Electric vehicle AC charging pile

Product user manual

MODEL NO. PEEV-ACK007-1G



PRISHDA
ENERGY

Thank you for choosing our AC charging pile products. To help you properly use, operate, maintain, inspect, troubleshoot, and maintain this AC charging pile product, please read this user manual carefully before use. Please follow this user manual when using it, please also keep this user safe. manual.

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1 Safety rules

- Always turn off the power during installation and replacement of the charging post to prevent electric shock.
- The cable of the charging pile must be firmly connected and well-insulated. If the connection is loose or damaged, the circuit will be faulty, causing personal injury or fire or serious fire.
- Charging pile installation and access to the grid must be operated by professionals.
- Dropped charging posts can be installed directly even if they are not damaged in appearance, and must be checked by a professional to determine if they can be installed.
- This charging post is not allowed to be rinsed with water.
- Any failure of the charging pile that may affect safety must be eliminated by a qualified service technician.
- The charging pile is installed by professional technicians. Unauthorized installation changes cause safety accidents. If the loss is caused, the company will not bear any responsibility.

2 Introduction to charging pile

The company's AC charging pile is a charging device developed to meet the needs of charging new energy vehicles. It is used in conjunction with electric vehicle in-vehicle chargers to provide slow charging services for electric vehicles. This product is easy to install, small in floor space, easy to operate, and stylish. It is suitable for all kinds of open-air and indoor parking lots such as private parking garages, public parking lots, residential parking lots, and enterprise-only parking lots. Since this product is a high-voltage device, please do not disassemble the casing or modify the wiring of the device.

1.1 product composition

The charging pile is mainly composed of a casing, a rear cover, a main control board, a human-machine interaction interface, a display module (optional), a card swipe module (optional), a communication module (optional), a fuse, an emergency stop switch, and a charging interface. , charging gun line, gun line hanging board, and other components.

1.2 Main features of the product

- It has a dynamic and dynamic human-computer interaction function, is equipped with an LED status indication, and the charging process is clear at a glance.
- Embedded emergency stop mechanical switch to increase equipment handling safety.
- With rs485/rs232 communication monitoring mode, it is convenient to obtain the current charging pile Row data.
- With the GPRS/Ethernet online communication function (optional), online control and payment functions can be realized by scanning the QR code on the app/mobile WeChat.
- Complete system protection functions: overvoltage, undervoltage protection, overcurrent protection, short circuit protection, leakage protection, over temperature protection, lightning protection, safe and reliable operation.
- Convenient and intelligent appointment charging.
- Data storage and fault identification.
- Accurate battery metering and identification (optional) for increased user confidence.
- The structure of the whole machine adopts a rainproof and dustproof design and has an IP55 protection grade. It is suitable for indoor and outdoor, and the use environment is wide and flexible.
- Easy to install, operate and maintain.
- Security and theft.

3 The main technical parameters

Table 1 Wall-mounted AC charging pile technical parameters

Environmental	Operating Temperature	-30℃ to +50℃
	Humidity	95% relative humidity
Power input	Input rating	240Vac, single phase,32A maximum,50/60 Hz
	Number of phase/wire	L, N, and PE
	Standby power	＜ 2W （basic model, without LCD module）
	Internal RCD	DC 6mA RCD Function
Power output	Output rating	240Vac, single phase,32A maximum,50/60 Hz 7.4kW maximum
	Charger Interface	IEC62196-2 Type1 or Type2 tethered plug
protection	Over Current	Support
	Under/over voltage	Support
	Short circuit	Support
	Over Temperature	Support
	Ground fault	support
	Plug-out protection	support
USER interface	Status indicators	Three LEDs indicate, POWER/Charging/Fault
	Buttons	Emergency stop button
	User Authentication	RFID
Communaction	Network interface	Ethernet, 2G, 4G support
	Charging protocol	Can support OCPP 1.6

(If the product size and parameters change, the latest information of the company is subject to change without notice)

4 Appearance description

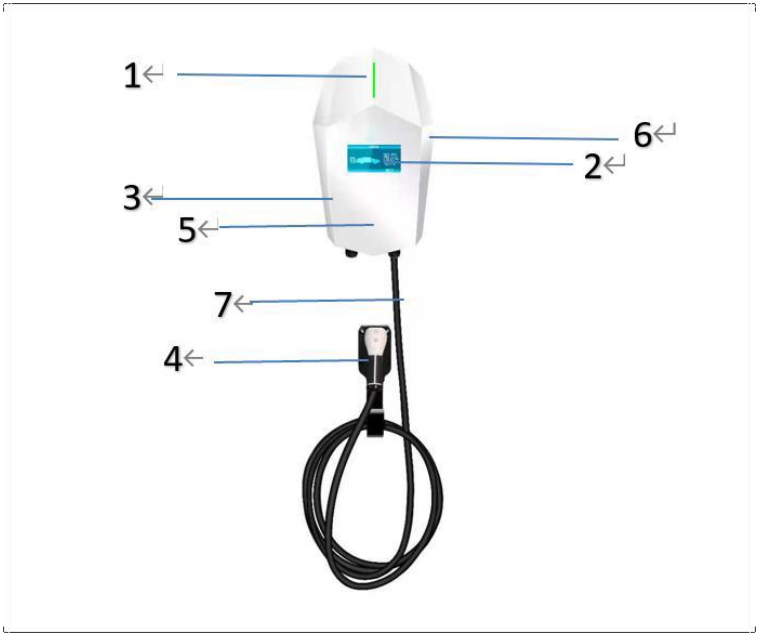


Figure 1 Overall appearance

1、Led indicator: different colors indicate different states;

2、Display: 4.3-inch LCD display, showing charging information;

3、 the shell: pc / abs, metal painting process;

4、 Charging gun: gb / t 20234.2, connected to a 5-meter long charging line; 5、Swipe area: perform card swipe operation in this area;

6、 Emergency stop switch: In case of emergency, press the emergency stop switch to cut off the output;

7、gun line: 5 meters charging gun line;

5 installation

5.1 Please check if the following items are included in the package before installation.

1. Wall-mounted AC charging pile (including gun line) 1 set

2, wall-mounted AC charging pile user manual 1

3. One certificate

4, m5 expansion screws (including plastic expansion tube) 8 sets (only for wall-mounted equipment)

5, m4*20 hexagon socket screws 1

6, charging gun base and hook 1

7, install a hanging plate 1

8. 2 card swipe cards (only for card swiping equipment)

9, charging pile column kit (only supporting landing equipment)

5.2 Installation environment requirements

1. The charging pile is an outdoor charging pile, which meets the ip55 protection level and can be installed in an open space.

2. Please ensure the ambient temperature is within the range of -30 °C to +50 °C.

3. The altitude of the installation site shall not exceed 2000 meters.

4. There should be no severe vibration and flammable or explosive materials near the installation site.

5, the installation site should not be in low-lying terrain or easy to accumulate water.

6. The pile body must have wall support. If there is no wall support, it is recommended to use a special floor stand for installation and fixing.

7. When installing the pile, ensure that the pile is vertical and the

installation height is from the center of the gun to the horizontal ground: 1200~1300mm.

5.3 Installation method

This product adopts wall-mounted installation. For safety reasons, only professionally trained personnel can install charging piles. Please do not install them yourself.

According to the position of the mounting hole on the ledge, use the impact drill hole (ϕ8*40) after the hole is marked on the wall, and then put the plastic expansion tube so that the ledge penetrates the bolt and is positioned accurately. , put the flat and 弹 washers and tighten them to complete the installation of the ledge. Install the hanger on the back of the charging post using the included screws, and then attach the charging post to the ledge.

When wall-mounted installation, the hanger has an anti-theft screw hole position. After installation, please tighten the anti-theft screw fixing equipment hanger by yourself.

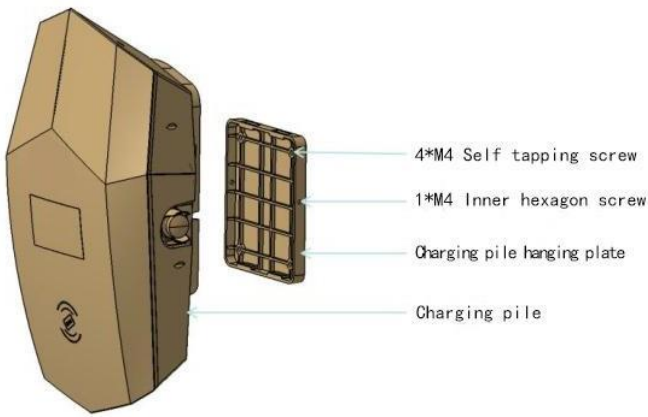


Figure 2 Charging pile installation figure

5.4 Wiring method

1. An independent power supply circuit should be provided for the charging pile, which cannot be shared with other electrical equipment;

2. The equipment is equipped with an input cable interface when it leaves the factory. When wiring, first use the Phillips screwdriver to open the back cover of the charging port and connect the three cables (fire line l, neutral line n, ground line pe) to the terminal block according to the wiring identification. Complete the wiring; if you need to extend the length of the input cable, be sure to extend it according to the correct cable connection. (Because the equipment current is large, it is necessary to ensure a reliable connection at the connection);

3. To prevent the risk of electric shock, the equipment should ensure that the input ground wire is firmly grounded.

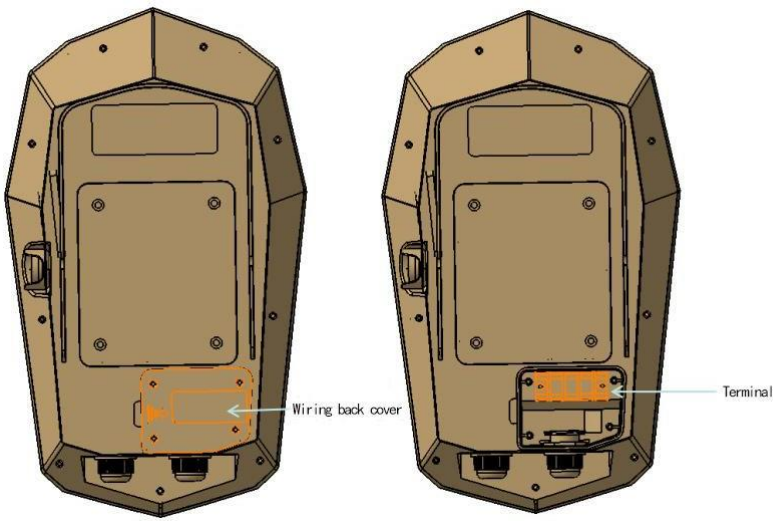


Figure 3 Charging pole wiring diagram

5.5 Installation steps:

Step 1: Use the charging pile back plate to place the position to be installed (the charging pile position is generally 1.5m from the ground, and the hook

position is 0.9m from the ground), and mark the holes with a marker on the four screw holes of the back plate. The inflatable drill is then used to drill holes in the marked points. Note that the M8 drill is used here. Punch the expansion tube into the hole after the hole has been punched. In this step, type the holes of the hook together.

Step 2: Fix the back plate with matching screws according to the hole position. Pay attention to the face with holes on the back plate. This step also fixes the hook.

Step 3: Connect the charging pile to the charging pile. In this step, it should be noted that the positions of the fire line, ground line, and zero line should not be connected incorrectly. After connecting, fix the charging pile upper line cover plate.

Step 4: Insert the charging pile into the wall hanging board, and then lock the left anti-theft screw with the M4 inner hexangular screw. The installation is complete.

6 Instructions

6.1 Start charging:

1. Plug and Play Charging: Connect the power supply of the charging pile, and the indicator light is always yellow after the completion of the self-inspection, indicating that the charging pile is normally energized. After the charging gun head is inserted into the charging port at the end of the vehicle, the normal indicator light flashes green, indicating that it is in the charging state.

2. Card switching without charge type: switch on the power supply of the charging pile, the yellow indicator light is always bright after the completion

of

self-inspection, indicating that the charging pile is energized normally. After the charging gun head is inserted into the charging port at the end of the car, the card is switched on and charged, and the normal indicator light flashes green, indicating that it is in the charging state.

3. Card-swiping charging type: Connect the power supply of the charging pile, the yellow indicator light is always bright after the completion of self-checking, indicating that the charging pile is electrified normally. After the charging gun head is inserted into the charging port at the end of the vehicle, the card is swiped to start charging, and the normal indicator light flashes green, indicating that it is in the charging state.

4. Scanning and charging type: Connect the power supply of the charging pile, the indicator light is always yellow after the self-check of the device is completed, indicating that the charging pile is on normally. After the charging gun head is inserted into the charging port at the end of the car, the two-dimensional code of the mobile phone scanning device is charged by charging selection, indicating that the indicator light is green flashing, indicating that the charging state is in progress.

6.2 End charging:

1. Plug and Play Charging: The device is full of automatic power off, the indicator light is green and always bright, the charging gun is pulled out from the vehicle interface and put back in place, and the charging is finished.

2. No charge type: stop charging by swiping the card or pulling the charging gun

out of the vehicle interface directly and put it back in place, and the charging end.

3. Card-swiping charging type: After the card-swiping settlement, the charging gun is pulled out from the vehicle interface and put back in place, and the charging is completed.

4. Scanning charging type: After the mobile terminal chooses to end charging, the charging gun is pulled out from the vehicle interface and put back in place, and the charging is finished.

6.3 Light strip control logic description

1. Alarm indicator (red):

(1) Major alarms: leakage, emergency stop, relay adhesion, flashing

(2) General alarm: slow flash

(3) Normal situation: off

2. Charging indicator (green):

(1) The charging current is faster than 1/2 of the rated current.

(2) The charging current is less than 1/2 of the rated current and slow flashing

(3) Suspend charging: always bright

(4) Stop charging: off

3. Charging connection indicator (blue):

(1) The s2 switch is closed and flashes quickly.

(2) The s2 switch is not closed, slow flashing

(3) No gun, idle state, always bright

Priority: The warning light is displayed first, the charging light is second, and the connected light is last.

7 appendix

7.1 Precautions for use

1. The power supply used must be consistent with the requirements of this equipment. The three-core power cord must be reliably grounded.

2. Please strictly follow the design parameters and usage conditions during use. Do not exceed the threshold in this user manual, otherwise the equipment may be damaged.

3. Please do not change the specifications of electrical components, do not change internal wiring or graft other lines.

4. After the charging pile is installed, if the charging pile cannot be started normally after the equipment is connected to the power supply, please check if the power supply wiring is correct.

5, the equipment has limited dust and water resistance, the use of the process should pay attention to anti-static, moisture, waterproof, etc., if the equipment has entered the water should immediately power off and stop using.

6, the device has a limited anti-theft function, please install it in a safe and reliable environment.

7. Please do not plug and unplug the charging gun during the charging process to avoid causing charging piles and cars.
Irreversible damage.

8、Other questions and explanations:

8.1 line problem

a Charging pile inlet cable with a minimum of 3*6 square meters, the length should not exceed 60 meters, and for more than 60 meters, please use 10 square cables.

b 32a equipment using c40 open, not greater than c40, not less than c40. 16a equipment using c20 open.

8.2 About the ability to start charging without current

a There is a battery icon at the top right of the display interface. If it is gray, the vehicle S2 switch is not closed. The charging pile waits for the vehicle S2 switch to close. If it does not close for a long time, try to energize the vehicle without a fire.

8.3 Overvoltage and undervoltage

a The device shows overvoltage or undervoltage in the lower right corner. Please check the line. The voltage may be too high or too low. Use a multimeter to measure the value of the wire at the incoming line of the device. Then measure the voltage at the incoming line of the distribution box. What is the value?

8.4 Leakage alarm

a If there is leakage on the screen of the device, it may be that the vehicle is leaking or the screw at the incoming line of the device is not tightened. Check whether the incoming line of the device is tight. If not, please change the car to charge.

9. If abnormal conditions occur during use, please refer to “Exclusion of general faults” first. If you still can't remove a fault, please cut off the power of the charging pile and contact our customer service center.

7.2 General troubleshooting

Table 3 Fault Description

Fault phenomenon	possible reason	Approach
Charging pile LED or display is not bright	The power is not connected	Check if the power inlet is powered and the the power switch is closed.
	Circuit breaker trip	The charging port has a leakage trip function, the side switch cover needs to be opened, and the circuit breaker switch is closed.
	Equipment damage	Please contact the customer service center for repair
Unable to start charging	The charging gun is not fully connected	Check if the charging gun and the vehicle socket are securely connected, and ensure that the charging gun is plugged into the bottom of the socket.
	The card does not match the charging post	Please use the correct card to charge the card. If the card is lost, please contact the customer service center to reissue it.
	Emergency stop button press	Rotate the emergency stop switch in the direction indicated by the emergency stop button to return the emergency stop switch to normal.
The charging current is less than rated	Equipment failure or vehicle approaching full	When the vehicle battery is nearly full, the charging current will decrease, which is normal. If not, please contact the customer service center for repair.
Equipment bright fault light	Fault light flashes	Contact customer service center repair
	The fault light is always on	Contact customer service center repair

Warranty Regulations

1. The warranty period of this product is two years.

2. During the warranty period, according to the instructions for use, the fault occurs under normal use.
(determined by the official staff of the company), free maintenance.

3, charging equipment in addition to the following issues, can enjoy the above relevant warranty terms:

1) The warranty certificate cannot be provided, or the content on the warranty certificate is inconsistent with or altered by the physical identification of the repaired product;

2) unable to provide a valid invoice;

3) Exceeding the warranty period specified by the manufacturer;

4) Failure to use, maintain, or keep following the requirements of the product user manual;

5) There is foreign matter entering to cause damage or malfunction;

6) Failure to undertake the damage caused by the dismantling of the three-pack repairer;

7) Damage caused by force majeure (such as lightning, excessive voltage, earthquake, fire, flood, etc.);

8) Other unavoidable external factors cause malfunction and damage;

9) Damage caused by improper use of equipment or other solutions;

10) Damage caused by the power supply and voltage other than the specified one.

4. We only make the above warranties and make no other express or implied warranties (including implied warranties of merchantability, reasonableness, and fitness for a particular application), whether in contract or civil negligence. On or in other respects, the company is not responsible for any special occasional or indirect damages.