



**ISV-J
VIDEOSCOPES
OPERATION MANNUAL**



User Instructions

◆ Purpose and scope of application

This product is applied to the real-time detection and analysis of industrial field equipment and automobile production and maintenance, with direct visual features point, can directly observe whether there are defects or abnormalities on the inner surface of pipes, turbines, cylinders, engines and other devices. The other in Real-time photography and video recording are performed to provide indispensable data collection for analyzing equipment usage and equipment production guarantee set.

◆ Maintenance and modification

This product does not have any parts that can be maintained by the user, do not attempt to disassemble, refit and repair, The repair service of this product is only provided by our company and our company authorized dealer repair.

◆ Safety Precautions (Please observe the following contents when using this product)

Do not use this instrument to observe human or animal body.

Do not use or store in places with explosive, strong electromagnetic field or combustible gas, which may cause fire or explosion.

Do not allow the detected material to work under the condition of live, so as not to cause electric shock.

Do not contact the end of the lens directly during use, especially pay special attention to the use of the endoscope in a high temperature environment.

Contact with the ends at this point may cause burns.

Do not look at the strong light source from the LED at the end of the endoscope probe close to avoid the impact of strong light on vision.

Do not bend, stretch, twist or roll the probe line too hard, otherwise it may cause damage to the equipment.

Long-term use of this product will cause stains on the lens objective lens, resulting in blurred picture and affecting data collection.

Wipe the objective lens clean with alcohol or acetone before use.

If you feel any abnormality in the Angle adjustment operation, stop the current operation and shut down. Then contact the supplier.

Keep tube away from any liquids except water, salt water, oil, and light oil.

After the instrument is used up, please clean the front section of the insertion tube of the instrument in time to prevent corrosion.

Product in production

◆ System parameters (Based on general models)

Bending control	360° full direction articulation
Insert tube	Durable flexible probe
System language	Chinese, English, German, French, Russian, Spanish, Italian, Polish, Japanese, Ukrainian, and other languages
Screen size	5 inch IPS HD screen
Image/Video format	JPEG/MOV
Host structure	Screen and handle detachable split design
Storage	Standard 32GB TF card, Max support 128GB
Data port	Type-C port, HDMI video output port, AUX port
IP Grade	Insert probe IP67
Host working time	≥4 hours
Host weight	≤0.8kg (with battery)
Power	26650 battery (5000mAh)
Power adapter	DC5V

◆ Operating environment

Host system working temperature	-10°C~50°C
Video probe working temperature	-20°C~70°C Below 0°C, Steering operations should be reduced
Storage temperature	-20°C~60°C(Host)
Relative humidity	Max 90%, no condensation

◆ Packing list

Series Number	Description	Number	Unit
1	Host	1	PCS
2	Endoscope Probe	1	PCS
3	Card reader	1	PCS
4	TF card(32G)	1	PCS
5	26650 Battery	1	PCS
6	Packing case	1	PCS
7	Charging adapter	1	PCS
8	Type-C cable	1	PCS
9	HDMI cable	1	PCS
10	Instruction Manual	1	PCS
11	Certificate card	1	PCS
12	Warranty card	1	PCS

Operation process

- ◆ Take out the instrument
Open the outer box of the instrument, take out the main body of the endoscope, connect the handle pipeline, and hold the probe firmly to avoid collision with the probe and scratching of the probe lens.
- ◆ Power up and prepare to insert the TF card
- ◆ Press the boot key to turn on the instrument
- ◆ Use endoscope
Use the endoscope probe to insert into the internal part of the inspection work piece.
- ◆ Bending operation
According to the on site detection, the joystick is required to control the probe bending. If the joystick is suddenly resistant during the shaking process, or any abnormalities in the operation of the endoscope, please stop observing immediately. After shaking the joystick to the middle position, carefully take out the endoscope from the testing products
- ◆ Exit
It is confirmed that the bending of the endoscope is in a rough straight position (the joystick is in the middle position), and then slowly exit it.
- ◆ After use
Turn off the power switch and put the endoscope into the portable box, split the host and the handle probe, and put the inserted into the pipe disk (if the battery is not used for a long time, take out the batteries)

Operation Guide

- ◆ Preparations before starting up
Remove the endoscope and insert the TF card; keep the probe as straight as possible. When the environment is not allowed, the probe is prohibited from being used.
- ◆ Bending control
The curved corner control of the endoscope is directly controlled by the joystick on the operating panel. The direction of shaking the joystick is the direction of the probe rotation. The size of the corner is determined by the angle of the joystick shaking.

◆ Buttons, port introduction

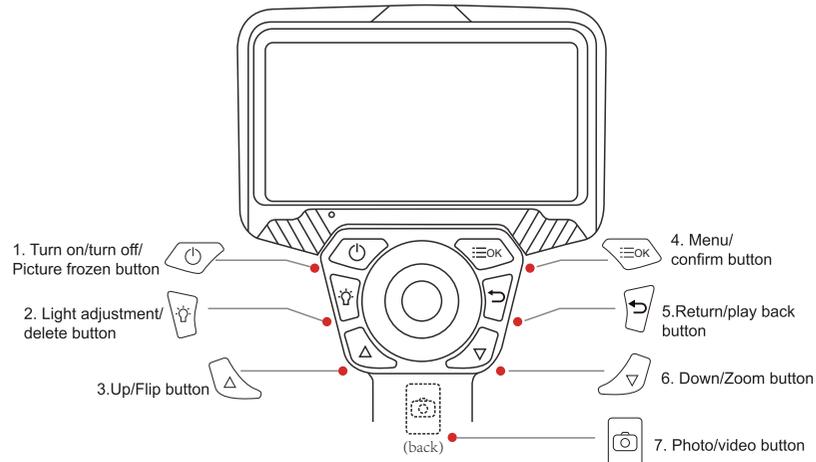


Figure 1 Key Button diagram

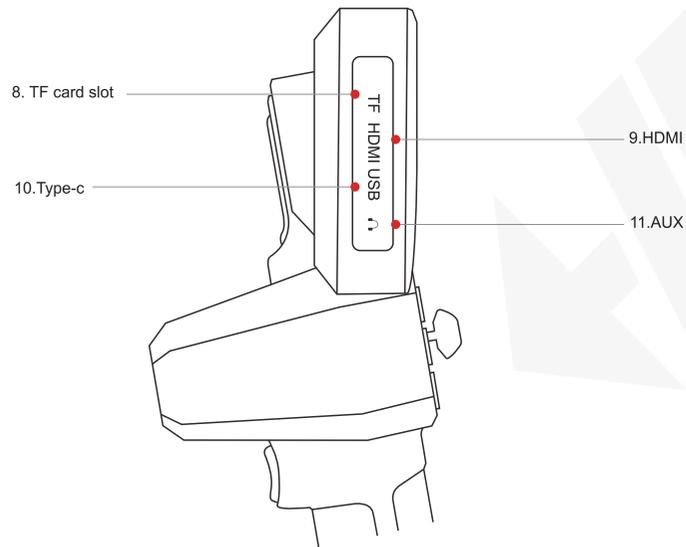


Figure 2 Interface diagram

1. On/Off/Picture frozen button:Power on and power off function, long press to power on or power off. In the preview state, short press tap to freeze the screen

2. Light adjustment/delete button:When the system is powered on, the system is in the visible light lighting state by default, and the brightness level is 0 when it is in the unlit state. Press the"LED light adjustment" button successively, and the LED light will gradually increase :0, 1, 2...8,after the LED light increases to 8, press the key again, and the LED light will turn to 0, and so on

3. Up/Flip button:When setting the interface, the upward navigation function is enabled. The function is rotated when previewing the interface.

4. Menu/confirm button:When previewing the interface, press to enter the setting interface; The confirm button is displayed on the Settings screen

5. Return/play back button:In the preview screen, go to the Photos and videos browse folder; It is used as a return function in the browsing interface.

6. Down/Zoom button:When previewing the interface, it works as zoom buttons, when it comes to setting interface, it is a menu down navigation function.

7. Photo/video button:When the small dot icon is displayed in the upper left corner, press and hold for 3 seconds to take a picture. Press and hold for 3 seconds to enter the video mode.Press and hold for 3 seconds to return to the video mode and save the video file

8. TF card slot: External storage; maximum support 128GB

9. HDMI: Use with external large screen

10. Type-c: Used for data transmission and charging functions

11. AUX: AUX audio port

◆ Battery disassembly and charging

The battery cover is at the bottom of the handle. Use a cross screwdriver to remove the 4 screws and open the cover to take out the battery.

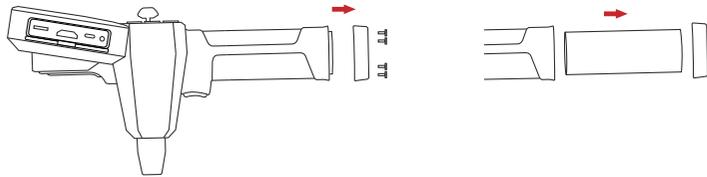


Figure 3 Demonstration of battery disassembly

You can also directly connect the Type-C cable to charge online. The online charging screen has a charging logo in the upper right corner of the screen.

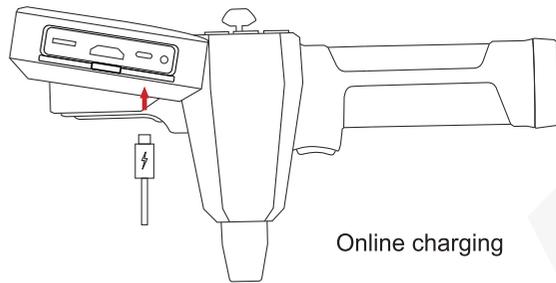


Figure 4 Charging diagram

When charging, the indicator light below the screen shows red, and when the battery is full, the indicator light shows green.

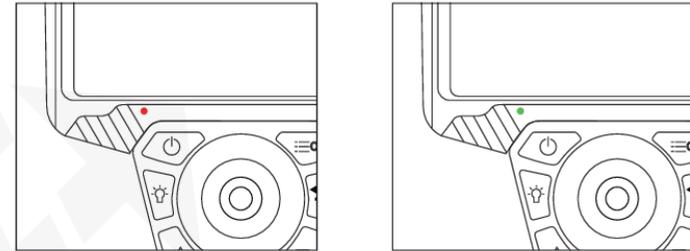


Figure 5

◆ Quick split Screen and Install Screen

Hold the handle tightly and pull up the screen to separate it; to install the screen, just align it with the slot and press down firmly.

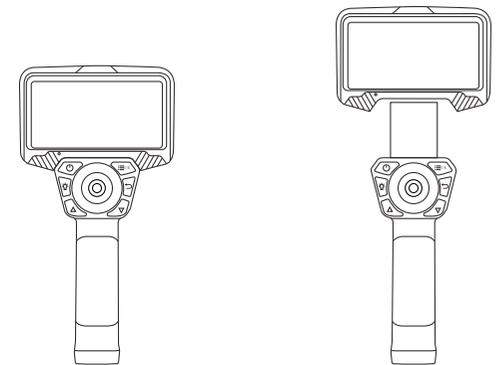


Figure 6

◆ Preview interface

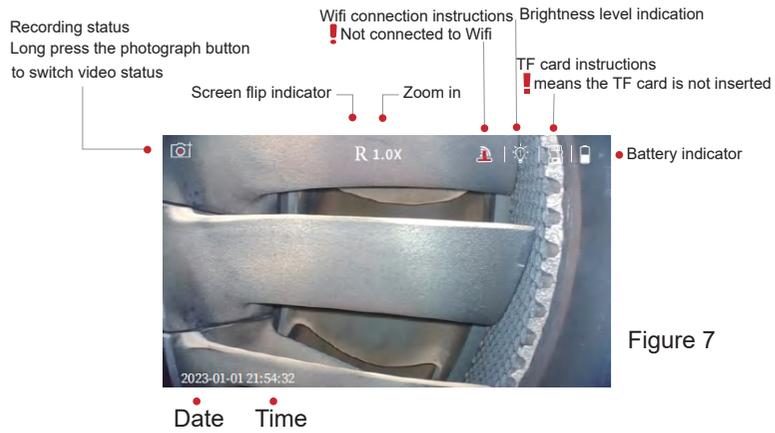


Figure 7

◆ Photo/Video

Short press the button to take photos, and long press the button to record. When recording, you can short press the button to take photos and long press to exit video recording and save.



Figure 8 Photo Mode



Figure 9 Recording Mode

◆ Photo/video browsing

Press in the preview interface, Press the key to enter the file, and you can preview photos and play videos online.

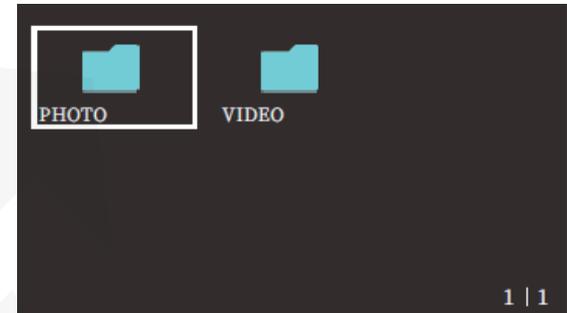


Figure 10 Files

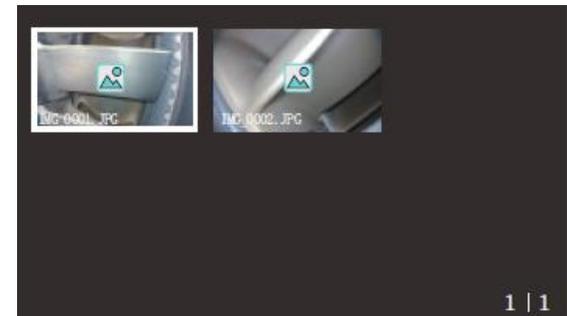


Figure 11 Photos files

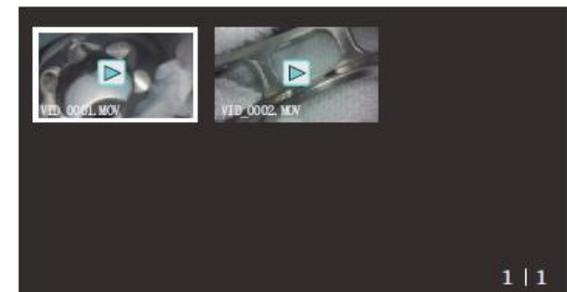


Figure 12 Videos files

◆ Press  key in the file folder to preview photos or play videos in full screen.



Figure 13 View photos in full screen mode



Figure 14 Video not display mode



Figure 15 Video playing mode

When previewing photos or videos in full screen and not playing, press  and  to scroll up or down photos and videos
During video playback, press  and  to fast forward or rewind the video



Figure 16 Video fast forward



Figure 17 Video rewind

Press  to delete photos, video files or folders, and the delete option can select single or multiple files.

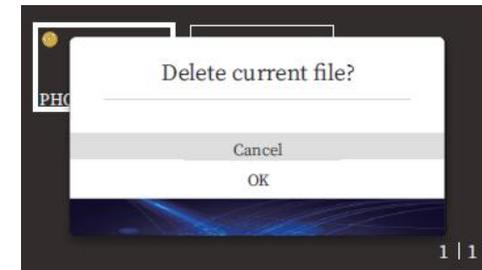


Figure 18 Asking for deletion status

◆ System setup mode:

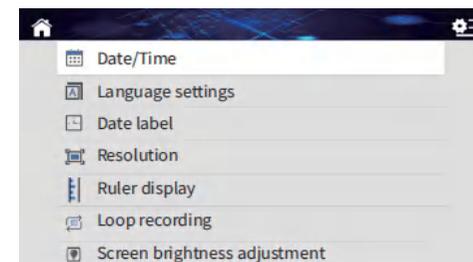


Figure 19 Setting interface

◆ Date and time settings:

Press to enter the date and time setting interface. Press and to add or subtract, and press to switch.

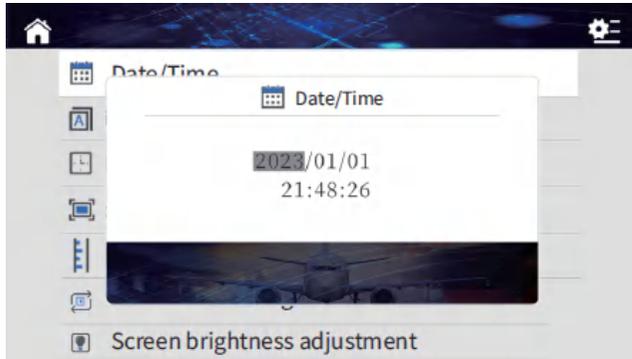


Figure 20 Date and time setting interface

◆ Language settings:

Select the "Language Settings" column in the setting interface and press to enter the language setting interface.

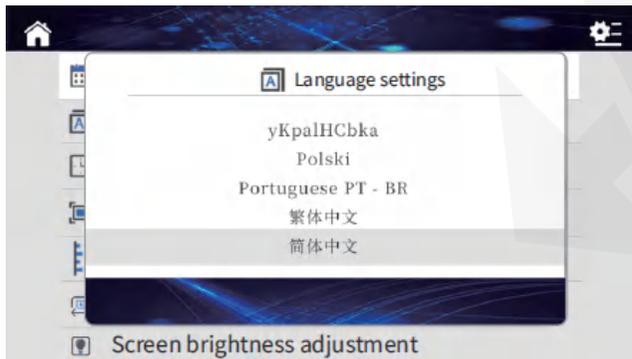


Figure 21 Language setting interface

◆ Ruler display:

Select the "Ruler Display" column in the setting interface, and press to enter the ruler display setting interface to select the desired ruler mode.



Figure 22 ruler display

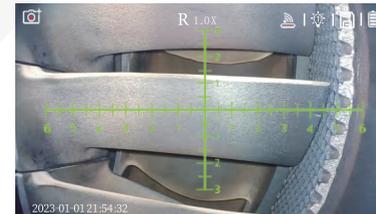


Figure 23 Cross mode

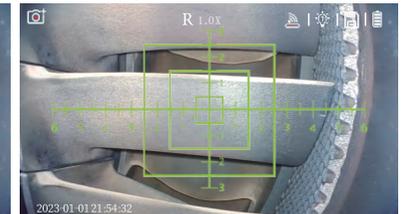


Figure 24 Cross frame mode

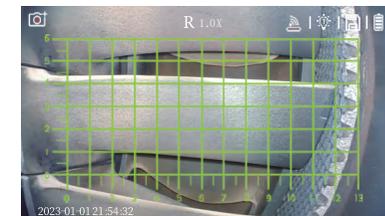


Figure 25 Grid mode