

[Manuals.plus](#) /

› [NVX](#) /

› NVX XSBI80 80 Amp Smart Battery Isolator Instruction Manual

NVX XSBI80

NVX XSBI80 80 Amp Smart Battery Isolator Instruction Manual

Model: XSBI80

1. PRODUCT OVERVIEW

The NVX XSBI80 is a microprocessor-controlled 80 Amp dual sensing smart relay battery isolator designed to manage power between your primary (starter) and auxiliary batteries in various vehicles, including cars, RVs, ATVs, UTVs, and boats. This device ensures your primary battery remains charged and isolated from accessory loads, preventing unexpected power drains.

Key features include:

- Monitors main starter battery voltage to automatically connect/disconnect auxiliary battery.
- Prevents excessive wear and extends the life of both batteries.
- 80 Amps at 12V Continuous Power Handling.
- 150 Amps Surge Power Handling.
- Switching Power: 10 - 16 VDC.
- Draws less than 1 Amp when active.



Figure 1: Front view of the NVX XSBI80 Smart Battery Isolator.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your NVX XSBI80. It is recommended that

installation be performed by a qualified professional.

2.1 Wiring Diagram Overview

The isolator connects your primary (starter) battery to your auxiliary (accessory) battery. It automatically connects them for charging when the engine is running and disconnects them when the engine is off to prevent the auxiliary battery from draining the primary battery.

Your browser does not support the video tag.

Video 1: An overview of the NVX XSBi Series Smart Battery Isolators, demonstrating their function and application in dual battery systems.

2.2 Installation Steps (General Guidelines)

1. **Safety First:** Disconnect the negative terminals of both your primary and auxiliary batteries before beginning installation.
2. **Mounting:** Choose a secure, dry location for the isolator, away from excessive heat or moving parts. Use appropriate fasteners to mount the unit.
3. **Wiring Connections:**
 - Connect the primary battery positive terminal to one large terminal on the isolator.
 - Connect the auxiliary battery positive terminal to the other large terminal on the isolator.
 - Connect the small blue wire from the isolator to a reliable ground point on the vehicle chassis.
 - Connect the small red wire from the isolator to a switched ignition source (ACC or IGN) that provides 12V when the vehicle is running.
4. **Remote Button (Optional):** The XSBI80 includes a remote button. Connect its cable to the designated port on the isolator. This button allows for manual linking of the batteries for emergency jump-starting or other specific needs.
5. **Re-connect Batteries:** Once all connections are secure and verified, re-connect the negative terminals of your batteries.

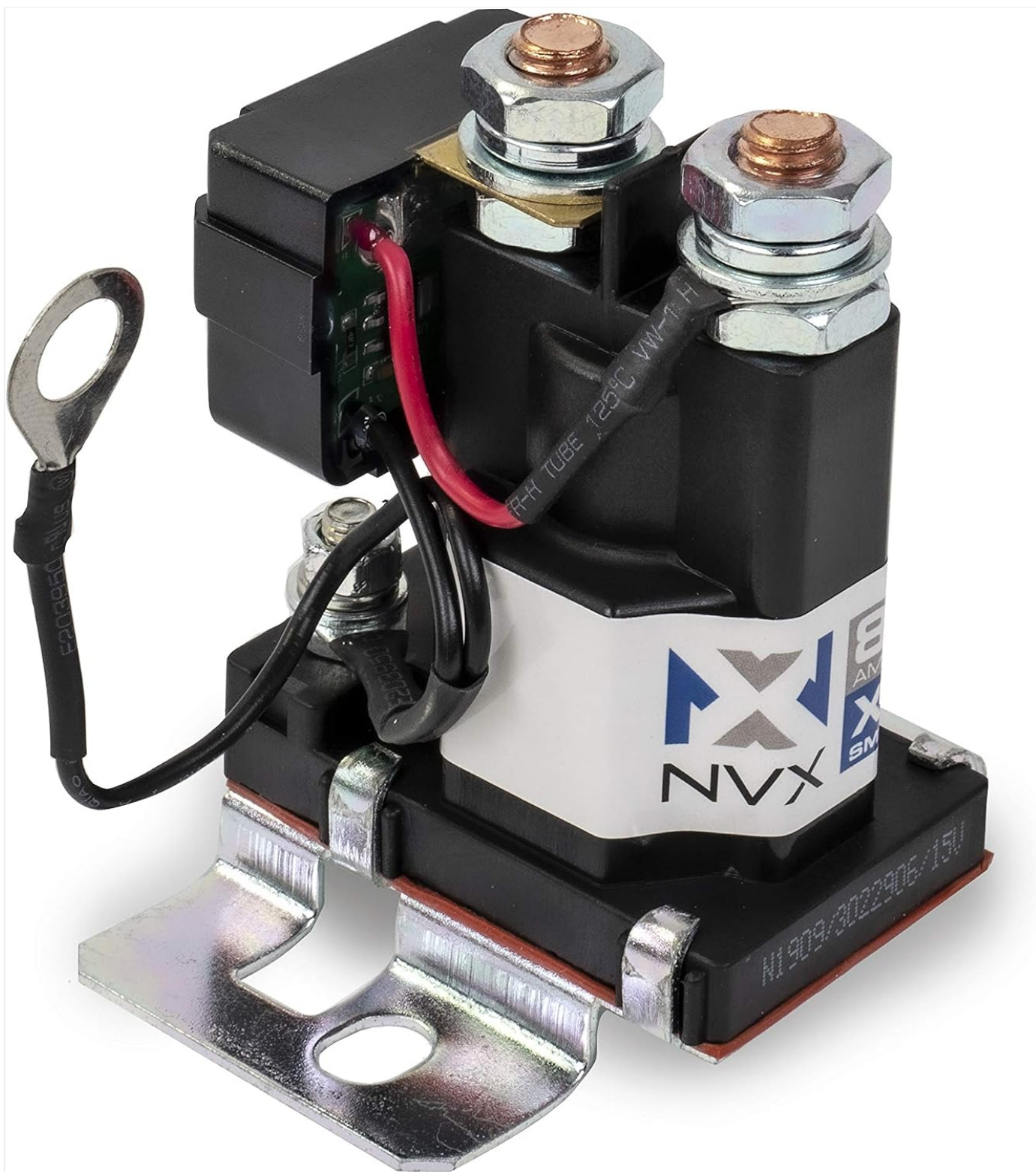


Figure 2: Rear view of the NVX XSBI80, showing connection terminals.



Figure 3: The remote button for manual battery linking.

3. OPERATING INSTRUCTIONS

The NVX XSBI80 operates automatically based on your vehicle's charging system voltage.

- **Automatic Connection:** When the main starter battery voltage reaches 13.2 volts (indicating the engine is running and the alternator is charging), the isolator's solenoid automatically connects the auxiliary battery to the charging system. This allows both batteries to charge.
- **Automatic Disconnection:** When the ignition is turned off and the system voltage drops below 12.7 volts, the solenoid opens, isolating the starter battery from the auxiliary battery. This prevents the auxiliary battery and its connected accessories from draining the primary starting battery.
- **Manual Linking (Emergency Start):** In an emergency, such as a drained primary battery, you can manually link the two batteries by pressing the remote button. This will temporarily connect both batteries, allowing you to use the auxiliary battery to assist in starting the vehicle.

4. MAINTENANCE

The NVX XSBI80 is designed for maintenance-free operation. However, regular checks of your battery system are recommended:

- Ensure all wiring connections to the isolator and batteries are clean, tight, and free from corrosion.
- Periodically inspect the isolator unit for any signs of physical damage or overheating.
- Maintain your vehicle's batteries according to their manufacturer's recommendations.

5. TROUBLESHOOTING

If you experience issues with your NVX XSBI80, consider the following general troubleshooting steps:

- **Isolator Not Engaging/Disengaging:**

- Check all wiring connections for looseness or corrosion.
- Verify that the primary battery is receiving a charge from the alternator (voltage above 13.2V when engine is running).
- Ensure the switched ignition source (red wire) is providing 12V when the ignition is on.
- Confirm the ground connection (blue wire) is secure.

- **Primary Battery Draining:**

- Ensure the isolator is properly disconnecting the auxiliary battery when the ignition is off and voltage drops below 12.7V.
- Check for any parasitic draws on the primary battery that are not related to the isolator.

- **Remote Button Not Working:**

- Inspect the cable connection between the remote button and the isolator for damage or looseness.

For persistent issues, it is recommended to consult a professional automotive electrician or contact NVX customer support.

6. SPECIFICATIONS

Feature	Specification
Brand	NVX
Model Number	XSBI80
Current Rating (Continuous)	80 Amps
Surge Power Handling	150 Amps
Switching Power	10 - 16 VDC
Coil Voltage	12 Volts
Operation Mode	Automatic
Connector Type	Screw
Contact Type	Normally Open
Mounting Type	Surface Mount
Item Weight	12.3 ounces
Dimensions (W x D x H)	2-7/8"W x 1-3/8"D x 3"H
UPC	818060012983

7. WARRANTY AND SUPPORT

For warranty information, technical support, or further inquiries, please visit the official NVX website or contact their customer service department.

You can find more information about NVX products and support at their official store [NVX Official Store](#).

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B084VVM6FQ>

More documents and user manuals: <https://manuals.plus/>