

# Great spot to be... unless you have a flat battery.

The Redarc SmartStart® is a microprocessor-controlled battery isolator designed for use in multi-battery applications as a solenoid priority system, protecting the start battery from excessive discharge, whilst allowing the auxiliary battery to supply non-essential loads.

The Redarc SmartStart® is designed primarily for use in 4WD and commercial vehicles and is available in four models; 12V DC or 24V DC incorporating 100A or 200A continuous ratings. The 200A models are designed for extremely heavy-duty operations.

The Redarc SmartStart® is Australia's most trusted dual battery isolator and is used by 4WD clubs throughout Australia.

## Primary benefits

- Compact in size and easy to install
- Cost-effective protection against a flat battery
- Smarter than a continuous duty solenoid
- Silver contacts for longer life
- Power saving technology
- Cooler operating temperature
- Only draws approximately 0.15A when engaged
- Fault indication
- LED lights when the solenoid is activated
- Fully surge-protected
- Two year warranty



**REDARC**®

THE POWER CONVERSION SPECIALISTS

The SmartStart® monitors the start battery voltage and when the start battery reaches 13.2V (26.4V for a 24V system) the SmartStart® connects the auxiliary battery to the charging system.

When the system voltage drops below 12.7V (25.4V) the solenoid opens isolating the start battery from the auxiliary battery.

The SmartStart® features sophisticated fault detection and indication to warn the user of faults including overvoltage, voltage drop and excessive current draw conditions.

The SmartStart® is ideal for installations that cannot tolerate the voltage drop associated with diode battery isolators.

The SmartStart® can be used with dissimilar battery types. Many users successfully operate their battery system with a standard cranking battery as main and a deep cycle battery as auxiliary.

## SmartStart® frequently asked questions

### Does the unit have surge or spike protection?

Yes. The unit incorporates components which prevent the solenoid from generating high voltage transients.

### Are the voltage limits and time delay settings customisable?

Yes. Call Redarc for further information on what customisation is possible.

### Is the Redarc SmartStart® suitable for use on modern vehicles fitted with the latest alternators using smart electronics?

Yes. Many users owning current model 4WDs have bought and used the SmartStart® with the product working exactly as designed.

### Can an override switch be fitted to the dash to allow the auxiliary battery to be joined to the start battery to assist with starting?

Yes. The Redarc SmartStart® has an additional input (blue wire) which can be used to override the voltage sensing feature for emergency starting. This input may be temporarily connected to +12V (+24V) from the auxiliary battery to turn the solenoid on.

### Can I leave the SmartStart® connected if a trailer or caravan is not hooked up to the towing vehicle?

Yes. The SmartStart® will not be affected by not having an auxiliary battery connected.

### Can I use the SmartStart® to control a load (e.g., fridge) without using an auxiliary battery?

Yes. You can use the SmartStart® to switch an auxiliary load (e.g. fridge). The SmartStart® will power the fridge until the voltage falls below 12.7V (25.4V), isolating the start battery. The SmartStart® will then power up the fridge when the voltage in the start battery rises above 13.2V (26.4V).

### Does the internal LED illuminate when I use the external override switch?

Yes. The internal LED is turned on by the microprocessor inside the control box, whether by voltage or over-ride.

### Can a remote indicator on the dash show when the solenoid is activated?

Yes. You can wire up an LED.

### Can an external battery charger or solar panel be connected to the auxiliary battery?

Yes, but if the battery charger or solar panel is connected whilst the SmartStart® is still engaged, the SmartStart® will stay engaged and both batteries will receive charge.

### Can I use my SmartStart® to winch off both batteries?

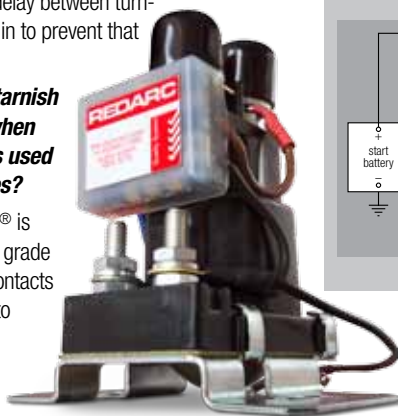
Yes. The SmartStart® can be wired to connect both batteries when the winch is turned on.

### When the solenoid closes to provide charge to a discharged auxiliary battery, will the contacts chatter and not provide effective charge to the auxiliary battery?

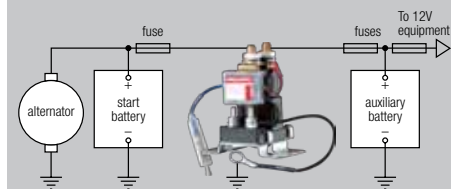
No. There is a time delay between turn-on and turn-off built in to prevent that occurring.

### Will the contacts tarnish due to moisture when the SmartStart® is used in tropical climates?

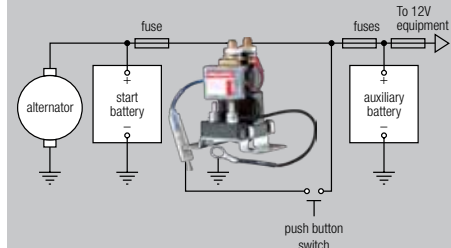
No. If the SmartStart® is sprayed with a good grade silicon sealant the contacts will not be exposed to moisture.



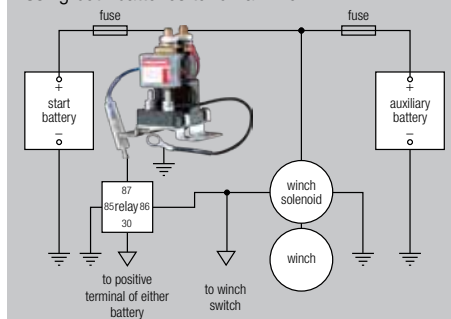
SmartStart® standard installation



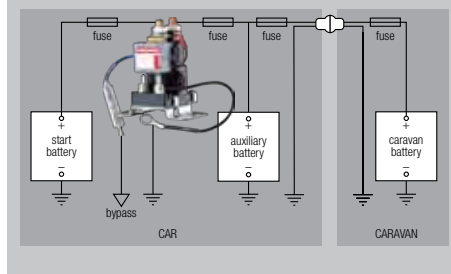
Adding an override switch



Using both batteries to run a winch



Connecting a caravan



Part number	Nominal voltage	Continuous load rating	Off/on Volts	Inrush load rating	Dimensions L x W x H	Approx weight
<b>SBI12</b>	12V	100A	12.7/13.2V	400A	75mm x 70mm x 80mm	300g
<b>SBI24</b>	24V	100A	25.4/26.4V	400A	75mm x 70mm x 80mm	300g
<b>SBI212</b>	12V	200A	12.7/13.2V	600A	90mm x 95mm x 100mm	800g
<b>SBI224</b>	24V	200A	25.4/26.4V	600A	90mm x 95mm x 100mm	800g

See the Redarc SmartStart® at your nearest automotive parts dealer



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