

Endoscope Instruction Manual



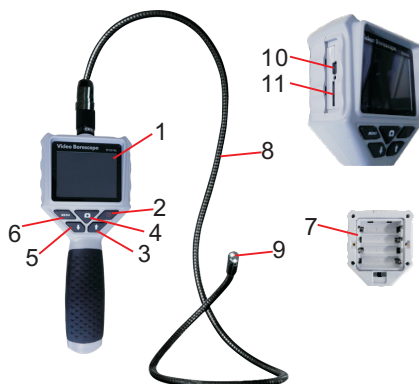
Please read this instruction manual carefully before using the product

MAIN PART LIST

Keypad



1. 2.7"color LCD monitor
2. Power on/off button
3. Brightness up button (rotation)
4. Camera button
5. Brightness down button (zoom)
6. Menu/OK
7. Battery compartment (4 x 1.5V AA)
8. Flexible tube
9. Camera and LEDs
10. Mini USB port(to PC)
11. SD cadr slot



ACCESSORIES PART LIST

12. Mirror
13. Hook
14. Magnet
15. USB cable(to PC)



TABLE OF CONTEN

1. Safety Instructions.....	3
2. In The Package.....	3
3. Information About The Product.....	4
4. Before First Use.....	4
5. Installation.....	4
6. Operation	4
7. Disposal.....	10
8. CE Declaration of Conformity.....	10
9. Product Specifications.....	11

Safety Instructions

Before first use please familiarise yourself with the proper usage of the device. Keep these operating instructions for future reference. These operating instructions contain important details for handling the device. Please pass it on along with the unit if it is handed over to a third party!



Please read the safety instructions most carefully!

These instructions will make it easier for you to handle the device appropriately and help prevent mishaps and possible damage to the device.



Please note the following safety advice to avoid malfunctions, damage or physical injury:

- **Prevent object and liquid entry.** Never spill liquid of any kind on the video display and the main body of the unit.
- **The unit is not shock-resistant.** Do not use it as a hammer or drop it.
- **Do not immerse the camera and monitor in water.** Store it in a dry place. Such measures reduce the risk of electric shock and damage. The image head and the cable are water resistant when the unit is fully assembled, but the monitor and camera are not.
- **Do not use the camera if condensation forms inside the lens.** Let the water evaporate before using again.

Cautions

- The apparatus should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Turn off the unit if not in use.
- Attention should be drawn to the environment aspects of the 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 BATTERIES in the unit with new ones.
- 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 the battery. Exposure to high temperatures which can cause the batteries to explode, so do not dispose of in a fire. Please tape over the terminals to prevent direct disposal. Please follow all applicable regulations.

IN THE PACKAGE

Qty	Description
1	Endoscope Main Unit
1	Instruction Manual
1	USB Cables
1	Mirror
1	Hook
1	Magnet

Check all parts for transport damage. In case of damage contact your dealer immediately. Check the package for completeness. Inform your dealer about missing parts immediately.

Information About The Product

The product is designed as a remote inspection device. It can be used to look into tight spots and beam back real-time video to its LCD monitor. Typical applications might include HVAC, termite and other insect or building inspections, cable routing, automotive/boat/aircraft inspections etc.

Before First Use

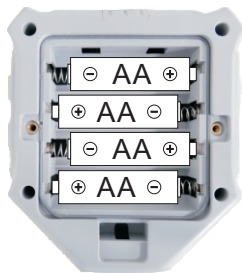
Remove all packaging materials and check the scope of delivery for completeness (IN THE PACKAGE).

Installation

Please install the batteries before using the product, choose the accessory according to the actual situation. Steps of installation as following:

To Install Batteries

1. Using a screwdriver, remove screw and cover
2. Remove battery compartment and insert 4 new AA (1.5 V) batteries into the proper slots in the battery compartment. Proper battery orientation is indicated on the battery compartment.
3. Reinstall battery compartment, battery cover and screw.



OPERATION

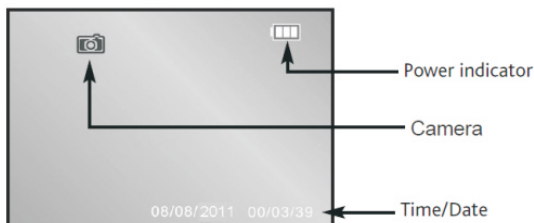
Switching On/Off

BEFORE USING THE UNIT FOR THE FIRST TIME:

- Ensure the time and date have been set
- Ensure the SD card is inserted



Press the ON/OFF button (2) to switch the device on.
The camera image will appear on the screen.



To switch the device off press
The ON/OFF button

Camera Illumination

The inspection camera is equipped with a dimmable LED light in the camera head, which can be adjusted using the navigation/brightness keys (3 or 5).

Press **4** to increase the brightness

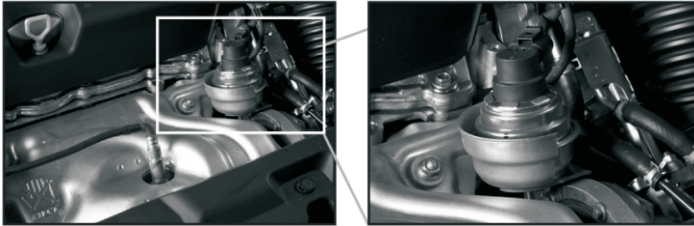
Press **5** to reduce the brightness

Rotating the display

Press the **6** button for 1.5 seconds to rotate the display by 180°.

Zoom function

Press the **5** button for 1.5 seconds to be increased in size from x1 to x4

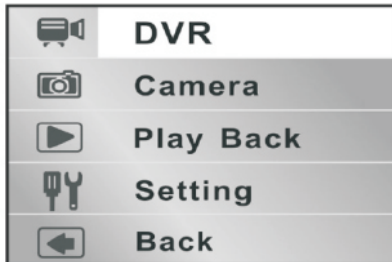


Menu Options

MENU

The menu options are accessed by pressing the MENU/OK button (6)

To move up/down the menu press **4**/**5** keys



To select a menu item press the camera button (4)

Select EXIT to return to the previous menu or exit the menu options

Settings



	DVR
	Camera
	Play Back
	Setting
	Back

	Frame Rate
	Format
	Date/Time
	Language

Frame Rate
20FPS
25FPS
✓ 30FPS

Format
YES
✓ NO

Date/Time
08/08/2011

✓ 1,English
2,Deutsch
3,Español
4 Français
5,Nederlands

Language Selection

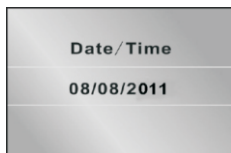


Allows the language to be set for the menu functions.
Use the navigation keys to select from the language available

✓	1,English
	2,Deutsch
	3,Español
	4 Français
	5,Nederlands

Date / Time

Set Date / Time



Use the navigation keys  to edit the and date

Camera & Video Operation

Inserting SD card

Before using the camera or video function an SD card must be inserted into the card slot

Note:- Card must be inserted with contacts facing upwards

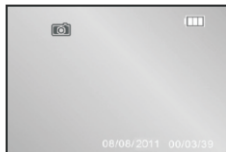


Then screen will then show the SD card icon

Camera



Press the camera button (4) to take a picture



DVR




Image Management

Step1: Push "MENU" button



Step2: Select "Playback"



Step3: Use the navigation key  to choose the image you would like to delete. For example, if you would like to delete image #A



Step4: Press  then select "Delete Current"



Step 5: Select "Yes"



Playback



Use the navigation keys  to select playback
Press button (4) to start video playback

Format



Format	
YES	
✓ NO	

Select 'Yes' to format all data on the SD card
Select 'No' to exit without formatting

Frame rate



Frame Rate	
20FPS	
25FPS	
✓ 30FPS	

Transferring files to a computer



Connect USB cable (15) between mini USB port (10) and computer
Switch on camera, computer will then detect unit as a removable disk
Files can now be copied over to computer as required

ACCESSORIES

Clip-on tools

The inspection camera is supplied with a hook, mirror and magnet tool to aid inspection and component retrieval



Ensure the tool is securely clipped onto the camera head before using

WARNING: Do not use excessive force to insert or retrieve probe when using clip-on tools, no responsibility will be accepted for tools disconnecting during use.

Connecting/Disconnecting camera

To replace or upgrade the camera probe, it can easily be removed

First loosen the locking screw, then remove the flexible probe

Push the new camera probe in position and re-tighten locking screw



Disposal

Packaging



The packaging can be recycled. Put the packaging materials to appropriate collection containers only.

Device



After the device has reached the end of its service life, follow the legal regulations concerning the disposal of electrical devices. Take the device to your retailer or to an appropriate public collection point, where it will be recycled



Do not put your used batteries, nickel cadmium, rechargeable, round cell or starter batteries in with your household rubbish. Take them to an appropriate disposal /collection site.

CE Declaration Of Conformity

This product complies with the EU CE guidelines and directives. Electromagnetic Compatibility 2004/108/EEC RoHS Directive 2011/65/EU Annex II;recasting 2002/95/EC.

Product Specification

2.7" TFT resolution	960 x 240 Pixel
Lens sensor resolution	640 x 480 Pixelss
Sensitivity	1.8V (Lux,sec)
Color Mosaic	RGB Bayer pattern
White comparison	Automatic
Exposure to light	Automatic
Camera illumination	4 LEDs, white
Power by	4 x 1.5V AA batteries
Power Consumption	Max 350 mA
Ambient / operation temperature	0 to 45°C
Total length of device	114.2 ± 2.0 cm
Metal tube length	88.0 ± 2.0 cm
Minimum bending radius	4.5 cm
Diameter of camera head	8.0 mm
Lens coverage	54°
Short distance focus	≥3cm
Weight without accessories	Approx. 350 gm
SD slot	Support Micro SD up to 32 GB
Zoom	Maximum to 4.0 times