

DIY Solar Install



BY KAREN RIFFEL

In this article I'll share with you the steps in the solar panels installation on a 2008 MCI bus conversion. In 2017 the bus was purchased and upgraded by myself and my partner at the time. Since then the bus has been sold to a family who loves it. To see the before and after of the upgrades check out my albums: https://www.facebook.com/Kriffel83/media_set?set=a.10100293419878911&type=3

Solar Panels

This circuit was wired in parallel. Parallel circuits create an additive amperage and the voltage remains constant. For example, if you had four panels in parallel series each rated at 36 volts, 9.7A, the solar array would produce 36 volts (constant) and 38.8A (4 panels x 9.7A). This allows the current to travel consistently across multiple types of circuits. If there is a break in the circuit it will continue to move along to other paths, disregarding the broken circuit. For example, if the stove is turned off, it will not also turn off the fridge or lights. The fridge remains on and or the lights and only the stove is off. Connecting two panels that are the same wattage wired in parallel will multiply the total output current by two and keep the system voltage at the same level.

Series circuits create one continuous closed loop which all current must travel through. If there is a break at any point, it causes the current to stop at the broken point. For example, when one Christmas light goes out it causes the entire string to turn off.

This installation consisted of four polycrystalline solar panels. They were being sold by SRH Solar on Craig-

slist, Houston and purchased for \$440 (4 x \$120). (http://sunrise-ridge.com/srh_solar).

The panels were mounted on fabricated supports made from repurposed luggage racks found at a junk yard.



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