

## DS18 PRO-X6.4BM

# DS18 PRO-X6.4BM 6.5" Mid-Range Loudspeaker

## INSTRUCTION MANUAL

### Introduction

Thank you for choosing the DS18 PRO-X6.4BM 6.5" Mid-Range Loudspeaker. This manual provides essential information for the proper installation, operation, and maintenance of your new audio component. Please read this manual thoroughly before attempting installation or operation to ensure optimal performance and safety. The DS18 PRO-X6.4BM is engineered to deliver powerful and clear midrange audio, making it an excellent choice for custom car audio systems, motorcycle setups, and professional sound projects. Its robust design ensures durability and consistent performance even at high volumes.

### Safety Information

Always observe the following safety precautions when installing or operating this loudspeaker:

- Disconnect the vehicle's battery before beginning any electrical work to prevent short circuits.
- Ensure all wiring is properly insulated and secured to prevent damage or electrical hazards.
- Do not expose the speaker to excessive moisture or extreme temperatures.
- Avoid operating the speaker at distorted levels, as this can cause permanent damage to the speaker and other audio components.
- Professional installation is highly recommended for optimal performance and safety.

### Package Contents

Your DS18 PRO-X6.4BM Loudspeaker package should include:

- 1 x DS18 PRO-X6.4BM 6.5" Mid-Range Loudspeaker with Red Aluminum Bullet

*Note: Please inspect the package contents immediately upon receipt. If any items are missing or damaged, contact your retailer or DS18 customer support.*

## Specifications

|  |                               |
|--|-------------------------------|
| <b>Model Name</b>                          | PRO-X6.4BM                    |
| <b>Speaker Type</b>                        | Coaxial Mid-Range Loudspeaker |
| <b>Speaker Size</b>                        | 6.5 Inches                    |
| <b>RMS Power</b>                           | 250 Watts                     |
| <b>Max Power</b>                           | 500 Watts                     |
| <b>Impedance</b>                           | 4 Ohm                         |
| <b>Frequency Response</b>                  | 100Hz–12KHz                   |
| <b>Sensitivity (Signal-to-Noise Ratio)</b> | 96 dB                         |
| <b>Magnet Material</b>                     | Ferrite (30 oz)               |
| <b>Voice Coil</b>                          | 1.5" High-Temp                |
| <b>Mounting Depth</b>                      | 2.58" (65.5mm)                |
| <b>Overall Diameter</b>                    | 6.57" (167mm)                 |
| <b>Front Mount Baffle Cut Out</b>          | 5.7" (145mm)                  |
| <b>Product Dimensions (D x W x H)</b>      | 3"D x 7"W x 7"H               |
| <b>Item Weight</b>                         | 5 Pounds                      |

## Product Features

- Powerful Midrange Performance:** Delivers up to 500W MAX / 250W RMS, producing clean, punchy vocals and instruments.
- High Sensitivity:** With a 96dB sensitivity rating, this speaker is designed for extreme loudness with minimal power.
- Bullet-Style Design with Ferrite Magnet:** Integrated bullet dust cover enhances sound direction and clarity, with a durable 30 oz ferrite magnet for consistent performance.
- Ready for Nonstop High-Volume Action:** Features a robust 1.5" high-temp voice coil and 2.58" mounting depth, built to handle extended play at high volumes.
- Wide Frequency Response:** Broad 100Hz–12KHz frequency range ideal for midrange clarity and seamless integration with tweeters and subwoofers.

## Setup and Installation

Proper installation is crucial for the performance and longevity of your DS18 PRO-X6.4BM loudspeaker. Follow these general guidelines:

### Mounting

The DS18 PRO-X6.4BM is designed for car mount applications. Ensure the mounting location provides sufficient depth and clearance for the speaker and its magnet structure. The mounting depth is 2.58 inches (65.5mm) and the front mount baffle cut out is 5.7 inches (145mm).



Figure 1: Speaker Dimensions and Mounting Specifications

Use appropriate mounting hardware to secure the speaker firmly. Avoid overtightening screws, which can damage the speaker frame.

### Wiring

Connect the speaker to your amplifier using high-quality speaker wire. Ensure correct polarity: positive (+) terminal on the speaker to the positive (+) output on the amplifier, and negative (-) terminal on the speaker to the negative (-) output on the amplifier. Incorrect polarity can result in poor sound quality and reduced

performance.



Figure 2: Speaker Wiring Terminals

For optimal sound and to prevent damage, it is recommended to use an external amplifier that can provide sufficient RMS power (250W) to the speaker. Consult your amplifier's manual for proper gain settings and crossover adjustments.

## Operating Instructions

Once installed, the DS18 PRO-X6.4BM loudspeaker is ready for operation. Connect your audio source (e.g., car stereo, MP3 player) to your amplifier, and ensure the amplifier is powered on.

### Initial Playback and Tuning

Start with the amplifier's gain setting at its lowest point. Gradually increase the volume from your audio source. Slowly increase the amplifier's gain until you achieve the desired volume without any audible distortion. If distortion occurs, reduce the gain immediately.

For best sound quality, utilize your amplifier's crossover settings. As a mid-range loudspeaker, the PRO-X6.4BM performs best with a high-pass filter (HPF) set to prevent low bass frequencies from reaching the speaker. A typical HPF setting for this speaker would be around 100Hz or higher, depending on your system's overall setup and the presence of subwoofers.



**6.5"**

**4 Ohms**

*Experience every detail of your music thanks to our aluminum bullet design*



500W MAX Power  
250W RMS Power



Glossy Red  
Steel Basket

Figure 3: Key Power and Impedance Ratings

## Maintenance

To ensure the longevity and performance of your loudspeaker, follow these simple maintenance tips:

- Regularly clean the speaker cone and surrounding areas with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- Inspect wiring connections periodically to ensure they are secure and free from corrosion.
- Avoid exposing the speaker to direct sunlight or extreme temperatures for prolonged periods.
- Do not apply excessive pressure to the speaker cone or bullet, as this can cause damage.

## Troubleshooting

If you experience issues with your DS18 PRO-X6.4BM loudspeaker, refer to the following common problems

and solutions:

| Problem               | Possible Cause   | Solution  |
|-----------------------|--|---|
| No Sound from Speaker | Loose or incorrect wiring connections. Amplifier not powered on or in protect mode. Speaker damaged. | Check all wiring connections for proper polarity and secure fit. Verify amplifier power and status. Test speaker with another known good amplifier if possible. |
| Distorted Sound       | Amplifier gain set too high. Crossover settings incorrect. Speaker damaged.                          | Reduce amplifier gain. Adjust HPF settings on amplifier. Inspect speaker cone for physical damage.  |
| Low Volume Output     | Amplifier gain set too low. Incorrect wiring. Low input signal.                                      | Increase amplifier gain gradually. Verify correct wiring polarity. Ensure audio source volume is adequate.  |

*If the problem persists after attempting these solutions, please contact DS18 customer support or a qualified audio technician.*

## Warranty and Support

The DS18 PRO-X6.4BM Loudspeaker comes with a limited warranty. For specific details regarding warranty coverage, duration, and terms, please refer to the warranty information provided with your purchase or visit the official DS18 website.

For technical support, troubleshooting assistance beyond what is covered in this manual, or inquiries about replacement parts, please contact DS18 customer service through their official website or contact information provided by your retailer.