

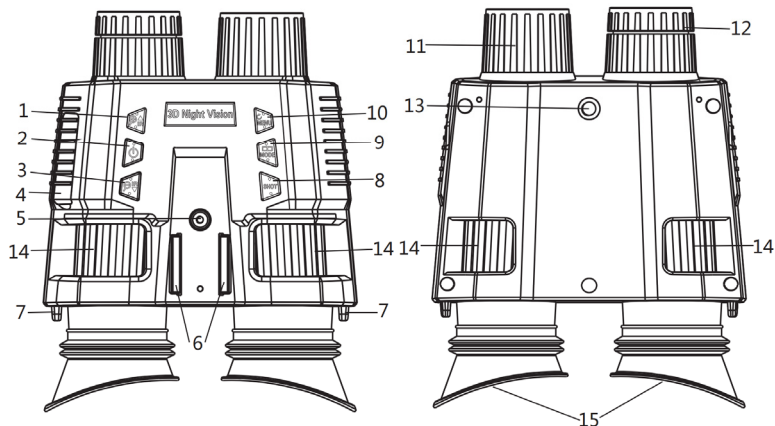
User Manual



Contents

Product Overview.....	2
Specification.....	3
About Charge.....	4
Inserting Memory Card.....	4
Basic operation.....	5
Turn On And Turn Off.....	5
New and Special Color Effects:.....	5
Display selection.....	6
Changing The Modes.....	8
Taking pictures.....	8
Recording Video.....	10
Device Power Off.....	12
Poor Image.....	12
IR – LED (Night vision function).....	13
Settings in Photo and Video Mode.....	14
Playback.....	15
Download files to PC.....	17
Using a Card Reader.....	17
Connecting the Device to a PC through the USB Cable.	17
NOTES on Cleaning.....	18

Product Overview



1. IR Up/Zoom in/Up Button	2. Power Button
3. IR Down/Zoom out/Down Button	4. USB port/Micro SD card slot Cover
5. Helmet bracket fixing screw	6. Helmet bracket chute
7. Strap Hole	8. Shot button
9. Mode Button Lens	10. Menu Button
11. IR LEDs	12. Lens focus wheel
13. Tripod fixing screw	14. Eyepiece diopter adjusting wheel
15. View Area /display screen	

Specification

Photo Resolution: 【3M(2048x1536)】 / 【2M(1600x1200)】
/ 【1M(1280x960)】 / 【VGA(640x480)】

Video Resolution: 【1080P(1920x1080P@30FPS)】 /
【960P(1280 x960@30FPS)】 / 【VGA(640x480@30FPS)】

Sensor: 1.3MP Starlight sensor

Display Screen: Inner screen is 1.4" 390* 390 HD TFT ,
7-level brightness adjustment, free switching between
single and double screens, 7X magnification

Eyepiece: Fully independent binocular technology, can
independently adjust the vision compensation of left and
right eyes (refractive adjustment range +/-3, both myopia,
farsightedness 300 adjustment compensation)

IR LED: 3W, 850nm strong infrared spotlight , 7 grades
infrared adjustment.

Lens: F1.4 larger aperture, f=25mm, FOV 10°

Auto off : 1 min/ 3 min/ 5 min/ OFF

View Distance: 200m~250m full black observation distance,
1m~infinity low light observation distance

Digital Zoom: Digital Zoom 4X

Power Source: 3.7V, 3000MAH lithium battery

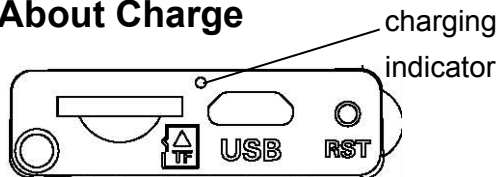
Environment temperature: operation temperature:

-10℃to + 50℃; storage temperature: -20℃ to +60℃

Dimensions: approx. 152mm*122*55mm

Weight: about 440g with battery

About Charge



The device has a built-in rechargeable battery, please fully charge it before first use.

Please use a universal USB power adapter* (DC 5V/2A) (*not included) to charge this machine. When charging, the charging indicator on the left side of the Micro USB port will turn red; when fully charged, the charging indicator will turn off. (If the machine is fully charged, it can be fully charged in about 4 hours.)

Inserting Memory Card

- ◆ Please prepare a Class 10 Micro card (up to 32GB) in advance.
- ◆ Open the card slot cover, you will see the card slot.
- ◆ Insert the Micro SD card into the slot. Make sure the

direction is right. Never insert the card forcibly.

◆ Format the Micro SD card, this can improve the compatibility of Micro SD card.

◆ To remove the card from the memory card slot of the device, press the edge of the memory card in gently, the card will pop out. Then remove the card.

Note: If the TF card is not inserted or the card is not inserted correctly, the prompt icon of SD card and the number of photos or recording time will not appear on the screen when the machine is turned on. When pressing the shoot button, the prompt of "No card" will appear.

Basic operation

➤ Turn On And Turn Off

Long press the POWER button for 3 seconds to turn on the device. Long press the POWER button for 3 seconds again to turn off the device.

➤ New and Special Color Effects:

Luminous Green Color Effect & Film Color Effect.

These 2 color effects are available in both normal mode and infrared night vision mode.

Steps:

Long press "Menu" ->Luminous Green Color Effect,

Long press "Menu" ->Film Color Effect,

Long press "Menu" ->Get back to the normal color mode.

➤ **Display selection**

After you turn on the device,please long press "MODE" button for 3 seconds to switch the display of the single sided display (left) and then long press "MODE" button for 3 seconds to switch the display of the single sided display (right) and then long press "MODE" button for 3 seconds to switch dual display.

Adjust the display

After you turn on the device,please press the MENU button to enter the menu.When you viewing the eyepiece/ display screen if the MENU font is not clear enough, please adjust the eyepiece diopter adjustment wheel until the MENU font looks clear, press the MENU button again to exit the MENU. Then adjust the focus wheel to focus according to the actual distance of the viewed scene until the screen is clearly

displayed.

The diopter can be adjusted separately by the two eyepieces, the specific steps are as follows:

1 . After power on, long press the MODE button to switch to the left display screen alone, short press the MEUN button to enter the menu and adjust the left eyepiece diopter adjustment wheel according to your needs until the menu display is the clearest (if you have myopia, The eyepiece lens is adjusted inward; if hyperopia, please adjust it outward, and normal vision is basically adjusted in the middle position);

2 . Long press MODE button again to switch to a separate display on the right side of the screen, short press MEUN button to enter the menu and then adjust the refractive adjustment wheel on the right side of the eyepiece according to your needs to display the menu as clear as possible (adjust the eyepiece lens outside and inside, adjust the eyepiece lens outside for hyperopia, and adjust normal vision in the middle);

3 . Press MODE button again to switch to dual display,

then aim at the viewing target and adjust the lens focusing wheel until the display is the clearest.

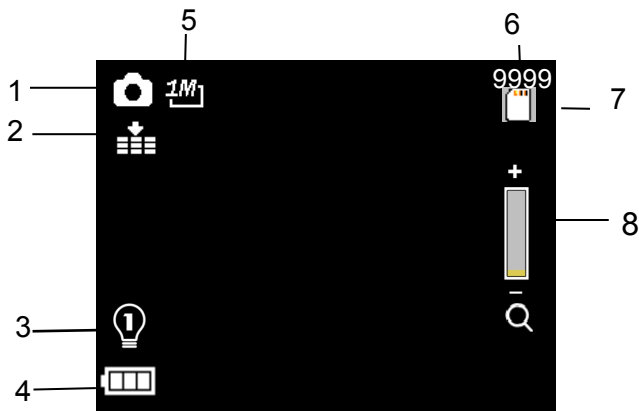
If the light is insufficient or using at night, please press the IR Up/Zoom in/Up Button to turn on the infrared light and please select the IR gear according to the light at that time. The darker the light, the higher the gear adjustment. Long press the IR Up/Zoom in/Up Button to zoom.

➤ **Changing The Modes**

The night version has 3 different modes : photo mode, video mode and playback mode. Press the Mode button can change mode.

	Photo Mode	For taking still photos.
	Video Mode	For recording video.
	Playback Mode	For playing the recorded files.

➤ **Taking pictures**



1.	Camera mode	2.	Default high quality images
3.	Infrared light gear	4.	Battery status
5.	Photo Resolution	6.	Number of pictures that can be taken
7.	SD card prompt	8.	Digital zoom indication

1. Turn on the device, the default is Video mode. Please press the Mode button to switch to photo mode.

2. Zooming:

Keep pressing the  or  button to zoom in or zoom out the image. the value of magnification level appears on the LCD screen.

3. Take a still photo.

- View your subject via the LCD screen.

-Adjust the focus by turning the focus wheel.

For night or insufficient light use,turn on the IR by pressing the IR Up/Zoom in/Up Button.Increase the brightness by pressing the button repeatedly.It has 7 levels of brightness(0> 1> 2> 3> 4> 5> 6> 7> 0...)The brightness can be adjusted according to your needs.The darker the light, the higher the gear adjustment.

- Press the Shot button to take a photo.

➤ Recording Video 4



1.	Video mode	2.	Infrared light gear
3.	Battery status	4.	Video Resolution
5.	Number of pictures that can be taken	6.	SD card prompt
7.	Digital zoom indication		

1. Turn on the device,the default is Video mode. If not, press the Mode button to switch to Video mode.

2. Zooming:

Keep pressing the  or  button to zoom in or zoom out the image. The value of magnification level appears on the LCD screen.

3. Start to record video.

- View your subject via the LCD screen.

- Adjust the focus by turning the focus wheel

For night or insufficient light use,turn on the IR by pressing the IR button.Increase the brightness by pressing the button repeatedly.It has 7 levels of brightness(0> 1> 2> 3> 4> 5> 6> 7> 0...)The brightness can be adjusted according to your needs,darker and need adjusted more brightness.

- Press the Shot button to start to record.The record duration will be shown on the LCD screen.

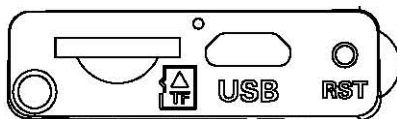
4. Finish recording.

- Press the Shot button again to stop recording.

- The device will stop recording automatically once capacity of the memory card is full.

Notice:

➤ **Device Power Off**



1. If the device is fully charged and cannot be turned on or the screen cannot move during use and cannot be turned off, please insert a small hard strip such as toothpick or wire into the RST hole, when you feel the resistance, press it and then turn it on .

2. Please use a universal USB power adapter* (DC 5V/2A) (*not included) to charge this device. After the MICRO USB is connected to the device, when the red light of the charging indicator of the device is on, long press the power button to turn on the device , unplug the MICRO USB to turn off the device ,which means that the built-in battery has no power and it needs to be fully charged or connected to an external mobile power supply.

➤ **Poor Image**

◆ If you wear glasses, please keep them on while using

the device.

- ◆ If at day, make sure the IR is off (if IR is on, screen is black and white or the screen is colored)
- ◆ If at night, make sure you have turned on the IR, press IR up (if IR is on, screen is black and white).
- ◆ Adjust the focus by slowly turning the Focus wheel . Make sure it is focused.

IR – LED (Night vision function)

1. Regarding manual focusing: users can manually focus the focus wheel according to the actual observation distance to debug the best focus until the display is clear.

2. In photo/video mode, if you have to view the darkness environment, please short press IR UP button to activate the IR LED, the image will change to black and white. The IR LED have seven levels, short press IR UP button to up the level, short press IR DOWN button to down the level.

(If the battery voltage is not enough, the IR LED level will down automatically. IR level can up to 7 levels when the battery power is full. If only left half power, the level just can up to 5. If only left 25% power, the level just can up to 3. If the battery power is lower than 25%, IR LED cannot be activated.)

➤ **Settings in Photo and Video Mode**

Press Menu button in photo or video mode, can change the settings.

Menu	Function
Photo Resolution	Set the photo resolution. Options:[3M(2048x1536)] / [2M (1600 x 1200)] / [1M 1280x960] / [VGA 640x480]
Video Size	Set the video resolution. Options:[FHD 1920X1080]/ [960 1280 x 960] / [640 640x480].
Night vision sensitivity	Choose the night vision sensitivity. Options:[Low]/[Middle]/[High].
Display mode	Options:[Full]/[Normal]
Screen brightness	User can according to their need to adjust the brightness of the Lcd screen. Options:[Level 1]/ [Level 2]/[Level 3]/[Level 4]/[Level 5]/[Level 6]/[Level 7].
Power Frequency	Set the light source frequency to match frequency of electricity supply in local region to prevent interference. Options:[50Hz]/[60Hz].

Power Save	Set the time to shut down the device for power saving if the device is idle. Options:[3min]/[5min]/[10min]/[OFF].
Date&Time	Set the date and time of device.
Date Stamp	Add the date stamp on the photo or video files.Options:[Off]/[Date]/[Date&Time].
Language	Set OSD (on-screen) language. Options:[English]/[简体中文]/ [繁体中文] / [Francais]/[Nederlands]/[Espanol]/ [Italiano] /[Portugues]/[Deutsch] / [Pyccknn] /[日本語]/[Korean]
Format	Format your TF card. Format TF card will delete all files including the protected files. Please copy the important files before confirm.Options:[Yes]/[No].
Reset All	Restore the setup to factory default settings.Options:[Yes]/[No].
FW Version	User can see the firmware version information.

➤ Playback

1.Turn on the device, press the Mode button to switch to

playback mode.

2.Press Up/Down button to view photos and video files.

3.Playback the video

- Press the Shot button to start playing the video files.
- Press the Shot button again to have a pause.
- Press Menu button to stop the current video playing.

Press Menu button in playback mode,the screen will display the playback menu.Press Up/Down button to scan lock or delete. And press Shot button to select one to enter the sub-menu.

Playback menu list :

Menu	Function
Lock	Lock or unlock the current one file or all files in memory card.Options:[Lock/Unlock one]/[Lock All]/ [Unlock All].
Delete	Delete the current one file or delete all files in memory card.Options:[One]/[All].

Download files to PC

There are two ways to download files from the device to a computer:

- By inserting the memory card into a card reader.
- By connecting the device to a computer using the supplied USB cable.

Using a Card Reader

1. Eject the memory card from the device and insert it into a card reader. Then connect the card reader to a computer.
2. Open [My Computer] or [Windows Explorer] and double-click the removable disk icon that represents the memory card.
3. Copy images from the card into a directory of your choice on the computer's hard disk.

Connecting the Device to a PC through the USB Cable

1. Turn on the night vision. Connect it to a computer through the supplied USB cable.

2. When connecting to the computer, it will appear "MSDC" on the screen.
3. Open [My Computer] or [Windows Explorer]. A "Removable Disk" appears in the drive list. Double-click the "Removable Disk" icon to view its contents. Files stored on the camera are located in the folder named "DCIM".
4. Copy the photos or files to your computer.

NOTES on Cleaning

Before cleaning the device, disconnect it from the power supply! Only use a dry cloth to clean the exterior of the device. To avoid damaging the electronics, do not use any cleaning fluid. Clean the eyepieces and/or lenses only with a soft, lint-free cloth, (e.g. microfiber cloth). To avoid scratching the lenses, use only gentle pressure with the cleaning cloth. Protect the device from dust and moisture. Store it in a bag or box.