

**suaoki**  
**ICS4+ 6V/12V**

Car Battery Charger

User Manual

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Thank you for choosing Suaoki.

## About ICS4+






The ICS4+ is designed for charging all types of 6V&12V lead-acid and 12V lithium-ion batteries, including Wet, Gel, MF, AGM, and Lithium-ion batteries. It is suitable for charging 12 to 120Ah batteries and for maintaining batteries of any capacities.

Before using the charger, please carefully read the battery manufacturer's specific precautions and recommended rates of charge for the battery. Make sure to determine the voltage and type of your vehicle's battery by referring to your owner's manual prior to charging.

## Charging Modes

The ICS4+ has multiple modes, all 9 together. Some charging modes must be selected manually. It is important to understand the differences and purpose of each mode before use. This way, you could select the appropriate charging mode for your battery before use.




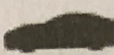





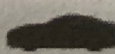




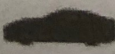
### Manual Selection



-  Battery Type Selection Button: SLA (Wet, MF, GEL, Flooded and VRLA),  AGM (EFB), LiON (LiFePO4)
-  Mode Button:  SLOW(1A),  FAST(4A)






### Auto Selection

Charging Voltage: 6V, 12V


Battery Type & Mode	Explanation
Pon	In Standby mode, the charger is connected to AC supply but not to the car battery. The charger is not charging under this mode.
	No Power

12V	SLA 12V  FAST	<p>For charging 12-volt Wet Cell, Gel Cell, and Maintenance-Free batteries. Press BATTERY TYPE SELECTION button  after plug in and toggle until SLA icon shows on LCD screen. Press MODE button  to toggle until  appears on LCD.</p>
	14.4V   4.0A   2-120Ah Batteries	
	SLA 12V  SLOW	<p>For charging 12-volt Wet Cell, Gel Cell, and Maintenance-Free batteries. Press BATTERY TYPE SELECTION button  after plug in and toggle until SLA icon shows on LCD screen. Press MODE button  to toggle until  appears on LCD.</p>
14.4V   1.0A   2-35Ah Batteries		
 AGM 12V  FAST	<p>For charging 12-volt batteries in cold temperatures (winter mode) below 50°F (10°C) on  AGM &amp; EFB batteries. Press BATTERY TYPE SELECTION button  after plug in and toggle to  AGM icons displays on LCD, Press Mode button  to toggle until  appears on LCD.</p>	
14.7V   4.0A   2-120Ah Batteries		

 AGM  
12V  
 SLOW

For charging 12-volt batteries in cold temperatures (winter mode) below 50°F (10°C) on  AGM & EFB batteries. Press BATTERY TYPE SELECTION button  after plug in and toggle to  AGM icons displays on LCD, Press Mode button  to toggle until  appears on LCD.

14.7V | 1.0A | 2-35Ah Batteries

LiON  
12V  
 FAST


For charging 12-volt lithium-ion batteries, including lithium iron phosphate. (LiFePO4)

14.4V | 4.0A | 2-120Ah Batteries

Con  
12V


An advanced battery conditioning mode for repairing and storing, old, idle, damaged, stratified or sulfated batteries. Automatically starts and initialize once it is determined necessary.

20V | 0.3A | Any Battery Capacity

SLA  
6V  
 SLOW

For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, and Maintenance-Free batteries.

7.2V | 1.0A | 2-35Ah Batteries

AGM  
6V  
 SLOW

For charging 6-volt Wet Cell, Gel Cell, Enhanced Flooded, and Maintenance-Free batteries.

7.3V | 1.0A | 2-35Ah Batteries

### Step 1

First, plug in and LCD will light up and display "Pon".

### Step 2

Press BATTERY TYPE SELECTION button until the correct battery type appears on LCD, and this could be show as SLA, AGM or LiON icon. Winter program and icon " ❁ " will appear when AGM is selected.

### Step 3

Press MODE button , choose the correct charging rate to charge your battery and this could be 1A Slow and 4A Fast respectively. For 6V car battery, you MUST choose 1A Slow. Otherwise, abnormal behavior will damage your 6V battery.

Please Note: This device has a special memory function. After you unplug the charger from AC source, it will retain the selected battery type choice and charging speed.

### Step 4

Attach the RED (+) and BLACK (-) clamps to the correct polarity of your vehicle battery.

(a) If the polarity is attached correctly, it would show vehicle battery voltage temporary, then it will display "Con" on LCD, this will indicate the charger is now entering self conditioning mode to repair car battery automatically.

(b) If you attach the RED (+) and BLACK (-) clamps to the wrong polarity, the LCD will display " Err " and stop operation.

**Note:** At 6V mode or if the car battery voltage reaches over 13.2V, battery Desulphation step would be skipped.

ICS4+ would detect car battery voltage automatically and select. If you have a 6V car battery, ICS4+ will automatically detect and select 6V charging voltage.