TELESCOPIC VIDEO INSPECTION SYSTEM WITH DVR FUNCTION INSTRUCTION MANUAL



Read these instructions completely before operating the device PLEASE CHARGER BATTERY FIRST BEFORE USE

Technical Specification

| Ca | Camera | | | | |
|---------------------------------|---------------------|--|--|--|--|
| Camera head | 1/4 CMOS | | | | |
| Pixel | 0.3 Mega Pixels | | | | |
| LED lights | 12pcs LED lights | | | | |
| Camera length | 320mm | | | | |
| Camera diameter | 23mm | | | | |
| Monitor | | | | | |
| LCD screen | 5.0 inch LCD | | | | |
| Resolution | 800*480 | | | | |
| Monitor size | 130*80*10mm | | | | |
| Telescopic Pole | | | | | |
| Max Length | 3.5m | | | | |
| Min length | 0.9m | | | | |
| Battery | | | | | |
| Battery capacity | 2200mAh | | | | |
| Output voltage | DC 12V | | | | |
| Charger adaptor | | | | | |
| Input voltage | AC 100-240V 50/60HZ | | | | |
| Output voltage | DC-12V 500mA | | | | |
| DVR | | | | | |
| PAL output | 704X576(PAL) | | | | |
| Video format | MP4 | | | | |
| Picture format | JPEG | | | | |
| SD card | 32GB | | | | |
| Complete Set | | | | | |
| Length | Max length 3.5M | | | | |
| Working voltage | DC 12V | | | | |
| Working and storage temperature | -20°C to 50°C | | | | |

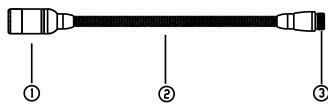
Save this manual

Attention

- 1. Read this manual carefully before using this system.
- 2. Do not drop or press hard on the device.
- 3. Please screw the camera tightly if using it under the water
- 4. Do not operate hard when adjusting the monitor direction, and the angle is less than 30°from left to right and 90°to up.
- 5. Pls inset the SD card heads, otherwise it will damage the DVR.
- 6. Pls using DVR format the SD card for first time.
- 7. Do not remove the SD card in working time.
- 8. Please use the original charger adaptor to charge

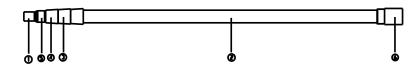
Know your device

Camera head and flexipart



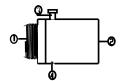
- 1. camera head
- 2. flexible part
- 3. Gold pins connector

Telescopic pole



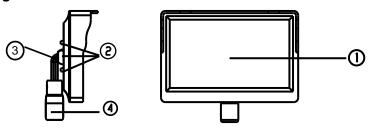
- 1.Connector to camera
- 2.First telescopic shaft
- 3.Second telescopic shaft
- 4. Third telescopic shaft
- 5. Fourth telescopic shaft
- 6.Controller connector

Rotating joint



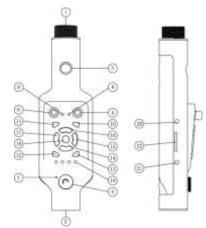
- 1.Connector To telescopic pole
- 2.Connector To DVR control box
- 3.Rotating set screw
- 4. Allen screw(Plsease do not screw it)

Digital Monitor



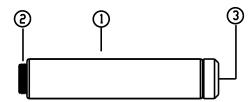
- 1.TFT screen
- 2.Button
- 3. The rotating part and bracket
- 4. Monitor female plug and fixed nut

Control Box



| No | Button | Function |
|----|---------------------|----------------------------|
| 1 | Connector | To Rotating joint |
| 2 | Connector | To battery hand shake |
| 3 | Male plug | To monitor |
| 4 | Knob | Off/on/LED |
| 5 | DVR button | DVR on/off |
| 6 | MIC button | MIC on/off |
| 7 | MIC recording | Recording port |
| 8 | DVR indicator light | Working/on |
| 9 | MIC indicator light | MIC/on |
| 10 | ESC | Exit |
| 11 | MENU | Main menu |
| 12 | P/P button | Playback |
| 13 | STOP | Stop recording |
| 14 | | Up button/ Take a picture |
| 15 | • | Down button |
| 16 | • | Left button / backward |
| 17 | | Right button / forward |
| 18 | ОК | Record video / Confirm |
| 19 | Battery indicator | Battery level |
| 20 | VIDEO port | Connect with other monitor |
| 21 | Earphone jack | Connect to earphone |
| 22 | SD card slot | Inset SD card heads |

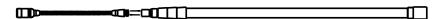
Battery Hand Shake



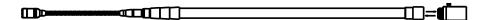
- 1.Holding Position
- 2.Connector
- 3.12V charger port for battery

Assembly

- 1. Take off the protectors of components.
- 2. Screw the camera head to the telescopic shaft connector



3. Screw the rotating joint to another connector of the telescopic pole



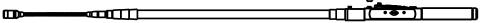
4. Screw the DVR control box to the connector of the rotating joint.



5. Screw the hand shake to the DVR control box connector



6. Insert the monitor to female plug into the DVR control box, and then screw the nut tightly.



Instruction

- 1. Switch the knob by clockwise to turn on the systen and adjust the LED brightness
- 2. Adjusting the direction of the monitor to view the images on different positions.
- Stretch the second and third telescopic shaft to inspect the further position, do not forget to screw the knob tightly, otherwise they will retract. Pushing back the telescopic shaft when you inspect the near position.
- 4. The camera flexi part can be bended to a suitable position for easy to inspect different viewings.
- Using rotating joint to adjust the camera direction ...
- 6. Pay attention to the level indicator of the battery, the system will be automatically power off when indicating low battery. You can change the standby battery.
- 7. Use the 12V power to charge the battery and no power output during charging.
- 8. If you don't need to use DVR function, pls shut off the DVR power to save the battery.
- 9. Inset the SD card in right side up.
- 10. In standby model ,press "p/p" button, take a photo,then press"OK" button, start to recording.

Icons on screen

Standby Model

current time





Audio icon



N(NTSC) P (PAL)



SD card display icon



U disk display icon

Remark:



This icon indicates failure

Recording Model



Recording time period

This icon represents the SD card has been read

- 1.Please format the SD card for the first use, Format into FAT32 format
- 2. When the device reads the SD card, The bottom right corner of the screen disappears. If it does not disappear, the reading falls, Need to format it again

Menu playback interface

Press "MENU" button to enter the main menu



1. VIDEO

1.1 Record the video



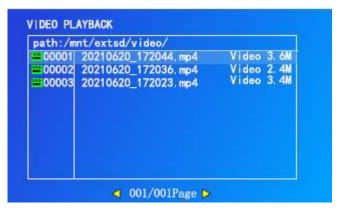
Press "OK" button to record the video .

Press "Stop" button to stop recording the video.

1.2 Video playback



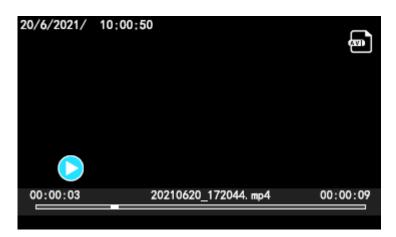
Press the "MENU" button to enter the main menu. Press "OK" to enter the "VIDEO" play folder.



Click the OK button to enter video playback.

The list can be in accordance with the time period.

Choose the video you want to play



Enter the current playback video interface.

Press "

" to backward,"

" to forward.

Press " **\(\Lambda \)** " to play the previous video," **\(\Lambda \)** "to play the next video.

2.PHOTO

2.1 Take a photo

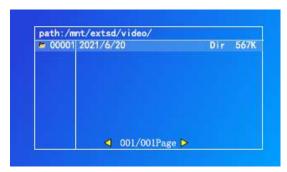


In DVR model,press " \blacktriangle " button to take a photo. The files will be stored on the SD card.

2.2 Photo playback



Press the "MENU" button to enter the main menu.



Press "OK" to enter the "Photo" folder.

3.System settings

3.1 System setting

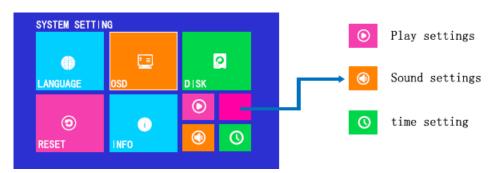


Press the "MENU" button to enter the main menu.

Press "

" key to select system setting.

Press "OK" to enter.

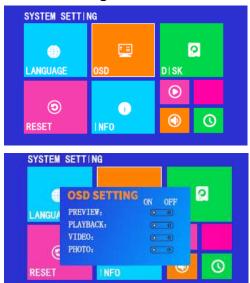


LANGUAGE: Include Chinese/English/German/Spain/Polish/French

RESET: This option can be used to restore the factory default settings.

INFO: This setting is to view the system software version number

3.2 OSD setting



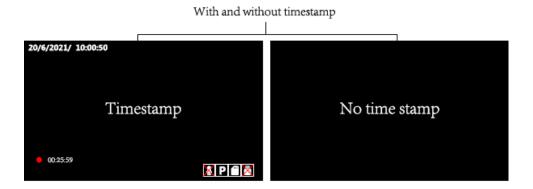
Preview: In the real-time preview state. No watermark on the screen.

Replay: Refers to the playback ofvideo or pictures. No watermark

Video: Video file watermark off **Picture:** Picture file watermark off

Tips: Please don't change these settings. Otherwise it may causes some

function that is not available.



3.3Save setting/format (DISK)







Fault judgment

Can't read card and can't record video?

- 1.Please use a genuine card.
- 2.If the card is not read,enter "Save Settings" to format
- 3.For SD cards that have been used for a long time, please clean the pins of the SD card before inserting it into the device.
- 4. The card is not read, please restart the device.

4.Image Setting



Press "Menu" button to enter the main menu.

Choose "IMAGE" icon.

Image setting:

Through color contrast and brightness adjust image parameters in real time.



Mirror settings: After entering the image settings, press the " " key to select enable or disable,then press "Esc" key,it can be automatically saved. **Brightness:** Refers to adjusting the brightness of the screen on the screen to high or low

Chroma: refers to adjusting the color of the screen picture to dark or light **Contrast:** A measure of comparison between the bright and dark parts of the same picture. The contrast is large, and the picture is very brightin black and white.

5. Video Setting



Press "Menu"to enter the main menu and choose the "RECORD" icon 5.1 Recording time setting



Video clip time:Press "OK" to pop up the option bar then press "▲" "▼" to select.If you want the time period, press "OK" to confirm and save.

Video packaging time: After this function option bar is expanded, 1/5/10/15/30/60 minutes and other time periods. After the settings are saved, the device packs the videofiles according to this time period,

For example: set to 1 minute, then the device will save the video as a video file per 1 minute when recording

5.2 Video frame rate



low frame rate video, the advantage of saving storage space, if not necessary, you can press the default setting.

Video frame rate: Press "OK" to pop up the option bar then press "\(\bigcap \)" "\(\bigcup \)" to select. If you want the time period, press "OK" to confirm and save.

5.3 Video Quality



Video Quality: High/Midddle/Low, there modes.

5.3 Video compression



Video compression:H.264/H.265 two compression methods

5.4 Photo quality



Photo quality: High/Midddle/Low, there modes. The higher the picture quality, the clearer the picture.

5.5 Record mode



Record mode: Manual recording/automatic recording. **Set up manual recording :** need to use buttons, etc.

Power-on video: when the device is turned on ,automatically record

5.6 Overwrite

| VIDEO CLIP TIME | 1 MINUTE |
|-----------------|--------------------|
| FRAME RATE | NTSG30FPS/PAL25FPS |
| VIDEO QUALITY | HIGH |
| COMPRESS | H. 264 |
| PHOTO QUALITY | HIGH |
| RECORD MODE | MANUAL |
| OVERWR I TE | ON |
| TV SYSTEM | ON OFF |

Overwrite: refers to the automatic loop.

If OFF,after the storage device is full ,automatically stop to record the video . It is recommended to turn on (default is on status)

5.7 Video format

| IDEO CLIP TIME | 1 MINUTE |
|----------------|--------------------|
| FRAME RATE | NTSG30FPS/PAL25FPS |
| VIDED QUALITY | HIGH |
| COMPRESS | H. 264 |
| PHOTO QUALITY | HIGH |
| RECORD MODE | MANUAL |
| OVERNRITE | ON |
| TV SYSTEM | PAL |

Please make sure the system video format and input camera format are consistent. Otherwise, the image will be abnormal or no image.

For example, if the TV system is PAL, then the camera will also be PAL.

Assembly parts list

| PART NO. | DESCRIPTION | |
|----------|-------------------------------|---------|
| 1 | Camera head and flexible part | 1pcs |
| 2 | Lcd monitor | 1pcs |
| 3 | Telescopic pole | 1pcs |
| 4 | Extend pole | 2pcs/3m |
| | Extend pole | 4pcs/5m |
| 5 | Rotating joint | 1pcs |
| 6 | Earphone | 1pcs |
| 7 | 32GB SD CARD | 1pcs |
| 8 | Li-ion battery | 2pcs |
| 9 | DVR control Box | 1pcs |
| 10 | Charger adaptor | 1pcs |
| 11 | User manual | 1pcs |