

12 Volt Jump Starter and Power Supply

Model Nos. JNC8550 & JNC8800

Charge the internal lithium battery for 12 hours upon initial purchase, charge as indicated on the status display and charge every 90 days when not in use.



Failure to follow instructions may cause damage or explosion, always shield eyes. **Read entire instruction manual before use**. WARNING: This product can expose you to chemicals including Vinyl-Chloride, Styrene and Acrylonitrile, which are known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling. Congratulations! You have just purchased a world-famous **Jump-N-Carry** jump starter, preferred by professionals around the world for its powerful output, exceptional service life and rugged design. We have taken numerous measures in quality control and in our

manufacturing processes to ensure that your product arrives in top condition, and that it will perform to your satisfaction.

This unit has a internal reserve power lithium battery that should be kept charged. Recharge when first purchased, as indicated to do so by the display, and every three months if not used. Failure to perform maintenance charges may cause the battery life to be reduced greatly.

Safety Information

WARNING

	Read these instructions completely before using the <i>Jump-N-Carry</i> and save them for future reference. Before using the <i>Jump-N-Carry</i> to jump start a car, truck, boat or to power any equipment, read these instructions and the instruction manual/safety information provided by the car, truck, boat or equipment manufacturer. Following all manufacturers' instructions and safety procedures will reduce the risk of accident.
	Working around lead-acid batteries may be dangerous. Lead-acid batteries release explosive gases during normal operation, charging and jump starting. Carefully read and follow these instructions for safe use. Always follow the specific instructions in this manual and on the <i>Jump-N-Carry</i> each time you jump start using the <i>Jump-N-Carry</i> . All lead-acid batteries (car, truck and boat) produce hydrogen gas which may violently explode in the presence of fire or sparks. Do not smoke, use matches or a cigarette lighter while near batteries. Do not handle the battery while wearing vinyl clothing because static electricity sparks are generated when vinyl clothing is rubbed. Review all cautionary material on the <i>Jump-N-Carry</i> and in the engine compartment.
	Always wear eye protection, appropriate protective clothing and other safety equipment when working near lead-acid batteries. Do not touch eyes while working on or around lead-acid batteries.
	Always store clamps in their holsters, away from each other or common conductors. Improper storage of clamps may cause the clamps to come in contact with each other, or a common conductor, causing the battery to short circuit and generate high enough heat to ignite most materials.
	Use extreme care while working within the engine compartment, because moving parts may cause severe injury. Read and follow all safety instructions published in the vehicle's Owner's Manual.
and the second second	While the reserve power battery in the Jump-N-Carry is a sealed lithium cell with no free liquid acid, batteries being jump started with the Jump-N-Carry unit likely contain liquid acids which are hazardous if spilled.

AWARNING: When charging the internal reserve power lithium battery, use only the included wall charger. This charger is exactly designed for use with the internal battery. Use of another charger could result in permanent unit damage and/or personal injury.

General precautions for use:

- Someone should always be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes. Protective eyewear should always be worn when working near lead-acid batteries.
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with cold running water for at least 10 minutes and get medical attention immediately.
- Be extra cautious to reduce risk of dropping a metal tool onto a battery. It might spark or short circuit the battery or another electrical part that may cause explosion.
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead-acid battery. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.
- Use the Jump-N-Carry for jump starting *lead-acid batteries* only. Do not use for jump starting dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
- **NEVER** charge or jump start a frozen battery.
- To prevent arcing, *NEVER* allow clamps to touch together or to contact the same piece of metal.
- Use of an attachment not recommended or sold by the manufacturer may result in a risk of damage to the unit or injury to personnel.
- When using the power extension cord, pull on the plug and never on the wire when disconnecting.
- Do not recharge the **Jump-N-Carry** with a damaged power extension cord. Replace it immediately.
- The Jump-N-Carry may be used under any weather condition rain, snow, hot or cold temperatures.
- Do not submerge in water.
- Do not operate with flammables such as gasoline, etc.
- If the Jump-N-Carry receives a sharp blow or is otherwise damaged in any way, have it checked by a qualified service person. Take it to the closest battery recycler in your area.
- Do not disassemble the Jump-N-Carry. Have it checked by a qualified service person.
- The **Jump-N-Carry** should never be left in a completely discharged state for any period of time. Damage to the reserve power battery could occur, with poor performance as a result. When not in use, recharge every three (3) months.
- Always store, use and charge the **Jump-N-Carry** in an area where children cannot get to the unit.

Features

- The **Jump-N-Carry** provides plenty of power for starting vehicles more than enough to start most cars and light trucks.
- The **Jump-N-Carry** utilizes an ultracapacitor power source, which is largely unaffected by cold temperatures.
- The **Jump-N-Carry** features an internal reserve power lithium battery to power the ultacapacitor when the disabled vehicle's battery is extremely discharged.
- The **Jump-N-Carry** features a status display for the reserve power battery, allowing you to know its state of readiness for use.
- The **Jump-N-Carry** features a 12 Volt input and included extension cord, allowing you to charge the capacitor directly from a vehicle or other 12 Volt power source.
- The **Jump-N-Carry** features convenient side-mounted holsters with cable tracks for easy cable and clamp management. Always re-wrap cables and re-holster the clamps after each use.

Battery Status Gauge

The unit features a LED status display to alert you to the state of charge of the internal reserve power lithium battery. Press the Jump Start button to display the battery status on the gauge.

- 4 lights fully charged
- 3 lights 75% charged
- · 2 lights 50% charged charge soon
- 1 or zero lights charge immediately

Recharging

Note: Upon initial purchase, charge the internal reserve power lithium battery until full.

There are options for charging your **Jump-N-Carry**. First, you can charge the internal reserve power lithium battery, which can later be used to charge the ultracapacitor when it is needed for jump starting. Second, you can charge the ultracapacitor directly for immediate use. Both options are reviewed below:

Charging the internal reserve power lithium battery.

AWARNING: Only use the included wall charger. Use of any other charging device could result in damage to the unit and/or personal injury.

- 1. Connect the microUSB end of the supplied wall charger to the Jump-N-Carry via the micro USB LITHIUM BATTERY CHARGE PORT in the control panel.
- 2. Connect the wall charger to an AC outlet.
- 3. Charging progress is indicated by the status LED on the wall charger.
 - Red = Charging Green = Charge Complete

- 4. Charge until the wall charger indicates charge complete.
- **Note**: The unit can remain connected to the wall charger indefinitely without adverse consequences.

Directly charging the ultracapacitor for immediate use.

- **Note:** We refer to this method as "for immediate use" because ultracapacitors, while very powerful, do not hold a charge for more than a few days. This method should only be used to charge the unit when it will be used to jump start very soon after charging the ultracapacitor.
- 1. Connect the pin jack end of the supplied 12V cable to the **Jump-N-Carry** via the 12V CAPCITOR CHARGE PORT in the control panel.
- 2. Connect the 12V Male Pulg end of the 12V cable to a 12V power port.
- 3. Charging progress is indicated by the % READY TO JUMP display on the right of the control panel.
- 4. Charge until % READY TO JUMP display indicated 100% state of charge.

Jump Starting Instructions

- **Note:** The unit is designed to be used as a jump starter only when the ultracapacitor is above 80% ready to jump as indicated on the control panel.
- 1. Use in a well ventilated area.
- 2. Shield eyes. Always wear protective eyewear when working near batteries.
- 3. Review this instruction manual and the instruction/safety manual provided by the manufacturer of the vehicle being jump started.
- 4. Turn ignition off before making cable connections.
- 5. Stay clear of batteries while jump starting.
- 6. Clamp the positive (red +) clamp to the positive terminal on the vehicle battery (for negative ground system), or an alternate vehicle starting point as recommended by vehicle manufacturer.
- 7. Clamp the negative (black –) clamp to the vehicle ground (non-moving metal part, such as the vehicle frame).
- 8. Make sure the cables are not in the path of moving engine parts (belts, fans, etc.).
- 9. When connection is made, the VEHICLE VOLTAGE display on the control panel will display the disabled vehicle's state of charge and the unit will indicate the next step to take:
- 9a. PRESS JUMP START the disabled vehicle's state of charge is high enough to use to charge the ultracapcitor. Press JUMP START and the unit will count up as the ultracapacitor is charged to full from the disable vehicle's battery and the Green READY LED is lit. The unit will sound an audible beep indicating it is ready to jump start. The jump starter function is engaged for 30 seconds after which the unit will return to idle mode.

- 9b. PRESS RESERVE POWER the disabled vehicle's state of charge is not high enough to use to charge the ultracapcitor. Press RESERVE POWER and the unit will count up as the ultracapacitor is charged to full from the internal lithium battery and the Green READY LED is lit. The unit will sound an audible beep indicating it is ready to jump start. The jump starter function is engaged for 30 seconds, after which the unit will return to idle mode.
- 9c. No lights lit / no vehicle voltage shown the disabled vehicle's battery is so discharged that the jump starter cannot recognize it and sense the vehicle's polarity (<1.5VDC). Check all connections and ensure proper polarity of your unit to vehicle cable/clamp connects. Press and hold JUMP START for 4 seconds to override the polarity check. Then, press RESERVE POWER to charge the ultracapacitor from the internal lithium battery as indicated by the Green READY LED.
- 10. Start the vehicle (turn on the vehicle ignition).
 - **Note:** If the vehicle doesn't start within 6 seconds, let the **Jump-N-Carry** cool for 3 minutes before attempting to start the vehicle again or you may damage the **Jump-N-Carry**.
- 11. When the vehicle is started, press JUMP START to turn the unit OFF.
- 12. Disconnect the negative (-) battery clamp from the vehicle frame/ground.
- 13. Then, disconnect the positive (+) clamp.
- 14. Always rewrap cables and properly store clamps when the unit is not in use.

Performance

Performance of your Jump-N-Carry will depend upon several factors:

- A good, solid connection between the **Jump-N-Carry** clamps and the battery and ground connections are a must. Moving the clamps back and forth while connecting to the battery will help create a better connection.
- Clean connections between your vehicle or equipment battery and its terminals are very important. For an optimal connection, corrosion (soft grayish-white buildup) on battery terminals must be removed. With the ignition turned off, disconnect the battery cables and clean the terminals and battery posts with a baking soda solution.

Troubleshooting/FAQs

- Q. What is the ideal use for the Jump-N-Carry?
- A. The Jump-N-Carry performs strongly when a vehicle's battery needs an extra boost because a light or radio was left on, or when a vehicle has been sitting for a long period of time. The Jump-N-Carry will start vehicles without any other batteries present, but the primary use is for an extra boost.
- Q. Will the Jump-N-Carry start every vehicle?
- A. No. In addition to a dead battery, a car may have other mechanical problems that would prevent the **Jump-N-Carry** from starting the vehicle.
- Q. How often should I recharge the Jump-N-Carry?
- A. To maximize battery life, charge the internal reserve power lithium battery when the status display indicates to do so (less than three LEDs lit). The **Jump-N-Carry** should not be left in a discharged state for extended periods of time – this is detrimental to battery health and longevity.
- Q. How many jump starts can I get from the Jump-N-Carry before recharging?
- A. A large number of factors affect this answer, including the following: the length of time for each jump start, the charge level of the original battery, the length of time between jump starts, the temperature of the vehicles being jump started (winter cold makes for difficult starting), the size of the engines (4-cycl, 6-cycl, 8-cycl, etc.), the mechanical condition of the engine and starter, and more. These factors must all be weighed on an individual basis before an accurate answer can be given. It's feasible to get 5-30 starts (individual's results will differ) from a single charge.
- Q. After jump starting, can I leave the unit hooked to the battery to recharge the **Jump-N-Carry** while the engine is running?
- A. Yes. The unit's ultracapacitor power supply can be recharged from the newly started vehicle. You can watch as the ultracapacitor recharges and then press JUMP START to turn the unit OFF prior to disconnecting. If you are starting several vehicles (such a on a service lot), this will speed the set-up of your next jump start application.
- Q. Can the Jump-N-Carry battery be replaced?
- A. Yes, the internal reserve power lithium battery can be replaced.
- Q. I have a regular 10 amp battery charger, can I use it to recharge the

Jump-N-Carry?

- A. No, only the methods reviewed in the "Recharging" section should be used.
- Q. Is the Jump-N-Carry goof proof?
- A. No, jump starting instructions must be followed. Read and understand all safety and operating instructions in this manual and those found in the owner's manual of any vehicle being jump started before using your **Jump-N-Carry**.

Storage

The **Jump-N-Carry** may be stored virtually anywhere, and in any position. However, take precautions to ensure that the positive and negative clamps do not come into contact with each other or a common metal surface. We recommend storing the **Jump-N-Carry** in the box in which it was originally received. Always be sure to re-wrap cables and re-holster clamps after each use and prior to storage.

Battery Replacement and Disposal

This unit contains a lithium battery. This battery must be recycled. Consult your state or local government concerning regulations for proper disposal.



The internal reserve capacity battery inside this product is a lithium battery. It is required by law to be removed and recycled or disposed of properly. While there are federal regulations that must be complied with throughout the United States, your individual state or local governments may have additional regulations to be followed.

When the battery in this product is in need of replacement, remove it according to the instructions provided below and take it to your local recycling center for proper recycling or disposal. If you don't have a local recycling center that handles lithium batteries, contact your local environmental agency for instructions.

Removal instructions:

Begin by making sure that both clamps are securely placed in a position that ensures they will not come into contact with each other.

- 1. Lay the **Jump-N-Carry** down on its front. On the back of the unit, locate the 15 screws that hold the case together.
- 2. Remove the screws, then lift off the back half of the case, lifting first from the bottom.
- 3. The internal reserve power lithium battery is mounted n the top of the ultracapacitor box. First, remove the lithium battery from the power circuit by disconnecting its quick attach harnesses (2 connections to separate).
- 4. Then, remove the two screws used to mount the lithium battery to the top of the ultracapacitor box and reserve the screws for step 5.
- 5. Install replacement lithium batter onto top of ultracapacitor box using the two screws removed in step 4.
- 6. Reconnect the power connections using the quick connect harnesses that were disconnected in step 3.
- 7. Reassemble case using the 15 previously removed screws.