ACPOTEL

# Handheld Infrared HD Night Vision

## User's Manual

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## Product Overview

Thank you for choosing ACPOTEL Digital Night Vision, please read the user guide carefully before use.

Inspired by spaceships with a scientific and minimalist design, NV30 is a professional infrared HD night vision device with fully upgraded performance. NV30 is also a multifunctional night vision device with HD night vision, zoom telescope, photo and video recording, day and night use, and full-color mode during the night.

NV30 is the first night vision that uses a maximum F1.4 aperture adjustment lens, 1080P HD photo and video, to ensure clearer and widen observation in the different light and dark environments. With 6X optical zoom, 60X digital zoom, even when observing distant scenes, the picture quality and details are very fine and clear.

NV30 uses a night vision dedicated Sony IMX sensor to deliver industry-leading clear night vision performance. NV30 is a perfect tool for observation in the light environment for an infinite distance, moonlight environment up to 500m, all-black environment up to 350m. High nighttime sensitivity and powerful algorithm delivers smoother and clearer observation.

Built-in 3" IPS ultra-wide screen, NV30 displays a wide range and fine photo and video quality. The display brightness and contrast

are finely adjusted from 1-9 steps to avoid too dark or too bright light for comfortable viewing. NV30 is a 1080P HD device with a 40mm high transmission multi-layer coated all-optical glass lens for less glare, clear picture, and saturated color, NV30 can be used both day and night for seamless conversion.

NV30 IR illumination lamp can pull out and push back to adjust the focus and diffuse. Pull out to focus, so that the observation distance is farther and brighter; push back to diffuse, so that the close observation field of view is wider. The Infrared illuminator also has 1-5 levels fill light adjustment, that can be freely selected to adjust according to the different environment. Even in total dark environment, NV30's observation is also very clear and bright.

## Safety instructions

In order to ensure product use safety, please follow the instructions strictly. Otherwise, warranty will not be carried out if the product is damaged.

Please use a damp cloth or weak soap and liquid to clean structure shell. Do not use abrasives, isopropyl alcohol or solvents to clean instrument shell, lens and windows.

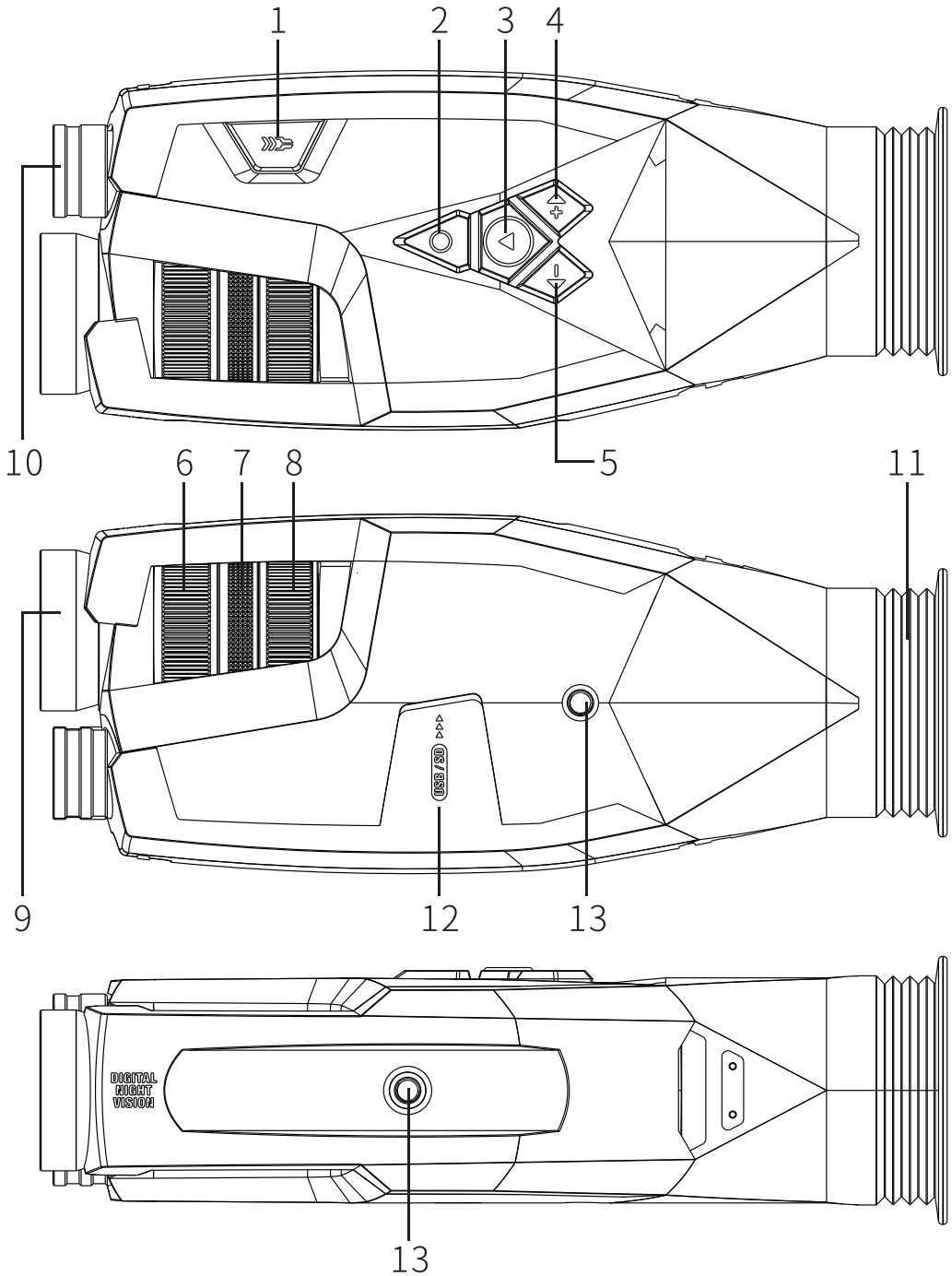
Please do not use this instrument in flammable, explosive, steamy, humid or corrosive environments.

Do not continue to use it if it is damaged after a drop or corrected.

When LCD screen does not light up, it indicates that the voltage is too low, please charge it in time.

Store it in a dry place in terms of a long time not using.

## Appearance



**1.Infrared Compensate Light Button**

Short press to turn on Full Color Mode, short press again to switch night mode and 1 Level/2 Level/3 Level /4 Level /5 Level / Off of infrared compensation light.

**2.Mode Button**

Short press to switch modes, long press to enter and exit the Settings. In the setting menu, short press back to the last menu.

**3.Power Button**

Long press to turn On/Off, short press to confirm.

**4.Up Button**

Can be used to scroll up options, view pictures, image zoom.

**5.Down Button**

Can be used to scroll down options, view pictures, image zoom.

**6.Optical Adjustment Handwheel**

**7.Aperture Adjustment Handwheel**

**8.Lens Focusing Adjustment Handwheel**

**9.Zoom Lens**

**10.Infrared Lens**

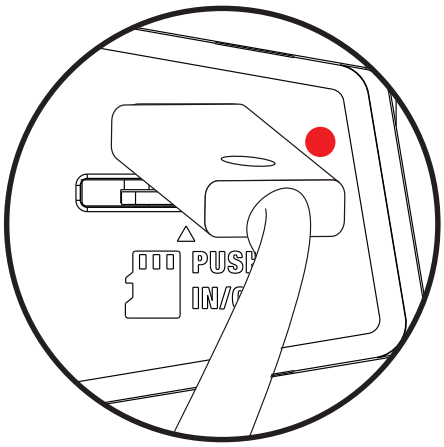
**11.Eyepieces**

**12.USB Port/SD Card Slot**

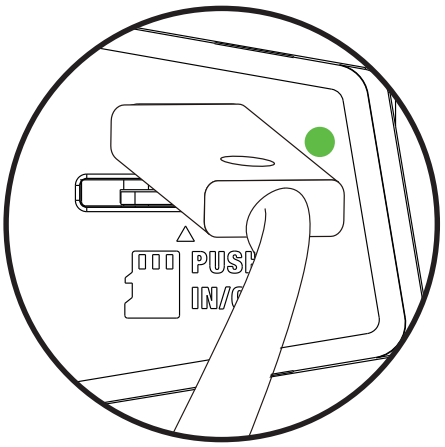
**13.Tripod Screw Hole**

## Charging Instructions

The rechargeable battery is built-in this night vision. When it is in low power, please use the equipped USB cable to power charge it. Power indicator lighting Red means the charging is in progress, and power indicator lighting Green means the charging is completed.



Charging in Progress



Charging Completed

## Turn on/off

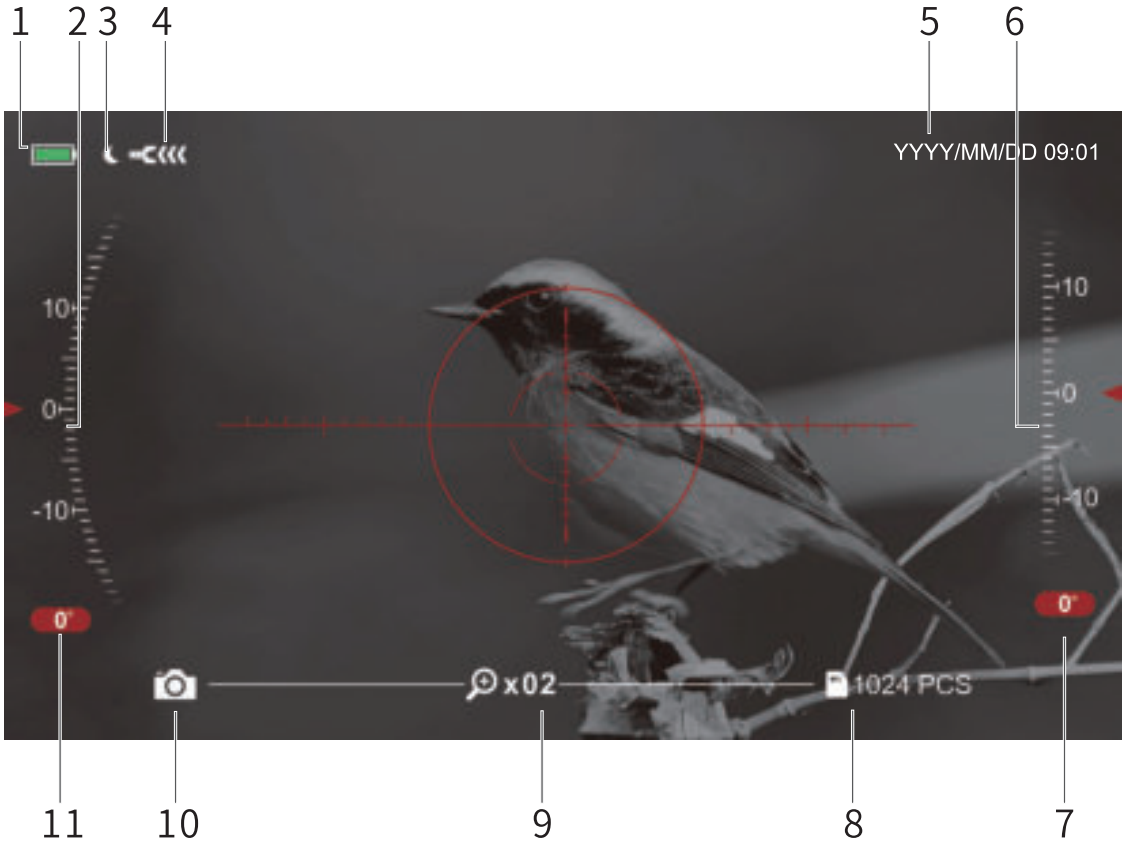
Long press turn on/off button to turn on.
According to factory default setting, the instrument will shut down automatically without operation within 3 minutes.

**Note:**

**1.The auto shut down time can be set in the setting menu. Device will not shut down automatically during recording and playback.**

**2.The device will enter into observation (photograph) state after turning on, normal observation and photographing operations can be carried out.**

## Icons instruction



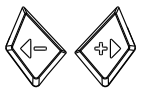

1. Battery level display
2. Left and right scroll angle
3. Night mode
4. Infrared light
5. Present date and time
6. Up and down pitch angle
7. Up and down pitch angle display
8. Storage display
9. Electronic magnification
10. Function display (photograph/video/album)
11. Left and right scroll angle display

## Object observation

Under observation (photograph) state, aim objective lens at object , look at display screen from the eyepiece.

Adjust objective lens focusing handwheel to make observed scene the clearest.

The machine will fine-tune the brightness of display automatically according to average brightness of object in the center of screen.

Press  , electronic zoom can be realized, and range of image electronic magnification is 0-60 times.

Turn off auxiliary infrared light (avoid overexposure of image and save battery power at the same time) when ambient light is relatively bright.

In order to make observation clear, please turn on auxiliary infrared light and adjust brightness of the light when ambient light is very dark or the scenery is unclear.

Turn on the auxiliary infrared light, device will switch to black and white mode for observation automatically (photographing, video recording).

## Infrared compensation light adjustment

Under observation (photograph or video), short press to enter full color mode(Fig 1), the icon appears in the upper left corner of screen. Then short press to enter Night mode (Fig2), the icon appears in the upper left corner of the screen, and short press button again to enter infrared compensation light mode (Fig3), the infrared compensation light level 1 icon appears in the upper left corner of the screen, then short press button to adjust intensity of infrared light (level 1-5). After infrared compensation light is adjusted to level 5, short press key again to turn off the infrared compensation light.

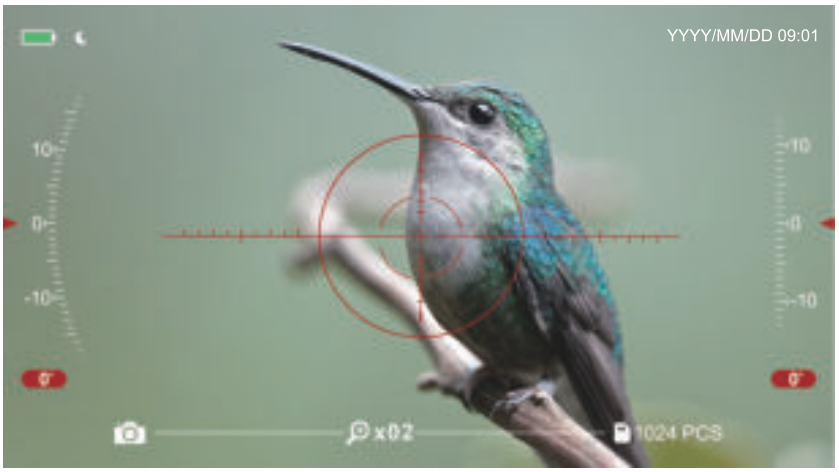



Fig 1: Full Color Mode(Colors Image at Night)

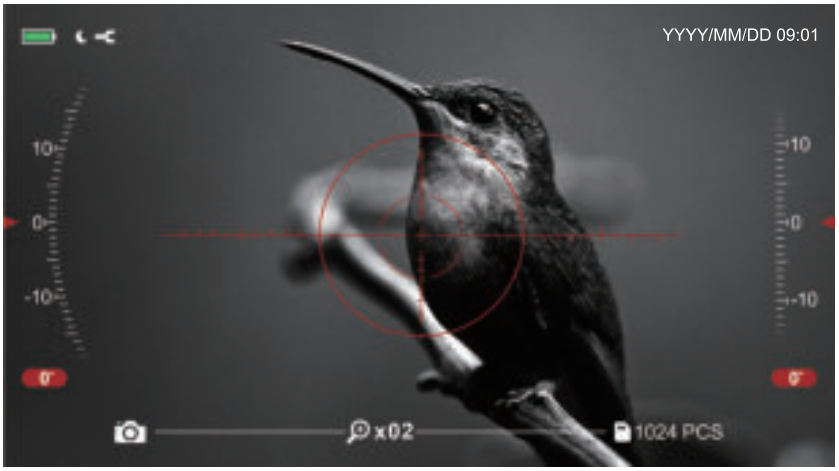



Fig 2：Night Mode(Black & White Image Without IR Fill Light)

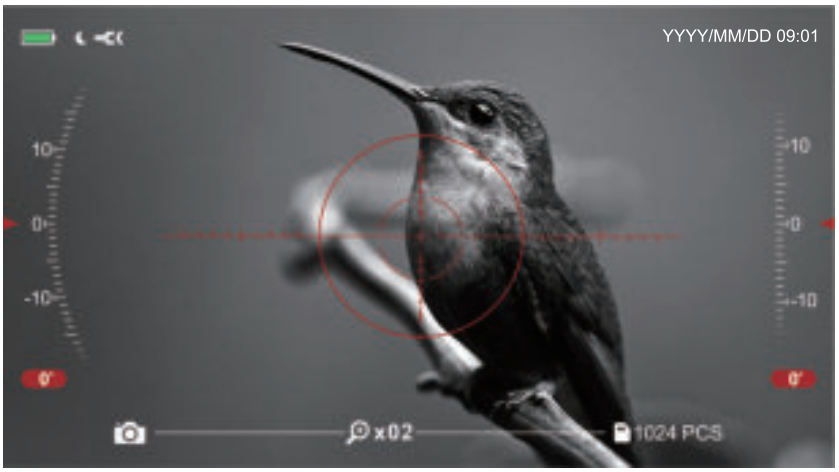



Fig 3：Level infrared compensation light

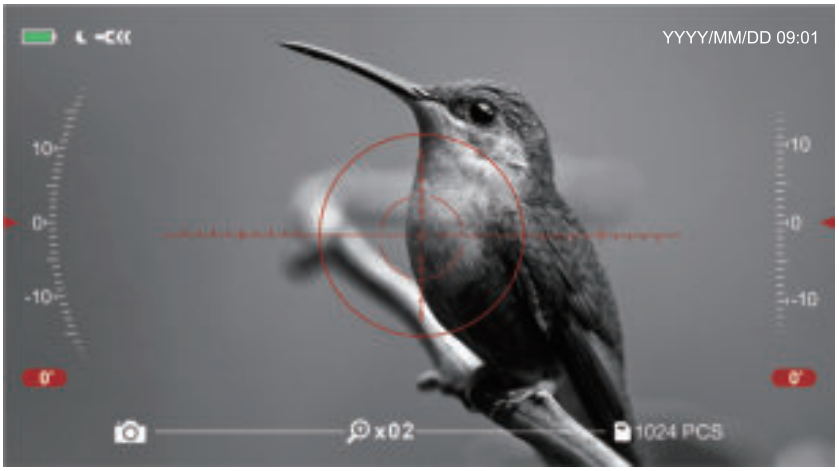



Fig 4：Level 2 infrared compensation light

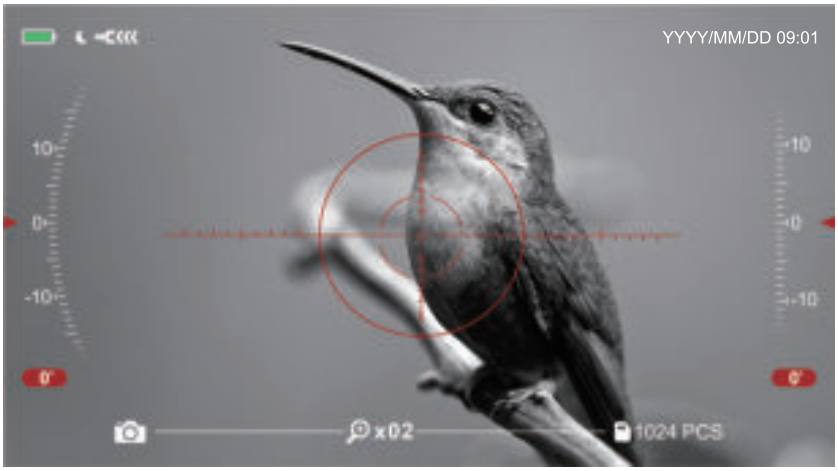



Fig 5：Level 3 infrared compensation light

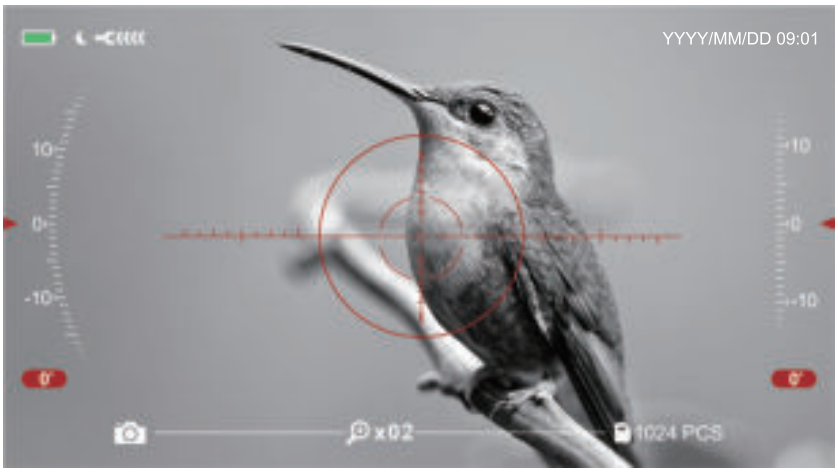



Fig 6：Level 4 infrared compensation light

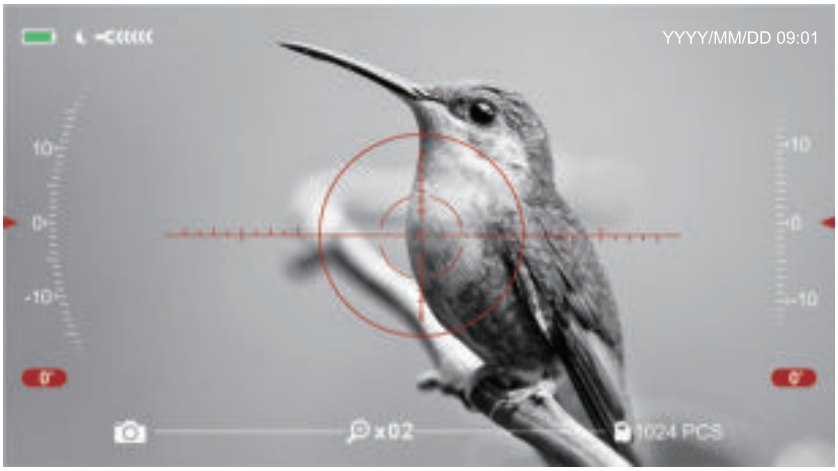
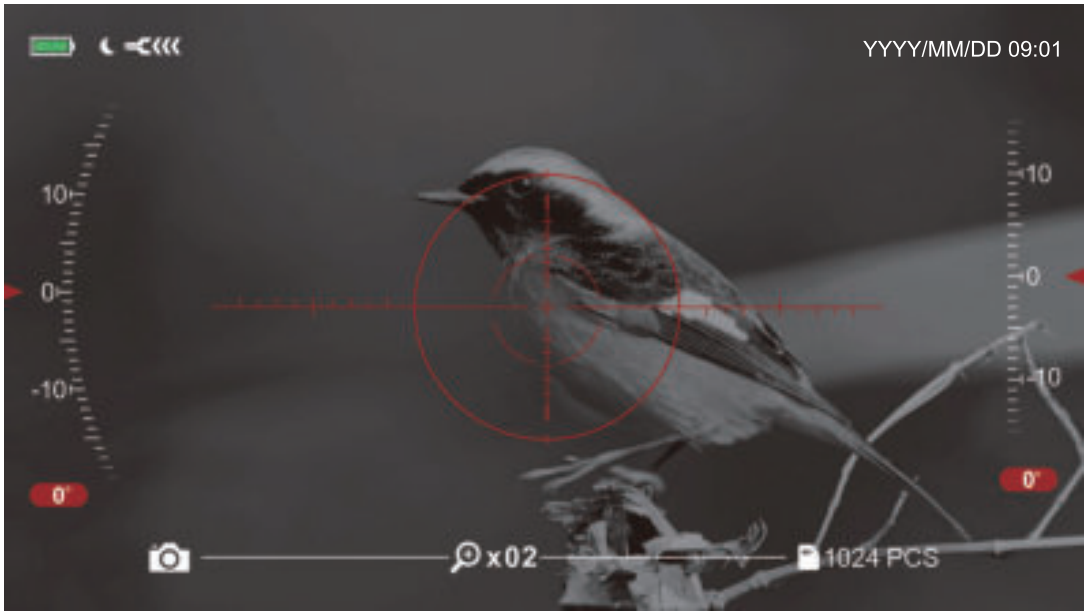



Fig 7：Level 5 infrared compensation light

**Note: please turn off auxiliary infrared light when there is no necessary use infrared light to save power.**
**(There is no objects should be blocked in front of the light when infrared auxiliary light is turned on to avoid overexposure of image at close range.)**

## Photograph

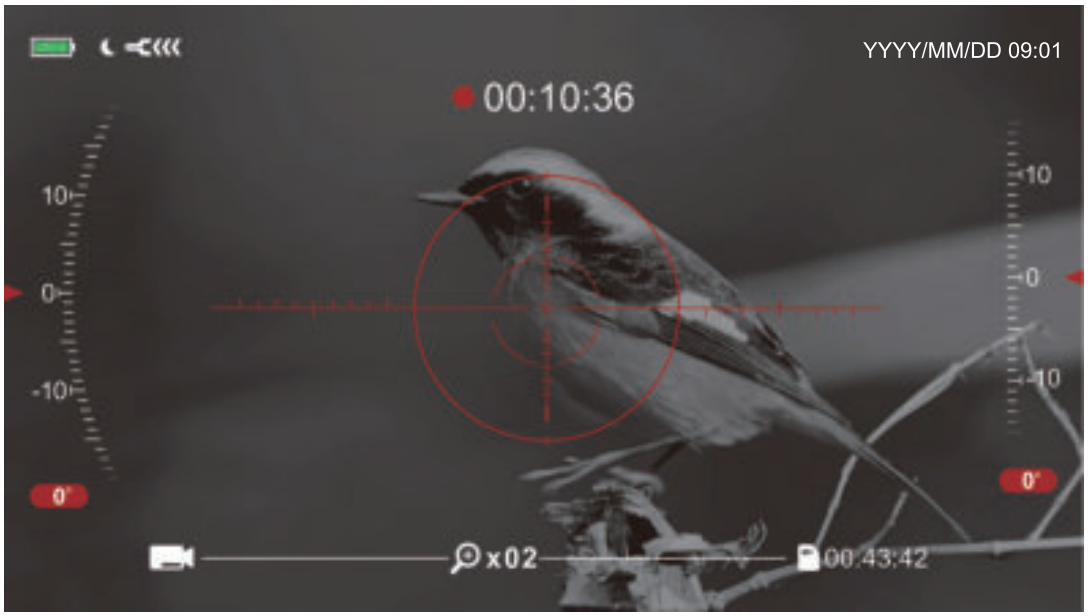
Turn on device, system will automatically enters into camera mode , the scenery can be observed and photographed. Aim at target and short press , the screen will flash once, then the photo is taken successfully and saved to the SD card automatically.



**Note: In photo mode, if the number of photos exceeds 10,000, you may not be able to continue taking pictures. Please transfer a certain number of photos to your computer before taking new photos.**

## Video

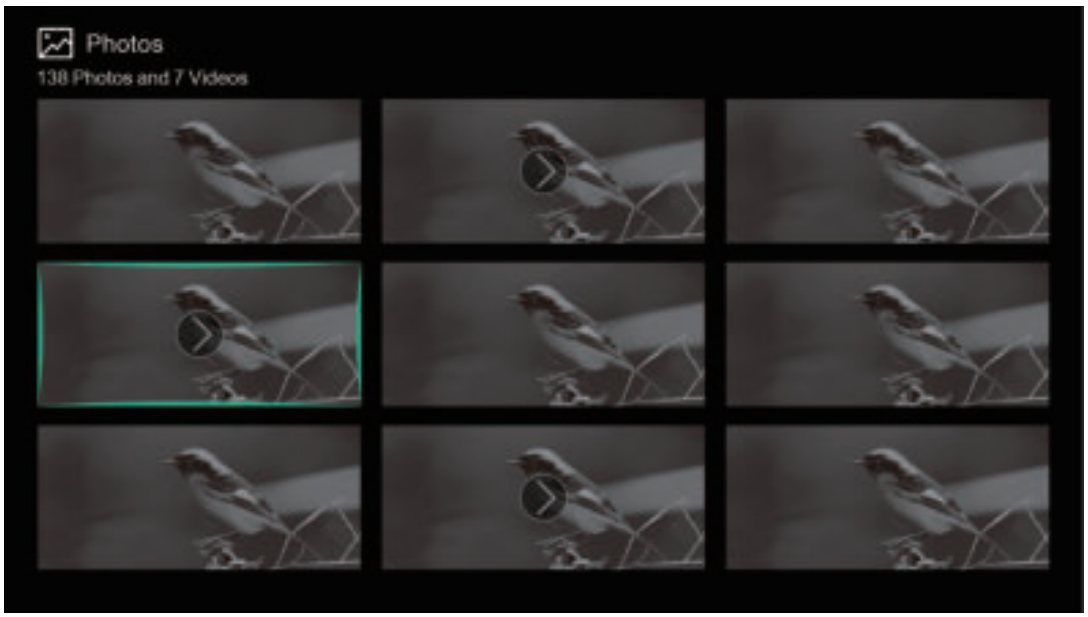
Short press to switch to recording mode , short press to start recording, and the recording time at the top of the screen starts counting. Short press again to stop recording, the recording time at the top of screen disappears, and the video file is successfully recorded and automatically saved to the SD card. After stopping recording, the time displayed in the lower right corner is remaining available recording time.



**Note: During the recording process, please do not turn off the device suddenly, otherwise it may cause video data errors or fail to be saved.**
**Solution: Connect to a compute, format memory, or delete damaged files if the data errors or failure happened.**

## Album

Short press to switch to album mode Short press to browse pictures/video files; Select a video file, short press to play the current video file, and short press again to pause play.



## Delete

Select the photo/video that needs to be deleted, long press , the delete selection box will pop up, short press to switch back and forth to delete or delete all, short press to delete. Long press to exit delete selection box.

**Note: In album status, screen brightness and auxiliary lighting adjustment function can not be used.**

# Setting Menu

## Setting Menu Operation Instructions

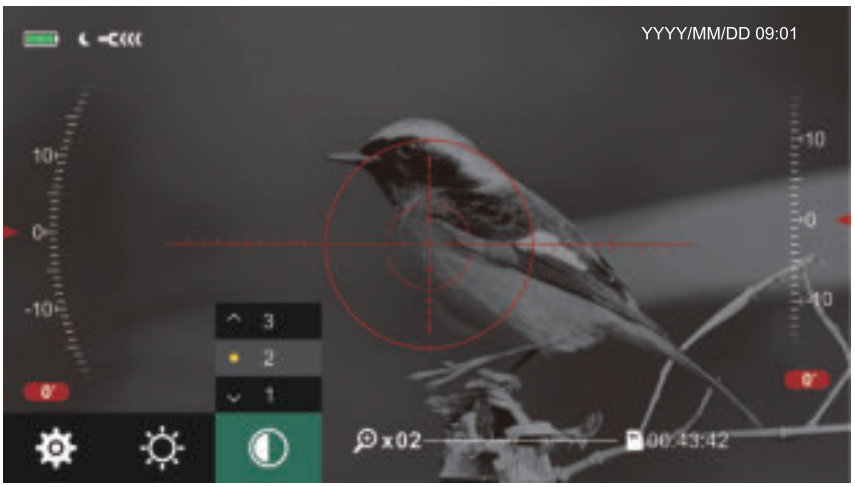
1. Long press to enter setting menu;
2. Short press to switch menu options, press to enter setting interface, and press to set value;
3. Short press to complete setting;
4. Short press to back to last setting;
5. Long press to exist setting menu.

## Screen brightness

Long press to enter setting menu, press to select screen brightness .

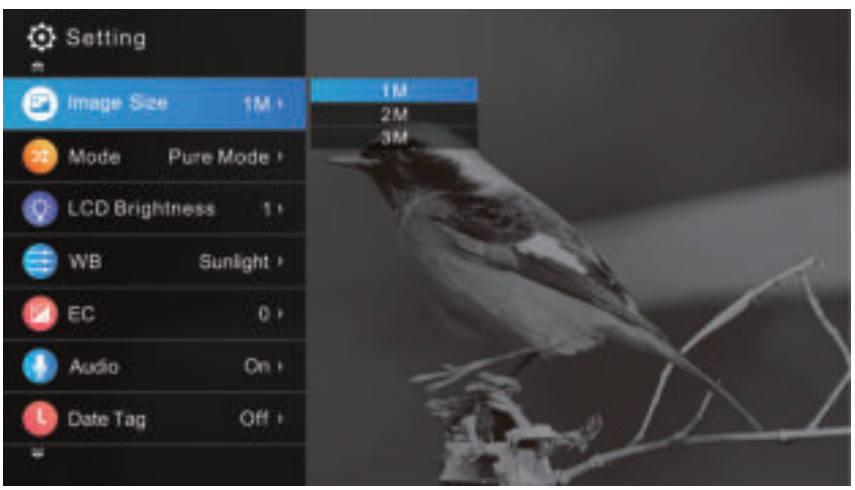
## Contrast

Long press to enter setting menu, press to select contrast .



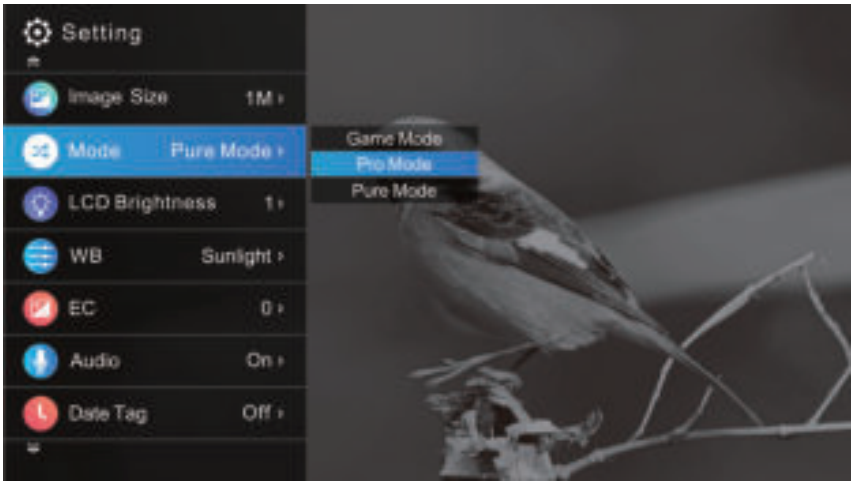

## Picture quality

After selecting the picture quality, short press to enter setting, press to switch options, and short press after selecting the setting to complete.



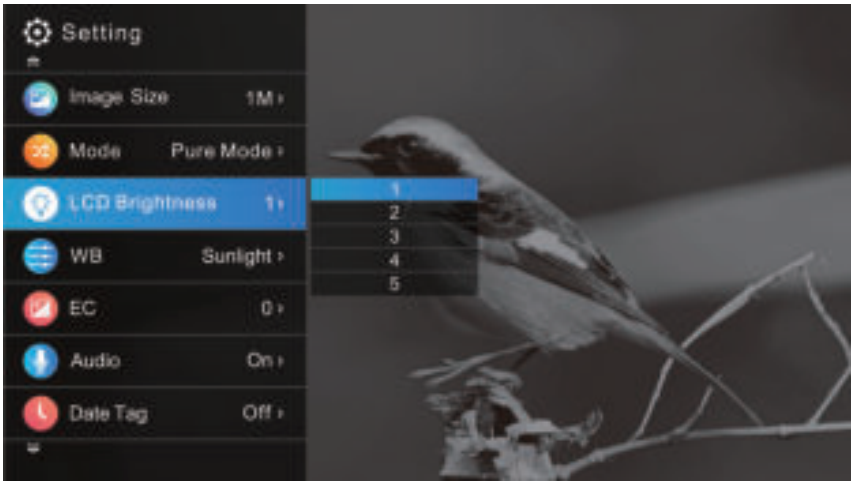
## Switch mode

After selected mode is switched, short press to enter setting, press to switch options, and short press to complete setting after selecting.



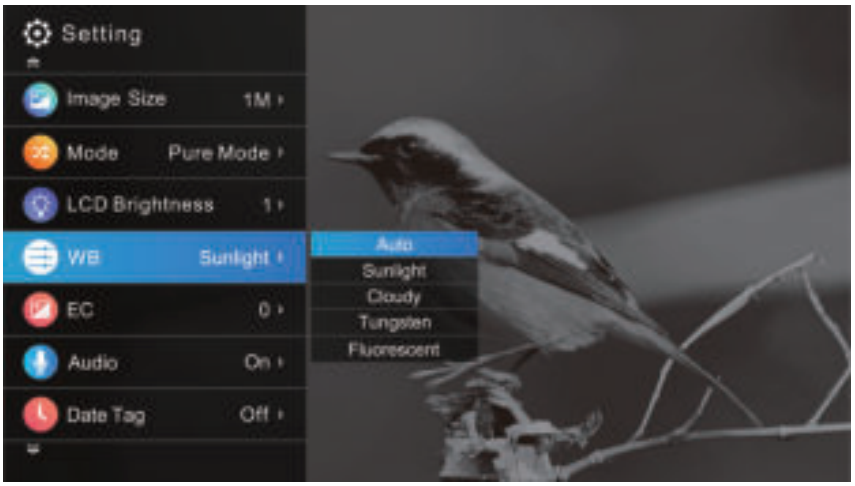

## LCD brightness

After selecting LCD brightness, short press to enter setting, press to switch options, and short press to complete setting after selection.



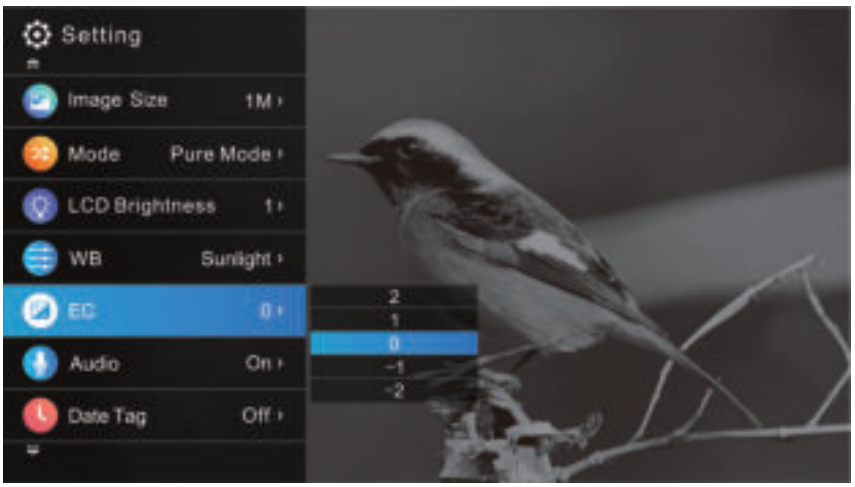
## White balance

After selecting WB, short press to enter setting, press to switch options, and short press to complete setting after selecting.



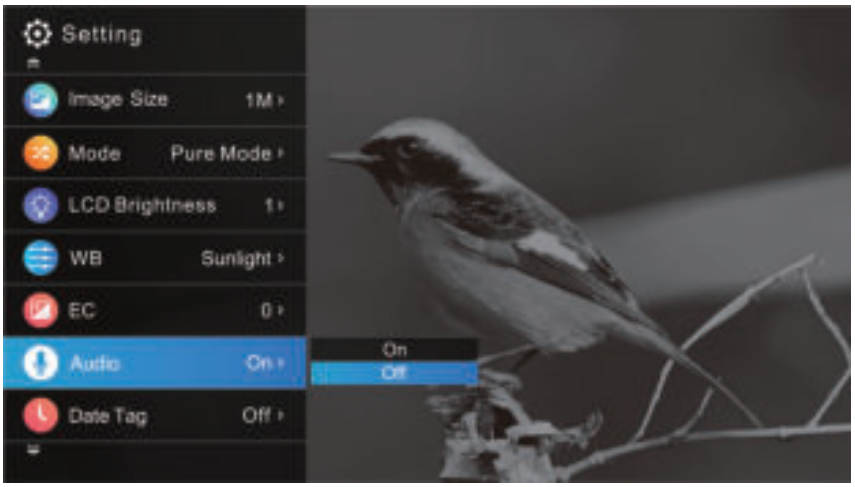

## Exposure compensation

After selecting the EC, short press to enter setting, press to switch options, and short press to complete setting after selecting.



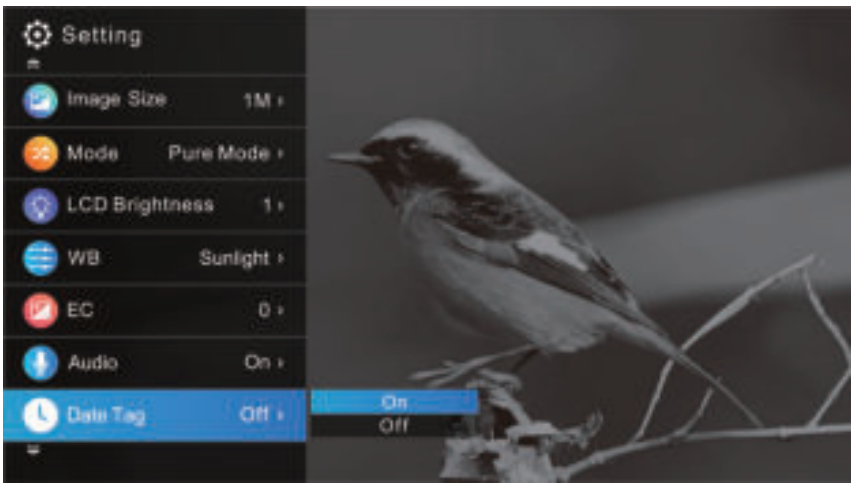
## Audio recording

After selecting recording, short press to enter setting, press to switch options, and short press to complete setting after selecting.



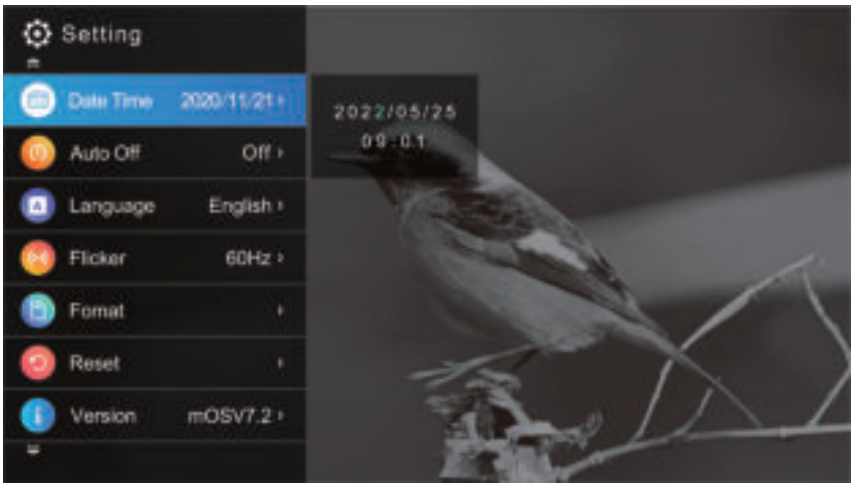

## Date Tag

After selecting the Data Tag, short press to enter setting, press to switch options, and short press to complete setting after selection.



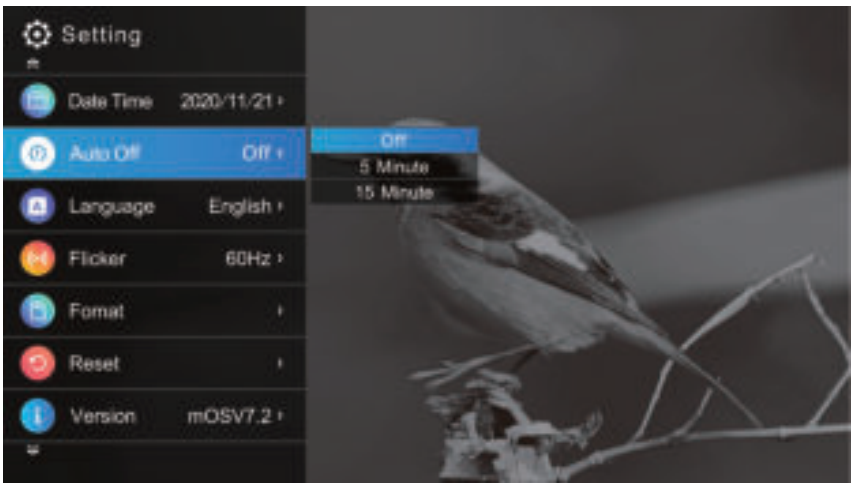
## Time setting

After selecting Date Time, short press to enter setting, press to set value, and short press to complete setting after selecting.



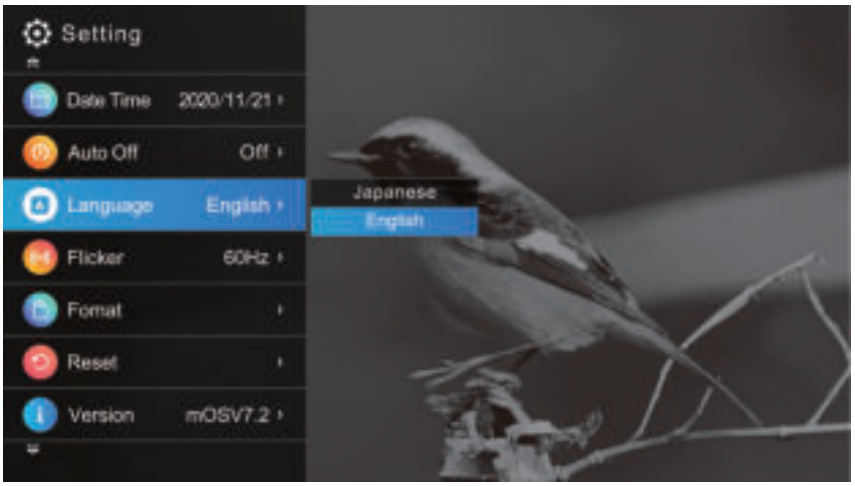

## Automatic power off

After selecting Auto Off, short press tto enter setting, press to switch options, and short press tafter selecting to complete setting.



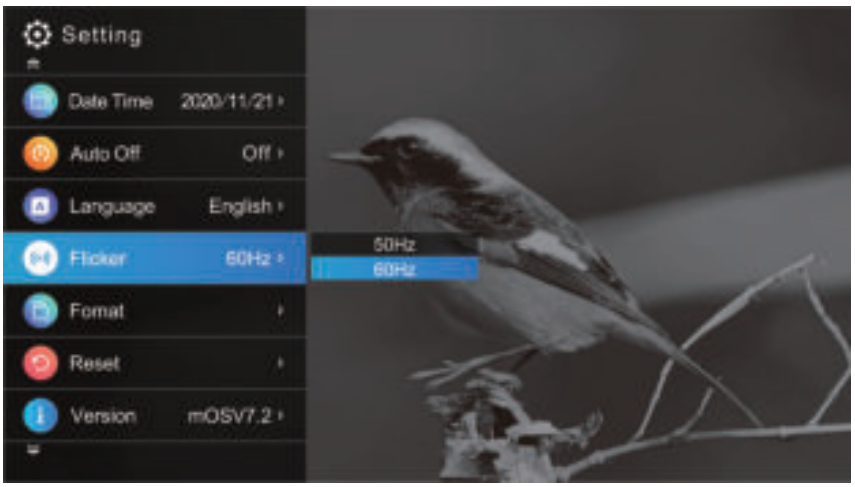
## Language

After selecting Language, short press to enter the setting, press to switch options, and short press after selecting the language to complete setting.



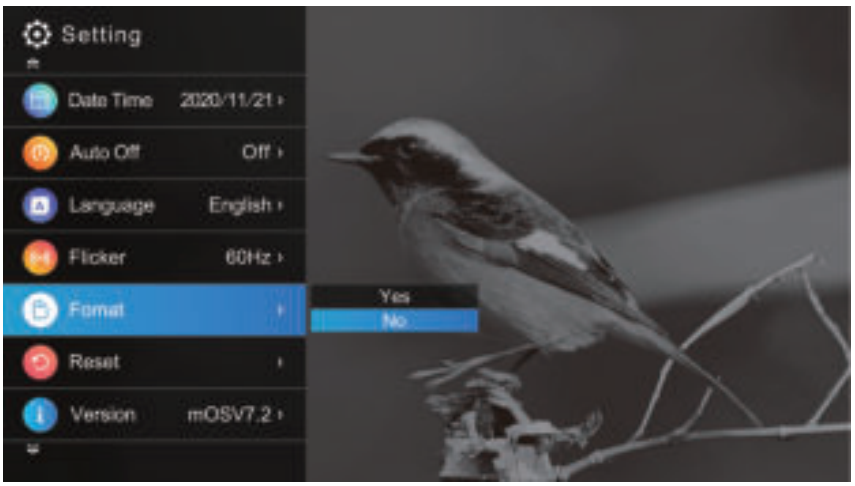

## Flicker

After selecting Flicker, short press to enter setting, press to switch options, and short press to complete setting after selection.



## Format

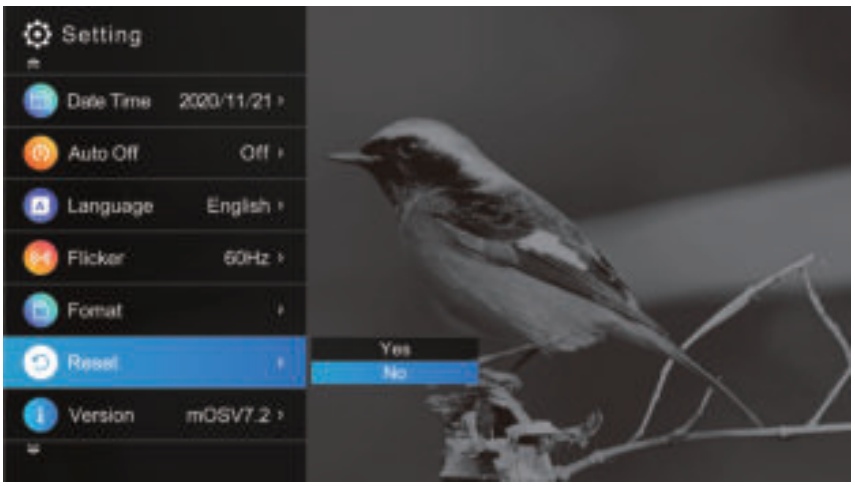
After Format is selected, short press tto enter the setting, press to switch options, and short press tafter selecting to complete setting.




**Note: Please use format setting with caution, once format is confirmed, all information in the SD will be lost.**

## Reset system

After selecting Reset, short press to enter settings, press to switch options, and short press to complete setting after selecting.




**Note: Please use reset system settings with caution. Once confirmed factory settings are restored, all information in the instrument will be lost.**

## Connect to Computer

In the off state, connect this device to the computer through a USB cable, it will automatically boot up and then enter into storage reading mode. Open the storage card, you can browse pictures or videos. Unplug the USB cable, this device will automatically shut down.

In the power-on state, connect this device to the computer, and the computer will read the storage card data directly. Unplug the USB data cable, this device automatically shut down.

## Specification

| Category | Item | Parameter value |
|---|---|---|
| Optical performance | Optical Magnification | 6X(8~50mm) |
| | Objective size | 40 mm |
| | Eyepiece size | 52 mm |
| | Low light observation distance | 2m~∞ |
| | Observation Distance in Moonlight | ~500M |
| | Observation Distance in Complete Darkness | ~350M |
| Electronic performance | Pixel | 200W |
| | Pictures | 2560*1440, 1920*1080, 1280*720 |
| | Video | 1080P |
| | Display Screen | 3 inches, IPS color screen |
| | | 854*480 |
| | Digital Magnification | 60 |
| | USB Type | Type-C |
| | Storage | TF Card |
| power supply | Operating Voltage | 3.7V DC |
| | Battery | 3000mAh built-in lithium battery |
| other | Size | 226x89.5x67mm |
| | Weight | 650g |

## Copyright statement

The above product specifications are subject to change without notice, and all interpretation rights belong to Shenzhen Mileseey Technology Co., Ltd. All trademarks, product pictures, technical parameters copyright and ownership belong to Shenzhen Mileseey Technology Co., Ltd. all infringements must be investigated.

## Contact us

**Email:** contact.us@acpotel.com

We has been a professional R&D manufacturer of quality optical products including Golf rangefinders, night vision, laser measure devices, binoculars and numerous other products in the hunting since 2009.

Focus on the development, researching, and manufacturing for over 12 years.

We strive to provide you with premium qualified products and satisfying customer service to make your life easier and smarter.

## Warranty

30-Day return and refund guarantee, 12-Month warranty, lifetime technique support by ACPOTEL.

Please feel free to reach us with any concerns,

Email: contact.us@acpotel.com

We strive to reply to you within 24hours.

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Made in China