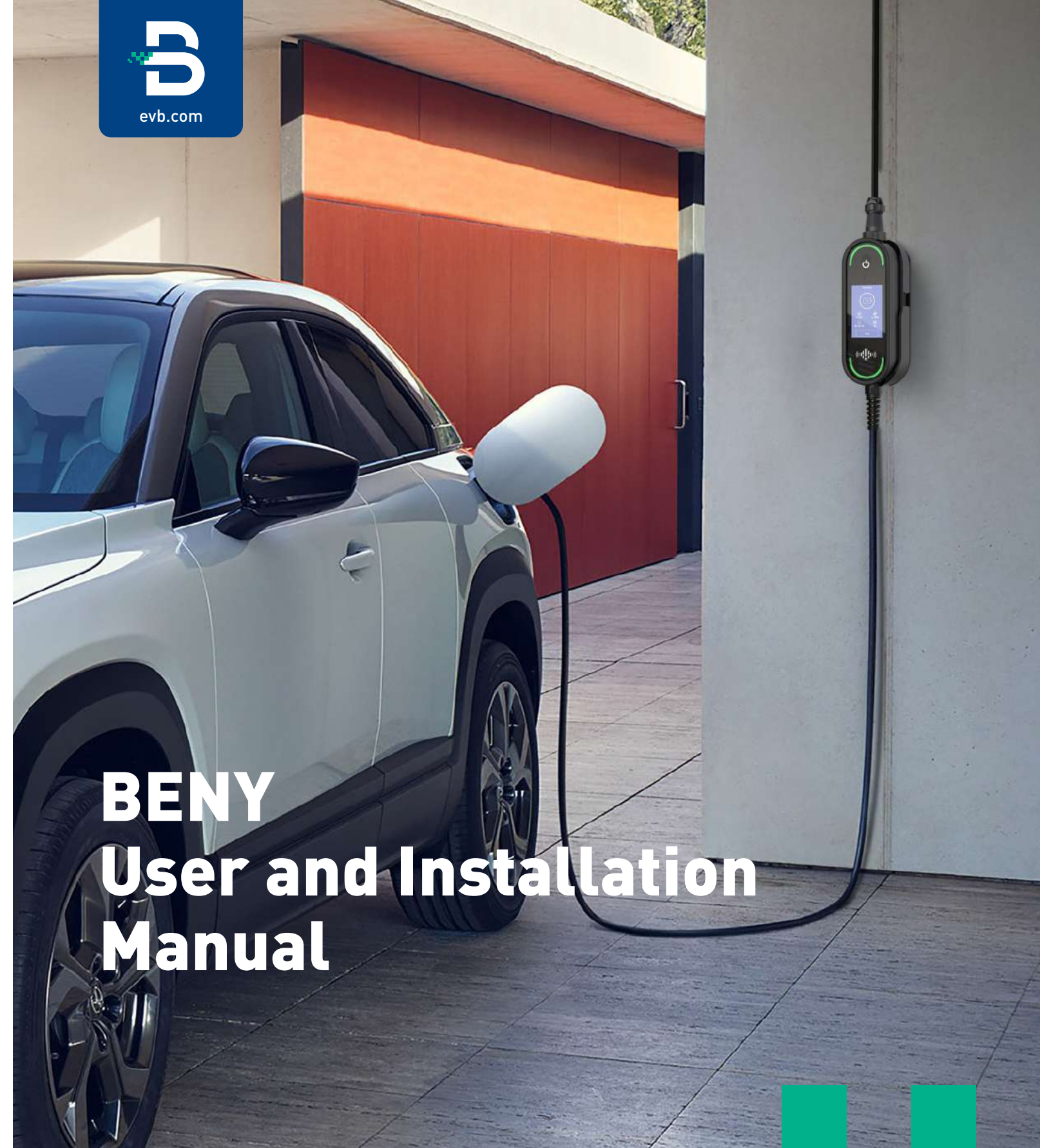




BENY User and Installation Manual

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⚠️ If the models and specifications in this product catalogue change due to product updates, we will not provide prior notification.



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ZBENY

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1. Safety Information

Thank you for purchasing and using the Type 2 EV Charger. This document contains important instructions and warnings that must be observed in use and maintenance of this product. Please read this manual carefully before charging so that you can use the product correctly.

 Warning

- Read this mandatory document in its entirety before using the product.
- Supervision shall be provided when the product is used around children.
- Do not install or use the product near flammable, explosive, irritating or combustible materials, chemicals or steam.
- Use is only permitted within the range of specified operating parameters.
- If the product is defective, cracked, worn, broken or otherwise damaged or inoperable, stop using or do not use it.
- Do not attempt to disassemble, repair, tamper with, or modify the EV Charger. Contact use for any repairs or maintenance.
- Do not make contact with its terminals by sharp metal objects, such as wires, tools or needles.
- Do not fold violently or apply pressure on any part of the charger, or damage it with sharp objects.
- Do not insert any foreign matter into any part of the charger.
- Confirm whether your vehicle parameters match the charger before use, otherwise your vehicle may be damaged.

 Warning

- For the safe use of electricity, outdoor service on rainy days is not recommended.
- Do not immerse AC charger in water.
- Do not tread, pull, bend or bundle the cable.
- Do not drop the control box or put heavy objects on its surface.
- Do not keep the equipment working near any object that causes high temperature.
- Do not keep the equipment working in a vehicle or an enclosed space.
- Do not use the product at a temperature out of the range of -30°C to + 50°C.

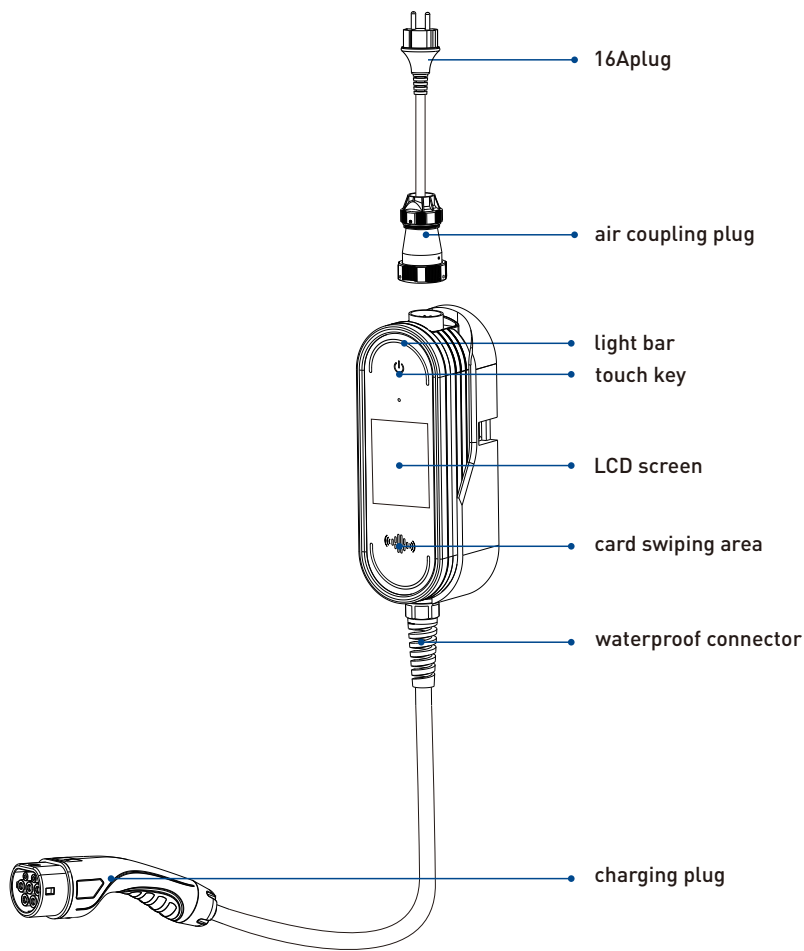
 Warning

- It is suitable for EVs only.
- This product must be fully grounded during use.
- When the AC charger is in use (the power plug is inserted into the socket or the vehicle connector is connected to the vehicle), it is prohibited to remove or install any components.
- Do not finger into the charging plug.
- This product does not contain user maintainable parts. Do not attempt to repair or maintain it yourself.
- If it does not work properly according to this manual, contact your dealer for repair or replacement.
- Do not store this product outside the ambient temperature of -40°C to 85°C. Lower or higher temperatures will damage the equipment.
- When the product is not in use, it should be stored in a safe environment with less vibration and impact.
- When not charging, seal the charging connector interface with a waterproof silicone cover to prevent rain/moisture from entering and causing patina.

2. Product Description

The charger is designed according to IEC 62752 and IEC 61851-21-2, comprising a control box, a charging plug and a plug. This is a portable/wall-mounted EV charging device. It is an efficient and portable EV charger which can be removed from charging piles and brought with vehicles when needed, with a power interface suiting to all kinds of plugs.

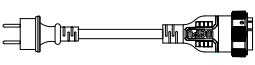
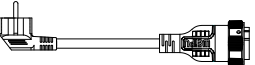
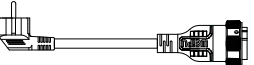
2.1. Appearance

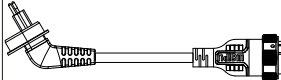
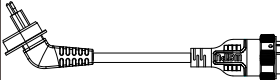
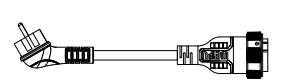
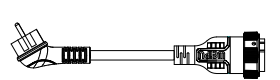


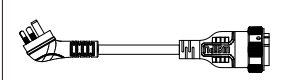
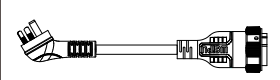
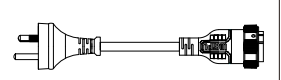
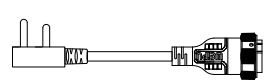
2.2. Product Specification

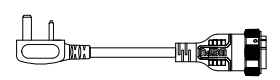
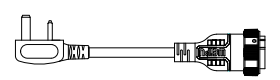
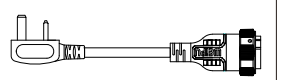
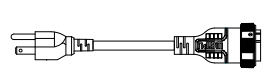
Parameter description	Parameter		
Model	BCPP-A2N-32	BCPP-AT2N-16	BCPP-AT2N-32
Standard	IEC 62752, IEC 61851-21-2		
Rated input/output voltage	AC230	AC400	AC400
Frequency	50Hz / 60Hz		
Rated current	32A	16A	32A
Standby power consumption	<2W		
Rated residual operating current (IΔn)	AC 30mA, DC 6mA		
Operating temperature	-30°C~50°C		
Storage temperature	-40°C~85°C		
Operating humidity	5%~95%		
Ingress protection (IP) rating	IP65		
Protection functions	Leakage Protection, Over Current Protection, Over Voltage Protection, Under Voltage Protection, Fire Protection, Anti-pressure Protection, Over Temperature Protection, Relay Adhesion Protection, Ground Protection, Lightning Protection, CP Signal Abnormal Protection		
Insulation resistance	>100MΩ		
Impulse withstand voltage	2.5KV		
Number of operating cycles	<10000		
Size of charging pile	304mm*106mm*89.5mm		
Altitude	<2000m		
Fire rating	UL94-V0		

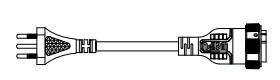
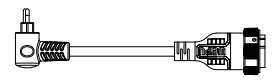
2.3. Plug Types

	EU	EU	EU	EU
				
Model Type	ZH-3	ZH-1A	ZH-1	ZH-1AN
Current/Voltage	16A/250V~	16A/250V~	16A/250V~	16A/250V~
Protection Degree (Disconnected state)	IP20	IP20	IP20	IP20
Protection Degree (Connected state)	IP65	IP65	IP65	IP65
Wire	H07RN-F 3G 2.5mm²	H07BZ5-F 3G 2.5mm²	H05VV-F 3G 2.5mm²	H07BZ5-F 3G 2.5mm²+2G 0.5mm²
Material	P.V.C	P.V.C	P.V.C	P.V.C

	EU	EU	EU	EU
				
Model Type	ZH-32AE	ZH-32AN	ZH-3E	ZH-3N
Current/Voltage	10A/250V~	10A/250V~	16A/250V~	16A/250V~
Protection Degree (Disconnected state)	IP20	IP20	IP20	IP20
Protection Degree (Connected state)	IP65	IP65	IP65	IP65
Wire	H07BZ5-F 3G 2.5mm ²	H07BZ5-F 3G 2.5mm ² +2G 0.5mm ²	H07BZ5-F 3G 2.5mm ²	H07BZ5-F 3G 2.5mm ² +2G 0.5mm ²
Material	P.V.C	P.V.C	P.V.C	P.V.C

	AU	AU	AU	ZA
				
Model Type	ZH-41AA	ZH-41AN	YP-39A	ZH-70A
Current/Voltage	10A/250V~	10A/250V~	20A/250V~	16A/250V~
Protection Degree (Disconnected state)	IP20	IP20	IP20	IP20
Protection Degree (Connected state)	IP65	IP65	IP65	IP65
Wire	H07BZ5-F 3G 2.5mm ²	H07BZ5-F 3G 2.5mm ² +2G 0.5mm ²	H05VV-F 3G 2.5mm ²	H07RN-F 3G 2.5mm ²
Material	P.V.C	P.V.C	P.V.C	P.V.C

	UK	UK	UK	USA
				
Model Type	ZH-61B	ZH-61BN	YP-61A	ZH-02
Current/Voltage	13A/250V~	13A/250V~	13A/250V~	15A/125V~
Protection Degree (Disconnected state)	IP20	IP20	IP20	IP20
Protection Degree (Connected state)	IP65	IP65	IP65	IP65
Wire	H07BZ5-F 3G 2.5mm ²	H07BZ5-F 3G 2.5mm ² +2G 0.5mm ²	H05VV-F 3G 2.5mm ²	SJ 14AWG*3C*2.08mm ²
Material	P.V.C	P.V.C	P.V.C	N.P.C-45P

	BRZ	BRZ
		
Model Type	ZH-72B	ZH-72BN
Current/Voltage	20A/250V~	20A/250V~
Protection Degree (Disconnected state)	IP20	IP20
Protection Degree (Connected state)	IP65	IP65
Wire	H07RN-F 3G 2.5mm ²	H07BZ5-F 3G 2.5mm ² +2G 0.5mm ²
Material	P.V.C	P.V.C

				
Model Type	TYPR285	TYPR281	TYPR235	TYPR231
Current Voltage	32A, 380-415V (3 phase)	32A, 200-250V (1 phase)	16A, 200/346-240/415V (3 phase)	16A, 200-250V (1 phase)
Protection Degree (Disconnected state)	IP44	IP44	IP44	IP44
Protection Degree (Connected state)	IP65	IP65	IP65	IP65
Wire	H07BZ5-F 5G 6mm ² +1G 0.75mm ²	H07BZ5-F 3G 6mm ² +1G 0.75mm ²	H07BZ5-F 5G 2.5mm ² +1G 0.75mm ²	H07BZ5-F 3G 2.5mm ² +1G 0.75mm ²
Material	nylon	nylon	nylon	nylon

		
Model Type	Three-phase cable/0.9M	Single-phase cable/0.9M
Current Voltage	32A/400V (3 phase)	32A, 230V (1 phase)
Protection Degree (Disconnected state)	IP44	IP44
Protection Degree (Connected state)	IP65	IP65
Wire	H07BZ5-F 5G 6mm ² +1*0.75mm ²	H07BZ5-F 3G 6mm ² +1*0.75mm ²

Note: When the industrial plug is perfectly connected to the charger, the IP rating of the connection part between the plug and charger can be IP67.

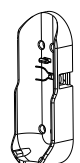
Note: The cables or plugs used with charger must be produced by Beny, and the use of cables or plugs and other components produced by other manufacturers is prohibited.

Note: Different countries support different charging devices, please only use charging devices approved for your country.

2.4. Features

- Poor grounding detection, as well as protections against over-voltage, under-voltage (U > 264V or U < 187V), over-current, over-temperature, abnormal CP signals, and EN standard-compliant protection against type A + DC 6mA leakage
- Operating temperature: -30°C~+50°C.
- IP65 protection, indoor and outdoor operating humidity range: 5%~95%.
- Temperature sensors in important areas of fire protection.
- Leakage current test ensures the normal operation of leakage protection.
- Automatic reset after troubleshooting, providing regular self-inspection of exception suppression when the charger stops working in case of an exception found. After the exception is eliminated, the charger will automatically come into operation.
- The product can be wall-mounted or portable. Air coupling plug available for all modes of connection.
- Start via RFID card or APP.
- Rated charging current depending on household load.
- Lightning protection device ensures personal safety.
- Certificate: CE/UKCA.
- LCD provides more intuitive and clear display.
- Touch screen control ensures more flexible and convenient operation.

2.5. Product list

①  EV charger	②  RFID card (optional)	③  Position template	④  8*40 socket head screws and anchorings
X1	X2	X1	X4
⑤  Base fastener	⑥  Base (optional)	 Wireless DLB(optional)	
X1	X1	X1	

Note: Card type supported by RFID: RF card ISO14443 Type A, MIFARE® ONE (MF1) card, with the read-write frequency of 13.56MHz±7K.

3. Installation

3.1. Preparation

⚠ Installation location

- Make sure that the parking position is within the range of charging cable.
- There is enough space for windings of charging cable, and the charging handle can be properly placed on one side of the base.
- In an enclosed garage, install it on one side of the charger slot.
- For outdoor installation, waterproof protection is recommended but not mandatory.
- Install in a well-ventilated space. Avoid installation in a closed box or near high-capacity appliances.

⚠ Installation height

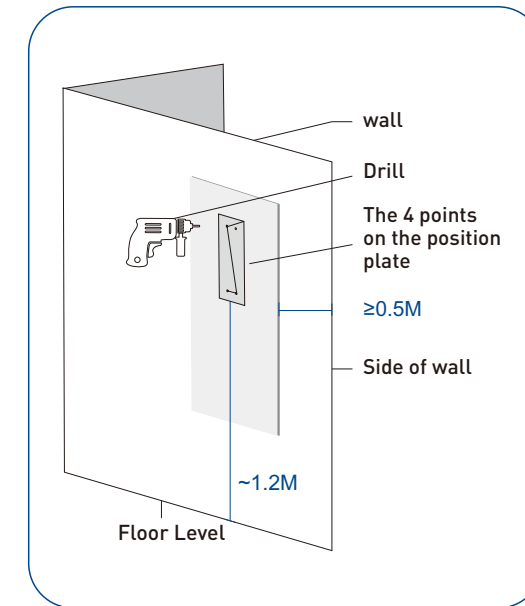
- Maximum height (indoor and outdoor): 60 in. (1.5 m)
- Recommended height: 47 in. (~ 1.2 m)
- Minimum outdoor height: 24 in. (0.6 m)
- Minimum internal height: 18 in. (0.45 m)

⚠ Maximum distance of receiving WiFi signals

- For optimal functioning, the wall-mounted connector should be connected to the local Wi-Fi network. To receive maximum signals, avoid far distance of installation as this may hinder the reception of Wi-Fi signals.

3.2. Installation procedure

● Step 1:



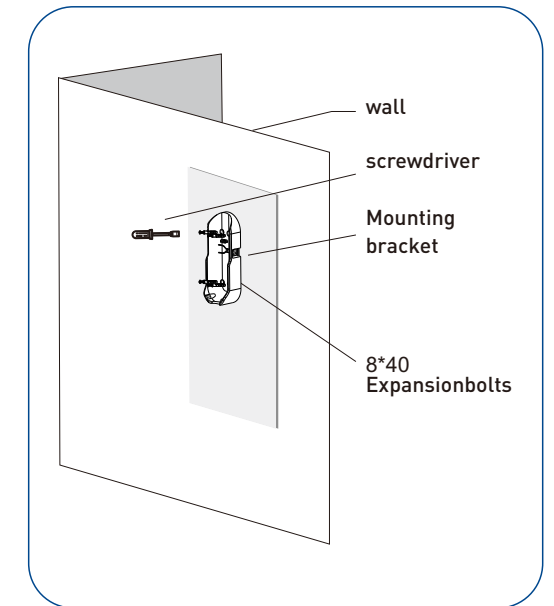
Step 1: Positioning

The bottom of the positioning plate is recommended to be 1.2 m above the ground. For installation near the wall edge, the positioning plate should be at a distance of greater than 0.5 m from the wall edge. Drill according to positioning paper.

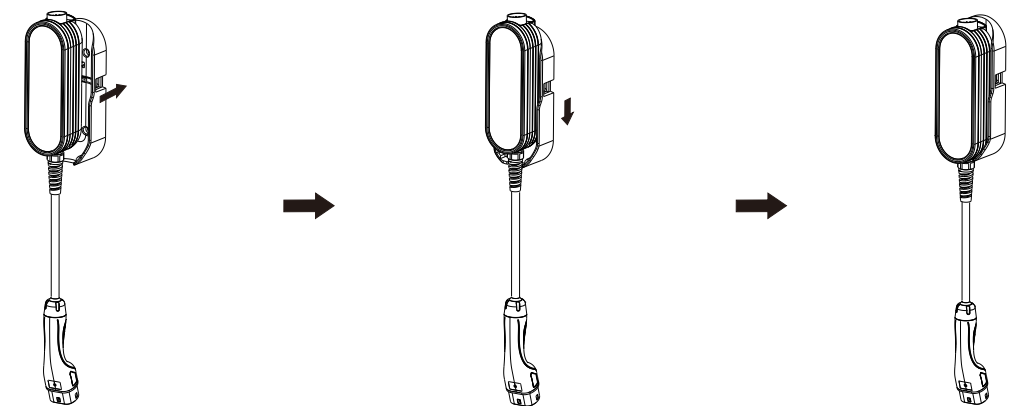
Step 2: Installing bracket

Drive the expansion bolt into the hole and secure the bracket to the wall with 8*40 screws.

● Step 2:



● Step 3:

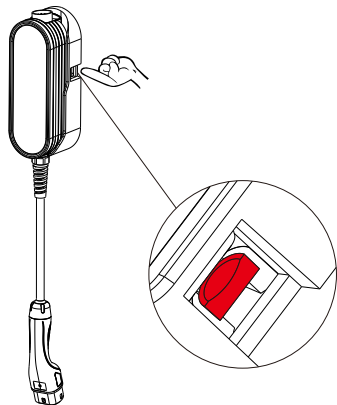


1.Put the charger to the mounting base.

2.Fix the charger like picture.

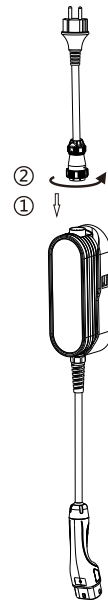
3.After correct fix, you will hear a click sound.

● Step 4:



Push the button and push up the charger to take off from the base.

● Step 5:



- ① Plug into the socket.
- ② Revolve the plug and tighten it to charge.

Warning:

- Do not dismantle or modify charging facilities and lines arbitrarily, otherwise, fire or electric shock may occur.
- In case of power failure or outage, maintenance can only be performed by professionals or authorized operation and maintenance personnel, otherwise electric shock may occur; maintenance with the device not disconnected from the power source is prohibited as this may cause electric shock.
- No combustible or flammable material is permitted around the equipment. Such material, if any, should be timely removed, otherwise there is risk of fire.

4. Charger Usage Steps

4.1. Check before powering ON

- Check and ensure that a proper circuit breaker is selected for the charger.
- Make sure there is no short circuit in the AC output live/neutral/ground wires of the charger.
- Make sure the charging gun is not connected to the vehicle.
- Make sure the circuit breaker is closed.

4.2. Charger Self-check

- Within about 10 seconds of powering ON, the charger will perform a self-check.
- During the self-check process, the white LED light of the charger is always ON, shows the self-check process.
- After the self-check is completed, observe the status of the LED indicator. Normal standby state: The white breathing light is ON. Equipment failure: red light is ON (see charger status table).

4.3. Charging Steps

- Insert the power plug into a fixed socket.
- Insert the charging gun into the vehicle.
- Make Charging Settings.
- Click to start charging on screen or swipe your card to charge.

4.4. Charging Finish

- When the EV is fully charged or the EV battery reaches the charging percentage threshold set by the EV itself, charging will stop automatically .
- To interrupt the charging process: press the stop button on the Z-BOX or the charger control box or use the RFID card to stop charging (when the charger is in the plug-and-play state, it can only be interrupted by clicking the stop button on the charger control box).
- Unplug the charging gun from the electric vehicle charging port.
- Unplug the power plug from the fixed electrical outlet.
- Keep charging equipment in a safe environment with less vibration and impact.

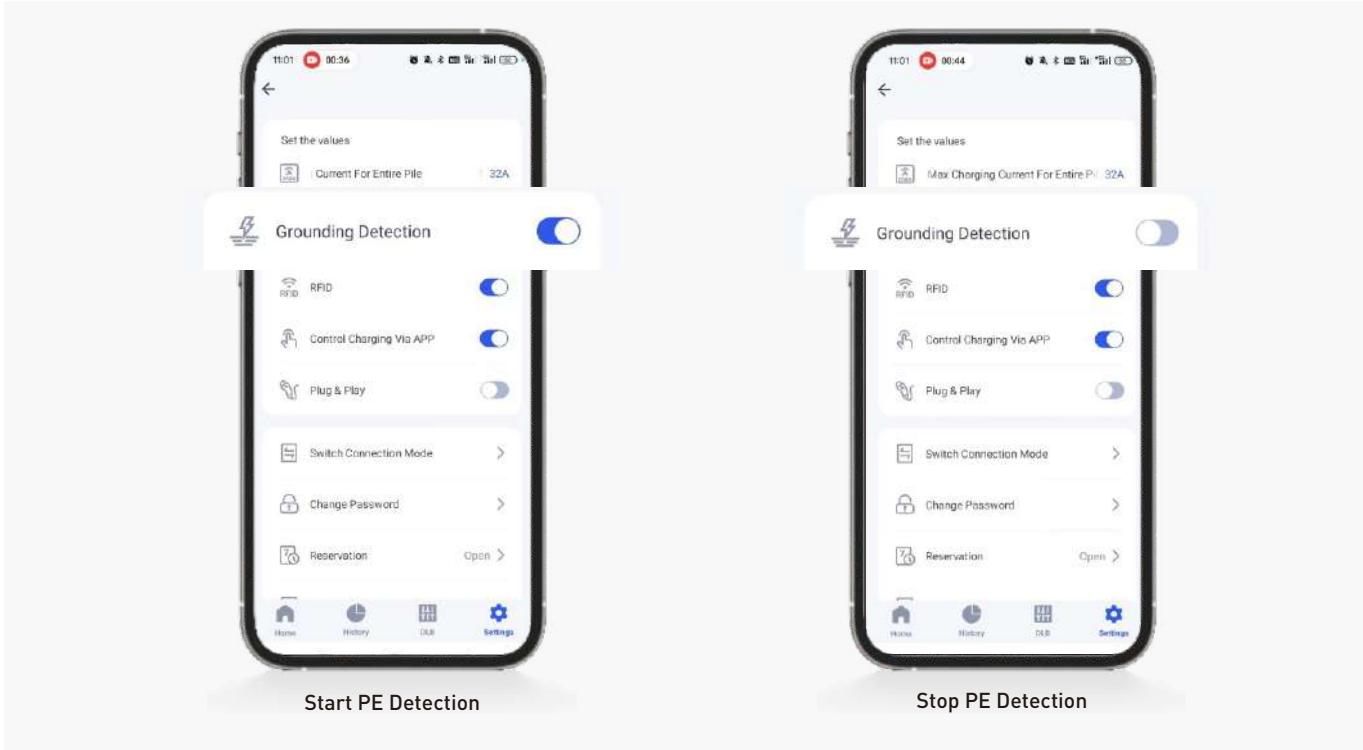
Note: Before turning ON the power, to ensure safety, you should connect one end of the power plug cord to one end of the pile body before turning on the power.

Note: Before use the charger, you must ensure that the power plug of the charger is directly connected to the fixed socket and that the charging gun plug is fully coupled with the electric vehicle charging socket. The use of any extension cord or adapter is prohibited.

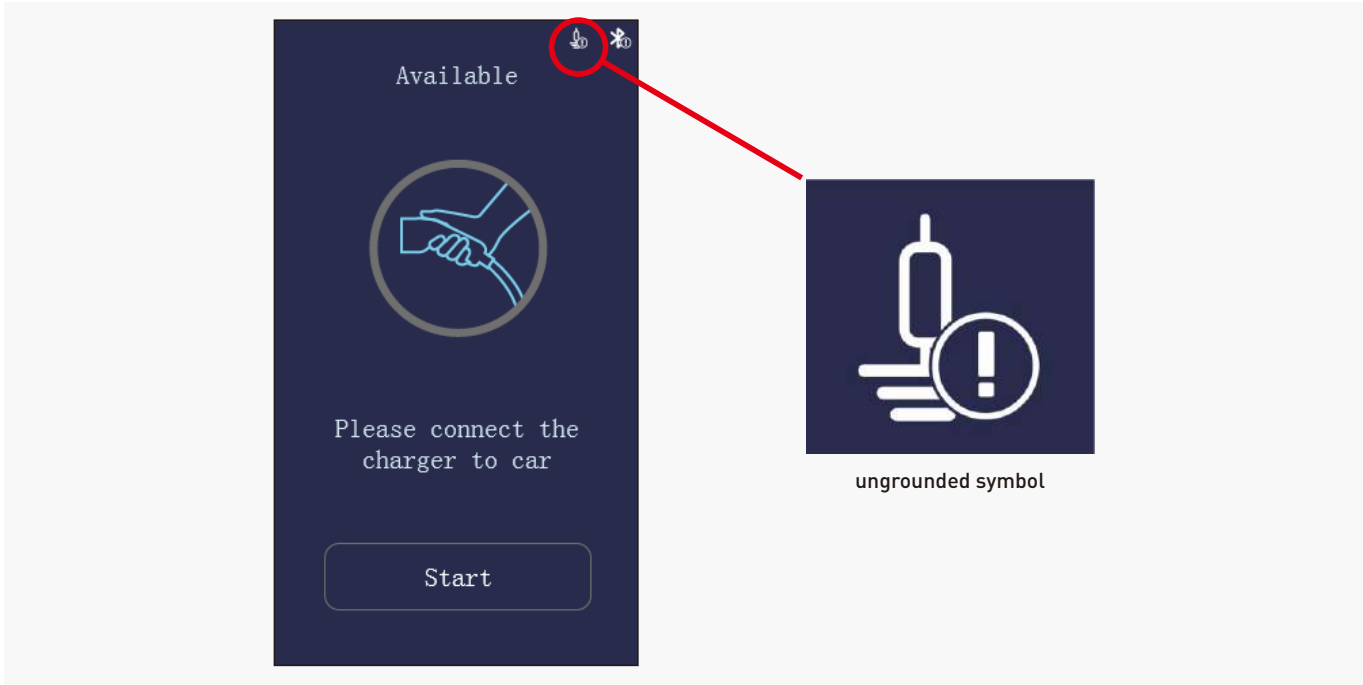
Note: If the charger still cannot be used after following the installation and usage instructions, please contact the agent or manufacturer for technical support in a timely manner.

5. How to start or stop PE detection

- This model supports turning on or off ground detection: open Z-BOX, enter the setting interface, click to turn on or off ground detection.
- It is not recommended to cancel the upstream PE detection function. Turning off ground PE detection may cause safety risks.

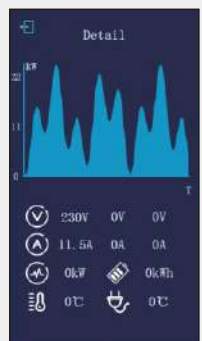


- When the grounding detection OFF and the power plug is connected to an ungrounded socket, an ungrounded symbol will appear on the display of charger.

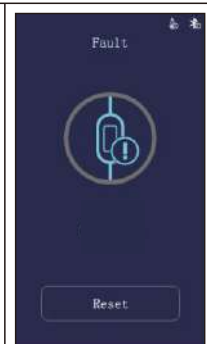


6. Operating Condition

Normal Status				
LED lamp status	Screen status	EV charger status	Fault description	Solutions
	Screen off	No power supply	No power supply	Check the power supply
		Charger Power ON self test		
		Standby		
		Charger is authorized, waiting for connection to the vehicle		
		Charger is connected to the vehicle, waiting for RFID card swiping or clicking Start		

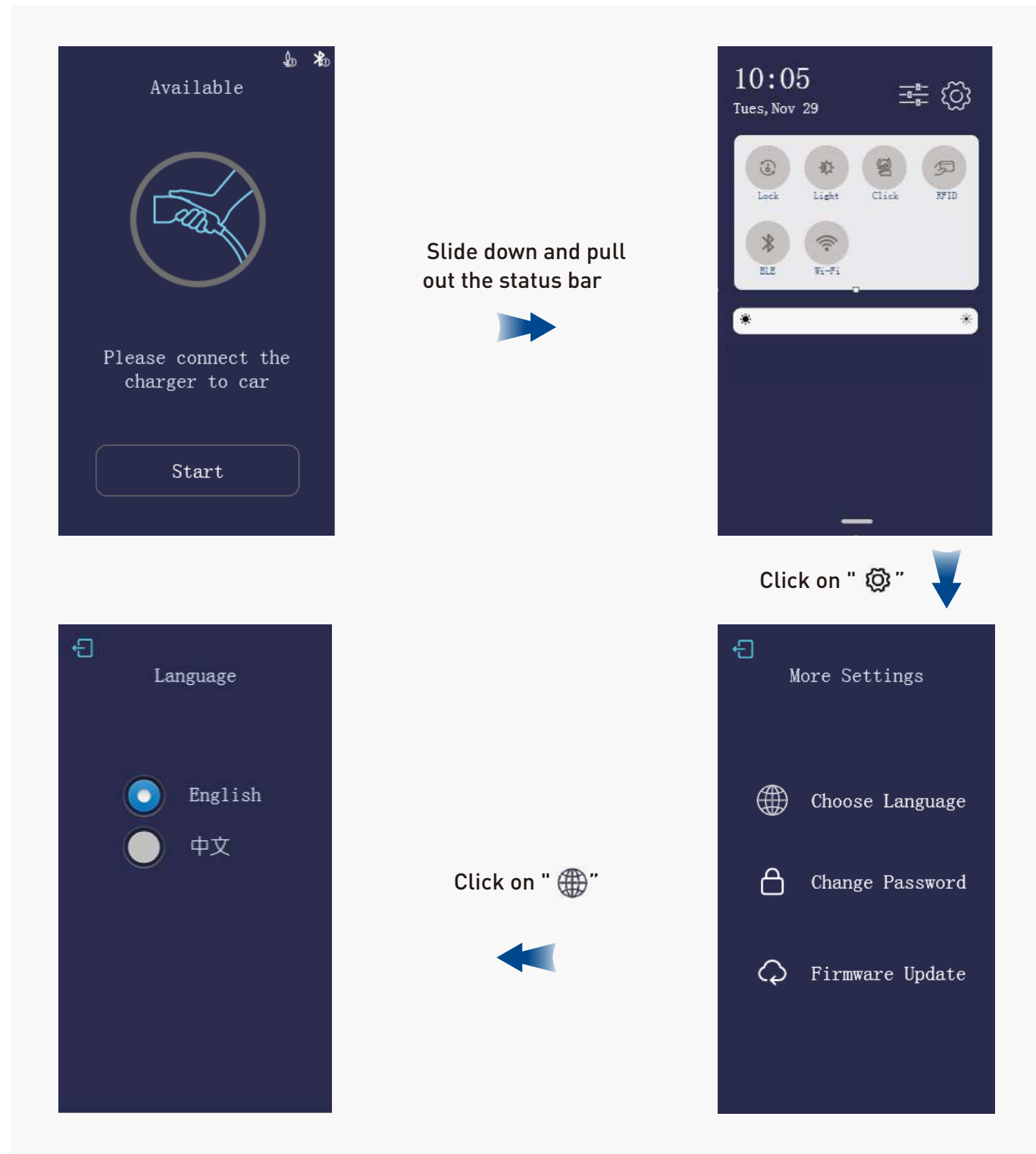
Normal Status				
LED lamp status	Screen status	EV charger status	Fault description	Solutions
		Charging		
		Charging completed		

Fault state				
LED lamp status	Screen status	EV charger status	Fault description	Solutions
		Abnormal grounding	The ground wire is not wired or the neutral wire is reversed	Check whether the grid connection and charger wiring is correct
		Leakage fault	Leakage	Check for leakage of charger connector or vehicle
		Over-voltage	Short circuit or unstable power supply	1. Check the power unit 2. Check the power supply wiring

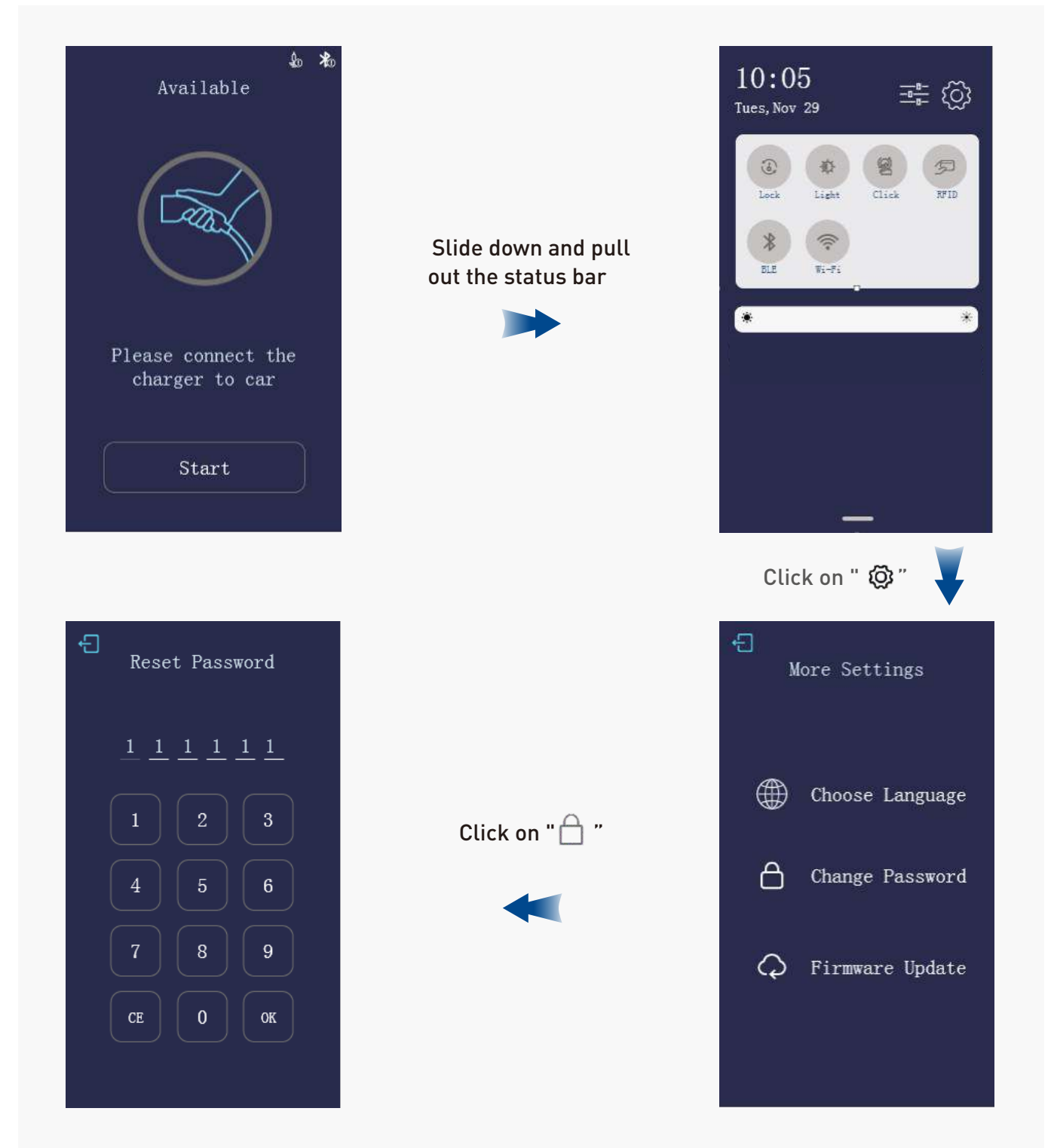
		Under-voltage	Power supply under voltage	1. Check the power unit 2. Check the power supply wiring
		Over-current	Possible short circuit	Arrange professionals for repair
		Over-temperature alarm	High temperature	1. Wait until the charger cools down 2. Make sure no loose connection of the charger terminal
		Abnormal CP signal	Loose connection between the charger and the vehicle	1. Check for water leakage of the charger connector 2. Make sure that the connector matches the vehicle
		Abnormal CC signal	Loose connection between the charger and the vehicle	Check for reliable charger connector
		DLB offline	Communication abnormality between external DLB and charger	1. Check whether the WIFI function of the EV charger is turned on normally 2. Check whether the connection between DLB and DLB wireless device is loose 3. Restart DLB
		DLB abnormality	Loose connection between DLB box and CT or CT not properly clamped	1. Check for correct position of CT 2. Check for reliable clamping of CT 3. Check for correct phase sequence of CT 4. Check for secure connection between CT and DLB box
		Relay Abnormal	Relay Adhesion Relay No Action	Emergency stop charging, restart charger to check if it is normal; If not, please contact the dealer

7. More Settings

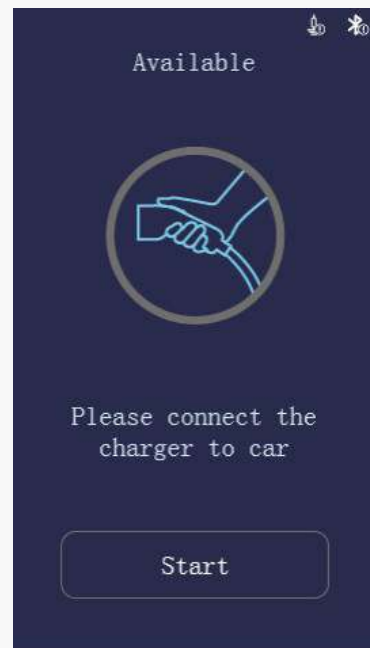
- Choosing a language



- Changing the password



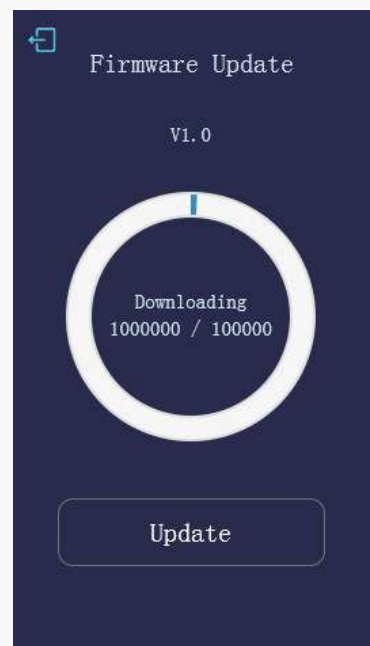
● Updating the firmware



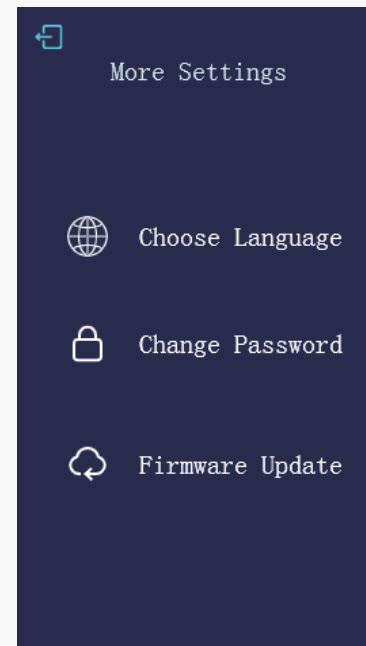
Slide down and pull out the status bar



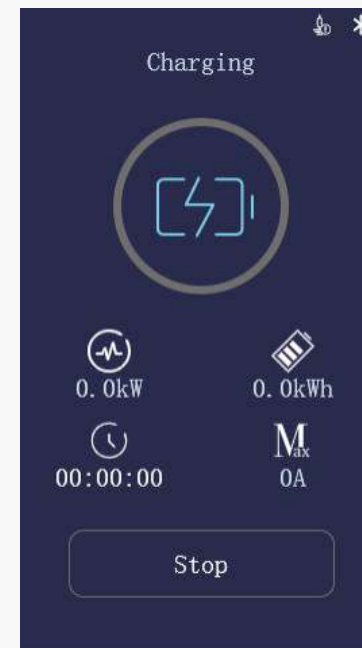
Click on "⚙️"



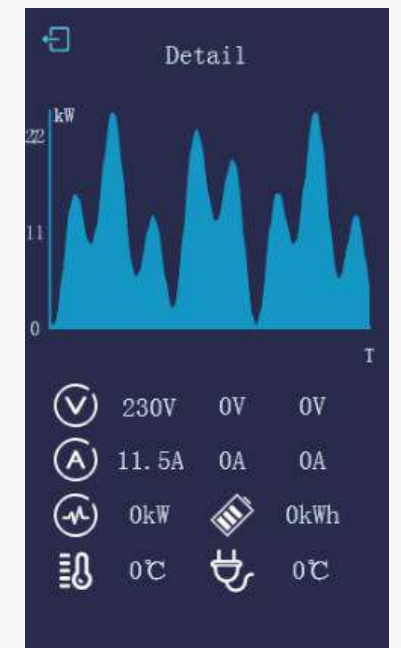
Click on "🔄"



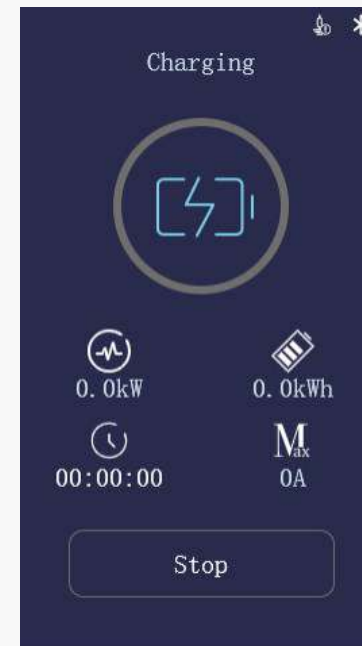
● Checking the charging state



Click on "[⚡]"



● Current limit

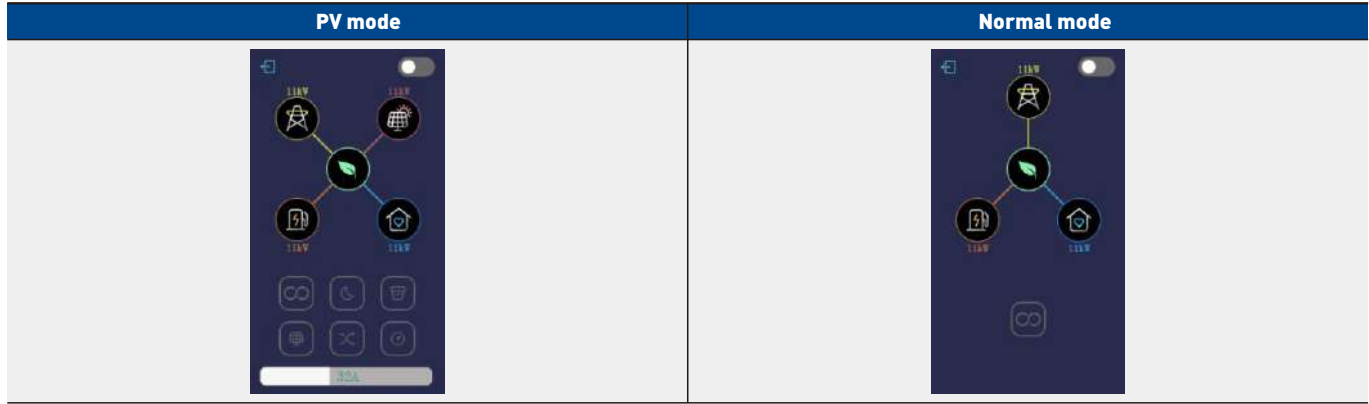


Click on "M_{ax}"



8. Instructions for Use of DLB

8.1. DLB interface



8.2. Icon description

	Extreme mode
	Night custom full speed mode
	DLB box
	PV mode
	Mixing mode
	Full speed mode

Note: DLB box is wirelessly connected. Refer to the DLB manual for details.

9. Warranty

In order to ensure the normal service life of charging piles and reduce the risks in use, maintenance must be done within the specified time by professionals with accredited safety maintenance tools.

- Two-year free warranty is provided for any damage or malfunction caused by quality problems from the date of production of the charger.
- Damage caused by operation failure, natural force majeure, incorrect installation or instructions for use is not covered by warranty.
- Repair can only be performed by professionals. If any problem occurs during installation or use, contact your dealer first.

10. APP Downloading

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