## THE POWER OF



## **One BCDC for two batteries in different locations**

## Question

Can I use the BCDC\* charger to charge my under-bonnet auxiliary battery as well as my fridge battery in the rear of the vehicle (or the slide on camper or the camper trailer)?

## Answer

Whilst this can be done, it is not as good as having a BCDC\* charger close to each auxiliary battery you want charged. The reasons for this are:

- The BCDC\* will charge the under-bonnet battery 100% but the voltage drop associated with the long run of cable from there to the battery in other location will mean that battery may take longer to reach 100% charge or may not reach 100% charge if it has a fixed load such as a fridge (unless you use heavy cable).
- If the auxiliary battery under the bonnet is a different type from the battery in the other location, it is likely one battery or the other will be either under or over charged. For example if you set the BCDC\* to charge the standard flooded battery under the bonnet and you have an AGM or Gell battery in the other location, it may be over charged. Alternatively, if you set the BCDC\* to charge the AGM or Gell in the other location, the one under the bonnet may be undercharged.
- The BCDC\* will work at full capacity up to 55°C ambient. Above that it will de-rate its output as temperature increases such that at 85°C, it will cut back to no charge at all. This is partly to protect itself but more importantly to protect the battery, as batteries can be damaged by being charged 100% in under-bonnet temperatures (especially AGM or Gell batteries).\* If your under-bonnet battery is being protected in this way, the battery in the relatively cool other location is also getting a reduced charge when it could be getting full charge as it is not in the hot environment.

For these reasons, it is far better to have a BCDC\* close to each auxiliary battery being charged. If you want avoid the cost of two BCDC\* chargers, one possible compromise is to have a SBI12 battery isolator for the under-bonnet battery and a BCDC\* charger close to the battery in the other location.

• For more information on charging batteries at under bonnet temperatures, try "Googling" E.g. charging batteries at under bonnet temperatures.

