



ATG lithium battery safe mode

Each ATG battery is equipped with a Battery Management System that incorporates various safety features not present in lead-acid, calcium, or other lithium batteries. To guarantee that ATG batteries are the safest option available in the Australian market, we implement protections against over-current, over-voltage, extreme temperatures, reverse polarity, and over-discharge. Should any of these safety mechanisms be activated, the ATG lithium battery will switch to safe mode, rendering it unusable until it is reset from this mode.

How do I bring my lithium battery out of safe mode?

To restore your lithium battery from safe mode, it is important to note that, aside from discharging the battery below 10 volts, the battery is capable of self-recovery from safe mode. For instance, if the internal temperature of the battery rises to 80 degrees Celsius, it will enter safe mode; however, once the temperature drops below this threshold, the battery will automatically exit safe mode.

The primary cause for an ATG battery entering safe mode is typically due to the battery being drained to a voltage of 10 volts or lower.



Below are the procedures to restore the battery from safe mode.

If you possess a charged battery (for example, a car battery), jumper cables, and a battery charger, please adhere to the following steps to bring your ATG lithium battery out of safe mode:

1. Disconnect all loads and inputs from the ATG battery.
2. Connect the ATG battery in parallel with another battery (referred to as battery number 2).
3. Verify the voltage of both batteries while they are connected in parallel; they should display similar voltage readings.
4. Attach an A.C. 240v charger or a DCDC charger to the ATG battery and initiate the charging process. It is advisable to use a three-stage charger with a current rating of 20 to 40 amps for batteries exceeding 60 amp-hours.
5. For batteries with a capacity below 60 amp-hours, the charger's current output should be approximately half of the battery's capacity. For example: - A 50 amp-hour battery should use a 25-amp charger. - A 24 amp-hour battery should use a 12-amp charger. - A 7 amp-hour battery should use a 3.5-amp charger.
6. Once the charger begins to charge the ATG battery, disconnect battery number 2.
7. The charger will continue to charge the ATG battery, facilitating its exit from safe mode.
8. Allow the charger to fully charge the battery.
9. Refrain from reintroducing any load until the battery has been completely charged.



If you have access to a portable jump starter, please follow these steps to restore your ATG lithium battery from safe mode:

1. Disconnect all loads and inputs from the ATG battery.
2. Connect the jump starter cables to the battery (positive to positive, negative to negative).
3. Attach an A.C. 240v charger or a DCDC charger to the ATG battery and allow the charging process to commence.