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> [KLH M-8602-C In-Ceiling Speaker Instruction Manual](#)

## KLH M-8602-C

# KLH M-8602-C In-Ceiling Speaker Instruction Manual

## INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your KLH M-8602-C In-Ceiling Speakers. The KLH M-8602-C is a high-performance 2-way in-ceiling speaker designed for seamless integration into your home audio system, delivering clear, detailed sound with deep bass. Each speaker features a 6.5-inch Kevlar/Fiberglass woofer and a 1-inch Silk Dome tweeter, housed within a sealed steel enclosure.

## SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating your speakers. Retain this manual for future reference.

- **Power Disconnection:** Always ensure that all power to the audio system and associated components is disconnected before making any electrical connections or performing installation.
- **Qualified Installation:** If you are unsure about any aspect of the installation process, consult a qualified audio installer or electrician.
- **Environmental Conditions:** Do not expose speakers to moisture, extreme temperatures, or direct sunlight. Ensure adequate ventilation around any connected electronic equipment.
- **Wiring:** Use appropriate gauge speaker wire for your installation to prevent signal loss and ensure safe operation.
- **Mounting:** Ensure the mounting surface is structurally sound and can support the weight of the speaker. Follow all cutting and mounting instructions carefully.

## PACKAGE CONTENTS

Verify that all items are present in your package:

- KLH M-8602-C In-Ceiling Speaker (quantity as purchased, typically 4 units in a bundle)
- Removable Magnetic Grille (pre-attached to each speaker)
- Installation Template

## SETUP AND INSTALLATION

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Follow these steps for proper installation of your KLH M-8602-C In-Ceiling Speakers.

### 1. Planning Speaker Placement

Determine the optimal location for your speakers in the ceiling. Consider room acoustics, listening area, and proximity to power sources and audio equipment. Ensure there are no obstructions (e.g., studs, pipes, electrical wires) in the ceiling cavity at your chosen locations.

### 2. Cutting the Ceiling Opening

1. Use the provided installation template to mark the cutout area on the ceiling. The required cutout diameter is 8.9 inches (226 mm).
2. Carefully cut the opening using an appropriate tool (e.g., drywall saw). Ensure the cut is clean and precise.

### 3. Wiring the Speakers

Run speaker wires from your amplifier or receiver to each speaker location. Ensure proper polarity (+ to + and – to –) for all connections.

- Strip approximately 1/2 inch (12 mm) of insulation from the ends of the speaker wire.
- Connect the positive (+) terminal of the speaker to the positive (+) terminal of the amplifier.
- Connect the negative (-) terminal of the speaker to the negative (-) terminal of the amplifier.



The rear view of the KLH M-8602-C in-ceiling speaker highlights its sealed enclosure and the red mounting clamps used to secure the speaker firmly in place within the ceiling opening. Speaker wire terminals are visible for connection.

#### **4. Mounting the Speakers**

1. Carefully insert the speaker into the ceiling cutout.
2. Tighten the four mounting screws located on the front baffle of the speaker. As you tighten, the mounting tabs on the rear of the speaker will pivot outwards and clamp onto the ceiling material. Do not overtighten.

#### **5. Attaching the Grille**

The KLH M-8602-C speakers come with magnetic grilles. Simply align the grille with the speaker baffle, and the magnets will secure it in place.



This image displays the KLH M-8602-C in-ceiling speaker unit with its protective white grille detached. The speaker features a central woofer and a smaller tweeter, designed for flush mounting into a ceiling. The magnetic grille is shown separately.

## OPERATING INSTRUCTIONS

Once installed, your KLH M-8602-C speakers are ready for use with your audio system.

### 1. Connecting to Your Audio System

Ensure your amplifier or receiver is powered off before making final connections. Connect the speaker wires from the KLH M-8602-C speakers to the appropriate speaker output terminals on your amplifier. The recommended power range for these speakers is 50 W to 175 W.

### 2. Adjusting Tweeter Level

The KLH M-8602-C speakers feature a tweeter level adjustment switch, allowing you to fine-tune the high-frequency output to suit your listening preferences and room acoustics. This switch is typically located on the front baffle of the speaker, accessible by removing the magnetic grille.

- **-3 dB:** Reduces tweeter output for brighter rooms or if you prefer a softer high-frequency response.
- **0 dB:** Neutral setting, suitable for most environments.

- **+3 dB:** Increases tweeter output for duller rooms or if you prefer a more pronounced high-frequency response.



This close-up image shows the tweeter level adjustment switch on the KLH M-8602-C speaker. Users can select between -3 dB, 0 dB (neutral), and +3 dB settings to fine-tune the high-frequency output.

## MAINTENANCE

Your KLH M-8602-C speakers require minimal maintenance to ensure long-lasting performance.

- **Cleaning:** Use a soft, dry cloth to gently wipe the speaker grilles and surrounding surfaces. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the finish or components.
- **Grille Care:** If the grilles become dusty, they can be carefully removed and gently vacuumed with a soft brush attachment. Ensure the speaker is powered off before removing grilles.
- **Inspection:** Periodically check speaker wire connections to ensure they are secure.

## TROUBLESHOOTING

If you encounter issues with your KLH M-8602-C speakers, refer to the following common problems and solutions:

- **No Sound:**

- Ensure your amplifier/receiver is powered on and the correct input source is selected.
- Check all speaker wire connections at both the speaker and amplifier ends for proper polarity and secure contact.
- Verify that the volume on your amplifier/receiver is turned up.

- **Distorted Sound:**

- Check speaker wire connections for loose strands or short circuits.
- Ensure the amplifier is not overdriven (volume too high, causing clipping). Reduce the volume.
- Verify that the amplifier's power output is within the recommended range for the speakers (50W-175W).
- Inspect speaker cones for any visible damage.

- **Uneven Sound or Imbalance:**

- Check the balance settings on your amplifier/receiver.
- Ensure all speakers are wired with correct polarity.
- Adjust the tweeter level switch on individual speakers if necessary to balance high-frequency output.

## SPECIFICATIONS

<b>Model</b>	M-8602-C
<b>Speaker Type</b>	2-Way In-Ceiling Speaker
<b>Woofer</b>	6.5-inch Kevlar/Fiberglass
<b>Tweeter</b>	1-inch Silk Dome
<b>Enclosure Material</b>	Sealed Steel
<b>Frequency Response</b>	50Hz - 20KHz
<b>Sensitivity</b>	89dB
<b>Impedance</b>	8 Ohms
<b>Recommended Power</b>	50W - 175W
<b>Mounting Depth</b>	8.75 inches (222 mm)
<b>Cutout Diameter</b>	8.9 inches (226 mm)
<b>Overall Diameter</b>	10.375 inches (263.5 mm)
<b>Weight (per speaker)</b>	7.2 lbs (3.27 kg)

## WARRANTY INFORMATION

The KLH M-8602-C In-Ceiling Speaker is 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 caused by misuse, accident, unauthorized modification, or improper installation.

Please retain your proof of purchase for any warranty claims.

## CUSTOMER SUPPORT

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For technical assistance, troubleshooting beyond this manual, or to inquire about warranty service, please contact KLH customer support. Refer to the official KLH website for the most current contact information.

**KLH Official Website:** [www.klhaudio.com](http://www.klhaudio.com)

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