Congratulations on your purchase of SpeakerCraft CRS6 Series In-Ceiling Speakers. All CRS6 Series speakers are equipped with pivoting dome tweeters, which allow you to direct the sound toward, or away from, a listening area to achieve a desired effect. In addition, each CRS6 model comes equipped with WavePlane, SpeakerCraft’s revolutionary tweeter baffle. SpeakerCraft has a wide variety of accessories to complement your CRS6 Series speakers. Contact your dealer or SpeakerCraft direct for more details.

**SPEAKER PLACEMENT**

Before installing your speakers, you should consider the placement carefully, taking into account the location of electrical, plumbing, and other fixtures. Contact your dealer for assistance if you are not sure of the best location in your particular room environment.

**Placement In Ceiling:** When placing your speakers in the ceiling, they should ideally be located above the primary listening area. The unique tweeter baffle of the CRS6 Series speakers allows for more forward radiation and a more even frequency response than is obtainable on conventional coaxial type round speakers.

**Diagram 1**

1. If the speakers are positioned far away from the primary listening area, adjust the pivoting tweeter so they are pointed at the primary listening area. Note: To avoid possible damage to the pivoting tweeters, read the section entitled “SPEAKER ADJUSTMENTS” in this manual prior to performing the tweeter adjustment.

In a very large room with low ceilings, it may be necessary to place additional speakers throughout the room. Contact your Authorized SpeakerCraft dealer for assistance.

**MOUNTING SURFACE PREPARATION**

New Construction - Unfinished Ceilings

A New Construction Bracket, SpeakerCraft P/N BKT906022, is available from your dealer. If the speakers are to be mounted more than 24" on-center, a special “Extra Long Wing”, SpeakerCraft P/N WING90222, is available from your dealer.

Finished Ceilings

Prior to the actual installation of the speakers, it will be necessary to run cables to the speaker locations. See your dealer for more information about cable installation. After the cable has been properly installed, you are ready to mount the speakers. Following the simple steps listed below will result in a professional looking installation:

1. Determine the best area to mount your speakers. This area of the ceiling should be free of obstructions such as electrical conduit, HVAC ducts, or water lines. This can be best determined by noting the placement of fixtures and gaining access to an attic or crawl space for further analysis of the location of such obstacles.

2. Find the joists nearest the desired speaker mounting location. We highly recommend using a good stud-finder tool for this procedure. If you are lining up the speakers to some other object or molding in the room, make sure you consider the size of the baffle flange which extends beyond the mounting hole.

3. Mark the hole. A template for setting the hole is provided in the box along with two paint mask inserts for use when painting. Position the template in the desired position and pencil an outline on the ceiling.
4. Cutting the hole: CAUTION: This is the most important part of the entire installation. If you are uncertain whether any obstructions exist behind the desired mounting area, you should start by cutting a hole in the center of your penciled mounting hole with a drywall saw, cutting at a 45° angle towards the inside of the hole. (See Diagram 2) Cutting the small hole at this angle will make drywall repair much easier, using the piece cut out. Once you have determined that there aren’t any obstructions in your desired mounting location, start cutting the finished hole at a 90° angle to the ceiling surface.

5. Add insulation. If the area in the ceiling is not already insulated, add an adequate amount insulation material to loosely cover the back of the speaker. If the insulation material used is faced with foil or paper, position the foil or paper away from the speaker.

**SPEAKER INSTALLATION**

The unique integral four foot mounting system incorporated into each CRS6 Series speaker allows for a quick installation by following these easy steps:

1. Remove the grille. It may be necessary to push one or two of the mounting screws and its attached foot towards the baffle and against the inside surface of the grille to force the grille out of its retaining groove.

2. Attach the speaker cable (observing the proper polarity with your amplifier) to + and – terminals.

3. Make sure the mounting feet are turned inward to clear the opening, and insert the speaker into the ceiling. Position the speaker into the hole. **Note:** The flange of the speaker is designed to flex and conform to any small imperfections in the ceiling’s surface. Tighten the four screws on the front of the baffle only enough to make the flange become snug against the ceiling. As you tighten the screws, the feet will automatically flip into an outward position (See Diagram 4) thereby clamping the drywall between the feet and the flange. CAUTION: Over tightening may warp the baffle, crack the ceiling, cause flange to distort, and make the grille difficult to install.

4. Push the grille firmly into the slot in the speaker baffle.

**SPEAKER ADJUSTMENTS**

Your CRS6 Series speakers come from the factory with the tweeter facing straight out from the baffle. This will result in the overall smoothest response. However, depending on your particular primary area, room acoustics, ceiling height, or personal preference, you may find the sound more pleasing by pointing the tweeters in a particular direction. If additional treble is desired in the primary listening area, point the tweeter towards that area, and if less treble is required, point the tweeter away. Push gently at the edge of the tweeter to point it in the desired direction. (See Diagram 3) CAUTION: Avoid touching tweeter dome as damage will occur on metal dome tweeters (CRS6 THREE & FOUR).

**Tweeter Adjustment (CRS6 TWO, THREE & FOUR):**

The switch labeled TWEETER allows for 6dB of tweeter adjustment. Your speakers were shipped with the tweeter switch in the “+” position, and the tweeter will play 2dB higher. If you want less treble, roll the switch to the “–” position and the tweeter will play 2dB lower. To return to the neutral setting, slide the switch to the middle position. (See Diagram 5)

**Woofer Adjustment (CRS6 THREE & FOUR):**

The switch labeled BASS allows for 6dB of bass adjustment. Your speakers were shipped with the bass set to neutral, resulting in 6dB of impedance. This setting provides the flattest bass frequency response. Desiring more bass, roll the switch towards “+” and the bass will play 2dB lower and increase the impedance to 8ohm. This setting provides a more linear bass frequency response. To return to the neutral setting, slide the switch to the center position. (See Diagram 6)

CAUTION: Altering the impedance affects the number of speakers able to be driven by an amplifier. If multiple pairs of speakers are to be driven by one amplifier, SpeakerCraft suggests using the lowest output position (switch rolled towards the “–” position) and it is determined that the amplifier will operate properly with the speakers switched to a higher output mode. If you want to safely operate multiple pairs of speakers, consider purchasing SpeakerCraft 14 or 18 Speaker Selectors.

**PAINTING THE SPEAKERS**

If you plan to paint your speakers, we recommend that it be done prior to installation. If you plan to paint your speakers sometime in the future, it is best to remove them by simply reversing the steps for “SPEAKER INSTALLATION” on page 2. If it is necessary to paint the speakers while they are still in the ceiling, the paint masks provided in the carton must be installed in place of the grilles while the flange is being painted with the ceiling. The grilles can also be painted, however, great care should be taken not to alight the grilles, as this will greatly reduce the sound quality of the speakers. SpeakerCraft recommends only light spray painting using 5 parts thinning agent to 1 part paint. Do not paint the grilles while they are attached to the speaker. If it is necessary to paint the undersides of the grille material, follow the same procedure used to paint the grilles.

**SPECIAL FIRE WALL INSTALLATION**

If you plan to mount your speakers in a fire-rated ceiling, you should purchase SpeakerCraft 6” Round Sound Enclosures, model #SE1612. The metal enclosures mount easily between joists, and contain a standard electrical type connector for connections of your speaker cable directly to the speaker.

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**LIMITED LIFETIME WARRANTY**

SpeakerCraft Inc. warrants to the original retail purchaser only that this SpeakerCraft product will be free from defects in materials and workmanship, provided the speaker was purchased from a SpeakerCraft Authorized Dealer. To obtain warranty service, the original retail purchaser must contact the speaker manufacturer or a SpeakerCraft Authorized Dealer, or the Consumer Service Center, 22424BX1, (800) 327-0490, for further instructions. SpeakerCraft will repair or replace this product, provided the product has been properly installed, in a proper environment, and the installation has been constructed in accordance with the Owner’s Manual. SpeakerCraft will repair or replace this product free of charge (a) for any defects in materials or workmanship for a period of five (5) years from the date of the original retail purchase, or (b) for any defects in materials or workmanship for a period of one (1) year from the date of the original retail purchase, under the following conditions:

1. If it is necessary to paint the under grille material, follow the same procedure used to paint the grilles. SpeakerCraft recommends only light spray painting using 5 parts thinning agent to 1 part paint. Do not paint the grilles while they are attached to the speaker. If it is necessary to paint the undersides of the grille material, follow the same procedure used to paint the grilles.

2. Paper away from the speaker.

3. Adequate amount insulation material to loosely cover the back of the speaker.

4. Cutting the hole. CAUTION: This is the most important part of the entire installation. If you are uncertain whether any obstructions exist behind the desired mounting area, you should start by cutting a hole in the center of your penciled mounting hole with a drywall saw, cutting at a 45° angle towards the inside of the hole. (See Diagram 2) Cutting the small hole at this angle will make drywall repair much easier, using the piece cut out. Once you have determined that there aren’t any obstructions in your desired mounting location, start cutting the finished hole at a 90° angle to the ceiling surface.

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