

TESTING FOR NORMAL OPERATION

1. With the ignition set to 'ACC' (Accessories) or 'OFF' and the override switch set to 'OFF', the 'Engaged' LED should be off.
2. Start the vehicle's engine. Once the starting battery reaches 13.4V the VSR will activate and the 'Engaged' LED will illuminate. If the LED does not illuminate within a few seconds, increase the engine RPM to a fast idle allowing the alternator to generate more current to charge the starting battery.
3. Once the LED illuminates, turn the engine 'Off' and switch the headlights and other accessories 'On'. When the starting battery voltage falls below 12.8V, the LED will turn off and the VSR will disconnect the auxiliary load.

TESTING OVERRIDE:

Turn the ignition to 'ON' and then switch the rocker switch to 'ON'. The LED in the switch should illuminate along with the VSR 'Engaged' LED, indicating the connection of both batteries in parallel.

SPECIFICATIONS

P/No.	VSR100
VOLTAGE	12V
CHARGING CURRENT	100A Continuous 200A Peak
CUT IN VOLTAGE	13.4V
CUT OUT VOLTAGE	12.8V
CUT OUT DELAY	8 sec.
CHARGE TYPE	Parallel
CONTROL	MCU
MOUNTING	Surface/Firewall
CURRENT DRAW	Charging 550mA (standby 10mA)
VOLTAGE DROP	None
SURGE PROTECTION	Built-in
ENVIRONMENTAL POTECTION	IP66
OVERRIDE	Requires minimum 10V
RECOMMENDED FUSE	150A
MIN CABLE SIZE	14mm ² (6 B&S)
TORQUE SETTINGS	3.75Lb/ft, 5Nm

WARRANTY

Projecta products are covered by a 12 month warranty. Failure to follow the operating instructions may damage the product and will void warranty. Please read these operating instructions carefully before use. For a warranty claim please return unit to the place of purchase with your sales receipt as proof of purchase date.

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PROJECTA

12 VOLT 100 AMP VSR DUAL BATTERY SYSTEM



P/No.s VSR100K

WARNING

- PLEASE READ THESE INSTRUCTIONS COMPLETELY PRIOR TO INSTALLATION.
- BATTERIES PRODUCE EXPLOSIVE GASES – Ensure no sparks or flames are present.
- Wear eye protection.
- Vehicles must be in 'NEUTRAL' or 'PARK', park brakes 'ON'.
- Follow all vehicle manufacturers' instructions.
- Beware of moving parts.
- Voltage Sensitive Relays (VSR) are designed for negative ground alternator systems with batteries of the same nominal voltage.
- Batteries of differing voltages cannot be used.

FEATURES

Projecta's Voltage Sensitive Relays (VSRs) are suitable for a wide variety of 12V DC applications. VSRs sense the input voltage and automatically connect/disconnect the appliance or circuit at the set voltages. The cut-out has an 8 sec. delay preventing the relay from disconnecting during a momentary drop in voltage.

Manual override

The VSR's manual override can be used to jumpstart your vehicle in the event of a flat starting battery.

Surge protected

Weatherproof (IP66)

L.E.D Indicator (on/contact closed)

CONTENTS:

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|----------------------------------|--------------------------------------|
| 1 x 100A Voltage Sensitive Relay | 1 x Negative Battery Terminal |
| 1 x 4m Battery Cable (Red) | 2 x Black Heat Shrink |
| 1 x 60cm Battery Cable (Black) | 4 x Red Heat Shrink |
| 1 x 2.5m Switch Cable (Blue) | 3 x Insulated Female Blade Terminals |
| 1 x 1m Switch Cable (Black) | 1 x Insulated Male Blade Terminal |
| 1 x Rocker Switch | 1 x Insulated Ring Terminal |
| 6 x Small Battery Lugs | 1 x Wire Tap (White) |
| 2 x Pan Head Screws | 10 x Small Cable Ties |
| 2 x Positive Battery Terminals | |

INSTALLATION

1. Disconnect the negative battery cable (Earth) from the starting battery.
Note: To prevent the loss of the vehicle's electronic memory, preset radio and security codes it is recommended that an 'Electrical System Memory Protector' (P/No. IPS700) be used.
2. Mount the VSR in a convenient location. Mount as far away as possible from the exhaust manifold, turbo or any other high temperature components. Do not mount on the engine.

INSTALLATION – CONNECTION

To make electrical connections, all cables need to be made to the correct length using cable lugs and heatshrink. Cable lugs should be crimped or soldered to the stripped battery cable and then protected with the heatshrink.

Follow the diagram below to complete the installation.

