

# INSTRUCTIONS FOR:

# 6/12V, 12V & 12/24V ELECTRONIC **BATTERY CHARGERS**

MODEL No:

CHARGETRONIC 6/12 CHARGETRONIC 12 CHARGETRONIC 12/24.V2

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

#### **SAFETY INSTRUCTIONS**

#### **ELECTRICAL SAFETY**

WARNING! It is the user's responsibility to read, understand and comply with the following:

You must check all electrical equipment and appliances to ensure they are safe before using. You must inspect power supply leads, plugs and all electrical connections for wear or damage. You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey dealer. You must also read and understand the following instructions concerning electrical safety.

- The Electricity At Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, at least 1.1.1. once a year, using a Portable Appliance Tester (PAT).
- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of 1.1.2. appliance operators. If in any doubt about electrical safety, contact a qualified electrician. Yellow & Green
- Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. 1.1.3. See 1.1.1. & 1.1.2. above and use a Portable Appliance Tester (PAT).
- 1.1.4. Ensure that cables are always protected against short circuit and overload.
- Regularly inspect power supply, leads and plugs for wear or damage and also power connections to ensure that none is loose. 1.1.5.
- 1.1.6. Important: Ensure the voltage marked on the product is the same as the electrical power supply to be used and check that plugs are fitted with the correct capacity fuse. A 13 amp plug may require a fuse smaller than 13 amps for certain products - see fuse rating at right.
- 1.1.7. DO NOT pull or carry the appliance by its power supply lead or by the output leads.
- DO NOT pull power plugs from sockets by the power cable. 1.1.8.
- DO NOT use worn or damage leads, plugs or connections. Immediately replace or have repaired by a qualified 1.1.9. electrician. Where a U.K. 3 pin plug with ASTA/BS approval is fitted, in case of damage, cut off and fit a new plug according to the following instructions (discard old plug safely).

(UK only - see diagram at right). Ensure the unit is correctly earthed via a three-pin plug.

- Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
- Connect the BROWN live wire to the live terminal 'L'.
- Connect the BLUE neutral wire to the neutral terminal 'N'.
- After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable external insulation extends beyond the cable restraint and that the restraint is tight.

Double insulated products are fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol 🔲 To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue wires to the earth terminal.

NOTÉ: If this product requires more than a 13 amp electrical supply, then NO plug is fitted. You must therefore contact a qualified electrician to ensure that a 30 amp fused supply is available. We recommend you discuss the installation of a industrial round pin plug and socket with your electrician.

Cable extension reels. When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cores in the cable is important and should be at least 1.5mm², but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, we recommend the use of 2.5mm2 section.



DANGER! BE AWARE, LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS VERY IMPORTANT TO READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY, EACH TIME YOU USE THE CHARGING EQUIPMENT.

Follow these instructions and those published by the battery and vehicle manufacturers, and the maker of any equipment you intend to use in the vicinity of the battery. Remember to review warning marks on all products and on engines.

# PERSONAL PRECAUTIONS

- Ensure there is another person within hearing range of your voice and close enough to come to your aid, should a problem arise when working near a lead-acid battery.
- Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- Have fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- Wash immediately with soap and water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current which is high enough to weld a ring or the like to metal, which would cause severe burns.
- Ensure hands, clothing (especially belts) are clear of fan blades and other moving or hot parts of engine, remove ties and contain long hair.
- DO NOT smoke or allow a spark or flame in the vicinity of battery or engine.

### **GENERAL SAFETY INSTRUCTIONS**

- Familiarise yourself with the application and limitations of the charger as well as the potential hazards. Also refer to the vehicle manufacturer's hand book. IF IN ANY DOUBT CONSULT AN ELECTRICIAN.
- Ensure the charger is in good order and condition before use. If in any doubt do not use the unit and contact an electrician.
- Only use recommended attachments and parts. To use non-recommended items may be dangerous and will invalidate your warranty. Use the charger in the upright position only and ensure it is placed on a stable surface which will adequately support its weight.
- Ensure the charger is disconnected from the mains supply before attaching/detaching the power clamps to/from the battery.
- Keep tools and other items away from the engine and ensure you can see the battery and working parts of engine clearly
- Ensure the output voltage of the charger is, or is set to, the same voltage as the battery.
- If battery has caps to access the battery fluid, remove the caps and check the fluid level before connecting the power clamps. If necessary top-up the battery with distilled water by referring to the battery manufacturer's instructions (Apply the personal safety precautions described in part 1.2).
- If the charger receives a sharp knock or blow the unit must be checked by a qualified service agent before using.
- If the battery terminals are corroded or dirty clean them before attaching the power clamps
- Keep children and unauthorised persons away from the working area.
- **DO NOT** dis-assemble the charger for any reason. The charger must only be checked by qualified service personnel.
- DO NOT try to charge a non-rechargeable battery.
- DO NOT try to start engine when charger is connected to battery.
- DO NOT try to charge battery if fluid is frozen.







Earth Wire

**FUSE RATING** 

THE PLUG FITTED TO THIS

PRODUCT MUST BE

**EQUIPPED WITH A** 

3 AMP FUSE

Blue

Wire

Neutral

Brown

Live

Wire

Cable

Restraint

- □ WARNING! To prevent the risk of sparking, short circuit and possible explosion DO NOT drop metal tools in the battery area, or allow them to touch the battery terminals.
- DO NOT allow power clamps to touch each other or to make contact with any metallic part of the vehicle.
- **DO NOT** cross connect power leads from charger to battery. Ensure positive (+/RED) is to positive and negative (-/BLACK) is to negative. If symbols cannot be distinguished, remember that the negative terminal is the one directly connected to the vehicle bodywork.
- DO NOT pull the cables or clamps from the battery terminals.
- DO NOT use the charger outdoors, or in damp, or wet locations and DO NOT operate within the vicinity of flammable liquids or gases.
- DO NOT use charger inside vehicle or inside engine compartment.
- Ensure there is effective ventilation to prevent a build-up of explosive gases, and do not cover or obstruct charger ventilation louvres.
- DO NOT use the charger for a task for which it is not designed.
- WARNING! DO NOT simultaneously charge batteries of different capacities or discharge levels.
- WARNING! If a fuse blows, ensure it is replaced with an identical fuse type and rating. Use only Sealey genuine parts.
- When not in use, store the charger carefully in a safe, dry, childproof location.

### INTRODUCTION & SPECIFICATIONS

The Chargetronic 6/12, Chargetronic 12 and Chargetronic 12/24.V2 are battery chargers with 230 volt AC input and electronically monitored outputs. The Chargetronic 6/12 is switchable between 6 & 12 volts and Chargetronic 12/24.V2 is switchable between 12 & 24 volts. The units are intended for charging free-electrolyte lead-acid batteries as used in motor vehicles (petrol and diesel), motorcycles and boats.

		Chargetronic 12	
Supply voltage			
Supply power			
Output voltage	6/12V DC. switchable		
Charge current			
External fuse			

# **OPERATION**

WARNING! Ensure you read, understand and apply the safety and operational instructions before connecting the charger power clamps to the battery. Only when you are sure that you understand the procedures is it safe to proceed with the actual charging process.

3.1. Status indicators: The four LEDs on the charger front panel indicate the following status conditions:





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Red LED: Danger! Polarity reversed. Clamps have been incorrectly connected to battery - disconnect charger from mains supply and reconnect red clamp to positive battery terminal, black clamp to negative terminal.

Yellow LED: Battery is being charged but the charging is not complete.

Green LED (Upper): Battery is fully charged - disconnect charger from mains supply and then from battery.

Green LED (Lower): Charger is connected to mains supply.

3.2. Output voltage switch - ( Not Chargetronic 12).

Chargetronic 6/12. A rocker switch on the front panel allows selection of either 6 or 12 volt output to suit the battery which is to be charged. Chargetronic 12/24. A rocker switch on the front panel allows selection of either 12 or 24 volt output to suit the battery which is to be charged. The selection should be made prior to connecting the clamps to the battery.

3.3.

The output fuse is located on the front panel and a spare fuse is clipped into the rear of the charger.

- 3.4. Battery charging.
- Establish the battery voltage (noting that two 12V batteries in series will require a 24V charge). 3.4.1.
- 3.4.2. Select appropriate output voltage - Chargetronic 6/12 & Chargetronic 12/24.V2 only.
- 3.4.3. Remove battery caps, if possible.
- 3.4.4. Connect power clamps to the battery terminals, ensuring correct polarity.
- Connect charger to mains power supply, switch on and ensure lower green LED is illuminated. Confirm that red LED is not illuminated, indicating correct 3.4.5. connections, and that yellow LED is illuminated, indicating that battery is being charged.
- 3.4.6. When upper green LED illuminates, indicating that battery is fully charged, disconnect charger from the mains supply and only then remove clamps from the battery terminals.
- 3.4.7. Carefully wipe any spillage of acid from the battery top and replace battery caps, if removed.
- CHARGING VERY FLAT BATTERIES. For a very flat battery, disconnect the battery from the vehicle and allow it to rest for 30 minutes before 3.4.8 attempting to recharge. Remember to provide a back up supply for the vehicle when doing this in order to prevent damage to on-board electronics. Check Sealey Model VS207 (Memory S aver) for this function.
- BYPASS BUTTON. (Chargetronic 6/12 only) 3.4.9

On the Chargetronic 6/12 a bypass button is provided to aid in the charging of severely depleted batteries.

If the battery has a voltage of less than 70% of its rated value charging will not take place and the YELLOW LED will remain OFF.

In these circumstances press the bypass button for several seconds then release it.

If the YELLOW LED remains on this will indicated that controlled charging has been restored.

If after holding the button in the bypass position for several minutes the YELLOW LED goes off this indicates that the battery cannot be charged.

- WARNING! Never lock the button in the bypass position as this could damage the battery and the battery charger.
- 3.5 **Overload Protection.** Fuse protection is provided for the following conditions:
- 3.5.1 OVERLOADS: (Too much current supplied to the battery.)
- 3.5.2 SHORT CIRCUIT: ( Inadvertent contact between the two charging clamps.)
- 3.5.3 POLARITY REVERSAL: ( Reversed connections to battery.)
- 3.5.4 Replacing the external fuse. Before replacing the fuse the charger must be disconnected from the mains supply. The fuse must be replaced with one of the same type and value as previously fitted. Never substitute a fuse of a different type or value or attempt to bridge the fuse mounting as serious damage could result to persons and the charger.
- 3.6 Internal fuse protection. An internal fuse is also fitted. Should this fuse fail the unit should be returned to your local service agent.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode. Sole UK Distributor, Sealey Group,

Kempson Way, Suffolk Business Park,

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