

DS18 PRO-GM6

DS18 PRO-GM6 Loudspeaker Instruction Manual

Model: PRO-GM6

1. INTRODUCTION

Thank you for choosing the DS18 PRO-GM6 6.5-inch Midrange Loudspeaker. This manual provides essential information for the proper installation, operation, and maintenance of your speaker. Please read this manual thoroughly before installation and use to ensure optimal performance and safety.

2. SAFETY INFORMATION

Always observe the following safety precautions when installing and operating your loudspeaker:

- Disconnect the vehicle's negative battery terminal before beginning any electrical work to prevent short circuits.
- Ensure proper wiring and connections. Incorrect wiring can damage the speaker, amplifier, or vehicle's electrical system.
- Use appropriate gauge wiring for power and speaker connections.
- Mount the speaker securely to prevent movement during vehicle operation.
- Avoid installing speakers in locations that obstruct vehicle safety features (e.g., airbags).
- Do not operate the audio system at excessively high volumes for prolonged periods, as this can cause hearing damage.
- Consult a professional installer if you are unsure about any part of the installation process.

3. WHAT'S IN THE BOX

- DS18 PRO-GM6 Loudspeaker (1 unit)
- Instruction Manual

Note: Additional mounting hardware or speaker wire may be required and is not included.

4. SPECIFICATIONS

DS18®



6.5" Mid-Range
Loudspeaker



Impedance: 8 Ohms



Black Stamp
Steel Basket



480W MAX Power
140W RMS Power



Frequency Response:
98Hz - 10KHz



Sensitivity:
92dB



PRO

PRO-GM6

Image: Front view of the DS18 PRO-GM6 loudspeaker with its main technical specifications highlighted.

Feature	Value
Model Name	PRO-GM6
Speaker Type	Mid Range Speaker
Speaker Size	6.5 Inches
RMS Power	140W
MAX Power	480W
Impedance	8 Ohms
Frequency Response	98 Hz - 10 KHz
Sensitivity	92dB

Feature	Value
Voice Coil Size	1.5 Inches (Kapton)
Magnet Material	Ferrite (23 oz)
Basket Material	Black Stamp Steel
Cone Material	Black Paper Woofer Cone
Surround Material	Cloth Surround
Mounting Depth	2.72 inches (69mm)
Cut-Out Dimension	5.70 inches (145mm)
Product Dimensions (DxWxH)	6.61"D x 6.61"W x 2.72"H
Item Weight	3.8 Pounds
Compatible Devices	Car, Truck, UTV, Bus, Tractor, ATV

5. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your DS18 PRO-GM6 loudspeaker. This section provides general guidelines. Specific vehicle requirements may vary.

5.1 Planning the Installation

- **Location:** Identify suitable mounting locations in your vehicle, typically door panels or custom enclosures. Ensure sufficient mounting depth (2.72 inches / 69mm) and clearance.
- **Wiring:** Plan the routing of speaker wires from your amplifier to the speaker locations. Avoid running speaker wires alongside power cables to prevent noise interference.
- **Amplifier Matching:** The PRO-GM6 has an 8 Ohm impedance and handles 140W RMS. Ensure your amplifier can safely deliver power within these specifications. Connecting an 8 Ohm speaker to a 4 Ohm amplifier output will result in lower power delivery than the amplifier's rated 4 Ohm output.

5.2 Mounting the Speaker



Image: Side profile of the DS18 PRO-GM6 loudspeaker, illustrating its depth and mounting flange.

1. **Prepare Mounting Surface:** If installing in a new location, carefully cut a circular opening with a diameter of 5.70 inches (145mm). Ensure the surface is sturdy and free of obstructions.
2. **Position Speaker:** Place the speaker into the opening, aligning the mounting holes with the pre-drilled holes or marking new ones.
3. **Secure Speaker:** Use appropriate screws (not included) to firmly secure the speaker to the mounting surface. Do not overtighten.

5.3 Wiring Connections



Image: Rear view of the DS18 PRO-GM6 loudspeaker, showing the positive and negative speaker terminals.

1. **Identify Terminals:** The speaker has clearly marked positive (+) and negative (-) terminals.
2. **Connect Wires:** Connect the positive (+) output from your amplifier to the positive (+) terminal on the speaker. Connect the negative (-) output from your amplifier to the negative (-) terminal on the speaker. Maintain correct polarity for all speakers in your system.
3. **Secure Connections:** Ensure all connections are tight and free from short circuits.



Video: A short 7-second clip demonstrating the DS18 PRO-GM6 loudspeaker rotating, showcasing its design and build from multiple angles. This can be useful for visual confirmation of the product before installation.

6. OPERATING INSTRUCTIONS

The DS18 PRO-GM6 is a midrange loudspeaker designed to reproduce frequencies between 98 Hz and 10 KHz. It should be used as part of a complete car audio system, typically paired with subwoofers for low frequencies and tweeters for high frequencies.

- **System Integration:** Connect the PRO-GM6 to an appropriate amplifier channel.
- **Crossover Settings:** For optimal sound quality and speaker protection, use an electronic crossover to filter out frequencies below 98 Hz (high-pass filter) and above 10 KHz (low-pass filter). Refer to your amplifier or head unit's manual for crossover adjustments.
- **Gain Adjustment:** Set the amplifier gain correctly to match the output voltage of your head unit. Avoid setting the gain too high, as this can lead to distortion and speaker damage.
- **Break-in Period:** Allow a break-in period of approximately 10-20 hours of normal listening before operating the speakers at high volumes. This allows the speaker's suspension components to loosen and perform optimally.

7. MAINTENANCE

The DS18 PRO-GM6 loudspeaker requires minimal maintenance:

- **Cleaning:** Use a soft, dry cloth to wipe the speaker cone and frame. Avoid using harsh chemicals or excessive moisture.
- **Inspection:** Periodically check speaker connections for tightness and ensure no wires are frayed or exposed.
- **Environmental Protection:** While the speaker features a steel basket, it is not waterproof. Protect it from direct exposure to water and extreme temperatures.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Sound from Speaker	<ul style="list-style-type: none">◦ Loose or incorrect wiring connection.◦ Amplifier not powered on or in protect mode.◦ Head unit output issue.◦ Speaker damaged.	<ul style="list-style-type: none">◦ Check all speaker and amplifier connections for proper polarity and tightness.◦ Verify amplifier power and status indicators.◦ Test with another known-good speaker or audio source.◦ Inspect speaker cone and voice coil for visible damage.
Distorted Sound	<ul style="list-style-type: none">◦ Amplifier gain set too high.◦ Incorrect crossover settings.◦ Speaker receiving too much power or too low frequencies.◦ Loose mounting.	<ul style="list-style-type: none">◦ Reduce amplifier gain.◦ Adjust crossover settings to filter out frequencies below 98 Hz.◦ Ensure speaker is securely mounted.
Weak or Muffled Sound	<ul style="list-style-type: none">◦ Incorrect wiring polarity.◦ Insufficient power from amplifier.	<ul style="list-style-type: none">◦ Verify speaker wire polarity (+ to + and - to -).◦ Ensure amplifier is providing adequate power for an 8 Ohm load.

9. WARRANTY AND SUPPORT

DS18 products are covered by a limited warranty. For specific warranty terms, conditions, and duration, please refer to the warranty card included with your product or visit the official DS18 website. For technical support, troubleshooting assistance beyond this manual, or service inquiries, please contact DS18 customer support directly. You can find more information and contact details on the [DS18 Official Store on Amazon](#).

