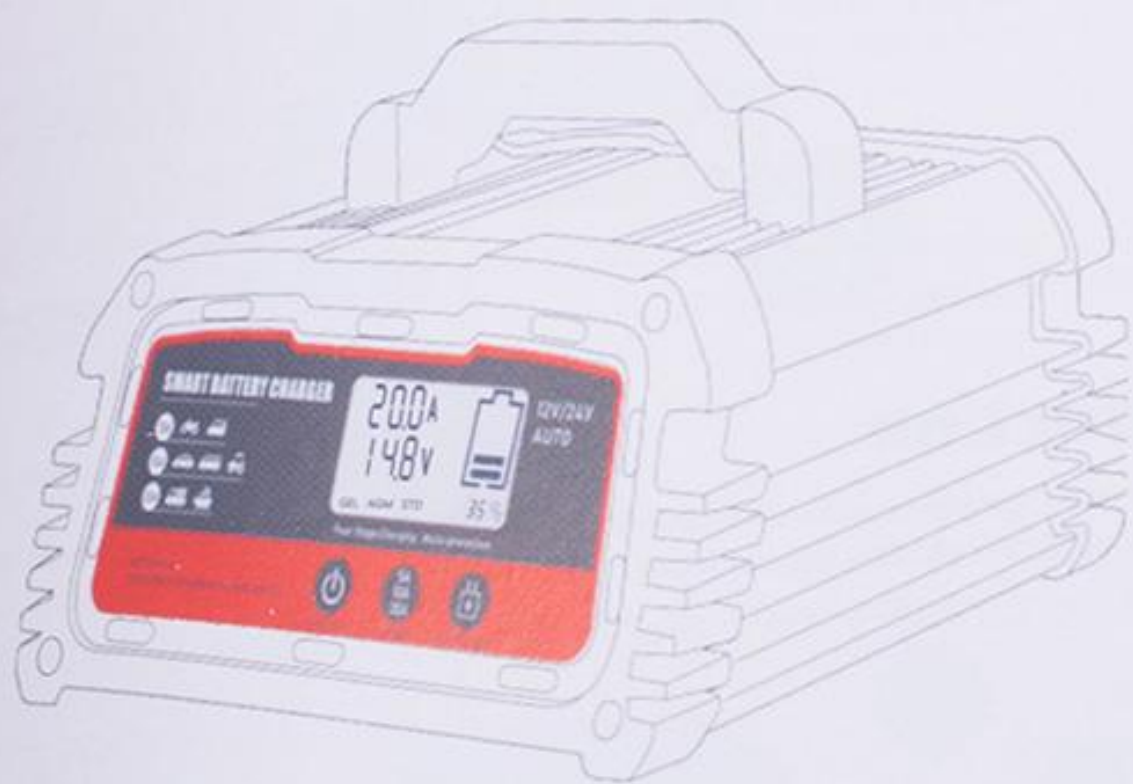


# Smart Battery Charger Description



# Package Contents



Package



Smart Battery Charger



User manual

## Product Description



## Instruction

1. Connect the power plug cord to the AC mains power grid (110V models connect to 110V power grids, 220V to 220V power grids).
2. Turn the power on to "1". The LCD display flashes to indicate the standby state.

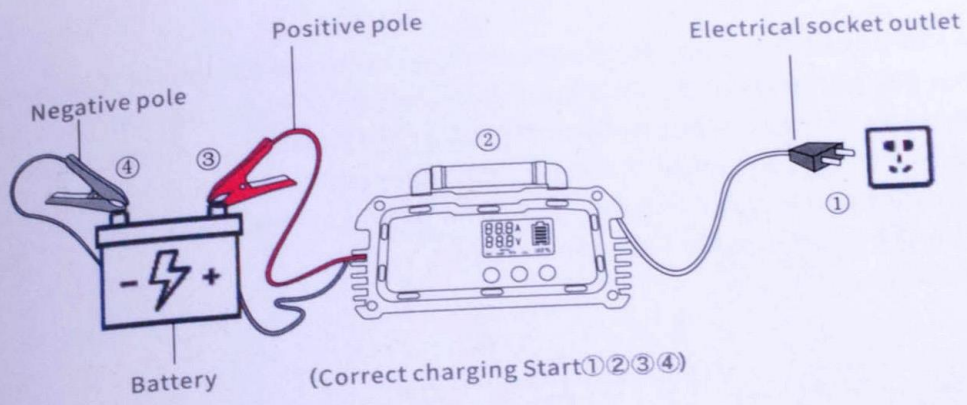


Screen flicker

3. Connect the red clamp wire of the charger to the "+" pole of the battery and the Black clamp wire to the "-" pole of the battery. Intelligent detection of battery voltage, remaining power, 12/24V.



LCD flashes

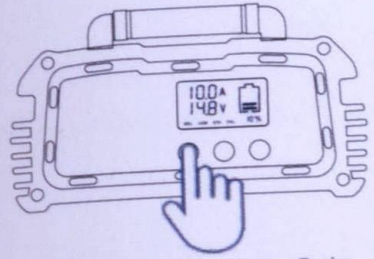


4. Intelligent temperature control fan: When the temperature inside the machine reaches 45 °C , the fan will automatically start to dissipate heat, enhancing the service life.



Intelligent fan

5. Start/stop button: after connecting the battery, press the start button to start charging. If the battery voltage is less than 12.8V for one minute, the keyboard machine will automatically start charging.



(Automatic cycle charging: Cycle mode)

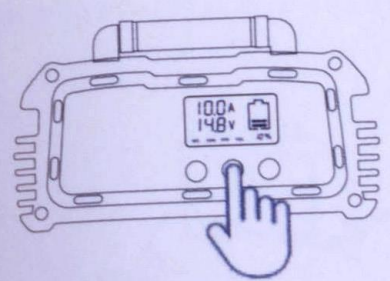


Charge start/stop button

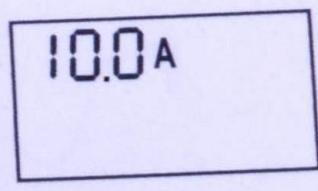
6. Charging current gear selection key: according to the size of the battery capacity and the type of the car to choose different current gear charging, 12V system has 5A/10A/20A three files can choose, 24V system has 5A/10A two gears can choose, You can switch gear while charging. It will indicate 10A gear for boot default.



current selection

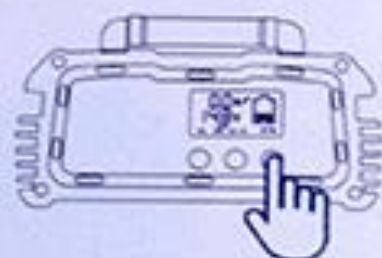


current selection



5A10A20A

8.Repair mode : Press and hold the button for 5 seconds to enter the repair mode. For some seriously over-d i schar ged batteries and vulcanized batteries, this function can be used to repair. The repair cycle is 24 hours. If the repair is not completed within 24 hours, you can restart and enter the next --A 24-hour repair mode. If the battery becomes too hot, it must be stopped. The repair work can be stopped by pressing the start-stop button during work. The two clips cannot be short-circuited in the repair mode. It can not repair 24V battery.



Smart Repair Mode



Intelligent repair mode



Repair mode start button

The repair process takes 24 hours

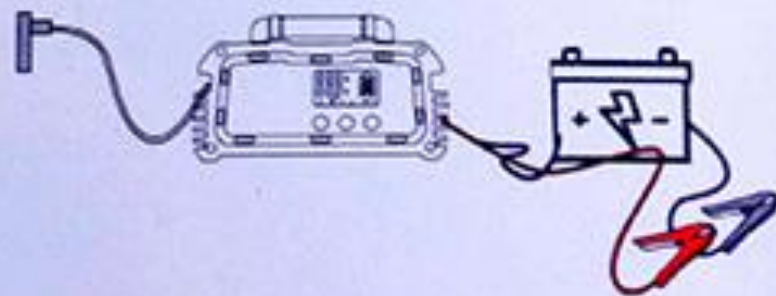
(Note: short circuit battery and open circuit battery can not be repaired, and the battery can not be connected to any discharge equipment during repair. It is strictly forbidden to repair the battery on the equipment)

## Application

Suitable for 12V, 24V 15AH-250AH motorcycles, cars, off-road vehicles, vans, SUVs, trucks, yachts, dry-charged batteries, maintenance-free batteries, ordinary batteries, AGM batteries, and other lead-acid batteries are compatible.

## Breakdown self check

- 1.Check whether the positive and negative terminals of the clip are properly connected to the battery.If the battery is not properly connected, it will not be able to start charging normally.
2. If the battery is connected and the screen is still flashing,check if the volt is higher than 12.8v, or you could press the start/stop button to charge the battery.
- 3.If your battery is under voltage, the battery cannot be started charging. The fourth button repair button can be selected. Press and hold for 5 seconds to start the repair function and repair the battery.



## Product Parameter

Input voltage	AC110V/AC220V $\pm$ 20V		
Frequency	50HZ/60HZ		
Output voltage	STD: 14.8V 29.6V		
	GEL: 14.8V 29.6V		
	AGM: 14.8V 29.6V		
Output current	12V(5A-10A-20A)		
	24V(5A-10A) Optional		
Peak power	AC-300W	Efficiency	85%
Appearance size	205*200*115MM		
Power wire length	130CM		
Output wire length	150CM		
Net weight	1.8KG		
Battery type	12V24V15AH-250AH STD battery / gel battery / AGM battery / EFB battery (lithium charging is prohibited)		

## Charging schedule

Charging current	Battery Capacity	The charging time
5A	15AH-50AH	4.5H-15H
10A	30AH-100AH	4.5H-15H
20A	60AH-200AH	4.5H-15H

# Performance Feature

1. Intelligent automatic identification: 12/24v battery auto identification .
2. One-press repair mode charging: battery under 8V can be intelligent charging repaired, can start in 0V (24 hours to stop repair).
3. Intelligent fan control: when the internal temperature of the machine reaches the set value, the fan will start the heat dissipation to prevent high temperature operation.
4. Digital display: digital display of the current voltage.
5. Short circuit protection: the charger will automatically shut down the output when an accidental short circuit occurs to the charger output.
6. Reverse connection protection: when the charger output positive, negative and battery positive, negative connection opposite, charger will automatically stop the output, and give a beeping alarm, after the correct connection alarm will automatically lift.
7. Automatic cycle charging (Cycle mode: If the battery voltage is lower than 12.8v, it will start to charge automatically )
8. Charging mode: constant current mode + constant voltage mode + floating charging mode + all-charging mode full stop.

## Announcements

- ※ Do not use as startup power.
- ※ Do not charge damaged batteries.
- ※ Do not use in humid, high temperature, flammable, explosive gas environment.
- ※ During the charging process of the battery, hydrogen will leak The working environment should be well ventilated so as not to cause an explosion.
- ※ Specifications are subject to change without prior notice.

## concept

This charger is professionally designed and produced according to 12V24V battery, such as lead acid battery, maintenance-free battery, AGM, EFB start-stop battery, etc., using intelligent microcomputer processing chip, self-developed software technology and advanced PWM pulse modulation technology. It has the advantages of small size, safe and convenient, high conversion rate, stable output current, large design capacity, long time full load operation, and so on. It is a new generation of green environmental protection charger. With short circuit protection, reverse connection protection, overheating protection, low voltage protection, stable, reliable and safe performance. Due to the use of pulse modulation charging, improve the battery charge rate and reduce the battery water loss rate to eliminate the battery charge heat, charge drum, the battery plate vulcanization damage to the minimum, greatly improve the battery life.