



DCS200

USER'S MANUAL



THE SEEKER 200

VIDEO INSPECTION SYSTEMS

Please read this manual carefully and thoroughly before using this product.

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INTRODUCTION

The Seeker 200 inspection systems have been designed as a user friendly and economical way of solving hidden problems and increasing productivity. The product has a high clarity color LCD to show clear images. The camera head is housed inside the tip of the probe with adjustable LED lights, which helps you to reach into gaps and holes. The mirror tip is included to make it possible to view different angles. The magnetic tip is used to pick up small metal objects. The hook is used to grab onto objects.

The video inspection systems have the advantages of clear images, easy operation and portability. It is widely used in applications such as HVAC/R building, aviation and vehicles maintenance.

FEATURES

- **DCS200:** 2.4" (70mm) Color LCD Screen for crystal clear image
- 0.47" (12mm) diameter Camera-tipped Probe is flexible and strong with built-in adjustable LED lighting, and is slim enough to perform automotive engine check-up
- Flexible Probe retains configured shape to suit different inspection needs
- View findings instantaneously
- Mirror, Magnet and Pick-up Hook

SAFETY INSTRUCTIONS

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

- Read and understand all instructions prior to any operation.
- Do not remove any labels from the product.
dark areas may cause accidents.
- Do not operate the product in 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 product.
- Stay alert, watch what you are doing and use common sense. A moment of interruption can result in serious personal injury.
- Do not over-reach. Keep proper footing and balance at all times.
- Always wear eye protective gear. Dust mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions.
- Do not place the product on any unstable cart or surface. The product may fall causing serious injury to a person or serious damage to the product.
- Never spill liquid of any kind on the video display units. Liquid increases the risk of electrical shock and damage to the product.
- Do not use the device for personal or medical use.
- The units are not shock-resistant. Do not drop it.

PRODUCT COMPONENTS

1. Hand Held Display Unit
2. Camera Head and Probe
3. Magnetic Tip
4. Hook Tip
5. Mirror Tip

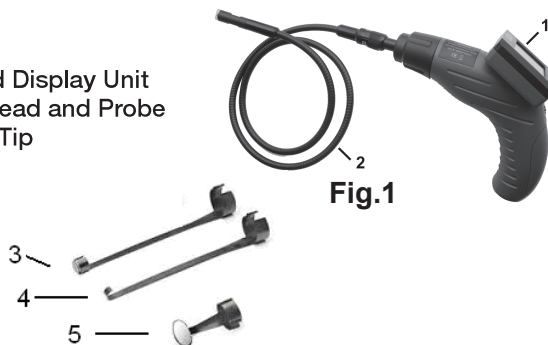


Fig.1

Fig. 2

- A. LCD Screen
- B. Battery Compartment
- C. Wheel / LED Lighting Adjusting Wheel
- D. Probe Connector
- E. Probe
- F. Camera Head

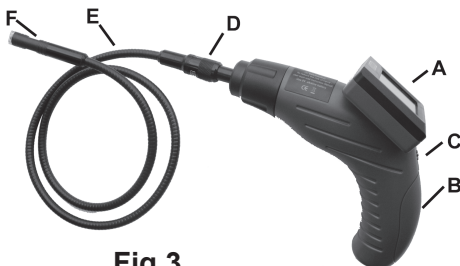


Fig.3

INSTALLATION

BATTERY INSTALLATION:

1. Use a screwdriver to open the screw on the battery compartment cover (See Fig. 4).
2. Insert one "9V" alkaline battery (6LR61) into the battery compartment. Close the battery cover and fasten the screw (See Fig. 5).

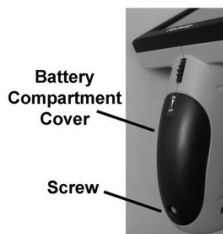


Fig.4



Fig.5

BATTERY PRECAUTIONS!

- Remove the battery while cleaning the unit.
- Remove the battery before storing the unit for a long period of time.
- Be sure to install the battery with the correct polarity as indicated in the battery compartment.
- Properly dispose of the batteries. Exposure to high temperatures can cause the batteries to explode. Do not dispose in 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.

CONNECTING THE DISPLAY UNIT TO THE CAMERA HEAD AND PROBE:

The display unit must be connected to the camera head and probe. To connect the probe to the display unit, make sure the keyed ends are properly aligned (See Fig. 6). Once they are aligned, tighten the nut.

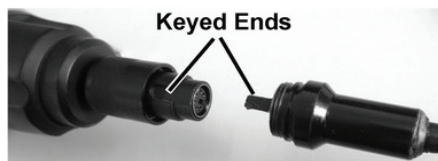


Fig.6

ACCESSORIES INSTALLATION:

The three accessories include mirror tip, hook tip and magnetic tip (See Fig. 2). All are attached to the camera head the same way. Hold the camera head as shown in Fig. 7, slip the semicircle end of the accessory over the flats of the camera head and then rotate the accessory 90° to fix as shown in Fig. 8.



Fig.7



Fig.8

OPERATION INSTRUCTIONS

BASIC OPERATION:

To turn the unit on, hold the LCD display unit facing you (See Fig. 9). Roll the wheel towards you to turn the power on. The wheel then acts as a dimmer for the twin LED's (See Fig.10), which is the power supply for the camera.



Fig.9



Fig.10

This product is designed for hard-to-reach distance inspection. Typical applications include HVAC/R inspections, car inspections, circuitry, vessel, and aircraft. While in operation, the product is easy to extend ahead. The accessories can be used to pick up items such as rings or screws on the floor.

OPERATION PRECAUTIONS!

1. Please read all the safety instructions carefully.
2. The probe is flexible to help you operate in hard-to-reach areas. Please don't insert or bend by force. Please do not over bend any part of the probe. Normally, the bending radius should not be less than 2" (50mm) to prevent from causing permanent damage to the probe.
3. Don't use the probe or camera head to modify surroundings, clear pathways or clogged areas.
4. The hand-held display unit is not waterproof. The camera head and its cover is waterproof, but not acid-proof or fireproof. Do not touch these materials or they will ruin the camera head's protective plastic. Avoid submersing

the camera head into corrosive, oily places or high temperature objects.

5. Don't place the camera head or probe into anything or anywhere that may contain a live electrical charge. Please check following methods to avoid injury.

For walls: For inspecting the inside walls, be sure to shut off the circuit breaker to the whole house 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. A ground circuit, in some cases, can be returned to the cast aluminum pipes and cause them to be charged.

For automobiles: Be 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.

- Please do not operate this product unless the manual has been read thoroughly and proper training has been completed.
- Do not immerse the handheld display unit in water which will result in electric shock and damages.
- The camera head is water-proof, but the handheld display is not water-proof.
- Do not use the product if condensation forms inside the camera head.
- If the tool does not work well after turning it on. Please take the batteries out and do not use. Please have the unit checked by a qualified technician.
- Store idle products out of reach of children and other untrained personnel. The product is dangerous in the hands of untrained users.
- Maintain the inspection product with care. If the product

is dropped, check for the breakage which may affect it's operation. If it is damaged, have the product serviced before using. Many accidents are caused by poorly maintained products.

- Use only accessories that are recommended by the manufacturer for your product. Accessories are suitable for the product, but may become hazardous when used on another product.
- Dry your hands before turning the product ON or OFF and before replacing battery.
- Protect against excessive heat. The product should be kept away from heat sources, such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat. Do not use the product near moving machinery or areas where the temperature exceeds 113°F (45°C).
- Store the product in ventilated and dry places.

MAINTENANCE INSTRUCTIONS

- Product service must be performed only by qualified repair personnel. Services performed by untrained repair personnel could result in injury.
- When servicing the product, only use identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electrical shock or injury.
- Don't attempt to take any pieces of this product apart unless directed by this manual.
- Provide proper cleaning. Don't use acetones to clean the product. Use soap or soft cloth to clean. Gently clean the LCD with a dry cloth. Remove the battery before cleaning.

- Upon completion of any service or repair, please ask the service technician to check if the product is in proper working condition.
- Stop using the unit if it starts smoking or emitting noxious fumes.
- Remove the battery and ask a qualified personnel under the following conditions:
 - A. If liquid has been spilled or objects have fallen into the product.
 - B. If product doesn't operate normally even if you have followed the operation instructions.
 - C. If the product has been dropped or damaged in any way.
 - D. When the product exhibits a distinct change in performance.

TROUBLE SHOOTING

| Symptoms | Reasons | Solutions |
|--|-------------------------------------|--------------------------------------|
| The connection Display is on, but no image. | The connection is loose. | Check connection and try again. |
| | Image head covered by debris. | Check if it is covered by debris. |
| LED's on the camera head are dim at max bright, display changes from black to white, color display turns itself off after a period. | Low battery. | Replace battery. |
| The product won't turn on. | Dead batteries. | Replace battery. |

SPECIFICATIONS

| Video Inspection | | Specifications |
|----------------------------------|--------|--|
| Recommended use | | Indoor |
| Viewable Angle | | 60° |
| Focal length | | 50mm |
| Viewable Distance | | .98" to 11.8" (2.5 to 30cm) |
| Diameter of Camera Head | | .47" (12mm) |
| Image Display | DCS200 | 2.4" TFT/LCD |
| Resolution | | 320 x 234 pixels |
| Accessories | | Mirror tip, Hook tip and Magnetic tip |
| Probe Length | | 39.4" (100cm) |
| Probe and camera head protection | | IP67 |
| Light Source | | Adjustable LED |
| Power Source | | One "9V" alkaline battery (6LR61) |
| Estimated Battery Life | | More than 2.5 hours |
| Operating Temperature | | 32° to 113° F (0° to 45°C) |
| Operating Humidity | | 5%~95%Rh non-condensing |
| Storage Temperature | | -4° to 140°F (-20° to 60°C) ≤85% (w/o battery) |
| Body Dimensions | DCS200 | 8.5" x 4.6" x 3.2" (215 x 156 x 80mm) |
| Body weight | | About 218g (w/o battery and probe) |

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 environment which is with shock, too high or too low temperatures.
- Store the product in a safe area.
- Don't immerse the product into water which can cause damages to the product.
- Please take out the battery if not in use for long period of time.

WARRANTY INFORMATION

The product is warranted to be free from defects in materials and workmanship for a period of one year from the date of purchase.

NOTICE: The warranty does not apply to the following conditions:

- Disassembling the product will void the warranty.
- We are not responsible for any damages resulting from abrasion, water, dropping or disassembling.

TIP! Most parts of the products can be recycled.
Please refer to your local regulations for proper disposal.



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DCS200/DCS300 User's Manual

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NOTICE - WE ARE NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

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