



INTRODUCTION

Thank you for purchasing a Sonance Symphony Single Stereo Technology® (SS_{TR}) speaker. When properly installed, this speaker will give you many years of entertainment pleasure. To get the most out of your new speaker, please read this manual thoroughly before you begin installation.

To achieve the best performance, Sonance recommends that this speaker be installed by a Sonance Authorized Dealer/Installer.

This manual covers both the Symphony S623SS_{TR} and Symphony S621SS_{TR} speaker models.

PARTS LIST

Your Sonance Symphony in-ceiling speakers include the following:

- (1) Sonance Symphony Speaker
- (1) Paintable Grille
- (1) Plastic paint plug to protect speakers during painting
- (1) Mounting cutout template (in packaging)

OPTIONAL ACCESSORIES

Symphony FlexBracket (part# 92092) and **Symphony Staple Template** (part# 901049) — Plastic templates to reserve a mounting hole for the speaker in new construction. Designed to be used with the RotoLock® mounting system.

Symphony Coverplate (part# 92094) — Covers the hole made by the FlexBracket during construction until the speaker is installed.

Symphony Retrofit Enclosure (part# 92098) — Molded enclosure that reduces sound transmission into adjacent rooms and spaces. Can be used in installations where the speaker is retrofitted into existing walls.

Sonafill® In-Ceiling System (part# 91928) — Retrofittable acoustical treatment for in-ceiling speakers consisting of two pillows and four tiles that virtually eliminates noises produced by resonating drywall. Dramatically improves midbass sound quality and reduces sound transmission into adjacent rooms.

Symphony Acoustic Enclosure (part# 91688) — ½” MDF enclosure that provides ideal acoustic performance and maximum reduction of sound transmission into adjacent spaces. Designed for use only in new construction.

Fire-Rated Back Can (part# 91906) — Meets ASTM E 119, CAN/ULC S 101, NFPA 251, UBC 7-1 and UL 263 criteria for commercial installations.

SPEAKER PLACEMENT

Sonance Symphony SS_{TR} speakers combine the outputs of your receiver’s or amplifier’s left and right stereo channels, and play both stereo channels from just one speaker.

Symphony SS_{TR} speakers are ideal for use in hallways, bathrooms, closets, or in any location where listeners will be moving around and a pair of stereo speakers would be impractical.

The location of the speaker should be determined by considering your primary listening location as well as aesthetic values. Because a single Symphony SS_{TR} speaker reproduces both stereo channels, Symphony SS_{TR} speakers will deliver outstanding performance from a wide variety of locations.

For optimum results contact your Authorized Sonance Dealer for advice.

INSTRUCTION MANUAL

SONANCE SYMPHONY® SERIES SINGLE STEREO TECHNOLOGY® SPEAKER

WIRE GAUGE

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 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 the following table when selecting the proper wire gauge for your system:

Wire resistance in Ohms vs. length of cable run						
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

All Sonance speakers are designed to be relatively insensitive to variations in enclosure volume. To achieve the ultimate performance from your speaker, the wall or ceiling bay can be sectioned-off to form a back box. Building such an enclosure will create a dramatic improvement in bass performance and power handling.

Ideal back box volume requirements:

Symphony S623SS _{TR}	1.5 ft ³
Symphony S621SS _{TR}	1.0 ft ³

Insulating the Wall or Ceiling Cavity

To reduce sound transmission to adjacent rooms and further improve speaker performance, insulate the wall or ceiling cavity by inserting a sheet of unfaced fiberglass insulation above and below the speaker.

To reduce noise produced by unsupported drywall, install fiberglass insulation in the wall or ceiling bays adjacent to the speaker location.

Symphony Retrofit Enclosures

For installations where it isn’t possible to section-off the wall or ceiling bay to form a back box (such as when you’re retrofitting the speakers into an existing ceiling), you can effectively reduce sound transmission into adjacent rooms by fitting the speakers with optional Symphony Retrofit Enclosures (part# 92098). This enclosure is designed specifically to be used with Symphony speakers, and will noticeably reduce sound “spillover” from the rear of the speakers into adjacent rooms and spaces.

INSTALLING THE SPEAKERS

New Construction

For installations in new construction, Sonance recommends using a Symphony FlexBracket (part#92902) to reserve a location for the speaker. The FlexBracket is nailed or screwed to the studs and serves as a guide for the drywaller so that the speaker hole will be in the desired location once the drywall is installed.



Symphony FlexBrackets are compatible with the RotoLock mounting system (see *Retrofit*, below).

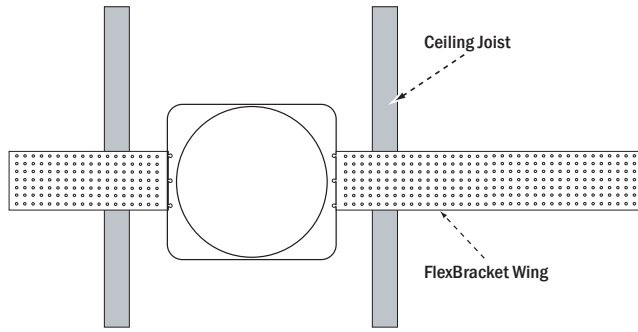


Illustration 1: Symphony FlexBracket Installation

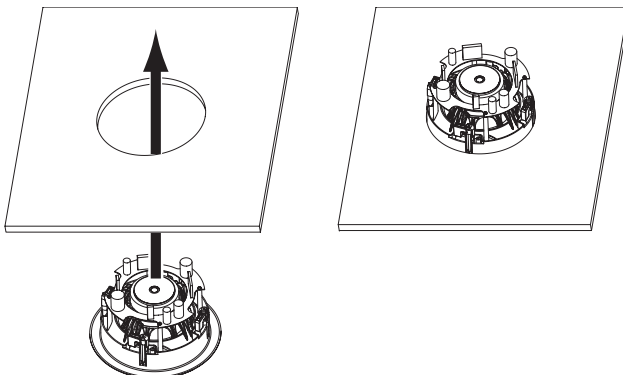
Retrofit

Symphony Speakers feature an integral RotoLock® mounting system for quick mounting directly into existing ceilings and walls. Once the hole is cut and the cable is run, you can install the speaker in a matter of seconds.

1. Determine the location for the speaker (see *Speaker Placement*).
2. Perform an obstruction survey to be certain that there are no studs, conduit, pipes, heating ducts or air returns that will interfere with the speaker.
3. The cutout for Symphony SS_{TR} Speakers is 8⁵/₃₂" (207mm). There also must be at least 5³/₁₆" (132mm) depth within the ceiling or wall cavity for the speaker.
4. Find the cutout template provided in the speaker packaging. Position the template where the speaker is to be located and pencil an outline on the wall or ceiling.
 - 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 hole using a drywall saw, and run the speaker wires.
6. Remove the paint plug from the speaker. Connect the speaker wires to the terminals on the back of the speaker.:
 - Connect the left channel amplifier '+' wire to the red 'Left' speaker terminal; connect the left channel amplifier '-' wire to the black 'Left' speaker terminal.
 - Connect the right channel amplifier '+' wire to the red 'Right' speaker terminal; connect the right channel amplifier '-' wire to the black 'Right' speaker terminal.
7. Make sure all the RotoLock clamps are in the full clockwise position so that they are tucked within the cutout border. Insert the speaker into the hole in the ceiling.

Note: The RotoLock system can accommodate a maximum wall or ceiling material thickness of 1³/₈".

Step 7:



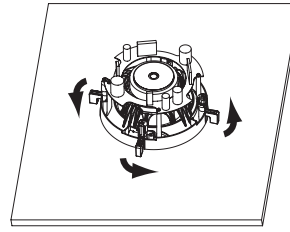
8. Tighten the four screws on the front of the speaker baffle. The RotoLock clamps will automatically rotate into position and begin clamping the speaker.

- When you notice resistance on the four screws the speaker has been clamped successfully.

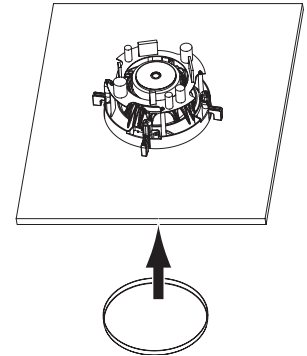
The speaker flange is designed to flex and conform to any small imperfections in the wall surface. Do not tighten the screws so much so that the flange bows-out.

Important: Always use low-torque settings – NEVER over-tighten.

Step 8:



Step 9:



9. 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 speaker and grille before installing it, which will eliminate the "paint scar" 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 Symphony speakers come from the factory fitted with a plastic 'paint plug'. Use the paint plug to protect the speaker drivers while the flange is being painted along with the wall.

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

ADJUSTING YOUR SPEAKERS

Tweeter Level Control (S623SS_{TR} only)

The Symphony S623SS_{TR} has a tweeter level control switch that lets you boost or cut the tweeters' level by 3dB.

Once you have installed the speaker, listen to a variety of music that you are familiar with. If the music all tends to sound too bright, adjust the level control to the -3dB position. If the music all tends to sound too dull, adjust the level control to the +3dB position. If some recordings sound dull and some sound bright, the speaker is accurately reproducing differences in the recordings, and you should leave the control in the 0dB position.

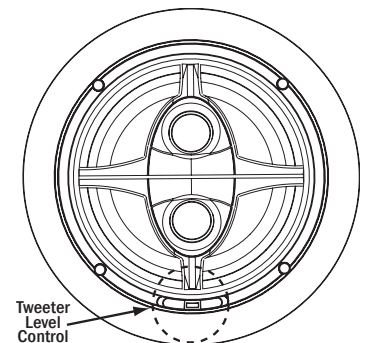


Illustration 2: Tweeter Level Control



Pivoting Woofer

Both Symphony SSTR Speakers have a pivoting woofer assembly. This pivoting speaker allows you to direct sound toward or away from the listening area. For example, if listeners will be off-axis of the speaker, you can pivot the speaker towards the listeners for smoother sound.

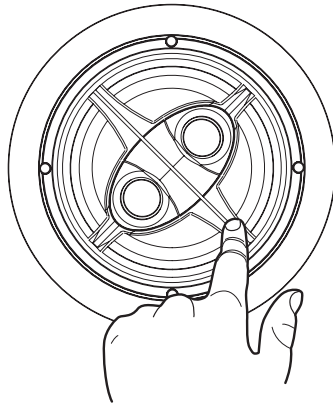


Illustration 3: Pivoting the Woofer

To pivot the woofer:

Apply pressure on the outer edge of the tweeter support bracket, as shown in Illustration 3.

Note: Do not touch or apply pressure to the woofer cone.

SPECIFICATIONS

S623SSTR

Tweeter	1" (25mm) Silk Domes, Ferrofluid cooled
Woofer	6½" (165mm) Carbon Fiber cone, rubber surround, dual voice coil, pivoting
Frequency Response	43Hz – 20kHz ±3dB
Impedance	8 Ohms nominal; 6 Ohms minimum
Power Handling	5 watts minimum; 135 Watts maximum
Sensitivity	90dB SPL (2.83V 1 meter)
Grille Material	Perforated Aluminum
Adjustments	±3dB tweeter level
Dimensions (Dia. x Depth)	9¾" (248mm) x 5⅓" (132mm)
Cutout Diameter	8⅝" (207mm)
Shipping Weight	5 lbs. (2.3 KG) Pair

S621SSTR

Tweeter	Two – ¾" (19mm) Silk Domes, Ferrofluid-cooled
Woofer	6½" (165mm) Polypropylene cone, rubber surround, dual voice coil, pivoting
Frequency Response	50Hz – 20kHz ±3dB
Impedance	8 Ohms nominal; 6 Ohms minimum
Power Handling	5 watts minimum; 100 Watts maximum
Sensitivity	88dB SPL (2.83V 1 meter)
Grille Material	Perforated Aluminum
Adjustments	None
Dimensions (Dia. x Depth)	9¾" (248mm) x 5⅓" (132mm)
Cutout Diameter	8⅝" (207mm)
Shipping Weight	4.5 lbs. (2.0 KG) 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:

1. 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 a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.

4. Contact United Parcel Service, Federal Express, or RPS to arrange prepaid (not collect) shipping. Do not use the U.S. Mail 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 factor 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 Factor 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 its sole option, may replace the unit with a current model of equal or greater 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, tampered-with 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 a 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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