



# **80A Flux AC Charger**

# **USER MANUAL**

© Copyright 2024 ChargeTronix. All rights reserved



# IMPORTANT SAFETY INSTRUCTIONS RELATED TO RISK OF FIRE OR ELECTRIC SHOCK

**WARNING:** When working with electrical products, basic precautions should always be followed. This manual contains important instructions for ECA-NC8002S-SG80 ECA-NC8002S-DG40, ECA-NC8002S-DG80 models, needs to be observed during installing, operating and maintaining. 1. Please read all instructions before using this product.

2. Use of this device around children should be done under supervision.

3. Do not stick your fingers into the EV connector.

4. Do not use this product if the flexible power cord or scooter cable is frayed, has torn insulation, or has any other damage.

5. Do not use this product if the housing or EV connector is broken, cracked, open, or otherwise damaged.

6. Indicate the ambient temperature grade: -30°C to 50°C.

7. Note the following or something similar: "To reduce the risk of fire, connect to a circuit providing the following function". @ampere's maximum branch circuit overcurrent protection shall be in accordance with the National Electrical Code ANSI/NFPA 70, and Canadian Electrical Code Part 1 C22.1

### SAVE THESE INSTRUCTIONS



# Contents

Abbreviations	4
Safety Instructions	4
Standard	5
Safety Standard	5
Radio Frequency Standard	5
Energy Star Standard	5
Charging Connections	5
1 Product Information	6
1.1 Type	6
1.1.1 Shape and Size	6
1.1.2 Block Diagram	7
1.2 Cable Holder and Hook	8
1.3 Specifications	9
2 Operations	10
2.1 Power Switch	11
2.2 About the interface	11
3 Function Introduction	13
3.1 User Interface & Control	13
3.2 Configure WiFi Network	17
3.3 Operation Guide	11
3.4 Troubleshooting	20
4 Product Installation	21
4.1 Labels	21
4.2 Packing List	22
4.3 Check and Confirm	22
4.4 Preparation	23
4.5 Installation Steps	24
4.6 Grounding instructions	29
4.6 Maintain	29
Warranty Agreement	30



In this manual, the following warning labels and precautions are used on AC EV Chargers:





# **STANDARD**

### **Safety Standard**

Complies with UL 2594 UL 2231 UL 1998 UL991

### **Radio Frequency Standard**

47CFR Part 15 (2020) ANSI C63.4 (2014) ICES-003 Issue 7: October 2020+

### **Energy Star Standard.**

ENERGY STAR<sup>®</sup> Program Requirements for Electric Vehicle Supply Equipment (EVSE) Version 1.2

### **Charging Connection**

The connections for charging are shown below





# **1 PRODUCT INFORMATION**

# 1.1 Туре \_\_\_\_\_

Welcome to our AC EVSE

### 1.1.1 Shape and Size

The shape and size of the AC EVSE is shown in the figure below:







### 1.1.2 Block Diagram

The block diagram of EVSE is as follows:





# 1.2 Cable Holder and Hook \_\_\_\_\_

IAC EVSE is equipped with an American standard car-side charging connector.

When the EVSE is in standby mode, insert the car end charging connector into an empty seat to protect the car end charging connector.

Use the mounting screws to fix this empty socket in place next to the EVSE.





2mm (0.078")-11mm(0.433")







# 1.3 Specifications \_\_\_\_\_

RD10 American Standard AC EV Charging Specifications								
			Specifications	& Paran	neters			
Category	Model Number	Part Number	Rated Input/ Output (v)	Rated Input (A)	Rated Output (A)	Max Power	Charge Coupler	Option
Powor		CTX-C80- 240-1	Level 2, 208/240VAC 60Hz	80A	80A	19.2kW	SAEJ1772 TYPE1/80A	Optional
Specification	CTX-CAC80	CTX-C80- 240-2	Level 2, 208/240VAC 60Hz	80A	1*80A/2*40A (Load Balancing)	19.2kW	2*SAE J1772 TYPE1/40A	Optional
Power Wiring	LAN (RJ-45)							
	4G cat. 4							
	WiFi 2.4G							Optional
	BLE 5.0							Optional
Communication	RFID							Optional
	USB (type A)							
	RS-485							Optional
	CAN						Optional	
OCPP Version	OCPP 1.6J(Upgradeable to 2.0)							
	LCD screen size:4.3-inch;/pixels resolution:800*480/262K colors/No touch function.							
	RGB LED ligh	nt bar						
User Interface & Control	Capacitive t	ouch button	S					Optional
	Power option	n switch						
	Swipe card							
User Authentication	QR Code /APP							
	ISO 15118 (Plu	ug & Play )						Optional
Meter	On-board power meter Measurement error accuracy less than 1%					Optional		
	V2G				Optional			
Power Management	Load balancing: single device							
5	Load balancing: operating stations							
	Flash rom (12	28M bit)						
Memory	TF card memory expansion (No TF card)							



Real Time Clock	Over-current protection	
	CCID20	
	Over voltage protection	
	Under voltage protection	
	Over-current protection	
Drotaction	Over load protection	
Function	Over load protection	
	Short circuit protection	
	Ground protection	
	Over-temp protection	
	Surge protection 6 kV @ 3,000A	
	Fault self-test	
	Enclosure Protection: Type 4, IK10	
	Operating Temperature: -30 ~ 50°C	
	Storage Temperature: -40 ~ 75°C	
Environmental	Humidity: Up to 95%, non-condensing	
	Altitude: <2000m	
	Cooling Method: Natural Cooling	
	Net Weight:TBD	
Mechanical	Product Outline Size: TBD	
	Cable Length: 18ft or Customization	
	Safety Regulations: ETL (UL2231 UL2594 UL1998 UL991)	
Regulation	Metering & Billing: CTEP	
	Energy Efficiency: Energy Star	
	Wireless Certificate: FCC/IC	
Warranty	2 Years	



# **2 OPERATIONS**

# 2.1 Power Switch

1. Check and make sure the mainboard power switch is off and that the fuse is there and installed. As shown below.



2. Turn off the power of this product, turn on the power switch of the mainboard; observe whether the boot interface of the product is normal.

# 2.2 About the Interface \_\_\_\_\_





S/N	Name Label	Function	Specification
1	A gun meter PF pulse output port.	Power pulse signal output interface	
2	A gun line Interface	CP signal, temperature signal, CC signal and power supply	
3	Ethernet Interface	10/100M ethernet network	
4	Download Interface	Debug port	Firmware burn-in port
5	485 Interface	M-bus protocol	
6	TF Interface	TF card interface	Micro SD
7	Power mode selection	Refer power mode setup instructions	Firmware burn-in port
8	CAN Interface		
9	USB Interface	USB 2.0	
10	WIFI reset button		
11	B gun line Interface	CP signal, temperature signal, CC signal and power supply	
12	B gun meter PF pulse output port	Power pulse signal output interface	
13	Power switch	Charging pile control power switch	

Charging with single pot version ECA-NC8002S-DG80 updates the rated current according to the DIP switch status, no reboot required

16A+16A	24A+24A	32A+32A	40A+40A	48A+48A	1*80A/2*40A	

Charging with dual pot version ECA-NC8002S-SG80 updates the rated current according to the DIP switch status, no reboot required

16A	24A	32A	40A	48A	80A	



# **3 FUNCTION INTRODUCTION**

# 3.1 User Interface & Control



1. The electrical parameters are displayed in the upper left corner of the status bar. The order from left to right is: charging power, voltage level, and rated current.

Charging power is calculated by multiplying the grid voltage and the rated current. The voltage level is automatically detected as "208VAC " or "240VAC" when turned on. The rated current can be set by dial switch. For details on dial settings, please refer to the interface introduction and instructions.

2. The upper right corner of the status bar displays network communication parameters. From left to right, there are Bluetooth, 4G, WIFI, Ethernet, and Fahrenheit icons in the charger. The Bluetooth icon only appears when the Bluetooth module is installed. If the 4G module is not installed, it will be a gray low-light icon. If the 4G module is installed normally, it will be a white high-light icon. If there is no connection, WIFI is a gray low-light icon. When WIFI is correctly set up and successfully connected, WIFI is a white high-light icon. If communication with the router is not established, Ethernet is a gray low-light icon, and when successfully established, a white high-light icon appears. The temperature inside the pile has a white highlight icon, it is dynamic, and it is displayed in degrees Fahrenheit.

3. This language switching prompt is unique to the "Ready" interface. When you touch the button below, you can switch between English and French. Currently, these are the only two languages available.

4. Status prompts vary as per different language and different status.

5. The operation status of gun A is displayed on the left, and the operation status of gun B is displayed on the right. After swiping the card, the user can choose which gun to activate for operation through the touch button at the bottom of the screen.

6. The main interface displays different content under each status.

7. Charging pile SN code – a unique code assigned at the time of shipment. The client can modify it through the server, and the uniqueness after modification is not guaranteed.

8. After-sales service phone number.

9. U stands for UI and display project file version, H stands for firmware version.



Status	LED Description		Current Status Interactive Functions
Power On	After alternating flashes of red, green and blue, yellow continues to flash slowly	The provention approach in a provide a permission	No operation is recommended
Available	Green always on		<ol> <li>Enter to the available page after the bootup finished;</li> <li>Touch the left and right keys to switch A and B cable languages respectively;</li> <li>If there is no operation, the screen brightness will drop to 50% after 3 minutes;</li> <li>There is cable insertion, card tapping and platform interactive action screen brightness is 100%.</li> </ol>
Cable Selection (Unplugged)	Green flash		<ol> <li>If you tap the card in standby mode without plugging the cable, you will enter the cable selection (unplugged) interface;</li> <li>Touch the left and right buttons to select A and B cables respectively, and enter the cable insertion interface after selection.</li> </ol>
Cable Selection (Plugged)	Green flash	Philes Johns Johns     10.00     0.00     0.00       Pressention of All Property State o	<ol> <li>If you tap the card in standby mode with plugging the cable, you will enter the cable selection (plugged) interface;</li> <li>Touch the left and right buttons to select A and B cables respectively, and enter the vehicle not ready interface after selection.</li> </ol>
Plug prompt	Blue slow flash	Palar Jones Park di la Contra	<ol> <li>When a cable is not plugged in the standby state, and the user selects the cable for charging by tapping the card, APP activation, platform activation, etc. it jumps to the page that prompts the cable to be plugged;</li> <li>The interface will stay for 1 minute, if the user does not insert the plug within 1 minute, it will return to the standby mode.</li> </ol>
Vehicle not Ready	Green flash		<ol> <li>After inserting the coupler and charging, the S2 switch inside the car is not closed, and it is not ready for charging, will jumps to the car not ready page;</li> <li>Enter the charging page when the car is ready;</li> <li>If you unplug the charging cable at this time, the screen will return to the standby page.</li> </ol>
Charging	Blue is always on		<ol> <li>Enter the charging settlement page after successfully starting charging;</li> <li>You'll be prompted to select a cable after the card is tapped;</li> <li>Enter the charging completion interface after APP or platform stops charging;</li> <li>Return to standby page with plugging out the cable.</li> </ol>



Status	LED Description		Current Status Interactive Functions
Charging (Busy Electric Piles)	Blue is always on		<ol> <li>After the charging is completed normally, enter the charging completion settlement page;</li> <li>Unplug the charging cable or wait 1 minute to return to the standby page.</li> </ol>
Complete	Purple is always on		<ol> <li>After the charging is completed normally, enter the charging completion settlement page;</li> <li>Unplug the charging cable or wait 1 minute to return to the standby page.</li> </ol>
Fault	Unrecoverable fault: red is always on Recoverable fault: slow flashing red	Principles Proc. 15.0 C. C. A. A. W. G. K. V. And an annual former on the Annual Control of Contro	<ol> <li>If an abnormality occurs in the charging state, jump to the fault prompt page;</li> <li>Return to standby page after unplugging charging cable.</li> </ol>
Abnormal Settlement	Purple slow flash		<ol> <li>The plug is abnormally loose in the charging state, jumping to abnormal settlement page;</li> <li>Hold for 1 minute and return to the standby page.</li> </ol>
Reserved	Green slow flash		<ol> <li>The user selects the electric pile in the APP, and enters the reserved page after operating the scheduled charging;</li> <li>Only reserved users can start charging;</li> <li>When non-reserved users start charging, it will prompt that the electric pile has been reserved;</li> <li>After the scheduled time is exceeded, if the customer is not present for use, it will automatically return to the standby page.</li> </ol>
Reminder that the Electric Pile has been Reserved	Green slow flash	Anter Anne Ann. 4 h. 4 d. 7 (2 h) Consult for Anny Anne Networks The Anne A	1. Plugging in the cable in the booked state will prompt the stakes have been booked; 2. The prompt disappears after unplugging the cable.
Charging Cable Failure	Unrecoverable fault: red is always on Recoverable fault: slow flashing red		<ol> <li>Pile body abnormality occurs in charging pile in non-charging state, jumping to the system fault interface;</li> <li>Return to the standby page after the fault is resolved.</li> </ol>



Status	LED Description		Current Status Interactive Functions
Out of Service	Yellow always on	Patie Same Patie - 41-10 - 42-20 47 42 49 Patiential Patiential Patiential Patiential Patiential Patiential Patiential Patiential Patiential Patiential Patiential	<ol> <li>In the standby state, will enter to out of service state when receive "stop use" command from the server;</li> <li>Return to the standby state when receive "recover to use" command from server.</li> </ol>
System Update	Yellow slow flash	Proba base MAL II. II. E E E E E IV. IV. Parters parter Parters parter Anno an anno anna mainta bases Anno an anno anna mainta bases Anno an anno anna mainta bases	<ol> <li>Perform remote OTA in standby state, it will enter the upgrade page;</li> <li>When the download is complete and the verification is successful, it will enter the upgrade success state;</li> <li>During the download process, if the network is disconnected or the verification fails after the download is complete, it will enter to upgrade failure state;</li> <li>After the upgrade is complete, the firmware version number in the bottom right corner will be updated.</li> </ol>
System Update Succeeded	Yellow slow flash	Pater Anno Peri di la La Tigano Perenanda Deservada Deservada Deservada en el la perano Deservada	<ol> <li>After the update is successful, jump to the upgrade success page;</li> <li>After waiting for 10 seconds, turn on the power pile and restart.</li> </ol>
System Update Failed	Yellow always on	Pelan bana para ana ana ana ana ana ana ana ana ana	<ol> <li>If the upgrade fails, enter the upgrade failure prompt page;</li> <li>Wait for 10 seconds and return to the state before the firmware upgrade.</li> </ol>
System Update Failed	Unrecoverable fault: steady red Recoverable fault: slow flashing red	nation laters in the state of the state Defension of the state of the	<ol> <li>Pile body abnormality occurs in charging pile in non-charging state, jumping to the system fault interface;</li> <li>Return to the standby page after the fault is resolved.</li> </ol>

# **3.2 Configure WIFI Network**

### Internet configuration via WIFI and OCPP Authpass.

Take the laptop configuration charger parameters as an example, the introduction is as follows. (The method of setting parameters with a mobile phone is similar and will not be repeated)

### Step 1: Connect to WIFI Hotspot

Keep your laptop in a state where it can connect to a WIFI hotspot. Turn on the charger, find the hotspot- named "ECA-NH", and connect to it without a password. (If you do not find a hotspot named" ECA-NH ", please restart the power of the charging station).

### Step 2: Log in to Settings

Open a web browser, preferably Google Chrome or Microsoft Edge, and fill in the – IP address "192.168.4.1" in the browser's address bar. Press the Enter key to enter the page of EVSE CONFIGURA-TION LOGIN. (Note: Microsoft IE browser cannot visit)

### Step 3: Configure Your EV Charger

Fill in the default password "12345678" to enter this page. When you log in to this page for the first time, please change to a new login password.

Fill in the name of the hotspot and the password of your WIFI router on the web page, click the "SAVE" button to save the settings, and click the "RESTART" button to restart the charging pile to make the settings take effect. Once it takes effect, the charging pile can be accessed through your WIFI router the Internet.

# 3.3 Operation Guide \_\_\_\_\_

### **1. Charging Preparation:**

**A. Find the available charging pile:** product, park the car, turn off the vehicle, and make the electric car in a chargeable state.

### B. If choose to use APP:

You can download the APP according to the prompts, and register an account according to the prompts.

# C. If choose to use an RFID card:

Contact the operator to obtain an RFID card; the private pile is equipped with an RFID card in the box.











### 2. To Connect The Charging Connector

Open the cover of the car charging socket, and connect the charging cable to the car socket stably. Make sure the connection is successful.



### **3. Start Charging**



### A. Plug and charge

The charging mode is configured as plug and charge, when step 2 is completed, the car is ready to start charging.



### B. Tap card to start

Put the RFID card close to the card-tapping. Select the charging cable to be activated according to the prompts to start charging, after the charging process taps the card again, selecting the corresponding charging cable will end the charging.



### C. APP start and stop

Use the APP to scan the QR code, select the charging cable number according to APP prompts, start charging, and after charging, click to stop charging according to the APP prompts.

### 4. Charging:



During the charging process, the charging pile screen will display the charging voltage, charging current, charging time.



### 5. End Charging:



A. Through charging, the car owner can take initiative to end the charging, plug-andplay charging situation can be stopped through the car terminal; To start by tapping the card, you can stop by selecting the corresponding charging gun after tapping the card; APP startup can be controlled and stopped in APP.



B. After the car is fully charged and the charging current is less than 1A for 15 minutes, the pile will automatically stop charging.



C. After the charging is completed, please pull out the charging coupler and put it back to the empty coupler-holder and hang the cables back on the hook.

### 6. Order Settlement:

After the charging is completed, the display screen will display the charging power and charging cost. The order settlement will be completed on the APP or platform.





### 7. Abnormal Situation:

In any state, if there is abnormal prompt on the screen and the light bar, please stop charging and disconnect the charging cable from the socket on the car.





# 3.4 Troubleshooting \_\_\_\_\_

When a fault occurs, the charger will automatically protect. The fault information and processing methods are as follows.

Fault Code	Handling Method
20 Flash Fault	The memory chip is damaged, you need to contact the after-sales service.
21 EEPROM Fault	The memory chip is damaged, you need to contact the after-sales service.
22 Emergency Stop Failure	Check that the emergency stop button is not pressed. Resolve the fault after restoring the emergency stop button
23 Power Failure	Check whether there is any problem with the input power supply. Resolve the fault after restoring the power supply.
24 Ground Fault	The charging pile is not grounded, so the circuit needs to be tested.
25 Motherboard Over Temperature Alarm	The equipment temperature is too high. Resolve the fault after the temperature drops.
30/40 A/B Cable Meter Communication Fault	Internal communication line failure, need to contact the after-sales service.
31/41 A/BA/B Cable Input Undervoltage Alarm	Check whether the input cable is connected correctly; whether the grid voltage is abnormal.
32/42 A/B Cable Input Overcurrent Alarm	Check that the charging adapter is properly connected to the car and that the car charger is working properly.
32/42 A/B Cable Input Overcurrent Alarm	Check that the charging adapter is properly connected to the car and that the car charger is working properly.
33/43 A/B Cable Input Overvoltage Alarm	Check whether the input cable is connected correctly; whether the grid voltage is abnormal.
34/44 A/B Cable L1 On RLY Closure Fault	Damaged relay, need to contact after-sales service.
35/45 A/B Cable L2 On RLY Closure Fault	Damaged relay, need to contact after-sales service.
36/46 A/B Cable L1 On RLY Normal Opening Fault	Damaged relay, need to contact after-sales service.
37/47 A/B Cable L2 On RLY Normal Opening Fault	Damaged relay, need to contact after-sales service.
38/48 A/B Cable Relay NTC Alarm	The temperature measuring element is damaged, need to contact the after-sales service.
39/49 A/B Cable L1L2 NTC Alarm	The temperature measuring element is damaged, need to contact the after-sales service.
3A/4AA/B Cable Relay Over-Temperature Alarm	The relay temperature is too high. The fault will be resolved after the temperature drops.
3B/4B A/B Cable L1L2 Over-Temperature Alarm	L1L2 line temperature is too high. The fault will be resolved after the temperature drops.
3C/4C A/B Cable Leakage Current Fault	Check the charging adapter and its cable for damaged or wet. Recovery after fault removal.
3D/4DA/BCable Leakage Current Device Self-test Fault	Leakage detection equipment is damaged, need to contact the after-sales service.
3E/4EA/B Cable Input Overload Alarm	Check whether the charging adapter is correctly connected to the car and check whether the car charger is normal.

# **4 INSTALLATION**

# 4.1 Labels \_\_\_\_\_

### WARNING

For use with Electric Vehicles. Ventilation Not Required. To avoid a risk of fire or electric shock, do not use this device with an extension cord. This device is intended only for charging vehicles not requiring ventilation during charging.

THE SUITABILITY OF THE USE OF FLEXIBLE CORD IN ACCORDANCE WITH CE CODE, PART I, RULE 4-012, IS TO BE DETERMINED BY THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.

### CAUTION

To reduce the risk of electric shock, connectonly to properly grounded outlets. Do not use this product if there is any damage to the unit. Risk of electric shock, Do not

remove cover or attempt to open the enclosure. No user serviceable parts inside. Refer servicing toqualified service personnel.



# CHARGETRONIX

Model: ECA-NH4006S Input/Output: 208/240VAC 60Hz Max 40A Max 9.6kW

MMQ: 0.1kWh Enclosure type: TYPE 4 Operating Temp: -30 50°C -22 122°F

Storage Temp: -40 75°C -40 167°F



4912888535269720090 Date Code ECA2315RD030001

CHARGETRONIX FOR USE WITH ELECTRIC VEHICLES. FOR INDOOR OR OUTDOOR USE.



Intertek 5014466

Conforms to UL Std.2594 Certified to CSA Std.C22.2#280 CAN ICES-3(B)/NMB-3(B) Contains IC: 23236-BW16 Contains FCC ID: 2AHMR-BW16 Contains IC: ESO001-ISED-6489 Contains FCC ID: 2AFOS-WT32C3-SX Contains IC: 23243-CBU Contains FCC ID:2ANDL-CBU





# 4.2 Packing List \_\_\_\_\_



# 4.3 Check and confirm \_

When unpacking, please confirm the following points carefully:

- According to the packing list, whether the accessories are complete.
- Whether there is any damage during transportation.
- Whether the model and specification on the nameplate of the machine are consistent with the order requirements.
- If any damaged or missing parts are found, please do not start the machine and contact the supplier as soon as possible.
- Please keep the box and packaging materials for 1 month for future disposal. Paper packaging is recyclable.



# 4.4 Preparation\_

In order to ensure long-term stable operation of the product, it is recommended to avoid the following installation problems:

- This product is an electrical device. Handle with care and avoid severe vibration and shock.
- EVSE cannot be transported by dragging the charging connector and charging cable.
- EVSE cannot be used in extreme weather, especially when the ambient temperature is too low or too high, which will affect the use of EVSE.

It is recommended to install EVSE in a ventilated and cool place away from direct sunlight and rain. To ensure good ventilation, you should install the EVSE vertically with enough space. Installation tools before installing AC EVSE, you should prepare at least the following tools:



Multimeter



Electric impact drill (D8mm+D6mm)





Wrench (10mm)

Wire strippers



AWG23-7 Tube terminal crimping pliers



Utility knife



Phillips screwdriver (D5mm)



Anti-static bracelet



Electric batch (with plum blossom hole T20.T25 bit)



Heat coupler



Marker pen



Rubber hammer



# 4.5 Installation Steps \_\_\_\_\_

### 4.5.1 Mount the EVSE on the Wall as Follows

## Location Requirements



### **Angle Requirements**









### Wall-mounted Installation Steps







### 4.5.2 Column installation

Schematic Diagram of Column Decomposition



Number	Name	Material	Quantity
1	Column cap	Silica gel	1
2	Column Boom	AL6063-T6+Oxidation 1	1
3	Hook up	SGCC+baking paint	1
4	M5*12 combination screw	Stainless steel	4
5	M5*20 countersunk head screw	Stainless steel	4
6	Coupler mount	Nylon	1
7	M4*10 combination screw	Stainless steel	4
8	Floor bracket	SGCC+baking paint	2
9	Base cover	SGCC+baking paint	2
10	M4*10 countersunk head screw	Stainless steel	2
11	M12*30 hexagon socket screw	Stainless steel	4
12	Leveling pad	Stainless steel	1
13	M12*120 expansion screw	Stainless steel	4









After installation



# 

# 4.6 Grounding Instructions

This product must be connected to a grounded, metallic, permanent wiring system, or an equipment ground wire must be run with the circuit conductor and connected to the equipment ground terminal or conductor on the product.

The ground conductor must run with the circuit conductors and be connected to the equipment ground terminal or conductor on the product.

Wiring port	PE L1 L11 L21 L1 L2 PE
Crimp Terminal Specifications	SC16-6
Installation Tool Specifications	Diameter 3mm (0.1181") flat-blade screwdriver Diameter 5mm (0.1968") flat-blade screwdriver Diameter 5mm-6mm Phillips screwdriver
Installation Tool Specifications	2~5N m

# 4.7 Maintain

To ensure the long-term stable operation of the device, please perform regular (usually monthly) maintenance on the device according to the operating environment.

(a) Equipment is maintained by professionals.

(b) Check if the equipment is well grounded and safe.

(c) Check whether there are potential safety hazards around the charging pile, such as whether there are high-temperature, corrosive, or flammable and explosive items near the charger.

(d) Check whether the connection points of the input terminals are in good contact and whether there is any abnormality. Check other wiring points for looseness.



# WARRANTY

1. The scope of the warranty refers to the product itself.

2. The warranty period is 24 months. During the warranty period, if the product fails or is damaged under normal use (determined by the company's technicians ), the company will repair it free of charge.

3. The starting time of the warranty period is the production date of the product.

4. Even within the warranty period, if the following conditions occur, a certain maintenance fee will be charged.

- Equipment failure caused for not operate according to the user manual.
- Equipment damage caused by fire, flood, abnormal voltage, etc.
- · Equipment damage caused by abnormal function of the product.
- Equipment damage caused by the entry of foreign objects.
- Equipment damage caused by other human-made external factors.
- 5. The service fee shall be calculated according to the actual cost. If there is any other contract, this contract shall prevail.
- 6. During the warranty period, please be sure to keep this card and show it to the maintenance personnel.

7. If you have any questions, please contact the agent or our company directly.





# For Both FCC & IC application:

This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# **MPE Requirements**

To satisfy FCC / IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.