

Behringer NX3000D

Behringer NX3000D Power Amplifier User Manual

Ultra-Lightweight 3000 Watt Class-D Power Amplifier with DSP Control

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Behringer NX3000D Ultra-Lightweight 3000 Watt Class-D Power Amplifier. Please read it thoroughly before use to ensure optimal performance and longevity of your device.

Key Features:

- Delivers 2 x 1500 Watts into 2 Ohms; 2 x 900 Watts into 4 Ohms; 3000 Watts into 4 Ohms (Bridge mode).
- Weighs less than 7.9 lbs / 3.6 kg, ensuring portability.
- Features revolutionary cool-running high-density Class-D technology for ultimate reliability and near-zero thermal buildup.
- Equipped with an ultra-efficient switch-mode power supply for noise-free audio, superior transient response, and low power consumption.
- High-performance DSP and 24-bit/96 kHz converters provide ultimate signal integrity and extreme dynamic range.
- DSP section includes sophisticated delay, crossover (3 filter types, up to 48 dB/octave), EQ (8 parametric, 2 dynamic), dynamics processing, and lockable security settings.

2. IMPORTANT SAFETY INSTRUCTIONS

Always follow these basic safety precautions when using your amplifier:

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.

- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

3. WHAT'S IN THE BOX

Upon unpacking your Behringer NX3000D, ensure all items listed below are present and in good condition:

- Behringer NX3000D 3000W Ultra-Lightweight Class-D Power Amplifier
- Power Cable
- Quick Start Guide (this document serves as the comprehensive manual)

If any items are missing or damaged, please contact your dealer immediately.

4. PRODUCT OVERVIEW

Familiarize yourself with the front and rear panels of your NX3000D amplifier.

4.1 Front Panel



Image: Front view of the Behringer NX3000D Power Amplifier, showing the main display, control knobs for channels A and B, and status indicators.



Image: Angled front view of the Behringer NX3000D Power Amplifier, highlighting the rack-mountable design and ventilation grilles.

- **Power Button:** Turns the amplifier on or off.
- **Level Controls (CH A/CH B):** Adjust the input sensitivity for each channel.
- **LCD Display:** Shows DSP settings, operating modes, and status information.
- **Navigation Buttons (SETUP, PROCESS, UP/DOWN, EXIT):** Used to navigate and adjust DSP parameters.
- **LED Indicators (SIGNAL, LIMIT, PROTECT):** Provide visual feedback on signal presence, clipping, and protection status.

4.2 Rear Panel



Image: Rear view of the Behringer NX3000D Power Amplifier, displaying input and output connectors, cooling fan, and power inlet.



Image: Angled rear view of the Behringer NX3000D Power Amplifier, showing the USB port for PC connection and additional ventilation.

- **AC Input:** Connects to the main power supply using the provided power cable.
- **Input Connectors (CH A/CH B):** XLR/TRS combo jacks for connecting audio sources.
- **Output Connectors (CH A/CH B):** Twist-lock speaker connectors for connecting loudspeakers.
- **USB Port:** For connecting to a computer for DSP control and firmware updates.
- **Cooling Fan:** Ensures proper thermal management of the amplifier.

5. SETUP

Follow these steps to set up your Behringer NX3000D amplifier:

1. **Placement:** Position the amplifier in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure adequate space around the unit for airflow. For rack mounting, secure the amplifier

using appropriate rack screws.

2. **Power Connection:** Connect the supplied AC power cable to the AC input on the rear panel of the amplifier and then to a suitable power outlet. Ensure the amplifier's power switch is in the OFF position before connecting.
3. **Input Connections:** Connect your audio source (e.g., mixer, audio interface) to the Input Connectors (CH A and/or CH B) on the rear panel using XLR or 1/4" TRS cables.
4. **Output Connections:** Connect your passive loudspeakers to the Output Connectors (CH A and/or CH B) using high-quality speaker cables with twist-lock connectors. Ensure correct polarity (+ to + and - to -) and that the impedance of your speakers matches the amplifier's capabilities (2 Ohms, 4 Ohms, or Bridge mode 4 Ohms).
5. **Initial Power On:** With all connections secure and input levels turned down, switch the amplifier's power button to the ON position. The display will illuminate, and the unit will perform a self-test.

6. OPERATING THE AMPLIFIER

The Behringer NX3000D features advanced DSP control for precise sound optimization.

6.1 Basic Operation

1. **Adjusting Levels:** Slowly increase the Level Controls for CH A and/or CH B until the desired volume is achieved. Monitor the SIGNAL and LIMIT LEDs to prevent clipping. The SIGNAL LED indicates audio presence, while the LIMIT LED indicates that the signal is approaching clipping.
2. **Monitoring Status:** The PROTECT LED will illuminate if the amplifier enters protection mode due to overheating, short circuits, or other issues. If this occurs, turn off the amplifier, resolve the issue, and then power it back on.

6.2 DSP Control

The integrated DSP allows for comprehensive sound shaping and system management:

- **Accessing DSP Settings:** Use the **SETUP** button to enter the main DSP menu. Navigate through options using the **UP/DOWN** buttons and confirm selections with the rotary encoder.
- **Crossover:** Configure high-pass and low-pass filters for each channel. Choose from 3 filter types (e.g., Butterworth, Linkwitz-Riley) and slopes up to 48 dB/octave. This is crucial for integrating subwoofers or bi-amping systems.
- **Equalization (EQ):** Utilize the 8 parametric EQs and 2 dynamic EQs per channel to fine-tune the frequency response. This helps in correcting room acoustics or tailoring the sound to specific preferences.
- **Delay:** Apply delay to individual channels to align speakers in different physical positions, ensuring phase coherence.
- **Dynamics Processing:** Adjust compression, limiting, and gating settings to control the dynamic range of your audio.
- **SmartSense Loudspeaker Impedance Compensation:** This feature automatically adjusts the amplifier's output to match the loudspeaker impedance, providing consistent power delivery and improved sound quality.
- **Security Settings:** Lock DSP settings to prevent unauthorized changes, ideal for fixed installations.

For detailed DSP parameter adjustments, refer to the full software manual available on the Behringer website or connect the amplifier to a PC via the USB port for software control.

7. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your amplifier.

- **Cleaning:** Regularly clean the exterior of the amplifier with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure ventilation grilles are free from dust and debris.
- **Ventilation:** Always ensure that the amplifier's ventilation openings are not obstructed. Overheating can lead to reduced performance and potential damage.
- **Storage:** If storing the amplifier for an extended period, disconnect it from power, clean it, and store it in a cool, dry place, preferably in its original packaging or a protective case.

8. TROUBLESHOOTING

If you encounter issues with your Behringer NX3000D, consult the table below for common problems and solutions.

Problem	Possible Cause	Solution
No power	Power cable disconnected; Power outlet faulty; Amplifier fuse blown.	Check power cable connection; Test outlet with another device; Contact qualified service personnel for fuse replacement.
No sound output	Input/output cables disconnected or faulty; Speaker impedance mismatch; Amplifier in protect mode; Input levels too low.	Check all cable connections; Verify speaker impedance; Check PROTECT LED and resolve underlying issue; Increase input levels gradually.
Distorted sound	Input signal too high (clipping); Speaker impedance mismatch; Faulty cables or speakers.	Reduce input signal (monitor LIMIT LED); Verify speaker impedance; Test with different cables/speakers.
Amplifier overheats (PROTECT LED on)	Insufficient ventilation; Excessive load (low impedance speakers); Prolonged high-power operation.	Ensure proper ventilation; Use speakers with correct impedance; Reduce output level or allow cooling time.

If the problem persists after attempting these solutions, please contact Behringer support or a qualified service technician.

9. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Behringer
Model Number	NX3000D
Output Wattage	2 x 1500 Watts (2 Ohms); 2 x 900 Watts (4 Ohms); 3000 Watts (4 Ohms Bridge mode)
Speaker Amplification Type	Class-D
Item Weight	7.92 pounds / 3.6 Kilograms
Product Dimensions	19.02 x 9.09 x 3.7 inches
Connector Type	Twist-lock (Outputs), XLR/TRS Combo (Inputs)
Power Source	Corded Electric
Voltage	100V
Color	Black
DSP	High-performance DSP with 24-bit/96 kHz converters, delay, crossover, EQ, dynamics processing, SmartSense Impedance Compensation

10. WARRANTY AND SUPPORT

10.1 Product Warranty

The Behringer NX3000D amplifier typically comes with a **3-year limited warranty**, indicating its design and engineering quality. Please refer to the warranty card included with your product or visit the official Behringer website for detailed terms and conditions.



DESIGNED AND ENGINEERED
IN GERMANY

Image: Behringer logo with a '3 Years Warranty' badge, indicating the product is designed and engineered in Germany.

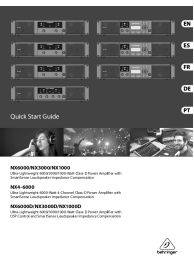
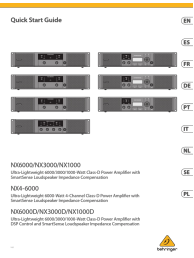
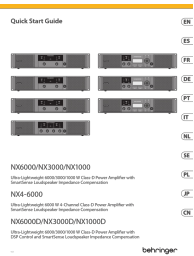

10.2 Technical Support



For technical assistance, troubleshooting beyond this manual, or service inquiries, please visit the official

Behringer website or contact their customer support. You can find more information and resources at the [Behringer Store](#).

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Related Documents - NX3000D

	<p>Behringer NX Series Power Amplifiers: Quick Start Guide</p> <p>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.</p>
	<p>Behringer NX Series Power Amplifiers: Quick Start Guide</p> <p>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.</p>
	<p>Behringer NX Series Power Amplifiers Quick Start Guide</p> <p>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.</p>
	<p>Behringer NX Series Power Amplifiers Quick Start Guide</p> <p>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.</p>

	<p><u>BEHRINGER iNUKE Series: High-Power, Lightweight DSP PA Amplifiers</u></p> <p>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.</p>
	<p><u>Behringer iNUKE Series PA Amplifiers: High-Density Power and Advanced DSP</u></p> <p>Explore the Behringer iNUKE series of ultra-lightweight, high-density PA amplifiers, featuring powerful output, advanced DSP control, and efficient Class-D technology. Discover models like the NU12000DSP, NU6000DSP, NU3000DSP, NU1000DSP, NU12000, NU6000, NU3000, and NU1000.</p>