







# NO BATTERY INCLUDED & PROPRIETARY PATENT

## ■ SC-400

3 IN 1 Ultra Capacitor Jump Starter SC-400 Engine Start + Battery Analysis + Alternator Analysis

#### Parameter:

Colour screen: 3.5 inches

Output voltage: 12V

Peak current: 400~1000A

Working temperature: -40°C~+80°C

#### Product use and storage attentions

- (1) When using the jump starter, positive and negative polarity are reversely connected accidentally, jump starter won't damage substantially, it can be used normally after adjustment, but it can't be reversely connected frequently, or the lifetime of jump starter to decay rapidly.
- (2) It's better to use the DC voltage which not exceeding the rated voltage to charge super capacitor jump starter, avoiding to use AC to charge jump starter.
- (3) We recommend that use the direct current to charge super capacitor jump starter, because jump starter will heat up during the AC circuit or high-frequency charging and discharging, which will cause the lifetime decay rapidly.
- (4) Jump starter should be protected from moisture during transport or storage. The storage temperature between -30°C to 50°C, the relative humidity should be less than 60%, and the maximum humidity should not be more than 85%, otherwise the capacitor will deteriorate in moisture or rust.

### ATTENTION

- 1. Warning—May produce explosive gases
  - a. There may be danger in the area around the lead-acid battery. The battery generates explosive gas during normal operation.
  - b. Therefore, please be sure to read and strictly follow the user manual below each time before using the super capacitor quick starter.
  - c. The equipment of this product cannot be used by children or the elderly. Please avoid children playing with this product as a toy.
- 2. Please read the user manual carefully to understand the manufacturer's specific instructions and instructions for the iump start procedure.
- 3. Precautions before quick jump start; pull up the handbrake to select neutral or "parking" gear position.
- 4. Ensure all electrical control system accessories are turned off before attempting to jump start.
- 5. To reduce the risk of battery explosion, please follow this manual and the instructions on the battery.
- 6. Do not smoke or allow sparks or open flames around the battery or engine to prevent accidents.
- 7. Please do not expose the super capacitor quick starter to use in wet, high temperature, rainy or heavy snow environment.
- 8. Please avoid direct sunlight.
- 9. Please use recommended or supplied accessories by the manufacturer! Avoid the risk of fire, electric shock or personal injury.
- 10. Please do not use batteries with a voltage of more than 12V that do not match the rated output to avoid damage to the device.
- 11. Please do not use the super capacitor quick starter in a closed or ventilated environment.
- 12. Please do not use the super capacitor quick starter with broken line. If the wire is damaged, please scrap the starter.
- 13. Do not use this starter if it has been hit hard, dropped or suffered any damage.



- 14. Please do not disassemble the starter. If maintenance or repair is required, please go to a qualified repair site or local dealer. Improper disassembly and installation can cause electric shock or fire.
- 15. The test of starting times of this product is car displacement less than 3.0L

Important note: Please don't use cables other than the DC output cables supplied with the device, and don't use extension cables to avoid damage to the starter that is not covered by the warranty.

Note: This device has built-in positive and negative electrode error protection circuits, but please try to avoid contact and reverse connection of the two electrode clips

# Instructions for starting the car

#### **Application scenarios**

- A. When the car doesn't start for a long time, the residual power of the car battery is too low to start the car:
- B. When the weather temperature is too low, causing the car to be frozen and unable to start;
- C. When the car battery exceeds its lifetime and the stored capacity is too low; the car can not start normally;
- D. When the car battery is damaged or the alternator is faulty; the car can not start normally

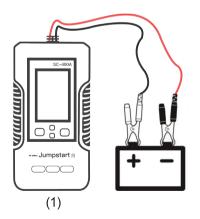
When the above situation is encountered, super capacitor jump starter SC-400 will provide power to assist in starting the car. The specific operation steps are as follows:

#### (1) Charge jump starter

Connect the red clamp to the positive pole (+) and the black clamp to the negative pole(-) of the battery. The connection method as following: Picture (1)

At this time, the battery will automatically charge jump starter. When the battery is connected to jump starter, the charging state will automatically turn on and can't be turned off. The charging state as below:

Picture (2)





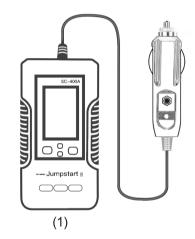
Jump starter can be charged with the residual power of the battery on the car that needs to be used for auxiliary ignition, or jump starter can be charged with another normal car battery. The speed of charging depends on the voltage and current output of the rechargeable battery. The greater the current and voltage output of a rechargeable battery, the faster it can be charged, and the less time it takes to fully charge. Kindly noted the voltage should not more than 16V, and current should not be lower than 3A. it can be fully charged in 15 seconds when charging current is more than 3A, Otherwise, the lower the charging current and the lower the voltage, the longer time it will take to charge full.

#### (2) Car cigarette lighter charging

Car cigarette lighter can be connected to charge jump starter too.the connection charging method as follows: Picture (1)

#### (3) Car ignition start

When jump starter is fully charged, as shown in the figure below: Picture (2)

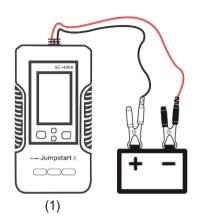


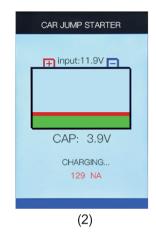


Tip: This kind of charging speed is slow, the output voltage of the cigarette lighter is low, the output current is small, the charging time is long, the user experience effect is poor, and it is also easy to cause damage to the cigarette lighter. It is suggested that charging the starting-power supply with less or no cigarette lighter in a non-essential time.

Connect the red clamp to the positive pole (+) and the black clamp to the negative pole (-) of the battery. The connection method is as follows: Picture (1)

If the power is insufficient after starting jump starter repeatedly, the screen will prompt that the power is too low. please charge it. The prompt status is shown in the following figure: Picture (2)





Select the start mode. There are two modes. The first is instant start START . This mode is suitable for two person to operate. One person turns on jump starter (press START), the other person starts the car synchronously after hearing the start prompt sound; the second way is start with a 10-second delay ( SARI ). This mode is suitable for one-person operation. When the delay 10-second button is turned on (press start), there is a 10-second delay to start, in order to ensure that the operator has enough time to enter the driving position and do the preparations for starting the car, when hearing the start prompt's sound to start the car:

# Device language/ function switching

#### Language switching

When the power is turning on, click the menu/up and down button enter the menu, then press the menu/up and down button to select the desired language, then press the "OK" button oK the interface switches to the selected language.

As same as the language switching, select the function menu through the menu/up and down button on to enter the operation interface, press the corresponding operation interface to complete the operation.

## Car Battery Inspection

Following the point 2 in (2) to switch the operation. Select the battery detection function of the confirmand enter the interface, there will be a text prompt.

Make sure polaritys are connected correctly, press the red button operation to prompt a 3-second countdown meanwhile the buzzer sounds three times, then enter the battery detection that show real-time data, as shown in the following figure:

Important noted: This function must be ensure that the voltage of jump starter is significantly different from the voltage of the car battery. and the voltage of the battery can not be lower than the voltage of jump starter, jump starter can detect the car battery: otherwise jump starter will point out: "capacity of car battery is close to jump starter, failed detected".



## Car alternator automatic detect function

When the car is successfully started by jump starter, jump starter will automatically detect the performance of the car battery and car alternator, and display testing data. This function can better determine the source of the fault that the car can't start.