TRACKER LITHIUM Gen 2

FREQUENTLY ASKED QUESTIONS

SIZING/SELECTION

Q: Will Tracker Lithium batteries work with my Trolling motor?
Tracker Lithium deep-cycle batteries 52A and greater are designed to work with all production Trolling Motors. Please consult your specification sheet for larger current drains.

Q: What is the minimum quantity of batteries needed for my trolling motor or boat motor?

- 12V trolling motor — 1 battery
- 24V trolling motor — 2 batteries
- 36V trolling motor — 3 batteries
- 12V Starting Battery — 1 battery

Q: Do I need to use the Lithium Starting battery if I purchase Lithium deep-cycle batteries?
No, but we recommend the Tracker Lithium starting batteries for extended accessory runtime and faster charging than lead batteries.

Q: Can I use different types (Flooded, AGM, Lithium) batteries in my boat for Deep-Cycle applications?
Yes, if there is a defective lithium unit, then adding a Flooded or AGM battery short-term in the battery bank will not cause any damage to either setup, but you cannot mix Lithium and Lead in series connections for long-term use. Also, ensure you use the same SKU battery per bank.

Q: Can I use different types (Flooded, AGM, Lithium) batteries in starting applications.
Yes, adding a flooded or AGM (Lead) battery in parallel can protect the lithium battery and boat components from momentary/ defective peak alternator current & voltage.

Please note: The lead battery should connect to the lithium battery in parallel as a stand-alone battery. Then, install the lithium battery as the main battery with all wires, charger, alternator, starter, etc.… connected to the lithium battery terminals.
(See series and parallel diagram on page 2)

Q: Are my Tracker Lithium batteries drop-in replacements?
Yes, Tracker Lithium batteries have physically similar dimensions as Lead and AGM.

Deep-Cycle options: The 52A battery is in the U1 size (riding lawnmower size). The 60, 80, and 100 options are all group 24.
Starting: The 100A starting battering is a group 31.

INSTALLATION

Q: How should I install my Tracker Lithium batteries?
The battery is a direct replacement and should be installed the same as the existing batteries.

INSTALLATION (cont'd)

Q: What size cables/wiring do I need to connect the Tracker Lithium batteries?
Refer to the Original Equipment Manufacturer's specifications for wire size required to operate your electrical components and motors.

CHARGING

Q: What charger do you recommend for marine applications?
We recommend using a multi-bank charger to ensure each battery is balanced correctly and receives a full charge. Chargers with a lithium charge profile are required; Lead battery chargers may charge the lithium battery, but doing so will harm the lithium cells lifespan. Please consult your Tracker Lithium dealer for approved lithium charger models.

Dual Pro and Noco Charging brands with lithium settings are the the approved options for Tracker Lihtium. There are there brands that state they can "charge" lithium, but there could be functionality concerns, such as not having to the ability to charge a battery that's 100% discharged. We will update this list with additional chargers as they become available.

Q: Can I use any charge profile to charge my batteries?
No. AGM or Lead charging profiles can charge a lithium battery which is not fully depleted, but it will harm lithium cells and reduce the battery's overall lifespan.

Lithium chargers use algorithms that properly balance and charge the lithium cells.

Q: Can I charge multiple batteries in series or parallel with a single set of charge leads (single-bank charger)?
Yes, but each battery must receive a full charge independently before connecting in series or parallel. It is strongly recommended to use a multi-bank charger to ensure proper charging and wake-up functions.

Q: How long does it take for the batteries to be fully charged?
The charging time for your batteries depends on the following: the percent discharged, the charger's output current (Amps), and the total capacity of your battery. Typically, a 10A charger will fully charge a depleted 100A battery in 10 hours.

Q: Do I need to charge my Tracker Lithium batteries after each use?
It is recommended to fully charge your batteries after each use to ensure full capacity for subsequent uses. Storing lithium batteries under 20% charged can damage the cells or BMS which reduces their overall lifespan.

CHARGING (CONT'D)

Q: How long can I leave my charger connected to my batteries?
This is dependent on the type of charger being used as some are automatic and other manual. Please refer to the charger's instruction manual.

Q: What is the recommended charging temperature range of Tracker Lithium Batteries?
32°F to 95°F. Charging temps below 32°F are acceptable if using a charger with less than 10% of the battery's capacity, or approved by the OEM. Example: 10% of a 100-amp battery is 10 amps.

Q: Why is my battery not charging after the battery was completely discharged?
The battery management system will enter " low-voltage protection mode" (sleep mode) to safeguard itself from possible damage; the battery will read what's called "ghost voltage" that will range from negative voltage to positive 9.5V while in sleep mode.

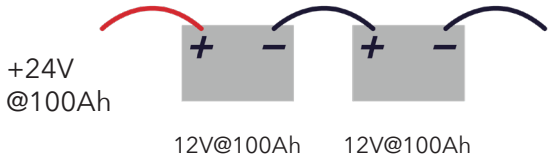
If the battery is completely drained of capacity (power/amperage), a battery charger with a Lithium charge profile and wake-up feature must be used to recharge the battery fully. Standard flooded lead acid or AGM chargers do not have the "smarts" to charge lithium batteries properly.

- Please consult your local Tracker Lithium dealer for charger selections

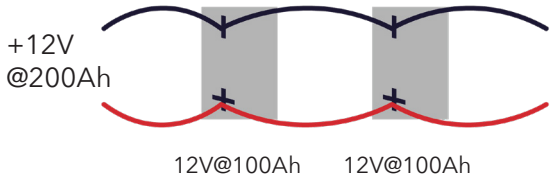
Q: How can I charge or test a battery that is in Low Voltage Protection mode when I do not have a lithium charger?
"Older" style chargers with a Manual setting or timer will work, but this method should NOT exceed 20 minutes in duration.

Instructions:
1. Initiate the Manual charge with a preferred setting of 2-5 amps, but settings up to 20A will work as well. -Important: Do not charge the battery until all connections are removed from terminals, except for the charger leads.
2. After 20 minutes- turn off the charger and remove the charger leads.
3. Check voltage to make sure the battery reads 12.00V volts or higher.
4. Connect the battery to the lithium onboard charger to complete the charge cycle

SERIES: Double Voltage & Same Amperage



PARALLEL: Same Voltage & Double Amperage



OPERATION

Q: What is the expected runtime of my Tracker Lithium battery?
The runtime is dependent on the amp draw and other such as the general operation of electronic equipment. Example: One Tracker Lithium 100-Amp battery will run approximately 30-50% longer than a group 31 100-amp flooded lead-acid or AGM battery.

Q: How far can I discharge my Tracker Lithium starting/dual-purpose battery before it can't start my engine?
If your battery is more than 80% discharged, you may experience issues starting your motor. If users feel their battery is getting low on power, they should start their motor and recharge the battery with the alternator.

Q: Can I mix batteries in my boat?
It is not recommended to mix varying amp-hour or chemistry of batteries for the same application. Deep-cycle batteries should be the same SKU for each bank. And Starting batteries should be the same SKU when connected in parallel. (Other than noted in the Sizing/Selection portion of this sheet.)

Q: How long will my batteries last?
With proper care, expect 3,500-4,000 discharge/charge cycles at 80% depth of discharge at 77°F. The average Flooded or AGM marine battery life expectancy is 100-300 discharge/charge cycles at 80% depth of discharge at 77°F.

Q: Will my existing battery gauge work on Tracker Lithium battery?
Not if it's a lead-acid battery gauge. Lithium and Flooded/AGM batteries have slightly different voltages (12V for Lead and 12.8V for Lithium), so the reading of the Lead battery gauge is inaccurate on Lithium batteries.

Q: Are my Tracker Lithium batteries water-resistant?
Yes, Tracker Lithium batteries have an IP67 rating.

Q: Are my Tracker Lithium batteries fire resistant?
Yes, Tracker Lithium batteries utilize a BMS to protect the battery and user from certain abuse. In addition, each cell has a protective wrap to ensure extra durability along with a specialized membrane to extinguish a thermal event with 10 seconds, and are designed to be one of the safest lithium options available in the market.

Q: Do my batteries have peak limitations?
Yes, please refer to the datasheet for your battery model.

STORAGE

Q: How do I store my Tracker Lithium batteries?
- Fully charge your batteries before storage.
- Unhook the main negative to prevent any drain on the batteries.
- Ensure to "Trip" any circuit breakers connected directly to the battery.
- If stored in areas where it drops below 23°F for multiple days, then it is recommended to keep the batteries in a climate-controlled room.

Q: What is the recommended storage temperature of Tracker Lithium Batteries?
Between 23°F and 95°F.

Q: What is Tracker Lithium battery's recommended operating ambient (discharge) temperature?
-4°F to 104°F.