

30A 12V DC TO DC BATTERY CHARGER

MODEL NO: DCBC30

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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.







protection

Wear protective gloves



Warning: Electricity



Warning! corrosive substance



Use in well ventilated areas



Protect from rain

1. SAFETY

instructions

IMPORTANT: To reduce the risk of a battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of the battery. Remember to review warning marks on all products and on engines. Modern vehicles contain extensive electronic systems. Check with the vehicle manufacturer for any specific instructions regarding the use of this type of equipment on each vehicle. No liability will be accepted for damage/injury where this product is not used in accordance with all instructions.

1.1. ELECTRICAL SAFETY

- □ WARNING! For automotive 12 volt use only. DO NOT use with dry cell or lithium batteries.
- **WARNING!** It is the user's responsibility to check the following:
 - Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage.
 - Electrical safety information. It is important that the following information is read and understood.
- 1.1.1. Ensure that the insulation on all cables and on the appliance is safe.
- 1.1.2. Regularly inspect cables and plugs for wear or damage and check all connections to ensure that they are secure.
- 1.1.3. Inadequate ventilation may over-heat the charger and cause inefficient operation.
- 1.1.4. The battery charger contains hazardous voltages. There are NO user serviceable parts / components inside. To avoid any hazard this unit must be repaired or replaced by the vendor or equally qualified person.
 - **DO NOT** expose the unit to sustained moisture or extreme weather conditions.

1.2. GENERAL SAFETY

- DANGER! BE AWARE, LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT 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.
- **DO NOT** smoke or allow a spark or flame in the vicinity of battery or engine.
- Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- 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.
- ✓ 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.

2. INTRODUCTION

DC to DC battery charger ideal for charging an auxiliary battery in vehicles such as camper vans and caravans. Will charge your second battery whilst driving and will be linked to the ignition switch to avoid draining your main battery. Suitable for 12V Gel, AGM, Calcium and conventional Lead Acid batteries. Can be used in conjunction with a solar panel when the vehicle is switched off. Protected against short circuits, open circuits, output reverse polarity, over charging, over current and overheating. Rated at IP65 water resistance. 2-Year guarantee.

3. SPECIFICATION

Model no:	DCBC30
Input:	11.5 - 15.5V
Output:	13.3 - 16V
Output Charge:	30A DC
Battery Range:	60 - 300A/h (2000 CCA)
Cable Length:	270mm
IP Rating:	IP65
Working Temperature Range:	10 to +90°C
Solar Input (Optional): 3 Stage (Max Solar Input 25V / 400W)	



INSTALLATION

NOTE: For optimum performance, the battery charger should be located as close to the main cranking battery as practicable. If a position

is chosen that is away from the main battery you must adhere to a cable size of 6 AWG (13.3mm² / Ø4.11mm) for the +12V Start battery wire (BLUE wire), +12V Auxiliary battery wire (RED wire) and common Ground wires (BLACK wires) exiting the rear of the charger (fig.2).

DO NOT use cable sizes smaller than 6 AWG when joining to these fixed cables.

NOTE: Maximum recommended length of 6 AWG +12V Start battery wire (BLUE wire) is 4 metres.

NOTE: Maximum recommended length of 6 AWG +12V Auxiliary battery wire (RED wire) is 7 metres.

NOTE: Reducing cable sizes or exceeding maximum recommended lengths may lead to excessive voltage drop, causing poor charger performance or failure signified by either the charger's lights flashing or failure to initialise.

4.1. Secure the charger using the screws provided. See note above ref. location.

4.2. When the unit is in position connect the red, vehicle ignition power wire (fig.2) to the ignition power supply. The charger will therefore only function while the ignition system is on.

When charger is connected and powered On, the Power light will illuminate (fig.1). When the charger is charging the auxiliary 4.3. battery, the green CHARGING light will be lit (fig.1) and when fully charged the yellow FULLY CHARGED light (fig.1) will be lit.

4.4. The thinner black wire (fig.2) should now be connected. The nature of the connection depends on the type of battery being used.

4 4 1 GEL battery: Connect the wire to the common ground cable (fig.2).

4.4.2. AGM / Lead Acid: DO NOT connect this wire to anything. Fully insulate the wire's bare end.

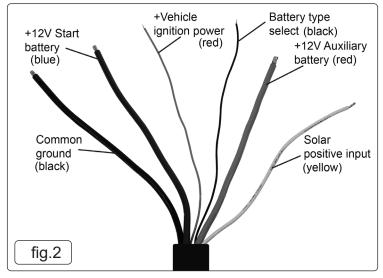
443 Calcium: Connect the wire to the blue (+12V cranking battery) wire (fig.2)

4.5. Measure and cut cable to suit distances from charger to cranking and auxiliary batteries (see fig.2). Terminate the cable ends with suitable cable lugs. Soldering these is strongly recommended to maximise connectivity.

WARNING!: An essential safety feature is to fit a suitable in-line fuse or circuit breaker (not supplied) at a suitable point along the cable between the charger and the main cranking battery.

MAINTENANCE

- 5.1. Cleaning and user maintenance should be carried out by competent persons.
- 5.2. Use a dry cloth to wipe all battery corrosion and other dirt or oil from the battery connectors, cords, and the charger case.
- 5.3. Ensure that all of the charger components are in place and in good working condition.
- 5.4. Servicing does not require opening the unit, as there are no serviceable parts.
- 5.5. All other servicing should be performed by qualified service personnel.
- 5.6. If any component is damaged, do not use until repaired or replaced.





ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

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 24 months from purchase date, proof of which is required for any claim.

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