



Charging your SolarFlex 600i-L/1200i-L batteries with a small portable generator

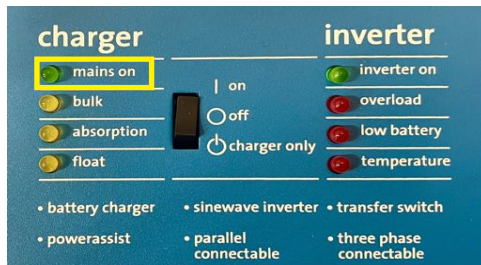
Most small generators are not internally grounded, and your system will see this because they monitor the voltage of incoming power. Because of this, your system will only see half of the incoming 120 volts.



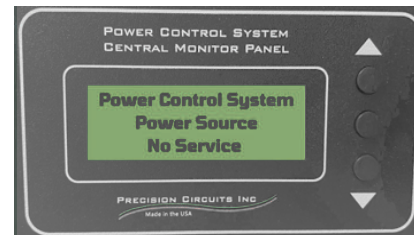
The 600i-L/1200i-L do not have converters but have smart inverters and use smart energy management systems that look for faulty wiring conditions. The system will see the lower voltage and protect itself from what they perceive as low voltage. They do this to protect the components and appliances in your Keystone RV. Below is the symptom for each system.

SF600i-L - The "Mains On" light on the face of the inverter will not be illuminated even though the generator is running.

SF1200-L - The "Power Control System" will show no service even though the generator is running.



SF600i-L



SF1200i-L

To verify your system is only seeing half of the voltage needed, you can test your generator with a multimeter by plugging the leads into a 120v outlet on the inverted circuit in the RV or at the cord you are using to power the RV. See Figures A and B. If you see voltages between 55 VDC and 65 VDC (Figure A), you need a Neutral/Ground bonding plug.

If you are not familiar with how to use a multimeter or do not feel comfortable performing this test please contact your local dealer for assistance.

Note: A Neutral/Ground bonding plug completes the circuit, so the output voltage is acceptable to the inverter. Bonding plugs are readily available online or where generators are sold. **See Figure C.**



Figure C



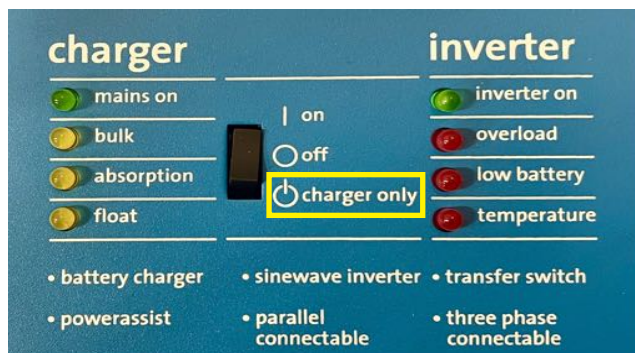
Figure A - Low Voltage



Figure B - Correct Voltage

If you find yourself in a dead battery situation with a SolarFlex 600i-L or 1200i-L, there are a few things you can do to ensure faster recharge times:

1. Turn off any unnecessary loads. The chargers on your system can provide up to 1750 watts of energy to your batteries. Unnecessary loads will pull energy away from the batteries and lengthen your recharge time. In ideal conditions, a 600i-L should achieve full charge in roughly 2.5 hours and a 1200i-L in 4.5 hours.
2. If your generator starts to charge and then stops intermittently you are most likely reaching the output limit of the generator. You will need to reduce the other loads inside the RV to make sure you aren't overloading the generator.
3. On the 600i-L you can turn the switch on the inverter to "Charger Only". This will help divert as much power as possible to the batteries.
4. On the 1200i-L you can turn down the shore power to match the generator on the Magnum remote.



SF600i-L



SF1200i-L