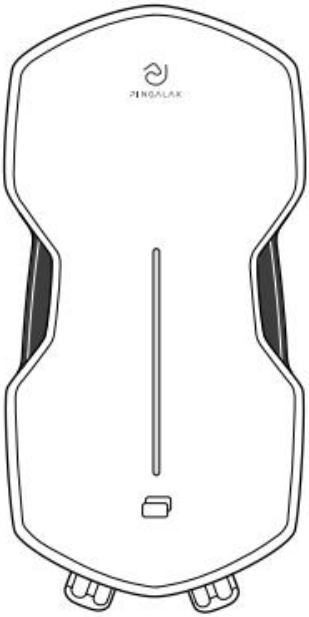

Wall-mounted / Floor-mounted AC EV Charger User Manual

PCAC-J4 Series AC EV Charger

EV Charger User Manual

Thank you for choosing to charge using our AC EV Charger (hereinafter referred to as charging post).Please read this manual carefully before using the product and keep it in a safe place.

EV chargers are designed to meet the charging needs of new energy electric cars, which can be installed in garages, parking lots, etc. The high-voltage wires, low-voltage wires and electronic components inside the EV charger have a complicated structure. Please don't disassemble or modify the wires or electronic components of the EV charger by yourself, as the failure caused by this will not be covered by the warranty. And our company won't be responsible for the the personal injury caused by such behavior.

This manual is intended to assist you in the proper use of the product. It does not represent any description of the configuration of this product. For the configuration of the product, please refer to the contract (if any) related to the product or consult the seller who sold you the product. The pictures in this manual are for reference only. If some picture don’t match the actual product, please refer to the actual product.

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I. Safety Information

1.1 Introduction

We have developed the intelligent AC chargers (PCAC-J4 series) to work with EV on-board chargers for charging electric vehicles.This product is suitable for public parking lots, residential parking lots, corporate parking lots, and other types of outdoor and underground parking lots with convenient installation, small footprint, easy operation, and stylish appearance.

1.2 Product Specification

All specifications and descriptions in this manual have been verified for accuracy at the time this manual was printed. At the same time, Pingalax aims for continuous improvement and we reserve the right to make changes at any time.

1.3 Errors and Omissions

If you find any errors or omissions in this manual, or want to give feedback or make suggestions about this manual, please send an e-mail to:pingchuang@pingalax.com

1.4 Copyright

Copyright and other intellectual property rights in all information contained herein are owned by Pingalax and its licensors. The information cannot be copied, reproduced or modified without the permission of Pingalax. Additional information is available upon request.

Warnings

WARNING: Read through the instructions before using this product.

WARNING: When using this equipment in the presence of children, keep them under close supervision.

WARNING: This EV charger must be grounded through the permanent conductor system or equipment grounding conductor.

WARNING: Do not install or use the EV charger near flammable, explosive, rough or combustible materials, chemicals or vapors.

WARNING: Turn off the input power at the circuit breaker before installing or cleaning the charging post.

WARNING: Use the charging post only in accordance with the specified operating parameters.

WARNING: Do not spray water or other liquids directly onto the ev charger wallbox . Do not spray water on the charging handle or immerse the charging handle in liquid. Keep the charging handle inside the charging cradle to avoid unnecessary contamination or moisture.

WARNING: Discontinue or do not use the EV charger if it is defective, cracked, worn, broken, damaged or not work.

WARNING: Do not attempt to disassemble, repair, tamper with or modify the EV charger. The EV charger cannot be modified by user, pls contact Pingalax for any repairs.

WARNING: Please be careful when transporting the EV charger. Do not subject it to strong force or impact such as pull, twist, tangle, drag, or step on the EV charger to prevent damage.

WARNING: Do not touch the interface/end of the EV charger with your fingers or sharp metal objects (e.g., wires, tools, or pins).

WARNING: Do not fold or press any part of the EV charger with force or sharp objects.

WARNING: Do not insert other objects into any part of the EV charger.

WARNING: The operation of medical or implantable electronic devices, such as implantable pacemakers or implantable cardioverter defibrillators, may be affected or damaged by use of the Charging Station. Consult the manufacturer of such electronic devices regarding the effects of charging on them before using the Charging Station.

Caveat

WARNING: Power supply cords must be used with specified cables.

WARNING: Do not use your private generator as a charging source.

WARNING: Incorrect installation and testing of the EV charger can cause potential damage to the vehicle battery and/or the charger itself.

WARNING: Do not use the EV charger when the temperatures that exceed the range of -30°C to 60°C.

Note

NOTE: Ensure that the charging cords of the charging post have been properly placed so that they will not be stepped on, run over, detained, or damaged or stressed.

NOTE: Do not use cleaning agents to clean any components of the Charging Post. The exterior of the Charging Post, the charging wires and the end of the Charging Post should be wiped down periodically with a clean, dry cloth to remove accumulated dirt and dust.

NOTE: Do not damage circuit boards or components during installation.

II.Parameter

2.1 Model number:

PCAC-J4-US11.5/240

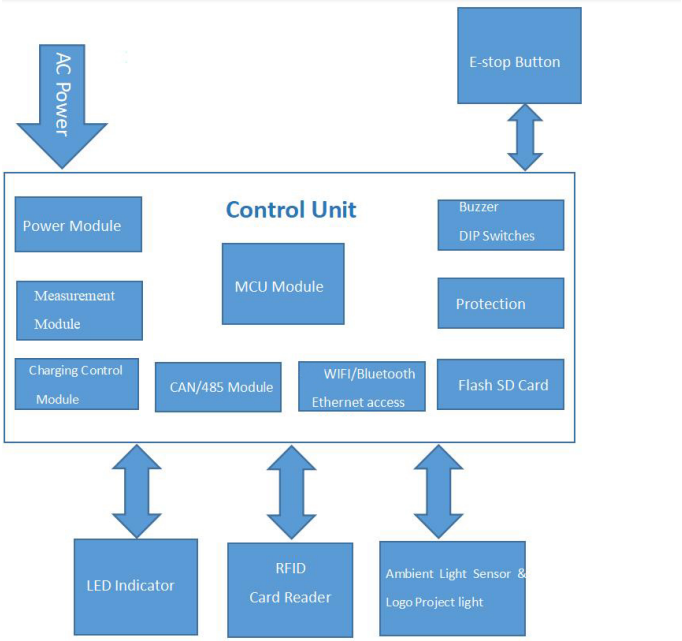
- Maximum output voltage: 240V
- Maximum output power: 11.5kW
- Execution standard: UL standard
- Box type: J stands for AC Charger
  Serial number is decided by the running number of the shell
- Charging post type: AC
- Company name: PINGALAX

2.2 Technical parameters:

Item	Parameters
Output power	11.5kW
Output voltage	208-240V
Maximum Output Current	0-48A
Power Conversion Efficiency	≥99%
Interface	Type 1
Cable Length	25 feet
Input Voltage	208-240V
Frequency	50/60Hz
Power Factor	>0.99
Inlet	L1+L2+PE（N6-50P or N14-50P）
Display	LED
Communication	RJ45, Wi-Fi
Communication Protocol	OCPP 1.6J, 2.0.1J
Bluetooth/WIFI	BLE 4.2 / Wi-Fi 2.4G
Safety Compliance	Over Current, Over Voltage, Under Voltage, Short Circuit, Over Temperature Protections, Emergency Stop
Leakage Protection	RCD Type B
Surge Protection	20kA
Measurement Accuracy	1%
Charge Control	APP/RFID/Plug&Play

RFID	ISO/IEC 14443A/B, Mifare
Certificate	UL
Other Functions	OTA
IP Class	Type3R, IK10
Operating Temperature (°C)	-30°C ~ 60°C
Storage Temperature (°C)	-40°C ~ 70°C
Cooling Method	Natural-air-cooled
Humidity	≤95%
Altitude	≤3000m
Noise	≤40dB
Mounting Method	Bracket-mounted\Floor-mounted
Dimension	208mm × 153mm × 418mm
Cover Material	PC+PBT
Front Panel	ABS

Schematic:



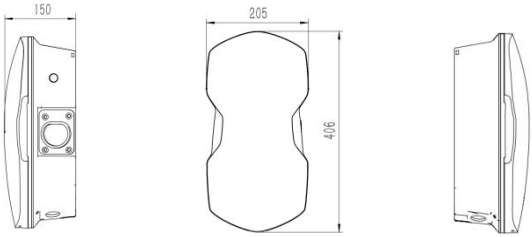
Wall-mounted / Floor-mounted AC EV Charger Installation Instructions

PCAC-J4 Series AC EV Charger

III. Installation Instruction

3.1 EV charger shape and dimensions：

Dimension:



3.2 Safety regulations

The operating voltage and current inside the EV charger is very high, so the following regulations should be observed at all times to ensure personal safety:

（1）Only personnel who have been trained in and have full knowledge of the EV charger personnel with an electrician's operating license) may install it. The safety precautions and local safety regulations should always be observed during installation;

（2）If operating the inside of the EV charger, make sure that the EV charger is no longer energized. The mains input to the EV charger must be disconnected;

（3）Distribution cables should be properly routed and protected so that they are not touched when operating power devices;

（4）To ensure the safe operation of the EV charger, it is recommended to use leakage protection circuit breakers;

（5）EV charger should be permanently grounded, and must be grounded first when installing the equipment and last when removing the equipment. The operation of the equipment without a grounding conductor is strictly prohibited;

3.3 Minimum requirement

Installation of the EV charger is required:

- Calculate the existing electrical load to determine the maximum operating current.
- Calculate inlet wire length to ensure minimum voltage drop.

- Use only 8AWG three-core wire (in accordance with local electrical code requirements)..
- With the use of protection devices, the selected circuit protection device shall incorporate an appropriate residual current device (RCD) as well as a corresponding overcurrent protection device for the electrical load.

3.4 Power supply cables

NOTE: Consult an electrician to ensure installation complies with codes.

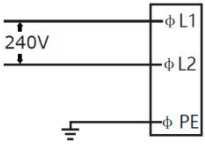
9.6kW: Has a three-core cable wire capable of carrying 208V-240V/40A (please use ≥8AWG three-core cable wire).

3.5 Wiring method

You need to connect the single-phase wires L (Fire), N (Zero) and PE (Earth), and ensure the phase voltage between the Fire and Zero wires is 240V.

WARNING: Read through the instructions before using this product. Before installing the charging post, determine the type of field grid power connection available. If you are unsure of the type of connection available at the service panel, consult an electrician or contact Pingalax for assistance.

Note: Please consult your local electrician or Pingalax in order to select the appropriate wire that match with the specification of the EV charger.



3.6 Circuit breaker requirements

In order to determine the type of upper level breaker required, the distribution panel or breaker box needs to be inspected in order to determine the available amperage at the installation location.

3.7 Choosing the best location for the EV charger

Ensure that the parking location is within the range of the charging wires. Ev charger should be located in following place:

- In enclosed garages, it should be on the side of the vehicle charging port.
- Keep the space ventilated. Avoid installation in closed boxes or near high power appliances.
- When the mounting method is wall-mounted, it is recommended to be installed between 1m-1.5m above the ground.
- The mounting position should be such that the indicator can be easily observed and operated.
- The installation environment requires cleanliness.

- The installation location requires an altitude of 3000 meters or less, an average humidity of 5%RH~95%RH, and an operating temperature of -30℃~60℃.

Note: 1. EV Charger can be exposed to outdoors, but are not designed for full intrusion into liquids. Installation of rain protection is recommended but not mandatory.

2. It is advisable to set up a rain shelter (outdoor installation), camera and fire extinguisher on site, which can effectively prolong the service life of the EV charger, prevent malicious human damage to the EV charger, and ensure timely and effective elimination of hazards.

3. EV charger and distribution box and other electrically charged equipment need to be affixed with obvious anti-electrocution signs.

4. In order to improve user experience, the distance between the edge of the charging space and the outer edge of the EV charger should be greater than 0.5 meters, and the arrangement of the EV charger should not impede the charging and passage of other vehicles.

3.9 Installation precautions

- Installation of charging posts must avoid gas, water and sewage pipes.
- The incoming conduit can be routed along the floor or along the lower edge of the wall, or from the ceiling before the charge post is installed.

NOTE: The term "conduit" in this manual refers to the protective tubing for the power supply wires. Instead of conduit, the supply wires can be placed in protective sleeves.

Here are some additional guidelines:

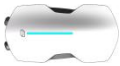
- Catheter opening size (OD) is 40mm.
- Please use suitable circuit breaker. Each EV charger needs to be powered by an independent circuit breaker in the distribution cabinet, and for 9.6kW AC EV charger, the distribution cabinet needs to be equipped with a circuit breaker parameter of 50A/2P miniature circuit breaker. PE wire needs to be led from the grounding row of the distribution cabinet, and the cable stripping needs to be covered with a special cable head.
- The conduit should be free of perforations, cracks and significant unevenness, and the inner wall should be smooth.
- Metal cable ducts should not have serious corrosion, and plastic cable ducts should have adequate protection.
- Where mechanical damage is desirable and for direct burial at high forces, pipe of adequate strength shall be used.

Cable insert

IV. Installation Instruction (Wall-mounted)

4.1 Check the content of the box

Parts included in the shipping box can be used for the above installation methods and are also applicable for this manual. If any parts are damaged or missing, please contact us.

Name	Model	Picture	Quantity	备注
AC EV Charger	PCAC-J4 series		1	
Charging connector and cable (pre-fixed)	11.5kW 7.5m (default)		1	
Hanger			1	Wall-mounted
Post			1	Post-mounted
Charging IC card			2	Stand-alone model with card reader
User manual			1	
Factory report			1	
Certification			1	
Cross recessed countersunk head tapping screw	M5*60mm		6	Wall-mounted
Cross recessed countersunk head tapping screw	M5*110mm		2	
Plastic expansion sleeve	φ8mm*60mm		8	
Cross recessed countersunk head tapping bolt	M6*25mm		2	Post-mounted
Cross recessed hexagon bolt	M6*80mm		2	
Expansion bolt	M10*100mm		4	

4.2 Tools and materials

Before installing the charger, the following tools and materials need to be prepared:

- Pencil or marker
- Leveling instrument
- Range finder
- Wire stripper
- Electric pencil or digital multimeter (for measuring the AC voltage at the installation site)
- Wrench
- Cross screwdriver
- Conduit (conduit diameter depends on the cable size and structure)
- Wire clip (configure according to the conduit model)
- Three-core cable (6mm²)
- Hammer
- Electric driller and drilling bits

Note: Pingalax advises shielded cables to avoid potential interference.

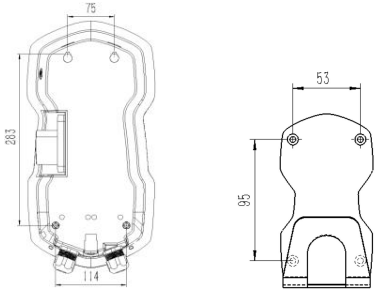
4.3 Wall opening

Install the charger body as shown in the figure below:

➢ Refer to the installation hole positions on the back of the charger body, mark the positions on the wall for the expansion screws.

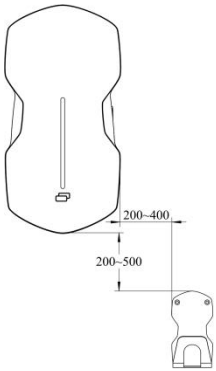
- Use a leveling instrument to make sure the marks are vertically aligned.
- The position to keep a charger should be at a maximum distance from the ground of no more than 150cm. If installed indoors, the minimum height is 100cm, and if installed outdoors, the minimum height is 120cm. (The above data are for reference only).

Note: The installation should avoid any reasonably predictable influences, such as: moisture, uneven walls, accumulated water, hollow walls, etc.

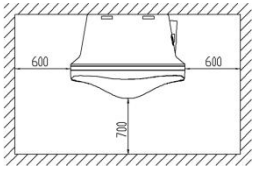


- Take the charger body as a reference, mark the installation position of the hanger at 200mm-500mm from the bottom edge of the charger body and 200mm-400mm from the right side of the charger body (for reference only).
- Use a leveling instrument to make sure the marks are vertically aligned.

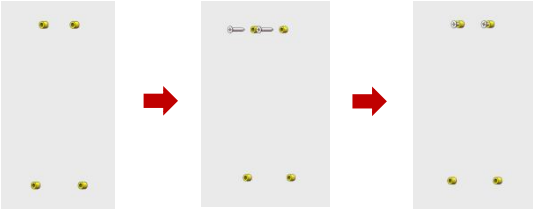
Note: It is important to choose the minimum and maximum height and position for the back plate carefully. The installation shall be free from any reasonably foreseeable influence.



Installation schematic diagram (wall-mounted)



- Drill the marked positions on the wall with an electric drill in diameter of 10mm and depth of 60mm. Put the expansion sleeves in the holes properly.
- Use a cross screwdriver to tighten the 2 upper screws (M5*60mm) leaving 5mm-8mm exposed for hanging the charger body through the mounting holes at the upper end of the charger box.



4.4 Install the charger

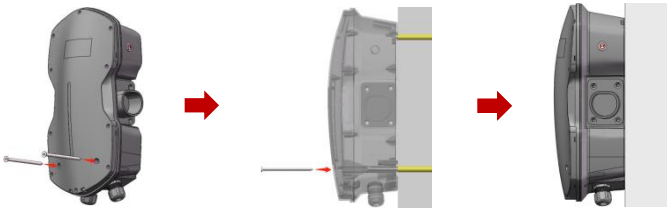
- Remove the 2 screws at the bottom of the outer decorative cover of the charger and remove the outer cover. Hang the charger on the pre-installed screws by the mounting holes at the upper back of the charger box.
- Adjust the exposed screws on the wall according to the tightness after hanging.

Note: After removing the outer decorative cover, it is necessary to protect it from scratches or damage.

- Fix 2 screws (M5*110mm) into the 2 holes at the lower end of the charger inner cover, align it with the mounting holes on the wall, and tighten the screws with screwdriver.

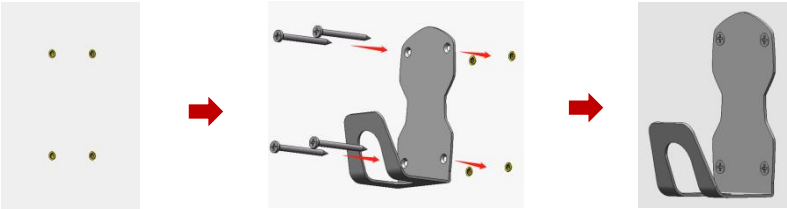
Note: 1. It need to be able to support a weight of 20kg (reference value) after installation.

2. Pay attention to the direction of EV charging box.



- Align the hanger with the pre-drilled mounting holes, and use a cross screwdriver to tighten the 4 screws (M5*60mm) for the hanger to complete the hanger installation.

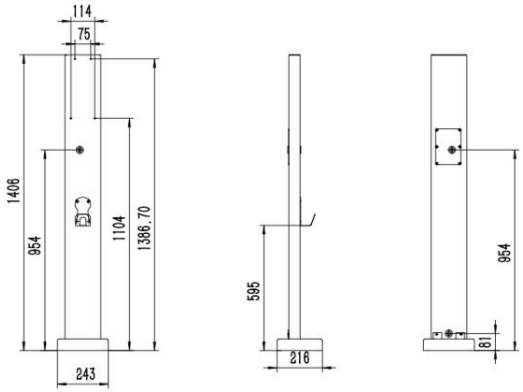
Note: After the hanger is installed, it must be able to support a weight of 20kg (reference value).



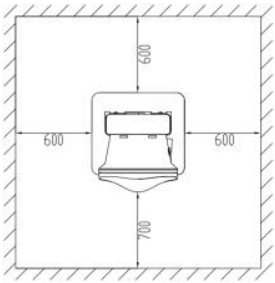
V. Installation Instruction (Floor-mounted)

5.1 EV Charger foundation and site selection:

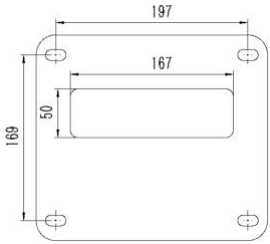
Outline dimension:



Installation schematic diagram (post-mounted)

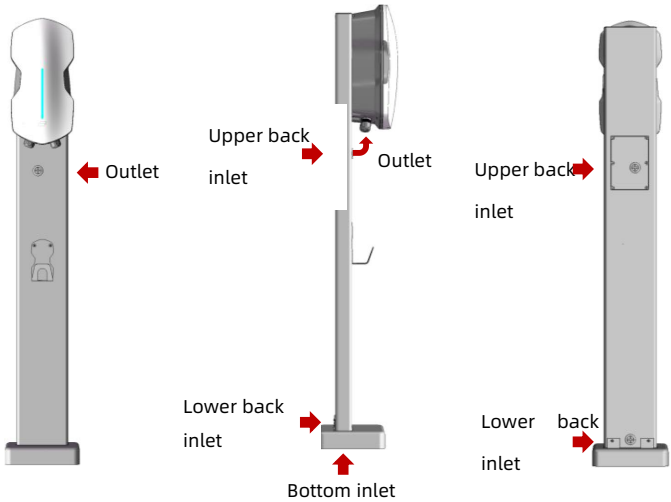


Dimensional drawing of the cable inlet holes and the bolts mounting holes

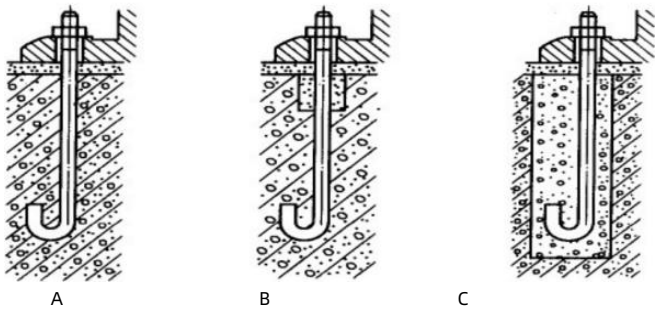


Follow the instructions below to wire and install the post

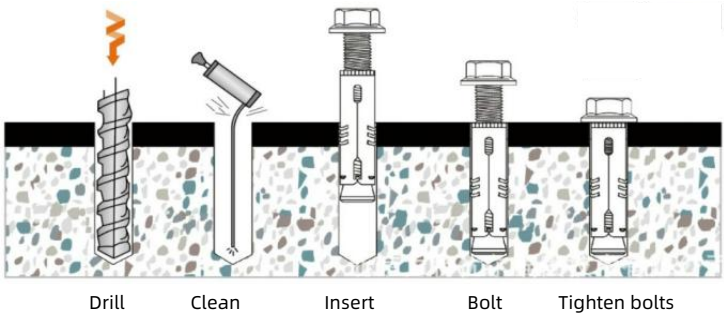
（1） 3 inlet methods optional: the bottom inlet method, upper back and lower back inlet methods. The post must be placed vertically on the cement foundation or ground (the ground needs to be hardened), and fixed with anchor bolts or expansion screws.



（2） Users can choose the mounting method of anchor bolts or expansion screws according to the mechanical strength required by the local climate conditions. In typhoons areas, the charger box should be fixed on cement foundation with pre-embedded anchor bolts, this mounting method is more stable to ensure the mechanical strength compared with the normal expansion bolt. Fix the post with 4 M10 anchor bolts, and the allowable tilt is 5° in any direction vertically.

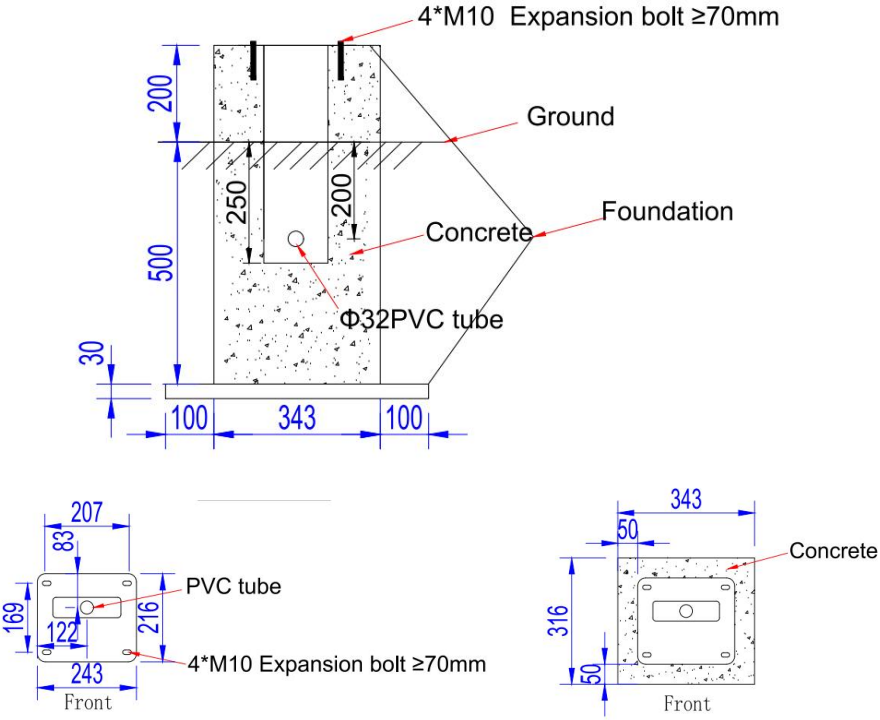


Schematic diagram of pre-embedded anchor bolt method



Schematic diagram of expansion bolt fixing

（3） The cement foundation of the post depends on the site conditions, the bearing layer of the foundation is the old soil layer, and the characteristic value of the bearing capacity of the foundation shall not be less than 150kpa. In case of over-excavation, C15 concrete shall be used to treat the foundation to the designed bottom level, and the foundation shall be casted with C25 concrete, which requires one-time pouring, and construction joints is not allowed on the surface. The size of the foundation for post mounting should be slight larger than the size of the post base plate. The length*width should not be less than 343*316mm, and the foundation height is recommended to be 200mm to ensure that the post is completely placed on the foundation to prevent flooding, and to ensure that the height allows convenient operating. The size of the cement foundation should not be too large to avoid inconvenience or users standing on the foundation causing damage to the foundation and danger.



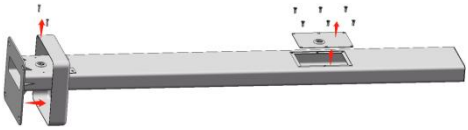
Schematic diagram of foundation opening

5.2 EV charger pile installation

- Use the base plate of the post as a reference to mark the installation position of the expansion bolts on the ground.
- Use a leveling instrument to make sure the post is vertical to the ground.

Note: Please be sure to choose the post position carefully, and avoid any reasonably predictable influences during installation, such as places like: marsh land, sandy soil, damp, salt beds, etc.

- Drill the marked placement on the foundation or ground, put the expansion bolt (M10*100mm) into the holes and remove the screw nuts, spring and pads. If you have embedded the bolts, you can install the post directly.
- Remove the cover on the back of the post with a cross screwdriver and detach the decoration cover on the base.



- If the power and network cables (network cables are required for ethernet version) are pre-buried underground, you need to firstly put the cables inside the post from the opening at the square base bottom and pull the cables out from the outlet before installing the post.

- ➢ Place the post on the bolts (expansion bolts or embedded bolts), fix the pads, springs and nuts, and tighten them with a wrench.
- Use leveling instruments to ensure the post be set vertically.
- ➢ Place the decorative base cover and tighten the screws with a cross screwdriver.

- ➢ Select the inlet method for the power and network cables (network cables are required for ethernet version).

(1) If the cables are pre-buried underground, use the bottom inlet method.

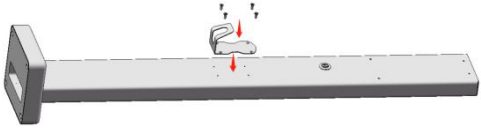
- Put the power and network cables (network cables are required for ethernet version) into the post through the square inlet at the bottom of the post.
- Then pull the cables out from the circular outlet on the middle front of the post body.

(2) If the cables enter the post from the edge of the wall or ground surface, use lower-back entering method.

- Put the cables (network cables are required for ethernet version) into the circular inlet at the lower back of the post.
- Then pull the cables out from the circular outlet on the middle front of the post body.

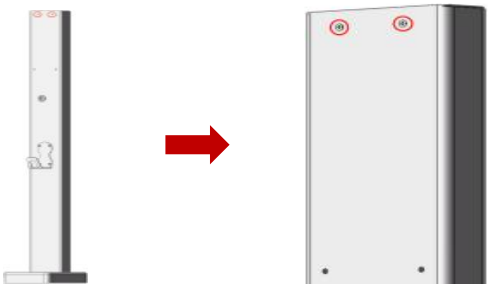
(3) If the cables are routed from the ceiling to the post, use the upper back inlet method.

- Put the power and network cables (network cables are required for ethernet version) into the circular inlet on the back of the post.
- Then pull the cables out from the circular outlet on the middle front of the post body.
- ➢ Arrange the power and network cables (network cables are required for ethernet version), fix the threading installation plate back to the pack of the post, and tighten the screws with a cross screwdriver.
- ➢ Install the charging cable hanger. Align the hanger with the mounting holes on the middle front of the post, and tighten the screws with a cross screwdriver to complete the post installation.



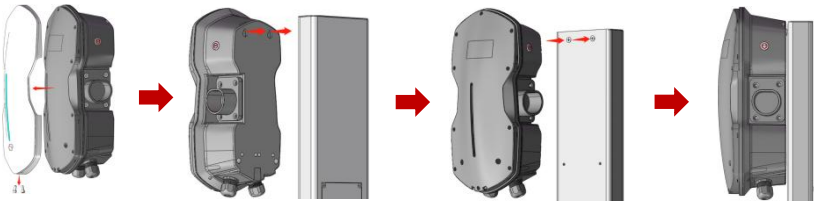
5.3 Charger installation

- ➢ Use a cross screwdriver to tighten the 2 screws (M6*25mm) at the upper end of the post front, and about 5mm-8mm should be left exposed for hanging the charger body through the holes at the upper back of the changer body.

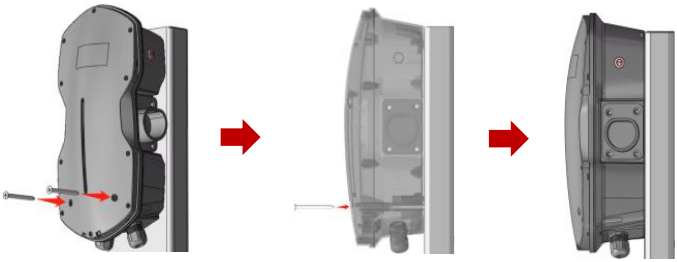


- Remove the screws at the bottom of the outer decorative cover of the charger and remove the cover. Hang the charger body on the pre-fixed screws by the mounting holes at the upper end of the charger back.
- Adjust the exposed screw according to the tightness after hanging.

Note: After removing the outer decorative cover, it is necessary to protect it from scratches or damage.



- Put 2 screws (M6*80mm) into the holes at the lower front of the inner cover of the charger, align it with the mounting holes on the post, and tighten the screws with a cross screwdriver.



VI.Installation Instruction (Connect the Cables)

6.1 Connect the cables

If there is an external cable for input power, just connect the cable to the circuit breaker for power input.

If the charger body is not equipped with an external power cable for power input, please connect the cables according to the following instructions.

Note: Please consult a local electrician to select cables suitable for the required electric current of the wall-mounted EV charger.

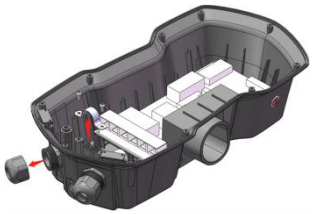
Note: It is the installer's responsibility to ensure that grounding is in accordance with installation specifications.

Note: For single-phase cables, terminals should be connected to L1 , L2, and PE (Earth) wires.

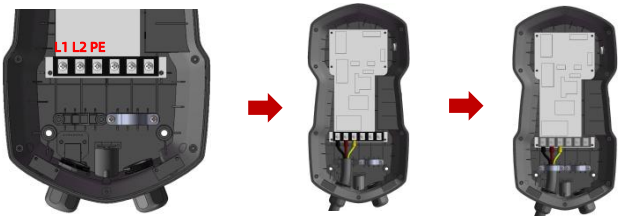
WARNING: Do not connect the power cables until you have read and fully understood all of the information presented on page 7-8 for power cables. Please consult an electrician or contact our technicians for help if there's any question.

- Remove the inner cover of the charger body with a cross screwdriver (10 screws).

- The power cables are three-core cables. They are marked as L1,L2, and PE (Earth) with different colors. Connect the cables with copper terminals (RV5.5-6).
  - Peel the cables, and the stripping length is between 35mm-45mm.
  - To connect the copper terminal, the cables need to be striped, and the length of the striped cables is between 6mm-10mm.
- The power cable inlet is on the bottom left of the charger box. Detach the cable gland head and the corresponding saddle clip simultaneously, put the gland head on the power cable, align the gland head and route the cables through the cable gland on the bottom left of the charger.

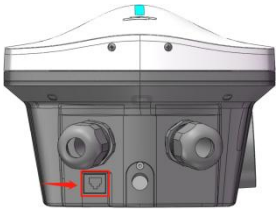


- Open the wire terminal cover, take out the screws for L1, L2, and PE (Earth) wire and put the wires into the copper terminals, and then use a cross screwdriver to tighten the screws and fix the terminal cover back.
- Tighten the head of the cable gland on the cables with a torque wrench, press the saddle clip back on the power cables, and tighten the screws with a cross screwdriver.



6.2 Connect network cables (Ethernet version only)

Connect the network cables through the ethernet port on the bottom left of the charger body.



6.4 DIP switches introduction

If the output power of the charger needs to be configured, please follow the instructions below (4 DIP switches are off by default).

- The DIP switches are on the upper middle side of the control board on the charger back shell, and can be configured according to actual needs

Switch 1	Switch 2	Switch 3	Switch 4	Output current/power
OFF	OFF	OFF	OFF	32A/7kW
OFF	ON	OFF	OFF	24A/5.2kW
ON	OFF	OFF	OFF	16A/3.5kW
ON	ON	OFF	OFF	N/A

6.5 Install the cover

If the charger is equipped with an external input power cable, only need to install the decorative cover of the charger.

If the charger is not equipped with an external power cable, please install the inner cover first, and then install the decorative outer cover to the charger.

- Install the inner cover to the charger body, and tighten the screws on the cover with a cross screwdriver (10 screws).
- Then attach the decorative outer cover onto the charger body, and tighten the two screws at the bottom with a cross screwdriver.

6.6 Arrange the output cable (charging connector)

- Wind the charging cable neatly on the hanger.
- Detach the cover of the charging connector and put it into the holder on the right side of the charger body.

6.7 Safety check before use

- After the installation is completed, the commissioning personnel should check whether the wiring is connected correctly, whether the fasteners are loose or falling off, whether the wiring harness, terminals and other connections are firmly connected. Before powering on, check whether there is short circuit with the inlet cables with a multimeter. If any problem is found, it must be corrected in time. It is necessary to check again to make sure there is no problem and then power it on. After starting, check whether there is fault alarm, and correct it in time according to the situation to ensure normal perform after powering on.
- It is recommended to use a megger to test the insulation resistance before powering on the main circuit, and it can be turned on only after the insulation requirements are met.

Warning: It is necessary to check whether each component is well connected.

Note: When doing the insulation test, the main inlet line should be detached and all the switches should be disconnected.

Power on

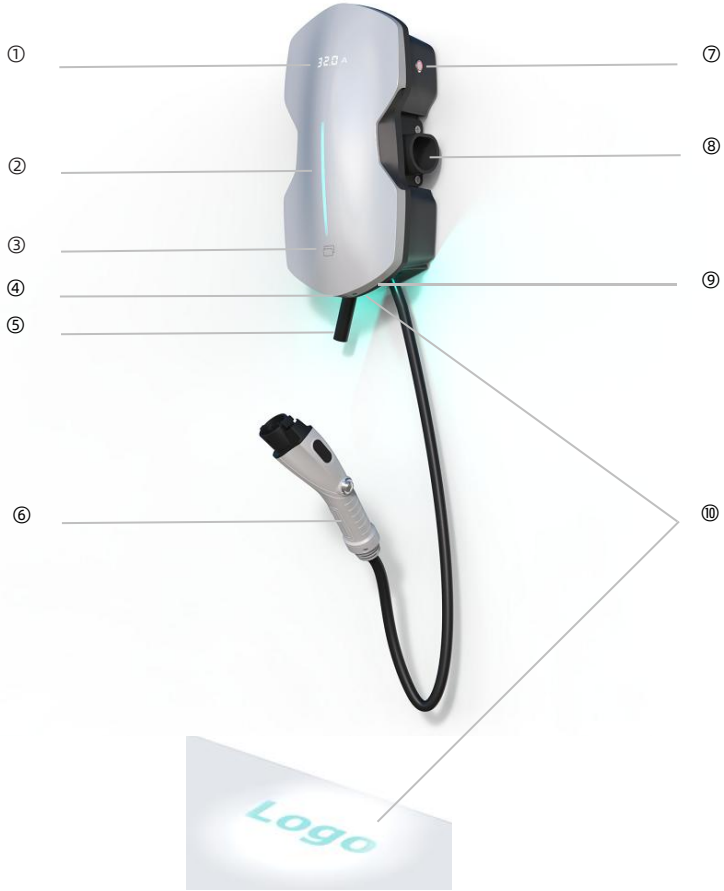
- After checking and finding all components in order, you can turn on the power supply.

How to Use the AC EV Charger

PCAC-J4 series AC EV chargers

Physical introduction

PCAC-J4 series AC EV chargers and accessories:



①Digital display(optional)

②Card reader

③Status indicator

④Ethernet interface

⑤Power input cable

⑥Charging connector

⑦E-stop button

⑧Charging connector holder

⑨Ambience light

⑩Logo spotlight

VII. How to Use the Charger

7.1 Get ready to charge

- When the power is on, a "beep" sound (once) and the status indicator will be turned on (white) indicating that the power is on and the device starts normally.

  Note: If it is a network version (Bluetooth, Ethernet, and WIFI charger, it can be used only after being connected to the server.
- Plug the charging connector into the AC charging adapter on the vehicle to charge, and the status indicators will flash (green).
-

7.2 Start charging

(Swipe card to charge)

- Swipe the IC charging card in the sensor area, and if you hear a "beep" sound (once), means the card is read successfully.

Note: If charging is not started after swiping the card, the status indicator (red) will flash 5 times.

Note: The IC cards for network version chargers need to be credited before using (If the charging IC card number is the same as the charger number, there is no need of credit, and the card can be used directly). If you need to add credit to your card, please contact the station operation personnel or Pingalax.

(Scan code to charge)

Turn your phone on, open the app GalaxyOS and scan the QR code on the left side of the charger (network version only) to start charging.

Note: Register and log in to the app GalaxyOS to use this function.

(Start charging)

- After the card is successfully read, the charger will start charging automatically, and the status indicator will be in breathing mode (green).

Note: When the charger is in normal working, please do not disconnect the power supply or press the e-stop button or pull out the charging connector arbitrarily.
Note: It is forbidden to disassemble the charger when using.

7.3 End charging

- When fully charged, the charger will automatically end charging. You will hear "beep" sound (2 times), the status indicator will stay on in blue, and will turn back to white after connector is disconnected.
- If you are charging with IC card, swipe the card again and the charger will automatically end charging. You will hear "beep" sound (3 times), the status indicator will stay on in blue, and will turn back to white after the connector is disconnected.

Note: When using the charger with IC card, please use the same card to start and end charging

- When using the charger with the app GalaxyOS, you can end the charging from the mobile app, the charger will automatically end charging and you will hear "beep" sound (2 times), the status indicator will stay on in blue, and the status indicator will turn back to white after the connector is disconnected.
- When the charging connector is directly disconnected, the charger will automatically end charging, you will hear "beep" sound (2 times), the status indicator will flash 3 times red and blue alternately and then stay on in white.
- When the e-stop button is pressed, the charger will automatically end charging. When you long-press the e-stop button, the status indicator will flash 3 times in red and blue alternately (continue flashing after 2 seconds). If press only once, the status indicator will stay on in blue.

Note: When charging, it is forbidden to press the emergency button arbitrarily. But if a dangerous situation occurs, please press the emergency button immediately to stop charging.

7.4 Ambient light & Logo spotlight introduction

- Ambient light introduction: When the environment where the charger is installed is relatively dark, the ambient lights will automatically on.
- Logo spotlight introduction: When a moving object approaches the charger, the spotlight will automatically on.

7.5 Power setting

- This charger supports charging power setting, and is defaulted at the maximum power output. If you need to set it, please check the DIP switches introduction in page 22.

VIII. Failure & Maintenance

8.1 Failure description:

Failure description	Indicators response (charging)	Indicators response (not charging)
Not grounded	Flash once in red and blue, 2s interval	-
Emergency stop	Press the e-stop button once: stay on in blue Long press: Flash 3 times in red and blue, 2s interval	Press the e-stop button once: flash once in red and restore Long press: Flash 3 times in red, 2s interval; No response if long press after charging connector connected
Current leakage	Flash 4 times in red and blue, 2s interval	-
Overcurrent	Flash 5 times in red and blue, 2s interval	-
Overvoltage	Flash in red and green	-
Undervoltage	Flash in red and green	-
Overtemperature	Flash 8 times in red and blue, 2s interval	-
Metering	Flash 4 times in red and blue, 2s interval	-
Relay	-	Flash 10 times in red, 2s interval (relay not in operating)
CP detection error	Flash in red	-
Server not connected	-	Flash 12 times in red with 2s interval when swiping the card or scanning the code

8.2 Maintenance

In order to ensure the normal service life of the charger and reduce the risk during operation, it is recommended to maintain within specified period, check the table below:

Note: The maintenance of the charger must be carried out by professionals, and qualified and safe maintenance tools should be used.

Warning: To ensure safety, please disconnect the power before maintenance.

Note: If live maintenance is required, please wear necessary protective equipment during maintenance.

Item	Content	Period
Appearance inspection	Check the appearance of the charger body and whether the charging connector is in good condition	irregular inspection (The longest period should not exceed 6 months)
Dust removal	Remove the dust on the surface of the charger and the cable, and remove the dust inside the port of the charging connector	
Check the signs	Check each label, and replace it immediately if any sign that is peeled or blurred	6 months
Internal inspection of charger body	Check whether the components of the charger are in good condition, and whether the screws and bolts are corroded and loose	6 months
Machine characteristics	Check whether the functions of the charger are in normal condition	6 months
Emergency button test	In the charging state, press the emergency button and check whether the charger stops charging	1 month
Leakage circuit breakers	Check whether the circuit breaker is effectively disconnecting the electrical connection	6 months
	Check whether the leakage circuit breaker is effective for leakage protection	1 month

Note: Keep the maintenance records for each time, which can be used as a reference for equipment replacement.

Note: The maintenance period can be determined according to the using environment of the charger (less than or equal to 6 months). If the charger is installed in a relatively harsh environment, the maintenance period should be shortened.

IX. Liability Clause

9.1 General clause

In addition to the following terms and restrictions, the warranty service of the company's products includes necessary refunds, repairs and replacements for the manufacturing defects of the chargers that manufactured and provided by us within 12 months (calculated from the date of providing the purchase invoice to the customer) of normal use. However, the warranty service does not apply to direct or indirect damage or failure caused by normal wear, abuse, misuse, neglect, accident, improper installation, using, maintenance, storage or transportation, including but not limited to:

- Failure to follow the instructions in this manual of our charger
- External factors: including but not limited to the failures or damages resulted from physical hitting to the charger body, electrical wiring, junction boxes, circuit breakers, sockets or power outlets, and the damages resulted from environmental or natural disasters (including but not limited to fire, earthquake, flood, lightning and other environmental conditions) ;
- General damages to cosmetic or paint, including chipped, scratched, dented or broken paint;
- Did not contact us after discovering the defects contained in this "Limited Quality Warranty for Charging Equipment";
- The charger or any parts and accessories been repaired, modified, or installed or used by unauthorized and unlicensed individuals or parties.
- Lack of or improper repair or maintenance, including use of non-genuine accessories or parts, and commercial use.

Although it is not required to do all service or repairs at Pingalax service center or Pingalax authorized service stations, lack of or improper service or repair will void this warranty or cause the stated repair services to be excluded from the scope of warranty. Pingalax service centers and Pingalax authorized repair shops can supply professional training, technics, tools and materials related to Pingalax chargers, in specific cases, these centers and shops are the only spots that employs authorized or licensed personnels or are authorized or licensed to operate Pingalax chargers. We strongly recommend that you do all maintenance, service and repair works at Pingalax service centers or the Pingalax authorized service stations to avoid invalidation of this warranty or cause the above maintenance duties to be excluded from the warranty scope.

9.2 Limitation of Liability

This clause is the only express warranty offered by Pingalax to you. The express and implied warranties and conditions arisen from applicable laws, regulations, or other current rules, including but not limited to the implied warranties and conditions of merchant ability or fitment for particular purposes, the implied warranties and conditions of durability, or any warranties and conditions arisen from trade practices, are disclaimed to the fullest extent permitted by law, or limited to the duration of the warranty period. To the fullest extent permitted by law, our sole remedy for defects within

the warranty scope is necessary repair and/or replacement of parts, reworked parts, or remodeled parts. To the maximum extent permitted by law, the liability of this warranty service clause is limited to the reasonable price range for repairing or replacing the relevant Pingalax chargers and shall not exceed our suggested retail price. When necessary, Pingalax may replace parts with similar types and qualities, including non-original manufacturer parts, refurbished parts, or remodeled parts.

Any liability for defects in this warranty service clause shall not exceed the fair market price of the relevant Pingalax chargers before the defect is discovered. In addition, the total amount of compensation under this warranty service clause shall not exceed the price you paid for the chargers. Pingalax has the right to authorize any individual or entity to generate any other obligations or responsibilities related to this warranty service term on its behalf. Subject to legal regulations, Pingalax has the full discretion to decide whether to repair or replace parts, or use new, refurbished, or modified parts. Subject to legal regulations, Pingalax hereby declares that it shall not be liable for any indirect, incidental, special, or consequential damages related to Pingalax chargers, including but not limited to transportation costs to and from Pingalax authorized service centers, loss of time, loss of income, loss of use, personal or commercial property damage, inconvenience or aggravation, mental anguish or harm, business losses (including but not limited to loss of profits or revenue), tow fees, public transportation fares, vehicle rental fees, service call fees, fuel costs, accommodation expenses, damage to towing vehicles, and incidental expenses such as call, fax, and postage fees.

Subject to legal regulations, compensation claims are based on contractual provisions, breach of warranties and conditions, misrepresentation (whether negligent or otherwise) or claims compliance with law or precedents, and the above limitations and exclusions shall apply, even if we are aware of the possibility of such damage or such damage can be reasonably predicted.

IX. Product Warranty

9.1 Product warranty card

1, The warranty period of this product is_____years, calculated from the date of installation.

2, During the warranty period, if the product cannot perform normally due to poor quality, poor installation by the installation team designated by us, or fails from normal use according to the user manual (determined by the company's staff), it will be repaired free of charge.

3, Non-warranty scope:

1）Warranty card and valid proof of purchase are not available.

2）Failure or damages caused by improper use, unauthorized repair, disassembly and shifting after installation.

3）Failure or damages caused by transportation, moving, or falling after purchase.

4）Failure or damages caused by other inevitable external factors (irresistible factors such as natural disasters and man-made disasters).

4, Product appearance, vulnerable and consumable parts and accessories are not under the warranty: Vulnerable and consumable parts and accessories include: (charging connector, status indicator light, ambient light, spotlight).

5, Please keep this card properly, and it will be valid only when it is presented together with the official purchase invoice or formal purchase contract when maintenance is required.

Warranty Card

Product Name: _____ Product Model No.: _____

Factory Number: _____ Production Date: ____D____M____Y__

Client Name: _____ Contact: _____

Client Address: _____

1、Warranty Content: _____ After Sale: _____

Client Signature: _____ □Satisfied □Dissatisfied

2、Warranty Content: _____ After Sale: _____

Client Signature: _____ □Satisfied □Dissatisfied

3、Warranty Content: _____ After Sale: _____

Client Signature: _____ □Satisfied □Dissatisfied

PINGALAX

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www.pinglax.com
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Chongqing, China

FCC Caution:

This device complies with part 15 of the FCC Rules. 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.

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

NOTE: 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.

To maintain compliance with FCC' s RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.