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› [Legacy LA120 2-Channel 240W Amplifier User Manual](#)

## Legacy LA120

# Legacy LA120 2-Channel 240W Amplifier User Manual

Model: LA120

## INTRODUCTION

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The Legacy LA120 is a high-performance 2-channel power amplifier designed to deliver clear and powerful audio. This manual provides essential information for the proper installation, operation, and maintenance of your amplifier, ensuring optimal performance and longevity.



Front view of the Legacy LA120 2-Channel 240W Amplifier, showcasing its black aluminum alloy heat sink design, 'LEGACY' branding, 'LA120' model number, and '2 Channel High Performance Power Amplifier 240W' text. This image illustrates the compact and robust design of the amplifier.

## KEY FEATURES

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- **Total Output Power:** 240 Watts (120 Watts x 2 Channels)
- **Protection Circuitry:** 3-way protection (short circuit, thermal overload, electrical overload)
- **Heat Sink:** Heavy-duty aluminum alloy for efficient heat dissipation
- **Gain Control:** Variable gain control for precise audio level matching
- **Input Options:** High-level and low-level inputs for versatile connectivity

## SETUP AND INSTALLATION

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Proper installation is crucial for the amplifier's performance and safety. It is recommended to have this unit installed by a qualified professional.

## Mounting Location

Choose a mounting location that is dry, well-ventilated, and away from direct sunlight or heat sources. Ensure sufficient airflow around the amplifier's heat sink. The amplifier is designed for freestanding mount.

## Wiring Connections

- Power Connection (12V):** Connect the main power cable from the amplifier to the positive terminal of the vehicle's battery. Use appropriate gauge wire and an inline fuse (not supplied) as close to the battery as possible.
- Ground Connection:** Connect the ground cable from the amplifier to a clean, unpainted metal surface of the vehicle's chassis. Ensure a solid, low-resistance connection.
- Remote Turn-On:** Connect the remote turn-on wire from the amplifier to the remote output of your head unit. This will turn the amplifier on and off with your audio system.
- Audio Input:** Connect your audio source (head unit) to the amplifier's input terminals. Use either the high-level inputs (speaker wire from head unit) or low-level inputs (RCA cables from head unit's pre-outs).
- Speaker Output:** Connect your speakers to the amplifier's speaker output terminals. Ensure correct polarity (+ to + and - to -) for each speaker.

## OPERATING INSTRUCTIONS

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### Initial Power-Up

After all connections are made, turn on your vehicle's ignition and then your audio head unit. The amplifier should power on, indicated by an LED indicator (if present).

### Adjusting Gain Control

The variable gain control allows you to match the amplifier's input sensitivity to the output level of your head unit. Start with the gain control at its minimum setting. Play a familiar piece of music at a moderate volume on your head unit. Slowly increase the amplifier's gain control until you hear distortion, then back it off slightly until the sound is clear. Avoid setting the gain too high, as this can lead to distorted audio and potential damage to speakers or the amplifier.

## MAINTENANCE

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The Legacy LA120 amplifier requires minimal maintenance. Regular checks can help ensure its longevity.

- Cleaning:** Periodically wipe the exterior of the amplifier with a soft, dry cloth to remove dust and debris. Do not use liquid cleaners or solvents.
- Ventilation:** Ensure that the heat sink fins are not obstructed by dust or other materials. Proper airflow is essential for cooling.
- Connection Check:** Occasionally check all wiring connections to ensure they are secure and free from corrosion. Loose connections can lead to poor performance or damage.

## TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No Power / Amplifier Not Turning On	Blown fuse, loose power/ground/remote wire, faulty head unit remote output.	Check inline fuse and amplifier fuses. Verify all power, ground, and remote connections are secure and have proper voltage. Test remote wire for 12V when head unit is on.

Problem	Possible Cause	Solution
No Sound Output	No audio input signal, incorrect gain setting, speaker wires disconnected or shorted, amplifier in protection mode.	Check RCA/high-level input connections. Adjust gain. Inspect speaker wiring for shorts or disconnections. If amplifier is in protection, refer to protection section.
Distorted Sound	Gain set too high, poor ground connection, speaker impedance mismatch, damaged speakers.	Reduce gain setting. Ensure a solid ground connection. Verify speaker impedance matches amplifier's capabilities. Test speakers individually.
Amplifier Overheating / Protection Mode	Insufficient ventilation, low speaker impedance, prolonged high volume use, internal fault.	Ensure proper airflow around the amplifier. Check speaker impedance. Reduce volume. If problem persists, seek professional service. The 3-way protection system (short/thermal/overload) will activate to prevent damage.

## SPECIFICATIONS

Model Number	LA120
Brand	Legacy
Channels	2
Total Output Power	240 Watts (120 Watts x 2 Channels)
Protection Features	3-way (Short Circuit, Thermal Overload, Electrical Overload)
Heat Sink Material	Heavy-duty Aluminum Alloy
Gain Control	Variable
Input Type	High-level / Low-level
Operating Voltage	12 Volts DC
Dimensions (L x W x H)	21 x 21 x 6.8 centimeters (approx. 8.27 x 8.27 x 2.68 inches)
Weight	1.09 kg (approx. 2.4 lbs)
Mounting Type	Freestanding Mount

## WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or service, please refer to the warranty card included with your purchase or visit the official Legacy Audio website. Keep your proof of purchase for warranty claims.

