

**i**on-drive®  
OF SWEDEN

# LITE LITHIUM

LiFePO<sub>4</sub> Golf Battery



## USER MANUAL

## WELCOME

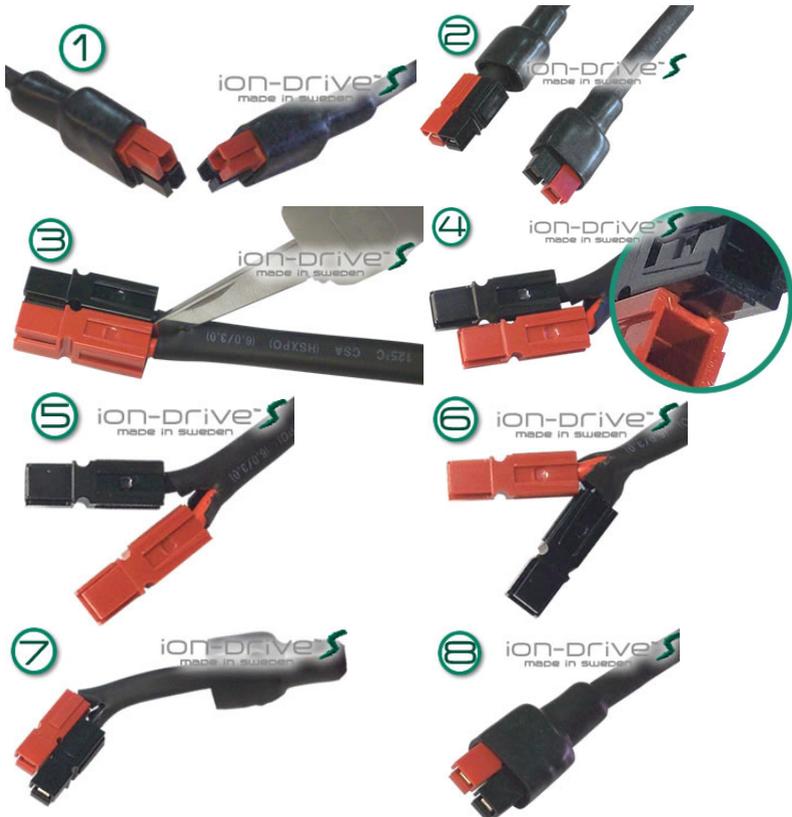
Thank You for choosing the iON-Drive LITE Lithium battery. The function and life expectancy of a battery depends much on how the user maintains it. Therefore it is imperative that You follow the instructions and recommendations in this user manual to have the best possible experience with your new Lithium battery.

## NEW BATTERY

This battery is made with harmless LiFePO4 lithium cells. It is completely encased and impervious to water. The capacity is 17 Ah for use with electric trolleys running on 12 V. The battery is also impervious to deep discharge, e.g. draining the battery completely. This differs this lithium battery from traditional lead-acid batteries that should not be discharged by more than 50-60% in order to reach advertised cyclic life. iON-Drive LITE is guaranteed for 1000 cycles and the warranty is for 12 months.

iON-Drive LITE is delivered with charger and red / black PowerPole connection.

The battery is also available with interconnect "T-adapter"-connection for use with Powakaddy trolleys.



## USE & CHARGING

Before you connect the battery to your trolley, please make sure that the positive (+ Red) and negative (-Black) leads match the corresponding connections on the trolley. ALWAYS connect Black to Black and Red to Red.

If needed, change the composition of the trolley connection according to the illustration on last page. If the connection on the battery is changed, please note that you will also have to change the connection on the charger

- The charger cable (from charger to battery) should be straightened and not be coiled up when in use.
- The battery needs a 10-12 hour charge before first use. This is also the standard charging time after use.
- Always charge the battery in dry and tempered environment (room temperature).
- When charging, connect the charger to a 110-230 Volt socket and then to the Red / Black connection on the battery.
- Please charge the battery for 10-12 hours after each use.
- Never leave the battery without charge it after use – put it on charge as soon as practically possible.
- Only use the supplied original charger with your iON-Drive LITE battery.
- A fully charged battery should not be reconnected to the charger as this could cause harm to the battery
- Never leave the battery connected to a charger that is not connected to a power supply

If you normally play every 14:th day or less, please leave the battery on charge. This ensures that your battery is always fully charged and ready for use.

## Winterstorage

When not using the battery for a longer period, e.g. during winter time, please follow these instructions:

- Charge the battery from empty (used) for 1-2 hours. Disconnect the battery from the charger, and the charger from mains supply.
- Repeat the procedure above roughly every 3 months, or at least once during winter storage
- The capacity of your iON-Drive battery (cyclic life) is best preserved when stored at about 50% charge.
- Room temperature (about 20 degrees Celsius) is the preferred storage temperature.

## Attention!

- iON-Drive LITE is a powerful battery and any shorting must be avoided. Never place clubs or other conductive materials in the vicinity of battery leads
- Never connect battery red (+) to black (-) on a trolley as this will surely fry the electronics of the trolley.
- Never leave the battery connected to a charger that is not connected to an active mains supply.
- If the iON-Drive LITE battery is professionally load-tested, the continuous load should not be greater than 17 A. The battery is rated for short time (a few seconds) peak loads of up to 34 A.
- If the overload protection shuts down the battery, connect it to the charger in order to automatically reset.
- The battery should only be used as a separate unit, and not in serial or parallel with other batteries
- Handle the battery with care. Never throw the battery, or load heavy equipment on top of it.



Certification for transport by air:

## Lithium Battery Certification for UN 38.3

June 27, 2010

Product: Lithium Battery

Model Name: iON-Drive LITE battery (YT12170F)

We hereby certify that above products meet all united nations dangerous material transport test and standard handbook 3<sup>rd</sup> part of UN38.3

### TEST RESULT

Item No.	Test Item	Requirements	Result
T1	Altitude Simulation	No Mass Loss, No Leakage, No Venting No disassembly, No Rupture, No Fire	Pass
T2	Thermal test	No Mass Loss, No Leakage, No Venting No disassembly, No Rupture, No Fire	Pass
T3	Vibration	No Mass Loss, No Leakage, No Venting No disassembly, No Rupture, No Fire	Pass
T4	Shock	No Mass Loss, No Leakage, No Venting No disassembly, No Rupture, No Fire	Pass
T5	External Short Circuit	No disassembly, No Rupture, No Fire	Pass
T6	Impact(Cell test)	No disassembly, No Fire	Pass
T7	Overcharge	No disassembly	Pass
T8	Forced Discharge	No disassembly, No Fire	Pass

All detail test procedure on UN manual have been applied for this test.

Signature: Chen Lihua

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**Battery Solution Expert**

For further information please contact:

Moby Dick AB, Sweden

Tel. +46 (0) 31 - 68 10 02, +46 (0) 708-68 12 58