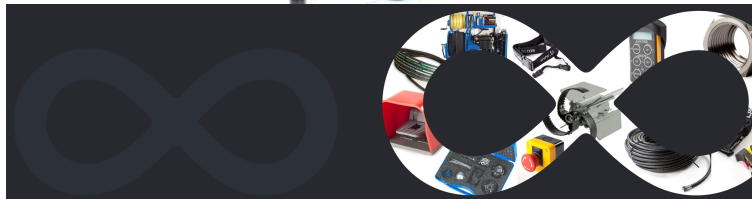# PIPE INSPECTION CAMERA

Please read the manual carefully before operating the system.

Please charge the battery before use.

MANUAL

Catalog

Safety and Notice

> **Warning**
> To avoid electrical shock put the item indoor when charging

Warning

Use only input AC 110~240V output DC 13.5V 5A charger.
This machine can only use the original charger and lithium battery, reminding the charging time is 5 hours. Please charge the battery before use!

1. Please check the appearance and functionality of the goods upon receipt. In the event of damaged or missing goods, please forward images to us within 3 working days, Otherwise, we will not be able to provide after-sales service

2. Working environment of camera system -10°C~50°C(14°F~122°F)≤95% RH; Storage environment: -20℃~70℃(-4℉~158℉) ≤95% RH.

3. The warranty becomes void if any physical damage is present by user or force majeure factors or if the system is disassembled or connect non-factory parts by the user

4. Do not disconnect the SD card while recording or playing as this may damage the system and/or the SD card

5. Remember to always back up the data on your SD card

6. Before using the SD card for the first time, it is recommended to use the check system to format the SD card.

7. Remember to slide the write protection tab to the unlocked position. Otherwise, all data on the SD card is protected and cannot be edited or formatted.

8. Use only the original accessories to avoid possible risks to health and property, and thus meet all related legal regulations.

9. Keep controller dry.

10. Do not drop, knock, or shake the inspection system. Inappropriate behavior when using the camera system may damage the internal electronic circuit board or deform the lens shape.

11. Make sure all accessories are connected before starting up.

12. Do not remove or install camera, keyboard, coil, SD card and other accessories when the machine is turned on. If replacement is required, please replace it in the power off state.

1. Parts list

1.1. Accessories

Item	Image	Description	Optional
Camera Head & Skids		• Camera Head size：ø17mmX115mm • Skid size：ø24mm	
		• Camera Head size：ø23mmX134mm • Skid size：ø40mm & ø80mm	
		• Camera Head size：ø23mmX134mm • Transmitter **: 512Hz** • Skid size：ø40mm & ø80mm	
		• Camera Head size：ø23mmX240mm • Transmitter **: 512Hz** • Self-balancing • Skid size：ø40mm & ø80mm	
Controller & Cable Wheel		• Controller size: 280*220*37.5mm • Resolution: 1024x600 • Monitoring & Video recording & text writing ＆WIFI image transmission（Optional） • Storage medium: 8G SD card & card read or USB stick **(max 256G)** • Built-in battery:12.6V 6000mAh 66.6Wh	√
		• Wire rack size: 456*395*200mm • Wire rack material: aluminum alloy	√
		• Size: Ø376*70mm • Coil material: glass fiber • Wire diameter: ø6.3mm 5-core+coaxial • Coil length: 30 m	√
		• Hard Keyboard • Size: 300.8*115.8*12.25mm	√

Item	Image	Description	Optional
Charger		● Input: AC100-240V～50 / 60Hz ● Output: DC 13.5V / 5A ● Plug specifications:5521	√
Microphone		● Frequency Response：20-20KHz	√
SD card ＆ Card reader		● 8G SD card & card reader	√
Waterproof Ring			√
Manual			√
Screwdriver			√
Pipe Receiver		● Frequency 512hz ● Signal: Analog ● Distance: 4.5-5m	

1.2. Control Box
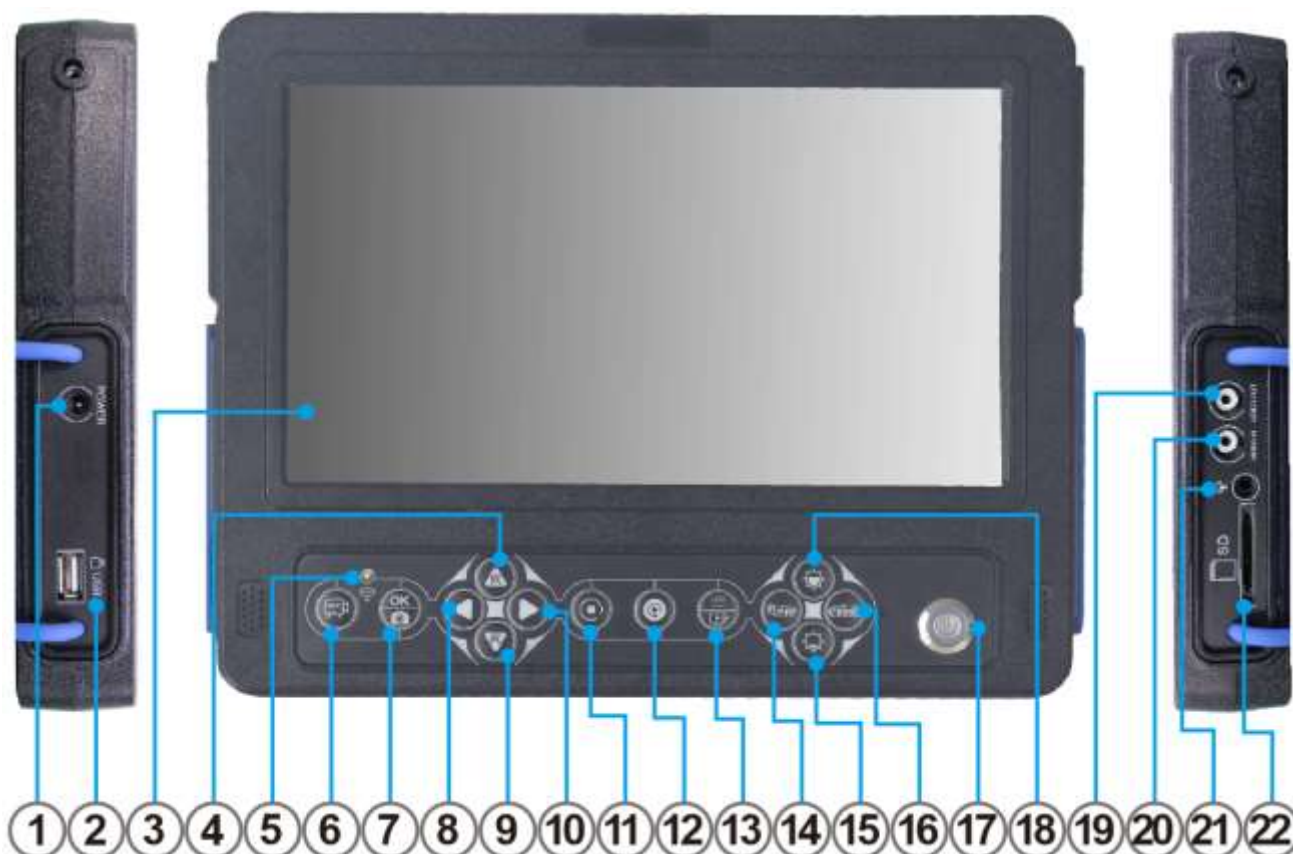
1	DC JACK	12	Quick playback
2	USB stick port	13	Menu/ Delete
3	10.1 inch display	14	Meter/Feet switch
4	UP/ZOOM+	15	Light brightness down
5	WIFI indicator	16	Counter reset
6	Record	17	ON/OFF
7	Photo/OK/ Photo folder	18	Light brightness up
8	Left/ backward	19	Video output
9	Down/ZOOM-	20	Video input
10	Right/ Fast forward	21	Headphone jack
11	Back	22	SD Card Slot

2. Quick Start Guide

2.1. Connection

1. Loosen the screw, open the sunshade and tighten the screw. 	2. Raise the screen to choose a suitable angle. 	3. Lift the keyboard to open the toolbox.
4. Loosen brake screw 1. 	5. Open the coil bracket. 	6. Loosen the brake screw 2.
7. Press the top screw firmly and pull out the camera. 	8. Put the camera at the wire hook when using. 	9. Clamp the camera on the top after use.
10. It can be placed vertically for operation. 	11. It can be placed horizontally. 	
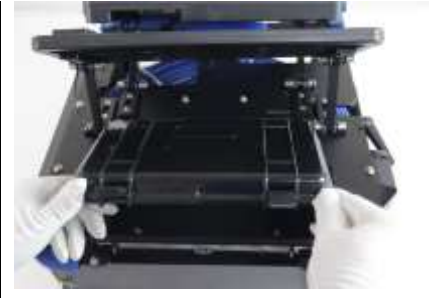
WARNING:
Check the waterproof ring between all connections.

2.2. Charge the Battery

Initial charging for more than 5 hours

1. Connect the adapter to the AC 100~220V power supply.	2. Connect the DC plug to the jack on the controller.	3. When the charging is completed, the charging indicator will change from red to green. On/off key of the display screen The breathing light goes out.

2.3. Assemble skid

2.3.1. Install 40mm skids

1. Put the camera in the stand.	2. Tighten the screws on the outside of the skid to fix the skid.	3. The skid is installed.

2.3.2. Install 80mm skids

1. Loosen the skid screws and install the camera head;	2. Tighten the screws on the outside of the skid to fix the skid.	3. The skid is installed.

2.4. Starting up

1. Insert SD Card Insert SD card or card reader & SD card.	2. Staring up Press and hold the On/Off button to power on.	3. Record video Press this button to record, press again to stop recording.
4. Take photo & playback Press this button to take photo. Long press button to playback.	5. Audio and text record Support to record audio by microphone and input text by keyboard when recording video (requires a headset)	6. Meter counter Press (reset) button to reset the counter. Press (ft≒m) button to switch meter/ feet.
7. Zoom in and out Press these two buttons to zoom in and zoom out image when recording.(max 8 levels) When playing a video, you can use these two buttons to adjust the volume	8. Adjust volume When recording a video, you can use these two buttons to adjust the volume When playing a video, press these two buttons to fast forward/rewind.	9. Adjust lights of camera Press these two buttons to adjust the light
10. Play video Press these two buttons to play video.	11. Delete video Press these buttons to delete video. are you sure want to delete this photos? Delete Cancel	12. CVBS video out Long press the menu button for 3 seconds to switch the screen connected to other RCA jacks. Operate in the same way to turn off this feature

When play back video, press [OK] button to pause the video, and press buttons to fast forward and backward the video.

Warning: Do not use "USB STICK" and "SD card" at the same time. Pay attention to the direction of the SD card. Do not insert or remove the U disk or SD card during the photo/video process.

2.5. WIFI (Optional)

Note: When WFI mode is turned on, the USB flash disk cannot be used and the SD card is available.

2.5.1. Switch WIFI

1. No WIFI icon in the lower right corner of the display indicates that WIFI is not turned on. Long press for 5 seconds to display the transfer in switch between USB flash disk and WIFI, USB flash disk ->>WIFI or WIFI ->>USB flash disk. After pressing the key, the automatic restart takes effect. After turning on WIFI, the lower right corner of the display screen displays WIFI icon, and the icon has an "X". At this time, the WIFI power is not turned on.

2. Enter the video settings, select WIFI, select "ON" to open, and return to the main interface. If there is no "X" in the WIFI icon, the WIFI power has been turned on.

2.5.2. Connect WIFI

1. Install APP "HD VIEW" on Android phones; Install "MEGAEYE W" on the iPhone. APP networking and storage permission shall be allowed.

Android phone   iPhone

2. Mobile phone searches WIFI and connects it. WIFI name: MOQO or MERCUY or MG Newton; Password: 12345678; The WIFI indicator light at the lower left corner of the controller will change from slow flashing to fast flashing after successful connection;
3. Open the mobile phone APP to see the picture. If there is no image, please restart the APP; WIFI transmission distance is about 5M.
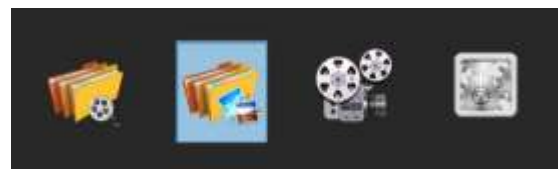

3. Menu

Press to enter menu. Press choose the items. Press enter submenu. Press enter upper submenu until to homepage.

Play Video   **Play Photo**

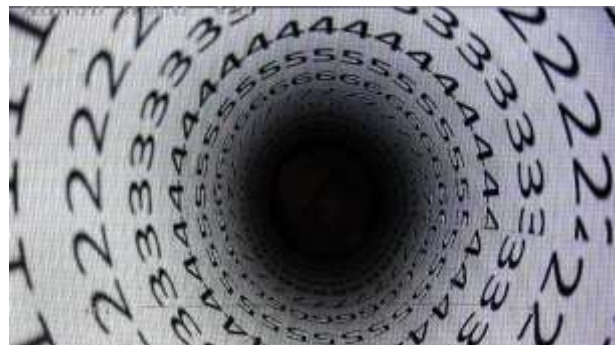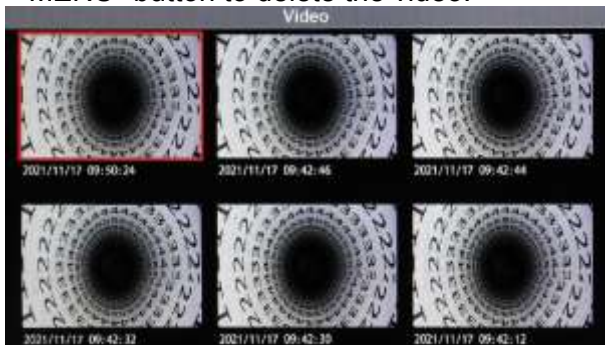**Video settings**   **System settings**

3.1. Play Video

The video folder can be opened in the menu, or it can be opened quickly by pressing " Quick playback ".
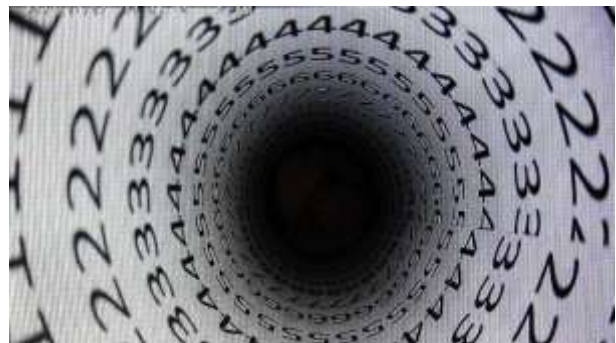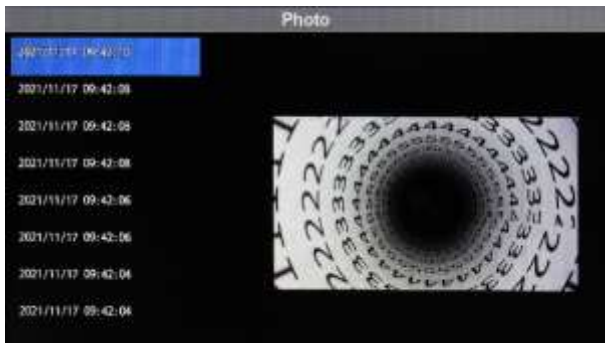
- "OK" button to play the video, "◄►"backward/ Fast forward , "▲▼"adjust the volume , "MENU" button to delete the video.

3.2. Play Photo

The photo folder can be opened in the menu, or you can press and hold the "OK" button for 3 seconds to quickly open it.

- "OK" button to view photos, "MENU" button to delete photos.

3.3. Video settings

3.3.1. Set the length of time to record video

- 5 minute
- 15 minute
- 30 minute

3.3.2. Record Audio

- ON
- OFF

3.3.3. CVBS output

- NTSC
- PAL

3.3.4. Mic volume

- First press the OK key, press the left and right keys to adjust the volume

3.3.5. Time Stamp

- ON
- OFF

3.3.6. WIFI（**Optional**）

- ON
- OFF

3.4. System settings

3.4.1. Picture

- Brightness
- Contrast
- Chroma
- Reset

3.4.2. Volume

- Press the left and right keys to adjust the volume

3.4.3. Language

● Press the up and down keys to set the language

3.4.4. Time

Date and time
Press the up and down keys to set the date and time, and press the left and right keys to select the time and date

3.4.5. Default Setting
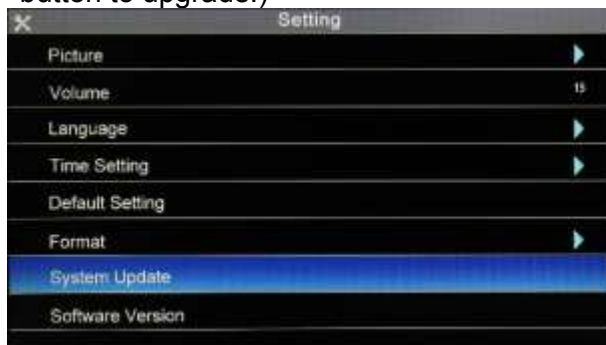
● No: Cancel
● Yes: Confirm

3.4.6. Format

● No: Cancel
● Yes: Format SD card(Note: please back up the data in the SD card before operation)
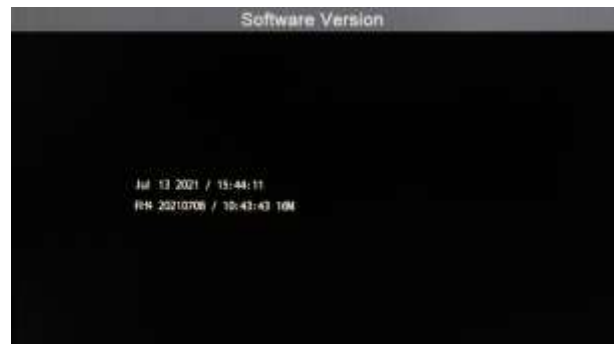
3.4.7. Firmware update

- No: Don't upgrade system
- Yes: Start to upgrade (Need to insert the SD card with the upgrade program, press the "OK" button to upgrade.)
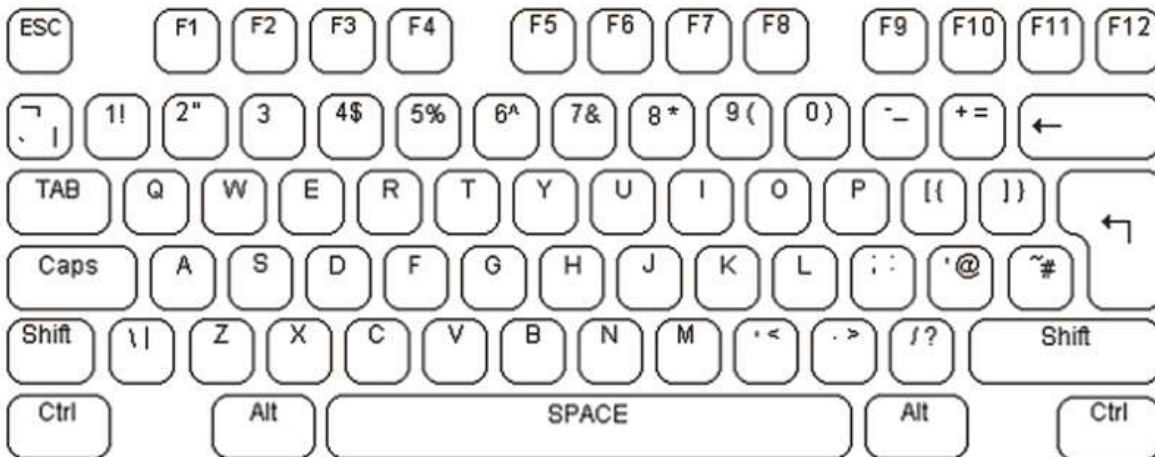

3.4.8. View software version

- View software version, date

4. Keyboard

1. The font and character size have been set and cannot be changed.
2. The basic operation of characters is to automatically push back, covering the input characters on the image.
3. The cursor flashing indicates the current position of the character to be input on the screen. The cursor position can be controlled by the direction key on the keyboard. The cursor will move from left to right, from top to bottom and back. After typing a character, the cursor flashes quickly at the position of the next character, and then disappears. Press F6 to switch between cursor flashing and cursor clearing.
4. Video character overlay input uses a standard American keyboard. The alphabetic characters in the QWERTY area and the numeric characters of the keypad can be directly input to the screen. Normally, lowercase letters are entered. When you press and hold the shift key or press caps lock, you can enter uppercase letters. When exiting uppercase input, press caps lock again. Use the backspace key to move the characters on the screen, which will quickly replace the characters to the left of the cursor with blank characters, and the cursor will move to the left. The delete key on the keyboard does not give any function. Press enter to move the cursor to the start of the next line.

F6	The switch cursor flashes
F9	Clear screen
↑↓←→	Move cursor position
CTRL+1~8	Quick jump page

5. The video text superimposing unit displays it in the current screen page. The text written to these pages will be saved in the local nonvolatile memory until it is overwritten. To move between screen pages, use the page up and page down keys. To quickly jump to page 1 ~ 8, press Ctrl + X (x stands for 1 ~ 8). Supports up to 64 page editing. To clear the screen page of the text, press F9.