



## 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 one 255Ah 12V battery and a battery monitoring system. 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 battery** securely in a custom made cabinet, or use straps. It is heavy and not something you want tumbling around during a wreck. Weight distribution and maintaining balance should not be a concern with just a single battery, but be conscious of this if expanding the system in the future.
2. **Mount the shunt** and connect to the 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 battery.
5. **Check the connections** to make sure they are correct and tight.
6. **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.

