

Memphis Audio PRX500.4V2

Memphis Audio PRX500.4V2 4-Channel 500 Watt Amplifier

INSTRUCTION MANUAL

1. Introduction

Thank you for choosing the Memphis Audio PRX500.4V2 4-Channel 500 Watt Amplifier. This manual provides essential information for the proper installation, operation, and maintenance of your amplifier. Please read this manual thoroughly before attempting installation or operation to ensure optimal performance and safety.

The PRX500.4V2 is designed to deliver powerful and clear audio output for your car audio system, featuring 4 channels with 125 Watts RMS per channel at 2-Ohm.



Image 1.1: Top view of the Memphis Audio PRX500.4V2 amplifier, showcasing its sleek black casing and illuminated Memphis logo.

Safety Information

- Always disconnect the vehicle's battery negative terminal before starting any electrical work.

- Ensure proper grounding to the vehicle chassis.
- Use appropriate gauge wiring for power, ground, and speaker connections.
- Avoid mounting the amplifier in areas exposed to excessive heat, moisture, or vibration.
- Consult a professional installer if you are unsure about any part of the installation process.

2. Setup and Installation

2.1 Unpacking

Carefully remove the amplifier from its packaging. Inspect for any signs of damage. If damage is present, contact your dealer immediately.

2.2 Mounting Location

Choose a mounting location that provides adequate ventilation for the amplifier. Avoid enclosed spaces that can trap heat. Ensure the location is secure and protected from moisture. Common locations include under seats, in the trunk, or behind panels.

2.3 Wiring Connections

Proper wiring is crucial for performance and safety. Refer to the following guidelines for connecting power, ground, remote, input, and speaker wires.

Power and Ground Connections



Image 2.1: Angled view of the Memphis Audio PRX500.4V2 amplifier, showing the power, ground, remote, and speaker output terminals.

- **B+ (Power):** Connect this terminal directly to the positive (+) terminal of the vehicle's battery using a fuse holder within 18 inches of the battery. Use appropriate gauge wire (e.g., 8 AWG for typical installations).
- **GND (Ground):** Connect this terminal to a clean, bare metal point on the vehicle's chassis. Ensure a solid electrical connection. The ground wire should be the same gauge as the power wire and as short as possible.
- **REM (Remote Turn-On):** Connect this terminal to the remote turn-on output of your head unit. This wire signals the amplifier to turn on and off with your stereo.



Image 2.2: Top-down view of the Memphis Audio PRX500.4V2 amplifier's input panel, detailing RCA inputs, REM/DC/AUDIO switch, and input level switch.

- **RCA Inputs (CH1, CH2, CH3, CH4):** Connect these to the RCA pre-amp outputs of your head unit. Ensure correct channel matching (e.g., Front Left to CH1, Front Right to CH2, Rear Left to CH3, Rear Right to CH4).
- **REM/DC/AUDIO Switch:** This switch determines how the amplifier turns on.
 - **REM:** Uses the remote turn-on wire from the head unit.
 - **DC:** Detects a DC offset on the speaker-level inputs (for head units without a remote output).
 - **AUDIO:** Detects an audio signal on the speaker-level inputs.

Speaker Output Connections

Connect your speakers to the designated speaker terminals. The PRX500.4V2 is a 4-channel amplifier, allowing for various speaker configurations. Ensure correct polarity (+ to + and - to -) for all speakers.

- **Standard 4-Channel:** Connect one speaker to each channel output.
- **Bridged Mode:** The amplifier can be bridged to provide more power to fewer channels (e.g., 2-channel operation for subwoofers). Refer to the amplifier's terminal markings for correct bridging connections.

3. Operating the Amplifier

3.1 Initial Power-Up

After all connections are made, reconnect the vehicle's battery. Turn on your head unit. The amplifier should power on, indicated by an illuminated logo or status LED.

3.2 Controls and Adjustments



Image 3.1: Angled view of the Memphis Audio PRX500.4V2 amplifier, highlighting the input side with RCA connections and control switches.

- **INPUT LEVEL (Gain Control):** This control matches the amplifier's input sensitivity to the output level of your head unit. Start with the gain set to minimum. Play a familiar track 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.
- **2CH/4CH Switch:** This switch determines whether the amplifier uses 2 or 4 input channels.
 - **2CH:** If your head unit only has 2 RCA outputs, this setting will feed the signal to all 4 amplifier channels.
 - **4CH:** For head units with 4 RCA outputs, allowing independent control of front and rear channels.
- **LOW/HI (Crossover Switch):** This switch activates the built-in crossover.
 - **LOW:** Activates a low-pass filter, allowing only low frequencies to pass through (suitable for subwoofers).
 - **HI:** Activates a high-pass filter, allowing only high frequencies to pass through (suitable for full-range or component speakers).

4. Maintenance

The Memphis Audio PRX500.4V2 amplifier requires minimal maintenance to ensure long-term performance.

- **Cleaning:** Periodically wipe the amplifier's exterior with a soft, dry cloth to remove dust and debris. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure that the amplifier's cooling fins are free from obstructions to allow for proper heat dissipation.
- **Connections:** Occasionally check all wiring connections for tightness and corrosion. Loose connections can lead to poor performance or damage.

5. Troubleshooting

If you experience issues with your amplifier, refer to the following table for common problems and solutions.

Problem	Possible Cause	Solution
Amplifier does not turn on	No power, ground, or remote signal; Blown fuse	Check power, ground, and remote wire connections. Verify fuse at battery and on amplifier. Check REM/DC/AUDIO switch setting.
No sound output	No input signal; Speaker wires disconnected; Amplifier in protect mode	Check RCA input connections. Verify speaker wire connections. Check amplifier status LED (if red, troubleshoot protect mode). Adjust gain.
Distorted sound	Gain set too high; Improper crossover settings; Poor ground connection	Reduce gain setting. Adjust crossover switch. Ensure solid ground connection. Check speaker impedance.
Amplifier overheats	Insufficient ventilation; Low impedance load; Prolonged high output	Ensure proper airflow around amplifier. Check speaker impedance (do not go below 2-Ohm per channel or 4-Ohm bridged). Reduce volume or gain.

If the problem persists after attempting these solutions, contact Memphis Audio customer support or a qualified installer.

6. Specifications

The following are the technical specifications for the Memphis Audio PRX500.4V2 Amplifier:

- **Model:** PRX500.4V2
- **Channels:** 4
- **Total Power:** 500 Watts
- **RMS Power Output (per channel):** 125 Watts RMS x 4 at 2-Ohm
- **Item Weight:** 4.1 pounds
- **Package Dimensions:** 10.8 x 7.6 x 4.2 inches
- **Manufacturer:** Memphis Audio
- **Date First Available:** February 27, 2024

7. Warranty Information

The Memphis Audio PRX500.4V2 amplifier comes with a **1-Year Manufacturer Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by improper installation, accident, misuse, abuse, neglect, or unauthorized modification. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, please refer to the official Memphis Audio website or contact their customer support.

8. Support and Contact





For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Memphis Audio customer support.

- **Online Support:** Visit the official [Memphis Audio Store on Amazon](#) or their corporate website for FAQs and support resources.
- **Contact Information:** Refer to the Memphis Audio official website for the most current contact details,

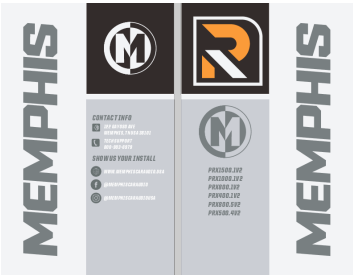
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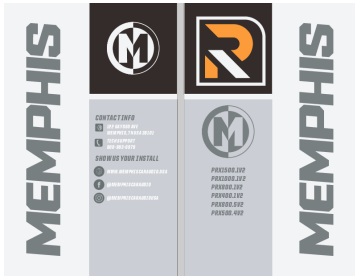
Related Documents

	<p>Memphis MXA300.4 300 Watt 4-Channel Amplifier User Manual and Specifications</p> <p>Comprehensive guide to the Memphis MXA300.4 300 Watt 4-Channel Amplifier, covering features, specifications, controls, installation, troubleshooting, and warranty information. Designed for powersports and marine use.</p>
	<p>Memphis Audio SE1200.4V2 4-Channel Amplifier: Controls and Installation Guide</p> <p>Comprehensive guide to the Memphis Audio SE1200.4V2 4-channel amplifier, covering crossover controls, gain settings, installation, and troubleshooting.</p>
	<p>Memphis Audio MOJO PRO Amplifiers: MJP Series Product Guide and Specifications</p> <p>Comprehensive guide to Memphis Audio MOJO PRO amplifiers (MJP750.1, MJP1000.1, MJP1500.1, MJP3000.1, MJP800.4), covering features, specifications, installation, troubleshooting, and warranty information.</p>
	<p>Memphis Audio SE3200.1V2 Mono Amplifier Manual & Installation Guide</p> <p>Comprehensive guide for the Memphis Audio SE3200.1V2 mono amplifier, covering installation, troubleshooting, specifications, and system planning for car audio enthusiasts.</p>

Documents - Memphis Audio – PRX500.4V2



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Ground Lighting 3 FULL RANGE AMPLIFIERS PRX800.5V2 **PRX500.4V2** 5-CH 4 x

100W 1 x 400W 2 4-CH 4 x 125W 2 MONO AMPLIFIERS PRX1500.1V2

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PRX500.4V2 4-CH 4 x 125W 2 MONO AMPLIFIERS P R X 150 0 . 1 V 2 1-CH 1 x

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