

720P pipeline detector



Read these instructions completely before operating this system.

Please charge the battery first before use.



MANUAL

Catalog



| | |
|--|-----------|
| CATALOG | 2 |
| SAFETY AND NOTICE | 3 |
| 1. PARTS LIST..... | 5 |
| 1.1 ACCESSORIES | 5 |
| 1.2 CONTROL BOX..... | 7 |
| 2. FAST OPERATION | 8 |
| 2.1 BATTERY CHARGING | 8 |
| 2.2 START | 8 |
| 2.3 CHECK THE WATERPROOF RING AND ASSEMBLY BRACKET | 10 |
| 3. VIDEO AND MENU | 11 |
| 3.1 INSERT SD CARD AND U DISK | 11 |
| 3.2 RECORD VIDEO..... | 11 |
| 3.3 TAKE PHOTOS | 13 |
| 3.4 PLAY VIDEO | 13 |
| 3.5PLAY PHOTOS | 15 |
| 3.6 MENU..... | 16 |
| 4.VIDEO SETTINGS..... | 17 |
| 5.SYSTEM SETTINGS..... | 18 |
| 6.METER COUNTER | 21 |
| 7.KEYBOARD | 22 |

Warning



Warning

To Avoid electrical shock put the item indoor when Charging



Warning

Use only input 110~240V AC output DC 13.5V, 5000mA charger. machine can only use the original charger and lithium battery, reminding the charging time is 5 hours. Please charge the battery before use!



Warning

Item contains battery, dispose according local legal requirements properly



Warning

Please check the appearance and functionality of the goods after receive it. Any damage or loss of goods, please take pictures and contact us within 3 work days, or else take the consequences by self.

Do not drop or press on the system as this may cause damage to the device

The warranty becomes void if any physical damage is present or if the system is disassembled by the user

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

Remember to always back up the data on your SD card

Safety and Notice

For your safety

Do not attempt to insert, use, or charge a battery not designed for this inspection system.

2. Use the power supply only on even surfaces, without any cover. Open air and circulation around the product must be available. The maximum ambient temperature is 50 °C.

3. Risk of explosion may occur if an incorrect battery type is inserted or used. Dispose of used batteries according to their instructions.

4. Keep the inspection system and its accessories out of the reach of babies, toddlers, and children. In particular, small parts such as memory cards and battery could be easily dismantled and swallowed.

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

6. When using the LED lights, do not use too close to human or animal eyes (particularly for babies, toddlers, and children) to avoid injury.
7. In very rare occasions, Li-ion Batteries such as the one provided with this inspection system could explode if a conductive material such as jewelry, keys or beaded chains touch exposed terminals. The material may complete an electrical circuit and become quite hot. Exercise care in handling any batteries, particularly when placing it inside your pocket, purse, or other container with metal objects. In such an event, this could result in property damage, injury or burns. Do not dispose of batteries in fire as they may explode.

Warranty

1. Warranty is void if damage or system failure occurred due to outside factors such as collision, fire, flood, dirt, sewage, earthquake, and other force majeure events as well as incorrect usage of electricity or use of non-original accessories.
2. It is the sole responsibility of the user if problems (such as data loss and system failure) occurred due to non-factory installed software, parts, and/or non-original accessories.

Taking care of your inspection system

1. Always keep the inspection system in the pouch provided or other suitable cases for increased protection against splashes, dust, and collision.
2. The only way of replacing the battery and the memory card is to open the Battery / Memory cover. Use care when opening this cover to avoid damage the inspection system.
3. Dispose of unwanted batteries and inspection systems as permitted by the laws in your country.
4. Water may cause a fire or electric shock. Therefore, store your battery in a dry place.
5. If your control component becomes wet, wipe it with a dry cloth as soon as possible.
6. 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.
7. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the inspection system.
8. To avoid unclear images, be sure to clean the inspection system lens before taking pictures or recording videos. Use a lens brush or soft cloth to clean the lens.
9. To avoid the loss of video and photos on the memory card, you should make a backup copy to a computer or optical disc as soon as possible. Memory cards should not be considered as a long term storage device.
10. Before initial use of a memory card, it is recommended to use the inspection system to format the card first.
11. Remember to slide the write-protect tab (if available) to the unlock position. Otherwise, all data (if any) on the memory card is protected and the card cannot be edited or formatted.

Operating environment

1. The camera system operating temperature is between -10°C ~ 50°C (14°F ~ 122°F). It is normal for the operating time to be shortened when the temperature is low.
2. The capacity of your inspection system battery will reduce each time it is charged/emptied.
3. Storage at too high or low temperatures will also result in a gradual capacity loss. As a result, the operating time of your inspection system may be considerably reduced.
4. It is normal for the camera system to become warm during operation, because the inspection system casing can conduct heat.

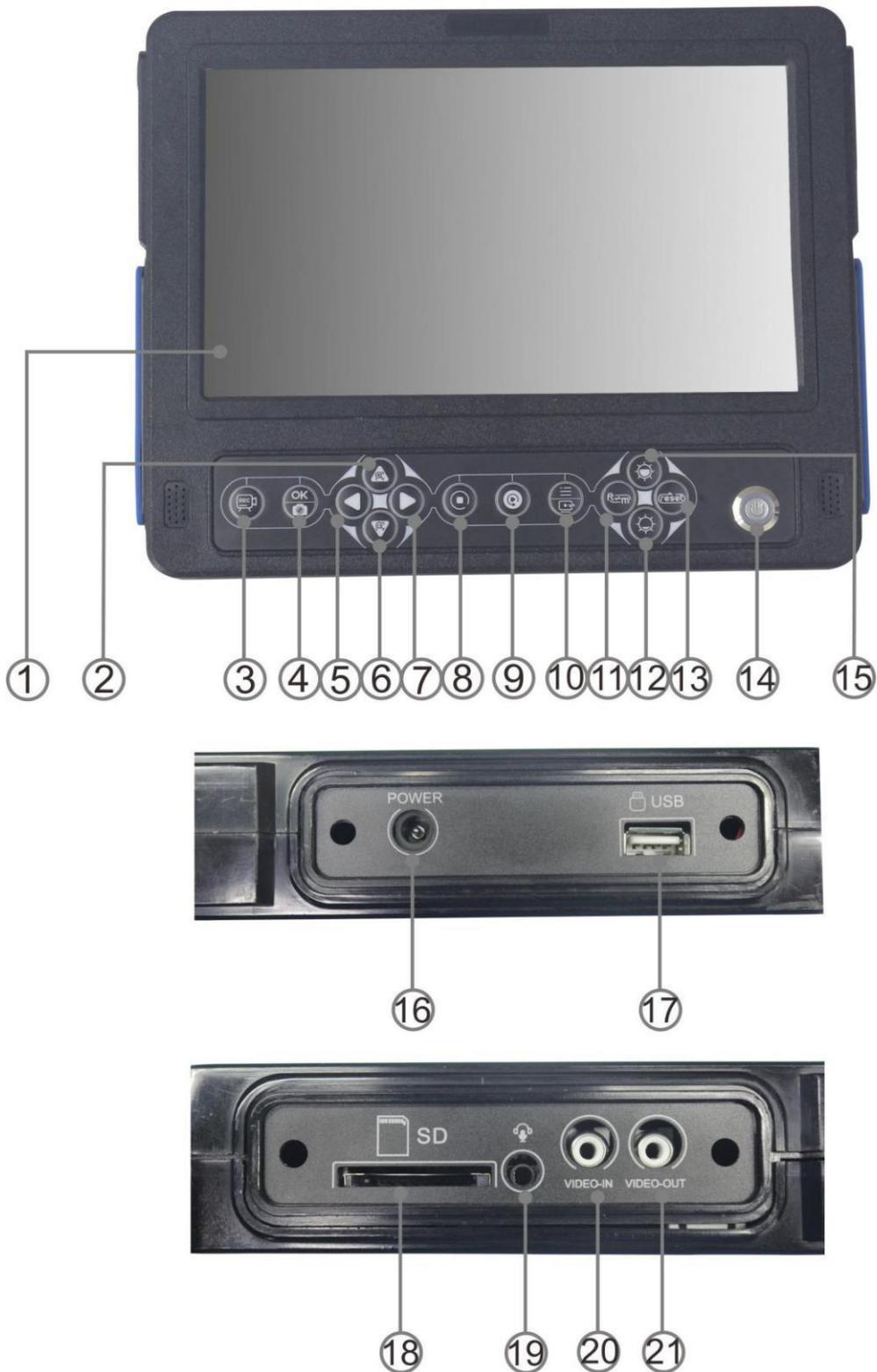
1. Parts list

1.1 Accessories

| Item | Image | Description | select |
|-------------------------|---|---|--------|
| Camera and bracket |  | <p>Ø23mm*240mm camera size Pixel: 720X1280 512Hz transmitter Self-balancing ø40mm and ø80mm bracket</p>  | |
| |  | <p>ø23mmX134mm camera size Pixel: 720X1280 512Hz transmitter ø40mm and ø80mm bracket</p> | |
| |  | <p>ø23mmX134mm camera size Pixel: 720X1280 ø40mm and ø80mm sticks 架</p> | |
| Control box and display |  | <p>Size: 280*220*37.5mm Resolution: 1024x600</p> | √ |
| |  | <p>Wire frame size: 360*455*215mm Wire frame material: aluminum alloy</p> | √ |
| |  | <p>Coil size: Ø332*59mm Cable diameter: ø6.3mm, 4-core coaxial Cable length: 30m standard</p> | √ |
| |  | <p>Waterproof soft keyboard size: 300.8*115.8*12.25mm language: English Keyboard interface: USB</p> | √ |
| charger |  | <p>Input: AC100-240V~50/60Hz Output: DC 13.5V/5A DC plug diameter: 2.1mm</p> | √ |
| Headset |  | | √ |

| | | | |
|--|---|--|---|
| Card reader SD card |  | | √ |
| waterproof ring | | | √ |
| Manual | | | √ |

1.2 Control box



| | | | |
|---|--------------------------|----|---|
| 1 | 10.1 inch screen | 12 | Reduce brightness |
| 2 | Up / ZOMM + | 13 | Reset |
| 3 | Recording/recording exit | 14 | Long press for 3 seconds to turn on/off/power |

| | | | |
|----|---|----|-------------------------|
| 4 | Confirm / stop / take photo / long press to enter the photo catalog | 15 | Increase brightness |
| 5 | Left button/volume-/reverse | 16 | Charging port |
| 6 | Down button / ZOMM- | 17 | U Disk |
| 7 | Right/volume+/fast forward | 18 | SD card slot |
| 8 | return | 19 | Headphone / microphone. |
| 9 | Video catalog | 20 | Video input |
| 10 | Menu/delete | 21 | Video output |
| 11 | Metric/English | | |

note:

- Please insert the USB flash drive before booting. If you cannot read it, restart the system.

2. Fast operation

2.1 Battery charging

1. Connect the DC head.
2. Plug the charger into the socket, and the charger indicator will turn green.
3. Insert the charging port.
4. The red light of the charger lights up, and the battery level is displayed on the screen.

①



②



③



④



2.2 Start

1. Loosen the screw, open the sunshade and tighten the screw.
2. Raise the screen to choose a suitable angle.
3. Raise the keyboard to choose a suitable angle.

①



②



③



- 4. Can be operated horizontally.
- 5. Open the coil holder.
- 6. It can be operated vertically.

④



⑤



⑥



- 7. Loosen the screw to open the coil plug.
- 8. Rotate the coil to exit.
- 9. Fix the coil.

⑦



⑧



⑨



- 10. Long press for 3 seconds to turn on.
- 11. Adjust the lights.
- 12. Turn off the lights.

⑩



⑪



⑫



2.3 Check the waterproof ring and assembly bracket

2.3.0 Check the waterproof ring on the bottom of the camera

2.3.1 40mm bracket and 23mm camera

1. Put the camera into the bracket
2. Tighten the screws on the outside of the bracket to fix the bracket
3. The bracket installation is complete

①



②



③



2.3.2 80mm bracket and 23mm camera

1. Put the camera into the bracket
2. Tighten the screws on the outside of the bracket to fix the bracket
3. The bracket installation is complete

①



②



③



3. Video and menu

3.1 Insert SD card and U disk

Insert the SD card into the slot, and then gently press to make sure the SD card is connected, then gently press and pull out the SD card.

①



②



③



④



⑤



3.2 Record video

1. After inserting the SD card, the screen displays the memory.

2. Press "" to record video.

①



②



3. To record a video, you can press the "  " button to take a photo.

4. Press the "  " key ZOOM+

③

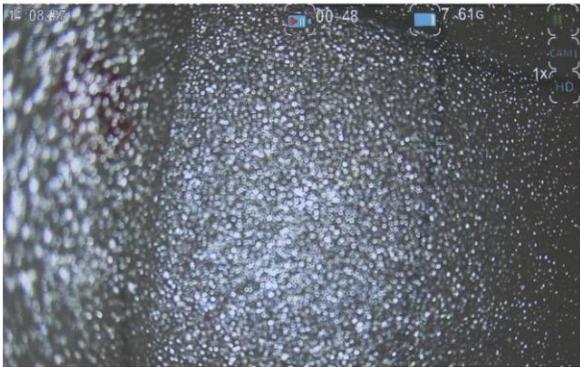


④



5. Press the "  " key ZOOM-

6. Press the "  " button again to end recording.



3.3 Take photos

Press the "" button to take a photo

①

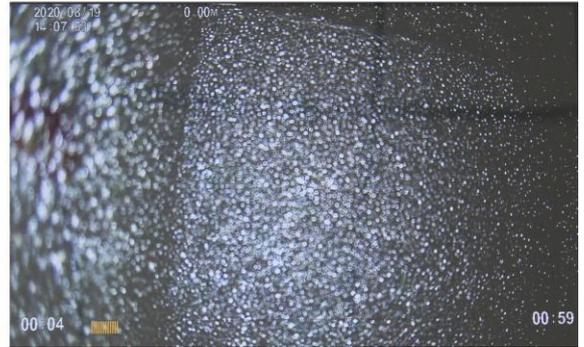


②



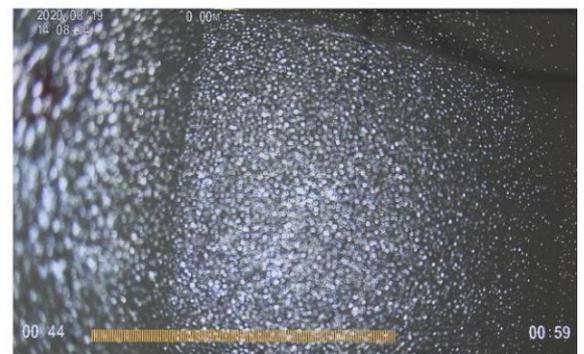
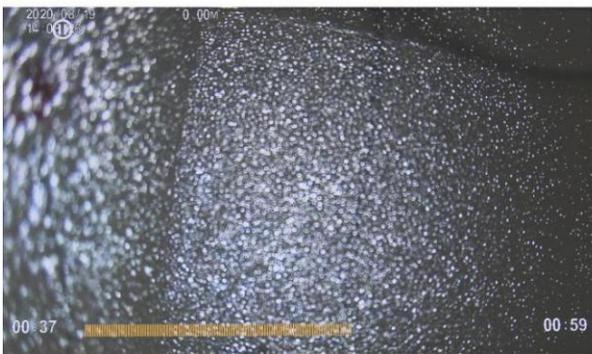
3.4 Play video

1. Press the "" button to enter the video catalog.
2. Press the "" button to enter the video.



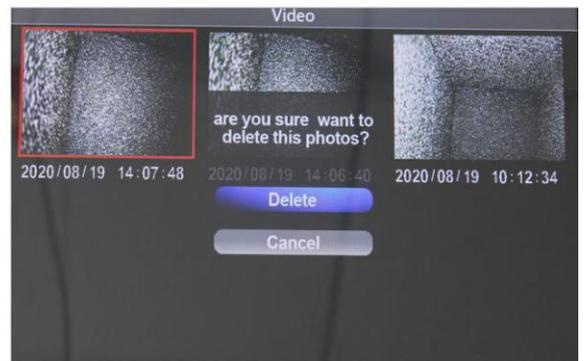
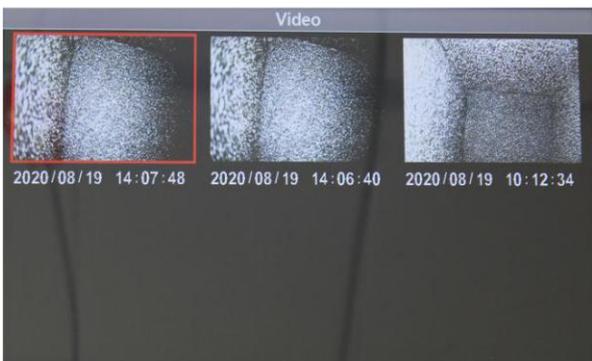
3. Press "  " to pause video playback.

4. Press the left and right buttons to fast forward and rewind the video playback.



5. Return to the main photo catalog

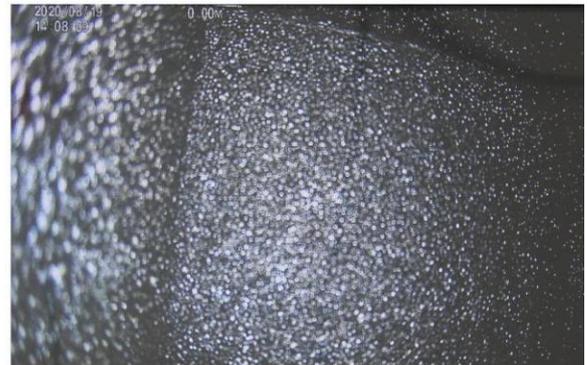
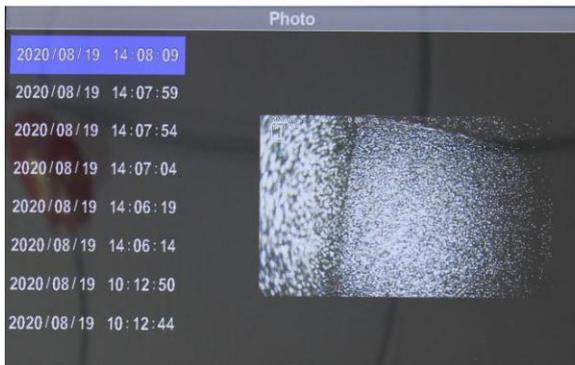
6. Press "  " to delete the video.



3.5 Play photos

1. Long press the "OK" key for three seconds to enter the photo library

2. Press "OK" to view photos



3. Press the "Play" button to go to a picture.

4. Press the "Next" key to next picture.

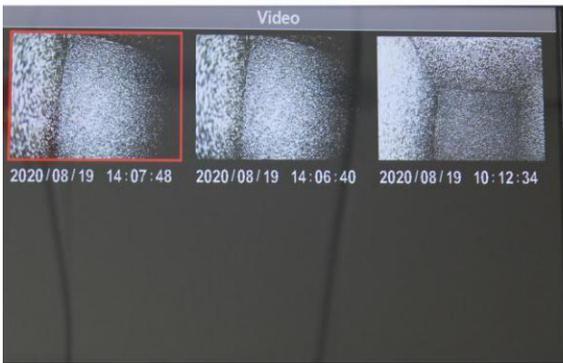


5. Return to the main photo catalog

6. Press "Back" to delete the video



⑤



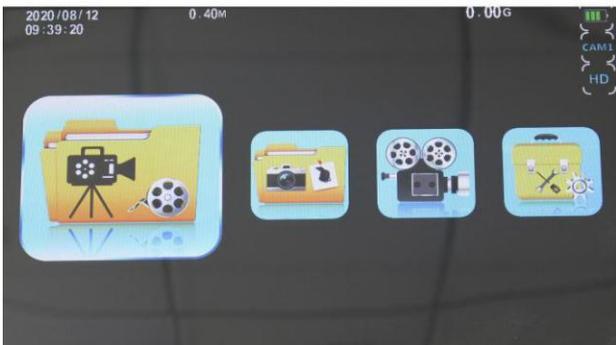
⑥



3.6 Menu

Press "" to enter the main menu.

VIDEO



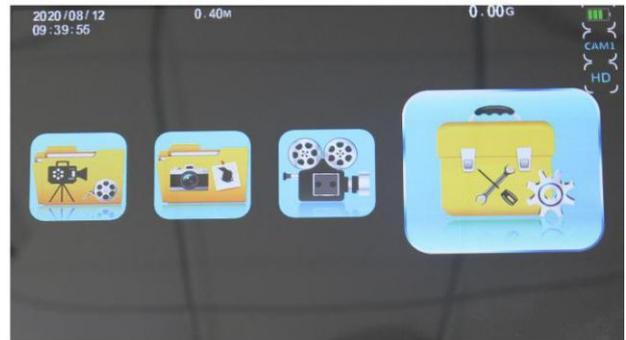
PHOTO



VIDEO SETTINGS



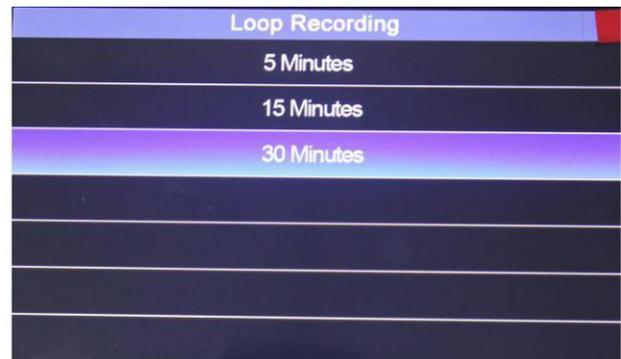
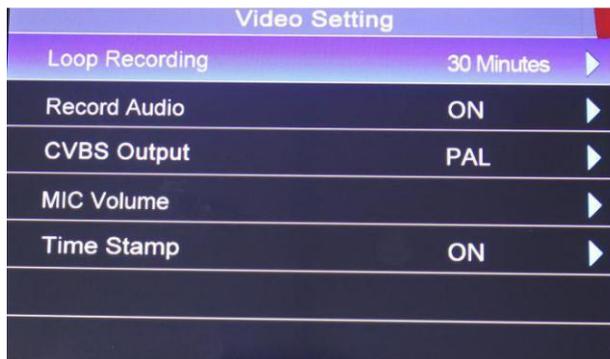
SETTOMGS



4.Video settings

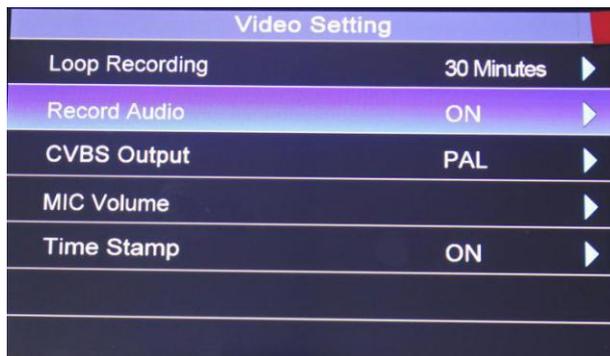
4.1. Set the length of time to record video

- 5 minutes
- 15 minutes
- 30minutes



4.2. Record Audio

- Off
- ON



4.3. CVBS output

- NTSC
- PAL



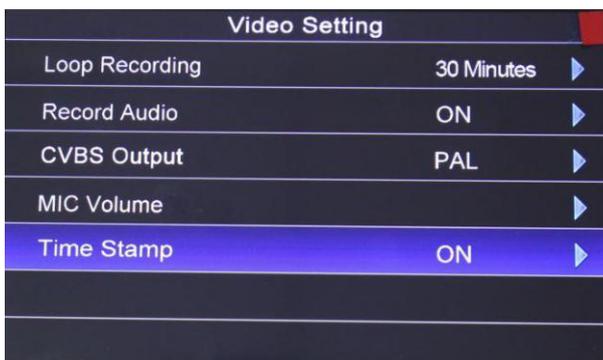
4.4. MIC Volume

- First press the "OK" button, press the left and right buttons to adjust the volume



4.4 Time stamp

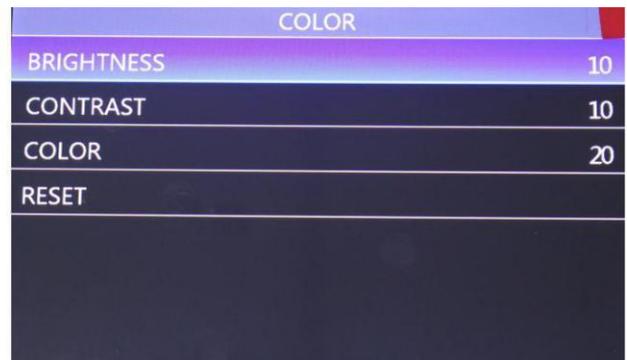
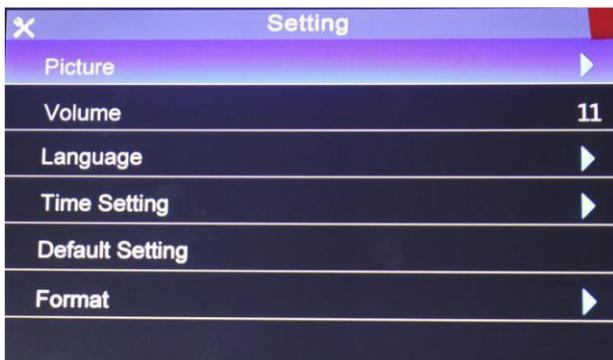
- Off
- ON



5. System settings

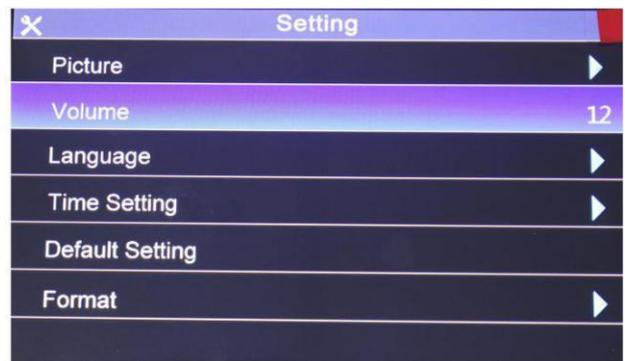
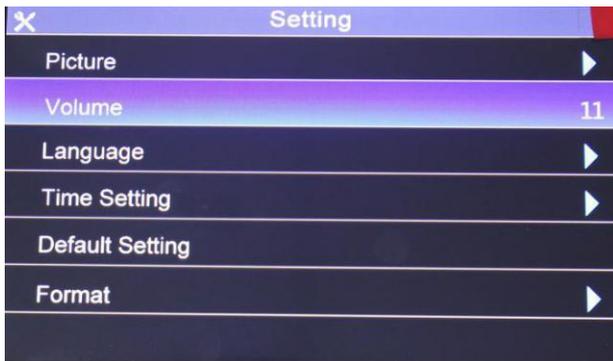
5.1. Picture

- Brightness
- Contrast
- Color
- Reset



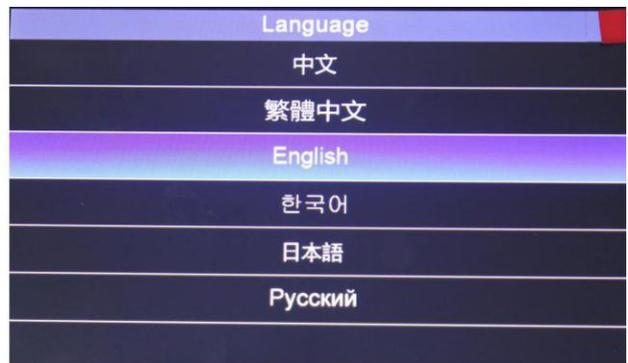
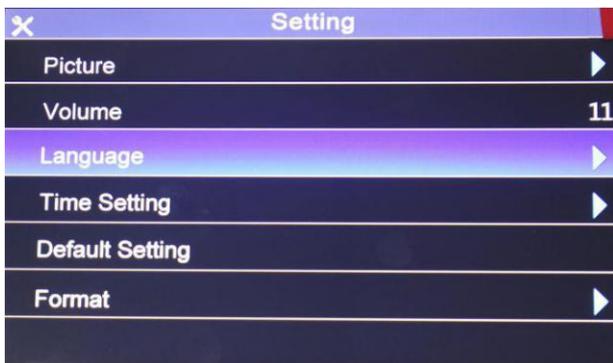
5.2. Volume

- Press the left and right keys to adjust the volume



5.3. Language settings

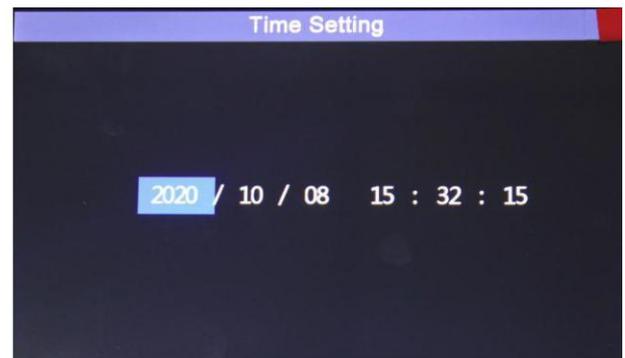
- Chinese
- English
- Spanish
- French
- Italian



5.4. Time setting

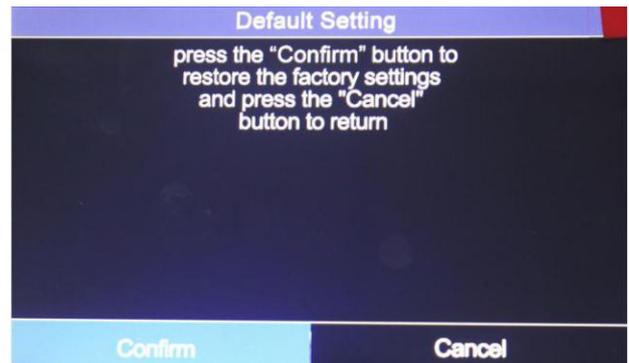
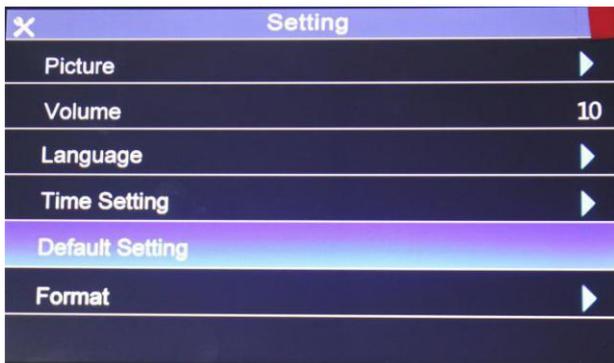
Date and time

- Key to set date and time, left and right keys to adjust time and date



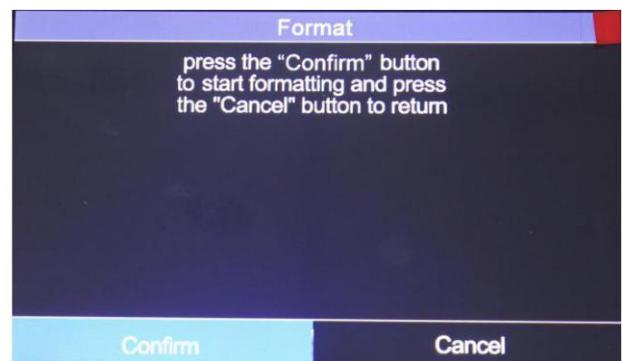
5.5 Default setting

- No: Cancel
- Yes: Confirm

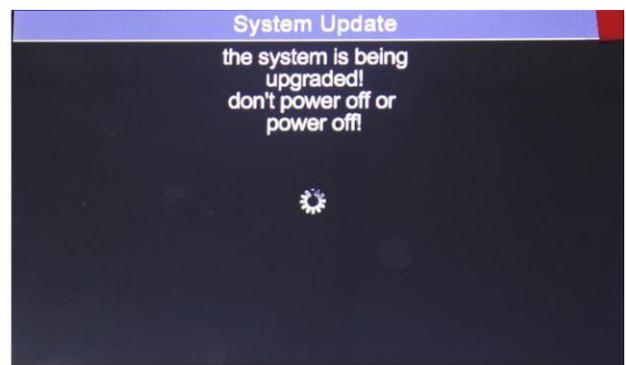
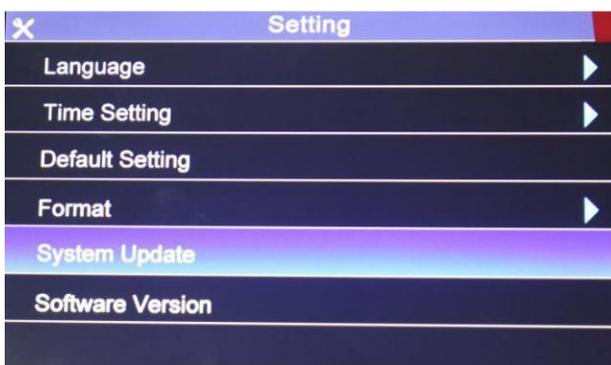


5.6. Format

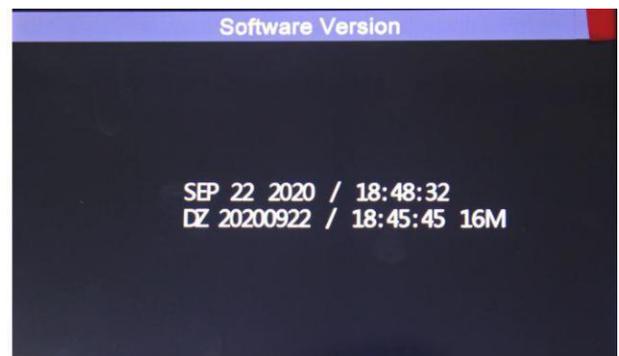
- No: The system does not format the SD card
- Yes: The system can format the SD card (Note: Please back up the data in the SD card before operation)



5.7. System Update



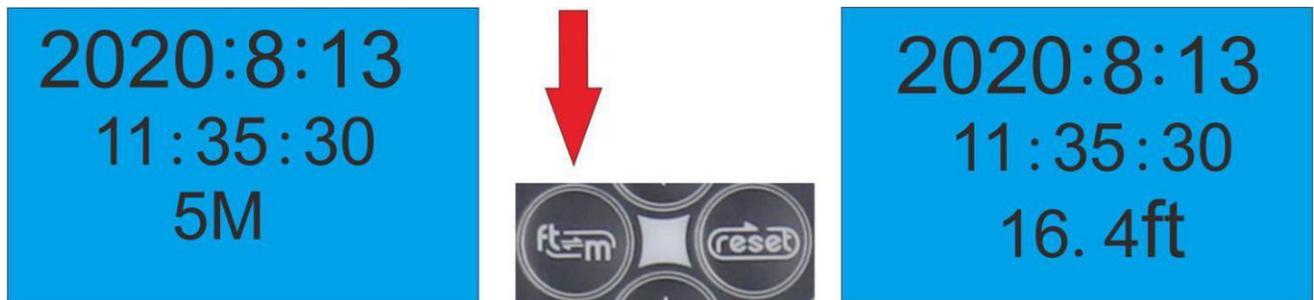
5.8. Software Version



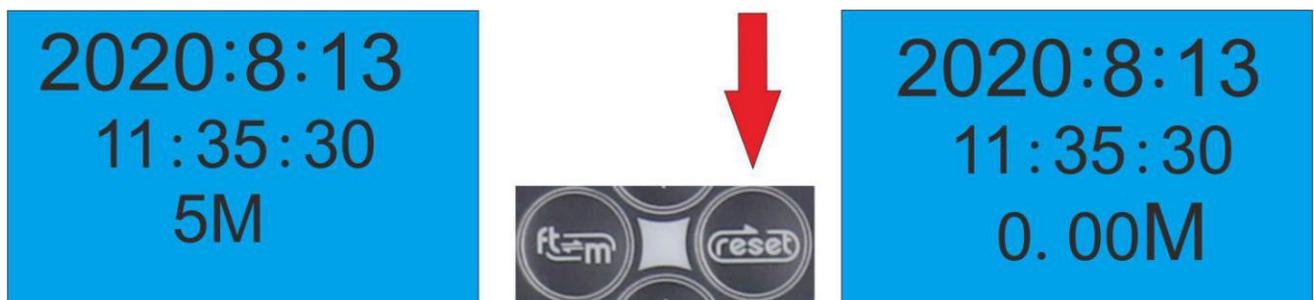
6. Meter Counter



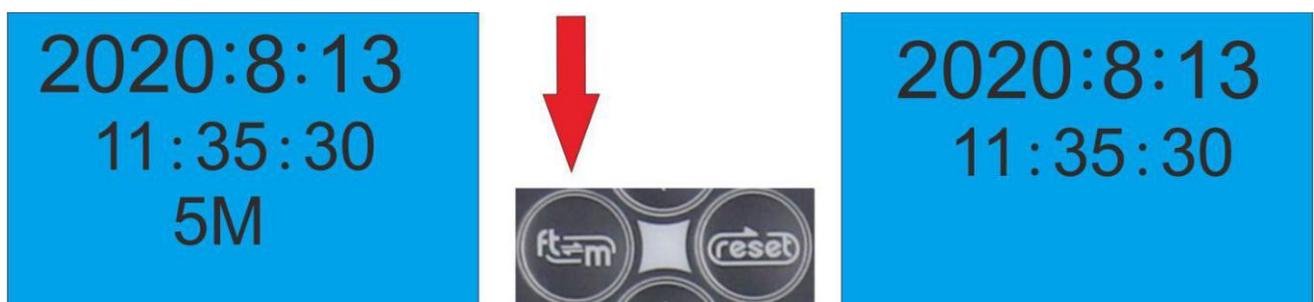
1. Press the “ft=m” button to alternate metric and imperial unit



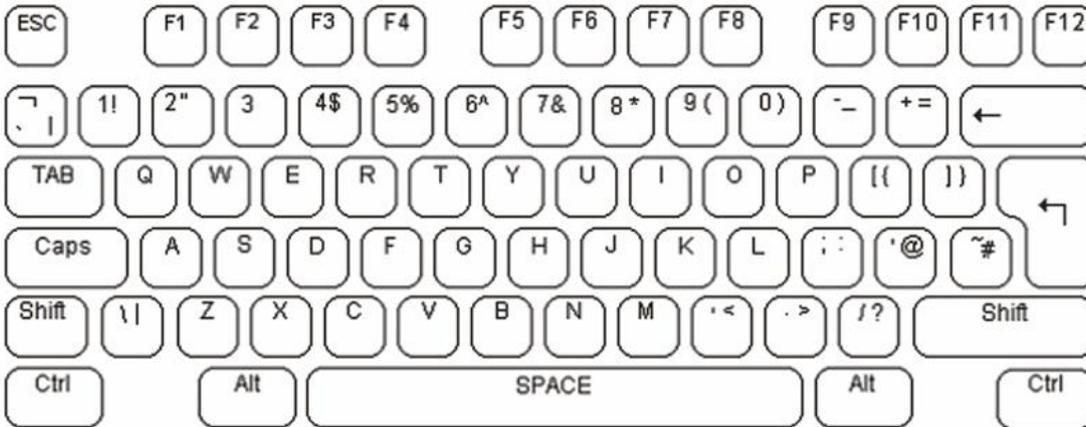
2. Press the “reset” button to reset the value of cable length



3. Hold the “ft=m” button for 3 seconds, the meter count number hide; hold the button again for 3 seconds, the meter count number show.



7.Keyboard



The font and text size are fixed and cannot be changed.

The basic operation of the text overlay unit is straight forward. A flashing underscore cursor indicates the current screen position. This cursor can be moved the screen by the keyboard cursor keys. The cursor will wrap around the screen left and right, top and bottom. If no key is pressed then the cursor will disappear after approximately ten seconds. The video text overlay unit uses the standard US keyboard mapping.

Standard US keyboard mapping used by the video text overlay unit. By default all US units are supplied with this.

The alphanumeric characters in the QWERTY section of the keyboard and the keys of the numeric keypad can be typed directly to the screen as would normally be expected. Each alphabetic character key is normally lowercase. Uppercase characters can be typed by holding down the shift key or pressing the CAPS LOCK key. The keyboard's LED indicators will be lit by the unit. To exit CAPS LOCK mode press the key again.

To remove a character from the screen use the backspace key and delete key. This will replace the character immediately to the left of the current cursor position with a blank space and move the cursor to that position. The Delete key has no function. The Home and End keys move the cursor position to the left and right of the current line on the screen. The Return key moves the cursor to the beginning of the next line.

The video text overlay unit operates in two modes. In the first mode the text is overlaid over the video input signal. When the video signal is removed the unit automatically switches to generating its own internal dark grey background video signal and will switch back to the external video when this is reconnected. In the second mode the unit generates its own video signal internally, but ignores the external video signal. All keyboard commands operate in the same way in both modes. To switch between modes use the F3 key as shown in the command table below. Each page can have this mode set independently.

| | |
|-----|--|
| Esc | Clear the cursor current settings back to the first line and the first position |
| F1 | the cursor from any page back to the first line and the first position |
| F2 | Select text over internal video |
| F3 | Select text over external video signal |
| F4 | Shift display up |
| F5 | Shift display down |

| | |
|----|---------------------------------------|
| F6 | Shift display left |
| F7 | Shift display right |
| F8 | Reset display X-Y position (defaults) |
| F9 | Clear the screen |

The video text overlay unit divides its display between four on screen pages. Text written to each of these pages will be stored in the unit's non-volatile memory until overwritten. There is no default on screen indication of which page is currently selected. To move between the screen pages use the page up and page down keys or Page up moves toward page 1. Page down moves toward page 4. To clear the screen page of text press F9.