

Digital Night Vision Monocular

Operating Instructions

NV-300



Package detail



Introduction



【Name】 Digital Night Vision

【Model】 NV-300

【Features】

- It is a night vision monocular which can be used to observe objects in the dark and low light situation. Two lighting modes are available to use. The viewing distance in the low light environment will be at infinity, 200 meters viewing distance in the dark environment.
- Easy to exchange data with other instruments, having USB, AV OUT and DC IN sockets.

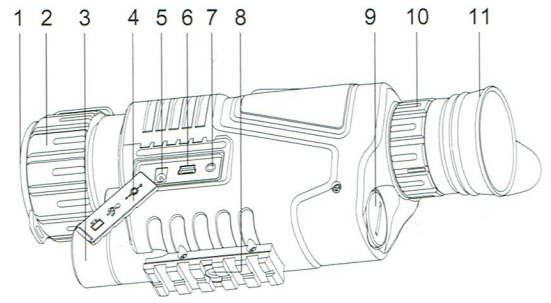
【Operating Hints】

- It can be used normally in the day or night, owning the photo shooting, video shooting, playback and other functions. 5X fixed zoom and 5X digital zoom.
- It is the best auxiliary tool of extending human's visual senses.

【Operating Hints】

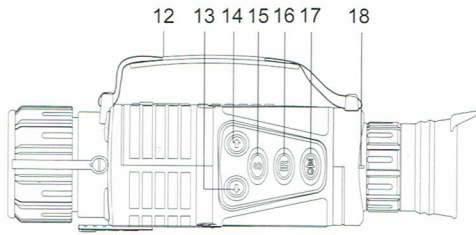
- It is a night vision monocular which can be used to observe object in the dark and low light situation. Two lighting modes are available to use.
- It is suitable to use in full dark environment.
- Turn the auxiliary light on to observe the objects when it works in the dark situation. Adjusting the brightness by the distance of the objects. CCD is used in this viewer. If there is any light resource existed, the auxiliary light could not be turned on, please adjust the focal distance only to get the sharp image of objects.
- Work time: 1 hour under auxiliary light mode; 1.5 hour without using auxiliary light mode.

Components Introduction



- 1 - Objective Cover
- 2 - Objective Focusing Wheel
- 3 - High Beam Light
- 4 - Socket Door
- 5 - Micro SD card Slot (Not Incl.)
- 6 - USB2.0
- 7 - DC 5V
- 8 - Tripod Receptacle
- 9 - Battery Cover
- 10 - Diopter Ring
- 11 - Eyecup

Components Introduction

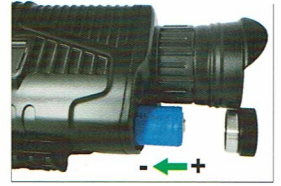


- 12 - Hand Grip Strap
- 13 - Up
- 14 - Down
- 15 - Functions(for photos shooting, video shooting and playback)
- 16 - Auxiliary Lighting/Brightness Adjustment
- 17 - POWER/FUNCTION
- 18 - Diopter Dial

Operating Instructions

【Battery Installation】

● Turn the battery cover down; insert one battery correctly (note the negative electrodes bottomed) and turn the cover back. Turn the viewer on, the screen could be lightened up if the battery installed correctly. Otherwise, please reinstall the battery again or tighten the cover again.




【Announcements】

Ensure the model of battery should be correct;
Ensure the electric quantity should be full enough;
Pay attention to the anode and the cathode of the battery.

● 【Power On】

Take the objective cover down.

- Long press  for 3 seconds to lighten screen up, observing from Eyecup#11,

if the screen has been lighten up and icons have been shown normally, the viewer could be used then.

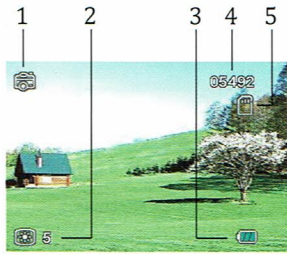
● Icons Instructions:

1. Current mode: photo shooting mode
2. Screen brightness level
3. Battery
4. Available memory of micro SD card
5. Micro SD card in



The Observing (Photo Shooting) Mode is available to use after the startup.

【Power Off】

In any mode, long press  for 3 seconds to turn it off.



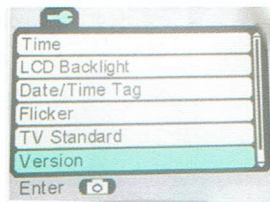
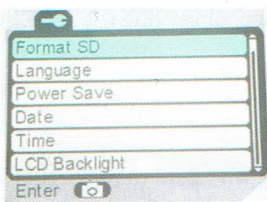
【Scenery Observation】

- Take the objective cover down, observing the screen from eyecup#11.
 1. Adjust the diopter ring #10 until to get the sharp images.
 2. Adjust the objective focusing wheel #2 to make the images to be sharpest and easy to observe then.
- Automatic fine-tuning control of the display brightness can be operated by entering the camera menu.
- Digital zoom could be realized by pressing  #13 and  #14 ranged at 1x to 5x.
- If the environment is light enough, turn the auxiliary light off to save the power. On the contrary, please turn the auxiliary light on to get the sharpest image to observe
- Otherwise, please turn the auxiliary light on.

【Announcements】

Don't block the light resource.

Setup menu



1. Format SD

Select to format memory card on this Digital Night Vision Monocular, we suggest format the memory card on computer then format it on this camera again for first use.

2. Language

Select the desired menu language.
The following languages are available: English, German, French, Spanish, Poland, etc.

3. Power Save

Select the time when the device is automatically turned off when there is no operation to save battery consumption.

4. Date / Time

Press "MENU" to find "Date / Time". Press "⏻", then select the settings. Set the time and date according to current time. Press \leftarrow / \rightarrow key to choose the number value. Confirm the changes with "⏻" key.

5. LCD Backlight

Select the LCD brightness of the device, the number after "Backlight" means the current brightness index. Press \leftarrow to heighten the index and \rightarrow to lower it. 15 means the highest brightness of display. The index ranged at 1 to 15, 15 means the brightest index.

6. Date/Time Tag

Turn on/off display of watermark on photo.

7. Flicker

Turn on / off the positioning laser light.

8. Version

Select to check the device's current firmware version number.

9. TV Standard

Press the **MENU** key 2 times to enter the replay mode.
Press **[◀]/[▶]** key to review the photos/videos. While reviewing photos, press **[◀]/[▶]** key to page up/down. While reviewing videos, press **[▶]** key to start playing, press **[▶]** one more time to stop. Press **MENU** key to return to standby.

【Monitor Connection】

Connect monitor to video Output Interface.
Long press **[▶]** for 3 seconds to switch the display on the screen of external monitor.

【PCs Connection】

The viewer is equipped with USB2.0 interface.
The PC could identify the viewer automatically and read the content in the SD card.
The battery could be charged by connection of PCs.

【Auto Power Off】

Set the auto power off in the device's menu, and the device will be automatically closed according to the set time when there is no operation.

Power Management

【Battery Application】

Model: 14500, 600mAh , 3.7V.
Please ensure the battery should be charged 10 hours to make it works best in the first time.

【External Power】

Plug the DC IN 5V in.

The viewer could work for long time and won't be powered off automatically.

The viewer could be charged when the external power connected well.

Parameter

Item	Index
Image Size	4 Mega Pixel(1/3")
Magnification	5*40
Dimension of Objectives	φ40mm
Field of View	5°x3.75°
Display resolution [Pixel]	320 x 240
Operation Buttons	5 buttons (PWR ON,IR+,MENU,ZOOM-,ZOOM+)
Brightness display	Brightness display
Infrared illumination	IR LED 3W, 850 nm
Visualisation	In colour by day, black and white by night
Range up to approx. [m]	1000m by day / 300m by night
Picture angle approx	6,8°
Aperture	f / 1,4
Recording capability	Photo / Video with audio
Digital picture format	30MP/JPEG (7360 x 4128 Pixel)
Digital video format	4K/30fps, H.265 (4096×2160 Pixel)
Memory card	micro SD/SDHC 4GB to 256GB
Power supply	18650 Li-battery,3.7V/3000mAh
Operating time approx. (with fresh batteries)	10 hours in day mode 6 hours with infrared illumination

Item	Index
Tripod mount	1/4"
Housing	ABS, rubberized
Dimensions approx.[cm]	21.5 x 8.6 x 6.0 cm
Weight without battery approx. [g]	350g
Operation Temperature	-20°C to +60°C
Storage Temperature	-30°C to +70°C

【Configuration Standard】

Items	Amount
video cable	1
USB cable	1
Pouch	1
External power adapter	1
Operating Manual	1
Hand grip Strap	1
battery	1
Cloths	1

【Operating Environment and Announcements】

The viewer should be kept in the soft pouch. Operating temperature ranged at -20~60℃. Relative humidity is 80%.

In order to avoid the wetness and mildew, please keep it in the clear and dry environment. Avoiding the great pressure and solar radiation also please.

When the image jitter happens or the LCD couldn't be lightened up, please charge the battery in time.

Blow away the dusts before wipe the optical surface.
If the viewer won't be used for a long time, please keep charge the battery occasionally to avoid the effectiveness lose.