

CCTV Tester

User's Manual



Table of Contents

1,	Safety Information	2
	1.1 Precaution before using the tester	2
	1.2 Precautions when using the tester	2
	1.3 Precautions for battery charging and using.....	2
2,	Introduction:	2
	2.1 Features and functions	2
	2.2 Packing list.....	3
	2.3 Function of each part	4
	2.4 Specification	6
3,	Operation Introduction	7
	3.1 Power and battery	7
	3.2 Main menu introduction.....	7
	3.3 Video test.....	8
	3.4 System information sub-menu.....	8
	3.5 PTZ test	9
	3.6 UTP cable test	10
	3.7 Video generating.....	11
	3.8 RS485 data test	12
4,	Warranty	13
	4.1 Warranty items	13
	4.2 Warranty exclusion	13
	4.3 Complemented items.....	13

1, Safety Information

1.1 Precaution before using the tester

- A. Make sure to read the user's manual before using the product.
- B. Make sure to check the input and output range of voltage or current at all input and output ports before connecting, so that the system cannot be overloaded.
- C. The following operational environment should be maintained constantly:
 - Temperature: -10degC to 50degC
 - Relative humidity: 30% ~ 90%
 - Recharging voltage: 9V ---12V

1.2 Precautions when using the tester

- A. Do not use the tester in damp, humid or leaking gas environments.
- B. Do not handle the tester with wet hands.
- C. To avoid damage, be careful not to subject to shock or shake the tester while in use.
- D. Avoid areas with strong magnetism or electric waves, which could cause influence measuring results.
- E. Be careful not to expose the ports or joints to dirt or liquid.
- F. Do not disassemble the tester.

1.3 Precautions for battery charging and using

- A. Use only original re-chargeable batteries with the tester. When charging the batteries, use the original power adapter.
- B. **Make sure not to change the polarization of batteries!**
- C. Do not short-circuit or disassemble batteries.

2, Introduction:

2.1 Features and functions

A. Video test

The video signal and quality of a picture can be tested.

B. PTZ controlling

It has a basic operational test of PTZ products, Function includes pan/tilt, zoom in/out, preset setting and operation, speed adjustment etc; support multi-protocol and baud rate (2400, 4800, 9600, 19200 bps) communication via RS-232 and RS485 port.

Protocols include most popular brands such as: Pelco D & P, Samsung, Panasonic, Minking, Vido, Yaan, Molynx, B01, A01, LiLin, CSR600, Alec, Vicon, DynaColor, VideoTrec, AD, KDT KB3, KDT 405, KDT 304, LG (please confirm required formats on placing order)

C. UTP cable test

Wiring condition (disconnected, short, pairing, and continuity) can be tested and shown on the screen.

D. Video signal generation

It can output Green, White & Black and Blue screen to allow a technician to test a video monitor or DVR.

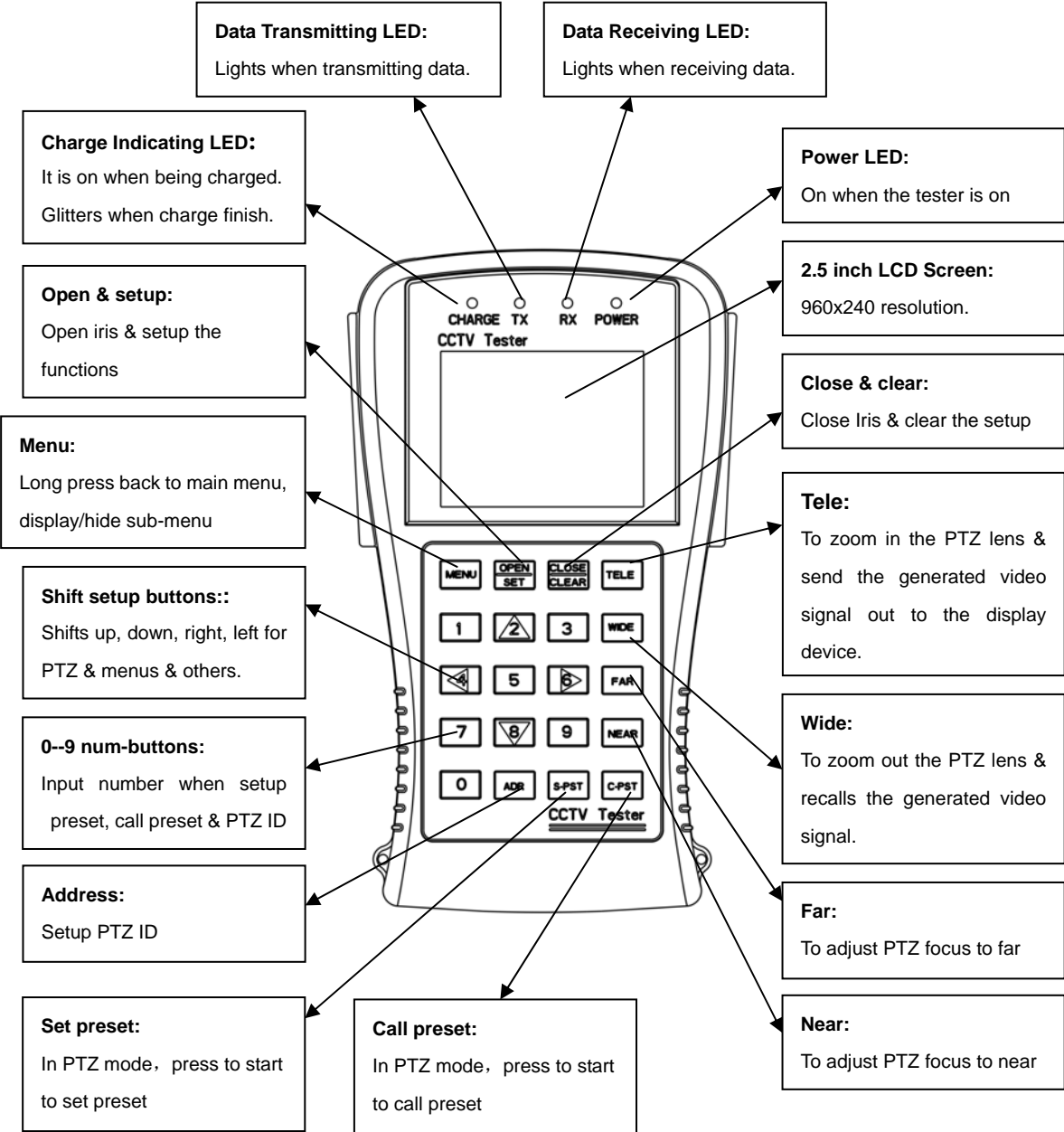
E. RS485 data test

It can test the RS485 data sent from a controlling device and display the hexadecimal data content for analysis.

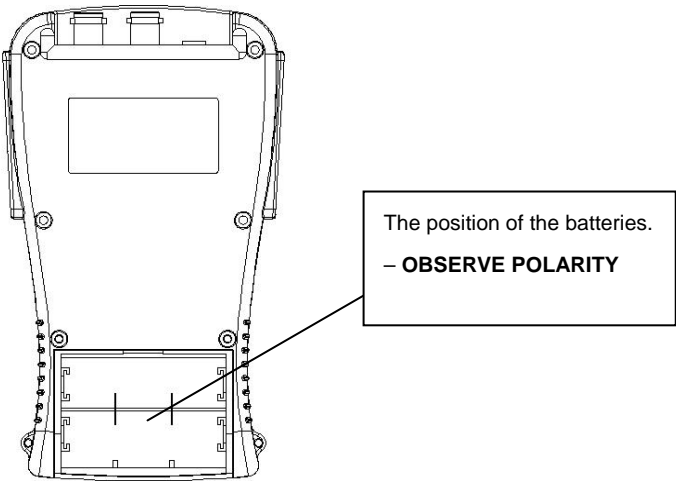
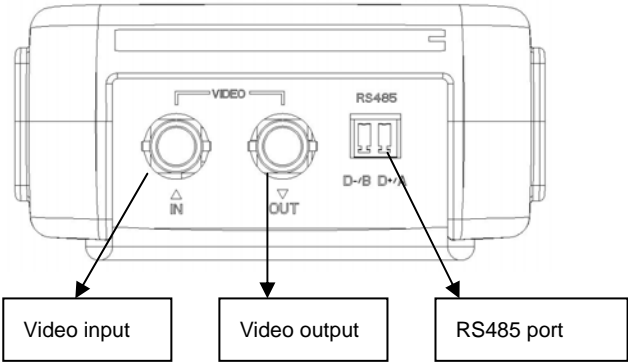
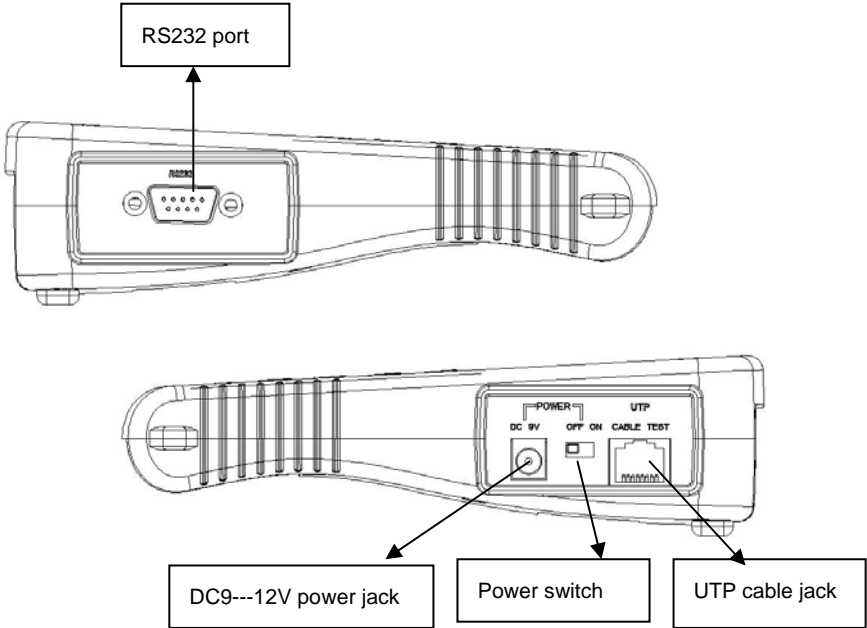
2.2 Packing list

Item	Quantity
CCTV tester	1
3.6V battery	2
UTP cable termination	1
Power adapter	1
BNC fly lead	1
User's manual	1

2.3 Function of each part



Changes in function layout may be effected without prior notice



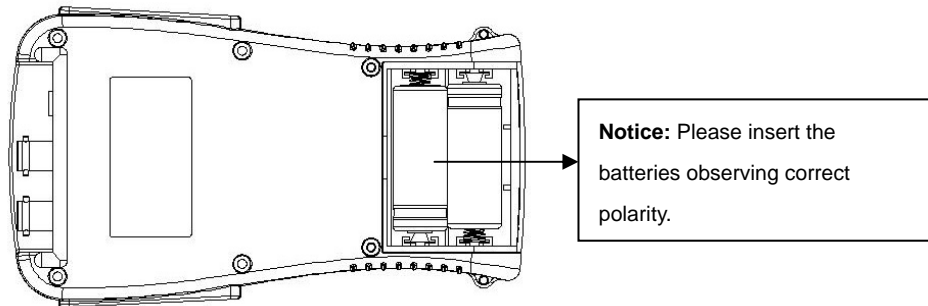
2.4 Specification

Model	CCTV Tester
Video Test	
Signal Mode	NTSC/PAL automatic for viewing
Display	2.5 inch LCD screen,960 x 240 resolution
Video Input	1 channel BNC
Video Output	1 channel BNC
PTZ Controlling	
Communication	RS232 and RS485
Protocol	. Pelco D & P, Samsung, Panasonic, Minking, Vido, Yaan, Molyx, B01, A01, LiLin, CSR600, Alec, Vicon, DynaColor, VideoTrec, AD, KDT KB3, KDT 405, KDT 304, LG
Baud Rate	2400,4800,9600,19200
Other Functions	
Signal Generation	Output 1 channel video signal for testing monitor
UTP Cable Test	Test UTP cable connection state and display in the screen
RS485 Data Test	Test RS485 data sent from a controlling device
Operation	English OSD menu
Power	
Power Adapter	DC9V---12V
Batteries	2 pcs 18490 standard 3.6V,capacity 2800mAh
Rechargeable	5 hours recharging time, operation for 5 hours
Low Consumption	Sleep mode, display battery power state
Other Parameters	
Work Temperature	-10°C---+50°C
Work Humidity	30%-90%
Dimensions	170mm x 99mm x 48mm

Changes may be effected without prior notice

3, Operation Introduction

3.1 Power and battery



- A. The power slide switch is located at the side of the tester. Turn the power slide switch on to power on the tester, turn it off to power off the tester.
- B. After the tester has turned to sleep mode, switch the slide switch off/on to restart it.
- C. The batteries should be charged for over 5 hours for full charge, when charged the **Charge Indicating LED** will come on.
- D. After full charging, the **Charge Indicating LED** light will flicker and the charging stop automatically.
- E. Charged batteries can operate for 5 hours or more.
- F. When the battery indicator in system information menu shows 25 (the situation number includes 100, 90, 75, 50, 25), please recharge it for use.
- G. The tester can be used when it is being charged.

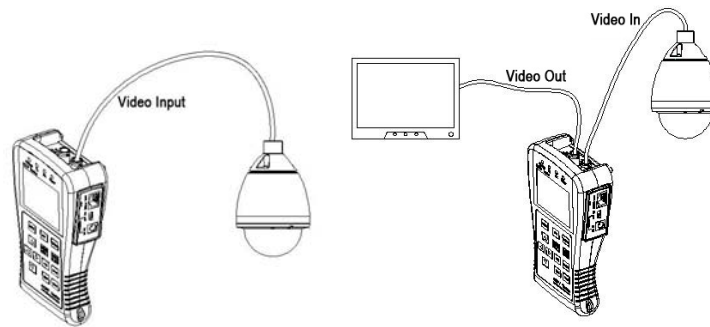
3.2 Main menu introduction

Turn on the device and you will see the main menu, as shown below:

- 1-5 are five independent sub-menus;
- Press the corresponding number button to go to the sub-menu;
- Version number and S/N can't be edited;

1 SYSTEM SETUP	→	System information
2 PTZ CONTROLLING	→	PTZ controlling function
3 UTP TESTING	→	UTP testing function
4 VIDEO GENERATING	→	Video generating function
5 RS485 DATA ANALYZING	→	RS485 protocol analyzing
VER:V1.09 S/N:08110910	→	Software version and S/N

3.3 Video test



- A. Connect the output terminal of video system to the video input BNC of tester, turn on the tester, the video will be displayed on the screen.
- B. Connect the video output BNC of tester to the video input of a display device, it will display the video signal generated by the tester or looped by tester.

3.4 System information sub-menu

- A. Press “1” to switch to the system information sub-menu, as follows:

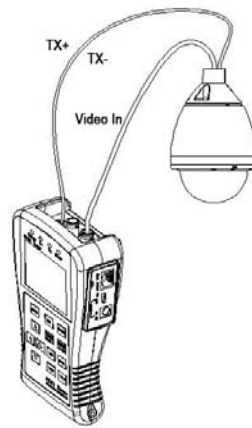
PROTOCOL	Pelco P	——>	PTZ protocol
COM	485	——>	Communication port in used
RATE	4800	——>	Baudrate: 2400/4800/9600/19200
SPEED	016	——>	Pan and tilt speed
IDLE TIME	000	——>	Idle time from last operation to auto turn off (minute)
BATTERY	090	——>	Battery power status: 100/90/75/50/25/5

- B. Press **Set** button to start the set up:
- C. Press num-button “2” and “8” (PTZ direction button “UP” and “DOWN”) to select the option; (Battery power status can't be edited)
- D. Press num-button “2/6/8” (PTZ direction button “UP/DOWN/RIGHT”) to adjust the parameters;
- E. Press num-button “4” (PTZ direction button “LEFT”) to save and quit;
- F. Press num-button “4” again to finish the setup the characters in the menu will stop flickering;
- G. Press **MENU** button for 1 second to go back to the main menu.

Note: For PTZ control there are 16 speed levels (some protocols only have 7), 0 means the minimum speed, 17 (or 7) means maximum speed.

3.5 PTZ test

A. Connection



- Connect the tester with the PTZ camera as the picture shows.
- In the main menu, press num-button “2” to switch to the PTZ testing function sub-menu, as the following



B. Operation

- Press the **ADR** button, input the PTZ address by using num-button;
- Press the **SET** button to save the setup;
- Press the **MENU** button to hide the menu information and show a clean screen for camera image;
- Press **MENU** button for 1 second to back to the main menu

C. PTZ controlling

When connect to the PTZ correctly, the camera image will displayed in the screen of the tester, after setup the proper protocol, baud rate and the ID of the PTZ, user can control the PTZ as the following method:

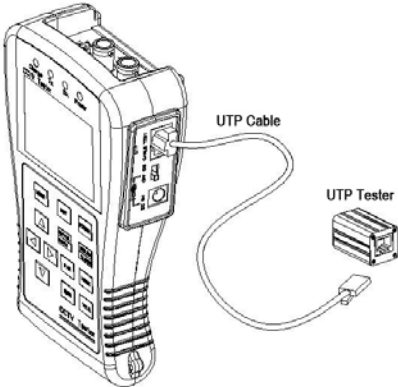
- Press **UP/DOWN/LEFT/RIGHT** to control the movement of the PTZ;
- Press **OPEN/CLOSE** to control the iris;
- Press **FAR/NEAR** to adjust the focus manually;
- Press **WIDE/TELE** to zoom in/out the camera lens.

D. Preset position

- Setting up the preset position
 In the PTZ controlling mode, press **S-PST** button, then input the preset position number by the num-buttons, press **SET** to save the setup operation, user can use this method to set several preset positions one by one;
- Calling the preset position
 In the PTZ controlling mode, press the C-PST button, then input the preset position number by the num-buttons, press **SET** to save the setup operation, user can use this method to call several preset positions one by one;

3.6 UTP cable test

A. Connect the tester to the UTP cable termination as the picture indicate:



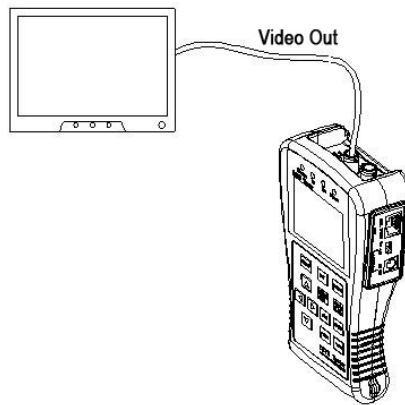
- B. . In the main menu mode, press num-button “3” to switch to the UTP testing mode;
- C. Press **Set** to start the test, UTP cable information will be displayed in the screen.
- D. User can estimate the UTP cable connection situation from the information.

CCTV Tester side sequence	<---	<p>UTP CABLE TEST</p> <p>1 -----3</p> <p>2 -----6</p> <p>3 -----1</p> <p>4 -----0</p> <p>5 -----0</p> <p>6 -----2</p> <p>7 -----7</p> <p>8 -----8</p>	<p>---></p> <p>---></p> <p>---></p>	<p>UTP tester side sequence(double check)</p> <p>“0” means open circuit</p> <p>If there are 2 line show “0”, it maybe:</p> <ul style="list-style-type: none"> ● They open circuit separately; ● They short circuit to each other;
------------------------------------	------	--	--	---

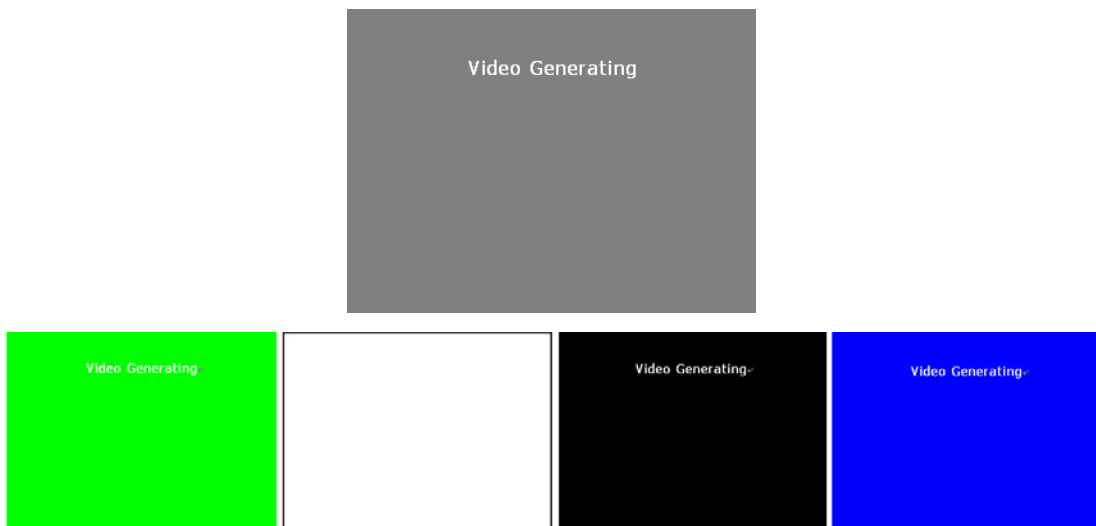
- E. User can estimate the connect situation base on the information;
- F. Press Menu button for 1 second to back to the main menu.

3.7 Video generating

A. Connect the tester to the displayer device as the picture shows:



B. Press **Mode** to switch to video generating menu as follows:



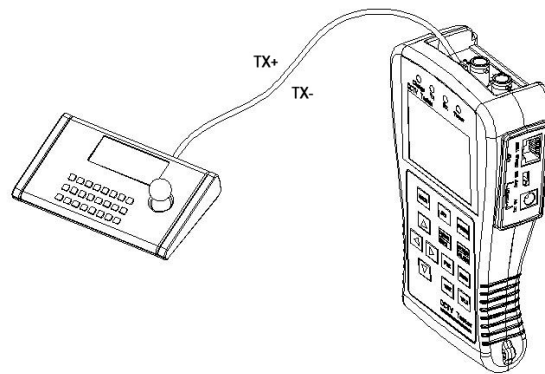
C. **Operation setup**

- Press the **Mode** to switch to the video generating mode
- Press **Set** to switch the video generating signal: Green, White & Black and Blue.
- Press **Tele** to send the generated video signal to the display device.
- Press **Wide** to recall the generated video signal.
- Press **Return** to finish the video generating operation.

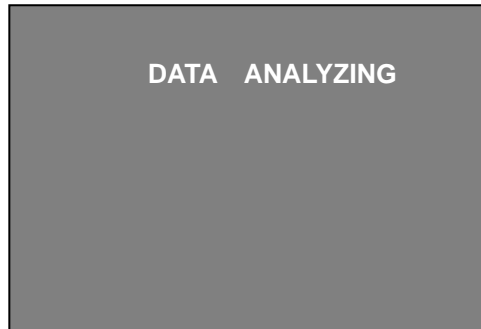
Note: If "return" is not pressed after the generating mode, the will not switch to any other operating mode

3.8 RS485 data test

A. Connect the tester to the controlling device as the picture shows:



B. In the main menu, press button "5" to switch to the RS485 protocol analyzing mode, menu as follows:



C. Press **Set** to start the setup of baud rate.

D. Press **Up/Down** to select the baud rate to be same as the controlling device used.

E. Make the controlling device transfer the RS485 data to the tester, the hexadecimal signal data will displayed in the screen as follows, the data can be analyzed to determine if the controlling device is working with the correct protocol.

Data Test	RATE	2400
A0 00 01 00 00 00 AF 0F		
A0 00 00 00 00 00 AF 0E		
A0 00 00 01 00 00 AF 0F		
A0 00 01 00 00 00 AF 4F		
A0 00 00 00 00 00 AF EF		
A0 00 00 00 00 00 AF 2F		

4, Warranty

4.1 Warranty items

From delivery:

- 1) Exchanging service within 14 days from the receipt, we will be responsible for the freight charge (battery exchanging service within 90 days from receipt).
- 2) Repair service within 2 years, change accessories and repair for free, customers should responsible for the freight charge (repairing service don't include battery).
- 3) We provide whole life repairing service for our products with proper charge, customers should responsible for the freight charge.

4.2 Warranty exclusion

- 1) Damage caused by abuse, unreasonable use, mistreatment, or neglect.
- 2) Damage caused by modification or repair not authorized by our company, working in hostile environments, or natural disaster.
- 3) Damage caused by improper or improperly used packaging, or other devices work in the same system.

4.3 Complemented items

- 1) Company is not responsible for other assurance and other derivative from capital loss: The product and the user guides are not assured for particular users and some special purpose of use.
- 2) If the products returning for exchanging was damaged, modified or missing accessory, we will charge accordingly.
- 3) If the components are no longer produced during the warranty-limited period, company will make a decision to replace similar products at no charge.
- 4) We don't offer exchanging service for special design products by customers.