

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

REDARC®

The REDARC Smart Start® 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 Smart Start® is designed primarily for use in 4WD and commercial vehicles and is available in four models; 12 or 24 volt DC incorporating 100 or 200 amp continuous ratings. The 200 amp models are designed for extremely heavy-duty operations.

The REDARC Smart Start® is Australia's most trusted dual battery isolator and is used by 4WD clubs throughout the country.

Benefits

- Charge your auxiliary battery whilst you drive
- Cost effective protection against a flat start battery
- A safe way to charge your auxiliary battery
- Compact in size and easy to install
- Power-saving technology



MADE IN AUSTRALIA



The Smart Start® monitors the start battery voltage and when the start battery reaches 13.2 volts (26.4 volts for a 24 volt system) the Smart Start® connects the auxiliary battery to the charging system.

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

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

The Smart Start® 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.

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

Smart Start® 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 Smart Start® 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 Smart Start® 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 Smart Start® 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 +12 volts (+24 volts) from the auxiliary battery to turn the solenoid on.

Specifications

Part number	SBI12	SBI24	SBI212	SBI224
Turn on voltage	13.2V	26.4V	13.2V	26.4V
Turn off voltage	12.7V	25.4V	12.7V	25.4V
Continuous current rating	100A	100A	200A	200A
Inrush current rating	400A	400A	600A	600A
Standby current	<4mA	<4mA	<4mA	<4mA
Weight	200g		700g	
Dimensions	75mm x 60mm x 85mm		70mm x 85mm x 95mm	
Standards	CE, C-Tick			
Warranty	2 years			

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

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

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

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

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 a 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 Smart Start® is still engaged, the Smart Start® will stay engaged and both batteries will receive charge.

Can I use my Smart Start® to winch off both batteries?

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

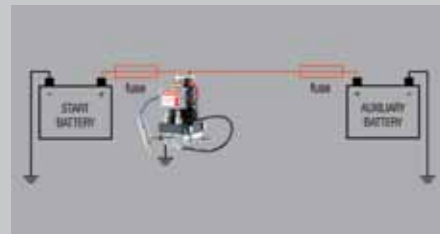
When the solenoid closes to provide charge to a discharged auxiliary battery, will the contacts chatter and not provide effective charge to the auxiliary battery?

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

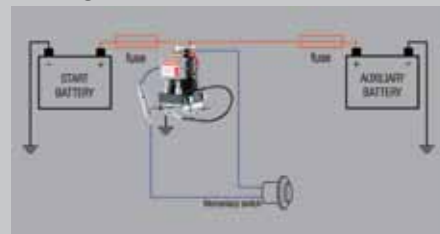
Will the contacts tarnish due to moisture when the Smart Start® is used in tropical climates?

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

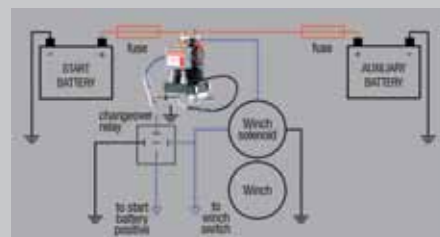
Smart Start® standard installation



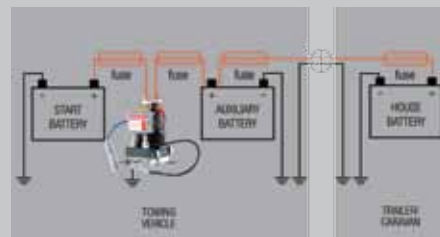
Adding an override switch



Winch from both batteries



Smart Start® caravan installation



The Smart Start® Dual Battery Isolator and Wiring Kit (part number SBI12KIT) comes with everything required to install your Smart Start® Dual Battery

Isolator including:

- Smart Start®
- Full instruction booklet
- Two year warranty

See the REDARC SBI12 Smart Start® at your nearest auto-electrician or 4WD specialty store.



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