

2.4GHz Wireless
Articulating Inspection Camera

INSPECTION TOOL



Model: H5802AL/H5803AL/H5804AL/H5805AL/H5805BL/H5806AL/H5807AL/H5807BL

EU Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



USER MANUAL

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Version 1.0

Please read this user manual carefully before using this product.
Failure to understand operation procedures may result in injury.

CONTENTS

General Safety Information	02
Welcome	02
Features	03
Packing List	03
Structure	04
Installation	05
To Install Monitor Mounting Bracket	05
To Insert SD Card	05
To Connect USB Cable	05
To Connect Monitor Power	05
To Connect Camera Power	06
Operation	06
Connection of the Hose with the Handle	06
Basic Operation.....	07
Video Output of Camera	07
Recording Video	08
Taking Photos	08
Playback Video/Picture	08
Deleting Video/Picture	09
Deleting Folder	09
How To Enter The Setting Mode	10
Language Setting	10
Video System Setting	10
Format	10
Default Setup	10
View Version Information	11
Date/Time Setting	11
Frame Rate Setting	11
Time Stamp Setting	11
Recording Type	11
Event Playback	11
Specifications	12
Troubleshooting	13
FCC Information	13

GENERAL SAFETY INFORMATION

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

SAVE THESE INSTRUCTIONS!

- Please don't place the product in high temperature, humid, or dusty places.
- Please avoid any friction or impact between this machine and hard objects, otherwise it will cause the abrasion of the machine or damage to other hardwares. Please don't disassemble the machine.
- This product is a tooling product, and please do not use this product for any illegal purpose. We are not liable for consequences caused by these illegal acts of users.
- The handle of this machine do not have the waterproof function. Please use it with care.

WELCOME

Thank you for purchasing our H58 Series Wireless Inspection Camera.

This series will provide a cavity inspection solution with high specification. The system can take the in-depth exploration in the places that are unable to face up to, and discern the internal objects in the illumination of highlight LED. For instance, it can be applied to hollow walls, interior pipeline and oil line of car engines, detection for dry rot, pest control and prevention.

FEATURES

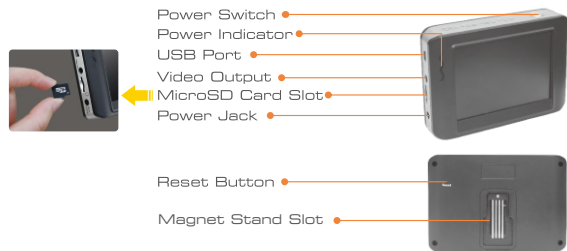
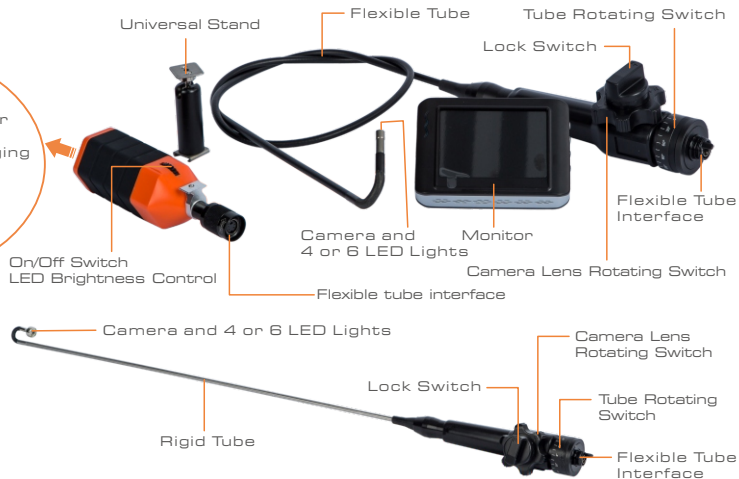
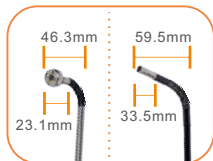
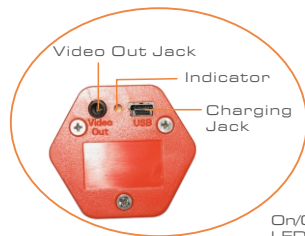
- One-key on/off & LED brightness adjustment
- Articulating camera head adjusts up to 300 viewing angle
- Mini 5.8mm, 6.2mm or 13.8mm waterproof Rigid or Flexible camera tubes for option
- 3.5" TFT-LCD wireless monitor with SD card recording (Max. SD card: 32GB)
- With video output function: TV-OUT.
- 2.4GHz wireless transmission function.
- Built-in rechargeable Li-battery in both camera and monitor
- Multi-language support

PACKING LIST

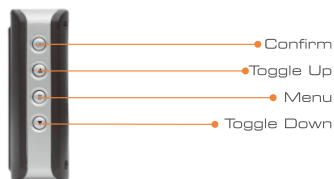


STRUCTURE

HANDLE & CAMERA



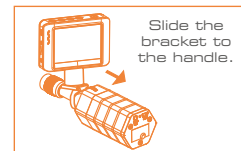
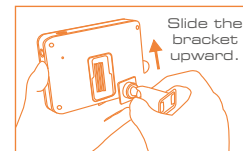
MONITOR



INSTALLATION

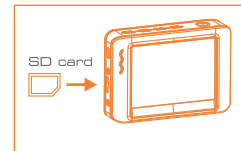
To Install Monitor Mounting Bracket

Attach the magnetic mounting bracket to the monitor.



To Insert SD Card

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



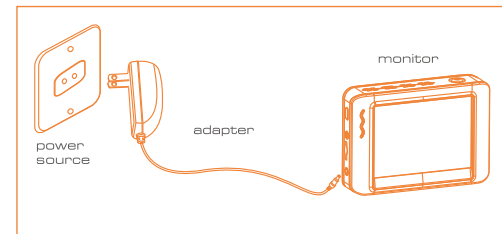
To Connect USB Cable

Use the provided USB cable to connect the monitor to any PC with a USB slot. Your computer should automatically recognize the new hardware, which you may browse by double-clicking on the My Computer icon on your desktop, and then navigating into the Mobile Disk directory.



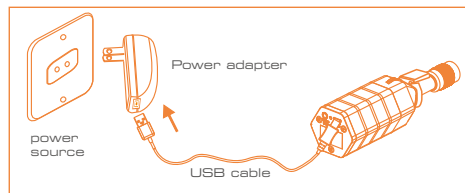
To Connect Monitor Power

Connect the monitor to an appropriate (100-240V ~ 50/60Hz) power source with the provided adapter. The power indicator LED will illuminate red and the battery capacity icon on the LCD will flicker, indicating that the battery is charging. When the red indicator light disappears, the battery has been fully charged.



To Connect Camera Power

1. Plug the USB cable into the power adapter, and the other end into the camera to charge it.
2. When the red charging indicating lamp is on, it is charging. When the red charging indicating lamp turns off, the charging is full.
3. This machine need to charge 4 to 5 hours so as to ensure the battery is fully charged.



Tip: If the machine can not start up, maybe the built-in battery of the machine is dead, then please use the original power adapter for charging full before you continue to use.

1. This charger is only for the use of this product. The charger is only for indoor use and please do not place it in humid environment. Please unplug the charger timely after charging is completed and keep properly. Users shall not repair, disassemble and transform the charger by oneself.
2. In order to make the battery achieve the best performance, please charge fully the machine before the first time of using it. The new battery can achieve optimal performance after several times of charging and discharging.
3. If the machine is not used for long, we recommend to charge it every 2 - 3 months and shut it down for storage.

OPERATION

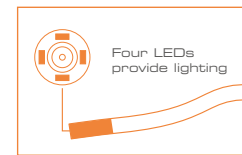
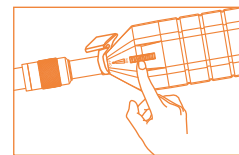
Connection of the Hose with the Handle

1. To connect the hose camera and control handle, first ensure the keyed end of hose to be aligned with the slot of handle, then gently push them together. Once properly aligned, rotate it clockwise to tighten the knob until the connection is secure.

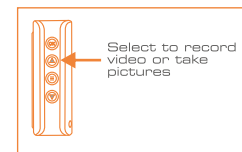
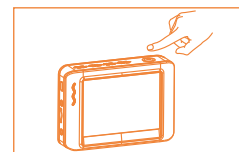


Basic Operation

1. As you roll the power switch to turn on the camera, the power indicator on the camera handle will light Green. The rolling switch then acts as a dimmer for the on the end of the tube.



2. Press and hold the power switch for 2 seconds on the monitor until the power indicator illuminates green. When the picture from the lens is displayed on the monitor, press the (A) button on the side of the monitor. To toggle between video recording and picture taking functions.



Notes:

1. Rotate the rotary switch, the camera head could rotate 180° right and left, and the rotation angles could be shown in rotary switch:



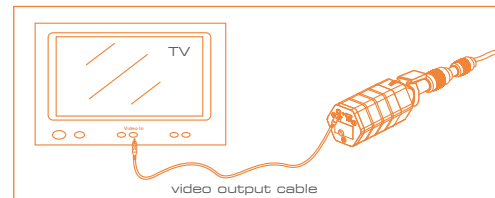
2. Rotate the lock button 90° with clockwise, then switch could be locked:




3. It is forbidden to bend the spring connections manually, since there is a flexural spring inside the front end of the hose:

Video Output of Camera



Insert video cable into the video out socket of the monitor, insert the other end of the cable into the VIDEO IN jack of any compatible TV or display device. The LCD monitor is now capable of outputting high quality video to another display.

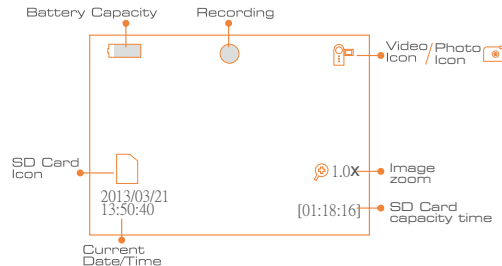


Recording Video


1. In real-time monitoring mode, press the  button to toggle to video recording mode.
2. Press the 'OK' button to begin recording.
3. Press again to stop recording.

Notice!

- * The video will be automatically saved as an individual file every 30 minutes.
- * In real-time monitoring mode, press the  button to zoom interface.
- * The  icon indicates that the SD card memory is full.



Taking photos


1. In real-time monitoring mode, press the  button to toggle to photo capturing mode.
2. Press the 'OK' button to take a photo.

Notice!

The  icon indicates that the SD card memory is full.



Playback Video/Picture

1. In real-time monitoring mode, press the  button to toggle to the video/picture folder.
2. Press the  or  buttons to select your desired folder, and then press 'OK' to toggle to the right interface:

Notice!

The JPG format file is a picture;
the MP4 format file is a video.

2013/03/21		0001/0005
13:54:15	JPG	Indicates picture file
14:12:19	MP4	
14:17:34	MP4	Indicates video file
14:36:40	JPG	
15:09:03	MP4	

3. for playback video:

Press the  or  button to select your desired video, and then press 'OK' to playback.




Pause: press the 'OK' button once to pause, press again to resume play;

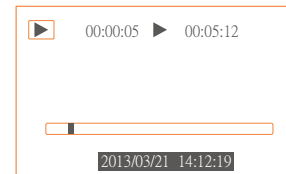
Fast Forward: press the  button;

Rewind: press the  button;









Stop/Exit: press the  button.

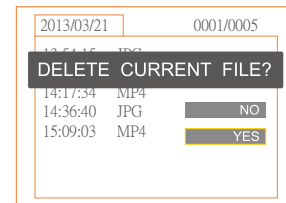
for view pictures:

Press the  or  button to select your desired photo, press 'OK' button to view and press the  button to exit.



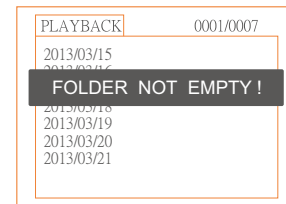
Deleting Video/Picture

1. In real-time monitoring mode, press the  button to toggle to the video/picture folder.
2. Press the  or  button to select your desired folder, and then press 'OK' button.
3. Press the  or  button to select your desired file, and then press and hold the  button for 2 seconds, or until the right interface appears:
4. Press the  or  button to toggle between YES and NO, that is, to delete or cancel. Once you have highlighted your desired selection, press the 'OK' button.




Deleting Folder







Deleting a folder is done in the same way as deleting a single file, however, make sure that the folder is empty first, otherwise the following error message will appear:









How to enter the Setting Mode

In real-time monitoring mode, press and hold the  button for 1~2 seconds, or until the right interface appears:







Language Setting

1. In the setting mode, press the  or  button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Language', and then press 'OK' button, the following interface will appear:
3. Press the  or  button to select your desired language.
4. Press 'OK' button to confirm and exit.







Video System Setting

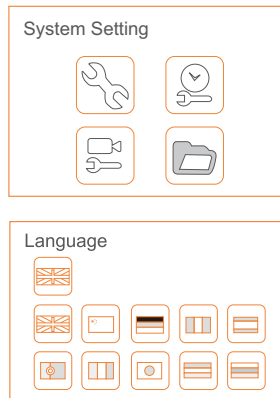
1. In the setting mode, press the  or  button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Video System' and then press 'OK' button.
3. Press the  or  button to toggle between NTSC and PAL. Once your desired system is selected, press 'OK' button to confirm and exit.

Format


1. In the setting mode, press the  or  button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Format', and then press 'OK' button.
3. Press the  or  button to toggle between YES and NO, that is, to format or cancel. Once you have highlighted your desired selection, press the 'OK' button.

Default Setup






1. In the setting mode, press the  or  button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Default Setup' and then press 'OK' button.
3. Press the  or  button to toggle between YES and NO, that is to restore default or cancel. Once you have highlighted your desired selection, press the 'OK' button.



View Version Information







1. In the setting mode, press the  or  button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Version' and then press 'OK' button. You will now be able to view the version details of your product.

Date/Time Setting







1. In the setting mode, press the  or  button to select 'Date/Time' and then press 'OK', The right interface will appear:
2. Press 'OK' button to select Date or Time; Press the  or  button to adjust selection; Press the  button to confirm and exit.









Frame Rate Setting

1. In the setting mode, press the  or  button to select 'RECORDER SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Frame Rate' and then press 'OK' button.
3. Press the  or  button to toggle between different frame rates. Once your desired rate is selected, press 'OK' button to confirm and exit.



Time Stamp Setting

1. In the setting mode, press the  or  button to select 'RECORDER SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Time Stamp' and then press 'OK' button.
3. Press the  or  buttons to toggle between on and off. Once your desired selection is made, press 'OK' button to confirm and exit.

Recording Type

1. In the setting mode, press the  or  button to select 'RECORDER SETTING', and then press 'OK' button.
2. Press the  or  button to select 'Recording Type' and then press 'OK' button.
3. Press the  or  button to toggle between 'still' and 'video'. Once your desired selection is made, press 'OK' button to confirm and exit.

Event Playback


1. In the setting mode, press the  or  button to select 'EVENT PLAYBACK', and then press 'OK' button.
2. Refer to user manual instructions on Playback of Video/Picture, Deleting Video/Picture, and Deleting Folder for guidance.

SPECIFICATIONS

CAMERA	MODEL	H5802AL	H5803AL	H5804AL	H5805AL	H5805BL	H5806AL	H5807AL	H807BL
	Image Sensor	CMOS	CMOS	CMOS	CMOS	CMOS	CMOS	CMOS	CMOS
	Diam. of Insertion Tube	6.2mm	6.2mm	13.8mm	13.8mm	13.8mm	5.8mm	5.8mm	5.8mm
	Effective Pixels	720×480(PAL) 720×625(NTSC)	720×480(PAL) 720×625(NTSC)	720×480(PAL) 720×625(NTSC)	720×480(PAL) 720×625(NTSC)	720×480(PAL) 720×625(NTSC)	640×480(PAL) 640×480(NTSC)	752×582(PAL) 768×494(NTSC)	704×576(PAL) 712×488(NTSC)
	Field of View (FOV)	55°	55°	55°	55°	55°	55°	55°	50°
	Bending angle	300°	300°	300°	300°	180°	300°	300°	180°
	Weight	133g	133g	133g	176g	149g	259g	217g	375g
	Focus Distance	3cm(approx)	3cm(approx)	6cm(approx)	6cm(approx)	6cm(approx)	3cm(approx)	3cm(approx)	3cm(approx)
	Depth of Field(DOF)	30cm(approx)	30cm(approx)	50cm(approx)	50cm(approx)	50cm(approx)	30cm(approx)	30cm(approx)	30cm(approx)
	Illuminative Distance	0.5m (4LEDs)	0.5m(4LEDs)	2m(4LEDs)	2m(4LEDs)	2m(4LEDs)	0.5m(6LEDs)	0.5m(6LEDs)	0.5m(6LEDs)
MONITOR	Water Proof	IP67							
	Lowest Illumination	0Lux							
	Transmission Distance	10m(Max.)							
	Transmitting Frequency	2468MHz							
	Video Out	1p-pv@75ohm							
	Power	5V/1.5A							
	Current Consumption	260mA							
	Work Time	6 hours							
	Product Dimension	113mm × 45mm × 43mm (Active area)							
	Screen Size	3.5" TFT-LCD							
	Display Resolution	320(R.G.B.) x 240dot							
	Video Format	NTSC / PAL							
	Modulation Mode	FM							
	Receive Sensitivity	-85dBm (module)							
	Built-in Li-Battery Capacity	1100MAH/3.7V							
	Charge Time	3 hours							
	Work Time	3 hours							
	Consumption Current	500MA(MAX)							
	Memory	Micro SD Card							
	Picture Format	.JPG							
	Video Format	.AVI							
	Picture/Video Resolution	640x480							
	Frame Rate	30Frame/S							
	Operation Temperature	0~+45°C							
	Storage Temperature	-20~+60°C							

* Actual transmission range may vary according to the weather, location, interference or building construction.

TROUBLESHOOTING

Problem	Possible Causes	Likely Solutions
The camera handle can not be charged	1. The adapter cable is not installed properly. 2. The power adapter is not connected to a power source.	1. Make sure the adapter to connect to the camera handle. 2. Make sure the adapter is securely plugged into a wall outlet.
Image too dark or light	1. LEDs near camera need adjustment 2. Mobile devices need adjustment	1. Use dial on control handle to adjust brightness of LEDs. 2. Adjust brightness of Mobile Devices.
Camera LED does not light and no images.	1.The camera runs out of power. 2.The handle is damaged. 3.The camera is damaged.	1. Charge the camera. 2. Separate the camera and the handle, and replace the handle. 3. Separate the camera and the handle, and replace the camera.
 Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.		

FCC INFORMATION

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference;
- (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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