# 7400 Series Owner's Manual

Congratulations on the purchase of your new RV. We hope you have many years of enjoyment. Your new RV is equipped with the latest, most advanced 120-volt to 12-volt power converter available today. The Parallax 7400 series electronic switch mode power converters have been designed to give you many years of trouble-free use.

These revolutionary RV power converters utilize technology developed for power supplies in computers that eliminates the loud, bulky, inefficient power converters of yesteryear.

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

Parallax Power Supply, L.L.C. 425 Sycamore St. Anderson, IN 46016 (800) 443-4859

## **General Information**

FAX: (765) 608-5235

A regulated 12-volt power supply, the 7400 series, is maintenance free. It is so self-sufficient and quiet that you should not even know it is working except for the occasional cycling of the cooling fan when necessary. 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 7400 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 7400 series power converter has been tested for the utmost safety, it is output short-circuit proof, and UL listed. The 7400 series is also FCC Class B certified so that it will not interfere with any other electrical equipment as some power converters do. Some interference could occur from accumulations of multiple sources.

## Converter Operation and Timer Option

The Parallax 7400 Series (**non Option T**) has been factory set at a nominal 13.8 volts output for battery charging. On non-maintenance free batteries check water level often. Do not allow the battery cell plates to become exposed to the air. Poor battery performance will result. Parallax recommends disconnecting batteries during extended periods of inactive use or storage following the battery manufacturer's recommendations for proper maintenance.

### Timer models: (Option T on nameplate label)

The timer circuit is designed to initially establish float voltage at 14.1 volts for faster battery charging and after the converter has been connected to shoreline power for 13 hours then lower float voltage to approximately 13.5 volts.

This abrupt drop in voltage is designed to minimize over charging during extended periods of operation on shoreline power. When the AC power is disconnected the timer will reset. The next time AC power is applied the battery voltage will again shift up to the 14.1 volt setting for another 13 hrs., only to again drop to the nominal 13.5 volt point. This method minimizes overcharging on good batteries.

The 7400 series electronic power converter is also 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(s) always observe polarity. Connecting a battery with reverse polarity will open the two 30-ampere power converter output fuses.

If the 12-volt load exceeds the converter output rating the output voltage will drop to prevent any further increase in current. 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(s), temperature, and the length of time the battery(s) are connected to the converter. In actual RV use the engine alternator and on board motor generators 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 7400 Series power converter is capable of delivering its **full rated output** to the battery(s) if needed, but will taper off to a few hundred milliamps when the battery(s) are at full charge

## **Converter Cooling System**

The 7400 electronic fan cooling system is the key to long life and trouble free operation. The fan is never on more than required to cool the electronic components in the converter. You may never hear the fan operate.

## **Mounting Location**

The 7400 series converter is designed for indoor use only!

Qualified service personnel should install the 7400 series meeting all applicable codes and standards.

Do not mount in engine compartment or other harsh environments; avoid areas where high levels of dust, dirt, or moisture may occur.

The Parallax 7400 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 on rear of converter.

## **Mounting Position**

The 7400 fan cooled converters may be mounted in any position as long as adequate ventilation is allowed for fan intake and exhaust.

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 to the front and rear of

Provide a minimum of three inches to the front and rear of the converter. Do not mount in zero clearance compartments; overheating and thermal shut down will result. Specifications subject to change without prior notice.

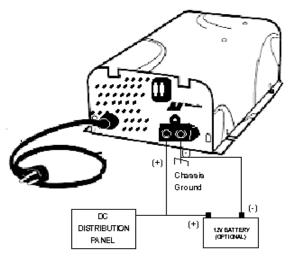
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	Fan Listing Cooled Agency (			U.L. C.U.L.	U.L. C.U.L.	U.L. C.U.L.	U.L. C.U.L.
				Yes	Yes	Yes	Yes
400 Series Specifications.			Weight	7.1 lbs.	7.2 lbs.	7.5 lbs.	7.5 lbs.
	Dimensions		Depth	11.5"	11.5"	11.5"	11.5"
			Width	8.0.	8.0,	8.0.	8.0"
			Height	4.125"	4.125"	4.125"	4.125"
			Amps	30	45	55	65
	D.C. Output		Volts	*13.8 max. @ no load 13.6 min. @ full load	*13.8 max. (a) no load 13.6 min. (a) full load	*13.8 max. @ no load 13.6 min. @ full load	*13.8 max. @ no load 13.6 min. @ full load
	A.C. Input		Watts	490	775	975	1120
			Volts	105-130 60Hz	105-130 60Hz	105-130 60Hz	105-130 60Hz
100 0010		Parallax	Model	7430	7445	7455	7465

T- Battery saver timer system

\*13.5 volts after optional timer (option "T") has cycled. Complies with FCC Class B radiation limits.

## Typical Connection Diagram:

#### 7400 SERIES CONVERTER TYPICAL CONNECTIONS



CAUTION: OBSERVE POLARITY WHEN CONNECT-ING BATTERY(S). REVERSE POLARITY WILL BLOW CONVERTER OUTPUT FUSES.

## Warranty Statement

Parallax warrants is 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 Stated and Canada. You may download the entire Parallax Power Supply Warranty Policy at:

http://www.parallaxpower.com/warranty\_policy

If a problem should occur with your Parallax 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 Supply L.L.C.

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51092309-001 Rev. E



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## For a special offer concerning **Extended Warranty Coverage.**

Visit our website at www.parallaxpower.com

## 7400 Series Converter/ **Battery Charger Owner's Manual**



