LIVE ELECTRICAL DISTRIBUTION UK LTD

Ensure that these instructions are made available to the end user for future reference.

© Product installation and operation guide

User's Manual of
AC electric vehicle charging station

AC electric vehicle charging station

This product is designed and manufactured according to the IEC61851 & SAEJ1772 international standards.

Operating Environment

The operating environment of this charging station :Altitude ＜ 2000m,-40℃ ~45℃，relative humidity ＜ 85%.If you need to use in more harsher environments please provide us the enviromental conditions .

⚠ Safety recautions and dangers

Safety precautions: Please comply with the safety instructions and legal notes.

This device will be installed in different countries, regions and jurisdictions, the installer must ensure that the installation meets the legal installation requirements.

1)Do not bring any flammable, explosive or combustible materials, chemicals, flammable vapors and other dangerous articles near the charging station .

2)Keep the charging plug head clean and dry. If it was dirty, please wipe it with a clean dry cloth. It is strictly prohibited to touch the charging plug core with hands when it is charging.

3)It is strictly prohibited to use the charging station when the charging plug or the cable has defects, cracks, abrasion, exposure, etc. If you find any problem, please contact a qualified electrician.

4)Please don't attempt to disassemble, repair,or modify the charging station.If there is a need for maintenance or modification,please a qualified electrician Any improper operation may cause some problems such as damage ,water leakage , electricity leakage etc.

5)In case of rain and thunder ,please charge carefully.

6)In order to avoid injury,children should not approach or use the charging station when it is charging.

7)The vehicle is prohibited from driving when it is charging and only can be charged when it is stationary.

Please turn off the vehicle before charging.

⚠ Danger: voltage hazard

If you touch the internal parts when it is working, it will cause serious injury.

⚠ Repair

Repair is not allowed, and the defective device shall be disposed (discarded) under the condition of meeting the environmental protection requirements.

⚠ Warning: opening the device without permission will cause danger.

Opening the device without permission will cause harm to the user or cause significant damage or property loss.

⚠ Attention: modification of the device will invalidate the manufacturer's warranty.

It is not allowed to modify the device in violation of regulations.

If you don't comply with this requirement , the manufacturer's warranty will be revoked.

Product description

1.1 Product brief introduction

This product is a single AC charging station, which is used for AC charging of electric vehicles. The equipment adopts industrial design principles. The protection level of the charger is IP55, with dustproof and waterproof functions, and can be safely operated and maintained outdoors. The AC charging station is divided into two categories: with cable version and without cable version.

Product description

1.2 Technical data

Items	Partcodes	Cable Version LEVCT2132O-A	Socket Version LEVST2132O-A
Voltage& Power	Power Supply	1P+N+PE	1P+N+PE
	Rated Voltage	AC230V±10% 50Hz	AC230V±10% 50Hz
	Output Current	32A (10A/16A/20A/25A adjustable)	
	Output Voltage	AC230V±10% 50Hz	AC230V±10% 50Hz
	Rated Power	7.3KW	7.3KW
Connector	Charger Connector	Plug+Cable	Socket
	Connector Standard	T2:IEC/EN 62196-2, T1:SAE J1772 ,GB/T:20234.2-2015 Optional	
	Connector Material	Flame retardant, RoHS, wear resistance, rolling pressure resistance, high and low temperature resistance, stamping resistance, high oil resistance, ultraviolet rays resistance	
	Connector IP Degree	IP67	
Net mode	Ocpp1.6 (Ethernet/Wifi/4G/3G/2G)		
	APP	/	/
Protection	Inner kWH Meter	Optional	
	Inner RCCB	Type A RCCB	
	PEN Fault Protection	√	
	Emergency Stop Pushbutton Switch	√	
	RFID	√	
	DLB	Connect to current transfer or Connect to kWH Meter(RS485) Optional	
	LCD	Optional	
Working Environment	Working Temperature	-25℃ ~50℃	
	Working Humidity	3%~95%	
	Working Altitude	<2000m	
Installation	Installation	Wall Mounted or Post Mounted	
	Installation Dimension(mm)	180*280	180*280
	Product Dimension(mm)	357*245*123	357*245*123
Other	Product IP Degree	IP54	IP54
	Certificate	BV CB+CE Certification	
	Standard	IEC/EN 61851 ,GB/T 18487.1-2015	

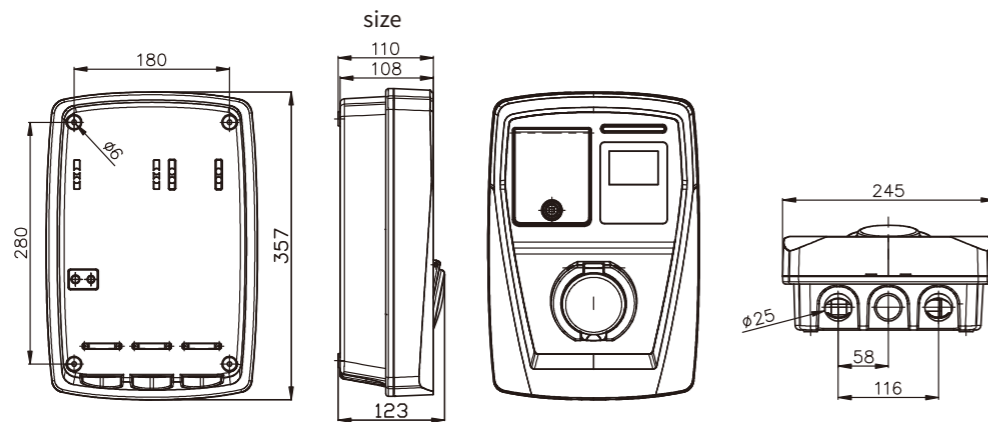Remark: ● means have, / means havn't

2.1 Internal structure drawing
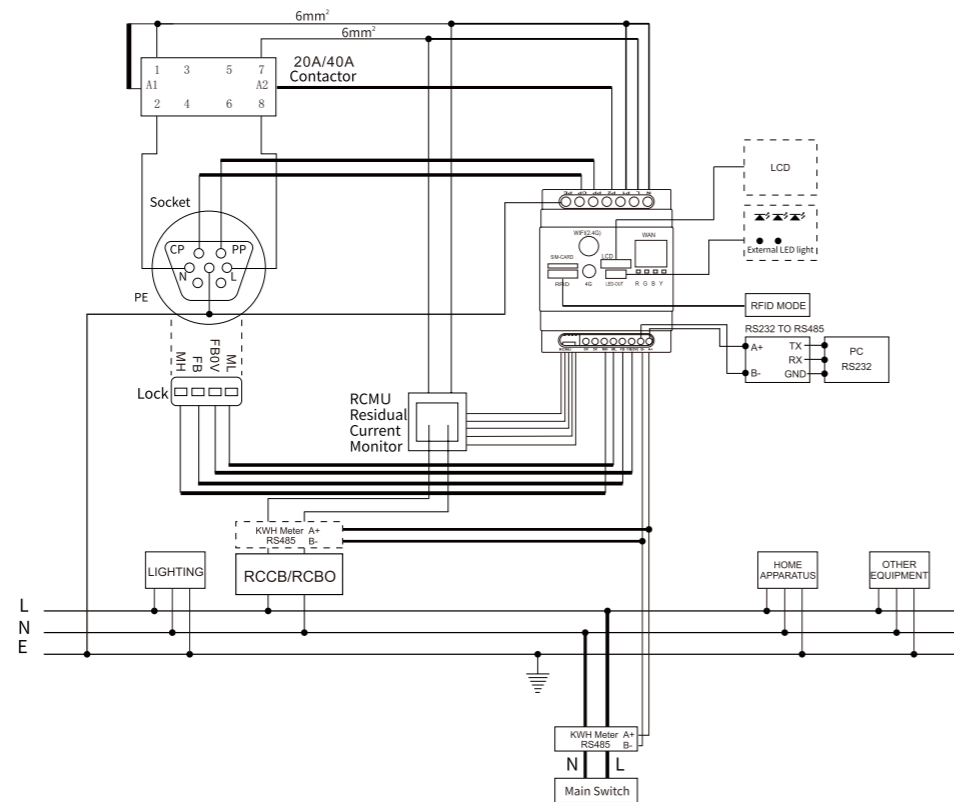
Single Phase

Wiring example 230V AC

2.2 Installation

A、Overall dimension and installation size

size

B、 Drill 4x∅6 35mm counterbore holes on the wall with the size of the mounting holes, insert the expansion screw plastic tube, and then screw in the M4x30 self-tapping screws from the internal mounting holes of the charging pile.

C、The power cord is connected to a leakage circuit breaker, the single-phase charging station is connected to N and L, and the three-phase charging pile is connected to N L1 L2 L3,

The ground wire (PE wire) is connected to the yellow and green two-color terminals, the schematic diagram is as follows:

Recommended cable section:

Current value(A)	10	16	20	32
Wire area(mm^2)	2.5	2.5	4	6

3.1 Inspect before operation

Before operation, please check carefully and make sure the following items :

The installation position of the AC charging station must convenient for operation and maintenance.

The AC charging station and its accessories must be correctly connected and installed firmly.

Appropriate MCB for the AC input end.

No external objects or components on the top of the AC charging station.

3.2 Controller Setting(OCPP1.6 Version)

• 3.2.1) Ethernet connection

The network cable from the Ethernet network port or LAN network port is directly connected to the controller RJ45 port, and the charging pile controller is automatically connected to the network.

• 3.2.2) WIF or 4G net connection

• 1. Enter the configuration local web

We are divided the login configuration local web setting page method into wired network connection and wireless network connection, you can enter the network settings in a networkless environment.

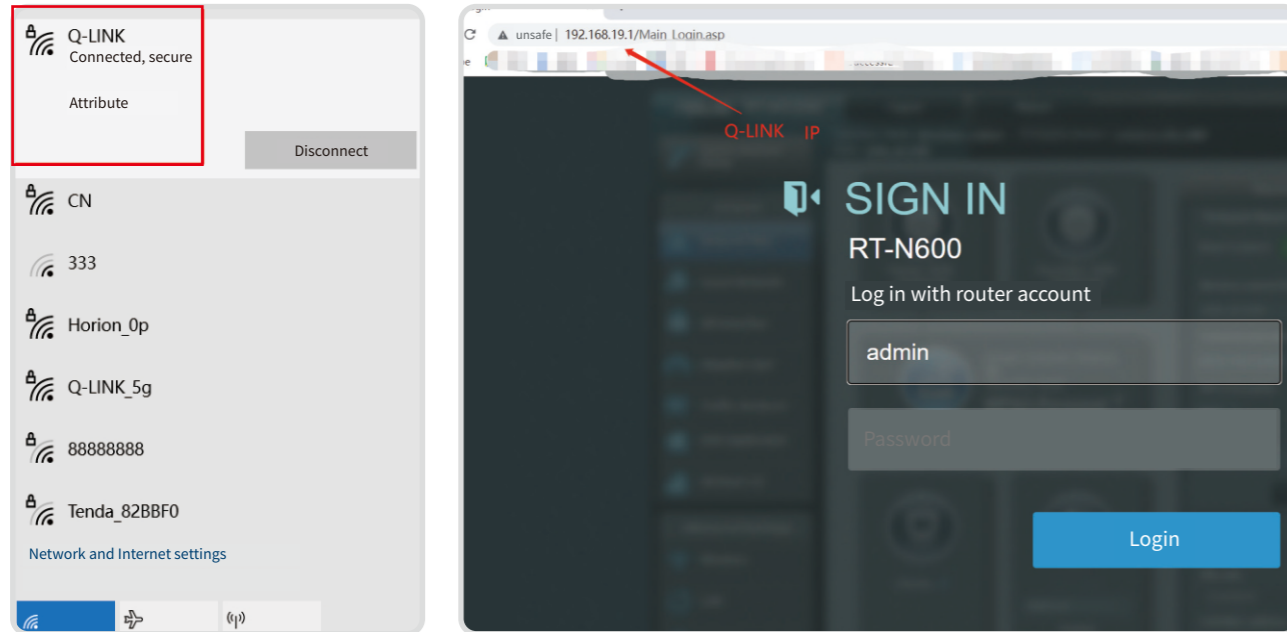• 1.1 Wired network connection

• Step 1)

Open the charging pile cover, connect a network cable from the router port to the controller RJ45 port, power on the charger, and the green and yellow lights of the control indicate that the network cable has been connected.
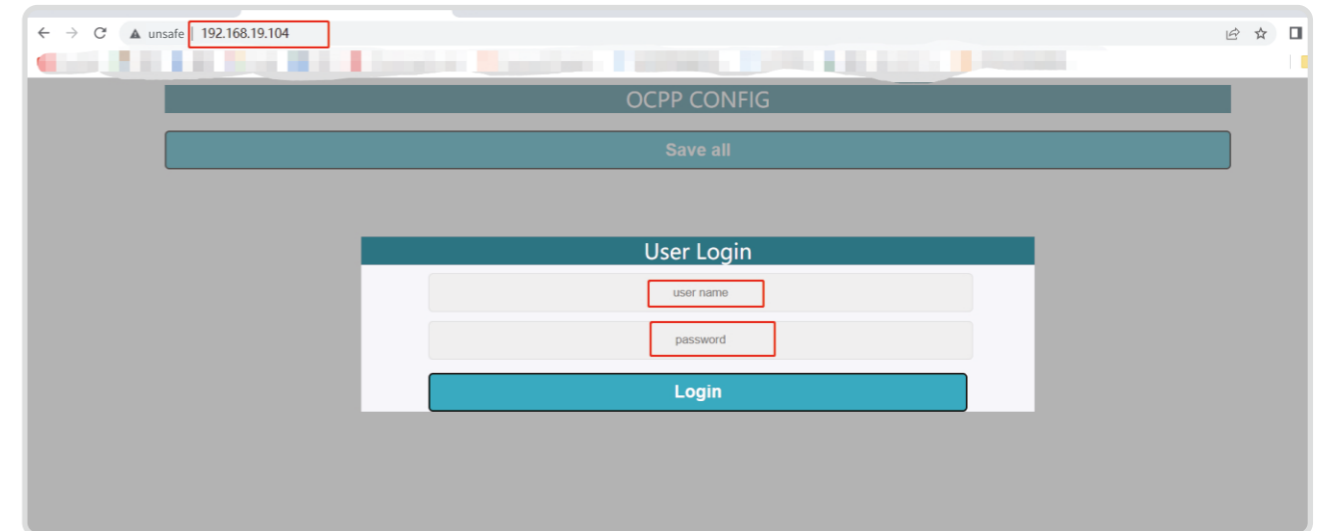

Router

Q-LINK

• Step 2) Connect the router's network with a mobile phone or laptop, open the router's setting IP address, log in to manage the account password, look for espressif (this is the device name of our controller) in the connected device, find the IP address of our controller,here it is 192.168.19.104

• Step 3) Enter the controller IP address to enter the local configuration web settings interface.
• 1.2 Wireless network connection

   Wireless network connection we use the swipe management card(blue tag) to configure the network.
• Step 1)

   Connect the plug between car and charger,power on charger, and then swipe the blue management card , which will stimulate the device to generate hot spots, and the names of the hot spots is OCPP_XXXX, such as our OCPP_AD41 here.
• Step 2) Enter the hotspot password 88888888 and then enter the fixed address 192.168.4.1 on the web page to enter the local web settings interface.
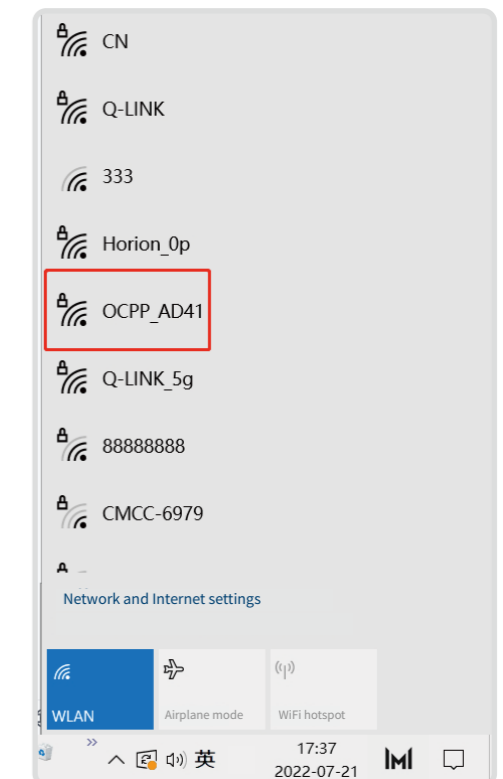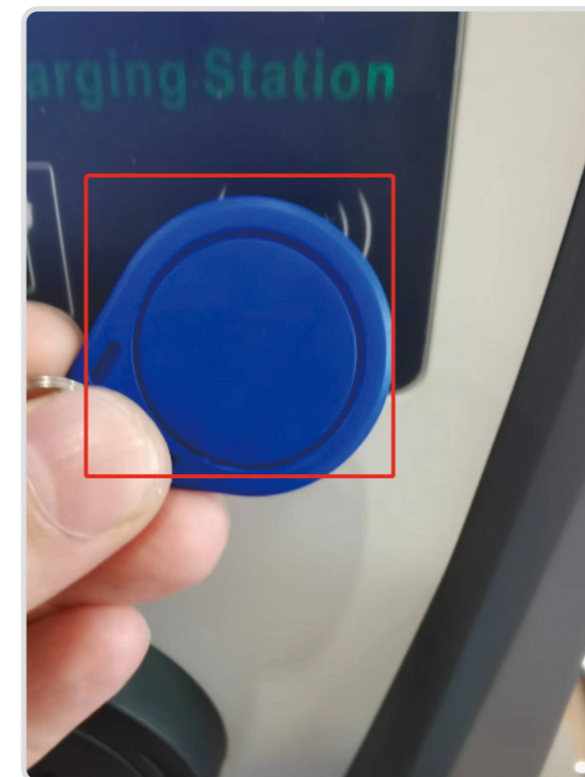
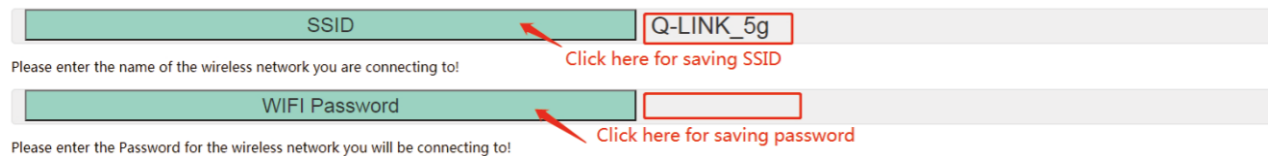• 2 Log in to your account set up WIFI and 4G network

Step 1) Log in to your account

We have set up a level 3 account, which is the manufacturer, operator and end user, and the level

• 3 account has different initial accounts and passwords, and customers can change the account number and password in the setting interfaceManufacturer account &Password: If there is a demand, please apply to the factoryOperator account &Password: If there is a demand, please apply to the factoryEnd customer account: OCPP-00001 Password: 88888888.

Step 2) Set up WIFI and 4G network

Fill in your SSID account and Wifi Password at configuration web,then click title will saving the setting,the charger controller will automatic .connect to the Wif

SSID		Q-LINK_5g

Click here for saving SSID

Please enter the name of the wireless network you are connecting to!

WIFI Password		

Click here for saving password

Please enter the Password for the wireless network you will be connecting to!

Insert in a 4G/3G/2G SIM card on EV charger controller,then fill in your 4G operator at configuration web,the charger controller will automatic connect to the 4G/3G/2G net.

Please enter the Password for the wireless network you will be connecting to!

4G Operators		CMNET

Click here for saving the 4G/3G/2G Operator

Please enter the name of the operator of the 4G network you will be connecting to correctly

3.3 Indicator light and working status description

No.	State Code	LED Color	LED State	PE、CP、PP state	Controller state	Remark
0	K	Red	5Hz flashing	Power self detect failed	Fault--1#	Power self-check failed!Please turn the power back on!
1	A	Blue	1Hz flashing	CP disconnection	Ready	
2	I	Blue	2Hz flashing	Waiting for IC card	RFID Waiting	
3	B	Blue	Stabilization	CP connect to diode+2.7KΩ	Connected	
4	B	Blue	Stabilization	CP connect to diode+1.3KΩ	Connected	
5	C	Green	Green brightening	CP connect to diode+2.7KΩ parallelconnect1.3KΩ	Charging	
6	D	Red	Stabilization	CP connect to diode+2.7KΩparallelconnect1.3KΩ parallel connect 270R or CP connect to diode+270R Or CP connect to diode+270R parallel connect 2.7KΩ Or CP connect to diode+270R parallel connect 1.3KΩ	Fault--2#	Need Ventilation!
7	F	Red	1Hz flashing	CP line short circuit with PE line	Fault--3#	CP- PE short circuit! Please check the CP line
8	H	Red	5Hz flashing	RCMU occurs residual current or self detect failed	Fault--4#	RCMU leakage or self-inspection failure
9	E	Red	2Hz flashing	Diode short circuit (Requirement waiting the CP disconnected)	Fault--5#	EV-Charing Socket Fault
10	G	Blue+Red	2Hz flashing	PP line disconnection	Fault--6#	SPLIT PP wire，Please check the PP line
11	J	Red+Green +Blue	2Hz flashing	Electromagnetic Lock failed	Fault--7#	Electronic Lock Disabled
12	L	Blue	5Hz flashing	IC card failed	Fault--8#	RFID card is not valid
13	M	Red+Green	1Hz flashing	Circuit overload， DLB Mode activated	Fault--9#	Circuit overload， DLB Mode activated

Warranty Agreement

- 1) The warranty period of this product is 36 months (it is subject to the barcode information of the product). During the warranty period, if the product has malfunction or damage under normal use according to the manual, we can provide free maintenance for you.
- 2)During the warranty period, if the damage is caused by the following reasons, it will need to charge repair fee:
  A The damage which is caused by mistaken use , unauthorized repairs and modifications;
  B The damage which is caused by fire, flood, abnormal voltage, and other natural disasters, secondary disasters, etc.
  C Hardware damage caused by falling and transportation after purchase;
  D The damage which is caused by not operation in accordance with the user manual ;
- 3) If you have any questions during the service process, please contact us or our agent in time;
- 4) The right to interpret this agreement belongs to our company.