



電動車專用AC充電設備 電動車交流充電器 完整操作指引手冊

ELECTRIC VEHICLE AC CHARGER
WALL-MOUNT EV CHARGER
OPERATING INSTRUCTION MANUAL

目錄

1. 關於本《操作手冊》	2	6. 操作說明	26
錯誤或疏漏	3	待機畫面	27
版權與商標	3	充電開始前	28
2. 安全資訊	4	充電開始	29
重要安全說明	5	充電結束	30
警告	5	充電完成	31
注意事項	5	7. 疑難排除 Q&A	32
3. 規格	6	8. 充電器有限品質保養	36
產品外觀	7	一般條款	37
產品規格	8	責任限制	37
功能	9	保養	37
4. 準備安裝	10		
最低要求	11		
供電電線	11		
供電方式	11		
確定無熔絲開關額定容量	11		
充電器選擇最佳位置	11		
有關安裝的注意事項	11		
檢查內容物	12		
5. 充電器安裝步驟	14		
工具及材料	15		
壁掛式充電器安裝步驟	16		
電纜線配線準備	19		
電纜線配線	20		
確認需求電流及檢測	22		
通電檢測及組裝	23		
接線圖	24		

關於本《操作手冊》

01

錯誤或疏漏

如對本《操作手冊》欲傳達任何建議或疏漏之處，歡迎您將意見或建議，傳送電子郵件至：service@f-evalue.com

版權與商標

本《操作手冊》中所有資訊，均受華城電能著作權及其他知識產權法保護。
若事先未獲得華城電能書面許可，則不得對資料中的全部或部分內容進行修改、重現或複製。

產品規格如有變更，恕不另行通知。

安全資訊

02

重要安全說明

本《操作手冊》包含安裝及維護壁掛式交流充電器時必須遵循的重要指示與警告。

警告

- 使用本產品前，請先閱讀所有指示。
- 使用本產品時如附近有兒童的情況下，需監督控管兒童並留意安全。
- 充電器必須藉由永久性配線系統或保護接地導體來做接地。
- 請勿在具易燃性、易爆性、刺激性或可燃性物質、化學物品或氣體附近安裝或使用充電器。
- 安裝或清潔充電器之前，請先關閉斷路器上的輸入電源。
- 請嚴格遵循所指定的工作參數使用充電器。
- 請勿將水或任何其他液體直接噴灑安裝在牆上的開關箱。請勿將任何液體噴灑充電槍或將充電槍浸入液體中。請將充電槍放在基座上，以防止接觸不必要的汙染物或濕氣。
- 如果充電器存在缺陷、出現裂痕、磨損、破裂或損壞以致無法使用或操作，請停止使用。
- 請勿試圖拆卸、維修、不當調整或改裝充電器。使用者切勿自行維修充電器。如果需要任何維修或修改，請聯絡華城電能科技股份有限公司。
- 運送充電器時，請務必小心，請勿讓充電器承受強大作用力或衝擊力，或拉動、扭曲、纏結、拖曳或踩踏充電器，以防止機體或任何元件受損。
- 請勿用手指或尖銳金屬物件（例如電線、工具、或針 ... 等）接觸充電槍頭的末端。
- 請勿用力折疊充電器的任何零件或對其施加壓力，或者使用尖銳的物件破壞。
- 請勿將異物插入充電器的任何部位。
- 使用充電器可能會影響或損壞醫療或植入式電子設備的運作，例如植入式心臟起搏器或植入式心臟除顫器。使用充電器之前，請就充電對此類電子設備的影響向電子設備製造商進行諮詢。

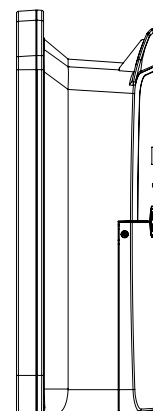
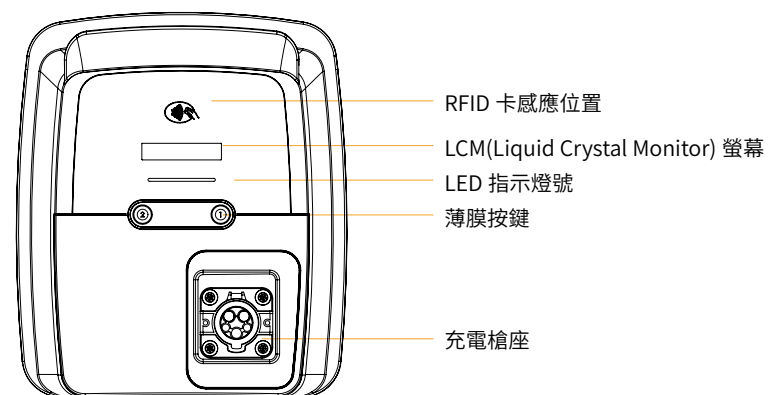
注意事項

- 請勿以發電機作為充電電源。
- 錯誤安裝及測試充電器將對車輛電池及 / 或充電器本身帶來潛在損壞，由此導致的任何損壞均不屬於保固範圍。
- 請勿在充電器工作範圍 -13° F 至 122° F (-25° C 至 50° C) 以外的溫度下操作充電器。
- 若有用到網路線，長度不得超過三十公尺。
- 本充電設備需搭配合格認證之無熔絲開關過載保護器和漏電保護斷路器同時使用方可符合國家 BSMI 之 VPC (Voluntary Product Certification; 自願性產品驗證) 認證規定，安裝上若有問題請與華城聯繫諮詢或購買合格料件，若非使用合格認證之無熔絲開關過載保護器和漏電保護斷路器，造成本充電設備異常或出現其他問題由使用者自行負責。
- 禁止使用轉接器或轉換轉接器。
- 禁止使用延長線組。

規格

03

1. 產品外觀



2. 產品規格

說明	規格
電壓規格	· 使用電壓：220V 單相交流電：L、中性線與地線 · 電壓範圍：N 端與 L 端之間 220V 交流電
頻率範圍	60 Hz
輸出電流	(最高)50A
輸出功率	(最高)11KW
充電槍規格	SAE J1772
電纜線長	5 米
充電器外觀尺寸	長度：393.8 毫米 寬度：338.54 毫米 高度：144.53 毫米
重量（包含充電槍線）	9.2 公斤
按鈕	功能鍵①、功能鍵②
指示燈號	待機：綠燈 / 充電中：藍燈 / 充飽電：閃綠燈 / 錯誤：紅燈
使用者身份辨識	RFID 讀卡機（註：可選擇啟用或關閉身分辨識功能）
LCM 液晶顯示	中英文顯示
保護功能	過電壓保護、低電壓保護、過電流保護、短路保護、漏電保護、過載保護、過溫保護
操作溫度	-25° C 至 50° C
濕度	<95% 相對溼度
IP 防塵防水等級	IP55
認證規範	CNS15511

3. 功能

(1) 可選輸出額定電流

根據現地得需求調整額定電流的輸出。可調整充電器的電流範圍為 6、16、24、32、40 或 50A。

(註：需於安裝時調整，安裝完成若尚須調整，需請有合格證照的專業電工人員評估和設定。)

(2) 延遲充電啟動

若想延遲充電啟動時間，可按下功能鍵②即可預設 1、2、4 或 8 小時後，開始充電。

例：現在時間是 10：00，希望在 2 小時後開始充電，所以按功能鍵②兩次，倒數 2 小時完畢之後，充電器即會自動啟動充電功能。

(註：與車端的充電接口需保持正確連接)

(3) 加卡和刪卡

- 按住功能鍵①不放 (此時 LCM 顯示的文字會輪放，不用理會)，直到 LED 燈出現黃色燈號，並聽到嗶嗶兩聲。此時，可使用功能鍵②來選擇【加卡】或是【刪卡】功能。
- 加卡：藍 / 綠燈交錯閃爍時，將卡片靠近 RFID 讀卡位置，嗶長音後，會回到待機狀態，代表已加入卡號。一次只能加入一張卡號。
- 刪卡：藍 / 紅燈交錯閃爍時，長按功能鍵①，直到嗶長音，再放開按鍵，會回到待機狀態，代表已刪除全部卡號。
- 20 秒內未進行動作，會自動回到待機狀態。
- 刪卡模式時（藍 / 紅燈交錯閃爍），長按功能鍵②，可以再回到加卡模式

(4) 手動停止充電

按住功能鍵①不放 (此時 LCM 顯示的文字會輪放，不用理會)，直到 LED 燈出現黃色燈號，並聽到嗶嗶兩聲，此時，會立即停止充電。等待 20 秒後，會先出現充電完成訊息，然後回到待機狀態。

準備安裝

04

1. 最低要求

- 量測電力供應負載，確認可滿足充電器最大之電流。
- 開關箱內備用或新增之無熔絲開關額定電流需大於充電器最大電流 1.25 倍。
- 確認現場電壓及配線之距離，計算電壓之壓降是否符合當地法令或充電器之最小需求。
- 請於充電器前方預留斷路器及配管配線至車位後方 1.2M 高位置，出線預留 0.5M 線長，以利結線。

2. 供電電線

電纜線需使用當地國家認證合格之絕緣披覆銅導線，且導線之耐電流須大於無熔絲開關之額定電流 1.25 倍以上。(依台電電工法規標準)

3. 供電方式

本充電器使用電力為單相三線 220V，可兼容三相四線 220V/380V、單相三線 110V/220V、單相二線 220V、三相三線 220V。（注意：電力配接建議由合格電力技術員或技師進行配接，避免發生人員觸電或短路意外）。

4. 確定您的無熔絲開關額定容量

- 確定您的總開關規格，請檢查配電盤或開關箱，以確定安裝場地的電力來源可用電流量。
- 充電器內有內置旋轉開關，供您調整其工作電流，備用或新增的無熔絲開關額定電流選用應按以下數值的連續電流值 6、16、24、32A 選擇適當之無熔絲開關。
- 根據現地需求調整額定電流的輸出。可調整充電器的電流範圍為 6、16、24、32、40A 或 50A。

5. 壁掛式交流充電器選擇最佳位置

安裝位置應確保充電電纜可連到車端的充電接口，充電器應該位於以下位置：

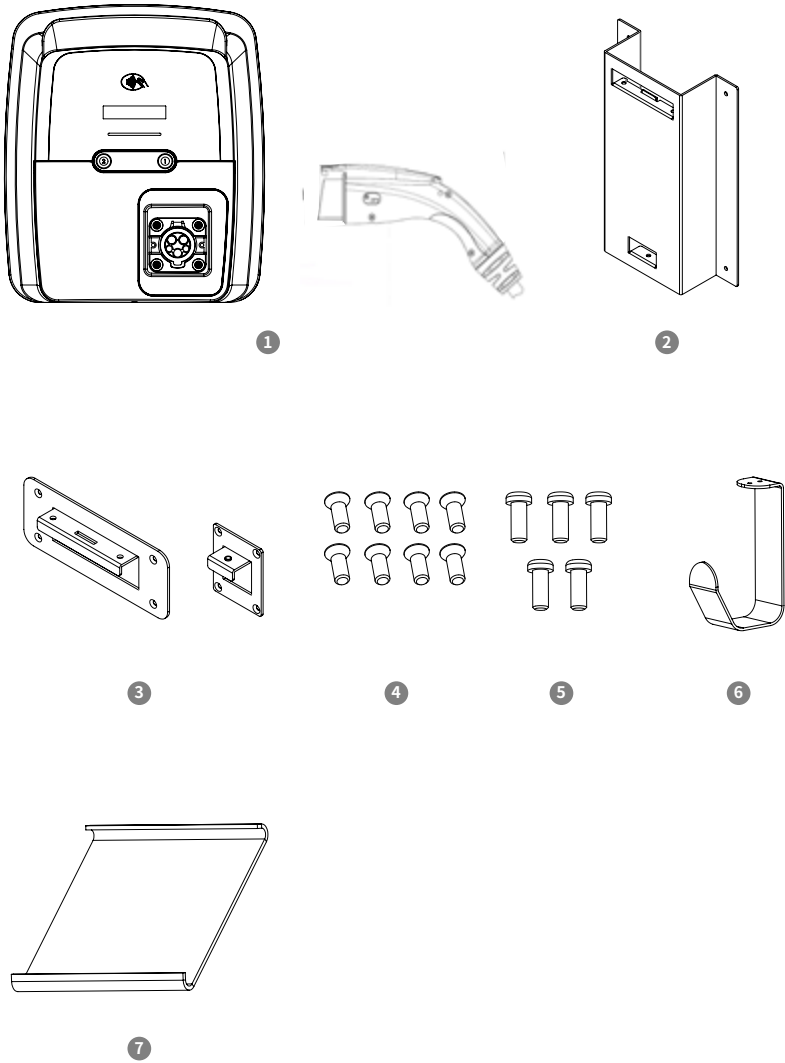
- (1) 在封閉式車庫內，一般位於車輛充電口旁。
- (2) 通風良好的地方，避免安裝在封閉式箱體內或傳熱裝置附近。
- (3) 室內充電器安裝需在離地 100 公分以上，不超過 120 公分的位置。
- (4) 室外充電器安裝需在離地 100 公分以上，不超過 120 公分的位置。
- (5) 充電器本體需離週遭障礙物 20 公分以上，以便電纜線存放時纏繞於充電器本體。

6. 有關安裝的注意事項

- 安裝前請確認供電端開關已關閉斷電，並作好預防性防護，避免充電器安裝過程發生人員觸電危害。
- 配管線過程需依當地電力相關法規進行安裝。

7. 檢查內容物

項目	說明	數量
1	充電器本體和槍線	1
2	壁掛架	1
3	壁掛鐵件	2
4	壁掛件用皿頭螺絲 (M3 X 8L)	8
5	壁掛架和電纜掛鉤圓頭螺絲 (M4 X 12L)	5
6	充電槍電纜線掛鉤	1
7	端子台蓋板	1



充電器安裝步驟

05

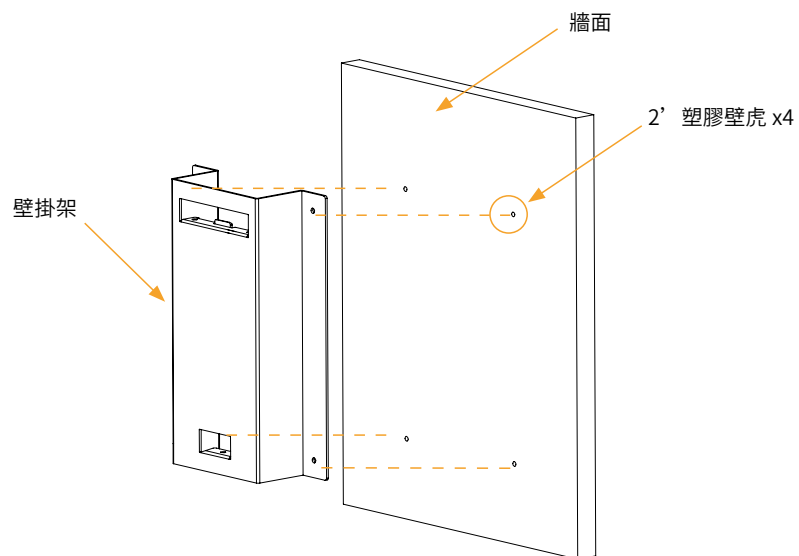
1. 工具及材料

- 鉛筆或簽字筆
- 電工鉗
- 剝線鉗
- 2mm²~14mm² 壓接鉗
- 捲尺
- 三用電表或數位萬用電表
- 十字螺絲起子
- 小型平頭螺絲起子
- 水平儀
- 電鑽及鑽頭
- 塑膠壁虎
- 圓型端子 R8-6
- 扭力起子

2. 壁掛式充電器安裝步驟

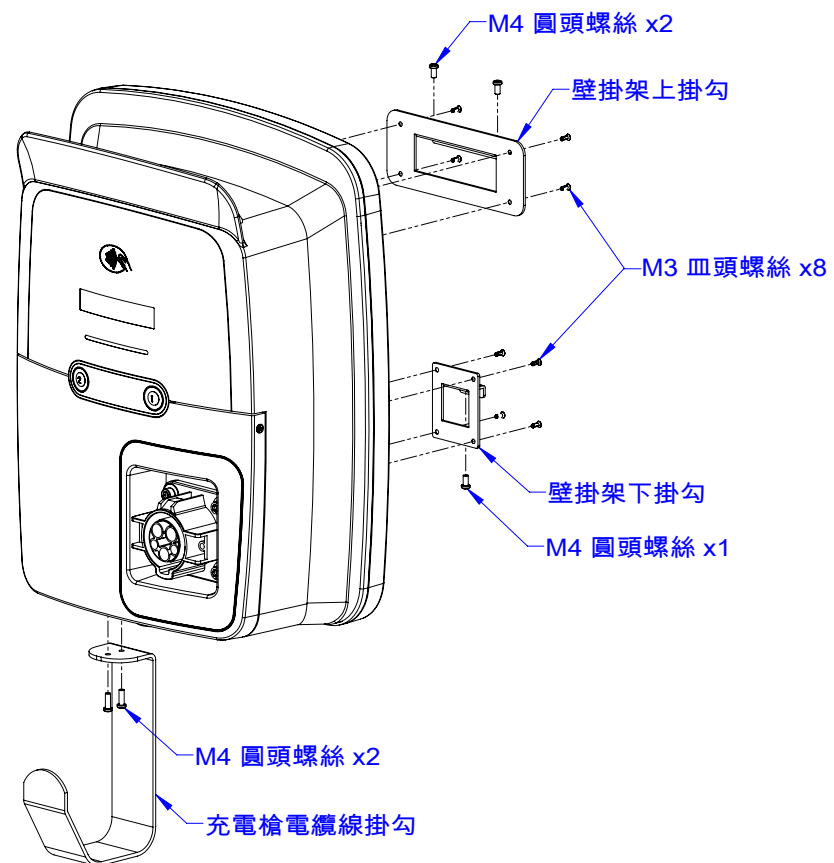
(1) 使用支架作為指引，在安裝牆面上標記鑽孔位置

- 使用 5.8mm 水泥鑽頭鑽孔，並將 2 分塑膠壁虎埋入孔中。
- 使用螺絲將壁掛架（注意壁掛架方向）鎖固於牆面。

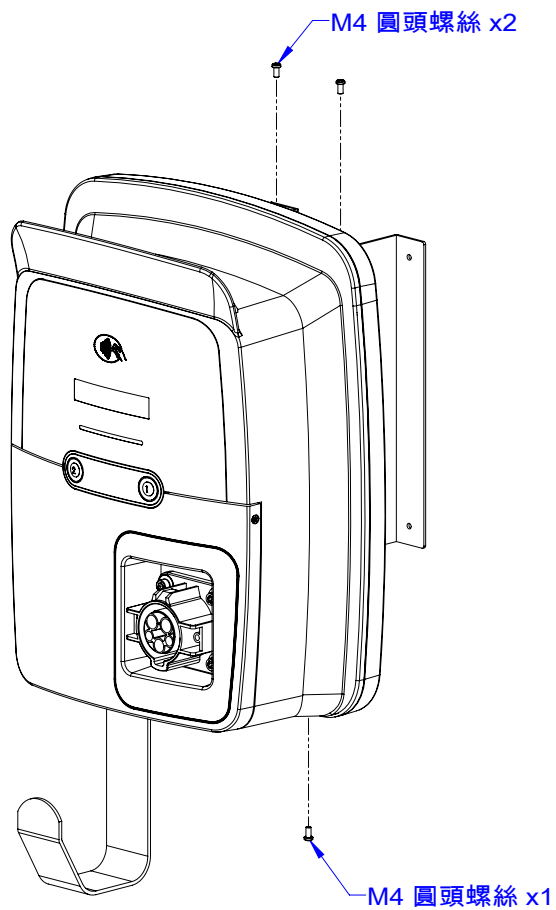


(2) 壁掛架掛勾及電纜線掛勾組裝

- 使用附件螺絲包中的 M3 皿頭螺絲將壁掛架上掛勾與下掛勾固定於充電器背板。
- 使用附件螺絲包中的 M4 圓頭螺絲將充電槍電纜線掛勾固定於充電器左下方。



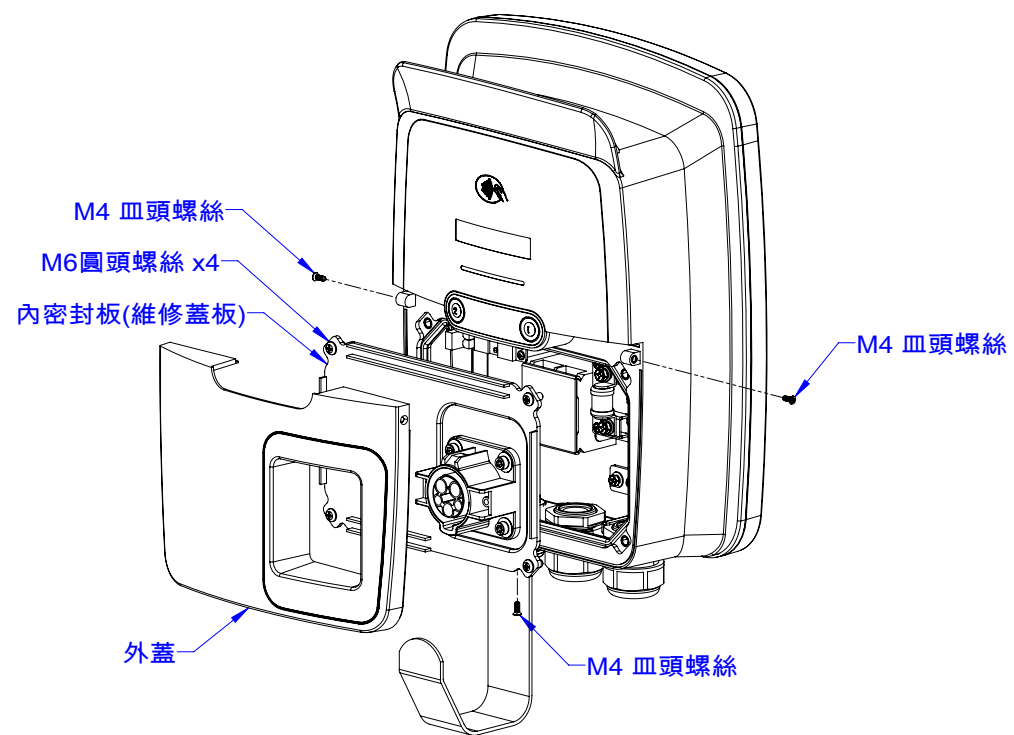
(3) 將充電器本體掛到固定在牆面上的支架，並使用附件螺絲包中的 M4 圓頭螺絲將上掛勾與支架固定。



3. 電纜線配線準備

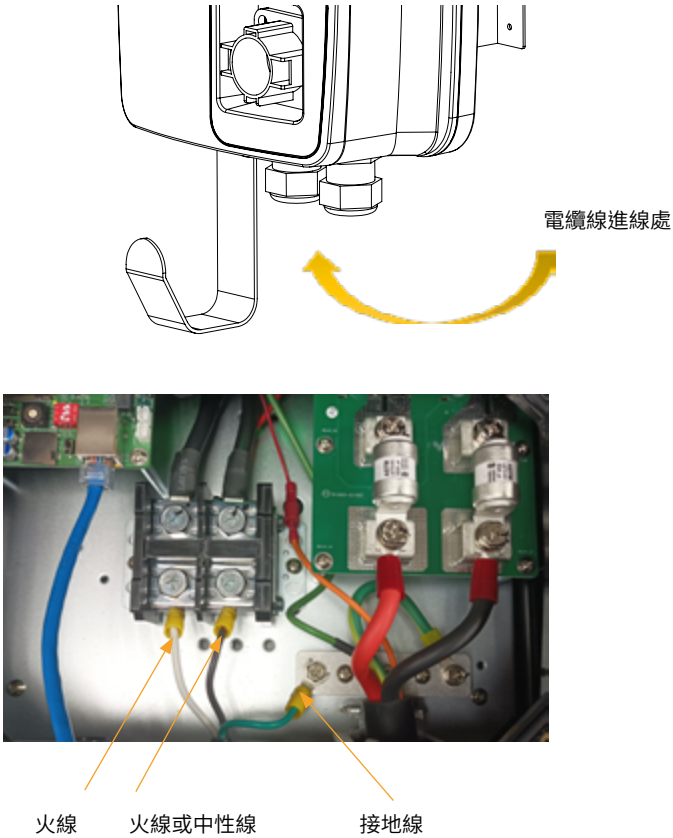
(1) 使用十字螺絲起子將充電器外蓋殼及內密封板卸除。

- 小心將外蓋殼左右及下方的十字皿頭螺絲卸除，並取下外蓋。
- 小心將內密封板正面四個角落的十字圓頭螺絲卸除，並取下密封板。



4. 電纜線配線

- (1) 移除端子座上的透明保護蓋，將電纜線由充電器本體下方的電纜固定頭進線，並將電纜線固定於端子台上。
- a. 逆時針旋轉鬆開進線口的電纜固定頭，將電纜線穿入約 10~15cm 後順時針旋轉鎖緊電纜固定頭，並稍微拉扯確認電纜線不會移動。
- b. 將電纜線的 L1、L2 與接地電線分別壓接圓型端子後使用扭力起子鎖附於端子台上的 Lin、Nin 與 GND 上 (4N-m)，並將端子座透明保護蓋裝回。（注意：L1、L2 與接地電線的線色需依各國家或地區法規標示。）



充電器本體內端子台

5. 使用模式設定

壁掛式充電器，可依需求調整使用模式，相關指撥開關設定方式如下；
注意：場勘時請先確認設備使用模式需求及有無額外購買 RFID 感應卡需求。

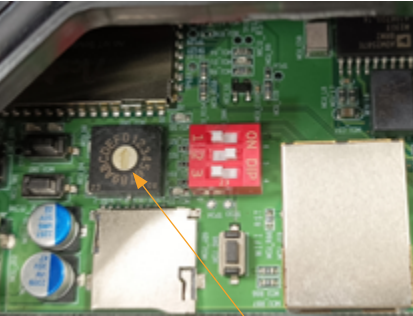
	隨插即用 (預設值)
	RFID 卡片認證
	OCPP (註：此功能只限 OCPP 後台主機連 線用)
	全卡

(1) 最大輸出電流設定方式：

	- 硬體指定 (出廠預設值) - 依手冊指撥 2 & 3 設定在全卡 / 卡片認證 / 隨插即用 / OCPP - 最大輸出電流由硬體旋鈕及槍線序號決定 - 此模式設定頁面可讀取設定，但設定頁面不可變更操作模式與最大輸出電流。
--	---

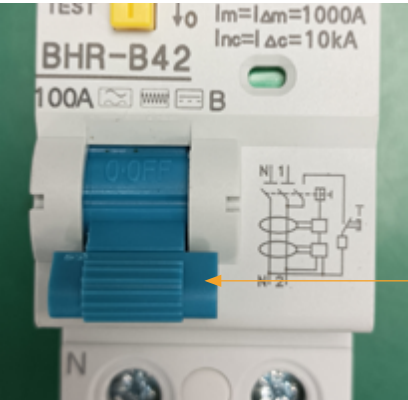
6. 確認需求電流及檢測

- (1) 充電器充電電流預設為 32A，確認是否需調整輸出電流，如需調整輸出電流請參閱下表。
- (2) 開啟電力來源的無熔絲開關及使用三用電表或數位電表確認輸入電壓是否為單相 220V ± 10%，確認無誤後開啟漏電斷路器。



輸出電流調整開關

設定值	輸出安培數
0	依槍線序號決定
1	6
2	16
3	24
4	32
5	50
8	40



向上開啟 ON

漏電斷路器

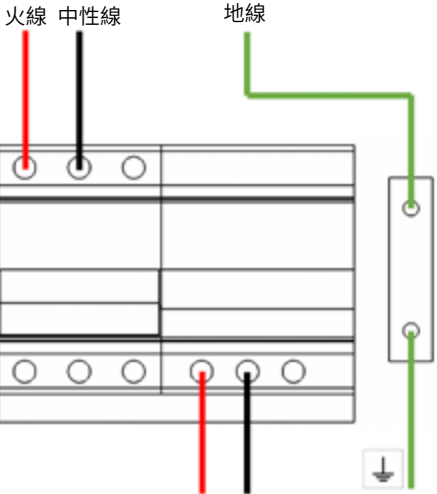
7. 通電檢測及組裝

- (1) 通電後充電器 LCM 及 LED 燈亮起並自我檢測
 - a. 充電器初始化及偵測可輸出的最大電流值，確認無誤後顯示待機畫面「充電器待機中」。
 - b. 依序將內密封板及外蓋板鎖回。（注意：密封板與外蓋殼是否與本體完全貼合）

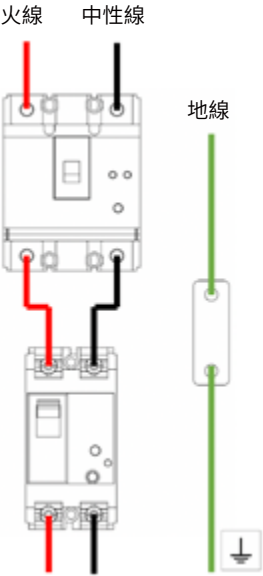


充電器螢幕顯示畫面

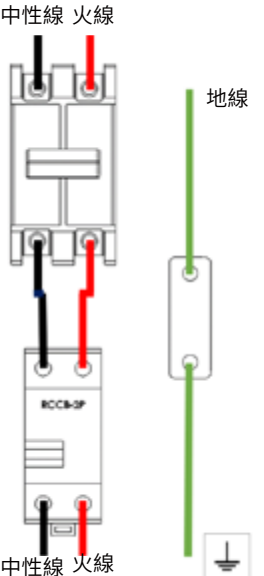
8. 接線圖



樣式 1



樣式 2

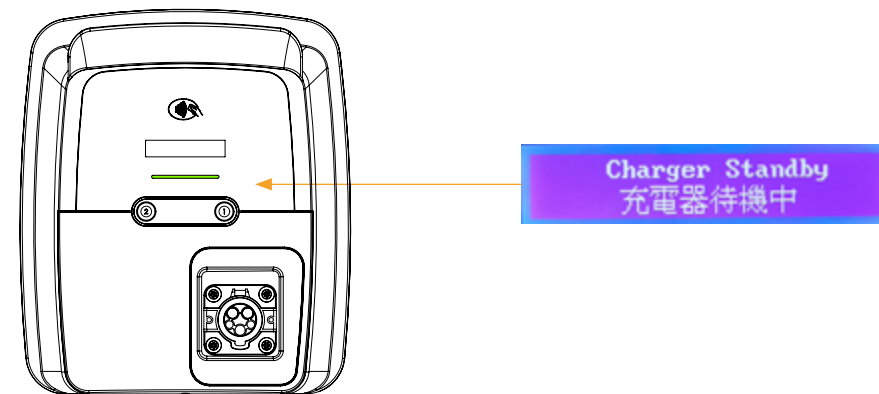


樣式 3

操作說明

06

1. 待機畫面

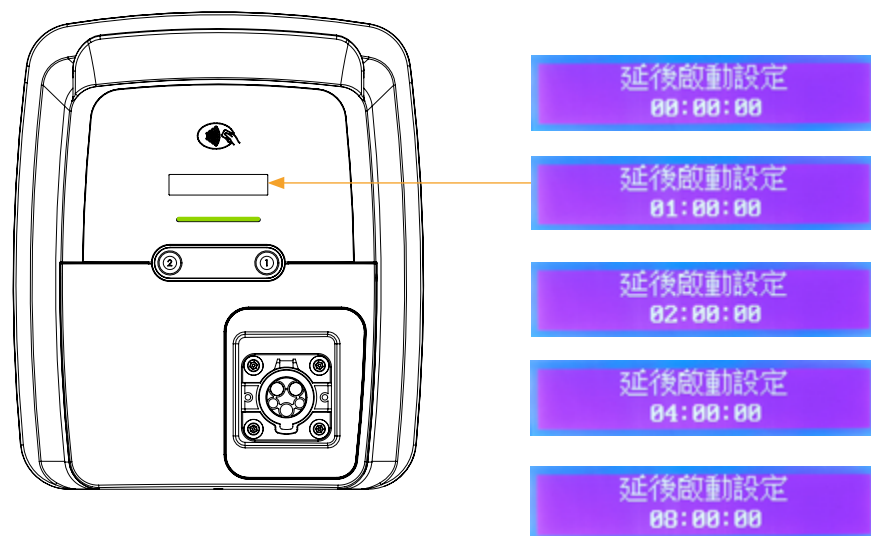


注意事項：

- (1) 本設備僅限電動汽車使用。
- (2) 充電中請勿強行拔除充電槍。
- (3) 如遇大雨造成雨水落在充電槍接口，請先將水珠擦拭乾淨再行使用。
- (4) 使用過程如有任何問題，請撥打華城電能科技股份有限公司 02-2325-3320。

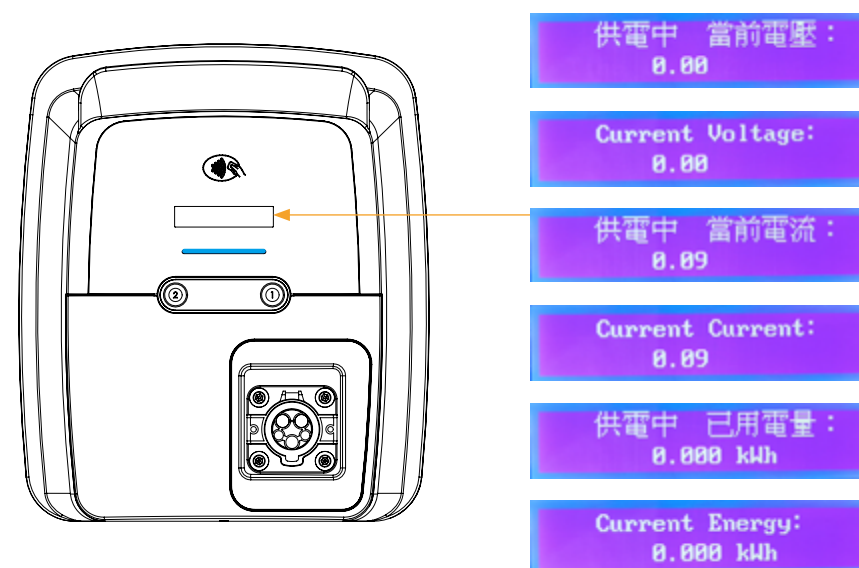
2. 充電開始前

- 充電前原始設定為 0 小時，當按下功能鍵②可預設 1、2、4 或 8 小時後，開始充電。當按到 8 小時後，再多按一次就變回原始設定。
- 功能鍵②設定必須在待機中 (綠燈)，才能設定。如要取消必須按功能鍵②回到原始設定。



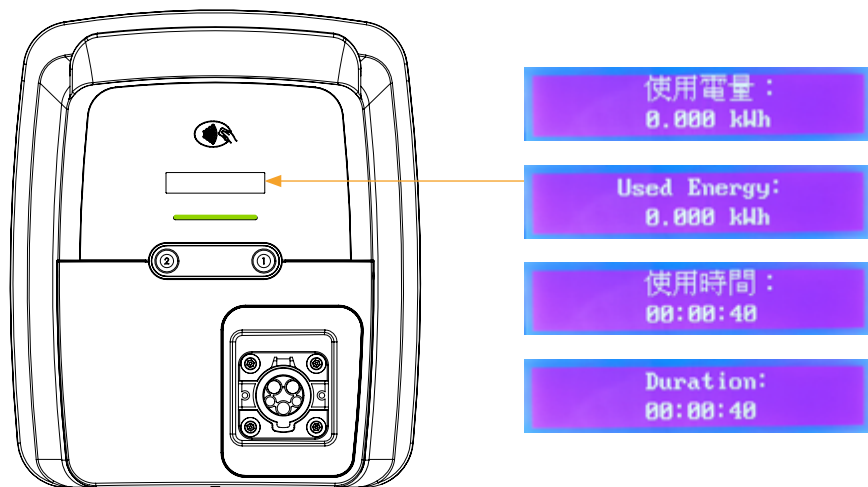
3. 充電開始

- 取下充電槍連接至電動車充電接口。
- 進行充電時，指示燈號由恆亮綠燈轉為恆亮藍燈。
- 供電中時，LCM 輪流以中英文顯示當前電壓、電流及已用電量。



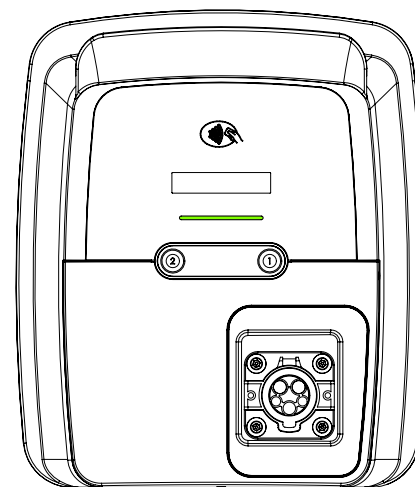
4. 充電結束

- 完成充電時，指示燈號由恆亮藍燈轉為閃爍綠燈。
- LCM 輪流以中英文顯示使用電量及時間。



5. 充電完成

將充電槍取出放回充電插座，指示燈號由閃爍綠燈轉為恆亮綠燈。



疑難排除 Q&A

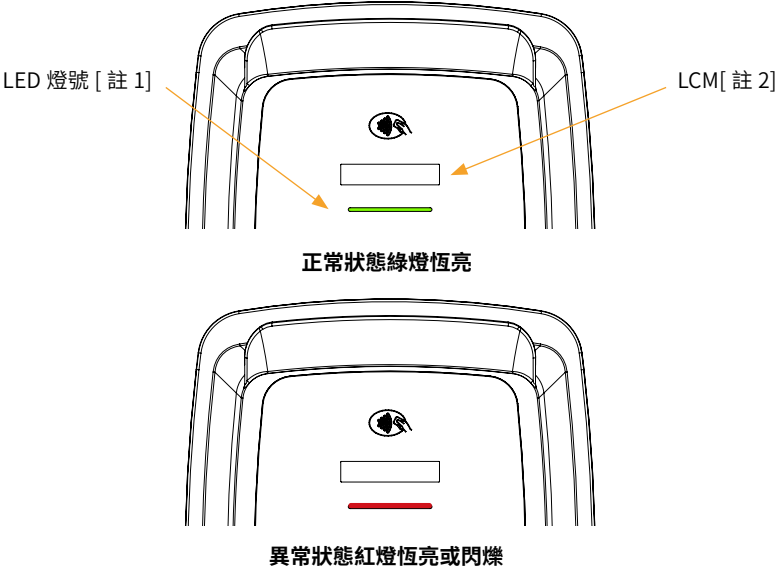
07

項次	LED 燈號 [註 1]	LCM 顯示 [註 2]	問題原因	排除方式
1	紅燈恆亮	「等待時間過長，尚未刷卡請重接充電槍」  	充電槍與車輛連結後超過時間（約 60 秒）未刷卡。	請將充電槍移除後重新與車輛連接及刷卡 ※
2	紅燈閃爍 5 次	「輸出電流過高」	充電電流超過最大輸出電流設定值，充電器進入保護模式停止供電。	請先關閉充電器電源開關（無熔絲開關 [註 3]）後再重啟充電器，如仍持續發生請聯繫專業人員協助。

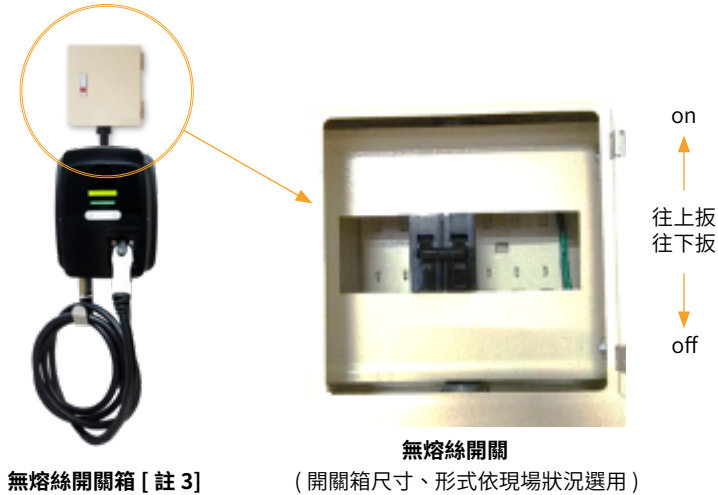
※ 僅適用選用 RFID 啟用卡啟用本交流充電器之用戶，如無啟動 RFID 感應功能之充電器將不會看到該錯誤畫面。

項次	LED 燈號 [註 1]	LCM 顯示 [註 2]	問題原因	排除方式
3	紅燈閃爍 5 次	「發生故障 輸入電壓異常」 	AC IN 電壓過低或是過高，充電器進入保護模式，停止供電。	請先關閉充電器電源開關（無熔絲開關 [註 3]）後再重啟充電器，如仍持續發生請聯繫專業人員協助。
4	紅燈閃爍 9 次	「發生故障電錶異常」 	充電器內建電表發生錯誤。	
5	紅燈閃爍 3 次	「卡片錯誤」 	使用之感應卡片損壞或使用非經設定過之感應卡片該充電器之感應卡片。	請確認使用之啟用卡為該充電器專屬認證過之卡片，如確認卡片無誤仍顯示卡片錯誤，請聯繫專業人員協助更換啟用卡或重新輸入卡號 ※
6	紅燈閃爍 五次	「溫度異常 OTP」	充電器內部偵測溫度異常。	請在雙手乾燥情況下將電力箱內的漏電保護器重新開關，此步驟為先行排除是否為供電端的問題，如仍持續發生請聯繫專業人員協助。

※ 僅適用選用 RFID 啟用卡啟用本交流充電器之用戶，如無啟動 RFID 感應功能之充電器將不會看到該錯誤畫面。



例如：當「尚未感應卡片請拔除充電槍」異常發生時，LED 燈號會連續閃爍 3 次後間隔 1~2 秒後再連續閃爍 3 次，不斷重複此動作直到異常問題排除。



充電器有限品質保養

08

1. 一般條款

- 本充電器自保固起算日保固 2 年，保固範圍包含充電器本體及其內部電子元件（耗材除外，如：保險絲）、充電槍，保固貼紙如有破損、拆除痕跡或人為破壞時，如仍於保固期限內亦不予以保固。
- 華城電能有限品質保養承諾從華城電能充電器產品安裝日起，二年（“質保期”）內享受由於充電器本身出現的故障質保。包括但不限於因下述情形導致華城電能充電器出現缺陷或受到損壞，不享受有限保修待遇：
 - 因正常磨損或老化、誤用、濫用、疏忽、事故、不當使用、存放環境導致的任何直接或間接損壞或故障。
 - 無遵守華城電能充電器依本《操作手冊》的操作說明及注意事項。
 - 外部因素，包括但不限於用物件撞擊華城電能充電器、周圍存放環境或天災（包括但不限於火災、地震、洪水、閃電以及其他環境情況）。
 - 一般的外觀損壞，包括刮痕、凹陷或龜裂。
 - 未獲華城授權或許可標章的個人或機構以任何方式維修、更換或改裝華城電能充電器，或安裝或使用任何零件或配件。
 - 缺乏或不當的維修或保養；以及包括使用非華城電能所提供的配件或零件。

2. 責任限制

- 如非經華城電能認證之專業人員施工安裝充電器而造成設備損壞，則不在保固範圍內，若有發生任何人員或財產傷害，本公司皆不負任何法律責任與損害賠償。
- 針對上述針對上述權利未涵蓋的部分，華城電能不承擔本《操作手冊》所載之補救措施以外的責任，包括但不限於任何產品無法使用、利益損失、業務損失，或是資料或軟體遺失、損毀、受損，或服務條款之責任。除明確指出者外，華城電能不承擔任何衍生性、特別的、間接的、懲罰性損害之責任（即使華城電能已知悉可能發生這類損害），或負責任何第三方提出的求償。針對任何與購買產品相關的責任，您同意 華城電能 均不承擔或負起支付超出您訂購金額的任何賠償金額之責任。在消費者的投訴中，協助釐清重大傷亡或是刑事犯罪事件的責任範圍可能比疏忽導致的損害還廣，在此情況下，華城電能不會試圖排除相關責任。

3. 保養

- 充電器表面如有灰塵或髒汙可用擰乾的抹布進行表面擦拭，不可使用有機溶劑或揮發性液體擦拭避免損壞充電器外殼及引起火災的風險。
- 可由所在地合格之電機專業人員定期檢測外部開關箱內無熔絲開關的一二次側接點是否有鬆脫或異物。
- 長時間不使用充電器時，可將外部開關箱內的無熔絲開關關閉。

- 主型號：
CBDA-X80A
- 系列型號：
CBDA-X80-A4、CBDA-X80-A7、CBDA-X70A、CBDA-X50A、CBDA-350A、CBDA-X50A-A4、CBDA-X50A-A6、CBDA-X50A-A7、CBDA-X40A、CBDA-X40A-A6、CBDA-X32A、CBDA-X32A-A6、CBDA-X24A、CBDA-X24A-A6、CBDA-X16A、CBDA-X16A-A6、CBDA-X70B、CBDA-X70B-A4、CBDA-X70B-A7、CBDA-X50B、CBDA-X40B、CBDA-X32B、CBDA-X32B-A4、CBDA-X32B-A7、CBDA-X24B、CBDA-X16B

機種型號	額定電流 _A	輸出功率 _kW	充電槍規格	重量 _kg
CBDA-X50A-A6	50	11	SAE J1772	9.2
CBDA-X40A-A6	40	8.8	SAE J1772	9.2
CBDA-X32A-A6	32	7.04	SAE J1772	9.2
CBDA-X24A-A6	24	5.28	SAE J1772	9.2
CBDA-X16A-A6	16	3.52	SAE J1772	9.2

華城電能科技股份有限公司

台北市大安區復興南路一段 368 號 10 樓

TEL：(02)2325-3320 FAX：(02)2325-3350

官方網站：www.evalue.com.tw

客服信箱：service@f-evalue.com

Made in Taiwan

Contents

1.About This Operating Instruction Manual.....	52
Error or Omission	53
Copyright & Trademark.....	53
2.Safety information.....	54
Important Safety Instruction.....	55
Warning	55
Precautions	56
3.Specification.....	58
Product Physical Appearance.....	59
Product Specification.....	60
Function.....	61
4.Preparation for Installation.....	62
Minimum Requirements	63
Power Supply Cable.....	63
Power Supply Mode	63
Confirm if Rated Capacity of Your No Fuse Breaker Able to Meet Requirements.....	63
Selection of Best Position for Wall mounted EV charger.....	64
Precautions for Installation.....	64
Check Contents.....	65
5.Installation Steps of Charger.....	66
Tools & Material.....	67
Installation Steps of Wall mounted EV charger.....	68
Wiring Preparation of Cables	69
Wiring of Cables.....	72
Setting the operation modes	73
Confirmation of Current Needs & Test.....	74
Power-on Test & Assembly.....	75
wiring diagram.....	76
6.Operating Instruction.....	78
Standby Page.....	79
Prior to Charge	80
Start to Charge.	81
End of Charge.....	82
Completion of Charge.....	83
7.Troubleshooting Q&A	72
8.Limited Quality Maintenance of Charging Equipment.....	76
General Terms.....	77
Limitation of Liability.....	77
Maintenance.....	78

About This Operating Instruction Manual

01

Error or Omission

If you would like to convey any recommendation or omission with respect to this "Operating Instruction Manual", you are welcome to send your comments or recommendation to this email address: service@f-evalue.com

Copyright & Trademark

All the information contained in this "Operating Instruction Manual" is protected by the copyright of Fortune Electric Value Co., Ltd. and the other laws of intellectual property right. Without the prior written permission of Fortune Electric Value Co., Ltd., all or part of the contents contained in this "Operating Instruction Manual" shall not be revised, reproduced or copied.

The product specifications are subject to change without prior notice.

Safety information

02

Important Safety Instruction

This operating instruction manual includes the important instruction and warning which shall be followed during the installation and maintenance of wall mounted EV charger.

Warning

- Prior to use this product, please read all instructions.
- If there is any child nearby while using this product, monitor and control the child shall be required and pay attention to safety.
- The charger shall be grounded through the permanent wiring system or the protective grounding conductor.
- Please do not install or use the charger around the combustible, explosive, irritating or flammable materials, chemical goods or gases.
- Prior to install or clean the charger, please turn off the input power on the circuit breaker.
- Please strictly follow the specified operating parameters for using the charger.
- Please do not spray water or any other liquid directly on the switch box installed on the wall. Please do not spray any liquid on the charging gun or immerse the charging gun in the liquid. Please place the charging gun on the base to prevent from contacting with the unnecessary contaminant or moisture.
- If the charger has defect, appears crack, wear, fracture or damage so that it cannot be used or operated, please stop using or do not use it.
- Please do not attempt to disassemble, repair, improperly adjust or modify the charger. The user shall not repair the charger by himself. If any repair or modification is required, please contact with the Fortune Electric Value Co., Ltd.
- Please be careful during the shipment of charger. Please do not subject the charger to strong force or impact, or pull, twist, tangle, drag or step on the charger to prevent from damage to the body or any component.
- Please do not contact with the end of charging gun head with your fingers or sharp metal object (such as electric wire, tool or needle etc.).
- Please do not fold any part of the charger or put pressure on it, or damage it with sharp object.
- Please do not insert foreign object into any part of the charger.
- The use of charger may affect or damage the operation of medical or implantable electronic equipment, such as the implantable pacemaker or implantable defibrillator. Prior to use the charger, please consult with the manufacturer of electronic equipment with respect to the impact of charging on such electronic equipment.

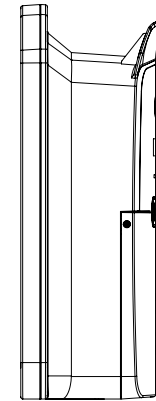
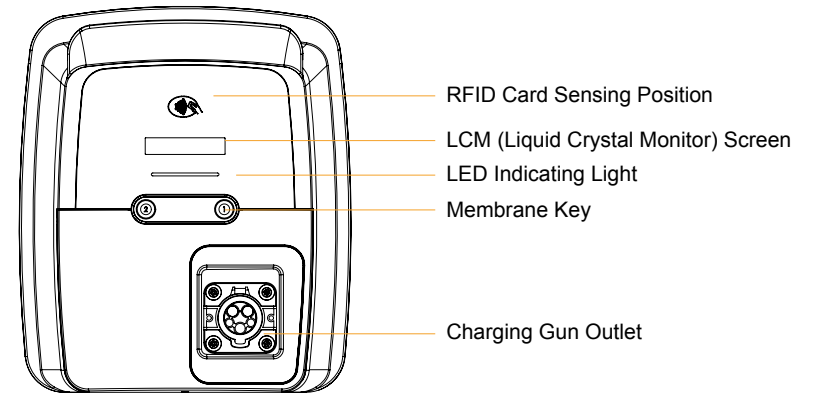
Precautions

- Please do not use the generator as the power supply source for charging operation.
- The incorrect installation and test of charger will cause the potential damage to the vehicle battery and/or the charger itself. Any damage caused by these will not be covered by the warranty.
- Please do not operate the charger under the temperature outside the operating range i.e. -13 °F to 122°F (-25°C to 50°C).
- If using a network cable, the length must not exceed thirty meters.
- This charging device must be used with a certified non-fuse switch overload protector and leakage protection circuit breaker to comply with the national BSMI VPC (Voluntary Product Certification) certification requirements. If you have any questions about installation, please contact EVALUE for consultation or purchase qualified materials. If the non-fuse switch overload protector and leakage protection circuit breaker are not used, the user shall be responsible for the abnormality or other problems of the charging equipment.
- Do not use adapters or conversion connectors.
- Do not use extension cord sets.

Specification

03

1.Product Physical Appearance



2.Product Specification

Description	Specification
Voltage Specification	- Voltage Used:220V Single-phase AC: L, Neutral & Ground Cable - Voltage Range: 220V AC between N end and L end
Frequency Range	60 Hz
Output Current	(Highest)50A
Power Output	(Highest)11KW
Charging Gun Specification	SAE J1772
Cable Length	5m
Physical Dimension of Charger	Length: 393.8mm / Width: 338.54mm /Height: 144.53mm
Weight (including charging gun cable)	9.2kg
Buttons	Button 1, Button 2
Indicating Lights	Standby: Green Light, Under Charging: Blue Light, Full Charge: Flashing Green Light, Error: Red Light
Identification of User Identity	RFID Card Reader (Note: Enable or disable identify identification function is selectable)
LCM Liquid Crystal Display	Both Chinese & English Display
Protection Function	Overvoltage Protection, Low voltage protection, Over Current Protection, Short Circuit Protection, Overload Protection, Over-temperature protection
Operating Temperature	-25°C to 50°C
Humidity	<95% Relative Humidity
IP Dustproof/Waterproof Class	IP55
Certification Standard	CNS15511

3.Function

(1) Selectable Rated Current

The output of rated current can be adjusted in accordance with the field needs. The current ranges of this adjustable charger are 6, 16, 24, 32, 40 or 50A.

(Note: It shall be adjusted at the time of installation. If further adjustment is still required after the installation is completed, the qualified professional electrician shall be called for assessment and setting.)

(2) Start of Delaying Charge

If it is intended to delay the starting time of charge, press the button 2 to preset the starting time of charge after 1, 2, 4 or 8 hours.

Example: The current time is 10:00, and it is intended to start the charge after 2 hours, so press the button 2 twice, and the charger will automatically start the charging function upon the end of 2 hours countdown.

(Note: The charging connector to the vehicle shall be properly connected)

(3) Adding and Deleting Cards

- Press and hold function key 1 without releasing it (at this point, the text displayed on the LCM will cycle through, but you can ignore it) until the LED light shows a yellow indicator and you hear two beeps. At this point, you can use function key 2 to select the "Add Card" or "Delete Card" function.
- Adding Card: When the blue/green lights flash alternately, place the card near the RFID card reader position. After a long beep, it will return to standby mode, indicating that the card number has been added. Only one card number can be added at a time.
- Deleting Card: When the blue/red lights flash alternately, long-press function key 1 until a long beep is heard, then release the button. It will return to standby mode, indicating that all card numbers have been deleted.
- If no action is taken within 20 seconds, it will automatically return to standby mode.
- While in delete card mode (blue/red lights flashing alternately), long-press function key 2 to return to add card mode.

(4) Manual Stop Charging

- Press and hold function key 1 without releasing it (at this point, the text displayed on the LCM will cycle through, but you can ignore it) until the LED light shows a yellow indicator and you hear two beeps. At this point, charging will immediately stop. After waiting for 20 seconds, the charging completed message will appear first, and then it will return to standby mode.

Preparation for Installation

04

1.Minimum Requirements

- Measure the load of power supply and confirm it is able to meet the maximum current of charger.
- The rated current size of spared or newly added no-fuse breaker in the switch box shall be 1.25 times greater than the maximum current of charger.
- Confirm the field voltage and wiring distance, and calculate if the voltage drop is able to meet the local regulations or the minimum requirements of charger.

2.Power Supply Cable

The cable shall use the insulation-jacketed copper wire certified by the local country, and the withstand current of wire shall be 1.25 times greater than the rated current of no fuse breaker.

3.Power Supply Mode

The power used by charger is the single-phase 3-wire 220V, which is compatible with 3-phase 4-wire 220V/380V, single-phase 3-wire 110V/220V, single-phase 2-wire 220V and 3-phase 3-wire 220V. (Note: It is recommended that the power distribution/wiring shall be performed by the qualified power technician or engineer to avoid the electric shock or short circuit accident occurred on the personnel.)

4.Confirm if Rated Capacity of Your No Fuse Breaker Able to Meet Re-quirements

- Confirm the specification of your main switch. Please check the distribution panel or switch box to determine the current amount available for the power source at the installation site.
- The charger has the built-in rotary switch for you to adjust its working current. The selection of rated current for the spared or newly added no fuse breaker shall be performed in accordance with the continuous current value of following values i.e. 6, 16, 24, 32, 40, 50 to select the appropriate no fuse breaker.

5.Selection of Best Position for Wall mounted EV charger

Confirm the parking position to ensure that the charging cable is able to connect to the charging connector at the vehicle end. The charger shall be placed at the following positions:

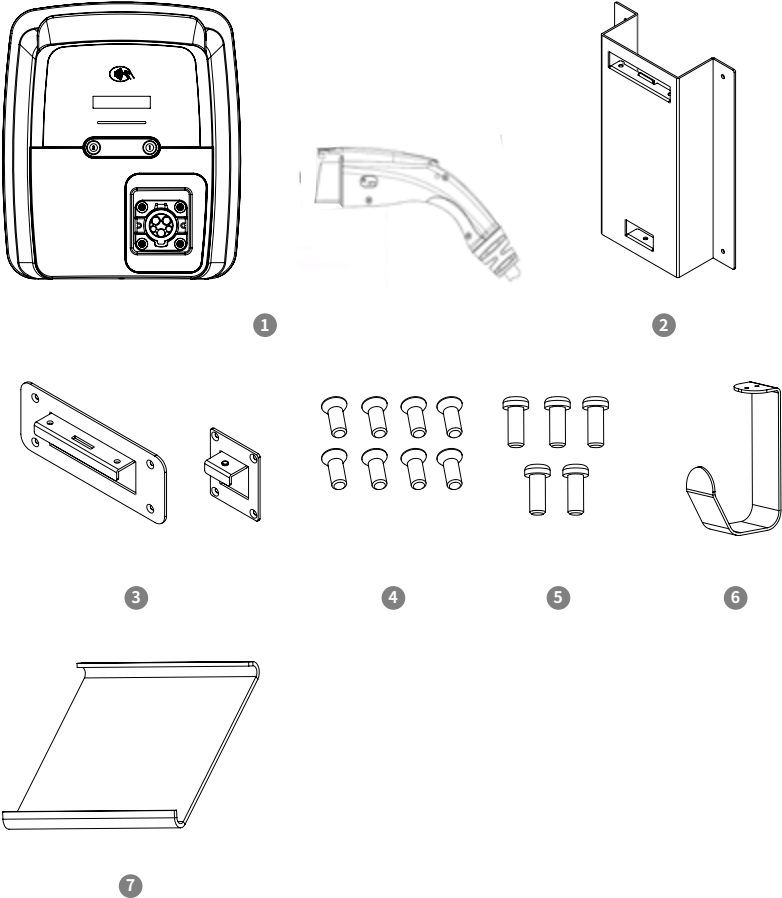
- i. In the enclosed garage, it is usually located next to the charging connector of vehicle.
- ii. A well-ventilated place, avoid install in the enclosed case body or near the heat transfer device.
- iii. The indoor charger shall be installed at the position of 45 cm or more above the ground but less than 120 cm.
- iv. The outdoor charger shall be installed at the position of 60 cm or more above the ground but less than 120 cm.
- v. The charger body shall be 20 cm or more away from the surrounding obstacles, so that the

cable is able to wrap around the charger body during the storage.

6.Precautions for Installation

- Prior to the installation, please confirm that the switch of power supply is turned off and the power is cut off and the preventive measures are taken to avoid the electric shock hazard occurred to the personnel during the installation process of charger.
- The wiring process shall performed in accordance with the related local power regulations for proceeding the installation.

7.Check Contents



Item	Description	Qty
1	Wallbox Body & Charger Cable	1
2	Metal Parts of Wall Hanging	1
3	Countersunk Screw for Wall Hanging (M3 X 8L)	2
4	Wall Hanging Mount	8
5	Wall Hanging Mount & Cable Hook Round Head (M4 X 12L)	5
6	Cable Hook	1
7	Cover Plate of Terminal Block	1

Installation Steps of Charger

05

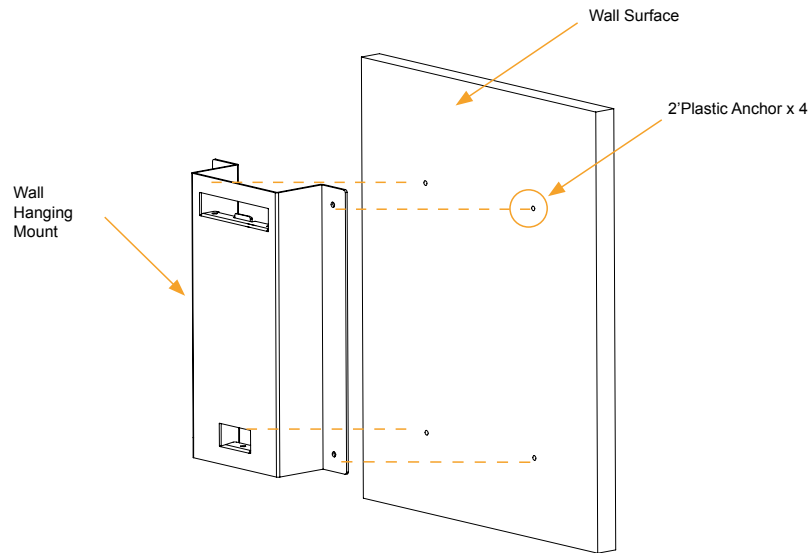
1.Tools & Material

- Pencil or sign pen
- Electrician's plier
- Wire stripper
- 2mm² ~ 14mm² crimping plier
- Measuring tape
- Multimeter or digital multimeter
- Phillips screwdriver
- Small flat head screwdriver
- Spirit level
- Electric drill and bits
- Plastic anchor
- Round terminal R8-6
- Torque screwdriver

2.Installation Steps of Wall-type Charger

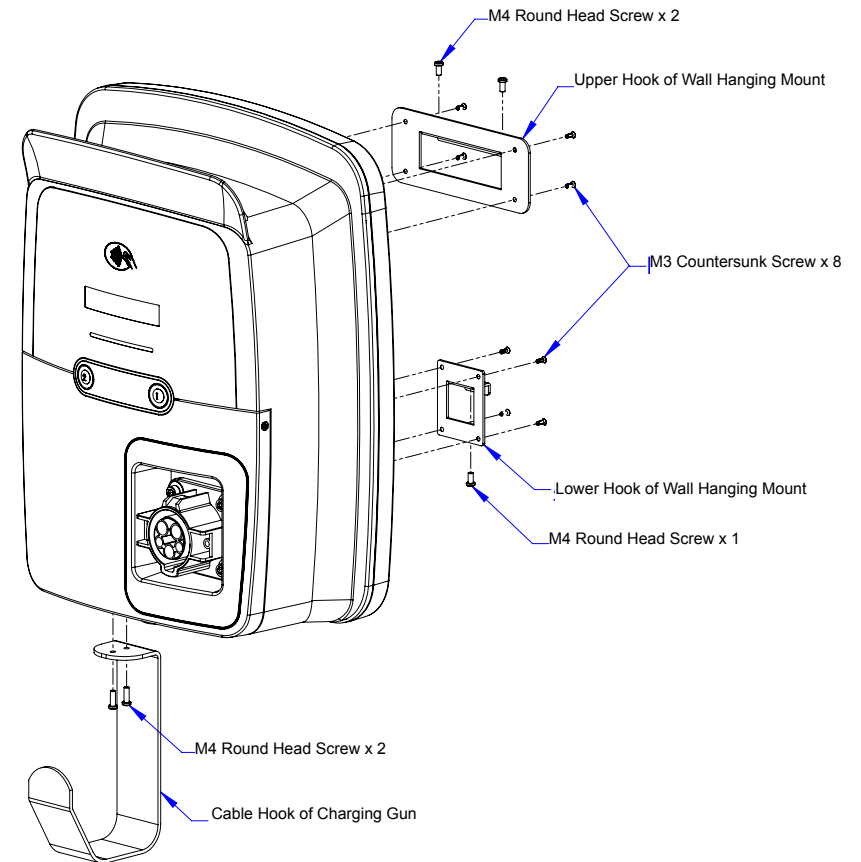
(1) Use the mount as the guide to mark the drilling position on the mounting wall.

- a. Use 5.8mm cement bit to drill the hole and embed the 2' plastic anchor in the hole.
- b. Use the screws to lock and fix the wall hanging mount on the wall surface (please pay attention to the direction of wall hanging mount).

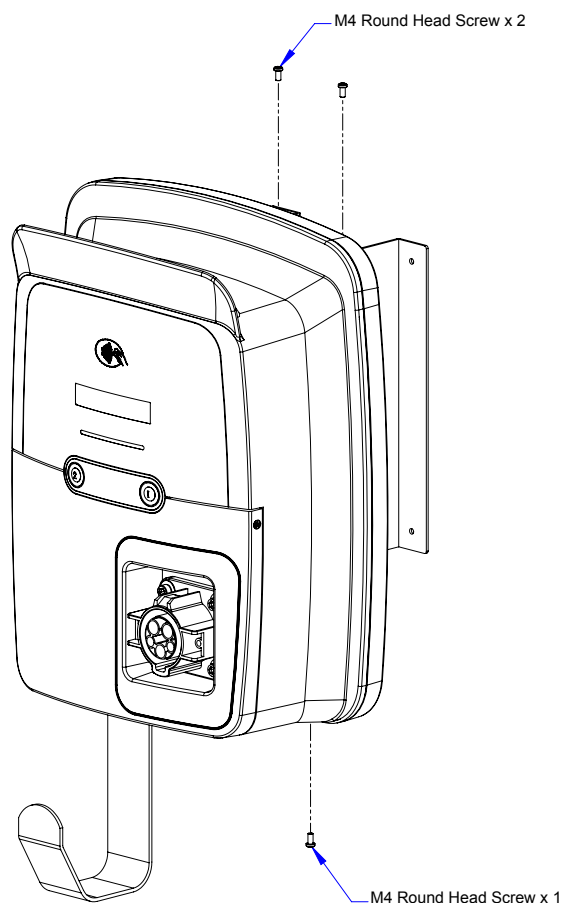


(2) Assembly of Hook of Wall Hanging Mount & Hook of Cable

- a. Use M3 countersunk screws in the attached screw pack to fix the upper and lower hooks of wall hanging mount to the back plate of charger.
- b. Use the M4 round head screws in the attached screw pack to fix the hook of charging gun cable to the bottom left of charger.



(3) Hang the charger body to the mount fixed on the wall, and use M4 round head screws in the attached pack to fix the upper hook and mount.

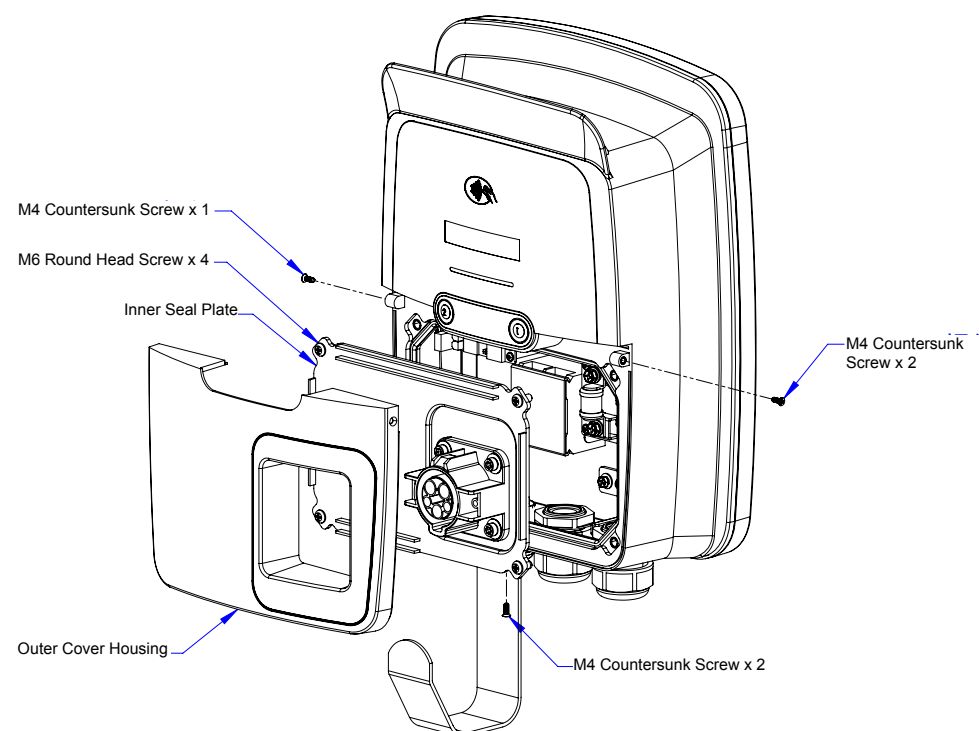


3.Wiring Preparation of Cables

(1) Use a Phillips screwdriver to remove the outer cover housing and inner seal plate of charger.

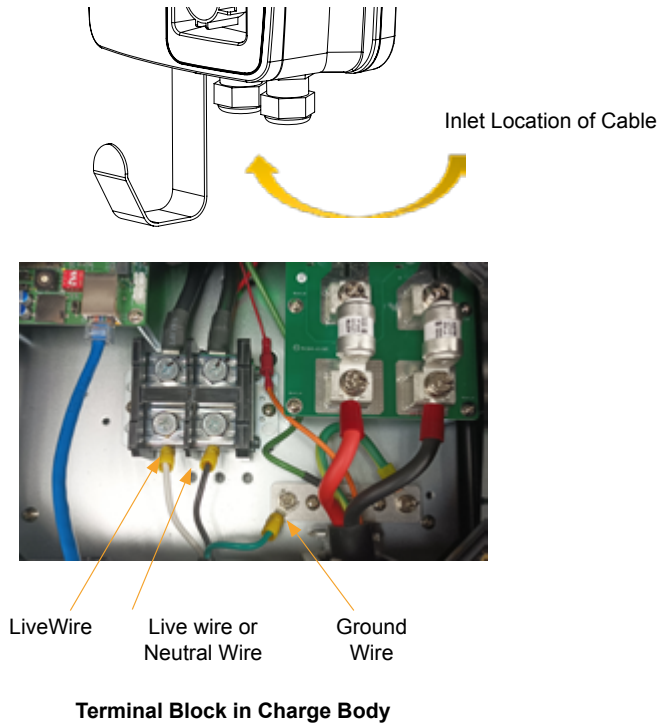
a. Carefully remove the crosshead countersunk screws on the left/right and bottom of outer cover housing, and remove the outer cover.

b. Carefully remove the Phillips round head screws on the 4 corners in front of the inner seal plate, and remove the seal plate.



4.Wiring of Cables

- (1) Remove the transparent protective cover on the terminal block, and insert the cable through the cable fixing head under the charger body, and fix the cable on the terminal block.
- a. Unscrew the cable fixing head of cable inlet by turning counterclockwise, and tight the cable fixing head by turning clockwise after inserting into the cable about 10 ~ 15cm, and pull slightly to confirm that the cable will not be moved.
- b. After crimping L1, L2 of the cable and the ground wire with the round terminals respectively, use the torque screwdriver to tight Lin, Nin and GND attached on the terminal block (4 N-m), and assemble back the transparent protective cover of terminal block . (Note: The color of L1, L2 and ground wire shall be marked in accordance with the national or local regulations.)



5. Setting the operation modes

The wall-mount charger can be adjusted the operating mode according to your needs. Settings of the corresponding modes as below:
Attention: Please ensure if extra RFID cards are needed and confirm user's setting preferences at the preliminary evaluation

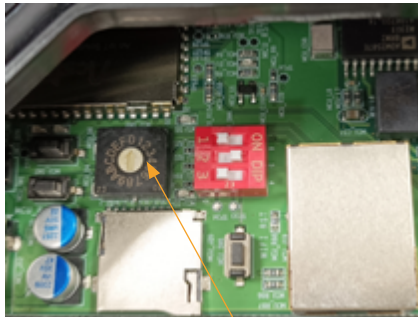
	Plug-and-play Function (default)
	RFID Card Reading
	OCPP Mode (Remark: This function only supports OCPP backend hosing server)
	Full Function

Setting the maximum output current

	- Hardware Specification (Default) - According to the manual, set switches 2 & 3 to full card/card certification/plug-and-play/OCPP. - The maximum output current is determined by the hardware knob and gun cable serial number. - This mode setting page can read the settings but cannot change the operating mode and maximum output current.
--	---

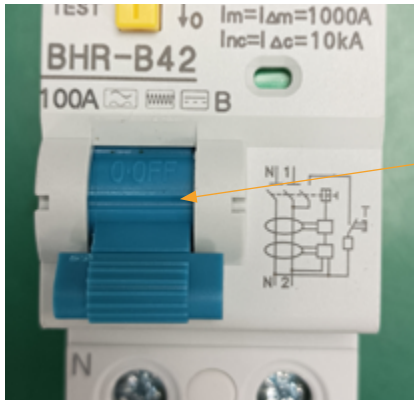
5.Confirmation of Current Needs & Test

- (1) The default charging current for charger is 32A, confirm if the output current is required to adjust, if the output current is required for adjustment, please refer to the table below.
- (2) Turn on the no fuse breaker of power source and use the multimeter or digital multimeter to confirm if the input voltage is 220V ± 10%., open the leakage circuit breaker after confirming the voltage is correct.



Adjustment Switch for Output Current

	Output Current
0	By the charger cable serial number.
1	6
2	16
3	24
4	32
5	50
8	40

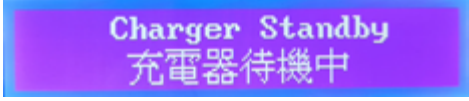
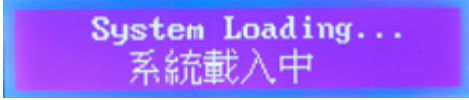
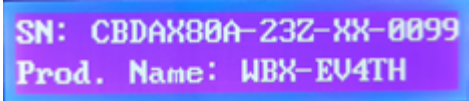
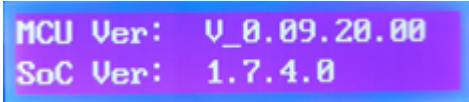
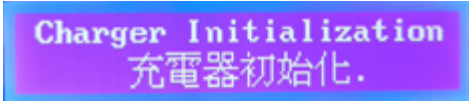
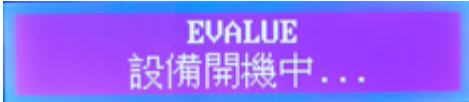


Leakage Circuit Breaker

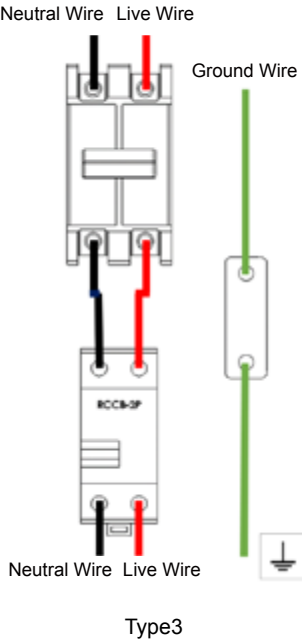
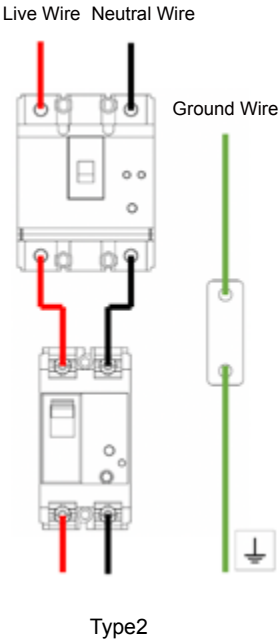
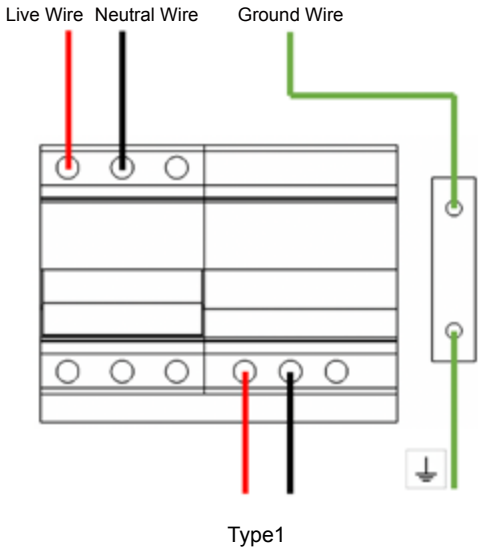
Upward to Open ON

6.Power-on Test & Assembly

- (1)The LCM and LED lamp of charger are lit after power on and perform the self-test.
- a.The charger starts the initialization and detects the maximum output current value, the standby page of “Charger Standby” is displayed after confirming the current value is correct.
- b.Tight back the inner seal plate and outer cover housing in sequence. (Note: If the seal plate and outer cover housing are completely fitted to the body.)



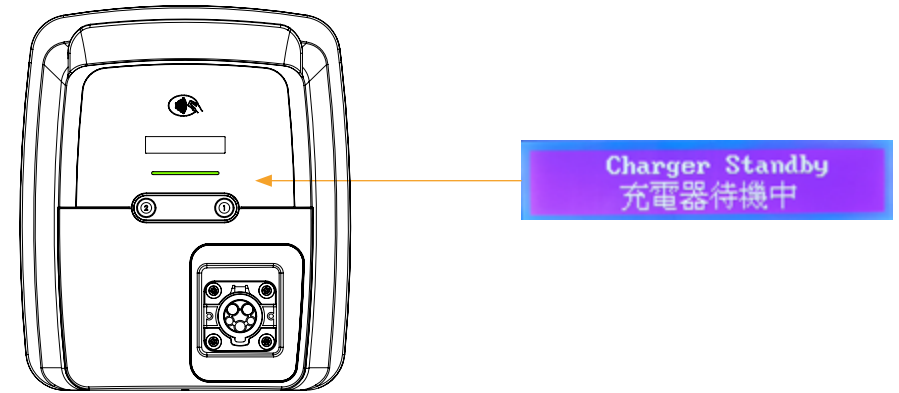
7.wiring diagram



Operating Instruction

06

1.Standby Page

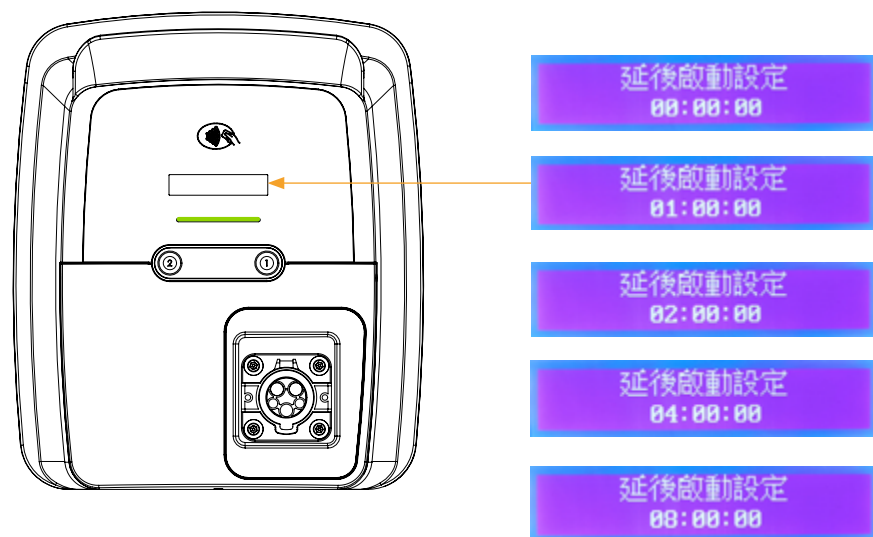


Precautions:

- (1) This equipment is only used by the electric vehicle.
- (2) Please do not remove the charging gun forcibly during the charging process.
- (3) If the rain drops on the connector of charging gun due to the heavy rain, please wipe off the raindrop prior to use.
- (4) If you have any question during the using process, please call customer service number 02-23253320 at the Fortune Electric Value Co., Ltd.

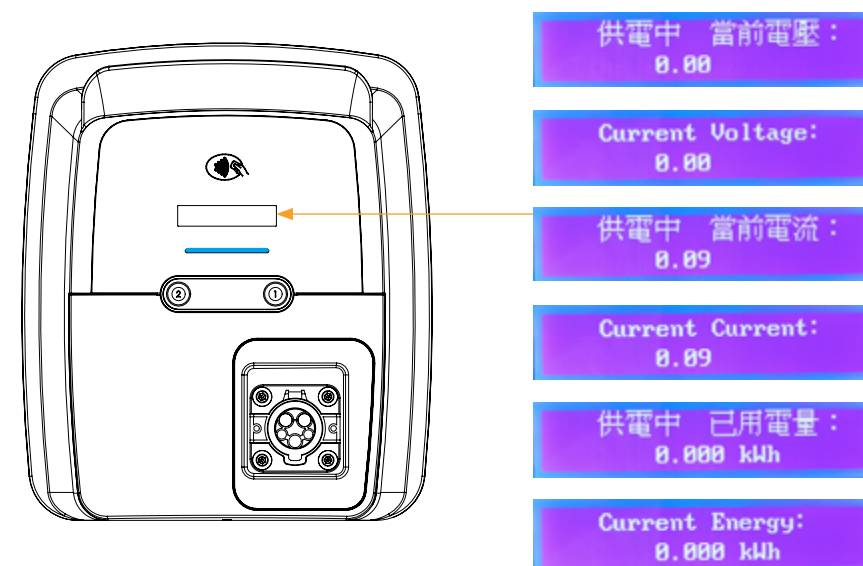
2.Prior to Charge

- The original setting is 0 hour prior to charge. When the Button 2 is pressed, it is able to preset that the charge starts after 1, 2, 4 or 8 hours. After pressing up to 8 hours, it will return to the original setting after pressing it once again.
- The DELAY setting can only be set while the standby mode(green light). If the cancel is required, Button 2 shall be pressed for returning to the original setting.



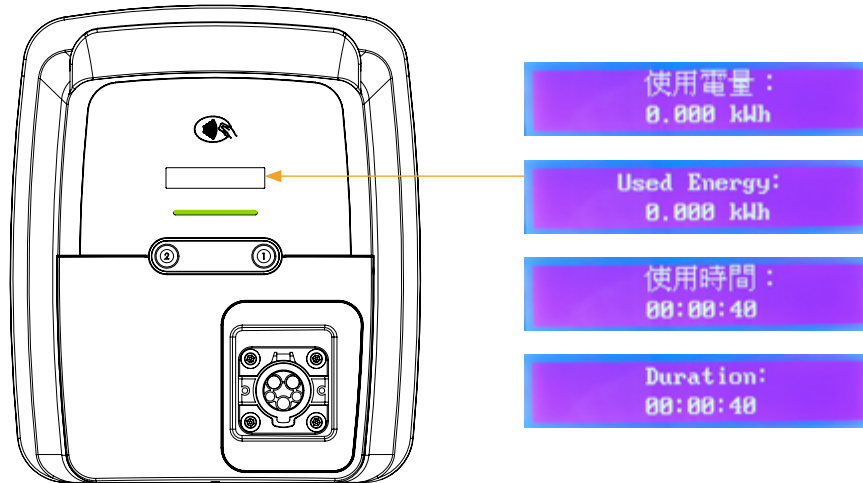
3.Start to Charge

- Remove the charging gun and connect to the charging connector of electric vehicle.
- When perform the charge, the indicating light switches from the steady green light to the steady blue light.
- The LCM displays the currently voltage, current and degree in Chinese/English alternately during the power supply process.



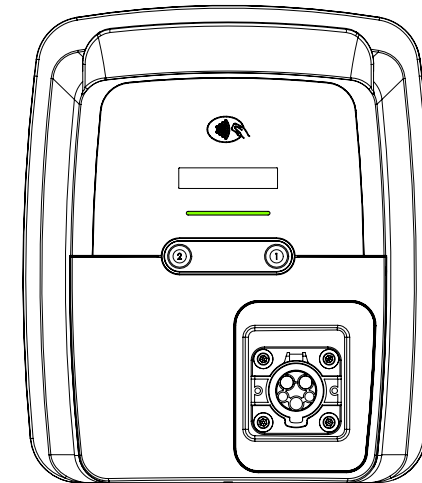
4.End of Charge

- After completing the charge, the indicating light switches from the steady blue light to the flashing green light.
- The LCM displays the current degree and time in Chinese/English alternately.



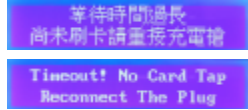
5.Completion of Charge

Take out the charging gun and place back to the charging outlet, the indicating light switches from the flashing green light to the steady green light.



Troubleshooting Q&A

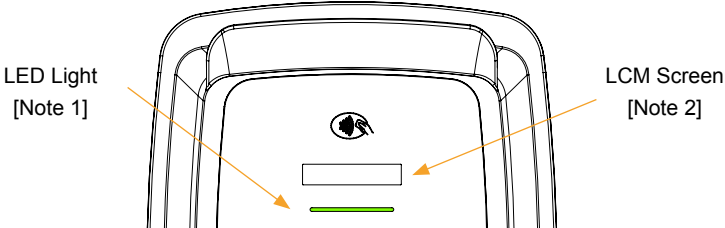
07

	LED Light [Note 1]	LCM Display Problem [Note 2]	Cause of Problem	Troubleshooting Mode
1	Steady Red Light	“Timeout! No Card Tap Reconnect The Plug” (The information page in Chinese/English displays alternately) 	Card is not swiped after connecting the charging gun and vehicle (approximately 60 seconds)	Please remove the charging gun and reconnect with the vehicle and swipe the card.※
2	Red Light Flashing for 5 times	“Output current too high”	The charging current exceeds the maximum setting value of output current, charger enters into the protection mode and stop the power supply.	Please turn off the power switch of charger (no fuse breaker [Note 3]), and then restart the charger, if it continues to occur, please contact with professional for assistance.

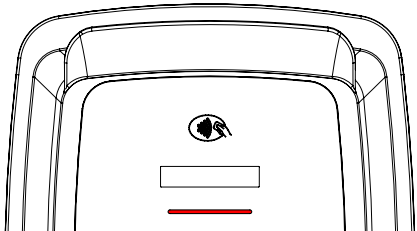
※Only applicable for the user who uses the RFID enable card to enable this AC charger. If the charger does not have the function of enable RFID sensing function, the error page will not be seen.

	LED Light [Note 1]	LCM Display Problem [Note 2]	Cause of Problem	Troubleshooting Mode
3	Red Light Flashing for 5 times	"Malfunction Abnormal Voltage"	If the AC IN voltage is too low or too high, the charger will enter protection mode and stop the power supply.	Please turn off the power switch of charger (no fuse breaker [Note 3]), and then restart the charger, if it continues to occur, please contact with professional for assistance.
4	Red Light Flashing for 9 times	"Malfunction Abnormal Meter" "Meter is abnormal"	Error occurred on the built-in electricity meter of charger.	
5	Red light flashing for 3 times	"Wrong card"	The sensing card used by the charger is damaged or the sensing card used by the charger has not been set.	Please confirm that the enable card used is the unique card certified by the charger. If the card is correct and the card error is still displayed, please contact the professional for assisting in replacing the enable card or re-entering the card number.
6	Red Light Flashing for 5 times	" 温度異常 OTP"	Internal Temperature Abnormality Detected in the Charger.	Please, under dry conditions, switch off and on the residual current circuit breaker inside the power box. This step is to initially rule out whether it is a power supply issue. If the issue persists, please contact a professional for assistance.

※Only applicable for the user who uses the RFID enable card to enable this AC charger. If the charger does not have the function of enable RFID sensing function, the error page will not be seen.

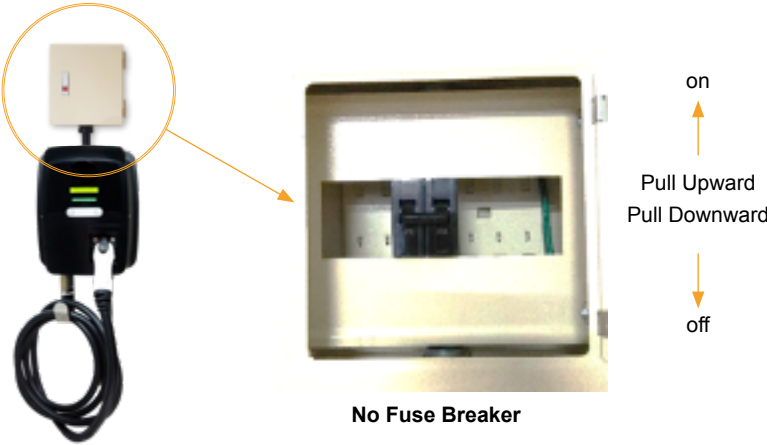


Normal State, Steady Green Light



Abnormal state, steady red light or flashing

For example: When the abnormality of "Please remove the charging gun due to the card has not been sensed yet" occurs, the LED light will flash for 3 times continuously, and then continuously flash for 3 times again with the interval of 1-2 seconds. This action will be repeated until the abnormal problem is troubleshooted.



**No Fuse Breaker Box
[Note 3]**

Size and shape of the product will be selected according to the situation on-site.

Limited Quality Maintenance of Charging Equipment

08

1.General Terms

- This charger is warranted for 2 years from the date of warranty. The warranty scope includes the charger body and its internal electronic components (except consumables, such as fuses), charging guns, if the warranty stickers have damages, removal trace, or man-made damages, no warranty will be provided even during the warranty period.
- The limited quality maintenance commitment made by Fortune Electric Value Co., Ltd. starts from the date of installation of charger product made by Fortune Electric Value Co., Ltd. for two years ("Quality Warranty Period") to enjoy the quality warranty for the failure presented on the charger itself. This does not include but not limited to the defect or damage caused to the charger of Fortune Electric Value Co., Ltd. due to the following situations, that does not enjoy the limited maintenance warranty:
 - Any direct or indirect damage or malfunction caused due to the normal wear or aging, misuse, abuse, negligence, accident, improper use or storage environment.
 - Fail to follow the operating instruction manual and pre-cautions required by Fortune Electric Value Co., Ltd. for this charger.
 - External factors, including but not limited to collide the charger of Fortune Electric Value Co., Ltd. with objects, the surrounding storage environment or natural disasters (including but not limited to fire, earthquake, flood, lightning and other environmental conditions).
 - General appearance damage, including scratches, dents or cracks.
 - An individual or organization who has not been authorized or licensed by Fortune Electric Value Co., Ltd. to repair, replace or modify the charger of Fortune Electric Value Co., Ltd. in any way, or install or use any parts or accessories.
 - Lacking or performing improper repair or maintenance; and including the use of accessories or parts not provided by Fortune Electric Value Co., Ltd.

2.Limitation of Liability

- If the construction/installation of charger is performed by the professional personnel not certified by Fortune Electric Value Co., Ltd. that causes the damage to the equipment, it will not be covered by the warranty scope. If any personal injury or property damage occur, this company will not be liable for any legal responsibility and compensation for damage.
- Regarding the part not covered by the above stated rights, Fortune Electric Value Co., Ltd. does not assume any liability beyond the remedial measures contained in this operating instruction manual, including but not limited to unable to use any product, profit loss, business loss or liability from the data or software loss, demolition, damage or service terms. Except as specifically stated, Fortune Electric Value Co., Ltd. shall not be liable for any derivative, special, indirect, punitive damages (even if Fortune Electric Value Co., Ltd. has already aware that such damage may occur), or be responsible for claims from any third party. For any liability as related to the purchase of the product,

you agree, Fortune Electric Value Co., Ltd. shall not be responsible or liable for paying any compensation in excess of the dollar amount you ordered. In the complaints made by consumer, the scope of responsibility for assisting in clarifying the major casualty or criminal event may be even wider than the damage caused by negligence, under such circumstance, Fortune Electric Value Co., Ltd. will not try to exclude the relevant liability.

3.Maintenance

- If there is dust or dirt on the charger surface, wipe the surface with the dry cloth. Do not use the organic solvent or volatile liquid for wiping to avoid damaging to the charger housing and the risk of fire.
- The qualified electrical professionals at the location may perform the regular test to check if the primary or secondary side contact of the no fuse breaker in the external switch box has any loose or foreign objects.
- When the charger is not used for a long term, the no fuse breaker in the external switch box can be turned off.
- **Model:**
CBDA-X80A
- **Serial Model:**
CBDA-X80-A4,CBDA-X80-A7,CBDA-X70A,CBDA-X50A,CBDA-350A,CBDA-X50A-A4,CBDA-X50A-A6,CBDA-X50A-A7,CBDA-X40A,CBDA-X40A-A6,CBDA-X32A,CBDA-X32A-A6,CBDA-X24A,CBDA-X24A-A6,CBDA-X16A,CBDA-X16A-A6,CBDA-X70B,CBDA-X70B-A4,CBDA-X70B-A7,CBDA-X50B,CBDA-X40B,CBDA-X32B,CBDA-X32B-A4,CBDA-X32B-A7,CBDA-X24B,CBDA-X16B

Serial Model	Output Current	Power Output (kW)	Charging gun SPEC	KG
CBDA-X50A-A6	50	11	SAE J1772	9.2
CBDA-X40A-A6	40	8.8	SAE J1772	9.2
CBDA-X32A-A6	32	7.04	SAE J1772	9.2
CBDA-X24A-A6	24	5.28	SAE J1772	9.2
CBDA-X16A-A6	16	3.52	SAE J1772	9.2

Fortune Electric Value Co., Ltd.

10F., No. 368, Sec. 1, Fuxing S. Rd., Da'an Dist., Taipei City 106468 , Taiwan (R.O.C.)
 TEL: (02)2325-3320 FAX: (02)2325-3350
 Official Website: www.evalue.com.tw
 Customer Service Mailbox: service@f-evalue.com

Made in Taiwan

