

SCA

VALUE YOU CAN TRUST



QUALITY
ASSURED

5 YEAR
WARRANTY

12V - 1.6A, 2.5A 7 STAGE BATTERY CHARGER

INSTRUCTION MANUAL



PLU 611219
PLU 611220

TECHNICAL DATA

| Model | HFGP1.6L | HFGP2.5L |
|---|---|---|
| Charger Type | 7 Stage Intelligent Battery Charger | 7 Stage Intelligent Battery Charger |
| Compatible Rechargeable Battery Types | 12V Only, Flooded Lead Acid, AGM, GEL, Maintenance free, Calcium, LiFePO4 (12V 4 cells) | 12V Only, Flooded Lead Acid, AGM, GEL, Maintenance free, Calcium, LiFePO4 (12V 4 cells) |
| Lithium Battery Compatible | Yes, LiFePO4 batteries only | Yes, LiFePO4 batteries only |
| AC Input Voltage (V) | 220V-240V / 50-60Hz | 220V-240V / 50-60Hz |
| Maximum Input Power | 27.48W | 42.94W |
| Maximum Output Power | 23.36W | 36.5W |
| Maximum Output Current | 1.6A | 2.5A |
| Absorption Output (V) | 14.6V | 14.6V |
| Float Output (V) | 13.4V | 13.4V |
| Battery Type Selections | Manual and Automatic selection options | Manual and Automatic selection options |
| Maximum Recommended Battery Charging Capacities | Batteries up to 250CCA | Batteries up to 400CCA |
| Maximum Recommended Battery Maintenance Capacities | 100Ah | 120Ah |
| Minimum DC Start Charge (V) | Above 1V | Above 1V |
| Ambient Working Temperature | -20°C to 50°C | -20°C to 50°C |
| Case Type | Plastic | Plastic |
| Water Resistance | Not water resistant. Use indoors or undercover only. | Not water resistant. Use indoors or undercover only. |
| 240V Cable Length | 1m | 1m |
| 12V Cable Length | 0.5m | 0.5m |
| Additional Lead Lengths (1 x alligator clips, 1 x ring terminals) | 0.5m each | 0.5m each |

SAFETY/WARNING

- Before using this SCA battery charger, ensure the instructions have been read and understood.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance, cleaning and user maintenance shall not be made by children without supervision.
- This SCA battery charger is designed to charge most 12 volt battery types including: Lead Acid, Deep Cycle, Calcium, Gel, Absorbed Glass Matt (AGM) batteries and LiFePO4 batteries, and flooded and maintenance free configurations.
- Always wear the appropriate Personal Protective Equipment (PPE) when working near batteries. This includes gloves and eye protection.
- Always ensure that there is no damage to the power source (240V power outlet). This includes cracks or exposed wires.
- When working with Lead Acid batteries remove all jewellery including watches and rings.
- Use insulated tools to ensure prevention of a battery short, should the metal tool make contact with the battery terminals.
- Ensure battery is charged in a well ventilated area. Explosive gases may escape from the battery during charging. Never charge a battery in a closed off space or in an area without ventilation.
- Never smoke, use an open flame or create sparks near a battery or charger whilst charging as gases may cause an explosion. Please keep lit cigarettes, flames or other ignition sources away from the charging battery at all times.
- SCA battery chargers are designed for indoor use only, and are not water resistant or waterproof. Do not expose the battery charger to water or liquids.
- If the supply cord is damaged, it must be replaced by a service agent or similarly qualified person, in order to avoid a hazard.
- Do not disassemble the battery charger. The warranty will be void if this instruction is ignored.
- Ensure the battery charger is OFF before connecting and disconnecting from the battery. Once connected, power can be turned on.
- Ensure vehicles ignition is switched off before charging the battery.
- Do not place the battery charger where it is not able to get adequate ventilation. Do not place the battery charger on any painted panels on your vehicle, on fabric/leather/vinyl seats, on the battery, or balanced in the engine bay.
- This battery charger is not capable of charging frozen batteries or non-rechargeable, dry cell or lithium batteries (except LiFePO4 types).

FIRST AID

- For advice, contact the Poisons Information Centre in Australia (PH: 13 11 26) or the National Poisons Centre in New Zealand (PH: 0800 764 766).
- If battery acid makes contact with the skin or clothing, wash immediately with soap and water.
- If battery acid makes contact with the eyes, hold eyelids apart and flush the eye continuously with fresh running water for at least 15 minutes or until the Poisons information center advises you to stop.
- If battery acid is swallowed, do not induce vomiting. Drink a glass of water and seek medical assistance.

FEATURES

- 7 stage charging system.
- Suitable for 12V Gel, Lead Acid, AGM, Maintenance Free, Calcium and Lithium LiFePO4 automotive battery types.
- LED indicator shows charging status. Integrated battery test function notifies of battery fault or reverse polarity connections.
- Internal protection systems.
- Supplied with alligator clamps and ring terminals for fixed connections.
- Memory function memorizes the battery type status and applies this battery type as the default status for the next charge cycle.
- Battery level test function(12V battery only):
When you connect the battery but without AC input connected, the charger can test the battery power level, red indicator means low power, amber color means middle level, green color means high level, please refer to below voltage detail:
 - $V > 12.7Vd.c.$ Green LED on.
 - $12.2V \leq V \leq 12.7Vd.c.$ Amber LED on.
 - $7V \leq V \leq 12.2Vd.c.$ Red LED on.
- Bad battery detection function.

Note: Hold button for 5S to enter force charging mode, and the charging LED flashes slowly.

7 STAGES OF CHARGING

This charger uses an automatic 7 stage charging process, designed to optimally charge and maintain batteries.

- Stage 1: Analysis & Desulphation - pulsed current
- Stage 2: Soft Start - constant current
- Stage 3: Bulk Charge - high current
- Stage 4: Absorption - constant voltage
- Stage 5: Rest & Diagnosis – no current, voltage drop monitored
- Stage 6: Recondition - pulsed current, float voltage
- Stage 7: Maintenance - low current, float voltage

BATTERY PROTECTION SYSTEMS

1. Short circuit protection

If the positive and negative clamps are connected together, no power will be sent to output cables.

2. Reverse polarity protection

If the clamps are connected to the battery in reverse, the reverse polarity protection will engage and the LED indicator will illuminate. Reconnect the clamps correctly to commence charging.

3. Overload protection

This protection is triggered if the charger output current is greater than the maximum output. The charger will automatically cut off the output and enter into an idle state.

4. Overheat protection

The overheat protection mode will engage if the temperature of the charger's housing reaches 60°C. The charger will decrease the charging current and only resume an increased charge current, once the charger cools down to 55°C.

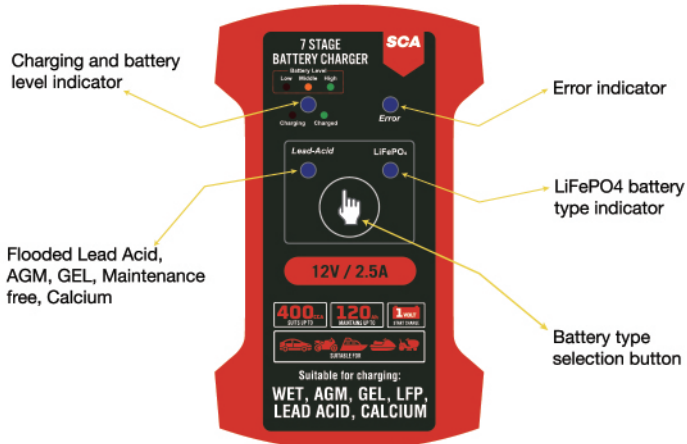
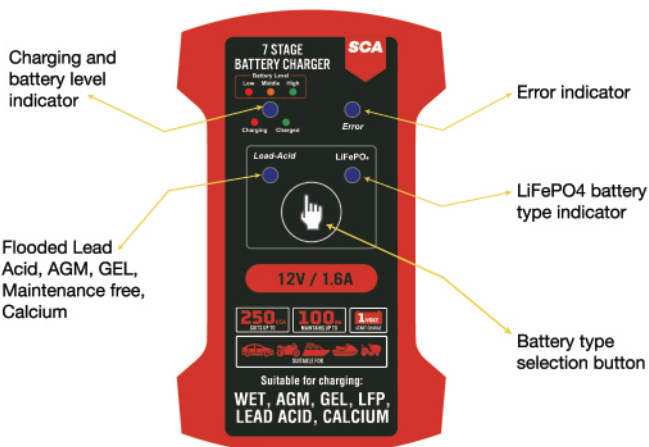
5. Overcharge protection

If the overcharge protection mode engages, the charging current will decrease with the increase of the battery voltage until the battery is fully charged. The charger will automatically disconnect the output, and the 'charged' light will illuminate, preventing the risk of overcharge.

6. Over voltage protection

If the battery voltage is too high, the battery charger will not charge and the LED error indicator will illuminate.

BATTERY CHARGER FUNCTIONS



CHARGING INSTRUCTIONS

IMPORTANT:

Note the time the charger is connected to the battery and switched on.

Step 1 - Electrolyte Level Check

For sealed maintenance free batteries check the state of charge indicator.

Please Note: Refer to the vehicle manufacturers' owner's manual.

Step 2 - Connect battery charger to the battery

Please Note: Refer to the vehicle manufacturers' owner's manual.

There are three (3) options for connecting the battery charger to a battery

- i. Connect battery charger to a battery out of the vehicle
- ii. Connect battery charger to a battery fitted inside vehicles engine bay
- iii. Hard wire connection battery charger to a battery

i. Battery out of a vehicle

- Ensure the battery is in a safe location on a stable surface with adequate ventilation.
- Ensure the correct Personal Protective Equipment is being worn i.e. gloves and eye wear.
- Connect the RED lead (Battery Clip) to the Positive Terminal (+/positive) on the battery.
- Connect the BLACK lead (Battery Clip) to the Negative Terminal (-/negative) on the battery.
- The battery charger is then to be connected to the supply mains.
- Turn the 240V AC power source ON to turn the battery charger on.
- Charging will automatically commence. After charging, disconnect the battery charger from the supply mains.
- Disconnect the BLACK lead (Battery Clip) from the Negative Terminal (-/negative).
- Disconnect the RED lead (Battery Clip) from the Positive Terminal (+/positive).
- Refit battery into vehicle and correctly reconnect using the vehicle manufacturer's recommendations.



ii. Battery connected in vehicle

- Ensure the correct Personal Protective Equipment is being worn I.e. Gloves and Eye Wear.
- Ensure vehicle ignition is switched OFF before making ANY connection to battery.
- The battery terminal not connected to the chassis (positive) must be connected first.
- The second connection (negative) is to be made to the chassis, remote from the battery and fuel line.
- The battery charger is then to be connected to the supply mains.
- Turn the 240V AC Power Source ON to turn the battery charger on.
- Charging will automatically commence.
- After charging, disconnect the battery charger from the supply mains. Then remove chassis connection, and then the battery connection.



iii. Hard wire connection

- Ensure the battery is in a safe location on a stable surface with adequate ventilation.
- Ensure the correct Personal Protective Equipment is being worn i.e. gloves and eye wear.
- Secure the RED Battery Cable ring terminal to the Positive Terminal (+/positive) on the battery.
- Other connection is to be made to the chassis, remote from the battery and fuel line.
- Plug the battery charger into the one-way connector on the ring terminals.
- The battery charger is then to be connected to the supply mains.
- Turn the 240V AC Power Source ON to turn the battery charger on.
- Charging will automatically commence. After charging, disconnect the battery charger from the supply mains and disconnect battery connection.
- Disconnect the charger one way connector from the ring terminals, and ensure any loose leads in the engine bay are secure.

Step 3 - Charging

Either press the mode selection button on the battery charger (within 5 seconds of connection) to select mode, or the charger will automatically commence charging after 5 seconds.

Select Lead Acid for Flooded Lead Acid, AGM, GEL, Maintenance free or Calcium batteries.

Select LiFePO4 for Lithium Iron Phosphate batteries.

Note:

If the battery charger does not detect a properly connected battery, the LED 'error' indicator will illuminate. In this instance, follow the appropriate instructions and reconnect the charger to the battery terminals.

If the battery clips or ring terminals are connected in reverse, the LED 'error' indicator will illuminate, showing that the charger has been incorrectly connected to the battery. Follow the appropriate instructions and reconnect the charger to the battery terminals.

FREQUENTLY ASKED QUESTIONS

Q. Is this battery charger waterproof, or water resistant?

A. No. Ensure charger is used indoors or undercover only.

Q. Is this battery charger suitable for lithium batteries?

A. This battery charger is suitable for 12V (4 cells) LiFePO₄, Lithium Iron Phosphate batteries only.

Q. Is this battery charger suitable for 6V or 24V batteries?

A. No. This battery charger is suitable for 12V batteries only.

Q. Can this battery charger be left connected to a battery permanently?

A. No. Do not leave this battery charger connected to the battery for more than 96 hours.

IMPORTANT:

Leaving a battery on charge permanently may cause damage to your battery, if a fault occurs. Lead Acid batteries require frequent checking of electrolyte levels. It is not recommended to leave AGM batteries on float charge permanently. Do not leave maintenance free batteries on float charge for extended periods as the electrolytes can dry out and cause an internal explosion.

Always refer to the vehicle or battery manufacturers' owners manual.

TROUBLESHOOTING ERROR CODE

| Problem | Possible reasons | Solutions |
|---|---|---|
| Faulty battery (Error LED indicator illuminate) | <9V charge after 30 minutes of charging | Visit your local Supercheap Auto store to get your battery tested. |
| The battery will not charge (Error LED indicator illuminate) | Battery voltage of charged battery is <1V or >15V | Check voltage range of battery is between 1V - 14.2V. If <1V, this battery charger will not charge the battery. |
| | Incorrect connection of charger clamps / ring terminals to the battery. | Check connections and reconnect if required. |

WARRANTY

Our product is guaranteed to be free from quality and manufacturing defects for a period of 5 years.

If your product becomes defective during this period, SRGS PTY LTD will offer you either a replacement, credit or refund where a product is faulty; wrongly described; different from the sample shown to you or do not do what they are supposed to do.

This warranty will not cover substantially modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim the warranty, take the product to the front Service Desk of your nearest store of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim. Should you not be able to provide proof of purchase with a receipt or bank statement, identification showing name, address and signature may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you. For online store purchases, SRGS PTY LTD will pay for the return freight for any product assessed as having a major failure.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by SRGS PTY LTD, 6 Coulthards Avenue, Strathpine QLD 4500, Australia. Phone: 1300 175 010.

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Manufactured and packaged for SRGS PTY LTD ABN 23 113 230 050
6 Coulthards Avenue, Strathpine QLD 4500, Australia