



INSTALLATION INSTRUCTIONS AND MANUAL

SONANCE SILHOUETTE™ I, II, III



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IMPORTANT SAFETY INSTRUCTIONS

When using your Sonance Silhouette™ speakers, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read and understand all instructions.
2. Retain the safety and operating instructions for future reference.
3. Follow all warnings and instructions in this manual and marked on the product.
4. Any service or repair required must be performed by qualified, factory authorized personnel.
5. Do not use this product in a high humidity environment or near water, for example a wet basement, wet bar, or swimming pool.
6. Never touch the drivers or push objects of any kind into this product through the grilles.



INTRODUCTION

Congratulations on your choice of the Sonance Silhouette™ series, the no compromise in-wall speakers from Sonance®, the Leader in Architectural Audio™. Sonance Silhouette speakers deliver audiophile quality music reproduction without the space requirements of freestanding loudspeakers. Their elegant, unobtrusive form combines remarkable transparency, imaging, and dynamic range with architectural styling.

Sonance Silhouette has been designated a Signature Series—its baffle proudly displays the signature of chief speaker designer, Todd Ryan. Every aspect of the series is designed to contribute to its benchmark performance for in-wall speakers. The 1" medium-density fiber board (MDF) baffle, chosen to provide a rigid platform for the drivers, features a black lacquer finish rivaling a fine musical instrument. The bi-wireable five-way binding posts provide a variety of connection options. The elliptical bass drivers extol the groundbreaking nature of this design.

Since designing the first high fidelity in-wall speaker in the world, Sonance continues its evolutionary success with Sonance Silhouette. The Sonance Silhouette series combines years of scientific research with stunning aesthetics to satisfy both the discriminating audiophile and the most particular of design requirements.

By combining innovative driver technology with a sophisticated crossover design, Sonance Silhouette delivers sonic performance previously limited to high-end, free-standing speakers. From its introduction, the Sonance Silhouette series has been praised by respected critics.

Sound sources make drywall vibrate, creating its own resonant frequency, adding "coloration" to the original information. The Sonance Silhouette design approach eliminates this coloration by carefully matching a 1" titanium tweeter and two 4" magnesium midranges with the proper crossover components meticulously crafted into a multi thickness enclosure, isolating these critical components from the wall itself. This enclosure is then mounted from the rear, to the center of a 1" front baffle along with proprietary aluminum 9" elliptical woofers. The entire baffle is then coupled to a rigid aluminum frame complete with steel mounting feet for rigidity. This entire system creates the Sonance Silhouette, easily integrating into any décor while delivering sonic performance unmatched by any other in-wall product. Now, there truly is a better alternative to large free-standing speakers, the elegant Sonance Silhouette.

The Sonance Silhouette series exceeds a remarkable set of design goals. These in-wall speakers deliver the full detail, subtlety, imaging, and dynamic range present in a fine recording. They mount in a standard 4" deep stud bay and eliminate the coloration and acoustical artifacts of drywall construction.

The seven-driver Sonance Silhouette III, five-driver Sonance Silhouette II, and four-driver Sonance Silhouette I are all well suited to left and right channel duties in fine music and home theater systems.



CUSTOM INSTALLATION

Your Sonance Silhouette speaker will provide maximum performance and entertainment value when custom installed by skilled professionals with specialized tools and experience to design and install audio/video and related systems. These professionals can assist you in the selection of complementary components engineered to meet your needs and optimize performance while satisfying the physical and aesthetic demands of the space you have chosen for your home theater.

Custom installed systems can be configured to accommodate music reproduction throughout your home, security, telephone, and other home systems. Professional installers coordinate their efforts with architects, interior designers, and electricians to ensure that these systems blend into your home both functionally and aesthetically.

The increasingly sophisticated audio and video component now available demand expert system design and installation to deliver full value. More than ever, consumers rely on custom installers to help them explore the myriad of home entertainment options now available . . . to explain the features and functions of each and assure compatibility of related components.

Custom installation caters to the homeowner who eschews the complexity and unsightliness of traditional audio and video systems, yet wants to enjoy music throughout the home. In the capable hands of a custom installer, special devices like those supplied by Sonance can make the most sophisticated audio/video systems easy to use and practically invisible.

The growing popularity of home theaters speaks to a change in the way you perceive audio and video components. You probably see them as an integral part of an investment in your home and lifestyle. The professional installer can assure that this investment meets your expectations.



DRIVER-COMPLEMENT DESIGN

The symmetrical placement and use of 4" midrange drivers above and below the tweeter were chosen to widen the vertical dispersion which is critical for a wide off-axis listening window.

The use of small diameter midrange drivers and a low crossover frequency to the tweeter combine to produce the desired flat room response.

Magnetic shielding of the midrange and tweeter array eliminates potential interference with video monitors in close proximity.

TWEETER DESIGN

Sonance Silhouette's high frequency driver is a custom Focal® tweeter featuring a concave titanium dome with a titanium dioxide coating designed to dampen unwanted resonance. This element delivers high definition, high frequency information while maintaining a low resonant frequency. This tweeter was specifically designed for the Sonance Silhouette's novel crossover design. Its elevated breakup frequency results in high frequency articulation without coloration. The tweeter design also features:

- High-pressure, injection-molded face plate with 5 mm thickness
- Titanium dome employing super high Youngs modules dioxide coating
- 20mm diameter voice coil with aluminum former ensures high power handling

MIDRANGE DESIGN

Sonance Silhouette's 4" midrange driver is essential to the overall design. This specific approach was chosen after months of research into the resonant characteristics of stud wall construction and interaction between wall components and loudspeakers. Research reveals that the typical drywall/stud interface is most susceptible to acoustical resonance in the 150 Hz to 200 Hz band. The 4" midrange drivers allow a crossover point at 135 Hz, which is below this resonant frequency. Additionally, mounting the midrange tweeter array in its own MDF back box eliminates coloration induced by driver/wall interaction. Additional features include:

- Die-cast aluminum basket for maximum mechanical integrity as a rigid device
- Concave, one-piece magnesium cone, for designated polar response to generate uniformity both on- and off-axis
- Vented pole piece design selected to ensure voice coil cooling and eliminate air pressure build-up behind the driver element assembly. This results in the required high power handling capability.



ELLIPTICAL WOOFER DESIGN

Capitalizing on the unique characteristics of an elliptical driver, the woofer assembly delivers superior reproduction while offering the perfect profile for Sonance Silhouette's design criteria. An elliptical metal cone driver yields essentially the same radiating area as an 8" driver, but with a width of only 6". The undeniable performance of this drive unit delivers these unique benefits:

- The elliptical design varies the distance from center to edge that contributes to the cancellation of unwanted cone resonance. Resonance is a type of vibration that interferes with the accuracy of the sound source.
- The use of a die-cast aluminum basket provides a rigid, stable foundation necessary for correct driver function.
- Audiophile performance requires low distortion components during high cone velocity situations. Those goals were met with the use of a light metal alloy cone, which combines reduced mass (weight) with high rigidity to perform as a pure piston for predictably linear excursion. Acting as a heat sink for the voice coil, the metal cone further contributes to the Sonance Silhouette's high power handling capability.
- An extended pole piece voice coil eliminates non-linearity coloration caused by common designs that suffer from dust cap back pressure while providing active and effective cooling for the voice coil assembly.
- A high-compliance, half-roll rubber surround and long excursion enhance power handling.

BAFFLE DESIGN

The Sonance Silhouette baffle is constructed from 1" MDF. This material is known for its extreme rigidity and non-resonant qualities. The high-gloss, black lacquer finish is applied to the baffle in a 10-step process that requires five days of hand finishing. This process is similar to that used so successfully to finish pianos and guitars. Precise, smooth driver openings ensure optimum propagation of waveforms.

MIDRANGE, TWEETER DRIVER ENCLOSURE

The midrange and tweeter driver array is acoustically isolated from outside interference by its own enclosure attached to the back of the baffle. This enclosure is constructed with a combination of three different thicknesses of MDF to eliminate the mutual resonance occurring between the panels of the enclosure. The enclosure is filled with a new synthetic damping material called Myraflex® manufactured by Owens Corning, thus properly loading the interior of the enclosure.



ALUMINUM FRAME ARCHITECTURE

The baffle attaches to an extruded aluminum frame specially tooled for the Sonance Silhouette speaker. The frame employs a truss design that adds incredible strength and rigidity to the Sonance Silhouette assembly. This frame design also facilitates the ease of installation attributed to all Sonance Silhouette speakers.

ROTO-LOCK™ MOUNTING SYSTEM

Sonance's Roto-Lock mounting system firmly couples the Sonance Silhouette speaker to the wall. By turning the screws visible on the front baffle of the speaker, a metal tab rotates into place and clamps the drywall between the mounting tab and the baffle of the speaker assembly. This results in an extremely secure and non-resonant installation.

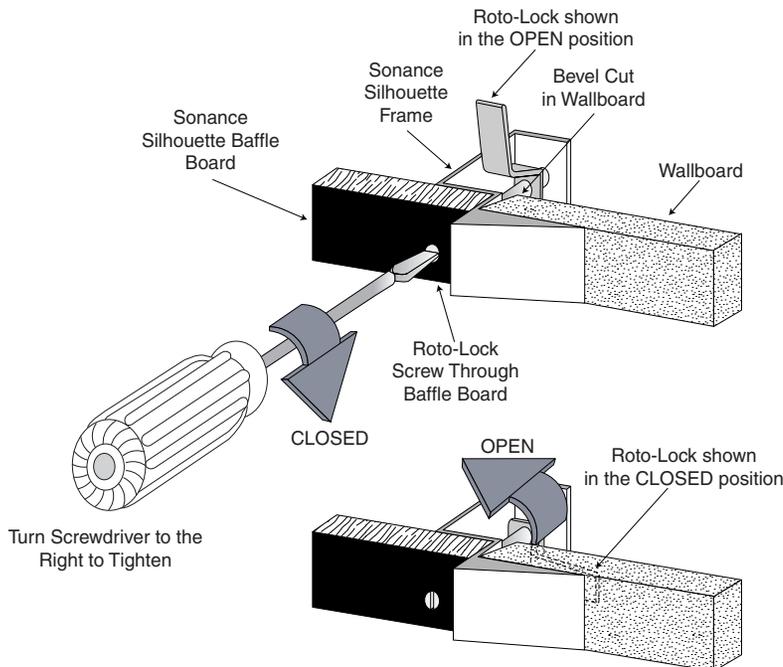


Figure 1. Sonance Roto-Lock mechanism. The Roto-Lock mechanism is built into every Sonance Silhouette series speakers. Roto-Lock makes in-wall speaker installation fast and easy.



CROSSOVER NETWORK DESIGN

The function of the crossover is to route the incoming signals to the intended driver locations. This results in a cohesive blending of the sound from the woofer, midrange and tweeter elements. The crossover affects the entire performance of a loudspeaker design. An ideal speaker possesses both flat on-axis frequency response and smooth off-axis response; this is particularly important for in-wall speaker designs.

The sound character of a speaker in a home environment is a combination of the on-axis, and the horizontal and vertical off-axis responses. Due to reflections off the floor, ceiling, side and rear surfaces, evaluating and engineering the response of the speaker both on-axis and off-axis become critical components of the overall design.

In-wall speaker designs also have the additional challenge of being mounted in a wall which can immediately reflect sound into the listening room. Sonance Silhouette's off-axis frequency response is optimized to eliminate that specific coloration. The sound directly from the speaker and those reflected are all equally critical to the overall sound quality.

A major innovation in the Sonance Silhouette design is the application of low crossover frequencies. These lower frequencies allow the woofer, midrange and tweeter to operate within their ideal frequency ranges. The result produces the ideal flat on-axis and smooth off-axis performance. The low 135 Hz crossover frequency from woofer to midrange was specifically designed for the woofer and midrange to work together without exciting wall vibrations. The crossover point from the midrange to the tweeter is located at 2150 Hz. High quality 18 dB per octave slopes are used on all crossovers to ensure correct and unaffected interaction between drivers with an increase in power handling and maximum vertical dispersion. Three separate PC boards are utilized for the design.



GETTING THE MOST FROM YOUR SONANCE SILHOUETTE SPEAKERS

When properly installed and operated with appropriate components, your Sonance Silhouette speakers will provide many years of entertainment pleasure. Your Sonance Silhouette speakers are capable of delivering pristine sound quality, unparalleled clarity, and precise imaging. Your system also can sustain reproduction of substantial continuous sound levels, with a large dynamic performance margin. To realize the full potential of your new speakers, please read all instructions before starting the installation process.

Pre-installation is critical to achieving the maximum performance of your Sonance Silhouette speakers. Factors such as the location and height of seating and location of video monitor dictate the proper placement and direction of speakers. As with any fine speaker, good room characteristics are necessary to ensure the maximum sonic performance of which the Sonance Silhouette is capable.

Remember that the wall is part of the sound reproduction system. To the degree possible, the listening room should be symmetrical both in overall shape, and with respect to furnishings (especially wall treatments and hanging art). The best listening rooms exhibit low intrusion of ambient noise. In any event, the Sonance Silhouette speakers should not be mounted with less than two feet of unobstructed wall on either side (i.e., not in columns).

Optimum horizontal placement of left and right speakers is six to ten feet apart and at least 18" from side walls (see Figure 2 below). All measurements are at the center of the tweeter.

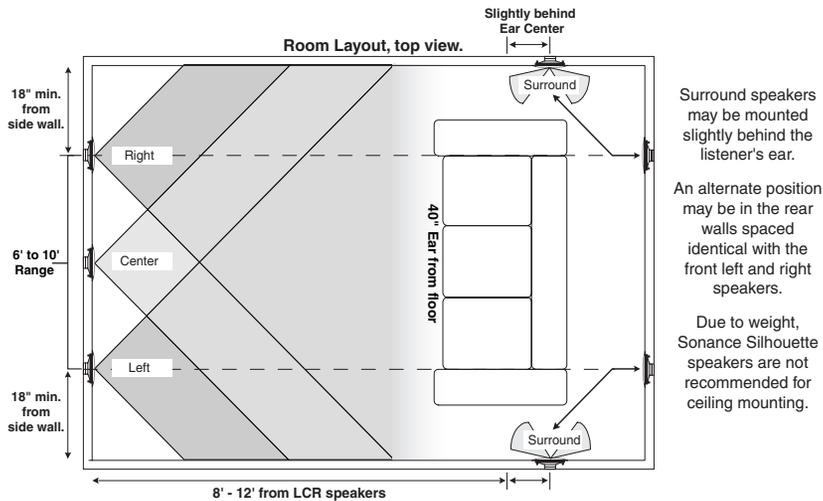


Figure 2. In-wall speaker locations for optimum speaker performance.



Seating position should be 8'–12' from the front speakers. Ideally, the tweeter and listeners' ears should be 38"–42" from the floor, though the excellent off-axis dispersion of the Sonance Silhouette speakers provides superb reproduction even when optimal placement is impossible.

When employed as surround speakers, the Sonance Silhouette speakers should be in the side walls, in line with the listeners' ears and with the tweeters 60"–72" from the floor (see Figure 3 below). If this is not possible, the surround speakers may be installed in the back walls of the room at the same width as the left and right front speakers. The tweeters should also be 60"–72" from the floor. Due to their substantial weight, it is not recommended that any of the Sonance Silhouette series speakers be employed in ceiling installations.

For center and surround channel duty, the compact Sonance Cinema® Two speakers also complement Sonance Silhouette speakers in these applications.

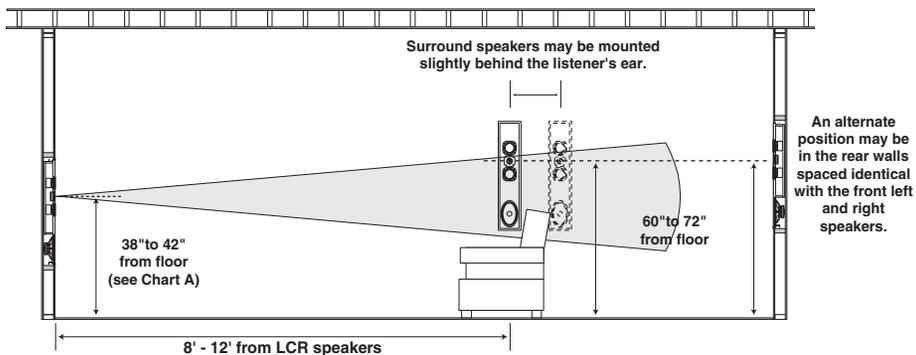


Figure 3. In-wall side and rear speaker locations for optimum speaker performance.



INSTALLATION QUICK START

Read “Getting The Most From Your Sonance Silhouette Speakers” and plan speaker locations.

If this is your first installation of a Sonance Silhouette system, read all of the installation instructions before beginning.

Choose high quality (oxygen-free, multi-strand) copper wire to make the wire runs between your audio equipment and your Sonance Silhouette speakers. Larger wire than normal is recommended. to reduce resistance which eliminates power losses between your audio equipment and your in-wall Sonance Silhouette speakers. Follow the information listed below:

- 14 gauge for less than 30 feet.
- 12 gauge for between 30 and 75 feet.
- 10 gauge for greater than 75 feet.

Verify adequate parts and tools for the installation:

PARTS LIST / TOOL LIST

	NEW CONSTRUCTION	RETROFIT
PARTS		
Construction Adhesive (not included)	●	●
Silicon Sealer (not included)	●	●
Drywall Screws (not included)	●	●
TOOLS		
Electric Drill (1/4" - 3/8" drive)	●	●
Phillips Bit	●	●
1" Flat Bit		●
Stiff Wire (coathanger, fishtape)		●
Torpedo Level	●	●
Wire Strippers	●	●
Keyhole or Drywall Saw	●	
Gloves	●	●
Eye Protection Goggles	●	●

Chart A. Installation Parts and Tools List for Sonance Silhouette speakers.



INSTALLATION SAFETY

When installing Sonance Silhouette speakers, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read and understand all instructions.
2. Never drill or cut into wall cavities that already contain electrical wiring or plumbing.
3. Follow all warnings and instructions in this manual and marked on the product.
4. Always exercise caution when working in unfinished spaces such as attics. Areas with exposed joists present a significant danger of injury from falls or stepping on nonstructural surfaces. Before working in areas with exposed joists, always create temporary walkways using plywood or dimensional lumber strong enough to support your weight.

CARE AND MAINTENANCE

1. Retain the safety and operating instructions for future reference.
2. Any service or repair required must be performed by qualified, factory authorized personnel.
3. Do not use liquid or aerosol cleaners on the speakers.
4. To clean your speakers, wipe the grilles with a soft cloth dampened with water. You may remove the grilles to wash and dry them. The baffle and drivers may be dusted by gentle use of “canned air” commonly used to clean cameras and computer equipment.
5. Do not expose your Sonance Silhouette speakers to direct sunlight or high heat. Extended periods of exposure may cause deterioration of adhesives and driver materials, compromising the useful life of the speakers.
6. Sine wave test tones can damage your Sonance Silhouette speakers and should only be used at low volume levels for short periods.
7. Do not expose your Sonance Silhouette speakers to construction dust, dirt, or airborne paint particles. If the area in which your speakers are installed is subject to potentially damaging airborne particles, you may remove the grilles, temporarily cover them with paper or plastic food wrap, then replace them over the speakers. Be sure to remove this protective cover after the dirty activity is complete and the room is thoroughly cleaned.



CREATE OPENINGS (NEW CONSTRUCTION)

Survey proposed sites and look for installation obstacles, like plumbing, wiring, and other fixtures. Any high performance loudspeaker needs some care in understanding its physical placement requirements:

- The optimum installation space is a 2" x 6" stud bay. This allows for the use of a back box with notable sonic improvement. Several physical and acoustic criteria are better served with this space allocation. Back box plans are provided for all models on pages 16, 17, and 18.
- Double 1/2" dry wall in a 2" x 4" stud bay, is the next best solution. The physical size and weight of Silhouette are best served with this type of physical support.
- After double dry wall, a standard 5/8" drywall in a 2" x 4" stud bay can be used though optimum sonic integrity will be compromised. Magnet depth requires a 1/8" relief cut-out made behind the magnet with a dremel® tool to accommodate current speaker depth of 4-1/4".
- Any other situation will take more creativity on the part of the installer. This is achievable, but will take more time.

WITH A BACK BOX

To obtain the ultimate performance from your Sonance Silhouette speakers we strongly recommend the use of a back box. Back boxes will provide better definition to bass, higher power handling, and less intrusion of sound into other rooms.

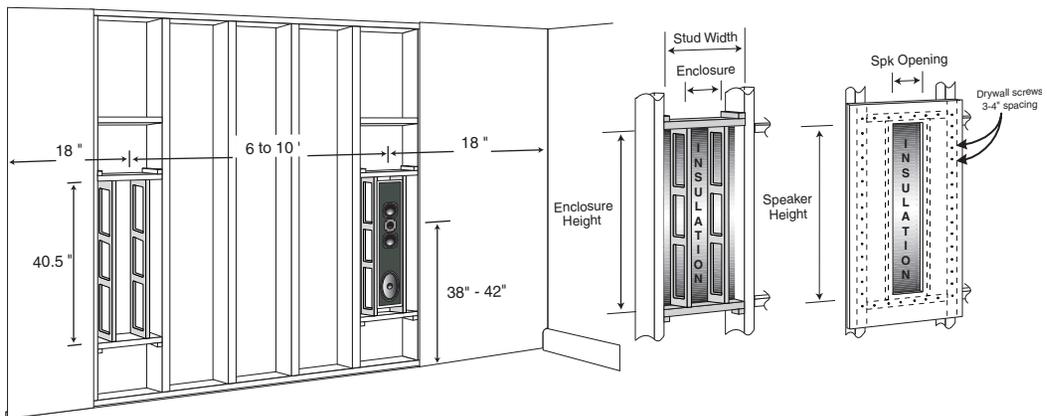


Figure 4: New construction locations for optimum speaker performance.



- Attempt to avoid placing a speaker in a stud bay shared with the home's electrical system.
- Move any fire stops that will interfere with the installation location (use the cardboard cut-out template to pre-visualize installed speaker). Be sure to follow local building codes.

To use a back box with the Sonance Silhouette speakers you will need a wall with at least 5-1/2" of depth. On pages 16 through 18 of this manual you can find construction drawings of back boxes for the three Sonance Silhouette models. Follow the drawings as closely as possible.

1. Construct the back boxes out of 3/4" MDF according to the drawings, apply glue to all joints and screw or nail the box together. Loosely fill the back box with fiberglass.

NOTE : On the construction drawings you can find the back box volumes necessary for each of the Sonance Silhouette models. If your installation requires, modify the dimensions of the box but maintain the proper internal volume. If you modify the depth of the back box, please allow at least 4-1/4" of depth to clear the woofer magnet.

Sonance Silhouette I (1.218 cubic feet)

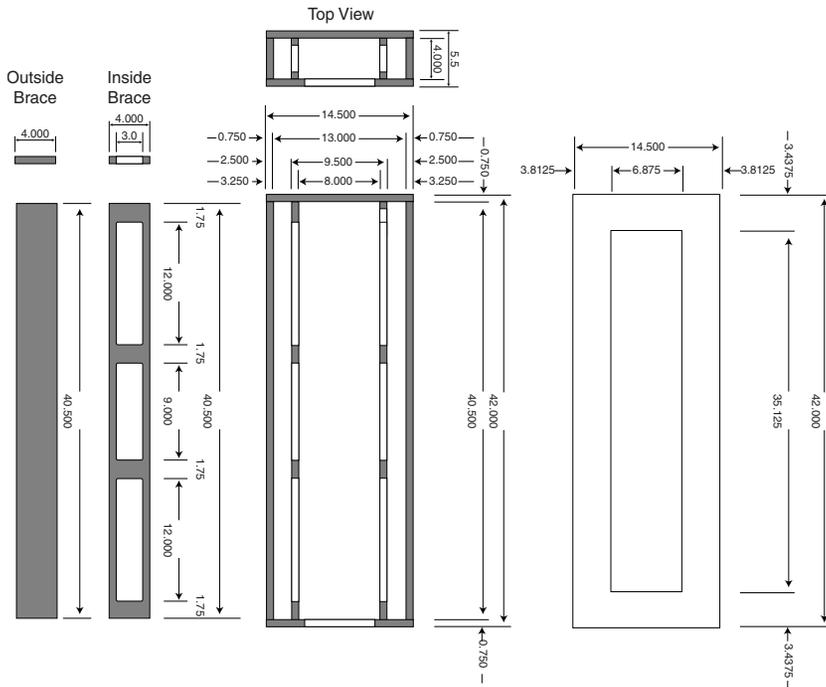


Figure 5: Sonance Silhouette I rear box design.



2. Once the boxes are constructed, attach the back box to the studs using 3" screws. Drill a hole through the back box and run the speaker wire through it. After wire is installed, seal the hole with silicone chalking to prevent air leaks.
3. To further improve sound quality, install fiberglass in each stud bay adjacent to the speaker's locations.
4. Use construction adhesive and drywall screws to attach the drywall around the rim of the enclosure. Space screws at 4-6" intervals.
5. After drywall has been installed, mark and cut the drywall along the template outline and discard the center.
6. Tape and fill seams to finish the drywall around the back box location.

Sonance Silhouette II (2.106 cubic feet)

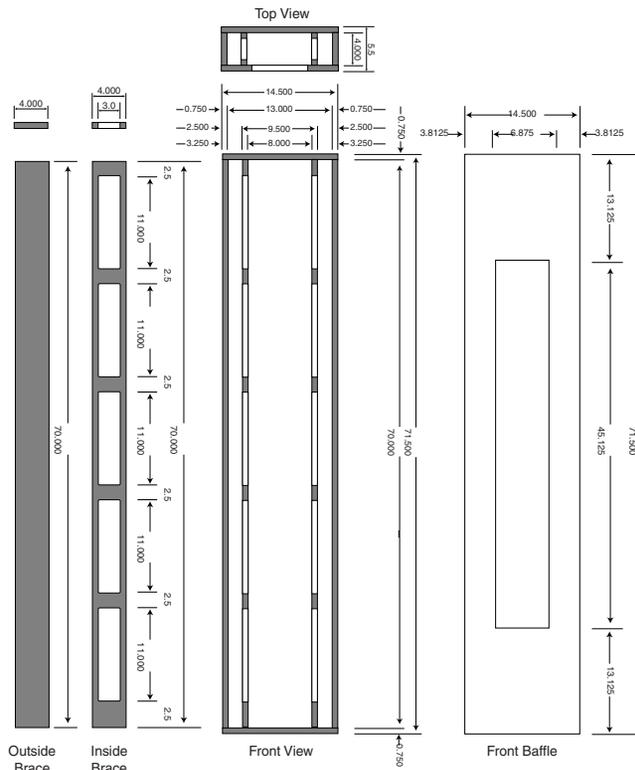


Figure 6: Sonance Silhouette II rear box design.



Sonance Silhouette III (2.71 cubic feet)

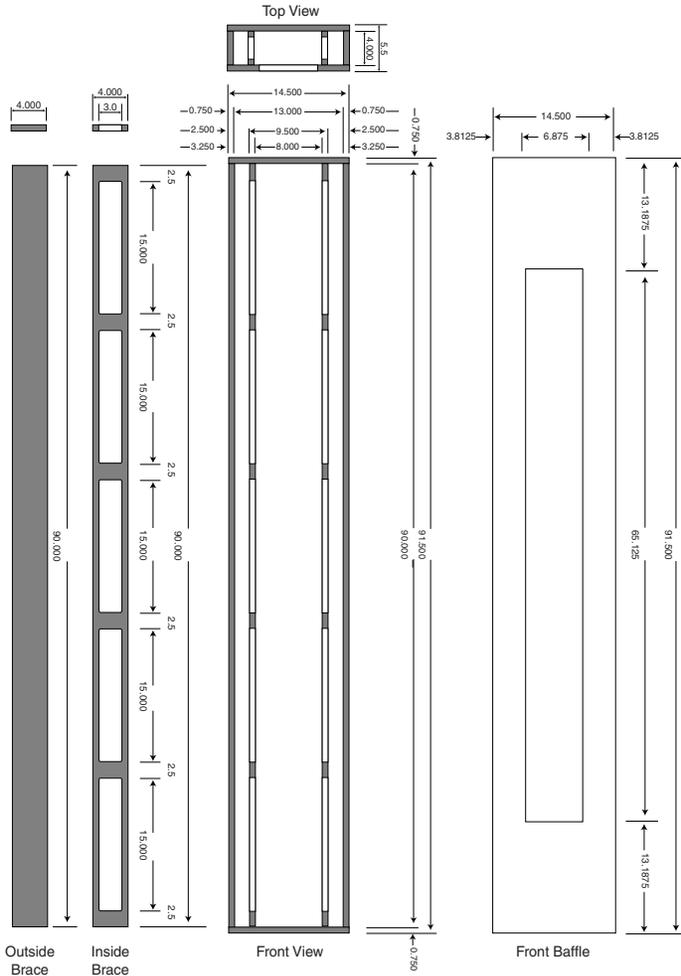


Figure 7: Sonance Silhouette III rear box design.



WITHOUT A BACK BOX

1. Run wire to desired speaker locations. Mark stud bay for reference when returning to install speakers.
2. We strongly recommend using construction adhesive to secure the drywall to the studs around the bay the speaker will be mounted in. Use extra drywall screws to secure the drywall to the studs, space the screws approximately 4"–6" apart.

CAUTION: The speaker opening must be smaller than the enclosure width (use the Retrofit cut-out dimensions). Do not cut the drywall out to the width and height of the enclosure sides or the Roto-Lock fasteners will not work.

3. After drywall is installed and ready for speakers follow retrofit instructions on page 19.

CREATE OPENINGS (RETROFIT)

Survey proposed sites and look for installation obstacles, e.g., plumbing, wiring, and other fixtures. Access the attic or crawl space to check routing of air ducts and available mounting depth. The Roto-Lock requires a 1" area around the speaker to function.

1. At each selected site, use a stud locator (available at hardware stores for about \$20) to identify studs. Center each speaker between two studs. Check on both sides of the wall (this and adjacent room) for electrical outlets or switches, which indicate wiring in the selected stud bay. Attempt to avoid placing a speaker in a stud bay shared with the home's electrical system.
2. Measure in from wall and mark planned edge of each wall opening. Painter's masking tape (available at paint and hardware stores) is good for this because it leaves no adhesive residue.

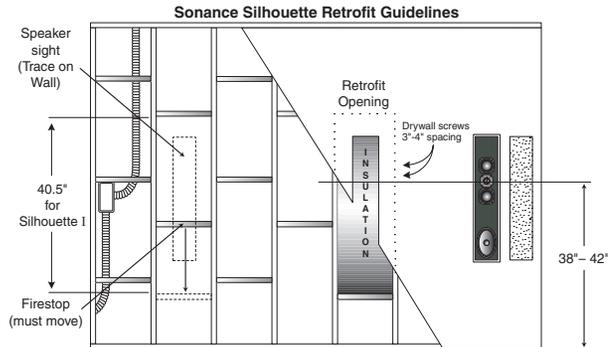


Figure 8: Retrofit construction for Sonance Silhouette speakers.

3. Position and temporarily attach the cardboard cut-out template from packaging with painter's tape or a stapler and a level. Trace a cutout hole on wall for each speaker (Figure 8). Remove template.



4. Use a painter's drop cloth, available at paint and hardware stores, to protect floor, carpet, and furniture from drywall dust during drilling and cutting.
5. At each proposed opening, drill several small holes along the length of the center of chosen area and insert a bent coat hanger to confirm that the cavity is clear at least 6" in all directions. If you feel any obstruction, immediately stop drilling, patch hole with drywall compound, and search for a new installation location. Possible obstructions include braces, plumbing supply, drain, vent pipes, electrical conduit, junction boxes, and light fixtures.
6. Using a drywall saw, cut a hole large enough to allow inspection.
7. Look inside opening and move any fire stops that will interfere with installation. Be sure to replace any fire stops you remove.
8. Cut the drywall you just removed along the template outline and discard center.

SPEAKER INSTALLATION/GRILLE/FRAME PAINTING

Speaker grilles may be painted to color match surroundings. Proper preparation will lead to a beautiful, long lasting surface that matches the room décor.

1. First, remove the grille by carefully prying it away from the baffle starting at the short end of the speaker. Prepare both the grille and speaker frame using a light 600 grade sanding material. The idea is to create a slightly rough surface for the primer to adhere to.
2. All sanded surfaces should be cleaned with a soft cloth. Apply a primer such as XIM grade spray primer to all metal surfaces to be painted. Dry according to the directions provided by the primer manufacturer. After the primer is dry, a light final sanding should be done to increase the adherence of the paint to the primer.
3. Prior to painting, all surfaces should be wiped clean with a dry cloth. Several factors will determine how many coats of paint are required to properly cover the surfaces. The quality of the paint, color and texture all have affects on the number of coats. Sonance recommends the use of the highest quality water based paint available. Other paints such as acrylic, may be used as long as the painting surface is properly prepared.
4. Apply the paint with a sprayer if possible creating an even finish. Let dry according to the instructions supplied by the paint manufacturer. Additional coats may be desired to achieve the needed results.



WIRE SIZE/TYPE

Choose high quality (oxygen-free) copper wire to make the wire runs between your audio equipment and your Sonance Silhouette speakers. Larger wire than normal is recommended to reduce resistance and to eliminate power loss between your audio equipment and your in-wall Sonance Silhouette speakers. Follow the information listed below when choosing a high-quality wire at your local dealer or making plans with your custom installation dealer:

- 14 gauge for less than 30 feet.
- 12 gauge for between 30 and 75 feet.
- 10 gauge for greater than 75 feet.

SINGLE WIRE CONNECTIONS

If you have run a single, two conductor wire to each speaker location, use the positive (+) and negative (-) terminals closest to the outside edges of the Sonance Silhouette speaker (see Figure 9, pg. 22).

BI-WIRING CONNECTIONS

If you have run a single, four conductor wire or special bi-wire cable to take advantage of the bi-wire option (see Figure 10, pg. 22), follow these instructions;

1. Remove the two special jumper wires that cross-connect the four input terminals on the rear of the Sonance Silhouette speaker.
2. Attach the two wires you have designated for the woofer and connect them to the terminals marked woofer. Carefully observe polarity, making sure to connect the positive (+) lead to the positive (+) terminal and the negative (-) lead to the negative (-) terminal of your amplifier.
3. Attach the two wires you have designated for the mid-high range to the other set, again being careful to observe proper speaker to amplifier connection. Make sure to connect the positive (+) lead to the positive (+) terminal and the negative (-) lead to the negative (-) terminal of your amplifier.

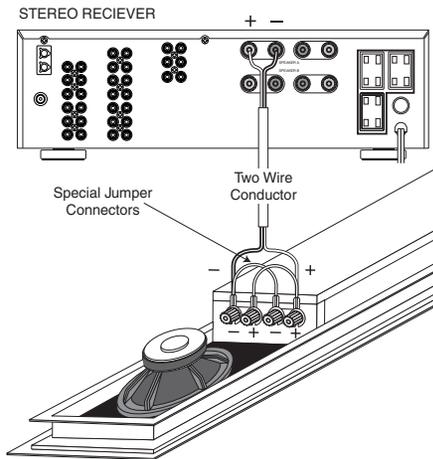


Figure 9: Two Wire Connection

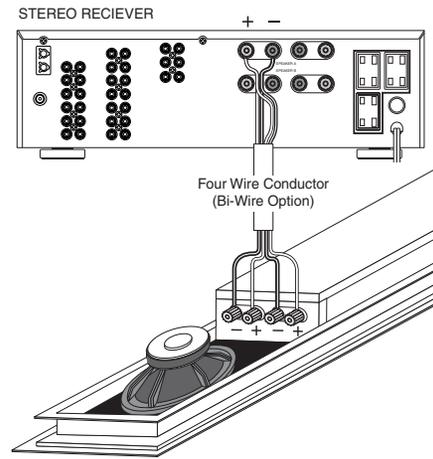


Figure 10: Four Wire Bi-Wire Connection

FINAL ASSEMBLY

1. Strip 1/2" of insulation from each speaker wire. Attach the positive conductor to the red 5-way binding post and the negative wire to the black post. To connect, loosen the nut on the binding post until the hole in the post is visible. Insert the stripped end of the wire through the slot, then snug the nut. Do not over tighten.

NOTE: *Polarity of wiring is critical. All positive leads (+) must be attached to red connectors throughout the system.*

2. Rotate all Roto-Lock mounting fasteners around the speaker's edge to their OPEN position.
3. Carefully lift the speaker into the wall opening.
4. Use a screwdriver to turn the Roto-Lock mounting fasteners visible in the channel of the extruded aluminum frame into the CLOSED position. Sonance's Roto-Lock mounting system firmly attaches the Sonance Silhouette speaker to the wall by means of a foot that rotates into place, securely clamping the baffle to the mounting surface.
5. Insert the grilles in the groove in the extruded frame starting at one of the short ends and working the grille into the frame.



SILHOUETTE I



Design: In-Wall Infinite Baffle

Tweeter: 1" (25mm) Inverted titanium dome.

Midrange: 2 - 4" (102mm) Magnesium cones.

Woofer: 1 - 9" Elliptical Aluminum woofer (152mm x 229mm) with a rubber surround and extended pole piece.

Crossover Design: Woofer, midrange and tweeter crossovers are physically independent with connections for bi-wiring or biamping provided

Slope: 18dB per octave

Crossover Frequency: 135 Hz and 2150 Hz

Frequency Response: 45 Hz to 20,000 Hz \pm 3dB

Impedance: 4 Ω nominal, 3.5 Ω minimum

Power Handling: 10 to 175 watts

Efficiency: 90dB 1W/1m

Enclosure Volume: 1.218 ft³

Grille Type: White Metal

Speaker Dimensions*

(WxHxD): 7.75" x 36" x 4.25" (197mm x 914mm x 108mm)

Grille Dimensions

(WxH): 6.55" x 34.8" (166mm x 884mm)

Retrofit Cutout

(WxH): 6.875" x 35.125" (175mm x 892mm)

Shipping Weight: 30 lbs. (13.6kg)

*** Speaker Change**

(Mid Yr. 2000)

(WxHxD): 7.75" x 36" x 3.75" (197mm x 914mm x 95mm)



SILHOUETTE II



Design: In-Wall Infinite Baffle

Tweeter: 1" (25mm) Inverted titanium dome.

Midrange: 2 - 4" (102mm) Magnesium cones.

Woofer: 2 - 9" Elliptical Aluminum woofer (152mm x 229mm) with a rubber surround and extended pole piece.

Crossover Design: Woofer, midrange and tweeter crossovers are physically independent with connections for bi-wiring or biamping provided

Slope: 18dB per octave

Crossover Frequency: 135 Hz and 2150 Hz

Frequency Response: 40 Hz to 20,000 Hz \pm 3dB

Impedance: 4 Ω nominal, 3.5 Ω minimum

Power Handling: 10 to 200 watts

Efficiency: 91dB 1W/1m

Enclosure Volume: 2.106 ft³

Grille Type: White Metal

Speaker Dimensions*

(WxHxD): 7.75" x 46" x 4.25" (197mm x 1168mm x 108mm)

Grille Dimensions

(WxH): 6.55" x 44.8" (166mm x 1138mm)

Retrofit Cutout

(WxH): 6.875" x 45.125" (175mm x 1146mm)

Shipping Weight: 40 lbs. (18.8kg)

*** Speaker Change**

(Mid Yr. 2000)

(WxHxD): 7.75" x 46" x 3.75" (197mm x 1168mm x 95mm)



SILHOUETTE III

Design: In-Wall Infinite Baffle

Tweeter: 1" (25mm) Inverted titanium dome.

Midrange: 2 - 4" (102mm) Magnesium cones.

Woofer: 4 - 9" Elliptical Aluminum woofer (152mm x 229mm) with a rubber surround and extended pole piece.

Crossover Design: Woofer, midrange and tweeter crossovers are physically independent with connections for bi-wiring or biamping provided

Slope: 18dB per octave

Crossover Frequency: 135 Hz and 2150 Hz

Frequency Response: 35 Hz to 20,000 Hz \pm 3dB

Impedance: 4 Ω nominal, 3.5 Ω minimum

Power Handling: 10 to 250 watts

Efficiency: 92dB 1W/1m

Enclosure Volume: 2.71 ft³

Grille Type: White Metal

Speaker Dimensions*

(WxHxD): 7.75" x 66" x 4.25" (197mm x 1676mm x 108mm)

Grille Dimensions

(WxH): 6.55" x 64.8" (166mm x 1646mm)

Retrofit Cutout

(WxH): 6.875" x 65.125" (175mm x 1654mm)

Shipping Weight: 55 lbs. (25kg)

*** Speaker Change**

(Mid Yr. 2000)

(WxHxD): 7.75" x 66" x 3.75" (197mm x 1676mm x 95mm)



SERVICE

The Technical Assistance Department at Sonance is available to answer any questions concerning the operation and installation of your Sonance Silhouette speakers. Please contact us between the hours of 9 AM and 5 PM Pacific Time, Monday through Friday, except holidays:

Telephone toll free, Continental USA: (800) 582-7777

Telephone outside Continental USA: (949) 492-7777 or contact us online at www.sonance.com

Sonance • Technical Assistance Department

Address inquiries to: 212 Avenida Fabricante, San Clemente, CA 92672-7531

YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR UNIT!

In the event that your unit should need service or repair, return the unit to your Authorized Sonance dealer. If you wish to return it to the factory yourself, you must contact us to obtain a return authorization (RA) number prior to returning your unit to us. Be prepared to state the model number, date of purchase and the dealer's name and address when you call.

The unit must be returned to the factory in its original shipping carton and packing to make sure it arrives in good condition. If the original carton has been lost or damaged, a new one can be obtained from Sonance for a small fee.

When you ship your unit use United Parcel Service, Federal Express, etc. Never ship your unit via US Postal Service.

FREIGHT COLLECT SHIPMENTS WILL BE REFUSED!

WARRANTY COVERAGE (U.S. ONLY)

Sonance offers a five (5) year limited warranty on this unit. You must observe the following conditions in order to receive this protection:

1. Retain your bill of sale or legible facsimile (photo copy). In the event that your unit should ever require service, the bill of sale shall act as your proof of ownership and give the effective date of your warranty.
2. Read your warranty thoroughly. Sonance offers you certain rights outlined in your warranty and requires specific conditions to be met to retain those rights. You may also have other rights which vary from state to state.



FIVE YEAR LIMITED WARRANTY

Sonance warrants to the original retail purchaser for the period of five (5) years, the unit to be free from defects in material and workmanship provided the unit is operated in accordance with the printed instructions included with the unit. Five (5) years begins on the date of purchase shown on the bill of sale (receipt). Your purchase must have been from an "Authorized Sonance Dealer." For this warranty to be effective, the bill of sale must also show from whom the unit was purchased and the purchase price. In the event proof of purchase cannot be established as stated in the previous sentence(s), warranty shall commence on the date the unit was shipped from the factory. This warranty shall apply exclusively to the original purchaser and shall not apply to purchasers who purchased units for industrial or commercial purposes.

During the warranty period, Sonance agrees to repair or, at its discretion, replace at no charge components that prove to be defective, provided the unit is returned in accordance with the shipping instructions detailed above. This warranty does not apply if the unit has been damaged by accident or misuse, or as a result of service or modification by unauthorized personnel.

This warranty is limited to Sonance product(s) 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.

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose or otherwise. In no event shall Sonance be liable for incidental or consequential damages or have any liability with respect to defects other than as specifically set forth above.

Declaration of Conformity



We, Sonance
212 Avenida Fabricante
San Clemente, CA 92672-7531
U.S.A.

declare in own responsibility, that the product described in this owner's manual is in compliance with technical standards:

EN 50082-1:1992
EN 55013:1993
EN 50020:1994

Chip Brown
Sonance
San Clemente, CA U.S.A.

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