

NVX XLOC88X

NVX XLOC88X User Manual

High Voltage Active Line Output Converter with Impedance Matching and Remote Level Control

Model: XLOC88X

1. INTRODUCTION

The NVX XLOC88X is an 8-channel high voltage active line output converter designed to integrate aftermarket amplifiers with factory car stereo systems. This device converts high-level speaker outputs from a factory head unit into low-level RCA signals, suitable for aftermarket amplifiers. It features impedance matching, noise isolation technology, and enhanced output controls to maintain audio quality and provide a clean signal to your amplifier. The XLOC88X allows for system upgrades without replacing the factory stereo, preserving original vehicle features such as large touchscreens, Bluetooth, Apple CarPlay, and Android Auto.

2. SAFETY INFORMATION

Please read and understand all instructions before operating this product. Failure to follow these instructions may result in injury or damage to the product or vehicle.

- **Professional Installation Recommended:** Installation of car audio components requires experience with electrical wiring and automotive procedures. If you are unsure about any part of the installation, seek assistance from a qualified professional.
- **Power Disconnection:** Always disconnect the vehicle's negative battery terminal before beginning any electrical work to prevent short circuits and potential damage.
- **Proper Wiring:** Ensure all wiring is correctly routed and secured to prevent pinching, chafing, or damage. Use appropriate gauge wire for all connections.
- **Ventilation:** Mount the XLOC88X in a location that allows for adequate airflow to prevent overheating.
- **Avoid Moisture:** Do not expose the unit to moisture or extreme temperatures.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- NVX XLOC88X Line Output Converter Unit
- Remote Level Control with Cable
- Mounting Hardware (Screws)
- Small Screwdriver



Image: Remote Level Control with cable for adjusting output levels.



Image: Included mounting screws and a small screwdriver for installation.

4. PRODUCT OVERVIEW

The NVX XLOC88X features a robust design with clearly labeled inputs, outputs, and control switches. Understanding each component is crucial for proper setup and operation.



Image: Top view of the NVX XLOC88X unit, highlighting the various controls and connection points.

Controls and Connections:

- **12V, GND, REM IN, REM OUT Terminals:** Power input, ground connection, remote turn-on input, and remote turn-on output for amplifiers.
- **CH1+ to CH8- Speaker Level Inputs:** Connects to the factory stereo's speaker wires.
- **Turn On Mode Switch:** Selects how the unit turns on (DC Offset, Audio Detection, or Remote Input).
- **Ground Isolation Switch:** Helps eliminate ground loop noise (GND, ISO, 200Ω).
- **Load Select Switches (CH1-CH4, CH5-CH8):** Adjusts the impedance load presented to the factory stereo (20Ω, 60Ω, 20KΩ).
- **Input Mode Switch:** Selects between 8-channel or 4-channel input configuration.
- **LPF Switch (Low Pass Filter):** Activates or deactivates a low-pass filter.
- **Boost Switch:** Provides a bass boost (0dB or 12dB).
- **Gain Controls (CH1/2, CH3/4, CH5/6, CH7/8):** Adjusts the output level for each pair of RCA channels.
- **Clip Indicators:** LEDs that illuminate when the output signal is clipping, indicating distortion.

- **Remote Level Control Port:** Connects the included remote level control.
- **CH1/2 to CH7/8 RCA Outputs:** Low-level audio outputs to connect to aftermarket amplifiers.



Image: Angled view of the XLOC88X, highlighting the speaker level input terminals on the left side.



Image: Angled view of the XLOC88X, highlighting the RCA output terminals on the right side.

5. SETUP AND INSTALLATION

Careful planning and execution are essential for optimal performance and safety.

5.1 Mounting the XLOC88X

- Choose a secure, dry location away from direct heat or moisture. Ensure adequate ventilation.
- Use the provided mounting screws to secure the unit.

5.2 Wiring Connections

Before making any connections, disconnect the vehicle's negative battery terminal.

1. Power and Ground:

- Connect the **GND** terminal to a clean, solid chassis ground point in the vehicle.

- Connect the **12V** terminal to a constant 12V power source from the vehicle's battery, preferably through a fused connection.

2. Remote Turn-On:

- If using the XLOC88X to turn on an amplifier, connect the amplifier's remote input to the **REM OUT** terminal of the XLOC88X.
- The **REM IN** terminal is optional. If your factory stereo has a remote output, connect it here. Otherwise, the XLOC88X can generate a remote output based on DC offset or audio detection.

3. Speaker Level Inputs:

- Carefully identify the positive (+) and negative (-) speaker wires from your factory stereo for each channel you intend to use (up to 8 channels).
- Connect these wires to the corresponding **CH1+ to CH8-** terminals on the XLOC88X. Ensure correct polarity.

4. RCA Outputs:

- Connect RCA cables from the **CH1/2 to CH7/8 RCA Outputs** on the XLOC88X to the corresponding RCA inputs on your aftermarket amplifier(s).

5. Remote Level Control:

- Connect the included remote level control to the **REMOTE** port on the XLOC88X. Mount the remote control in an accessible location for the user.

6. OPERATING INSTRUCTIONS

Once installed, configure the XLOC88X settings for optimal audio performance.

6.1 Initial Setup and Adjustments

1. Turn On Mode:

- Set the **Turn On Mode** switch based on your vehicle's factory stereo:
- **DC**: Detects a DC offset on the speaker outputs when the stereo turns on.
- **AUD**: Detects audio signal on the speaker outputs.
- **REM**: Uses a traditional 12V remote turn-on signal from the factory stereo (connected to REM IN).

2. Ground Isolation:

- If you experience noise (e.g., engine whine), adjust the **Ground Isolation** switch. Start with **GND**, then try **ISO**, and finally **200Ω** to find the setting that minimizes noise.

3. Load Select:

- The **Load Select** switches (for CH1-CH4 and CH5-CH8) adjust the impedance presented to the factory stereo. This can prevent the factory stereo from detecting an open circuit and shutting off or reducing output. Experiment with **20Ω**, **60Ω**, or **20KΩ** to match your factory system's requirements.

4. Input Mode:

- Set the **Input Mode** switch to **8CH** if you are using all 8 speaker level inputs. Set to **4CH** if you are only using 4 inputs and want to sum them to 8 outputs.

5. LPF (Low Pass Filter):

- If connecting to a subwoofer amplifier, you may activate the **LPF** switch to filter out high frequencies.

6. Boost:

- The **Boost** switch provides a 0dB or 12dB bass boost. Use sparingly to avoid distortion.

7. Gain Adjustment:

- With the factory stereo volume set to about 75% of maximum, slowly increase the **Gain** controls on the XLOC88X until the corresponding **Clip** indicator just begins to flash. Then, back off slightly until the clip indicator no longer illuminates. This ensures a clean, undistorted signal to your amplifier.
- Adjust the gain on your aftermarket amplifier(s) according to their respective manuals, using the clean signal from the XLOC88X.

8. Remote Level Control:

- The remote level control allows for convenient adjustment of the output level from the XLOC88X, typically used for subwoofer level control.

7. MAINTENANCE

The NVX XLOC88X requires minimal maintenance to ensure long-term performance.

- **Cleaning:** Use a soft, dry cloth to wipe the unit. Do not use harsh chemicals or abrasive cleaners.
- **Connection Checks:** Periodically inspect all wiring connections to ensure they are secure and free from corrosion.
- **Environment:** Ensure the mounting location remains dry and free from excessive heat or vibration.

8. TROUBLESHOOTING

If you encounter issues with your XLOC88X, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power to XLOC88X	Incorrect 12V or GND connection; Blown fuse.	Check 12V and GND wiring. Verify fuse in 12V line.
No audio output	Incorrect speaker level input wiring; RCA output not connected; Gain set too low; Incorrect Turn On Mode.	Verify all input/output connections. Check gain settings. Ensure XLOC88X is powered on and Turn On Mode is correct.
Distorted audio	Gain set too high (clipping); Factory stereo output too high; Incorrect Load Select.	Reduce XLOC88X gain until clip indicator stops flashing. Adjust factory stereo volume. Experiment with Load Select settings.
Engine whine or noise	Ground loop; Poor ground connection; Signal interference.	Adjust Ground Isolation switch (GND, ISO, 200Ω). Ensure a clean, solid ground connection. Reroute signal cables away from power cables.

Problem	Possible Cause	Solution
Factory stereo shuts off or reduces volume	Incorrect Load Select setting.	Adjust Load Select switches (20Ω, 60Ω, 20KΩ) to find the optimal setting for your factory stereo.

9. SPECIFICATIONS

Feature	Specification
Model Number	XLOC88X
Number of Channels	8
Speaker Level Inputs	8-Channel
RCA Outputs	8-Channel
Max Input Voltage	40V (400 watts RMS)
Max Output Voltage	Up to 9.5 Volts
Turn-On Modes	DC Offset, Audio Detection, Remote Input
Load Selection	20Ω, 60Ω, 20KΩ
Ground Isolation	GND, ISO, 200Ω
Dimensions (Parcel)	21.6 x 21.3 x 5.1 cm
Weight (Parcel)	655 g
UPC	810021844565







10. WARRANTY INFORMATION

NVX products are designed and manufactured to high-quality standards. This product is covered by a limited warranty provided by the manufacturer. Please refer to the official NVX website or your purchase documentation for specific warranty terms, conditions, and duration. Keep your proof of purchase for warranty claims.

11. SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact NVX customer support. You can typically find contact information on the official NVX website or through your product retailer.
Online Resources: Visit the official NVX website for product updates, FAQs, and additional support materials.

Related Documents - XLOC88X

	<p>NVX XC-Series Subwoofers User Manual and Specifications</p> <p>User manual for NVX XC-Series subwoofers, including detailed specifications, enclosure recommendations, and warranty information for models XCW121, XCW122, XCW151, and XCW152.</p>
	<p>NVX XDSP28 Bluetooth Digital Signal Processor User Manual</p> <p>Comprehensive user manual for the NVX XDSP28 Bluetooth Digital Signal Processor, covering installation, control panel functions, audio processing, troubleshooting, and warranty information.</p>
	<p>NVX VADM Series Owner's Manual</p> <p>Owner's manual for the NVX VADM series audio amplifier, detailing installation, connections, and safe operation.</p>
	<p>NVX V-Series Premium Class-D Amplifiers User Manual</p> <p>Explore the NVX V-Series Premium Class-D Amplifiers with this detailed user manual. Learn about installation, features, specifications, and warranty for models like VAD10001v2, VAD8402v2, and VAD22008v2. Optimize your car audio system with NVX's high-performance amplifiers.</p>
	<p>Crestron DM NVX AV-over-IP System Design Guide</p> <p>A comprehensive design guide for the Crestron DM NVX AV-over-IP system, detailing endpoint and network design, installation procedures, and case studies for digital video and audio distribution over Ethernet.</p>
	<p>NVX XLCA2 2-Channel Digital Bass Enhancer Owner's Manual</p> <p>Owner's manual for the NVX XLCA2 2-Channel Line Output Digital Bass Enhancer, detailing features, specifications, functions, signal connections, warranty, and introduction.</p>

