

Deaf Bonce MLA-600.1

Deaf Bonce Machete MLA-600.1 Class D Monoblock Amplifier User Manual

Model: MLA-600.1

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Deaf Bonce Machete MLA-600.1 Class D Monoblock Power Amplifier. Please read this manual thoroughly before attempting to install or operate the amplifier to ensure proper function and safety. The MLA-600.1 is designed to deliver powerful and clear audio performance for your car audio system.

SAFETY INFORMATION

- Always disconnect the vehicle's battery negative terminal before starting any installation work.
- Ensure all wiring is properly routed and secured to prevent damage or short circuits.
- Use appropriate gauge wiring for power and ground connections as specified in this manual.
- Avoid installing the amplifier in locations exposed to direct sunlight, excessive heat, moisture, or dust.
- Do not open the amplifier casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- Operating the amplifier at extreme volumes for extended periods can cause hearing damage.

PACKAGE CONTENTS

Verify that all items are present in the package:

- (1) Deaf Bonce Machete MLA-600.1 Amplifier
- (1) Remote Bass Level Controller
- (1) Remote Bass Controller Cable
- (1) User Manual (this document)



Image: The MLA-600.1 amplifier shown with its included remote bass level controller and connecting cable.

PRODUCT OVERVIEW

The Deaf Bonce Machete MLA-600.1 is a compact and powerful Class D monoblock amplifier designed for car audio subwoofers. It features a robust design and a range of controls for precise sound tuning.



Image: Top view of the MLA-600.1 amplifier, showcasing the Deaf Bonce and Machete Lite branding along with the model number.



Image: Detailed view of the amplifier's control panel (top) with input RCA, SENS, BOOST, SUBSONIC, LPF, and REMOTE connections, and the power/speaker terminal block (bottom) with +12V, REM, GND, and speaker outputs.

SPECIFICATIONS

Feature	Specification
Model	MLA-600.1
Amplifier Class	Class D
Number of Channels	1 (Monoblock)
Frequency Response	10 - 250 Hz
RMS Power (1 Ohm, 14.4 V)	600 W
RMS Power (2 Ohm, 14.4 V)	420 W

Feature	Specification
RMS Power (4 Ohm, 14.4 V)	240 W
Minimum Permissible Load	1 Ohm
Low Pass Filter (LPF)	50 - 250 Hz
Crossover Slope	24 dB/Oct
Subsonic Filter	10 - 55 Hz
Input Terminal Gauge	4 Ga
Output Terminal Gauge	8 Ga
Working Voltage	9 - 15 V
Signal-to-Noise Ratio	≥ 100 dB
Dimensions (LxWxH)	6.7 x 4.3 x 1.7 inches

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and safety. If you are unsure about any part of the installation process, consult a professional car audio installer.

1. Mounting Location

Choose a dry, well-ventilated location that is not exposed to direct sunlight or excessive heat. Ensure there is sufficient airflow around the amplifier for cooling. Avoid mounting on carpet or vibrating surfaces.

2. Power Wiring

- Battery Disconnection:** Disconnect the negative (-) terminal of your vehicle's battery.
- Power Cable (+12V):** Run a 4-gauge power cable directly from the positive (+) terminal of the vehicle's battery to the amplifier's "+12V" terminal. Install an appropriate fuse holder (not included) within 18 inches (45 cm) of the battery. The fuse rating should match the amplifier's power requirements (e.g., 60A-80A for 600W RMS).
- Ground Cable (GND):** Connect a 4-gauge ground cable from the amplifier's "GND" terminal to a clean, unpainted metal surface on the vehicle's chassis. Ensure a solid, low-resistance connection. The ground cable should be as short as possible, ideally less than 3 feet (1 meter).
- Remote Turn-On Cable (REM):** Connect a 18-gauge or thinner remote turn-on cable from your head unit's remote output to the amplifier's "REM" terminal. This cable turns the amplifier on and off with your head unit.

3. Audio Signal Input

Connect RCA cables from your head unit's subwoofer or full-range pre-out to the amplifier's "INPUT" RCA jacks (L and R). Even though it's a monoblock amplifier, using both L and R inputs ensures the amplifier receives the full stereo signal for summing.

4. Speaker Output

Connect your subwoofer(s) to the amplifier's speaker output terminals. Ensure the total impedance of your subwoofer(s) is not lower than 1 Ohm. Use 8-gauge speaker wire for optimal performance.

- For a single 1 Ohm subwoofer, connect directly.

- For multiple subwoofers, ensure they are wired in parallel or series-parallel to achieve a final impedance of 1 Ohm, 2 Ohms, or 4 Ohms.

5. Remote Bass Level Controller

Connect the remote bass level controller to the "REMOTE" port on the amplifier using the provided cable. Mount the controller in an accessible location for easy adjustment of bass levels from the driver's seat.

6. Initial Power-Up

Once all connections are secure, reconnect the vehicle's battery negative terminal. Turn on your head unit. The amplifier's power indicator should illuminate. If not, check all power and ground connections and the remote turn-on signal.

OPERATING INSTRUCTIONS

The MLA-600.1 amplifier features several controls to fine-tune your audio system. Adjust these settings carefully to achieve the desired sound quality.

1. Gain Control (SENS)

The "SENS" (Sensitivity) knob adjusts the input sensitivity of the amplifier. This should be set to match the output voltage of your head unit. Start with the gain at minimum (MIN). Play a familiar track with a strong bass signal at about 75% of your head unit's maximum volume. Slowly increase the amplifier's gain until you hear distortion, then back it off slightly. This ensures maximum clean signal from your head unit without clipping.

2. Low Pass Filter (LPF)

The "LPF" (Low Pass Filter) control allows only frequencies below the set point to pass through to the subwoofer. This is essential for integrating your subwoofer with your main speakers. Adjust the LPF between 50 Hz and 250 Hz. A common starting point is 80-100 Hz, but this may vary depending on your main speakers and personal preference.

3. Subsonic Filter

The "SUBSONIC" filter removes extremely low frequencies (below 10-55 Hz) that are inaudible but can cause your subwoofer to over-excurt and waste amplifier power. Set this filter slightly below your subwoofer's port tuning frequency (if applicable) or around 20-30 Hz for sealed enclosures to protect the subwoofer.

4. Bass Boost (BOOST)

The "BOOST" control provides an adjustable bass equalization at a specific frequency. Use this sparingly, as excessive bass boost can lead to distortion and potential damage to your subwoofer. Start at 0dB and increase only if needed to enhance bass impact.

5. Remote Bass Level Controller

The remote bass level controller provides convenient adjustment of the subwoofer output level from the driver's seat without affecting the amplifier's gain setting.

MAINTENANCE

- **Cleaning:** Periodically clean the amplifier's exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure that the amplifier's cooling fins are free from dust and debris to maintain proper heat dissipation.
- **Connections:** Occasionally check all power, ground, remote, and speaker connections to ensure they are secure

and free from corrosion.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No Power / Amplifier does not turn on	◦ Blown fuse ◦ Poor power or ground connection ◦ No remote turn-on signal ◦ Vehicle battery low	◦ Check and replace fuse (if blown, investigate cause) ◦ Verify +12V, GND, and REM connections are secure ◦ Check head unit's remote output ◦ Charge or replace battery
No Sound Output	◦ RCA cables disconnected or faulty ◦ Speaker wires disconnected or shorted ◦ Gain set too low ◦ Head unit volume too low	◦ Check RCA connections and cables ◦ Verify speaker wiring and impedance ◦ Adjust gain control ◦ Increase head unit volume
Distorted Sound	◦ Gain set too high ◦ Speaker impedance too low ◦ Poor ground connection ◦ Damaged speaker	◦ Reduce gain setting ◦ Check speaker impedance (must be ≥ 1 Ohm) ◦ Ensure solid ground connection ◦ Inspect speaker for damage
Amplifier Overheats	◦ Insufficient ventilation ◦ Speaker impedance too low ◦ Gain set too high ◦ Prolonged high volume operation	◦ Relocate amplifier or improve airflow ◦ Check speaker impedance ◦ Reduce gain setting ◦ Allow amplifier to cool down

WARRANTY AND SUPPORT

Deaf Bonce products are designed and manufactured to the highest quality standards. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Deaf Bonce website. In case of technical issues or questions regarding your MLA-600.1 amplifier, please contact your authorized Deaf Bonce dealer or customer support for assistance.

For further information, you may visit the [Deaf Bonce Store on Amazon](#).

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