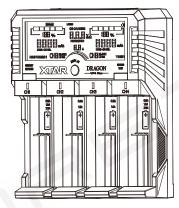




### Premium Li-ion/Ni-MH LCD Charger





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### Introduction

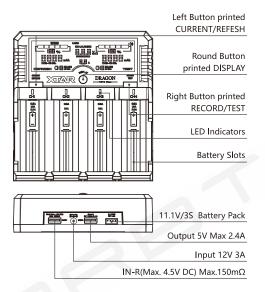
DRAGON VP4 Plus - The first 4 slots LCD charger with USB output function that can precisely test battery resistance and charge battery pack.

### DRAGON applies to:

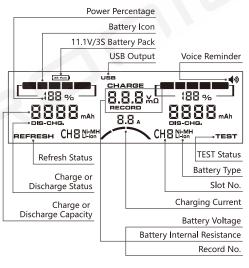
- 1. Li-ion/IMR/INR/ICR batteries:
- 10440 14500 14650 16340 17335 17500
- 17670 18350 18490 18500 18650 22650
- 25500 26650 32650 (3.6V/3.7V)
- 2. Rechargeable Ni-MH/Ni-CD batteries:
- AAAA AAA AA A SC C D
- 3. Battery pack:
- 11.1V/3S battery pack
- (\* Please insert batteries properly before charging.)

# **Technical parameter**

Input	DC 12V 3A
0.5A Charge Current	0.5A x 4
1.0A Charge Current	1.0A x 4
2.0A Charge Current	2.0A x 2
Cut-off Voltage for Li-ion Battery	4.2 ± 0.05V
Cut-off Voltage for Ni-MH/Ni-CD Battery	1.45 ± 0.1V
USB Output Voltage	5V
USB Output Current	Max 2.4A
Operation Temperature	0-40°C



# LCD Display







## **Operation**

### **■** Operation of Charge function.

- 1. Connect the charger with standard wall adaptor to input power, insert rechargeable Li-ion/Ni-MH batteries into slots properly.

  2. During charging, LCD shows corresponding data with red LED. Default 1A charging current and pushing left button printed CURRENT to switch as (2A->0.5A->1.0A) and press round button printed DISPLAY to switch LCD display, and long press(>1.5s) turn LCD on or off
- 3. When finished charging, charger stop charging automatically with LED shows green and a voice reminder.

(Note: \* Charging current max 2A in CH1 or CH4 could be used only when there is no battery in CH2 and CH3.)

### ■ To process 0V activation for battery.

Do the same step as charging. Because of different battery types, capacities and over-discharge conditions, the time of revived may vary. If heavily over-discharge batteries can't be revived, LCD show "null". If OV activation is succeed, then charger start charging process.

# ■ To repair Ni-MH batteries and test Li-ion batteries' capacity quickly.

REFRESH mode process discharge -> charge.

- 1. A long press on left button printed REFRESH to enter or withdraw REFRESH mode, it's accessible by 4 slots and for both Li-ion and Ni-MH at the same time.
- 2. During REFRESH, LCD shows REFRESH on bottom left corner and corresponding data, LED shows blue while discharging

and red while charging. Default charge current 1A, one press on left button could change charging current ( charger control smartly battery discharge current ), and one press round button printed DISPLAY could change channel display.

3. Once finished, LED shows green with a voice reminder, and LCD shows capacity of discharge and charge alternately.

(Note: \* Flashing "Ni-MH" means it is to recognize battery type by charging Ni-MH/Ni-CD or low voltage Li-ion batteries in the first 10 min.)

# ■ Accurately measure the capacity of Li-ion and Ni-MH/Ni-CD batteries and automatically saves the records.

TEST mode process charge-> discharge -> charge.

1. A long press on right button printed TEST to enter or withdraw TEST mode, it's

accessible by 4 slots at the same time and for both Li-ion and Ni-MH at the same time.

2. During TEST, LED shows blue when discharging and red when charge, LCD shows "TEST" on bottom right corner and corresponding data. Default charge currents 1A, one press left button could change charging current ( charger control smartly battery discharge current ), one press on ROUND button printed DISPLAY could change display channel.

3. Once finished, LED shows green with a voice reminder, showing capacity of discharge and charge alternately.

(Note: \* Data were saved to RECORD only when TEST mode is finished.

\* Flashing "Ni-MH" means it is to recognize battery type by charging Ni-MH/Ni-CD or low voltage Li-ion batteries in the first 10 min.)

### ■ To Review TEST Data By Record Function

- 1. One press on right button printed RECORD to enter, one press on right button to select the previous record and long press to view front record, one press left button to select the next record and long press to view post record. One press on DISPLAY button could change display channel.
- 2. Delete the selected data: Twice press on left button, then the selected data is flashing, one more press on DISPLAY button to confirm delete.
- 3. Delete ALL data: One more twice press on left button(Continue four press did not work), then LCD shows flash "ALL", one more press on DISPLAY button to confirm delete.
- 4. In order to withdraw RECORD mode, you can double click on DISPLAY button or without any operations after 1 minute.

(Note: \* Data were saved to RECORD only when TEST mode is finished.

- \* Flashing "Ni-MH" means it is to recognize battery type by charging Ni-MH/Ni-CD or low voltage Li-ion batteries in the first 10 min.
- \* At any modes, one press right button could enter RECORD.)

### ■ Test The Usage of your battery

To test internal resistance and voltage of battery.

1. Insert the probe into the USB1 IN-R port properly, then cross the red (+) and black(-) probes to activate measurement function. Red probe touch battery positive pole(+) properly and black probe touch battery negative pole (-) properly, then the data of voltage and internal resistance will be alternately displayed on LCD. The function can last for 10 minutes and work at any modes.



**Test Battery Internal Resistance** 

### **■** Charge The External Devices

- USB Output Charging
- 1. Insert rechargeable Li-ion batteries into any slots properly, plus external devices to restart USB output which can be up to max 2.4A, the LCD displays corresponding battery data. Charger can charge battery and external mobile device at the same time.
- 2. When the power is connected, external devices could be charged directly from the

power, so the battery could be more durable.

- 3. When the power is not connected, the charger and inserted batteries could be used as an power bank to provide current for the external devices.
- Charge 11.1V 3S battery pack
- 1. The 11.1V/3S port is able to charge 11.1V/3S battery pack, default charge currents 1A.
  2. Connect charger with 11.1V/3S battery pack, then insert wall adaptor to input power to start charging. During charging, 3S Pack on upper left corner in LCD is flashing. Once finished, 11.1V/3S Pack stop flashing with a voice reminder.

(Note: \* Charger can detect bad battery whose voltage lower than 2.0V, then charger stop charging and 11.1V/3S Pack in LCD disappear, the battery pack is damaged.)

# **Tips**

- 1. At any modes, on press right button could enter RECORD.
- 2. It is recommended that you remove battery from the charger once charging has completed. If battery is not removed from charger, charger will restart when the battery's voltage drops below 3.9V.
- 3. Charger have dynamic power management function, so it can automatically adjust the charging current.

When overloaded , it stop USB output function to ensure charging for battery and 11.1V/3s battery pack. Once finish charge , charger will automatically restart USB output.

4. Indicator status show as below:

Indicator	Meaning
Red	Charging battery/Recognition /Being activated
Blue	Discharging battery
Green	Finish Charge/Stand-by/ Battery reversed/ Poor connection

- 5. If this specification describes against the official website, please refer to the official website.
- 6. To learn more features of XTAR charger, please visit XTAR official website technical section:

http://www.xtar.cc/news\_list/&newsCategory-ld=9.html

### **Customer Service**

Please take the receipt and warranty card to local dealer to get A/S service.

- 1. 15 days free replacement. We will repair or replace a charger within 15 days of purchase if it is afflicted with a manufacturing defect. If the problem calls for a replacement, we will replace the charger 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.
- 2. 24 months free repair. We offer free repair within 24 months of purchase if problems develop with normal use.
- 3. Lifetime technical support warranty. If problems develop after 24 months of the purchase date, we will charge for parts. The total repair fee will access according to the

cost of the replaced materials. If damage to the charger is grave, XTAR will contact distributors with a quote who should contact the customer to decide whether to exchange the parts or not. Freight should be paid by distributors or customers.

(This warranty is not applicable for damages caused by artificial damage or intentional force.)

# Website & Anti-fake Inquiry

1. Welcome to visit our company website to get more information:

#### www.xtar.cc

- 2. Follow us on Facebook: <a href="https://www.facebook.com/Shenzhen XTAR">www.facebook.com/Shenzhen XTAR</a>
- 3. Anti-fake inquiry: A group of eighteen-digit number could be gained by scraping the anti-counterfeiting label on our WARRATY CARD. Then, input it to the corresponding query window in our service column of our official website to distinguish the product's authenticity.
- 4. Thank you for choosing our excellent products, your satisfaction and feedbacks are essential to our progress.

### **Notice**

- 1. Because of different battery types, capacities and over-discharge conditions, the battery revive time may vary. Heavily over-discharge batteries may not be able to be revived.
- 2. Please do not charge the unsuitable batteries, otherwise may damage the batteries and charger.
- 3. Keep charger away from water and excessive dust.
- 4. Children should use the charger accompanied by an adult
- 5. Do not disassemble or operate the charger if it is damaged in any way.
- 6. The charger has short circuit protection to protect the charger. Note that it does not prevent batteries from internal short circuiting.