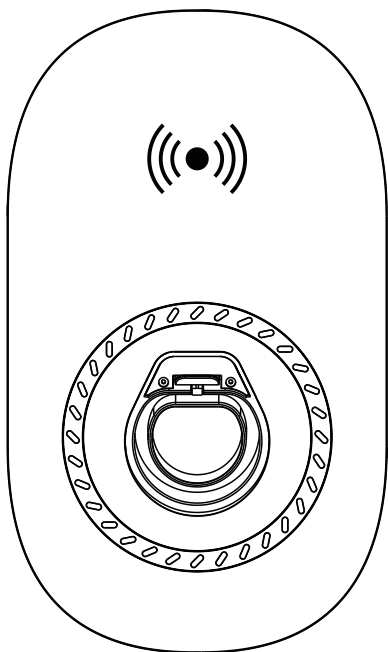
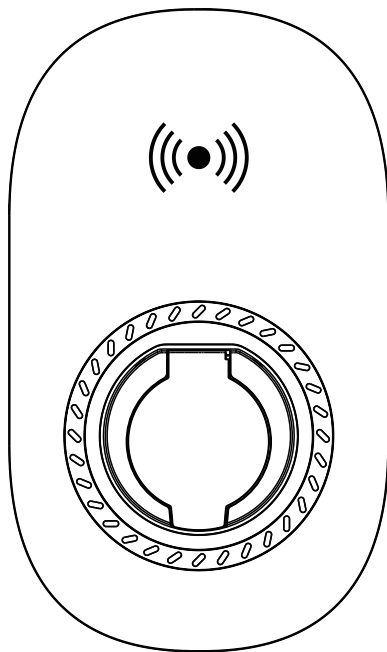


# User Manual

7.4KW/11KW/22KW EV Charger Station



F-EVE-PCA



F-EVE-PSA

- The EV Charger station described in this manual is suitable for plug-in and pure electric vehicles (EV).
- This product complies with the charging connector regulated by the standard to connect and communicate with EV to achieve the necessary control and protection functions.

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**Manufacturer:**

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All Rights Reserved.

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# Safety Warning

## **⚠ WARNING: Important safety tips:**

This manual contains important instructions for model F-EVE-PCA/F-EVE-PSA.

The following basic precautions should be followed during installation, operation and maintenance. For general instructions, it is not necessary to indicate the type of the specific model.

- Please read all instructions before installing or using this product.
- Supervise charging when used around children.
- Do not allow children to operate the charger.
- Do not touch the connector and its terminals with your fingers or any sharp metal objects or tools.
- Do not use this product if the AC power cord or EV cable shows signs of wear, insulation breakdown, or other damage.
- Do not use this product if the housing or EV connector is cracked, broken, open, or shows any other signs of damage
- Please save these instructions.

**⚠ WARNING:** Improper connection of the equipment grounding conductor can result in an electric shock hazard. If you are confused about whether the product is properly grounded, please contact a qualified technician for help. Do not modify the plug supplied with the product if it does not fit the receptacle, please contact a qualified technician to install a suitable receptacle.

## **⚠ WARNING: Grounding instructions.**

This product must be grounded. Grounding reduces the risk of electric shock by providing a path of least resistance for current when the equipment malfunctions or breaks down. This product is equipped with a flexible cord with an equipment grounding conductor and a grounding plug.

The plug must be plugged into a suitable outlet and properly installed and grounded in accordance with local regulations.

## **⚠ WARNING: User maintenance instructions.**

Turn off the charger before cleaning. Do not use cleaning solvents to clean any part of the charger. Use a clean, dry cloth to clean the cable, connectors and charger to remove the dust and dirt.

## **⚠ WARNING: Movement, Transportation and Storage Instructions.**

Improper movement or storage of the charger can result in damage of the product.

**⚠ WARNING:** Turn off the circuit breaker at the service panel before performing any electrical work or repairs.

**⚠ WARNING:** Supervise charging when used around children. Do not allow children to operate the charger.

⚠ **WARNING:** If the EV charger displays repeated malfunctions, please contact a qualified technician.

⚠ **WARNING:** Please use or operate the charger in a well-lit area. Keep the EV charger away from crowded areas to avoid accidental tripping hazards. Keep the EV charger away from areas where children are easy to touch to avoid the potential risk of electric shock.

⚠ **WARNING:** Turn off the power or unplug the charging connector for electrical isolation.

⚠ **WARNING:** If the charger does not work properly according to the instruction manual, do not use the unit. Contact a qualified technician for repairing or contact your supplier for replacement.

⚠ **WARNING:** Improper installation of the charger will result in personal injury or product damage.

⚠ **WARNING:** This charger installation guide is not a substitute for electrical safety precautions.

⚠ **WARNING:** Use this charger within the specified operating parameters to prevent the risk of personal injury.

⚠ **WARNING:** Install the charger where the charging cable cannot be stepped on, tripped over, damaged, or subjected to force.

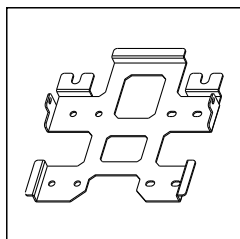
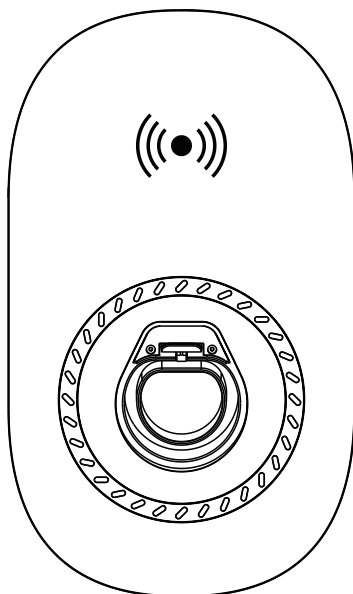
**CAUTION:** Incorrect charger installation will result in the increasing of the risk damaging the battery of EV and the EV charger itself.

**CAUTION:** Do not operate the charger at temperatures over its specified operating range.

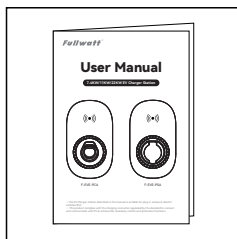


# 1. Package Contents

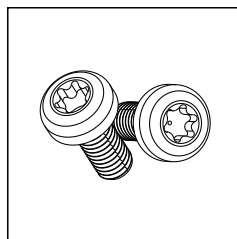
## 1.1 Packing List For F-EVE-PCA



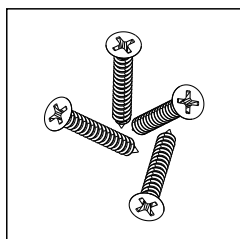
Mounting Backplane(\*1)



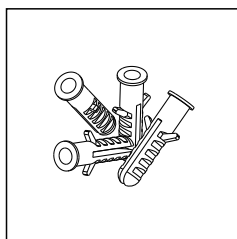
User Manual



M4\*10 Screw(\*2)



St4\*32Screw(\*2)

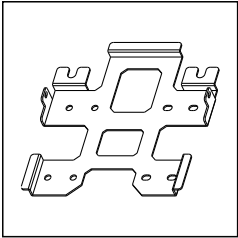
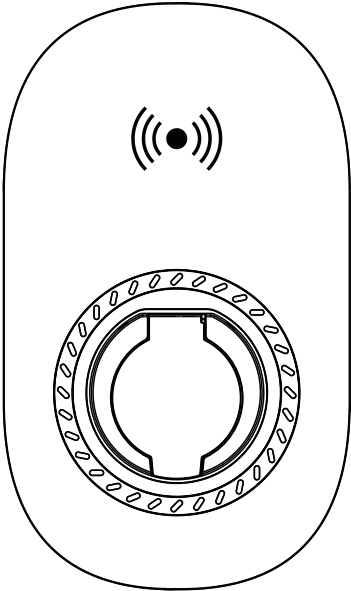


8\*30 Expansion Screw(\*4)

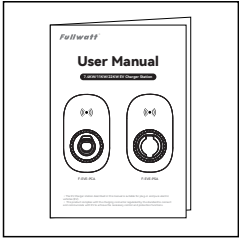


Nfc Cards(\*2)

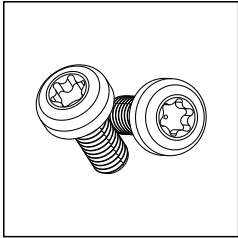
# 1.2 Packing List For F-EVE-PSA



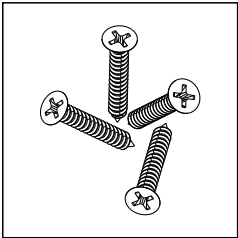
Mounting Backplane(\*1)



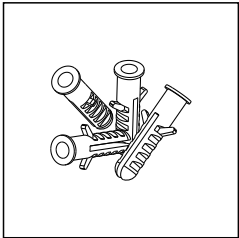
User Manual



M4\*10 Screw(\*2)



St4\*32Screw(\*2)



8\*30 Expansion Screw(\*4)

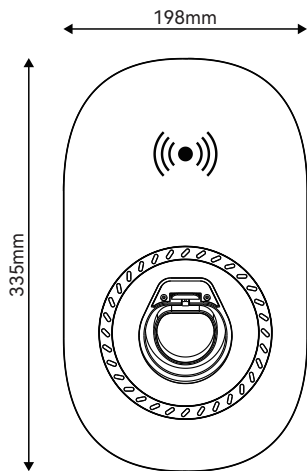


Nfc Cards(\*2)

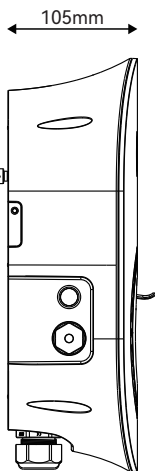
## 2. Prouducts

### 2.1 External Structural

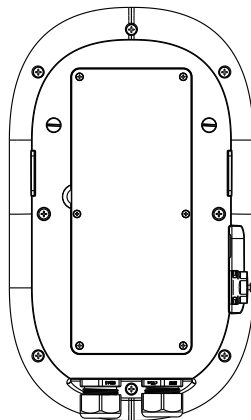
#### F-EVE-PCA



Front View

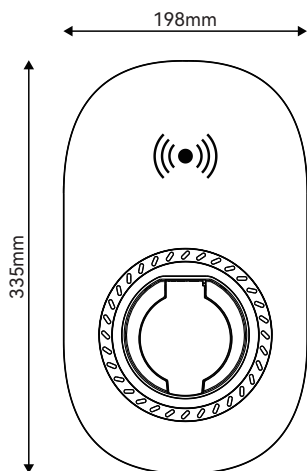


Side View

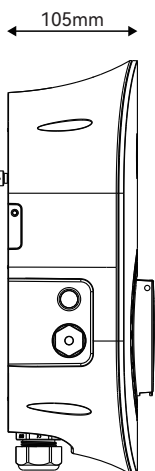


Bottom View

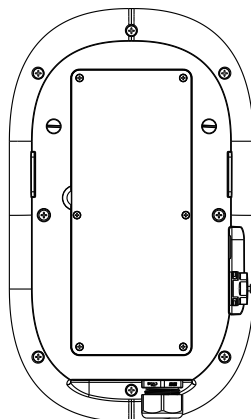
#### F-EVE-PSA



Front View

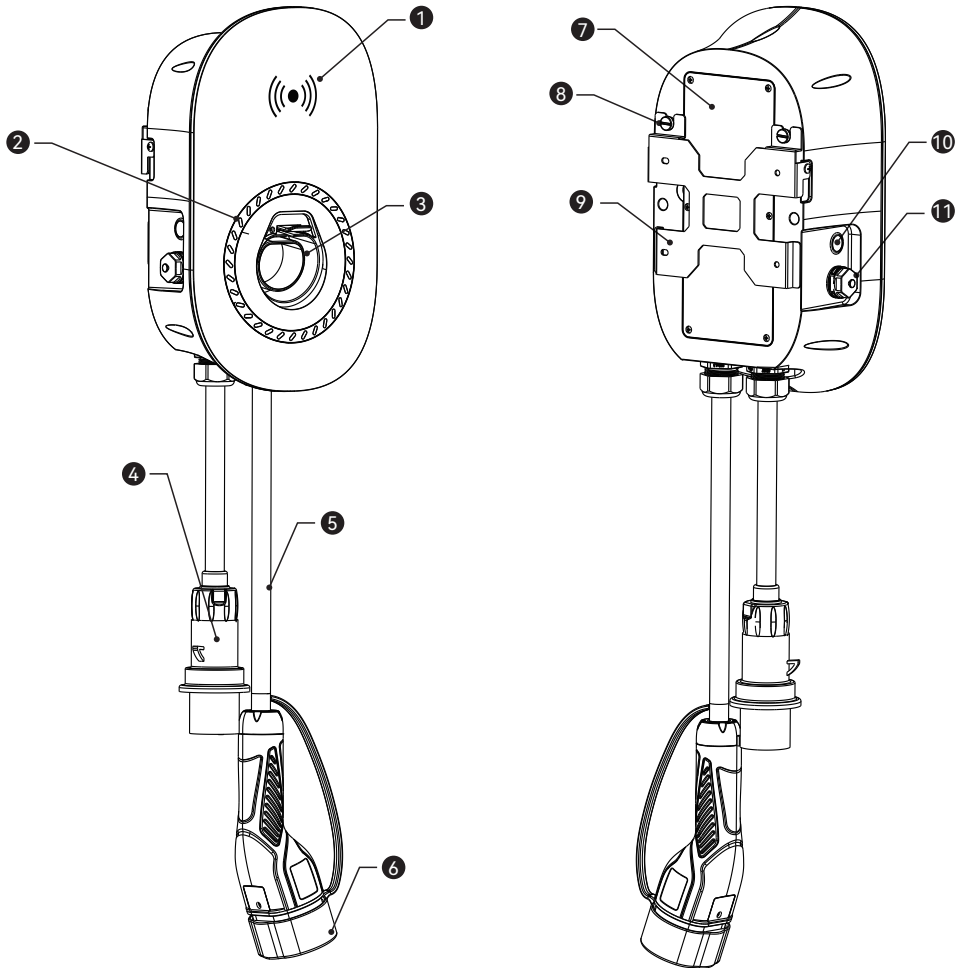


Side View



Bottom View

## 2.2 Product Details - F-EVE-PCA



1 Position for swiping card

2 LED light indicator

3 Hanging position

4 CEE industrial plug  
(optional)

5 European standard cable

6 Charging gun

7 Repairing cover

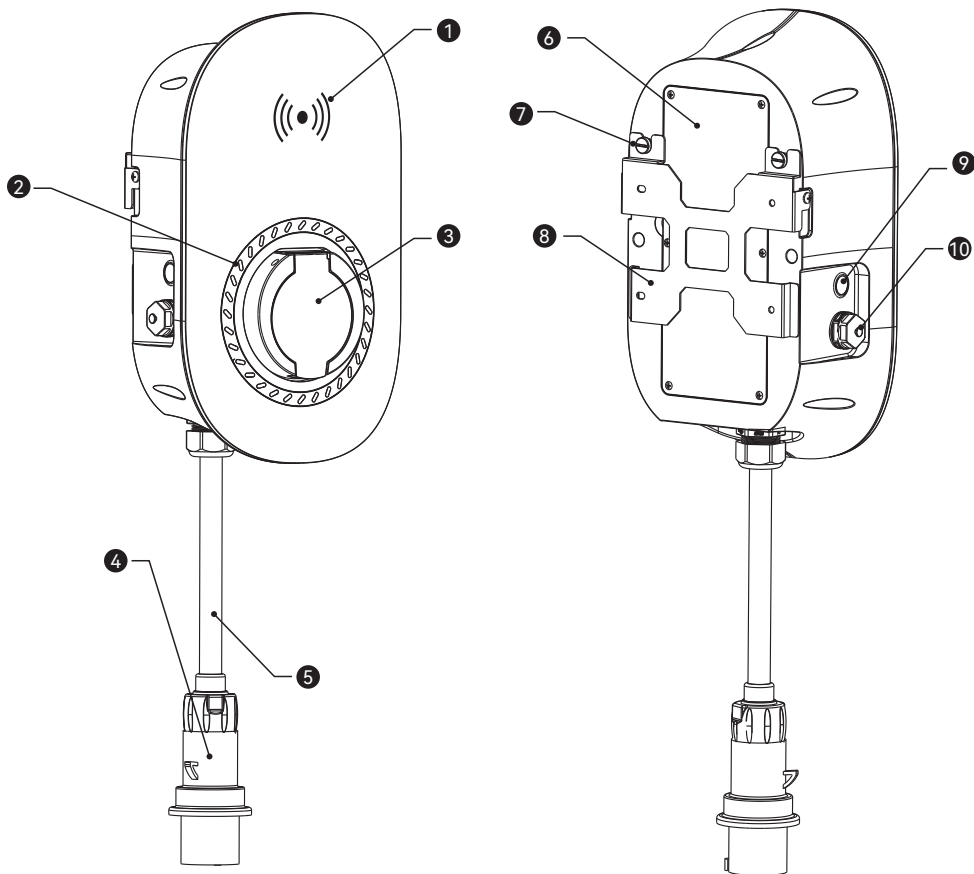
8 Hook nut

9 Mounting plate

10 Function button/  
Emergency stop

11 Network cable port  
(optional)

## 2.2 Product Details - F-EVE-PSA



1 Position for swiping card

2 LED light indicator

3 Charging Socket

4 CEE industrial plug (optional)

5 European standard cable

6 Repairing cover

7 Hook nut

8 Mounting plate

9 Function button/  
Emergency stop

10 Network cable port  
(optional)

## 2.3 Product Specifications

Model	F-EVE-PCA-07	F-EVE-PCA-11	F-EVE-PCA-22	F-EVE-PSA-07	F-EVE-PSA-11	F-EVE-PSA-22
<b>Input</b>						
Power Supply	1P+N+PE	3P+N+PE		1P+N+PE	3P+N+PE	
Phase	Single Phase	Three Phase		Single Phase	Three Phase	
Frequency	50/60 HZ					
Rated Input Voltage [V]	AC230	AC400		AC230	AC400	
Rated Current [A]	32	16	32	32	16	32
<b>Output</b>						
Rated Input Voltage [V]	AC230	AC400		AC230	AC400	
Rated Current [A]	32	16	32	32	16	32
Maximum Output Power [KW]	7.4	11	22	7.4	11	22
<b>Specification</b>						
Fire Rating	UL94-V0					
Ingress Protection	IP54 (Plug) IP55 (Control Box)			IP54 (Plug) IP54 (Control Box)		
Resistance Voltage [V]	Between L.N and PE,2000AC					
Insulation Resistance [MΩ]	>1000MΩ (DC500V)					
Cable Specification	3*6+1*0.5mm <sup>2</sup>	5*2.5+1*0.5mm <sup>2</sup>	5*6+1*0.5mm <sup>2</sup>	3*6+1*0.5mm <sup>2</sup>	5*2.5+1*0.5mm <sup>2</sup>	5*6+1*0.5mm <sup>2</sup>
Contact Resistance [Ω]	<0.5Ω					
<b>Configuration</b>						
Output Connercter (to car)	TPU Cable + Type2 VEHICLE			Socket		
Material	Plastic PC+ASA					
Charging Status Indicator	LED					
Charging Mode	Plug&Play / RFID NFC / APP (Optional)					

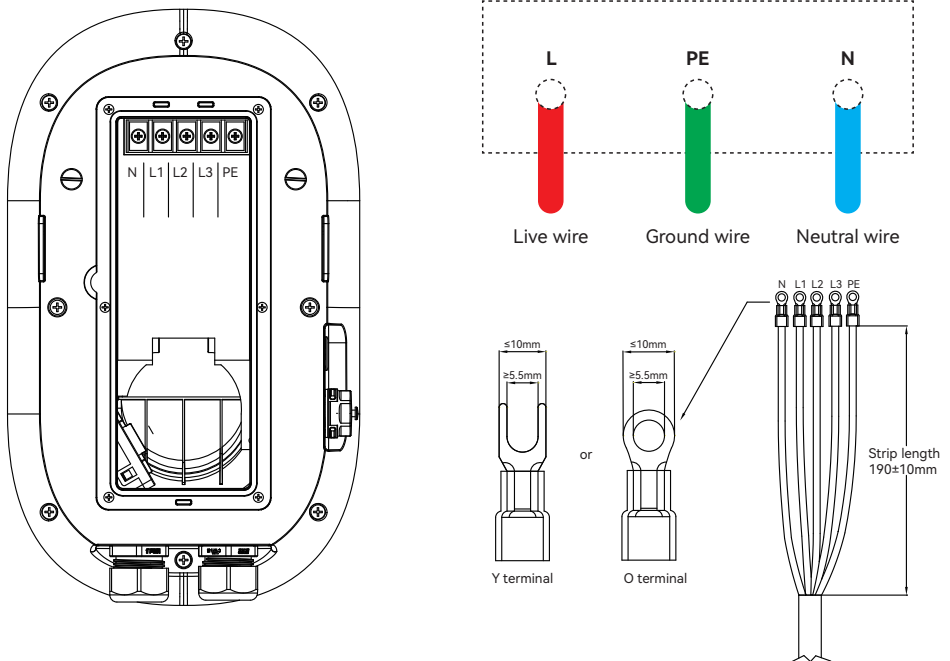
<b>Safety</b>		
<b>Protection</b>	Over current protection, Residual current protection. Ground protection, Surge protection, Over/Under voltage protection, Over temperature protection	
<b>Leakage Current Protection</b>	AC30mA+DC6mA	
<b>Surge Protection</b>	4kV @2500A	
<b>Communication</b>		
<b>Communication</b>	RFID, bluetooth/wifi 2.4G , RJ45 , 4G	
<b>Protocal</b>	OCPP1.6 J	
<b>Operating Frequency</b>	Bluetooth · Low · Energy: ·2402-2480MHz Wi-Fi: ·2412-2472MHz RFID: ·13.56MHz GSM900: ·880-915MHz ·(TX), ·925-960MHz ·(RX) DCS1800: ·1710-1785MHz ·(TX), ·1805-1880MHz ·(RX) LTE ·Band ·1: ·1920-1980MHz ·(TX), ·2110-2170MHz ·(RX) LTE ·Band ·3: ·1710-1785MHz ·(TX), ·1805-1880MHz ·(RX) LTE ·Band ·7: ·2500-2570MHz ·(TX), ·2620-2690MHz ·(RX) LTE ·Band ·8: ·880-915MHz ·(TX), ·925-960MHz ·(RX) LTE ·Band ·20: ·832-862MHz ·(TX), ·791-821MHz ·(RX) LTE ·Band ·28: ·703-748MHz ·(TX), ·758-803MHz ·(RX)	
<b>Output Power</b>	Bluetooth · Low · Energy: ·≤10dBm Wi-Fi: ·≤20dBm GSM: ·≤35dBm ·(GSM900); ·≤32dBm ·(DCS1800) LTE: ·≤25dBm	
<b>General Information</b>		
<b>Installation</b>	Wall-mount / Pole-mount (Optional)	
<b>Operation Temperature[°C]</b>	-30°C~50°C	
<b>Storage Temperature[°C]</b>	-40°C~85°C	
<b>Working Humidity</b>	5%~95%	
<b>Operation Altitude[m]</b>	<2000m	
<b>Warranty[year]</b>	2 year	
<b>Package Dimension (L*W*H) [mm]</b>	450*350*200mm(1 PCS)	410*350*170mm(1 PCS)
<b>Net Weight [kg]</b>	<3.5	<2.5
<b>Gross Weight [kg]</b>	<4.5	<3.5
<b>Charging Standard</b>	IEC 61851-1	
<b>Product Certification</b>	CE	
<b>Status Indicators</b>	The LED indicators distinguish between standby, plugged-in, charging, and fault states (see Status Indicators)	

# 3. Installation Instructions

## 3.1 Installation Precautions

- 1) When installing, repairing and maintaining the equipment, Please comply with the relevant local, regional and national regulations.
- 2) The EV charger can be installed on wood, stone, cement or metal walls, but make sure that they can be fixed and will not fall easily.
- 3) This device is for permanent installation, if you need to change the position, please use the necessary tools.
- 4) Please check the place before installation to ensure that the position of the charger is easy to use and maintain.
- 5) Before installing, the AC input components in the power supply have been correctly installed with the required protection devices.

Figure for power wire

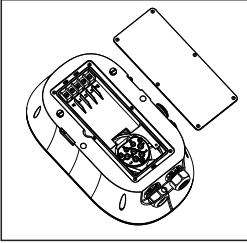


Note: The actual wiring data is subject to the label in the product



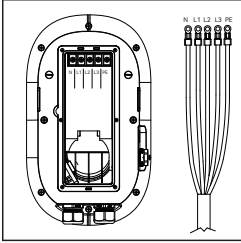
## 3.2 Wiring Instructions

STEP1



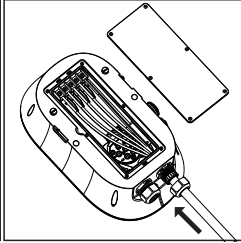
Remove the screw with a phillips screwdriver

STEP2



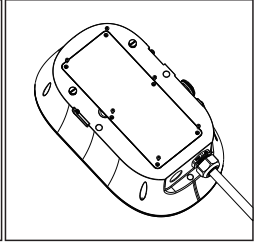
Insert the lines into the corresponding holes

STEP3



Plug the power cord and Connect it according to the instructions

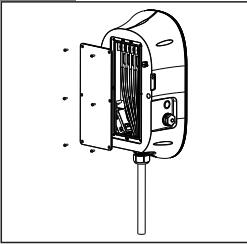
STEP4



Screw on to complete the installation

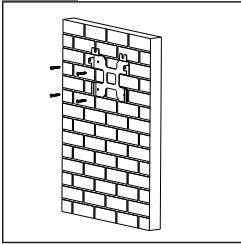
## 3.3 Wall-mounted

STEP1



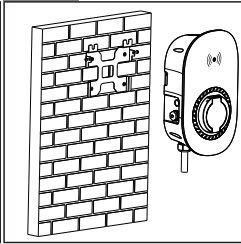
Open the repairing cover, install the incoming wire finish wiring and lock the repairing cover

STEP2



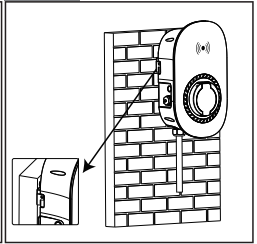
Install the mounting plate to the wall

STEP3



Attach the stake to the pegboard and secure it with the left and right side screw lock attachments

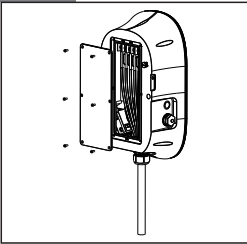
STEP4



Wall mounting completed

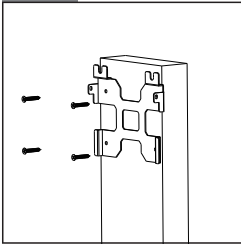
## 3.4 Column Mounted

STEP1



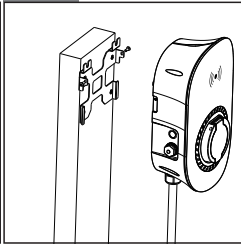
Open the repairing cover, install the incoming wire Wires finish wiring and lock the repairing cover

STEP2



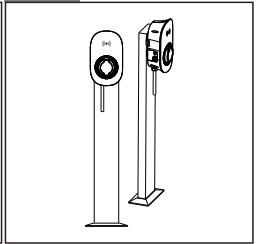
Install the mounting plate to the column

STEP3



Attach the stake to the pegboard and secure it with the left and right side screw lock attachments

STEP4



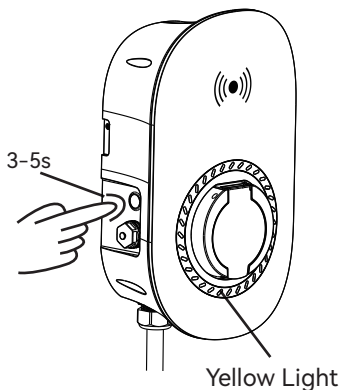
Column mounting installation completed

# 4. Instructions For Function Button

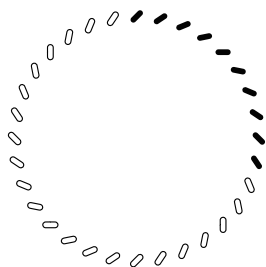
## 4.1 Instructions For Reserved Charging

### Enter of the reserved charging mode:

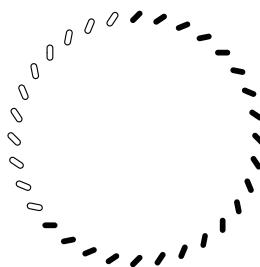
Press and hold the function button for 3~5s, 1/3 of the LED lights flashing yellow light, release the button, the EV charger enter reserved charging mode.



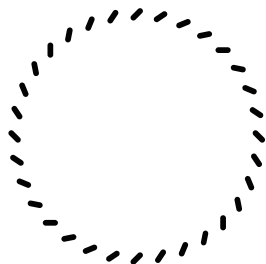
### Selection of reserved time



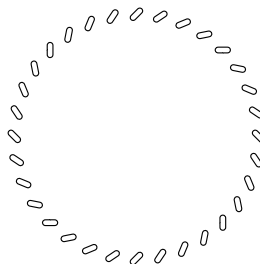
On-third green light lashing  
Reserved for **2** hours



Two-thirds green light  
Reserved for **4** hours



3/3 green lights flashing  
Reserved for **6** hours

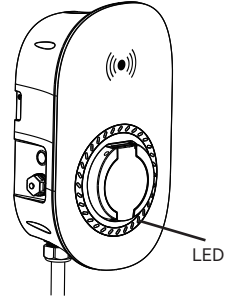


All lights were off  
Reserved for **0** hours  
(Cancel reserved time)

## Confirmation of reserved time:

Press the button for 2s or no actions for longer than 15s, the reserved time will be confirmed and enter the count down process.

- The left reserved time was indicated by green LED light.
- all the green LED lights are on, indicating the left time 4~6h
- 2/3 of the green LED lights are on, indicating the left time 2~4h
- 1/3 of the green LED lights are on, indicating the left time 0~2h



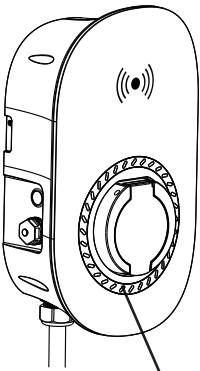
Attention: If the EV charger was operate under card charging mode, please swipe card after reservation.

## Cancel of reservation:

1. Enter the reserved charging mode again and select reserved time for 0h
2. Shut down the power and restart the EV charger.

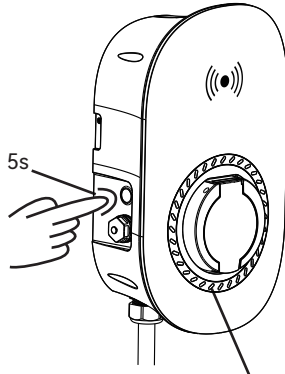
## 4.2 Selection Of Charging Mode

### Enter of charging mode selection:



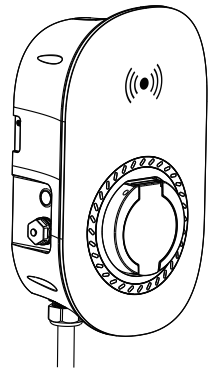
Baby blue

① Standby mode



Dark blue

② If you hold the button for more than 5 seconds, the LED light flashes dark blue



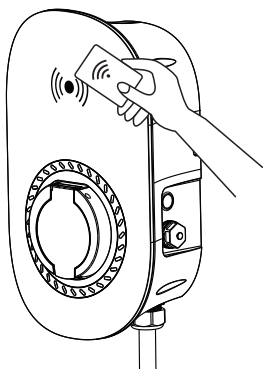
③ Release the button to enter the charging mode selection state

## Charging Mode selection

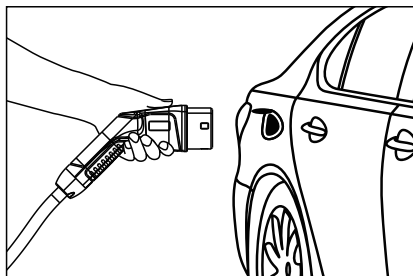
Press the button to select the charging mode. The selection sequence and LED lights are as follows:

- ① Conventional card charging mode: (light blue LED)
- ② Conventional plug-in charge mode: (white LED light on)
- ③ Compatible card charging mode, dark blue LED light on
- ④ Compatible plug-in charge mode, purple LED light on

Attention: compatible card charging mode and plug-in mode are not recommended for common case, please contact qualified technician if you want to use it. APP and swipe mode cannot control it at the same time.



① Swipe card charging



② Plug and charge

## Charging Mode Confirm Exit

Hold down the button for 2 seconds or more than 15 seconds without a button action to exit the mode selection and save the last selection

# 5. Troubleshooting

## Definition of indicator light

<b>Operating State</b>	Standby Status/Charging Complete	Light Blue	Permanent Blue Light On
	Connected	Yellow (Color)	Permanent Yellow Light On
	Connection Successful	Green	Green Light On
	Charging	Light Blue	Blue Light Breathes And Flashes
<b>Fault Indicator Language</b>	Emergency Stop	Red (Color)	Red Light On
	Overvoltage/Undervoltage	Yellow. & Red.	Yellow Light Flash 1 Time And Red Light Flash 1 Time
	Grounding	Yellow. & Red.	Yellow Light Flash 1 Time And Red Light Flash 2 Tmes
	Overcurrent	Yellow. & Red.	Yellow Light Flash 1 Time And Red Light Flash 3 Tmes
	Leakage	Yellow. & Red.	Yellow Light Flash 1 Time And Red Light Flash 4 Tmes
	Overheating	Yellow. & Red.	Yellow Light Flash 1 Time And Red Light Flash 5 Tmes
	Relay Connection	Yellow. & Purple.	Yellow Light Flash 1 Time And Purple Light Flash 1 Tmes
	4G Communication Failure	Yellow. & Purple.	Yellow Light Flash 1 Time And Purple Light Flash 2 Tmes
	Wifi/btt Communication Failure	Yellow. & Purple.	Yellow Light Flash 1 Time And Purple Light Flash 2 Tmes
	Cp Short Circuit Fault To Ground	Yellow. & White.	Yellow Light Flash 1 Time And White Light Flash 1 Tmes
	Cp Voltage Abnormal Fault	Yellow. & White.	Yellow Light Flash 1 Time And White Light Flash 3 Tmes
	Car End Diode Short Circuit Failure	Yellow. & White.	Yellow Light Flash 1 Time And White Light Flash 4 Tmes

# 6. Maintenance



## Note

- The charger should be shaded from the sun and rain, and the use of a rain shelter outdoors is recommended.
- Protect the charger from lightning strikes by ensuring effective shielding and reliable grounding of the charger.
- When in use, try to keep the output voltage and current of the charger within the nominal range to ensure that the charger operates at maximum efficiency.
- When the charger is not in use, the charging output should be stopped and then the cable should be wound back to its original position.
- The charger should be firmly packed with piles and labeled with loading and unloading directions before transportation. Take appropriate fastening measures to prevent severe vibration and shock, avoiding damage to the charger's outer packaging.
- If the product has any quality or operation problems, the seller can be notified through the platform for after-sales treatment. If the power cord is damaged, the seller can be notified through the platform, and the manufacturer or professionals can specially replace it to avoid danger.
- Persons with reduced physical, sensory or mental capacity or lack of experience or knowledge should use the product under supervision and understanding of the risks.
- Keep the device and its wiring out of reach of children under 8 years of age. Do not let children operate the machine independently to avoid accidents.
- Never leave the device unattended when it is connected to a power source.