MB Quart DSH216

MB Quart Discus DSH216 6.5-inch 2-Way Component Speaker System Instruction Manual

Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your MB Quart Discus DSH216 6.5-inch 2-Way Component Speaker System. Please read these instructions thoroughly before installation and retain this manual for future reference.

Product Overview

The MB Quart Discus DSH216 is a high-quality 6.5-inch 2-way component speaker system designed for car audio applications. It delivers clear and dynamic sound reproduction with a power rating of 50-120 watts and a frequency response of 40Hz-30kHz.

- **6.5-inch Woofers:** Feature carbon fiber reinforced frames and polypropylene membrane cones for robust bass and mid-range performance.
- **30mm WideSphere Tweeters:** Designed to provide extra-wide sound dispersion, optimizing the listening experience from various seating positions within a vehicle.
- **Crossover Networks:** Included to properly distribute audio frequencies between the woofers and tweeters, ensuring optimal sound clarity and protection.
- **Voice Coil:** Equipped with an edge-wound 1-inch voice coil for efficient power handling.
- **Terminal Connections:** Gold-plated for reliable signal transfer.

Image: The MB Quart Discus DSH216 component speaker system, showing the 6.5-inch woofer, 30mm tweeter, and passive crossover network.

Safety Information

Always observe the following safety precautions during installation and operation:

- Disconnect the vehicle's battery negative terminal before beginning any electrical work to prevent short circuits.
- Ensure all wiring is properly insulated and secured to prevent damage from vibration or sharp edges.
- Do not install speakers in locations that obstruct the driver's view or interfere with vehicle safety features.
- Use appropriate tools and wear safety glasses during installation.
- Consult a professional car audio installer if you are unsure about any aspect of the installation process.
- Avoid prolonged exposure to high volume levels, which can cause hearing damage.

Package Contents

Verify that all items are present in the package:

- Two (2) 6.5-inch Woofers
- Two (2) 30mm Tweeters
- Two (2) Passive Crossover Networks

- Mounting Hardware (screws, clips, etc.)
- Speaker Grilles (if applicable)

Image: The retail packaging for the MB Quart Discus DSH216 speaker system, displaying the woofers, tweeters, and crossover.

Setup and Installation

Proper installation is crucial for optimal performance. If you are not experienced with car audio installation, it is recommended to seek professional assistance.

1. Mounting the Woofers

Select a suitable location in your vehicle, typically factory speaker locations in doors or rear decks. Ensure there is sufficient depth and clearance for the woofer magnet and frame. If the speaker opening is slightly larger than the woofer, a spacer may be required for a flush fit.

1. Carefully remove the existing speakers or trim panels.
2. Position the woofer in the desired location and mark the mounting screw holes.
3. Drill pilot holes if necessary, ensuring not to damage any vehicle wiring or components behind the mounting surface.
4. Secure the woofer using the provided screws. Do not overtighten.

Image: Front view of the 6.5-inch woofer with its protective grille, ready for installation.

Image: Rear view of the 6.5-inch woofer, displaying the magnet structure and gold-plated terminal connections.

2. Mounting the Tweeters

The 30mm WideSphere tweeters can be flush-mounted, surface-mounted, or installed in factory tweeter locations. Choose a location that provides optimal sound imaging, typically near the woofers or higher up on the dashboard/A-pillars.

1. Determine the best mounting method and location.
2. Use the provided mounting cups or hardware specific to your chosen method.

3. Ensure the tweeters are securely fastened and aimed towards the listening position for best results.

3. Crossover Network Connection

The passive crossover networks are essential for directing the correct frequency ranges to the woofers and tweeters. Mount the crossovers in a dry, secure location, away from heat sources and moving parts. Ensure the wiring is clearly labeled and connected correctly.

1. Connect the output from your amplifier or head unit to the "INPUT" terminals on the crossover.
2. Connect the woofer to the "WOOFER" or "LOW" terminals on the crossover.
3. Connect the tweeter to the "TWEETER" or "HIGH" terminals on the crossover.
4. Observe correct polarity (+ to + and - to -) for all connections. Incorrect polarity will negatively affect sound quality.

Image: The complete MB Quart Discus DSH216 component speaker system, including the woofer, tweeter, and passive crossover network, illustrating the components involved in the setup.

4. Wiring

Use high-quality speaker wire of appropriate gauge for your system. Route all wiring away from sharp edges, moving parts, and potential sources of electrical interference. Secure wires with zip ties or clips.

Operating Instructions

Once installed, follow these steps to operate your speaker system:

1. **Initial Power-Up:** After reconnecting the vehicle battery, turn on your head unit or amplifier. Start with the volume at its lowest setting.
2. **Volume Adjustment:** Gradually increase the volume to a comfortable listening level. Listen for any distortion or unusual noises.

3. **Audio Settings:** Use your head unit's equalizer (EQ) and balance/fader controls to fine-tune the sound to your preference. The WideSphere tweeters are designed to provide broad sound dispersion, which may reduce the need for extreme fader adjustments.
4. **Break-in Period:** Allow a break-in period of several hours of normal listening for the speakers to achieve their optimal performance.

Maintenance

Your MB Quart Discus DSH216 speakers require minimal maintenance:

- **Cleaning:** Use a soft, dry cloth to wipe down the speaker grilles and surrounds. Avoid using harsh chemicals or abrasive cleaners.
- **Inspection:** Periodically check all wiring connections to ensure they are secure and free from corrosion.
- **Environmental Protection:** While designed for automotive use, avoid exposing the speakers to excessive moisture or extreme temperatures beyond normal vehicle operating conditions.

Troubleshooting

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

Problem	Possible Cause	Solution
No sound from speakers	Loose or incorrect wiring connections; amplifier/head unit off or faulty; speaker damage.	Check all wiring connections at the speakers, crossovers, and head unit/amplifier. Ensure the head unit and amplifier are powered on and functioning. Test with another audio source if possible.
Distorted or unclear sound	Incorrect gain settings on amplifier; damaged speaker cone/tweeter; incorrect crossover wiring; poor quality audio source.	Reduce amplifier gain. Inspect speaker cones and tweeters for physical damage. Verify crossover connections are correct. Try a different audio source.
One speaker not working	Loose connection to that specific speaker or crossover; faulty speaker.	Check wiring for the non-working speaker from the crossover to the speaker itself. Swap speakers (if possible) to determine if the speaker or wiring is at fault.
Lack of bass or treble	Incorrect EQ settings; reversed speaker polarity; improper crossover settings.	Adjust EQ settings on your head unit. Verify speaker polarity (+ to + and - to -). Ensure crossover connections are correct.

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

Specifications

Model Number	DSH216
Speaker Type	2-Way Component System

Woofer Diameter	6.5 inches (16.5 cm)
Tweeter Diameter	1.18 inches (30 mm) WideSphere
Power Rating (RMS/Max)	50-120 Watts (Max Output 120 Watts)
Frequency Response	40Hz - 30kHz
Impedance	4 Ohms
Woofer Cone Material	Polypropylene
Woofer Frame Material	Carbon Fiber Reinforced
Voice Coil	1-inch Edge Wound
Terminal Connections	Gold-plated
Item Weight	3.7 Pounds (1.68 kg)
UPC	806576215356, 806576216025, 368298569242

Warranty Information

Maxxsonics USA Inc., the manufacturer of MB Quart products, warrants this product to the original consumer purchaser to be free from defects in material and workmanship for one (1) year from the date of purchase. This warranty covers the amplifier (if applicable, though this is a speaker system) and all other parts and accessories of the system.
Maxxsonics will, at its option, repair or replace any defective component free of charge during the warranty period, provided the product is returned to an authorized Maxxsonics dealer with a photocopy of the original purchase receipt. The receipt must contain the name and address of the authorized reseller.
Exclusions: This warranty does not cover damage resulting from misuse, abuse, accident, incorrect wiring, improper installation, alteration of date code or barcode labels, natural disaster, or repairs/alterations performed outside of factory-authorized service centers. This warranty is limited to defective parts and specifically excludes incidental or consequential damages. Warranty on installation labor, removal, re-installation, and freight charges are not the responsibility of Maxxsonics USA Inc. Products damaged due to insufficient or improper packing materials during return are also not covered.
For full warranty details, please refer to the official warranty statement provided with your product or contact Maxxsonics USA Inc.

Support

For technical assistance, warranty claims, or further information regarding your MB Quart Discus DSH216 speaker system, please contact MB Quart customer support or visit the official MB Quart website.
MB Quart Official Website: www.mbquart.com
Please have your model number (DSH216) and proof of purchase ready when contacting support.