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Home Audio Products

Micca C-8C/C-6C
8" and 6.5" 2-Way In-Ceiling Speakers

Thank you for purchasing the Micca C-8C/C-6C In-Ceiling Speaker! This product has been designed for optimal audio reproduction performance in a variety of home entertainment configurations, with accuracy, clarity, and impact that discerning audiophiles listen for.

Please take the time to become familiar with the C-8C/C-6C and the proper installation procedures as detailed in this manual.

Installation Tools

A proper installation ensures optimal performance from the C-8C/C-6C. The following installation tools will be needed:

1. Drywall saw
2. Screwdriver, Phillips head
3. Masking tape – 1.8 to 2.0 inch
4. Pencil
5. Bubble or laser level
6. Tape measure
7. Stud finder

Mounting Location

When choosing where to mount for the C-8C/C-6C speakers, be sure that there are no electrical wires, ducts, plumbing, gas pipes, or any other services running through the location. The C-8C/C-6C can be mounted in any orientation in order to provide proper coverage at the listener's position. While it is most often mounted in ceiling, it can also be mounted in walls. Keep the following in mind while deciding where to mount the C-8C/C-6C:

Separation – Distance between a pair of C-8C/C-6C should be shorter than the distance from the speakers to the listener.

Height – Front speaker position should be mounted in-wall with the center of the C-8C/C-6C at ear level of the listener when seated. Center speaker position should be in-wall above or below the TV/Display, whichever is closer to seated ear level. Surround locations can be in-wall just above seated ear level, or behind and to the side of listening area for in-ceiling.

Mounting Preparation

The C-8C/C-6C requires a cutout size as listed in the specifications section. An additional ¾" is required in all directions behind the ceiling for attachment. Modern home construction typically utilize wall studs or joists spaced on 16" centers, providing approximately 14 ⅜" between studs.

Use a stud finder to locate studs or joists in the ceiling, including horizontal braces that may interfere with the mounting location.

Use the supplied template and a pencil to mark the position where the cutout will be made. If mounting on a vertical wall, use a bubble or laser level to help ensure that the template is straight. Cut a small square hole in the marked location to double-check that there are no obstructions behind the ceiling.

Figure 1
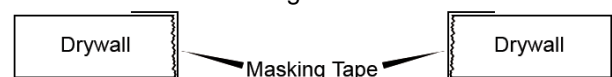
Using a drywall saw, make the mounting cutout according to the template outline. Be sure to cut through the drywall at a 90 degree angle. Trim any jagged or loose pieces of drywall. Cover the cut edges of the drywall with strips of masking tape, folding over the edges on both the front and back sides of the drywall (See Figure 1). This will prevent the gypsum in the drywall from being knocked loose from speaker vibration. Do not allow the edge of the masking tape to protrude more than ¼" beyond the cutout on the outside ceiling surface. Masking tape within ¼" of the cutout will be hidden by the speaker frame.

If the ceiling contains insulation, remove the insulation at the cutout and approximately 1 foot around it. This ensures adequate air volume for the C-8C/C-6C to operate. Secure any loose insulation that may fall on the speaker.

If the ceiling is not insulated, it is recommended that the cavity is stuffed with approximately 2 feet of fiberglass insulation around the cutout, starting at about 1 foot around the cutout. The insulation will provide damping to the speaker and isolate vibrations.

Speaker Wire

In ceiling speakers should be connected to the amplifier with UL rated CL2/CL3 speaker wire – this is required by building code for most consumers. Avoid installing speaker wire in parallel with household AC wiring to avoid potential hum. It is okay for speaker wire to cross AC wiring at a right angle, however.

It is recommended that a professional or licensed electrician perform the speaker wire installation if you are uncomfortable with the task.

The gauge or thickness of the speaker wire can affect the performance of the C-8C/C-6C. Always choose a CL2/CL3 rated in-wall speaker wire of the appropriate gauge to prevent excessive speaker wire resistance. Using undersized speaker wire can result in lose of volume, detail, and dynamic range. Please select speaker wire for the C-8C/C-6C based on the following minimum recommendations:

50' or less - 16 Gauge 2 Conductor CL2/CL3
50' - 80' - 14 Gauge 2 Conductor CL2/CL3
80'-120' - 12 Gauge 2 Conductor CL2/CL3
120'-200' - 10 Gauge 2 Conductor CL2/CL3

Amplifier speaker output terminals are typically color coded with black for negative (-) and red for positive (+). Similarly, the C-8C/C-6C has speaker wire terminals with a black and red color coding. When connecting speaker wire, ensure that the positive terminal on the amplifier is connected to the positive terminal on the C-8C/C-6C. And similarly, the negative terminal on the amplifier should be connected to the negative terminal on the C-8C/C-6C. Speaker wires typically use at least one of several possible methods to help maintain correct polarity, including color coded insulation or

conductor strands, or printing of text and symbols along one side of the wire insulation.

Removing the Grill

The C-8C/C-6C has 4 mounting tabs on the back that rotate. While looking at the back of the speaker, rotate the tabs fully counter clockwise so that they stick out away from the speaker frame. Slide each tab towards the front of the speaker and when the tab screw comes in contact with the grill, push gently so that the grill comes away from the speaker.

The grill is held in place by contact pressure. Take care when removing and reinstalling the grill to not distort it due to excessive force.

Mounting the Speaker

While looking at the back of the C-8C/C-6C, rotate the tabs fully clockwise so that they are inside the speaker frame (See Figure 2). If a tab does not stay rotated, tighten its screw until it stays rotated – do not over tighten.

Figure 2
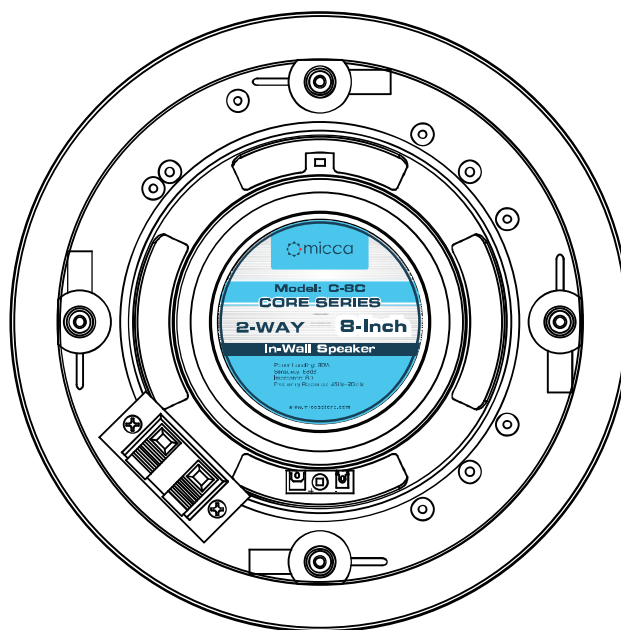
Place the speaker into the ceiling cutout. One at a time, loosen each of the four screws until the tabs can turn freely. Next tighten each screw clockwise until the tabs press firmly against the inner surface. The speaker need only be properly aligned and held securely to the ceiling – do not over tighten to break the tabs or damage the drywall.

Painting the Frame and Grill

The supplied template can be used as a paint shield when trimmed. Carefully trim along the inner line and place the paint shield inside the speaker frame with the grill removed. The frame can now be painted to match the ceiling surface. Use an appropriate primer for painting over plastic.

Only the front of the grill should be painted, paint on the sides will make the grill difficult to install onto the speaker frame. Be careful not to clog any of the grill perforations as it may affect speaker performance by restricting airflow.

Speaker Removal

The C-8C/C-6C can be easily removed should it ever become necessary. Remove the grill using a small hook tool available from hardware and auto parts stores. Loosen the four screws until the tabs release from the ceiling and tuck back into the speaker frame. Pull the C-8C/C-6C out of the ceiling and disconnect the speaker wire. The speaker can now be easily replaced or serviced.

C-8C Specifications

Woofer: 8" Polypropylene Cone with Rubber Surround
Tweeter: ½" PEI
Crossover: 6dB/Octave
Frequency Response: 45Hz-20kHz
Impedance: 8 Ohms
Sensitivity: 88dB 1W/1M
Power Handling: 90 Watts (Each)
Outer Dimension: 10 ¾" Diameter
Cutout Dimension: 9 ½" Diameter
Mounting Depth: 3 ¼"

C-6C Specifications

Woofer: 6.5" Polypropylene Cone with Rubber Surround
Tweeter: ½" PEI
Crossover: 6dB/Octave
Frequency Response: 55Hz-20kHz
Impedance: 8 Ohms
Sensitivity: 87dB 1W/1M
Power Handling: 75 Watts (Each)
Outer Dimension: 9" Diameter
Cutout Dimension: 7 ¾ " Diameter
Mounting Depth: 3"