Shenzhen Southking Technology CO.,LTD
2nd / 4th Floor, Building 1 and 2nd Floor,Building 2， No. 596 Zhoushi Road, Jiuwei Community,
Hangcheng Street, Baoan District, Shenzhen, Guangdong, China

User Manual

Wallbox EV Charger

SK-EV40

Thank you for purchasing and using our products. Our AC Wallbox EV Charger can compatible with a wide range of electric vehicles such as BEV, HEV, PHEV, EREV, etc.....
Before using the EV Charger, please read and follow the instructions to use this product;

Note:
If you choose the EV charger is NORMAL VERSION , please refer to the NORMAL VERSION GUIDE for operation instructions and screen display.

If you choose the EV charger is SMART VERSION , please refer to the SMART VERSION GUIDE for operation instructions and screen display.

Table of Contents

Safety Precautions 03

Product Diagram 04

Installation Steps 05

Indicator lights 06

Product Parameters 06

Operation Instructions 07
- NORMAL VERSION GUIDE 07
- SMART VERSION GUIDE 08

Screen Display 11
- NORMAL VERSION GUIDE 11
- SMART VERSION GUIDE 13

Error Message 15

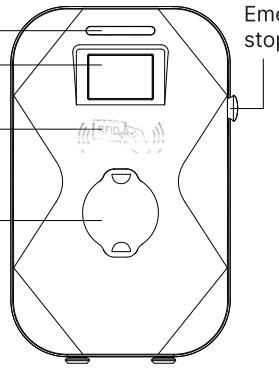
Terms and Conditions of Warranty 17

FCC Statement 18

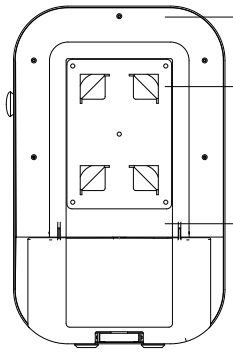
01/ Safety Precautions

- Please read the instructions carefully before use.
- Do not dismantle the product, Wrong disassembly can cause product damage, leakage.
- Do not put fingers into the charging connector when the power plug is still connecting to the power.
- Do not drop the charger or put heavy object on it.
- Do not use this product if the cable is frayed, has broken insulation, or displays any other signs of damage.
- Do not use this device with non-approved power adapters or other power components to avoid the risk of fire or electric shock.
- The installation of the electrical outlets for the charger should be done by licensed and qualified electrician.
- Do not leave children unsupervised around chargers or other power outlets.
- The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. Due to many places are not properly grounded, in the event of a ground fault, the charging pile can still charge the electric vehicle. However, the fault error indicator flashes 3 times every 20 minutes, and the display screen warns of abnormal charging, reminding the owner to pay attention to safety precautions.
- When using electric products, you need to fully plug into the socket so that metal plug fork can completely connect the socket. Otherwise, the socket may be burned due to poor contact.

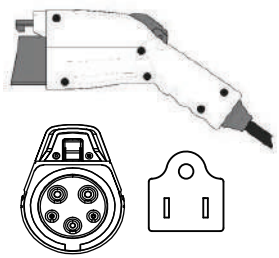
02/ Product Diagram



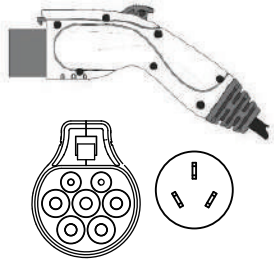
Control Box Front



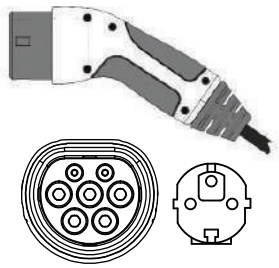
Control Box Back



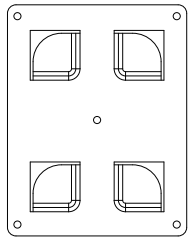
SAE Charge Coupler



GB/T Charge Coupler



IEC Charge Coupler

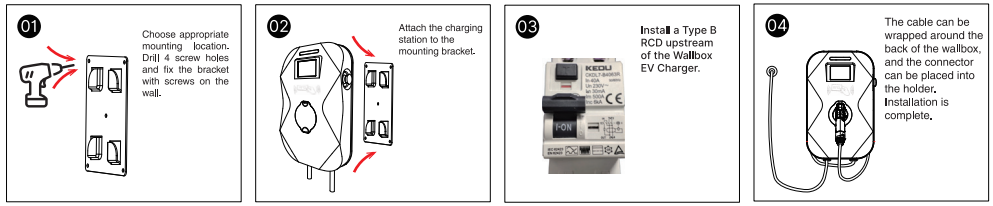


Wall-mounted fixture

03/ Installation Steps

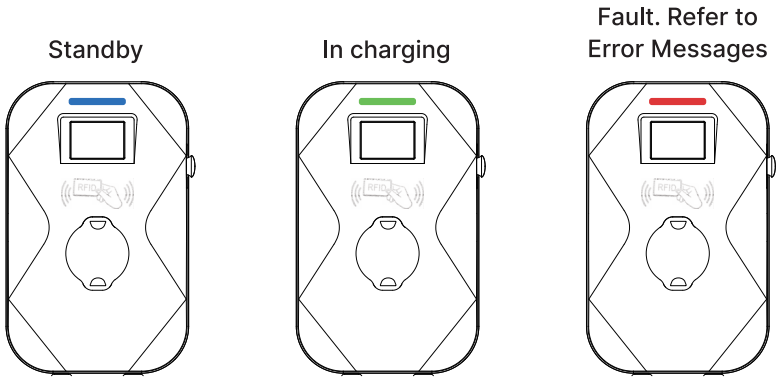
Installation notes:

- Disconnect electrical power prior to installing the wallbox.
- Please keep the wallbox in a clean and well-ventilated place.
- Wallbox should not be installed in places with severe shocks and flammable and explosive materials
- Please ensure that a Type B RCD is installed upstream of the wallbox EV Charger.



04/ Indicator lights

Make sure the wallbox is powered on, the status indicator will be switched on; blue light (STANDBY), green light (IN CHARGING) and red light (FAULT). The blue light (READY) will stay on in standby mode.



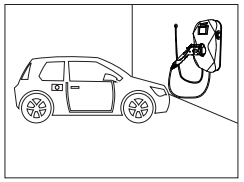
05/ Product Parameters

Product Name	Wall box EV Charger
Model NO.	SK-EV40 SK-EV40-16AS,SK-EV40-16AT, SK-EV40-32AS,SK-EV40-32AT,
Charging Standard	IEC 61851-1:2017
LCD Screen	3.5 Inch Touch Display
Phase	Single phase/Three phase
Rated Current	16A~40A Max.
Rated Power	Max.22KW
Input&Output Voltage	85-415V AC
Input Frequency	50Hz
Operating Temperature	-25°C~45°C
Insulation Resistance	>1000M2(DC500V)
Contact Resistance	0.5MΩ
Housing Fire Rating	UL94V-0
Length Of Cable	5 Meter(16.5feet)or customized
IP Degree	IP55

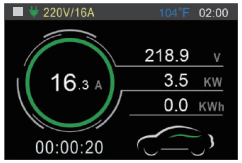
06/ Operation Instructions

NORMAL VERSION GUIDE

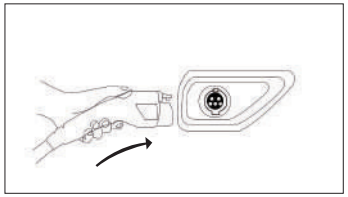
1. Make sure your wallbox is powered on , unpiug connector.



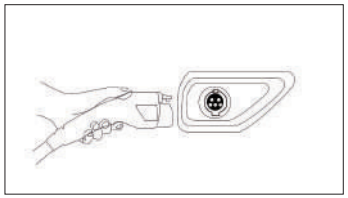
2.Long press the car sign which is displayed in the lower right pane of the screen to set current and charging time.



3.After set up, insert the connector into your vehicle's charging port.



4.Remove the connector from the EV after fully charged.



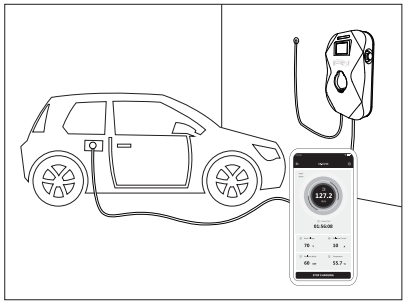
SMART VERSION GUIDE

With smart version, charging could be controlled either by 'APP' or 'RFID' card.

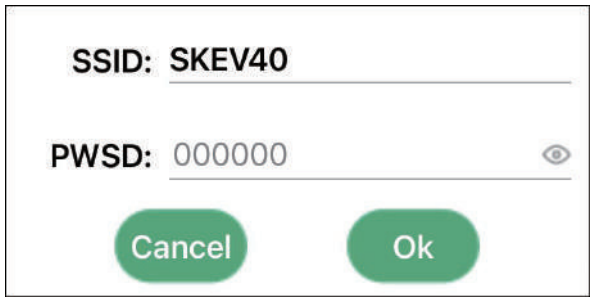
Smart 'APP' Guide

1.Download APP on the Google App Store or Apple App Store.

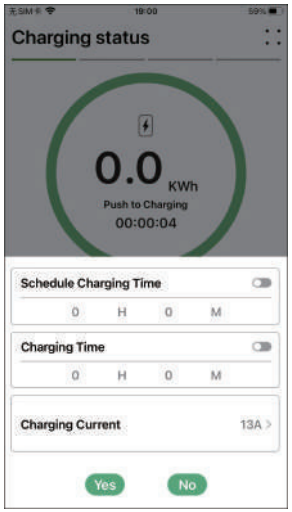
2.After wallbox is powered on, insert connector into your vehicle. Connect App with the wallbox.



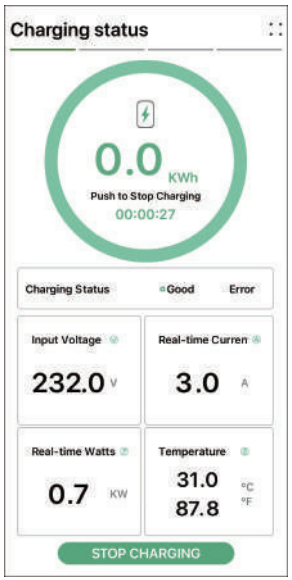
3.The initial password is '000000' (6 digitals of ZERO)



4.Tap 'Push to charging' , select 'Yes' to set the appropriate charging current and schedule charging time.



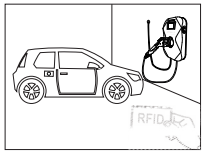
5.Start or stop the charging by APP remote control.



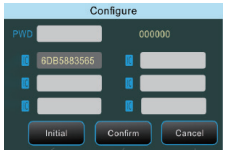
RFID Guide

Note: Any RFID card can work with this product. The first authorized RFID card will be the Main Controller to manage and edit RFID information.

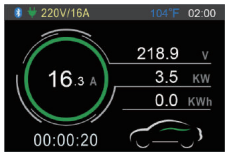
1.Make sure your wallbox is powered on, unplug connector.



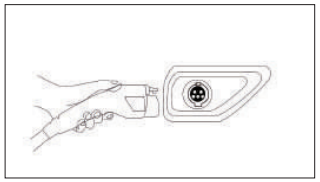
2.Manage RFID card information: Hold RFID card against the RFID reader area, screen displays card#. You need to press confirm to authorize the RFID card. The card# showing on the first line will be the main controller to access the RFID management system, PLEASE MAKE NOTE FOR THE MAIN RFID CARD and each card#.



3.Long press the car sign which is displayed in the lower right pane of the screen to set current and charging time.



4.After set up, insert the connector into your vehicle's charging port.

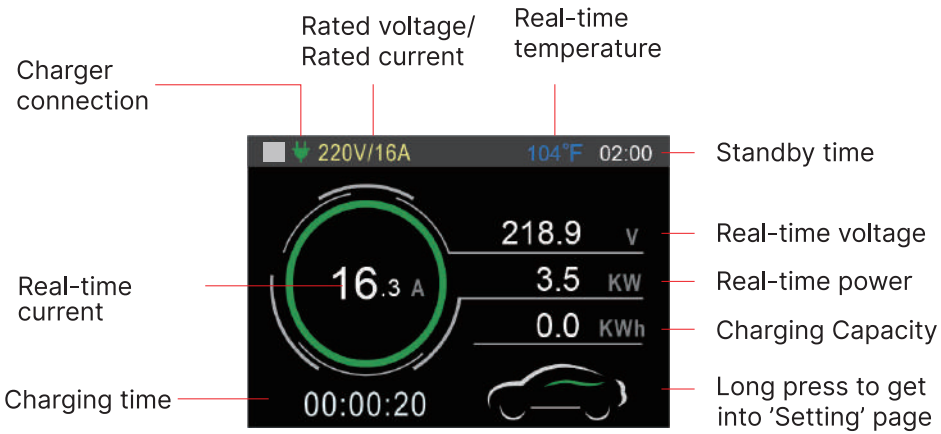


5.Swipe the RFID card to start or stop the charging.

07/ Screen Display

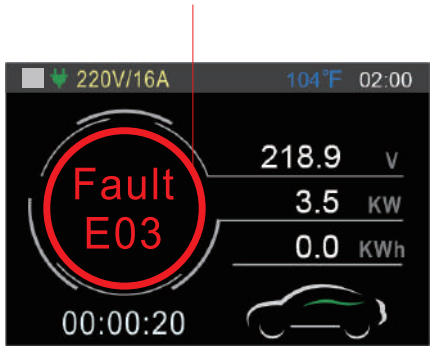
NORMAL VERSION GUIDE

Charging Status



01

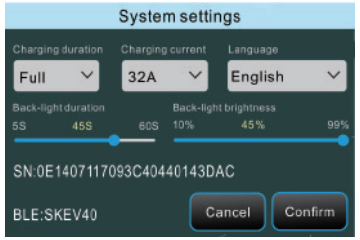
Fault (Error code refers to Error message)



02

Settings

Long press the bottom right of screen to enter into setting page



Note:
-The settings on the screen can only be set up before the connector is plugged into the vehicle.
-After confirmation of settings, connect charger with your vehicle.

Parameter configuration

1.The charging time: Full/1H/2H/4H/6H/8H/10H/12H; Default "Full"; When 1H/2H/4H/6H/8H/10H/12H is selected, the timing is the countdown; "full" is selected, the timing is the count;
The default duration will be restored if the time is not up after charging and the gun is pulled for exceed 300S;

2.Charging current: 6A/10A/13A/16A/20A/32A five, default 16A;

3.Language: English/French/German/Italian/Spanish 5 languages, Default English;

4.Backlight duration: 5s-60s; The default value is 30s.

5.Backlight brightness: 10%-99%; Default is 99%;

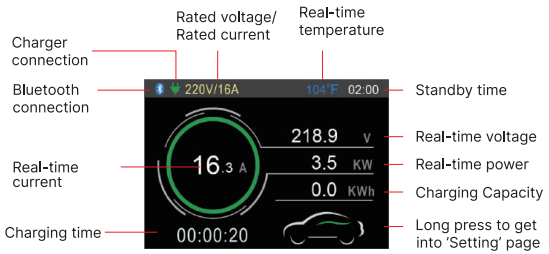
6.Adaptive voltage: Default AC110V; Switching from real-time voltage>175V to AC220V; Real time voltage < = 175v switch to AC110V;

*Item 1 is only confirmed but not saved, and items 2-5 will be saved after modification and confirmation;

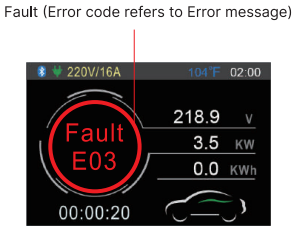
*The device name can only be modified through app or server command;

SMART VERSION GUIDE

Charging Status



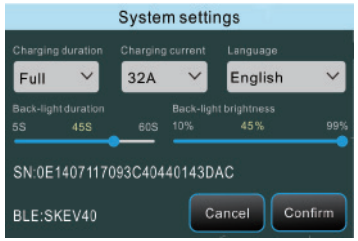
01



02

Settings

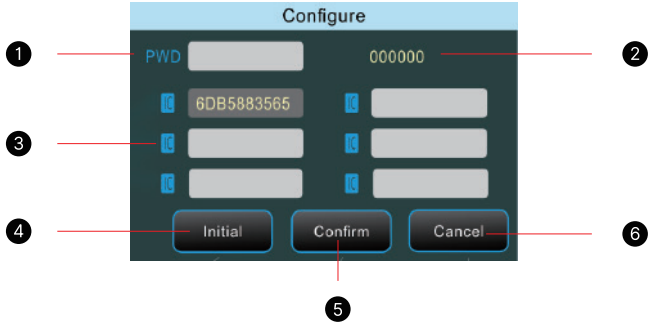
Long press the bottom right of screen to enter into setting page



Note:
-The settings on the screen can only be set up before the connector is plugged into the vehicle.
-After confirmation of settings, connect charger with your vehicle. Control start or stop charging by swiping authorized RFID card.
-The default Bluetooth name will be SKEV40. This can be edited on APP SSID section.

Configuration

Note: When you receive the product, you could swipe any RFID card to access this page. Once you confirm and authorize the main controller, you can only use main RFID card to access this page.



1. PWD: Input password
2. 000000: Current password for accessing Bluetooth APP.
-The initial password will be '000000', which is 6 digitals of zero.
-Password has to be 6 digitals. If you change the password, the rest of the information will be initialized.
3. IC: RFID card number. You could authorize maximum of 6 RFID card. Please make a label for each RFID card with the numbers on it.
-*The FIRST authorized RFID card will be the main controller. You have to use it for editing RFID card information. PLEASE PROPERLY KEEP IT.
4. Initial: Initialize everything.
5. Confirm: All the changes will be effective once you press 'confirm'.
6. Cancel: All the changes will be invalid if you press 'cancel'

08/ Error Message

Fault E00

Leakage protection

When the real-time leakage value exceeds 20mA(<5mS), it will cut off charging immediately.
*Pull out the charging connector to eliminate the E00 Alarm;

Fault E01

PE grounding protection

It appears when the EV Charger not grounded successfully,please make sure the connected socket is grounded, you can ask a professional electrician to test or try to reconnect the grounded socket. If it still happens, please contact the supplier for repair and do not disassemble the EV Charger by yourself.

Fault E02

Control Pilot fault protection

It appears when the CP voltage is less than 3V. Please check whether the connector is connected correctly and reliably.

Fault E03

Over-current protection

It appears when the input current exceeds the max-current (max-current= setting value*1.20).

Fault E04

Over-voltage protection

It appears when the input voltage exceeds 264V, it will automatically recover when input voltage is lower than the 253V.

Fault E05

Under-voltage protection

It appears when the input voltage is lower than 88V, it will automatically recover when input voltage is higher than the 93.5V.

Fault E06

High-temperature protection

When the temperature of the internal control box exceeds 85℃, over temperature protection will cut off power. It will recover when the temperature of the internal control box is lower than 75℃.

Fault E07

Communication failure protection

It appears when ATT7022 communication fails, it will automatically recover when it is normal.

Fault E08

Leakage detection protection

It appears when connection leakage self-check signal fails, please re-plug the connector and it will automatically recover when it is normal.

Fault E09

Emergency shutdown

It appears when the emergency stop button (on the right-hand side) is pressed. Rotate the button, it will bounce back and charger recovers automatically.

09/ Terms and Conditions of Warranty

The warranty coverage for one (1) year initiates from the date of purchase.
EV charger during warranty will exchange with new one or replace and fix the damage.
During the warranty, customer should provide video and picture of the problem, we shall confirm within 48 Hours (or it is to be considered replace approved), after confirme the problem, exchange new one or to repair.

The following conditions cannot be returned to the manufacturer for warranty:

- No proof of purchase can be provided.
- The warranty period specified by the manufacturer is exceeded.
- In case of repair, disassembly, or modification by unauthorized persons.
- Failure or damage caused by force majeure.
- The instructions for use, maintenance, and storage are not followed.
- Damage and malfunction caused by the mains power supply and a voltage not specified for use with the charger.

Upon discovery of any defective EV charger, please contact our Customer Service department for further instructions as to how to replace the defective unit.

10/ FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference.
(2)This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note:This equipment has been tested and found to comply with the limits for a class B digital device,pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates uses and can radiate radio frequency energy and,if not installed and used in accordance with the instructions,may cause harmful interference to radio communications.However,there is no guarantee that interference will not occur in a particular installation.if this eguipment does cause harmful interference to radio or television reception,which can be determined by turning the equipment off and on,the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement,This equipment should be installed and operated wih a minimum distance of 20 cm between the radiator and your body.