

MB Quart FKB116+FKB113

MB Quart Formula FKB116 6.5" and FKB113 5.25" Coaxial Speakers User Manual

Model: FKB116+FKB113

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1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MB Quart Formula FKB116 6.5-inch and FKB113 5.25-inch coaxial car speakers. These speakers are designed to deliver clear audio performance in a vehicle environment. Please read this manual thoroughly before installation and use to ensure proper function and longevity of your product.



Figure 1.1: MB Quart Formula FKB116 (larger) and FKB113 (smaller) coaxial speakers.

2. SAFETY INFORMATION

Observe the following safety precautions during installation and operation:

- Always disconnect the vehicle's battery negative terminal before beginning any electrical work to prevent short circuits.
- Ensure all wiring is properly insulated to prevent electrical shorts and potential damage to the vehicle's electrical system or the speakers.
- Mount speakers securely to prevent them from becoming loose during vehicle operation, which could cause injury or damage.
- Avoid installing speakers in locations that obstruct airbags, driver visibility, or vehicle controls.
- Do not operate audio systems at excessively high volumes for prolonged periods, as this can cause hearing damage.
- If you are unsure about any part of the installation process, consult a qualified professional car audio installer.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- One pair of MB Quart Formula FKB116 6.5" Coaxial Speakers
- One pair of MB Quart Formula FKB113 5.25" Coaxial Speakers
- Mounting hardware (screws, clips)
- Speaker grilles (if applicable)

4. KEY FEATURES

The MB Quart Formula coaxial speakers incorporate several design elements for enhanced audio performance and durability:

- **Speaker Surround:** Butyl rubber surrounds provide durability and contribute to deeper mid-bass impact.
- **Voice Coil:** Pure Copper voice coil creates a strong magnetic field with a very thin extrusion for efficient operation.
- **Voice Coil Former:** Kapton voice coil former is lightweight and efficiently dissipates heat, improving speaker longevity.
- **Spider:** Natural fiber allows flexibility while infused epoxy provides strength during the manufacturing process, ensuring consistent performance.
- **Cone Material:** Lightweight thermal-formed polypropylene cones enable faster midrange response for clear audio reproduction.
- **Cooling System:** An over-coil cooling system facilitates air exchange over the voice coil through the spider, aiding in thermal management.



Figure 4.1: Detailed view of a speaker's cone and voice coil area, highlighting construction.

5. TECHNICAL SPECIFICATIONS

Refer to the following specifications for your MB Quart Formula speakers:

Specification	FKB116 (6.5")	FKB113 (5.25")
Speaker Type	3-way Coaxial	2-way Coaxial
RMS Power Handling	60 Watts	45 Watts
Peak Power Handling	120 Watts	90 Watts
Speaker Impedance	4 Ohms	4 Ohms
Frequency Response	40Hz - 22kHz	60Hz - 20kHz
Sensitivity	88dB	88dB
Crossover Point	4kHz	4kHz
Crossover Slope	12dB	12dB
Mounting Diameter / Cut Out	5.59 inches	4.48 inches
Outside Diameter	7.01 inches	6.26 inches
Mounting Depth / Chassis Depth	2.13 inches	2 inches
Product Dimensions (Overall Package)	17"D x 15.25"W x 9.75"H	
Item Weight (Overall Package)	6 Pounds	
UPC	841992122765	

6. SETUP AND INSTALLATION

Proper installation is crucial for optimal speaker performance. Follow these general steps:

6.1 Tools and Materials

- Wire strippers/crimpers

- Screwdriver set (Phillips and flathead)
- Drill with appropriate bits (if custom mounting)
- Speaker wire (if replacing existing)
- Electrical tape or heat shrink tubing
- Panel removal tools (plastic pry tools)

6.2 Pre-Installation Steps

1. **Disconnect Battery:** Always disconnect the negative terminal of your vehicle's battery before starting any electrical work.
2. **Access Speaker Locations:** Carefully remove door panels, rear deck covers, or other trim pieces to access the factory speaker locations. Refer to your vehicle's service manual for specific instructions.
3. **Remove Old Speakers:** Disconnect the wiring from the old speakers and unmount them.

6.3 Mounting the Speakers

1. **Test Fit:** Place the new MB Quart speakers into the existing openings to ensure a proper fit. If the opening is too small, careful modification may be required.
2. **Secure Mounting:** Use the provided screws and clips to securely fasten the speakers. Ensure there is no vibration or movement.



Figure 6.1: MB Quart speaker with protective grille, ready for installation.

6.4 Wiring Connections

1. **Identify Polarity:** Speakers have positive (+) and negative (-) terminals. Match these to the corresponding wires from your vehicle's audio system or amplifier. Typically, the positive terminal is marked with a '+' or a larger tab, and the negative with a '-' or a smaller tab.
2. **Connect Wires:** Strip a small amount of insulation from the speaker wires and connect them firmly to the speaker terminals. Use crimp connectors or solder for a secure connection, then insulate with electrical tape or heat shrink tubing.
3. **Verify Connections:** Double-check all connections to ensure they are tight and correctly polarized. Incorrect polarity can lead to poor sound quality.



Figure 6.2: A pair of MB Quart coaxial speakers, illustrating the connection terminals.

6.5 Post-Installation

1. **Reassemble:** Carefully reattach all trim panels and covers.
2. **Reconnect Battery:** Reconnect the negative terminal of your vehicle's battery.
3. **Test System:** Turn on your vehicle's audio system and test the speakers at a low volume. Gradually increase the volume to ensure proper function and sound quality.

7. OPERATING YOUR SPEAKERS

Once installed, your MB Quart Formula speakers will operate as part of your vehicle's audio system. No specific controls are on the speakers themselves. Adjust audio settings through your head unit or amplifier.

- **Volume Control:** Adjust the overall volume using your head unit.
- **Balance and Fader:** Use these controls to distribute sound evenly between left/right and front/rear speakers.
- **Equalizer Settings:** Experiment with your head unit's equalizer (EQ) settings to tailor the sound to your preference. Start with a flat EQ and make small adjustments.
- **Crossover Settings:** If using an external amplifier with crossover capabilities, set the high-pass filter (HPF) for the speakers to prevent low frequencies that could cause distortion or damage. Refer to your amplifier's manual for recommended settings.

8. MAINTENANCE

Your MB Quart Formula speakers require minimal maintenance to ensure long-lasting performance:

- **Cleaning:** Periodically wipe the speaker grilles and surrounds with a soft, dry cloth to remove dust and debris. Avoid using harsh chemicals or abrasive cleaners.
- **Inspection:** Occasionally inspect the speaker surrounds for any signs of cracking or deterioration. Check wiring connections for tightness and corrosion.
- **Environmental Factors:** Protect speakers from excessive moisture and extreme temperatures, which can degrade materials over time.

9. TROUBLESHOOTING

If you encounter issues with your speakers, refer to the following common problems and solutions:

9.1 No Sound from Speakers

- **Check Head Unit/Amplifier:** Ensure the head unit or amplifier is powered on and functioning correctly.
- **Verify Wiring:** Inspect all speaker wire connections at both the speaker and the head unit/amplifier for looseness, corrosion, or incorrect polarity.
- **Blown Fuse:** Check the fuse for your head unit or amplifier.
- **Speaker Damage:** Visually inspect the speaker cone and surround for any tears or damage.

9.2 Distorted or Poor Sound Quality

- **Check Wiring Polarity:** Incorrect positive/negative wiring can cause phase issues and distorted sound. Ensure all speakers are wired with correct polarity.
- **Volume Level:** Reduce the volume. Distortion often occurs when the amplifier or head unit is overdriven.
- **EQ Settings:** Reset your head unit's equalizer settings to flat and adjust gradually. Excessive bass or treble boost can cause distortion.
- **Loose Mounting:** Ensure speakers are securely mounted. Loose speakers can vibrate and cause rattling or distorted sound.
- **Speaker Damage:** Inspect for physical damage to the speaker cone or surround.

9.3 Intermittent Sound

- **Loose Connections:** Check all wiring connections for intermittent contact.
- **Damaged Wire:** Inspect speaker wires for cuts or pinches that could cause intermittent signals.

If these steps do not resolve the issue, contact MB Quart customer support or a qualified car audio technician.

10. WARRANTY INFORMATION

MB Quart Formula FKB116 and FKB113 coaxial speakers are covered by a **1-Year Manufacturer Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, accident, misuse, abuse, neglect, unauthorized modification, or normal wear and tear.

For warranty service, please retain your proof of purchase and contact MB Quart customer support. Do not attempt to repair the product yourself, as this may void the warranty.



11. CUSTOMER SUPPORT





For further assistance, technical support, or warranty inquiries, please visit the official MB Quart website or contact their customer service department. You can often find contact information, FAQs, and additional resources on the manufacturer's website:

- **MB Quart Official Website:** [mbquart.com](https://www.mbquart.com)
- Refer to the website for the most current contact information, including phone numbers and email addresses.

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Related Documents - FKB116+FKB113

	<p>MB Quart Discus DK2-168 Quick Start Installation Guide</p> <p>Concise installation guide for MB Quart Discus DK2-168 coaxial car speakers, covering component installation, speaker removal, and technical specifications. Includes diagrams explained in text.</p>
	<p>MB Quart ONYX Series Car Audio Speakers - Model Specifications and Installation Guide</p> <p>Explore the MB Quart ONYX series car audio speakers (OKC116, OKC168, OKC169, OSC213, OSC216). Find detailed specifications, features, and installation tips for enhancing your car's sound system.</p>

	<p>MB QUART Premium/Reference Midrange Kit Installation Guide and Technical Specifications</p> <p>Comprehensive installation guide and technical specifications for MB QUART Premium/Reference Midrange Kit car audio speakers, including model details, mounting instructions, and warranty information.</p>
	<p>MB QUART DISCUS DKG/DSG Series Car Speaker Installation Manual</p> <p>Comprehensive installation guide for MB QUART DISCUS DKG 110, DKG 113, DKG 116, DSG 213, and DSG 216 car speakers, covering mounting, wiring, and specifications.</p>
	<p>MB Quart GMR-3 AM/FM Bluetooth Source Unit Operators Guide</p> <p>Comprehensive operators guide for the MB Quart GMR-3 AM/FM Bluetooth Source Unit, covering installation, operation, controls, and troubleshooting.</p>
	<p>MB Quart MBQG-RAD-1 Radio Installation Instructions for Polaris General</p> <p>Step-by-step installation guide for the MB Quart MBQG-RAD-1 radio kit designed for the Polaris General UTV. This document details dash disassembly, radio mounting, and reassembly procedures, including parts lists and required tools.</p>