

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	16GB SD CARD	1pcs
8	Li-ion battery	2pcs
9	DVR control Box	1pcs
10	Charger adaptor	1pcs
11	User manual	1pcs



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TELESCOPIC VIDEO INSPECTION SYSTEM TIC23D WITH DVR FUNCTION INSTRUCTION MANUAL



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

Technical Specification

Camera	
Camera head	1/4 CMOS
Pixel	0.3 Mega Pixels
LED lights	12pcs white 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	5.0m
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	2GB-32GB
Complete Set	
Length	Max length 5m
Working voltage	DC 12V
Working and storage temperature	-20°C to 50°C

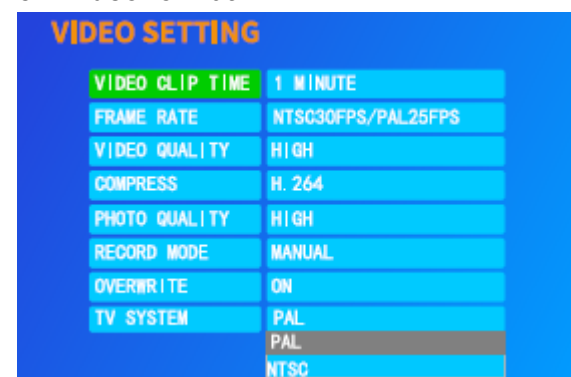
5.6 Overwrite



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



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.

5.4 Photo quality

VIDEO SETTING	
VIDEO CLIP TIME	1 MINUTE
FRAME RATE	NTSC30FPS/PAL25FPS
VIDEO QUALITY	HIGH
COMPRESS	H. 264
PHOTO QUALITY	HIGH
RECORD MODE	MIDDLE
OVERWRITE	LOW
TV SYSTEM	PAL

Photo quality :High/Middle/Low ,there modes.

The higher the picture quality, the clearer the picture.

5.5 Record mode

VIDEO SETTING	
VIDEO CLIP TIME	1 MINUTE
FRAME RATE	NTSC30FPS/PAL25FPS
VIDEO QUALITY	HIGH
COMPRESS	H. 264
PHOTO QUALITY	HIGH
RECORD MODE	MANUAL
OVERWRITE	MANUAL
TV SYSTEM	POWER UP PAL

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

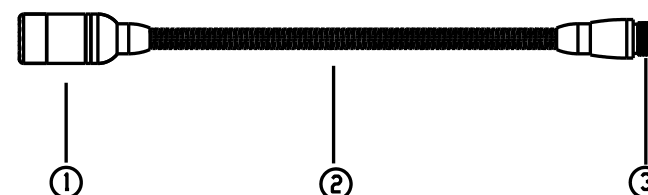
Save this manual

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

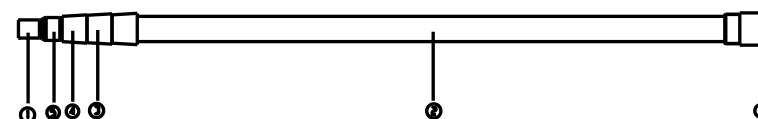
Know your device

Camera head and flexipart



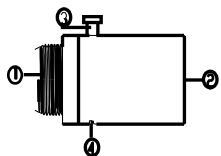
1. camera head
2. flexible part
3. Gold pins connector

Telescopic pole



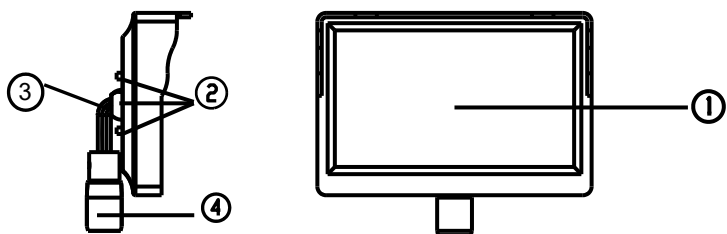
- 1.Connector to camera
- 2.First telescopic shaft
- 3.Second telescopic shaft
- 4.Third telescopic shaft
- 5.Fourth telescopic shaft
- 6.Controller connector

Rotating joint



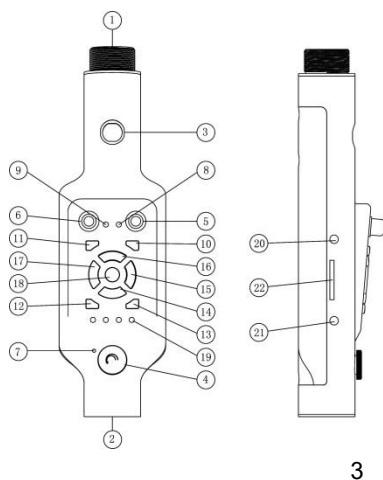
- 1.Connector To telescopic pole
- 2.Connector To DVR control box
- 3.Rotating set screw
- 4.Allen screw(Please do not screw it)

Digital Monitor



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

Control Box



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 “▲” “▼” to select.If you want the time period, press “OK”to confirm and save.

5.3 Video Quality

VIDEO SETTING	
VIDEO CLIP TIME	1 MINUTE
FRAME RATL	NTSC30FPS/PAL25FPS
VIDEO QUALITY	HIGH
COMPRESS	MIDDLE
PHOTO QUALITY	LOW
RECORD MODE	MANUAL
OVERWRITE	ON
TV SYSTEM	PAL

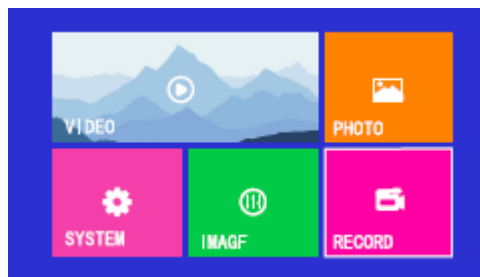
Video Quality: High/Middle/Low ,there modes.

5.3 Video compression

VIDEO SETTING	
VIDEO CLIP TIME	1 MINUTE
FRAME RATL	NTSC30FPS/PAL25FPS
VIDEO QUALITY	HIGH
COMPRESS	H. 264
PHOTO QUALITY	H. 264
RECORD MODE	MANUAL
OVERWRITE	ON
TV SYSTEM	PAL

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

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,

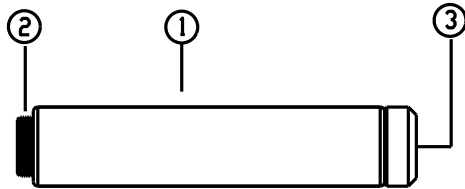
For example: set to 1 minute,then the device will save the video as a video file per 1 minute when recording

5.2 Video frame rate



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	OK	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

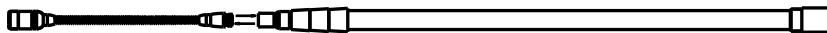
Battery Hand Shake



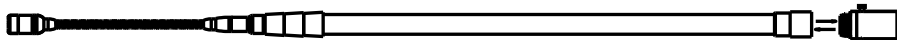
1. Holding Position
2. Connector
3. 12V charger port for battery

Assembly

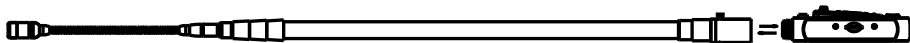
1. Take off the protectors of components.
2. Screw the camera head to the telescopic shaft connector



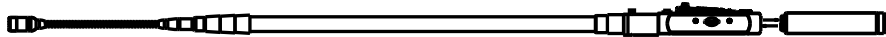
3. Screw the rotating joint to another connector of the telescopic pole



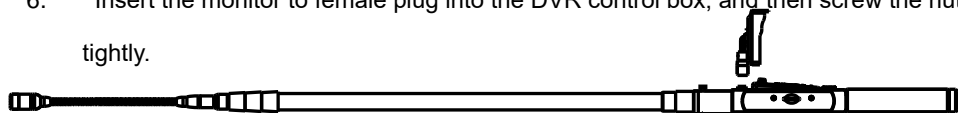
4. Screw the DVR control box to the connector of the rotating joint.



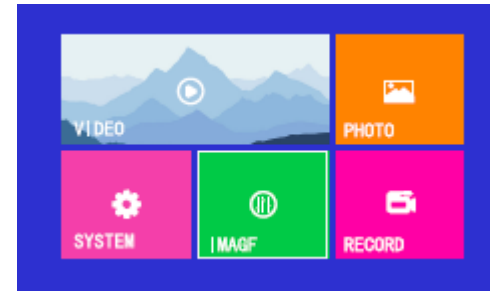
5. Screw the hand shake to the DVR control box connector



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



4. Image Setting

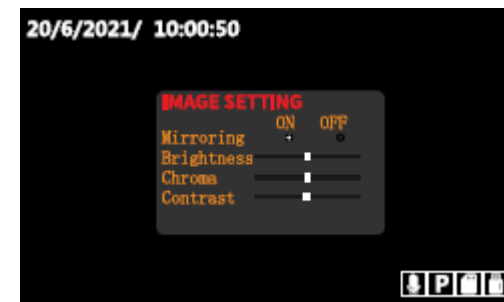


Press “Menu” button to enter the main menu.

Choose “IMAGE” icon.

Image setting:

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



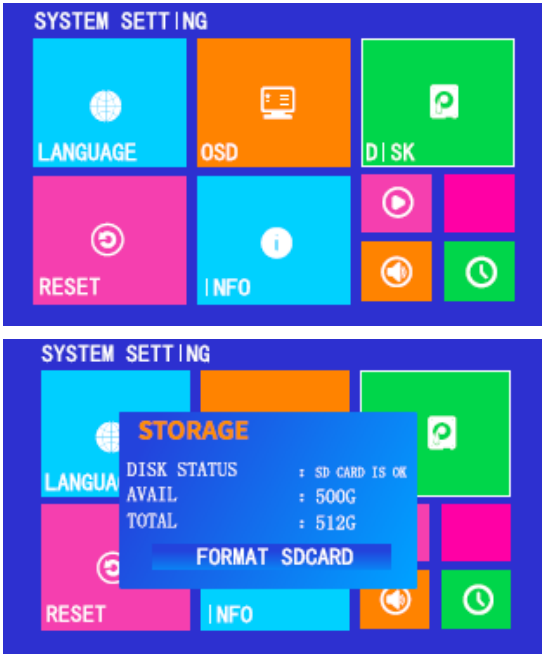
Mirror settings: After entering the image settings, press the “◀” “▶” key to select enable or disable, then press “Esc” key, it can be automatically saved.

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 bright in black and white.

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.

Instruction

- 1. Switch the knob by clockwise to turn on the system and adjust the LED brightness
- 2. Adjusting the direction of the monitor to view the images on different positions.
- 3. 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.
- 5. 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



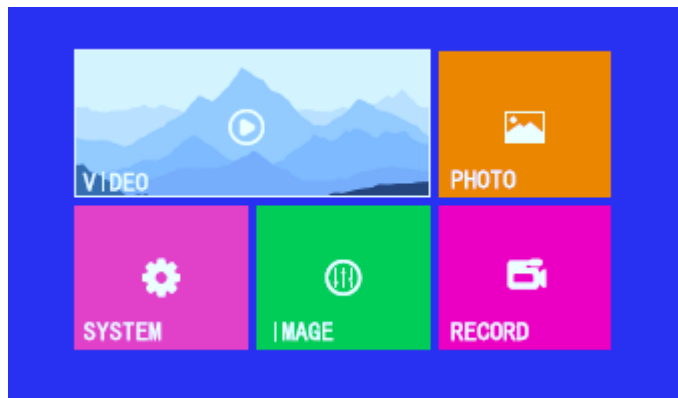
Recording time period

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 fails, Need to format it again

Menu playback interface

Press "MENU" button to enter the main menu



3.2 OSD setting



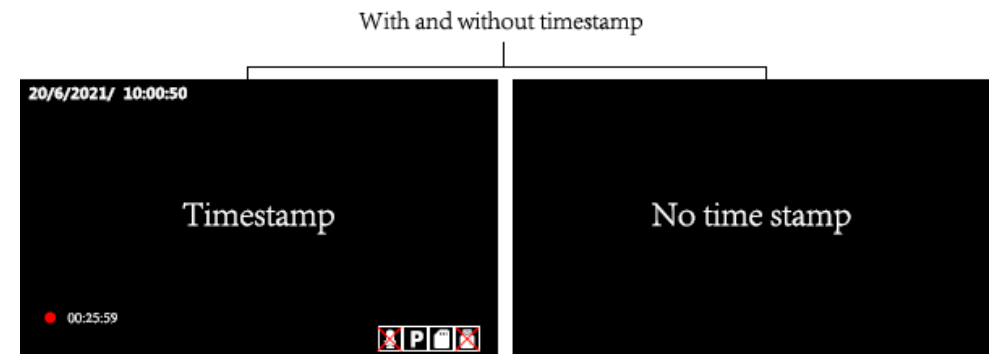
Preview: In the real-time preview state. No watermark on the screen.

Replay: Refers to the playback of video or pictures. No watermark

Video: Video file watermark off

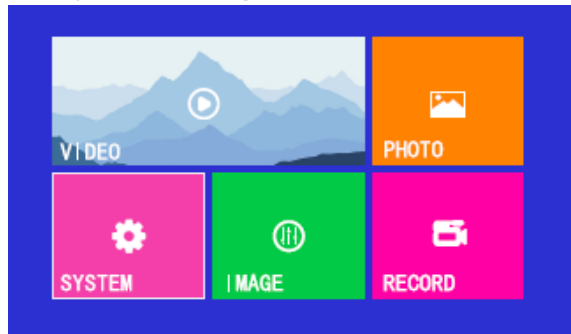
Picture: Picture file watermark off

Tips: Please don't change these settings. Otherwise it may cause some function that is not available.



3.System settings

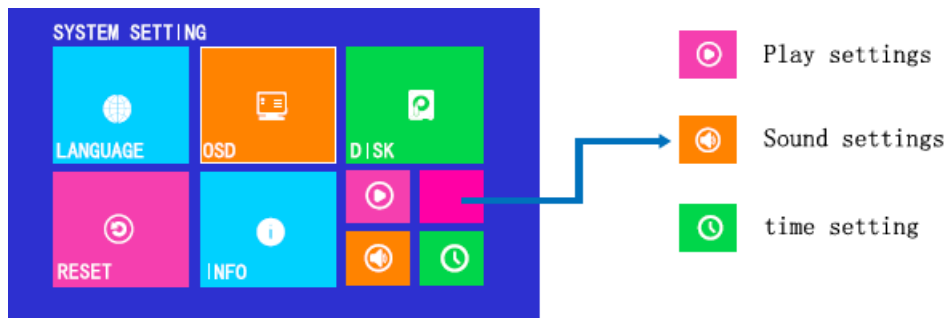
3.1 System setting



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

1. VIDEO

1.1 Record the video



Press “OK” button to record the video .

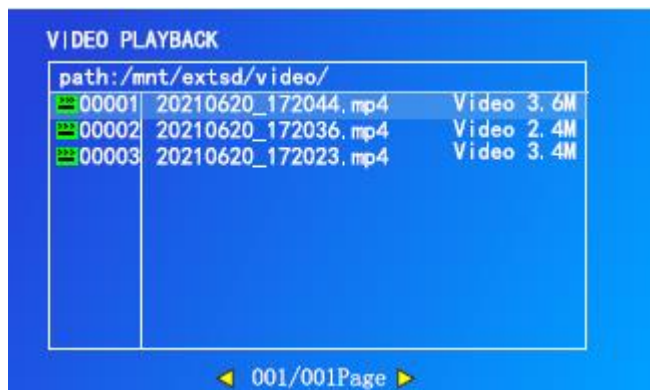
Press “Stop” button to stop recording the video.

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 “▲” “ to play the previous video,” ▼ “to play the next video.

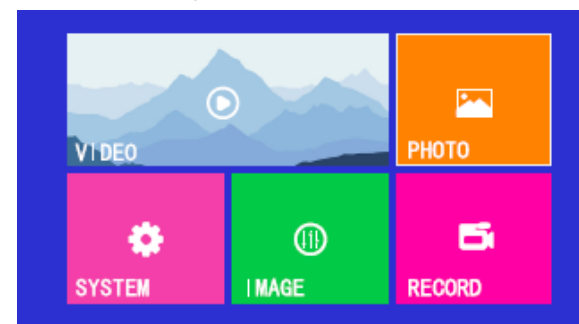
2.PHOTO

2.1 Take a photo

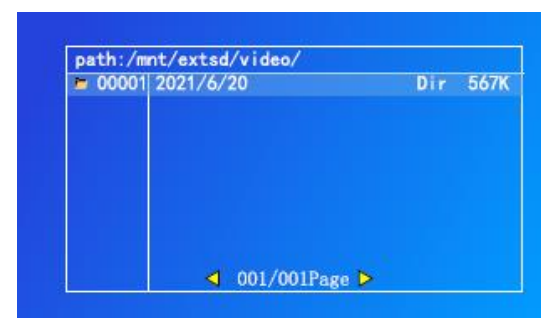


In DVR model,press “▲” button to take a photo.
The files will be stored on the SD card.

2.2 Photo playback



Press the “MENU” button to enter the main menu.



Press “OK” to enter the “Photo” folder.