

WP2 II

CHARGER INSTRUCTION MANUAL



Hong Kong XTAR Co., Ltd is a scientific research, production and service integrated enterprise. It is always focusing on LED flashlight, Li-ion charger and battery's research. It has Diving, Tactical, Sport and EDC series LED flashlights and intelligent Li-ion battery chargers and Li-ion batteries etc. related accessories complete product system.



HONG KONG XTAR CO., LTD



CHARGER INSTRUCTION MANUAL





■ Features :

- XTAR WP2 II charger is apply to charging for two 14500/14650/17670/18500/18650/18700 3.7V Li-ion battery simultaneously but independently, it can charge for 10440/16340 when use 2pcs spacers. It is designed with undervoltage lockout and algorithm (TC.CC.CV) charging method which can monitor the battery's status real time and control charging safe automatically.
- WP2 II designed with USB output function, use fully charged battery can supply electricity to those devices power below 5.0V/500mA.
- WP2 II Charger adopts reverse-polarity protection circuit board and over/under voltage disconnecting technology, can prevent the possibility like sundries, wrong polarity and misoperation caused short circuit.
- WP2 II built battery over discharging activating function, it can repair varying degrees discharged battery and then charging automatically, it is your first choice safer and reliable Li-ion battery charger.



■ Electrical Technology Parameters:

- Charging qualifications and structures

Operation Temperature	0-40℃
Input AC	12VDC/1000mA
500mA CC Current	500mA±5%
1000 A CC Current	1000mA±5%
Cut-Off Voltage	4.2±0.05V
CV Cut-off Current	<100mA
Standby Current	<20.0mA
TC Current (Battery Volt 2.0~3.0V)	80±20mA
Auto Recharging Threshold Value Voltage	3.9±0.15V

- USB Discharging qualifications and structures

Operation Temperature	0-40℃
USB Interface Output Floating Voltage	5.0V
Output Floating Voltage Ripple	<120 mV
Reactive Current	<10mA
Maximum Output Current	500mA
Battery Output Cut-off Voltage	2.80±0.15V



■ Usage and LED Indicator Instruction:

- “0” Gear: USB 5.0V/500mA voltage output; “1” Gear: Charging current 500mA; “2” Gear: Charging current 1000mA.
- The SCM will start to self check when connected the external power, Channel 1 and Channel 2 enter into charging standby status and indicator turned green from red. It starts to charge if the connection detected last more than 5 seconds normally and indicator turned red. When the batteries are full charged and indicator turned green, then charging complete. Bad contact, wrong battery polarity, no charging current or battery activating status green indicator.
- When battery laid into channel 1, gear shifted to “0”. If external power connected and the red indicator flashing, the USB interface no output voltage. When the external power disconnected and channel 1's indicator extinguished but USB interface indicator turned red, USB output is processing. If the battery pulled out, USB output stopped and no indicator.
- When charger is standby, both the indicator of channel 1 and 2 turned green if we short out them, but it is no harm to charger for WP2 II has short circuit protection function.
- WP2 II will restart charging when detected full charged battery voltage lowered than 3.9V if the external power normally connected.
- USB output protection function will be activated if the battery's voltage in channel 1 is lower than rated value. Then the indicator extinguished and no output.
- WP2 II can apply to charging for two 14500/14650/14650/17670/18500/18650/18700 3.7V Li-ion battery, also for 10440/16340 when use 2pcs spacers.



■ Notice:

- When use USB output function, laid the battery into channel 1 (channel 2 is invalid) and shift the gear to “0”. Please remember to cut off the external power before discharging, or the USB will have no output voltage.
- The USB's maximum output current is 500mA, please do not apply to those device's power exceeded 500mA, or will lead to permanent damage to USB interface.
- The USB output function has low-voltage protection function, when the outputting battery is lower than the preset cut off value, the SCM will cut off the outputting and LED indicator turns red.
- WP2 II built battery interface short circuit protection function, can protect the charger from damage when interface circuit shorted. This function can not protect the battery, please remember to take out the battery before testing.
- WP2 II will start to repair the over discharged battery (voltage $\leq 2.0V$) properly placed once the power connection is normal, then the indicator turns green. After the battery's voltage is covered and charger will process the charging and the indicator turns red. (Remarks: How long will the reparation take depended on the battery's status, the seriously over discharged battery may can not to be repaired.)

■ Warranty:

- 15 days free replacement: We will repair or replace a light within 15 days of purchase if it is afflicted with a manufacturing defect. If the problem calls for a replacement, we will replace the light with the same model as the one you bought. If the model has been discontinued, customers will receive a product with similar or improved performance one.
- 24 months free repair. We offer free repair within 24 months of purchase if problems develop with normal use.
- Limited lifetime warranty. If problems develop after 24 months of the purchase date, we will charge for parts. The total repair fee will assess according to the cost of the replaced materials, If damage to the light is grave, XTAR will contact distributors with a quote who should contact the customers to decide whether to exchange the parts or not. Freight should be paid by distributors or customers.



■ Suggestion:

- We strongly recommended log on XTAR official website to register to be a VIP member, you guarantee period will add a half year automatically after your input information approved.
- **(This warranty is not applicable for damages cause by artificial damage or intentional force.)**

■ Guidelines for Free VIP Member Service Register:

- In order to offer better after sale service and build up unimpeded communication platform, XTAR found the FREE VIP Member Service system. Here are the guidelines and benefits for VIP register:
 1. Please log on www.xtarlight.com, click the <Service> button, then the <VIP> button, all you have and only to do is to fill your brief information and light's details as our simple requirements.
 2. To show sincerity and thank for your kind support, XTAR will automatically extend a half year guarantee period after your input register information approved, and every year we will draw some members at random to attend our activities with lavish essentials and value-added privileges.
- **Thank you for choosing our excellent product, your satisfaction and feedbacks are the power of our progress.**

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