

Harmony Audio HA-A1500.1

Harmony Audio HA-A1500.1 Class D Mono Subwoofer Amplifier

Instruction Manual

1. INTRODUCTION

Thank you for choosing the Harmony Audio HA-A1500.1 Class D Mono Subwoofer Amplifier. This amplifier is designed to deliver powerful and clear bass performance for your car audio system. To ensure optimal performance and longevity, please read this manual thoroughly before installation and operation. Keep this manual for future reference.

2. SAFETY INFORMATION

Always observe the following safety precautions during installation and operation:

- Disconnect the vehicle's negative battery terminal before starting any electrical work.
- Ensure proper grounding to the vehicle chassis.
- Use appropriate gauge wiring for power, ground, and speaker connections to prevent overheating and damage.
- Mount the amplifier securely in a well-ventilated area, away from moisture and direct sunlight.
- Avoid placing the amplifier near fuel lines, brake lines, or other critical vehicle components.
- Do not operate the amplifier if it is damaged or malfunctioning. Refer to a qualified technician for repairs.
- Keep volume at safe levels to prevent hearing damage.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Harmony Audio HA-A1500.1 Mono Subwoofer Amplifier
- Bass Remote Control
- Mounting Hardware
- User Manual (this document)

4. FEATURES

The Harmony Audio HA-A1500.1 amplifier offers the following key features:

- Class D Monoblock Design for High Efficiency
- 3000 Watts Max Power Output
- 1 Ohm Stable Operation
- Variable Low Pass Crossover (LPF)
- Variable Subsonic Filter
- Variable Bass Boost
- Remote Bass Level Control Included
- LED Power and Protection Indicators

5. INSTALLATION

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

5.1 Mounting the Amplifier

Choose a mounting location that is dry, well-ventilated, and secure. Avoid mounting on carpet or directly on metal surfaces without proper insulation. Use the provided mounting hardware to secure the amplifier.



Figure 1: Harmony Audio HA-A1500.1 Mono Subwoofer Amplifier. This image shows the top view of the amplifier, highlighting its sleek design and the Harmony Audio logo.

5.2 Wiring Connections

Follow these steps for wiring your amplifier:

1. **Power Connection:** Run a heavy gauge power cable (e.g., 4 AWG or larger) directly from the positive terminal of the vehicle's battery to the amplifier's BATT+ terminal. Install an in-line fuse holder within 18 inches of the battery.
2. **Ground Connection:** Connect a heavy gauge ground cable (same gauge as power cable) from the amplifier's GND terminal to a clean, unpainted metal surface on the vehicle's chassis. Ensure a solid, low-resistance connection.
3. **Remote Turn-On:** Connect a remote turn-on wire from your head unit's remote output to the amplifier's REM terminal. This wire turns the amplifier on and off with your head unit.
4. **RCA Input:** Connect RCA cables from your head unit's subwoofer output to the amplifier's RCA input jacks.
5. **Speaker Output:** Connect your subwoofer(s) to the amplifier's SPEAKER output terminals. Ensure correct polarity (+ to + and - to -) and that the total impedance matches the amplifier's stable operating range (1 Ohm minimum).



Figure 2: Harmony Audio Bass Remote and Wiring. This image displays the included bass remote control and typical wiring components, illustrating how they connect to the amplifier.

6. CONTROLS AND ADJUSTMENTS

The HA-A1500.1 amplifier features several controls to fine-tune your audio system:

- **GAIN:** This control matches the output voltage of your head unit to the input sensitivity of the amplifier. Start with the gain at minimum and slowly increase it until you hear distortion, then back off slightly.
- **LPF (Low Pass Filter):** This filter allows only frequencies below the set point to pass through to the subwoofer. Adjust this to blend the subwoofer with your main speakers. Typical range is 50Hz-200Hz.
- **SUBSONIC:** This filter removes extremely low frequencies that are inaudible and can damage your subwoofer. Set it slightly below your enclosure's tuning frequency. Typical range is 10Hz-50Hz.
- **BASS BOOST:** This control provides an increase in bass output at a specific frequency. Use sparingly to avoid distortion and potential speaker damage.
- **REMOTE LEVEL:** The included bass remote allows you to adjust the subwoofer output level from the driver's seat.

7. OPERATING INSTRUCTIONS

Once installed and configured, operating your amplifier is straightforward:

1. Turn on your vehicle's ignition and head unit. The amplifier should power on automatically (indicated by a blue power LED).
2. Play audio at a moderate volume.
3. Adjust the GAIN, LPF, SUBSONIC, and BASS BOOST controls as described in Section 6 to achieve desired sound quality.
4. Use the remote bass level control for on-the-fly adjustments to subwoofer output.
5. If the protection LED illuminates, refer to the Troubleshooting section.

8. TROUBLESHOOTING

If you encounter issues with your amplifier, consult the table below for common problems and solutions:

Problem	Possible Cause	Solution
No Power (Power LED Off)	Blown fuse, poor power/ground connection, no remote signal.	Check in-line fuse and amplifier fuses. Verify power, ground, and remote wire connections.
Protection LED On	Overheating, short circuit in speaker wiring, impedance too low.	Allow amplifier to cool. Check speaker wiring for shorts. Verify speaker impedance is 1 Ohm or higher.
No Audio Output	Incorrect RCA connections, gain too low, head unit settings.	Check RCA cable connections. Adjust amplifier gain. Verify head unit's subwoofer output is enabled.
Distorted Sound	Gain set too high, improper crossover settings, damaged speaker.	Reduce gain. Adjust LPF and Subsonic filters. Inspect subwoofer for damage.

9. SPECIFICATIONS

Technical specifications for the Harmony Audio HA-A1500.1 amplifier:

- **Model:** HA-A1500.1
- **Type:** Class D Monoblock Subwoofer Amplifier
- **Max Power:** 3000 Watts
- **Stable Impedance:** 1 Ohm
- **Operating Voltage:** 12 Volts (DC)
- **Mounting Type:** Surface Mount
- **Product Dimensions (L x W x H):** 24 x 9 x 8 inches

10. MAINTENANCE

To maintain your amplifier's performance and appearance:

- Keep the amplifier clean and free of dust. Use a soft, dry cloth for cleaning.
- Ensure adequate ventilation around the amplifier to prevent overheating.
- Regularly check all wiring connections for tightness and corrosion.
- Avoid exposing the amplifier to extreme temperatures or moisture.

11. WARRANTY AND SUPPORT

Harmony Audio products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the official Harmony Audio website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.

For additional resources and product information, visit the [Harmony Audio Store](#).