

Morel IR-BMW42

Morel IR-BMW42 Integration Reference 4" 2-Way Component Speakers User Manual

Model: IR-BMW42

INTRODUCTION

The Morel IR-BMW42 Integration Reference 4-inch 2-Way Component Speakers are designed for seamless integration into BMW vehicles. These speakers offer enhanced audio clarity and detail. Featuring a DirectFit design, the unique 4-inch chassis, supplied mounting brackets, easy snap-in 1.1-inch (28mm) tweeters, and factory wire connections ensure compatibility with modern BMW models without requiring vehicle modification.

WHAT'S IN THE BOX

Verify that all components are present before beginning installation.

- 4-inch Woofers (2 units)
- 1.1-inch (28mm) Acuflex Silk Dome Tweeters (2 units)
- Tweeter Hi-Pass Crossovers (2 units)
- Midrange Low-Pass Crossovers (2 units)
- Mounting Adapters/Brackets (various types for BMW fitment)
- Speaker Wire Connections

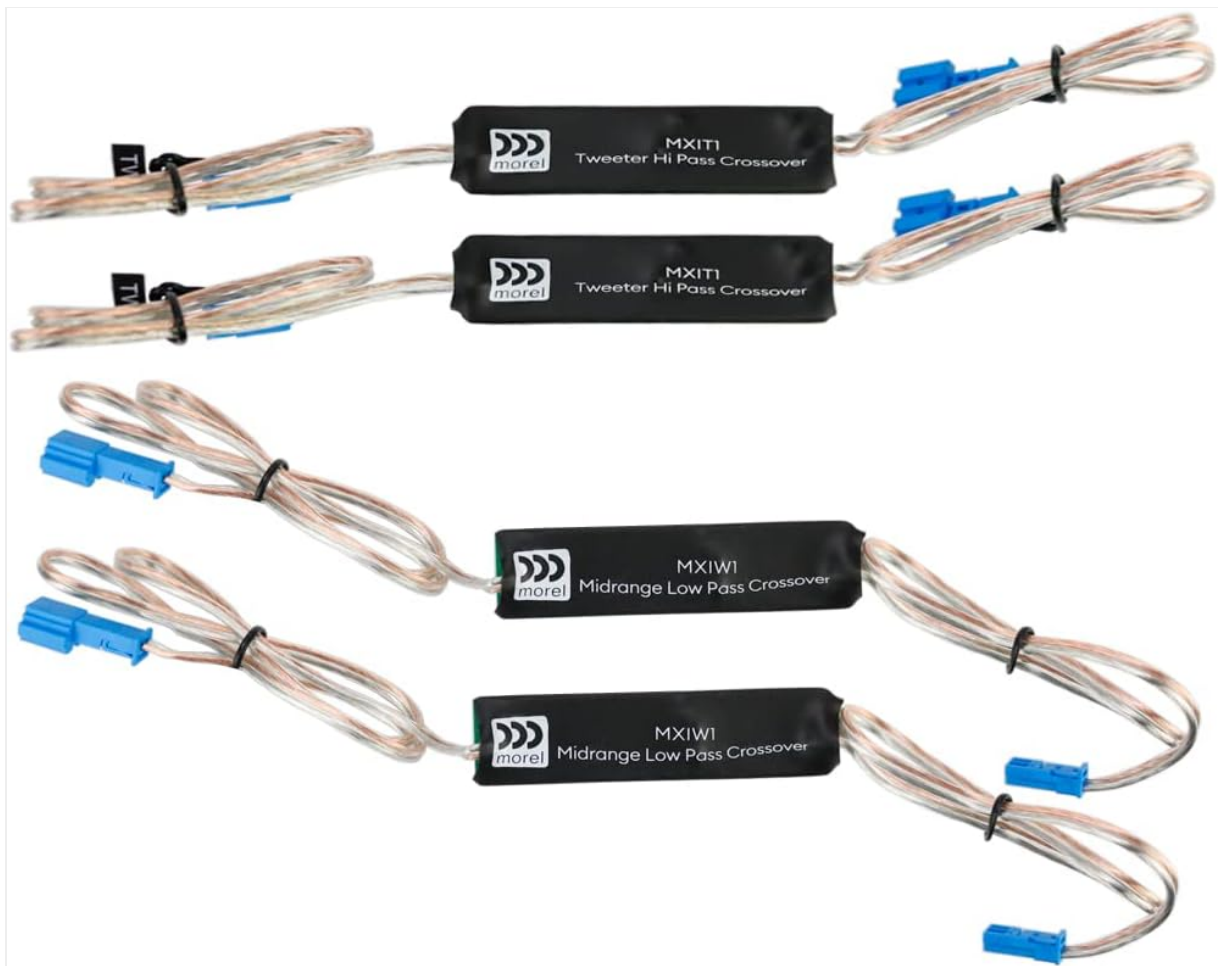


Image: Two tweeter hi-pass crossovers and two midrange low-pass crossovers, each with wiring and blue connectors.



Image: Two Morel Acuflex Silk Dome Tweeters, each with attached wiring and blue connectors.

SETUP AND INSTALLATION

Installation of the Morel IR-BMW42 speakers requires basic automotive audio knowledge and tools. If you are

unfamiliar with car audio installation, it is recommended to seek professional assistance.

1. Preparation

- Ensure the vehicle's ignition is off and the battery is disconnected to prevent electrical damage.
- Gather necessary tools, including trim removal tools, screwdrivers, wire cutters/strippers, and zip ties.
- Consult your BMW vehicle's service manual or online resources for specific instructions on removing door panels and accessing factory speaker locations.

2. Removing Factory Speakers

- Carefully remove the door panels or trim pieces covering the factory speaker locations.
- Disconnect the wiring from the factory speakers and remove them from their mounts.

3. Woofer Installation

1. Select the appropriate mounting adapter from the supplied kit that matches your BMW's factory speaker mount.
2. Attach the Morel 4-inch woofer to the selected adapter. The DirectFit design ensures a precise fit.
3. Mount the woofer assembly into the factory speaker location.
4. Connect the factory speaker wiring to the woofer's terminals. The IR-BMW42 speakers are designed with factory wire connections for ease of installation.



Image: Front view of the Morel IR-BMW42 4-inch woofer with a black cone and foam surround.



Image: Rear view of the Morel IR-BMW42 4-inch woofer, showing the magnet structure, terminals, and "Adapter 1" label.



Image: Four black plastic mounting adapters, two labeled "Adapter 3", designed for speaker installation.

4. Tweeter and Crossover Installation

1. Locate the factory tweeter locations, typically in the door sails or A-pillars.
2. The 1.1-inch (28mm) Acuflex Silk Dome Tweeters are designed for easy snap-in installation into compatible factory locations.
3. Connect the tweeter wiring to the Tweeter Hi-Pass Crossover.
4. Connect the woofer wiring to the Midrange Low-Pass Crossover.
5. Route the speaker cables and crossovers securely, using zip ties to prevent rattles and ensure they do not interfere with window mechanisms or door panel reinstallation. Ensure crossovers are placed in a dry, secure location within the door panel or vehicle interior.
6. Connect the input side of the crossovers to the vehicle's factory speaker wiring that previously connected to the full-range factory speaker.

5. Reassembly and Testing

- Before reattaching door panels, reconnect the vehicle battery.
- Test the audio system to ensure all speakers are functioning correctly and sound is balanced.
- If satisfied with the sound, carefully reattach the door panels and any removed trim pieces.

OPERATING INSTRUCTIONS

Once installed, the Morel IR-BMW42 component speakers operate as an integral part of your vehicle's existing audio system. No special operating procedures are required beyond the normal use of your car's head unit or amplifier.

- Adjust audio settings (bass, treble, balance, fader) on your car's head unit to optimize sound quality to your preference.
- Avoid excessively high volume levels for prolonged periods to prevent speaker damage.

MAINTENANCE

The Morel IR-BMW42 speakers are designed for durability and require minimal maintenance.

- Keep speaker grilles clean and free of dust and debris. Use a soft, dry cloth for cleaning.
- Avoid exposing speakers to excessive moisture or direct sunlight. The product is not waterproof.
- Periodically check speaker connections for tightness, especially after significant vehicle vibrations or impacts.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound from speakers	Loose or incorrect wiring connections.	Check all wiring connections at the speaker, crossover, and head unit/amplifier.
	Crossover improperly connected.	Ensure crossovers are correctly wired (input from head unit, output to woofer/tweeter).
	Vehicle head unit or amplifier issue.	Verify head unit and amplifier are powered on and functioning.
	Speaker damage.	Inspect speakers for visible damage.
Distorted or poor sound quality	Incorrect audio settings (bass/treble too high).	Adjust audio settings on your head unit.
	Loose mounting.	Ensure speakers are securely mounted.
	Speaker polarity reversed.	Verify positive (+) and negative (-) terminals are correctly connected.
	Amplifier clipping.	Reduce amplifier gain or volume if distortion occurs at high levels.
Intermittent sound	Loose wiring connection.	Check and secure all connections.
	Faulty speaker wire.	Inspect speaker wires for cuts or damage.

SPECIFICATIONS

Model Number	IR-BMW42
Speaker Type	Component, 2-Way
Woofer Diameter	4 Inches
Tweeter Diameter	1.1 Inches (28mm)

Peak Power Handling	300 Watts (each) / 600 Watts (pair)
RMS Power Handling	100 Watts (each) / 200 Watts (pair)
Sensitivity	92dB
Frequency Response	50Hz - 25,000Hz
Connectivity Technology	Speaker Wire
Mounting Type	Flush Mount
Audio Output Mode	Stereo
Water Resistance Level	Not Water Resistant
Item Dimensions (D x W x H)	4"D x 4"W x 2"H

WARRANTY INFORMATION

The Morel IR-BMW42 Integration Reference speakers come with a **1 Year Limited Warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, please refer to the warranty card included with your product or contact Morel customer support.

SUPPORT

For technical assistance, troubleshooting, or warranty claims, please contact Morel customer support. You can find more information and contact details on the official Morel website or through the [Morel Store on Amazon](#).

When contacting support, please have your product model number (IR-BMW42) and proof of purchase available.