
Wireless USB Transmitter/ Wireless USB Receiver

Model: DCS100T/DCS100R

Operation Manual



Wireless USB Transmitter/

Wireless USB Receiver

Model: DCS100T/DCS100R

Overview

DCS100T/DCS100R USB wireless video inspection has been designed as a user friendly and economical way of solving hidden problems and increasing productivity. (eg. Inspect vent pipe and system of air conditioner, machine equipment, engine and so on).

Wirelessly transmit the image signal between the unit and the receiver. Then the receiver transmit to computer by USB, which is facilitate for watching and collecting. The camera head is connected to the probe and with adjustable LED lights, which helps you to reach gaps and holes. The camera head has equipped with several accessories, which makes it flexible. The magnetic tip is used to pick up small metal objects. The mirror tip is easy to view the 90 ° angle. The hook is used to grab onto objects.

The product has built-in polymer lithium battery, also could use AC adapter for charging with LED indication. [The receiver has USB 2.0 interface, which is power supplied by USB to computer.](#) It has the advantages of small size、clear image、stable performance、easy operation and portability. It is widely used in applications such as the industry, the building, the aviation, the vehicles maintenance.

Safety Instructions

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

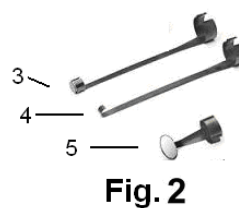
- Read and understand all instructions prior to any operation.
- Do not remove any labels from the tool.
- Keep the work area clean and well lit, cluttered and dark areas may cause accidents.
- Do not operate the tool with the presence of flammable/explosive gases.
- Do not use the product around corrosive 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.
- Do not overreach. Keep proper footing and 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 any unstable cart or surface. The product may fall causing serial injury to a person or serious damage to 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.

Battery precautions

- Please use the standard factory power adapter, otherwise will destroy the inside battery.
- Please completely exhaust the power for the first time. And we recommend full charging and full discharging for the first three times. And the charging time should not less than 12 hours. Fully activate the battery could play maximum capacity of the built-in battery.
- The charging and discharging time differs because the different power from the factory.
- Please always keep the charging connector away from the metal and oily objects.
- Please fully charging the battery before it is not for use, to make sure the high performance while using.
- Don't compress and puncture the inside battery.
- Please stop operating if the inside battery is broken.
- Don't throw the product into fire, which will cause explosion.
- Please dispose the battery properly. High temperature will cause the battery to explode. Please follow the local regulations for disposing the old battery.

Product Configures



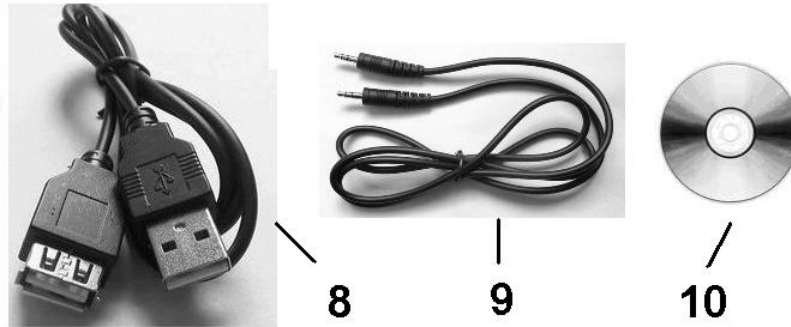


Fig.4

1. Camera head and Probe ×1
2. The inspecting grip ×1
3. Magnetic tip ×1
4. Hook tip ×1
5. Mirror tip ×1
6. Receiver ×1
7. DC adapter ×1
8. USB cable ×1
9. Signal cable ×1
10. CD ROM ×1

Tool components

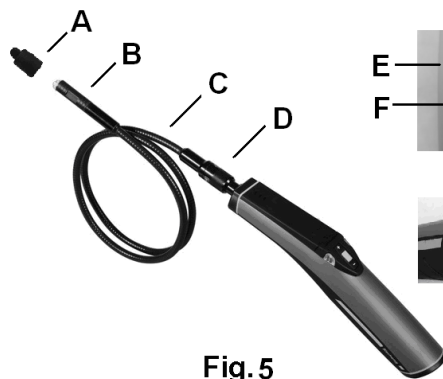


Fig.5

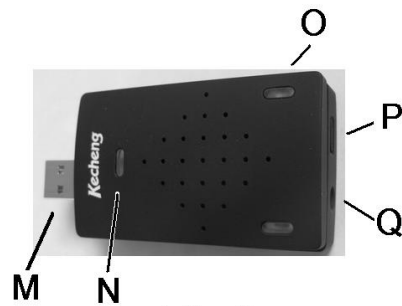
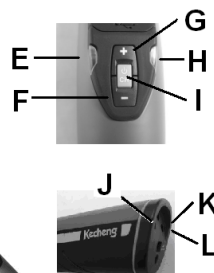


Fig.6

- A. Camera protection
- B. Camera head
- C. Probe
- D. Probe connector
- E. Channel indication (green) —the flash times corresponding CH1~CH4
- F. —LED brightness decrease key
- G. —LED brightness increase key
- H. Low battery indication (red)
- I. —Switch / exchange the wireless transmission channel

- J. Signal cable interface
- K. Charging interface
- L. Charging light indicator
- M. USB interface
- N. Working light indicator
- O. Channel light indicator—the flash times corresponding CH1 ~CH4
- P. CH—Wireless channel selection
- Q. Signal cable socket

Operation Instructions

●Battery Charging

- 1、Connect the DC cable to the tail of the handle L.
- 2、Plug the AC plugs to household power outlet.
- 3、The LED L turns red ,means charging.
- 4、The LED L turns green, means fully charging.
- 5、Pull out the AC plug of adapter.

●Connect the grip unit to camera head and probe

The inspecting grip must be connected to the camera head and probe. To connect the probe to the grip, make sure the keyed ends are properly aligned. (Fig7). Once they are aligned, finger tighten the nut.



Fig.7

● Accessories installation

If you need to use the three accessories as FIG2 (magnetic tip、hook tip、 mirror tip), please accord the steps followed to connect.

As showed in Fig 8, hold the camera head .Slip the semicircle end of the accessory over the flats of camera head . Then rotate the accessory 90°to fix ,as shown in Fig9.



Fig.8



Fig.9

● Program installation

Your computer should support the follows, then the receiver could connect to computer for use:

- P4 1.4GHz or higher CPU
- 256 MB RAM of system memory or above (recommended)
- One available USB port (USB2.0)
- Graphics Card (Must support DirectX 9.0c)
- 1GB Free HD Space
- CD-ROM Drive (For software installation)

- Microsoft Windows XP/vista/win7

- 1、Place the CD, find the CD directory from "My Computer", click on "KC-Setup" file, install the drivers;
- 2、Directly connect the receiver to computer (or use cable), Windows will discover the new device, just one moment, there will be tips for normal use;
- 3、The CD contains share software of AMCAP, you could copy to your computer and no need installation; You could another video software also;

●Operation methods

1、How to operate the grip:






- a、Press  key, the grip to power on, the times the green LED flashes means the corresponding channel (The default channel is CH1).
- b、Press  to increase the two LED brightness. (Fig.10)。



Fig.10

- c、Press  decrease the two LED brightness.
- d 、 Press  to choose wireless transmission frequency, every press to choose CH2——CH3——CH4——CH1 repeatedly. (The green LED accordingly flashes twice——three times——four times——once) .

2、How to operate receiver:

- a、Directly connect the USB interface of receiver to computer (or use USB cable).
- b、Press  to choose receiving frequency CH2——CH3——CH4——CH1 repeatedly (the default frequency is CH1).
- c、Open video software, select “KC362 USB Video”to monitor real-time image.

3、Connect the grip to receiver

The product could wirelessly transmit the image signal between the grip and the receiver; as well the unit could transmit by connecting the grip to receiver by cable; While cable transmission, the wireless functions is useless to ensure the image quality and not interfered from outside.

- 4、This product is designed for hard-to reach distance inspection. Typical applications include HVAC inspection、car inspection、circuitry、vessel and aircraft. While in operation, the product is easy to extend ahead. If there is distance limitation, the accessories could be used to pick up the ring or screws on the floor.

● Operation Pecautions:

- a、 Please read the safety instructions carefully, choose desirable work area for fear causing danger.
- b、 The probe is flexible to help you operate in hard-to-reach areas. Please don't insert or bend by force.. Please do not overbend any part of the probe. Normally, the bending radius should more than 5cm to prevent from causing permanent damage to the probe.
- c、 Don't use the probe or camera head to modify surroundings, clear pathways or clogged areas. It couldn't be used as a fishing rod or tape.
- d、 The hand-held display unit is not waterproof .The camera head and its cover are waterproof, but not acid-proof or fireproof. Don't touch with 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.
- e、 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 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 aluminium 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 imager head.

Operation Notes

- Please don't operate this product unless the manual has been read and proper training has been completely.
- The red LED will on when low battery of the inside battery.
- Please be sure to shut off the image software firstly, then turn off the product and pull out the cable before turn off your computer, which could avoid computercrash.
- Don't use sharp objects、 metal or liquid to touch the signal connector in order to avoid short circuit or product damage
- Don't let any object compress the signal cable, or placed the signal cable in a humid places.
- Don't place the signal cable on places where people often walk in order to avoid being damaged.
- Don't immerse the grip inspection 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 grip and the receiver isn't water-proof.
- Don't use the product if white dew forms inside the camera head.
- If the tool couldn't work well after turning it on. Please stop use and have the unit checked by a qualified technician.
- 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 tools's operation. If it is damaged, have the tools 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 tool, but may become hazardous when used on another product.
- Dry your hands before turning the tool ON or OFF.
- 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. Don't use the tool near moving machinery or areas where the temperature is exceed 45°C.
- Please cover the camera protection while not in use.
- Store the product in ventilated and dry places.

Maintenance Instructions

- Product service must be performed only by qualified personnel. Performed by untrained personnel could result in injury.
- When servicing the product, only use identical replacement parts. Use of authorized parts or failure to follow maintenance instructions may create a risk of electrical shock or injury.
- Don't attempt to disassemble the product other than the needs specified on this manual.
- Provide proper cleaning: don't use acetone to clean the product. Gently clean the LCD with a soft dry cloth.
- Upon completion of any service or repair, please ask the service technician to check if the tool is in proper condition.
- Stop using the unit if it starts smoking or emitting noxious fumes.
- Please ask qualified person under the following conditions:
 - a、 If liquid has been spilled or objects have fallen into 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 Shootings

Problems	Causes	Solutions
Can't charge the grip.	Adapter didn't connect well with grip power	Please check and try again.
	The connect or cable is broken.	Replace and try again.
	Dead battery.	Ask a technician to replace the battery.
The computer couldn't find new device.	1、Loosed cable.	Check and connect again.
	2、The computer is not configured with USB2.0 interface.	Use proper computer.
	3、Drivers is not installed.	Check and install the drivers.
The computer is on but without image.	1、The channel set is not right.	Set the same receiving and transmitting channel.
	2、The probe is loosed.	Check and connect again.
	3、Stains on the camera head.	Check if exists stains.
The image has spots.	Spots on the camera head.	Check and clean the camera head.
LED lighting appears to be dimmer at maximum	Low battery	Use adapter for charging.
The grip couldn't power on.	The circuit inside grip is in protection state.	Use adapter for charging to release.
	Low energy of inside battery.	Use adapter for charging.
	Dead battery	Ask a technician to replace the battery.

C a u t i o n s

- 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 vibrated 、 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. • Please charge the inside grip battery every three month if it is not in use for long time.

Technical Specifications

Name	USB wireless video inspection	
Model	DCS100T/DCS100R	
Recommended use	Indoor	
Viewable angle	60°	
Focal length	50mm	
Diameter of camera head	12mm (or other size)	
Connection	Standard USB connection	
Valid pixels	300 thousand pixels	
Image size	640×480	
Wireless transmission frequency	2414MHz 、 2432MHz 、 2450MHz 、 2468MHz	
Wireless transmission distance	Up to 10M; If no obstacles, will more than 10M.	
Accessories	Magnet tip、hook tip、mirror tip、 USB cable、 Signal cable、 CD ROM	
Probe length	100cm or your requirements	
Probe and camera head protection	IP67	
Light source	High lighting LED	
Adapter	INPUT	AC 100~240V (50~60Hz)
	OUTPUT	DC 5.5V 1.5A
Inside battery	Polymer Lithium battery	
Battery capacity	1200mAh	
Charging time of inside battery	About 3hours	
Battery life	About 2hous	
Operating temperature	0℃ ~45℃	
Operating humidity	RH 5%~95% non-condensing	
Storage temperature	-20℃ ~+60℃ , ≤85% (w/o battery)	
Dimension	Grip	266mm×73mm×80mm
	Receiver	83mm× 42mm× 19mm
Weight	Grip	About 159 g (w/o probe)
	Receiver	约 35g

Warranty

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 laser tool will void the warranty.
- We are not responsible for any damage resulting from abrasion, water, dropping or disassembling.

Tips: Most parts of the product could be recycled, please refer to your local regulations for disposing of them instead of throwing into the dustbin.

Warning

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 and
 - (2) This device must accept any interference received, including interference that may cause undesired operation
- Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.