

MB Quart XS2-216

MB Quart XS2-216 6.5-Inch Component 2-Way Speaker System User Manual

Model: XS2-216

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MB Quart XS2-216 6.5-inch Component 2-Way Speaker System. Please read this manual thoroughly before attempting installation or operation to ensure proper function and to prevent damage to the product or your vehicle. Retain this manual for future reference.

2. SAFETY INFORMATION

Always observe the following safety precautions:

- Disconnect the vehicle's battery negative terminal before beginning any electrical work to prevent short circuits.
- Ensure all wiring is properly routed and secured to prevent pinching, chafing, or damage from moving parts.
- Use appropriate gauge wiring for power and speaker connections as specified by car audio standards.
- Avoid installing speakers in locations that obstruct airbags, driver visibility, or vehicle controls.
- Wear appropriate safety gear, including eye protection, during installation.
- If you are unsure about any aspect of the installation, consult a qualified professional car audio installer.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- 2x 6.5-inch Woofers
- 2x Tweeters
- 2x Passive Crossovers
- Speaker Wire
- Mounting Hardware (screws, clips, etc. - may vary)
- User Manual (this document)



Image 3.1: Overview of the MB Quart XS2-216 component speaker system, including woofers, tweeters, and passive crossovers.

4. PRODUCT OVERVIEW

The MB Quart XS2-216 is a 6.5-inch 2-way component speaker system designed for car audio applications. It features separate woofers, tweeters, and passive crossovers to deliver a balanced and dynamic sound experience.

4.1 Key Features

- **High Power Handling:** 120 watts RMS and 240 watts peak power per pair for robust sound output.
- **Exceptional Clarity:** 88dB sensitivity and a wide frequency response range of 55Hz-22kHz for precise audio reproduction.
- **Durable Construction:** Built with high-quality materials for long-lasting reliability.
- **Advanced Sound Performance:** Features a 4kHz 12dB crossover slope for superior sound separation and clarity.
- **Compact Design:** 6.5-inch size with a 5.59-inch cut-out and 2.24-inch depth for versatile installation.

4.2 Components

The system includes dedicated components for optimal sound reproduction:

Woofers:

COAXIAL **SPEAKER** WITH TWEETER

These speakers are ideal for car audio enthusiasts who are looking for a powerful and durable option. With a max power handling, they are capable of producing loud and clear sound

LOUD CLARITY:

*Produce Crisp, High-Quality
Sound Will Leave You in Awe*



**Neodymium
Magnet**



**Crystal Clear
Power**



POWERFUL SPEAKER

Image 4.1: The 6.5-inch woofer, featuring a neodymium magnet for powerful and clear sound reproduction. The 6.5-inch woofers are designed to produce crisp, high-quality mid-bass frequencies. They incorporate neodymium magnets for efficient power handling and dynamic sound.

Tweeters:

CRYSTAL CLEAR TWITTER

The neodymium tweeters are designed for crystal clear accuracy and exceptional response

PRECISE RESPONSE

POWER HANDLING

LIGHTWEIGHT DESIGN

EXCEPTIONAL RESPONSE



EASY INSTALLATION

Image 4.2: Close-up of the neodymium tweeters, designed for clear accuracy and exceptional response. The neodymium tweeters are engineered for crystal clear accuracy and exceptional high-frequency response, ensuring every detail of your music is reproduced.

Passive Crossovers:

Included Passive Crossovers

2x 2-Way (Woofer/Tweeter) Passive
Crossovers



Precison Wattage and Frequency Sepration

Image 4.3: The included 2-way passive crossovers, which separate audio signals for the woofer and tweeter. Two 2-way passive crossovers are included to precisely separate the audio signal, directing appropriate frequencies to the woofers and tweeters for optimal sound staging and clarity.

Speaker Wire:

Included Speaker Wire

The wires essentially work as the nervous system of your sound system



Image 4.4: The included speaker wires, essential for connecting the components of the sound system. The provided speaker wires are designed to facilitate proper connection between your amplifier, crossovers, and speakers, ensuring efficient signal transfer.

5. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance. It is recommended that installation be performed by a professional car audio technician.

5.1 Planning the Installation

- **Location:** Choose suitable locations in your vehicle for the woofers, tweeters, and crossovers. Woofers are typically installed in factory speaker locations (doors, rear deck). Tweeters can be flush-mounted or surface-mounted in various locations (A-pillars, dash, door panels) for optimal sound imaging. Crossovers should be mounted in a dry, secure location, away from heat and moisture.
- **Measurements:** Ensure the chosen locations accommodate the speaker dimensions.

Tweeter Size:

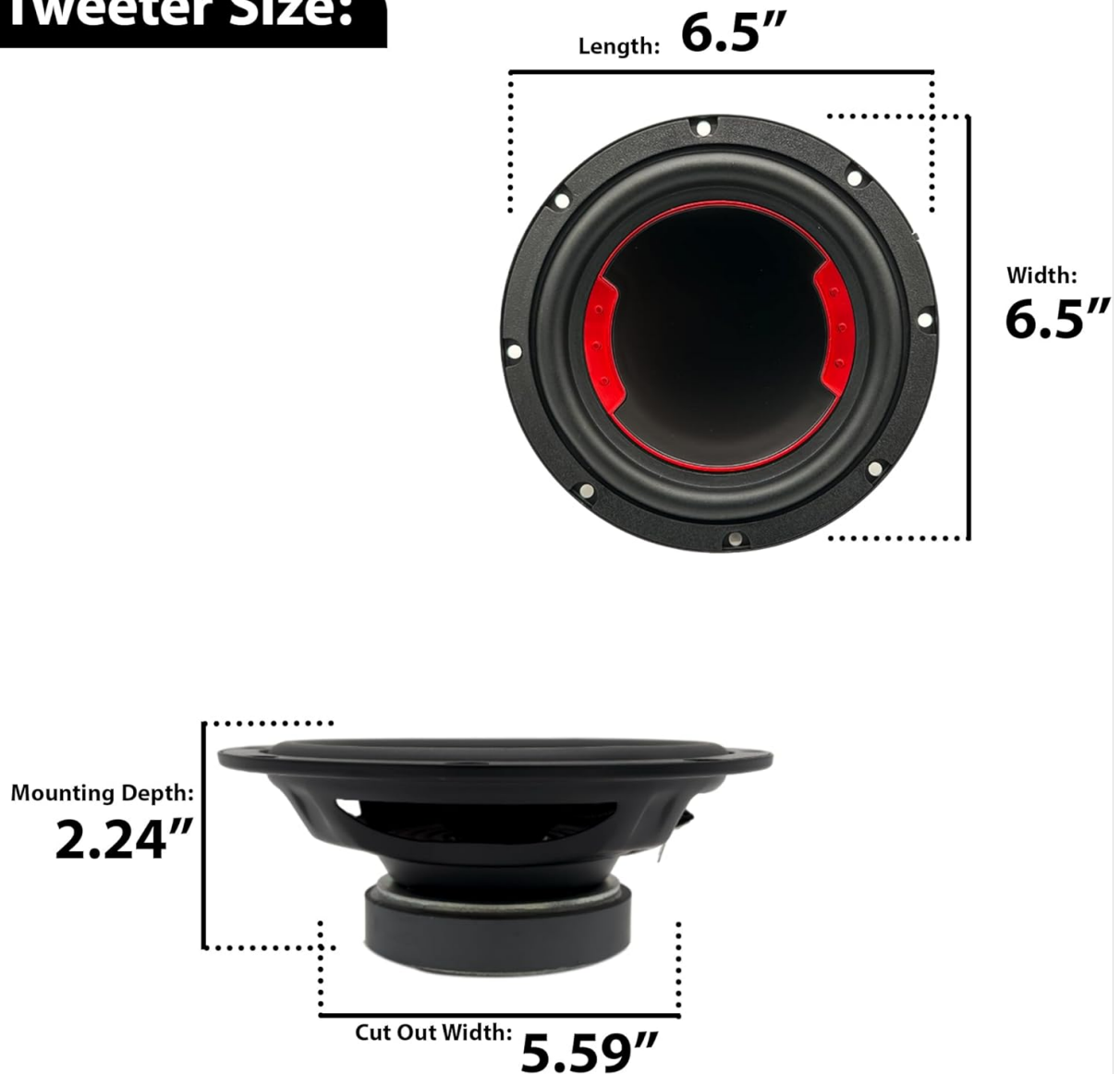


Image 5.1: Diagram showing the dimensions of the speaker, including length, width, mounting depth, and cut-out width.

Speaker Dimensions:

- Length: 6.5 inches
- Width: 6.5 inches
- Mounting Depth: 2.24 inches
- Cut Out Width: 5.59 inches

5.2 Wiring Connections

1. Connect the output from your amplifier or head unit to the input terminals of the passive crossover.
2. Connect the woofer output terminals of the crossover to the 6.5-inch woofer.
3. Connect the tweeter output terminals of the crossover to the tweeter.
4. Ensure correct polarity for all connections (+ to + and - to -) to prevent phase issues and ensure optimal sound quality.

Easy Installation

A Versatile Speaker that can be Easily Installed in Various Factory Settings



Image 5.2: Visual representation highlighting the ease of installation and key specifications like 4 Ohms impedance and 88 dB sensitivity.

6. OPERATING INSTRUCTIONS

Once installed, the MB Quart XS2-216 speaker system operates in conjunction with your car's head unit and amplifier. No direct user controls are present on the speakers themselves.

- **Power On:** Turn on your car's audio system.
- **Volume Adjustment:** Adjust the volume level from your head unit. Start at a low volume and gradually increase it.
- **Audio Settings:** Use your head unit's equalizer and balance/fader controls to fine-tune the sound to your preference. Avoid excessive bass or treble boost that could lead to distortion.
- **Listening Levels:** Prolonged listening at excessively high volumes can cause hearing damage and speaker damage. Listen at comfortable levels.

7. MAINTENANCE

The MB Quart XS2-216 speaker system requires minimal maintenance.

- **Cleaning:** Use a soft, dry cloth to gently wipe dust from the speaker grilles and cones. Avoid using

harsh chemicals or abrasive cleaners.

- **Inspection:** Periodically check speaker connections for tightness and ensure no wires are frayed or exposed.
- **Environmental Factors:** While durable, avoid exposing speakers to excessive moisture or extreme temperatures.

8. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No sound from speakers	Loose wiring connection Incorrect wiring polarity Amplifier/head unit issue Damaged speaker/crossover	Check all speaker and crossover connections. Verify correct polarity (+/-). Test amplifier/head unit with another speaker. Inspect speakers and crossovers for visible damage.
Distorted or unclear sound	Volume too high Incorrect gain settings on amplifier Loose connections Damaged speaker cone/tweeter	Reduce volume. Adjust amplifier gain settings according to manufacturer recommendations. Check all wiring connections. Inspect speakers for physical damage.
One speaker not working	Faulty speaker wire Faulty crossover Damaged speaker	Swap speaker wires to isolate the problem. Test crossover by bypassing it (for testing purposes only). Contact support if speaker is damaged.

If troubleshooting steps do not resolve the issue, contact MB Quart customer support or a qualified service technician.

9. SPECIFICATIONS

Detailed technical specifications for the MB Quart XS2-216 speaker system:

Specification	Value
Model Name	XS2-216
Speaker Type	Component 2-Way
Speaker Size	6.5 Inches
Power Handling (RMS)	120 Watts (per pair)
Peak Power Handling	240 Watts (per pair)
Sensitivity	88 dB
Frequency Response	55Hz-22kHz
Crossover Slope	4kHz 12dB

Specification	Value
Nominal Impedance	4 Ohms
Mounting Depth	2.24 Inches
Cut-out Diameter	5.59 Inches
Product Dimensions	6.5"D x 6.5"W x 2.5"H
Item Weight	6.59 pounds (2.99 Kilograms)
Connectivity Technology	Coaxial
Vehicle Service Type	Car
Warranty Type	Limited




10. WARRANTY INFORMATION



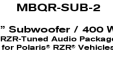






The MB Quart XS2-216 speaker system comes with a Limited Warranty. Please refer to the warranty card included with your product or visit the official MB Quart website for specific terms, conditions, and duration of coverage. Keep your proof of purchase for warranty claims.

11. SUPPORT AND CONTACT

For technical assistance, warranty inquiries, or further information regarding your MB Quart XS2-216 speaker system, please contact MB Quart customer support through their official website or the contact information provided in your product packaging.

Related Documents - XS2-216

	<p>MB Quart Discus DS2-216 Component Speaker System Quick Start Installation Guide</p> <p>Concise installation guide for MB Quart Discus DS2-216 component speaker systems, covering component installation, tweeter mounting, wiring, and specifications. Features multilingual support and warranty information.</p>
	<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 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>

<div> MUSIC DEFINED</div> <div> Installation Manual</div> <div> MBQR-SUB-2 10" Subwoofer / 400 Watt RZR-Tuned Audio Package for Polaris® RZR® Vehicles</div>	<p>MB Quart MBQR-SUB-2 RZR-Tuned Audio Package Installation Manual</p> <p>This installation manual provides detailed instructions for installing the MB Quart MBQR-SUB-2 10-inch subwoofer and 400-watt audio package into Polaris RZR vehicles. It covers preparation, disassembly, mounting, wiring, amplifier settings, initial testing, reassembly, and final inspection.</p>
<div> MUSIC DEFINED</div> <div> Quick Start Installation Guide</div> <div> RA1-150.2 RA1-280.4 RA1-300.1 RA1-750.1 RA1-710.5</div>	<p>MB Quart RA1 Series Amplifier Quick Start Installation Guide</p> <p>Comprehensive guide for installing MB Quart RA1 series amplifiers, including models RA1-150.2, RA1-280.4, RA1-300.1, RA1-750.1, and RA1-710.5. Covers power cable sizing, installation steps, system setup, and control adjustments.</p>
<div> MUSIC DEFINED</div> <div> Quick Start Installation Guide</div> <div> RA1-150.2 RA1-280.4 RA1-300.1 RA1-750.1 RA1-710.5</div>	<p>MB Quart RA1 Series Car Amplifier Quick Start Installation Guide</p> <p>Comprehensive quick start installation guide for MB Quart RA1 Series car amplifiers (RA1-150.2, RA1-280.4, RA1-300.1, RA1-750.1, RA1-710.5), covering setup, wiring, level setting, and troubleshooting. Includes warranty information and specifications.</p>