

Memphis 15-mcr10d4

Memphis 15-mcr10d4 Subwoofer

USER MANUAL

1. Introduction

Thank you for choosing the Memphis 15-mcr10d4 Dual 4-Ohm Subwoofer. This manual provides essential information for the proper installation, operation, and maintenance of your new subwoofer. Please read this manual thoroughly before attempting to install or use the product to ensure optimal performance and safety.

The Memphis 15-mcr10d4 is a high-performance 10-inch subwoofer designed to deliver powerful and accurate bass response, enhancing your audio experience in various applications, including car audio systems, home theater setups, and other custom audio installations.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the product and other equipment:

- **Power Handling:** Do not exceed the rated power handling of 300 Watts RMS (600 Watts Peak). Overpowering the subwoofer can lead to permanent damage.
- **Proper Wiring:** Ensure all wiring connections are secure and correctly polarized. Incorrect wiring can cause damage to the subwoofer or amplifier.
- **Ventilation:** Install the subwoofer in an enclosure that allows for adequate ventilation to prevent overheating, especially during prolonged high-power operation.
- **Hearing Protection:** Prolonged exposure to high sound pressure levels can cause permanent hearing damage. Use caution and avoid excessively loud volumes.
- **Professional Installation:** If you are unsure about any aspect of the installation, consult a qualified audio professional.
- **Environmental Conditions:** Avoid exposing the subwoofer to extreme temperatures, moisture, or direct sunlight.

3. Product Overview

The Memphis 15-mcr10d4 subwoofer is engineered for robust performance and durability. Key components include:

- **Cone:** Designed for rigidity and light weight, ensuring accurate bass reproduction.
- **Surround:** Features a double-stitched butyl rubber surround for excellent excursion capabilities and long-term durability.
- **Voice Coil:** Equipped with a 1.5-inch Kapton voice coil with 4-layer winding, capable of handling significant power.

- **Terminals:** Spring-loaded push terminals for secure and easy wire connections.
- **Magnet Structure:** A robust motor assembly provides strong magnetic force for precise cone control.



Figure 3.1: Angled view of the Memphis 15-mcr10d4 subwoofer, highlighting its robust construction.

This image displays the subwoofer from an angled perspective, revealing the textured cone, the durable butyl rubber surround, and a portion of the sturdy magnet assembly. The design emphasizes both aesthetic appeal and functional integrity.



Figure 3.2: Front view of the Memphis 15-mcr10d4 subwoofer.

This image provides a direct front view of the subwoofer, showcasing the main cone and the wide, flexible butyl rubber surround. The clean design is evident, ready for flush mounting in an enclosure.



Figure 3.3: Angled view showing the subwoofer's terminals.

This angled view focuses on the spring-loaded push terminals located on the side of the subwoofer, providing a clear look at the connection points for speaker wires. The robust construction around the terminals is also visible.



Figure 3.4: Rear view of the subwoofer, displaying the magnet structure.

This image shows the rear of the subwoofer, prominently featuring the large, powerful magnet structure and the sturdy basket design. The speaker terminals are also visible, indicating the connection points.

4. Setup

4.1 Enclosure Requirements

The performance of your subwoofer is highly dependent on the enclosure it is installed in. For optimal sound quality and longevity, it is recommended to use a sealed or ported enclosure designed to match the subwoofer's specifications. Consult a professional or use specialized software for enclosure design if you are building a custom box.

- **Mounting Depth:** Ensure your enclosure provides at least 13 cm (5.12 inches) of mounting depth clearance.
- **Mounting Type:** This subwoofer is designed for flush mounting.

4.2 Wiring Connections (Dual 4-Ohm)

The Memphis 15-mcr10d4 features dual 4-ohm voice coils, offering flexibility in wiring configurations to achieve different impedance loads for your amplifier. Always ensure your amplifier is stable at the chosen impedance.

- **Parallel Wiring (2-Ohm Load):** Connect the positive (+) terminals of both voice coils together, and connect the negative (-) terminals of both voice coils together. Then, connect the combined positive to the amplifier's positive output and the combined negative to the amplifier's negative output. This configuration results in a 2-ohm load.
- **Series Wiring (8-Ohm Load):** Connect the positive (+) terminal of one voice coil to the negative (-) terminal of the other voice coil. Then, connect the remaining positive (+) terminal to the amplifier's positive output and the remaining negative (-) terminal to the amplifier's negative output. This configuration results in an 8-ohm load.

Important: Always verify the impedance stability of your amplifier before connecting the subwoofer. Incorrect impedance can damage your amplifier.

4.3 Connecting to an Amplifier

1. Turn off all audio equipment before making any connections.
2. Determine the desired wiring configuration (parallel for 2-ohm or series for 8-ohm) based on your amplifier's capabilities.
3. Connect the speaker wires from your amplifier's subwoofer output to the subwoofer's terminals according to your chosen wiring configuration. Ensure correct polarity (+ to + and - to -).

- 4. Secure all connections firmly to prevent loose wires and potential short circuits.

5. Operating

5.1 Initial Power-Up and Gain Setting

After installation, carefully power on your audio system. Start with the amplifier's gain setting at its minimum. Gradually increase the gain until the desired volume is achieved without any audible distortion. If distortion occurs, reduce the gain immediately.

5.2 Break-in Period

Like all new speakers, your Memphis 15-mcr10d4 subwoofer requires a break-in period. During the first 20-30 hours of use, operate the subwoofer at moderate volumes. This allows the suspension components (surround and spider) to loosen up and reach their optimal compliance, leading to improved bass response and longevity.

6. Maintenance

The Memphis 15-mcr10d4 subwoofer is designed for durability and requires minimal maintenance. Follow these guidelines to ensure its longevity:

- **Cleaning:** Use a soft, dry cloth to wipe down the cone and surround. Avoid using harsh chemicals or abrasive cleaners.
- **Inspection:** Periodically inspect the subwoofer for any signs of damage to the cone, surround, or voice coil. Check all wiring connections for tightness and corrosion.
- **Environmental Protection:** Ensure the subwoofer remains protected from direct sunlight, extreme temperatures, and moisture.

7. Troubleshooting

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

Problem	Possible Cause	Solution
No Sound from Subwoofer	No power to amplifier Loose or incorrect wiring Amplifier in protect mode Source unit issue	Check amplifier power connections and fuses. Verify all speaker and signal wires are securely connected and correctly polarized. Check amplifier for overheating or short circuits. Ensure audio source is playing and outputting signal.
Distorted Sound	Amplifier gain set too high Clipping from amplifier Incorrect enclosure Damaged voice coil	Reduce amplifier gain. Ensure amplifier is not being overdriven. Verify enclosure volume and tuning are appropriate for the subwoofer. Inspect voice coil for damage (e.g., rubbing sound). If damaged, professional repair or replacement may be needed.

Problem	Possible Cause	Solution
Subwoofer Overheating	Overpowering	Reduce volume or amplifier gain.
	Inadequate ventilation	Ensure enclosure has proper ventilation.
	Incorrect impedance load	Verify wiring configuration matches amplifier's stable impedance.

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

8. Specifications

Feature	Specification
Model	15-mcr10d4
Speaker Type	Subwoofer
Size	10 inches (25.4 cm)
RMS Power Handling	300 Watts
Peak Power Handling	600 Watts
Impedance	Dual 4-Ohm
Voice Coil	1.5 inch (3.8 cm) Kapton, 4-layer winding
Surround Material	Double-stitched Butyl Rubber
Mounting Depth	13 cm (5.12 inches)
Mounting Type	Flush Mount
Power Source	Electric Cable (requires external amplifier)
Recommended Uses	Car audio systems, home theater, custom audio installations

9. Warranty and Support

Memphis products are manufactured to the highest quality standards. For information regarding the warranty period and terms for your 15-mcr10d4 subwoofer, please refer to the warranty card included with your purchase or visit the official Memphis Car Audio website.

For technical support, troubleshooting assistance beyond what is provided in this manual, or service inquiries, please contact Memphis Car Audio customer support through their official website or authorized dealer. When contacting support, please have your product model number (15-mcr10d4) and purchase information readily available.

Note: Unauthorized modifications or repairs may void your warranty.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question