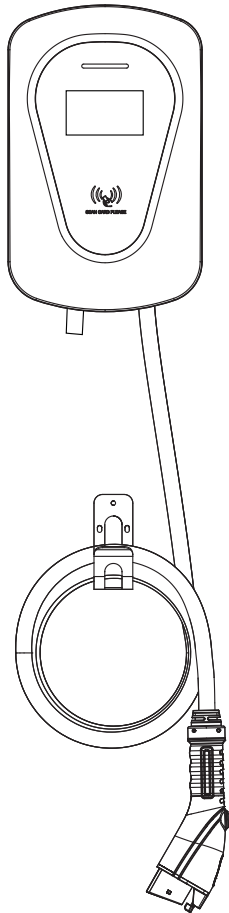


Wall mounted AC electric vehicle supply equipment

EVC48-V2



Catalogue

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IMPORTANT SAFETY INSTRUCTIONS



WARNING

When using electric products, basic precautions should always be followed, including the following.

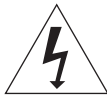
- a) Read all the instructions before using this product.
- b) This device should be supervised when used around children.
- c) Do not put fingers into the electric vehicle connector.
- d) Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- e) Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.

f) **WARNING**

GROUNDING INSTRUCTIONS

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

- g) Risk of electric shock.



SAVE THESE INSTRUCTIONS

CONCERNANT LA SÉCURITÉ CONSERVER CES



AVERTISSEMENT

Lors de l'utilisation de produits électriques, les précautions de base doivent toujours être suivies, y compris les suivantes.

- a) Lisez toutes les instructions avant d'utiliser ce produit.
- b) Ce dispositif devrait être supervisé lorsqu'il est utilisé autour des enfants.
- c) Ne mettez pas les doigts dans le connecteur de véhicule électrique.
- d) N'employez pas ce produit si le cordon d'alimentation flexible ou le câble d'ev est effiloché, a l'isolation cassée, ou tout autre signe de dommages.
- e) N'employez pas ce produit si le boîtier ou le connecteur EV est cassé, fissuré, ouvert, ou montre n'importe quelle autre indication de dommages.

f) **AVERTISSEMENT**

INSTRUCTIONS de mise à la terre

Ce produit doit être relié à un système de câblage permanent mis à la terre, en métal, ou un conducteur de mise à la terre de l'équipement doit être exécuté avec les conducteurs de circuit et connecté à la borne de mise à la terre de l'équipement ou au fil sur le produit.

- g) Risque de choc électrique.



CONSERVER CES INSTRUCTIONS

For Both FCC & IC application

This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

MPE Requirements

To satisfy FCC / IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

Les antennes installées doivent être situées de façon à ce que la population ne puisse y être exposée à une distance de moins de 20 cm. Installer les antennes de façon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'antenne.

La FCC des États-Unis stipule que cet appareil doit être en tout temps éloigné d'au moins 20 cm des personnes pendant son fonctionnement.

Safety Precautions

1. Do not bring dangerous items such as inflammable, explosive, or combustible materials, chemicals, and combustible steam near charging piles.
2. Keep the head of the charging gun clean and dry. If there is any dirt, please wipe it with a clean dry cloth. Do not touch the charging plug core with your hand when it is electrified.
3. Do not use charging piles in case of charging plug or charging cables are broken, cracked, exposed etc. If anything above is found, please contact the staff in time.
4. Do not disassemble, repair and modify charging piles without permission. If there is any need for maintenance and modification, please contact the staff. Improper operation may cause equipment damage and leakage phenomenon.
5. If there is any abnormal situation during usage, please immediately press the emergency button and cut off the power supply.
6. During the charging process, the vehicle is not allowed to drive and can only be charged when it is stationary. Please turn off the engine before charging the hybrid electric car.
7. In case of rain and thunder, please charge carefully.
8. Children should not approach and use charging piles during charging to avoid injury.
9. Please close the doors on both sides during charging to avoid electric shock.
10. During the charging process, the charging connector should not be pulled out forcibly, which may cause fire at the connector and result in a safety accident.

1. Brief account

It is a wall-mounted AC charger, which is mainly used for AC slow charging of electric vehicles. It integrates charging control, human-computer interaction control, communication, billing and metering functions. With protection level up to 4X, it can work safely indoors (If installed outdoors, chargers should be equipped with an awning, if not, please do not charge cars when it rains). It meet tha charging needs of electric vehicles with different capacities.

2. Equipment parameters

a. HBE-AC48A01HW-U-SHSAED4GFG

Maximum Power	11.5KW
Input Voltage	200-240VAC / L-L/L-N Single phase
Output Voltage	200-240VAC / L-L/L-N Single phase
Input Current	48A
Output Current	48A
Input Frequency	60Hz
Charge Mode	Plug & Play or App Control
Operating Temperature	-30°C to +50°C (-22°F to 122°F)
Relative Humidity	≤90%
Enclosure Rating	Type 4
Impact Resistance	IK08
Output Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Automatic full charge protection, Control pilot fault protection.
Input Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection.
Installation mode	Wall-mounted
Cable length	18 ft
Dimension	16 1/2 x 10 1/2 x 5 inch
Operating Environment	Indoor & Outdoor
Application	Non residential charging
Output Interface	SAE J1772
Certification Standards	UL 2594: 2022 Ed.3 Clause, CSA C22.2#280:2022 Ed.3, UL 2231-2:2012 Ed.2+R:15Dec2020 Clause, UL 1998:2013 Ed.3+R:24Sep2018 Clause, UL 991:2004 Ed.3+R:09Jun2010: Clause, UL 50E: 2020 Ed.3 Clause
Altitude	≤6561.68 ft
Net Weight	20.6 lbs(Includes a charging connector and an 18ft output cable)

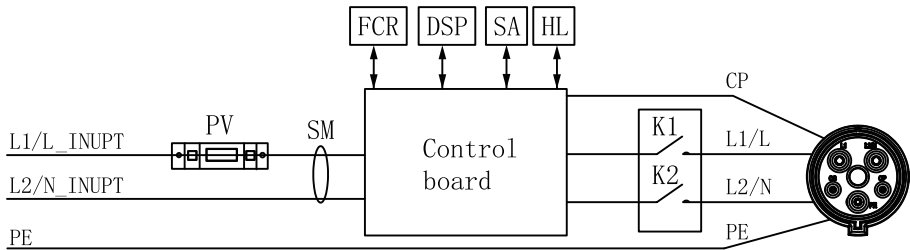
b. HBE-AC40A01HW-U-SHSAED4GFG

Maximum Power	9.6KW
Input Voltage	200-240VAC / L-L/L-N Single phase
Output Voltage	200-240VAC / L-L/L-N Single phase
Input Current	40A
Output Current	40A
Input Frequency	60Hz
Charge Mode	Plug & Play or App Control
Operating Temperature	-30°C to +50°C (-22°F to 122°F)
Relative Humidity	≤90%
Enclosure Rating	Type 4
Impact Resistance	IK08
Output Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Automatic full charge protection, Control pilot fault protection.
Input Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection.
Installation mode	Wall-mounted
Cable length	18 ft
Dimension	16 1/2 x 10 1/2 x 5 inch
Operating Environment	Indoor & Outdoor
Application	Non residential charging
Output Interface	SAE J1772
Certification Standards	UL 2594: 2022 Ed.3 Clause, CSA C22.2#280:2022 Ed.3, UL 2231-2:2012 Ed.2+R:15Dec2020 Clause, UL 1998:2013 Ed.3+R:24Sep2018 Clause, UL 991:2004 Ed.3+R:09Jun2010: Clause, UL 50E: 2020 Ed.3 Clause
Altitude	≤6561.68 ft
Net Weight	20.6 lbs(Includes a charging connector and an 18ft output cable)

c. HBE-AC32A01HW-U-SHSAED4GFG

Maximum Power	9.6KW
Input Voltage	200-240VAC / L-L/L-N Single phase
Output Voltage	200-240VAC / L-L/L-N Single phase
Input Current	32A
Output Current	32A
Input Frequency	60Hz
Charge Mode	Plug & Play or App Control
Operating Temperature	-30°C to +50°C (-22°F to 122°F)
Relative Humidity	≤90%
Enclosure Rating	Type 4
Impact Resistance	IK08
Output Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Automatic full charge protection, Control pilot fault protection.
Input Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection.
Installation mode	Wall-mounted
Cable length	18 ft
Dimension	16 1/2 x 10 1/2 x 5 inch
Operating Environment	Indoor & Outdoor
Application	Non residential charging
Output Interface	SAE J1772
Certification Standards	UL 2594: 2022 Ed.3 Clause, CSA C22.2#280:2022 Ed.3, UL 2231-2:2012 Ed.2+R:15Dec2020 Clause, UL 1998:2013 Ed.3+R:24Sep2018 Clause, UL 991:2004 Ed.3+R:09Jun2010: Clause, UL 50E: 2020 Ed.3 Clause
Altitude	≤6561.68 ft
Net Weight	20.6 lbs(Includes a charging connector and an 18ft output cable)

3. Schematic diagram



4. Shape Model Diagram



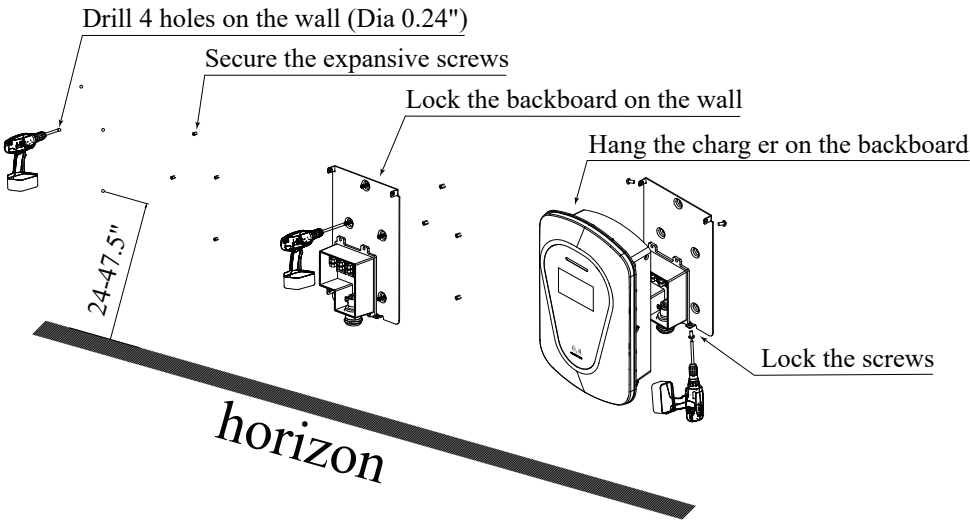
5. Product installation

Before installation, test the local network environment to ensure that the network environment ranges from 45 dB to 55dB.

5.1 Tools and Materials Required

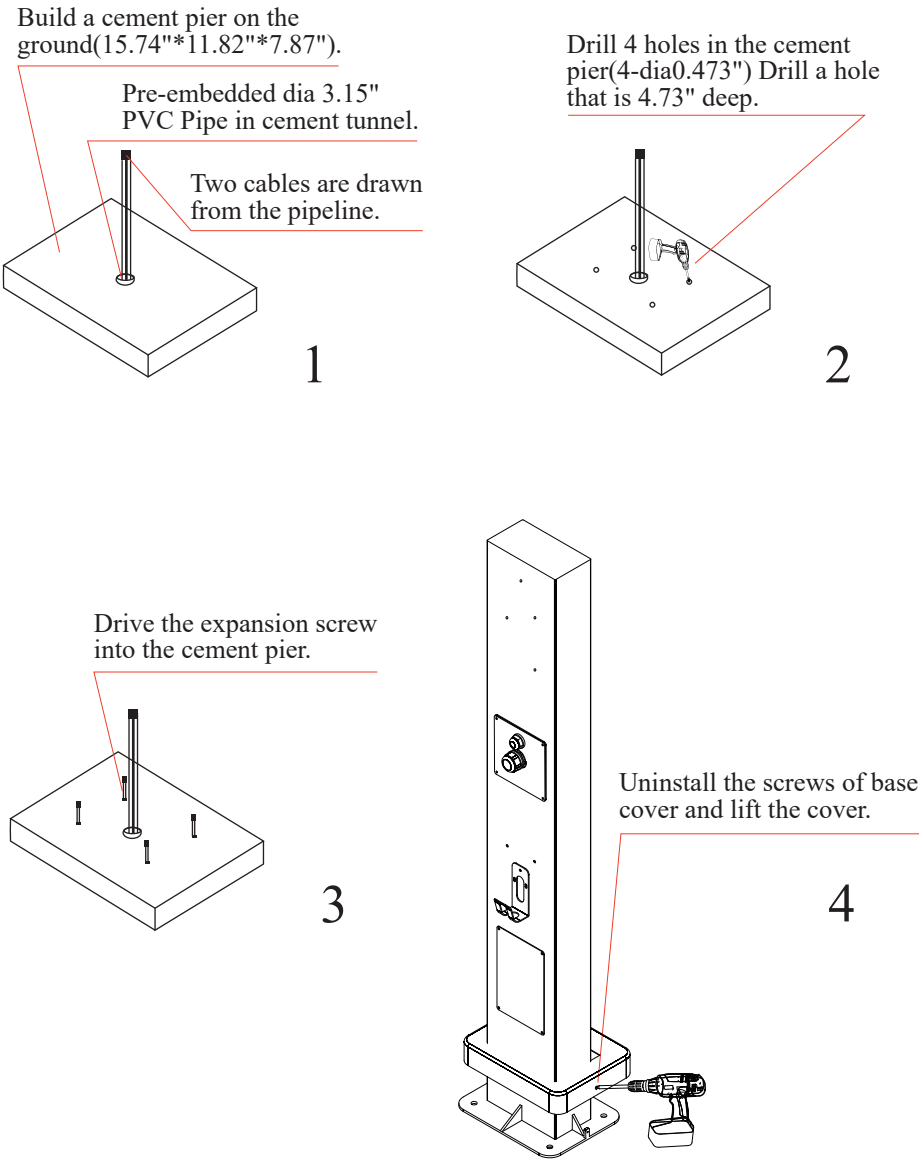
Type	Description
Screwdriver	No. 2 and 3
Adjustable wrench	Pieces 0.25"(6.3mm) metric machine set STMT82672-23
Socket screwdriver	No. 8, 10, 17 and 19
Electrical tape	Black / 0.6" (15mm) Width
Electric drill	One manual electric drill (Diameter 0.24"(6 mm)) (Wall-mounted 0.55"(14 mm) Column installation)
Wire nipper	One
Needle nose pliers	One

5.2 Basic Requirements for hanging plate:

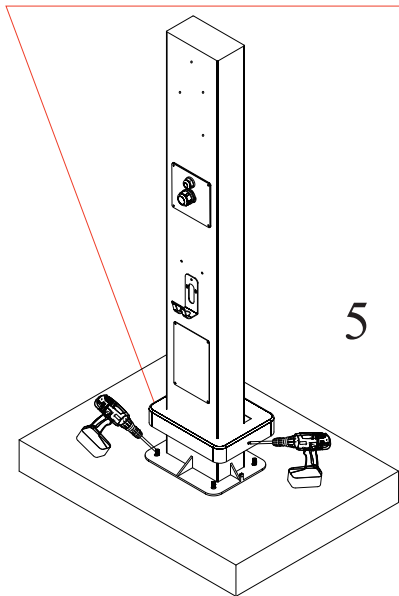


5.3 Column Installation Requirements:

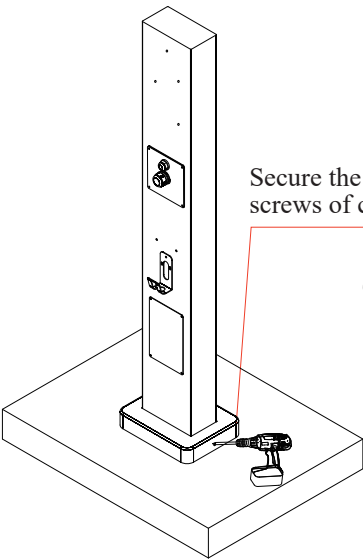
Picture: Height, width, foundation installation diagram



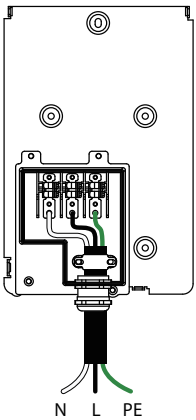
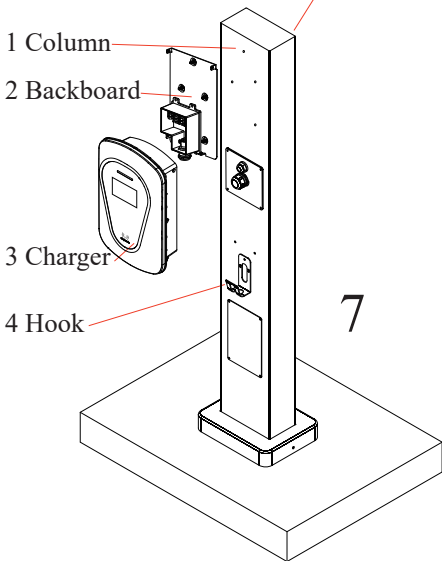
Aligned the screws of pedestal with the ones in cement pier and tight them.

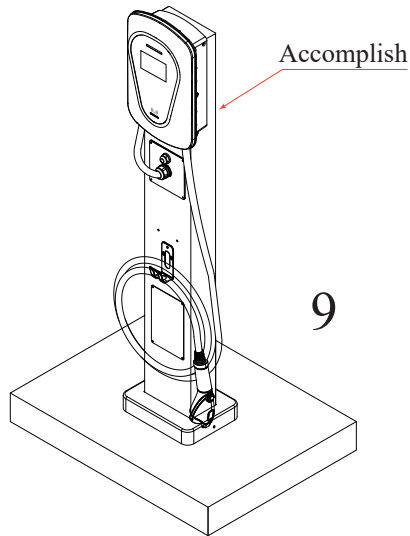


Secure the screws of cover



Assemble the backboard and charger pile in sequence





Note: This device shall be mounted at a sufficient height from ground such that the height of the storage means for the coupling device is located between 450 mm (18 inches) and 1.2 m (4 feet) from ground for indoor use, between 600 mm (24 inches) and 1.2 m (4 feet) from ground for outdoor use.

5.4 Recommended Tools for Installation:

a. HBE-AC48A01HW-U-SHSAED4GFG

Cable for Hardwire: 6AWG ×2

Breaker: Minimum requirements 63A/2P

b. HBE-AC40A01HW-U-SHSAED4GFG

Cable for Hardwire: 8AWG ×2

Breaker: Minimum requirements 63A/2P

c. HBE-AC32A01HW-U-SHSAED4GFG

Cable for Hardwire: 10AWG ×2

Breaker: Minimum requirements 50A/2P

Note: The cordset metal tube and Ethernet cord with the anti-theft tube do not with the EV charger shipped, only as an accessory.

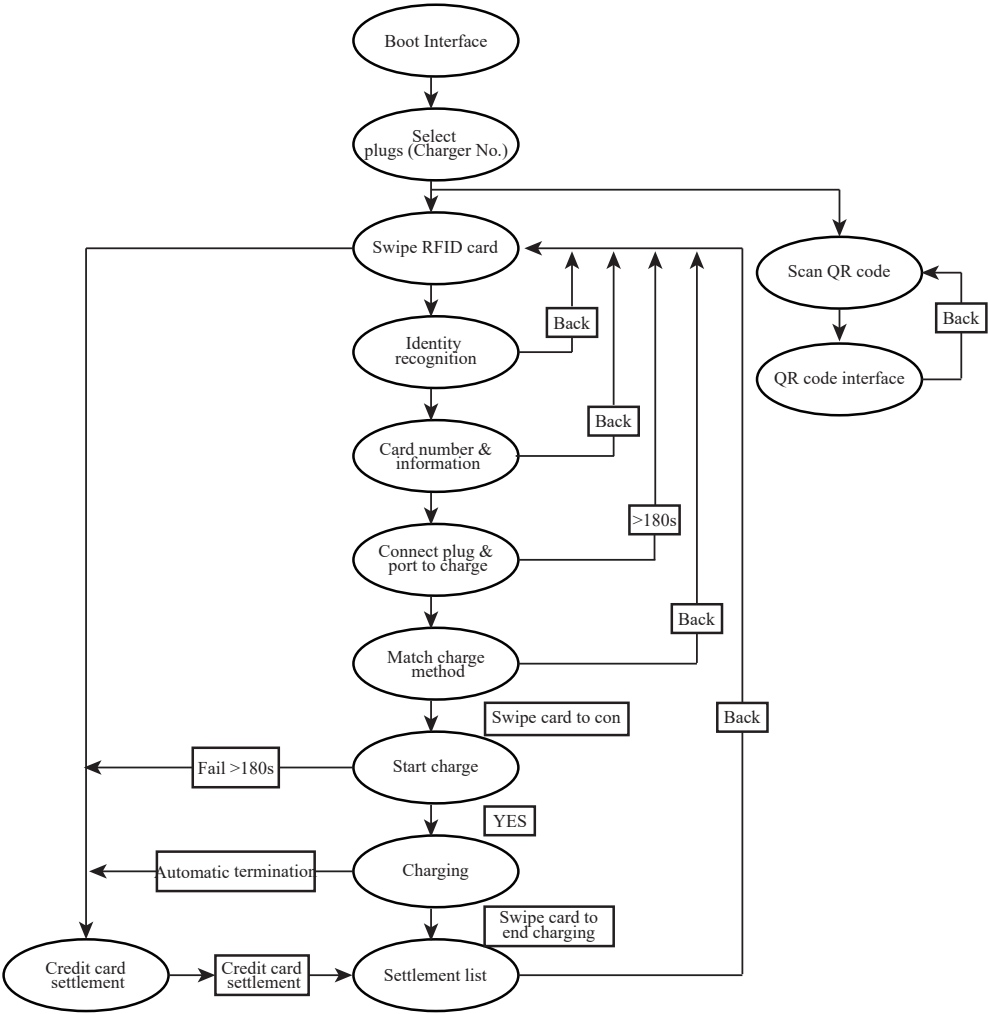
Recommended: The cordset metal tube size for AC inlet lines is 1 inch.
Ethernet cord with the anti-theft tube size is 1/4 inch.

5.5 Device Commissioning:

- a. Check the device before power-on
- b. Check the power-on voltage of the device
- c. Pre-charge test

6. Charging operation

6.1 Charging operation flowchart



6.2 Charging Mode Startup operation interface

HBE-AC32A01HW-U-SHEAED4G / HBE-AC40A01HW-U-SHEAED4G / HBE-AC48A01HW-U-SHEAED4G

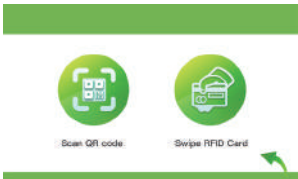
This series of charging machine has two charging startup modes: swiping card(online card swiping/ offline card swiping) and scanning QR code. Specific operation examples are as follows:

a.Charging by swiping card(online card swiping/ offline card swiping)

1. Click on the middle position of the screen to enter the charging method selection interface.

The screen displays a green car on a grassy field with a blue sky and clouds in the background. The text "Welcome to the charging system" is prominently displayed in the center. A "Language" dropdown menu is located in the top right corner.

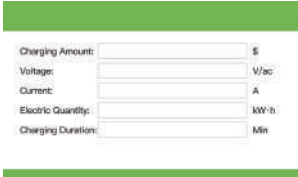
2. Click on the card reading charging method and select the card swiping charging mode.

The screen shows two circular icons: "Scan QR code" on the left and "Swipe RFID Card" on the right. A green arrow points from the "Swipe RFID Card" icon towards the next step.

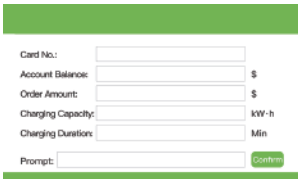
3. Enter the waiting card swiping to start charging interface.

The screen displays the text "Waiting To Swipe The Card" above a graphic of a hand holding a card over a charging pile. A green arrow points from the bottom right towards the next step.

4. Swipe card successfully and enter the charging interface.

The screen shows a form with the following fields: "Charging Amount:" with a "\$" symbol, "Voltage:" with a "V/ac" symbol, "Current:" with an "A" symbol, "Electric Quantity:" with a "kW·h" symbol, and "Charging Duration:" with a "Min" symbol. A green bar is at the bottom.

5. Swipe the card again to stop charging and enter the settlement interface.

The screen shows a form with the following fields: "Card No.:", "Account Balance:" with a "\$" symbol, "Order Amount:" with a "\$" symbol, "Charging Capacity:" with a "kW·h" symbol, and "Charging Duration:" with a "Min" symbol. At the bottom, there is a "Prompt:" field and a green "Confirm" button.

b. Scan QR code for charging mode

Scan the QR code on the pile directly with APP.

1. Click on the middle position of the screen to enter the charging method selection interface.

Language▼

Welcome to the charging system



2. Click on scan code to charge, wait for the user to start using the APP scan code.



Scan QR code

3. The APP successfully scanned the code and entered the charging interface.

Charging Amount: \$

Voltage: V/ac

Current: A

Electric Quantity: kW·h

Charging Duration: Min

4. Users use the app to remotely stop charging and enter the settlement interface.

Card No.:

Account Balance: \$

Order Amount: \$

Charging Capacity: kW·h

Charging Duration: Min

Prompt:

c. Password charging method

1. Click on the middle position of the screen to enter the charging method selection interface.



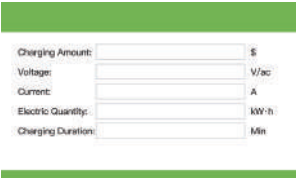
A welcome screen with a green car illustration and the text 'Welcome to the charging system'. There is a 'Language' dropdown menu in the top right corner.

2. After setting the password charging configuration, the user clicks on the screen and enters the user password.



A screen with a green header bar, a 'Password:' label, a text input field, and two green buttons labeled 'OK' and 'ESC'.

3. The user password has been successfully entered and enters the charging interface.



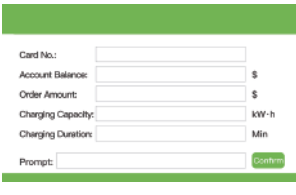
A screen with a green header bar and a green footer bar. It contains several input fields with labels: 'Charging Amount:' with a '\$' symbol, 'Voltage:' with a 'V/ac' symbol, 'Current:' with an 'A' symbol, 'Electric Quantity:' with a 'kW·h' symbol, and 'Charging Duration:' with a 'Min' symbol.

4. When the user is charging with a password, click on the screen and the password box will pop up. Enter the user password to enter the settlement interface.



A screen with a green header bar, a 'Password:' label, a text input field, and two green buttons labeled 'OK' and 'ESC'.

5. If the user password is entered correctly, the charging is completed.



A screen with a green header bar and a green footer bar. It contains several input fields with labels: 'Card No.:', 'Account Balance:' with a '\$' symbol, 'Order Amount:' with a '\$' symbol, 'Charging Capacity:' with a 'kW·h' symbol, 'Charging Duration:' with a 'Min' symbol, and a 'Prompt:' label next to a 'Confirm' button.

6.3 Process for Setting Parameters

1. Continuously click on the bottom left corner, select English and French language, and jump to the password input interface.

Welcome to the charging system

Language

English

Francais

Espanol



2. Enter the device parameter interface.



Parameter

Screen:800*480_2023.07.10

3. Enter a 3-digit password ***

1

2

3

4

5

6

7

8

9

0

←

OK

4. Users can configure the URL address, device station number, etc. of OCPP through this screen interface.

OCPP:

Charger No:

Next Page

Confirm

Cancel

5. Users can choose device offline, 4G, WIFI and other communication, grounding, leakage protection functions, etc. on this interface. After completion, click OK to return to the first interface.

Offline: ☐

4G: ☐

Return Page

Leakage Protection: ☐

Wi-Fi: ☐

Confirm

Ground Protection: ☐

Charge Disabled

Cancel

6. Users can select the AC single-phase/three-phase, maximum current coefficient, etc. of the device on this interface.

Single Phase/Three Phase:

Return Page

Rated Current:

Confirm

Cancel

7. Users can choose the charging mode of the device on this interface, which includes: plug and play charging, APP scanning, RFID card swiping, password charging, etc.

Mode Selection

Plug-in Charge: ☐

Standard Charging: ☐

Password Charging:

Return Page

Confirm

Cancel

8. After setting the parameters, click Save to return to the first interface.



7. Operation procedures and the use of emergency stop switch

7.1 Operating procedures

1. Open the hatch cover and charging socket protective cover on the vehicle after parking it in the charging station space.
2. Connect the car socket and the charging station plug.
3. Choose the appropriate mode (swipe card/ scan QR code), Save and then begin charging in accordance with the instructions above.
4. The combined instrument will display the pertinent parameters as soon as the charging indication turns on.
5. When the vehicle is fully charged, press and hold the unlock button to pull out the plug , insert it into the holder of the pillar.
6. Close the hatch cover and protective cover of the socket, end charging.

7.2 Use of emergency stop switch

1. In case of fire or electric shock, press the emergency stop switch immediately;
2. If the machine leaks electricity, please press the emergency stop switch immediately;
3. When the emergency stop switch is pressed in the charging state, the charging will stop immediately, the circuit breaker on the output side will be disconnected, and the fault light will turn on;
4. In case of pile failure, unable to stop charging, internal circuit short circuit and other abnormal conditions, please immediately press the emergency stop switch;
5. When the emergency stop switch is pressed in the non-charging state, the fault light will be on and the display screen will jump to the fault interface;
6. When the critical situation is relieved, please rotate the emergency stop switch, otherwise the charging cannot continue;

Warm reminders:

1. Please read the operation instructions and precautions carefully.
2. Before charging, check whether the charging gun is firmly in contact with the charging interface and whether the indicator works well.
3. During the charging process, do not forcibly pull out the charging connector. Forcibly pulling out the charging connector may cause fire at the connector, resulting in safety accidents.
4. To stop charging in advance, press the stop button and hold it for 5-10 seconds before pulling out the charging gun.
5. If any safety accident occurs during the charging process, such as abnormal sound or short circuit, press the emergency stop button immediately, disconnect all power supplies, and contact the on-site personnel.

8. User maintenance instructions

8.1 Instructions

The maintenance of AC charging pile is relatively simple. During operation, attention should be paid to ventilation and heat dissipation and keep the environment clean. There should be no explosive dangerous medium in the air, and no gas enough to corrode metal and destroy insulation. The device should be placed in a stable place without violent vibration or turbulence. Before the device is put into operation for the first time after transportation, or when it is put into operation again after a long-time outage, the whole machine should be checked. In addition to checking the wiring according to the drawings, it is also necessary to check whether the components are loose or fall off, whether the connection is strong, whether the contact is good due to transportation and other reasons. After the inspection, carry out the electrification test. Dust removal and cleaning should be carried out regularly according to the degree of ambient air. When cleaning, all power supplies should be cut off, and the surface and internal components of the device and the connection of wires should be cleaned with compressors, vacuum cleaners, or small brushes. Do not use any cleaning agent or damp rags when cleaning the internal components of the device, including the circuit board.

8.2 Maintenance

According to the need to clean the pile inside and outside, regularly check wiring terminals, wiring cables, contactors, switching switches, insurance for excessive dust and dirt. Check whether the insulation of terminals and wiring cables is strong, check the contact force of contactors, contacts and insurance, check whether the jumper cap of the circuit board is loose, whether the component is strong, and the control function and state switch of each module, to avoid the hidden trouble caused by failure.

9. Instructions of packing, handling, transportation and storage

- 9.1 Package: charging pile product weight 27.56lb (12.5KG) (including outer box), Dimensions: 20.47" x 17.32" x 13.19" (520*440*335MM).
- 9.2 The transportation can be by car, vessel or aircraft.
- 9.3 During transportation, attention should be paid to sunscreen and civilized loading and unloading, avoiding violent vibration and impact.
- 9.4 Products stored in Class I environment and stored for more than 6 months are recommended to be re-tested and can only be used if they are qualified.

Made in China

Name of Manufacturer: SHENZHEN HB ELECTRONIC CO., LTD

Address : Floor 301, Bldg 21, Zhengdaan Industrial Park, 172 Xiangshan Rd,
Luotian Village Yanluo Town, Baoan District Shenzhen City 518105, China