Mounting Location

The 5400 series converter is designed for **indoor use only!** Do not mount in engine compartment or other harsh environments; avoid areas where high levels of dust, dirt, or moisture may occur.

The Parallax 5400 series power converter is of solid state design and does not contain relays or mechanical devices that produce arcs or sparks, but in the unlikely event that an electronic component would fail, Parallax *does not recommend mounting the power converter in battery compartments or in areas where flammable materials are stored.*

Wire Routing

In order to minimize radio and T.V. interference, avoid routing supply and output wiring across fan intake or adjacent to ventilation slots of the converter.

Mounting Position

The 5400 series converters require horizontal mounting. Do not mount vertically or upside down. Allow adequate ventilation for fan intake and exhaust. Mount the 5400 series converter utilizing the mounting holes in the front and rear flanges and using fasteners appropriate for the mounting surface.

Input Supply Requirements

Connect to a 120VAC 60HZ 3-wire grounded supply with no larger than 20 ampere circuit protection.

Mounting Clearances

Provide a minimum of three inches on all sides of the converter. Do not mount in zero clearance compartments; overheating and thermal shut down will result.



5400 SERIES PARAMODE™ CONVERTER SYSTEM



TEMPERATURE COMPENSATED BATTERY CHARGING WITH OPTIONAL TempAssure[™] MODULE! ►

NEW!



US Patent Number, 7,245,109

For a special offer concerning Extended Warranty Coverage, Visit our website at www.parallaxpower.com



Listed for RV use in the U.S. and Canada!

5400 Series Owner's Manual

Congratulations on the purchase of your new RV. We hope it provides you many years of enjoyment. Your Parallax 5400 series contains the latest designed, technologically advanced, and upgradeable 120-volt to 12-volt power converter available today. The Parallax 5400 series electronic switch mode power converters have been designed to give you many years of trouble-free use.

If you have any comments, please contact Parallax's Customer Service Representative at the address, fax or phone number below.

Parallax Power Supply

100 West 11th St. Suite 100 Anderson, IN 46016 Phone: (800) 443-4859 FAX: (765) 608-5235

General Information

The Parallax 5400 series power converter is a solid-state electronic power supply and is maintenance free. These revolutionary RV power converters utilize technology developed for power supplies in computers that provides a clean, stable, voltage regulated output while also providing safety features designed to help protect the converter against over-temperature and output over-load.

If any 12-volt appliance fails to operate, first locate your RV's 12-volt distribution fuse block and inspect all fuses. If a fuse is open or "blown" replace it with the same size fuse (never install a larger fuse). If the fuse opens again, have an electrician or certified RV technician locate the circuit trouble.

If the 5400 series power converter is not working, first confirm the RV supply or "shoreline" cord is plugged into a live circuit. Then check all the 120-volt breakers in your RV distribution panel to make sure they are "on". If a breaker is tripped, follow the instructions to reset the breaker. If the breaker trips again, consult an electrician or certified RV technician.

Operation

The 5400 series power converter has been tested for the utmost safety and is specifically listed for use in the RV. The DC output is over-current protected, and "reversed battery polarity" protection is provided.

TempAssure (Option) (Patent 7,245,109)

The addition of the (optional) TempAssure module and sensor cable employs technology that allows the output voltage of the converter to be varied by the temperature of the RV's "house" battery. The benefit of this feature helps to provide a more appropriate charging voltage for the "house" battery exposed to varying ambient temperatures. For example, in cold climates the output voltage of the converter will be increased, which results in a more fully charged and maintained

battery. In hot climates the output voltage of the converter will automatically be lowered, which will aid in reducing excessive out-gassing of the battery caused by the battery requiring a lower "float" voltage.

Also with the addition of the **TempAssure** module and sensor cable, the 5400 series converter will automatically start out in a "boost" mode for the first 4 hours of operation every time the 5400 series converter is powered "on". The ouput voltage of the 5400 series converter will still be temperature compensated even while in "boost" mode.

Your RV manufacturers installation may also allow you to manually trigger the "boost" function by pressing a switch. (Optional wiring configuration.)

While the 5400 series converter with the addition of the **TempAssure** module is designed to provide a better means of charging and maintaining the "house" battery(ies), Parallax Power Supply strongly recommends proper battery maintenance be performed by the owner on non-maintenance free batteries following the battery manufacturer's recommendations. Do not allow the battery cell plates on non-maintenance free batteries to become exposed to the air. Poor battery performance will result. Parallax Power Supply will not be responsible for battery failure resulting from improper battery maintenance.

Converter Operation

The Parallax 5400 Series electronic power converter is designed to supply the nominal 12-volt filtered D.C. power for all 12-volt operated devices encountered in RV service. Although the converter is an excellent battery charger, the converter does not require a battery to be connected to it for proper operation. **CAUTION:** When installing a battery(ies) always observe polarity. Connecting a battery with reverse polarity will blow the power converter polarity protection fuses.

If the 12-volt load exceeds the converter output rating the output voltage will drop. Turn off some lights or appliances and the output voltage will automatically restore. The same will occur if the converter exceeds safe operating temperature limits. Check to see that the converters air circulation is not blocked, or turn off some of the 12-volt load.

Battery Charger Performance

The National Electric Code requires that power converters for RV service use is marked with an average charge rate, as part of the total continuous output rating. Average charge rate will depend on several variables such as, condition of the battery(ies), temperature, and the length of time the battery(ies) are connected to the converter. In actual RV use, the engine alternator, on board motor generators, and inverters are also possible sources of charging currents.

With all these variables it is difficult to determine the average charge rate from the converter. In most cases the average rate will be very small; in the order of a few hundred milliamps (1 AMPERE= 1,000 MILLIAMPS). Your Parallax 5400 Series power converter is capable of delivering its **full rated output** to the battery(ies) if needed, but current accepted by the battery(ies) at full charge will typically be a few hundred milliamps.

Converter Cooling System

The 5400 electronic fan cooling system contributes to long converter life and trouble free operation. The fans operate constantly when the converter is receiving 120VAC. The amount of air "flow" required is necessary to properly cool the converter components and the associated "air sound" generated may be audible in quiet environments.