

# 安全指示手冊

# Safety Instruction

二次鋰電池組

Rechargeable Li-ion Polymer Battery

J8/J8P

翔碩科技股份有限公司

臺北市大安區羅斯福路3段285號2樓

## Safety Instruction 安全指示說明

當使電池組時，請遵照下列重要指示及警告標語進行操作，以避免造成危險及傷害。Please keep follow all listed important warnings and cautions below while using this battery pack to avoid any damage or hazard.

1. 請勿將電池組的正極與負極短路。  
Please do not make battery polarity (+) and (-) be short-circuited.
2. 請將電池組遠離火源及高溫，因電池組接觸火源及熱源，可能會有爆炸情形發生。請勿將電池組接近任何高溫物體或發熱源。  
Please keep this battery pack away from fire and high heat sources due to the explosion might be happened if it could contact the sources. Do not make your battery pack be close to any heater or object has high temperature.
3. 請勿拆解電池組。  
Please do not disassemble this battery pack.
4. 請勿撞擊或擠壓電池組。請勿將電池組碰觸尖銳鋒利的物體。  
This battery pack shall not be hit or impacted. This battery pack shall not be contact with any sharp or keen objects either.
5. 請勿將電池組曝露或放置於潮濕、充滿水氣的環境；亦禁止對電池組潑灑液體或將電池組放置於充滿液體或水氣的容器或設備中。  
This battery pack shall not be exposed to moisture, dripping or splashing and no objects filled with liquids, shall not be placed on the apparatus.
6. 請正確連接電池組的正極與負極，請勿將電池組的正極與負極相反連接至產品或充電器等設備。如果電池組的極性連接錯誤，可能會造成任何爆炸危險產生。  
The battery polarity (+) and (-) cannot be connected reversely. If the battery polarity (+) and (-) is reversed, any damage of explosion might be happened.
7. 如果電池組的電解液流露出來，請避免觸碰電解液，並立即尋求醫療協助。  
If any electrolyte flow out of this battery pack, please seek medical advice immediately.
8. “WARNING!”(警告!)如果安裝或更換錯誤的電池組型號至設備中，會有爆炸危險發生。如要替換電池組時，請使用正確及相同的電池組型號，或是製造商宣告的型號進行換置。請依照指示處理廢棄電池組。  
“WARNING!” Risk of explosion if battery is replaced by incorrect type. Please use the same type or the recommended type from manufacturer if replacement. Dispose of used batteries according to the instructions.

項目 Item	技術資訊及規格 Technical information and specifications		
1 型號名稱 Model name	J8 (1ICP4/39/94)	J8P (1ICP4/50/109)	
2 標稱容量 Nominal capacity	2230mAh	3400mAh	
3 標稱電壓 Nominal voltage	3.82Vdc	3.82Vdc	
4 截止電壓 The end of discharging voltage	3.2Vdc	3.2Vdc	
5 最大充電電壓 Maximum charging voltage	4.35Vdc	4.35Vdc	
6 最大充電電流 Maximum charging current	2100mA	2100mA	
7 操作環溫 Operating temperature	充電 Charge: 0~45°C 放電 Discharge: -10~50°C	充電 Charge: 0~45°C 放電 Discharge: -10~50°C	

## 附錄 I

### 對設備製造商及電池組裝配業者之建議事項

#### Recommendations to equipment manufacturers and battery assemblers

- A. 不得拆解、開啟或撕裂單電池。電池組僅得由接受訓練後之人員拆解。由單電池組成之電池組，其外殼應設計為僅可在工具輔助下始得開啟。

Do not dismantle, open or shred cells. Batteries should be dismantled only by trained personnel. Multi-cell battery cases should be designed so that they can be opened only with the aid of a tool.

- B. 不得將單電池或電池組短路。勿隨意將單電池或電池組存放於箱中或抽屜中，以避免可能在其內部發生相互短路或由導電性材料所造成之短路。

Do not short-circuit a cell or battery. Do not store cells or batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials.

- C. 未使用前，勿將單電池或電池組從原包裝中取出。

Do not remove a cell or battery from its original packaging until required for use.

- D. 不得使單電池或電池組曝露於熱或火源。避免存放在陽光直射處。

Do not expose cells or batteries to heat or fire. Avoid storage in direct sunlight.

- E. 不得使單電池或電池組遭受機械性衝擊。

Do not subject cells or batteries to mechanical shock.

- F. 當單電池發生洩漏時，不得使液態電解質接觸皮膚或眼睛。若不慎接觸時，以大量清水沖洗患部並尋求醫療協助。

In the event of a cell leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.

- G. 設備應設計為，可防止單電池或電池組之極性反接，並應提供明確之極性標示。為確保正確使用，務必留意單電池、電池組及設備所標示之極性。

Equipment should be designed to prohibit the incorrect insertion of cells or batteries and should have clear polarity marks. Always observe the polarity marks on the cell, battery and equipment and ensure correct use.

- H. 不得將電池組中之單電池，以不同廠牌、電容量、大小或型式者混搭使用。

Do not mix cells of different manufacture, capacity, size or type within a battery.

- I. 若不慎吞食單電池或電池組時，應立即尋求醫療協助。

Seek medical advice immediately if a cell or battery has been swallowed.

- J. 詢問單電池或電池組之製造商關於電池組中可組配單電池之最大數量，以及單電池最安全之連接方法。

Consult the cell/battery manufacturer on the maximum number of cells, which may be assembled in a battery and on the safest way in which cells may be connected.

- K. 每 1 個設備宜提供專用之充電器。應對所有二次單電池及電池組之販賣業者提供關於充電之完整說明資料。

A dedicated charger should be provided for each equipment. Complete charging instructions should be provided for all secondary cells and batteries offered for sale.

- L. 使單電池及電池組保持潔淨與乾燥。

Keep cells and batteries clean and dry.

- M. 當單電池或電池組之端子不潔時，以清潔之乾布擦拭。

Wipe the cell or battery terminals with a clean dry cloth if they become dirty.

- N. 二次單電池及電池組須於使用前充電。務必依單電池或電池組製造商所提供之說明資料，以正確之程序進行充電。

Secondary cells and batteries need to be charged before use. Always refer to the cell or battery manufacturer's instructions and use the correct charging procedure.

- O. 當不使用時，勿使單電池及電池組保持充電狀態。

Do not maintain secondary cells and batteries on charge when not in use.

- P. 經長時間存放後，可能須對單電池或電池組進行數次充、放電，以達其最大效能。

After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance.

- Q. 妥善保存單電池及電池組隨附之原始資料，以備日後查考。

Retain the original cell and battery literature for future reference.

- R. 二次單電池或電池組於丟棄時，應將不同電化學體系之二次單電池或電池組加以區分。

When disposing of secondary cells or batteries, keep cells or batteries of different electrochemical systems separate from each other.

- S. 將 1 個內含二次電池組之設備由 1 公尺之高度自由落下 1 次，使其落於水泥地上，針對 3 個完全充電之二次電池組進行試驗。選擇自由落下時，可能對二次電池組之安全性造成最大衝擊之方向進行試驗。亦可對二次電池組施加等效於自由落下之衝擊，以此模擬試驗取代對設備所進行之自由落下試驗。

Drop a device containing the battery once from a height of one meter onto a concrete floor. Test three sets of fully charged batteries. For dropping, select the direction in which the free fall is likely to have the greatest impact on the safety of the battery. Instead of dropping a host device, a shock equivalent to dropping may be given to the battery for simulation.

## 附錄 II

### 對最終使用者之建議事項

#### Recommendations to the end-users

- A. 不得拆解、開啟或撕裂二次單電池或電池組。  
Do not dismantle, open or shred secondary cells or batteries.
- B. 不得使單電池或電池組曝露於熱或火源。避免存放在陽光直射處。  
Do not expose cells or batteries to heat or fire. Avoid storage in direct sunlight.
- C. 不得將單電池或電池組短路。勿將單電池或電池組存放於箱中或抽屜中，以避免可能在其內部發生相互短路或由導電性材料所造成之短路。  
Do not short-circuit a cell or a battery. Do not store cells or batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
- D. 未使用前，勿將單電池或電池組從原包裝中取出。  
Do not remove a cell or battery from its original packaging until required for use.
- E. 不得使單電池或電池組接受機械性衝擊。  
Do not subject cells or batteries to mechanical shock.
- F. 當單電池發生洩漏時，不得使液態電解質接觸皮膚或眼睛。若不慎接觸時，以大量清水沖洗患部並尋求醫療協助。  
In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
- G. 不得使用任何非指定搭配設備使用之充電器。  
Do not use any charger other than that specifically provided for use with the equipment.
- H. 為確保正確使用，務必留意單電池、電池組及設備所標示之正(+)、負(-)極性。  
Observe the plus (+) and minus (-) marks on the cell, battery and equipment and ensure correct use.
- I. 不得使用任何非設計搭配設備使用之單電池或電池組。  
Do not use any cell or battery which is not designed for use with the equipment.
- J. 不得將設備中之單電池，以不同廠牌、電容量、大小或型式者混搭使用。  
Do not mix cells of different manufacture, capacity, size or type within a device.
- K. 孩童使用電池時宜有成人從旁監督。  
Battery usage by children should be supervised.
- L. 若不慎吞食單電池或電池組時，應立即尋求醫療協助。  
Seek medical advice immediately if a cell or a battery has been swallowed.

- M. 務必選購由設備製造商建議使用之電池組。  
Always purchase the battery recommended by the device manufacturer for the equipment.
- N. 使單電池及電池組保持潔淨與乾燥。  
Keep cells and batteries clean and dry.
- O. 當單電池或電池組之端子不潔時，以清潔之乾布擦拭。  
Wipe the cell or battery terminals with a clean dry cloth if they become dirty.
- P. 二次單電池及電池組須於使用前充電。務必使用正確之充電器並依電池製造商所提供之說明書或設備之使用手冊，以正確之程序進行充電。  
Secondary cells and batteries need to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
- Q. 當不使用時，勿使電池組長時間處於充電狀態。  
Do not leave a battery on prolonged charge when not in use.
- R. 經長時間存放後，可能須對單電池或電池組進行數次充、放電，以達其最大效能。  
After extended periods of storage, it may be necessary to charge and discharge the cells or batteries several times to obtain maximum performance.
- S. 妥善保存單電池及電池組隨附之原始資料，以備日後查考。  
Retain the original product literature for future reference.
- T. 僅使用適用於預期用途之單電池或電池組。  
Use only the cell or battery in the application for which it was intended.
- U. 若有可能，在設備不使用時將電池取出。  
When possible, remove the battery from the equipment when not in use.
- V. 棄置時應妥善處理。  
Dispose of properly.