

### **ECO-CHARGE SLA BATTERIES**

Eco-Charge sealed lead acid rechargeable batteries will stand up to tough operating conditions such as overcharge, overdischarge, and can withstand vibration and shock more readily than competitive products. In field service, problems due to abnormal, improper operation or misuse are reduced to a minimum. All batteries are thoroughly tested before shipment and are guaranteed to be defect free.

### **MAINTENANCE-FREE OPERATION**

There is no need to fully drain Eco-Charge batteries because **there is no voltage depression or memory effect**. The batteries need only charging for maintenance and storage.

### **SEALED DESIGN**

Eco-Charge batteries have exceptional leak resistance. The batteries can be discharged in any position but should not be charged upside down.

### **CABLES AND CONNECTORS**

All Eco-Charge battery systems include high quality cables and connectors. With proper care, these should provide unlimited reliable service. When making any connections, insure that the male and female connectors are fully engaged and locked. Always disconnect by grasping the connector instead of the cable.

### **PROTECTIVE CASES**

All Eco-Charge batteries are supplied with heavy-duty protective cases. We recommend that the batteries remain in the cases at all times. The cases may be hand cleaned with mild detergent soap and water. Allow to fully dry before replacing battery.

### **TRAVEL**

Since many people travel with Eco-Charge batteries, we have added a safe shipping label on the side of each battery. Although this will not guarantee a hassle free airport security check, it should be noted that this information is provided by the Department of Transportation and is sufficient for safe shipping of all sealed lead acid batteries. The label reads:

### **MATERIAL SAFETY DATA**

ECO-CHARGE SEALED BATTERIES ARE UNREGULATED BY THE DOT FOR TRANSPORTATION BY TRUCK, RAIL, OCEAN AND AIR TRANSPORT BECAUSE THEY MEET THE REQUIREMENTS OF 49 CFR 173.159.

### **TRANSPORTATION**

All Eco-Charge batteries are unregulated for air transportation because they meet the requirements of Special Provision--"A67" as promulgated by the International Civil Aviation Association (IATA) and the International Civil Aviation Association (ICAO). They also meet the Vibration and Pressure Differential Tests of the International Maritime Dangerous Goods (IMDG) regulations.

### **WARRANTY**

To the extent permitted by law, and for twelve (12) months from the date of sale for products other than batteries and six (6) months for batteries, Eco-Charge warrants to the original purchaser only, that products sold by Eco-Charge are free from defects in workmanship, that standard products meet or exceed the applicable published ratings and specifications at the time of shipment. The original purchaser's warranty rights are limited to the repair or replacement of any defective products or the issuing of credit, at Eco-Charge's exclusive option. No warranty claim will be allowed which, in the opinion of Eco-Charge resulted from the product being altered or repaired by anyone other than Eco-Charge. No warranty claim will be allowed which, in the opinion of Eco-Charge, resulted from misuse, negligence, improper storage, or accident. The original purchaser shall have no right to return or seek credit for any product that is not defective. Before returning any defective product, the original purchaser must receive prior approval at which time a return authorization number will be issued.

# **OWNERS MANUAL**

## **6 VOLT BATTERY SYSTEM**



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Revision A October 2003  
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## WELCOME TO POWER FREEDOM!

Eco-Charge power products represent the best value, reliability and performance available for demanding portable applications. With proper use, Eco-Charge power products will provide years of reliable service. Please spend 5 minutes and read this information guide before using your new battery system. Thank you for purchasing Eco-Charge!

## SAVE THESE INSTRUCTIONS

This manual contains important safety and operating information. Before using this system, please read all instructions and cautionary markings on the battery charger, the battery, and the product using the battery.

## QUICK GUIDE TO OPTIMUM RELIABILITY AND PERFORMANCE

- Do not use battery more than recommended operating time.
- Always charge immediately after use.
- Fully charge each battery before storage.

### CAUTION! TO REDUCE THE RISK OF ELECTRIC SHOCK:

- Do not expose to rain or moisture.
- Do not disassemble the charger. There are no user serviceable parts inside.
- Do not disassemble or modify the charger or battery connectors. Severe damage may occur. Contact Eco-Charge when service or repair is required.
- Connect the charger directly to a proper receptacle. An adapter should not be used with this unit. The unit must be plugged into an outlet that has been properly installed in accordance with all local and national codes and ordinances.
- Disconnect charger from outlet before attempting any maintenance or cleaning.

### WARNING!

- Charge only sealed lead-acid, non automotive, maintenance free rechargeable batteries. Attempting to charge other types of batteries may result in personal injury and battery damage.
- The plastic enclosure of the charger may become warm during the charge cycle. Do not operate the charger in direct sunlight as the unit may become too hot and trip the internal thermal fuse.
- Where hydrogen gas may be present, connect or disconnect the output connectors only when the unit is disconnected from AC power or arcing and burning may result.

### DANGER!

- Never alter power plug blades on the charger unit. If it will not fit the outlet, have a proper outlet installed by a qualified electrician. Improper connection will result in the risk of an electric shock or fire.
- Make sure output cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress. Do not operate the charger with a damaged output cord or connector, replace the defective part immediately. To reduce the risk of damage to the electric plug, grasp the charger by the plastic body rather than the output cord when disconnecting.
- Do not operate the charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.
- Battery chargers are intended to charge batteries only. Use of a battery charger as a power supply may cause damage to the battery charger, batteries, or other equipment.
- Allow air space around the charger and adequate air circulation to reduce internal heat build up and potential thermal fuse failure.
- Do not operate the charger or battery in direct sunlight.

## OPERATING INSTRUCTIONS

**CONNECT THE BATTERY** - Fully engage and lock the male connector on the charger to either female connector on the battery. It does not matter which connector you plug the charger into. The first charge will take longer than normal as the battery chemicals form. Do not interrupt the charge process for optimum battery performance.

**PLUG IN THE BATTERY CHARGER** - Plug the battery charger into a properly installed outlet. The charger should now be on and charging the battery. The red charge indicator light should be on. The red indicator will stay on until the battery is about 95% recharged. At this point the red indicator will turn off and the battery may be used. To insure a full charge and to help your battery keep its full capacity, we recommend the battery be left connected to the charger, in float mode until ready to use. The battery may be connected to the charger indefinitely, in float charge mode, without danger of overcharging. Charge time is determined by the amount of voltage remaining in the battery after the most recent use. Therefore, charge time will vary with each use. Operating time will vary and is determined by the device used. See the white decal on the front of this booklet for estimated operating time and recharge time.

## CHARGING NOTES AND TIPS: MODEL 66-A

For safer and efficient charging, batteries should be charged with higher voltages when cold and lower voltages when warm. The 66-A smart charger incorporates temperature compensation of the output voltage. It will increase the charge voltage in cold conditions and decrease the charge voltage in warm conditions. For this feature to work properly, the battery and charger should be located in the same environment (allow the battery and charger to stabilize at room temperature before charging). Make sure that you only charge the proper voltage battery. Charging a lower voltage battery will cause severe overcharging and charging a higher voltage battery may damage the charger.

## CHARGER TROUBLESHOOTING: MODEL 66-A

**NO INDICATOR LIGHT** - If the indicator light will not illuminate, the battery may be fully charged. However, in this case, the indicator should illuminate briefly before shutting off. If the battery is not charged, check to see if the receptacle is controlled by a light switch or power strip switch. If all else appears normal, the charger may need repair or replacement.

**NO CHARGE INDICATOR, NOT CHARGING** - If the charger will not go into charge mode (Red indicator), the battery is probably already charged. Try again with another battery.

Agency Approvals:	UL; CSA; IEC; 950; EN 60950
Operating Temperature:	0 to 40 degrees C (32 to 104 degrees F)
Dimensions:	H-85mm x W-58mm D-96mm
Weight:	Less than 1.0 lb. with cable and connectors

### INPUT RATINGS:

Model:	66-A
Input voltage and Frequency:	120 VAC / 60 Hz / 13.5 VA

### OUTPUT RATINGS:

Current Limit:	.600 mA
Output Voltage:	7.40 Volts DC +/- 1%
Minimum Battery Capacity	2.4Ah