EV Charging Wallbox
AC Charger User Manual
EVP02 Series

MENU

• Application

EV charger is used to offer the AC power for the vehicle with an battery charger.
EV charger can be assembled in all kind of parking lot public, company and community.
It is also can be assembled in all kind of large, medium and small charge station.
It is adopted self-service way.
It is suitable all kinds of parking lot unmanned, users can charge, etc. independently.

• Main Function

- Supporting RFID to charge.
- Screen Display
- Shows information such as charging status ,max and charging current , power, and Kwh.

• WARNING

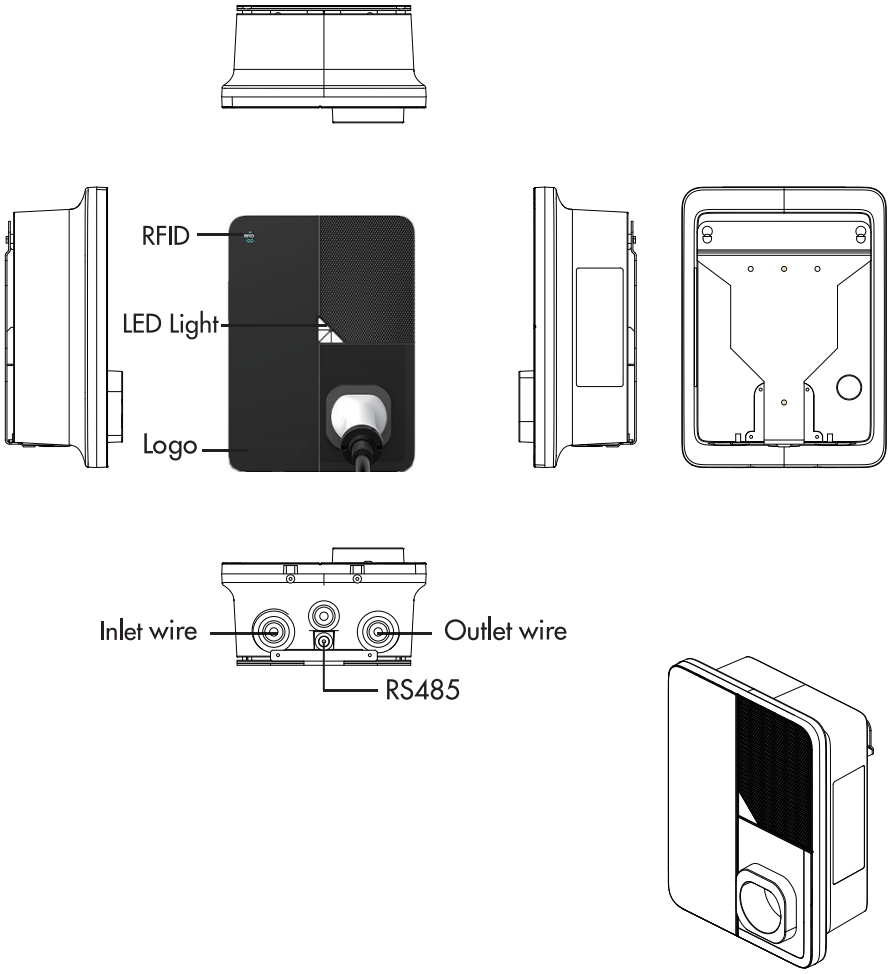
It may cause danger and harm, or damage the device if you don't operate in accordance with safety guide.

• Electrical and fire risk:

Don't use damaged and smudgy charge connector.
The electrical system for the connection of the EV charger must be inspected by professional. Meet the current requirements of the station. Don't follow the safety instructions can result in danger and injury, as well as damage to the equipment.
Check the charging station and connector and see if there are any visible damage before each use.
EV chargers can only be used to charge electric vehicles (EVs) or hybrid vehicles (PHEVs)
Do not install the charging station in a closed container to avoid overheating.

Product View

• 1.1 Appearance



• 1.2 Product Specification

EV Home Charging Wallbox-IEC				
Product	Model No.	EVD02–11RD		EVD02–22RD
Input	Power Supply	3 phase (3P+N+PE)		3 phase (3P+N+PE)
	Rated Voltage	400V AC		400V AC
	Rated Current	16A		32A
	Power Frequency	50Hz		50Hz
Output	Output Voltage	400V AC		400V AC
	Max Current	16A		32A
	Rated Power	11kW		22kW
User Interface	Power Wiring	Hardwired		
	Charging connector	Type 2		
	Cable Length	5m/8m/10m		
	Cable Specification	3×6mm²+1×0.5mm²	5×2.5mm²+1×0.5mm²	5×6mm²+1×0.5mm²
	Enclosure Material	Plastic PC		
	Display	Charging Data		
	Start Mode	RFID card		
Safety	Application Standard	IEC 61851, IEC62196, EN50620/IEC62893		
	Certification	CE, CB, RoHS		
	Ingress Protection	IP65 for box		
	RCD	6mA DC/ 30mA AC		
	Electrical protection	Over Current Protection, Over/Under Voltage Protection, Over Temperature Protection, Surge Protection, Leakage Protection, Ground Protection		
Environment	Installation	Wall Mounted / Pole Mounted		
	Working Temperature	-25°C~ +45°C		
	Working Humanity	5%~95%		

• 1.3 Product list

Charging device assembly	1
Wall-mount Bracket	1
Installation fits (bag)	1
RFID cards	3
Instruction Manual	1

• 1.4 Transportation and Storage

The product is packed well before leave factory.
Avoid sharp pounding, jolt and damage the package when transport. The storage and transportation temperature is -40°C+70°C, the humidity is 95%, the ambient air shouldn't contain acidity, alkalinity and other corrosive gas or explosive gas.

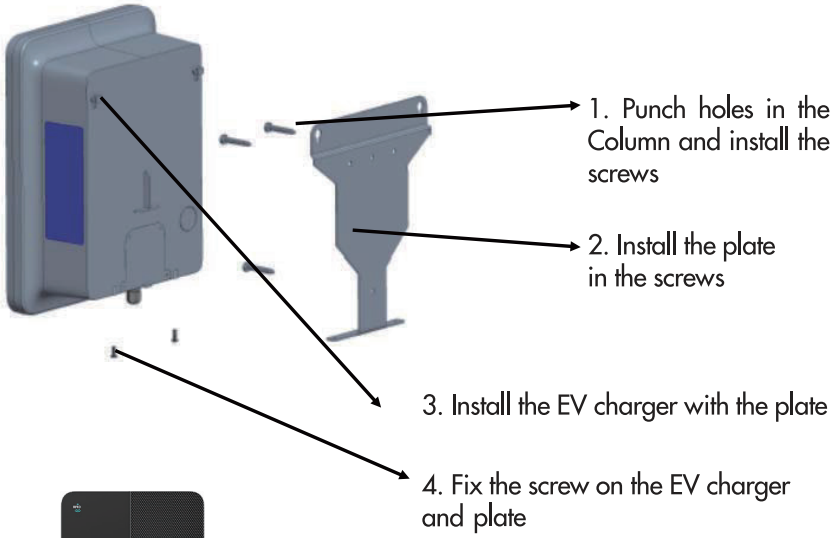
Installation Instruction

• 2.1 Safety Tip

The people who assemble and use the EV charger must response the follow principle and rule.to confirm the relevant people and device operation normally: Before device power on. please confirm the device is good earth, to avoid the unnecessary accident.
All of the tools must be insulation treatment to avoid the sort circuit or personal injury due to uncovered metal touches metal frame. Confirm the EV charger using life and operation steadily, the device should keep cleaning, constant temperature and constant humidity. the EV charger can't be used in the environment that contain volatile gas or flammable-explosive. Children mustn't touch EV

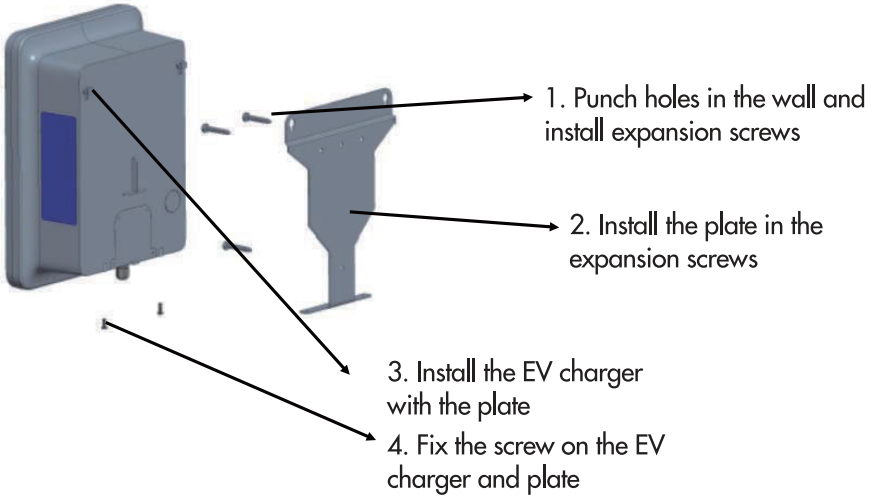
- **2.2 Installation Guide**

Pole mounted installation:



For Reference

Wall mounted installation:



For Reference

Danger!

Laypeople's installation may cause the danger.
Only electrician who is trained and qualified can install the EV charger.
The electric shock would happen if don't install accord with operation procedure.
The electric shock or the serious hazard would happen if don't observe operation instruction of safety precaution.

2.3 Electrical connection

Before use

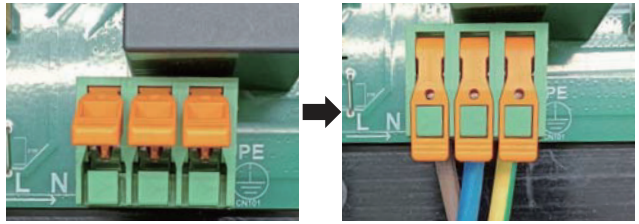
! PLEASE NOTE: This procedure may only be carried out by an authorised electrician!

Electrical connection:

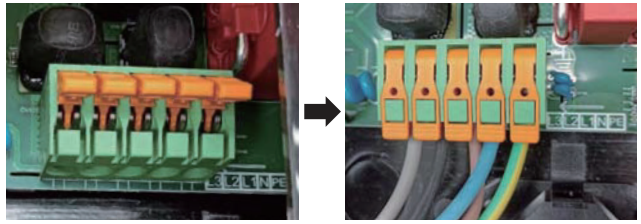
The protection of the charging system must be carried out in accordance with the relevant national regulations. It depends on, for example, the switch-off time required, the internal network resistance, conductor cross section, cable length and the max. capacity of the charging system. The individual phases of the supply voltage must each be fused with circuit breakers, at least type A (when used in the Netherlands or Italy they must also have residual current protection, type A on the input side). These should be certified in accordance with IEC 60898-1, IEC 60947-2 or IEC 61009-1.

! CAUTION: Please be sure that there is no voltage in the power lines which are to be connected to the EV charger

The **one phase** device connected is refer to the line connection in the picture



The **Three phase** device connected is refer to the line connection in the picture

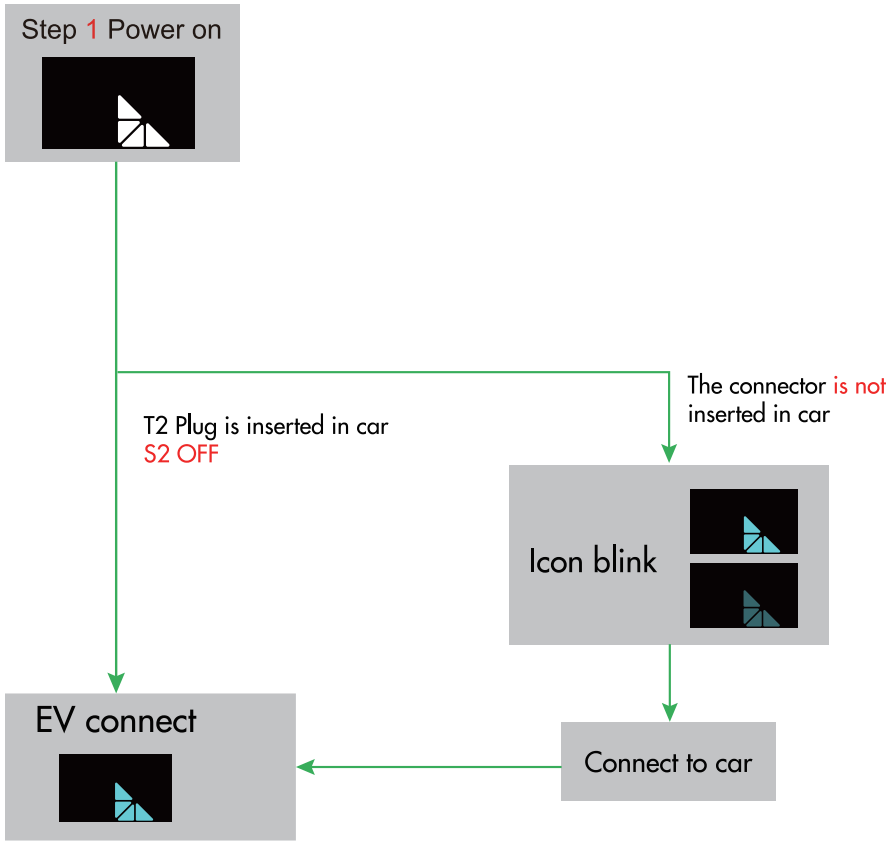


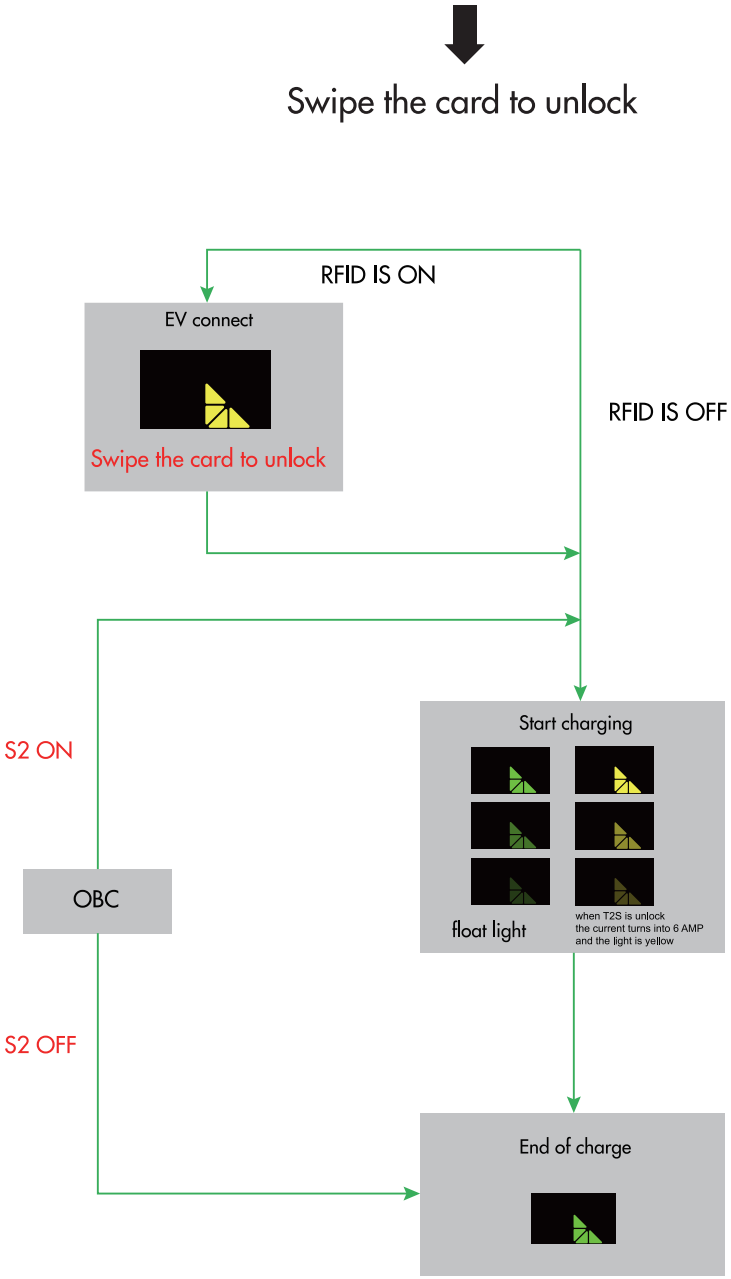
Charging Instruction

- **3.1 Charge preparation**

After plug in, according to the screen prompt operation, start to charge.

- **3.2 Start to charge (RFID)**





Malfunction and Maintenance

• 4.1 Maintenance caution

Check whether the line is aging with the monthly power cut. Conduct leakage test on the external leakage protector to ensure the normal operation of the leakage protector. Observe incoming lines to make sure no wire is damaged.

• 4.2 Breakdown and Maintenance

Error	Meaning	Solution
ERROR 1	The temperature inside the machine is generally too high	1. Stop Charging, and charge again when the case inside temperature falls below to fault clearance. 2. If the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 2	The temperature inside the machine is seriously too high	1. Stop Charging, and charge again when the case inside temperature falls below to fault clearance. 2. If the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 3	The output current is over 1.1 times	1. The fault is immediately eliminate if disconnect the connector, if not, after 30 second, the fault will eliminate 2. If the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 4	The output current is over 2 times	1. Recharging to recovery 2. If the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 5	The leakage current from the wallbox's output wire to ground is too high	1. Check and confirm the machine output line does not leak to the ground, to ensure that no electrical conductor (including the human body, etc.) directly short-circuit the machine output fire and neutral line to the ground. 2. After eliminating the leakage problem, if the fault persists, and the vehicle charge with the other machine shows working, it may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 6	The leakage detection equipment RCD and circuit can not finish RCD self-test	1. Check and confirm that the machine output line does not leak to the ground. 2. After eliminating the leakage problem, if the fault persists, and the vehicle charge with the other machine shows working, it may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 7	AC input is undervoltage	1. Under the faults status, the input voltage 220V to 240V products require the input voltage beyound 180V, the input voltage 100V to 240V products require the input voltage beyound 80V. 2. If the conditions met step 1 and the fault cannot be eliminated, it may be an internal circuit fault that needs to be sent for after-sales repair

ERROR 8 	AC input is overvoltage	1. Under the faults status, the input voltage 220V to 240V products require the input voltage beyound 180V, the input voltage 100V to 240V products require the input voltage beyound 80V. 2. If the conditions met step 1 and the fault cannot be eliminated, it may be an internal circuit fault that needs to be sent for after-sales maintenance.
ERROR 9 	The main relay's main contact cannot be disconnected	It may be an internal circuit fault that needs to be sent for after-sales maintenance.
ERROR 10 	The main relay's main contact cannot be connected	It may be an internal circuit fault that needs to be sent for after-sales repair
ERROR 11 	The temperature of the input cable connector is too high	1. After the plug temperature is reduced and the fault is eliminated, re-charge normally. 2. If the fault persists, it may be the temperature sampling circuit fault and needs to be sent for after-sales repair
ERROR 12 	The temperature of the input cable connector is seriously too high	1. After the plug temperature is reduced and the fault is eliminated, re-charge normally. 2. If the fault persists, it may be the temperature sampling circuit fault and needs to be sent for after-sales repair
ERROR 13 	The PE wire of the machine is not grounded or in poor contact with the power grid ground wire	1. Check and confirm the ground wire is connect the machine or not. 2. After eliminating the ground wire problem, if the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 14 	CP voltage fault (positive voltage is not any of 6V, 9V, 12V)	1. Check and confirm the ground wire is connect the machine or not. 2. After eliminating the ground wire problem, if the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 15 	P negative voltage fault (when CP is PWM, the negative voltage is not -12V, such as short circuit of the car end diode will cause CP negative pressure to be divided by the car end to ground resistance like positive pressure)	1. Check and confirm the positive and negative of connector's CP wire are not connect through the human body. 2. After eliminating the step 1, if the fault persists, and the vehicle charge with the other machine shows working, it may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 16 	The charging wallbox under the single-phase or three-phase input, the live wire and the neutral wire reverse connection	1. Check whether the input live wire and neutral wire reverse connection or not 2. If the fault still exists after confirming that the input live wire and neutral wire is not reversed, it may be the internal circuit fault of machine and needs to be sent for after-sales maintenance.
ERROR 17 	S phase or T phase is no voltage under the three-phase input mode	1. Check the three phase input wire of 3 live wires and 1 neutral wire is connect right or not. 2. After confirming the three phase input wire is connect right, if the fault persists, it may be an internal circuit fault and needs to be sent for after-sales repair.
ERROR 19 	In host mode (the host RS485 interconnection address is 1) It is Received the packets from other hosts	1. Check and confirm that only one RS485 address is host address 1. 2. If the fault still exists after the fault is confirmed in 1, it may be the internal circuit fault of the machine and needs to be sent for after-sales repair
ERROR 20 	In slave mode (when the RS485 interconnection address of the slave is greater than 1), the host cannot receive any packet from it	1. Check and confirm that the interconnection of the RS485 address should have a set to the host address 1, and all the interconnection harness connection is reliable. 2. If the fault still exists after the fault is confirmed in 1, it may be the internal circuit fault of the machine and needs to be sent for after-sales repair
ERROR 21 	The interconnection RS485 address of the machine exceeds 0-9	It may be the internal circuit fault of the machine and needs to be sent for after-sales repair
ERROR 22 	The AC voltage and current sampling circuit fault, and the CT clamp's cable disconnection fault	1. If reported Error 22 and charging is stopped, it may be the voltage and current sampling circuit fault, and the internal circuit of the machine fault, which needs to be sent for after-sales repair. 2. The yellow light is blinking, the fault code Error 22 and the charging current are displayed alternately by every 5 seconds. If eliminate the CT clamp wire disconnection problem, it may be the internal circuit fault of the pile and needs to be sent for after-sales repair.

ERROR 23 	Smart meter, RS 485 communication loss, inter-board CAN communication loss, Linky communication loss, etc	1. Check whether the communication wire is properly connected or disconnected 2. If the communication wire is connected correctly and there is no broken wire, and the vehicle charge with the other machine shows working, it may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 24 	The temperature sampling circuit inside the machine is faulty	It may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 25 	The input plug temperature sampling circuit is faulty	It may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 26 	The ADC sampling reference voltage is faulty	It may be an internal circuit fault in this machine and needs to be sent for after-sales repair
ERROR 27 	The status detection of the electronic lock at the machine is faulty	1. Check and confirm the charging cable connector should be connected tightly with the wallbox. 2. If the wallbox still cannot charge normally after the charging cable connecting the machine tightly, it may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 28 	In T2S mode, the CC sampling of the charging connector on machine exceeds the limiting value	It may be an internal circuit fault and needs to be sent for after-sales repair
ERROR 29 	In T2S mode, the CC sampling of the charging connector on machine exceeds the limiting value seriously	It may be an internal circuit fault and needs to be sent for after-sales repair