

Alpine SWR-M100

Alpine SWR-M100 10-inch 4-ohm Marine Subwoofer User Manual

Model: SWR-M100

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Alpine SWR-M100 10-inch 4-ohm Marine Subwoofer. Please read this manual thoroughly before use to ensure optimal performance and longevity of the product.

The Alpine SWR-M100 is designed to deliver deep bass in marine environments. It features a molded polypropylene cone with a Santoprene™ rubber surround, ensuring reliable performance and resistance to marine elements. The subwoofer is built with a high-strength polypropylene frame and a waterproof rubber mounting gasket, suitable for free-air applications.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury or damage to the product and surrounding equipment:

- Always disconnect the vehicle's battery negative terminal before starting any installation work.
- Ensure all wiring is correctly connected and insulated to prevent short circuits.
- Do not expose the subwoofer to extreme temperatures or direct sunlight for prolonged periods.
- Use appropriate tools and follow all local and national electrical codes during installation.
- Consult a qualified professional if you are unsure about any installation steps.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Alpine SWR-M100 10-inch Marine Subwoofer
- Power cable (and possibly other necessary cables for connection)
- Mounting hardware (screws, washers, etc.)
- User Manual (this document)

4. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and durability of your marine subwoofer. The SWR-M100 is designed for free-air applications.

4.1 Mounting Location

Select a mounting location that is structurally sound and provides adequate clearance for the subwoofer's depth. Ensure the location is protected from direct water spray if possible, despite its marine-grade construction.



Figure 1: Front view of the Alpine SWR-M100 Marine Subwoofer. This image displays the white grille and the central Alpine logo, indicating its robust design for marine environments.

4.2 Wiring Connections

- Power Connection:** Connect the subwoofer to a suitable marine amplifier. Ensure the amplifier can provide 300 watts RMS power at 4 ohms for optimal performance.
- Signal Connection:** Connect the amplifier's output to the subwoofer's terminals. Pay close attention to polarity (+ to + and - to -) to ensure correct phase and sound reproduction.
- Grounding:** Ensure a secure and clean ground connection for the amplifier and any associated components to prevent noise and ensure stable operation.

4.3 Mounting Procedure

- Prepare the Mounting Surface:** Cut an appropriate-sized hole in the chosen mounting location. Refer to the template provided with your subwoofer for precise dimensions.
- Secure the Subwoofer:** Place the subwoofer into the opening. Use the provided waterproof rubber mounting gasket between the subwoofer frame and the mounting surface to ensure a watertight seal.
- Fasten:** Secure the subwoofer using the supplied mounting screws. Tighten screws evenly to prevent warping of the frame.

5. OPERATING INSTRUCTIONS

Once installed, the Alpine SWR-M100 operates as part of your marine audio system. Follow these guidelines for optimal performance:

- Amplifier Settings:** Adjust your amplifier's gain, crossover, and phase settings according to the subwoofer's specifications and your system's acoustics. A low-pass filter setting between 80Hz and 120Hz is typically recommended for subwoofers.
- Volume Control:** Avoid operating the subwoofer at excessively high volumes for extended periods, which can lead to distortion and potential damage.
- Break-in Period:** Allow a short break-in period (approximately 10-20 hours of normal use) for the subwoofer's suspension to loosen, which can improve bass response.

6. MAINTENANCE

Regular maintenance helps preserve the performance and appearance of your marine subwoofer:

- Cleaning:** Use a soft, damp cloth to wipe down the grille and frame. Avoid harsh chemicals or abrasive cleaners.
- Inspection:** Periodically inspect the mounting screws and wiring connections for tightness and corrosion.
- Protection:** When not in use, especially during storage, consider covering the subwoofer to protect it from dust and prolonged exposure to elements.

7. TROUBLESHOOTING

If you encounter issues with your Alpine SWR-M100, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|

| Problem | Possible Cause | Solution |
|-----------------|---|--|
| No Sound | Loose wiring connection; Amplifier off or faulty; Incorrect source selection. | Check all wiring connections for security and correct polarity. Verify amplifier power and functionality. Ensure correct audio source is selected on your head unit. |
| Distorted Sound | Amplifier gain too high; Crossover settings incorrect; Damaged subwoofer. | Reduce amplifier gain. Adjust low-pass filter settings. Inspect subwoofer cone and surround for physical damage. |
| Weak Bass | Incorrect phase setting; Underpowered amplifier; Subwoofer not properly sealed. | Check amplifier phase setting. Ensure amplifier provides adequate RMS power. Verify mounting gasket is creating a tight seal. |

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

8. SPECIFICATIONS

| Feature | Detail |
|------------------------|--------------------------------|
| Model Number | SWR-M100 |
| Speaker Type | Subwoofer |
| Subwoofer Diameter | 10 Inches |
| Impedance | 4 Ohms |
| Power Handling (RMS) | 300 Watts |
| Peak Power Handling | 900 Watts |
| Woofer Material | Molded Polypropylene |
| Surround Material | Santoprene™ Rubber |
| Frame Material | High-strength Polypropylene |
| Water Resistance Level | Water Resistant (Marine-grade) |
| Product Dimensions | 8.66 x 3.94 x 7.09 inches |
| Item Weight | 8 Pounds |
| UPC | 793276621009 |

9. WARRANTY AND SUPPORT

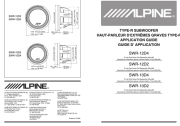
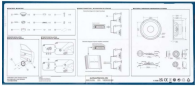



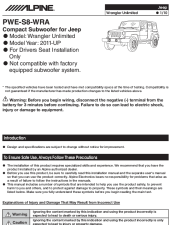
The Alpine SWR-M100 Marine Subwoofer comes with a**Limited Warranty**. Please refer to the warranty card included with your product for specific terms and conditions, including coverage duration and claim procedures.

For technical support, service, or warranty inquiries, please contact Alpine customer service through their official website or the contact information provided in your product documentation.

Manufacturer: Alpine

Date First Available: July 7, 2008

Related Documents - SWR-M100

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|---|--|
|  | <p>Alpine SWR-12D4 Subwoofer User Manual and Installation Guide</p> <p>Comprehensive user manual and installation guide for the Alpine SWR-12D4 12-inch car audio subwoofer. Features include detailed specifications, safety precautions, installation instructions, wiring diagrams, and troubleshooting tips.</p> |
|  | <p>Alpine EL-E65C Component 2-Way Speaker System Specifications and Installation Guide</p> <p>Detailed specifications, installation diagrams, wiring instructions, and external dimensions for the Alpine EL-E65C component 2-way speaker system. Includes power handling, impedance, sensitivity, frequency response, and mounting information.</p> |
|  | <p>Alpine DM-65C Component Speaker System Installation and Specifications</p> <p>Installation guide and technical specifications for the Alpine DM-65C 2-way component speaker system, including wiring diagrams, mounting instructions, and product features.</p> |
|  | <p>Alpine PWD-X5 DSP Subwoofer with 4-Channel Amplifier Owner's Manual</p> <p>Comprehensive owner's manual for the Alpine PWD-X5 DSP Subwoofer, detailing setup, operation via mobile app, PC software, and wired controller, along with technical specifications and safety information.</p> |
|  | <p>Alpine S2-S40C 4" Component 2-Way Speaker System - Specifications & Installation Guide</p> <p>Comprehensive guide for the Alpine S2-S40C 4-inch component 2-way speaker system. Includes installation instructions, detailed specifications, power ratings, wiring diagrams, external dimensions, warranty information, and product registration details. Learn how to properly install and use your Alpine speakers for optimal performance.</p> |
|  | <p>Alpine PWE-S8-WRA Compact Subwoofer Installation Manual for Jeep Wrangler Unlimited (2011-UP)</p> <p>Detailed installation guide for the Alpine PWE-S8-WRA 8-inch compact powered subwoofer system designed for the 2011-UP Jeep Wrangler Unlimited. Includes tools, accessories, disassembly, installation, and wiring instructions.</p> |