

# Inspection Camera

## Users Manual



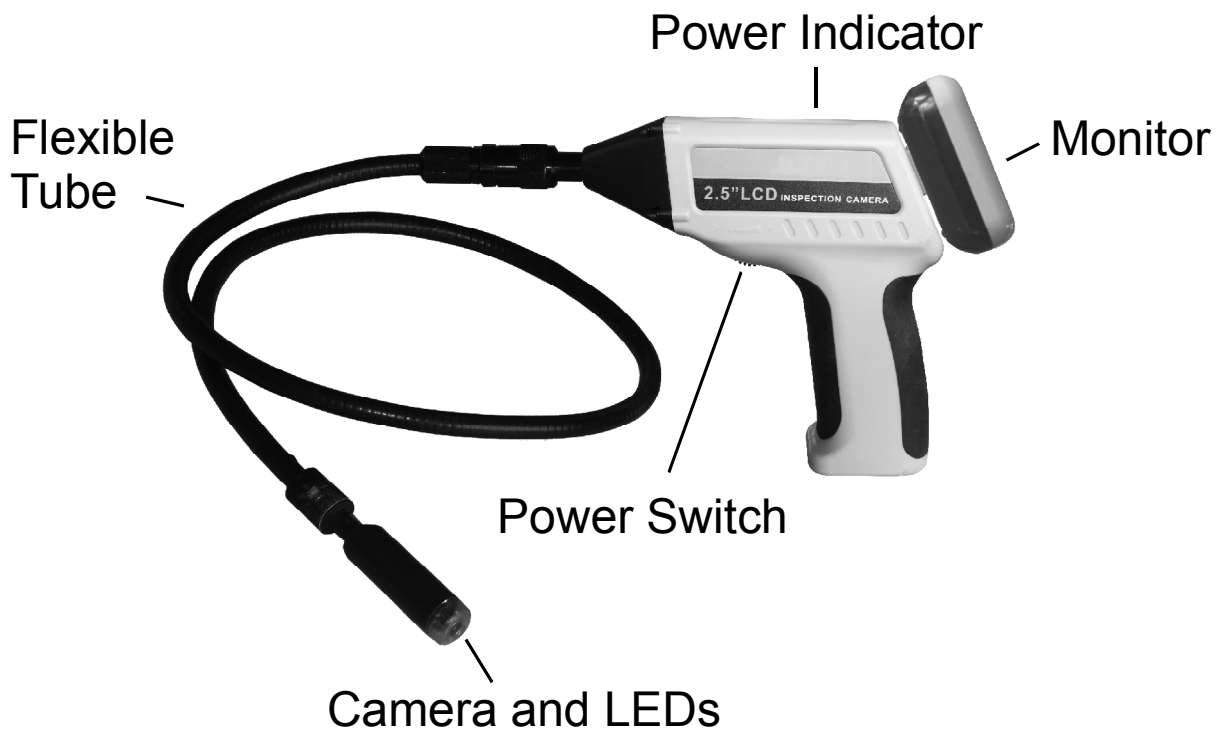
ES049A



# GENERAL DESCRIPTION

The instrument can be used to look into tight spots and beam back real-time video to the monitor. You can use it to inspect vehicle, pipe, machine, box, tank, and etc.

# STRUCTURE



# ASSEMBLY

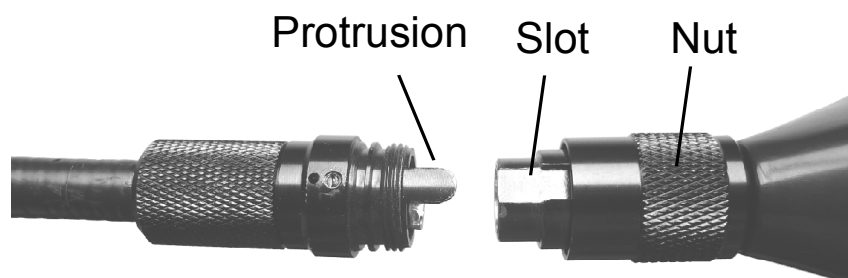
Before use, you must assemble the instrument.

## To Install Batteries



1. Use a suitable screwdriver to remove the screw of the battery cover, and then remove the battery cover.
2. Remove the battery holder from the battery compartment, and install 4 new 1.5V AA batteries in the battery holder in correct polarity. (Proper battery orientation is indicated on the battery holder.)
3. Reinstall the battery holder, the battery cover and the screw.

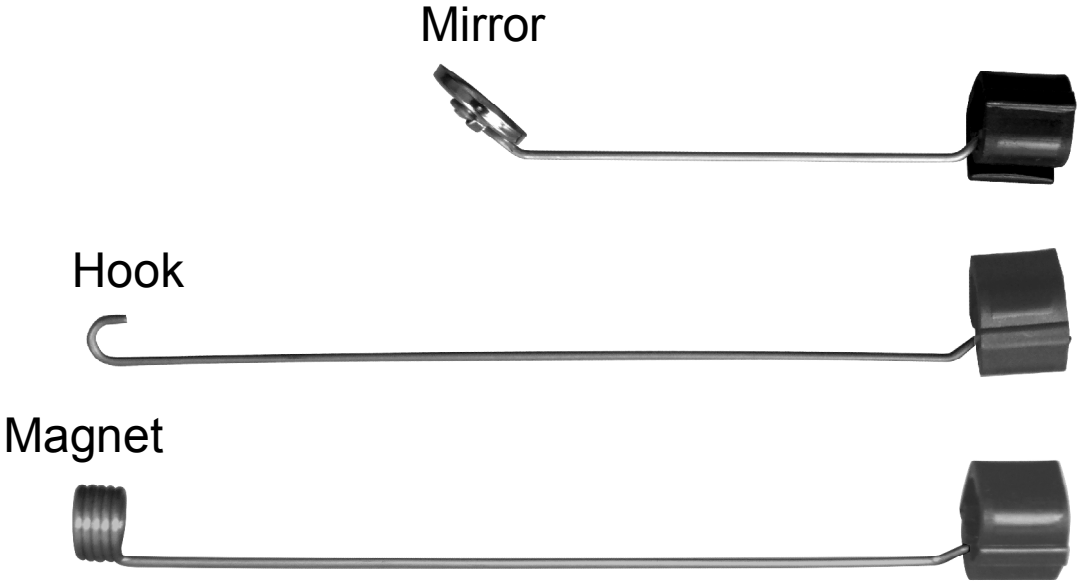
## To Install the Tube with Camera



There is a protrusion on the connecting end of the flexible tube. Slide this protrusion into the slot on the tube connector of the main body. Fasten the knurled nut of the main body until the tube and the main body are connected firmly.

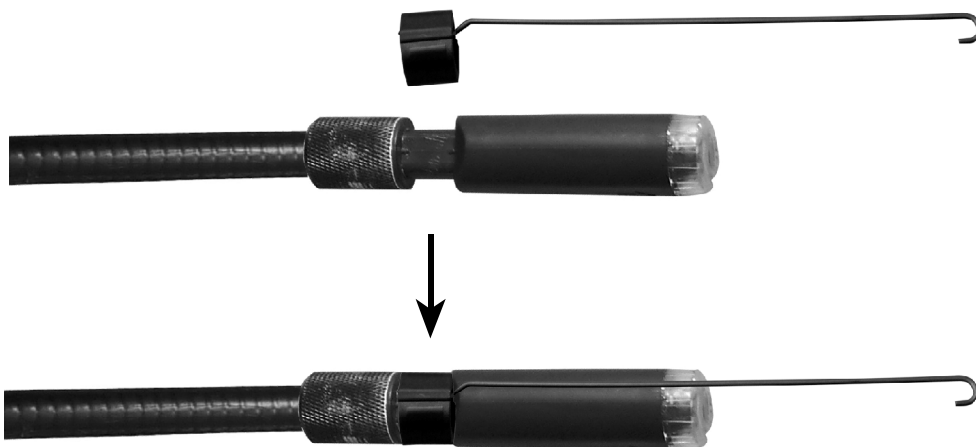
### To Install Accessory

There are 3 accessories: mirror, hook and magnet. Their installation methods are same. You can choose one of them to install to the image head of the tube if necessary.

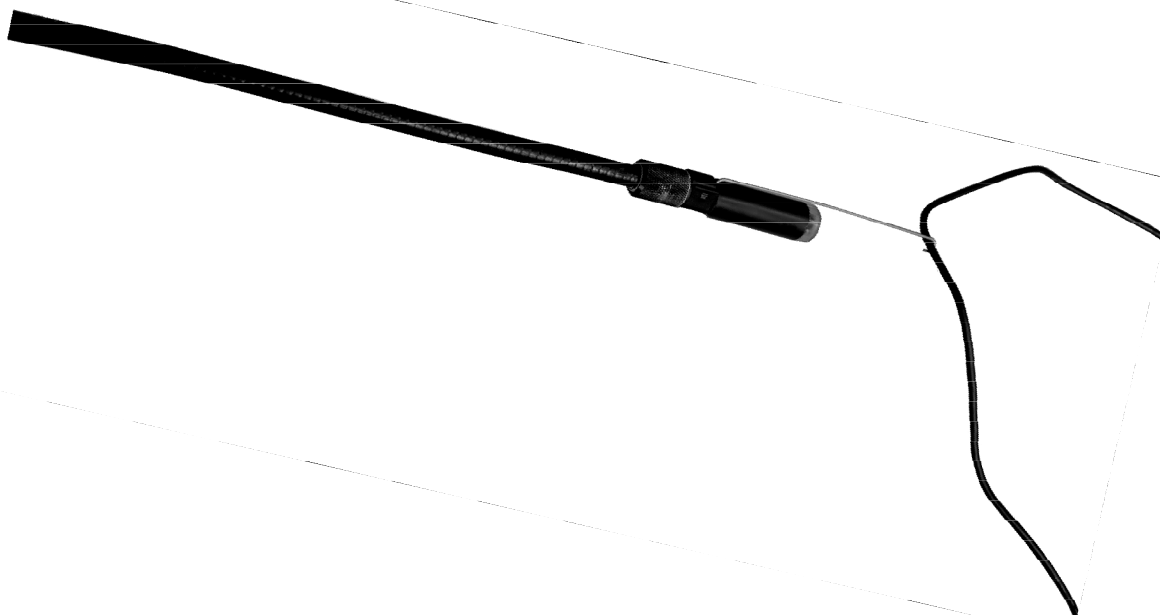


To install accessory, hold the image head of the tube, slip the end of the accessory over the flats of the image head. Adjust the end of the accessory and press the two parts of its end with thumb and forefinger.

**To Install Accessory:**



**Example:** Use the hook to catch a cable.



## To Install the Monitor

The following illustrations show the procedure to install the monitor.



Aim the slot of the monitor at the the signal output connector and gently place the monitor onto the connector.



Slide the monitor downwards.

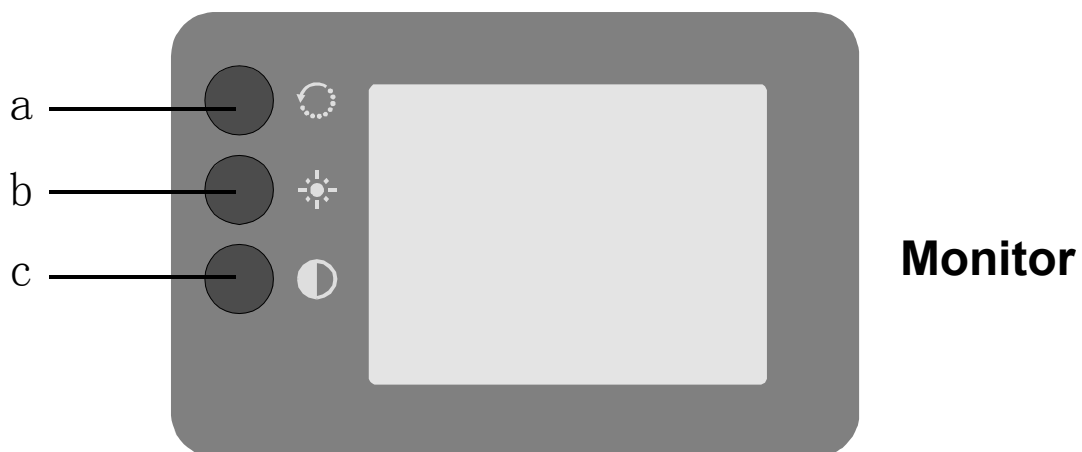


**Note:**

1. To avoid damage to the monitor, turn off the instrument before you connect or remove the monitor.
2. Do not reverse the monitor.

## **OPERATION INSTRUCTION**

1. Roll the power switch to turn on the instrument, the power indicator will light. This switch then acts as a dimmer for the LEDs which surround the camera and provide illumination. The display shows the real-time image caught by the camera.
2. There for 3 buttons on the monitor, you can use them to adjust the image for better effect.



### **Explanations for the buttons:**

**a. " ☉ " Button**

Press this " ☉ " button to mirror the image on the

display.

**b. " ☼ " Button**

Each press of this " ☼ " button increments the display's brightness. When the highest brightness is reached, the display wraps to the lowest brightness.

**c. " ● " Button**

Each press of this " ● " button increments the display's contrast. When the highest contrast is reached, the display wraps to the lowest contrast.

3. You can bend the tube into a certain shape for easy inspection if necessary.



Inspection Example

# SPECIFICATION

<b>Camera</b>	<b>Imaging Sensor</b>	1/4" Color CMOS sensor
	<b>Total Pixels</b>	510×492 (NTSC)
	<b>Output Frame Rate</b>	60 FPS
	<b>Optimum Image Distance</b>	100mm
<b>Display</b>		2.5" TFT-LCD
<b>Image Head Diameter</b>		17mm
<b>Tube Diameter</b>		9.5mm
<b>Tube Length</b>		950mm
<b>Battery</b>		1.5V AA alkaline battery, 4 pieces
<b>Power Consumption</b>		< 2W
<b>Operating Temperature</b>		-5°C ~ 45°C
<b>Operating Humidity</b>		relative humidity < 85%
<b>Storage Temperature</b>		-20°C ~ 50°C
<b>Storage Humidity</b>		relative humidity < 90%
<b>Weight (with batteries)</b>		about 650g

## **NOTE**

1. The instrument (including the tube and its image head) is not waterproof. Don't immerse the tube into water.
2. The instrument contains precision components. Don't drop or bump the instrument, especially the monitor.
3. Do not use the camera if condensation forms inside the lens. Let the water evaporate before use.
4. If the monitor can't work, the cause may be that the batteries are dead.
5. Use moist soft cloth to clean the instrument and then dry it by using dry cloth. Never use solvent and abrasive.

## **CAUTION**

1. Turn off the instrument when not in use.
2. Remove the batteries before cleaning the instrument.
3. Remove the batteries if you don't use the instrument in a long period.
4. Before you install or remove the monitor, you must turn off the instrument; otherwise the monitor may be damaged.
5. Do not short battery terminals or discard battery into fire; otherwise the battery may explode.
6. When you install battery, the battery's orientation must

be correct.

7. Properly dispose of the battery by following all applicable regulations.

## DECLARATION

1. This manual is subject to change without notice.
2. Our company will not take the other responsibilities.
3. The contents of this manual can not be used as the reason to use the instrument for any special application.

### DISPOSAL OF THIS ARTICLE

Dear Customer,

If you at some point intend to dispose of this article, then please keep in mind that many of its components consist of valuable materials, which can be recycled.

Please do not discharge it in the garbage bin, but check with your local council for recycling facilities in your area.

