

Alpine SPS-600

Alpine SPS-600 6.5-inch Coaxial Car Speaker Instruction Manual

Model: SPS-600

1. INTRODUCTION

The Alpine SPS-600 is a 6.5-inch 2-way coaxial car speaker system designed to enhance your vehicle's audio experience. These speakers feature a robust design for clear sound reproduction and reliable performance. Key specifications include a power handling capacity of 80 Watts RMS (240 Watts Peak), a frequency response range of 70Hz to 22kHz, and a sensitivity of 88dB /W(1m).

2. SAFETY INFORMATION

- **Professional Installation Recommended:** If you are unfamiliar with car audio wiring and installation, it is recommended to seek professional assistance to prevent damage to the speakers or your vehicle.
- **Disconnect Battery:** Always disconnect the vehicle's negative battery terminal before beginning any electrical installation to prevent short circuits and electrical hazards.
- **Proper Wiring:** Ensure all wiring connections are secure and correctly polarized. Incorrect wiring can lead to speaker damage or poor sound quality.
- **Mounting Security:** Securely mount the speakers to prevent them from becoming loose during vehicle operation, which could cause injury or damage.
- **Avoid Overpowering:** Do not exceed the speaker's rated power handling capacity (80 Watts RMS / 240 Watts Peak) to prevent damage.
- **Ventilation:** Ensure adequate ventilation around the speakers and any connected amplifiers to prevent overheating.

3. PACKAGE CONTENTS

Verify that all items are present in the package before beginning installation:

- Alpine SPS-600 6.5-inch Coaxial Speakers (Pair)
- Speaker Grilles (if included)

- Mounting Screws and Clips
- Speaker Wire (if included)
- Installation Template (if included)

4. SETUP AND INSTALLATION

This section outlines the general steps for installing your Alpine SPS-600 speakers. Specific vehicle requirements may vary.

4.1. Preparation

1. Disconnect the negative terminal of your vehicle's battery.
2. Remove the existing speakers or trim panels to access the speaker mounting locations.
3. Inspect the mounting location for adequate depth and clearance for the new speakers. The SPS-600 speakers have a 6.5-inch woofer diameter and a 2.54 cm tweeter diameter.

4.2. Mounting the Speakers

The Alpine SPS-600 speakers are designed for coaxial car mounting.

1. Place the speaker in the desired mounting location. If using an installation template, mark and cut the opening as necessary.
2. Align the speaker's mounting holes with the vehicle's speaker mounts. If new holes are required, drill pilot holes carefully to avoid damaging vehicle components.
3. Secure the speaker using the provided mounting screws. Do not overtighten.



Front view of the Alpine SPS-600 6.5-inch coaxial car speaker, showcasing its design and components.

4.3. Wiring Connections

The SPS-600 speakers utilize wired coaxial connectivity.

1. Connect the positive (+) terminal of the speaker to the positive (+) speaker output wire from your head unit or amplifier.
2. Connect the negative (-) terminal of the speaker to the negative (-) speaker output wire from your head unit or amplifier.
3. Ensure all connections are tight and insulated to prevent short circuits.

4.4. Final Steps

1. Reinstall any removed trim panels or grilles.
2. Reconnect the vehicle's negative battery terminal.
3. Test the speaker functionality.

5. OPERATING INSTRUCTIONS

Once installed, the Alpine SPS-600 speakers operate as part of your vehicle's audio system. They are designed for stereo audio output.

- 1. Power On:** Turn on your vehicle's head unit or audio receiver.
- 2. Source Selection:** Select your desired audio source (e.g., radio, CD, MP3 player, smartphone connected to the head unit).
- 3. Volume Adjustment:** Gradually increase the volume to a comfortable listening level. Avoid excessively high volumes that cause distortion, as this can damage the speakers.
- 4. Audio Settings:** Adjust bass, treble, balance, and fader settings on your head unit to optimize sound quality according to your preference. The SPS-600 features a bass boost capability, which can be further enhanced through head unit settings or an external amplifier.

6. MAINTENANCE

Proper maintenance ensures the longevity and performance of your Alpine SPS-600 speakers.

- Cleaning:** Use a soft, dry cloth to gently wipe dust and debris from the speaker cones and grilles. Avoid using harsh chemicals or abrasive cleaners.
- Environmental Protection:** While designed for vehicle use, avoid exposing speakers to excessive moisture or extreme temperatures. These speakers are not water-resistant.
- Regular Inspection:** Periodically check mounting screws for tightness and wiring connections for security.

7. TROUBLESHOOTING

If you encounter issues with your Alpine SPS-600 speakers, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No sound from speaker	<ul style="list-style-type: none">Loose or incorrect wiringHead unit/amplifier not powered onSpeaker damaged	<ul style="list-style-type: none">Check all wiring connections for security and correct polarity.Ensure head unit and amplifier are powered on and functioning.Test with another known-good speaker if possible.
Distorted sound	<ul style="list-style-type: none">Volume too highIncorrect audio settings (bass/treble)Speaker overpoweringLoose mounting	<ul style="list-style-type: none">Reduce volume.Adjust bass/treble settings on head unit.Ensure amplifier output does not exceed speaker's RMS rating.Check speaker mounting for tightness.

Problem	Possible Cause	Solution
One speaker not working	<ul style="list-style-type: none">• Wiring issue to that specific speaker• Balance/fader settings incorrect• Speaker damaged	<ul style="list-style-type: none">• Check wiring for the non-working speaker.• Adjust balance/fader settings on head unit.• Swap speakers to determine if the issue is with the speaker or wiring.

8. SPECIFICATIONS

Feature	Specification
Model Name	SPS-600
Speaker Type	Coaxial, 2-way
Speaker Size	6.5 Inches (Woofer Diameter)
Tweeter Diameter	2.54 Centimeters
Power Handling (RMS)	80 Watts
Power Handling (Peak)	240 Watts
Frequency Response	70Hz - 22kHz
Sensitivity	88dB /W(1m)
Material	Poly-Mica, Ultra Low Distortion Magnet Design
Connectivity Technology	Wired Coaxial
Audio Output Mode	Stereo
Product Dimensions	16 x 8 x 5 inches
Item Weight	1 Pounds
Water Resistance Level	Not Water Resistant

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Alpine website or contact Alpine customer service directly. Keep your proof of purchase for warranty claims.

Alpine Customer Support: Refer to your product packaging or the official Alpine website for the most current contact information.

