Mira AC Charger

User Manual

Contents

About the Manual

1.   This manual is only for Mira AC charger series products developed and produced by Sinexcel, providing comprehensive guidance for new energy vehicle users to use and maintain this charging device.

2.   This manual will provide users with detailed product information and operating instructions for using the AC charger. Please carefully read the contents of the manual and the safety chapter before using this product to ensure that you understand all the instructions, and properly store this manual in a safe place for installation, operation and maintenance personnel to access.

3.   The content of this manual and the pictures, logos, symbols, etc. used are all owned by Sinexcel. Without written authorization, it is not allowed to publicly, arbitrarily extract and copy part or all of the contents of this manual, and it is not allowed to disseminate in any form (including materials and publications).

4.   The manual will be adjusted, revised and updated according to the product upgrade. Users should take the actual product as the standard.

1. Liability Statement and Disclaimer

1.1 Responsibility statement

Requirements for users and field operators:
- Operate the charging station on the premise that the protective measures are fully implemented, and ensure that the protective facilities are correctly installed and regularly maintained;
- Prepare emergency plans to instruct people how to deal with emergencies;
- Ensure that the charger has enough space for passing and maintenance;
- It should be fully understood that changes and alterations without Sinexcel's permission may affect the user's operation authorization and may also affect the quality assurance;

1.2 Disclaimer

If the product equipment needs to be used normally within a certain range of conditions, Sinexcel will not be liable for any accident or damage caused by one of the following circumstances:
- Products and accessories not identified by our company;
- Products or parts have exceeded our warranty period;
- Failures and damages caused by not using according to the instructions or not using according to the instructions in the environment (such as too high and too low temperature, too wet or dry, too high altitude, unstable voltage or current, etc.);
- Failure or damage caused by disassembly, repair, modification of products without the consent of our company, which is not installed, repaired, changed or disassembled by our after-sales service personnel;
- Normal wear, tear, fracture and impregnation;
- Failure or damage caused by accident or human factors (operation error, scratch, handling, bump, access to inappropriate voltage, etc.), transportation damage;
- Failure or damage caused by force majeure (such as earthquake, lightning, fire, abnormal voltage, etc.) such as natural disasters;

2. Safety instructions

2.1 Identification description

identification	describe
	warning Indicates a potential danger that, if not effectively avoided, may result in death or serious injury.
	danger Be careful of electric shock.
	Fire Hazard Area.
	notes Provide detailed explanations to help users use this product more simply and safely.
	It means that the machine cannot be discarded at will after use and should be delivered to a dedicated recycling place, otherwise it may cause environmental pollution.
	Grounding identification This indicates that the product must be grounded during installation. If it is not properly grounded, it may cause death or serious injury.

2.2 Instructions for equipment use

- This product is an all-in-one machine that can charge electric vehicles in indoor and outdoor areas.
- Please properly use and keep the product data and accessories provided with the equipment.
- If the user has any problems and failures in the use process, please directly consult the equipment provider. During the warranty period, if the user privately seeks a third party or non professional for maintenance, any safety consequences arising therefrom shall be borne by the user.
- The charging equipment shall be installed far away from fire and other dangerous sources.

2.3 Safety operation instructions

- Please read the product manual carefully before use and operate in strict accordance with the steps in the product manual.
- Without the permission of the manufacturer, it is strictly forbidden for the user to disassemble this product without permission, and the adverse consequences caused by improper operation shall be borne by the user.
- Do not touch the charging plug or the charging socket of the electric vehicle, keep the charging plug dry, and do not touch the charging plug with water.
- It is strictly forbidden to continue to use this charging device when the connector is damaged or the insulating skin is damaged.
- Ensure that there are no foreign matters left in the charging plug and the charging socket at the vehicle end.
- Lock the door correctly after installation or maintenance.

In case of the following situations, please do not use the charger and contact the manufacturer immediately:
- Housing damage
- Electric vehicle charging cable or connector damaged
- Lightning strikes the charger
- Accident or fire near the charger
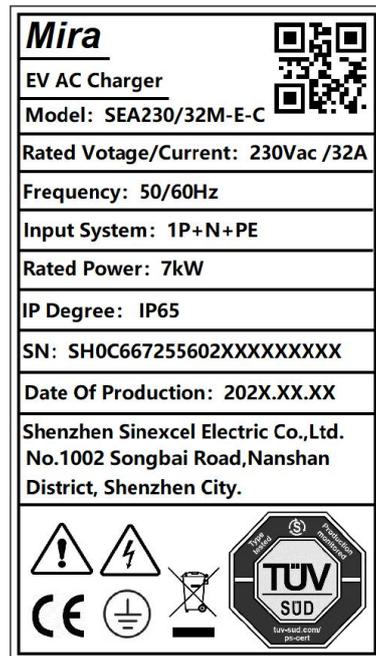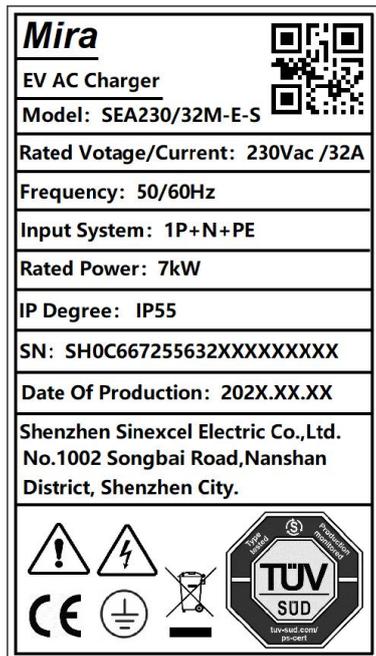- Water has entered the charger

> **Note: If the product is in emergency during operation, please press the emergency stop button immediately. It is strictly prohibited to use the emergency stop button in non emergency situations!**

3. Product Overview

3.1 Overview

Mira is an AC charger for charging electric vehicles, which is mainly composed of charger body and optional column. There are two versions: Socket and Cable. The IP level of the socket is IP55, and the IP level of the cable is IP65. Mira has multiple security protections to ensure the smooth operation of the equipment.

3.2 Nameplate

Left nameplate:

Mira

EV AC Charger

Model: SEA230/32M-E-S

Rated Votage/Current: 230Vac /32A

Frequency: 50/60Hz

Input System: 1P+N+PE

Rated Power: 7kW

IP Degree: IP55

SN: SH0C667255632XXXXXXXXX

Date Of Production: 202X.XX.XX

Shenzhen Sinexcel Electric Co.,Ltd.
No.1002 Songbai Road,Nanshan
District, Shenzhen City.

Right nameplate:

Mira

EV AC Charger

Model: SEA230/32M-E-C

Rated Votage/Current: 230Vac /32A

Frequency: 50/60Hz

Input System: 1P+N+PE

Rated Power: 7kW

IP Degree: IP65

SN: SH0C667255602XXXXXXXXX

Date Of Production: 202X.XX.XX

Shenzhen Sinexcel Electric Co.,Ltd.
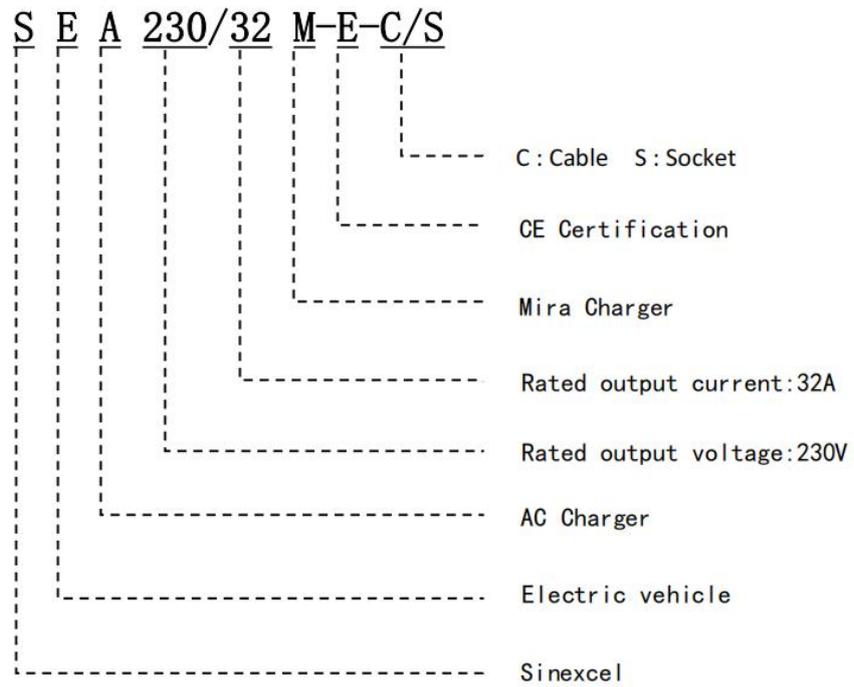No.1002 Songbai Road,Nanshan
District, Shenzhen City.

3.3 Product use

Mira is used for AC charging of electric vehicles and is suitable for indoor or outdoor use.

Mira can only be used with accessories provided by the manufacturer or conforming to local standards and specifications.
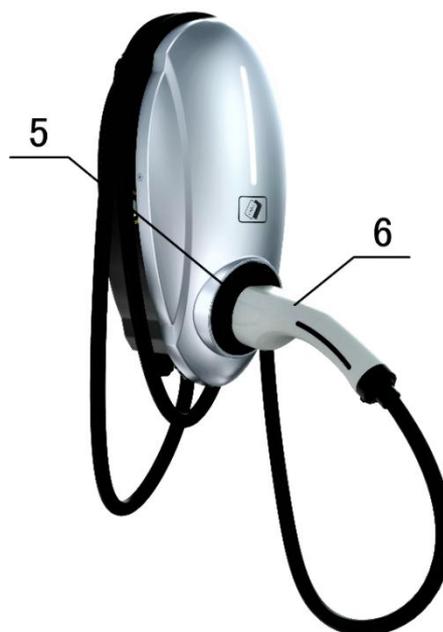
3.4 Overview of product naming

S E A 230/32 M-E-C/S

- C:Cable S:Socket
- CE Certification
- Mira Charger
- Rated output current:32A
- Rated output voltage:230V
- AC Charger
- Electric vehicle
- Sinexcel

3.5 Product diagram

1. Emergency stop button	2. Connector holder	3. Card swiping area
4. LED water lamp	5. Connector holder	6. Connector

SEA 230/32M-E-S   SEA 230/32M-E-C

Serial No	name	function
1	Emergency stop button	In case of emergency, press to stop charging immediately
2	Connector base	Connecting cabal
3	Card swiping area	RFID card identification area
4	LED water lamp	Display charging and standby status
5	Connector holder	Fixed connector
6	Connector	Connecting vehicle end

Prompt: The emergency stop button is not the power off restart button. It is forbidden to press it in non emergency situations. After pressing it, the charger will stop charging immediately. If the emergency stop button is pressed by mistake, gently rotate it in the direction of the arrow on the button to reset.

Note: The shell dimensions of SEA 230/32M-E-S and SEA 230/32M-E-C are the same.

3.6 Product specifications and parameters

European standard AC charger (home) Mira		
Model	**SEA 230/32M-E-S**	**SEA 230/32M-E-C**
power	**7kW**	**7kW**
Basic parameters		
Rated input/output current	32A	
Rated input/output voltage	Single phase 230V (± 10%)	
External dimensions	L385*W200*D145	
weight	2.35KG	2.50KG
working frequency	50/60Hz	
standby power	≤3.5W	
Connector type	IEC Type 2	
Connector cable	/	Cable: 5m (3m and 7m optional)
Charging mode	Plug & charge, card swiping charging, App charging	
Emergency stop function	Yes	
Leakage protection	Built in Type A 30mA+DC 6mA	
charge indicator	LED	
metering	On board metering function (level 1)	

Communication mode	Bluetooth, WiFi, 4G/LTE (optional)
working temperature	-30°C—+55°C
relative humidity	5%—95%
Altitude	＜2000m
Installation method	Support wall mounted type (column type installation is optional)
Degree of protection	IP55/IK09 IP65/IK09
Protection function	Overcurrent protection, overvoltage/undervoltage protection, lightning protection, short circuit protection, ground fault protection (built-in PEN fault device, supporting British PEN Fault protection), etc
Recoverable fault	Emergency stop, input overvoltage and undervoltage, meter communication, grounding, connector lock abnormality, CT abnormality, overfrequency and underfrequency fault, restart charging after recovery
EMC	Class B (residential environment)
Support power system	TN-CS、TN-C、TN-S、TT
authentication	CE、TUV mark、TR25、RCM、UKCA
colour	Silver black (silver shell, black bottom shell)

3.7 Product accessories and list

1) Charger

Serial No	name	Specification/material	quantity
1	Finished host	Charger body (PC)	1
2	Wall mounted directional paper	L425*W300mm	1
3	Charging card	Charging card	2
4	cable ties	Bagged	1
5	Installation and Operation Manual	Neutral User Manual	1
6	certificate	certificate	1
7	Anti-theft wrench	Stainless steel T20	1
8	Expansion pipe	⌀6*30mm（PE）	4
9	Cross recessed pan head tapping screw (GB845-85-SL)	Type C stainless steel ST4.2 * 30mm	4
10	Electrical drawings of AC charger system	Home Edition	1

2) Column

Serial No	name	Specification/material	quantity
1	Column body	L300*W175*H1431.5mm	1
2	GB818-2000_ Cross recessed pan head screw M4 * 12	Stainless steel M4 * 12	2
3	Expansion anchor bolt (GBT 22795-2008)	Stainless steel M8x80	4
4	Large flat washer (GB-96.1-2002)	Stainless steel M8 large washer	4
5	Installation and Operation Manual	Neutral User Manual	1
6	GB9074_ 4-88_ Cross recessed spring plain washer combination screw M4 * 12	Stainless steel combination screw M4 * 12	1

4.Sinexcel AC APP

4.1 Download APP

Apple users should search for Sinexcel AC download and installation in Apple Store, and Android users should search for Sinexcel AC download and installation in Google Store.


4.2 Registration/Login

To log in to Sinexcel AC APP for the first time, you need to register first.

4.3 Binding

Enter the App interface, as shown in the figure, click "+" in the upper right corner to enter the binding page. Enter a user-defined name, click the charger model and select Mira; bind the charger number by scanning the code, and automatically obtain the charger number by scanning the specified QR code; click "Bind Now" to start binding the charger. In the binding process, the location permission needs to be enabled, and the App will remind you to enable the location; One charger can only be bound by one account, and one account can be bound to multiple chargers.
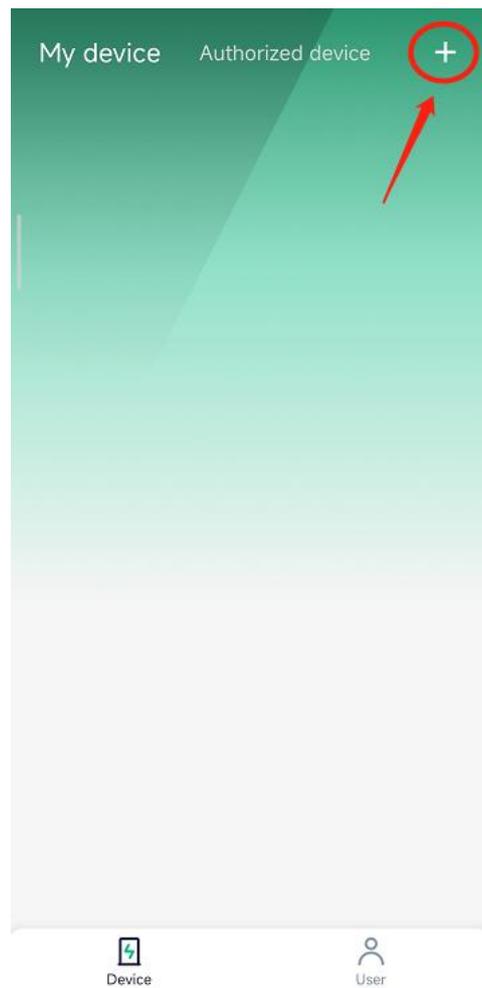
4.4 Unbinding
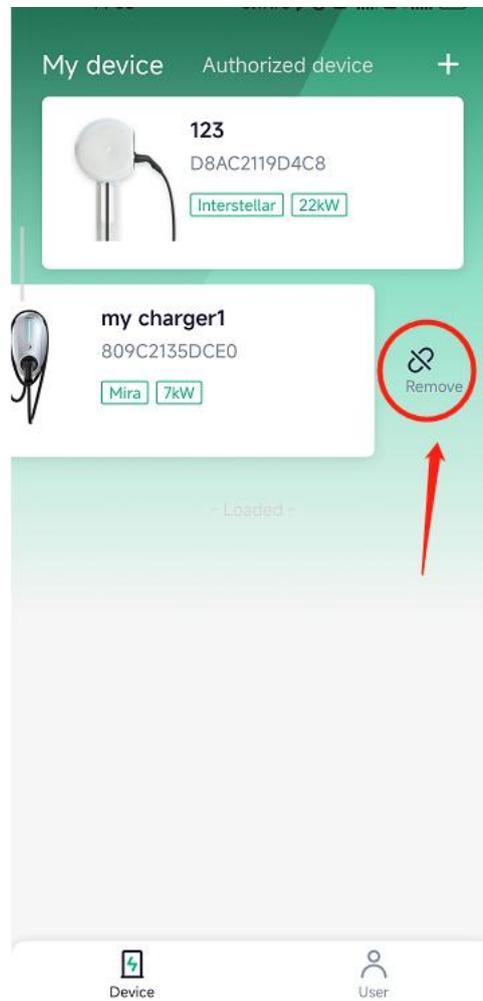
4.5 Setting the timing start

Click "Scheduled Charging" on the "Device Details" page, and click the "Start Scheduled Charging" button to start the scheduled start charging function. When the time is up to the set time point and the connector has been inserted, the charger will automatically start charging. Click the "Cancel Scheduled Charging" button to cancel the scheduled start charging function.
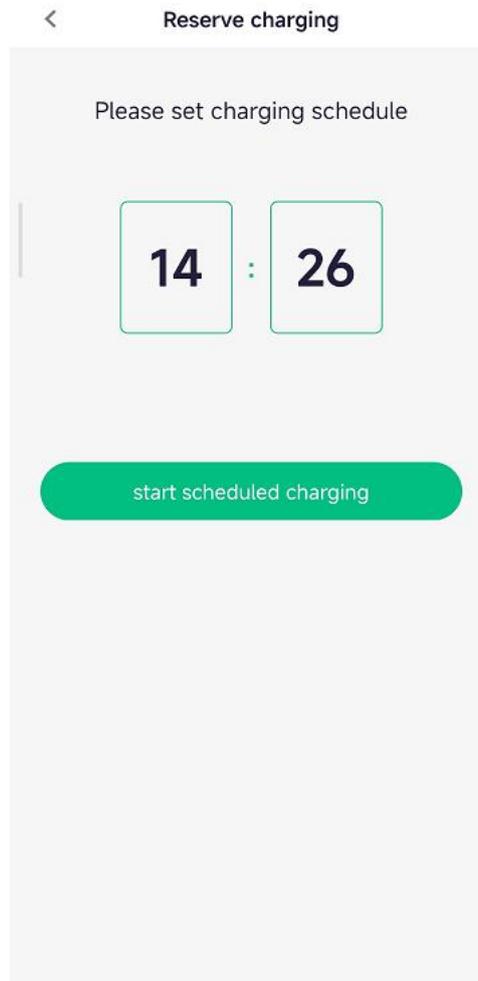
4.6 Authorization management

Click "Authorization Management" in the "Device Details" interface, click "Add Authorization" in the upper right corner, enter the email account of the authorized user (registered), and click "Save and Apply" to complete the authorization; The authorized user only has some functions such as start stop charging, timed charging, plug and play charging, and data analysis, but has no other functions.
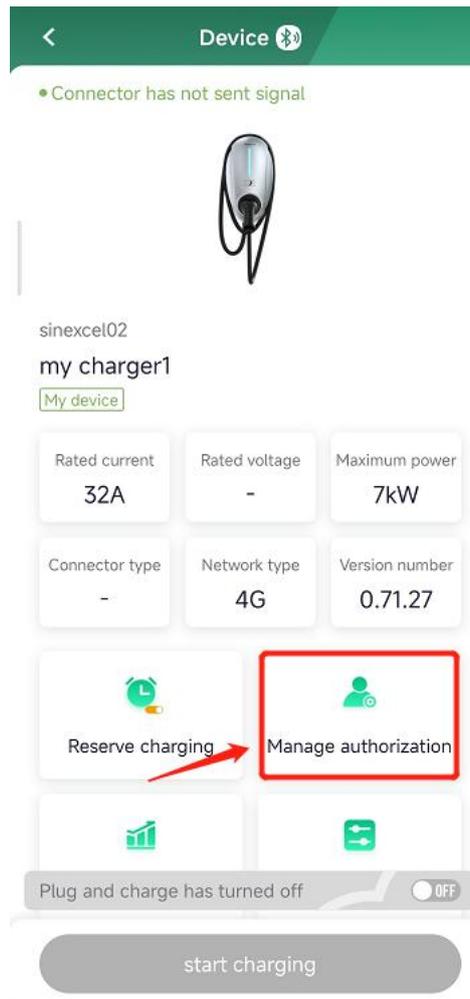
4.7 Parameter Search

Click "Parameter Setting" under the interface of "Device Details", you can check or set the following parameters in this interface (Note: Users should not modify the parameters without permission to avoid unnecessary trouble).
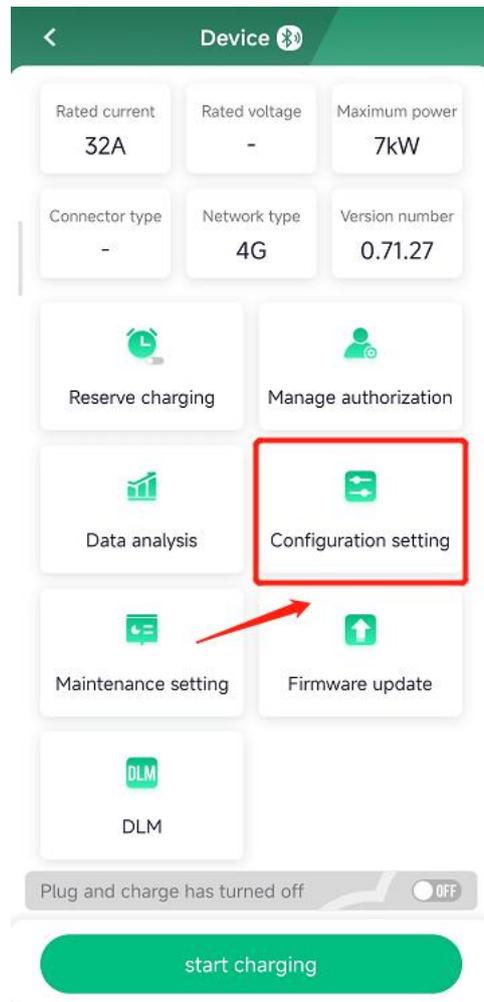
4.8 Firmware upgrade

Click "Firmware Upgrade" in the "Device Details" interface to enter the "Firmware Upgrade" interface, select the version as required, upgrade or downgrade to the corresponding version of software, and click "Upgrade or downgrade". When the software is being upgraded, please wait patiently for the upgrade progress bar to complete, which is expected to take 2-3 minutes. After the upgrade is completed, the charger will restart automatically. At this time, the APP needs to reconnect the charger. After reconnecting the charger, check the equipment version in the "Equipment Details" interface to confirm whether the upgrade is successful.
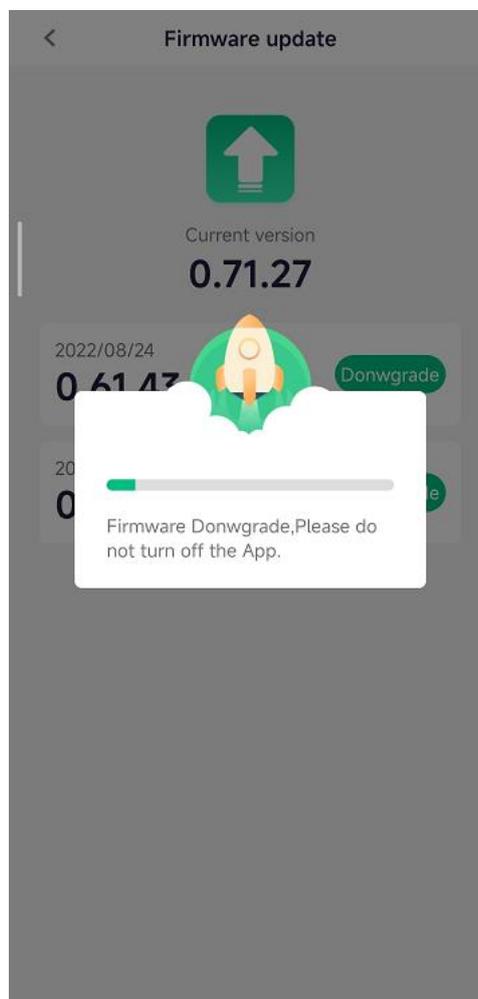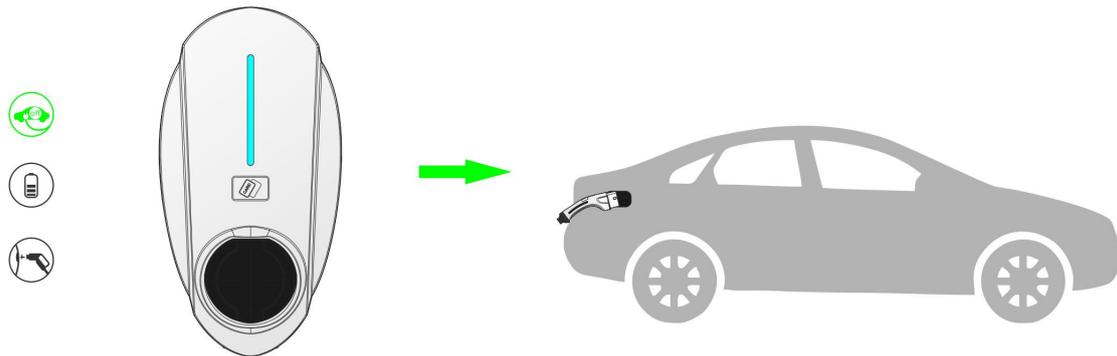
5. Charging instructions
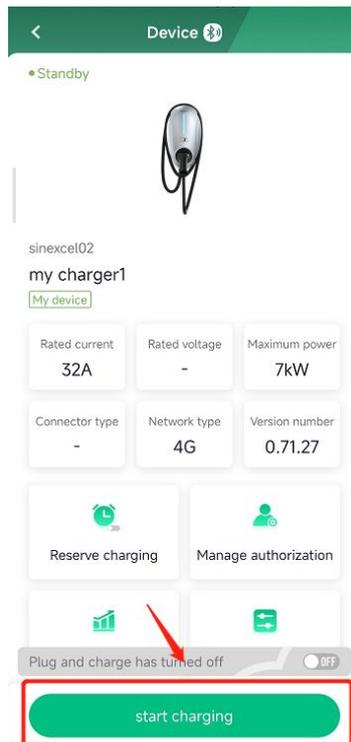
5.1 Charging steps

5.1.1 APP charging

Step 1: Insert the connector

Insert the connector into the socket of the electric vehicle, and the indicator light changes from green to blue, that is, it enters the connector insertion state.

Step 2: Start charging

After opening the APP and connecting the charger, click "Start charging" in the device details interface, and the indicator turns blue, running water, and the charging is successfully started. (To use the APP for the first time, you need to register an account, bind the charger, and scan the QR code to see the relevant APP operation steps).

Step 3. Stop charging

When the battery is fully charged or click "Stop charging" on the device details interface of the APP, the indicator light will turn blue and stay on, and the battery will stop charging. Pull out the connector and return it to the socket of the charger. The indicator light turns green and is always on, and it enters the standby state.

5.1.2 Charge by swiping card

Step 1: Insert the connector

Insert the connector into the socket of the electric vehicle, and the indicator light changes from green to blue, that is, it enters the connector insertion state.
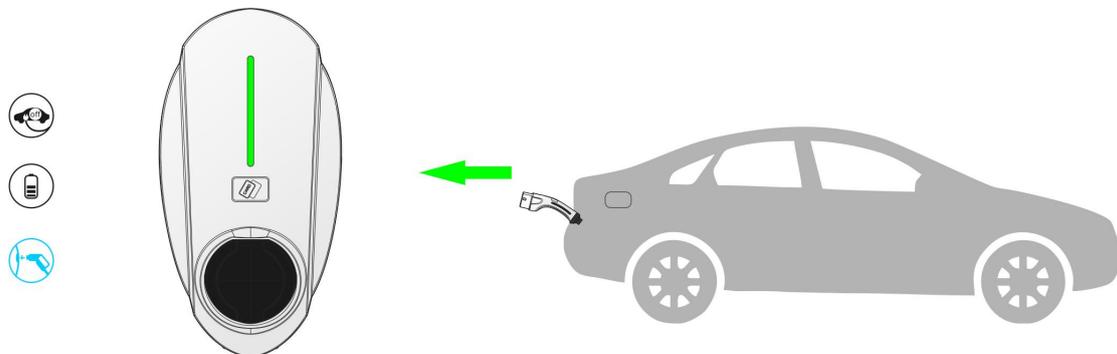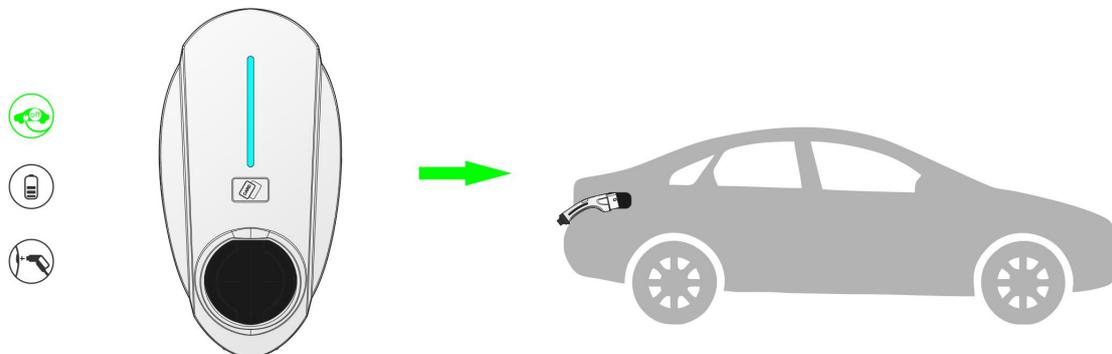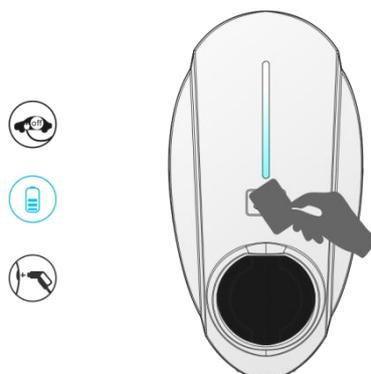
Step 2: Start charging

Place the RFID card in the card reading area. After the RFID card is successfully identified, the indicator turns blue and the water flows, and the charging is successfully started. (The first time you use an RFID card, you need to bind the RFID card to the charging post, scan the QR code to check the RFID card binding steps).

Step 3. Stop charging

When the charge is fully charged or the card is swiped in the card reading area, the indicator light turns blue and stays on, and the charging is stopped. Pull out the connector and return it to the socket of the charger. The indicator light turns green and is always on, and it enters the standby state.
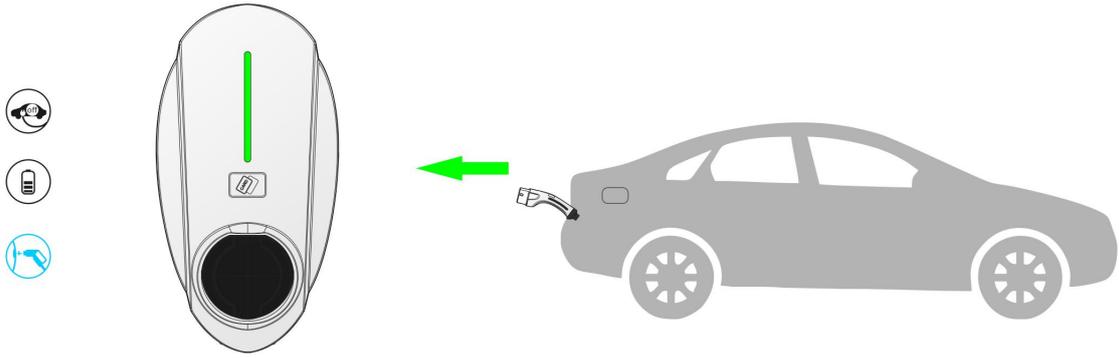
5.1.3 Plug and Charge

Step 1: Set the mode

After opening the APP and connecting the charger, click the "off" button of plug and play in the device details interface to start the plug and play mode.
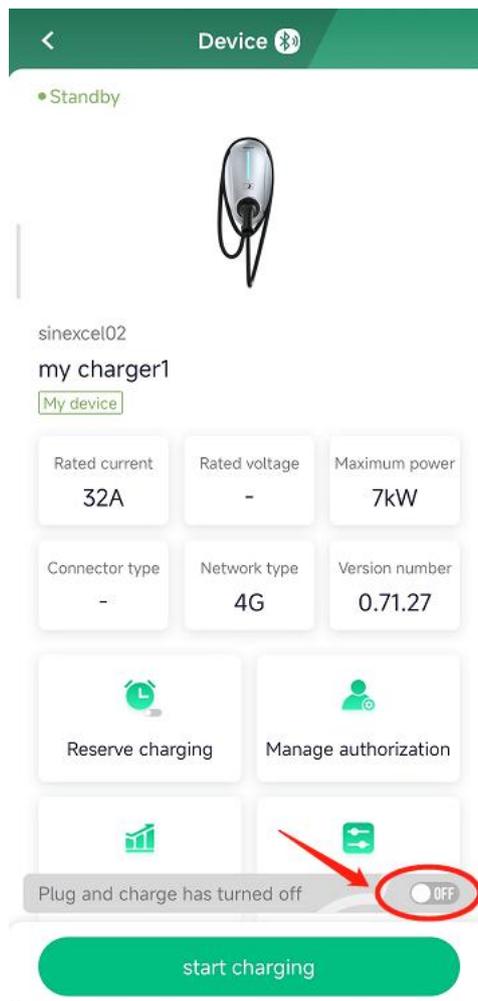
Step 2: Insert the connector

Insert the charging connector into the connector of the electric vehicle, the indicator light will change from green to blue, and water will flow, and the connector will immediately enter the charging state.

Step 3. Stop charging

When the charging is fully charged/swipe the card in the card reading area/click "Stop charging" in the APP interface, the indicator light will turn blue and stay on, and the charging will be stopped. Pull out the connector and return it to the socket of the charger. The indicator light turns green and is always on, and it enters the standby state.

Prompt: The emergency stop button is not the power off restart button. It is forbidden to press it in non emergency situations. After pressing it, the charger will stop charging immediately. If the emergency stop button is pressed by mistake, please press it again to reset the emergency stop button.
Reminder: Please remember to unplug the connector after stopping charging each time, otherwise the next charging cannot be started.

5.2 Indicator Status

Charger status	Indicator status	
Standby	Green is always on	
connect	Always bright blue	
charge	Blue water lamp	
Emergency stop	Red is always on	

Remark: the indicator light status of connector thread plate and connector base plate is consistent.

Indicator Status Overview

state	Breathing light indication
Standby	Green is always on
connect	Always bright blue
charge	Blue water lamp
Emergency	Red is always on

stop	
Under/over voltage	Red is always on, blue flashes for 2s
RCD failure	Red flashing for 2s
Over current	Red flashing for 500ms
Relay adhesion	Red is always on, green flashes for 500ms
Meter fault	Red is always on, green flashes for 2s
Ground fault	Red is always on. Blinking blue for 500ms
Network anomaly	Green is always on, blue flashes for 2s
Reader warning	Green flashes for 2s
USB data	The blue light flashes for 2s. If it fails, it is off. If it succeeds, the blue light is always on. Unplug the USB flash disk and it returns to green
Buzzer	The log is uploaded successfully, and the buzzer sounds twice

5.3 Cable management

The cable management system solves the user's trouble in actual use, keeps the cable clean and tidy, and avoids touching the floor. After charging, the user can easily wrap the cable around the hook on the column for easy operation. See the figure below.

5.4 Disabled Installation Mode

In order to provide convenience for the disabled, the installation height of the charger can be adjusted so that the disabled can have a better product use experience, as shown in the figure below.
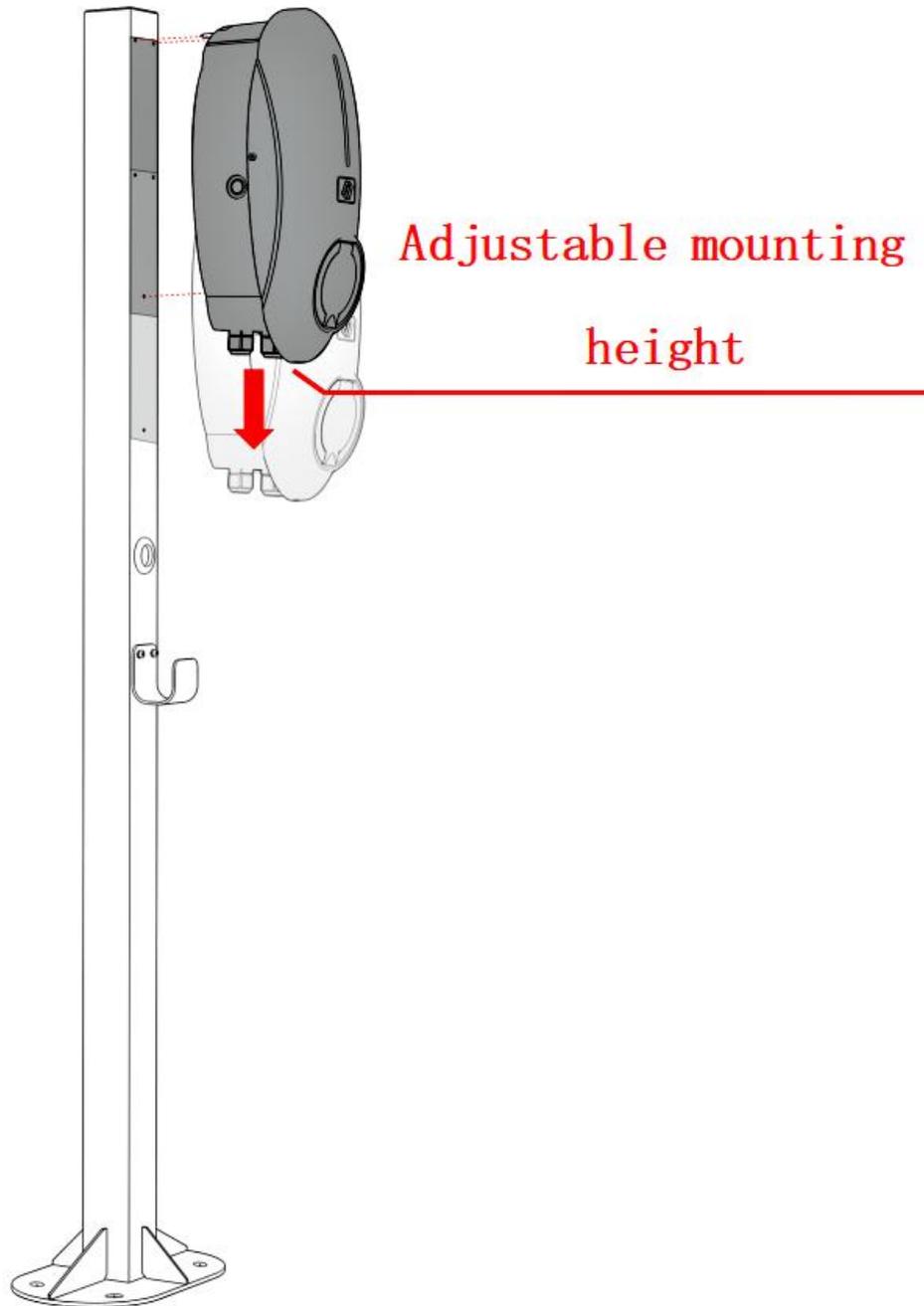
6. Fault diagnosis and resolution

When the indicator light of the charger has the following fault light effect, the corresponding fault treatment method is as follows.

error code	sketch	describe	processing method
Error 1	Emergency stop fault	Emergency stop button is pressed in case of emergency	1. Check whether the emergency stop button is pressed, and if it is pressed, reset the emergency stop; 2. Power off and open the cover, check whether the emergency stop terminal is loose, and if it is loose, plug it again;
Error 2	Overvoltage fault	Input voltage is greater than overvoltage	Use APP to check whether the overvoltage value is smaller than the input voltage of the charger, and if so, reset the reasonable overvoltage value
Error 3	Undervoltage fault	The input voltage is less than the undervoltage value	1. Use APP to check whether the undervoltage value is greater than the input voltage, and if so, reset the reasonable undervoltage value; 2. Use APP to check whether the type of meter is single-phase meter and whether the rated power is 7kW. If not, change it to single-phase meter and 7kW;
Error 4	Overcurrent fault	The output current is greater than the overcurrent value	Contact Technical Support
Error 6	L-phase relay adhesion fault	The relay contact is overheated, causing	Contact Technical Support

		adhesion or failure	
Error 7	Meter communication failure	Abnormal communication or fault of electric energy metering module	Contact Technical Support
Error 8	Card reader communication failure	The card reader is faulty or damaged	Contact Technical Support
Error 10	Leakage fault	The RDC leakage detection module fails or there is residual current in the charging circuit, and the current leaks to the ground	Contact Technical Support
Error 11	Ground fault	Charger is not grounded	Contact Technical Support
Note: If the above troubleshooting methods cannot solve the problem, please contact the technical support for help.			

7. Network security

7.1 Warning

The security protocol mentioned in this manual must be used for connection. If the security protocol is not used, there will be network security risks.

7.2 Product Network Security Disclaimer

The product is designed to connect with the network interface and transmit information and data through the network interface.

You are responsible for providing and continuously ensuring the secure connection between the product and your network or any other network, and developing and maintaining any appropriate measures (such as but not limited to installing firewall, authentication, encrypted data, anti-virus program, etc.) to protect the product, network, system and interface, and prevent any type of security vulnerability, unauthorized access, interference, intrusion, data or information disclosure and/or theft.

SINEXCEL ELECTRIC CO., LTD. shall not be liable for any damage and/or loss caused by the above security vulnerabilities, any unauthorized access, interference, intrusion, data or information disclosure and/or theft.

Although Sinexcel provides functional tests for the released products and updates, you should develop your own test procedures for any product updates or other major system updates (including but not limited to code changes, configuration file changes, third-party software updates or patches, hardware changes, etc.) to ensure that the security measures you implement are not damaged.

8. Quality assurance

8.1 Warranty period

The warranty period of this product is subject to the contract.
During the warranty period of our products, the customer should take the initiative to show our service personnel the invoice, date and SN number of the products purchased. At the same time, the nameplate identification on the product shall be clear and visible, otherwise, it has the right not to repair.

8.2 Warranty conditions

When the product leaves the factory, the user has completely complied with the storage, installation and use rules specified in this instruction, resulting in quality problems; After the product leaves the factory, due to transportation reasons, the user found that the product or supporting parts were damaged during the unpacking inspection, and the relevant personnel confirmed or retained the damaged parts and pictures.
We will repair or replace the products of the same type free of charge if they fail during the warranty period; The replaced faulty machine shall be owned by our company.

9. Contact us

Our company provides customers with all-round technical support. If you have any questions about our products and technical problems, please contact us in time.

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Email: sales@sinexcel.com