

## Taramp's DS 2000x4

# Taramp's DS 2000x4 4-Channel Car Audio Amplifier Instruction Manual

## 1. INTRODUCTION

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This manual provides essential information for the proper installation, operation, and maintenance of your Taramp's DS 2000x4 4-Channel Car Audio Amplifier. The DS 2000x4 is a Class D, full-range amplifier designed to deliver 2000 Watts RMS across 4 channels, with 500 Watts RMS per channel at 2 Ohms. It features a fixed crossover and overload protection for reliable performance. Please read this manual thoroughly before installation and use to ensure optimal performance and safety.

## 2. SAFETY INFORMATION

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- **Professional Installation Recommended:** Installation should ideally be performed by qualified professionals to prevent damage to the equipment or vehicle.
- **Disconnect Battery:** Always disconnect the vehicle's negative battery terminal before making any electrical connections to avoid electrical shock or short circuits.
- **Proper Ventilation:** Ensure the amplifier is mounted in a location with adequate airflow to prevent overheating. Do not cover the amplifier's cooling fins.
- **Correct Impedance:** Connect speakers with the correct impedance (2 Ohms per channel or 4 Ohms bridged) as specified to prevent amplifier damage.
- **Avoid Moisture:** Do not expose the amplifier to water or excessive moisture.
- **Fuse/Circuit Breaker:** Use a 100A circuit breaker or fuse on the main power line, located close to the battery.
- **Cable Gauges:** Use appropriate wire gauges for power, ground, and speaker connections as specified in this manual.

## 3. PRODUCT OVERVIEW

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The Taramp's DS 2000x4 amplifier is a compact yet powerful unit designed for car audio systems. It

features a robust aluminum chassis for efficient heat dissipation and clearly labeled connections for ease of installation.



Figure 3.1: Top view of the Taramps DS 2000x4 amplifier, showing the brand logo and model number.

### 3.1. Input and Control Panel

The input side of the amplifier features RCA inputs for channels 1-4, gain controls, and crossover switches (HPF, LPF, FULL) for precise audio tuning.



Figure 3.2: Rear view of the amplifier showing RCA inputs, gain controls, and crossover switches for channels 1-4.

### 3.2. Power and Speaker Output Panel

The output side includes terminals for power (positive, negative, remote) and speaker connections for channels 1-4, with options for bridged configurations.



Figure 3.3: Rear view of the amplifier showing power input terminals and speaker output terminals.

### 3.3. Dimensions

The compact design of the DS 2000x4 allows for flexible installation in various vehicle types.

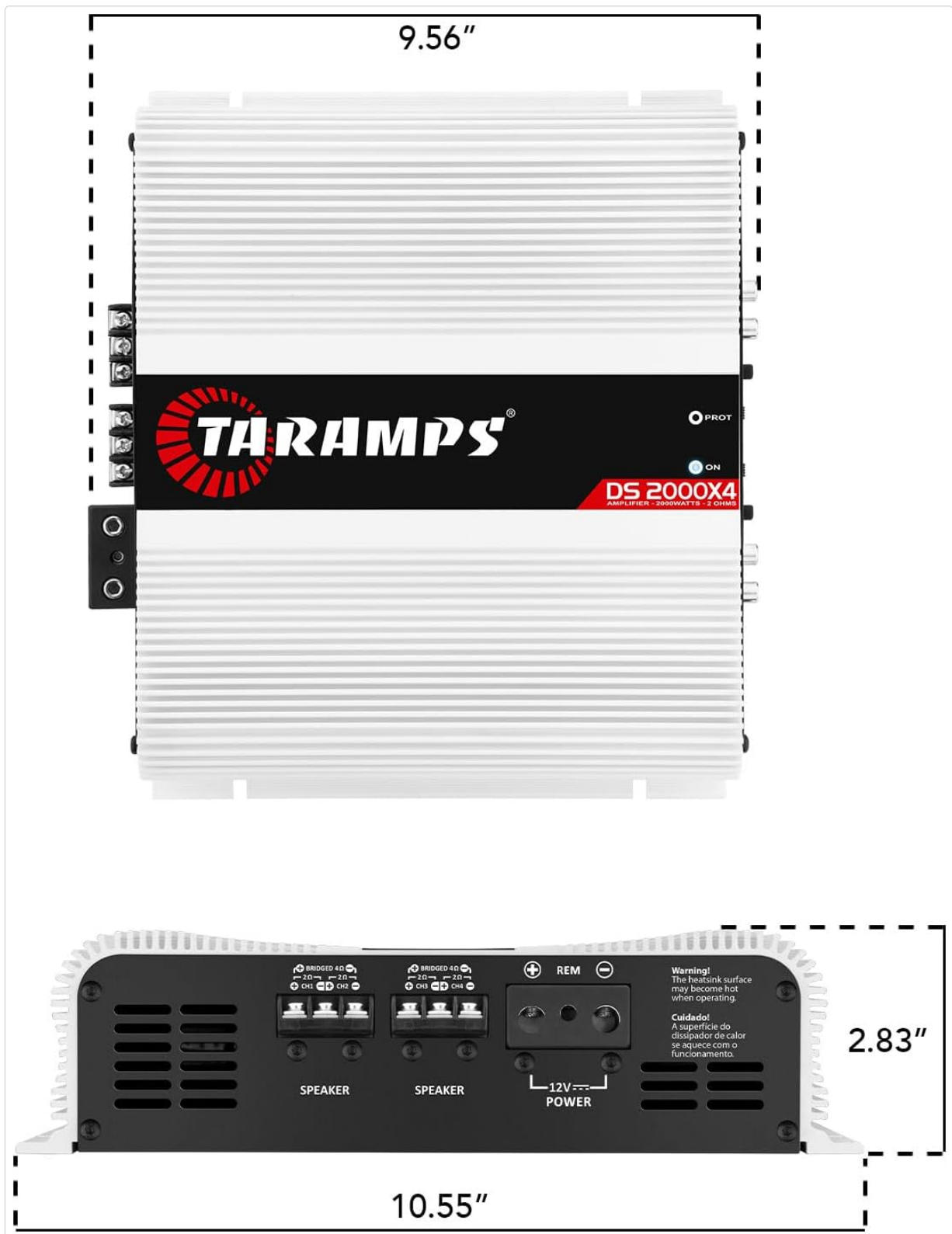


Figure 3.4: Dimensions of the Taramp's DS 2000x4 amplifier, approximately 10.55 inches (L) x 9.65 inches (W) x 2.83 inches (H).

## 4. SETUP AND INSTALLATION

### 4.1. Mounting

Choose a secure, dry location for mounting the amplifier, ensuring it is away from direct sunlight, heat sources, and moisture. Adequate ventilation around the amplifier is crucial to prevent overheating. Use the provided mounting hardware to firmly secure the unit.

### 4.2. Power Connections

- **Positive (+12V):** Connect a 4 AWG power cable directly from the positive terminal of the vehicle's battery to the +12V terminal on the amplifier. Install a 100A fuse or circuit breaker within 12 inches (30 cm) of the battery.
- **Ground (GND):** Connect a 4 AWG ground cable from the GND terminal on the amplifier to a clean, unpainted metal point on the vehicle's chassis. Ensure the connection is short (less than 3 feet / 1 meter) and secure for optimal performance and safety.
- **Remote (REM):** Connect an 18 AWG remote turn-on wire from the head unit's remote output to the REM terminal on the amplifier. This wire signals the amplifier to turn on and off with the head unit.

### 4.3. Audio Input Connections

Connect the RCA output cables from your head unit to the RCA input jacks (CH1, CH2, CH3, CH4) on the amplifier. Ensure correct channel matching.

### 4.4. Speaker Output Connections

Connect your speakers to the SPEAKER terminals using 11 AWG speaker wire. The DS 2000x4 supports both stereo (2 Ohms per channel) and bridged (4 Ohms) configurations. Refer to the wiring diagram for specific connections.

### 4.5. Wiring Diagram Example

The following diagram illustrates a typical wiring setup for the Taramp's DS 2000x4 amplifier, including power, ground, remote, and speaker connections. It also shows connections for a subwoofer and other speakers.

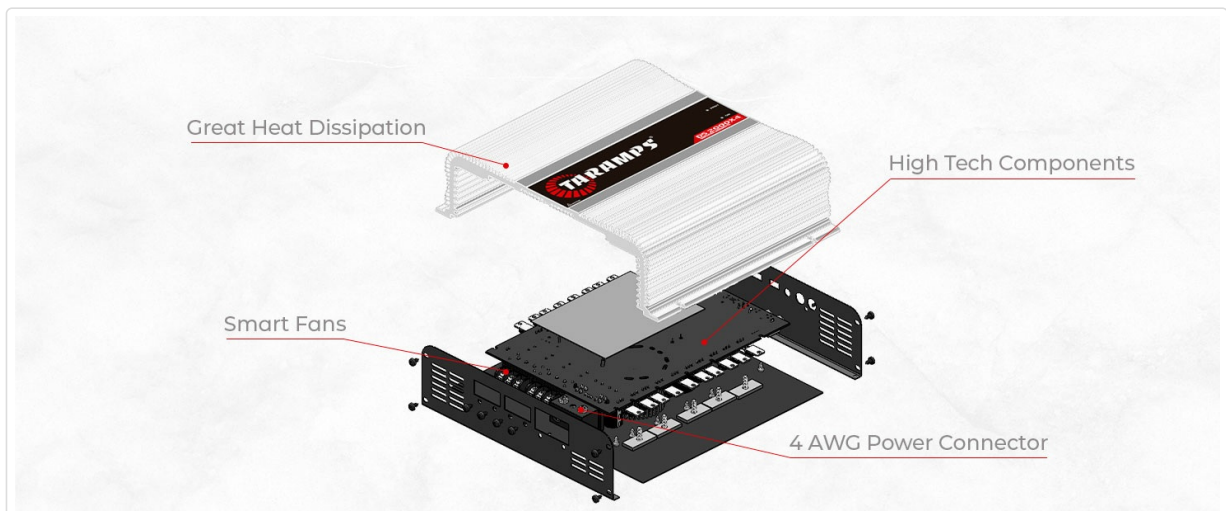


Figure 4.1: Example wiring diagram for the DS 2000x4 amplifier, showing connections to a head unit, battery, subwoofer, and speakers.

## 5. OPERATING INSTRUCTIONS

### 5.1. Initial Power-Up

After all connections are made and verified, reconnect the vehicle's negative battery terminal. Turn on your head unit. The amplifier's 'ON' LED indicator should illuminate, indicating it is receiving power and is operational.

### 5.2. Gain Adjustment

The gain control (LEVEL) on the amplifier matches the output voltage of your head unit to the amplifier's

input sensitivity. 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 off slightly. This ensures maximum clean output.

### 5.3. Crossover Settings

The DS 2000x4 features fixed crossover settings at 90Hz (-12dB / 8th octave). Use the switches to select between:

- **HPF (High Pass Filter):** Allows frequencies above 90Hz to pass, typically used for mid-range speakers and tweeters.
- **LPF (Low Pass Filter):** Allows frequencies below 90Hz to pass, typically used for subwoofers.
- **FULL:** Allows the full frequency range to pass, suitable for full-range speakers.

### 5.4. LED Indicators

- **ON:** Illuminates when the amplifier is powered on and operating normally.
- **PROT (Protection):** Illuminates when the amplifier enters protection mode due to overheating, short circuit, or low voltage. The amplifier will temporarily shut down to prevent damage.

## 6. SPECIFICATIONS

Detailed technical specifications for the Taramp's DS 2000x4 amplifier:

Feature	Specification
Brand	Taramp's
Model Number	901644
Number of Channels	4
Output Power	2000 Watts RMS (Total)
Power per Channel	500 Watts RMS at 2 Ohms
Class	Class D
Frequency Response	Full Range
Crossover	Fixed HPF and LPF at 90Hz (-12dB / 8th)
Minimum Supply Voltage	9 Volts (DC)
Maximum Supply Voltage	17 Volts (DC)
Recommended Fuse/Circuit Breaker	100A
Power Cable Gauge	4 AWG
Output Cable Wire Gauge	11 AWG
Remote Cable Gauge	18 AWG
Dimensions (L x W x H)	10.55 x 9.65 x 2.83 inches
Item Weight	7.4 pounds

Feature	Specification
Material	Aluminum
Special Features	Overload protection system at the outlet

## 7. TROUBLESHOOTING

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If you encounter issues with your amplifier, refer to the following common troubleshooting steps:

- **No Power:**
  - Check the main fuse/circuit breaker near the battery.
  - Verify all power, ground, and remote connections are secure and correctly wired.
  - Ensure the remote wire is receiving +12V from the head unit when it's on.
- **No Sound:**
  - Check all RCA input cables for secure connection and damage.
  - Verify speaker wires are correctly connected and not shorted.
  - Ensure head unit volume is up and not muted.
  - Adjust gain controls; they might be set too low.
- **Distorted Sound:**
  - Reduce the amplifier's gain setting.
  - Check speaker impedance to ensure it matches the amplifier's requirements.
  - Inspect speaker wires for shorts or damage.
  - Ensure the head unit's output is not distorted.
- **Amplifier Goes into Protection Mode (PROT LED On):**
  - **Overheating:** Ensure adequate ventilation around the amplifier. Allow it to cool down.
  - **Short Circuit:** Check all speaker wires for shorts to ground or to each other. Verify speaker impedance.
  - **Low Voltage:** Check the vehicle's battery voltage and charging system. Ensure power and ground cables are sufficient gauge and connections are secure.

## 8. MAINTENANCE

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To ensure the longevity and optimal performance of your Taramp's DS 2000x4 amplifier, follow these maintenance guidelines:

- **Keep Clean:** Regularly wipe the amplifier's exterior with a soft, dry cloth to remove dust and debris. Avoid using harsh chemicals or abrasive cleaners.
- **Ensure Ventilation:** Periodically check that the amplifier's cooling fins are free from obstructions and dust buildup. Proper airflow is critical for heat dissipation.
- **Check Connections:** Annually, inspect all power, ground, remote, and speaker connections to ensure they remain tight and free from corrosion. Loose connections can lead to poor performance or damage.
- **Avoid Extreme Conditions:** Protect the amplifier from extreme temperatures, direct sunlight, and

excessive moisture.

## 9. WARRANTY AND SUPPORT

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For warranty information, technical support, or service inquiries regarding your Taramp's DS 2000x4 amplifier, please refer to the warranty card included with your product or contact Taramp's customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

You can visit the official Taramp's website for additional resources and contact information: [Taramp's Official Website](#)