

# NOCO GB251 3000A Lithium Jump Starter User Guide

Home » NOCO » NOCO GB251 3000A Lithium Jump Starter User Guide 🖫



## **Contents**

- 1 NOCO GB251 3000A Lithium Jump
- Starter
- **2 Important Safety Warnings**
- 3 How To Use
- 4 Interface
- **5 Troubleshooting**
- **6 Technical Specifications**
- 7 NOCO One (1) Year Limited Warranty
- 8 Documents / Resources
  - 8.1 References
- **9 Related Posts**

NOCO GB251 3000A Lithium Jump Starter

**ADANGER** 

READ AND UNDERSTAND ALL SAFETY INFORMATION BEFORE USING T HIS PRODUCT. Failure to follow these safety instructions may result in ELECTRICAL SHOCK, EXPLOSION, and FIRE, which may result in a SERIOUS INJURY, DEATH, or PROPERTY DAMAGE.
Electrical Shock. The product is an electrical device that can shock and caus e serious injury. Do not cut power cords. Do not submerge in water or get wet.
<b>Explosion.</b> Unmonitored, incompatible, or damaged batteries can explode if u sed with the product. Do not leave the product unattended while in use. Do not attempt to jump-start a damaged or frozen battery. Use products only with batt eries of recommended voltage. Operate products in well-ventilated areas.
<b>Fire.</b> The product is an electrical device that emits heat and is capable of causing burns. Do not cover the product. Do not smoke or use any source of e lectrical spark or fire when operating the product. Keep product away from combustible materials.
Eye Injury. Wear eye protection when operating the product. Batteries can ex plode and cause flying debris.  Battery acid can cause eye and skin irritation. In the case of contamination of eyes or skin, flush the affected area with running clean water and contact pois on control immediately.
<b>Explosive Gases.</b> Working in the vicinity of lead-acid is dangerous. Batteries generate explosive gases during normal battery operation. To reduce the risk of battery explosion, follow all safety information instructions and those publish ed by the battery manufacturer and manufacturer of any equipment intended t o be used in the vicinity of the battery. Review cautionary markings on these pr oducts and on the engine.

# **Important Safety Warnings**

#### **CAUTION:**

Manual Override Mode disables all safety measures. When used improperly and/or against our recommended use, it may result in injury or death and will void your warranty. Risk of fire, explosion, and burns. Do not disassemble, crush, heat above 60°C (140°F), or incinerate. This device is intended for temporary use outdoors and reasonable care should be exercised when using this device in wet conditions.

#### WARNING.

Do not overcharge the internal battery. See Instruction Manual. Do not smoke, strike a match, or cause a spark in the vicinity of the power pack. Only charge the internal battery in a well-ventilated area when not in use.

# **CAUTION:**

Risk of Injury To Persons. Do not use this product if the power cord or the battery cables are damaged in any way. This device is not intended for use in a commercial repair facility. This device is intended to be stored indoors when not in use. This device shall not be stored or left outdoors when not in use.

**Proposition 65.** Battery posts, terminals, and related accessories contain chemicals, including lead. These materials are known to the State of California to cause cancer and birth defects and other reproductive harm. Personal Precaution. Only use the product as intended. Someone should be within range of your voice or close enough to come to your aid in case of emergency. Have a supply of clean water and soap nearby in the case of battery acid contamination. Wear complete eye protection and protective clothing while working near a battery. Always wash hands after handling batteries and related materials. Do not handle or wear any metal objects when working with batteries including; tools, watches, or jewelry. If metal is dropped onto the battery, it may spark or create a short circuit resulting in electrical shock, fire, or explosion which may result in injury, death, or property

damage. Minors. If the product is intended by the "Purchaser" to be used by a minor, purchasing adult agrees to provide detailed instructions and warnings to any minor prior to use. Failure to do so is the sole responsibility of the "Purchaser," who agrees to indemnify NOCO for any unintended use or misuse by a minor. Choking Hazard. Accessories may present a choking hazard to children. Do not leave children unattended with products or any accessories. The product is not a toy. Handling. Handle product with care. The product can become damaged if impacted. Do not use a damaged product, including, but not limited to, cracks to the casing or damaged cables. Do not use the product with a damaged power cord. Humidity and liquids may damage the product. Do not handle the product or any electrical components near any liquid. Store and operate products in dry locations. Do not operate the product if it becomes wet.

If the product is already operating and becomes wet, disconnect it from the battery and discontinue use immediately. Do not disconnect the product by pulling on the cables. Modifications. Do not attempt to alter, modify or repair any part of the product. Disassembling a product may cause injury, death, or damage to property. If a product becomes damaged, malfunctions, or comes in contact with any liquid, discontinue use, and contact NOCO. Any modifications to the product will void your warranty. Accessories. This product is only approved for use with NOCO accessories. NOCO is not responsible for user safety or damage when using accessories not approved by NOCO. Location. Prevent battery acid from coming in contact with the product. Do not operate the product in a closed-in area or an area with restricted ventilation. Do not set a battery on top of the product. Position cable leads to avoiding accidental damage by moving vehicle parts (including hoods and doors), moving engine parts (including fan blades, belts, and pulleys), or what could become a hazard that may cause injury or death. Operating Temperature. This product is designed to work in ambient temperatures between -20° C to 50° C. Do not operate outside of temperature ranges. Do not jump-start a frozen battery. Discontinue the use of the product immediately if the battery becomes excessively warm. Storage. Do not use or store your product in areas with high concentrations of dust or airborne materials. Store your product on flat; secure surfaces so it's not prone to falling. Store your product in a dry location. The storage temperature is -20°C to +50°C (0°C ~ +25°C daily average). Never exceed 80°C under any condition. Compatibility. The product is only compatible with 12-volt leadacid battery systems only. Do not attempt to use the product with any other type of battery. Jump-starting other battery chemistries may result in injury, death, or property damage. Contact the battery manufacturer prior to attempting to jump-start the battery. Do not jump-start a battery if you are unsure of the battery's specific chemistry or voltage. The Battery. The built-in lithium-ion battery in the product should be replaced only by NOCO and must be recycled or disposed of separately from household waste. Do not attempt to replace the battery yourself and do not handle a damaged or leaking lithium-ion battery. Never dispose of batteries in household trash. Disposal of batteries in household trash is unlawful under state and federal environmental laws and regulations. Always take used batteries to your local battery recycling center. If the product battery is excessively hot, emitting an odor, deformed, cut, or is experiencing or demonstrating an abnormal occurrence, immediately stop all use and contact NOCO. Battery Charging. Charge the product with the included 12VDC car charger or XGC4 wall charger. Do not use generic or third-party power adapters, as they may present a serious electrical risk that can result in injury to a person, Device, or property. Using damaged cables or chargers, or charging when moisture is present, can result in electric shock. NOCO is not responsible for the user's safety, damage to the Device, or damage to property when using accessories or power supplies that are not approved by NOCO. When using the XGC4 wall charger, make sure that the AC plug is fully inserted into the adapter before you plug it into a power outlet. The power adapter may become warm during normal use, and prolonged skin contact may cause bodily injury. Always allow adequate ventilation around the power adapter while in use. To ensure maximum battery life, avoid charging your product for more than a week at a time, as overcharging may shorten battery life. Over time, an unused product will discharge and must be recharged before use. Disconnect the product from power sources when not in use. Use the product only for its intended purposes. Medical Devices. The product may emit electromagnetic fields. The product contains magnetic components which may interfere with pacemakers, defibrillators, or other medical devices. These electromagnetic fields may interfere with pacemakers or other medical devices. Consult with your physician prior to use if you have any medical device including pacemakers. If you suspect the product is interfering with a medical device, stop using the product immediately and consult your physician. Medical Conditions. If you have any medical condition that you believe could be affected by the product, including but not limited to; seizures, blackouts, eyestrain, or headaches, consult your physician prior to using the product. The use of an integrated high-powered flashlight contains a light sensitivity hazard. Use of the light in Strobe Mode may cause seizures in persons with photosensitive epilepsy, which may result in serious injury or death. Light. Staring directly into the light beam or shine of the flashlight may result in permanent eye injury. The product is equipped with a high output LED pre-focused lamp that emits a powerful beam at the highest setting. Cleaning. Power off the product before attempting any maintenance or cleaning. Clean and dry the product immediately if it comes in contact with liquid or any type of contaminant. Use a soft, lint-free (microfiber) cloth. Avoid getting moisture in openings. Explosive Atmospheres. Obey all signs and instructions. Do not operate products in any area with a potentially explosive atmosphere, including fueling areas

or areas which contain chemicals or particles such as grain, dust, or metal powders. High-Consequence Activities. This product is not intended for use where the failure of the product could lead to injury, death, or severe environmental damage. Radio Frequency Interference. The product is designed, tested, and manufactured to comply with regulations governing radio frequency emissions. Such emissions from the product can negatively affect the operation of other electronic equipment, causing them to malfunction. Model Number: GB251This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### **How To Use**

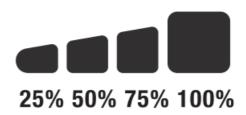
## Step 1: Charge the GB251.

The GB251 comes partially charged out of the box and needs to be fully charged prior to use. Connect the GB251 using the included 12V DC car charger or XGC4 wall charger to the 12V IN port. The time to recharge a GB251 will differ based on the discharge level and the power source used. Actual results may vary due to battery conditions and the level of discharge.

When recharging, the charge level of the internal battery is indicated by the Charge LEDs. The LEDs will slowly pulse 'On' and 'Off' and become solid until all four Charge LEDs are on. When the battery is fully charged, the Green 100% LED will be solid, and the 25%, 50%, and 75% Charge LEDs will turn "Off". From time to time, the Green 100% LED will pulse indicating maintenance charging is occurring.

Recharge Time:	Charger Rating:
8.5hr	56W

#### **Internal Battery Level**



# **Step 2: Connect to the Battery.**

Carefully read and understand the vehicle owner's manual on specific precautions and recommended methods for jump-starting the vehicle. Make sure to determine the voltage and chemistry of the battery by referring to your battery owner's manual prior to using this product. The GB251 is for jump-starting 24-volt lead-acid battery systems only. Before connecting to the battery, verify that you have a 24-volt lead-acid battery system. The GB251 is not suitable for any other type of battery. Identify the correct polarity of the battery terminals on the battery. The positive battery terminal is typically marked by these letters or symbols (POS, P,+). The negative battery terminal is typically marked by these letters or symbols (NEG, N,-). Do not make any connections to the carburetor, fuel lines, or thin, sheet metal parts. The below instructions are for a negative ground system (most common). If your vehicle is a positive ground system (very uncommon), consult the vehicle's manual for proper jump-starting instructions.

1. Connect the positive (red) battery clamp to the positive (POS, P,+) battery terminal and the negative (black) battery clamp to the negative (NEG, N,-) battery terminal or vehicle chassis.

#### Step 3: Jump Starting.

- 1. Make sure all of the vehicle's power loads (headlights, radio, air conditioning, etc.) are turned off before attempting to jump-start the vehicle.
- 2. Press the power button to begin the jump start, and all LEDs will flash once. If you are properly connected to the battery, the white boost LED will illuminate and the battery charge LEDs will chase. A 60-second timeout countdown will begin as soon as a battery is detected.
- 3. Try starting the vehicle. Most vehicles will immediately start. Some vehicles may require the GB251 to be connected for up to 30 seconds before starting. If the vehicle does not start right away, wait 20-30 seconds and try again. Do not attempt more than five (5) consecutive jump starts within a fifteen (15) minute period. Allow the GB251 to rest for fifteen (15) minutes before attempting to jump-start the vehicle again.
- 4. Once you have started your vehicle, disconnect the battery clamps, and remove the GB251.

#### 60-Second Timeout.

A 60-second countdown will be initiated as soon as a battery is detected. After 60 seconds have elapsed, the jump starting function will be disabled. The boost LED will turn off and the internal battery charge LEDs will indicate the current charge level of the unit. To reset the jump-starting function, press the power button to power off the unit. Press the power button again to power on the unit and restart the jump starting function.

#### CAUTION.

A 60-SECOND TIMEOUT IS DISABLED WHILE USING MANUAL OVERRIDE MODE. POWER WILL CONTINUE TO BE SUPPLIED WHILE MANUAL OVERRIDE IS ACTIVE. TO MAXIMIZE THE NUMBER OF JUMP STARTS, IT IS RECOMMENDED TO TURN OFF THE BOOST-UNIT AS SOON AS THE VEHICLE HAS STARTED.

### Low Voltage Batteries & Manual Override.

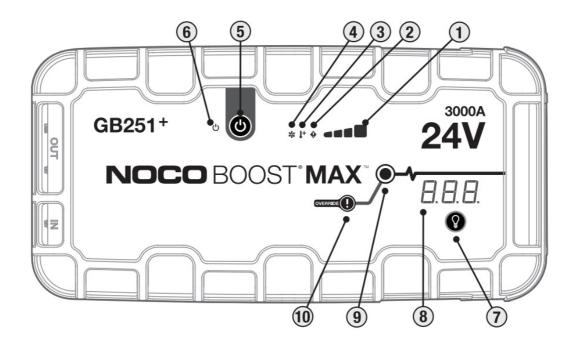
The GB251 is designed to jump-start 24-volt lead-acid battery systems down to 3 volts. If your battery is below 3 volts, the boost LED will be "off". This is an indication that the GB251 can not detect a battery. If you need to jump-start a battery below 3 volts there is a manual override feature, which allows you to force "on" the jump start function. If the battery is below 3 volts, the boost LED will be off and the voltmeter will not display a voltage.

#### CAUTION.

USE THIS MODE WITH EXTREME CARE. THIS MODE IS FOR 24-VOLT LEAD-ACID BATTERIES ONLY. BOTH THE SPARK PROOF AND REVERSE POLARITY PROTECTION FEATURES ARE DISABLED. PAY VERY CLOSE ATTENTION TO THE POLARITY OF THE BATTERY BEFORE USING THIS MODE. DO NOT ALLOW THE POSITIVE AND NEGATIVE BATTERY CLAMPS TO TOUCH OR CONNECT TO EACH OTHER AS THE PRODUCT WILL GENERATE SPARKS. THIS MODE USES A VERY HIGH CURRENT (UP TO 3000 AMPS) THAT CAN CAUSE SPARKS AND HIGH HEAT IF NOT USED PROPERLY. IF YOU ARE UNSURE ABOUT USING THIS MODE, DO NOT ATTEMPT AND SEEK PROFESSIONAL HELP.

#### Powering Your USB & 12V Devices.

The GB251 has (2) USB-OUT ports and a 12V-OUT port (12V AUX/ cigarette lighter port). Plug in any standard USB device or 12V device (Up to 15A) and turn the GB251 "on" to start powering your devices.



#### Interface

- 1. Internal Battery Level Indicates the charge level of the internal battery.
- 2. Error LED Illuminates red if the reverse polarity is detected, or blinks "on" and "off" in various sequences (from 1 to 6 blinks) to convey error conditions.
- 3. Hot LED Illuminates solid red; the unit is fully operational but approaching the upper-temperature limit. Flashing red; unit is too hot to jump-start, only the flashlight is available in this state.
- 4. Cold LED Illuminates solid blue; the unit is fully operational but approaching the lower temperature limit. Flashing blue; unit is too cold to jump-start, only the flashlight is available in this state.
- 5. Power Button Push to turn unit "on" & "off".
- 6. Power LED Illuminates white when the unit is "on". Will illuminate orange after the 60-second timeout countdown until the clamps are removed from the Car Battery or the GB251 is power cycled 'off' and back 'on' again.
- 7. Light Mode Button Toggles the ultra-bright LED light through 7 light modes: 100% > 50% > 10% > SOS > Blink > Strobe > Off
- 8. Voltmeter/Countdown Timer. The built-in voltmeter reads the voltage of the vehicle's battery for enhanced diagnostics and troubleshooting. The voltmeter will automatically read the voltage of any battery (or battery system) when the battery clamps are connected even if the unit is powered off. The voltmeter will read voltage between ~3V to ~30V. If the connected battery is below 3V, nothing will display. In this situation, it is likely there is a load(s) on the battery, such as headlights or an AC fan that should be shut off before attempting to start the vehicle. While the unit is on and after a battery is detected, the voltmeter will display the 60-second timeout countdown.
- 9. Boost LED Illuminates white when boost is active. If the unit is connected properly to a battery, the GB251 will automatically detect a battery and go into boost mode (LED flashes white when the manual override feature is active).
- 10. Manual Override Button To enable, push and hold for three (3) seconds. WARNING: Disables safety protection and manually forces boost "on". Only for use when a battery voltage is too low to be detected.

# **Troubleshooting**

	Error	Reason/Solution
	Error LED: Solid Red	Reverse polarity / Reverse the battery connections.
	Error LED: Blinking Red w/Cable s Connected Properly	Short circuit detected at the clamps. / Have the battery checked b y a professional.
	Single (1) Flash	Short circuit detected on battery clamps. / Remove all loads and r econnect clamps to the battery.
•	Double (2) Flash	The high voltage is detected at clamps (the GB251 is connected t o a voltage system greater than 24V).
•	Quadruple (4) Flash	Charge timeout error (i.e. the GB251 has been in bulk charge for t oo long)
	Quintuple (5) Flash	XGC OUT over current (i.e. more than 15amps is being drawn fro m the XGC OUT port)
	Sextuple (6) Flash	BMS (Battery Management System) Fault. (Power GB251 "off" and "on" again to clear. If problem persists contact Customer Support)
	Hot LED: Solid	The unit is fully operational but approaching the upper-temperatur e limit. / Allow the unit to cool.
1+	Hot LED: Flashing	The unit is too hot to jump-start, only the flashlight is available in t his state. / Allow the unit to cool.
	Hot LED: Flashes Then All LEDs Off	The unit is too hot to jump-start or uses other functions. / Allow the unit to cool, and bring the unit into a cooler environment.
*	Cold LED: Solid	The unit is fully operational, but approaching the lower temperatur e limit. / Allow the unit to warm up.
	Cold LED: Flashing	The unit is too cold to jump-start, only the flashlight is available in t his state / Allow the unit to warm up.
	Cold LED: Flashes Then All LEDs Off	The unit is too cold to jump-start or uses other functions. / Allow th e unit to warm up and bring the unit into a warmer environment.
	Boost Light Does Not Come On/ Cables Connected Properly	The connected battery is below 3 volts / Remove all loads, and try again, or use manual override mode.

Internal Battery: 133Wh Lithium Ion	12V (Input): 12V/5A (14V Max)
Peak Current Rating: 3000A	12V (Output): 12V, 15A Max
Operating Temperature: -20°C to +50°C	Housing Protection: IP65 (w/Ports Closed)
Charging Temperature: 0°C to +40°C	Cooling: Natural Convection
Storage Temperature: -20°C to +50°C (Avg Temp.)	Dimensions (L x W x H): 12.5 x 13.65 x 3.7 Inches
USB (Output): 5V, 2.1A	Weight: 13.65 Pounds

# **NOCO One (1) Year Limited Warranty**

NOCO warrants that this product (the "Product") will be free from defects in material and workmanship for a period of one (1) year from the date of purchase (the "Warranty Period"). For defects reported during the Warranty Period, NOCO will, at its discretion, and subject to NOCO's technical support analysis, either repair or replace defective Products. Replacement parts and products will be new or serviceably used, comparable in function and performance to the original part, and warranted for the remainder of the original Warranty Period.

NOCO'S LIABILITY HEREUNDER IS EXPRESSLY LIMITED TO REPLACEMENT OR REPAIR. TO THE MAXIMUM EXTENT PERMITTED BY LAW, NOCO SHALL NOT BE LIABLE TO ANY PURCHASER OF THE PRODUCT OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, PROPERTY DAMAGE, OR PERSONAL INJURY, RELATED IN ANY WAY TO THE PRODUCT, HOWSOEVER CAUSED, EVEN IF NOCO HAD KNOWLEDGE OF THE POSSIBILITY OF SUCH DAMAGES. THE WARRANTIES SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THOSE ARISING FROM THE COURSE OF DEALING, USAGE, OR TRADE PRACTICE. IN THE EVENT THAT ANY APPLICABLE LAWS IMPOSE WARRANTIES, CONDITIONS, OR OBLIGATIONS THAT CAN NOT BE EXCLUDED OR MODIFIED, THIS PARAGRAPH SHALL APPLY TO THE GREATEST EXTENT ALLOWED BY SUCH LAWS.

This Limited Warranty is made solely for the benefit of the original purchaser of the Product from NOCO or from a NOCO-approved reseller or distributor and is not assignable or transferable. To assert a warranty claim, the purchaser must: (1) request and obtain a return merchandise authorization ("RMA") number and return location information (the "Return Location") from NOCO Support by emailing <a href="mailto:support@no.co">support@no.co</a> or by calling 1.800.456.6626; and (2) send the Product, including RMA number, receipt or a warranty fee (fee required only if not providing receipt) of 45% of MSRP of the defective Product (the "Warranty Fee") [RMA will include applicable Warranty Fee amount] to the Return Location. DO NOT SEND IN THE PRODUCT WITHOUT FIRST OBTAINING AN RMA FROM NOCO SUPPORT.

The original purchaser is responsible (and must prepay) for all packaging and transportation costs to ship products for warranty service.

NOTWITHSTANDING THE ABOVE, THIS LIMITED WARRANTY IS VOID AND DOES NOT APPLY TO PRODUCTS THAT: (a) are misused, mishandled, subjected to abuse or careless handling, accident, improperly stored, or operated under conditions of extreme voltage, temperature, shock, or vibration beyond NOCO's recommendations for safe and effective use; (b) improperly installed, operated or maintained; (c) are/were modified without the express written consent of NOCO; (d) have been disassembled, altered or repaired by anyone other than NOCO; (e) the defects of which were reported after the Warranty Period.

THIS LIMITED WARRANTY DOES NOT COVER: (1) normal wear and tear; (2) cosmetic damage that does not affect functionality; or (3) Products where the NOCO serial number is missing, altered, or defaced.

# **HASSLE-FREE WARRANTY CONDITIONS**

These conditions apply only to the Product during the Warranty Period. The Hassle-Free Warranty is void either by elapsed time from the date of purchase (elapsed time from serial number date, if no proof of purchase) or from the conditions listed earlier in this document. Return the Product with the appropriate documentation.

## With Receipt:

1 Year: No charge. With proof of purchase, the warranty period begins on the date of purchase.

# With NO Receipt:

1 Year: No charge. With no proof of purchase, the warranty period begins on the serial number date.

You may register your NOCO product online at: no.co/register. If you have any questions regarding your

warranty or product, contact NOCO Support (email and phone number above) or write to The NOCO Company, at 30339 Diamond Parkway, #102, Glenwillow, OH 44139 USA.

For more information and support visit:



# **Documents / Resources**



NOCO GB251 3000A Lithium Jump Starter [pdf] User Guide

GB251 3000A Lithium Jump Starter, GB251, 3000A Lithium Jump Starter, Lithium Jump Starter, Jump Starter

# References

• NNOCO

Manuals+, home privacy