

# Novus Start™ NS800R Super Capacitor Jump Starter

USER MANUAL (ENGLISH) – READ ALL INSTRUCTIONS

## PACKAGE INCLUDES

Novus Start NS800R  
Battery Clamp Cable  
12V Charging Cable  
Storage Case  
User Manual



*Read this manual and all warning labels on the product before using this product.  
Failure to follow these instructions and safety precautions can result in serious injury or death.  
Keep this manual nearby in a safe location for future reference.*

# Novus Start™ NS800R Super Capacitor Jump Starter

## FEATURES

### **Large Display**

2.5in bright LED display

### **No Internal Battery**

Provides safe operation, storage, maintenance-free

### **Lightweight, High Output**

Easy to handle, only 2 lbs. with 800 Amps

### **Fast Charging**

Only 1-5 minutes to fully charge the NS800R

### **Gas Vehicle 12V System Applications**

Automotive, Marine, ATV, Aviation

Battery: Lead-acid / Lithium LiFePO4

### **Built-in Protection**

Prevent overcharge, reverse polarity, short circuit, overheating, dust, and water protection rating IP62

## **WARNING & IMPORTANT SAFETY GUIDELINES**

**INTENDED USE ONLY:** This portable power jumper is designed specifically for jump-starting **12V vehicle batteries ONLY**. Do not attempt to use it for charging dry-cell batteries used in home appliances and portable devices. Misuse may cause injury to persons and damage to property. Never disassemble or attempt to replace the built-in capacitors yourself.

**READ ALL INSTRUCTIONS:** Read the User Manual thoroughly before operating this product. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

 **WARNING** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

**Potential Explosive Risk:** Lead acid batteries emit gases that may be explosive. It is essential to observe proper safety measures when working near batteries. Never boost or charge a frozen battery.

**Electric Shock Hazard:** The jump starter contains electrical components. Mishandling may result in electric shock. Use caution when operating and avoid contact with exposed components.

**Risk of Fire or Explosion:** Ensure that the battery or jump starter is not exposed to sparks, flames, or excessive heat. Failure to do so may result in fire or explosion. Never smoke near a battery or vehicle engine.

**Ventilation:** Use the jump starter in a well-ventilated area to prevent the accumulation of gases and reduce the risk of exposure to harmful fumes.

**Avoid Water Exposure:** Keep the jump starter away from rain, snow, water, or moisture to prevent damage to electrical components and reduce the risk of electric shock or short-circuiting.

**Avoid Dropping Metal Tools:** Take care not to drop metal tools onto the battery. This could create a spark, short-circuit the battery or other electrical components, and potentially lead to an explosion.

## **WARNING & IMPORTANT SAFETY GUIDELINES cont.**

**Heat Caution:** Avoid touching hot surfaces on the jump starter, especially after prolonged use, to prevent burns or injury.

**Proper Connection:** Ensure correct connection of jumper cables to vehicle battery terminals, observing correct polarity (positive to positive, negative to negative) to avoid damage to vehicle electrical systems. Never allow clamp jaws to touch together or to contact the same piece of metal.

**Other Warnings:** Always read and adhere to the instructions or warnings provided with the car, truck, van, boat, or any other equipment that you connect to your NS800R jumper unit.

## **IMPORTANT SAFETY GUIDELINES**

**Keep Away from Children and Pets:** Store the jump starter securely to prevent accidental ingestion or misuse. It's not a toy.

**Wear Protective Gear:** Use gloves and safety glasses when handling the jump starter and working with vehicle batteries.

**Personal Precautions:** Electrolytic acid may irritate eyes and skin. If contact occurs, rinse with clean water and seek medical advice. Remove personal jewelry and metal items before working on the battery to prevent burns. Avoid touching your eyes.

**Proper Storage:** Store the jump starter in a cool, dry place away from direct sunlight and extreme temperatures to prolong its lifespan and prevent damage.

**Cleaning:** Do not use corrosive solvents to clean the products.

**Stop Use if Abnormalities Occur:** Discontinue use immediately if the product becomes unusually hot, emits strange odors, deforms, cracks, or shows any other unusual signs.

**Seek Professional Assistance:** If unsure about proper usage or encountering issues, seek assistance from a qualified automotive professional. This product is not designed to be installed as a replacement for a vehicle battery.

# Federal Communication Commission Interference Statement

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

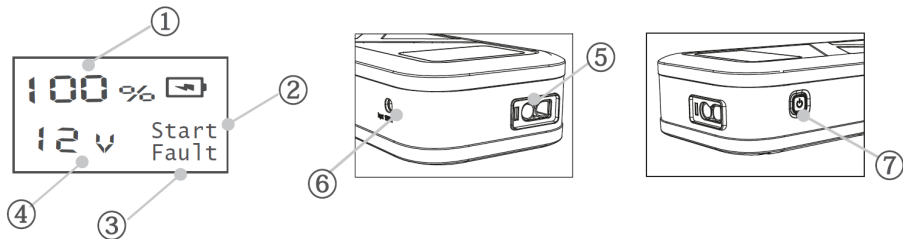
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This device is in compliance with CA Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

# Novus Start™ NS800R Super Capacitor Jump Starter

- ① **Capacitor Level Indicator:** Displays the capacitor level or any fault error codes that may occur.
- ② **Start Indicator:** The Start light comes on when the capacitor has enough power to start the car.
- ③ **Fault Indicator:** The Fault light comes on when there is a fault or improper operation.
- ④ **Battery / Capacitor Voltage Indicator:** Indicates car battery voltage or product capacitor voltage.
- ⑤ **Clamp Input / Output:** Connect the included cable clamp to start your car or charge the jumper.
- ⑥ **12V/8A Charging Port (Vehicle Input):** Plug the 12V charging cable into your vehicle's 12VDC port to start the initial charge to the jump starter. (DO NOT use both battery clamps and DC port simultaneously to avoid potential damage.)
- ⑦ **Power Button:** Press to power ON. Long press to power OFF. Press the button 5 times quickly to activate Start Mode.



# JUMP STARTING INSTRUCTIONS

Read the **WARNING & SAFETY GUIDELINES** and **JUMP STARTING INSTRUCTIONS** thoroughly before proceeding. Wear safety glasses or goggles for personal protection.

**Novus Start NS800R Super Capacitor Jump Starter does not come charged and must be fully charged before use. The NS800R is for use with 12V vehicle batteries only.**

## CHARGING THE JUMP STARTER

**Option A – Using the included NS800R battery clamps through vehicle battery terminals.**

1. Connect battery clamp cable to plug ⑤ on the NS800R.
2. Attach the NS800R battery clamps to the vehicle battery terminals. See Figure 1 on page 9. (If the battery voltage is above 7V, it can charge the NS800R to 100%. If the voltage is lower, use another battery source.)
  - Connect the Positive (Red +) battery clamp to the Positive (POS, P, +) battery terminal.
  - Connect the Negative (Black -) battery clamp to the Negative (NEG, N, -) battery terminal or vehicle chassis.
3. The charge level of the built-in capacitors is shown on the digital display.
  - The green charging indicator flashes on and off to show that charging is underway.
  - The display will show the percentage of the charge.

4. Once the capacitors are fully charged:
  - The display will show 100%.
  - The charging indicator will stop flashing.
5. The buzzer will sound and the Start indicator will appear.

Note: Option A instructions are for vehicles with a negative ground system, which is the most common. If your vehicle has a positive ground system (uncommon), follow the instructions in reverse polarity. Avoid making any connections to the carburetor, fuel lines, or thin sheet metal parts.

**Option B – Using the included NS800R 12V charging cable.**

1. Connect the 12V charging cable to ⑥ port on the NS800R.
2. Insert the power cable to vehicle 12VDC output port to begin charging cycle.
3. The charge level of the built-in capacitors is shown on the digital display.
  - The green charging indicator flashes on and off to show that charging is underway.
  - The display will show the percentage of the charge.
4. Once the capacitors are fully charged:
  - The display will show 100%.
  - The charging indicator will stop flashing.
5. The buzzer will sound and the Start indicator will appear.

# CONNECTING TO THE BATTERY

Connecting to the Battery if not already connected from Option A. See Figure 1 below:

- Connect the Positive (Red +) battery clamp to the Positive (POS, P, +) battery terminal.
- Connect the Negative (Black -) battery clamp to the Negative (NEG, N, -) battery terminal or vehicle chassis.

Note: If the battery clamps are connected in reverse, the Red Error will illuminate. Reverse the connections to clear this error. When disconnecting, reverse the sequence, removing the negative first (or positive first for positive ground systems).

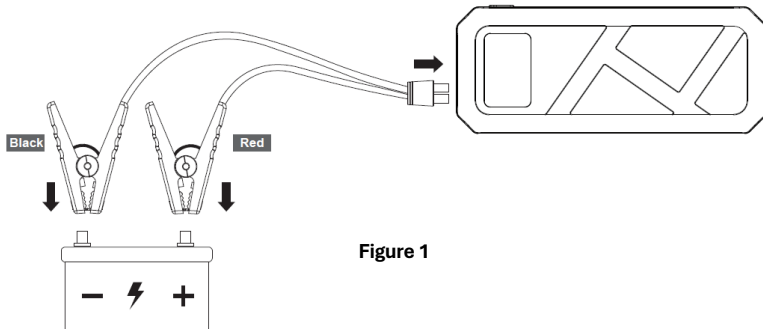


Figure 1

# JUMP STARTING

1. Turn off all vehicle power loads. (Radio, headlights, air conditioning, etc.)
2. Check the display to show 100% and Start. Press the Power Button ⑦ for 1 second to begin the countdown timer.
  - A beep will sound for 8 seconds, providing time to enter the vehicle and prepare to turn the ignition.
  - Wait for the steady tone to indicate readiness to start the vehicle.
3. Start the vehicle engine.
  - Most vehicles will start immediately. Some may require an additional 15 seconds of connection.
  - If the vehicle does not start, wait 20-30 seconds, and try again.
  - Do not attempt more than 5 consecutive jump starts within a 10-minute period.
  - Allow the battery to rest and cool down for 10 minutes before attempting another jump start.
4. If the display times out and turns off, press the Power Button 5 times quickly to enter forced Start Mode.
5. Once the vehicle is started, disconnect the NS800R from the battery and place it into the carry case.

## HOW TO FORCE START MODE FOR JUMP STARTING

Follow these steps if the NS800R cannot enter Start Mode due to a low/faulty battery or if it has been turned off.

1. Use a reliable power source to charge the NS800R to 100%. Ensure the unit remains turned on during charging.
2. Detach from original power source safely.
3. Attach the battery clamps to the Positive (RED +) and Negative (Black -) terminals on the low battery. See Figure 1.
4. Press the Power Button ⑦ five (5) times to force initiate Start Mode.
5. Start light will illuminate.
6. Press the Power Button ⑦ for 1 second to begin the countdown timer. Wait for the steady tone to start the vehicle.

# TROUBLESHOOTING ERROR CODES

ERROR	REASON	SOLUTION
Display E01	Clamps connected in reverse	Remove the clamps and press the Power Button to restart. Reconnect the clamps correctly by RED positive, BLACK negative.
Display E02	Charge failure / Too low input voltage	Vehicle battery capacity is too low to charge the jump starter. Check whether the battery is completely dead, whether the battery connection terminal is oxidized or corroded, whether the clamp is connected correctly, or charge from another vehicle.
Display E03	Battery voltage too low to start	The vehicle battery voltage is lower than 7V or the battery may have been damaged. Replace the battery.
Display E04	Input over voltage	Check whether the vehicle battery voltage is 12V. This product can only be used for a 12V engine system.
Display E05	Product voltage is too high	Jump starter voltage exceeds the set value (15V). Disconnect and allow the jump starter to rest until its voltage drops, then retry.
Display E06	Too high product temperature	The internal temperature of the jump starter is too high. Disconnect, allow jumper to cool and then retry.
Display E07	Wrong charging method	Remove the clamps and ensure that the charging method is correct. Note that the clamp input and 12VDC input cannot be operated simultaneously.

# TECHNICAL SPECIFICATIONS

**Super Capacitor:** 500Fx5

**Peak Current Rating:** 800A

**Operating Temperature:** -40°C to +65°C / -40°F to 149°F

**Charging Temperature:** 0°C to +40°C / 32°F to 104°F

**Storage Temperature:** -40°C to +65°C / -40°F to 149°F (Ave. Temp)

**Clamp Input:** 12VDC, 15A

**Charge Cable Input:** 12VDC, 8A

**Housing Protection:** IP62 (with ports closed)

**Cooling:** Natural Convection

**Dimensions (L x W x H):** 31.2 x 17.8 x 6.9 cm

**Weight:** 0.90 kgs/2 lbs.



Made in Cambodia

# LIMITED MANUFACTURER'S WARRANTY

Please retain proof of purchase, such as a dated store receipt, to establish the warranty period. In the absence of a dated receipt, the manufacturing date code will be used. The warranty for the NS800R Jumper is applicable to the original purchaser and covers defects in materials and workmanship for a period of ONE (1) YEAR or THREE (3) YEARS per the conditions stated. If there's a malfunction due to defects in materials or workmanship within the first 30 days, the unit will be replaced. After 30 days but within 1 year from the purchase date, any malfunction due to defects will be repaired at no cost. Notwithstanding the above provisions, this warranty is void to products in the following situations:

- Failure to follow the User Manual instructions.
- Improper installation, operation, or maintenance.
- Misuse, mishandling, abuse, accidents, improper storage, or operation under extreme conditions beyond recommended parameters.
- Unauthorized modification, disassembly, alteration, or repair.
- Defects reported after the warranty period expires.

This warranty excludes coverage for:

- Normal wear and tear.
- Cosmetic damage that does not impact functionality.
- Products lacking a manufacturer serial number or exhibiting missing, altered, or defaced serial numbers.
- Accessory items included with the product that are susceptible to wear from regular usage. Any repair or replacement of such accessory items will be the responsibility of the owner and may incur expenses.

# SPECIAL USER WARRANTY

Residential Personal Usage:	THREE (3) YEARS warranty with online registration (Dated store receipt required) ONE (1) YEAR warranty for non-registered product as stated above.
Commercial Service Usage:	ONE (1) YEAR warranty as stated above.

This warranty constitutes the sole and exclusive remedy and supersedes all other express warranties. Novus Start shall not be liable for consequential or incidental damages. Certain states may not permit limitations on warranties; therefore, the above limitation may not apply in those jurisdictions.

## Online Warranty Registration

Visit [www.NovusStart.com](http://www.NovusStart.com)

Click on the Warranty button and complete the form.

Additional information can be found here about out-of-warranty service and support.



## Product Return and RMA #

To initiate a warranty return, visit [www.NovusStart.com](http://www.NovusStart.com) to request an RMA # and return address. Ensure secure packaging to prevent shipping damage. Novus Start assumes no liability for lost items or shipping damage. Customers are responsible for return shipping costs. Please use UPS or FedEx only for returns.