

# RCC-6CX

## INSTRUCTION MANUAL

### 使用說明書



- ★Intelligent battery control system.
- ★Dual battery charging system.
- ★Individually monitoring of each cell.
- ★Adjustable charging current 0.1~4A.
- ★LCD charging status display.
- ★Auto control cooling fan.
- ★Reverse polarity and short circuit protection.
- ★Voltage, current, charge capacity, and individual cell voltage display.

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**SAFETY NOTE 安全注意事項**

- ★Read these instructions completely and attentively, before you use this unit for the first time.
  - ★Do not attempt to open the case, and do not modify the unit in any way. It can avoid the warranty.
  - ★Use the charger exclusively to recharge rapid-charge capable Li-Ion/Li-Polymer, batteries.
  - ★Observe the charging instructions of the battery provided by manufacturer. And you have to follow the instructions exactly.
  - ★Do not cover the charger with anything; provide adequate ventilation for cooling.
  - ★Use the charger only to charge battery pack consists of cells of same type and capacity.
  - ★Do not charge packs which are heated up high temperature; take time to allow them cool down.
  - ★Do not leave the charger is operating unsupervised.
  - ★Do not put the charger to a direct sunshine or in the car with closing windows when it is operating.
  - ★Keep the charger, battery and cables well away from flammable or temperature-sensitive materials.
  - ★Protect the charger from dust, damp, rain and vibration to avoid any short circuit or damage.
- ☆在開始操作之前，請務必詳閱本說明書。
  - ☆請勿將產品外殼拆開或改裝，否則無保固。
  - ☆本產品專用於可重複充電之鋰離子/鋰聚合物電池。
  - ☆請遵照電池原廠所提供的充電說明書。並且完全遵從以下操作說明。
  - ☆充電時請勿覆蓋任何物品於充電器上，並注意散熱口須有良好之通風。
  - ☆本充電器只適用於相同款式和容量的裸電所構成的電池組。
  - ☆電池組溫度過高時請勿充電，需待電池溫度下降後才可充電。
  - ☆請勿在無人看顧時離開使用中的充電器，避免任何不可預期之意外災害發生。
  - ☆充電器使用時，請勿將充電器置於太陽底下與窗戶緊閉之房內或車上。
  - ☆請將充電器、充電池和電線遠離易燃物。
  - ☆避免置於灰塵、濕氣、雨水和震動處造成不可預期短路損壞危險。

**FEATURE 系統特色**

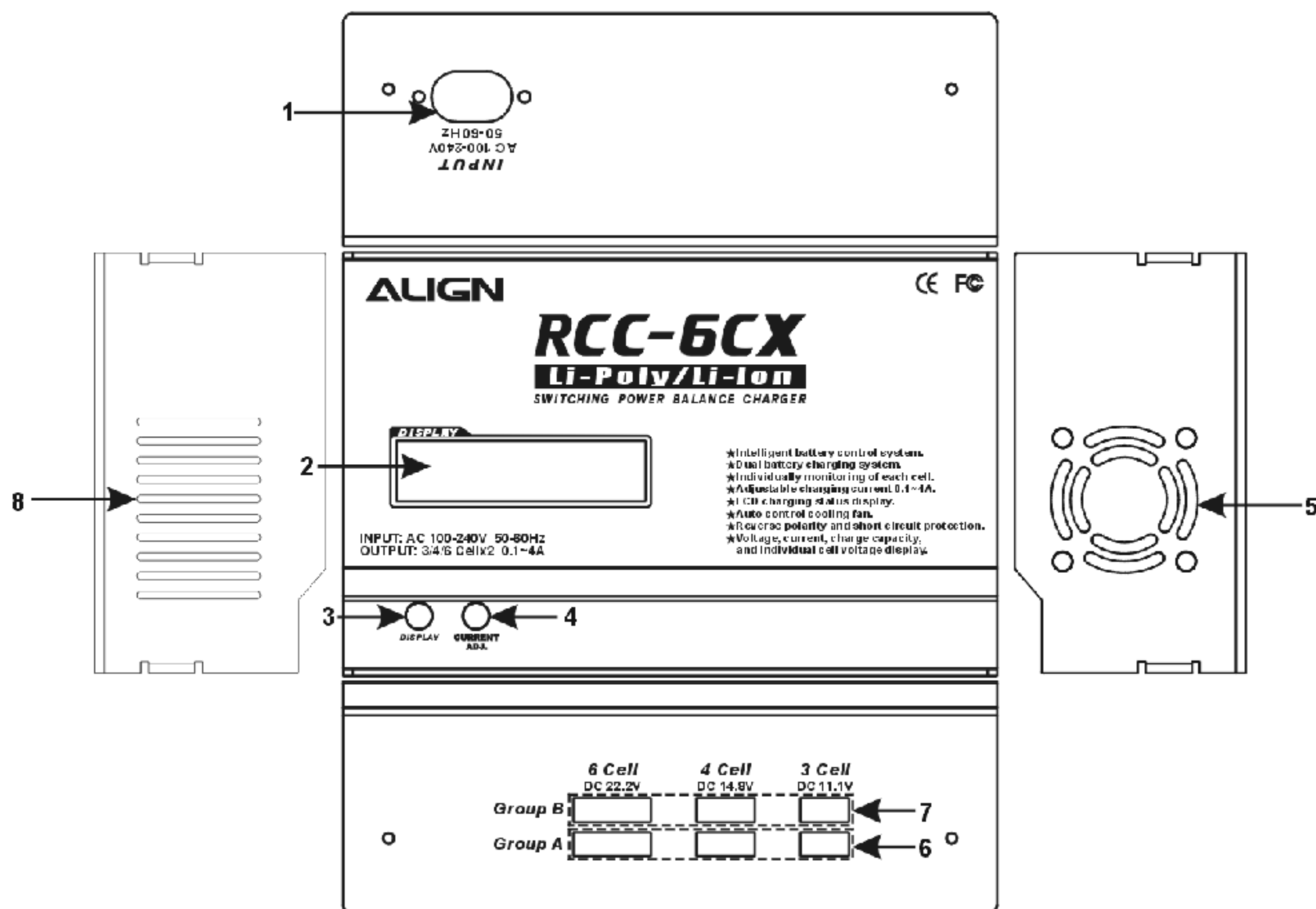
- 1.High efficiency alternating current (A/C) power source, rated at 100-240V.
  - 2.Distributed balancing charging ensures automatic cell balancing, and effectively prevents overcharging or undercharging of individual cell.
  - 3.Automatically compensates for undervoltage during charging to realize batteries full capacity potential.
  - 4.Dual battery charging system. LCD charging status display for voltage, current, charge capacity, and individual cell voltage display.
  - 5.Automatic Initial Charging function which detects excessively discharged cells and attempts initial charging to revive the cells.
  - 6.Auto control cooling fan.
  - 7.Reverse polarity and short circuit protection.
- 1.高效率交換式電源，適用AC100~240V。
  - 2.分壓平衡充電，自動校正不平衡電壓，有效防止單CELL過充危險或充電不足。
  - 3.自動偵測電壓不足補償充電，有效發揮電池最大蓄電功能。
  - 4.雙組輪流充電，LCD顯示各組容量、每CELL電壓、電流、總電壓。
  - 5.低電壓電池試充電功能與偵錯指示。
  - 6.自動控制散熱系統。
  - 7.充電輸出短路與電池反接保護功能。

**CHARGER SPECIFICATION 充電器規格**

1. Input Voltage: AC 100V~240V(50/60Hz)
2. Supported Battery Type: Lion or Li-polymer(3.6V/3.7V 1~6S Battery Pack)
3. Charging Method: CC/CV (Constant Current/Constant Voltage)
4. Charging Current: 0.1A~4.0A(100W max)
5. Charging Time Display: 0~9 hours and fifty nine mins
6. Charging Capacity Display: 0~9999mAh
7. A、B Battery Status Indicator: CHG. / Full / Ready / Error  
 Battery Voltage  $\leq 2.5V$ : LCD Displays Error  
 2.5V < Battery Voltage < 3.0V: Attempts Initial Charging on Batteries(LCD Displays CHG.)  
 Battery Voltage  $\geq 4.19V$ , Charging Current < 0.3A: LCD Displays Full

1. 輸入電源: AC 100V~240V (50/60Hz)
2. 電池類型: Li-ion or Li-polymer (3.6V/3.7V 1~6S Battery Pack)
3. 充電方式: CC/CV
4. 充電電流: 0.1A~4.0A (100W max)
5. 時間顯示: 0~9小時59分
6. 容量顯示: 0~9999mAh
7. A、B電池顯示狀態: CHG. / Full / Ready / Error  
 電池電壓  $\leq 2.5V$ : LCD顯示Error  
 2.5V < 電池電壓 < 3.0V: 對電池試充電 (LCD顯示 CHG.)  
 電池電壓  $\geq 4.19V$ : 充電電流 < 0.3A: LCD顯示Full

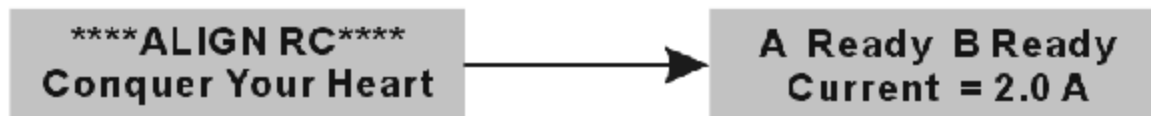
**2. CHARGER PARTS DIAGRAM 充電器各部名稱**



1. AC INPUT POWER 2. LCD 3. MODEL DISPLAY BUTTON 4. CHARGING CURRENT SETTING BUTTON  
 5. COOLING FAN 6. GROUP-A CHARGING JACK 7. GROUP-B CHARGING JACK 8. COOLING VENT  
 1. 充電器AC電源輸入 2. LCD 3. 顯示選擇鍵 4. 電流設定鍵 5. 散熱風扇 6. A組充電座 7. B組充電座 8. 散熱進氣口

**OPERATING INSTRUCTION 操作說明**

1. Attach the included power cord to the charger, and proceed to plug it into the wall outlet.  
1. 將所附的電源線一端連接充電器的AC電源輸入座，另一端插在牆壁的電源插座上。
2. After the initialization messages, the LCD will indicate group-A and group-B are ready for charging, with default current set to 2 amps.  
2. LCD顯示開機畫面與歡迎畫面後，進入A、B組準備充電之主畫面(內建充電電流為2A)。



3. Press Charging Current Setting Button once to enter current setting menu. While the whole number glitter, pressing Model Display Button will select the charging current. Then Press Charging Current Setting Button once again to set the decimal. After completing the setting, press Charging Current Setting Button once to exit the setting menu.

**NOTE:** The charging current will be able to be changed during the charging process.

3. 按一次電流設定鍵進入電流設定畫面，此時個位數閃爍，透過顯示選擇鍵可調整電流；接著再接一次電流設定鍵來調整小數點第一位的電流，設定完成後再接一次電流設定鍵，離開設定畫面。  
註：充電過程中亦可更改電流設定。



**4. Charging Methods:**

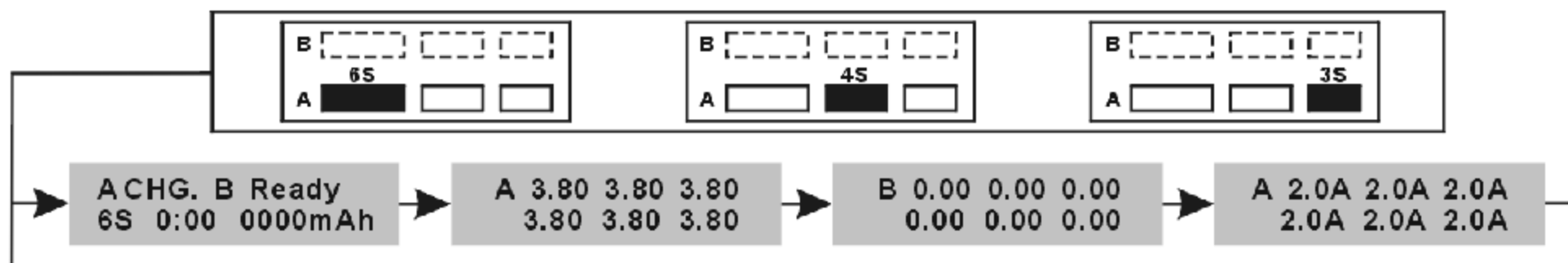
**Single group using group-A:**

Example of charging 6s pack using group-A: Plug the 6s pack into group-A's 6s port. LCD screen will display "A CHG B Ready" indicating group-A is charging, group-B is idling. Next line in LCD indicates cell count, timer, and capacity. Pressing Model Display Button will go to next page displaying individual cell voltages for group-A, individual cell voltages for group-B(0 in this case), and the charging current for each cell in group-A.

4. 充電方式分為：

**單組充電(A組)：**

依電池的規格，將電池的分壓接頭插入A組相對應的充電座上，LCD主畫面顯示A組充電(CHG.)、B組準備(Ready)、CELL數、時間計數、累計充電容量，依序按下顯示選擇鍵可顯示A組每CELL電壓、B組每CELL電壓、A組每CELL充電電流(如下圖以6S為例)。

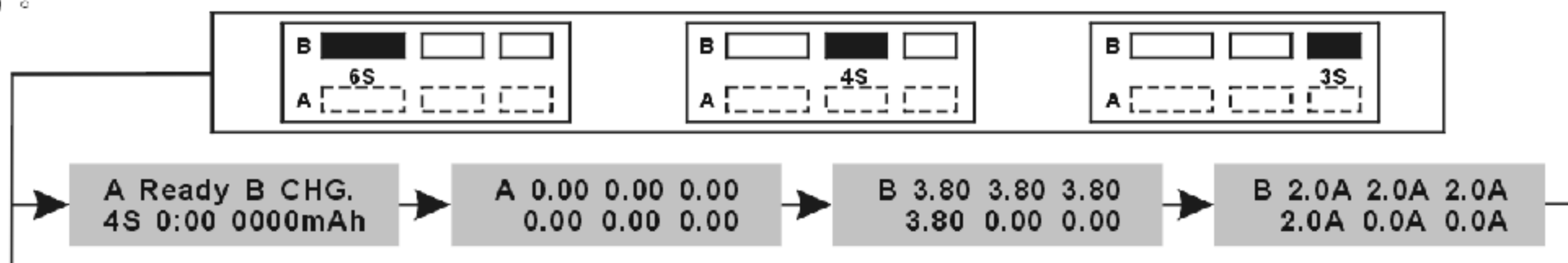


**Single group using group-B:**

Example of charging 4s pack using group-B: Plug the 4s pack into group-B's 4s port. LCD screen will display "A Ready B CHG" indicating group-A is idling, group-B is charging. Next line in LCD indicates cell count, timer, and capacity. Pressing Model Display Button will go to next page displaying individual cell voltages for group-A(0 in this case), individual cell voltages for group-B, and the charging current for each cell in group-B.

單組充電(B組)：

依電池的規格，將電池的分壓接頭插入B組相對應的充電座上，LCD主畫面顯示A組準備(Ready) B組充電(CHG.)、CELL數、時間計數、累計充電容量，依序按下顯示選擇鍵可顯示A組每CELL電壓、B組每CELL電壓、B組每CELL充電電流(如下圖以4S為例)。



**Warning: do not concurrently charge more than one pack in a group.**

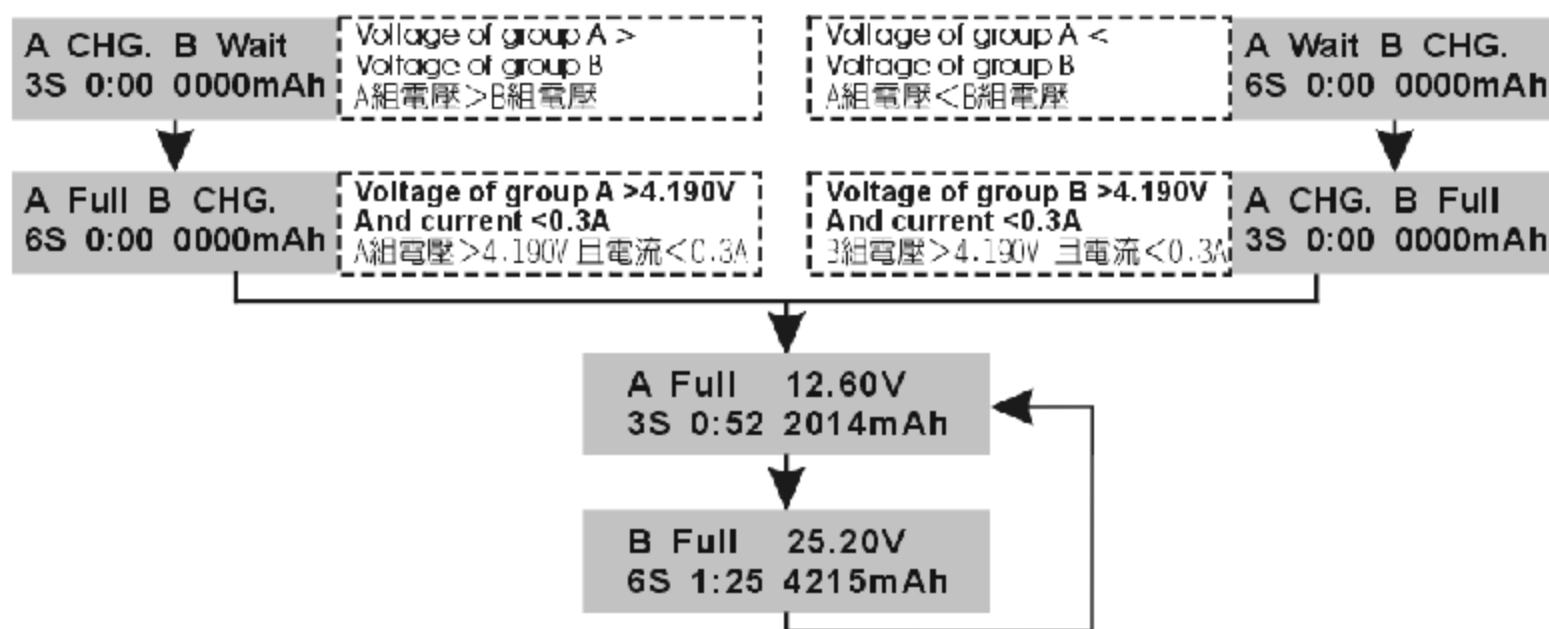
警告：同一組充電座不可插入兩顆以上的電池！

#### Dual Group Charging (group A and group B):

1. Dual group charging utilizes automatic system selection of the packs being charged. The pack with higher voltage will start charging process first, while pack with lower voltage goes into wait mode. When higher voltage pack reaches peak (cell voltage greater than 4.190V and charging current lower than 0.3A), LCD display will indicate "Full" and start charging the lower voltage pack.
2. When both packs connected to group A and group B are fully charged, LCD displays the total voltage, cell count, time elapsed, and charged capacity for both group A and group B.
3. For older battery packs or packs with large imbalance, they can be left on the charger after full charge. The charger will attempt to balance the cells with low current charge.
4. When pack is unplugged from group A or B, LCD will display "Ready" for the corresponding group.

#### 雙組充電(A、B組):

1. 系統自動選擇，電壓較高的電池組會先充，電壓較低的電池組則進入等待；當電壓高的電池組充電至每Cell電壓都大於4.190V且電流小於0.3A，則顯示充飽電(Full)並轉為較低電壓的電池組進行充電。
2. 當A、B組都充飽電時，主畫面顯示A組與B組電池總電壓、Cell數、充電時間、充入容量。
3. 對於老化現象或不平衡壓差大的電池，當充電器顯示Full後可繼續插在充電器上，充電器會以較小的電流對電池補償充電並平衡壓差。
4. 若拔除A組或B組電池，主畫面顯示A組Ready或B組Ready。



### 4. BALANCE PLUG ADAPTOR MODULE INSTRUCTION 轉接板使用方式

#### BALANCE PLUG ADAPTOR MODULE INSTRUCTION 轉接板使用方式

1. Please refer to the following diagram for part reference of the balance plug adaptor module. The ports labeled 2S and 5S are for use with Align 2.5mm pitch plugs. The ports labeled 2-3S TP, 4-5S TP, and 6S TP are for use with Thunder Power 2.0mm pitch plugs.
2. Plug the adaptor module into group A or group B port of the 6CX charger. Then plug the balancing plug of battery packs onto the corresponding plug on the adaptor module.

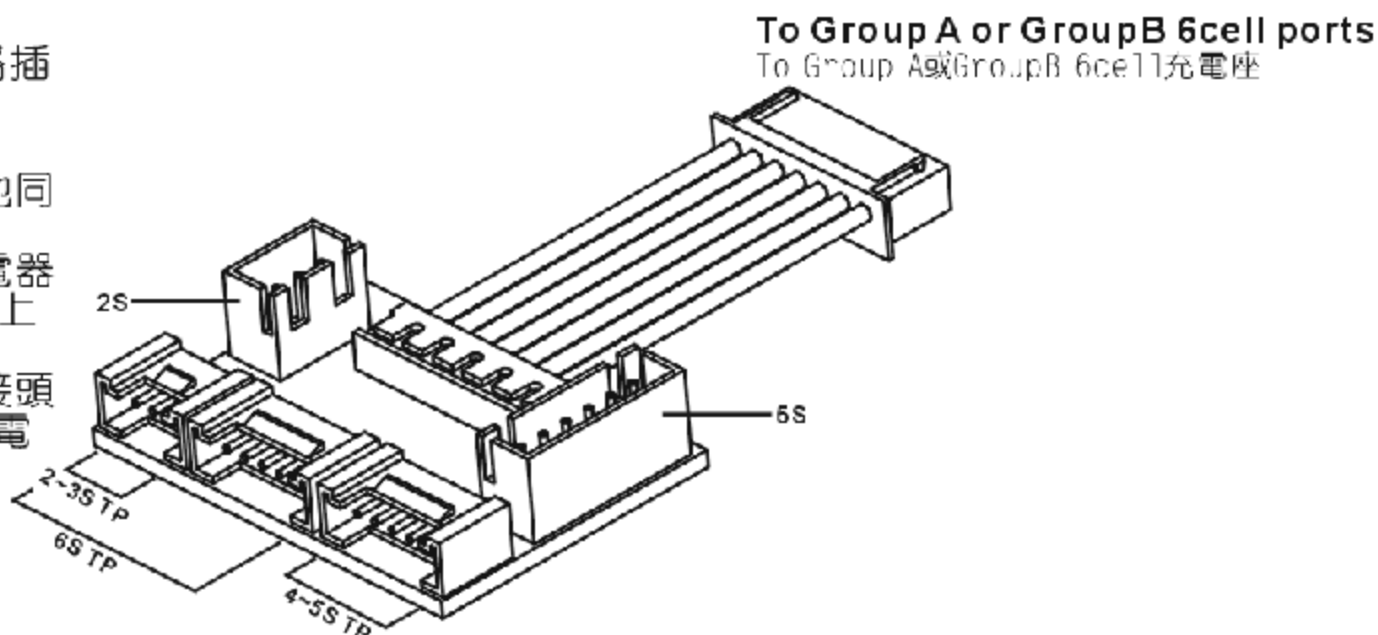
#### Warning:

1. This adaptor module is designed to accept only one battery pack. Do not connect more than 1 battery pack to this module at the same time.
2. When charging battery packs through the adaptor module on either group A or group B ports, do not connect any other battery packs to the unused plugs on the adaptor module or charger itself.
3. When charging through the 6S TP plug on the adaptor module, connect the 6 pin balancing plug before the 4 pin balancing plug to avoid pack being detected as 3S pack.

1. 如下圖為pitch2.0mm(TP 2~6S)與pitch2.5mm(ALIGN2S、5S)轉接板的充電連接示意圖。
2. 首先將轉接板連接至6CX充電器的A組或B組的6cell充電座上，接著依電池分壓接頭的規格插入轉接板相對應的充電座上。

#### 注意:

1. 轉接板1次只能連接一組電池，請勿將兩組電池同時接到轉接板上。
2. 當Group A或 Group B使用轉接板充電時，充電器與轉接板同組的3cell、4cell充電座請勿再接上其他電池。
3. 使用TP 6S電池充電時，請先插入6pin的分壓接頭再插入4pin的分壓接頭，避免充電器誤判為3S電池。



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