12 V Battery Charging Operation

The battery bank located in the forward port side locker is charged in four ways.

Solar Panels, Generator, Port or Starboard Yanmar motors with 120Ah alternators and shore power.

1. **The boat has 4 x 245W Kyocera KD245GX-LFB solar panels mounted on the coach roof and on a stainless steel frame attached to the dinghy davits. The panels over the dinghy provide partial sun protection for the dinghy.**
2. **The controllers are located in the forward battery/generator storage locker and are mounted on the bulkhead as shown in the photo below**
3. **The battery bank consists of 5 x 210 ah Lifeline batteries**

12 V Battery Bank Charging System

B. Generator

1. **A 9 kVa Yanmar diesel MAS generator is located in the port side forward locker adjoining the battery bank.**
2. **It can be switched on at the switchboard in the main cabin or on the switchboard on the generator.**
3. **Pressing the green button on the generator switch panel starts the motor. To turnoff press the red button or the white button.**
4. **The white button allows the generator to be switched on inside the boat at the main switchboard.**

12 V Battery Bank Charging System

Transformer and Inverter

1. **The boat is fitted with a 1000W Xantrex Inverter for converting 12V to 240V**
2. **In addition the boat has an RVT Transformer located under the mattress of the forward starboard bunk. This converts 240V 50Hz to 110V 60Hz to allow the use of the 110V air conditioners and the 110V battery charger to work when on shore power.**
3. **It also allows the use of any 110V small appliances such as toasters and electric jug and vacuum cleaner.**
4. **The shore power at marinas has limited capacity unless you are tied up at a super yacht berth. Because the air conditioners draw a lot of power it is only possible when on shore power to run one air conditioner at a time or you will trip the fuse on the transformer or the shore power fuse will trip.**
5. **The boat is also fitted with 4 x 240V power outlets in the main cabin and these work when plugged into shore power or when the inverter is switched on when at sea. The transformer and inverter don't need to be turned on when on shore power to get the 240V outlets to work. They are independent of the transformer.**