

## GWY003752

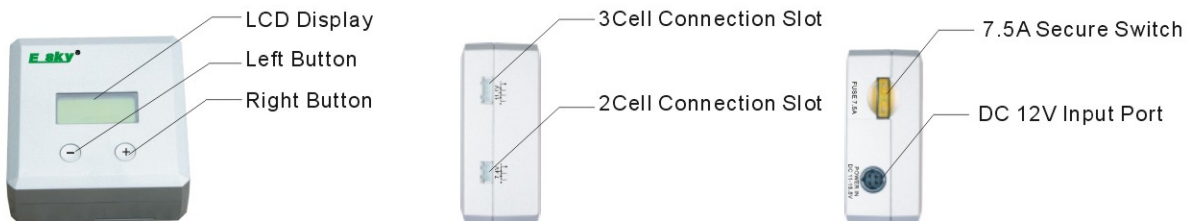
### 2&3 Ply Li-polymer Battery Charger User Manual

#### Battery Charger Specification and Package Content

1. DC power input line
2. 2&3 Ply Li-polymer battery Charger
  - a) Input voltage 11V ~ 15.5V, Max output current 5A
  - b) Max. Power  $\leq 75W$

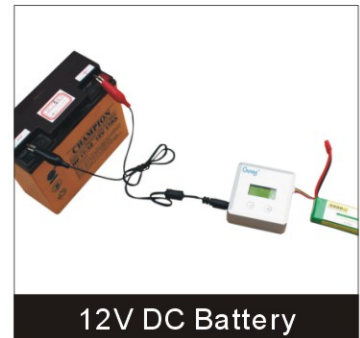


#### Battery Charger Introduction



#### How to Operate the Charger

1. When the power supply is connected to the charger, the LCD will light up and display “Li-Po” for 2 seconds. (Please select one of the following method to connect)



2. If there is no battery jack-in, it will display “Charger” and keep flashing. However, the LCD monitor will continue to display “Charger” after 30 second without battery jack-in, but the background light will switch off.
3. After jack-in with the battery, the charger will display “000” “mAh” . You can press the “left” and “right” button to choose the battery’s “Labelled Capacity Value” . Note: If you do not input the desired “Capacity Value” in 30 seconds, the charger will charge the battery at the default safety current. It will not display the remaining time but a “Charging Icon” and the total battery voltage will flash up. If you want to input the “Capacity Value” again, it is necessary to remove the battery and then reinsert the battery in the charger.
4. Pressing both buttons at the same time: The battery starts charging and displays the remained charging time (default is the minimum charging time), the background light will turn off after 30seconds and display the charging icon with the total battery voltage. Press any button, the screen will light up again and display the charging time remained, the background light will turn off after 30seconds and display the charging icon with the total battery voltage.
5. During the charging process: Press the left or right buttons to adjust the length of charging time, the left button is to reduce the charge time whereas the right button is increase the charge time. The remained charging time will depends on the left and right buttons' adjustment. If there is no more adjustment within 30 seconds, the charger will display the charging icon and the total battery voltage
6. Display Balance: Press any button, the screen will light up and display “Balance” , after 30 seconds, the background light will turn off and display the charging icon and the total battery voltage.
7. When charging completed: The charging icon will stop flashing, the background light will be on and display “OVER” . Once you pull out the battery, it will resume back to step 2.
8. Except during the charging process {ie step 3 to 6} , you can check out the battery voltage by the following steps. Connecting the charger's power supply, then jack-in the battery and press both buttons within 3 seconds at the same time. It will show up the battery's voltage. Remove the battery or press the buttons within 3 seconds to exit the screen.

## The Charger Features & Functions

1. Voltmeter function: When the charger is not connected with the power supply (adapter) but only insert the battery in the charger, the charger LCD screen will display each of the batteries voltage.
2. Over-Current protection function: When the charger has a transfer of over 10A current, the fuse will blown up to protect the charger. If the fuse has blown up, you are able to replace the fuse and use the charger again. When the charging power is more than 6A, the circuit will cut out immediately and protect the battery not being damaged by the high power impact. At this moment, the LCD screen display "Current" "Alarm", you should remove the battery and reinsert the battery in the charger.
3. Over-Voltage protection function: When the charger has a transfer of current less than 11V or more than 15.5V, the charger will stop function automatically. The LCD screen will display "Voltage" "Alarm" until the voltage recover back to normal status, the charger will restart to operation.
4. Over-Heat protection function: When the charger inside is over 70 degree during the charging process, the charger will stop function. The LCD screen will display "Tempe" "Alarm". Until the temperature is lower than 70 degrees, the charger will restart the operation.
5. Charging time protection function: To prevent the battery unable to be full-charged abnormally, the charger will stop charging after 3.5 hours automatically. The LCD screen displays "Time" "Over", you can remove the battery from the charger.
6. Battery balance function: When checked a battery is higher than 4.2V, the charger will discharge the battery power before charging, prevent the battery damaged during the charging process.
7. Damaged battery checking function: When the battery starts charging and detect the battery voltage lower than normal, the charger will not charge the battery and the LCD screen display "Bad" and the damaged battery number. You should remove the damaged battery from the charger.
8. Plug in checking function: When 2-ply or 3-ply batteries plug in the charger at the same time, the charger will stop all the operation. The LCD screen will display "Plug in" "Error". You should remove one of the plugged batteries from the charger.

**Caution: The current is fixed in the automatic mode, if the battery capacity is lower than normal, it will lead to the over 3C charging situation. We strongly recommend : When using a "lower than 200mah 2ply battery" or a "lower than 300mah 3ply battery", it is necessary to set the desired Battery Capacity when using the charger by pressing left and right buttons, Please avoid to apply the automatic mode to charge the battery.**

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## 2&3节锂聚合物电池充电器使用说明

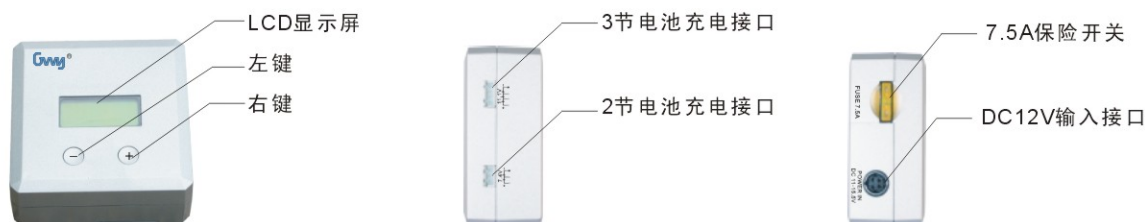
### 充电器的组成及规格

1. DC电源输入线
2. 2&3节锂电池充电器
  - a) 输入电压11V~15.5V, 最大输出电流5A
  - b) 最大功率≤75W



充电器的组成

### 充电器的介绍



### 充电器的操作

1. 上电后：背光灯亮起，显示“Li-Po” 2秒钟。(连接方式可选择以下其中一种)



12V DC电源



12V DC适配器



12V DC蓄电池

2. 如果没有插入电池，则显示“charger”并闪烁，30秒后没插入电池继续显示“charger”，但背景灯熄灭。
3. 插入电池后：显示“000”“mAh”，消费者按左右键选择电池上标示的“标称电量”。注意：如消费者30秒内未按要求输入“标称电量”，充电器将按默认安全电流充电，充电过程不显示剩余时间，只显示动态的电池充电符号和电池总电压。消费者如想输入电量，需取下电池后，重新插入电池设置。
4. 两键同时按下：开始充电，并显示剩余时间（默认为最短充电时长），显示30秒钟后，背景灯熄灭，显示正在充电的电池符号和电池总电压。按任意键，背景灯亮起，显示剩余充电时间，30秒钟后熄灭，又恢复到显示正在充电的电池符号和电池总电压。
5. 充电过程中：按左键/右键可调整剩余充电时长，按左键减小充电时长，按右键增大充电时长，剩余充电时长跟随按键作相应变化。30秒钟内无按键操作，恢复到显示正在充电的电池符号和电池总电压。
6. 进入balance：按任意键，背景灯亮起，显示“balance”，30秒钟后熄灭，又恢复到显示正在充电的电池符号和电池总电压。
7. 充电完成后：电池充电符号静止，背景灯亮起，显示OVER，直到消费者取下电池后，恢复到第2步。
8. 除了充电过程中（第3步到第6步），任何时候在上电情况下，插上电池，两键同时按下3秒钟，可检测显示各节电池的电压。取下电池自动退出或两键同时按下3秒钟退出。



## 充电器特点及功能

- 1.电压表功能：当不插充电器电源（适配器）时，插入电池将显示电池各节的电压值。
- 2.过流保护功能：当充电器输入电流超过10A时，保险丝会熔断以保护充电器，消费者需更换保险丝后才可以继续使用；当充电电流超过6A时，充电电路会自动关闭而保护电池不受大电流冲击，此时LCD会显示“Current”“Alarm”，消费者需拔下电池后重新插入。
- 3.过压保护功能：当充电器输入电压小于11V或大于15.5V时，充电器自动停止，此时LCD会显示“Voltage”“Alarm”，直到电压恢复到正常范围才继续工作。
- 4.过热保护功能：当充电器内部温度超过约70摄氏度时，充电器停止工作，此时LCD会显示“Tempe”“Alarm”，直到温度恢复到70摄氏度以下才继续工作。
- 5.时间保护功能：为避免异常电池长时间充不饱的情况，当充电时间大于3个半小时后，充电工作会自动停止，此时LCD会显示“Time”“Over”，此时消费者需拔下电池。
- 6.电池平衡功能：当检测到有高于4.2V的电池时，会自动将其放电到4.2V以下，从而避免过饱对电池造成的损坏。
- 7.坏电池检测功能：确认开始充电后，当检测有电压过低的坏电池时，充电器不充电，LCD显示“Bad”和坏电池符号，此时用户需拔下坏电池。
- 8.同时插入检测功能：当2节电和3节电同时插入时,充电器将停止一切充电和放电工作，LCD显示“Plug In”“Error”，此时消费者需拔下任意其中之一。

警告：由于自动模式的充电电流是固定的，故当使用的电池容量太小的话，将会导致超过3C充电的情况。强烈建议用户：当使用“小于200mah的2节电”或“小于300mah的3节电”的时候，应设置合适的电池容量后，通过按键来确认充电，避免自动模式充电。