INSTRUCTION MANUAL

SONANCE CINEMA® SERIES CEILING SPEAKERS

SONANCE®

Introduction

Thank you for purchasing a Sonance Cinema® Series Ceiling speaker. When properly installed, these speakers will deliver film soundtracks and music with outstanding clarity and realism, even in large home theater rooms. This manual covers the Sonance Cinema Ceiling LCR1S, LCR.5S, SUR1S and SUR.5S models.

Box Contents

Each Sonance Cinema Ceiling speaker box contains the following:

(1) Cinema Ceiling LCR or SUR speaker

(1) Paintable grille

(1) Hex bit (for use with a cordless drill/screwdriver)

(1) Mounting cutout template

Speaker Placement

Cinema Ceiling LCR1S and LCR.5S Speakers

The left, center, and right speakers should be located 8 – 18 feet (2.4m – 5.5m) from the listeners. The height and size of the television will largely determine this distance. As a rule of thumb, higher ceilings will require that the speakers be placed farther away from the listening positon. For example, if the television is placed at eye-level and the speakers are installed in an 8-foot ceiling less than 6 feet in front of the listening position, the picture and sound could seem very disconnected.

The speakers should be located 3 – 4 feet (0.9m – 1.2m) from the wall the television is on. All three speakers should be the same distance from the wall. The left and right speakers should be separated approximately 8 – 12 feet (2.4m – 3.7m) apart and be placed 2 – 3 feet (0.6m – 0.9m) from the side walls. The center speaker should be placed as close to the midpoint between the left and right speakers as possible. IMPORTANT: ALL THREE FRONT SPEAKERS MUST BE ORIENTED WITH THEIR MIDRANGE/TWEETER UNITS FACING THE LISTENING POSITION.

Use *Figure 1* as a guide.

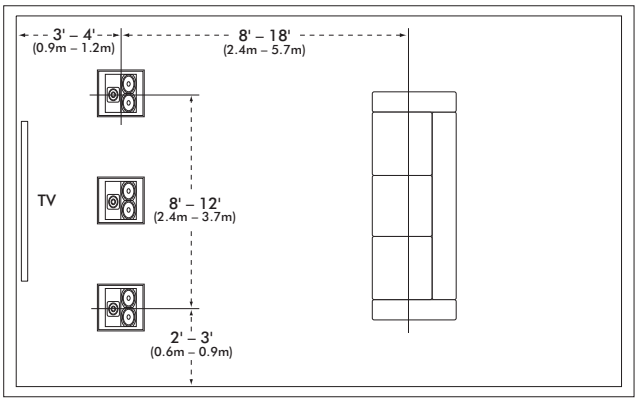

FIGURE 1: CINEMA CEILING LCR1/LCR.5 SPEAKER PLACEMENT

Cinema Ceiling SUR1S and SUR.5S Speakers

5.1-Channel System (see *Figure 2*)

- Place the left and right surround speakers on the ceiling 2 – 4 feet (0.6m – 1.2m) behind the listening position. The speakers should be 8 – 12 feet (2.4m – 3.7m) apart, and oriented so their driver panels face the room's front and rear walls.

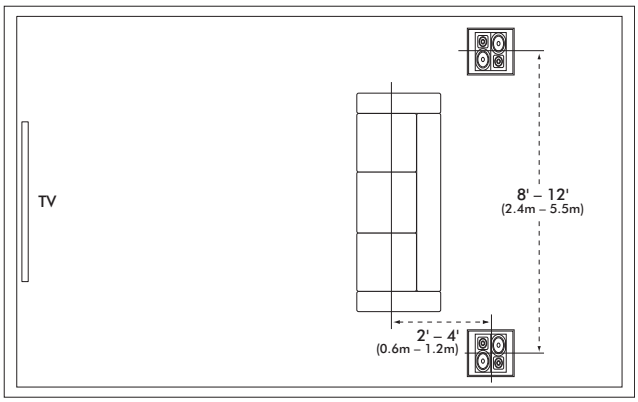

FIGURE 2: CINEMA CEILING SUR1S / SUR.5S SPEAKER PLACEMENT IN A 5.1-CHANNEL SYSTEM

7.1-Channel System (see *Figure 3*)

- **Left and Right Surround Speakers:** Place the left and right surround speakers on the ceiling directly to the sides of the listening position, 8 – 12 feet (2.4m – 3.7m) apart, oriented with their driver panels facing the room's front and rear walls.
- **Surround Back Speakers:** Place the surround back speakers on the ceiling 4 – 8 feet (1.2m – 2.4m) behind the listening position. The surround back speakers should be 4 – 8 feet (1.2m – 2.4m) apart, and oriented with their driver panels facing the room's side walls.

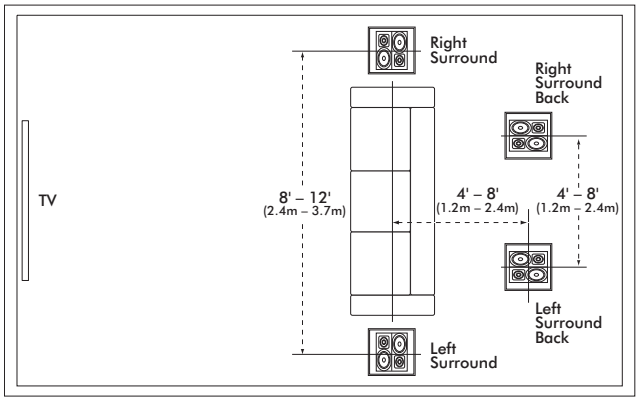

FIGURE 3: CINEMA CEILING SUR1S / SUR.5S SPEAKER PLACEMENT IN A 7.1-CHANNEL SYSTEM

Before Installation

NOTE: ALL CINEMA CEILING SERIES SPEAKER MODELS HAVE THE SAME INSTALLATION REQUIREMENTS.

1. Determine the location for the speaker (see *Speaker Placement*, on page 1).
2. Perform an obstruction survey to be certain that there are no studs, conduit, pipes, heating ducts, or air returns in the ceiling cavity that will interfere with the speaker.
3. The cutout for Cinema Ceiling speakers is 12 3/8" x 12 3/8" (314mm x 314mm). **IMPORTANT: The ceiling MUST have a minimum of 16" on-center stud construction.** There must be at least 7 9/16" (192mm) depth within the ceiling cavity for the speaker.
4. In ceilings with standard 2 x 10, 2 x 12, TJI 110, or TJI 210 joist construction, the RotoLock clamps will deploy without requiring modification (see *Figure 4*). The maximum ceiling material thickness in this application is 1¼" (32mm).

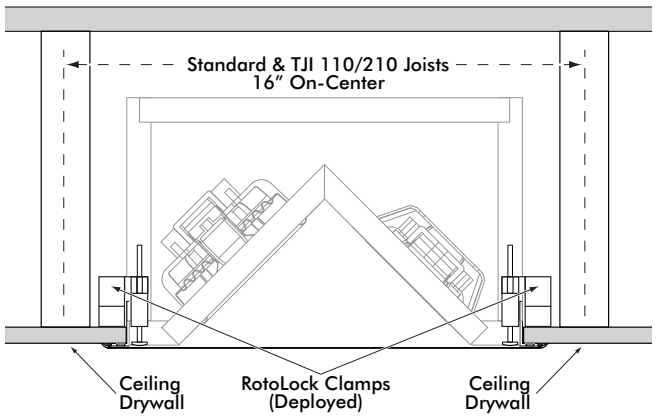

FIGURE 4: INSTALLATION IN STANDARD JOIST, TJI 110 AND TJI210 JOIST CONSTRUCTION

5. In ceilings with TJI 230, 360 and 560 joist construction you will need to remove the caps of the RotoLock clamps to allow the deployed clamps to clear the joists (see *Figure 5*). The maximum ceiling material thickness in this application is 5/8" (16mm).

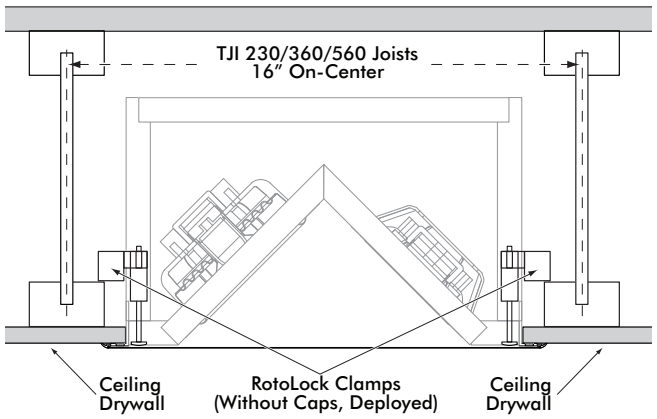

FIGURE 5: INSTALLATION IN TJI 230, TJI360 AND TJI560 JOIST CONSTRUCTION

To remove the clamp caps, use a small screwdriver to gently release the two locking levers (*Figure 6*, left). Then remove the caps from the clamps (*Figure 6*, right).

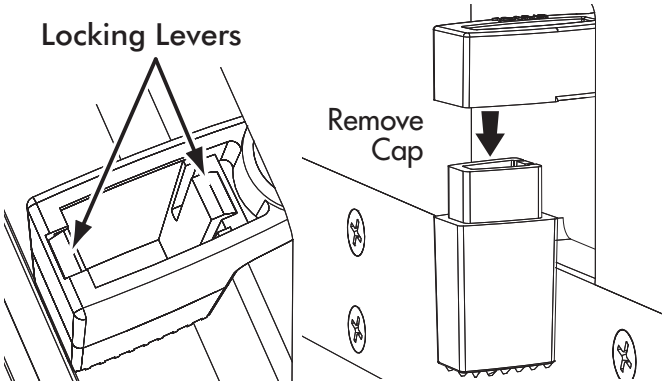

FIGURE 6: REMOVING THE CAPS FROM THE ROTOLOCK CLAMPS

6. Position the included mounting cutout template where the speaker is to be located and pencil an outline on the ceiling.
7. Cut the mounting hole using a keyhole or drywall saw, and run the speaker wire from the mounting hole to the amplifier location.

IMPORTANT: CONSULT LOCAL BUILDING CODES BEFORE RUNNING SPEAKER WIRES THROUGH CEILINGS AND WALLS.

Installation

Sonance Cinema Ceiling Series speakers feature an integral RotoLock® mounting system for quick mounting directly into existing ceilings.

1. Strip ¼" – ½" (6mm – 12mm) of insulation from each speaker lead. Twist the strands or tin the exposed wire with solder to ensure that there are no stray strands. (Stray strands that touch each other can cause a short-circuit that can damage the amplifier.)
2. The speaker's connector posts are spring-loaded. Push the top of each connector post down to open the connector and insert the exposed wires into the holes in the posts. The speaker's positive post is labeled with a red dot; the negative post is labeled with a black dot. Double-check that you connected amplifier "+" to speaker "+" and amplifier "–" to speaker "–". (See *Figure 7*.)

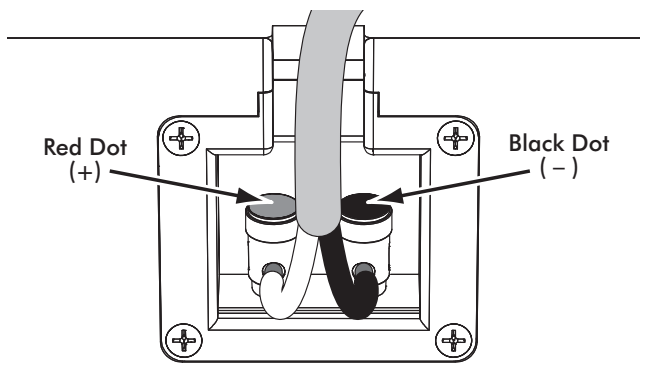

FIGURE 7: CONNECTING THE SPEAKER WIRE

3. Make sure all the RotoLock clamps are fully retracted into their recesses in the speaker box. Insert the speaker into the hole in the ceiling (see *Figure 8*).

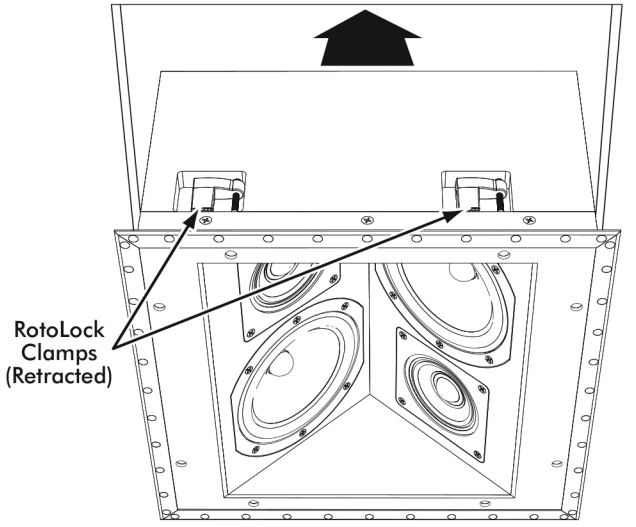

FIGURE 8: INSERTING THE SPEAKER INTO THE MOUNTING HOLE

4. Using the supplied hex bit, tighten the screws on the front of the speaker baffle. The RotoLock clamps will automatically rotate into position and begin clamping the speaker. When you notice resistance on the screws the speaker has been clamped successfully. See *Figure 9*.

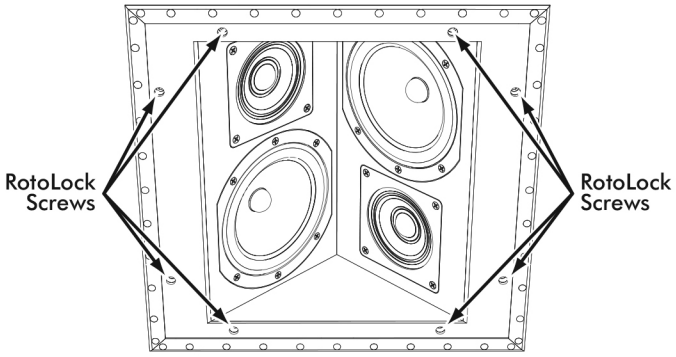

FIGURE 9: TIGHTENING THE ROTOLOCK® SCREWS

IMPORTANT: ALWAYS USE LOW-TORQUE SETTINGS WHEN TIGHTENING ROTOLOCK CLAMPS. NEVER OVER-TIGHTEN.

NOTE: ADJUSTING THE TENSION OF THE ROTOLOCK CLAMPS SO THAT THE SPEAKER FRAME IS FLAT WILL HELP ENSURE THAT THE GRILLE CONTACTS THE CEILING ALL THE WAY AROUND THE SPEAKER FOR A PROPER FIT.

5. The new micro-trim grille is held in place by several small, powerful magnets on the speaker frame. Place the grille against the speaker and the magnets will hold it firmly in place. When properly installed, the grille trim should make contact with the ceiling all the way around the speaker.

Painting the Speakers and Grilles

Please refer to the included *Painting Instructions* sheet.

Specifications

LCR1S

Tweeter:	1" (25mm) silk dome, ferrofluid-cooled
Midrange:	4" (100mm) carbon fiber/Rohacell® laminated cone with a rubber surround
Woofer:	Two 5¼" (133mm) carbon fiber/ Rohacell® laminated cones with rubber surrounds
Frequency Response:	70Hz – 20kHz ±3dB
Impedance:	6 ohms nominal; 4 ohms minimum
Power Handling:	5 watts minimum; 150 watts maximum
Sensitivity:	90dB SPL (2.83V/1 meter)
Grille Material	Perforated steel
Dimensions (W x H x D):	$13^{25}/_{32}$" x $13^{25}/_{32}$" x $7^{9}/_{16}$" (350mm 350mm x 192mm)
Cutout Dimensions (W x H):	$12^{3}/_{8}$" x $12^{3}/_{8}$" (314mm x 314mm)
Shipping Weight:	15 lbs (7.0kg) each

LCR.5S

Tweeter:	1" (25mm) silk dome, ferrofluid-cooled
Midrange:	4" (100mm) polypropylene cone with a rubber surround
Woofer:	Two 5¼" (133mm) polypropylene cones with rubber surrounds
Frequency Response:	70Hz – 20kHz ±3dB
Impedance:	8 ohms nominal; 6 ohms minimum
Power Handling:	5 watts minimum; 125 watts maximum
Sensitivity:	88dB SPL (2.83V/1 meter)
Grille Material	Perforated steel
Dimensions (W x H x D):	$13^{25}/_{32}$" x $13^{25}/_{32}$" x $7^{9}/_{16}$" (350mm 350mm x 192mm)
Cutout Dimensions (W x H):	$12^{3}/_{8}$" x $12^{3}/_{8}$" (314mm x 314mm)
Shipping Weight:	13 lbs (6.0kg) each

SUR1S

Tweeter:	Two 1" (25mm) silk domes, ferrofluid-cooled
Midrange:	Two 3" (76mm) carbon fiber/ Rohacell® laminated cones with rubber surrounds
Woofer:	Two 5¼" (133mm) carbon fiber/ Rohacell® laminated cones with rubber surrounds
Frequency Response:	70Hz – 20kHz ±3dB
Impedance:	6 ohms nominal; 4 ohms minimum
Power Handling:	5 watts minimum; 150 watts maximum
Sensitivity:	90dB SPL (2.83V/1 meter)
Grille Material	Perforated steel
Dimensions (W x H x D):	$13^{25}/_{32}$" x $13^{25}/_{32}$" x $7^{9}/_{16}$" (350mm 350mm x 192mm)
Cutout Dimensions (W x H):	$12^{3}/_{8}$" x $12^{3}/_{8}$" (314mm x 314mm)
Shipping Weight:	15 lbs (7.0kg) each

SUR.5S

Tweeter:	1" (25mm) silk dome, ferrofluid cooled
Midrange:	Two - 3" (76mm) polypropylene cone with a rubber surround
Woofer:	Two - 5-1/4" (133mm) polypropylene cone with a rubber surround
Frequency Response:	70Hz – 20kHz ±3dB
Impedance:	8 ohms nominal; 6 ohms minimum
Power Handling:	5 watts minimum; 125 watts maximum
Sensitivity:	88 dB SPL (2.83V 1 meter)
Grille Material	Perforated steel
Dimensions (W x H x D):	13-25/32" x 13-25/32" x 7-9/16" (350mm 350mm x 192mm)
Cutout Dimensions (W x H):	12-3/8" (314mm) x 12-3/8" (314mm)
Shipping Weight:	13 lbs. (6.0 KG) Each

LIMITED LIFETIME WARRANTY

Sonance warrants to the first end-user purchaser that this Sonance-brand product ("Product"), when purchased from an authorized Sonance Dealer/Distributor, will be free from defective workmanship and materials for the life of the Product, except for the grille, which is warranted for five (5) years. Sonance will at its option and expense either repair the defect or replace the Product with a new or remanufactured Product or a reasonable equivalent.

EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY SONANCE. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. No one is authorized to make or modify any warranties on behalf of Sonance.

The warranty stated above is the sole and exclusive remedy and Sonance's performance shall constitute full and final satisfaction of all obligations, liabilities and claims with respect to the Product. IN ANY EVENT, SONANCE SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Sonance's express warranty.

Your Product Model and Description: Sonance Cinema® Series Speakers

Additional Limitations and Exclusions from Warranty Coverage: The warranty described above is non-transferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat or cold or humidity, outdoor installation), or from service or repair which has not been authorized by Sonance.

Obtaining Authorized Service: To qualify for the warranty, you must contact your authorized Sonance Dealer/Installer or call Sonance Customer Service at (800) 582-0772, must obtain a return merchandise number (RMA), and must deliver the Product to Sonance shipping prepaid during the warranty period, together with the original sales receipt, or invoice or other satisfactory proof of purchase

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