



User Manual for  
ePower 4803c and 4803e  
Plug 'n Play Lithium Ion Golf Car Batteries

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## 1. Precautions

The ePower battery is not water proof and should not be sprayed with water.

The ePower battery cannot be left in storage with the power button in the on position for more than one week.

Follow the storage recommendations of section 5 of this manual.

An electrocution and arc flash hazard exists with the ePower battery. Do not attempt to open, disassemble or otherwise service the ePower battery. Removal of the tamper evident seal will void the warranty.

For any questions about or any concerns with your ePower battery please contact the dealer from which you purchased for additional help.

The ePower 4803 battery is capable of a recommended continuous discharge of 100A. It is not recommended for vehicles with high speed motors and controllers of heavy loads.

## 2. Introduction

Thank you for purchasing an ePower battery for your golf car! This guide serves as a quick start guide to using your new ePower battery. ePower 4803e is a plug 'n play Lithium Ion battery system for EZ-GO RXV vehicles, and ePower 4803e is a plug 'n play Lithium Ion battery system for Club Car Precedent vehicles.

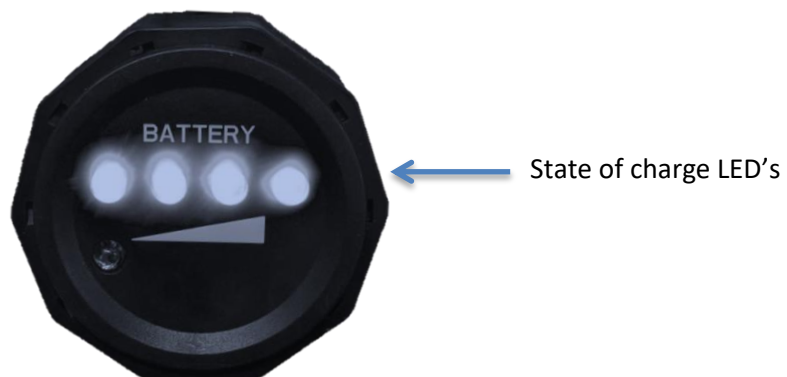
Your ePower may have a main power button on it. The location of this button varies depending on the model so please familiarize yourself with its location.









In order to use the ePower battery this button must be in the on position to either charge the battery or operate the vehicle. If this button is in the off position neither charging nor driving will be possible.

If your ePower does not have this button on the main case then it will have the main power connected through the vehicles key switch.


Optionally, your ePower system may have a State of Charge gauge installed on the vehicle. This gauge contains four LED's which indicate the State of Charge of the battery and also has one LED to indicate the state of the on board charger.



Each of the State of Charge LED's indicates 25% of the batteries available charge. The highest applicable LED will flash. Please reference the chart below to familiarize yourself with the operation of the gauge:

Capacity	LED's Lit
0%	
1% - 25%	
26% - 50%	
51% - 75%	
76% - 99%	
100%	

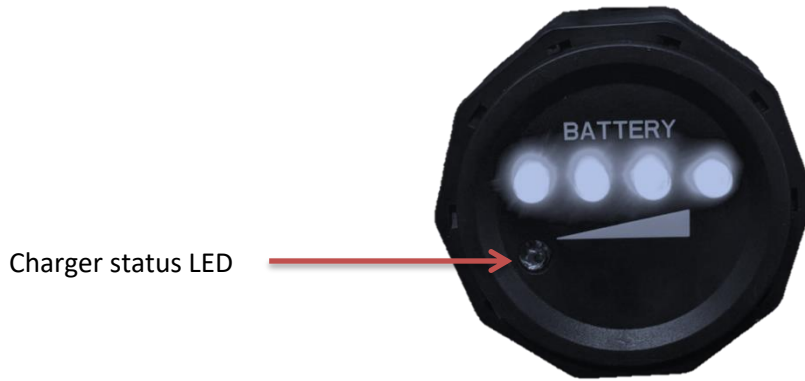
At 0% capacity the left most LED will give two quick flashes.



 Indicates a flashing LED


### 3. Charging

ePower batteries have a built in charger that is supplied via the 120VAC input port. A plug will be installed on the vehicle. To charge, make sure that the main power button on the box is in the on position, indicated by the back light being lit, and simply plug in an extension cord to the ePower. The extension cord should be a minimum of 14ga wire and no longer than 50ft. A 12ga extension cord can be used up to 100ft.

The single lower LED on the gauge indicates the charging status. This LED will either be flashing or lit solid whenever the charger is plugged in to AC power.



Charging or Maintenance Mode (Flashing)	Fully Charged (Solid)
	

 Indicates a flashing LED

It is recommended during normal use that, whenever possible, the ePower battery be plugged in to AC power to recharge the battery.

A fully depleted ePower will take up to four hours to fully charge from 0%. The charge time will be shorter if the battery is not fully depleted.

The battery charger in the ePower 4803 battery is designed to work with most standard existing garage type electrical circuits and will draw comparable power to other golf car battery chargers. If however, there are other large loads, such as a refrigerator, in use on the same circuit it is possible that the circuit breaker may trip from as the load is too large for the circuit. If this occurs remove additional items from the circuit.

## 4. Using the ePower battery

To use the ePower battery the main power button must be turned on to supply power to the vehicle and the battery must have sufficient charge in it in order to be able to operate the vehicle. This is indicated on the optional State of Charge display.

The ePower battery is used much like any traditional battery pack. It is normal that users will notice a significant improvement in how the vehicle accelerates compared to a traditional lead acid battery pack. This is due to the significantly lower weight of the battery and lesser voltage sag under load.

The ePower will not exhibit any significant loss of electrical power as the battery discharges, which you may have become accustomed to with lead acid batteries. Please pay attention to the State of Charge display as the vehicle is operated to ensure that the vehicle will make it back to a location where it can be re-charged.

When the indicator reaches 0% charge, as indicated by two rapid flashes of the left most LED on the State of Charge gauge, the ePower will automatically turn off the main power output to the vehicle. When this occurs the vehicle must be plugged in to 120VAC power so that the battery may be recharged before the ePower will allow the vehicle to operate again. It is not recommended that the battery be discharged to this point on a regular basis. The ePower battery can be charged at any time. There is no need to wait for the ePower battery to be discharged to any certain point before recharging it.

The ePower battery will slowly lose charge if it is left un-used for a long duration of time. From a full charge the ePower battery cannot be left unplugged for more than one week with the power button in the on position. The time it can be left without 120VAC power will be less if the battery is not fully charged. If the battery needs to be left for a longer period the main power button must be turned off.

To clean the ePower battery use a mild detergent or alcohol based cleaner sprayed on to a soft cloth and wipe clean. Do not use any petroleum or solvent based cleaners on the ePower battery. Do not spray water directly on to the ePower battery.

## 5. Storage

**Fully charge the ePower battery, then turn off the power button. Maximum storage time is 6 months.**

The ePower battery needs to be fully charged before using this approach. This is indicated when the charger LED on the State of Charge gauge is lit solid. It can take up to four hours for the battery to fully charge. Once the green LED is lit solid unplug the unit from 120VAC power and press the main power button to turn the ePower battery off. You will hear an audible click from the box and the back light on the power button will turn off. Ensure that the vehicle cannot be turned on and driven.

In this state the ePower battery can be left for up to six months with no maintenance charge. During this time a maintenance charge can be applied if desired by turning the main power button on, plugging the ePower battery in to 120VAC power and then turning the power button back off after the charger has fully recharged the ePower battery.

After a long period of storage the ePower should be fully charged before using.

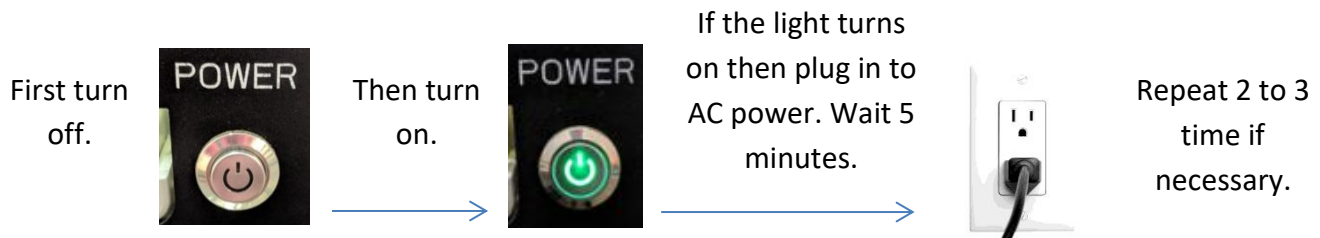
## Storage Temperature

The ePower must be kept between -4°F and 149°F at all times. The recommended temperature range is between 32°F and 100°F for optimal life time. Exposing the ePower battery to temperatures below -4°F will cause the battery to freeze. Such damage is not covered by warranty. The ePower batteries freezing temperature does not change with the state of charge like it does with lead acid batteries.

Failure to observe proper storage practices may potentially result in a battery that becomes over discharged while in storage. A battery that is not stored properly may not be covered by warranty.

## Over Discharge Recovery

In the event that your ePower battery becomes over discharged and will not turn on the following procedure will attempt to recover the charge in the battery.



- 1) Place the power button in the off position.
- 2) Press the power button in the on position. If the back light on the button illuminates then continue to step 3.

If the back light does not illuminate then the battery is too deeply discharged and you will need to contact the dealer from which you purchased your ePower battery from for further assistance.

- 3) Plug the ePower in to 120VAC power.
- 4) The on board charger will attempt a recovery charge for five minutes. These steps may need to be repeated two or three times in order for the system to recover. When the system continues to stay on and charge, as indicated by the State of Charge gauge LED's remaining lit, then you can resume normal operation.

## 6. Warranty

These special warranty provisions only apply to Elite Power Solutions (EPS) ePOWER<sup>®</sup> 4803c and 4803e products. Other warranty terms apply to EPS's other product lines.

### What Does The Limited Warranty Cover?

The warranty covers Elite Power Solutions battery assembly (referred to as the “battery”) which fails due to defect in materials or workmanship. Warranty only applies to original purchaser and cannot be transferred. The warranty period is four years (maximum 1,461 days) starting from the date of delivery. During the four year limited warranty period the customer will receive a replacement for a defective product free of charge (except for taxes, where applicable).

EPS reserves the right to replace the ePOWER battery with either a new or refurbished battery which meets or exceeds minimum performance specifications.

### **How To Obtain A Warranty Claim?**

To obtain a warranty claim, please contact your authorized ePOWER distributor who will confirm that the system is defective and eligible for warranty. They will install a replacement battery. The defective ePOWER battery must be surrendered in order to obtain a warranty replacement.

In the event that an authorized dealer is not located within what is determined to be a reasonable distance from the user, EPS may issue a replacement via a freight carrier to the customer. The customer will be responsible for returning the defective unit to EPS and complying with all legal shipping regulations.

### **What Is Not Covered?**

ePower products are only to be opened and serviced by a qualified service technician authorized by EPS to perform such work. There are no customer serviceable parts inside.

This warranty does not cover defects resulting from improper installation, from abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, collision, freezing, theft, or other such as act of God. The warranty will be void under the following conditions:

- Apply voltage and current to Elite Power Solutions’s products beyond specified ranges. All ePOWER products contain internal protection fuses. A blown fuse or battery used at too high of a current or otherwise short circuited battery may be excluded from the warranty at EPS’s discretion if abuse is evident.
- Use chargers that are not provided or not approved by Elite Power Solutions.
- Over-charge or under-discharge batteries beyond the specified voltage range during usage or storage. Batteries MERELY DISCHARGED are not considered defective.
- Operate and store batteries in the temperature or humidity ranges outside of specified ranges.
- Expose batteries to water, rain or direct Sun light for extended period of time.
- Product serial numbers, date coding or tamper evident seals, tampered with or destroyed.



- Improper storage. ePOWER batteries must be stored per section 5 “Storage” of this document. A completely discharged battery pack will not be covered by warranty.

Gradual capacity loss over time and with use is normal and expected with the ePOWER battery. Gradual capacity loss is not covered by this warranty.

### **Limitations and Exclusions**

Elite Power Solutions’ liability is limited to replacement of the battery according to the terms stated above. Elite Power Solutions will not be responsible for any expenses, electrical system tests, charging of batteries, any other implied warranties, including those of merchantability and fitness for a particular purpose. Elite Power Solutions will not be responsible for any incidental or consequential damages, including travel expense, telephone charges, data charges, loss of revenue, loss of time, inconvenience, loss of use of the product, and damage caused by the product and its failure to function properly. This warranty sets forth all of the Elite Power Solutions’ responsibility regarding this product.