

DS18 ZXI12.4D

DS18 ZXI12.4D 12-inch High Excursion Car Subwoofer Instruction Manual

MODEL: ZXI12.4D

1. Introduction

Thank you for choosing the DS18 ZXI12.4D 12-inch High Excursion Car Subwoofer. This manual provides essential information for the proper installation, operation, and maintenance of your subwoofer. Please read this manual thoroughly before attempting installation or operation to ensure optimal performance and safety.

The ZXI12.4D subwoofer is engineered for powerful low-frequency reproduction in car audio systems. It features a robust design with a 3-inch voice coil, dual 4-ohm impedance, and a high excursion surround for extended linear movement.

2. Safety Information

Observe the following safety precautions during installation and operation:

- Always disconnect the vehicle's battery negative terminal before starting any electrical work.
- Ensure all wiring is correctly routed and secured to prevent damage or short circuits.
- Use appropriate gauge wiring for power, ground, and speaker connections to handle the subwoofer's power requirements.
- Avoid installing the subwoofer in locations where it may obstruct vehicle operation or safety devices.
- Protect wiring from sharp edges and heat sources.
- Operating audio systems at excessively high volumes can cause permanent hearing damage.

3. Package Contents

Verify that your package contains the following items:

- DS18 ZXI12.4D 12-inch High Excursion Car Subwoofer (1 unit)

4. Technical Specifications

Refer to the table below for detailed specifications of the DS18 ZXI12.4D subwoofer:

Feature	Specification
Model	ZXI12.4D
Speaker Type	Subwoofer
Speaker Size	12 Inches
RMS Power Handling	1000 Watts
MAX Power Handling	2000 Watts
Impedance	Dual Voice Coil (DVC) 4 Ohm (4+4 Ohms)
Frequency Response	15Hz - 1.8KHz
Sensitivity	89.2 dB
Voice Coil Size	3-inch
XMAX (one-way)	32mm
Mounting Depth	7.55 Inches
Recommended Use	Car Audio Bass Reproduction



12" Subwoofer



Impedance:
4+4 Ohms



Mounting
Depth: 7.55"



2000W MAX Power
1000W RMS Power



Frequency Response:
10Hz - 1.8KHz



Sensitivity:
89.2dB



ELITE

ZXI12.4D

Image 1: Graphic displaying key specifications of the DS18 ZXI12.4D subwoofer, including size, impedance, power, frequency response, mounting depth, and sensitivity.

5. Installation Guide

Proper installation is crucial for the performance and longevity of your subwoofer. If you are unsure about any part of the installation process, consult a professional car audio installer.

5.1 Enclosure Recommendations

The ZXI12.4D subwoofer is designed to perform optimally in a custom-built enclosure. Consult DS18's official resources or a professional for recommended sealed or ported enclosure volumes and tuning frequencies specific to this model.

5.2 Mounting

Ensure the mounting surface is rigid and free from obstructions. Use appropriate screws to secure the subwoofer firmly into the enclosure. The mounting depth required is 7.55 inches.



Image 2: Angled view of the DS18 ZXI12.4D 12-inch High Excursion Car Subwoofer, showcasing its cone and surround.

5.3 Wiring Overview

The ZXI12.4D features a Dual Voice Coil (DVC) 4 Ohm design. This means it has two separate 4-ohm voice coils that can be wired in series or parallel to achieve different impedance loads for your amplifier. Always match the subwoofer's final impedance to your amplifier's stable output impedance.



Image 3: Bottom view of the DS18 ZX12.4D subwoofer, highlighting the dual voice coil terminals for wiring connections.

6. Wiring Configurations (DVC 4 Ohm)

Understanding how to wire your DVC 4 Ohm subwoofer is essential for proper system impedance matching. Below are the two primary configurations:

6.1 Parallel Wiring (2 Ohm Load)

To achieve a 2-ohm load, connect the positive terminal of Voice Coil 1 to the positive terminal of Voice Coil 2. Then, connect the negative terminal of Voice Coil 1 to the negative terminal of Voice Coil 2. Finally, connect the combined positive terminals to the amplifier's positive output and the combined negative terminals to the amplifier's negative output.

- Connect VC1 (+) to VC2 (+)
- Connect VC1 (-) to VC2 (-)
- Connect combined (+) to Amplifier (+)
- Connect combined (-) to Amplifier (-)

This configuration is suitable for amplifiers stable at 2 ohms.

6.2 Series Wiring (8 Ohm Load)

To achieve an 8-ohm load, connect the positive terminal of Voice Coil 1 to the amplifier's positive output. Connect the negative terminal of Voice Coil 1 to the positive terminal of Voice Coil 2. Finally, connect the negative terminal of Voice Coil 2 to the amplifier's negative output.

- Connect VC1 (+) to Amplifier (+)
- Connect VC1 (-) to VC2 (+)
- Connect VC2 (-) to Amplifier (-)

This configuration is suitable for amplifiers stable at 8 ohms.

7. Operating Instructions

7.1 Initial Break-in Period

Allow a break-in period of approximately 10-20 hours of normal listening before operating the subwoofer at high volumes. This allows the suspension components (surround and spider) to loosen up and reach their optimal compliance, improving overall performance and longevity.

7.2 Amplifier Gain Setting

Set your amplifier's gain control carefully. The gain control is not a volume knob; it matches the amplifier's input sensitivity to the output voltage of your head unit. Incorrect gain settings can lead to distortion and potential damage to the subwoofer. Start with the gain at its minimum, then slowly increase it until you hear distortion, then back off slightly.

8. Maintenance

The DS18 ZXI12.4D subwoofer requires minimal maintenance:

- Keep the subwoofer cone and surround free from dust and debris. Use a soft, dry cloth for cleaning.
- Periodically check all wiring connections to ensure they are secure and free from corrosion.
- Avoid exposing the subwoofer to extreme temperatures or moisture.

9. Troubleshooting Guide

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

Problem	Possible Cause	Solution
No Sound	No power to amplifier; loose wiring; amplifier in protect mode; incorrect input signal.	Check power/ground connections; verify remote turn-on; inspect speaker wires; check amplifier fuses; ensure head unit is on and sending signal.
Distorted Sound	Amplifier gain set too high; incorrect crossover settings; damaged subwoofer.	Reduce amplifier gain; adjust low-pass filter on amplifier/head unit; inspect subwoofer for physical damage.
Weak Bass Output	Incorrect wiring impedance; insufficient amplifier power; phase issues; improper enclosure.	Verify wiring configuration matches amplifier impedance; ensure amplifier provides adequate power; check subwoofer phase setting; confirm enclosure is correctly sized and built.

Problem	Possible Cause	Solution
Subwoofer Overheating	Amplifier clipping; prolonged high volume use; inadequate ventilation.	Reduce amplifier gain to eliminate clipping; allow subwoofer to cool; ensure proper airflow around the enclosure.

10. Warranty and Support



10.1 Limited Warranty





DS18 products are covered by a limited warranty against defects in materials and workmanship under normal use. The specific terms and duration of the warranty may vary. Please retain your proof of purchase for warranty claims.

10.2 Customer Support

For technical assistance, warranty inquiries, or further information regarding your DS18 ZXI12.4D subwoofer, please contact DS18 customer support through their official website or authorized dealers. Provide your product model number and purchase details when seeking support.

Related Documents - ZXI12.4D

	<p>DS18 ZXI12.4D High Excursion 12" Subwoofer Owner's Manual</p> <p>Detailed owner's manual for the DS18 ZXI12.4D High Excursion 12-inch Dual Voice Coil (DVC) 4-ohm subwoofer, including specifications, dimensions, and performance data.</p>
	<p>DS18 HOOL-X15.1DHE 15-Inch Competition High Excursion Subwoofer Owner's Manual</p> <p>Owner's manual for the DS18 HOOL-X15.1DHE 15-inch competition high excursion subwoofer. Contains detailed specifications, motor details, Thiele/Small parameters, physical measurements, and recommended enclosure designs for optimal performance.</p>

	<p>DS18 HOOL-X15.2DHE 15" Competition High Excursion Subwoofer Owner's Manual</p> <p>This owner's manual provides detailed specifications, dimensions, and recommended enclosure designs for the DS18 HOOL-X15.2DHE 15-inch competition high excursion subwoofer.</p>
	<p>DS18 GEN-XX12.4DHE 12-Inch High Excursion Subwoofer Owner's Manual and Specifications</p> <p>Detailed owner's manual and technical specifications for the DS18 GEN-XX12.4DHE 12-inch high excursion subwoofer, including power handling, impedance, sensitivity, frequency response, Thiele/Small parameters, and enclosure recommendations.</p>
	<p>DS18 ZXi12.2D 12-Inch High Excursion Subwoofer Owner's Manual</p> <p>Detailed owner's manual for the DS18 ZXi12.2D 12-inch high excursion subwoofer, including specifications, Thiele & Small parameters, and recommended enclosure dimensions for both sealed and ported boxes.</p>
	<p>DS18 HOOL-X12.1DHE 12" Competition High Excursion Subwoofer Owner's Manual</p> <p>Owner's manual for the DS18 HOOL-X12.1DHE 12-inch competition high excursion subwoofer, detailing specifications, dimensions, and recommended enclosure designs for optimal performance.</p>

Documents - DS18 – ZXI12.4D



[\[pdf\]](#) User Manual Owner's Manual Specifications

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OWNER S MANUAL ZXi12.4D HIGH EXCURSION 12 SUBWOOFER DVC 4-OHM

ZXi12.4D 12.55 / 319mm 7.55 / 192mm 9.13 / 232mm 7.08 / 180mm 11.1 / 282mm

Specifications: Nominal Diameter..... 12

Nominal Impedance

lang:en score:39 filesize: 664.44 K page_count: 4 document date: 2024-04-04



[DS18 ZXi12.4D High Excursion 12" Subwoofer Owner's Manual](#)

Detailed owner's manual for the DS18 ZXi12.4D High Excursion 12-inch Dual Voice Coil (DVC) 4-ohm subwoofer, including specifications, dimensions, and performance data.

lang:en score:36 filesize: 672.9 K page_count: 4 document date: 2021-08-17



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ZXi12 4D SPANGLISH MANUAL WEB V1 Ds18 High Excursion 12 Subwoofer 2000W Watts DVC 4 Ohms Quad Stacked Magnets car audio subwoofers DS18 v 1654023515 u003e u003cstrong u003eZR12 cdn shopify s files 1 0018 0142 0861 |||

OWNER S MANUAL ZXi12.4D HIGH EXCURSION 12 SUBWOOFER DVC 4-OHM

ENGLISH ESPAOL ZXi12.4D 12.55 / 319mm 7.55 / 192mm 9.13 / 232mm 7.08 /

180mm 11.1 / 282mm Specifications: Nominal

Diameter.....1..2.. Nominal Impedance

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ZXi12.4D 12.55 / 319mm 7.55 / 192mm 9.13 / 232mm 7.08 / 180mm 11.1 / 282mm

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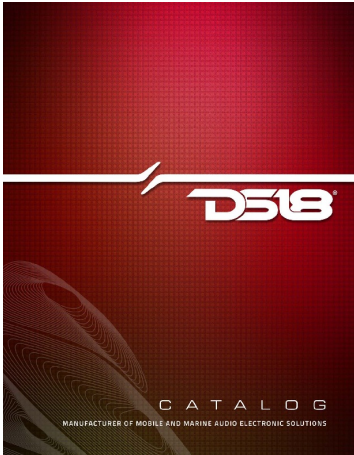
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light BULLET / 8 / 4 ohms / ... hm ENS-PRO-CHX82A.LD Loaded Ported Voceteo Box
2x 8 speakers / 2X 3.8 tweeters / 1100W / 4 ohms **ZXI12.4D** ELITE-Z subwoofer 12 /
4 4 OHMS / 2000W ZR8.4D HIGH EXCURSION subwoofer 8 / 4 4 OHMS / 9...

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