

## DS18 PRO-SM6.2

# DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker Instruction Manual

## 1. INTRODUCTION

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Thank you for choosing the DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker. This manual provides essential information for the proper installation, operation, and maintenance of your new audio component. The PRO-SM6.2 is engineered for high-performance audio systems, particularly suitable for motorcycle applications, offering an IP66 water-resistant rating for durability in various environmental conditions. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your speaker.



Figure 1: Angled view of the DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker, showcasing its red steel basket and cone.

## 2. SAFETY INFORMATION

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To prevent injury or damage to the speaker, please observe the following safety precautions:

- Always disconnect the vehicle's battery before beginning any electrical installation.
- Ensure all wiring is properly insulated and secured to prevent short circuits and damage.
- Avoid installing the speaker in locations that obstruct vehicle operation or safety features.
- Wear appropriate safety gear, including eye protection, during installation.
- Prolonged exposure to high volume levels can cause permanent hearing damage. Operate your audio system at safe listening levels.
- If you are unsure about any installation steps, consult a professional audio installer.

## 3. PRODUCT FEATURES AND PACKAGE CONTENTS

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### 3.1 Key Features

- **6.5-Inch Midrange Loudspeaker:** Optimized for clear and powerful midrange audio reproduction.
- **IP66 Water Resistance:** Designed to withstand water splashes and dust, making it suitable for outdoor and motorcycle environments.

- **High Power Handling:** 400W Max Power, 200W RMS Power for robust sound output.
- **2-Ohm Impedance:** Allows for efficient power transfer from compatible amplifiers.
- **Durable Construction:** Features a red steel basket and a non-pressed water-resistant paper cone with a cloth edge surround.
- **Compact Design:** Slim profile for versatile installation options.



 <p>6.5" FullRange Speaker</p>	 <p>Impedance: 2 Ohms</p>	 <p>Water Resistant Cone</p>
 <p>400W MAX Power 200W RMS Power</p>	 <p>Frequency Response: 65Hz - 12KHz</p>	 <p>Sensitivity: 95dB</p>



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PRO-SM6.2

Figure 2: Overview of key features and specifications for the DS18 PRO-SM6.2 loudspeaker.

### 3.2 Package Contents

- 1x DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker
- Mounting Hardware (screws, clips)
- Instruction Manual (this document)

## 4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your DS18 PRO-SM6.2 loudspeaker. Professional installation is recommended.

### 4.1 Pre-Installation Checks

1. Verify that the speaker size (6.5 inches) and mounting depth are compatible with your intended installation location.
2. Ensure your amplifier is capable of safely driving a 2-ohm load and provides sufficient power (200W RMS per speaker recommended).
3. Gather all necessary tools: screwdriver, wire strippers, crimping tool, drill, mounting template (if applicable).

## 4.2 Mounting Instructions

The PRO-SM6.2 requires a front mount baffle cut-out of 5.67 inches (144mm) and has a mounting depth of 2.12 inches (54mm).

1. Choose a suitable, secure mounting location that does not interfere with vehicle components or safety.
2. Using the provided template or speaker dimensions, mark the cut-out area and screw holes.
3. Carefully cut the opening and drill pilot holes for the mounting screws.
4. Position the speaker into the opening, aligning the screw holes.
5. Secure the speaker using the provided mounting screws. Do not overtighten, as this can damage the speaker frame or mounting surface.



Figure 3: Detailed dimensions for the DS18 PRO-SM6.2 loudspeaker, including overall diameter, mounting depth, and cut-out

size.

### 4.3 Wiring Instructions

The PRO-SM6.2 features two terminals for connection to your amplifier. The larger terminal is typically positive (+), and the smaller terminal is negative (-).

1. Ensure the amplifier is turned off and the vehicle's battery is disconnected.
2. Connect the positive (+) speaker wire from your amplifier to the positive terminal of the PRO-SM6.2.
3. Connect the negative (-) speaker wire from your amplifier to the negative terminal of the PRO-SM6.2.
4. Ensure all connections are secure and free from corrosion. Use appropriate gauge wiring for your power requirements.



Figure 4: Angled view of the speaker showing the positive (red) and negative (black) terminals for wiring connections.



Figure 5: Side profile view of the DS18 PRO-SM6.2 loudspeaker, illustrating its slim design and terminal placement.

## 5. OPERATING INSTRUCTIONS

Once installed, the DS18 PRO-SM6.2 loudspeaker operates as part of your vehicle's audio system.

1. **Power On:** Turn on your vehicle's ignition and audio head unit.
2. **Volume Adjustment:** Control the volume through your head unit or amplifier. Start at a low volume and gradually increase it to a comfortable listening level.
3. **Amplifier Tuning:** If using an external amplifier, refer to its manual for proper gain, crossover, and equalization settings. For optimal performance, set the high-pass filter to prevent low frequencies below 65Hz from reaching the midrange speaker.
4. **Break-in Period:** Allow a short break-in period (approximately 10-20 hours of normal use) for the speaker's suspension to loosen, which can improve sound quality.

## 6. MAINTENANCE

Regular maintenance helps ensure the longevity and performance of your DS18 PRO-SM6.2 loudspeaker.

- **Cleaning:** Despite its water-resistant rating, avoid direct high-pressure water spray. Clean the speaker with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Inspection:** Periodically check the speaker cone and surround for any signs of damage, tears, or deterioration. Ensure all mounting screws remain tight.
- **Environmental Protection:** While IP66 rated, prolonged exposure to extreme weather conditions (e.g., direct sunlight, heavy rain, extreme temperatures) should be minimized when possible to extend product life.

## 7. TROUBLESHOOTING

If you encounter issues with your DS18 PRO-SM6.2 loudspeaker, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No Sound	Loose or incorrect wiring; Amplifier off or faulty; Head unit issue.	Check all speaker and amplifier connections. Ensure amplifier is powered on. Test with another audio source or speaker.
Distorted Sound	Amplifier gain too high; Crossover settings incorrect; Damaged speaker.	Reduce amplifier gain. Adjust crossover settings (high-pass filter above 65Hz). Inspect speaker cone for damage.
Low Volume	Insufficient amplifier power; Incorrect wiring (e.g., phase issue); Head unit volume low.	Increase head unit volume. Check amplifier settings. Verify correct wiring polarity. Ensure amplifier provides adequate power.
Intermittent Sound	Loose connections; Faulty wiring; Overheating amplifier.	Inspect and secure all connections. Check wiring for breaks or shorts. Ensure amplifier has proper ventilation.

If these steps do not resolve the issue, please contact DS18 customer support or a qualified audio technician.

## 8. SPECIFICATIONS

Detailed technical specifications for the DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker:



Figure 6: Rear view of the DS18 PRO-SM6.2, displaying its product label with key specifications.

<b>Model Name</b>	PRO-SM6.2
<b>Speaker Type</b>	Midrange Loudspeaker
<b>Speaker Size</b>	6.5 Inches (165mm)
<b>Max Power Handling</b>	400 Watts
<b>RMS Power Handling</b>	200 Watts
<b>Impedance</b>	2 Ohms
<b>Frequency Response</b>	65 Hz - 12 kHz
<b>Sensitivity (1W/1M)</b>	95 dB
<b>Voice Coil Diameter</b>	1.5 Inches (Kapton VC)
<b>Magnet Material</b>	Ferrite (20 oz)

<b>Water Resistance Level</b>	IP66
<b>Mounting Depth</b>	2.12 Inches (54mm)
<b>Overall Diameter</b>	6.5 Inches (165mm)
<b>Front Mount Baffle Cut Out</b>	5.67 Inches (144mm)
<b>Product Dimensions (D x W x H)</b>	8"D x 8"W x 6.5"H
<b>Item Weight</b>	3.65 pounds (1.66 kg)
<b>Material</b>	Aluminum, Plastic (Red Steel Basket)

## 9. WARRANTY INFORMATION

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The DS18 PRO-SM6.2 Slim 6.5-Inch Midrange Loudspeaker comes with a limited warranty. For specific details regarding warranty coverage, terms, and conditions, please refer to the official DS18 website or contact DS18 customer support. Keep your purchase receipt as proof of purchase for any warranty claims.

## 10. SUPPORT

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For further assistance, technical support, or to download the official user manual PDF, please use the following resources:

- **Official User Manual (PDF):** [Download PDF](#)
- **DS18 Website:** Visit the official DS18 website for product information, FAQs, and contact details.
- **Customer Support:** Contact DS18 customer service for direct assistance with product inquiries or troubleshooting.