Do you have a second battery installed?

Protect your investment with a REDARC 40A In–vehicle Battery Charger.

REDARC

THE POWER CONVERSION SPECIALISTS

Most vehicle alternators are not designed to fully charge your secondary batteries, in fact most aren't designed with second batteries in mind at all. An insufficient charge rate will at best shorten the life and performance of your investment, but is more likely to result in a flat battery when you least expect it.

REDARC's In-vehicle Battery Charger features technology designed to fully charge your batteries, regardless of their type or size. By providing a unique charging profile to each specific battery type, the REDARC In-Vehicle Battery Charger is able to achieve and maintain an optimal charge in your secondary battery.

The In-vehicle Battery Charger also features a Maximum Power Point Tracking (MPPT) solar regulator, allowing you to deliver the maximum amount of power from your solar panels to your auxiliary battery.

Benefits

- Multi-stage charging saves you money by maximising battery life
- Won't leave you stranded with a flat start battery
- Enjoy the freedom of solar power
- Fast-charging 40A output means more power, faster
- Allows for flexible installation in 12V or 24V vehicles

MADE IN AUSTRALIA

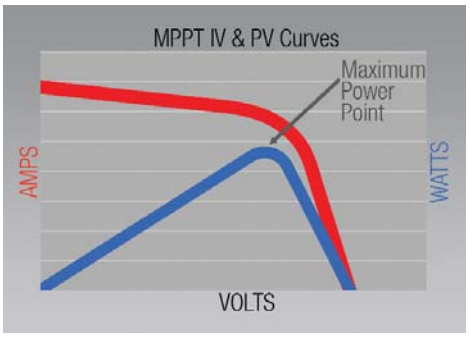
AUSTRALIAN DESIGNED · AUSTRALIAN BUILT · TWO YEAR WARRANTY

The REDARC 40A In-vehicle Battery Charger is a three stage, 12V, 40A, DC-DC battery charger with an inbuilt MPPT solar regulator that operates from an input between 9V and 32V DC. It is designed to charge any commonly used automotive battery to 100%.

What is MPPT and how does it work?

MPPT stands for Maximum Power Point Tracking, and it relates to the solar cell itself. Each solar cell has a point at which the current (I) and voltage (V) output from the cell result in the maximum power output of the cell. In the diagram below the curve is an example of the standard output expected from a solar cell, the Maximum Power Point is at the position marked on the diagram.

The principle is that if the output from the cell can be regulated to the voltage and current levels needed to achieve a power output at this point, then the power generated by the solar cell will be used most efficiently.

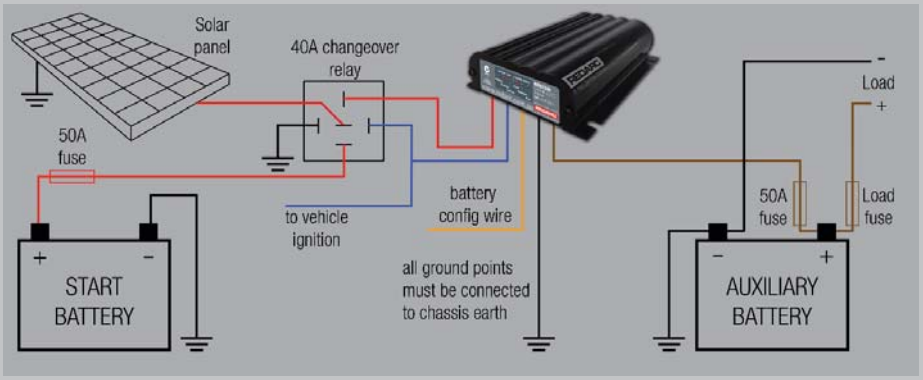


So in layman's terms, how does MPPT benefit me?

MPPT ensures that you get the most power possible from your solar panels during low light level conditions.

All this calculation and regulation results in the output from your solar regulator providing the maximum current possible at the required voltage at any given point. During low light level situations it will compensate for the low light level and find the new point at which the solar cell delivers its maximum power output.

BCDC1240 Alternator/Solar automatic switching installation diagram



The battery type is set by connecting the orange wire to either ground, positive supply or left unconnected during installation. The BCDC1240 will check the status of this wire on power up and display the selected battery type via the LEDs on the unit.

Battery type configuration wire (orange) connections:

Battery type	Connection
Standard Lead Acid	Ground
Calcium content	Positive supply
AGM or GEL	Not connected

Specifications

Part number		BCDC1240	
DC input voltage range		9V-32V (9V-28V for Solar)	
Recommended battery type	Gel/AGM	Standard lead acid	Calcium content
Maximum voltage	14.5V	14.9V	15.3V
Float voltage	13.3V	13.3V	13.3V
No load current		<100mA	
Standby current		<8mA	
Input fuse rating		50A (Not supplied)	
Output fuse rating		50A (Not supplied)	
Output power(max)*		600W	
Ambient temperature		-20°C to +80°C	
Weight		680g	
Dimensions		150 x 120 x 37mm	
Standards		CE, C-Tick, AS/NZS CISPR11:2004	
Warranty		2 years	

*Output power is dependent on installation

See the Redarc BCDC1240 at your nearest auto-electrician or 4WD specialty store.

Redarc Electronics
ABN 77 136 785 092
power@redarc.com.au

23 Brodie Road (North)
Lonsdale, South Australia
Australia 5160

Local
Phone (08) 8322 4848
Fax (08) 8387 2889

International
Phone +61 8 8322 4848
Fax +61 8 8387 2889

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www.redarc.com.au