

JL AUDIO 98223

JL Audio HD900/5 5-Channel HD Series Amplifier User Manual

Model: 98223

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your JL Audio HD900/5 5-Channel HD Series Amplifier. The HD900/5 is a high-performance Class D amplifier designed to deliver powerful and clear audio output for your vehicle's sound system. It features a compact design, advanced signal processing capabilities, and robust power delivery for both full-range speakers and subwoofers.

Please read this manual thoroughly before attempting installation or operation to ensure proper setup and to maximize the performance and longevity of your amplifier.

2. SAFETY INFORMATION

Always observe the following safety precautions when installing and operating the amplifier:

- Disconnect the vehicle's battery negative terminal before beginning any installation.
- Ensure all wiring is properly routed and secured to prevent damage from sharp edges or moving parts.
- Use appropriate gauge power and ground wires as specified in the installation section.
- Install an external fuse (60-amp recommended) on the main power wire within 18 inches (45 cm) of the battery. The amplifier itself does not have onboard fuses.
- Avoid mounting the amplifier in locations exposed to excessive heat, moisture, or direct sunlight.
- Do not operate the amplifier if it has been exposed to water or other liquids.
- Seek professional assistance if you are unsure about any part of the installation process.

3. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and reliability. The HD900/5 amplifier is designed for compact installation due to its efficient Class D design.

3.1. Mounting the Amplifier

Select a mounting location that provides adequate ventilation and protection from moisture. The amplifier dimensions are approximately 24.89 cm (9.8 inches) W x 10.16 cm (4 inches) H x 34.29 cm (13.5 inches) D. Ensure there is sufficient

space around the heat sinks for air circulation.



Figure 1: JL Audio HD900/5 5-Channel HD Series Amplifier. This image shows the top and side view of the amplifier, highlighting its compact silver and black casing with heat sink fins on the sides.

3.2. Wiring Connections

The HD900/5 utilizes removable power and speaker plugs for simplified wiring. Ensure all connections are secure and properly insulated.

- **Power and Ground:** A 4-gauge power and ground lead is recommended. An external 60-amp in-line fuse is required on the power wire, located close to the battery.
- **Signal Inputs:** The amplifier features differential-balanced inputs to minimize noise from the vehicle's electrical system. It accepts both preamp-level (RCA) and speaker-level inputs. A separate adapter may be required for speaker-level input.
- **Speaker Outputs:** Connect your speakers to the designated output terminals. The amplifier supports various impedance loads:
 - Front/Rear Channels: 100 watts RMS x 4 at 4 ohms, or 75 watts RMS x 4 at 1.5-3 ohms. Can be bridged to 150 watts RMS x 2 at 3-6 ohms.
 - Subwoofer Channel: 500 watts RMS x 1 at 1.5-4 ohms.
- **Remote Turn-On:** Connect the remote turn-on lead from your head unit to the amplifier's remote input.

4. OPERATING THE AMPLIFIER

The HD900/5 offers various controls for fine-tuning your audio system's performance.

4.1. Crossover Adjustments

- **Variable High-Pass Filter:** Available on the front and rear channels (50-500 Hz, 12 or 24dB/octave). This filter allows you to remove low frequencies from your full-range speakers, improving clarity and protecting them from over-excursion.
- **Variable Low-Pass Filter:** Available on the subwoofer channel (50-500 Hz, 12 or 24dB/octave). This filter allows only low frequencies to pass to the subwoofer, ensuring it reproduces only the intended bass notes.

- **Subsonic Filter:** On the subwoofer channel (24 dB/octave at 30 Hz). This filter removes extremely low, inaudible frequencies that can waste amplifier power and potentially damage subwoofers.

4.2. Input Sensitivity (Gain)

Adjust the input sensitivity controls to match the output voltage of your head unit. This ensures the amplifier receives an optimal signal without clipping or distortion. Refer to the detailed instructions in the full JL Audio manual for proper gain setting procedures.

4.3. Optional Remote Level Control

An optional wired remote control can be connected to the amplifier for convenient adjustment of the subwoofer channel's level from the driver's seat.

5. MAINTENANCE

The JL Audio HD900/5 amplifier requires minimal maintenance. Follow these guidelines to ensure its longevity:

- **Cleaning:** Periodically wipe the amplifier's exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure that the amplifier's heat sinks are not obstructed. Proper airflow is essential for dissipating heat and maintaining optimal operating temperature.
- **Connections:** Occasionally check all wiring connections to ensure they remain secure and free from corrosion.

6. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No Power / Amplifier Not Turning On	Blown fuse; loose power/ground connection; no remote turn-on signal.	Check external fuse; verify power, ground, and remote wire connections; ensure head unit is providing remote signal.
No Sound Output	Input signal issue; speaker wiring error; amplifier in protect mode.	Check RCA/speaker-level input connections; verify speaker wiring polarity and impedance; check amplifier status indicator.
Distorted Sound	Gain set too high; improper crossover settings; poor ground connection.	Reduce input sensitivity (gain); adjust crossover frequencies; ensure solid ground connection.
Amplifier Overheating	Insufficient ventilation; impedance too low; prolonged high-volume operation.	Ensure proper airflow around amplifier; verify speaker impedance is within specifications; reduce volume or allow amplifier to cool.

7. SPECIFICATIONS

Feature	Detail
Model Number	98223

Feature	Detail
Channels	5
RMS Power (4Ω)	4 x 100W (Front/Rear) + 1 x 500W (Subwoofer)
RMS Power (1.5-3Ω)	4 x 75W (Front/Rear)
RMS Power (Bridged 3-6Ω)	2 x 150W (Front/Rear)
RMS Power (Subwoofer 1.5-4Ω)	1 x 500W
Amplifier Class	Class D
High-Pass Filter	Variable (50-500 Hz, 12 or 24dB/octave) on Front/Rear
Low-Pass Filter	Variable (50-500 Hz, 12 or 24dB/octave) on Subwoofer
Subsonic Filter	24 dB/octave at 30 Hz on Subwoofer
Inputs	Differential-balanced (Preamp-level & Speaker-level)
Dimensions (L x W x H)	24.9 x 10.2 x 34.3 cm (approx. 9.8 x 4 x 13.5 inches)
Weight	3.11 kg (approx. 6.86 lbs)
Recommended External Fuse	60-amp


8. WARRANTY AND SUPPORT

Warranty information for your JL Audio HD900/5 amplifier is typically provided with your purchase documentation. Please refer to the warranty card or the official JL Audio website for specific terms and conditions, including warranty period and coverage details.

For technical support, service, or additional product information, please visit the official JL Audio website or contact their customer service department. Keep your proof of purchase for any warranty claims.






Official JL Audio Website: www.jlaudio.com

Related Documents - 98223

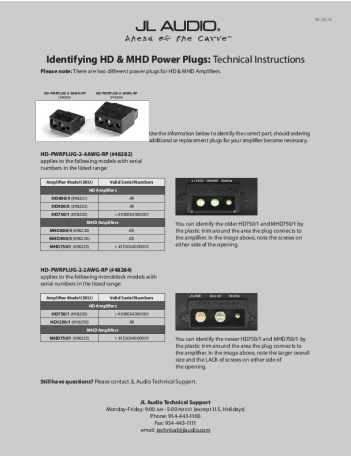
The image shows the front cover of a user manual for the Pyle PT8000CH 8-Channel Home Theater Amplifier. The cover features the Pyle logo at the top, a photograph of the black amplifier unit in the center, and the model name 'PT8000CH' and a brief description of the product below the photo. The text 'User Manual' is visible at the bottom of the cover.

[Pyle PT8000CH 8-Channel Home Theater Amplifier User Manual](#)

Comprehensive user manual for the Pyle PT8000CH 8-Channel Home Theater Amplifier, covering features, system design, installation, operation, and troubleshooting for multi-zone and home theater audio applications.

	<p>PYLE PT8000CH 8-Channel Home Theater Amplifier User Manual</p> <p>User manual for the Pyle PT8000CH 8-Channel Home Theater Amplifier, detailing features, installation, operation, and troubleshooting for multi-zone audio and home theater systems.</p>
	<p>Pyle PTA1000BT Wireless BT Pro Audio Power Amplifier User Manual</p> <p>Comprehensive user manual for the Pyle PTA1000BT, a 2-Channel 2000 Watt Pro Audio Rack Mount Amplifier with Wireless BT Streaming, USB/SD MP3 player, and FM radio. Includes safety, operation, and troubleshooting guides.</p>
	<p>Pyle PT8000CH: 8-Channel Home Theater Amplifier with Bluetooth & Multi-Zone Control</p> <p>Discover the Pyle PT8000CH, an 8000-watt, 8-channel rack-mount home theater amplifier. This user guide details its multi-zone audio control, Bluetooth features, and installation flexibility for custom audio systems. Ideal for home theaters and multi-room setups.</p>
	<p>Cicada Audio FLX1400-4P 4-Channel Amplifier with DSP - User Guide</p> <p>Detailed specifications and features for the Cicada Audio FLX1400-4P, a 4-channel 1400-watt full-range Class D amplifier with built-in DSP, engineered for motorcycle riding environments.</p>
	<p>Pyle PT8050CH & PT12050CH 8/12-Channel Audio Karaoke Wireless BT Amplifier User Manual</p> <p>User manual for the Pyle PT8050CH and PT12050CH 8/12-Channel Audio Karaoke Wireless BT Amplifier. This guide covers features, controls, troubleshooting, and technical specifications for these stage and studio sound mixer receiver systems.</p>

Documents - JL AUDIO – 98223



[\[pdf\]](#) Instructions

Technical Instructions JL Audio® Replacement Power Plug Type 2 HD PWRPLUG2 2AWG RP Paradyme avblng avbportal assets products documents Audio |||

08_30_16 Identifying HD MHD Power Plugs: Technical Instructions Please note:

There are two differ ... range: Amplifier Model SKU Valid Serial Numbers HD Amplifiers HD600/4 #98221 All HD900/5 **#98223** All HD750/1 #98220 #108034000001 MHD Amplifiers MHD600/4 #98224 All MHD900/5 #98...

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Please note: There are two different power plugs for HD & MHD Amplifiers.



applies to the following models with seat numbers in the United States:

Amplifier Model (SKU)	Valid Serial Numbers
100 Amplifiers	

You can identify the older HD50T and MH50T by the plastic trim around the area the plug connects to the amplifier. In the image above, note the screws on either side of the opening.

applies to the following monoblock motor serial numbers in the listed range:

Amplifier Model(SKU)	Valid Serial Numbers
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You can identify the newer HD750/T and MRD750/T by the plastic trim around the area the plug connects to the amplifier. In the image above, note the larger oval size and the LACK of screws on either side of the opening.

Still have questions? Please contact J. Audio Technical Support.

J. Audio Technical Support
Monday-Friday: 9:00 AM - 5:00 PM EST (except U.S. Holidays)
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email: techinfo@audio.com

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08_30_16 Identifying HD MHD Power Plugs: Technical Instructions Please note:

There are two differ ... range: Amplifier Model SKU Valid Serial Numbers HD
Amplifiers HD600/4 #98221 All HD900/5 **#98223** All HD750/1 #98220 #108034000001
MHD Amplifiers MHD600/4 #98224 All MHD900/5 #98...

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