



Star Charge[®]
星星充电



Electric Vehicle Supply Equipment (EVSE) Titan 180 Premium Instruction Manual

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Legal notices

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1 Important information

1.1 Safety tips

Symbols	Meaning
	‘Warning’, which indicates a hazard; Pay attention to personal injuries or death caused by operation steps, practice or incorrect implementation. The operation after the ‘warning’ sign can only be performed when the conditions are fully understood and satisfied.
	‘Caution’, which indicates a hazard. Pay attention to the damaged or destroyed product caused by the operation steps, experiments or incorrect execution. Only after fully understanding and satisfying the indicated conditions, the operation after the ‘caution’ mark can be performed.
	‘Hint’, which indicates skill or useful information. Skills and useful information are marked as ‘Hint’. It does not contain information that warns of dangerous or harmful features.
	‘Garbage disposal’, which indicates electrical and electronic waste. This symbol is located on the product, in the instruction manual or on the packaging, indicating that the electrical and electronic equipment and its accessories should be disposed separately from ordinary household waste. Materials can be reused based on their markings. By reusing old equipment, materials and other forms of reuse, you can make a significant contribution to the environment.

Table 1 Symbols & Meaning

1.2 Manual use

- This product is an Electric Vehicle Supply Equipment that can charge electric car in indoor and outdoor areas.
- Installation and connection Electric Vehicle Supply Equipment, shall comply with the regulations of each country.
- Please under specified environmental conditions using the Electric Vehicle Supply Equipment.
- The storage of the charger should meet the following requirements:
 1. Before receiving and installing the Electric Vehicle Supply Equipment, the Electric Vehicle Supply Equipment and its components need to be stored in a dry and ventilated warehouse. The temperature of the warehouse should be around $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$, and monthly average relative humidity of the warehouse should not be more than 90%, no corrosive or explosive gases in the warehouse. Avoiding rain, exposure to the sun, condensation and frost

during storage.

2. After the Electric Vehicle Supply Equipment is installed, the door of the EVSE should be kept closed to avoid raining and soaking.

- The EVSE is developed, produced, inspected and filed according to relevant safety standards. Therefore, if the instructions and safety technical instructions for the intended use are observed, the product will not cause damage to property or endanger the health of the person under normal circumstances.
- The instructions contained in this manual must be strictly observed, otherwise there may be a safety hazard or the device may fail. Although this manual describes the relevant safety instructions, it is important to pay attention to the safety regulations and accident prevention regulations when the charging equipment is used.

1.3 About this Manual

This manual applies to the Titan 180 Premium

This manual is for the following people:

- Customer (Charger user).
- Commissioning and service technicians

2 Product description

2.1 Apparent parameter

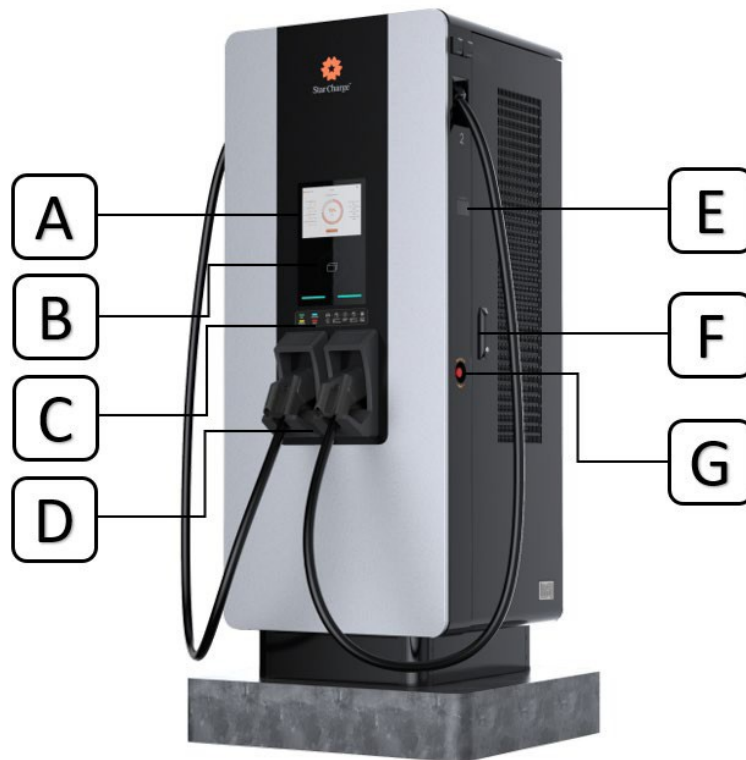


Figure 2-1 Product diagram

- [A] —— Touch screen
- [B] —— Card swiping area for charging
- [C] —— LED status indicator
- [D] —— Charging connector slot
- [E] —— Electric meter
- [F] —— Door lock
- [G] —— Emergency stop: press the button to stop the device running when the device is running abnormally



- Picture is for reference only, please in kind prevail.

2.2 Specification

General parameters	Model	Star Charge		
	Product name	Titan 180 Premium	Titan 150 Premium	Titan 120 Premium
	Product number	DH-DC1800SG56	DH-DC1500SG56	DH-DC1200SG56
Input parameters	Rated input	400Vac±10%, 3-Phase, 50/60 Hz, L1+L2+L3+N+PE		
	Power factor	0.99 (Normal load)		
	Total harmonic current:	≤5% (More than half a load)		
	Efficiency	≥94%@full load ≥95% at nominal output power		
Output parameters	Output Interface	DC CCS2*2		
	Output voltage	150-1000Vdc		
	Output current	200A max.		
	Output Power	180kW	150kW	120kW
User Interface& control	Display	10.4 " Touch screen		
	Support language	Chinese, English, other language available upon request		
	Mechanical button	Emergency button		
	RFID card reader	ISO/IEC14443A/B, NFC reader mode, Mifare		
	Start method	APP scan code/ swipe card start		
Communication	Network Interface	4G/Wi-Fi/Ethernet		
	Communication protocol	OCPP1.6J		
Environment	Operating temperature	-30°C-60°C (Derating above 50°C)		
	Storage temperature	-40°C-70°C		

Environment	Humidity	5%-95%（without condensation）		
	Altitude	≤2000m		
Mechanical	Ingress Protection	IP55/IK10		
	Cooling way	Forced air cooling		
	Size (W*D*H)	Size: 800 mm×750 mm×2050 mm（Including rings 2100mm）		
	Weight	320kg (Non module included) 410kg(Module included)	320kg (Non module included) 395kg(Module included)	320kg (Non module included) 380kg(Module included)
	Installation	Floor mounted		
Regulatory requirements	Certificate	CE , CB , TR25		

2.3 LED status indicator

LED Status Indicator	Meaning
Steady green	normal
Flashing green	RFID card detected
Steady yellow	Failure ,but can normal charging
Steady blue	Charging
Steady red	Failure

Table3 LED status indicator

3 Operation Instruction

The EVSE operation has two parts, the charging connection operation and the equipment operation. To use the product, the user must connect the EVSE to the vehicle first, and then carry out relevant charging operations through the touch screen interface.

3.1 Charging connection operation

Step 1 : First confirm that the EVSE is normal and the status indicator is steady green.

Step 2 : Confirm that the vehicle meets the charging conditions, remove the Charging connector from the Charging connector slot, and insert it into the corresponding charging port of the vehicle.

Step 3 : Confirm that the above connection is intact and start the next step.

3.2 Start charging operation

3.2.1 Swipe Card tocharge

Step 1: On the main interface of EVSE, insert the Charging connector to enter the next step, as shown in Figure 3-1 and

Figure 3-2. This interface can click " " to switch the display language (Chinese, English, other language available upon request).

A special sign will be displayed in the upper right corner of the interface to represent the current network status of the EVSE:

- "": The EVSE currently connects to the network via Wi-Fi;
- "": The EVSE currently connects to the network via 4G
- "": The EVSE currently connects to the network via Ethernet;
- "": The EVSE is currently connected to the OCPP cloud platform.

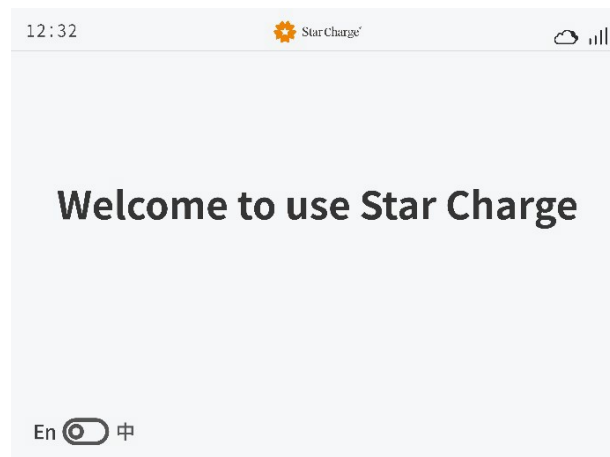


Figure 3-1 Main interface of charging

Step 2: Start charging by swiping card: Use IC card to place EVSE in the card swiping area to start charging, as shown in Figure 3-2. Click A and B buttons on the far right of the screen to switch to the interface of other charging connectors.

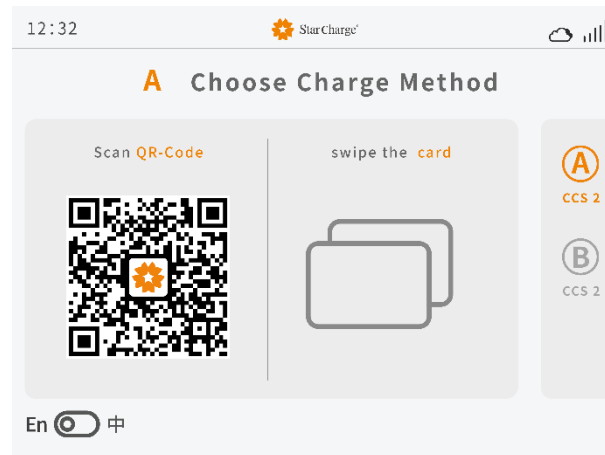


Figure 3-2 Charge by card

Step 3: During charging, the charging status interface is displayed on the EVSE screen. Click "Charging Details" to view charging details of the EVSE, as shown in FIG. 3-4. Click A and B buttons on the far right of the screen to switch to interfaces of other charging connectors, as shown in FIG. 3-3.

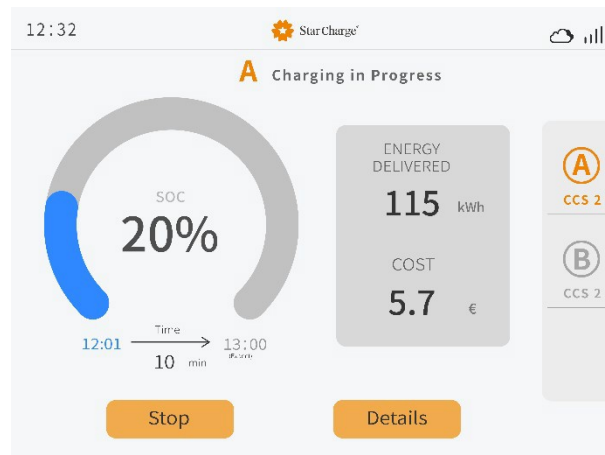


Figure 3-3 Charging interface in progress

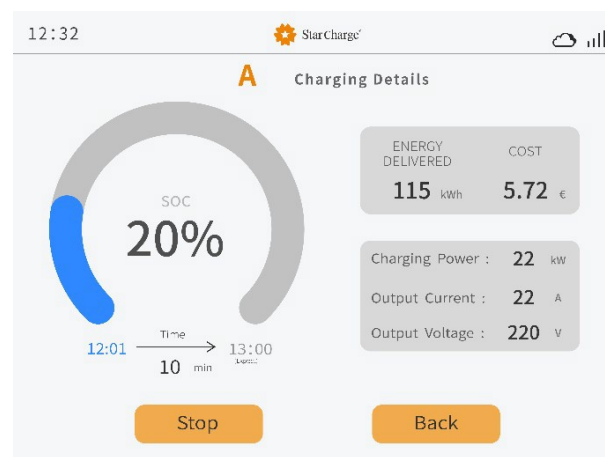


Figure 3-4 Charging details interface

Step 4: Swiping card to stop charging: Click "Stop" to enter the stop charging interface, and swiping card again to stop charging, as shown in Figure 3-5.

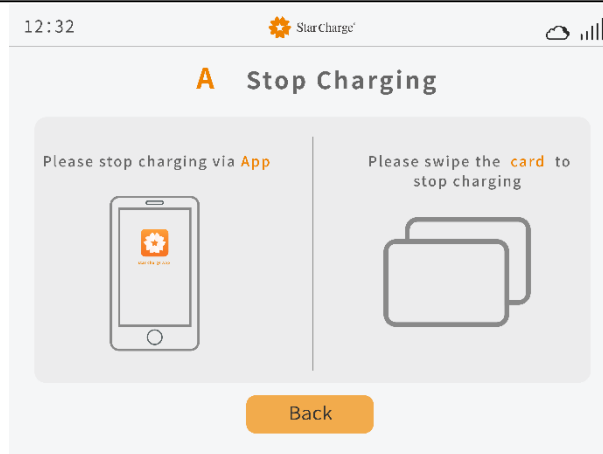


Figure 3-5 Stop charging interface

Step 5: Charging results are displayed on the EVSE screen after charging is fully charged or stopped, as shown in Figure 3-6. Click A and B buttons on the far right of the screen to switch to the interface of other charging connectors. The left picture is the interface of abnormal or manual stop details, and the right picture is the interface of successful full details. Click "OK". If the Charging connectors is still plugged in, repeat the charging steps to recharge it.

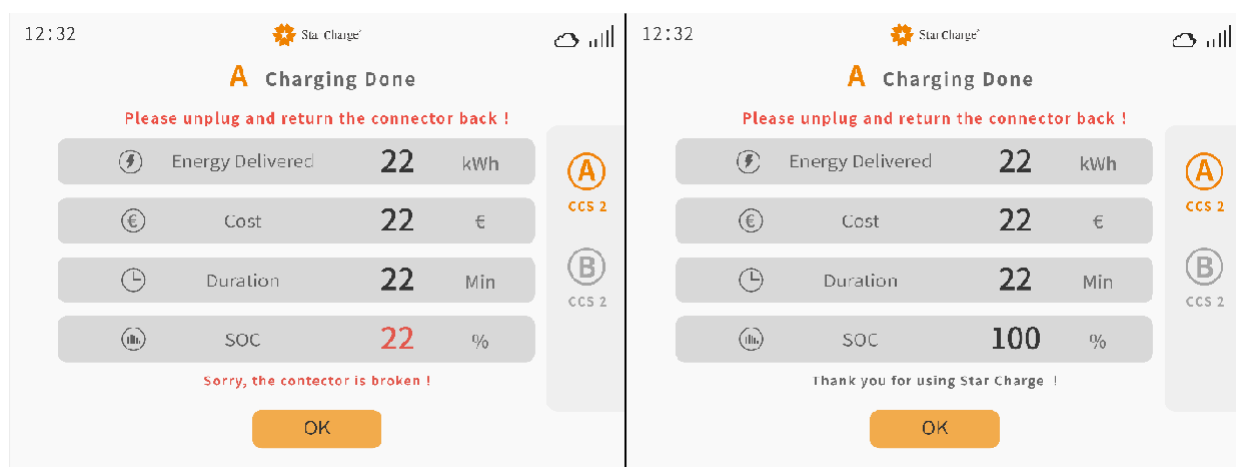


Figure 3-6 Interface at the end of charging

Step 6: Unplug the charging connector from the vehicle, reposition it in the Charging connector slot.

Step 7: When the LED status indicator of EVSE shows red, it indicates the fault of EVE. At the same time, the exclamation mark will appear in the lower right corner of the main charging interface, as shown in Figure 3-7.

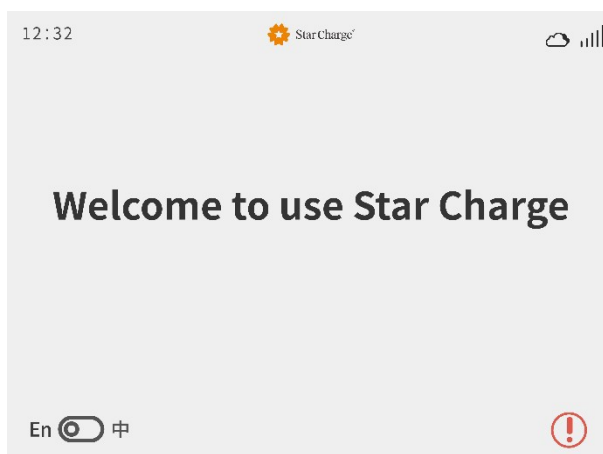


Figure 3-7 Home page fault interface

Step 8: Click the exclamation mark to view the fault information. Please contact the after-sales technical service for repair, as shown in Figure 3-8.

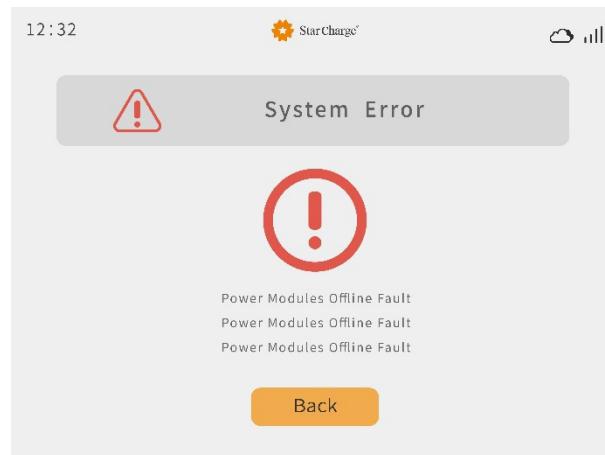


Figure 3-8 Fault details interface

If the emergency stop button of the equipment is pressed (as shown in FIG. 3-9), please contact after-sales technical service for inspection and maintenance

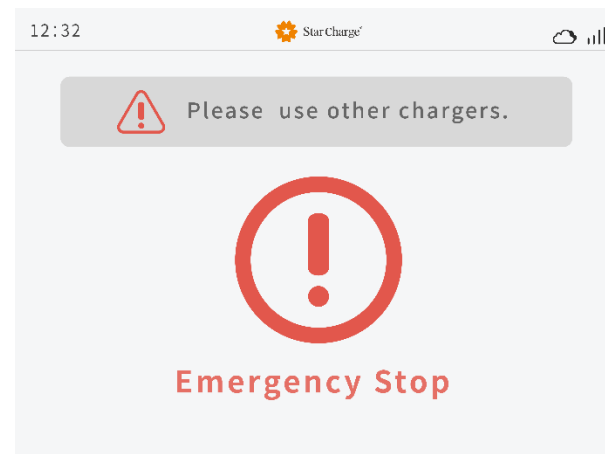


Figure 3-9 Emergency stop fault interface

End

3.2.2 Scan QR code to charge

Step 1: On the main interface of EVSE, insert the Charging connector to enter the next step

Step 2: Scan QR code to start charging: open "Star Charge" or other mobile phone clients to scan the QR code on the EVSE interface for charging, as shown in Figure 3-10. Click A and B buttons on the far right of the screen to switch to the interface of other charging connector.

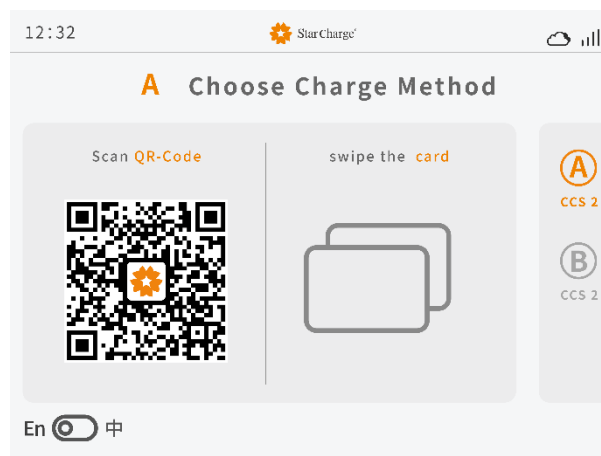


Figure 3-10 Scan QR code charging interface

Step 3: During the charging process, the charging status interface is displayed on the EVSE screen. Click "Charging Details" to view the charging details of the EVSE, and check the charging details in the mobile phone APP. Click A and B buttons on the far right of the screen to switch to other charging connector interfaces. (as shown in Figure 3-3)

Step 4: If you need to stop charging during the charging process, you can stop charging by clicking the stop button on the mobile phone interface.

Step 5: If the EVSE end or the car end is abnormal and the charging stops, the system will jump out of the picture 3-13 and click "OK". If the Charging connector is still plugged in, repeat the charging steps to resume charging.

Step 6: After charging fully and stopping charging, charging results are displayed on the EVSE screen, as shown in Figure 3-14.

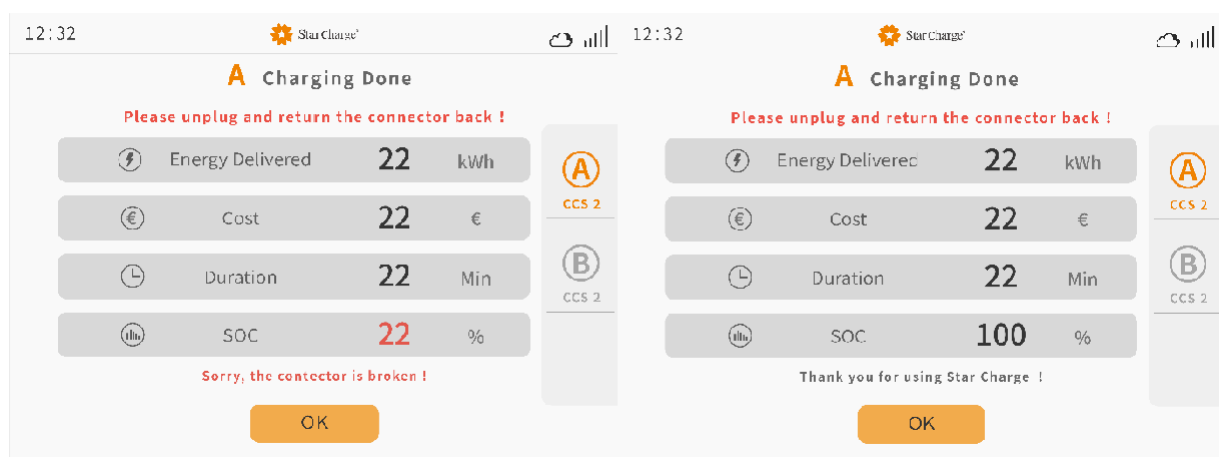


FIG. 3-13 Interface of abnormal completion of charging

FIG. 3-14 Interface of normal charging completion

Step 7: Unplug the charging connector from the vehicle, reposition it in the Charging connector slot.

End

4 Trouble shooting

When the EVSE is abnormal, please troubleshoot according to the following tips. If the fault cannot be eliminated, please contact your local service partner or contact the product manufacturer by referring to the <Customer Service> section.

Fault	Possible causes and Solutions
Power LED is off	● no power supply ● Please check whether the upper switch of EVSE is closed. If not, please close it. ● Please contact installation or operation personnel.
The LED status light is red	● Failure of EVSE ● Please check whether the emergency stop button is pressed. If it is pressed, please turn it out according to the prompt. ● Please check that the operating door is closed correctly. If not, close it. ● Please contact operation and maintenance personnel.
The screen shows that the Charging connector is not connected	● The charging connector is not properly plugged in, please reconnect the charging connector. ● There is a foreign body in the charging connector, please clean up after the power is cut off and try again. ● Communication failures, please contact operation and maintenance personnel.
The screen display device is offline	● Communication failures, please confirm the site signal status, if the signal is not good, please optimize the signal environment. ● Please contact operation and maintenance personnel.

Table 4 Troubleshooting

5 Routine maintenance

The following table is the recommended maintenance cycle. According to the environment of the country where the EVSE is located and relevant laws and regulations, the cycle needs to be changed. For details, please refer to the "Titan 180 Premium Maintenance Manual".

Inspection item	Period	Treating method
Fan	Every month	Clean
Dust-proof cotton	Every quarter	Change
Charging connector	Every month	Maintenance
Module communication	Every month	Maintenance
Secondary line check	Every quarter	Fasten
Emergency stop function check	Every month	Test
Dust inspection of control board	Every month	Maintenance and Clean

Table 5 Maintenance schedule

6 Customer service

6.1 Preparation

If you have any questions or problems, please contact the company responsible for performing the electrical installation.

Before contacting Customer Service:

- Check the troubleshooting measures in the Troubleshooting section of this manual.
- Check the troubleshooting measures in the Vehicle Manufacturer's manual.
- Record the model and serial number of the device (the nameplate of the device).

6.2 Contact Information

Company address: No.39 Longhui Road, Wujin District, Changzhou, Jiangsu, China

Website: <http://www.starcharge.com>

Company E-mail: starcharge@wanbangauto.com

Customer service: +86 400 828 0768

