

CHR005

6V/12V SMART LEAD ACID BATTERY CHARGER

Item ref: 690.005UK

User Manual

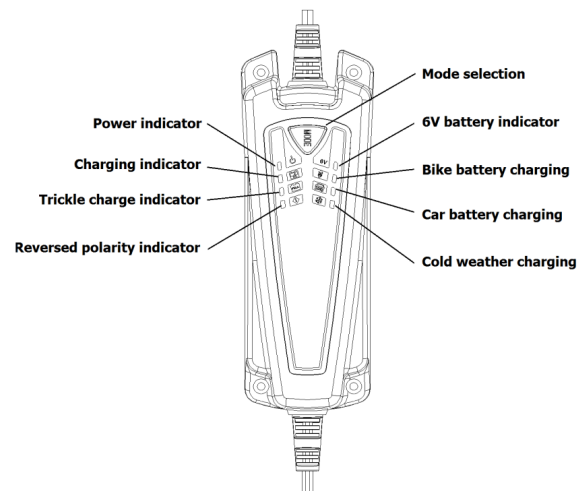
Thank for choosing this smart lead acid charger. This unit is designed for charging various different type of 6V/12V lead acid batteries (Wet, MF, VRLA, AGM and GEL). It automatically detects the battery charge status and will recharge, retain charge or recover deeply discharged batteries accordingly through seven charging stages. Suitable for charging batteries used in motorcycles, cars, caravans, boats or lawnmowers. The main body of the charger is built to IP65 standard therefore it can be left outdoors when in use.

Connection

Before connecting the charger to the battery, always ensure the battery terminals are disconnected. Always disconnect the negative terminal first as it is most likely to be connected to the chassis or framework of the vehicle.

Connect the red crocodile clip to the positive terminal and black crocodile clip to the negative terminal. Always ensure the correct polarity is connected, if polarity is reversed by incorrect connection, the reverse polarity warning indicator will illuminate preventing damage to the battery and charger. Plug the charger in to the mains; the unit will now be in stand-by mode ready for use.

Operation



Before operating charging procedure, always ensure the area is well ventilated and not near any naked flames. Hydrogen gas may be produced during the charging process and it is highly flammable.

Press mode button on the charger to select different types of charging mode:

6V battery charging mode

If a 6V battery is connected to the charger, the charger will set to 6V charging mode automatically when "MODE" button is selected. The LED will illuminate to indicate the mode. The charger will then automatically scan the status of the battery and enter charging or trickle charge mode accordingly.

12V battery (motorcycle size) charging mode

Press "MODE" button to cycle through charging modes until the bike battery indicator LED is on. This mode is suitable for charging smaller sized acid batteries up to 14Ah. Peak charging current is limited to 0.8A in this mode to avoid the battery overheating. The charger will then automatically scan the status of the battery and enter charging or trickle charge mode accordingly.

12V battery (car size) charging mode

Press "MODE" button to cycle through charging modes until the car battery indicator LED is on. This mode is suitable for charging larger acid batteries up to 120Ah. Peak charging current is at 4.0A in this mode to ensure maximum charging speed is achieved. The charger will then automatically scan the status of the battery and enter charging or trickle charge mode accordingly.

12V battery (car size) cold charging mode

Press "MODE" button to cycle through charging modes until the cold weather charging indicator LED is on. This mode is suitable for charging larger acid batteries up to 120Ah in a cold climate. The battery is charged to a slightly higher voltage to overcome frequent problems that occur in sub-zero conditions. The charger will then automatically scan the status of the battery and enter charging or trickle charge mode accordingly.

Auto scan and smart charging

The charger constantly performs battery scans to monitor the charge status of the battery. It then decides which of the 5 stages of charging to perform:

Recover charge

When voltage is below 10.5V, the charger will send pulses of 0.8A to recover the battery until a minimum of 10.5V is reached.

Fast charge

Charges at constant current of 4.0/3.0A from low until capacity is almost full.

Slow charge

Charges at constant current of 0.8A from almost full to fully charged.

Trickle charge

A constant voltage charge to keep battery at 100% for a period of time.

Maintenance charge

When the trickle charge mode is off, the charger will constantly monitoring the voltage of the battery. Maintenance charge will kick in when the battery has self-discharged below 90%.

Specifications

This charger has built in short circuit protection, reverse polarity protection and overheat protection. Charging procedure will not start unless correct voltage and resistance is detected between the two terminals, this prevents sparking between the output crocodile clip if contact happens. This also means none revivable faulty batteries will not be able to start charging due to the high internal resistance.

Input power	220-240Vac, 50/60Hz
Output power	60W max.
Charging voltage	7.3V/14.4V/14.7V
Charging current @ 6V	0.8A
Charging current @ 12V	0.8A recovery, 4A full speed
Trickle charge current	50 - 150mA
Charging capacity	No less than 1.3Ah @6V or 7.5Ah @12V
IP rating	IP65
Dimensions	194 x 68 x 47mm
Weight	300g

Warning

This charger is designed for charging lead acid batteries, always ensure it is only used with lead acid batteries that are compatible with the charger. Do not charge Lithium Ion, NiMH or NiCAD with this charger. This charger is strictly to be used by an adult or used under constant supervision of an adult only. No end user serviceable parts within, please refer to professional electrician for repairs.

Precautions

- Always check the cable is not damaged in any way before use to avoid electric shock.
- Ensure charger is not connected to the mains when connecting to the battery.
- Ensure charger is not connected to the mains when disconnecting the battery.
- Always ensure charging occurs in a well-ventilated area.
- Always ensure no naked flames are nearby.
- Always ensure charger is not contained, allow ventilation to avoid overheating.
- Ensure charger is not clipped on the fuel line.
- Ensure protective gloves/goggles/clothing is used
- Battery fluid is highly corrosive, rinse with water immediately after contact.



This product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life.
The goods must be disposed of according to your local council guidelines.