

Jensen JA2B

Jensen JA2B 2-Channel Class-D Car Audio Compact Amplifier User Manual

Model: JA2B

INTRODUCTION

Thank you for choosing the Jensen JA2B 2-Channel Class-D Car Audio Compact 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 JA2B amplifier is designed to deliver high-quality audio performance in a compact form factor, featuring Class-D technology, Digital Signal Processing (DSP), and app control for enhanced customization.

SAFETY INFORMATION

Always observe the following safety precautions during installation and operation:

- Disconnect the vehicle's negative battery terminal before starting any electrical work.
- Ensure all wiring is properly routed and secured to prevent damage or short circuits.
- Use appropriate gauge wiring as recommended in the specifications section.
- Avoid mounting the amplifier in locations exposed to direct sunlight, excessive heat, moisture, or dust.
- Do not open the amplifier casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- Wear eye protection when working with tools.

PACKAGE CONTENTS

Verify that all items are present in the package:

- Jensen JA2B Amplifier
- Mounting Hardware
- Wiring Harnesses (High-level input, Power/Ground/Remote)
- User Manual (this document)

PRODUCT OVERVIEW

The Jensen JA2B amplifier features a compact design with advanced functionalities for car audio systems.

Key Features:

- Class-D Digital Amplifier Design
- 2-Channel Output
- Integrated Digital Signal Processor (DSP)
- Jensen DSP AMP App Control (Apple/Android compatible)
- RGB Custom Color Illumination
- High-Level (Speaker Wire) and Low-Level (RCA) Inputs
- Adjustable Bass Boost at 45 Hz
- Adjustable High and Low-Pass Crossovers (32-320 Hz)
- RCA Pass-Through Outputs
- CTA-2006-D Certified

Component Identification:



Figure 1: Top view of the Jensen JA2B amplifier, showing the compact chassis and the illuminated Jensen logo.



Figure 2: Angled view of the Jensen JA2B amplifier, highlighting its compact size and input/output connections on the side.



Figure 3: Side view of the Jensen JA2B amplifier, illustrating its slim profile suitable for various mounting locations.



Figure 4: Rear panel of the Jensen JA2B amplifier, showing the High-Level input, Line Input (RCA), Line Output (RCA), and the Digital Signal Processor (DSP) section with app control wireless link indicator.

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and longevity of your amplifier. If you are unsure about any part of the installation process, consult a professional car audio installer.

Mounting Location:

Choose a mounting location that is dry, well-ventilated, and protected from direct sunlight and excessive heat. Ensure sufficient space around the amplifier for proper air circulation. Common locations include under seats, in the trunk, or behind interior panels.

Wiring Connections:

Before making any connections, disconnect the vehicle's negative battery terminal.

1. Power, Ground, and Remote Turn-On:

- **Power (B+):** Connect a 4-8 AWG power wire directly from the positive terminal of the vehicle's battery to the amplifier's B+ terminal. Install an in-line fuse (25A recommended) within 18 inches (45 cm) of the battery.
- **Ground (GND):** Connect a 4-8 AWG ground wire from the amplifier's GND terminal to a clean, unpainted metal surface of the vehicle chassis. The ground point should be as short as possible and securely fastened.
- **Remote (REM):** Connect a 18 AWG remote turn-on wire from the amplifier's REM terminal to the remote output of your head unit. This wire signals the amplifier to turn on and off with the head unit.

2. Audio Input Connections:

The JA2B supports both high-level (speaker wire) and low-level (RCA) inputs.

- **Low-Level (RCA) Input:** If your head unit has RCA pre-outs, connect RCA cables from the head unit's pre-outs to the amplifier's "LINE INPUT" RCA jacks.
- **High-Level (Speaker Wire) Input:** If your head unit does not have RCA pre-outs, use the provided high-level input harness. Connect the speaker wires from your head unit's speaker outputs to the corresponding wires on the high-level input harness. Ensure correct polarity.

3. Speaker Output Connections:

Connect your speakers to the amplifier's speaker output terminals. The JA2B is a 2-channel amplifier. Ensure correct

polarity (+ to + and - to -) for each speaker. Recommended speaker wire gauge is 12-18 AWG.

The amplifier is bridgeable. Refer to the wiring diagram in the full manual (if available) or consult a professional for bridged mode wiring.

4. RCA Pass-Through Output:

The "LINE OUTPUT" RCA jacks provide a pass-through signal, allowing you to connect additional amplifiers in your system without needing another set of RCA outputs from your head unit.

OPERATING INSTRUCTIONS

Initial Power-Up:

After all connections are made and verified, reconnect the vehicle's negative battery terminal. Turn on your head unit. The amplifier should power on, indicated by the illuminated Jensen logo.

Jensen DSP AMP App Control:

The JA2B amplifier features integrated DSP and app control for fine-tuning your audio system. Download the "Jensen DSP AMP" app from the Apple App Store or Google Play Store.

1. Ensure your amplifier is powered on.
2. Open the Jensen DSP AMP app on your smartphone or tablet.
3. The app will search for available Jensen DSP amplifiers. Select your JA2B amplifier from the list to establish a wireless connection.
4. Once connected, you can adjust various audio parameters, including:
 - **Gain Adjustment:** Set the input sensitivity (200 mV ~ 6 V) to match the output of your head unit. Start with the gain at minimum and slowly increase it until you hear distortion, then back off slightly.
 - **Crossover Settings:** Adjust the high-pass and low-pass crossovers (32-320 Hz) to properly filter frequencies for your speakers.
 - **Bass Boost:** Fine-tune the bass response at 45 Hz to your preference.
 - **RGB Illumination:** Customize the color and effects of the amplifier's illuminated logo.
 - Other DSP functions as available within the app.

Refer to the Jensen DSP AMP app's in-app help or documentation for detailed instructions on using its features.

MAINTENANCE

The Jensen JA2B amplifier requires minimal maintenance. Follow these guidelines to ensure its longevity:

- Keep the amplifier clean and free of dust. Use a soft, dry cloth to wipe the exterior.
- Ensure adequate ventilation around the amplifier to prevent overheating. Regularly check that cooling fins are not obstructed.
- Periodically check all wiring connections for tightness and corrosion. Loose connections can cause performance issues or damage.
- Do not use harsh chemicals or abrasive cleaners on the amplifier.

TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No Power / Amplifier does not turn on	Blown fuse Loose power or ground connection No remote turn-on signal Vehicle battery discharged	Check and replace the in-line fuse (25A). Verify all power, ground, and remote connections are secure. Ensure the head unit's remote output is active. Charge or replace the vehicle battery.
No Audio Output	Input cables not connected or faulty Speaker wires not connected or faulty Gain set too low Head unit volume too low	Check RCA or high-level input connections. Verify speaker wire connections and polarity. Increase the gain setting via the DSP app. Increase the head unit volume.

Problem	Possible Cause	Solution
Distorted Sound	Gain set too high Improper crossover settings Poor ground connection Speaker impedance mismatch	Reduce the gain setting via the DSP app. Adjust crossover frequencies for optimal sound. Ensure a clean, secure ground connection. Verify speakers are compatible with amplifier's impedance load.
Amplifier Overheating	Insufficient ventilation Improper speaker impedance Excessive volume for extended periods	Relocate amplifier to a better-ventilated area. Check speaker impedance. Reduce volume. Allow amplifier to cool down.

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

SPECIFICATIONS

Feature	Specification
Number of Channels	2
Amplifier Class	Class D Digital
Total Dynamic Power	310 Watts

Feature	Specification
RMS Power Output	225 Watts
Speaker Inputs	High-level (Speaker Wire), Low-level (RCA)
Illumination	RGB Custom Color
App Control	Yes (Jensen DSP AMP App)
Crossover	Adjustable High and Low-Pass Crossovers (32-320 Hz)
Frequency Response	20 Hz – 20 kHz
Signal-to-Noise Ratio	72 dBA
Outputs	RCA Pass Through
Gain Adjustment	Variable 200 mV ~ 6 V
Adjustable Bass Boost	45 Hz
Power Supply	PWM MOSFET
Fuse Size and Type	25A
Dimensions (H x W x D)	2.16" x 6.57" x 5.59"
Recommended Power/Ground Wire	4-8 AWG
Recommended Speaker Wire	12-18 AWG
Certification	CTA-2006-D Certified

WARRANTY AND SUPPORT

This product is covered by Jensen's standard warranty policy. For specific warranty terms and conditions, please refer to the warranty information provided with your purchase or visit the official Jensen website. The product's warranty is "As per Amazon's policy" as stated in the product specifications.

For technical support, troubleshooting assistance, or to inquire about service, please contact Jensen customer support. You can typically find contact information on the Jensen website or within your product packaging.

Online Resources: For the latest information, FAQs, and software updates, visit the official Jensen website: www.jensenmobile.com

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question