Specifications

Item	Value
camera out diameter	5.8mm
tube bending angle	290~340(°)
tube Rotation Angle	350±10(°)
length of the tube	1200mm
image sensor size	1/12"
type of sensor	CMOS
effective pixels	PAL:720X625 NTSC:720X525
format of video	NTSC/PAL
lens mount	color lens
view angle	45±5(°)
minimum lumination	0(LED ON)
output of vidoe	1Vp-p±0.2@750
operation voltage	3.3V
operation temperature	0~+50℃
storage temperature	-20~+60℃
operation humidity	15%~85%RH
storage humidity	10%~90%RH
Waterproof Capacity	IP65
weight of product	340±10g

Articulating Tube

* Actual transmission range may vary according to weather, location, interference or building construction.
* All specifications are subject to minor change without prior notice.

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.

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.

22 PAP

YORK
Survey Supply

YORK
Survey Supply

WWW.YORKSURVEY.CO.UK
YSC
TEL: 01904 692723

Articulating Inspection Camera

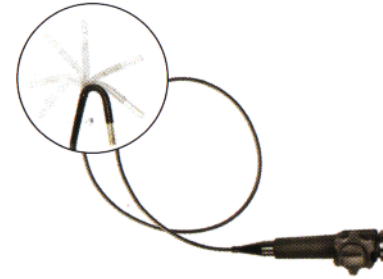**Code: 282270**

Operating Instructions

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!

※ Prevent object and liquid entry. Never spill liquid of any kind on the video display unit. Liquid increases the risk of electrical shock and damage to the product.

※ The unit is not shock-resistant. Do not use Explorer Standard as a hammer and avoid high impact resultant from things such as dropping the unit from height

※ Do not immerse camera handle or monitor in water. Avoid moisture, and store product in a dry place. Such measures reduce the risk of electric shock and damage. **The lens and the tube are water resistant when the unit is fully assembled, but the monitor and handle are not.**

※ Do not use the camera if condensation forms inside the lens. Let the water evaporate before using again.

※ Turn off the system if it is not in use.

※ This product can only be completely disconnected for from its power source by unplugging the power adapter.

※ Do not cut the DC power cable of provided with this product to fit with another power source.

※ Attention should be given to the environmental aspects of battery disposal.

※ Remove the batteries when cleaning the unit.

※ Remove the batteries before storing the unit for a long time.

※ When necessary, REPLACE ALL FOUR (4) BATTERIES in this unit with new ones, not one (1) or two (2) batteries at a time.

※ Use only the size and type of battery specified.

※ Be sure to install the battery with the correct polarity as indicated in the battery compartment.

※ Properly dispose of batteries. Exposure to high temperatures can cause batteries to explode, so do not dispose of in a fire. Place tape over the terminals to prevent direct contact with other objects.

※ Some countries have regulations concerning battery disposal. Please follow all applicable regulations.

WELCOME

Congratulations on your purchase of our inspection video camera with recordable color LCD monitor, the EXPLORER DELUXE. Please read the user manual carefully before using this product. These products are designed as a remote inspection device, capable of recording video/taking pictures. Appropriate for use in surveying pipes or other hard-to-reach places, equipment or furnishing installation, car repair, etc. Features include waterproof LED lens, real-time recording, and micro SD card storage.

FEATURES

- Allows for easy surveying of small, hard-to-reach places;
- Mini water-proof camera with 1m (3ft.) flexible extended tube;
- Increase visibility with 3×zoom capability;
- Manufactured and tested to IP67 waterproof standard;
- 3.5" TFT-LCD detachable/mountable monitor, built-in rechargeable Li-battery;
- Video recording capability, supports up to 32GB micro SD card;
- Adjustable brightness on lens-mounted LED light;
- Lightweight, handheld design, flexible and convenient to use.

3. Rotate the steering switch, the camera could rotate 300 degree:

4. Rotate the lock button 90 degree with clockwise, then switch could be locked:
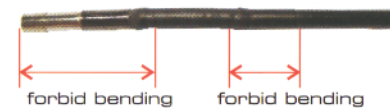

5. Rotate the rotary switch, the camera head could rotate 180 degree right and left, and the rotation angles could be shown in rotary switch:

Be Caution:

It is forbiden to bending the spring connections manually, since there is a flexural spring inside the front end of the hose:

forbid bending   forbid bending

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.
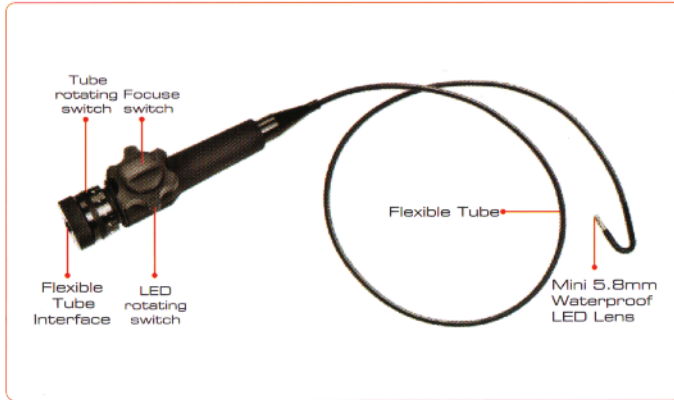
The graphics included in this user manual are subject to minor change without notice.

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.

22 PAP

Structure

Tube rotating switch
Focuse switch
Flexible Tube Interface
LED rotating switch
Flexible Tube
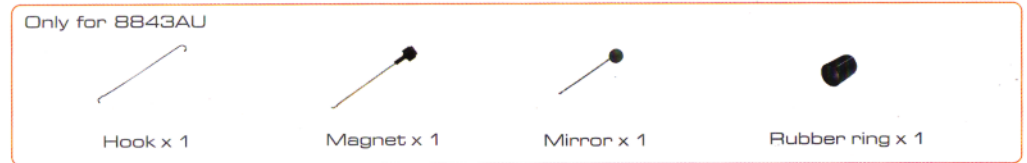Mini 5.8mm Waterproof LED Lens
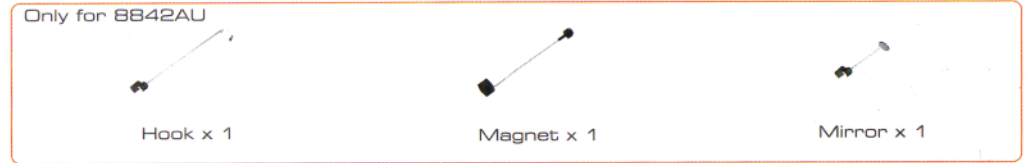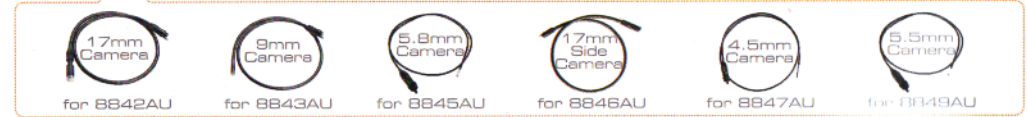
Installation and Use

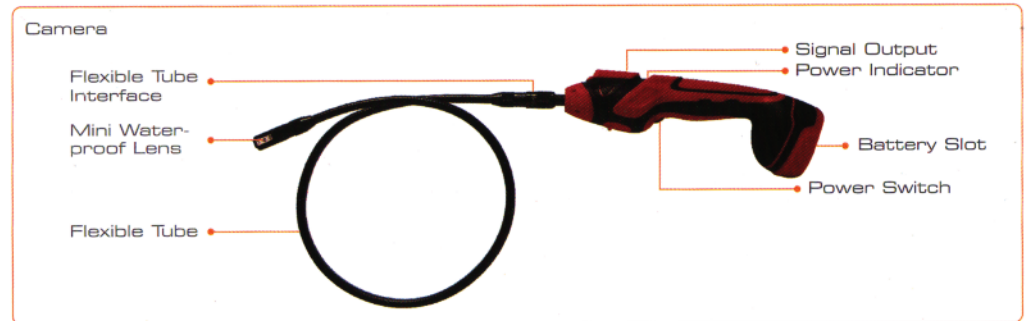1. Connect the rotatable camera head to handhold

2. Remove the lens protective cover :

▰ PACKING LIST

| Flexible Tube with Lens x 1 | Handle x 1 | LCD Monitor x 1 | Power Adapter x 1 | (Optional) Extension Tube | Micro SD Card |

| 17mm Camera for 8842AU | 9mm Camera for 8843AU | 5.8mm Camera for 8845AU | 17mm Side Camera for 8846AU | 4.5mm Camera for 8847AU | 5.5mm Camera for 8849AU |

Only for 8842AU

Hook x 1   Magnet x 1   Mirror x 1

Only for 8843AU

Hook x 1   Magnet x 1   Mirror x 1   Rubber ring x 1

▰ STRUCTURE

Camera

Flexible Tube Interface
Mini Waterproof Lens
Flexible Tube
Signal Output
Power Indicator
Battery Slot
Power Switch

Monitor — Delete file, zoom in picture, Power Switch, Play back, Record video, Take photo, Color TFT-LCD Monitor, Menu, Left OK, Right, Micro SD card socket, Power supply socket, Reset, Fixed socket, Signal Input
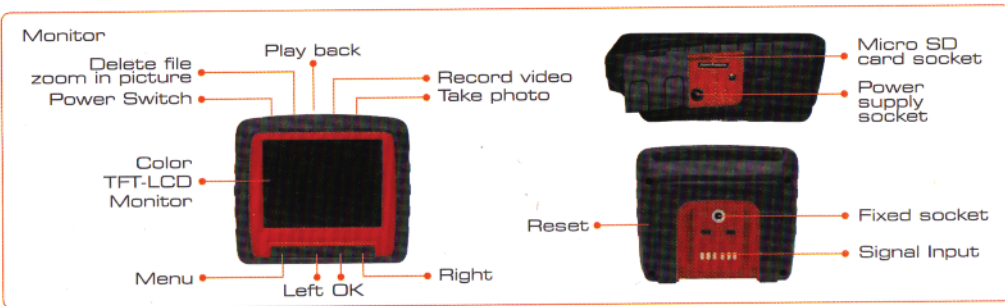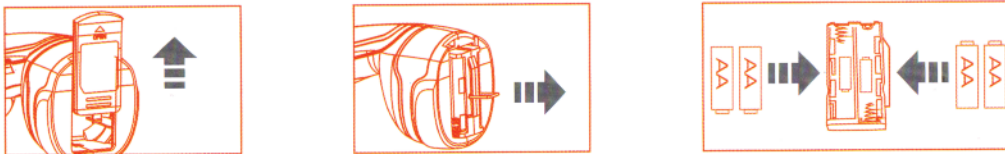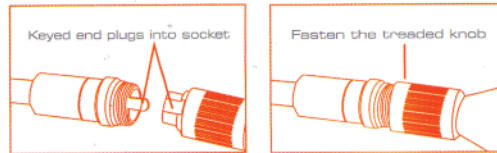
INSTALLATION

To Install Batteries (Dry your hands before installation or replacing batteries.)

1. Remove the battery cover as illustrated below:
2. Remove battery compartment and insert four (4) AA batteries into their appropriate slots, with proper orientation, as indicated on the battery compartment.
3. Reinstall battery compartment and replace battery cover.

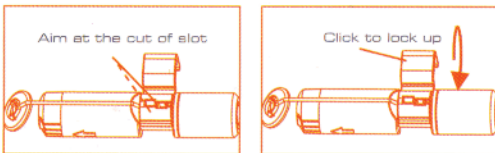### To Attach Flexible Tube with Handle

To connect the flexible tube camera with control handle, first make sure that the keyed end of the tube is aligned with the slot in the handle, then use slight force to push them together. Once properly aligned, twist the treaded knob clockwise until the connection is securely in place.

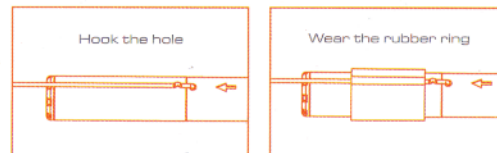Keyed end plugs into socket

Fasten the treaded knob

To Install Accessories

The three (3) included accessories (mirror, hook and magnet) are all attached to the camera in the same way as illustrated below:

For 8842AU

Aim at the cut of slot
Click to lock up

For 8843AU

Hook the hole
Wear the rubber ring

For 8842AU: to prepare accessory for installation, push down on stem-side of black interface while pulling away from adjacent side. This will open the base of the accessory. Next, align inside of stem-side to either treaded surface at the base of camera head. Tighten to secure the accessory in place.

SPECIFICATIONS

	Model No.	8842AU	8843AU	8845AU	8846AU	8847AU	8849AU
Camera	Imaging Sensor	CMOS					
	Total Pixels PAL	704 x 576	640 x 480	648 x 488	640 x 480	320 x 240	720 x 625
	Total Pixels NTSC	712 x 488	640 x 480	648 x 488	640 x 480	320 x 240	720 x 525
	Horizontal Viewing Angle	50°	45°	42°	35°	63°	48°
	Tube Diameter	17mm	9mm	5.8mm	17mm	4.5mm	5.5mm
	Transmission Frequency	2468MHz					
	Minimum Illumination	0 Lux (LED ON)					
	Modulation Type	FM					
	Bandwidth	18MHz					
	Power Supply	4 x AA batteries					
	Unobstructed Effective Range	10m (max.)					
	Waterproof Capacity	IP67 (for lens/tube only)					
	Dimensions (W x D x H)	260 x 108 x 71 (mm) (Excluding Flexible Tube)					
	Approx. Weight	540g	476g	352g	538g	288g	366g
Monitor	LCD Screen Type	3.5" TFT-LCD					
	Effective Pixels	320(R.G.B) x 240					
	Video System	PAL/NTSC					
	Transmission Frequency	2468MHz					
	Exterior Supply Voltage	9V DC					
	Consumption Current (Max.)	700mA					
	Charging Time	3 hours					
	Working Time	2 hours					
	Picture/Video Pixels	640 x 480					
	Video Format	.MP4					
	Picture Format	.JPG					
	Frame Rate	5, 10, 15, 20, 25, 30 frame/second (optional)					
	Receiving Sensitivity	≤-85dBm					
	Dimensions (W x D x H)	106 x 89 x 37 (mm)					
	Approx. Weight	234g					
	Operating Temperature	0°C-40°C/32°F~104°F					
	Operating Humidity (Max.)	15~85%RH					

* Actual transmission range of wireless monitoring may vary according to the weather, location, interference or building construction.
* All specifications are subject to minor change without prior notice.

TROUBLESHOOTING

Problem	Possible Causes	Likely Solutions
Tool will not start	1. monitor not charged. 2. batteries need charging.	1. charge monitor 2. replace batteries in control handle 3. press the reset button to start
Monitor will not charge	1. adapter cable not attached properly 2. adapter not connected to power	1. make sure adapter cable is connected between monitor and adapter. 2. make sure adapter is securely plugged into wall socket.
Image too dark or light	1. LEDs near camera need adjustment 2. monitor display needs adjustment	1. use dial on control handle to adjust brightness of LEDs. 2. press the Zoom button on the monitor to adjust the multiple of image.

⚠ Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

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. Press the OK button to confirm and press the MENU button to exit.

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. Press the OK button to confirm and press the MENU button to exit.

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 button, The right interface will appear:
2. Press OK button to select Date or Time; Press the ◄ or ► button to adjust selection; Press the MENU button to confirm and exit.

Date/Time

2013 / 03 / 21
09 : 51

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 press the MENU button to exit.
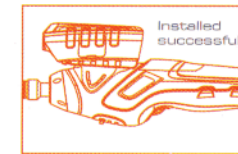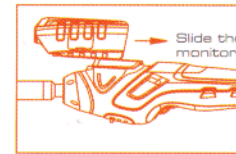
Time Stamp Setting

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 press the MENU button to 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.

To Install Monitor for Wired Use

EXPLORER DELUXE supports wired use by connecting the monitor to the camera handle.
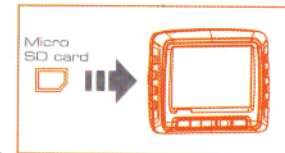

To Install Extension Tube

To connect the extension tube, first align the keyed end with the slot in the handle. Use slight force to push them together. Once properly aligned, twist the treaded knob clockwise until the connection is securely in place. Repeat this process to connect the other end of extension tube to flexible camera tube.

To Insert SD Card

After micro SD card is inserted into micro SD card slot successfully, an micro SD card ▣ icon will appear on the LCD screen; otherwise, the 'no SD card' ⊘ icon will show.
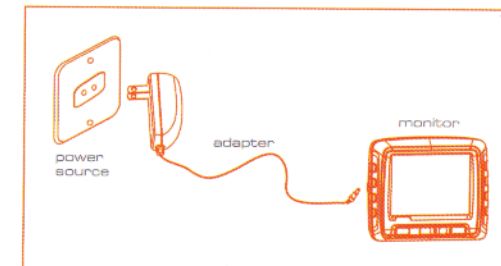
Notice!

* Please use class 4 or above TF card, Otherwise, cannot be identified.
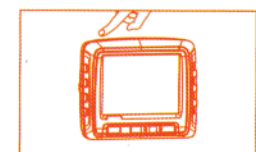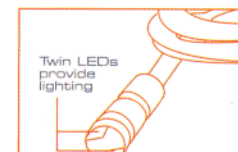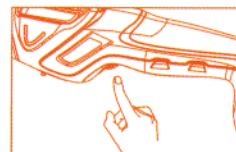
To Connect Monitor Power

Connect the monitor to an appropriate (100-240V ~ 50/60Hz) power source with the provided adapter to charge and the charging icon will flash on the LCD screen. Turned off, the charge without any prompt, but the monitor is charging.
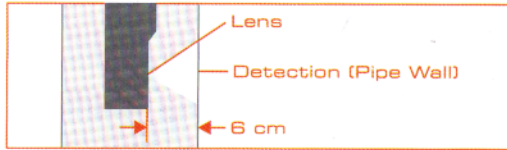

◼◼ OPERATION

Basic Operation

1. As you roll the power switch to turn on the camera, the power indicator on the camera handle will light. The rolling switch then acts as a dimmer for the twin LEDs that surround the camera on the end of the flexible tube.
2. Press and hold the ⏻ button on the top of the monitor for 2 seconds or until the picture from the lens is displayed on the monitor.

3. You can be real-time detection, recording or taking pictures, and other set operations.
   Only for 8846AU: The lens and the detection of the best distance is 6 cm, If too close or too far can cause objects not clear.
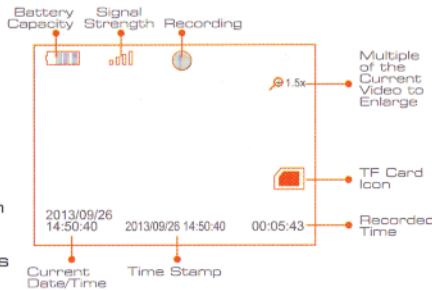

Lens
Detection (Pipe Wall)
6 cm

Notice!

* When in use, the tube should easily maneuver itself into position. Do not apply excessive force.

TIP!

* The flexible tube can be bent into numerous shapes that may help you explore areas you otherwise thought were impossible to see.
* The accessories included with EXPLORER DELUXE can be used to retrieve small items like dropped rings or screws. (only for 8842AU, 8843AU)

Recording Video

1. In real-time monitoring mode, press the 🎥 button on top of the monitor to begin recording.
2. Press again to stop recording.

Notice!

* The video will be automatically saved as an individual file every 30 minutes.
* In real-time monitoring mode only, Video recording can be conducted by 🎥 button.
* "Memory Full!" appears on the LCD screen indicates that the TF card memory is full.
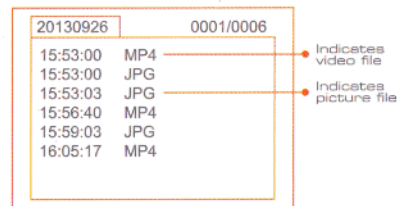

Battery Capacity
Signal Strength
Recording
1.5x
Multiple of the Current Video to Enlarge
TF Card Icon
Recorded Time
2013/09/26 14:50:40
2013/09/26 14:50:40
00:05:43
Current Date/Time
Time Stamp

Taking photos

In real-time monitoring mode, press the 📷 button to take a photo.

Notice!

* In real-time monitoring mode only, taking photos can be conducted by 📷 button.
* "Memory Full!" appears on the LCD screen indicates that the TF 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 on bottom of the monitor to select your desired folder, and then press the OK button to toggle to the right interface.

Notice!

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

20130926	0001/0006
15:53:00	MP4
15:53:00	JPG
15:53:03	JPG
15:56:40	MP4
15:59:03	JPG
16:05:17	MP4

Indicates video file
Indicates picture file

3. *for playback video:*
   Press the ◄ or ► button to select your desired video, and then press OK button to playback.
   Pause: press the OK button once to pause, press again to resume play;
   Fast Forward: press and hold on the ► button for about 2 seconds;
   Rewind: press and hold on the ◄ button for about 2 seconds;
   [In the fast-forward or rewind mode, press the OK button to return to normal play mode.]
   Stop/Exit: press the MENU button.
   for view pictures:
   Press the ◄ or ► button to select your desired video, press OK button to view and press again to exit.

* In the real-time monitoring mode only, playback can be conducted by ▶ button.

Current Playback Mode
▶ 00:00:05   ▶ 00:05:12

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 the 🗑 button and the right interface appears:
4. Press the ◄ or ► button to toggle between YES and NO, that is, to cancel or delete. Once you have highlighted your desired selection, press the OK button.

* In real-time monitoring mode only, deleting video/picture can be conducted by 🗑 button.

2013/03/21   0001/0005
DELETE CURRENT FILE?
14:17:34 MP4
14:36:40 JPG   NO
15:09:03 MP4   YES

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:

PLAYBACK   0001/0007
2013/03/15
FOLDER NOT EMPTY!
2013/03/19
2013/03/20
2013/03/21

How to enter the Setting Mode

In real-time monitoring mode, press the MENU button.

System Setting

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 press MENU button to exit.

Language

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 press the MENU button to exit.