

Alpine S2-S40C

Alpine S2-S40C - Next-Generation S-Series 4" Component Speaker Set User Manual

Model: S2-S40C | Brand: Alpine

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Alpine S2-S40C Next-Generation S-Series 4" Component Speaker Set. Designed for superior audio reproduction, these speakers are Hi-Res Audio Certified, offering an exceptional listening experience. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your speakers.

KEY FEATURES

- **Hi-Res Audio Certified:** Elevate your audio experience with the Next-Generation S-Series S2-S40C 4" Component Speakers, now Hi-Res Audio Certified. With a frequency response of up to 40kHz, these speakers deliver exceptional sound quality at an entry-level price, providing you with accurate and natural audio reproduction.
- **Reliable Performance:** Experience clean and accurate audio with the S2-S40C speakers. Crafted with a unique combination of Poly Propylene, Glass Fiber, and Mica Cone materials, these speakers are designed for lightweight construction, high output, and low distortion. Enjoy a superior audio experience with clear and precise sound reproduction.
- **HAMR Surround Technology:** The Alpine-exclusive High Amplitude Multi-Roll (HAMR) surround technology integrated into the speaker design allows for maximum cone movement. This technology enables the S2-S40C speakers to deliver powerful and accurate bass notes, immersing you in deep and impactful sound.
- **Versatile Component Design:** The S2-S40C speakers feature a woofer size of 4" and included 1" tweeters with threaded removable housing. With the ability to handle a maximum peak power of 140W and a maximum RMS power of 45W, these component speakers offer a dynamic and versatile audio performance.
- **OEM Fitment and In-Line Crossovers:** Enjoy a seamless integration into your vehicle's audio system with the S2-S40C speakers' OEM fitment design. The included in-line crossovers ensure optimized sound separation and distribution between the woofer and tweeter, resulting in a balanced and immersive listening experience. Upgrade your car's audio system with ease and enjoy high-quality sound that complements your vehicle's interior.

WHAT'S IN THE BOX

- Two 4" Woofers

- Two 1" Tweeters with threaded removable housing
- Two In-line Crossovers



Image: The complete Alpine S2-S40C component speaker set, including two woofers and two tweeters.

SETUP AND INSTALLATION

Proper installation is crucial for optimal sound performance. It is recommended that installation be performed by a qualified professional. Always disconnect the vehicle's battery before beginning any electrical work.

Woofer Installation

1. **Prepare Mounting Location:** Ensure the mounting location in your vehicle is clean and free of obstructions. The S2-S40C woofers are designed for OEM fitment, but minor modifications may be required for certain vehicle models.
2. **Connect Wiring:** Connect the woofer wires to the appropriate output channels from your amplifier or head unit. Pay close attention to polarity (+/-).
3. **Secure Woofer:** Mount the woofer securely using the provided screws or appropriate mounting hardware. Ensure a tight seal to prevent sound leakage.



Image: Various views of the Alpine S2-S40C woofer, showcasing its design and mounting points.

Tweeter Installation

1. **Choose Mounting Method:** The 1" tweeters come with threaded removable housing, allowing for various mounting

options (e.g., flush mount, surface mount). Select the method best suited for your vehicle's interior and desired sound staging.

2. **Connect In-line Crossover:** Connect the tweeter to the in-line crossover. The crossover separates the audio signal, sending only high frequencies to the tweeter for clear treble reproduction.
3. **Connect Crossover to Source:** Connect the in-line crossover to the appropriate output from your amplifier or head unit.
4. **Secure Tweeter:** Mount the tweeter securely in its chosen location.



Image: Close-up view of the Alpine S2-S40C tweeter and its associated in-line crossover.

Wiring Diagram (Conceptual)

While a detailed wiring diagram is typically provided with the product packaging, the general connection flow is as follows:

- Audio Source (Head Unit/Amplifier) → In-line Crossover Input
- In-line Crossover Woofer Output → Woofer
- In-line Crossover Tweeter Output → Tweeter

Ensure all connections are secure and insulated to prevent short circuits.

OPERATING YOUR SPEAKERS

Once installed, your Alpine S2-S40C speakers will integrate with your vehicle's audio system. The quality of sound will depend on the source unit, amplifier, and proper tuning.

- **Audio Source:** Play audio through your vehicle's head unit or external audio source.
- **Volume Control:** Adjust the volume to a comfortable listening level. Avoid excessively high volumes that can cause

distortion or damage to the speakers.

- **Equalization:** Use your head unit's or amplifier's equalization settings to fine-tune the sound to your preference. The Hi-Res Audio certification ensures a wide frequency response, allowing for detailed adjustments.
- **Crossover Points:** If using an external amplifier with adjustable crossovers, set the high-pass filter for the woofers and tweeters appropriately to protect them from low frequencies they are not designed to reproduce. The included in-line crossovers handle this automatically for basic setups.

MAINTENANCE

Your Alpine S2-S40C speakers are designed for durability and require minimal maintenance.

- **Cleaning:** Gently wipe the speaker grilles and surrounds with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- **Environmental Factors:** Protect speakers from extreme temperatures, direct sunlight, and excessive moisture.
- **Regular Inspection:** Periodically check speaker connections for looseness or corrosion.

TROUBLESHOOTING

If you experience issues with your speakers, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|------------------------|---|--|
| No Sound from Speakers | <ul style="list-style-type: none">◦ Loose or incorrect wiring connections.◦ Amplifier/head unit not powered on or faulty.◦ Incorrect audio source selected.◦ Blown fuse in amplifier or vehicle. | <ul style="list-style-type: none">◦ Check all wiring connections, ensuring correct polarity.◦ Verify power to amplifier/head unit.◦ Select the correct audio input.◦ Inspect and replace any blown fuses. |
| Distorted Sound | <ul style="list-style-type: none">◦ Volume too high, causing clipping.◦ Improper gain settings on amplifier.◦ Damaged speaker cone or voice coil.◦ Incorrect crossover settings. | <ul style="list-style-type: none">◦ Reduce volume.◦ Adjust amplifier gain settings according to manufacturer recommendations.◦ Inspect speakers for physical damage.◦ Verify crossover settings are appropriate for component speakers. |
| Weak or Muffled Sound | <ul style="list-style-type: none">◦ Incorrect wiring polarity.◦ Speaker impedance mismatch.◦ Poor quality audio source. | <ul style="list-style-type: none">◦ Reverse polarity on one speaker to check for improvement.◦ Ensure speakers are compatible with amplifier's impedance.◦ Try a different audio source. |

If the problem persists after attempting these solutions, please contact Alpine customer support or a certified car audio

technician.



SPECIFICATIONS



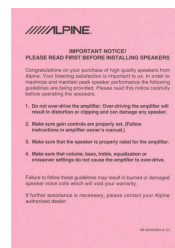
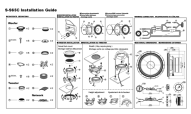
| Attribute | Value |
|--------------------|--------------------------------------|
| Model Number | S2-S40C |
| Woofer Size | 4 inches |
| Tweeter Size | 1 inch |
| Maximum Peak Power | 140W |
| Maximum RMS Power | 45W |
| Frequency Response | Up to 40kHz (Hi-Res Audio Certified) |
| Product Dimensions | 15 x 7.5 x 5 inches |
| Item Weight | 4.08 pounds |
| Manufacturer | Alpine |

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official Alpine website. Keep your proof of purchase for warranty claims.
Alpine Official Website: www.alpine-usa.com

Related Documents - S2-S40C

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|  | <p>Alpine S2-S69 Coaxial 2-Way Speaker System - Installation, Specifications, and Warranty</p> <p>Detailed information for the Alpine S2-S69 Coaxial 2-Way Speaker System, including installation guidelines, technical specifications, and limited warranty details. Learn about product features, power handling, and compliance.</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> |

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|---|---|
|  | <p>Alpine S2-Series Subwoofer Application Guide and Specifications</p> <p>Comprehensive application guide, technical specifications, enclosure recommendations, and installation notes for Alpine S2-Series subwoofers, including models S2-W8D2, S2-W8D4, S2-W10D2, S2-W10D4, S2-W12D2, and S2-W12D4. Features detailed component descriptions, wiring diagrams, and warranty information.</p> |
|  | <p>Alpine S2-S10TW Component Tweeter: Specifications, Installation, and Warranty Information</p> <p>Comprehensive guide to the Alpine S2-S10TW component tweeter, detailing technical specifications, installation instructions, important usage notices, warranty terms, and product registration methods.</p> |
|  | <p>Alpine S2-S65C Speaker System: Installation, Specifications, and Warranty</p> <p>This document provides installation instructions, technical specifications, and warranty information for the Alpine S2-S65C 2-way component speaker system. It includes important pre-installation notices and compliance declarations.</p> |
|  | <p>Alpine S-S65C Component Speaker System Installation Guide</p> <p>Comprehensive installation guide for the Alpine S-S65C S-Series 2-way component speaker system, detailing woofer, tweeter, and network components, wiring connections, and external dimensions for vehicle audio integration.</p> |