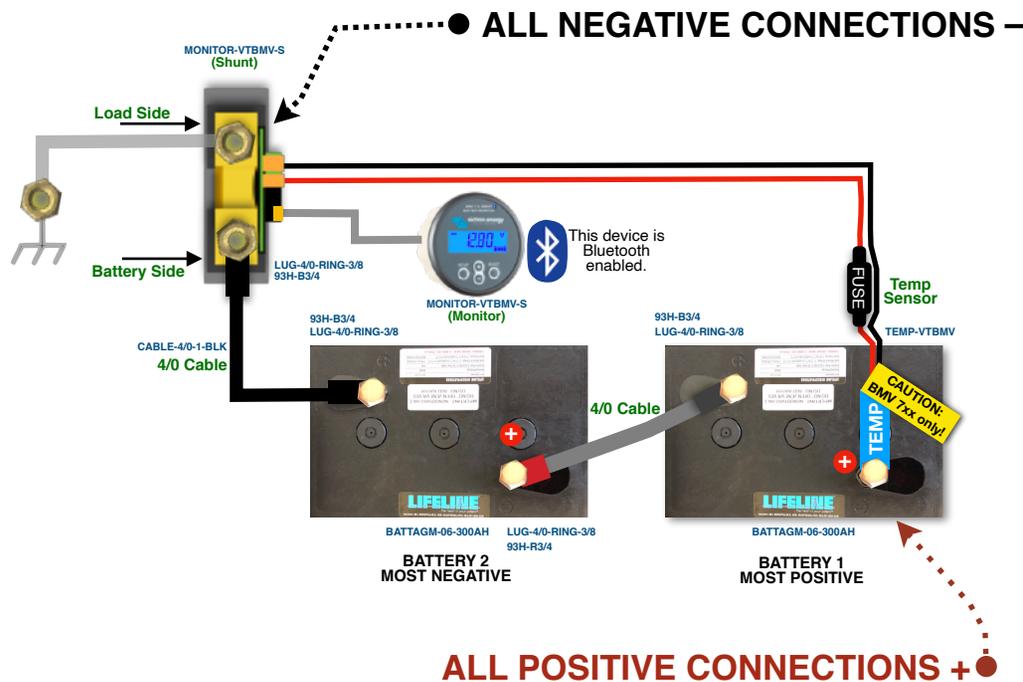




Battery Bank

AM SOLAR

The battery bank is the heart of the system. Its components usually take up the most space and all other subsystems connect to it. That's why we recommend installing it first. This battery bank consists of two 150Ah 6V batteries and a battery monitoring system. By connecting the batteries in series you end up with a 300Ah 12V battery bank. The Bluetooth battery monitor reads all charging and discharging current through a shunt and is able to interpret that data to compute battery usage, remaining energy, percent charge, etc. When a shunt is used, the load side of the shunt becomes the new negative battery terminal and no negatives will connect to the actual battery.



1. **Mount the batteries** securely in a custom made cabinet, or use straps. They are very heavy and not something you want tumbling around during a wreck. Weight distribution and maintaining balance may also be a concern for your installation.
2. **Mount the shunt** and connect the battery side (polarity matters) to the negative terminal of the most negative battery using heavy cable.
3. **Mount the display** in a convenient place and connect it to the shunt with the communication cable. This can be mounted on a wall or hidden away. Since the display communicates over Bluetooth, you don't actually need to interact with it.
4. **Connect the temperature sensor.** The temperature sensor also serves as the positive leg to power the battery monitor, therefore it must be connected to the positive terminal of the most positive battery.
5. **Check the connections** to make sure they are correct and tight.
6. **Series connect the batteries** by running a heavy cable from the positive of the most negative battery to the negative of the most positive battery. Ideally, this cable is as short as possible, but it is possible to use a longer cable and separate the batteries.
7. **Test the system** by checking that the battery monitor display is working. You can skip ahead to the programming section of this manual to program the battery monitor at this time.