

# ROSSI®



## Battery Charger Single Phase 12V/24V 30A

### User Manual

[Revision 1.0 January 2018]

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READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

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# Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

 You WILL be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You CAN be INJURED if you do not follow instructions or equipment damage may occur.
<p>It is important that you read and understand the instruction manual before use and keep the manual in a safe place for future reference. Safety information presented here is generic in nature – some advice may not be applicable to every piece of equipment.</p> <p>All safety precautions must be observed to reduce the risk of personal injury when operating the equipment.</p> <p>The term "equipment" refers to your product, be it electrical mains, battery or petrol engine powered.</p> <p><b>IMPORTANT</b> – Handle the equipment safely and carefully.</p> <p><b>BEFORE USE</b> - If you are not familiar with the safe operation/handling of this equipment, or are in any way unsure of any aspect of suitability or correct use it for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.</p> <p><b>WARNINGS</b></p> <ul style="list-style-type: none"> <li>Read all safety warnings and all instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury.</li> <li>Never run a combustion engine in confined areas.</li> <li>Do not operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. Engine and equipment may create sparks or heat that may ignite vapours, dust etc</li> <li>Keep clear of moving parts.</li> <li>This equipment may be a potential source of electric shock if misused.</li> <li>Do not operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.</li> <li>Do not allow others to use the equipment unless they have read this manual and are adequately trained.</li> <li>When using the equipment, basic safety precautions detailed here must always be followed to reduce the risk of fire, electric shock, personal injury and material damage.</li> <li>When wiring electrically powered equipment, follow all electrical and safety codes.</li> <li>Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting equipment.</li> </ul>	<p><b>General Work Area Safety</b></p> <p>Work areas should be clean and well lit. Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.</p> <p><b>Personal Safety</b></p> <p>Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.</p> <p>Prevent unintentional starting of the equipment - ensure equipment and power source switches are in the OFF position before connecting or moving the equipment. Do not carry equipment with hands/fingers touching any controls.</p> <p>Remove any tools or other items that are not a part of the equipment from it before starting or switching on.</p> <p>Stay alert and use common sense when operating equipment. Do not overreach. Keep proper footing and balance at all times. Do not use equipment when tired or under the influence of drugs, alcohol or medication. This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. Always wear eye protection. Protective equipment such as respirators, non-skid safety shoes, hard hat, hearing protection etc should be used for appropriate conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.</p> <p>If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.</p> <p><b>General Equipment Use and Care</b></p> <p>Do not force the equipment. Use the correct equipment for your application. The correct equipment will perform better and be safer within its design parameters. Do not use the equipment if the ON/OFF switch malfunctions – any equipment that cannot be controlled with the ON/OFF switch is dangerous and must be repaired.</p>	<p>Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.</p> <p>Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorized service centre or technician before use.</p> <p>Always keep the equipment and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment, controls and handles dry and free from dirt, oil and grease.</p> <p>Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place the equipment in places where there are flammable materials, combustible gases or combustible liquids etc.</p> <p>The equipment is not weather proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or very humid.</p> <p><b>Product Use and Care</b></p> <p><b>WARNINGS</b></p> <ul style="list-style-type: none"> <li>Be sure to select the correct voltage setting. This charger is suitable for both 12V and 24V systems. Selection of the incorrect voltage will damage the charger, battery system and vehicle. Incorrect voltage selection could also cause fire or battery explosion.</li> <li>The charger features inbuilt over-temperature protection. If over-temp protection activates it will be necessary to reduce the load placed on the charger and let it cool for an hour before re-start.</li> <li>The charger features a fuse to protect against excessive current draw. If the charger is overloaded and the fuse is blown, simply replace the fuse with a matching type/capacity available from most automotive outlets. The fuse rating/capacity MUST match the original fuse included with the charger or fire could result.</li> <li>Incorrect connection of positive/negative cables will damage the charger, battery system and vehicle. This could also result in battery explosion or fire.</li> <li>Location must be cool and out of direct sunlight.</li> <li>Location must be clean and dry.</li> </ul>

- Keep moisture/water away or electrocution may result.
- Ensure the battery is clean and in good working condition. Do not charge a battery that is in bad internal condition or heavily oxidised.
- Battery terminals must be clean always.
- Complete adequate training before handling/charging batteries.
- Batteries produce explosive gases. If ignited, an explosion can cause serious injury, blindness or death.
- Provide adequate ventilation when connecting and charging.
- Connecting/Disconnecting cables to/from batteries will often cause sparks which can ignite explosive battery gases.
- Keep flames and sparks away from batteries.
- Do not smoke in the area.
- Battery electrolyte contains sulphuric acid. Contact with eyes will cause blindness. Contact with skin will cause severe burns.
- Battery Electrolyte is Poisonous.
- If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and contact emergency medical assistance immediately.
- If electrolyte gets onto your skin, flush thoroughly with warm water for at least 15 minutes and contact emergency medical assistance immediately.
- If electrolyte is ingested, immediately give the person water or milk. Do not induce vomiting. Seek emergency medical care straight away.
- Wear a face shield and protective clothing when working with batteries.
- Some generators are equipped with a 12-volt socket. These require a special charging cable for connection to a 12 Volt automotive battery. Not all generator retailers will be able to supply suitable charging cables. To obtain cables consult a specialty generator retailer or electronics outlet.
- Do not charge a vehicle battery while it is still installed in the vehicle. The battery must be removed before charging.
- Do not attempt to start a vehicle while the generator is connected to the battery.
- Reversing the positive and negative connection to the battery will result in damage to the generator and/or battery.

Care should be taken when charging batteries to ensure that they are not over charged. To avoid battery explosion, charging should be stopped when the battery voltage reaches 16V DC.

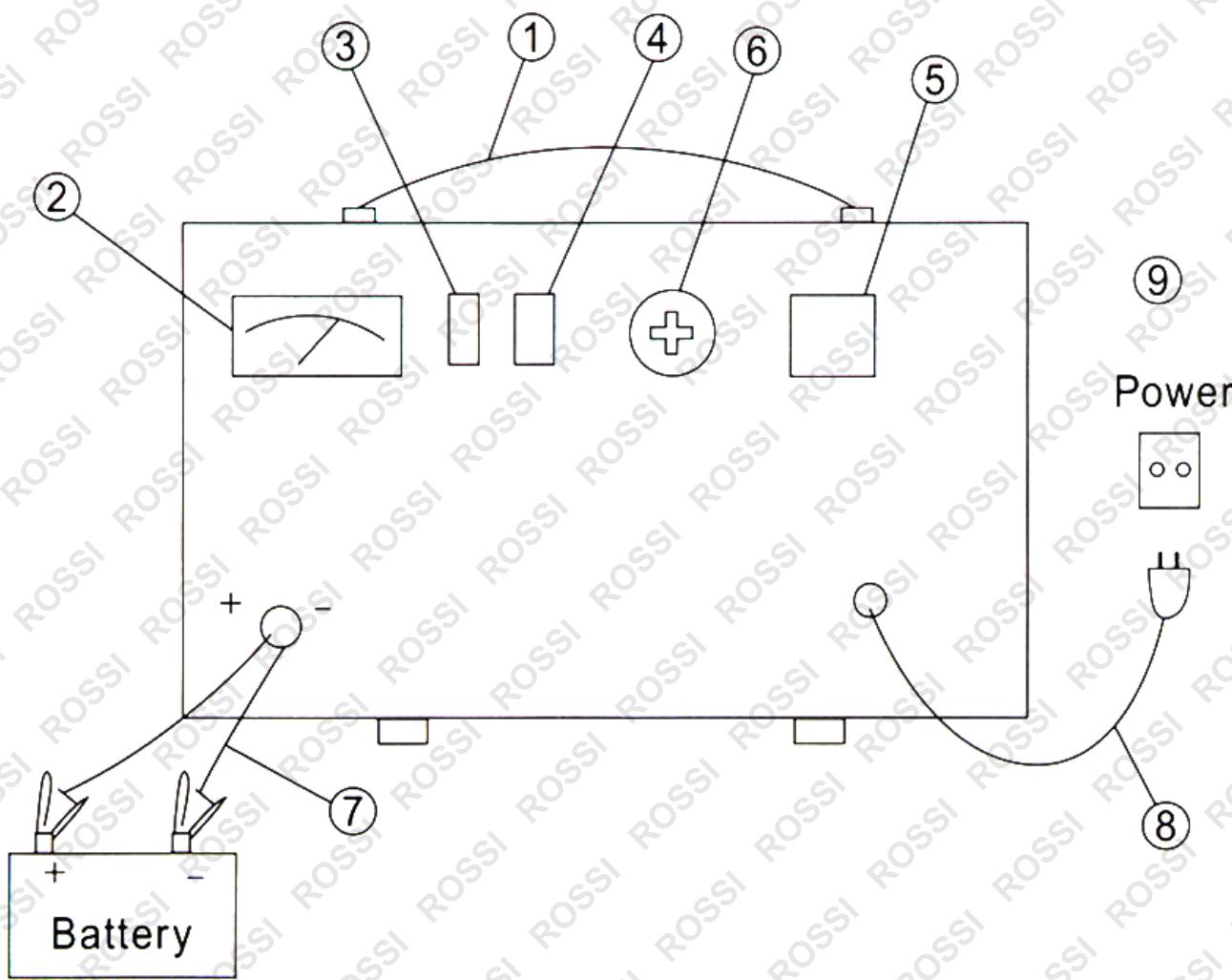
#### **General Service Information**

- Have the equipment serviced or repaired at authorized service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to help ensure that equipment safety is maintained.
- Do not attempt any maintenance or repair work not described in this instruction manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance.
- Do not make adjustments while the equipment is running.
- Perform all service related activities under suitable conditions, such as a workshop etc.
- Replace any worn, damaged or missing warning labels immediately.
- Do not clean equipment with solvents, flammable liquids or harsh abrasives.

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# Parts Identification



No.	Name
1	Handle
2	Output voltage meter
3	Over-current protector
4	Big/Small switchover
5	12V/24V switch
6	Temperature indicator
7	Clamps
8	Input cable
9	Shell

## Assembly

- Know your storage batteries voltage charge first before charging it. Do not charge your storage battery with the incorrect voltage charge.
- Do not put under direct sunlight or sources of heat.
- Set the battery charger in a clean and dry place. Do not set it in places filled with dust and debris.
- Do not put the battery charger in wet or damp environment to reduce the possibility of electric shocks.
- Before charging your battery, please clean the red clamp of the battery charger first from dirt and debris.
- Exchange the anode of the storage battery's black clamp with its cathode and insert the main power plug to a 220V 50Hz/60Hz power outlet.
- Connect the power output current import of the storage battery to display it on the current ammeter.
- If there is no output current, user needs to check the following:
  - Examine the 12/24V switch if it corresponds to the correct battery voltage.
  - Change the Over-current protection setting.
  - Replace the fuse with a new one, if needed.
  - Dirt and debris is found on their storage battery's anode or cathode

If there is still no current after following the procedures listed above, contact the manufacturer or an authorised service centre.

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**NOTE:** • The polarity of the power output should not be the same (+ to +, or – to –) or short-circuiting could happen. • The cooling hole of the storage battery should not be modified in any way. • If the electric charge of the storage batter is too high, reduce the current voltage: change the “MIN” on the battery panel to stop charging immediately.

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## Operation

The battery charger can charge lead-acid storage batteries that are suitable for automobiles. User should choose the correct type charge based on the storage capacity of the battery. Also ensure that the voltage must be between 12 – 24V.

## Machine Rigging with Temperature Protection

The battery can have a temperature protection function when rigged into machineries. It activates when a large electric current is detected that makes the internal temperature of the machinery rise. It will then automatically turn off once the internal temperature decreases.

## Machine Rigging with Over-Current Setting

When the output current exceeds that of the rated current, the fuse on the panel will be cut-off from the power. Ensure that the fuse is replaced with a new one before using the battery again.

For 12V storage batteries, examine if the storage battery has any malfunctions. If the battery voltage is below 9V, confirm if there has been a mistake in the electrical readings. If there aren't any mistakes, choose the "MIN" function to charge the battery. Avoid charging with large electric currents. After setting-up the base voltage, change to "Boost" function if the battery voltage is above 14V. Stop charging the battery afterwards.

For 24V storage batteries, examine if the storage battery has any malfunctions. Ensure that there are no mistakes in the electrical readings after setting up the base voltage, then change to "Boost" function to charge the battery. Stop charging the battery when the voltage reaches above 27V.

## Specifications

<b>Input Voltage</b>	220-240V 50Hz
<b>Charge Voltage</b>	12V/24V
<b>Rated Charging Power</b>	1kW
<b>Rated Output Current</b>	30A
<b>Battery Capacity</b>	60-200Ah
<b>Fuse</b>	30A



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

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