Endoscope Pipe Inspection Camera System

Manual





Model No.: U88

Please contact us at first time if you got issues with the product

service@sanyipace.com

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Attention: The illustrations and screenshots of this manual are to explain the product's operation, which may be a little different from actual products due to the products' version upgrades and different production batches. If the content in this manual does not match your machine, please refer to the machine!

1. Note

a. Please read the manual carefully before using the product.

b. Handle the device with care when operating, do not drop or push hard.

- c. Do not dismantle the machine without permission.
- d. Please turn off the monitor and disconnect the device after use.

e. Before inserting the TF card into the device, please back up the information on the TF card to avoid loss of information.

f. Do not cut off the power suddenly during recording and playback, otherwise, the product and video files may be damaged.

2. Application

- 1: pipe dredging machine
- 2: Pipe inspection camera Pipe tool
- 3: underground pipelines, air conditioning pipelines, oil and gas pipelines
- 4: Rescue work in a small space
- 5: For underground exploration
- 6: Underwater riverbed research
- 7: Underground TV

3. Specification

----Camera and Cable----

Sensor :1/3 CMOS Resolution: 1000TVL Camera Diameter: 23mm/50mm rotate camera (optional) Depth/Material: 9mm diameter (80m - 160m fiber tube optional) LED (Brightness can be adjustable): 23MM camera head: 12pcs White LED.50MM camera head: 8pcs White LED Angle: 120 degree Camera Material: stainless steel/ IP68 Waterproof Camera Type: 23MM : build-in 512HZ Locator. 50MM rotate camera: build-in 512HZ Locator,support 360 degrees horizontal rotate & 145 degrees vertical rotate Protective cover: 23MM camera: 38MM * 28MM & 90MM * 28MM. 50MM camera with: 65mm * 100mm Applicable pipe diameter: 23MM camera for ø30- 200mm. 50MM rotating camera for ø80- 600mm

---LCD Monitor---

Size: 9inch Function: Video record/audio/photo/power display/ meter counter/keyboard input (support English) Camera/Monitor image: Color Monitor input voltage: DC 12V TF Card: Max support 16 GB card, includes 8G card Display Resolution: 1024*600 IPS Menu: Chinese /English Optional Display Operation: Press button Video format: AVI Photo format: JPG Operate Temperature: -20-60 degree Storage Temperature: -30-80 degree

---Control Panel---

Switch ON/OFF Five-speed LED adjustment Meter/feet conversion function Meter Cleared function keyboard input Charger: D1000VAC-240VAC DC 12.6V 1000MA Battery capacity: Lithium battery 12V 4500AH Battery working time: about 6-8 hours

---Mounting function---

With wheels, easy to move

4. LCD Monitor Operation



TF card: including 16GB, maximum support 128GB card Built-in microphone and speaker

Display Operation :

- Turn On

Connect all the cables of the device, turn on the battery switch button and press the power button on the screen, and the system starts.

- Menu Settings (need to exit REC mode):

Press the "MENU/EXIT" key to enter the menu settings. Press "<" ">" to select, press "Rec/-" to confirm, and press "EXIT" to return. Allow operating time setting/playback setting/display setting/recording setting/system setting.

- How to Record Video:

Press "REC/-" to start recording (video with audio), press again to stop

recording.

- How to Playback Images/Videos:

Press "PLAY/+" to enter image browsing, press it again to enter video playback, press "<" ">" button to select, press "REC/-" to play, press "REC/-" again to exit.

- How to Take Photos:

Press ">/PHOTO" to capture a photo, press one at a time.

- How to Zoom the Image While Recording:

Press "<" to zoom in 0-5 times, press the 6th time to return to normal (0).

- How to Delete Pictures or Videos:

Press "PLAY/+" to enter photo/video viewing, press ">" to select one of the pictures or videos, press "MENU/EXIT" and ">" to enter delete or all delete options, press "REC/-" to confirm, press "PLAY/+" again to exit.

- How to Modify Video Length:

The recorded video will be divided into fixed-length videos and stored in the memory card, and the default length is 3 minutes. You can adjust it up to 10 minutes. Press "MENU/EXIT" and ">/PHOTO" to select "Video Menu", press "REC/-" to change it to 1mins, 3mins, 5mins, or 10mins, and press "Menu" to exit after setting.

- How to Set Recording without Audio:

Press "MENU/EXIT" and ">" to select "System Settings", press "REC/-" to enter sub-options, press ">" to find "Sound Settings", press "REC/-" to adjust turn on or off, press "MENU/EXIT" to quit.

5. Counter Function



Before using this function, please press the CLEAR button or F7 key to clear the counter information. You can toggle the display in feet or meters by pressing the F4 key. It will start counting feet/meters when the coil rotates, and display it on the screen in real time.

6. Control Panel & Keyboard Input



- $(\ensuremath{\underline{1}})$ Power charging port
- ② Battery switch (Note: please turn off the switch when not in use)
- ③ Counter reset button

- ④ LED brightness adjustment (0-5 gear)
- ⁽⁵⁾ Power indicator light
- 6 Second keyboard USB port (The first USB Port is under the control panel)
- $\ensuremath{\overline{\mathcal{O}}}$ Esc: Clear characters
- (F1,F2,F3 only for 360 rotating camera)
- F1 key: Rotate speed adjustment (low, middle, high)
- F2 key: Horizontal rotation automatic/ manual
- F3 key: Vertical rotation automatic/ manual
- ⑧ F4 key: Meter/Feet switch
- (9) F5 key: OSD switch (on-screen display)
- 10 F6 key: LED brightness adjustment (0-5 gear)
- 1 F7 key: Clear counter

P9 key: Factory setting (Press F9 then input password "3131" to enter settings, press (1) UP/Down to select cable's diameter and meters, Left/Right to select model (U16 or U88 is the correct model), then press F9 to save settings and exit)

The function of the keyboard: During working, you can input text/symbols/numbers to mark events.

7. Camera/Cable Mounting

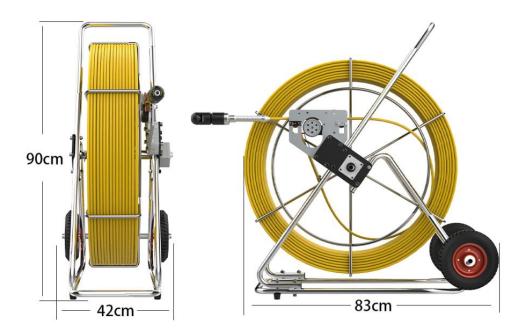
1. 50MM Rotate camera



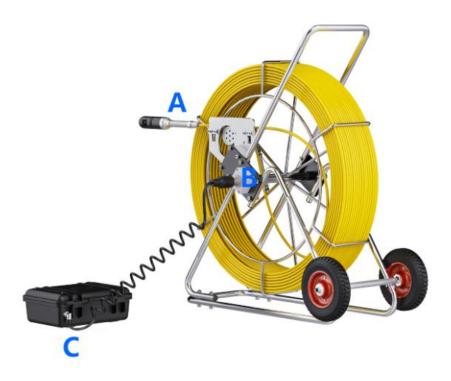
2. 23MM self-balancing 512HZ camera



3. Cable Mounting



- 4. Wire Diagram
- A: Install and tighten the camera head
- B-C: Connect the cable and tighten it



8. Trouble & Troubleshooting

Trouble	Troubleshooting
No power	a. Check whether each interface is connected correctly;b. Check whether the battery is out of power, check the power display.
Can't be charged	a. Is the DC adapter plug-in correctly;b. Check if the indicator light of the DC adapter is on.
Indicator light is on but no image	a. Check whether the connecting wires are well connected and whether the camera is tightened;b. Check whether the battery is fully charged, and try again after fully charged.
Can't record videos	a. Whether the SD card is inserted correctly;b. Insufficient SD card memory;c. Check whether the power off during the recording

	process.
Recording videos in black and white color	Adjust the LED light button to the appropriate brightness, observe the screen display, and select a brightness that is clearer and more colorful.
No signal, screen turns blue	 a. Turn off the power and turn it on to confirm the problem again; b. Check that connections are well connected and make sure all cables are properly connected; c. Adjust the camera probe and turn it slowly to confirm whether it is loose.
LED lights not working	 a. Check whether the LED lights setting is turned on, pressing the LED adjustment button on the panel or F6 to adjust the brightness; b. Tighten or loosen the camera probe slowly to check if it works; c. Use a voltage tester to test all connectors, find out the damaged part and contact Sanyipace to deal with it.

9. Warranty

We provide a one-year product quality warranty from the date of purchase and provide free lifetime product technical support. For normal faults or quality problems within the warranty period, we provide free replacement or repair services. For damage caused by manual operation, we will charge the cost of product parts for repair. Our technical support team is at your service 24 hours a day. If you encounter any problems during use, please feel free to contact us.

----Contact Us----

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