

What does calculating mean and how long does it take?

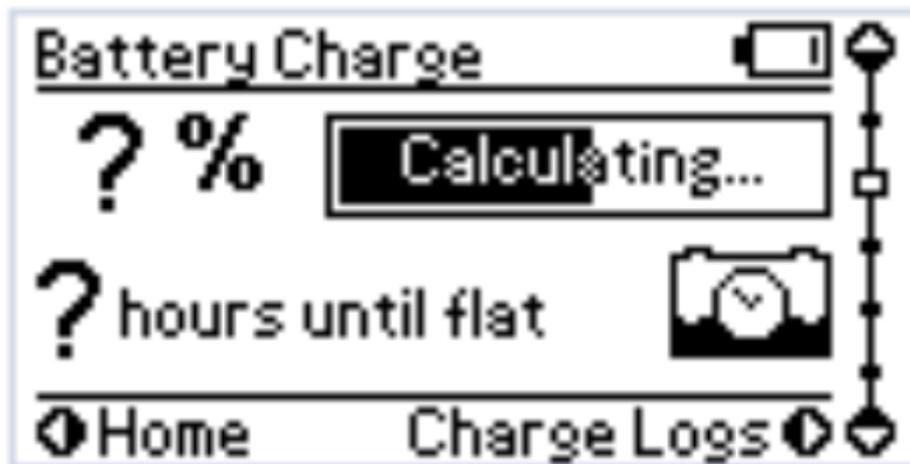
REDARC BMS calculating process explained

When a REDARC Manager30 is connected to a battery (whether a new install, a battery replacement, or its simply been disconnected for another reason), it will need to learn about the battery it's connected to

Firstly, the remote will prompt you to enter the battery type and size details; These give the charger information about the battery charging voltage, efficiency, and how big the battery is.

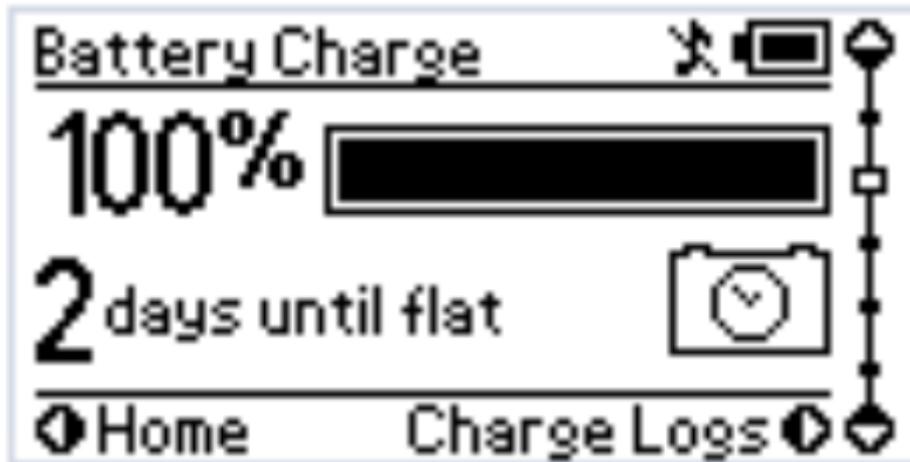


Secondly, the Manager needs to fully charge the battery. It does this so that it knows the battery has a full state of charge to use as a reference point for calculations on time till full or flat, and display its state of charge correctly. This process is displayed as "Calculating" on the remote.



Even a brand new battery, fresh from the shelf of a battery shop, may not be fully charged. The length of time before the battery is full, (and the Calculating stage completes), will depend on the type and size of the battery, and its state of charge when calculating commences. Calculating will automatically finish when the Manager is satisfied that the battery is full, and the state of charge and time frames will then be displayed.

The fastest and most effective way for the Manager to finish Calculating is to connect it to a 240V source and let it charge the battery without any loads turned on. This allows the maximum charge current to flow to the battery without being used by any loads. If 240V isn't available, the Calculating process will still occur from solar panels (as long as enough current is available for the Calculating period) or from a vehicle (as long as the drive time is long enough for the Calculating period).



If after 24 hours of continuous charging the battery still isn't full, the Manager will automatically time-out and deem Calculating to be complete. This can occur in cases where a battery may be very old or very hot due to an external heat source. You should always ensure that there are no external heat sources near the battery, and that correct battery care and maintenance is performed.