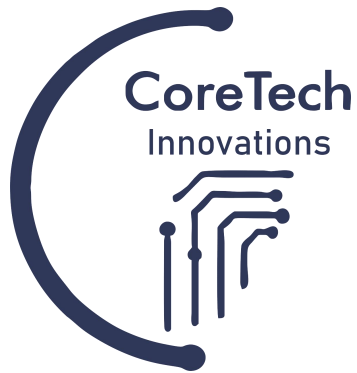




CoreTech Wall Box EV Charger

User Manual

7KW



User Manual Download



APP Download



Product Series

- ☐ EC7E-PX-Andro Core
- ☐ EC7E-PX-Andro Max
- ☐ EC7E-PX-Andro Vision



Forward

1.1 General

Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions, and keep the manual safe for future reference.

1.2 Safety information

For your own safety and the safety of others, and to prevent damage to the device and vehicles upon which it is used, it is important that the safety instructions presented throughout this manual be read and understood by all persons operating or coming into contact with the device.

Signal Words	Meaning
 DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.
 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
 NOTE	Provides additional information as a supplement to the text.

1.3 Safety instructions

The safety messages herein cover situations is being known by us, we can not know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.



SAFETY WARNINGS

- Read and follow all warnings and instructions before installing and operating the charger.
- This equipment should only be installed by a licensed electrician in accordance with all local codes and ordinances.
- This equipment must be grounded through a permanent wiring system or an equipment-grounding conductor.
- Do not install or use this equipment near flammable, explosive, harsh, or combustible materials, chemicals or vapors.
- Children should be supervised when around this equipment.
- Do not insert fingers or foreign objects into the electric vehicle connector.
- Do not use the equipment if the flexible power cord or EV cable is frayed, broken or otherwise damaged, or fails to operate.
- Do not use the equipment if the enclosure or the EV connector is frayed, broken or otherwise damaged, or fails to operate.
- Use 90 °C wire copper conductors only.
- Do not operate the equipment outside its operating temperature range of -40 to 55 °C.
- Incorrect installation and testing of the equipment could potentially damage the vehicle's battery, components, and/or the equipment itself.
- Handle the equipment with care during transportation. Do not subject it to strong force or impact or pull, twist, tangle, drag or step on the equipment, to prevent damage to it or any components.
- Neutral must be bonded to Ground upstream at the transformer or panel for each separately derived system.



CAUTION

- To avoid a risk of fire or electric shock, do not use this device with an extension cord.
- To reduce the risk of electric shock, connect only to properly grounded.
- Do not remove cover or attempt to open the enclosure. No user serviceable parts inside.

Refer servicing to qualified service personnel.

- This device is intended only for charging vehicles not requiring ventilation during charging.
- Automatic reset feature is provided.

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1 Using this manual

This manual describes the installation and use of the EV charger. Prior to installation, read through this manual to be familiarized with the instructions of this Charger to ensure a successful installation and smooth operations.

1.1 Conventions

The following conventions are used.

Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Notes and Important Messages

Notes

A note provides helpful information such as additional explanations, tips, and comments.

Important

Important indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

Illustrations

Illustrations used in this manual are only examples; the actual product(s) or screens may vary.

2 General introduction

The EV charger is designed to charge a plug-in hybrid electric vehicle or an electric vehicle (hereinafter called EV) at your home . Our chargers provide you with safe, reliable, fast, and smart charging solutions.

This manual will instruct you how to install and use this charger.

Intended Use

The AC EV charger is intended for the AC charging of EVs. It is intended for both indoor and outdoor use.



Danger

- If you use the equipment in any way other than described in this manual or other related documents, possible death, injury and damage to property can occur.
- Use the equipment only as intended.



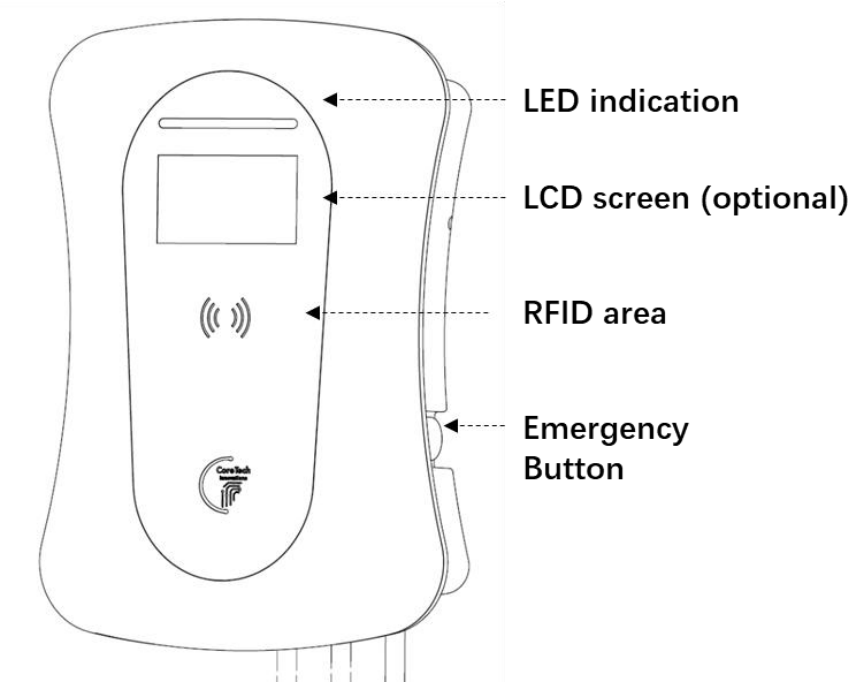
Note

The images and illustrations depicted in this manual may differ slightly from the actual Products.

2.1 Product Overview

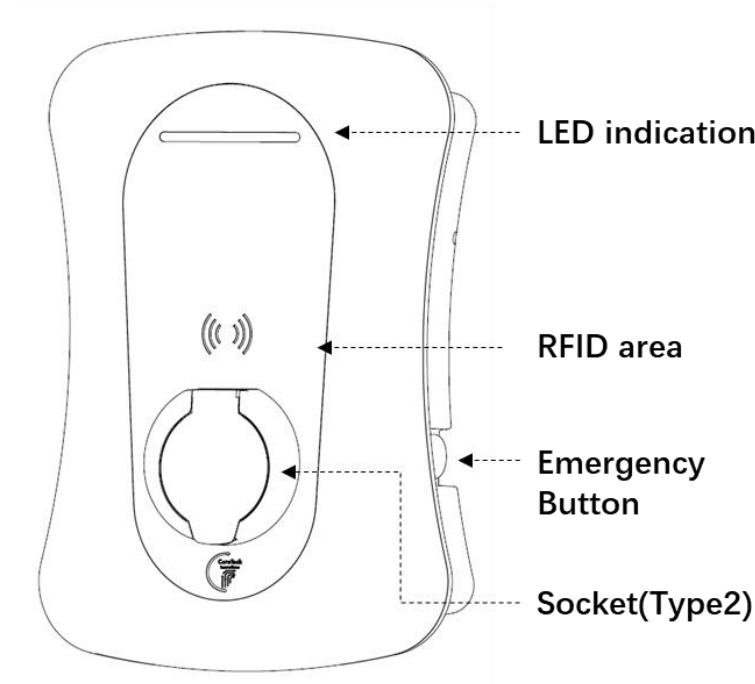
Series A: Tether Cable

Tether Cable



Series B: Type 2 Socket

Socket



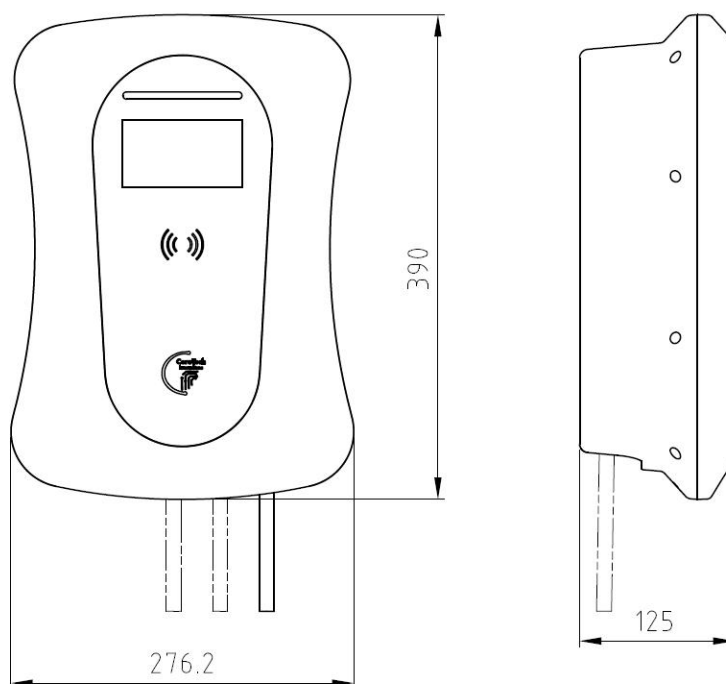
2.2 Specifications

NO.	Item	Description
1	AC Output rating	• Max 7.4KW(230Vac@32A model) single phase
2	AC Input rating	• 240Vac 50/60Hz Single phase@32A/16A/8A
3	Input wiring scheme	L+N+PE(three wires)
4	Charging interface	■ Tether cable Type 2 or ■ Type 2 Socket(optional)
5	Charging cable length	7m
6	Display	•Dynamic colorful LED display •4.3" LCD screen (only for special models)
7	Energy Metering	Meter IC, $\pm 2\%$
8	RCD	AC30mA+DC6mA
9	Protection	OVP/UVP/OCP/OTP/SPD protection, CP fault protection, Relay welding detection, anti-error wire connection protection, PEN protection
10	Communication	Wifi+Bluetooth ((only for special models))
11	User authentication	RFID/ (APP only for special models)
12	Card reader	ISO14443 A/B
13	Communication Protocols	OCPP1.6J Core (only for special models)
14	Mounting	Wall-mounted or floor using a pedestal
15	Enclosure Ratings	IP54 for indoor or outdoor installation

16	Operating Temp.	-30~55℃
17	Storage Temp.	-40~80℃
18	Dimension(H*W*D)	390*276*125mm (body)
19	Weight	3KG (Socket) 5KG (Tether Cable)
20	Products standards	IEC/EN 61851-1, IEC62955, IEC/EN 62196-1
21	Models	EC7E-PX-Andro Core EC7E-PX-Andro Max EC7E-PX-Andro Vision

2.3 Dimensions

Body size: 390mm*276mm*125mm(H*W*D)

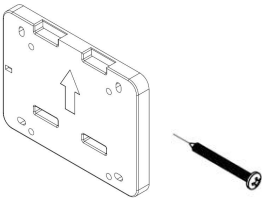


3 Installation

3.1 Unpacking

Make sure that all parts are delivered according to the order. Check the package for the following parts.

Item	Name	Description	Qty	Note
1	EV charger	body	1	
2	User Manual		1	
3	RFID card		2	
4	Mounting screw	M4*40mm	4	
5	Wall anchor	M6*40mm	4	
6	Wall holder	Plastic	1	
7	Holster	Type 2	1	Only for Special models
8	DLB Kits	2 CTs and 4 fast connect terminal	1	Only for Special models

Charging station 1pc		Wall Holder With Screw 1pc	
Mounting screw M4*40 4pcs		Wall Anchor M6*40 4pcs	
User manual 1pc		Holster* 1pc(for tether cable only)	

RFID card 2pcs			
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DLB kits(only for special models)

Current Transformer 2pcs		Fast connect terminal 4pcs	

Tool Kits:

No.	Tool	Image	Usage
1	Multimeter		Check the electrical connection and measure the voltage.
2	Electric impact drill		Drill fixing holes in the wall.
4	Diagonal plier		Cut the cable.
5	Wire stripper		Peeling cables.
6	Crimping plier		Pressed cable terminal.

7	Cross screwdriver		Fasten screws.
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Note: The list above does not necessarily include all the tools required for installation. We

recommend you read through the installation procedure and gather all the tools needed prior to installation.

3.2 Electrical Design

3.2.1 Upstream wiring

Charging stations are considered continuous load devices (EVs draw maximum load for long durations); therefore, electrical branch circuits must be sized at 125% of the load for EU installations, in accordance with IEEE National Electrical Safety Code (NESC) requirements (For other regions, refer to local code.) This means that for a maximum 32 A load at 240 V output to an electric vehicle, 40A or 50A breakers are required.

Wiring must be sized in accordance with NESC code for continuous load devices. Typically, 6 mm² or 10mm² insulated electrical wire is used, depending upon the rating of the circuit and the distance between the electrical panel and the charging station. The terminal block accepts a maximum of 16 mm².

3.2.2 Grounding Requirements

The charger must be connected to a grounded, metal, and permanent wiring system. An equipment-grounding conductor must be run with circuit conductors and connected to an equipment-grounding terminal or lead on the charger.

Ensure that a grounding conductor that complies with all applicable codes is properly grounded to earth at the service equipment, when supplied by a separate system, at the supply transformer.

3.3 Preparing for installation

3.3.1 Location

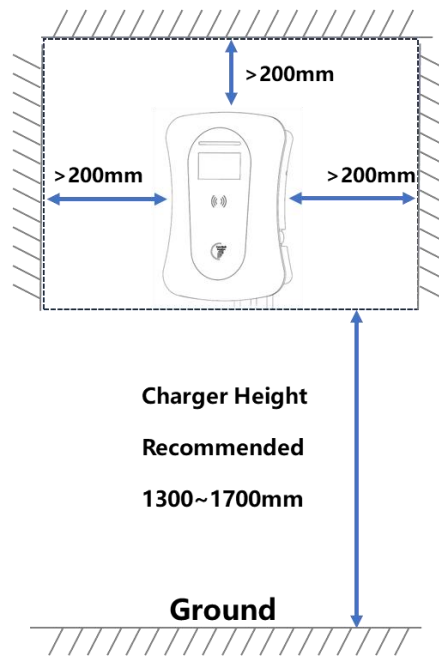
- Install the charger on a flat and vertical surface capable of supporting its weight (e.g., a finished wall or pedestal). The maximum weight of a AC charger is approximately (6kg).
- Install the charger in a location that allows the charging cable to remain within its bending tolerance.
- Position the charger in a location where it is not vulnerable to being damaged.

3.3.2 Positioning

1. Determine the desired charging amperage and whether the desired circuit rating requires a hardwired circuit. Choose based on the electrical capacity in the panel, the desired speed of charging.

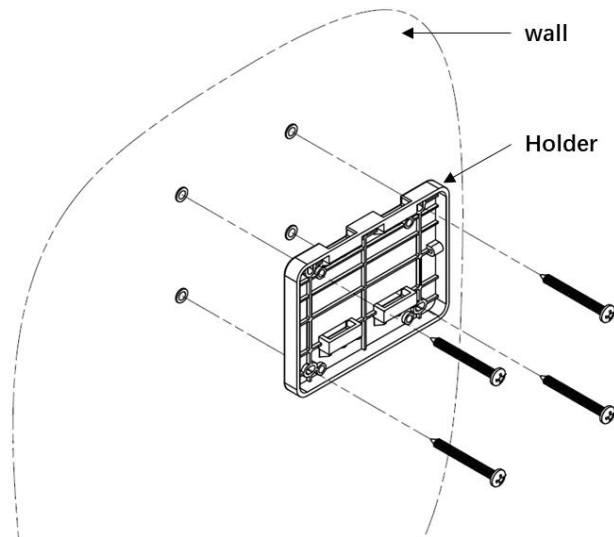
Power	Circuit Rating	Max Load	Estimated range Per Hour
7KW	40A/50A (2P)	32A	Up to 48KM
3.5KW	20A/32A (2P)	16A	Up to 24KM

2. Ensure the electrical panel supports a 240 V dedicated circuit with a new, dedicated, and non-GFCI two-pole circuit breaker, in accordance with local codes and ordinances.
3. The recommended installation height is between 1300 and 1700 mm. For wall mounting, Minimum space requires as following figure.

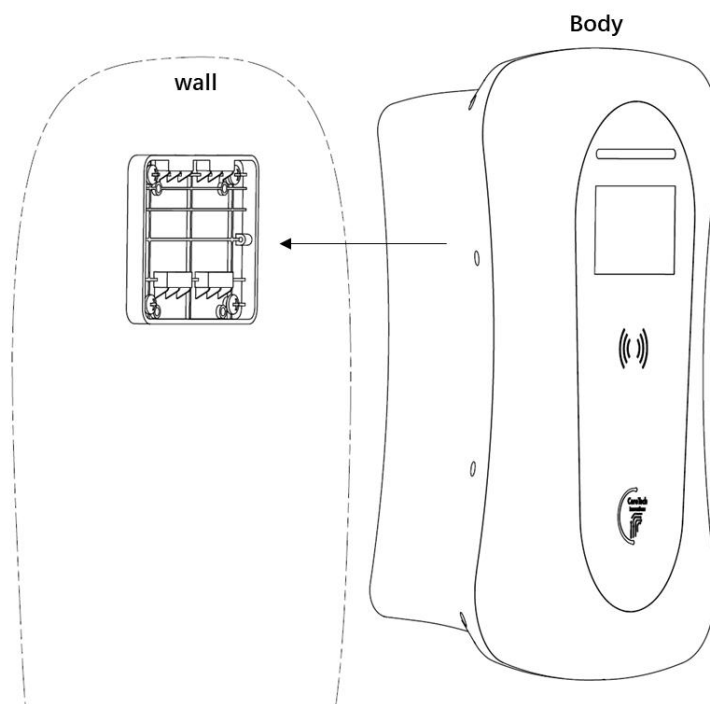


3.4 Wall mounting installation

Step1: Drill four Diameter 6mm depth 40mm holes and insert four 6mm diameter wall anchors into the lower mounting holes.

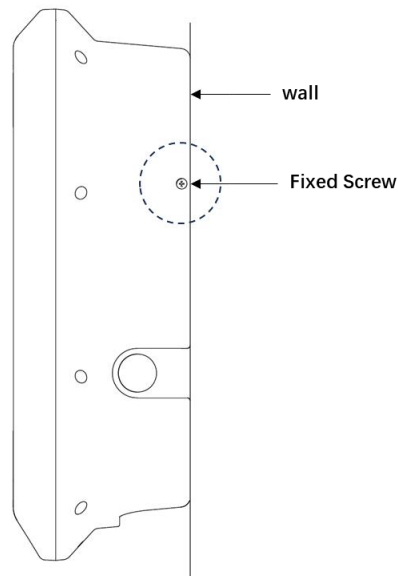


Step2: Attach the wall holder to the mounting location by screwing four M4 x 40 screws into the lower mounting holes. Tighten the screws using the type PH2 screwdriver (not included in the package).



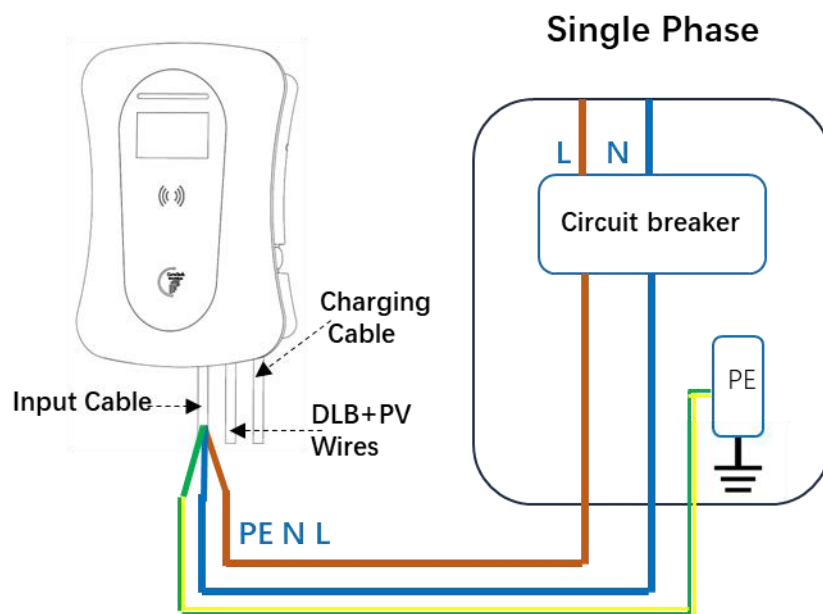
Step3: Hang the device on the wall holder properly.

Step4: Fixed the device by screwing one M4*10mm screw.



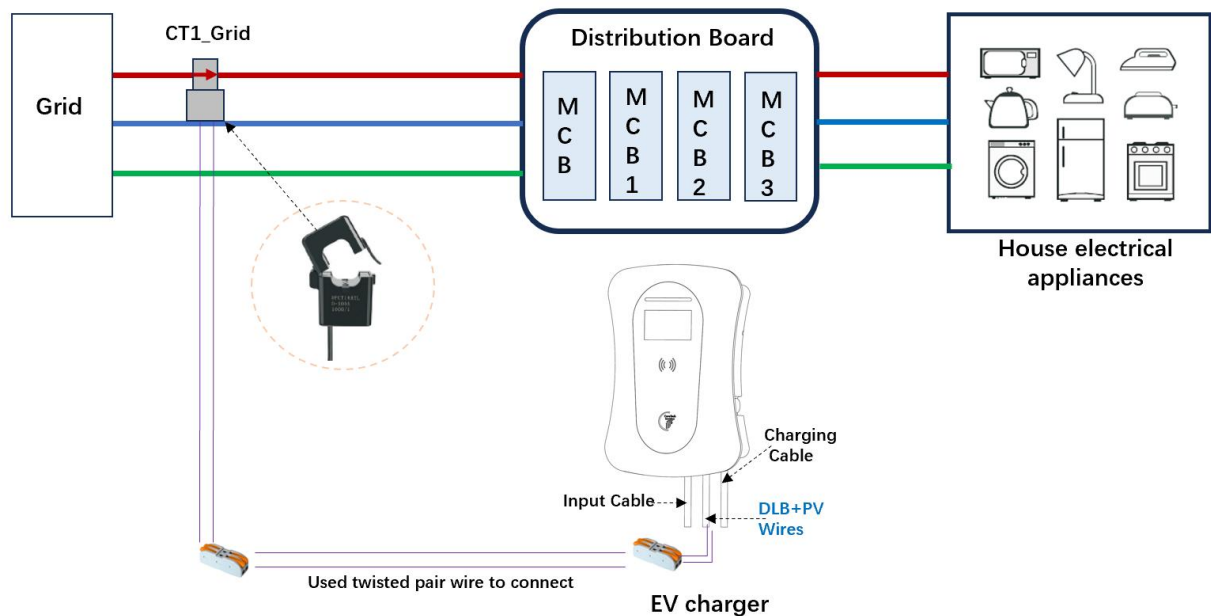
3.5 Wire Connection

Step1: Connect the wires L/N/PE according to the diagram and tighten each connector screw to 2 N.M.



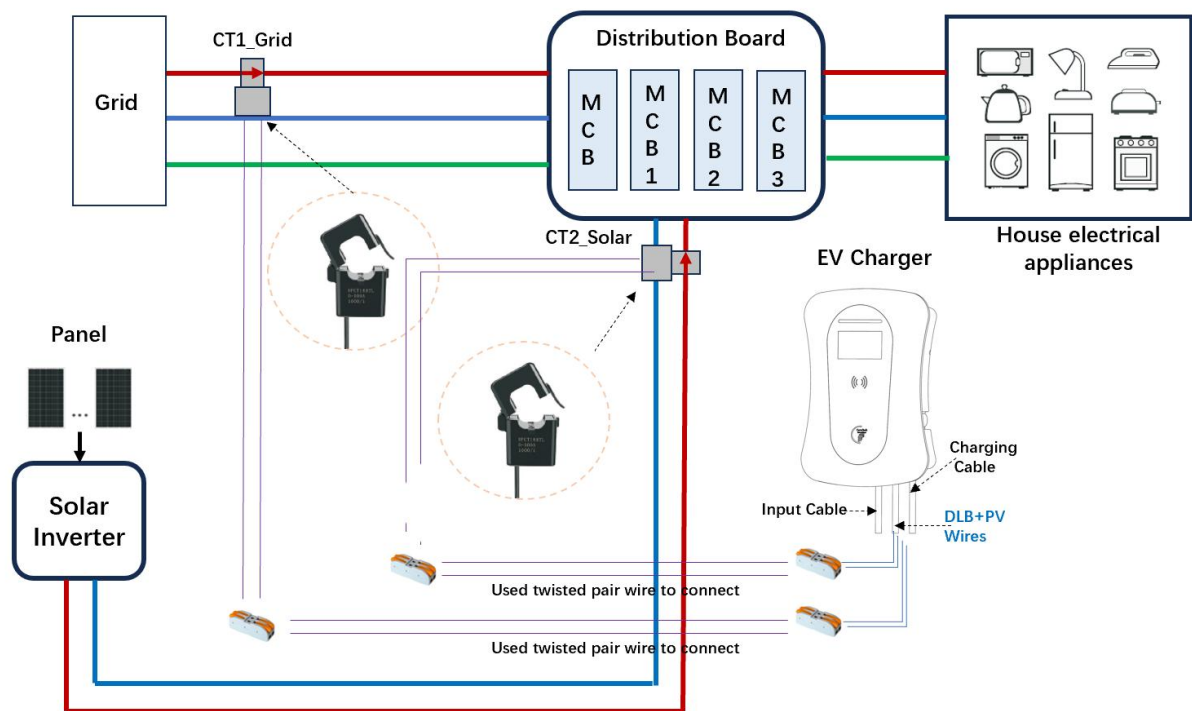
Step2: If the charger supports DLB function, please connect the wires of current

transformer (CT) according to the diagram as follows:



Note: For DLB function setting, pls refer to the APP user guide.

Step3: If the charger supports PV solar function, please connect the wires of current transformer (CT) according to the diagram as follows:



Note: For PV function setting, pls refer to the APP user guide.

4 Operation

4.1 Powering on

For all models, once all electrical connections have been safely made, switch on the power to the circuit from the circuit breaker and wait for the power supply to come on. There will be a series of self-check starts, ensuring the charger works correctly and safely. The LED should illuminate **BLUE** constant on.

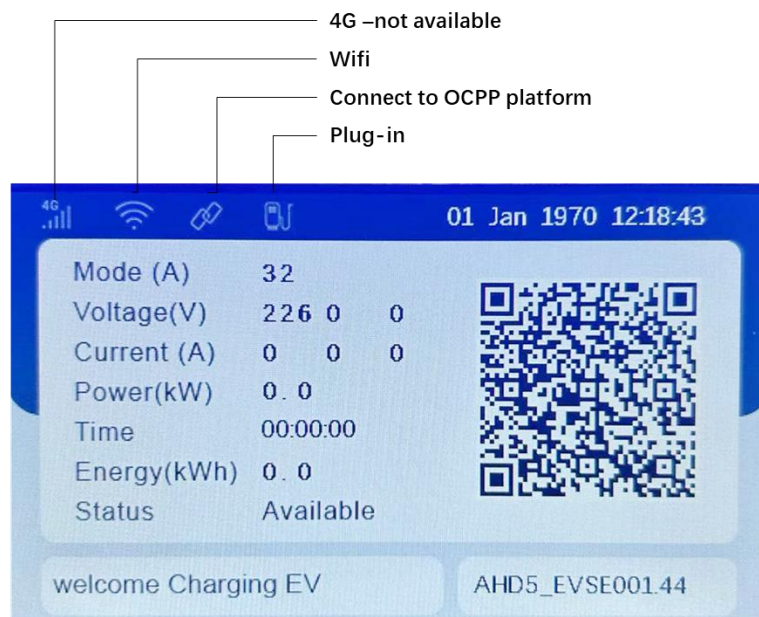
Note:

 The LED display and description as below:

Color	LED display	Description
R/G/B 	Red/Green/Blue on in turns	Starting/Resetting
Blue 	Blue constant on	Available
	Blue flashing at 0.9s interval	Off line (only after configured the platform address)
Yellow 	Yellow constant on	Preparing
	Yellow flashing at 0.9s interval	Suspended EV
RED 	Red constant on	Unavailable
	Red flashing at 0.3S interval	Faulted
Green 	Green breath	Charging
	Green constant on	Finishing
Cyan 	Cyan flashing at 0.9s interval	Reserving
Purple 	Purple flashing at 0.9s interval	Suspended EVSE

 The LCD screen display and description as below (Only available for LCD version):

1. The charger has two network connection methods: Bluetooth, WiFi. After the charger is connected successfully, the corresponding icon will be on.



2. When the charger is faulted, the screen will display the error information as follows:

NO.	Error information
1	EV Communication Error
2	Ground Failure
3	Over Temperature @Relay
4	Internal Error
5	Leakage current Error
6	Overcurrent failure
7	Over Voltage
8	Low Voltage
9	Emergency button is pressed



WARNING: Be careful when working with electricity.

4.2 Adding the charger(For APP version only)

Step1: Scan the QR code to download the **APP** to a mobile device from the Google Play or App Store.

Step2: Open the App on your mobile device, and log in with your phone number or email.

If you do not yet have an account, register with your phone number first.

Step3: Just select "**Add Device**" on the app and follow the prompts , select the activating charging pile device via Bluetooth.

Step4: Select "**Settings**" , then enter "**settings**" interface, select " **wifi connect setting**" , then input the wifi name and password as prompts.

For more details, please refer to the APP user guide.

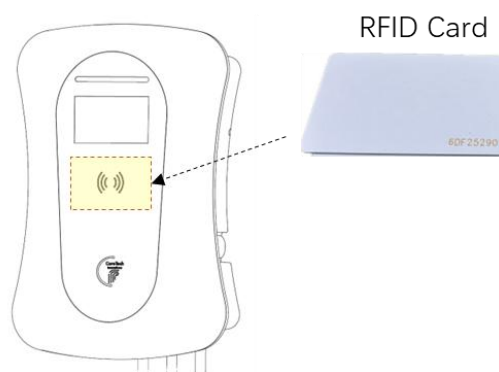
4.3 Start charging

Step1: Remove the connector from the holster.

Step2: Plug the connector into the EV charging port.

Step3: Choose one of the following ways to start a charge session:

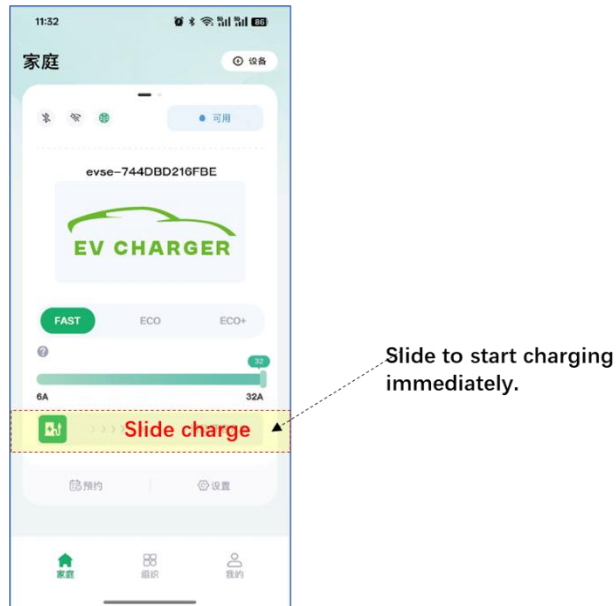
- If the RFID function is enabled, tap your RFID card on the RFID reader.



- If the Auto start function(Free insertion Mode) is enabled in the App, the charger

will automatically start charging once the connector is properly connected.

- Use the APP to start charging.



- If a charging schedule has been set in the App, the charger will initiate a charge session automatically as scheduled.



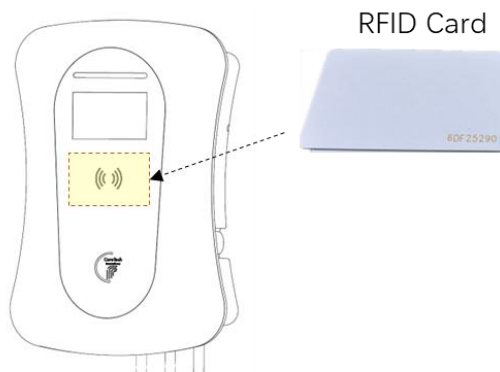
Note:

Ensure the EV is charging. The charging LED on the charger should be green breath on. If you suspect the vehicle is not charging properly, try reconnecting the charging cable or contact customer support.

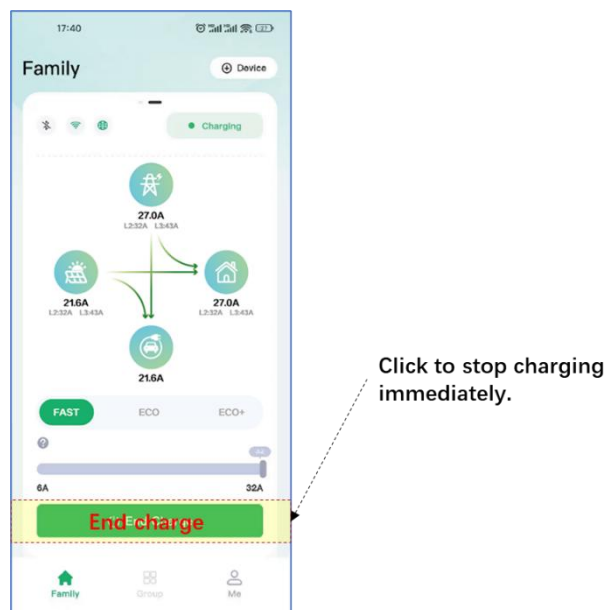
4.4 Stop charging

Step1: Choose one of the following ways to stop a charge session:

- If the RFID function is enabled, tap the RFID card on the RFID reader again.



- Use the APP to stop charging.



- Wait for the charge session to end and no further actions are required in the case of scheduled charging or auto start. The LED will be green constant on. The App displays that the charge session is finishing.

Step2: Unplug the connector from the EV and return it to the holster.

Note:

📖 If you disconnect the EV charging cable during the charge session, the charger automatically disconnects the power supply. This stops all charging operations.

📖 When the vehicle is fully charged, the charger will automatically disconnect the power supply.

4.5 Configure the OCPP platform

Important Note 1: This feature is only applicable for special models, not for all the products.

Important Note 2: It needs to use the special configuration tool provided by the manufacturer to operate.

Important Note 3: The configuration tool is applicable for android mobile phone, not suitable for iphone.

Important Note 4: After configure the OCPP platform address successfully, the APP of **My EV charger** will lose the remote control function. But the Bluetooth connection between the EVSE and APP is still valid.

Step1: Download the configuration tool. Use an android phone to download the file "**EV-tool.apk**" on link [**http://media.evse.charge-point.cn/manual/ev-tool.apk**](http://media.evse.charge-point.cn/manual/ev-tool.apk)

or Scan the QR code to download the configuration tool.



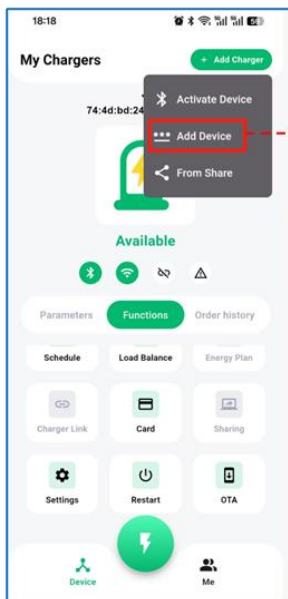
Step 2: install the configuration tool "EV-tool.apk"



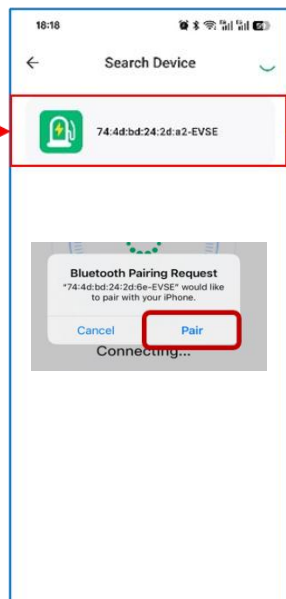
After the installation is successful, there will be an APP of ev tool on the mobile phone screen. Click to open the APP.

Step 3: Add the device

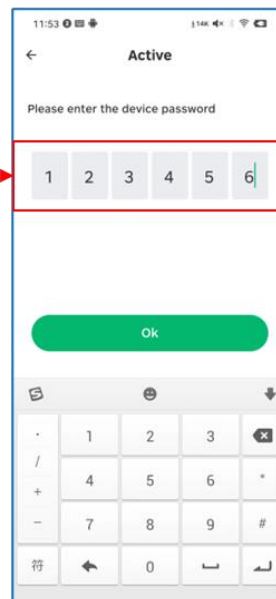
Select **【Add charger】**
add device



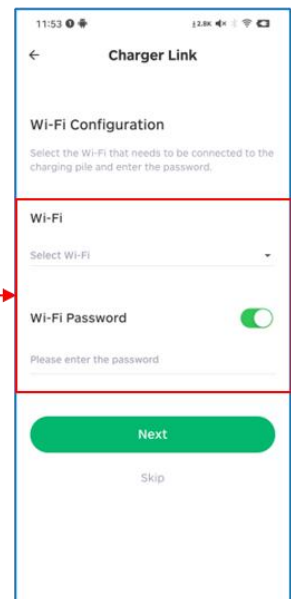
Select the Charger
SN



Set the password



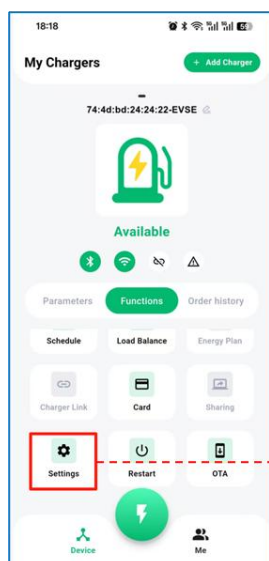
Configure the WIFI



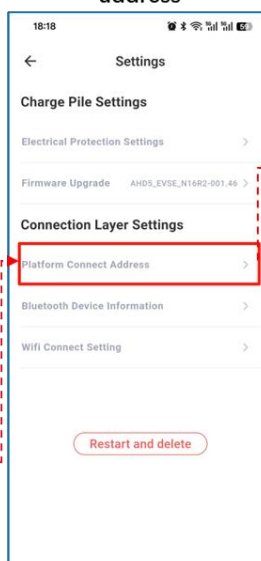
Note: Add device is done via a Bluetooth connection, make sure that the Bluetooth function of the phone is turned on and allow the device to pair.

Step 4: Configure the Charger ID and URL address.

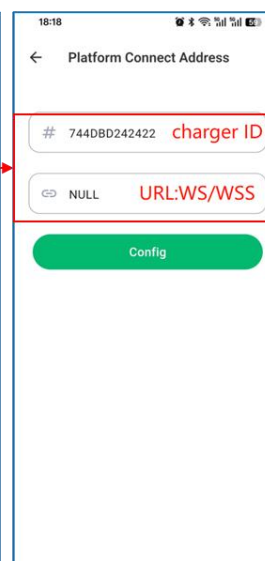
Select **【Settings】**



Select **【connection
layer settings】** -
platform connect
address



Input "charger
ID&URL address"



5 Troubleshooting and service

5.1 Troubleshooting table

Item	Problems	Solutions
1	The charger is successfully added, but the Bluetooth connection fails.	Check whether the phone connects the right charger. If so, make sure the Bluetooth is enabled on your mobile device; if not, contact customer support.
2	The charge session does not start as scheduled.	Do not insert the connector into your EV charging port before setting up a charging schedule for the first time. Insert the EV charging cable after the schedule is set up.
3	Over-voltage	Use the multimeter to check whether the voltage on the power input is too high. If the result is greater than or equal to 120 % of the rated voltage (276 V), contact local power grid company.
4	Under-voltage	Use the multimeter to check whether the voltage on the power input is not sufficient. If the result is less than or equal to 70 % of the rated voltage (161 V), contact local power grid company.
5	Ground fault	Make sure the charger is grounded correctly.

6	Power failure	• Make sure the switch to the circuit breaker is on. • Pls check the Emergency Button is pressed or not.
7	Over-heating	• Check whether the EV charging cable is securely connected. • Ensure the operating temperature is within the specified range on the product label. • Stop charging. Restart charging until it is within the operation temperature range.
8	Residual current detected	Unplug the vehicle and plug in again. If the problem persists, contact customer support.
9	Bluetooth communication failure	• Make sure the Bluetooth is enabled on your mobile device and the charger is powered on and operating properly. • Forget the charger in the Bluetooth settings on your mobile device and pair the charger to your device via Bluetooth again. • If the problem persists, contact customer support.
10	Update failure via Bluetooth	• Make sure the charger is in idle status. • Make sure the Bluetooth connection is working properly. • If the problem persists, contact customer support.

11	Internet connection fails	• Try to connect another device to the same Internet, verifying the Internet connection is working properly. • If the problem persists, contact customer support.
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(end)

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