



GENERAL

Before using this unit please read these instructions carefully. Take special care to follow the warnings and safety suggestions listed below. Keep these instructions for future reference. There are no user-serviceable parts within the unit, refer servicing to qualified service personnel.

IMPORTANT SAFETY INSTRUCTIONS

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

2. Working in vicinity of a lead-acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost important that each time before using your charger, you read this manual and follow the instruction exactly.

3. To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in vicinity of battery. Review cautionary markings on these products and on engine

4.Use the charger in door only, do not expose it to rain.

WARNINGS

1. Use charger for charging LEAD-ACID battery only.

2. Do not use battery charger for other types of batteries, these may burst and cause injury to persons and damage to property.

3. Use output socket for supply power to appliance with rated voltage DC12V and rated current less than 12A only.

4. Use only attachments recommended or sold by manufacturer. Use of non-recommended attachments may result in fire, electric shock, or injury.

5. When disconnecting the battery charger, pull by the plug, not by the cord. Pulling on the cord may cause damage to cord or plug.

6. Do not operate charger with damaged cord or plug. Have cord replaced immediately.

7. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Take it to a qualified professional for inspection and repair.

8. Do not disassemble charger. Take it to a qualified professional when service or repair is required. Incorrect reassembly may result in electric shock or fire.

9. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning.

Do not use an extension cord unless absolutely necessary. Use of an improper extension cord could result in fire or electric shock. If an extension cord must be used, make sure that:

• Pins on plug of extension cord are the same number, size, and shape as those of plug on charger. • Extension cord is properly wired and in good electrical condition.

• Wire size is large enough for AC ampere rating of charger

10. Always charge battery in a well-ventilated area. NEVER operate in a closed-in or restricted area without ad-equate ventilation. WARNING: Risk of explosive gas.

11. Locate charger as far away from battery as DC charger cable's permit.

12. Do not expose charger to rain or snow.

13. NEVER charge a frozen battery. If battery fluid (electrolyte) is frozen, bring into a warm area to thaw before charging.

14. NEVER allow battery acid to drip on charger when reading specific gravity or filling battery.

15. NEVER set a battery on top of charger.

16. NEVER place charger directly above battery being charged. Gases from battery will corrode and damage charger.

17. NEVER touch the battery clips together when the charger is energized.

18. NEVER crank engine with charger attached to battery.

19. WARNING: Wear complete eye protection and clothing protection, when working with lead-acid batteries.

20. Make sure someone is within range of your voice or close enough to come to your aid when you work with or near a lead-acid battery.

21. Have plenty of fresh water and soap nearby for use if battery acid contacts skin, clothing, or eyes. If battery acid contacts skin or clothing,

wash immediately with soap and water.

22. Avoid touching your eyes while working with a battery. Acid particles (corrosion) may get into your eyes! If acid enters your eye, immediately

flood eye with running cold water for at least 10 minutes. Get medical attention immediately. 23. Remove all personal metal items such as rings, bracelets, neck laces, and watches when working with a lead-acid battery. A lead-acid battery can produce a short-circuit current high enough to weld a ring.

24. Take care not to drop a metal tool or other metal onto the battery. Metal may cause sparking or short circuit the battery or another electrical devise. Sparking may cause an explosion. 25. Always operate battery charger in an open well-ventilated area.

26. NEVER smoke or allow a spark or flame in the vicinity of the battery or engine. Batteries generate explosive gases!

APPLICATION & OPERATION

This series of battery charger is widely used in 6V/12V normal lead-acid battery which is used in a variety of cars, sports cars, sport utility vehicles, RVs, van, pickup trucks, motorcycles, snowmobiles, ATVs, motorboats, sailing etc. for charge and maintenance. The battery charger uses constant current mode and float charge mode.



1. Please choose correct charging voltage according to battery rated voltage (e.g.6V battery choose 6V charging voltage).

2. Please connect red clamp to positive of battery "+", and connect black clamp to negative of battery "-". finally connect to AC mains socket after all good connection.

3. Please remove the plug from the AC power before disconnect the battery, then remove the clamp from battery.



1. Automatically enter float mode

The charger will enter float mode automatically when finished charge to prevent overcharge.

2. DC input short-circuit protection

The charger will shut down automatically when DC input short-circuit.

3. Over-temperature protection

The charger will shut down in two situations as below, and it will enter charge mode automatically when temperature recovers to the normal condition.

- a. When charger used long time under high temperature.
- b. When inside temperature of charger reaches the present temperature.
- 4. Over-voltage protection
- 5. Fire protection

There is no output in the clamp when disconnected with battery.

6. Low-voltage activation

The charger will enter the charge mode automatically when voltage of end of clamp was higher than DC 2V, the charger will not output if voltage is lower than

DC 2V.

TROUBLESHOOTING

No reaction when power is on:

- 1. Check the battery charger is plugged into the socket and makes a good connection
- 2. AC socket whether has AC output?
- 3. Send the charger to professional person to test

Power indicator light but no AC output:

- 1. Check the clip is connected well
- 2. Check the terminal for corrosion
- 3. Check the wire of the clip to see if broken
- 4. Send the charger to professional person to test

Power indicator and fault indicator light at the same time:

- 1. Check clips to see if they are connected round the wrong way
- 2. The charger was on over-temperature protection
- 3. Check to see if wrong voltage of battery selected
- 4. Send the charger to professional person to test

Power indicator not illuminated when charger is working

Faulty LED indicator

6V or 12V indicator not illuminated when charger is working

Faulty LED indicator

6V/12V can't switched or not sensitive

1. The operation is improper when using the switch

2. Switch was damaged

SPECIFICATION

| Type | |
|-----------------------------|------------------------------|
| Battery Types | |
| Rated output voltage | |
| Maintained Battery Capacity | 1-70Ah |
| Max input power | 21W |
| Max charging voltage | 7.2V DC±0.2V / 14.4V DC±0.2V |
| Rated output current | 1A |
| Rated input voltage | 100VAC-240VAC |
| IP Rating | N/A |
| Working temperature | 0C- 40C |
| Storage temperature | 0C- 60C |
| Dimensions | 12.50*6.90*7.20cm |
| Weight | 0.20Kg′s |
| Certificates | CE |