Behringer NX6000D

Behringer NX6000D Power Amplifier User Manual

Model: NX6000D

Introduction | Safety

Instructions | Setup | Operation | Maintenance | Troubleshooting | Specifications | Warranty & Support

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Behringer NX6000D Power Amplifier. Please read it thoroughly before use and retain it for future reference. The NX6000D is a high-performance, ultra-lightweight 6000-Watt Class-D power amplifier with integrated DSP and 24-bit/96 kHz converters, designed for professional audio applications.

2. IMPORTANT SAFETY INSTRUCTIONS

- **Power Source:** Connect the unit only to an AC power outlet of the correct voltage as specified on the rear panel.
- **Ventilation:** Ensure adequate ventilation. Do not block ventilation openings.
- **Water and Moisture:** Do not expose this appliance to rain or moisture. Do not place objects filled with liquids on the apparatus.
- **Servicing:** Refer all servicing to qualified service personnel. Do not attempt to service this product yourself.
- **Cables:** Use only high-quality, shielded cables for all audio connections to prevent interference.
- **Grounding:** This product must be grounded.
- **Cleaning:** Clean only with a dry cloth.

3. SETUP GUIDE

3.1 Unpacking and Inspection

Carefully unpack the amplifier and inspect it for any signs of damage during transit. If damage is found, contact your dealer immediately.

3.2 Placement

The NX6000D is designed for rack mounting. Ensure sufficient space around the unit for proper airflow. Avoid placing it near heat sources or in direct sunlight.

3.3 Connections

1. **Power Connection:** Connect the supplied AC power cord to the amplifier's power inlet and then to a suitable grounded power outlet.
2. **Input Connections:** Use balanced XLR or 1/4" TRS cables to connect your audio source (mixer, preamplifier) to the INPUT A and INPUT B jacks on the rear panel.
3. **Output Connections:** Connect your loudspeakers to the SPEAKON output connectors (OUTPUT A and OUTPUT B) on the rear panel. Ensure correct polarity and impedance matching. The amplifier supports 4-ohm and 8-ohm loads.

Figure 1: Front panel of the Behringer NX6000D Power Amplifier, showing controls and display.

Figure 2: Angled view of the Behringer NX6000D Power Amplifier, highlighting its compact design.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

Press the POWER button on the front panel to turn the unit on. The display will illuminate. To power off, press the POWER button again.

4.2 Front Panel Controls

- **Level Controls (CH A, CH B):** Adjust the output level for each channel.
- **SIGNAL/LIMIT/PROTECT LEDs:** Indicate signal presence, limiting activity, and protection mode.
- **LCD Display:** Shows current settings, DSP parameters, and status.
- **SETUP Button:** Accesses the main setup menu.
- **PROCESS Button:** Accesses DSP processing parameters.
- **Encoder Knob:** Navigates menus and adjusts parameter values.
- **EXIT Button:** Returns to the previous menu or main screen.

4.3 DSP Functionality

The integrated DSP allows for advanced audio processing. Press the PROCESS button to enter the DSP menu. Here you can configure:

- **Delay:** Adjust signal delay for speaker alignment.
- **Crossover:** Set crossover frequencies and filter types (e.g., Butterworth, Linkwitz-Riley, Bessel) up to 48 dB/octave.
- **EQ:** Utilize 8 parametric and 2 dynamic equalizer bands for precise frequency shaping.
- **Dynamics Processing:** Apply compression or limiting to control dynamic range.
- **Security Settings:** Lock settings to prevent unauthorized changes.

Use the Encoder Knob to navigate and adjust parameters. Press the Encoder Knob to confirm selections. Refer to the full digital manual (available on the Behringer website) for detailed DSP operation.

5. MAINTENANCE

- **Cleaning:** Disconnect the power cord before cleaning. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or solvents.
- **Ventilation:** Regularly check that the ventilation openings are clear of dust and debris.
- **Cable Connections:** Periodically check all cable connections for secure fit and signs of wear.
- **Storage:** If storing the unit for an extended period, ensure it is in a dry, dust-free environment.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power	Power cord disconnected; faulty outlet; internal fuse.	Check power cord connection; try a different outlet; contact service if fuse is suspected.
No sound output	Input/output cables incorrect; level controls too low; protection mode active.	Verify all cable connections; increase level controls; check PROTECT LED (if lit, power cycle unit).
Distorted sound	Input signal too high; speaker impedance mismatch; faulty speaker.	Reduce input signal level; verify speaker impedance matches amplifier; test with different speakers.
Unit overheats	Blocked ventilation; excessive load.	Ensure clear airflow around the unit; reduce output level or load.

7. TECHNICAL SPECIFICATIONS

Output Power: 2 x 3000 Watts into 4 Ohms, 2 x 1600 Watts into 8 Ohms

Weight: Less than 13.2 lbs / 6.0 kg

Dimensions (H x W x D): Approximately 3.7 x 19.02 x 12.44 inches (94 x 483 x 316 mm)

DSP: High-performance DSP with 24-bit/96 kHz converters

DSP Features: Delay, Crossover (3 filter types, up to 48 dB/octave), EQ (8 parametric, 2 dynamic), Dynamics Processing

Input Connectors: 2 x XLR/TRS combo jacks

Output Connectors: 2 x SpeakON connectors

Power Supply: Ultra-efficient switch-mode power supply

Cooling: Revolutionary cool-running high-density Class-D technology

Material: Metal

Color: Black

8. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the Behringer warranty program available on their official website. Behringer products are typically covered by a limited warranty against defects in materials and workmanship.
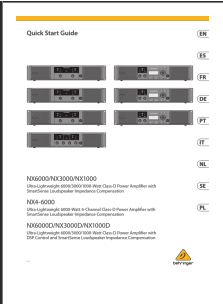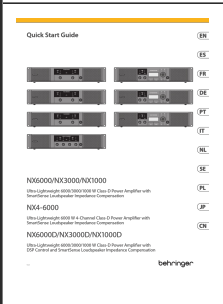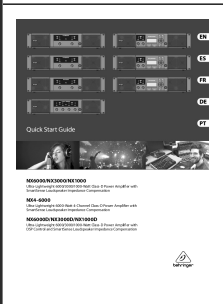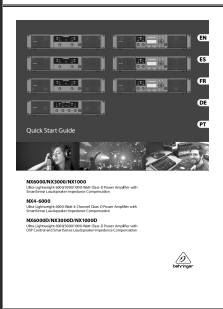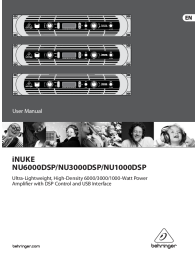
8.1 Technical Support

If you encounter issues not covered in the troubleshooting section or require further assistance, please visit the official Behringer support website or contact their customer service. You may need your product's serial number for support inquiries.

Behringer Official Website: www.behringer.com

Related Documents - NX6000D

[Behringer NX Series Power Amplifiers: Quick Start Guide](#)
Comprehensive quick start guide for Behringer NX6000, NX3000, NX1000, NX4-6000, NX6000D, NX3000D, NX1000D Class-D power amplifiers, covering safety, hook-up, controls, getting started, bi-amping, and specifications.

[Behringer NX Series Power Amplifiers Quick Start Guide](#)
Get started quickly with your Behringer NX Series Ultra-Lightweight Class-D Power Amplifiers. This guide covers essential setup, controls, and bi-amping for models NX6000, NX3000, NX1000, NX4-6000, and their DSP variants NX6000D, NX3000D, NX1000D, featuring SmartSense technology.

[Behringer NX Series Power Amplifiers: Quick Start Guide](#)
Get started quickly with the Behringer NX Series Ultra-Lightweight Class-D Power Amplifiers. This guide covers models NX6000, NX3000, NX1000, NX4-6000, and their DSP-enabled counterparts (NX6000D, NX3000D, NX1000D), detailing setup, controls, and bi-amping configurations.

[Behringer NX Series Power Amplifiers Quick Start Guide](#)
Quick start guide for Behringer NX6000, NX3000, NX1000, NX4-6000, NX6000D, NX3000D, and NX1000D Class-D power amplifiers. Covers safety instructions, controls, hook-up diagrams, bi-amping procedures, and detailed specifications.

[BEHRINGER iNUKE Series: High-Power, Lightweight DSP PA Amplifiers](#)
Discover the BEHRINGER iNUKE series of ultra-lightweight, high-density PA amplifiers. Featuring advanced Class-D technology, comprehensive DSP control, and substantial power output, these amplifiers are designed for professional audio applications, offering superior performance and portability.

[Behringer iNUKE NU6000DSP/NU3000DSP/NU1000DSP User Manual: Power Amplifier Guide](#)
Comprehensive user manual for the Behringer iNUKE NU6000DSP, NU3000DSP, and NU1000DSP ultra-lightweight, high-density power amplifiers. Covers setup, control elements, DSP processor functions, software control, applications, installation, and specifications.