

# Reference Ceiling Speakers

Model: **RCS-650**  
**RCS-800**

## User's Manual



**RCS-650**



**RCS-800**

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## Introduction

Congratulations on your choice of **RCS Series In-Ceiling** Speaker systems, one of Earthquake's most valued in-ceiling speaker lines. With the proper installation and operation RCS speakers will provide a life a time of durability and high-end performance.

It is important that you follow all installation and mounting instructions and recommendations in this manual closely and carefully to insure optimal performance operation and longevity.

## Features

- 1 inch silk dome swivel NEO tweeter
- Bumped back basket and T-yoke for high speaker excursion
- Wider surround for deeper bass and higher speaker excursion
- 12dB/octave filter network crossover
- Thermal tweeter protection
- Custom compact spring loaded terminals
- Easy to use Turn 'N' Lock installation mechanism
- 20% smaller footprint than competitors
- Tight, small lip for better aesthetic
- Paintable rust-resistant grille



The Sound That Will *Move* You.

Earthquake Sound Corporation  
2727 McCone Avenue  
Hayward, CA 94545  
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## Safety Instructions

- 1) Read these instructions in their entirety.
- 2) Store this manual and packaging in a safe place.
- 3) Heed all warnings.
- 4) Follow instructions (do not take short cuts).
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatuses that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments & accessories specified by the manufacturer.
- 12) Use only compatible rack or cart for final resting position.
- 13) Unplug this apparatus during lightening storm or when unused for a long period of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in anyway, such as: power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

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## Unpacking System Components

- Keep the original carton and packing materials for future shipment or storage.
- Check for any visual signs of damage. If you encounter any concealed damage, consult your Earthquake Sound dealer before proceeding with unit installation.
- Retain the sales receipt as it establishes the duration of the limited warranty and provides information for insurance purposes.

## System Installation Considerations

There are several factors to consider before installing Earthquake Sound's **RCS In-Ceiling Speakers**.

- What are the intended listening zones?
- What system options and accessories might be required for features such as local sources, etc.?
- From where in each zone will the listener prefer to control the system? Where will the remote gains be located? Where will the speakers be located?
- Where will the source equipment be located?

## Connection Tips

- Keep all power cords away from all signal cables to prevent humming from induced noise.
- Choose reliable signal cable cords (Earthquake Sound also specializes in high-performance RCA cables and patches).
- All speaker wires that are ran through the walls should be twisted to reduce potential hum noise pick up.
- Label both ends of all wires with the corresponding room location.
- It is best to use a grounded electrical outlet to power the amplifier. Lack of input ground reference could be unsafe. Consult your electrical contractor about proper grounding.

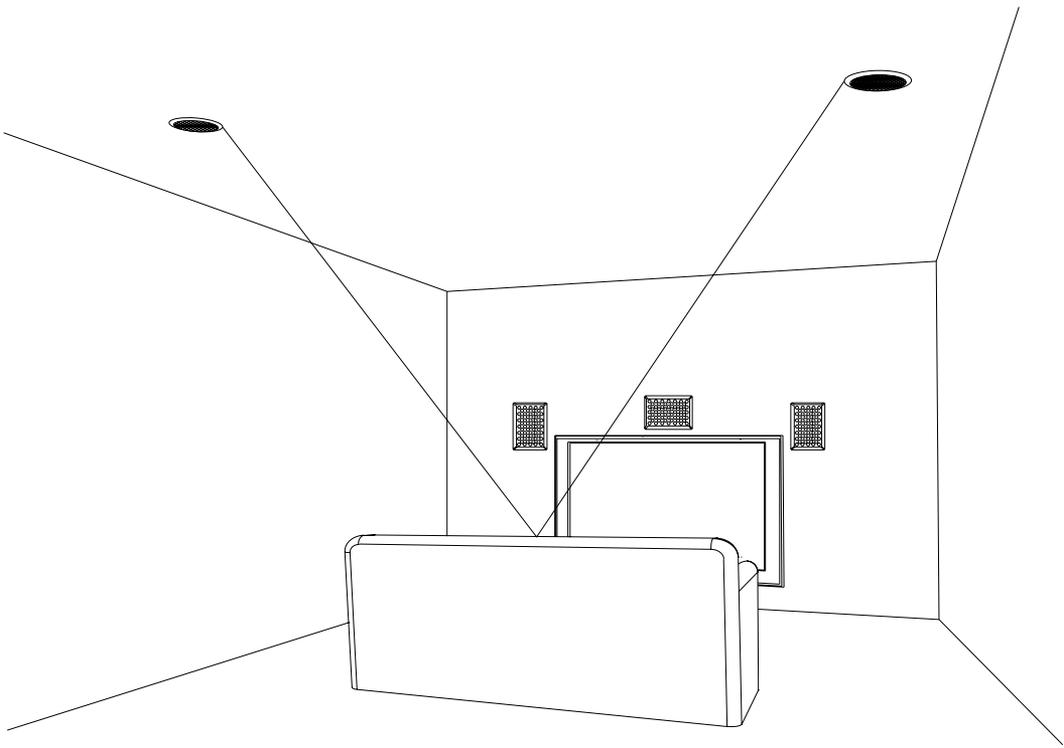
## Painting Guidelines

RCS in-ceiling speakers are paintable and can accept virtually any type of paint. Spray and roller paint applications typically provide the best results. When you are ready to begin painting remember to shield the driver and tweeter from the paint. Be sure to remove the inner grille cloth before painting. Replace it once the paint has completely dried.

## Speaker Placement

RCS in-ceiling speakers are designed to be flush mounted in walls or ceilings. To optimize their acoustics you should follow these simple guidelines:

For best stereo reproduction the speakers should be placed an equal distance from your listening position and separated so that the angle between them is between 40 and sixty degrees. The units should be placed with the tweeters angled toward the ear level of the seated listener.



## Easy Installation

# 1

Cut the hole using the provided cut out template



# 2

Wire the speaker using the non-obtrusive spring-loaded terminals



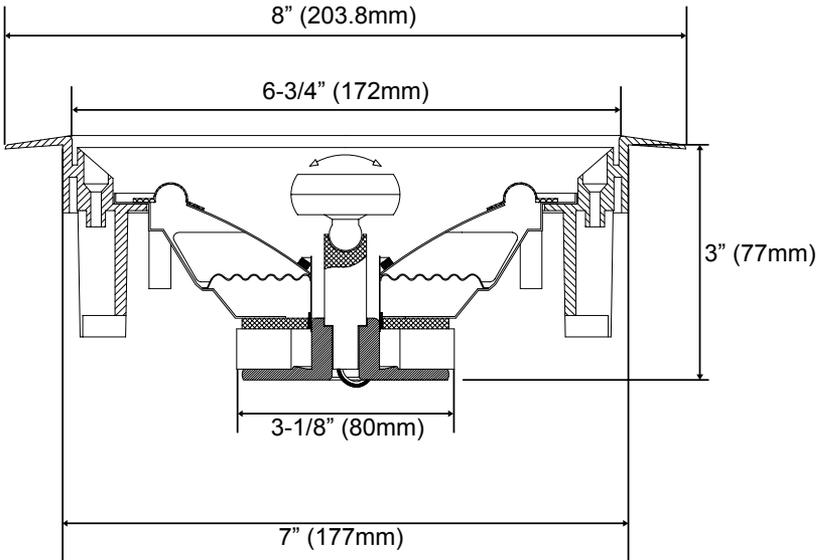
# 3

Mount the speaker by utilizing the Turn-N-Lock installation mechanisms



# RCS-650 Specifications

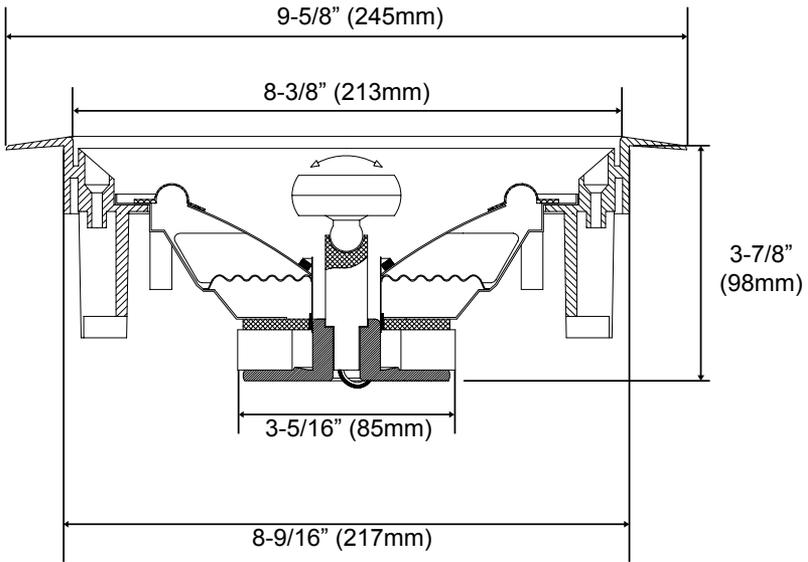
<b>Woofers Size:</b>	6-1/2" (165mm)
<b>Woofers Material:</b>	Polypropylene
<b>Tweeter Size:</b>	1" (25mm)
<b>Tweeter Material:</b>	silk dome/NEO magnet
<b>Power Handling RMS:</b>	5 - 80W
<b>Power Handling Max:</b>	160W
<b>Frequency Response:</b>	45Hz - 20kHz
<b>Sensitivity:</b>	92dB
<b>Impedance:</b>	8-ohm
<b>Crossover:</b>	12dB/octave filter network with polyswitch
<b>Finish:</b>	White/Paintable
<b>Weight:</b>	2.48 lbs (1.12kg)



<b>Frame Diameter:</b>	8" (203.8mm)
<b>Grille Diameter:</b>	6-3/4" (172mm)
<b>Cut-out Hole Diameter:</b>	7" (177mm)
<b>Mounting Depth:</b>	3" (77mm)
<b>Magnet Diameter:</b>	3-1/8" (80mm)

# RCS-800 Specifications

<b>Woofers Size:</b>	8" (203mm)
<b>Woofers Material:</b>	Polypropylene
<b>Tweeter Size:</b>	1" (25mm)
<b>Tweeter Material:</b>	silk dome/NEO magnet
<b>Power Handling RMS:</b>	10 - 100W
<b>Power Handling Max:</b>	200W
<b>Frequency Response:</b>	45Hz - 20kHz
<b>Sensitivity:</b>	92dB
<b>Impedance:</b>	8-ohm
<b>Crossover:</b>	12dB/octave filter network with polyswitch
<b>Finish:</b>	White/Paintable
<b>Weight:</b>	3.04 lbs (1.38kg)



<b>Frame Diameter:</b>	9-5/8" (245mm)
<b>Grille Diameter:</b>	8-3/8" (213mm)
<b>Cut-out Hole Diameter:</b>	8-9/16" (217mm)
<b>Mounting Depth:</b>	3-7/8" (98mm)
<b>Magnet Diameter:</b>	3-5/16" (85mm)

## Matching Products

For more involved projects requiring multiple pairs of Earthquake In-Ceiling Speakers, use the Cinénova IR16. This 16 channel, 8 zone amplifier is the best multi-room amplifier on the market. It can output 100 watt RMS with a bridged 8-ohm set up and 150 watt RMS with a 4-ohm configuration.

Cinénova IR16 also comes with 8 IR remote controls, 8 keypads, and 4 remote eyes for ultimate multi-room control.

## Recommended Configuration



50W RMS per channel (8-ohm stereo with all channels driven)

# 10 Year Limited Warranty

## **RCS In-Ceiling (10) year limited warranty:**

Earthquake warrants the original purchaser that the speaker or amplifier (product) is free from defects in material and workmanship, under normal and proper use, for a period of ten (10) years from the date of purchase (as shown on the original bill of sale with serial number affixed/written on it). The ten (10) year warranty period is valid only if the product is properly installed by an Earthquake authorized party, and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation. **If the product is installed by a non-authorized dealer, a thirty (30) day warranty period applies.**

### **(A) Ten (10) year limited warranty guidelines: (If installed by an authorized Earthquake dealer)**

First year: Earthquake pays for labor, parts, and ground freight **(only in US mainland)** back to customer.

Second to Tenth year: Earthquake pays only for labor. Customer must pay for parts and freight both ways.

### **(B) Warning:**

- Products (sent for repair) that are tested by Earthquake technicians and deemed to have no problem, will not be covered by the limited warranty. Customer will be charged a minimum of one (1) hour of labor (ongoing rates) plus shipping charges back to customer.
- Each product sent for repair must be packaged in its original packaging. Otherwise, **there will be repackaging charge in addition to labor, parts and shipping charges.**

### **(C) Earthquake agrees to repair or replace - at our option - all such defective products/parts subject to the following provisions:**

- Defective products/parts have not been altered or repaired by other than an Earthquake factory approved technician.
- Products/parts are not subjected to negligence, misuse, improper use, or accident, damaged by improper line voltage, used with incompatible products, or have its serial number or any part of it altered, defaced or removed, or have been used in any way that is contrary to Earthquake's written instructions.

### **(D) Warranty Limitations:**

Earthquake warranty does not cover products that have been modified or abused. Including but not limited to the following:

- Damages to speaker cabinet and cabinet finish due to misuse, abuse, or use of improper use of cleaning materials/methods.
- Bent speaker frame, broken speaker connectors, holes in speaker cone, surround & dust cap, burnt speaker voice coil.

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## 10 Year Limited Warranty (cont.)

- Fading, deterioration of speaker components & finish due to improper exposure to elements.
- Bent amplifier casing, damaged finish on the casing due to abuse, misuse, or improper use of cleaning material.
- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled & returned to Earthquake with a copy of the purchase receipt.

### (E) Service Request:

To receive product(s) service, contact Earthquake service department at (510) 732-1000 and request an RMA number (Return Material Authorization), items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number, and a brief description of the problem you are experiencing with the product. In most cases, our technicians might be able to resolve the problem over the phone, thus eliminating the need to ship the product.

### (F) Shipping Instructions:

Product(s) must be packaged in its original protective box(es) to minimize transport damage and avoid repackaging charges. Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse products that are improperly packaged. A copy of the purchase receipt must accompany product returned for service. We encourage you to include with the package a written description of the problem. Ship product to:

**Earthquake Sound Corp.**  
**2727 McCone Avenue**  
**Hayward, CA 94545**  
**Ph (510) 732-1000**

You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

### (G) Disputes Resolution:

All disputes - between clients and Earthquake Sound Corporation - resulting from the one (1) year limited warranty policy must be resolved according to the laws & regulations of the county of Alameda, California.



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Earthquake Sound reserves the right to amend details of the specifications without notice.

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