



## ROADSTART® EMERGENCY POWER PACK

12V 900 PEAK AMPS

MODEL NO: RS1312HV

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.



Refer to instruction manual



Warning: explosive material



Wear eye protection



Warning: corrosive substance



Wear protective gloves



Warning: electricity



Protect from rain



Use in well ventilated areas



Keep away from sources of ignition: battery could explode

### 1. SAFETY

#### IMPORTANT WARRANTY INFORMATION: KEEP YOUR ROADSTART HEALTHY

Read and understand the general safety and operating instructions before use. The following information is intended to help you keep the product in top working order.

**NOTE – The battery in this unit is a consumable item and its ability to accept charge will reduce over time. We will provide warranty against mechanical and electrical defect for a period of one year - this does not cover fair wear and tear.**

If the battery is not charged properly before first use, or regularly conditioned, its capacity will diminish. Under these circumstances we will not replace the battery even if it is less than one year old.

You can help prolong the life of the battery by following a few simple guidelines.

Plug in your new Roadstart to the mains transformer and make an INITIAL charge lasting 38 hours.

Ensure the unit is fully charged before storage.

- ✗ **DO NOT** leave the Roadstart for longer than 2 months without putting it on charge.
- ✗ **DO NOT** attempt to start a vehicle when the Roadstart battery level lights show red.
- ✗ **DO NOT** drop or roughly handle the Roadstart – this will break or disjoin the battery terminals rendering the battery useless and the warranty void.
- ✗ **DO NOT** use any other charger, other than the one supplied, to recharge the battery.

**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. PERSONAL PRECAUTIONS

- ✓ Ensure there is another person within hearing range, or close enough to come to your aid should a problem arise, when working near a lead-acid battery.
- ✓ Have fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working with a battery.
- ✓ 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 high enough to weld a ring or the like to metal, which may cause severe burns.

#### 1.2. IMPORTANT SAFETY INSTRUCTIONS

- ✓ Familiarise yourself with the applications, limitations and potential hazards of the RoadStart.
- ✓ Keep the unit in good working order and condition. Replace damaged parts immediately.
- ✓ Use only recommended parts. To use unapproved parts may be dangerous and will invalidate your warranty.
- ✓ The RoadStart must only be opened and checked by qualified service personnel. **DO NOT** disassemble the unit for any reason.
- ✓ Keep children and unauthorised persons away from the work area.
- ✓ Keep work area clean and tidy and free from unrelated materials. Ensure that there is adequate lighting.
- ✓ If the RoadStart receives a sharp knock or blow, it must be checked by a qualified service agent before being used.
- ✓ When not in use re-charge every two months.
- ✗ **DO NOT** smoke or allow a spark or flame in the vicinity of the battery or engine.
- ✗ **DO NOT** drop any metal item onto the battery as it may spark or short circuit the battery, which could cause an explosion.
- ✗ **DO NOT** use RoadStart to recharge dry cell batteries that are commonly used with home appliances. These batteries may explode and cause personal injury and damage to property.
- ✗ **DO NOT** charge or boost a frozen battery.
- ✗ **DO NOT** use attachments other than those recommended. To do so may risk damage to the unit and other equipment and possible personal injury.
- ✗ **DO NOT** pull or carry the unit by its cables and **DO NOT** pull the negative and positive clamps from the battery terminals.
- ✗ **DO NOT** operate in vicinity of flammable liquids or gases.
- ✗ **DO NOT** recharge the unit with plugs, cables or attachments that are damaged. Replace such items immediately.
- ✗ **DO NOT** use this product to perform a task for which it is not designed.

- ✗ **DO NOT** store the unit in damp or wet locations or where the temperature may exceed 50°C.
- ✗ **DO NOT** submerge the unit in water.
- ✗ **DO NOT** use whilst under the influence of drugs, alcohol or intoxicating medication.
- ✗ **DO NOT** leave the unit in a totally discharged state for an extended period of time as this may result in permanent damage.
- ✗ **DO NOT** cross-connect the power leads from the RoadStart to the battery. Ensure that positive is to positive and negative is to negative. Observe polarity indicator during connection.
- ✓ Ensure that the unit is fully charged before storage.

### 1.3. ELECTRICAL SAFETY (with respect to mains chargers)

- **WARNING!** It is the user's responsibility to check the following:

You must check the AC adaptor to ensure that it is safe before using. You must inspect the 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 Circuit 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. You can obtain a Residual Current Device through your Sealey stockist. You must read and understand instructions concerning electrical safety.

1.3.1. 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) on a regular basis

1.3.2. 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.

- ✓ **DO** ensure that the insulation on all cables and the product itself is safe before connecting to the mains power supply.
- ✓ **DO** ensure that cables are always protected against short circuit and overload.
- ✓ **DO** regularly inspect power supply, leads, plugs for wear and damage and power connections to ensure that none are loose.
- ✓ **DO** check product voltage is the same as power supply to be used and check that all fused plugs are fitted with the correct capacity fuses.

## 2. INTRODUCTION

Composite hi-vis green case with moulded rubber protection, integral battery cable storage and carry handle. LED Battery condition, polarity check, with audible warning if polarity is reversed, and charge indicators. Features independent on/off switch which allows the positive clamp to be connected without the risk of sparking and an integral LED work light for use at night. Fitted with two 12V power sockets that will accept any 12V device fitted with a vehicle accessory socket plug. Also features a USB outlet (5V/1A). Supplied with mains charger.

## 3. SPECIFICATION

Model no .....	RS1312HV
Cold cranking amps .....	400A
Peak amps .....	900A
Voltage .....	12V
Auxiliary output .....	5V/1A USB x1, 12V x 2
Cable & clamp length .....	725mm
Weight .....	6.6kg

## 4. FEATURES



### Key

- 1 On/off switch
- 2 12V output sockets
- 3 Negative lead
- 4 Positive lead
- 5 LED worklight
- 6 USB indicator
- 7 5V USB socket
- 8 Worklight/USB selector switch
- 9 Charging socket
- 10 Polarity indicator
- 11 Battery level indicator
- 12 Battery charge level check button

## 5. CHARGING

### 5.1. INITIAL CHARGING OF THE ROADSTART UNIT

**NOTE:** This product may arrive partially charged. The unit must be fully charged immediately after purchase and before using for the first time.

5.1.1. Initially, the unit should be charged using the AC charger supplied for a period of 38 hours. Charge subsequently until the green charge light illuminates. Never charge the unit for more than 40 hours.

### 5.2. READING THE LED POWER LEVEL INDICATORS

The charge level of the unit during use can be seen at any time by pressing the battery level check button (fig.2.11) and noting which power level lights are illuminated. The lights will illuminate in combination to show the charge level.

- 5.2.1. When just the green LED is illuminated the unit is fully charged and is ready to be used for starting a vehicle.
- 5.2.2. If the amber LED is illuminated the unit is partially discharged but can be used to operate most 12 volt accessories.
- 5.2.3. If only the red LED is illuminated the power level is low and only a short operating time remains. The unit should be recharged as soon as practical.
- 5.3. RECHARGING WITH THE AC CHARGING ADAPTOR**
- NOTE:** Only charge with the adaptor supplied with your specific model. Charging adaptors are not interchangeable.
- 5.3.1. Ensure the battery clamps are securely attached to the clamping bars on the unit as shown in fig.1.
- 5.3.2. Turn the on/off switch (fig1.1.) to OFF.
- 5.3.3. Plug the AC charger cable into the charging socket (fig.2.9) on the front control panel.
- 5.3.4. Plug the charger itself into any 230 Volt AC wall outlet. Charging will now commence but the charge level must be regularly monitored to prevent overcharging. The battery level lights will display whilst the charger is plugged in.(fig.1.14).
- 5.3.5. Charging a unit with a very low charge (i.e. showing red LED only) should take 34 to 36 hours. When just the green charge indicator is illuminated the unit is fully charged and the charger should be disconnected from the unit and from the AC supply.

## 6. OPERATION

### 6.1. PREPARATION AND PRECAUTIONS

- ☐ **WARNING!** Ensure that the Roadstart and vehicle voltages are the same.
- 6.1.1. Apply the vehicle hand brake and place in neutral gear (or "Park" if automatic transmission).
- 6.1.2. Turn ignition and electrical accessories off.
- 6.1.3. Use in a well ventilated area and wear eye protection and protective clothing.
- ☐ **WARNING! DO NOT** allow the red and black clamps to touch each other. Ensure that the correct clamps are placed on the correct battery terminals.
- 6.1.4. Press the battery level check button. If the green light does not illuminate the unit must be charged before it can be used for jump starting.
- NOTE:** A defective battery may not accept a charge from the portable power source. Ensure that the engine is functioning and that the vehicle battery is not damaged.

### 6.2. JUMP STARTING

- ☐ **WARNING!** Vehicles equipped with on board computers may be affected if the engine battery is jump started. Read your vehicle owner's manual before attempting to start the vehicle to determine if external starting assistance can be used.
- 6.2.1. Failure to follow these instructions may cause damage or explosion.
- NOTE:** For optimum performance, the unit should not be stored below 10°C when using the unit as a jump starter.
- 6.2.2. Turn off the vehicle ignition.
- 6.2.3. Ensure on/off switch is in the off position.
- ☐ **WARNING! DO NOT** place the unit where it will become unstable when the engine starts. Route power cables away from moving parts such as fans and belts.
- 6.2.4. Attach the RED (positive +) clamp to the positive terminal of the battery.
- NOTE:** On vehicles with multiple batteries, connect positive clamp to positive battery terminal which is connected to vehicle electrical system.
- 6.2.5. Attach the BLACK (negative -) clamp to the vehicle chassis, engine block or a non-moving metal part of the vehicle which is verified to be grounded, as far away from the battery as possible. **DO NOT** clamp directly to the negative battery terminal, carburettor, fuel lines, or sheet metal body parts.
- 6.2.6. Observe the polarity indicator on the control panel (fig.2.10). If the dual colour LED is green the connection is correct. If the LED is red and the alarm sounds do not proceed until the connections are correct.
- 6.2.7. Ensure that all cables are clear of moving belts and rotating fans.
- 6.2.8. Turn the on/off switch the 'ON' position.
- 6.2.9. Maintain a safe distance from the battery whilst jump starting.
- 6.2.10. Turn on the ignition to start the vehicle.
- NOTE:** If the vehicle does not start after 4 to 5 seconds, allow the RoadStart unit to cool for 3 to 4 minutes, before attempting to jump start the vehicle again. If this is not done, the unit could sustain damage.

### 6.3. DISCONNECTING

- VERY IMPORTANT! Failure to observe the following could result in the RoadStart battery exploding.**
- When the vehicle has started, remove the negative (black) clamp within 15 seconds.**
- 6.3.1. Switch the on/off switch to 'Off'.
- 6.3.2. Remove the positive (red) clamp and return both clamps to their housings on the back of the unit.

### 6.4. 12V POWER SOCKETS

- 6.4.1. The Roadstart is fitted with 2 x 12V power sockets (fig.1.2). They will each accommodate a male 12V accessory plug up to a combined total of 15A.

### 6.5. LED WORKLIGHT

- 6.5.1. The worklight may be switched on by pressing the worklight/USB selector once. A second press will switch the light off and energise the USB socket (see section 6.6.)

### 6.6. 5V USB SOCKET

- 6.6.1. The RoadStart is fitted with a 5V 1A USB socket (fig.2.7). To turn on the socket, press the worklight/USB selector twice. The USB indicator (fig.2.6) will light when the socket is live. A further press of the selector will switch the socket off.

### 6.7. STORAGE

- 6.7.1. This unit may be stored in any position. Ensure that the clamps are securely attached to the clamping posts at the rear of the unit. Store at room temperature. It is recommended to recharge the unit every three months when not in use and more frequently in warmer or colder storage conditions to keep the battery in peak operating condition.

### 6.8. BATTERY RECYCLING

- NOTE:** The RoadStart battery is a sealed, lead-acid type. At the end of the RoadStart's service life it **MUST** be removed and recycled, or disposed of properly, according to national and/or local regulations.
- 6.8.1. Removal**
- 6.8.1.1. Place the RoadStart unit front side down.
- 6.8.1.2. Remove the 10 screws holding the casing together and lift off the back half of the unit.

- 6.8.1.3. Undo and remove the nuts, bolts and washers on each battery terminal. The connecting wires will now be loose.
- 6.8.1.4. Move the wires away from the two battery terminals, taking care to avoid accidental arcing of the terminals.
- 6.8.1.5. Lift the battery out of the front half of the casing.
- 6.8.2. **Disposal**
- 6.8.2.1. Take the battery to a recycling centre that handles sealed, lead-acid batteries. If there is no recycling centre in the area, contact the local environmental agency for disposal instructions.

## 7. TROUBLESHOOTING

THE PROBLEM	THE SOLUTION
Unit has been charged for 36 hours but there is no change in the status of the LEDs.	Check charger to see that it is charging. Charger should be warm. Check all wire connections.
Charger works well but still no change in LED status.	Possible defective internal battery.
No LEDs come on, but when the AC adaptor is plugged into the unit they do.	RoadStart unit battery defective which could have been caused by intense use without a cool-down period.
Roadstart unit is fully charged but delivers no power.	Check where the wire meets the jaw on the unit clamps. Ensure they are well crimped. Ensure that the safety switch is in the ON position.
When connecting an accessory via the dc outlet there is no power.	The accessory is drawing too much current, resulting in the internal circuit breaker operating. Allow to cool and reset. Check accessory current draw.

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 national and local authority regulations.
What is the ideal in-use storage temperature of the RoadStart?	Room temperature. The RoadStart will also operate at lower temperatures, 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 charger can be used.
Is the RoadStart fool proof?	No. All jump starting instructions must be followed carefully.
Can I replace the internal batteries?	Yes, but note that the batteries are not covered by warranty as they are consumable items.



### BATTERY REMOVAL SEE SECTION 6.8

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.



### 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.



### 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.

**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 is required for any claim.

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# EC DECLARATION OF CONFORMITY

Description and Function: **RoadStart® Emergency Power Pack 12V 900 Peak Amps Hi-Vis Green**

Model/Type: **RS1312HV v1**

Manufacturing Date/Serial Number (optional):

- |   |   |
|---|---|
| <input type="checkbox"/> 2006/42/EC Machinery Directive               | <input type="checkbox"/> 2000/14/EC Noise Emission in the Environment Directive |
| <input checked="" type="checkbox"/> 2014/35/EU Low Voltage Directive  | <input checked="" type="checkbox"/> 2012/19/EU WEEE Directive                   |
| <input checked="" type="checkbox"/> 2014/30/EU EMC Directive          | <input checked="" type="checkbox"/> 2011/65/EU RoHS Directive                   |
| <input type="checkbox"/> 2009/125/EC Ecodesign Requirements           | <input type="checkbox"/> 2014/68/EU Pressure Equipment Directive                |
| <input type="checkbox"/> 2009/142/EC Gas Appliance Directive          | <input type="checkbox"/> 89/686/EEC PPE Directive                               |
| <input type="checkbox"/> 2014/29/EU Simple Pressure Vessels Directive | <input type="checkbox"/> 2014/53/EU RTTE Directive                              |

Manufacturer's authorised representative within the EC: **Jack Sealey Ltd, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR**

Conforms to the requirements of the Directives, as indicated.

And the following harmonised standard(s)

EN 60335-1:2012+A11:2014 .....	EN 55014-1:2006+A1:2009+A2:2011.....
EN 62233:2008.....	EN 55014-2:2015 .....
BS EN 61558-2-16:2009+A1:2013.....	EN 61000-3-2:2014 .....
BS EN 61558-1:2005+A1:2009 .....	EN 61000-3-3:2013 .....
.....	EN 50498:2010.....
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Technical file compiled by: **Jack Sealey Ltd**

**Being the responsible person appointed by the manufacturer.**

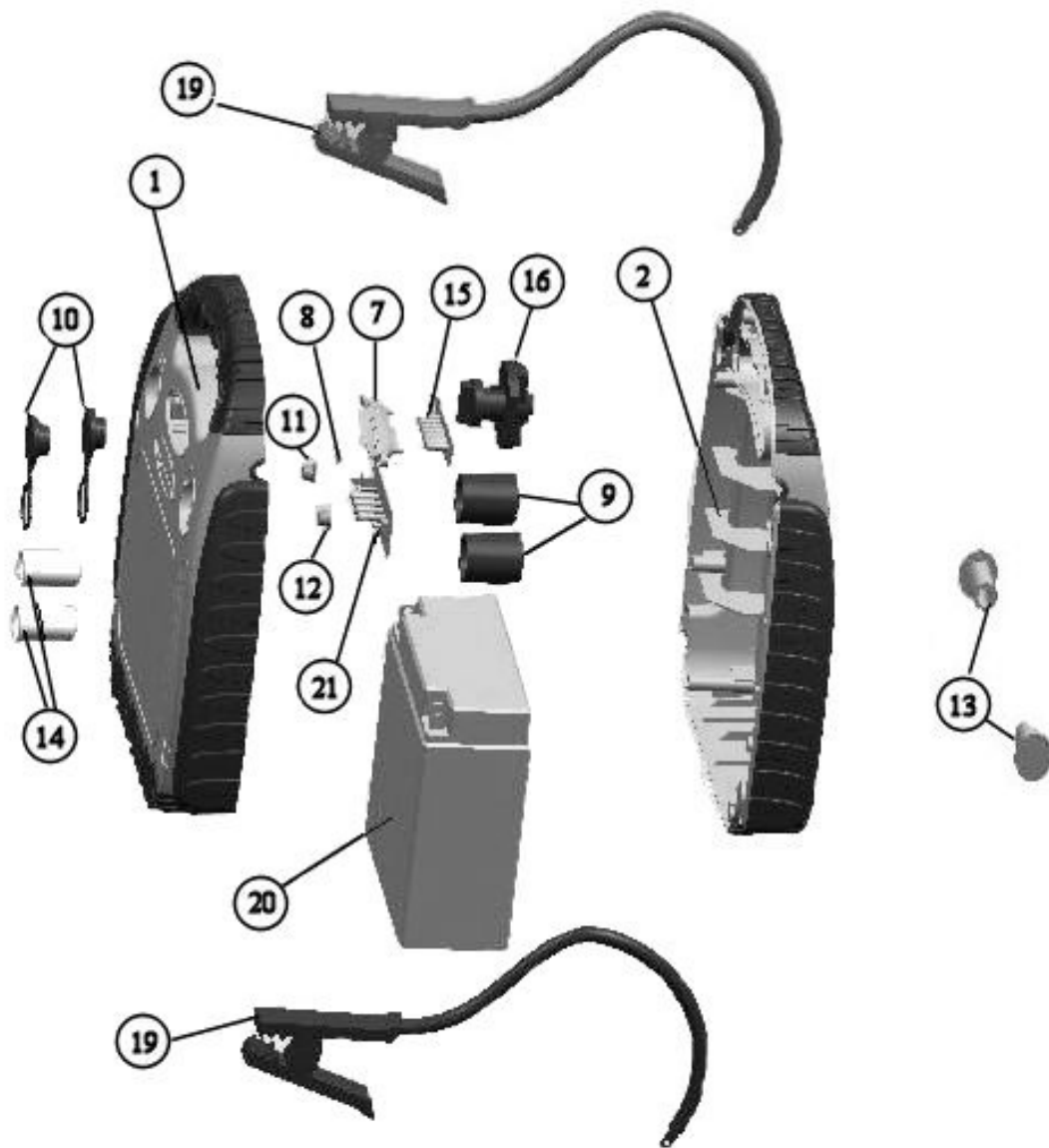
Signed.....  
Date.....  
Name.....  
Position.....

Place: Bury St Edmunds

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Item	Part No.	Description
1	RS1312HV.01	FRONT CASE
2	RS1312HV.02	BACK CASE
7	RS1312HV.07	REFLECTOR
8	RS1312HV.08	LIGHT COVER
9	RS1312HV.09	FIXING COVER FOR SOCKET
10	RS1312HV.10	WATERPROOF COVER FOR SWITCH
11	RS1312HV.11	LIGHT BUTTON
12	RS1312HV.12	TEST BUTTON
13	RS1312HV.13	CLAMP HOLDER

Item	Part No.	Description
14	RS1312HV.14	SOCKET 12V 15A
15	RS1312HV.15	LED ASSY
16	RS1312HV.16	SAFETY SWITCH
19	RS1312HV.19A	CABLE (POSITIVE) ASSY inc CLAMP
--	RS1312HV.19B	CABLE (NEGATIVE) ASSY inc CLAMP (NOT SHOWN)
20	RS1312HV.20	BATTERY 12V 17AH
21	RS1312HV.21	PCB ASSY
--	RS1312HVC	MAIN CHARGER 12V 800mA (NOT SHOWN)

**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.