

6. If the charging time is more than 12 hours unattended, the power supply should be cut off, and charging for a long time is strictly prohibited!
7. This product should be protected from rain and explosion. During the charging process, the charger is strictly forbidden to cover, and the battery is strictly forbidden to be inverted and slanted. It should be placed upright. Keep away from open flames when charging. Keep flammable materials in a well-ventilated environment.
8. Before connecting or disconnecting the battery charger and the battery, you should disconnect the power first.

COMMON TROUBLESHOOTING

1. The screen does not display when the charger is connected to the battery
Reason: The positive and negative poles are connected incorrectly, the positive and negative pole clips are not properly clamped or the battery is out of power, and the clamps are not clamped.
Solution: first check whether the positive and negative poles of the battery clip are reversed, and use a multimeter to check whether the battery has voltage, and confirm that the positive and negative clamps are clamped firmly.
2. Connect the battery to display the voltage, but it does not work when it is plugged in.
Reason: AC110-220V power supply has no input
Solution: Connect to a 110-220V socket with electricity.
- 3.The battery is not charged or the battery is low, but the display (FUL) is full when charging.
Reason: This type of battery is due to battery vulcanization, power feeding, or lack of water, low voltage, and long idle time. Due to the excessive internal resistance of the battery, or the reduction of the battery's own capacity, it will instantly reach the full voltage value during charging. Do not go in, so it will show full!
Solution: You can choose the repair mode and try to repair the activated battery!
4. Dissatisfied charging for a long time
Reason: If the charger is unsatisfactory for a long time, it is due to battery vulcanization, power feeding, or lack of water, and low voltage can not be charged, so it will always be charged. This type of battery will become hot and hot when charging!
Solution: During the charging process, if it is hot or hot, stop charging. If it is a water battery, check whether the battery is short of liquid!Is the bottle short of liquid!

Warm reminder: Thank you for using our products. For your legal rights, please read the above precautions carefully before using this product. If you violate the above matters, it may cause damage to the charger or cause personal and property damage. If the product is damaged due to violation of the above matters, the warranty service will not be enjoyed, and the personal and property damages will be at your own risk. The company will not assume any responsibility.Please be aware!For matters not covered, the company has the final judicial interpretation. The product is guaranteed for 12 months on the date of manufacture. (Please classify when discarding, it is recommended to collect separately and treat it specially.)

GUARANTEE CARD

Related Information

Name		Telephone	
Address		Fault content	
Email		Purchase date	
Purchase Add.		Distributor	

Please keep the warranty card properly. The warranty period is 12 months from the date of purchase of this product. During the warranty period, due to product quality issues, the user can bring a valid invoice with this card and contact our local distributors. We will be responsible for the "Three Guarantees". Non-quality problems are not included in the "Three Guarantees" .

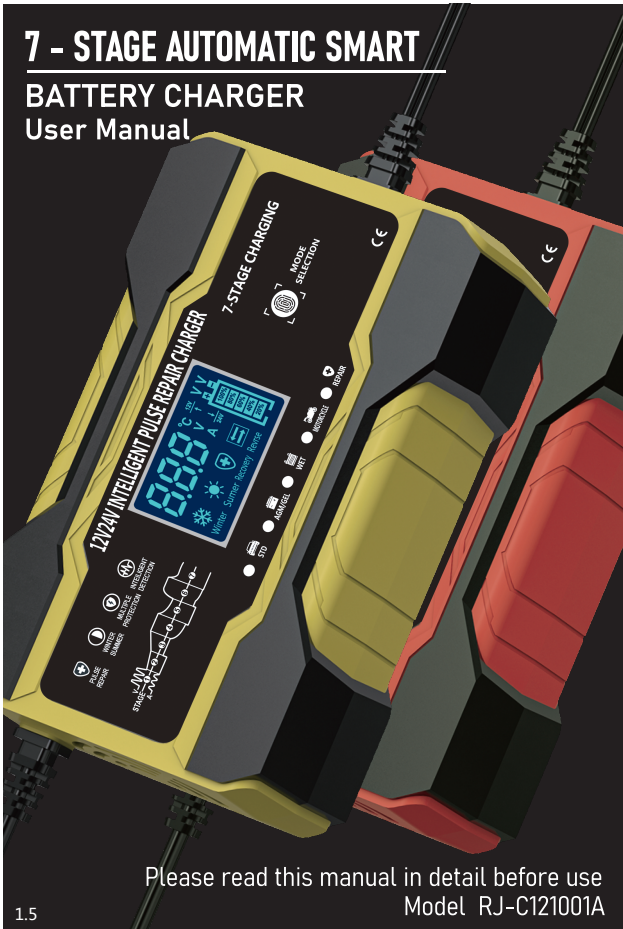
(CHECKER)

Qualified

(DATE)

See Production Lot number

7 - STAGE AUTOMATIC SMART BATTERY CHARGER User Manual



Please read this manual in detail before use
Model RJ-C121001A

PRODUCT PARAMETER

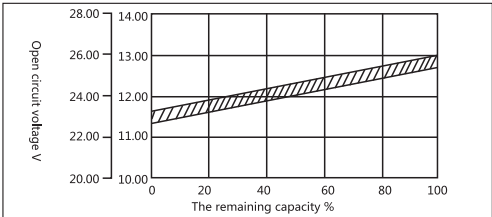
Dimensions: 158*95*62mm
Output line length: 65cm
Input voltage: AC:110-220V (50-60Hz)
Output voltage: 12V-15.5V/24V-31V (-15°C~45°C voltage automatic compensation)
Output current: DC == 12V10A/24V5A(Max)
Scope of application: 12V 2Ah-150Ah lead-acid battery (Lithium battery is prohibited)
24V 2Ah-100Ah lead-acid battery (Lithium battery is prohibited)

*Some of the above parameters are measured manually, with slight errors, please refer to the actual product.

APPLICATION METHOD OF THE CHARGER

1. Check whether the battery parameters match the charger;
2. Connect the red clip to the positive electrode (+) of the battery and the black clip to the negative electrode (-) of the battery;
3. After the positive and negative poles are connected, the LCD screen lights up, and the ambient temperature will be cyclically detected the time, Voltage, remaining capacity (refer to the figure below).

Note: After the battery has just been used, it needs to be left for 1 hour, and the remaining capacity of the battery is checked in the following figure.



4. After the household power supply is connected, the screen displays "dFS", which means it has entered the desulfurization stage.It will automatically switch to charging state after about 5 minutes. During charging (start-stop/hydro battery mode without desulfurization stage), the screen will cycle display battery voltage, current, ambient working temperature and current charging progress.
5. The positive and negative poles are connected incorrectly or abnormally, the screen "reverse connection" flashes, EI-I- is displayed, and there is a buzzer The beep sounds.
6. Select the charging mode that matches the battery (see mode selection for details)
7. After the charge is completed, the battery power bar on the screen is full (100%) and displays FUL, and it is recommended to continue floating charge about 1 to 2 hours, the effect will be better, Standby screen will displays OFF and shut down.
8. After unplugging the AC plug first, remove the positive and negative clamps to complete the charging.

Press and hold MODE for 5 seconds to turn the buzzer on or off.

MODE SELECTION

Each time the "mode" button is triggered, the sequence "standard-start/stop-water battery-motorcycle-repair"

1. * Suitable for ordinary lead-acid batteries/maintenance-free batteries.
2. * Suitable for AGM/GEL/EFB batteries.
3. * Suitable for water batteries and small lead-acid batteries.
4. * Suitable for all kinds of motorcycles and small lead-acid batteries.

to "MOTORCYCLE" mode it will enter trickle charging mode (Float charge) to maintain the battery's voltage and keep batteries stay charged for a long time. it will monitor the voltage of battery even though the screen is showing OFF, once the voltage drop under 12.5 Volts, the charger will automatically turn back on and charge it to full and maintain the voltage as normal.

5. * If it has been idle for a long time, old or cannot be charged, select "Repair" mode to try to activate the battery.

WINTER /SUMMER

1. Winter (❄): 0-10°C Summer (☀): >28°C
Normal Temperature: 10°-27°C (no icon displayed)
2. During the charging process, the microcomputer automatically detects the environment and working temperature, without manual setting, and automatically adjusts the appropriate charging state according to the detected environment temperature, extending the battery life and safe charging.
3. Detect the ambient temperature and identify every 3-5 seconds, and there is a certain error range during the detection, but it does not affect the normal charging of the charger.

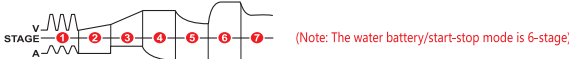
REPAIR FUNCTION

1. Connect the battery and plug in the power, trigger the "mode" key five times to enter the repair mode, the screen displays "PUL", () flashes.
2. It is recommended to repair the car battery for about 4 hours, and the motorcycle battery and water battery for about 2 hours.(If the battery does not heat up, can be extend the repair time).
3. The repair mode also has current. The battery can be fully charged for a long time repair. After the repair is completed, the battery power bar on the screen is full (100%) and displays FUL. At this time, the charger will automatically enter the floating charge stage. Wait until the screen displays OFF and the repair is complete.
4. If you need to stop the repair or charging process in advance, just remove the charger alligator clip and disconnect the power.

Reminder: If the battery has serious heating or burning hot during the battery repair process, stop repairing and charging immediately. To avoid danger! (The main reason for the hot repair is that the battery is severely vulcanized or the battery lacks water and needs to be replaced with a new battery)

7-STAGE CHARGING

The product has seven-stage charging functions: (respectively: desulfurization, trickle charging, constant current charging,Constant voltage charging, battery current detection, compensation charging, floating charging.) The charging curve is as follows:



1. Desulfurization 2. Trickle charging 3. Constant current charging 4. Constant voltage charging
5. Battery current detection 6. Compensation charging 7. Floating charging

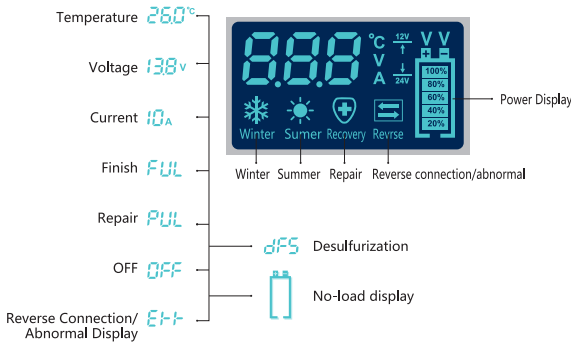
ANTI-FALSE TRIGGER MODE

Switch to anti-false trigger mode , After the product enters the charging state for about 25/s, the touch button locks itself and cannot be touched.If you need to switch the mode, you need to remove any clips or disconnect the electricity to unlock.

INTELLIGENT MEMORY

The product mode has a memory function. After charging, it defaults to the state mode which used before the last power failure, intelligent memory is convenient to use. (Repair mode without memory function)

SCREEN ILLUSTRATION



Safety Precautions

1. Lithium batteries is prohibited to use.
2.Before charging, check whether the charger is abnormal, whether the plug or power cord is damaged or cracked. If there is any abnormality, stop using the product. To avoid danger, Please contact the seller to return to the original manufacturer or be repaired and replaced by professional maintenance personnel,then it can be used.
3. Before charging, check whether the battery is damaged, whether there is any abnormality such as liquid overflow around the battery. If there is any abnormality, please charge carefully.
4. It is strictly prohibited to charge non-12V/24V output voltage lead-acid batteries, non-rechargeable batteries or non-voltage batteries.
5. To charge the vehicle or equipment, please remove the battery. It is strictly forbidden to use it in the vehicle. Choose a space with no flammable and explosive materials around for charging to avoid fire. Otherwise, accidents occur, and you are responsible for it!