



900 Series Converter/Battery Charger Owner's Manual

Questions & Answers:

Q. Does Parallax Power Components L.L.C. provide a warranty?

A. Yes. Two years from date of purchase by consumer. (See Warranty Statement on back cover).

Q. What happens if I leave the converter/charger on for long periods of time, unattended?

A. The converter charger is designed to function as an integral part of the battery system. The output voltage of the unit is designed to charge the battery fully without going high enough to overcharge. The ideal situation for prolonged battery life is to turn the converter on for ten hours a month during long periods of no use. This will keep battery gassing/fluid loss to a minimum, non-sealed batteries should be checked for fluid level once a month. Battery failure is most often caused by leaving the battery in a discharged or partially discharged state. Even a completely charged battery will discharge itself if it is not maintained or recharged periodically.

Q. What happens when the battery is removed?

A. When the battery is removed from the vehicle, you will experience dim lights and possibly a humming noise coming from your radio. Parallax Power Components L.L.C. does not recommend operation without a battery connected to the system. If connected to 120 VAC at all times. Parallax Power Components L.L.C.'s model SB100 simulated battery may be installed in place of the vehicle battery.

Q. Does the converter/charger normally run warm to the touch?

A. Yes. The ferroresonant transformer characteristically operates very warm. Since the Parallax Power Components L.L.C. converter charger is designed to withstand the involved temperatures, it is not cause for concern.

Q. Should my converter/charger make a humming noise?

A. There is some inherent noise with normal operation of the ferroresonant transformer and is not cause for concern.

Q. What happens when I leave the converter/charger fully loaded for long periods of time?

A. At full load, the output voltage of the converter/charger will be approximately 12.0 volts. If the system is loaded to full converter rating, the battery will supply part of the current to the load until the battery terminal voltage is the same as the converter charger voltage. At this time, the battery would simply be floating and acting as a filter to the system. The converter/charger would then be supplying the total current to the recreational vehicle. At the time, the battery would be slightly discharged condition and will return to full charge when the load is decreased. In this type of system, the battery would help absorb sudden changes in output voltage due to sudden changes in load current.

Parallax Power Components L.L.C.
Converter/Battery
Charger Facts

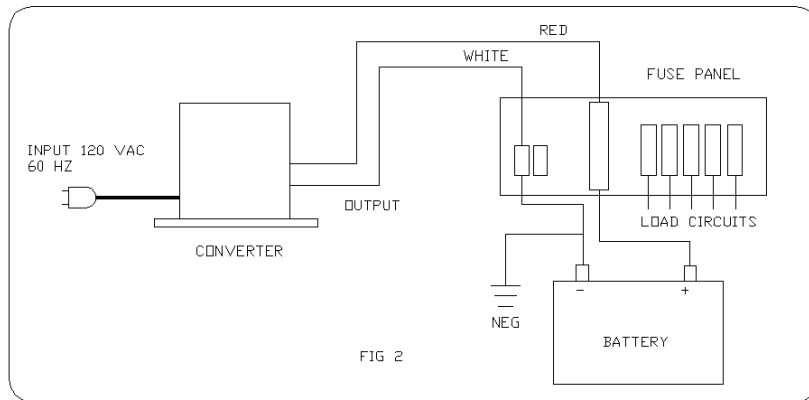
1. Your Parallax Power Components L.L.C. Converter/Battery Charger has been designed and manufactured to provide many years of convenience and trouble-free operation.
2. Parallax Power Components L.L.C. converter/chargers convert normal 95 to 130 VAC down to 12 VDC and provide RV users with all the advantages of conventional converters and also provide the added convenience of recharging the battery after the RV has been used without having 95 to 130 VAC available. The Parallax Power Components L.L.C. units also provide longer life for all RV motors, lights and other 12-volt appliances because of filtered DC operation.
3. Parallax Power Components L.L.C. converter/chargers are designed to operate with input voltage from 95 to 130 VAC without any noticeable change in output voltage. This prevents damage to lights, motors and appliances that might otherwise result from low or high AC line conditions.
4. Years of converter/charger manufacturing has resulted in significant design refinements. Your unit has been upgraded to compensate for the added power requirements of the "live-in" trend for the RV user. With the Parallax Power Components L.L.C. converter/charger, the user need not calculate the current he is using. There are no electronic circuits to burn up, no significant change in component values with age, and no adjustments to make.
5. The Parallax Power Components L.L.C. converter/charger is manufactured with a constant voltage, current limiting, ferroresonant transformer. This transformer cannot be damaged by overloads. (It is designed to withstand short circuit operation indefinitely). For example; Model NO. 940 has 40-amp rating, but has a current limit of approximately 68 amps. All current in excess of 68 amps would come directly from the battery. This condition cannot damage the converter/charger, and the battery will return to full charge when the excess load is removed.
6. All of the major components (transformer, capacitor and diodes) are overrated to prevent accidental and age-type failures. New designs are smaller and lighter in weight and cooler in operation. Output voltage at the rated load was increased without changing the output voltage at no load. This allows the RV user to draw more current without excessive battery discharge.

Trouble Shooting Tips:

1. Parallax Power Components L.L.C.'s experience has proven most problems encountered are found to be with something other than the converter/charger.
 2. The most common problem is loose wires or bad connections in the fuse panel or at the battery. The charging system of our type of converter/battery charger is called a float system. This means that if you 12 VDC for your lights, pumps, and other 12 VDC items in your RV, then you will also have 12 VDC to charge your battery.
 3. If the converter/charger does fail, the output voltage will either be cut in half (i.e. 6 VDC) or go to zero. This will cause your lights to be dim or not work at all. Please note that your battery will supply all DC voltage until it completely discharges.
 4. Some customers have called to say the converter/charger has overcharged their battery. This type of converter/charger will not overcharge a good battery, even if the converter/charger does fail. If the battery is left discharged for long periods of time, it will sulfate and lose charging capacity.
 5. As stated before, this type of system is a float system. If you have DC voltage to your lights when plugged into AC, but lose DC when you unplug from AC, either your battery fuse is blown or your battery is defective and will not hold a charge.
 6. The converter/charger will make a slight hum when it is working. If you have no DC and no hum, check to see if AC is available at the receptacle the converter/charger is plugged into. The best way to check for AC is to plug something else into the same receptacle, such as a hair drier or other AC appliance.
 7. The converter will run warm and this is normal. If, however, it gets too hot, it will turn itself off. After it cools down it will come back on. In most cases, when this happens it is because something has been put around or too near the converter/charger preventing it from receiving adequate ventilation.
 8. The Parallax Power Components L.L.C. converter/charge has no adjustments or user serviceable parts. Defective units must be returned to our factory for repair or replacement.
-

Typical Connection Diagram:

TYPICAL CONNECTION DIAGRAM



Units Are to Be Horizontally Mounted Only

Special Note for use with RV AC Generators

The output of many RV AC generators will vary in frequency with different RPM settings. Your converter charger has been designed to operate at maximum efficiency with an AC input frequency of exactly 60 hertz (cycles per second). For best results, RPM settings that provide 60 to 63 hertz should be utilized.

Converter/Battery Charger Specifications:

Parallax Model Number	Current Rating (D.C. Amps)	A.C. Input		D.C. Output (Volts)	Automatic Reset Thermal Cutout	Agency Listing	Weight (Pounds)
		Volts	Amps				
930	30	95-130 60 Hz.	4.6	12.0 min @ full load 14.1 max @ no load	Yes	U.L.	19
930-2	30	95-130 60 Hz.	4.6	12.0 min @ full load 14.1 max @ no load	Yes	U.L. C.S.A.	19
940	40	95-130 60 Hz.	6.4	12.0 min @ full load 14.1 max @ no load	Yes	U.L.	23
940-2	40	95-130 60 Hz.	6.4	12.0 min @ full load 14.1 max @ no load	Yes	U.L. C.S.A.	23
950	50	95-130 60 Hz.	8	12.0 min @ full load 14.1 max @ no load	Yes	U.L. C.S.A.	25
950-2	50	95-130 60 Hz.	8	12.0 min @ full load 14.1 max @ no load	Yes	U.L. C.S.A.	25
924	35	95-130 60 Hz.	11.4	24.0 min @ full load 28.2 max @ no load	Yes	U.L.	23
775	75	95-130 60 Hz.	14.5	12.0 min @ full load 14.1 max @ no load	Yes	U.L.	25
940-E	40	200-240 50 Hz.	3.5	12.0 min @ full load 14.1 max @ no load	Yes	None	23

Parallax Power Components L.L.C. Warranty Statement

Parallax Power Components L.L.C., warrants its products to be free from defects in material or workmanship under normal use and service and limits the remedies to repair or replacement.

This warranty extends for two years from the date of purchase and is valid only to the original owner and within the continental limits of the United States and Canada.

If a problem should occur with your Parallax Power Components L.L.C. converter within the first twenty-four months after purchase, please contact a dealer that handles warranty on your brand of RV. No user serviceable parts inside.

Parallax Power Components L.L.C.
112 East Union St.
Goodland, Indiana 47948
(219) 297-3111

900 Series Converter/Battery Charger Owner's Manual