

Operating instructions

6V/12V Battery Charger

Battery type lead acid with free electrolyte

| Operating voltage | Switch setting (if available) | Rated batte minimum | ery capacity maximum |
|-------------------|-------------------------------|------------------------|-------------------------|
| 230 V / 50-60 Hz | 6 V high | 40 Ah | 160 Ah |
| | 6 V low | 9 Ah | 36 Ah |
| | 12 V high | 40 Ah | 160 Ah |
| | 12 V low | 15 Ah | 60 Ah |

Important safety information:

Read these Operating Instructions carefully before use. Keep these Instructions for later reference. Always operate the charger according to these Instructions.

Important!

Explosive gases are produced when a battery is charged: do not smoke, and avoid open flames or sparks. Provide good ventilation when charging. Ensure good air flow around the charger. Protect the charger from moisture and humidity, and use it only indoors. Never block the charger's ventilation slots.

Do not place burning objects (such as candles) on the charger. Do not place liquid-filled objects (such as water bottles) on the charger. Use the charger only on undamaged batteries with free-flowing liquid electrolyte. Never remove the charging connectors (terminal clamps) during charging. Never short-circuit the terminal clamps. The power cord and charging cables must be in good condition. Do not shorten or lengthen the charging cable. Disconnect the charger from 230 V line power before removing the terminal clamps. Wear protective gloves and safety glasses when working on the battery. Battery acid is corrosive: immediately rinse acid splashes with plenty of water and consult a physician if necessary. Keep the battery and charger away from children. If the charger is defective, it must be serviced only by a qualified electronics technician. **CAUTION:** If you smell an unpleasant gas odor, there is a risk of explosion. Do not switch off the charger. Do not remove charging clamps. **IMMEDIATELY** provide good ventilation of the area. Disconnect power only after thorough ventilation. Have the battery checked by a qualified automotive electrical technician.

Never place the battery above your head height. Never turn the battery upside down.

Do not charge non-rechargeable batteries.

Charger characteristics:

This unit contains a temperature-sensitive switch that automatically shuts the charger off in the event of overload or excessively high temperature. The unit will automatically switch back on after a cooling period. This is an automatic charger that is suitable for continuous charging. With this charger, it is not necessary to monitor the charging operation.

Operation:

AUTOMATIC CHARGING

1. Consult the vehicle manufacturer owner's manual to determine whether and how the battery must be disconnected from the vehicle electrical system. For standard batteries, remove cell plugs and check electrolyte level. (The electrolyte must cover the plates in the individual cells. If it does not, top up with distilled water.) once battery is disconnected from car please beaware this may mean re-setting radio etc.

1.a. Make sure the charger is not plugged into a power socket.

2. First, connect the red clamp to the positive terminal (+) of the battery, then the black clamp to the negative terminal (-). When charging a battery that has not been removed from the vehicle, first attach the charging cable to the battery terminal that is not electrically connected to the vehicle chassis.

Make the other connection to the chassis, at a location away from the battery and the fuel line.

- 3. Connect the charger to line power and verify that the red indicator light is on.
- 4. Plug the charger into a line power socket; the charger will begin charging the battery. Charging current is displayed on the ammeter. Note: There may be no indication on the ammeter if the charger is connected to a fully charged battery. While the battery is being charged, the charging current displayed on the ammeter slowly decreases until it has reached a constant value. This means that the battery is charged. The ammeter will never drop to zero during the charging operation.
- 5. Once charging is complete, switch off the unit and remove the power plug from the line power socket. **CAUTION:** Always pull on the plug itself, never on the cord! Only then should the terminal clamps be detached from the battery. Retighten the battery cell plugs. **NOTE:** After charging a battery that has not been removed from the vehicle, first remove the connection on the chassis side and then the one on the battery, in that order.