



iLucharge

USER MANUAL



Symbol Meaning

Symbol	meaning
	The EU Directive 2012/19/EU regulates the collection and recycling of waste electrical and electronic equipment within the European Union. All products covered by this directive are marked with the symbol of the crossed-out wheeled bin and must not be disposed of with general household waste.
	Warning sign: indicates danger. Pay attention to the personal injury that may be caused by operation procedure or incorrect operation and take actions carefully.
	"CE" mark: on the product, instruction manual or package, indicating that the product has passed the test for safety certification.

The company is committed to the continuous improvement and update of the product. Product hardware and software will continue to upgrade. The information provided may change without prior notice.

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Product Overview



Basic Parameters

Model	ARR-W03C-S	ARR-W07C-S
Parameters		
Working voltage	AC230V 1P	AC230V 1P
Rated power	3.5 kW	7 kW
Frequency	50/60Hz	50/60Hz
IP Code	IP65	IP65
Use environment		
Working temperature	-30℃~-50℃	-30℃~-50℃
Working humidity	5%~95%HR	5%~95%HR
The cooling way	Natural air cooling	Natural air cooling
Display parameters	Charge voltage, charge current, charge power, soc. fault code.	Charge voltage, charge current, charge power, soc. fault code.
Physical size		
Wall box size	320*210*120mm	320*210*120mm
Installation mode	Wall-mounted or Floor standing	Wall-mounted or Floor standing

Model	ARR-W11C-S	ARR-W22C-S
Parameters		
Working voltage	AC400V 3P	AC400V 3P
Rated power	11 kW	22 kW
Frequency	50/60Hz	50/60Hz
IP Code	IP65	IP65
Use environment		
Working temperature	-30°C~+50°C	-30°C~+50°C
Working humidity	5%~95%HR	5%~95%HR
The cooling way	Natural air cooling	Natural air cooling
Display parameters	Charge voltage, charge current, charge power, soc. fault code.	Charge voltage, charge current, charge power, soc. fault code.
Physical size		
Wall box size	320*210*120mm	320*210*120mm
Installation mode	Wall-mounted or Floor standing	Wall-mounted or Floor standing

Operation and Safety Notes

Electrical Hazard
Only trained, qualified and authorized electricians are responsible for installation. The first commissioning and maintenance of the charger should comply with existing standards and installation regulations.
Electrical Hazard/Fire Hazard
• The charger’s socket or charging gun (including the charging cable) must be regularly inspected for damage, and the casing must be inspected for damage. • If the charger is damaged, it must be switched off immediately. • Do not open the casing and repair charger without authorization. • Do not modify the charger without authorization. • Do not remove safety symbols, warning tips, nameplates, signs or pipeline marks. • When installing, disconnect the power supply before connecting the external power cord to the charger input. • No extension cable shall be used when connecting the electric vehicle to the charger. • Make sure that there is no dirt or water on contacts of vehicle plug. • When using the charger, please carefully read the relevant tips and instructions. • Avoid falling of the charger from a high place or impact from strong mechanical force. Otherwise, electrical safety of the device can not be assured, resulting in potential safety hazards. • It is strictly prohibited to use in the environment with combustible material or explosive gas, otherwise there is the risk of explosion. • Do not let conductive objects such as metal parts fall into the charger, otherwise accidents may occur. • The PE end of the charger must be grounded reliably. Otherwise, electric shock or fire may occur.

Troubleshooting

Fault	Possible causes
AC overvoltage	AC input voltage too high
Rule out advice	
1. If the voltage exceeds 288 Vac for a short time, wait for the power grid to restore itself to the normal voltage range. 2. Check the background monitoring data and analyze. If the voltage in this area is over voltage for a long time, adjust the input over voltage protection point to 288 Vac by configuring software.	
Fault	Possible causes
AC undervoltage	AC input voltage too low
Rule out advice	
Check the background monitoring data and analyze. If the voltage in this area is chronically undervoltage (175 Vac), the protection point of input undervoltage can be adjusted to 90 Vac at least by configuring software.	
Fault	Possible causes
AC overcurrent	Excessive AC input current
Rule out advice	
1. Immediately turn off the leakage/overcurrent protection circuit breaker of the power distribution box. 2. Check whether there is low impedance or short circuit between the output line of Ac pile. 3. After the fault is rectified, power on the device again. If the fault persists, please contact us.	
Fault	Possible causes
Overtemperature	The temperature in the AC pile is too high
Rule out advice	
1. Check the AC pile installation environment. 2. Check whether there are other heating devices nearby. 3. Ensure that the ambient temperature is below 50 °C.	

Fault	Possible causes
Leakage current exceeds standard	High leakage current to the ground
Rule out advice	
1. Immediately turn off the leakage/overcurrent protection switches in the power distribution box. 2. Check whether the output line of AC pile is damaged or has low impedance to the ground. 3. After the fault is rectified, power on the device again. If the fault persists, contact us.	
Fault	Possible causes
Ground fault	The input/output is improperly grounded or the input L/N is inversely connected
Rule out advice	
1. Immediately turn off the leakage/overcurrent protection switches in the power distribution box 2. Check whether the input and output cables of AC piles are grounded properly and whether the input L/N cables are connected in normal sequence. 3. After the fault is rectified, power on the device again. If the fault persists, contact us.	
Fault	Possible causes
Abnormal communication (Internet mode)	Poor background communication of Ac pile
Rule out advice	
1. Check whether the network cable is properly connected. 2. Check whether charging piles are correctly configured in the background.	
Fault	Possible causes
Abnormal connection of charging gun	Charging gun CC/CP Connection exception
Rule out advice	
1. Check whether the charging gun is connected correctly and reliably. 2. If the fault persists, contact us.	

Fault display: Over-temperature fault
Possible causes
1. The ambient temperature exceeds the working temperature specification. 2. The input voltage of AC power supply is too high. 3. Internal charger failure.
Terms of settlement
1. Install the charging pile in an environment with low ambient temperature. 2. If the problem cannot be solved, please do not use the charging pile. Please contact your local company representative or a qualified electrical contractor.
Fault display: Device overvoltage
Possible causes
1. The input voltage of AC power supply is too high 2. Internal charger failure
Terms of settlement
1. Check the input voltage. 2. If the problem cannot be solved, please do not use the charging pile. Please contact local company representative or qualified electrical contractor.
Fault display: Device undervoltage
Possible causes
1. The input voltage of the Ac power supply is too low. 2. Internal charger failure.
Terms of settlement
1. Check the input voltage. 2. If the problem cannot be solved, please do not use the charging pile. Please contact local company representative or qualified electrical contractor.

Fault display: Emergency fault
Possible causes
1.The emergency stop button is pressed 2.The emergency stop button is damaged
Terms of settlement
1.Press the emergency stop button again 2.Replace the emergency stop button
Fault display: RFID unconnected
Possible causes
1. Card reader failure
Terms of settlement
1.Whether the power supply is restored after restart 2. Replace the card reader
Fault display: Grounding fault
Possible causes
1. Ground fault
Terms of settlement
1.Check whether the ground wire is reliably connected
Fault display: OverCurrent fault
Possible causes
1.Overload protection
Terms of settlement
1.Please contact the manufacturer's local representative or a qualified electrical contractor

Fault Indicator Prompt

Working status	Red	Green	Blue
Free	/	Stays On	/
Insert a gun	/	/	Flashing
Recharge	/	/	Stays On
Metering communication error	Flash for 1 times	/	/
Under-voltage alarm	Flash for 2 times	/	/
Over voltage alarm	Flash for 3 times	/	/
Ground fault	Flash for 4 times	/	/
Over current alarm	Flash for 5 times	/	/
Permanent overcurrent alarm	Flash for 6 times	/	/
Leakage alarm	Flash for 7 times	/	/
Over temperature alarm	Flash for 8 times	/	/
Emergency stop button	Flash for 9 times	/	/
RFID failure	Flash for 10 times	/	/
Relay failure	Flash for 11 times	/	/
Relay failure	Flash for 12 times	/	/
Memory failure	Flash for 13 times	/	/
Clock exception	Flash for 14 times	/	/

Maintenance

The power distribution system

The AC input of the charger is led out from the distribution box of the power grid, and the power shall be cut off before connection. The power on and power off steps are as follows:

1. Check whether the power supply voltage is normal.
2. Firstly turn off the main switch of the distribution box, and then turn off the branch circuit switch in turn.
3. Pull each branch circuit switch firstly, and then pull the main switch of the distribution box. Pull the main brake in case of emergency.

Wiring system

Regularly check the input and output cables of the charger:

1. Weekly inspection: check the cable for heating and damage.
2. Monthly inspection: check whether the cable is heated or damaged, whether the cable is stressed by external tension, and whether the cable is fixed firmly.
3. Annual inspection: check whether the connection between the cable and the switch is tight, whether the grounding is reliable, whether the cable is heated and damaged, whether the insulation resistance of the cable meets the requirements whether the cable seal is intact, and whether the holes are sealed tightly.

Circuit components

The following inspections shall be carried out by professional maintenance personnel:

1. Weekly routine inspection: whether the mechanical lock buckle of the charging gun is damaged and whether the connection is abnormal.
2. Quarterly routine inspection: whether there is ignition burning at the connection of charging gun wire core. If there is any abnormality, replace the parts in time.
3. Annual routine check: use brushes and vacuum cleaners to remove dust from the box. When cleaning, be careful to inhale dust into the components by mistake, resulting in short circuit. Check all components of the box and replace abnormal parts in time.

Equipment appearance

1. Check the appearance of the charger monthly to see if there are stains, and clean the charger shell.

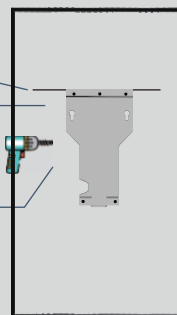
Installation Steps

Use a level ruler to draw a horizontal line on proper place

Drilling template : contains screw position and punching size

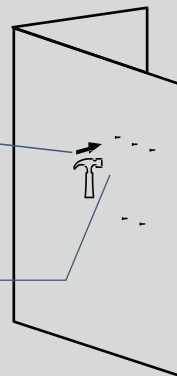
Drill holes using the drilling template

Wall

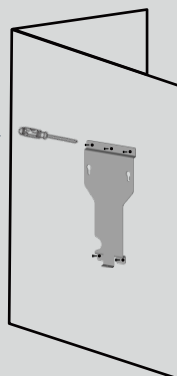


Hammer the M4.0 expansion tube into the wall hole

Remove the template from the wall



Use the screwdriver to fix the M4.0 self-tapping screws to the backplate on the wall



Remove covers for wiring

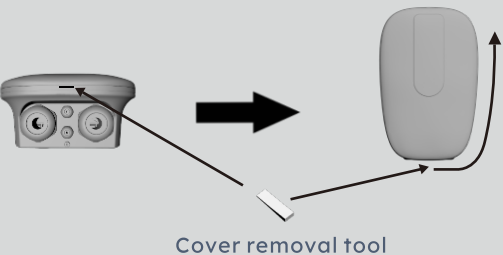
Step 1

Unscrew the anti-theft screw



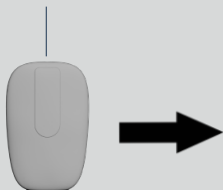
Step 2

Use the tool to open the top cover



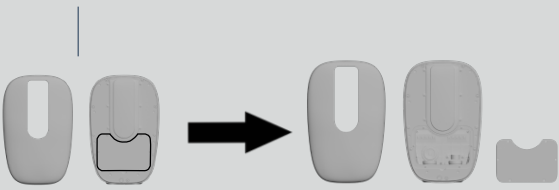
Step 3

Remove the top cover



Step 4

Remove the inner cover



Hang the wall box

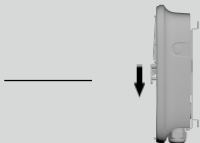
Step 1

Align the holes and hang the wall box on the back panel



Step 2

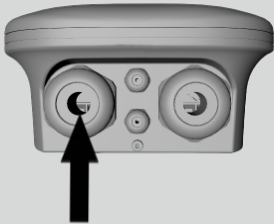
Move down and make it fixed



Wiring for 11kW and 22kW wallbox

Step 1

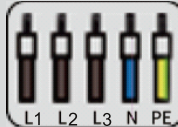
Open the wire entry hole and insert the input cable



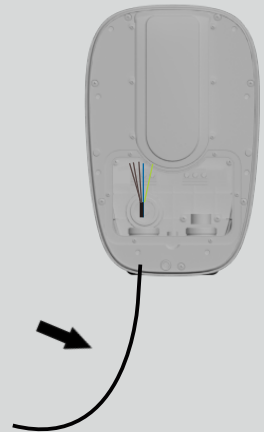
Wire entry hole

Step 2

Connect the input cable to the mainboard



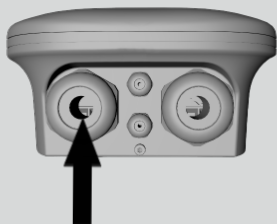
Input Cable



Wiring for 3kW and 7kW wallbox

Step 1

Open the wire entry hole and insert the input cable



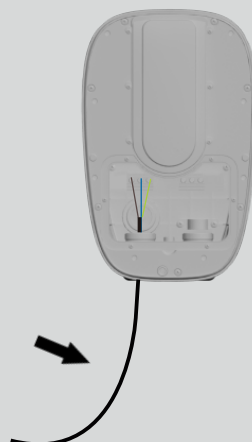
Wire entry hole

Step 2

Connect the input cable to the mainboard



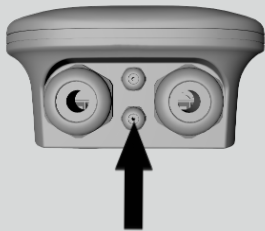
Input Cable



Connect 4G and Ethernet

Step 1

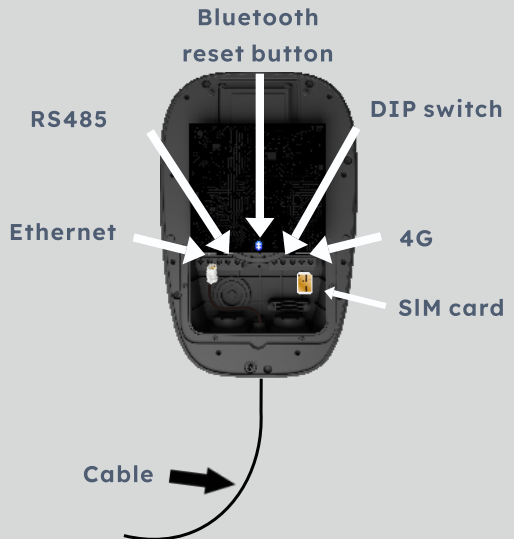
Open the wire entry hole
and put into the cable



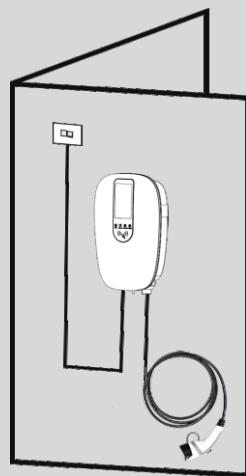
Wire entry hole

Step 2

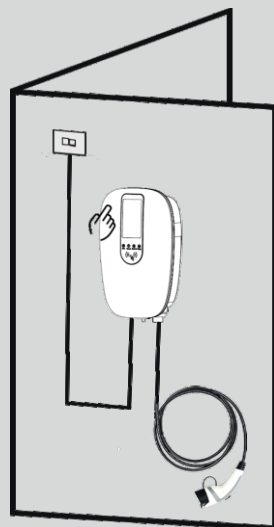
Connect Ethernet cable
to the LAN port
Insert the SIM card to
the 4G port



Tighten the anti-theft screw on the bottom of the wall box and place the plug holder in an appropriate place

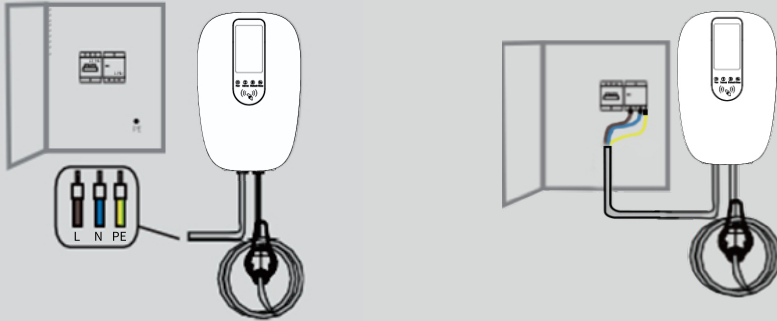


After completing the above steps, the surface protective film of the wall box can be torn off

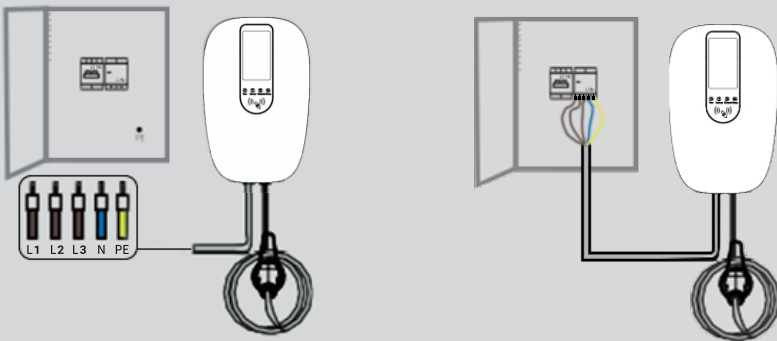


Wiring Instructions

If the power distribution box is connected, connect the L, N, and PE ends of the input line with the L, N, and PE ends of the circuit breaker respectively.



If the power distribution box is connected, connect the L1, L2, L3, N and PE ends of the input line with the L1, L2, L3, N and PE ends of the circuit breaker respectively.



Steps for connecting Device to wifi network

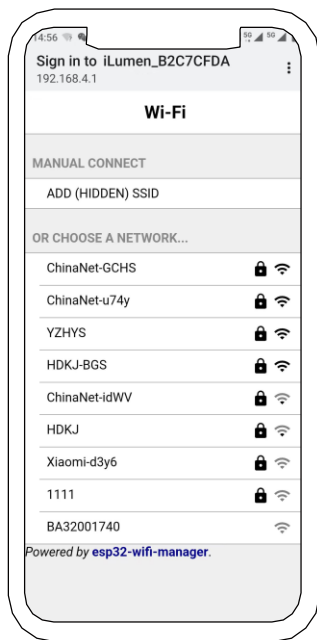
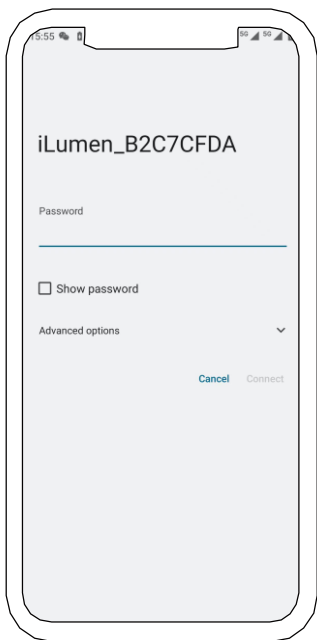
Step 1

Press the emergency stop button or the network configuration reset button 3 times. The charging pile will reboot and enter AP mode.

(If you use the emergency stop button, you need to pay attention to the fact that one press and one bounce are counted once, and press or bounce requires rhythmic intervals of 2~3 seconds)

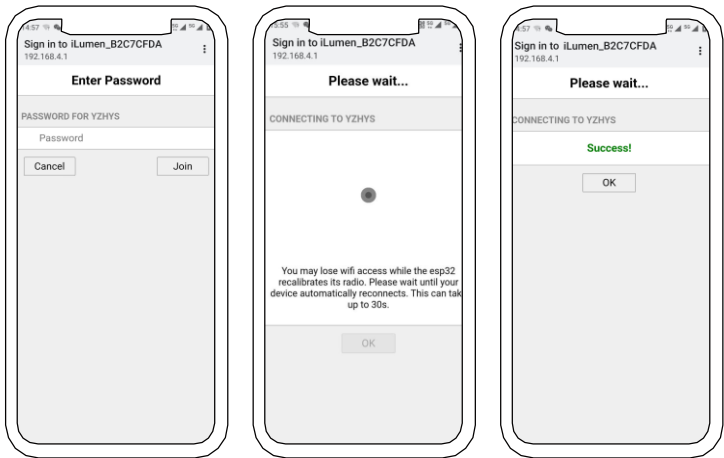
Use your mobile phone to connect to a WiFi access point whose name starts with iLumen_, then the phone will enter the captive portal as below. If it does not pop up on your device, you can access the WiFi manager at its default IP address 192.168.4.1.

Password: 12345678



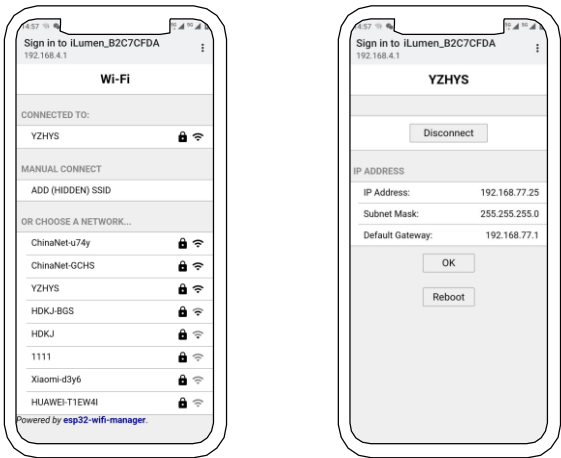
Step 2

Click on the name of the 2.4G WiFi access point that needs to be paired, in this case, YZHYS is selected. After enter the password, click the Join button, and the charging pile will try to connect.



Step 3

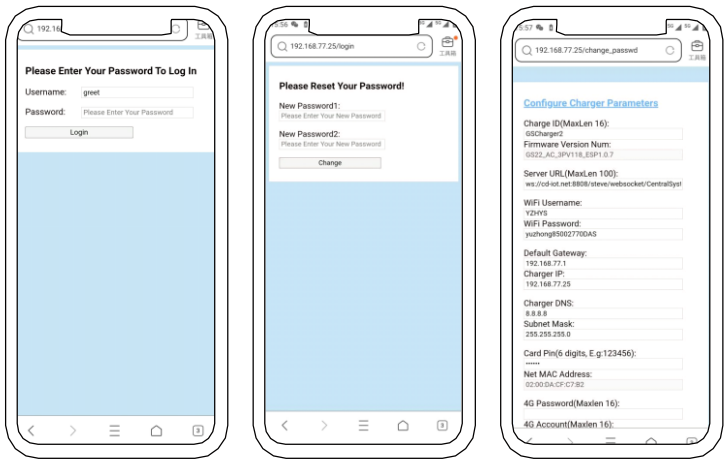
After the connection is successful, go back to the main page and you can see the access point you have connected to. Click on the name of the access point, you can see the IP address, you MUST record this IP address, then click Reboot button, the charging pile will restart and connect to the internet normally.



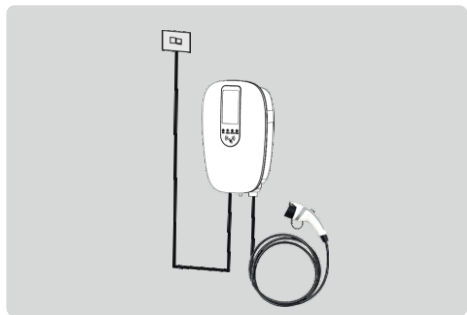
Step 4

Open the mobile phone (or the PC with the same subnet mask) browser and enter the IP address just recorded to open the charging pile configuration page. After entering the initial password and setting a new password, you can modify the configuration parameters.

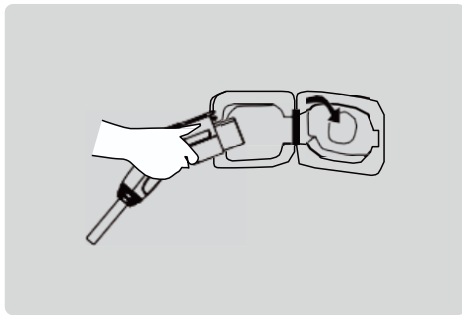
Password: greet



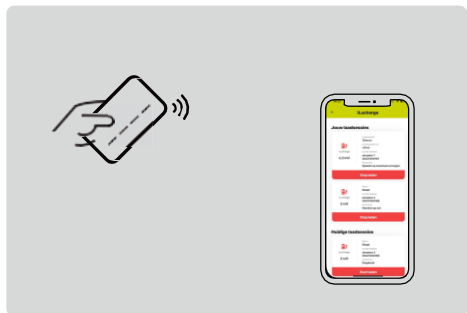
Usage Steps



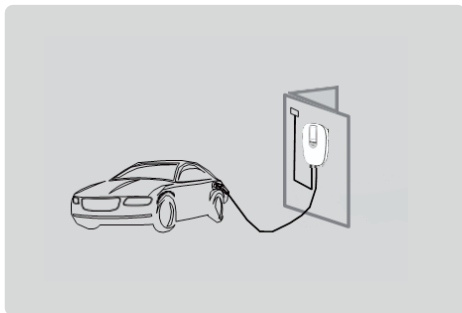
1.Insert the input cable to the power supply.



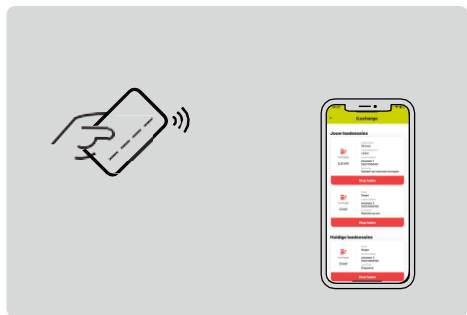
2.Insert the charging plug to the charging port.



3.Start charging in the iLusmart app.



4.E-cars are in normal charging status.



5. Stop charging in the iLusmart app



6.Remove the charging cable and put it back in place.

iLusmart app manual





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