



+ DUAL BATTERY ISOLATOR KIT 12V 125A

Instruction Manual



PLU: 605750
CODE: GW-DBIK
Manufactured and packaged for
SRGS PTY LTD
ABN 23 113 230 050
6 Coulthards Avenue,
Strathpine QLD 4500, Australia
MADE IN CHINA

+ DUAL BATTERY ISOLATOR KIT 12V 125A

Instruction Manual



+ WARNING

1. PLEASE READ THIS INSTRUCTION COMPLETELY PRIOR TO INSTALLATION.
2. Recommended for use between batteries of the same chemistry only. Do not connect lead acid batteries with Lithium batteries.
3. BATTERY PRODUCT can produce EXPLOSIVE GASES-Ensure no sparks or flames are present.
4. Wear eye protection.
5. Vehicles must be in "NEUTRAL" or "PARK", park brakes "ON"
6. Follow all vehicle manufacturer's instructions.
7. Beware of moving parts.
8. Battery isolators are designed for negative ground alternator systems with batteries of the same nominal voltage.
9. Batteries of differing voltages cannot be used.
10. Choose correct parts including the terminals, cables and so on based on the vehicles.
11. Larger cable is required if starting off the second battery (main battery has gone flat), the size of that cable will depend on the distance the battery away from the starter motor. If under the bonnet it will be required to be starter cable potentially 2 B&S (about 32mm²).

+ FEATURES

1. EASY to install-The electronic isolator does not require any changes to the vehicle's existing wiring. It can be fitted to all 12V vehicle types.
2. Manual Override-If the starting battery is flattened and the auxiliary battery is charged, the electronic isolator allows the batteries to be manually paralleled to jumpstart the vehicle. If appropriate cabling has been installed refer to number 10 above.
3. Surge Protection-Provides surge protection for vehicles with electronic ignition/management systems.

+ SPECIFICATIONS

- + Rating Voltage: 12V
- + Continuous Current: 125A
- + Cut-in Voltage: 13.4 ± 0.15V
- + Cut-out Voltage: 12.8 ± 0.15V
- + Turn off Voltage: 16± 0.15V or 7.5± 0.15V

PART NO.	GW-DBIK
VOLTAGE	12V
MAXIMUM VDC	16V
CHARGING CURRENT	125A CONTINUOUS, 150A PEAK
CUT-IN VOLTAGE	13.4V
CUT-OUT VOLTAGE	12.8V
CUT-OUT DELAY	60 SECONDS
MINIMUM OPERATING VOLTAGE	ONE BATTERY ABOVE 7.5V
CHARGE TYPE	PARALLEL
CONTROL	ELECTRONIC
MOUNTING	SURFACE/ FIREWALL/BATTERY SIDE
CURRENT DRAW	NONE
SURGE PROTECTION	BUILT IN
ISOLATOR DIMENSIONS	67.5*67.5*49MM

+ KITS INCLUDED:

PARTS	QUANTITY (PCS)
VOLTAGE DUAL SENSITIVE RELAY	1
10MM ² COPPER CABLE, BLACK, L=70CM	1
10MM ² COPPER CABLE, RED, L=700CM	1
M6 LUGS	2
M10 LUGS	2
POSITIVE BATTERY TERMINAL WITH M8 SCREW	1
NEGATIVE BATTERY TERMINAL WITH M8 SCREW	1
RED HEAT SHRINK	2
COPPER RING	1
200MM CABLE TIE	6

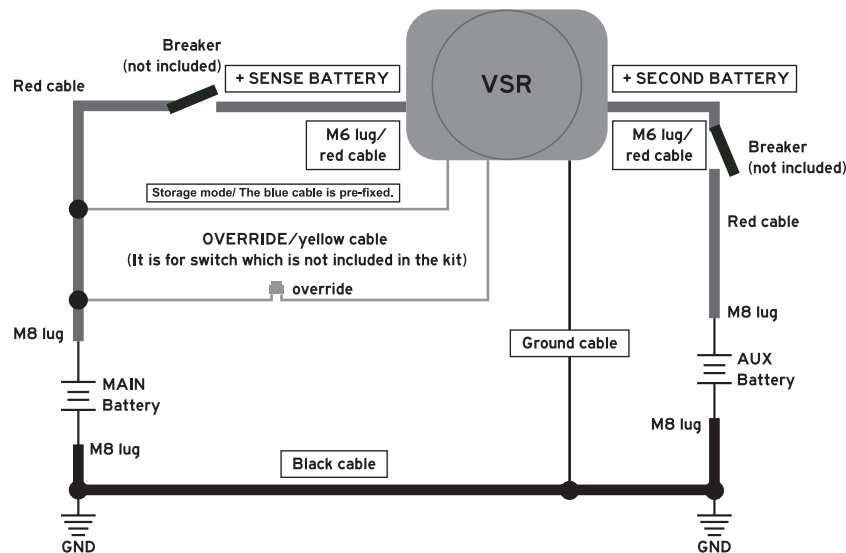
+ INSTALLATION- MOUNTING

1. Disconnect the negative battery cable from the vehicle's starting battery. To protect the loss of vehicle electronic memories, radio presets & security codes, it is recommended that an "Electrical System Memory Protector" be used.
2. Mount and fit the auxiliary battery.
3. Mount the electronic isolator in a convenient location as near to the main battery as possible. Keep the isolator as far as possible from the exhaust manifold, turbo or any other high temperature components. Do not mount on the engine.

+ INSTALLATION-CONNECTION

To make the electrical connections, the supplied battery cable will need to be made to the correct length using cable lugs and heat shrink. Cable lugs should be crimped or soldered to the stripped battery cable and then protected with the heat shrink.

1. Connect a length of the supplied red cable from the "SENSE BATTERY" terminal on the isolator to the positive battery terminal on the starting (main).
2. Connect a length of the supplied red cable from the "SECOND BATTERY" terminal on the isolator to the positive battery terminal of the auxiliary battery. The connection to the aux battery should be fused with an appropriate fuse/circuit breaker (not supplied with this kit), do not over-tighten the terminal studs on the electronic isolator.
3. Connect the isolator's "Ground Cable" wire (small black wire with ring terminal) to a suitable chassis bolt or screw, ensure the ring terminal will make a good electrical connection by removing any paint and apply battery terminal protector to prevent rust and connection contamination.
4. Reconnect the starting (main) battery's negative cable.
5. Connect a length of the supplied black cable from the vehicle's chassis or engine block to the negative terminal of the auxiliary battery, the LED light on the isolator should be red.
6. Connect all of the auxiliary loads (phone, lights, stereo, refrigerator, etc.) to the positive battery terminal of the auxiliary battery, use appropriate circuit protection direct switch. This needs to be connected with the positive (red) cables first. The negative or black cables should be the last connection, first off last on to avoid sparking and voltage spikes.



+ TESTING FOR NORMAL OPERATION

1. With the installation complete and the engine "OFF".
2. Start the vehicle's engine. Within approximately 10-20 seconds LED will turn on indicating that the starting battery is above 13.4V and the isolator will start charging the auxiliary battery.
3. If the isolator does not go into "Charging mode" within this time frame, increase the engine RPM to a fast idle. This will allow the alternator to generate more current.
4. Once the isolator is in "Charging mode", turn the engine "OFF", then switch the headlights and other accessories "ON". The isolator will now detect that the batteries are being used. Approx 60 seconds after the voltage falls below 12.8V, the LED will turn off and the isolator will disconnect the two batteries from each other.

+ OPERATION AUTOMATIC

Once the battery isolator has been correctly installed and tested it will function automatically to charge the auxiliary battery.

+ MANUAL OVERRIDE

If the starting battery is flat and the auxiliary battery is charged, the battery isolator can be used to connect both batteries to allow jumpstarting. Make sure appropriate size cable has been installed, and there is a negative to the engine of the vehicle.

1. Connect the "override" yellow cable to the switch. Turn on the switch (switch not included), the override function will operate.
2. If you wish to stop the override function manually disconnect the "Override" yellow cable.

(Note: The manual override can only be used if the starting battery has at least 7.5V.)

+ FREQUENTLY ASKED QUESTIONS

- + Q. Is the Battery Isolator waterproof?
- + A. IP65 Certified: Heavy duty silicone sealed interior with reinforced case is certified for off-road use, which is water resistant, shock resistant, dust proof and safe to use in harsh condition.
- + Q. Is this battery isolator suitable for lithium batteries?
- + A: This battery isolator is only suitable for Lead acid battery.
- + Q. How does the isolator work?
- + A. Battery isolator allows run the accessories from separate battery when the engine is off while keeping your main battery charged and prevents the starting battery from being run down by your equipment. Now you can add more large capacity electrical loads to your vehicles, such as audio, light, etc.
 - When the engine is started and the voltage of start battery is higher than cut-in volts, the isolator keeps engaging and two batteries be charged simultaneously. Unit Indicator (LED) is on.
 - When the engine is stopped and the voltage drops below cut-off volts approx 60 seconds, the smart battery isolator disconnects two batteries. This can protect start battery from being drained by overload on auxiliary battery, and ensure that the main battery is always charged. Unit Indicator (LED) is off.
- + Q. Which devices need to be equipped with this isolator?
- + A. This item can be installed to most of vehicle, for example Truck, SUV, RV, ATV, UTV, Boat and so on.

+ WARRANTY

Our product is guaranteed to be free from quality and manufacturing defects for a period of 12 months.

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 880 764.