



PROFESSIONAL SOUND CORPORATION

## PSC PELICAN LiFe BATTERY w/ Charging Port™



**PSC Part # FPSC0023LIFEC**

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**Volt and Current Meters,**

**SpeakON and 4P Female XLR connector,**

**Charging Port and Push Button Switches**

**Housed in a Rugged Pelican 1150 Case**

Thank you for purchasing your new PSC Pelican LiFE Battery with Charging Port. This new battery technology provides a compact, rugged and high capacity battery in a small and very lightweight package. ***Please read this entire product sheet before using your new PSC Pelican LiFE Battery.***

**SAFETY:** This new battery design is based on Lithium Iron Phosphate battery chemistry.....also known as “LiFE”. LiFE cells offer high capacity in a lightweight package similar to Lithium Polymer or Lithium Ion cells, but with one big improvement. LiFE chemistry is much more inherently safe as this chemistry does not suffer from temperature runaway conditions like older lithium chemistries do. The older lithium batteries were prone to fire if physically damaged or short circuited. These new LiFE batteries have proven to be a much safer alternative. While this battery chemistry is considered to be very safe, the TSA (Transportation Safety Authority) has not yet made the distinction between these LiFE lithium cells and the older less safe Lithium technologies. Please read and understand all transportation regulations before shipping these batteries on public airlines. You can get a full, detailed explanation of these regulations at the TSA website: [http://safetravel.dot.gov/whats\\_new\\_batteries.html](http://safetravel.dot.gov/whats_new_batteries.html) Additional information concerning “Larger Batteries” that applies to this product can be found here: [http://safetravel.dot.gov/larger\\_batt.html](http://safetravel.dot.gov/larger_batt.html) Never ship your PSC Pelican LiFE Battery if it has been physically or electrically damaged.

**CAPACITY and WEIGHT:** Your new PSC Pelican LiFE Battery with Charging Port is built in a rugged Pelican case. The rated capacity is 12.8 Volts at 20 Amp Hours (256 Watts). This battery can supply up to 25 amps continuous output (discharge) current. It can also be charged at up to a 25 amp rate using an appropriate battery charger (see below) Internally it is protected against overly high discharge current, overly high charging current, over voltage (over charge condition) and under voltage (deep discharge) conditions. In addition, our system includes cell balancing circuitry for longer cell life. All of this in a package that weighs just a little over 7 Lbs (3.3Kg)

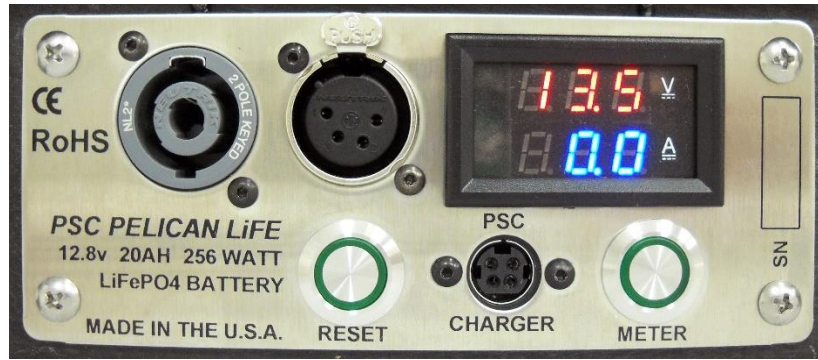
**SPEAKON and 4 PIN FEMALE XLR CONNECTORS:** The PSC Pelican LiFE Battery is equipped with one 2 pole SpeakON connector and one 4 Pin Female XLR connector. These connectors are used to supply power from the battery to your equipment. The polarity of the SpeakON connector is conventional SpeakON wiring. The center most contact is Positive (+) and the outer ring connection is Negative (-) Please refer to polarity markings inside all SpeakON connectors. The 4 Pin Female XLR is wired as follows: Pins 1 and 2 are Negative (-). Pins 3 and 4 are Positive (+). The pins are doubled up on purpose as each pin has a limit of 9 amps of current. By doubling up the pins, the 4 pin XLR output connector can supply up to 18 amps of output current.

#### **METERING:**

Your new PSC Pelican LiFE battery is equipped with a Dual LED Volt and Current Meter. This meter will display battery Voltage and output Current in an easy to read, dual color high brightness LED display. Voltage is displayed in RED LEDs and output Current is displayed in BLUE LEDs. The display is activated via an easy to use, flush mount, protected push button switch. Simply press the button and it will display the voltage and current readings.

**FUSING:** Internally, the LiFE cells are protected against many typical faults via electronic monitoring and automatic fault protection. In addition, there is a 40 Amp Slow Blow automotive blade- style fuse for ultimate safety. This fuse should never blow in normal use. If you ever experience a blown fuse, something is wrong with your setup. Please call PSC for technical assistance.

**AUTOMATIC PROTECTIVE SHUTDOWN:** The protection circuitry contained within the PSC Pelican LiFE Battery with Charging Port will disconnect the battery from the SpeakON and XLR output connections if you short circuit the output of the battery box. Should this happen, you must reset the protective circuitry before you can use the battery again. Resetting the protective circuitry can be accomplished in two ways. If the battery has sufficient charge, you may simply push the flush mount "RESET" button located on the connector panel on the left side of the Pelican case. If the battery is discharged you can simply connect the battery to a charger or other source of 12Vdc and the reset function is automatic.



**“RESET” button shown below the 4 Pin Female XLR Output Connector**

**CHARGING:** The PSC pelican LiFE Battery is primarily designed to be used with the various PSC power distribution systems. These include the PSC PowerMax Ultra and the PSC PowerStar (rack mount version) and our new PSC PowerStar LiFE. When connected to our PSC PowerStar LiFE, PSC PowerStar EuroLiFE, PSC PowerMax Ultra or our PSC PowerStar Zeus, this battery will be charged directly from those various units. The PSC Pelican LiFE Battery can also be charged with most two stage lead acid battery chargers that are rated at a maximum of 25 amps.

**PSC PELICAN CHARGER:** PSC offers an optional PSC Pelican LiFE battery Charger. This compact charger is rated at 7.5 Amps of charging current and will re-charge a fully depleted PSC Pelican LiFE battery in about 3 hours. Pelican LiFE Batteries that are only partly depleted will be recharged in even less time.



**PSC PELICANLIFE BATTERY CHARGER**

**SAFETY NOTE:**

Always check the condition of your PSC Pelican LiFE Battery before using any charger. Visually inspect the LiFE cells for any physical changes in the cell shape. Carefully open the lid to the Pelican case and inspect the cells for bulging, cracking, leaking or corrosion. Cells that show any signs of damage should not be recharged. If you see any cells that look abnormal or have changed physically, do not charge such cells.

**CHARGING BATTERY WHILE BATTERY IS IN USE:**

The PSC Pelican LiFE Battery charger can be used in some situations to charge your PSC Pelican LiFE Battery while the battery is powering your equipment, essentially making a *small* uninterruptible power DC supply. Please note that your equipment must be drawing approximately 6 amps or less to use this charger in this way. Please be sure to allow plenty of free air space surrounding the charger as it will get very warm. Please be sure to test the charger/use function for electrical noise issues with your particular gear combination before using this setup on location. Not all equipment packages will operate without electrical noise with this charger hooked up. While this mode of operation will work in most cases, PSC cannot guarantee that this charger will not generate noise within your system if used to charge the battery while you are operating your equipment.

**STORAGE:** Please note that all rechargeable batteries slowly self discharge while in storage. If you store this battery it must be fully recharged prior to storing it. It should also be charged every month while in storage. Failure to follow these instructions will cause damage to the battery and will not be covered under the PSC warranty.

**SHIPPING:** Shipping the PSC Pelican LiFE battery is restricted by the IATA and the TSA. Please read all current shipping restrictions before shipping this battery. Basically, all Lithium batteries have certain shipping restrictions when shipped via air. Larger capacity batteries such as this model cannot be shipped on passenger planes. It must be shipped on cargo aircraft such as DHL, Federal Express or United Parcel Service. In addition, the battery should be discharged to less than 30% remaining capacity before shipping by air cargo. This is a requirement of the IATA.

## Limited Warranty Certificate

Professional Sound Corporation warrants the individual cells to be free of defective material and workmanship for a period of two years (LiFE Cells only). Furthermore, Professional Sound Corporation warrants the remaining electronics, housing and other parts to be free from defective material and workmanship for a period of one year from the original date of purchase and agrees to repair or replace such defective parts or the whole product at its option, provided that the equipment is returned to Professional Sound Corporation. Shipping and insurance costs to and from Professional Sound Corporation must be prepaid by the owner. This warranty does not cover damage due to accident, careless handling, abuse or misuse, improper connection and/or installation, improper electrical contact, improper charging, long term storage without periodic charging, and/or improper grounding. This warranty will be null and void in the event of removal, alteration or tampering with the serial number, or by service or repair work not performed by Professional Sound Corporation. Proof of purchase date (copy of invoice or Warranty Certificate) must be furnished before warranty service will be performed. This warranty is in lieu of any other warranty, expressed or implied, including warranties without limitation, products being merchantable at the time of purchase or suitable for a particular purpose. This warranty does not extend to, or include consequential damage.

### **SPECIFICATIONS:**

<b>SIZE:</b>	<b>9.25" x 7.5" x 4.375" (23.5cm x 19cm x 11cm)</b>
<b>WEIGHT:</b>	<b>7.25Lbs (3.3Kg)</b>
<b>METERS:</b>	<b>Voltage and Output Current</b>
<b>CHEMISTRY:</b>	<b>Lithium Iron Phosphate (LiFEPO4)</b>
<b>RATED CAPACITY:</b>	<b>12.8 Volts @ 20 Amp Hours (256 watts)</b>
<b>TEMPURATURE RANGE:</b>	<b>-4F to 140F (-20C to 60C)</b>
<b>OUTPUT CONNECTORS:</b>	<b>SpeakON 2 Pole (Mating connector Neutrik NL2FC) XLR, 4 Pin Female,</b>
<b>CHARGING CONNECTOR:</b>	<b>4 Pin Din</b>
<b>MAXIMUM CHARGE/DISCHARGE RATE:</b>	<b>25 Amps</b>
<b>WARRANTY:</b>	<b>Electronics and Case, 1 year, Limited LiFE cells, 2 years, Limited</b>

# CE

## DECLARATION OF CONFORMITY

**EMC:** This product is in compliance with the Electromagnetic Compatibility Directive, 89/336/EEC as defined in EN 50081-1, EN55022 and EN 50082-1. IEC801-2, IEC801-3 and IEC801-4.

**LVD:** This product is in compliance with the requirements of the Low Voltage Directive, 73/23/EEC. 93/68/EEC as defined in EN60065, 1993 and/or EN60950/A1/A2/A3: 1995

**TRADE NAME:** PSC

**MODEL:** Pelican LiFE Battery w/Charging Port

**RESPONSIBLE PARTY:** Professional Sound Corp.  
28085 Smyth Drive  
Valencia, CA 91355 USA

**CONTACT PERSON:** Ronald Meyer  
  
(661) 295-9395

**TYPE OF PRODUCT:** Rechargeable Battery

**MANUFACTURER:** Professional Sound Corp.  
28085 Smyth Drive  
Valencia, CA 91355 USA

We hereby declare that the equipment bearing the trade name and model number listed above has been tested in accordance with the requirements contained in the above listed directives. All necessary steps have been taken and are in force to assure that production units manufactured will conform to Directive guidelines.

December 2016

Professional Sound Corporation.