

NOCO GB20 Lithium Jump Starter User Guide

Contents

- [1 GB20 Lithium Jump Starter](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 FAQ](#)
- [5 Important Safety Warnings](#)
- [6 How To Use](#)
- [7 Troubleshooting](#)
- [8 Technical Specifications](#)
- [9 NOCO One \(1\) Year Limited Warranty](#)
- [10 Documents / Resources](#)
 - [10.1 References](#)
- [11 Related Posts](#)

GB20 Lithium Jump Starter

Product Information

Specifications:

- **USB (Output):** 5V, 2.1A
- **Housing Protection:** IP65 (w/Closed Ports)
- **Cooling:** Natural Convection
- **Dimensions (L x W x H):** 6.7 x 3.2 x 1.7 Inches
- **Weight:** 2.4 Pounds

Product Usage Instructions

Charger Rating and Recharge Time:

The charger rating options are .5A, 1A, and 2A with corresponding recharge times of 12 hours, 6 hours, and 3 hours respectively.

Charge Level Indication:

During recharging, the charge level of the internal battery is indicated by the Charge LEDs. The LEDs will slowly pulse 'On' and 'Off' until all four Charge LEDs are on. When the battery is fully charged, the Green 100% LED will be solid while the other Charge LEDs will turn off.

Troubleshooting:

Error	Reason/Solution
Error LED: Solid Red	Reverse polarity/Reverse the battery connections.
Error LED: Blinking Red w/Cables Connected Properly	The internal battery is too hot/ Allow the unit to cool. Bring the unit into a cooler environment.
Boost Light Does Not Come On w/Cables Connected Properly	Connected battery is below 2 volts/ Remove all loads, and try again, or use Manual Override Mode.

FAQ

Q: Can I charge the internal battery in a closed room?

A: It is recommended to charge the internal battery in a well-ventilated area when not in use to ensure safety.

Q: How do I know when the battery is fully charged?

A: The Green 100% LED will be solid when the battery is fully charged, and the other Charge LEDs will turn off.

Q: What should I do if the Error LED is solid red?

A: Reverse the battery connections to address the reverse polarity issue causing the solid red Error LED.

DANGER

- **READ AND UNDERSTAND ALL SAFETY INFORMATION BEFORE USING THIS 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 cause serious injury. Do not cut power cords. Do not submerge in water or get wet.
- **Explosion.** Unmonitored, incompatible, or damaged batteries can explode if used 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 batteries of recommended voltage. Operate products in well-ventilated areas.
- **Fire.** 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 electrical spark or fire when operating the product. Keep product away from combustible materials.
- **Eye Injury.** Wear eye protection when operating the product. Batteries can explode 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 poison control immediately.
- **Explosive Gases.** Working in the vicinity of a 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 published by the battery manufacturer and manufacturer of any equipment intended to be used in the

vicinity of the battery. Review the cautionary markings on these products and engines.

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.

WARNING:

This product can expose you to chemicals including lead and exhaust fumes, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

- **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 your 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, and 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, the purchasing adult agrees to provide detailed instructions and warnings to any minor before 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 the product or any accessory. 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 property damage. 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

- **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 lead-acid batteries 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 before 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.** A third-party USB cable and 5W or 10W power adapter that are compatible with USB 2.0 or power adapters compliant with one or more of the following standards EN 301489-34, IEC 62684, YD/T 1591-2009, CNS 15285, ITUL.2000. Be cautious of using low-quality power adaptors, as they may present a serious electrical risk that can result in injury to person, Device, and property. If using a third-party USB power adapter, contact the manufacturer(s) to find out if your power adapter complies with the above standards. Using damaged cables or chargers, or charging when moisture is present, can result in electric shock. Using a generic or third-party power adapter may shorten the life of your product and cause the product to malfunction. NOCO is not responsible for the user's safety when using accessories or supplies that are not approved by NOCO. When using a USB Power Adapter to charge the product, make sure that the AC plug is fully inserted into the adapter before you plug it into a power outlet. Power adapters may become warm during normal use, and prolonged skin contact may cause bodily injury. Always allow adequate ventilation around power adapters when using them. 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 their intended purposes.
- **Medical Devices.** The product contains magnetic components that may emit electromagnetic fields, which may interfere with pacemakers, defibrillators, or other medical devices. Consult with your physician before use if you have any medical devices 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 before using of 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 that 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:** GB20 This 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, under 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 by 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 GB20.

The GB20 comes partially charged out of the box and needs to be fully charged before use. Connect the GB20 using the included USB Charge Cable to the USB IN port and the USB car charger. It can also be recharged from any USB-powered port, like an AC adapter, car charger, laptop, and more. The USB IN port is rated at 2.1 Amps to ensure safe and efficient charging of the internal lithium battery. Due to FCC regulations, we recommend not to charge and discharge the unit at the same time. The time to recharge a GB20 will differ based on the discharge level and the power source used. Actual results may vary due to battery conditions.

- **Charger Rating:**

- .5A
- 1A
- 2A

- **Recharge Time:**

- 12h
- 6h

- 3h

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.

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 before using this product. The GB20 is for jump-starting 12-volt lead-acid batteries only. Before connecting to the battery, verify that you have a 12-volt lead-acid battery. The GB20 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), follow the below instructions in reverse order.

1. Connect the battery clamps to the GB20 by connecting to the 12V OUT port.
2. Connect the positive (red) HD battery clamp to the positive (POS, P,+) battery terminal.
3. Connect the negative (black) HD battery clamp to the negative (NEG, N,-) battery terminal or vehicle chassis.
4. When disconnecting, disconnect in the reverse sequence, removing the negative first (or positive first for positive ground systems).

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 to jump starting. All LEDs will flash, indicating that all LEDs are properly functioning. If you are properly connected to the battery, the White Boost LED will illuminate. If the battery clamps are connected in reverse, the Red Error LED will illuminate. Reverse the connections to clear this error and then the White Boost LED will illuminate. The White Boost LED is illuminated when the GB20 is ready to jump-start your vehicle.
3. Try starting the vehicle. Most vehicles will immediately start. Some vehicles may require the GB20 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 GB20 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 GB20.

Low Voltage Batteries & Manual Override.

The GB20 is designed to jump-start 12-volt lead-acid batteries down to 2 volts. If your battery is below 2 volts, the Boost LED will be "Off". This is an indication that the GB20 can not detect a battery. If you need to jump-start a battery below 2 volts there is a Manual Override feature, which allows you to force "On" the jump-start function.

CAUTION

USE THIS MODE WITH EXTREME CARE. THIS MODE IS FOR 12-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 AS THE PRODUCT WILL GENERATE SPARKS. THIS MODE USES VERY HIGH CURRENT (UP TO 500 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

1. Internal Battery Level Indicates the charge level of the internal battery.
2. Error LED Illuminates Red if reverse polarity is detected, or blinks "On" and "Off" when the internal battery temperature is too high.
3. Power Button Push to turn unit "On" & "Off".
4. Power LED Illuminates White when the unit is "On".
5. Boost LED Illuminates White when Boost is active. If the unit is connected properly to a battery, the GB20 will automatically detect a battery and go into Boost mode (LED flashes White when the Manual Override feature is active).
6. 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 is too low to be detected.
7. Light Mode Button Toggles the ultra-bright LED light through 7 light modes: 100% > 50% > 10% > SOS > Blink > Strobe > Off

Troubleshooting

Error/Reason/Solution

- **Error LED: Solid Red**

Reverse polarity/Reverse the battery connections.

- **Error LED: Blinking Red w/Cables Connected Properly**

The internal battery is too hot/Allow the unit to cool. Bring the unit into a cooler environment.

- **Boost Light Does Not Come On w/Cables Connected Properly**

Connected battery is below 2 volts/Remove all loads, and try again, or use Manual Override Mode.

Technical Specifications

- **Internal Battery:** Lithium Ion
- **Peak Current Rating:** 500A
- **Operating Temperature:** -20°C to +50°C
- **Charging Temperature:** 0°C to +40°C
- **Storage Temperature:** -20°C to +50°C (Avg Temp.)
- **Micro USB (Input):** 5V, 2.1A
- **USB (Output):** 5V, 2.1A
- **Housing Protection:** IP65 (w/Ports Closed)
- **Cooling:** Natural Convection
- **Dimensions (L x W x H):** 6.7 x 3.2 x 1.7 Inches
- **Weight:** 2.4 Pounds

NOCO One (1) Year Limited Warranty

IMPORTANT:

BY USING THIS PRODUCT, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THE NOCO ONE (1) YEAR LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW. DO NOT USE THE PRODUCT UNTIL YOU HAVE READ THE TERMS OF THE WARRANTY. IF YOU DO NOT AGREE TO THE TERMS OF THE WARRANTY, DO NOT USE THE PRODUCT AND RETURN IT.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE, COUNTRY, OR PROVINCE. OTHER THAN AS PERMITTED BY LAW, NOCO DOES NOT EXCLUDE, LIMIT, OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE NONCONFORMITY OF A SALES CONTRACT. FOR A FULL UNDERSTANDING OF YOUR RIGHTS, YOU SHOULD CONSULT THE LAWS OF YOUR STATE, COUNTRY, OR PROVINCE.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ARE EXCLUSIVE AND INSTEAD OF ALL OTHER WARRANTIES, REMEDIES, AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS, OR IMPLIED. NOCO DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, TO THE EXTENT PERMITTED BY LAW. IN SO FAR AS SUCH WARRANTIES CANNOT BE DISCLAIMED, NOCO LIMITS THE DURATION AND REMEDIES OF SUCH WARRANTIES TO THE DURATION OF THIS EXPRESS WARRANTY AND, AT NOCO'S OPTION, THE REPAIR OR REPLACEMENT OF PRODUCTS DESCRIBED BELOW. SOME STATES, COUNTRIES, AND PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY – OR CONDITION – MAY LAST, SO THE LIMITATION DESCRIBED ABOVE MAY NOT APPLY TO YOU.

NOCO warrants the NOCO-branded Products contained in the original packaging ("NOCO Product") against defects in materials and workmanship when used normally under NOCO's published guidelines for a period of ONE (1) YEAR from the date of original retail purchase or delivery date by the end-user purchaser ("Warranty Period"). NOCO's published guidelines include but are not limited to, the information contained in this Warranty, technical specifications, and user manuals. For end-user purchasers in the European Union (EU), the European Free Trade Area (EFTA), Northern Ireland, or the United Kingdom, the Warranty Period may extend to a minimum of TWO (2) YEARS. IN SOME STATES, COUNTRIES, OR PROVINCES, NATIONAL LAW MAY PROVIDE MORE EXTENDED WARRANTY PERIODS. As such, the benefits of the Limited Warranty are intended to supplement, and not replace, the rights provided by consumer protection laws.

NOCO'S LIABILITY IS LIMITED TO REPLACEMENT OR REPAIR. NOCO SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION OR UNDER ANY OTHER LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOST REVENUE, LOST BUSINESS, PROPERTY DAMAGE, PERSONAL INJURY, OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER.

This Warranty is non-transferable and does not cover return packaging and transportation costs. This Warranty does not apply: (a) to damage caused by accident, abuse, misuse, fire, liquid contact, or other external cause, (b) mishandling, improper installation, modifications, disassembly, or attempted unauthorized repair, (c) cosmetic damage – such as dents or scratches – that doesn't affect the functionality of the Product, (d) to damage caused by operating the Product outside NOCO's published guidelines, (e) to defects caused by normal wear and tear or otherwise due to the normal aging of the Product, or (f) if any serial number has been removed or defaced from the Product.

If, during the Warranty Period, you submit a claim, NOCO will, at its option: (a) repair the Product that has been tested and passed our functional requirements, (b) replace the Product with a replacement product of the same model (or with your consent a product that has the same or substantially similar features as the original Product – e.g., a different model with the same features), that is new or like-new and has been tested and passed our functional requirements, or (c) exchange the Product for a refund of your purchase price. We require certain information, including proof of purchase, to process Limited Warranty

claims. To claim under the Limited Warranty, please get in touch with NOCO Support at:

- (Web) <https://no.co/support>
- (Email) support@no.co
- (US/CA/MX) +1.800.456.6626
- (UK) +44 20 4520 7738
- (EU) +31 20 214 0047
- (AU) +61 2 4062 0068
- (JP) +81 3 6893 3017

For more information and support visit: www.no.co/support.

For patent information visit www.no.co/ip.

NOCO HQ

- 30339 Diamond Parkway, #102, Glenwillow, OH 44139 USA.
- +1 800 456 6626

NOCO EU

- Kabelweg 57, 1014BA Amsterdam, The Netherlands.
- +31 20 214 0047

NOCO UK

- 18 Soho Square, London W1D 3QL, United Kingdom
- +44 20 4520 7738

NOCO AU

- Rialto, West Podium, Level Mezzanine 2 (M2), 525 Collins Street, Melbourne, Australia 3000
- +61 2 4062 0068

NOCO JP

- 5F Okura Bekkan 3-4-1 Ginza Chuo-ku Tokyo, 104-0061
- +81 3 6893 3017

Documents / Resources

References

-  [NOCO: Intellectual Property Reference](#)
-  [NOCO](#)
-  [P65Warnings.ca.gov](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.