



USER MANUAL

PIPE INSPECTION CAMERA



Model:QY6565

Version 1.0

Please read this user manual carefully before using and keep it for future reference.Failure to understand operation procedures may result in product damage or/and physical injury.

Contents

General Safety Information.....	1
Safety Instruction.....	1-2
Welcome.....	2
Features.....	3
Structure.....	4-5
Specifications.....	6
Packing List.....	7
Installation	7-8
To insert SD card.....	7
To connect monitor power.....	7
To connect USB cable to PC.....	8
To connect camera power.....	8
To connect monitor and camera.....	8
Video Output of Camera.....	7
Operation	8-9
Monitor Menu Interface.....	10-11
Troubleshooting.....	12
Maintenance Tips.....	13
Warranty Information.....	13
Return for Repair Policy.....	13

GENERAL SAFETY INFORMATION

WARNING! Read and understand all safety warnings and instructions. Failure to follow all safety warnings and instructions listed below may result in electric shock, fire and/or serious personal injury.

SAFETY INSTRUCTION

- ☞ Save this User Manual for future reference.
- ☞ Use only the original accessories especially the power adapter and lithium battery provided by the vendor to avoid possible risks to health and property, and thus meet all related legal regulations.
- ☞ The camera fully installed on the push cable is waterproof, however, the monitor is not. Do not expose the monitor in water or rain, this will increase the risk of electrical shock and damage to the monitor.
- ☞ Do not drop, knock, shake or press hard on the device, inappropriate behavior may damage the internal electronic circuit board or deform the lens shape.
- ☞ Do not disconnect the micro SD card while recording or playing back as this may damage the system and/or the micro SD card.
- ☞ Always backup your data before connecting your micro SD card to this system and remember that always backup the data after using this system to avoid data damage/loss or accidental deletion. Memory device should not be considered as a long term storage device.
- ☞ Keep the device and its accessories out of the reach of babies, toddlers, and children.
- ☞ When using the camera LED lights, do not use too close to human or animal eyes, particularly for babies, toddlers, and children to avoid injury.
- ☞ Do not use the unit to inspect environments known or suspected to contain exposed electrical wiring.
- ☞ Do not use the unit in the presence of high voltage equipment, flammable or explosive

liquids/gases, hazardous chemicals, superheated liquid or heavy dust.

☞ Do not try to use the camera head to clear obstructions. This System is a diagnostic tool, not a drain cleaner. Using the camera head to clear obstructions could damage the camera head or cause it to be caught in the obstruction.

☞ Never use the solvents to clean any part of the system. Substance like acetone and other harsh chemicals can cause cracking of the camera waterproof ring and affecting its waterproofness.

☞ Turn off the system if it is not in use and keep routine maintenance.

☞ Some countries have regulations concerning batteries disposal. Please follow all applicable regulations.

WELCOME

Thank you for purchasing our PIPE INSPECTION CAMERA SYSTEM. This pipe inspection camera system is designed as a real-time inspection camera and to unveil the internal objects and/or structures with the illumination of the highlight LEDs, it is specially designed for pipeline, sewer, drain, duct, chimney, plumbing, building, swimming pool, milk pipes, water mains, cable pipes, central air conditioning, pipes ventilation systems and other plumbing related sites, and many more where a pipe inspection camera system is required.

This system is suitable for pipes with inner diameter at 15mm-200mm (1/2"-4"). Ability to go through 90° bends in pipe with inner diameter at 50mm(for 21mm camera with 5.3mm push rod), 32mm(for 12.8mm camera with 4.8mm push rod).

FEATURES

- Compact and Portable design for easy carry and storage
- Detachable and collapsible monitor for adapt to various work angles
- Camera head with sapphire glass lens cover and 304 stainless steel housing allow the camera to withstand repeated hits in various pipes
- Rotatable cable reel mounted in metal frame for convenient operation.
- Waterproof level: IP67 (camera tube only)
- 5" LCD color monitor to real-time inspecting and easy to take pictures or record videos
- On-Screen date & time stamp
- Photo and video recording function when the memory card is installed
- The external storage micro SD Card slot (max. 32G) to store still pictures or videos.
- Rechargeable Li-battery lasts up to 3 hours continuous work
- Support multi-language support
- System supports two kinds of cameras: ϕ 21mm(with 5.3mm push rod) or ϕ 12.8mm(with 5.3mm or 12.8mm push rod).
- All-in-One visual pipe inspection camera system with ϕ 4.8mm/5.3mm push rod fiberglass cable length 10/20/30cm for options
- The cable reel is easy cleaning in the U-type metal frame.

STRUCTURE










Monitor



1. 5" TFT display 2. Power indicator 3. USB slot for power supply 4. Micro SD card slot
5. Video input port

Buttons:

- ①  POWTOER button. Long press to POWER ON/OFF the system.
- ②  PHO/UP button. Short press to take picture.
- ③  LED button/OK button. Short press to adjust the brightness of the LEDs on camera head/ Short press to confirm the selection when in Menu status.
- ④  VIDEO/DOWN button. Short press to record video.
- ⑤  FLIP/MIRROR button. Flip the picture/video 180 degree and mirror function.
- ⑥  MENU button. Short press to enter the MENU.
- ⑦  ZOOM/DELETE button. To enlarge video frame up to 2X, each button press increases zoom level by factor of 0.5.

SPECIFICATIONS



QY6565	Item	21mm camera	12.8mm camera
General	Operating Temperature	-10~50°C/+14~+122°F	
	Operating Humidity	30%RH~90%RH	
	Storage Temperature	-20~60°C/+4~+140°F	
	Power Adapter	Input:110VAC~240V AC, Output:12V DC 2A	
	Power Supply	DC 5V input	
	Current Consume	800mA Max	
	Battery Capacity	3800mAh Li-Ion Battery	
	A Single Charge Work Time	3Hours	
	Charge Time	5Hours	
	Waterproof	P66 (Only the camera head installed and the metal frame with cable reel are waterproof)	
Camera	MEAS.	37*35*22CM	
	Weight	Approx 5Kg (Slight different from different length of cable)	
	Sensor	1/ 3" CMOS	1/ 4" CMOS
	Resolution	728*488	640*480
	TV-Line	700TVL	600TVL
	View Angle	90°	60°
	Focus Distance	15cm (approx)	5cm (approx)
	Depth Of Field	100cm(approx)	100cm(approx)
	Camera Size	Φ21mm×45mm (Main body)	Φ12.8mm×12mm (Main body)
	Camera Length	165mm	135mm
5" Monitor	Front Lens	Sapphire	
	Shell Material	304#Stainless Steel	
	Lighting	Built-in 12×LED (White)	Built-in 6×LED (White)
	LED Driver	5levels	
	Water-resistant	10m water (Only when camera head is fixed on Cable)	
	Screen	5inch high-definition color LCD	
	Resolution	800X3(RGB)X480	
	Mirror and Flip	Normal, 180° flip, mirror, mirror & 180° flip	
	Image Zoom	1~3times (1.0X, 1.5X, 2.0X)	
	Image/Video Resolution	800*480	
Cable	External Memory	Micro SD card (not included, support Max32G)	
	Play Back	Photo and Video	
	Language	English, Deutsch, Français, Nèderlands, Simplified Chinese, Traditional Chinese, Japanese, Español, Русский	
	Image Format	JPG	
	Video Format	AVI	
	Size	157*100*36mm	
	Color	Black+Orange	
	Cable Diameter	Φ5.3mm	Φ5.3mm or Φ4.8mm
	Cable Color	5.3mm in red	5.3mm in red, 4.8mm in blue
	Cable Length	5/10/20/ 30meter (Selectable)	

PACKING LIST

				
5 inch monitor	Monitor support clamp	Metal frame with cable reel & camera head	Connection cable	User manual
				
Camera bracket and screwdriver for 12.8mm camera head	Camera bracket and screwdriver for 21mm camera head		Waterproof ring	Power supply

INSTALLATION

To Insert SD Card

After SD card is inserted into SD card slot successfully, a camera  icon will appear on the monitor screen; otherwise, the “no SD card”  icon will show.

To Connect Monitor Power

Plug the USB cable into the power adapter, and the other end into the USB slot on monitor, connect the power adapter to an appropriate(100-240V~50/60Hz) power source to charge, the power indicator LED will illuminate red to show in charging status, and it will turn off when the power is fully charged.

Notice: You must use the original power adapters provided by the vendor.

To Connect USB Cable to PC

Use the provided USB cable to connect the main body to any PC with a USB slot, the Power indicator will illuminate red to show in charging status. Power on the monitor, when the connection is successful, the display will show on the status as the picture on the right and you may browse by double-clicking on the My Computer icon on your desktop, and then navigation into the Mobile Disk directory to read the data in SD card.






To Connect Monitor And Camera










Plug the connection cable into the video input port on the back of monitor, and the other end to the camera output port on the cable reel.

OPERATION

Basic Operation On Monitor

1. Press and hold the power button for at least 2 seconds on the monitor until the power indicator illuminates green, then the real-time image from the lens is displayed on the monitor.
2. To insert the Micro SD card(support MAX.32G) into the device, use your thumb and index finger to carry the SD card with the front side down and insert into the SD card slot, then use your thumb to push gently until the SD card is locked with a sound. To take out the SD card, push the end of the SD card with your thumb, the SD card is unlocked with a sound, then you can pull out the SD card.
3. Press the  button to take picture.
4. Press the  button to begin recording, press again to stop recording.
5. Press the  button to flip/mirror the image. The first press for 180degree flip, the second press for mirror, the third press for mirror & 180 degree flip, the fourth press for the normal image.

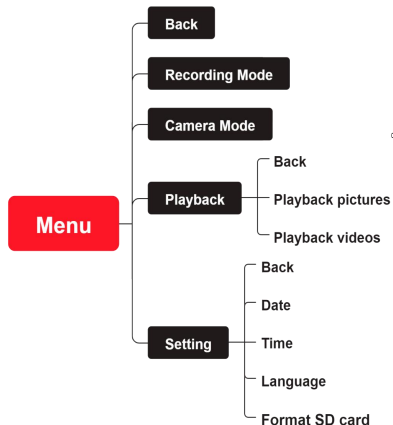


6. Press the  button to zoom the picture/video frame. The first press of the button to a zoom level of 1.0X. "1.0X" will appear in light at the top right of the screen. Push the button second and third time to zoom in closer at a level of 1.5X and 2.0X. The next push of the  button reverts to normal size (1.0X) viewing.
7. Press the **OK** button to increase or decrease the brightness of the camera LEDs.
8. Shot press the  button to enter menu.
9. Press the **OK** button to confirm the selection when in menu status.
10. Press the  button to delete the picture/video in playback picture/video status.
11. Press the  button to up the top in the MENU or to increase the number in DATE/TIME setting.
12. Press the  button to down to the bottom in the MENU or to decrease the number in DATE/TIME setting.
13. To power off the monitor, press and hold the  button for at least 2 seconds.
14. The monitor is built-in rechargeable Li-battery. A  full battery icon will appear on screen when the total battery charge is full. A  flickering low battery icon will appear on screen when the total battery charge drops below an operational threshold. To recharge the battery, follow the procedure on **To Connect Monitor Power**.
15. Only when the system is crashed and the buttons didn't work, you can use a needle to press the Reset button on the back of the monitor to restart the system.

Basic Operation On Cable Reel

Take out the camera from the camera holder, one hand to hold and control the reel speed, the other hand to point the camera head at the target entrance of the pipe, slowly pushing forward. When retrieve the push cable, one hand to pull out the cable slowly, the other hand to take up the cable backward to prevent being stacked and intertwined. When storing the push cable, hands should be close to the cable reel and push the cable with a short length every time. Push a long distance may cause the push cable bend or broken.

MONITOR MENU INTERFACE



Icons prompt:



shows the SD card is not installed.



CAMERA NOT CONNECTED

shows the camera is not connected.

SD CARD

No SD card found!

shows there is no SD card found.

VIDEO

Deleting...

shows the video is deleting.

DELETE

Completed!

shows the deletion is completed.

PLAY BACK

No data!

shows no data in the SD card.

SD CARD

Memory full!

shows the SD card memory is full.

SD CARD

Formatting...



show the SD card is formatting.



SD CARD

Format completed

shows the SD card is format completed.

MENU INTERFACE INTRODUCTION



Recording Videos: In real-time recording mode, press the  button to begin recording, the  icon on the screen, press again to stop recording.




Taking Photos: In the real-time camera mode, press the  button to take a photo, the  icon on the screen will flicker once to indicate successfully take the photo and save.







Notice:* In the recording mode, the SD card should be installed, otherwise it will prompt No SD card found!




* The video will be automatically saved as an individual file every 20 minutes(approximately).

* When the SD card memory is full, you can not continue to save the picture/video unless you backup the files and release the memory space.

Playback Videos/Pictures: Press the  or  button to select your desired video/picture and stop to pause.

Delete Videos/Pictures: Press the  or  to select your desired video/picture, then press the  button to delete One or All videos/pictures, or Cancel to delete any video/picture.


Date/Time Setting: In the setting mode, press  or  button to select Date/Time, and press  button to begin setting. Press the  or  button to decrease or increase in numbers, and press  button to confirm.

Language Setting: In the Language setting mode, press  or  button to switch the language, and press  to select the language.

Support languages: English, Deutsch, Français, Nerderlands, 简体, 繁體, 日本語, Español, Русский

Format SD card: In the setting mode, press  button to select Yes or No to continue the action.

TROUBLESHOOTING

Problem	Possible Causes	Likely Solutions
Tool will not start	1. Monitor not charged.	1. Charge monitor.
Monitor will not charge	1. USB cable not attached properly. 2. Power adaptor not connected power	1. Make sure USB cable is connected between monitor and power adapter. 2. Make sure power adapter is securely plugged into power source.
Image too dark or light	1. LEDs near camera need adjustment.	1. Press OK button on monitor to adjust the brightness of LEDs according to the inspecting environment.
Micro SD card can not be read	1. SD card problem. 2. System breakdown.	1. Make sure the Micro SD card is fine and not more than 32G. 2. Restart the system.
The video can not play	1. Maybe the format of video file is not supported by this monitor.	1. Please convert it into the supported format.
The video is not recorded	1. SD card is not in monitor 2. SD card memory is full 3. There is damaged area in memory	1. Please insert SD card 2. Change a SD card or remove the old data and make room for the new video. 3. Format the SD card.
The system is breakdown	1. Switching operations too fast and the system can't react. 2. System breakdown and can't power off.	1. Restart the system. 2. Use a needle to press the Reset button to restart the system.
 Follow all safety precautions whenever diagnosing or servicing the tool.		

MAINTENANCE TIPS

Do not use the camera head as a hammer or insert the pipes less than the head by force. Do not spill water on the monitor, only the camera and the cable are waterproof. Do not force the misplaced Micro SD card into the SD card slot, and do not force to pull out the SD card from the slot directly, doing these would damage the slot and SD card. To protect the device and the Micro SD card, do not insert or take out the Micro SD card when the device is working, please power off the device when doing these.

WARRANTY INFORMATION

We warrant its instruments and accessories against defects in material or workmanship for one year from the date of purchase. We will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the product.

Any implied warranties arising from the sale of a product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. We shall not be liable for loss of use of the product or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss.

State laws vary. The above limitations or exclusions may not apply to you.

RETURN FOR REPAIR POLICY

Every effort has been made to provide you with a reliable product of superior quality. However, in the event your instrument requires repair, please contact our Sales to obtain an RGA (Return Goods Authorization) number before forwarding the unit via prepaid/collect freight to us.

All the graphics and specifications included in this user manual are subject to minor change without prior notice.

Related Pipe Inspection Cameras

QY6565 (5" DVR)		
	21mm camera head, 5.3mm cable, Max. 30M	12.8mm camera head, 5.3mm(red)/4.8mm(blue) cable, Max. 30M
QY6566 (9" / 13.3" DVR)		
	21mm HD 1080P camera head(Optional 512Hz sonde and self-leveling), 5.3mm cable, Max. 30M	12.8mm HD 720P camera head(optional 512Hz sonde), 5.3mm(red)/4.8mm(blue) cable, Max. 40M
QY6688 (9" / 13.3" DVR)		
	21mm/28mm HD 1080P camera head(optional 512Hz sonde and self-leveling), 5.3mm/6.8mm cable, Max. 50M	12.8mm HD 720P camera head(optional 512Hz sonde), 5.3mm(red)/4.8mm(blue) cable, Max. 50M



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