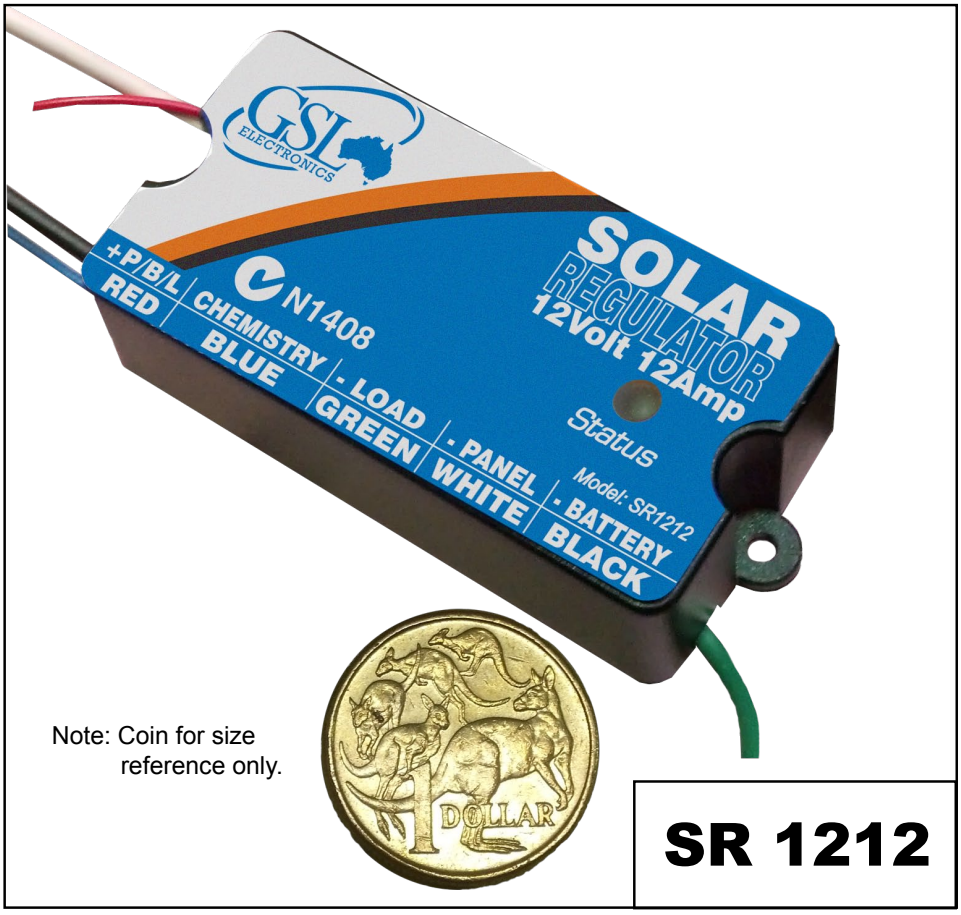
# 12Volt 12Amp Solar Regulator

Operating Instructions
Please read these instructions before use




Note: Coin for size reference only.




**SR 1212**

## Operation Guide

Thank You for purchasing another quality GSL Product.
The SR 1212 is a Negative Switched PWM Solar Panel Regulator which is feature rich and powerful for it's size due to it's microcontroller based design with the added bonus of polymer encapsulation making it water and weather proof.

Featuring:

- Operating from panels that are peak rated to 250W
- Very high efficiency, typically over 98%
- Low night time discharge current, below 10mA.
- Selectable multichemistry. For Sealed Lead Acid , Flooded Cell Lead Acid and Lithium (LiFePO4) chemistries. (Note: This feature is only available on SR1212-2 only. The SR1212-1 fixed for Flooded Cell Lead Acid)
- Simple Status LED Indication (SR1212-2 model only)
- High operating temperatures - Safely work up to 70°C.
- High reliablity due to dual over temperature protection.
- Built in Low Voltage Disconnect (LVD) (SR1212-2 model only)
- Advanced 3 stage automatic PWM charging algorithm

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SR1212-2 - This compact Solar Regular is designed for effective charging of 12 volt battery systems from your solar...more info.

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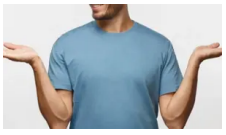
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| Operational Parameters | | |
|---|---|---|
| | **SR1212-1** | **SR1212-2** |
| Maximum Current at Bulk Charge | 12A | 12A |
| Input Operating Voltage Range | 15V to 25Volts | 15V to 25Volts |
| Maximum Charge Voltage for Flooded Cell (LEAD ACID) | 14.6Volts | 14.6Volts |
| Maximum Charge Voltage for Lithium | - | 14.4Volts |
| Maximum Charge Voltage for AGM/GEL | - | 14.2Volts |
| Float Voltage | 13.5Volts | 13.5Volts |
| Lithium Maintenance Charge | - | 13.2V |
| Standby Current | 0.01A | 0.01A |
| Maximum Operating Temperature | 70°C | 70°C |
| Automatic Derating Above 45°C | 0.5A/°C | 0.5A/°C |
| Typical Efficiency | 98% | 98% |
| LVD On/Off | - | On : <11V OFF : <12.5V |
| Status LED | - | YES |
| Dimensions | 81mm(L) x 37mm(W) x 22mm(H) | 81mm(L) x 37mm(W) x 22mm(H) |
| Weight | 50g | 70g |

## Important installation and safety notes

- **Use only PV systems with open circuit voltage below 25v and 250W rated peak power.**
- **Install the unit away from flammable liquids or gases.**
- **Use wires suitable for at least 15A, but if wire runs are over 3m then larger wires are recommended to limit voltage drop and losses.**
- **A battery fuse ( BF ) is always required and must be located as close as possible to the positive battery terminal and before any other connection. The fuse ratings will depend on the wire size and load but typically a 15A fuse is envisaged.**
- **Before connecting always check battery and PV panel polarity & Do not short PV or Load with Battery connected!**
- **Always check that the correct chemistry setting is used and that the voltage levels are suitable for your specific battery.**
- **Only use Lithium batteries with a suitable BMS.**
- **This appliance is not meant for use by young children.**
- **During the charging process on a vented battery do not use a naked flame near a battery which may ignite and explode.**
- **Never smoke or light cigarettes near a battery.**
- **Do not place tools on top of battery or allow tools to fall on to the battery.**
- **Always wear eye protection near a charging battery.**
- **Ensure a "well" ventilated area is used when testing or charging batteries.**
- **Ensure ventilation is adequate and venting holes are not obstructed.**
- **If skin or clothing comes into contact with acid, flush the area(s) with water immediately and seek medical attention if necessary.**

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## LED Indicators Guide

Solid ON: Battery charging and battery voltage over 13V

Flashing : Nightime - Battery OK | Daytime - Battery low or panel disconnected.

Blinking : Battery level very low.

(LED indication only on SR1212-2)

## Low Voltage Disconnect (LVD)

The LVD function of the unit utilized on the GREEN wire is designed to protect the battery from over discharge by disconnecting the negative load wire (GREEN) when the battery voltage drops below 11V for over 2 Seconds.

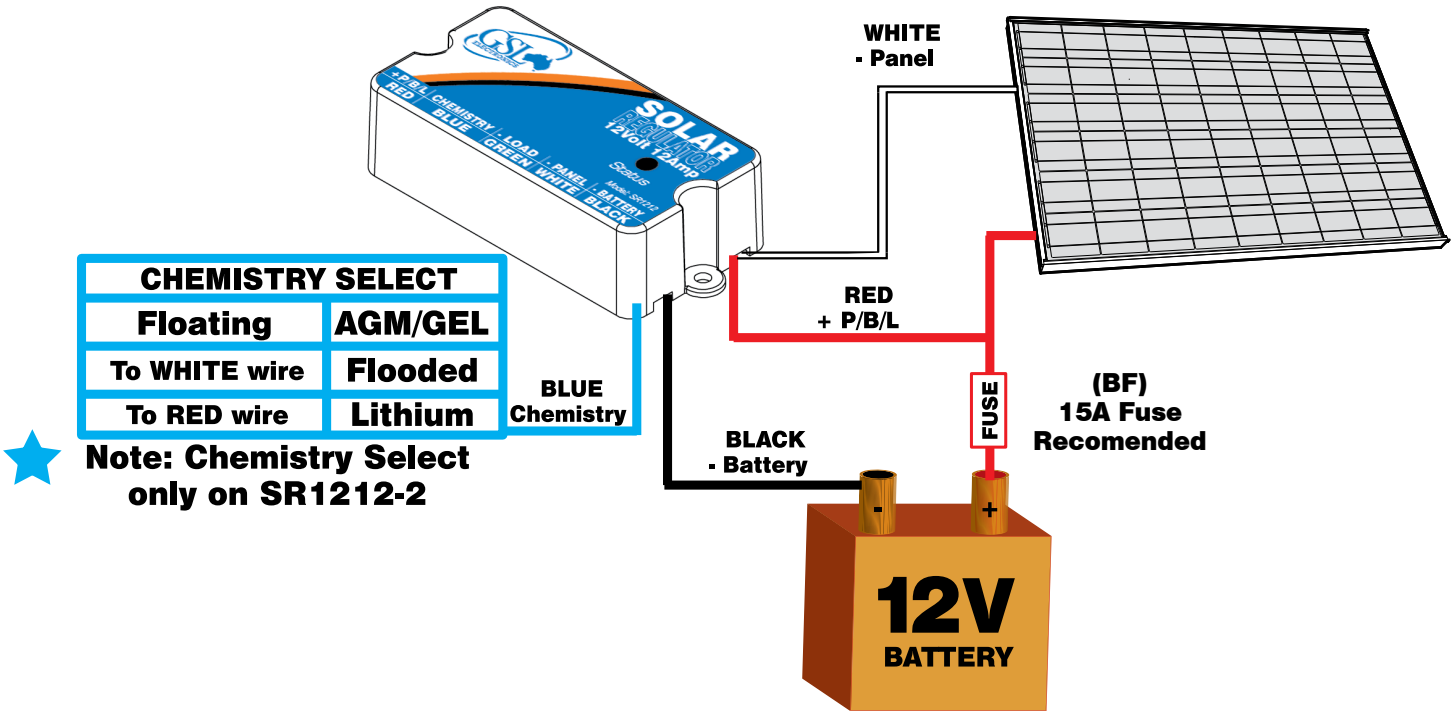
It reconnects automatically when a new charge cycle starts.

(Not Available on SR1212-1)

Note : Dawn to Dusk load operation is available but minimum orders apply, please contact our sales team for more info on this feature.

## Fig. 1 BATTERY SETUP

Choose a cable size suitable for your situation.




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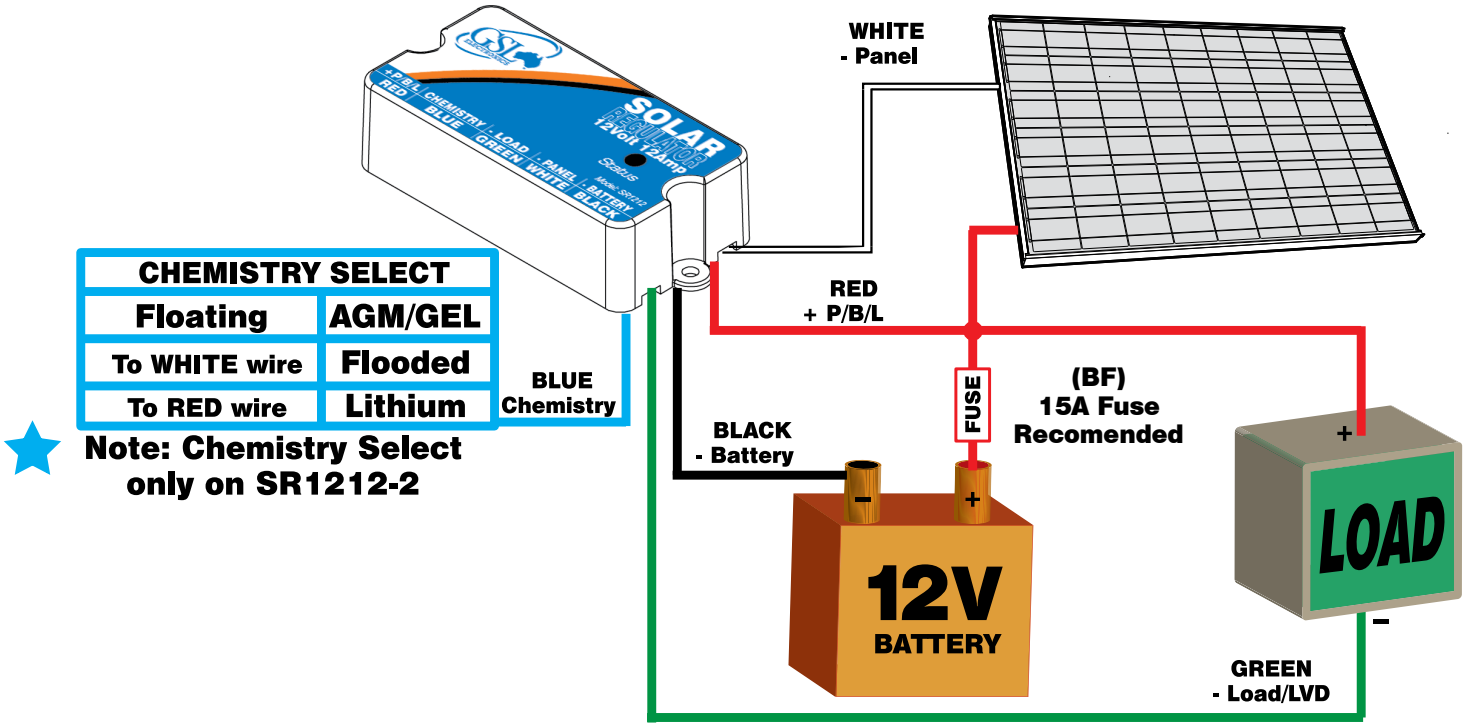


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**Fig. 2 Battery And LVD Load Setup** (SR1212-2 Only)




*Warranty Conditions:* Our products come with guarantees that cannot be excluded under the Australian Consumer Law.
The customer is entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage.
The customer is also entitled to have the products repaired or replaced if the products fail to be of acceptable quality and the failure does not amount to a major failure.
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