AX-B150 Video Inspection Camera

1. Safety instructions

Failure to follow the instructions listed below may result in electric shock or personal injury.

- Please read this manual carefully and thoroughly before using this product.
- Do not remove any labels from the tool.
- Keep the work area clean and well lit, cluttered and dark areas may cause accidents.
- Do not operate the tool with the presence of flammable/explosive gases.
- Do not use the product around corrosive chemicals, which can ruin the picture quality.
- Keep bystanders, children and visitors away while operating the tool.
- Stay alert, watch what you are doing and use common sense. A moment of inattention will result in serious personal injury.
- Keep proper footing and body balance all the time.
- Always wear protective eyewear. Dust mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions.
- Do not place this product on trolleys or other slippery slopes. The product may fall off and cause serious injury to a person or damage the product.
- For safety please always keep the video inspection away from any kind of liquid. Liquid increases the risk of electrical shock and damage to the product.
- Do not use this device for personal or medical use.
- The unit is not shock-resistant. Do not use it as a hammer or drop it.
- Remove the batteries before long term storage to prevent battery leak from damaging the instrument.
- Please dispose the batteries properly. High temperature will cause explosions and do not burn the batteries. Strap insulated tape around the battery charges to avoid unsafe contacts with other objects. Please follow the local regulations of battery disposing.



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2. Content



- 1 Camera probe
- 2 LCD and grip
- 3 Magnetic tip
- 4 Hook tip
- 5 Mirror tip
- 6 TV cable



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3. Product overview





- A Lens protector
- B Lens
- C Swan neck probe
- D Probe connector
- E LCD screen
- F Increase LED brightness
- G Image rotation
- H Decrease LED brightness
- I Image zooming
- J Power ON/OFF



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4. Operation Instructions

4.1. Battery Installation

- Unscrew the screw at the end of the grip and remove the battery lid.
- Extract the battery holder from the grip, and install AA alkaline batteries or rechargeable batteries following the correct direction signs indicated on the holder.
- Put back the battery holder following the indicated direction.
- Put back the battery lid and fasten the screw.

4.2. Connect the Unit with a Camera Probe

Connect the inspection unit with a camera probe before operation. To connect the probe to the unit, make sure the keyed ends are properly aligned. Tighten the knob when they are aligned and connected.

4.3. Accessories installation

· Accessories installation of standard

12mm probe

For the three accessories (magnetic tip, hook tip, mirror tip), hold the camera head and slip the semicircle end of the accessory over the camera head. Rotate the accessory by 90 degrees to a fixed position.

· Accessories installation of optional

9mm and 5,5mm probe

Accessories and camera head are connected using threaded screw. It is recommended to put on the thread protector when no attachment is installed. Remove the thread protector before put on other accessories.

4.4. Video Output to TV

To view images from the TV, connect the VIDEO OUT port of the camera and the VIDEO IN port of the TV using included TV cable. Once connection established, the real time image is displayed on both camera and the TV screen simultaneously.

4.5. Basic Operations

- Facing the LCD screen, press and hold (J) for 3 seconds to turn on, and LCD screen will be powered on (press again to turn off the unit)
- Press (F) to increase LED brightness
- Press (H) to decrease LED brightness
- Press (G) to rotate the image each time by 180
- Press (I) to zoom the picture from x1.0 to x2.0

This product is designed for long distance inspection. Classic applications are inspections of HVAC systems, vehicles, circuits, boats and aviation. Under limited conditions, accessories can be used to pick up small objects such as rings and screws.



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4.6. Operation Precautions

- Please read the safety instructions thoroughly before operation, choose a proper working area to reduce the risk of accidents.
- The probe is flexible, which helps you to get to hard-to-reach areas. Please don't insert or bend the camera probe by force. Please do not over bend the probe (normally, the bending radius should more than 5cm), so as not to cause permanent damage to the probe.
- Don't use the probe or camera head to remove barricades, clear pathways or clogged areas. It must not be used as a fishing rod or tape.
- The hand-held LCD display is not waterproof. The camera head and its cover are waterproof, but not acid-proof or fireproof. Touch with these materials will damage the camera head's protective plastic. Do not immerge the camera head into corrosive, oily places or contact high-temperature objects.
- Don't place the inspection into anything or anywhere that may contain a live electrical charge. Please check following methods to avoid injury.

For walls: For inspecting inside the walls, make sure the electricity of the whole house is shut down before using the tool.

For pipes: If you suspect a metal pipe could contain an electrical charge, have a qualified electrician to check the pipe before using. Ground circuit, in some cases, can be returned to the cast aluminum pipes and cause them to be charged.

For automobiles: Make sure the automobile is not running during inspection. Metal and liquid under the hood may be hot. Don't get oil or gas on the camera head.

5. Operation notes

- Please don't operate this product unless the manual has been read and proper training has been completed.
- Don't turn on and off the device continuously. Please allow more than 2 seconds between each On and Off for the unit to properly boot up or shut down. If there is unusual image, please turn off the unit and try again.
- Don't immerse the handheld display unit into water, which will result in electric shock and damage.
- Only while the product is assembled well, the camera head is water-proof, but the handheld display isn't fully water-proof.
- Don't use the product if condensation forms inside the camera head.
- If the tool couldn't work well after turning it on. Please take the battery out. It is dangerous, wait until it is repaired.
- Store idle product out of reach of children and other untrained persons. The tool is dangerous in the hands of untrained users.
- Maintain the inspection tool with care. If the tool is dropped, check for the breakage ,which may affect
 the tool's operation. If it is damaged, have the tools serviced before using. Many accidents are caused
 by poorly maintained tool.
- Use only accessories that are recommended by the manufacturer for your tool. Accessories are suitable for the tool, but may become hazardous when used on another tool.
- Dry your hands before turning the tool ON or OFF and before replacing battery.
- Protect against excessive heat. The product should be put away from heat sources, such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.
- Don't use the tool near moving machinery or areas where the temperature is exceed 45°C.



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- Put on the camera protector after operation.
- Store the product in ventilated and dry places.

Cautions

- Don't drop the product or use by force.
- Don't disassemble the product to avoid failure.
- Don't place the product with corrosive gas or objects.
- Don't expose the product in vibration, high or low temperature.
- Store the product in a safe area.
- Don't immerse the product into water, which will result in damage to product.
- Check the batteries regularly to prevent battery leak.
- Please take out the battery, if it is not for use for long time.

6. Technical specifications

Name

Video Inspection System

Model

AX-B150

Recommended use

Indoor

Viewable angle

60°

Focal lenght

12mm - 50mm and 50cm for your choice / 9mm - 50mm / $5,\!5mm$ - 10mm

Outer diameter of lens

Standard camera lens: 12mm / Optional camera lens: 9mm; 5,5mm

Probe length

12mm lens - 1m,2m,3m (max 5m) / 9mm lens - 1m,2m,3m (max 5m) / 5,5mm lens - 1m,2m,3m (max 15m) Extention for choice

1m, 2m, 3m

Image display

2,4" TFT/LCD

Image resolution

640x480

LCD resolution

320x240

Image rotation

180°

Image zooming

1,0-2,0x

TV output format

NTSC

Protection level

Probe and camera - IP67 / Main body - IP54

Light source



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Ultra brightness LED

Accessory

TV cable

Power supply

4 AA alkaline ir rechargeable batteries

Battery contionuous working time

>3 hours

Working temperature

 $0^{\circ}\text{C-}45^{\circ}\text{C}$

Working humidity

RH 5%-95% non-condensing

Storage temperature

-20°C + 60°C, $\leq 85\%$ (w/o batteries)

Dimension

266mm x 95mm x 66mm

Weight

About 360g (w/o batteries and probe)



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