horizontal 13.5 vertical
	Eyepiece adjustment range	+2 ~ -5D
	Low light observation distance	200m
	No light and black observation distance	100m

	Operating Voltage	3.7V DC
power supply	Replaceable battery	R e c h a r g e a b l e lithium battery 18650
	Charger	110V-220V
Others	Dimensions (length × width × height)	110×80×57
	Weight	245g

The Standard Configuration

[The standard configuration **]**

Name	Amount
user's manual	1
Battery	1
External power adapter	1
Battery charger	1
Lens cloth	1

Use Environment Requirements And Precautions

[Use environment requirements and precautions]

- The night vision device should be stored in a soft bag, the operating environment should be between -5°Cand 40 C, and the relative humidity should not exceed 80%.
- The night vision device should be stored in a clean and dry place to avoid moisture, mold, heavy pressure, mechanical damage, humidity, and solar radiation.
- Try to avoid rain or fog to prevent falling, bumping, and bumping.
 When the image on the display screen is bounced, the green gridlines, or the screen does not light up, it indicates that the voltage is too low and it needs to be charged in time.
- If you need to clean the optical surface of the objective lens, eye-

piece, and laser illuminator, blow off small grit and dust, and then

wipe the surface with a soft cloth. If the night vision device is not

used for a long time, please keep the battery charged frequently to

prevent the rechargeable battery from failing.

DIGITAL NIGHT VISION DEVICE WIFI CONNECTION STEPS

(1) Install and connect the mobile phone software:

Android and Harmony OS system

At present, it can be connected with the WIFI Camera Device app, which can currently perform real-time image transmission, photography, video recording and other functions.

WIFI Camera Device app can be downloaded in all application markets of Android phones;

Or use the installation package named "WIFI Camera Device.apk" to install;

Apple IOS system

Download the "Roadcam" APP from the App store, and open the app to connect to transfer images; however, "Please insert a memory card" will be displayed in the middle, and pictures and videos cannot be taken.

② Specific connection steps:

First, open WIFI in the menu, after opening, it will display the product wifi account and password (the WIFI icon in the lower left corner will turn green), please refer to the following figure for the specific operation;

Then connect the product's WIFI with your mobile phone (the password is the default 12345678);

Open the WIFI Camera Device app, After entering the following interface, click the "Connect" button to connect to transfer the real images;

③ Taking photo, video and file storage:

After completing the above operations, enter the following interface, please operate according to the instructions;

Pictures and video files will be saved in the "wcd/media" path in the mobile phone file, and the source file can be found in this path.

