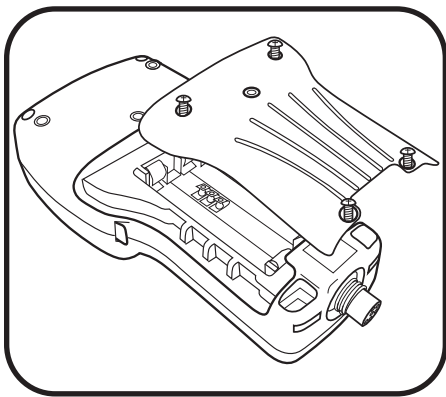


EXO[™] Rechargeable Li-Ion Battery Pack

Quick Start Guide

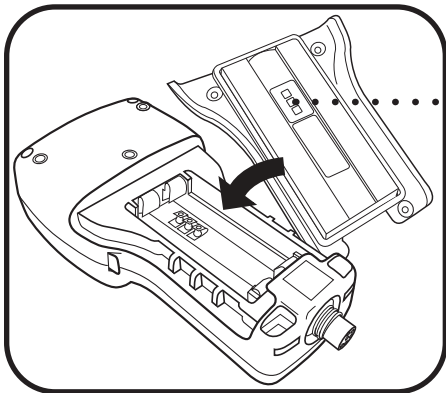
The EXO Handheld (HH) can use a rechargeable lithium-ion battery pack as a power source. Battery life varies depending on GPS and Bluetooth wireless use. Users can extend battery life by putting the HH in “Sleep” mode, when convenient, by pressing and holding the power button for less than three seconds.

⚠ WARNING: Be sure to reference the FAQ at the end of this document, and the supplied *Safety Warnings and Precautions* sheet included with the battery pack. Failure to exercise care while using this product and to comply with the safety guidelines could result in product malfunction, excessive heat, fire, damage to your products not covered under warranty, property damage, and/or personal injury.



1 Before the first charge.

Make a visual and physical inspection of the pack for any damaged or loose leads or connectors, damaged packaging, or other irregularities which may cause a short circuit and eventual fire. Always charge the pack in an open area away from flammable materials, liquids and surfaces. **Do not** charge or handle batteries that are hot to the touch.



2 Remove battery cover panel.

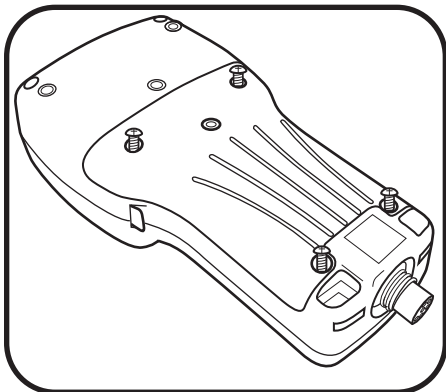
The battery cover panel is located on the back of the HH. To remove the panel, unscrew (counter-clockwise) the four screws with a flat or Phillips head screwdriver.

Note: The retaining screws are captured into this panel and are not independently removable. If replacement is necessary, replace the entire assembly.

3 Insert the Li-Ion battery pack.

Remove existing batteries if necessary.

⚠ WARNING: Be sure to remove the clear plastic tape from the back of the battery pack before inserting. Failure to do so can cause damage to your equipment.



Install the pack by fitting it correctly into the battery compartment. Ensure that the rubber battery cover gasket is seated properly, then tighten the four retaining screws back into their holes.

⚠ CAUTION: Overtightening of the screws is likely to cause damage and require replacement of the battery pack.

Prior to first use, charge the Li-Ion battery pack with the approved YSI charger. See the FAQ's for more details.

Rechargeable Li-Ion Battery Pack Specifications

Battery Life	Dependent upon variables such as temperature, screen brightness, and feature use. Up to 9 hours under active use for a <u>new</u> Li-Ion battery pack. Performance can be expected to decline over time and use.		
Temperature	Charging 2°C to 45°C (35.6°F to 113°F)	Operating -20°C to 60°C (-4°F to 140°F)	Storage 0°C to 35°C (32°F to 95°F)
Charging Supply	Charging Supply Input 100 - 240V		Charging Supply Output 12VDC / 2.5A
Software	For accurate battery gauge use KOR Interface Software: Operating System 1.0.2		

FAQ's

Q. How should I charge my Li-Ion battery pack?

- A.** You should charge your battery using the included, YSI approved 12V charger. There is a barrel-port for connecting the charger located on the back of the battery pack. We do not recommend using an alternative 12V source due to the possibility of damage caused by an incompatibility.

It takes approximately two hours to fully charge the battery. Always charge the battery in an open area away from flammable materials, liquids and surfaces. **DO NOT** handle or charge the battery if it is hot to the touch. See additional FAQ's and the *Safety Warnings and Precautions* sheet for instructions on handling a hot battery.

Q. I lost or damaged my charger. How can I order a replacement?

- A.** You can order a replacement charger (#119079) by either calling our toll free number at (800) 765-4974 and speaking with Customer Service or send an e-mail to orders@ysi.com.

Q. How long will my Li-Ion battery pack last during my trips to the field?

- A.** This is highly dependent upon how you use the instrument and the types of environment to which the handheld may be exposed. The battery life of a brand new pack can be expected to last 6-9 hours under typical active use cases. While hibernating, it will last much longer. As with all lithium-ion batteries, the working life will decline over time and use - this decay is typical and should be expected.

It is recommended to utilize batteries in your sonde to help extend the battery life of the Li-Ion pack. Powering the sonde with only the power from the HH will significantly reduce the daily usable charge.

Q. How long should it take to fully recharge my Li-Ion battery pack?

- A.** On average, it will take approximately two hours to fully recharge a dead battery pack. Unlike Ni-Cd batteries, you do not need to fully discharge your pack before charging, so feel free to top off the battery life as you see fit.

Q. Why is the battery gauge on my handheld not accurately depicting battery life?

- A.** If a handheld was built prior to 2/13/2014, then it will require an operating system update to have a compatible battery life gauge. Please visit the website below for instructions on this important update: www.EXOwater.com/handheld-update

FAQ's Continued

Q. Are there any special instructions for storing my Li-Ion battery pack?

- A.** Lithium-ion batteries will lose their charge capacity over time, especially when stored for long periods between use. For long term storage, remove the battery pack from the handheld, and if possible store in a cold environment (>0°C / >32°F). If stored cold, allow the battery to return to room temperature before charging. Also, store the pack with a partial charge (~50%) to limit loss of charge capacity.

Please note that storing your battery for long periods of time will not preserve its total capacity as these batteries are always in a state of decay. Always store batteries in a non-conductive and fireproof container.

Q. What should I do if the Li-Ion battery pack is damaged, hot or swollen?

- A.** If at any time the battery has become damaged, hot, or begins to balloon or swell, discontinue charging (or discharging) immediately. Quickly and safely disconnect the charger. Then place the battery in a safe, open area away from flammable materials and observe. After one hour, remove the battery from service. **DO NOT** continue to handle, attempt to use, or ship the battery. Failure to follow these procedures can cause damage to the battery, personal property or cause serious injury. Damaged or swollen batteries can be unstable and very hot. **DO NOT** touch the battery until it has cooled. Contact our Technical Support toll free at **(800) 765-4974** to speak to a service technician for more information.

In the event of a fire use a Class A, B, or C fire extinguisher. **DO NOT** use water.

Q. What should I do in the event that my Li-Ion battery pack is submerged in water?

- A.** The handheld has a rating of IP-67. Properly installed the Li-Ion battery has complete protection against dust and immersion in up to one meter (3.3 feet) of water for thirty minutes. However, overtightening of the screws and other surface damage from inappropriate use may allow water to seep into the battery pack. In the event that the internal battery pack comes into contact with, or is completely submerged in water, we recommend that you decommission the battery and seek out a replacement.

Q. How do environmental temperatures effect the life of my Li-Ion battery pack?

- A.** Extreme environmental conditions can impact the performance and life of your battery. The pack performance will suffer in cold temperature (0°C / 32°F) and perform best at warm temperature (37°C / 98.6°F). Never expose the battery pack to extreme sunlight, or leave it unattended in an automobile, for long periods of time where it may overheat. For ideal temperature ranges during charging, operation and storage see the specifications chart in this document.

Q. How do I properly dispose of my Li-Ion battery pack?

- A.** For information on how to prepare your battery for disposal, please reference the supplied *Safety Warnings and Precautions* sheet included with the battery pack. For additional details on recycling lithium-ion batteries, please contact a government recycling agency, your waste-disposal service, or visit a reputable online recycling sources such as www.batteryrecycling.com.

Q. How long is my Li-Ion battery pack protected under warranty?

- A.** We guarantee that the product will be free from defects in materials and workmanship at the date of purchase for up to one year. Replacement decisions are at the sole discretion of YSI. This does not cover cosmetic damage or damage due to accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the battery. YSI does not inspect or repair batteries.
Do not ship batteries to YSI unless instructed to do otherwise.