

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: BEFORE USING THIS PRODUCT, PLEASE READ THE INSTRUCTIONS CAREFULLY. MAKE CAREFUL NOTE OF SAFETY INSTRUCTIONS, WARNINGS AND CAUTIONS. THIS PRODUCT SHOULD ONLY BE USED FOR ITS INTENDED PURPOSE. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. RETAIN THESE INSTRUCTIONS FOR FUTURE USE.

(The use of symbols in this document is to attract your attention to possible danger. The symbols and warnings themselves do not eliminate any danger, nor are they substitutes for proper accident prevention measures).

1. GENERAL FEATURES

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- 3 400 amps initial peak power for starting. More than enough to start most cars. May also be used in DEEP CYCLE applications.
- 3 The Roadstart is also a portable power source for 12V DC accessories equipped with a male cigarette lighter plug. The DC outlet has automatic 12 amp overload protection.
- 3 Test switch and LED lights. Solid state circuitry.

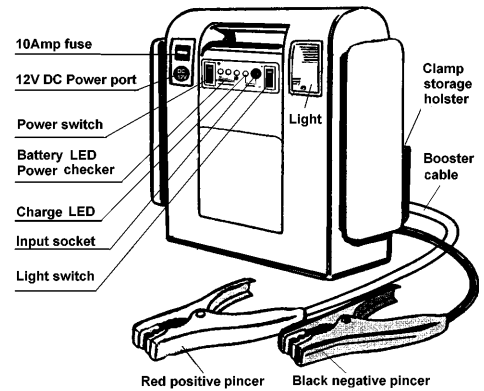
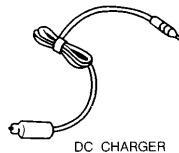
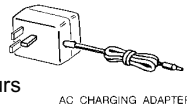
SAFETY FEATURES

- 3 Safety storage holsters prevent accidental sparking of pincers.
- 3 The Roadstart contains the latest technology with its 12 volt sealed gel battery. This means the Roadstart RS13 may be stored in any position without fear of leakage.

IMPORTANT: READ SAFETY INSTRUCTIONS BEFORE ATTEMPTING TO WORK WITH THE ROADSTART.

2. SPECIFICATION

Built in battery	Sealed gel, maintenance free, re-chargeable.
DC Output	12 Volts.
Boost Rate	400 Amps (peak).
Charging time	Approximately 20 hours with AC charging adaptor & approximately 11 hours with DC charging cable.
Fuse	12 Volt, 10 Amp (for 12 Volt DC power port).
Weight	8.3kg.
Dimensions	280 x 247 x 135 mm.
Bulb rating	12V/10 Watts.



3. SAFETY INSTRUCTIONS

DANGER! - RISK OF EXPLOSIVE GASES.



WORKING IN VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS VERY IMPORTANT TO READ AND FOLLOW EXACTLY THESE INSTRUCTIONS, EACH TIME YOU USE THE RS13.

IMPORTANT: To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of the battery. Remember to review warning marks on all products and on engines.

3.1. PERSONAL PRECAUTIONS

- 3 Ensure there is another person within hearing range of your voice, or close enough to come to your aid should a problem arise when working near a lead-acid battery.
- 3 Have fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- 3 Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- 3 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.
- 3 Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, which may cause severe burns.

3.2. OTHER IMPORTANT RS13 SAFETY INSTRUCTIONS

- 3 Familiarise yourself with the unit's application and limitation, as well as the specific potential hazards peculiar to this product.
- 3 Keep the unit in good working order and condition. (Take immediate action to repair or replace damaged parts).
- 3 Only use recommended attachments and parts. To use non-recommended items may be dangerous and will invalidate your warranty.
- 3 The Roadstart must only be opened and checked by qualified service personnel. DO NOT dis-assemble the RS13 for any reason.
- 3 Keep children and unauthorised persons away from the working area.
- 3 Keep working area clean and tidy and free from unrelated materials and ensure there is adequate lighting.
- 3 If the RS13 receives a sharp knock or blow, it must be checked by a qualified service agent before being used.
- 3 When not in use re-charge every six (6) months.
- 7 DO NOT smoke or allow a spark, or flame in the vicinity of battery or engine.
- 7 DO NOT drop any metal tool onto the battery as it may spark or short circuit the battery, which could cause an explosion.
- 7 DO NOT use RS13 to recharge dry cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
- 7 DO NOT charge or boost a frozen battery.
- 7 DO NOT charge the unit for more than 72 continuous hours.
- 7 DO NOT allow pincers to touch each other, or to contact the same piece of metal, as this will result in arcing.

- 7 DO NOT use attachments other than those recommended. To do so may risk damage to the unit, equipment and possible injury.
- 7 DO NOT pull or carry the RS13 by its cables or wires and do not pull the negative and positive pincers from the battery terminals.
- 7 DO NOT operate in vicinity of flammable liquids or gases.
- 7 DO NOT dis-assemble the RS13 for any reason. The RS13 must only be opened and checked by qualified service personnel.
- 7 DO NOT recharge the RS13 with plugs, cables or attachments that are damaged. Replace such items immediately.
- 7 DO NOT use this product to perform a task for which it has not been designed.
- 7 DO NOT store the unit in damp or wet locations or where temperature may exceed 50°C.
- 7 DO NOT submerge the unit in water.
- 7 DO NOT use whilst under the influence of drugs, alcohol or intoxicating medication.
- 7 DO NOT leave RS13 in a totally discharged state for an extended period of time as this may result in permanent damage to the unit.
- 7 DO NOT cross-connect the power leads from the Roadstart to the battery. Ensure positive is to positive and negative is to negative.
- 3 Ensure the unit is fully charged before storage.

Note: The RS13 may be used under any weather conditions. Rain, snow, heat, as well as cold temperatures.

3.3. ELECTRICAL SAFETY. ⚠ **WARNING! It is the user's responsibility to check the following:**



You must check electrical AC adaptor to ensure it is safe before using. **You must** inspect power supply lead, plugs and all electrical connections for wear and damage. **You must** ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Breaker) should be incorporated in the main distribution board. We 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 plug into an electrical supply not protected by an RCCB. If in doubt consult a qualified electrician. Obtain a Residual Current Device through your dealer. **You must** read and understand instructions concerning electrical safety.

- 3.3.1. The **Electricity At Work Act 1989** requires all portable electrical appliances, if used on business premises, to be tested by a qualified person, using a Portable Appliance Tester (PAT), at least once a year.
- 3.3.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of the appliance, and the safety of the appliance operator. If in any doubt about electrical safety, contact a qualified electrician.
- 3.3.3. DO ensure that the insulation on all cables and the product itself is safe before connecting to the mains power supply.
- 3.3.4. DO ensure that cables are always protected against short circuit and overload.
- 3.3.5. DO regularly inspect power supply, leads, plugs for wear and damage and power connections to ensure that none is loose.
- 3.3.6. DO check product voltage is the same as power supply to be used and check that all fused plugs are fitted with correct capacity fuse.
- 3.3.7. DO NOT pull the powered appliance by the AC adaptor.
- 3.3.8. DO NOT pull the AC adaptor plug from the mains socket by the cable.
- 3.3.9. DO NOT use the AC adaptor if damaged or the lead is worn. Replace items Immediately.
- 3.3.10. DO NOT disassemble the AC adaptor. There are no user serviceable items inside the unit.

4. CHARGING INSTRUCTIONS



WARNING! YOU MUST FOLLOW SAFETY INSTRUCTIONS

4.1 Reading the LED power indicators.

Fig 1 when all colour lights are illuminated the unit is in full charge status and is ready to be used for boosting depleted batteries.
 Fig 2 If only the yellow and red light illuminate the unit is in a 50% charge status and may not be used for boosting, but may be used to operate most 12 volt accessories.
 Fig 3 if there is only a red light the unit is low and must be recharged.

4.2. Re-Charging the RS13

Note: When you receive your RS13 from new you will have to charge the unit for approximately 72 hours.

The RS13 must be fully re-charged in following situations:

i) When new. ii) Before heavy usage. iii) When only one or two lights are on.

⚠ **WARNING! Use supplied adaptor, cables and connectors. Unauthorised parts may damage unit and will invalidate your warranty. Ensure you strictly apply the safety regulations as stated in Section 3.**

4.2.1. To recharge with the AC charging adaptor.

- a) Ensure all switches are turned off and the power cables are in the appropriate back holster.
- b) Plug the AC charge cord into charge input socket of the unit and into any 230 Volt AC wall outlet for approximately 20 hours.

4.2.2. To recharge with the DC charging cable.

- a) Ensure all switches are turned off and the power cables are in the appropriate back holster.
- b) With the vehicle engine running plug the DC charging cable into unit's charge input socket and then the other end into the vehicle's 12 Volt DC cigarette lighter jack. The unit will be charged by the vehicle's alternator.

Note: Should the battery become completely flat, then a 72 hour charge will be necessary.

Fig 1



Fig 2



Fig 3



5. OPERATING INSTRUCTIONS



WARNING! YOU MUST FOLLOW SAFETY INSTRUCTIONS

5.1. To use as an emergency jump starter. (Remember to apply safety rules from Section 3).

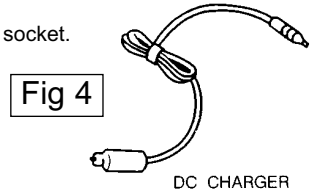
NOTE: Before using for the first time, re-charge the Roadstart unit.

- 5.1.1. Put hand brake on and place in neutral gear (or "Park" if automatic transmission).
- 5.1.2. Turn ignition and electrical accessories off.
- 5.1.3. Use in a well ventilated area and wear protective eye shields and clothing.
⚠ **WARNING! do not allow the red and black pincers to touch each other. Ensure the correct clamps are placed on the correct battery terminals.**
- 5.1.4. Attach the Positive (RED +) pincer to the Positive terminal on the vehicle's dead battery (for a negative ground system). Ensure connecting points are clean.
- 5.1.5. Attach the Negative (BLACK -) pincer to the (ground) engine block or frame of the vehicle. Ensure the cables are not in the path of moving engine parts, such as fan etc., and are away from the battery, carburettor/injection system, fuel lines etc.
- 5.1.6. Make sure that no one is standing near the battery. When all is OK, start the engine.
- 5.1.7. Once the vehicle has started, disconnect the Negative (BLACK -) pincer first.
- 5.1.8. Then disconnect the Positive (RED +) pincer.
- 5.1.9. Store the pincers in the unit holsters.

IMPORTANT: If vehicle does not start within 10 seconds, DO NOT continue. Let the Roadstart's internal battery cool for 3 minutes before attempting to start vehicle again. Failure to do so may damage the unit.

5.2. Use as a battery charger. (First check that the unit is switched off).

- 5.2.1. Plug DC charger (Fig 4) into unit's charge socket and the other end into the vehicle's cigarette lighter socket.
- 5.2.2. Ensure all vehicle electrical equipment is switched off and then switch ignition on.
- 5.2.3. Switch the RS13 on and allow exchange of current for 30 minutes.
- 5.2.4. Switch unit off and remove the DC charger cable. Start the vehicle.



Note: If the vehicle battery is defective it may not receive the intended charge. In such a case the battery should be checked by a specialist and changed if necessary.

5.3. Use as a vehicle's alternative power supply.

IMPORTANT: Before using this procedure make sure the vehicle's cigarette lighter outlet is 12 Volts.

Use the RS13 to protect electrical components with built in memory such as radios, alarm systems, computers, phones, etc.

- 5.3.1. Check that unit is switched off.
- 5.3.2. Plug the DC charger into the unit's charge socket and the other end into the vehicle's cigarette lighter socket.
- 5.2.3. Ensure all vehicle electrical equipment is switched off and then switch ignition on.
- 5.3.4. Switch the unit on, then disconnect and remove the vehicle's battery, taking care to prevent the positive cable terminal from contacting any metalwork (cover it with a heavy duty plastic bag).The unit will now take over the power supply protecting any electronic memory.
- 5.3.5. When the vehicle's battery, fully charged, has been replaced, the RS13 may be switched off and disconnected.

5.4. Use as a multi purpose power supply.

- 5.4.1 The Roadstart may be used as a portable power source for 12V DC accessories equipped with a male cigarette lighter plug. For example: Portable light, coffee maker, portable TV etc. The DC outlet has an automatic overload protection of 12 amps.
- 5.4.2. When the unit is used with a 12 volt inverter, it can operate appliances normally powered by 230 Volt AC (U.K).
- 5.4.3. Recommended inverter for the unit is up to 250 Watts.

6. TROUBLESHOOTING

THE PROBLEM	THE SOLUTION
One or two lights come on, you plug in the charger for 20 hours and there is no change in status of lights.	Check charger to see if it is charging. Charger should be warm. Check all wire connections.
Charger works well but still no change in status of lights.	Possible defective battery or faulty breaker. Try a 12 volt device (such as a light) fitted with a lighter plug to see if it works. Should it work, Roadstart breaker is OK and the battery is the problem.
No lights comes on, but when the AC adaptor is plugged into the Roadstart, all the lights come on.	The internal battery of the Roadstart needs to be replaced
Roadstart is fully charged but has no power.	Check where the wire meets the jaw on the Roadstart pincer. Make sure they are well crimped.
When using an accessory through the cigarette lighter outlet on the power pack, clicking is heard coming from inside the pack.	Accessory is drawing more than 12 amps causing circuit breaker to cycle on and off. Check accessory for problem (i.e. short circuit).

7. QUESTIONS & ANSWERS

QUESTION:	ANSWER:
How many jump starts can a fully charged Roadstart do before needing to be recharged?	Between 1 and 20 depending upon operating factors such as temperature, general condition of the vehicle, engine type and size.
Can the Roadstart be recycled?	Yes, in accordance with local authority regulations.
What is the ideal in-use storage temperature of the Roadstart?	Room temperature. The Roadstart will also operate at temperature below zero, its power however will be lessened. Intense heat will activate self discharge.
I have a regular 10 amp battery charger, can I use it to recharge the Roadstart?	NO, only the supplied adaptor and charger can be used.
Is the Roadstart fool proof?	No. All jump starting instructions must be followed carefully.
Can I replace the power pack's battery?	Yes, but note: the battery is not covered by warranty as it is a consumable item.

Declaration of Conformity We, the sole importer into the UK, declare that the product listed below is in conformity with the following standards and directives.

<p>AC/DC Adaptor Model No. RS13/C</p> <p>73/23/EEC Low Voltage Directive 89/336/EEC EMC Directive 93/68/EEC CE Marking Directive</p>		<p>The construction file for this product is held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd.</p> <p>Signed by Mark Sweetman 12th October 1999</p> <p style="text-align: center; font-size: small;">For Jack Sealey Ltd. Sole importer into the UK of Sealey Power Products.</p>
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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 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 call us on 01284 757525 and leave your full name and address, including postcode.

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