



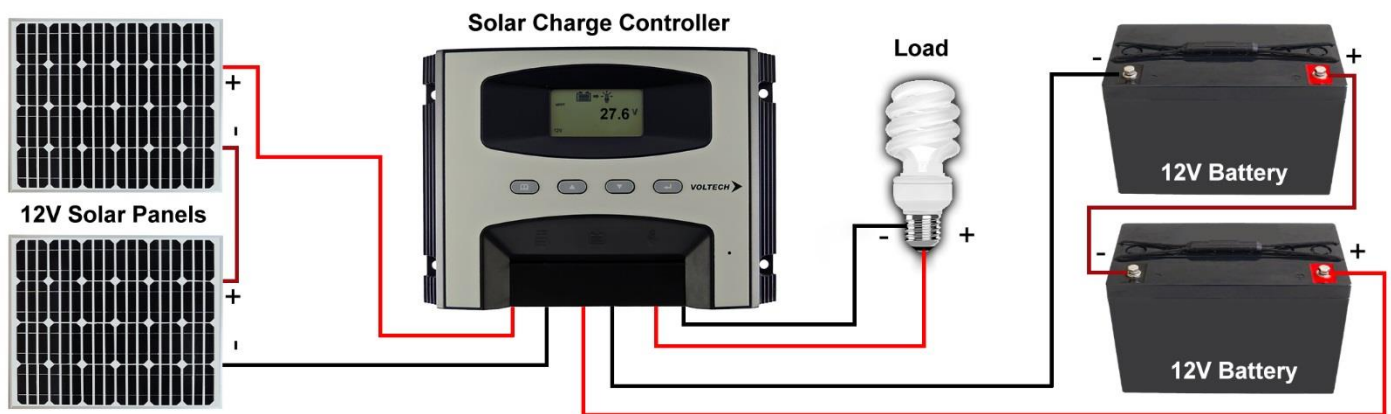
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Using Voltech Solar Panels in 12 & 24 Volt configuration.

Part 1

It is quite easy to make a 24Volt Panel by simply connecting two panels in series to double the output Voltage & therefore the available wattage, (e.g. 2 x 12V 40Watt Panels = 1 x 80Watt 24V panel).

Ideally the panels should be the same or very similar in regard to their Voltage & Current output as all the Current generated will now flow through both panels. So, any size '24V' panel from 10W to 400W or more can be created with the extensive model range of Voltech Solar Panels & 12/24V Solar Controllers.



It is also possible to use 24V panels such as the [SP290M](#) to charge a 12V battery bank, but in order to be efficient & make use of the available wattage a 'MPPT' type of Solar controller must be used ([ISC-3040](#) / [ISC-5040](#) & others). These work by taking the Input Power at a higher Voltage and efficiently converting it to match the Battery Voltage required, as opposed to standard PWM controllers which can only regulate current.

In a future article we will discuss in more detail the advantages of using MPPT controllers to connect panels in series on a 12V system including using the 'Dual Input' DC to DC boosters with PV input which can also accept higher Voltage panels.

In the meantime, if you require further information on anything discussed here or you have a question please contact us as below;