

ToolSmart Illuminated Inspection Camera

Model: TS07

Operation Manual



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Overview

TS07 product has CMOS image sensor, it combines the light function and wifi camera head with one product. Lighting for the Scope's line-of-sight camera is provided by a powerful LED, also can send the target video and image to the platform device for remote recording and review.

The unit uses WIFI technology and supports iPad/ iPhone/ Android .etc. It is easy for realtime image display, also can take a photo and video using a platform.

LED flashlight can be used separately with several modes or to illuminate camera's field of view. It has built-in polymer lithium battery, also could use 5V DC adapter or USB port for charging with LED indicator. It has the advantages of small size、stable performance、easy operation and portability. It is widely used in applications such as daily carry, camping, on foot ,hunting, fishing, industry, the building, the aviation, the vehicles maintenance and so on.

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.
- Don't stare at the flashlight or exposure the light to another person, it will hurt people's eyes and blasting flash function can make eyes temporarily blind dizzy.
- Do not operate the tool with the presence of flammable/explosive gases.
- Keep bystanders、children and visitors away while operating the tool.
- Please put the device away from children while not use, otherwise will cause danger.
- Don't operate the device under humidity, low temperature or high temperature for long time, otherwise will damage the device and decrease the lifetime.
- The unit is not shock-resistant. Do not use it as a hammer or drop it.

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.

Battery precautions

- Take off the battery when clean the device.
- Take off the battery if not use for long time.
- Place the battery with right polarity.
- The unit can connect the USB port to charge. Please use the standard factory connecting wire.
- 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.
- Don't immerge the battery inside water.
- Don't allow children to touch the battery.
- Please dispose the battery properly. High temperature will cause the battery to explode. Please follow the local regulations for disposing the old battery.

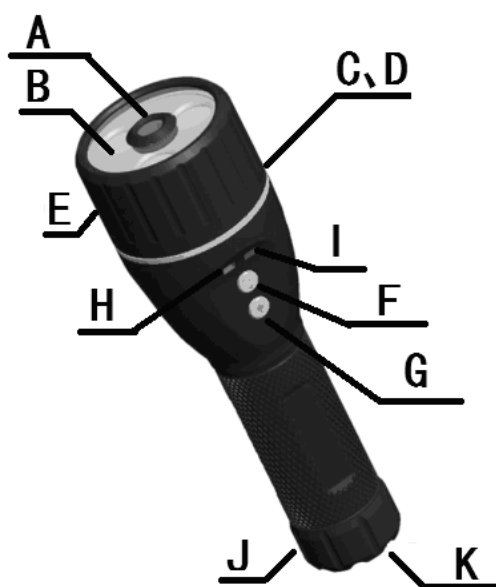
Product Configures



1. video flashlight ×1

2. USB charging/interface cable ×1

Product Configures



A: Camera head

B: LED lights

C: Charging hole (inside the front cover)

D: Return to factory default set hole (at the opposite side of front cover charging hole).

E: Front cover



F: WIFI camera power button. Hold for 1s to turn on the WIFI camera head; Hold 1s again to turn off the camera head.



G: Flashlight LED power button, each press to switch the lighting mode.

H: Camera head power indicator (green) (Flashes if the camera head battery is low).

I: WIFI indicator (Blue) / charging indicator (green) (if the flashlight is low battery, flashes green)

J: Battery cover

K: Safety sling hole.

Operation Instructions

● Battery Installation

The product uses 3.7V rechargeable cylinder Li-on battery.

- 1、Counter-clockwise open the battery cover;
- 2、As per the right polarity, insert the battery with the positive pole ahead.
- 3、Clockwise direction to close the battery cover.





Tips: The battery is installed before leaving factory, please remove the insulation spacer before use.


●To charge the battery:


- 1、Power off the flashlight and the camera power button.
- 2、Counter-clockwise direction to rotate the front cover and show the charging hole.
- 3、Plug the USB charging wire into the charging interface of main body. And connect the other side of charging wire to the computer's USB port or other 5V power supply with USB port (iPhone and ipad adapter is compatible).
- 4、When the green indicator light in the right of faceplate flashes 1Hz, it means charging.
- 5、When the green light in the right of faceplate is on all the time ,means fully charged.
- 6、Pull out the cable, then put on the front cover.



NOTES: Please keep the unit turn off while charging to avoid power loading. The charging time may last for more than 6 hours. If you use USB cable for charging, the charging time will be longer.

●USING THE FLASHLIGHT

- 1、Press  the first time, the flashlight enters 100% level, it is better for searching ,inradiation the far target.
- 2、 Press  the second time, the flashlight enters 50% level, it is better for close distance use.
- 3、 Press  the third time, the flashlight enters 25% level, it is better for close distance use.
- 4、 Press  the fourth time, the flashlight enters fast strobe mode.

5、 Press  the fifth time, the flashlight enters SOS strobe mode, it is better for SOS.

6、 Press  the sixth time, power off the flashlight.

NOTES:a、 Under any mode, no matter what status, holding  for 2s to turn on SOS mode, press  again to turn off the flashlight power.


b、 While use the device as a flashlight, the light brightness level will affect the battery working time, the higher the brightness, the shorter battery working time.

c、 During the flashlight is on, when it is low battery, the green light in the right of faceplate will flash every 4s until shut off. If it is very weak, it will turn off automatically.

● **WIFI camera operation instructions**

1、 Holding  for 2s to turn on the WIFI camera power, the green light will be on .

2、 After about 20s, the blue WIFI light will be on, also “IP BoreScope” will be found. The received image and video can be reviewed via App. During image transmission, the blue WIFI light will flash in a fast speed.

3、 Hold  for 2s, the green light is off and the WIFI camera will be off.

NOTES:a、 During working, if the blue wifi light is off, or the green light flashes, it means the battery is low, please use after charging.

b、 If the image environment is too dark, turn on the flashlight button, first press (100%)、 twice (50%) or third time (25%) , until you get a desirable status.

c、 While the camera head and the flashlight works at the same time,the green power light flashes mean low battery. You can decrease the brightness or shut off the flashlight to have a long working time.

● **About WIFI image wireless transmission**

This product uses WIFI wireless transmission, can work with iPhone/iPad and Android. On the intelligent platform, user can take a photo、 Video and review.

How to work with the intelligent platform, please refer to APP operation instructions.

Operation Precautions:

- Please read the safety instructions carefully, choose desirable work area for fear causing danger.

- If the battery is low while camera working, the green light will flash, after a while the camera head will turn off automatically. So please charge the battery in time to avoid to delay your operation.

- As a flashlight if the battery is low, the charging indication light inside the front cover will flash every 4s, if the battery is too weak , the flashlight will turn off automatically.

- Please keep the camera head surface clean, otherwise will affect the image clarity.

- Please dry your hand before using the product, also can't immerce the product in water, it will destroy the product or shock hazard.

- Keep the product away from the high temperature objects, such as radiator、 heat facility、 stove or another product could cause heat (including magnifying glass). Don't operate the product under environment temperature

above 45°C.

- Take care of this product, if drops, please check if every parts are ok, otherwise will affect the operation.If any damage, please repair it well, then operate.
- Store the product in aeration-drying places.
- Use accessory from the default factory, otherwise will cause danger.
- If the product doesn't work well or smell strange or smoking, please turn off and stop using, otherwise will cause danger.
- If the following condition occurs, please ask a professional person to repair:
 - a、 There is liquid or strange objects inside the product.
 - b、 The product doesn't work according to the manual.
 - c、 The product is dropped or there is damage.
 - d、 The performance differs so much..
- Electromagnetic compatibility declaration:

This product has been tested in accordance with the electromagnetic compatibility of the European Union and the approval, this does not guarantee that this product is absolutely not subject to electromagnetic interference, please avoid using this product in strong electromagnetic environment.

1. Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. 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.
3. This equipment complies with radio frequency exposure limits set forth by the FCC for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 5mm between the device and the user or bystanders.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Trouble Shootings

Problems	Causes	Solutions
Can't charge.	Loose connection of the charging wire	Please make sure the connection is good before use.
	The Charging interface or wire is bad	Replace before use
	Dead battery	Ask a technician to replace the battery.
The product can't power on.	The circuit is in protection status.	Use USB charging wire for charging to release.
	Low energy of inside battery	Take off the battery, charge then install again to turn on
	Dead battery	Use USB cable to charge
	The circuit is in protection status.	Replace the battery
Blue light off or 20s after turning on the blue light is not on	Low battery.	Use USB cable to charge
The image has spots	The camers head has spots.	Check and clean.
The image is still or disappears	There is interference	Restart the device and connect

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.
- Keep the product clean and dry.
- 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 temperature.
- Don't immerse the product into water, which will result in damage to product.
- Please charge the inside battery regularly (charging every three month is recommended) to avoid overdischarge of battery.
- Take out the battery if not use for long time.

Technical Specifications

Name		ToolSmart Illuminated Inspection Camera
Model		TS07
Lighting		3pcs of 2W high brightness LED, Max: 600 lumens.
Light Mode		5 levels (100%—50%—25%—8Hz fast strobe—SOS—turn off , in turns)
WIFI camera information	Image sensor	720P CMOS sensor
	Viewable angle	About 62°
	Visible range	60mm to without end
	Image zip mode	Motion-JPEG-N
	WIFI transmission distance	More than 10m at bleakerbleakest places
	Wireless net standard	WIFI 802.11 b/g/n
	Support WIFI platform	Support iPad / iPhone / Android and so on
Accessories		USB cable (use adapter of Ipad and Iphone, compatible with all computer
Protection		IP54
Power supply		Inside replaceable 3.7V cylinder Li-on battery
Continuous working time		1.8 hours @ 100% brightness, 3.5 hours @ 50% brightness, 7 hours @ 25% brightness, 4 hours @ wifi working independent
Charging voltage		DC 5V
Charging current		Max. 1.2A
Operating temperature		0℃~45℃
Operating humidity		RH 5%~95% non-condensing
Storage temperature		-20℃~+60℃ , ≤85% (w/o battery)
Dimension		188mm (L) ×Φ40mm (Head Φ58mm)
Weight		About 325g (with battery)

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.