

# SONANCE CINEMA SELECT® Home Theater Speakers

## **INSTRUCTION MANUAL**

#### SONANCE CINEMA® SELECT



### INTRODUCTION

Thank you for purchasing Sonance Cinema<sup>®</sup> Select THX<sup>®</sup> in-wall speakers. When properly installed, these THX-certified speakers will bring-out the best in all your entertainment, delivering film soundtracks as their creators intended them to sound and reproducing music with outstanding clarity and realism. This manual will teach you all about your new speakers' many innovative features and will show you how to get the very best performance from them. Please read it thoroughly. This manual covers both the Sonance Cinema Select LCR and Cinema Select SUR models.

### SAFETY WARNING:

These speakers have  $FastMount^{\circledast}$  tabs that prevent the speaker from falling out of the mounting hole during the installation process.

The edges of the FastMount tabs are very sharp.

Use caution when handling the speaker.

See Installation (page 6) for complete information about the FastMount tabs.

### **DESIGN AND FEATURES**

- Ideal for use in home theater systems and multi-channel music systems.
- •THX® Select certification guarantees cinema-quality performance in rooms up to 2,000 ft<sup>3</sup>.
- Carbon fiber woofer cone creates robust, low-distortion bass.
- Neodymium woofer magnet increases output and power handling.
- A unique tweeter acoustic back chamber widens and smooths high-frequency performance for crystal-clear, natural sound.
- 3/4"-Thick MDF baffle reduces resonances, improving clarity and detail.
- The RotoLock® mounting system makes installation quick and easy.

### **BOX CONTENTS**

Your Sonance Cinema Select speaker box should contain the following items:

#### Cinema Select LCR:

- (1) Cinema Select LCR speaker
- (1) Paintable grille
- (1) Plastic paint plug (installed on fronts of speakers)
- (1) Mounting cutout template (in packaging)
- (2) Cinema Select SUR speakers

**Cinema Select SUR:** 

- (2) Paintable grilles
- (2) Plastic paint plugs (installed on fronts of speakers)
- (1) Mounting cutout template (in packaging)

### **OPTIONAL ACCESSORIES**

Symphony FlexBracket (part # 92336): Plastic template to reserve a mounting hole for Cinema Select speakers in new construction. Designed to be used with the RotoLock<sup>®</sup> mounting system.

Symphony T Coverplate (part # 92334): Reusable cover protects the hole made by the FlexBracket during construction until the speaker is installed.





Figure 1: Sonance Cinema® Select LCR (left): Sonance Cinema® Select SUR (right)



### SPEAKER PLACEMENT

Your local authorized Sonance dealer is an expert in audio/video system planning and installation. We strongly recommend that you work with your dealer to ensure that your system is properly planned, assembled and installed.

#### Left, Center & Right Speakers

NOTE: CINEMA SELECT LCR SPEAKERS MUST BE ORIENTED VERTICALLY.

- Place the left & right speakers on either side of the video screen, anywhere from 6 feet to 10 feet apart and 38 42 inches from the floor (which corresponds to the height of your ears when you're seated on a couch or chair).
- If possible, locate the left and right speakers at least 18 inches away from the side walls.
- If possible, locate the center speaker at the same height as the left & right channel speakers (38 42 inches from the floor).
- If you must place the center speaker above or below a video screen, we recommend placing it no more than 2 feet above or below the center of the left and right speakers. This will help maintain consistent tonality between all 3 front channel speakers.

• The main listening position should be between 8 and 12 feet away from the speakers. Use Figure 2 as a guide.

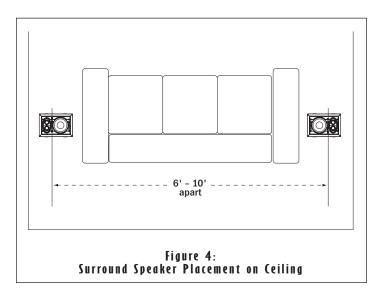
#### Left & Right Surround Speakers

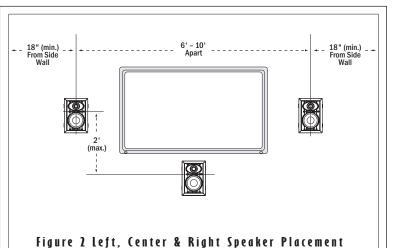
Place the left & right surround speakers directly to the sides of the listening position, between 5 and 7 feet off the floor. Use *Figure 3* as a guide.

If placing the left and right surround speakers on the walls directly to the sides of the listening position isn't possible, you can mount them on the ceiling. Locate the surround speakers directly to the left and right sides of the listening position, between 6 and 10 feet apart. Mount the speakers so the tweeters face the video screen and rear wall, with the woofers towards each other. Use *Figure 4* as a guide.

#### Surround Back Channel Speakers

The surround back speakers in a 6.1- or 7.1-channel system should be placed in the rear wall between 4 feet and 8 feet apart, at least 5 feet from the floor. Use *Figure 5* as a guide.





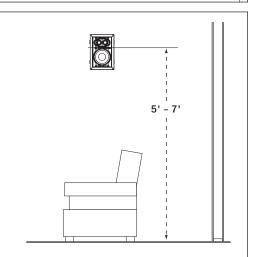
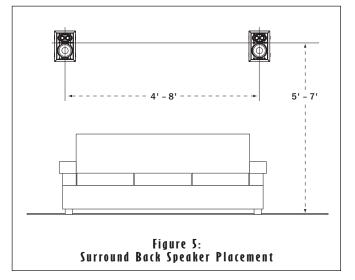


Figure 3: Surround Speaker Placement on Side Walls





### SELECTING THE PROPER SPEAKER WIRE

For the best sound we recommend that you use premium Sonance MediaLinQ<sup>®</sup> speaker cable, which also complies with UL fire rating codes. You may also

experiment with audiophile brands of speaker cable and interconnects, but be sure to check local codes governing wire that may be installed within walls or ceilings. Different brands of wire can have different sonic characteristics, and some may be more compatible with the sonic "signature" of your various audio system components.

For the best sound you should never use thin-gauge speaker wire — it will constrict the sound and diminish bass response. Extra resistance in the speaker wire can make a speaker sound less dynamic and reduce definition of the bass frequencies. In extreme cases, it can even attenuate high frequencies. Also, amplifier power is wasted in thin wire with extra resistance, reducing your system's maximum output level. To prevent degrading sound quality, the total wire resistance should be less than 10% of the speaker's impedance. This means that for an 8-ohm speaker, the total resistance of the wire should be less than 0.8 ohms. Refer to *Figure 6* when selecting the proper wire gauge for your system.

Distance in Feet	50'	100'	150'	200'	250'	300'
20 gauge	1.04	2.07	3.11	4.14	5.18	6.22
18 gauge	.65	1.30	1.96	2.61	3.26	3.91
16 gauge	.41	.82	1.22	1.63	2.04	2.45
14 gauge	.26	.52	.77	1.03	1.29	1.55
12 gauge	.16	.32	.49	.65	.81	.97
10 gauge	.10	.20	.31	.41	.51	.61

### PREPARING THE INSTALLATION LOCATION

#### Building a Backbox into the Wall Stud Bay

Sonance Cinema Select speakers are designed to provide exceptional performance in a wide variety of enclosure volumes. You can get the very best performance from your speakers by partitioning a section of the stud bay to form a sealed backbox with a specific internal volume. Building such an enclosure will create a dramatic improvement in your speakers' bass performance and power handling.

Ideal back box volume requirement for Cinema Select LCR and SUR speakers is 1.5 ft<sup>3</sup>.

#### **Optional Speaker Enclosures**

For installations where it isn't possible to partition the stud bay into a back box, installing optional SymphonyT Acoustic Enclosures (part #91687) will noticeably improve your speakers' bass performance and power handling and will significantly reduce sound transmission into adjacent rooms and spaces. These enclosures are made from ½"-thick MDF and are designed to be installed in new construction only.

To reduce sound transmission into adjacent rooms in installations where it isn't possible to install a SymphonyT Acoustic Enclosure (such as when you're retrofitting the speakers into an existing wall), you can fit the speakers with optional SymphonyT Retrofit Enclosures (part #92342). This enclosure will noticeably reduce sound "spillover" from the rears of the speakers into adjacent rooms and spaces.

#### Insulating the Wall Cavity

You can also reduce sound transmission to adjacent rooms and improve speaker performance by inserting a sheet of unfaced fiberglass insulation over the back of the speaker. To reduce mechanical noise produced by unsupported drywall, install fiberglass insulation in the stud bays adjacent to the speaker location.

#### **Sonafill**<sup>®</sup>

Sonafill (part #91698) is a retrofittable acoustical treatment system consisting of two pillows and four tiles that virtually eliminates noises produced by resonating drywall. The tiles have pressure-sensitive adhesive and are installed on the back of the drywall on either side of the speaker between the wall studs; the pillows are then stuffed in place behind the tiles. The system dramatically improves midbass sound quality and reduces sound transmission into adjacent rooms.

### INSTALLING THE SPEAKERS

#### Before Installation: New Construction

For installations in new construction, Sonance recommends using a SymphonyT FlexBracket (part #92336) to reserve a location for Cinema Select speakers. The FlexBracket has perforated wings that can be positioned at anywhere around the bracket, and is nailed or screwed to the studs. This serves as a guide for the drywaller so that the speaker hole will be in the desired location once the drywall is installed.

#### Before Installation: Retrofit

I. Determine the location for the speaker (see Speaker Placement on page 3).

2. Perform an obstruction survey to be certain that there are no studs, conduit, pipes, heating ducts, pocket doors or air returns in the wall cavity that will interfere with the speaker.

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- 3. The cutout for all Cinema Select speakers is  $10^{11}/_{16}$ " (270mm) x  $6^{13}/_{16}$ " (172mm). There also must be at least  $3^{7}/_{8}$ " (98mm) depth within the wall cavity for the speaker.
- 4. Position the included cutout template where the speaker is to be located and pencil an outline on the wall.
  - If you are unsure about obstructions, drill a small hole in the center of the outline and insert a coat hanger wire into the hole to feel-around for possible obstructions.
- 5. Cut the mounting hole using a keyhole or drywall saw, and run the speaker wires from the mounting hole to the amplifier location.

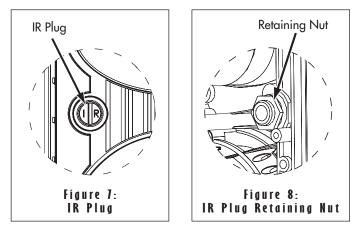
IMPORTANT: Consult local building codes before running speaker wires through walls.

#### Before Installation: IR Plug

Sonance Cinema Select speakers have a plug for installing an IR receiver into the speaker's front baffle (See *Figure 7*). In systems where the electronics may be placed in an inconvenient location this allows remote controls to be aimed at the front of the room instead of at the electronics.

The knockout is in the form of a bolt and retaining nut. To remove the knockout, unscrew the nut (located behind the baffle, see *Figure 8*) and remove the bolt. The hole is designed to receive a Sonance SMRI or SMRIP Surface-Mount IR receiver. Insert the IR receiver through the front of the speaker baffle and use the nut included with the receiver to secure it to the baffle.

Note: The speaker's grille may reduce the effectiveness of the IR receiver. If this occurs, slightly enlarge the holes in the grille that are directly in front of the IR receiver.



#### Installation

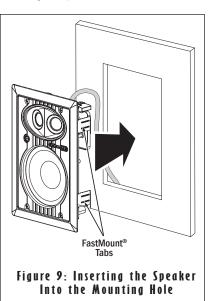
Sonance Cinema Select speakers feature exclusive FastMount® tabs and an integral RotoLock® mounting system for quick mounting directly into existing walls.

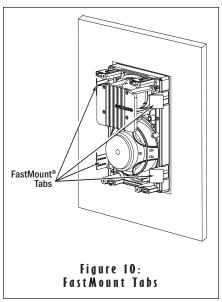
#### WARNING: THE EDGES OF FASTMOUNT TABS ARE VERY SHARP. USE CAUTION WHEN HANDLING THE SPEAKER.

- I. Remove the paint plug from the speaker.
- 2. Run speaker wire from each speaker to the amplifier location.
- 3. Strip  $\frac{1}{2}$ " 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 your amplifier.)
- 4. Push the top of each spring-loaded 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 "-".
- 5. Make sure all the RotoLock clamps are in the full clockwise position so that they are tucked within the mounting hole's border. Insert the speaker into the hole in the wall (*Figure 9*). The RotoLock system can accommodate a maximum wall material thickness of  $1\frac{1}{4}$ ".
  - The FastMount tabs will prevent the speaker from falling out of the mounting hole, allowing the installer to let go of the speaker to pick-up tools or other items (*Figure 10*).

NOTE: THE FASTMOUNT TABS ARE DESIGNED FOR ONE-TIME USE ONLY. IF THE SPEAKER IS REMOVED FROM THE MOUNTING HOLE THE FASTMOUNT TABS WILL DISCONNECT AND REMAIN INSIDE THE WALL.

continued on page 6







- 6. Tighten the four screws on the front of the speaker baffle. The RotoLock clamps will automatically rotate into position and begin clamping the speaker (Figure 11).
  - When you notice resistance on the screws the speaker has been clamped successfully.

IMPORTANT: Always use low-torque settings; NEVER over-tighten.

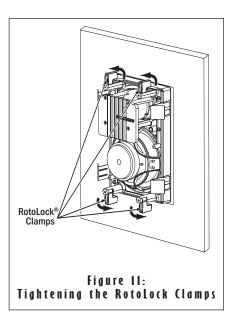
NOTE: THE SPEAKER FLANGE IS DESIGNED TO FLEX AND CONFORM TO ANY SMALL IMPERFEC-TIONS IN THE WALL SURFACE. DO NOT TIGHTEN THE SCREWS SO MUCH SO THAT THE FLANGE BOWS-OUT.

7. Attach the grille after the speaker has been installed. Insert about half of the grille into the groove at the edge of the speaker. Gently fit the remaining half of the grille by working around the speaker, fitting the grille into the groove as you go.

Note: You can adjust the torque applied to the RotoLock screws to achieve a proper grille fit.

### PAINTING THE SPEAKERS AND GRILLES

You can paint the speakers and grilles before installing them, which will eliminate the "paint scar" that can be left on the wall if the speaker ever needs to be removed for service. You can also paint the speakers after installation, but before the grilles are attached. All Sonance Symphony speakers come from the factory fitted with a plastic 'paint plug' that protects the speaker drivers while the mounting flange is being painted.



Sonance always suggests painting the grille separately from the speaker. Before painting, carefully remove the under-grille cloth. It is held in place with a light tacking glue that makes it easy to remove.

Spray the grille with thinned paint (5 parts thinner to 1 part paint), being careful not to plug the holes. Too heavy a coat of paint on the grille will adversely affect the sound of the speaker.

Once the grille and flange are painted and dry, replace the under-grille cloth, remove the paint plug from the mounting flange and install the grille.

### **SPECIFICATIONS**

Cinema Select LCR		Cinema Select SUR		
Tweeter:	l" (25mm) Silk dome, Ferrofluid-cooled,	Tweeter:	Two 1" (25mm) silk domes, Ferrofluid-cooled	
W (	shielded magnet	Woofer:	6½" (165mm) Carbon fiber cone, rubber	
Woofer:	6½" (165mm) Carbon fiber cone, rubber surround, shielded magnet	Frequency Response:	surround 55Hz — 20kHz ± 3dB	
Frequency Response:	80Hz — 20kHz ±3dB	Impedance:	8 Ohms nominal; 5 Ohms minimum	
Impedance:	8 Ohms nominal; 5 Ohms minimum	Power Handling:	5 watts minimum; 135 Watts maximum	
Power Handling:	5 watts minimum; 135 Watts maximum	Sensitivity:	90dB SPL (2.83V I meter)	
Sensitivity:	90dB SPL (2.83V I meter)	Grille Material:	Perforated aluminum	
Grille Material:	Perforated aluminum	Adjustments:	None	
Adjustments:	None	Dimensions (W x H x D):	$8\frac{1}{4}$ " x $12\frac{3}{16}$ " x $3\frac{7}{8}$ "	
Dimensions (W x H x D):	$8\frac{1}{4}$ " x $12^{3}/_{16}$ " x $3^{7}/_{8}$ "	, , , , , , , , , , , , , , , , , , ,	(210mm x 310mm x 98mm)	
	(210mm x 310mm x 98mm)	Cutout Dim. (W x H):	6 <sup>13</sup> / <sub>16</sub> " x 10 <sup>11</sup> / <sub>16</sub> " (172mm x 270mm)	
Cutout Dim. (W x H):	6 <sup>13</sup> / <sub>16</sub> " x 10 <sup>11</sup> / <sub>16</sub> " (172mm x 270mm)	Shipping Weight:	10 lbs. (4.5kg) Pair	
Shipping Weight:	5 lbs. (2.3kg) Each			

### TECHNICAL ASSISTANCE AND SERVICE

If you any have questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., PST.

If your speakers should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

- I. Prior to calling, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
- 2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

### IMPORTANT: YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR SPEAKER TO SONANCE!

- 3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize the chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
- 4. Contact a package delivery company such as United Parcel Service or Federal Express to arrange prepaid (not collect) shipping. Do not use the U.S. Postal Service.

#### IMPORTANT: Freight collect shipments will be refused.

5. Write the Return Authorization Number on the outside of the shipping carton.

6. Ship the packaged unit to:

QUALITY ASSURANCE DEPARTMENT Sonance 212 Avenida Fabricante San Clemente, CA 92672-7531

### LIMITED LIFETIME WARRANTY COVERAGE (U.S. ONLY)

Sonance warrants to the original retail purchaser only that this Sonance product will be free from defects in materials and workmanship, provided the speaker was purchased from a Sonance Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the Authorized Sonance Dealer from whom they were purchased, or to the Sonance factory at the address listed on this instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If upon examination at the factory or Authorized Sonance Dealer it is determined that the unit was defective in materials or workmanship at any time during this warranty period, Sonance or the Authorized Sonance Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, Sonance, at is sole option, may replace the unit with a current model of equal or grater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Sonance assumes no responsibility or liability for such modification. All replaced parts and product become the property of Sonance. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by Sonance. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty will be void if the Serial Number on the product has been removed, tamperedwith or defaced. This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will Sonance be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Sonance or an Authorized Sonance Dealer has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply. All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

### EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product. Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.





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Due to continuous product improvement, all features and specifications are subject to change without notice. For the latest Sonance product specification information visit: www.sonance.com

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www.sonance.com