

Jensen POWER760

Jensen Power760 4-Channel 760 Watt Amplifier User Manual

Model: POWER760

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Jensen Power760 4-Channel 760 Watt Amplifier. Please read this manual thoroughly before attempting installation or operation to ensure proper use and to prevent damage to the unit or your vehicle's audio system. Retain this manual for future reference.

2. 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 insulated to prevent short circuits.
- Mount the amplifier securely in a location that allows for adequate ventilation and is protected from moisture and excessive heat.
- Do not operate the amplifier if it is damaged or malfunctioning.
- Consult a qualified professional for installation if you are unsure about any steps.

3. PACKAGE CONTENTS

Verify that your package contains the following items:

- Jensen Power760 4-Channel Amplifier
- User Manual (this document)
- Mounting Hardware (screws, washers)

4. PRODUCT FEATURES

The Jensen Power760 amplifier is designed to enhance your vehicle's audio experience with robust power and versatile control. Key features include:

- **4-Channel Configuration:** Provides flexible options for powering multiple speakers or bridging channels for higher power output.
- **760 Watts Peak Power:** Delivers significant power for dynamic audio reproduction.
- **2 Ohm Stable:** Capable of operating with lower impedance speakers for increased power output.
- **Variable Low Pass Filter (LPF):** Adjustable from 40 Hz to 240 Hz (12 dB per octave) for precise subwoofer integration.
- **Variable High Pass Filter (HPF):** Adjustable from 40 Hz to 400 Hz (12 dB per octave) for optimizing full-range speaker performance.
- **Variable Bass Boost:** Adjustable from 0 to 12 dB at 45 Hz to enhance low-frequency response.
- **Low Level Pass-Through RCAs:** Available on channels 1 & 2 for connecting additional amplifiers.
- **Encapsulated Power & Speaker Connectors:** Ensures secure and reliable connections.
- **Channel-Mode Selector Switch:** Allows selection between 4, 3, or 2 channel operation, including bridge/tri-mode capability.
- **Protection Circuitry:** Safeguards against short circuits, DC-offset, and thermal overload.
- **LED Indicators:** Green LED for operation, Red LED for protection status.



Figure 1: Front view of the Jensen Power760 4-Channel Amplifier. The amplifier features a brushed aluminum finish with the 'JENSEN POWER' logo prominently displayed, along with 'Power 760', '4CH Amp', and '760 WATTS MAX' text.

5. INSTALLATION

Proper installation is crucial for optimal performance and safety. Follow these steps carefully:

5.1 Mounting Location

Choose a mounting location that:

- Is dry and free from moisture.
- Allows for sufficient airflow around the amplifier's heatsink to prevent overheating.
- Is secure and protected from physical damage.
- Is easily accessible for wiring and adjustments.

Common locations include under seats, in the trunk, or behind interior panels.

5.2 Power Wiring

1. **Battery Connection:** Run a heavy gauge power cable (e.g., 8-gauge or larger, depending on total system power) directly from the positive terminal of the vehicle's battery to the amplifier's +12V terminal. Install an in-line fuse holder within 18 inches (45 cm) of the battery.
2. **Ground Connection:** Connect a short, heavy gauge ground cable from the amplifier's GND terminal to a clean, unpainted metal surface on the vehicle's chassis. Ensure a good electrical connection.
3. **Remote Turn-On:** Connect a remote turn-on wire from your head unit's remote output to the amplifier's REM terminal. This wire signals the amplifier to turn on and off with your head unit.

5.3 Audio Input Wiring

The Power760 supports both low-level (RCA) and high-level (speaker wire) inputs.

- **Low-Level Input (RCA):** Connect RCA cables from your head unit's pre-amp outputs to the amplifier's RCA input jacks. Use high-quality shielded RCA cables to minimize noise.
- **High-Level Input (Speaker Wire):** If your head unit does not have RCA outputs, connect the speaker output wires from your head unit directly to the amplifier's high-level input terminals. Refer to your head unit's manual for speaker wire polarity.

5.4 Speaker Wiring

Connect your speakers to the amplifier's speaker output terminals. Pay close attention to polarity (+ to + and - to -) for each speaker. The Power760 can be configured for 4-channel, 3-channel (bridged for subwoofers and stereo for full-range), or 2-channel (bridged) operation.

- **4-Channel Mode:** Connect one speaker to each of the four output channels. Ensure the impedance of each speaker is within the amplifier's stable operating range (typically 2 ohms or higher per channel).
- **Bridged Mode (2-Channel):** For higher power output to two speakers (e.g., subwoofers), bridge two channels together. Connect the positive terminal of the speaker to the positive terminal of one channel and the negative terminal of the speaker to the negative terminal of the adjacent channel (e.g., CH1+ and CH2-). Refer to the amplifier's labeling for specific bridging instructions. The minimum impedance for bridged operation is typically 4 ohms.
- **Tri-Mode (3-Channel):** This configuration allows for powering two full-range speakers and one subwoofer. Bridge two channels for the subwoofer and use the remaining two channels for the full-range speakers.

6. CONTROLS AND ADJUSTMENTS

The Jensen Power760 features several controls to fine-tune your audio system:

- **GAIN Control:** Adjusts the input sensitivity of the amplifier to match the output level of your head unit. Start with the gain at minimum and slowly increase until desired volume is achieved without distortion.
- **CROSSOVER Switch (LPF/HPF/FULL):**
 - **LPF (Low Pass Filter):** Allows only frequencies below the set frequency to pass through. Ideal for subwoofers.
 - **HPF (High Pass Filter):** Allows only frequencies above the set frequency to pass through. Ideal for full-range speakers to prevent distortion from low bass.
 - **FULL:** Allows all frequencies to pass through.
- **FREQUENCY Control:** Used in conjunction with the LPF or HPF setting to select the cutoff frequency.

- **BASS BOOST Control:** Provides an adjustable bass enhancement at 45 Hz (0-12 dB). Use sparingly to avoid distortion.
- **CHANNEL-MODE Selector Switch:** Selects between 4, 3, or 2 channel operation.

7. OPERATING INSTRUCTIONS

Once the amplifier is correctly installed and wired, follow these steps for initial power-up and operation:

1. Ensure all connections are secure and correct.
2. Set all amplifier gain controls to their minimum (lowest) setting.
3. Set all crossover switches to the "FULL" position initially.
4. Reconnect the vehicle's negative battery terminal.
5. Turn on your head unit. The amplifier's green "Operation" LED should illuminate.
6. Play a familiar audio track at a moderate volume level on your head unit.
7. Slowly increase the amplifier's gain controls until the desired volume is reached without audible distortion. If distortion occurs, reduce the gain slightly.
8. Adjust the crossover settings (LPF/HPF) and bass boost as needed to achieve your preferred sound balance.

8. MAINTENANCE

To ensure long-term performance and reliability of your Jensen Power760 amplifier:

- Keep the amplifier clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Ensure adequate ventilation around the amplifier at all times. Do not block the heatsink fins.
- Periodically check all wiring connections for tightness and corrosion.
- Avoid exposing the amplifier to extreme temperatures or moisture.

9. TROUBLESHOOTING

If you experience issues with your amplifier, consult the following table before seeking professional assistance:

Problem	Possible Cause	Solution
No Power (Green LED Off)	Blown fuse, poor power/ground connection, no remote signal.	Check in-line fuse, verify +12V, GND, and REM connections.
Protection Mode (Red LED On)	Short circuit in speaker wiring, excessive heat, low impedance load.	Check speaker wiring for shorts, ensure adequate ventilation, verify speaker impedance. Allow amplifier to cool.
No Sound Output	Incorrect input connections, low gain setting, muted head unit.	Verify RCA/high-level input connections, increase gain, check head unit settings.
Distorted Sound	Gain set too high, improper crossover settings, poor quality input signal.	Reduce gain, adjust crossover settings, check input signal quality.

Problem	Possible Cause	Solution
Engine Noise/Whine	Poor ground connection, RCA cables routed too close to power cables, ground loop.	Improve ground connection, re-route RCA cables away from power cables, consider a ground loop isolator.







10. SPECIFICATIONS

Feature	Detail
Model	POWER760
Channels	4-Channel
Peak Power Output	760 Watts
Nominal Output Power	4 x 75W (RMS) or 2 x 195W (RMS) bridged
Impedance Stability	2 Ohm Stable (stereo), 4 Ohm Stable (bridged)
Low Pass Filter (LPF)	Variable 40 Hz - 240 Hz (12 dB/octave)
High Pass Filter (HPF)	Variable 40 Hz - 400 Hz (12 dB/octave)
Bass Boost	Variable 0 - 12 dB at 45 Hz
Input Type	Low-Level (RCA) and High-Level (Speaker Wire)
Minimum Supply Voltage	14.1 Volts
Dimensions (L x W x H)	12 x 10 x 3 inches
Item Weight	3.3 pounds
Material	Plastic (housing)

11. WARRANTY AND SUPPORT

This product comes with a manufacturer's warranty. Please refer to the warranty card included in your package for specific terms and conditions. For technical support or service inquiries, please visit the official Jensen website or contact their customer service department.

Online Support: www.jensenmobile.com

	<p>Jensen JA Series Power Amplifier User Manual</p> <p>Comprehensive user manual for Jensen JA Series JA1CH, JA2CH, JA4CH, and JA5CH power amplifiers, covering installation, setup, troubleshooting, specifications, and connections.</p>
	<p>Jensen JA Series Power Amplifiers Owner's Manual and Installation Guide</p> <p>Comprehensive owner's manual and installation guide for Jensen JA Series power amplifiers (JA1B, JA2B, JA4B), covering preparation, connections, app operation, specifications, troubleshooting, and warranty information. Features DSP and Bluetooth app control.</p>
	<p>JENSEN JAHD240BT Waterproof Heavy Duty Audio Amplifier: Features, Specs & Installation</p> <p>Detailed overview of the JENSEN JAHD240BT waterproof heavy-duty two-channel audio amplifier, including features, specifications, installation guide, and Bluetooth operation. Ideal for marine and powersports applications.</p>
	<p>Jensen XDA Series Octane Power Amplifier Installation and Owner's Manual</p> <p>Comprehensive installation and owner's manual for Jensen XDA Series Octane Power Amplifiers (XDA91RB, XDA92RB, XDA94RB), covering preparation, connections, app operation, specifications, and troubleshooting.</p>
	<p>Jensen JMC-1250 Bluetooth 3-Speed Stereo Turntable System User Manual</p> <p>Comprehensive user manual for the Jensen JMC-1250 Bluetooth 3-Speed Stereo Turntable Music System with Dual Cassette Deck. Learn about setup, operation, features, safety instructions, and troubleshooting.</p>
	<p>Jensen JA Series Power Amplifier Owner's Manual</p> <p>Jensen JA Series power amplifiers owner's manual and installation guide. Covers JA1CH, JA2CH, JA4CH, JA5CH models with details on preparation, connections, specifications, and troubleshooting.</p>