Digital Night Vision Binoculars
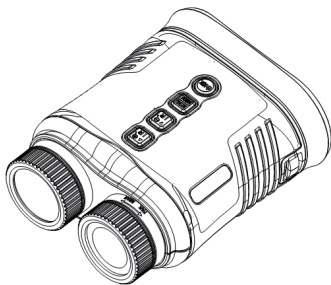
Operating Instruction
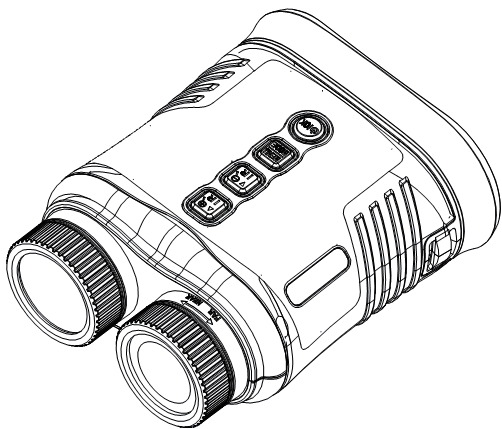
【Directory】

Product introduction

【**Name**】Infrared digital night vision Binoculars

【**Characteristics**】

• This product is a night vision device for observing objects in dark or week light. The distance is infinite, up to 300 meters in the dark environment.

• This product has USB interface and TF card slot interface.

• Fully functional, this product can be used during day and night,

It has the functions of taking pictures, videos and playback. The electronic zoom magnification reaches 8 times.

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

【**Instructions for use**】

• Night vision device is a sophisticated photoelectric instrument used to observe targets at night, It can work in extremely low light environment.

• The night vision device is equipped with infrared lighting, which is suitable for use in pure darkness.

• When the environment is dark, turn on the auxiliary lighting, You can adjust the brightness of the auxiliary lighting according to the distance of the observed object. The night vision device uses a low-light sensor. When the environment has a certain light source (such as street light, moonlight) , it is not necessary to turn on the auxiliary light source. Adjust the focal length of the objective lens to make the observation object clear .

• Work-time of night vision device: about 4-5 hours when the auxiliary light source is turned on; When the auxiliary light source is turned off, it can be used for about 6 hours.

【Component description】
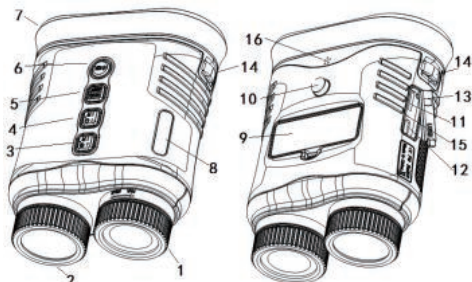
1. Objective focusing hand-wheel
2. Infrared fill light
3. UP key /infrared light up key /electronic zoom up key
4. Down key /infrared light down key /electronic zoom down key
5. Photo, video, playback, function mode key
6. Power switch /function confirmation OK key
7. Eyepieces /eye-cups
8. Brand plate
9. Battery cover
10. Tripod fixed interface
11. Memory card slot interface
12. Charging /data cable interface

13. USB cover
14. Shoulder strap joint
15. Charge lamp
16. Speaker

【Mode declaration】

• **Video mode**

IR LED:1

2024/02/01 20:53:15

• **Photo mode**

IR LED:1

2024/02/01 20:53:15

2
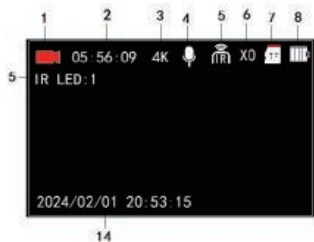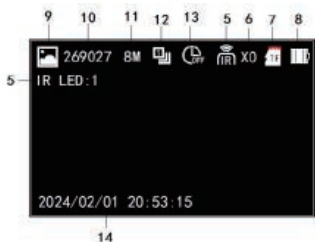
• **Icon description：**

|	
1.In recording state	9 .In photo state
2.Remaining recording time	10.Number of pictures that can be taken
3.Video resolution	11.Image resolution
4.Voice recording on icon	12.Number of consecutive shots
5.Infrared light on icon and gear	13.Time-lapse photo off icon
6.Electronic zoom magnification	14.System time
7.Loaded memory card icon	
8. Battery level display	

Operating instructions
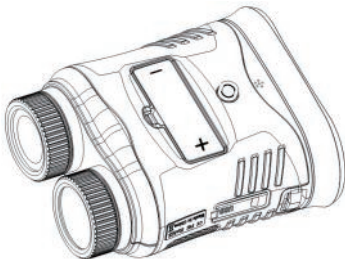
【Install the battery】

• Remove the battery cover from the card position, take a 18650# battery, and confirm the'+ and -' polar symbols, and then close the battery cover. Press the power button, when the display inside the machine lights up, indicating that the battery has been installed correctly. If there is no display on the display. Please check if the battery is assembled correctly. Then start the test until the machine works normally.

• When the battery cover has been installed in the correct position, make sure that the battery is in good condition and the battery is fully charged . If the device still does not work, send the machine in for repair.

【Notes】

The battery specifications should meet the requirements;

The battery should have sufficient power;

When installing pay attention to the positive and negative directions of the battery.

【Power on】

• Press and hold the power button 6# (3 seconds), watch from the direction of the eyepiece 7#, when the in-camera display lights up ,and the normal icon shown in the above figure is displayed on the display screen, the machine enters the normal working state.

• It will enter the observation (recording) state after power on. Normal observation and recording operations can be performed.

【Power off】

• No matter what state the machine is in, Press and hold the power button 6# (3 seconds), the machine will be powered off .

【Explanation of loop operation】

• After booting up and entering the system, every time the mode key 5 # is pressed, the system will be in: Video ->photos ->Playback ->loop among the three modes.

【Scenery observation】

• After power on, in the observation (photograph, video) state, aim the objective lens at the scene to be observed object , watch the display from the eyepiece 7 #.

• Adjust the hand wheel 1# to adjust the screen to the clearest.

• Press the up key 3# or press the down key 4#, can realize electronic zoom. Magnification of the image range is 1 to 8 times.

• When ambient light is relatively bright, the infrared auxiliary lighting source is not required (turn off the auxiliary lighting source, and save battery power).

• When the ambient light is very dark and the scene cannot be seen clearly. please turn or the infrared auxiliary lighting source, and adjust the brightness of the infrared light source to make the observation clear.

【Notes】

• Do not block anything in front of the infrared auiliary lighting source.

【 Infrared lighting adjustment】

• Manual: In the observation (photography, video recording) state, press the +button 3 # to open the auxiliary lighting source brightness adjustment menu. The screen is shown in the figure (IR LED1 and),The light icon and numerical value represent the intensity of the auxiliary lighting source.

• Press the up key 3 # and down key 4 # to adjust the screen brightness between values 0 and 7; The value of 7 is the maximum brightness, the value of 0 is the minimum brightness. Pressing the plus key will increase the value of the light from 1 to 7 and then turn off the infrared light. Pressing the minus key will decrease the value of the light from 7 to 0 and then turn off the infrared light.

【Matters needing attention】

When auxiliary lighting is not needed, please turn off the auxiliary lighting source to save battery power.

【Photograph】

• After turning on, press the mode key 5 # to enter the e observation (photography) state, where you can observe the scenery and take photos of the desired scenery.

• Press the switch button 6 # once to take a photo and display it as OK for 1 second. After taking the photo, it will be automatically saved and stored in the TF card. The number of photos that can be taken on the screen is automatically calculated based on the remaining TF capacity, and there is a slight difference from the actual number of photos that can be taken.

【Video】

• After booting up, the system is in the observation (recording) state, or press the mode key #5 to enter the recording function state.

• Every time the switch button 6 # is pressed, the recording begins and displays l-second START. The timing changes to recording timing status, recording the duration of the recorded video. Press button 6 # again to stop the recording and display 1-second STOP. The recording is automatically saved and stored on the TF card. The recording duration displayed on the screen is automatically calculated by the machine based on the remaining TF capacity, and there is a slight difference from the actual shooting duration.

【Playback】

• After turning on, it automatically enters the observation (recording) state. At this time, press the mode button 5 # twice to enter the playback function.

• When the machine is in playback mode, pressing the up key 3 # and down key 4 # can achieve flipping back and forth, with the playback order being the shooting order.

• When in video playback, press the switch button 6 # to start playing the video; When button6 # is pressed again, video playback stops.

【Connect to computer】

• This product is equipped with a USB2.0 interface, insert one end of the USB cable into the USB interface of the machine, and the other end connect computer equipment. It only charges the battery inside the unit at this time.

• Press the switch button 6# (3 seconds), a function screen appears: 1 memory/2 PC camera/3 camera mode. Select "Memory", at this time the machine is used as a mobile storage device, the computer will automatically recognize the machine and read the contents of the machine's memory card through the computer.

• Restart the machine, select "PC" to enter the PC camera mode. open the PC camera software installed in the computer. The device will act as a real-time video/photography and other operations.

• When connected to a computer, if you select "Camera Mode", you can observe the scene through this unit, and the USB interface can charge the internal battery.

【Notes】

When using USB communication, you are required to select the corresponding option , otherwise the USB communication data will be abnormal.

【Auto power off】

• The viewer will be powered off automatically, if there is not any operation within 3 minutes.

• It will not automatically power off during recording and playback.

• If you do not want the machine power off automati(cally, please press and hold the mode key 5# (3 seconds) to enter the menu options. Find the automatic power off column, select 'Off', the machine will not automatically powe er off.

【Battery selection】

• This device uses a large-capacity 18650# rechargeable lithium battery, 2200 mAh, 3.7 V.

• When charging the battery for the first time, the charging time should be 5 hours to ensure the capacity of the battery amount to the best.

【External power】

• Insert the external power plug into the USB power port of the device and connect the power supply. With external power, the device can work for a long time and will not automatically power off. The battery will be charged when the device connects with external power.

【Time setting】

• Press and hold the function mode key 5# (3 seconds) to enter the system setting menu options, and press the up key 3#, down key 4# to select the date option. Press the switch key 6# to enter, can be year/month/day / or hours/minutes/seconds, adjust the required value through the up and down keys, press the switch key 6 # confirm .

【Menu bar operation】

• After booting up and entering the system, long press the mode key 5 # (3 seconds) in recording or photography mode to enter the menu options. Press the plus key 3 # or minus key 4 # to select the corresponding option up and down, press the on key 6 # to enter, press the plus key 3 # or minus key 4 # to select the option, then press the on key 6 # to confirm exit, and then press the mode key 5 # to exit the menu options.

• The menu functions are as follows：

Video Resolution	4K 1080P 720P 480P	Default：4K
Image Resolution	2M 1920*1200 3M 2400*1456 5M 3024*1760 8M 3840*2128	Default：8M
Frequency	50Hz 60Hz	Default：50Hz
White Balance	Auto Sunlight Cloudy Tungsten Fluorsent	Default：Auto
Video Segments	5Mins 10Mins 15Mins 30Mins	Default：5 Mins
Mic	Off On	Default：On
Volume Size	Off Low Medium High	Default：Medium
Button Sound	Off On	Default：On
Button Light	Off On	Default：On
Date Tag	Off On	Default：On
Exposure	3 2 1 0 -1 -2 -3	Default：0
Auto Power Off	Off 3Mins 10Mins 30Mins	Default：3 Mins
Video Prompt	Off On	Default：Off
Screen Protection	Off 3Mins 10Mins 30Mins	Default：Off
Screen Brightness	Low Medium High	Default：Medium
Time Setting	2024/05/09 05:59:31	
Language	11 Language	Default：Englishe
Time Lapse Record	Off On	Default：Off
Continuous Shooting	1Sheet 2Sheets 3Sheets	Default：1Sheet
Delay Shooting	Off 3Seconds 5Seconds 10Seconds	Default：Off
Format	Press .Confirm to Delete	
Reset System	Press .Confirm to Restore	
Version	V68.5211.XX	

【Delete image】
• In playback mode, long press the mode key 5 # (3 seconds), delete or delete all select one of them, press the on key 6 # to confirm, press the acceleration and deceleration key to select "Delete", press the on key 6 # to confirm the deletion of files.

【Basic Parmeters】
• Optical properties

Electronic magnification：	8
Objective lens diameter：	φ28mm
Field of view：	5°x3.75°
Maximum photographed image:	3840*2128
Maximum recorded video：	4K
Weak light observation distance：	2m∼∞
Sight free all black observation distance：	∼300m

• Power parameter

Working voltage：	3.7V　DC
Replaceable battery：	18650#Rechargeable lithium battery
Charging Source：	5.0V/1500mA　adapter

• Other parameters

Dimensions（L×W×H）：	140 x 110 x 60mm
Weight：	395g

•【Standard configuration】

Items	quantity	Items	quantity
Night vision monocular	1	18650#battery	1
USB cable	1	Lens cleaning cloth	1
Operating instruction	1	Memory card	1
Wrist strap	1	Color box	1

【Operating Environment and Announcements】
• Keep the night vision device in its soft pouch when not use it. Operating temperature ranged at -5~40C, and the relative humidity should not exceed 80%.
• The night vision device should be stored in a clean and dry place to avoid moisture and mold on the lens, avoid heavy pressure, Mechanical damage, moisture and solar radiation.
• Try to avoid rain or fog, to prevent falling, bumping and hitting.
• When the image on the LCD jumps or the screen does not light up, it indicates that the voltage is too low. It needs to be charged.
• If you need to clean the objective lens, eyepiece, and laser illuminator, you should blow off the small gravel and dust first, and then wipe the surface with a fine soft cloth. If the night vision monocular won't be used for a long time, please keep the battery charged occasionally to avoid the effectiveness lose.