

Owner's Manual

OH-R7

In-Ceiling Loudspeaker

Snell

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SPECIFICATIONS

Frequency Response (± 3 dB)	48–22,000Hz
Nominal Impedance	4 ohms
Recommended Amplifier Power	10–200 watts
Sensitivity [1 watt (2.83v) at 1m]	89dB
Tweeter	$\frac{3}{4}$ -inch (19mm) soft dome
Midrange	3" (75mm) soft dome
Woofer	8" (200mm) copolymer cone
Crossover Frequencies	400 Hz / 2.5 kHz
External Dimension	$12\frac{7}{16}$ " (315mm) diameter
Mounting Hole Opening	$10\frac{7}{8}$ " (276mm) diameter
Mounting Depth	6" (153mm)

INTRODUCTION

Snell Performance From an In-Ceiling Speaker

The Snell OH-R7 speaker provides the exceptional Snell sound from an in-ceiling speaker. In addition the OH-R7 incorporates an angled, rotatable midrange/tweeter baffle that enables it to deliver ideal imaging characteristics in virtually any installation situation. This is particularly important in home theater installations. In these installations front channel speaker need to project sound directly toward the listener, but surround speakers need to direct their sound away from the listener to produce a diffuse sound. The woofer is positioned at an angle behind the midrange/tweeter, delivering its sound through a crescent-shaped opening.

The OH-R7 features a boundary compensation switch that allows the sound of each speaker to be adjusted to produce the best sound possible wherever it is installed.

Rugged paintable aluminum grilles and easy-to-use mounting hardware make the OH-R7 easy to integrate, visually and mechanically into any installation.

ABOUT INSTALLATION

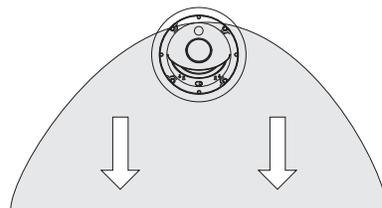
Warning – Always turn off the amplifier or receiver when connecting speakers or any other components to the system.

Note – Installation should only be performed by professional installers or those possessing skills in construction, experience with the proper use of hand and power tools, knowledge of local building and electrical codes, and familiarity with the environment in which the OH-R7 will be installed. Install the speakers to meet all local building, energy, and electrical codes.

PLACEMENT

Since the speaker installation is permanent and the furniture placement may not be, you should first determine the best long-term location for the speakers – one that will accommodate relocation of the furniture in the room while still providing well-balanced sound to the primary listening area.

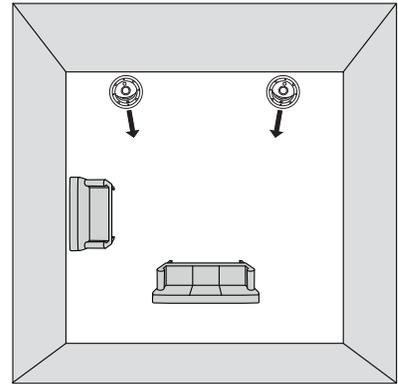
The tweeter and midrange baffle of the speaker is angled to deliver accurate on-axis response to the listening area. The baffle must be properly positioned to deliver the best sound. The illustration shows how the sound is directed relative to the position of the midrange/tweeter baffle position.



Music System Installation Locations

For best results from a music system, place the speakers on either side of the listening area and rotate the baffle toward the listening area. Use multiple pairs for optimum coverage in large rooms.

Note: The arrows and sound wave symbols (↑↻) indicate the direction of the speakers' dispersion. Rotate the baffle so that the arrow points toward the center of the listening area.



Home Theater Installation Locations

LCR (Left/Center/Right)

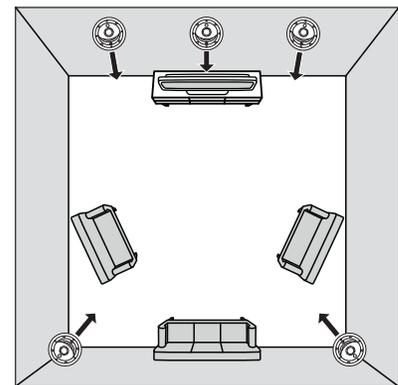
When using the OH-R7 as a front left or right channel speaker install them as close as possible to the front wall. They should not be too much farther apart than the width of the television screen. If more separation is required you can compensate to some extent by angling the midrange/tweeter baffle in toward the seating area.

When used as a center channel speaker the OH-R7 should be located on the same plane as the television.

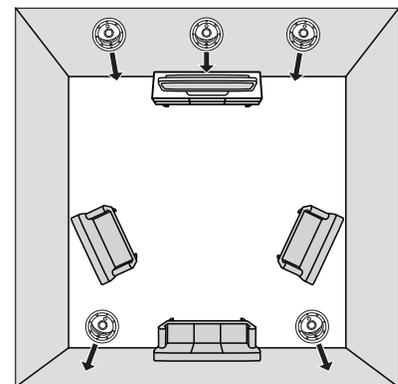
Surround Speakers

When the OH-R7 is used as a surround speaker, it can be used as configured as either a direct or diffuse surround speaker. For direct operation, orient the speaker baffle toward the seating area. For diffuse operation, turn the speaker baffle toward a back wall or corner.

Note: See the Boundary Compensation switch section if the speakers are mounted closer than 18-inches to an adjacent wall or 24-inches from a corner.



direct sound

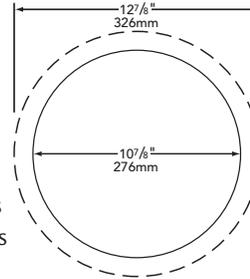


diffuse sound

INSTALLATION PREPARATION

Required Clearance

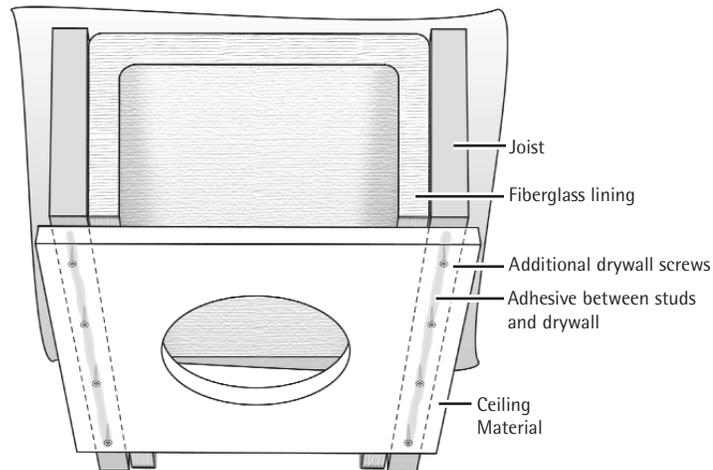
A mounting hole template is included with the OH-R7. An additional 1" of clearance is required around the mounting hole cut. This allows room for the grille flange and for the mounting clamps. There must be at least 6" of depth, measured from the front of the mounting surface.



Installation Site

Performance of the OH-R7 will be enhanced if the cavity behind the installation location is filled with standard fiberglass insulation. If there is already insulation in the ceiling that has a paper backing facing the speaker, remove the backing in the area behind the installation location. (Consult local building codes for compliance.)

Taking steps to increase the rigidity of the mounting surface by using additional drywall screws, and/or construction adhesive between the drywall and joists adjacent to the speaker location, will further enhance performance.



Optional New Construction Brackets

For new construction installations, we offer new construction brackets. The NCB brackets act as a perfect guide when cutting the wallboard.

Fire-Rated Boxes

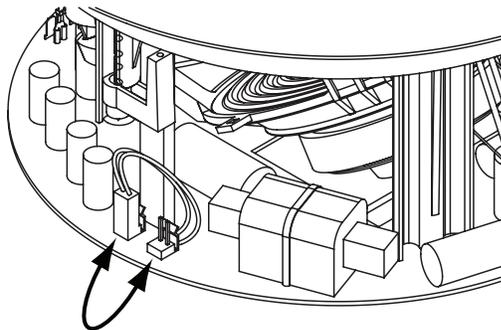
For new construction installations we offer a fire-rated back box (FRB) solution to satisfy local fire codes.

Grille Removal

If you need to remove the grille, gently lift it out at the edges. Use a sharp pointed instrument such as an awl or a heavy paper clip bent to serve as a tool.

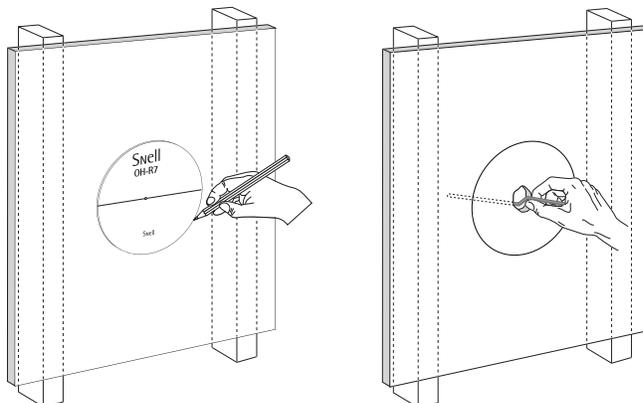
Bi-Wiring/Bi-Amplification

If you are bi-wiring or bi-amplifying your OH-R7 loudspeakers, you must move the jumper from the "NORMAL" terminal to the "BIAMP" terminal or you risk damaging your speakers and your amplifier.



INSTALLATION

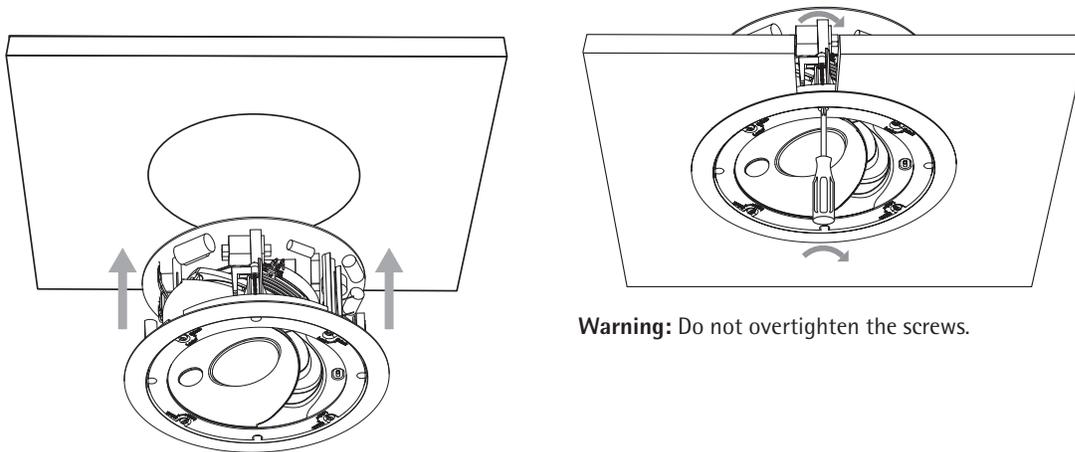
Mark the outline of the installation hole using the supplied template. Make a small hole at the center of the speaker location. Insert a long, bent piece of wire and rotate it to confirm that there are no obstructions behind the location.



Cut the installation hole. Run the wire from the amplifier location to the cutout. Allow for an extra foot of wire at the cutout.

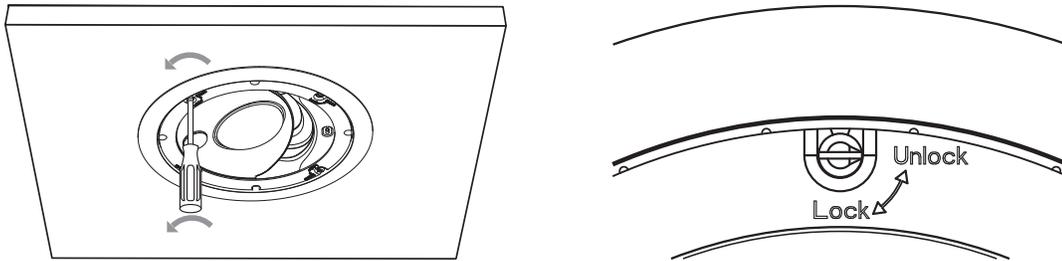
Strip 1/2-inch (13mm) of insulation from the wire, and twist the wire strands together. The speaker jack will accept either bare wire up to 12-gauge or single banana plugs. Connect the wire to the speaker.

Slide the speaker into the cutout. Tighten the four Phillips mounting screws. The mounting arms will pivot into position and clamp the speaker to the mounting surface.



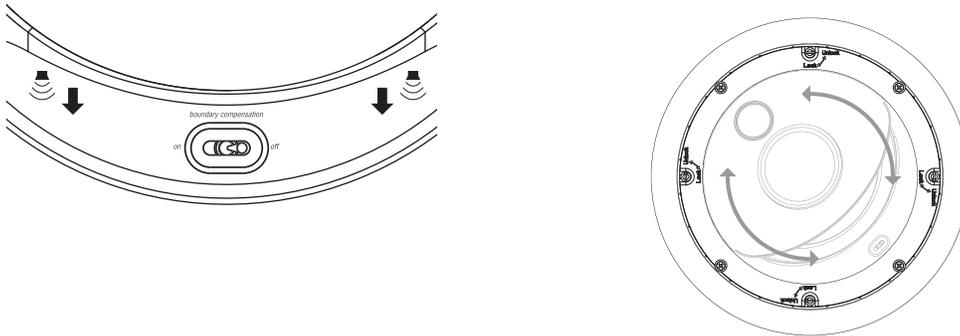
REDIRECTING THE MIDRANGE/TWEETER BAFFLE

To rotate the speaker baffle, first turn the four flat head screws 90° counterclockwise into the "Unlock" position.



Rotate the baffle so that the midrange/tweeter array points in the desired direction. The arrows and sound waves "↑" indicate the direction of the speakers' dispersion. Rotate the baffle so that the arrows point toward the center of the listening area for direct operation and toward a corner for diffuse operation. Refer to the "Placement" section for more information.

Warning: Do not press on the tweeter or midrange domes. Rotate with the outside edge of the baffle.



ADJUSTING BASS RESPONSE

If you are using your loudspeakers with a surround sound processor and subwoofer, set the bass management control of the electronics to "small." Consult your surround receiver's or processor's manual for instruction on the changing bass management settings.

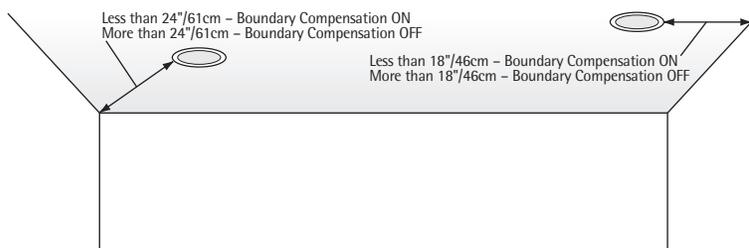
Boundary Compensation

The response of a speaker changes when it is mounted close to the boundary junctions of a room (near an adjacent wall or close to the corners of the room). The OH-R7 has been carefully voiced to compensate for these boundary effects.

Set the Boundary Compensation Switch to "ON" if:

The speaker is mounted less than 18-inches (46cm) from the junction of two surfaces (wall/ceiling).

The speaker is mounted less than 24-inches (61cm) from the junction of three surfaces (a room corner).

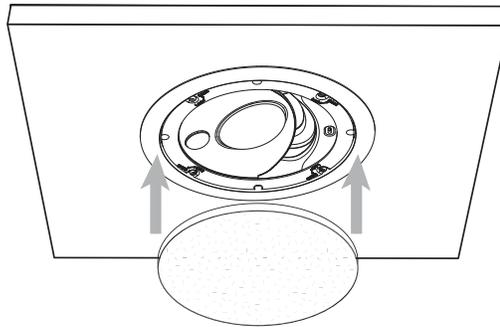


GRILLE INSTALLATION

If you wish to paint the frames or grilles of your speakers it should be done prior to installation of the grille. Refer to the painting instructions that follow. If you will not be painting the speakers you can install the grille now. A decorative scrim is attached to the grille of the speakers. A wax paper sheet is used to protect the scrim during shipment. Remove the wax paper sheet before installing the grille.

To install the grille simply press it into the speaker frame.

Warning: If you are planning to install the tie-tack logo on the grille, do not install the logo directly over the tweeter. It is possible for the pin to make contact with and possibly damage the dome of the tweeter.



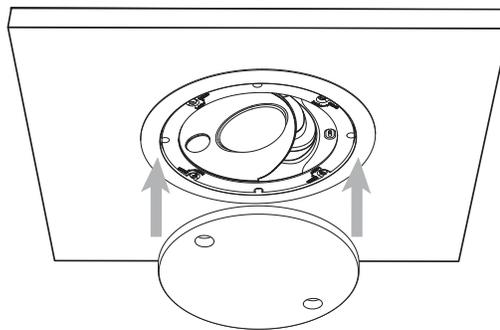
PAINTING

Painting the Speaker Frame

The speakers may be painted before or after they are installed. They are already primed.

Insert the supplied paint shield before you paint the frame. If you are using spray paint, apply two light coats. If you are applying paint with a brush or roller, thin the paint and apply two very light coats. This helps prevent excessive paint buildup and "runs" on the frame.

After the paint has dried, use the finger pulls to remove the paint shield.



Painting the Speaker Grille

Remove the protective wax paper from the scrim then carefully remove the scrim. Place the scrim on the wax paper to keep the adhesive clean while painting the grille.

If you are using spray paint, apply two light coats. If you are applying paint with a brush or roller, thin the paint and apply two very light coats. This helps prevent paint from filling the holes in the grille.

After the paint is dry, reinstall the cloth and grille logo. Note the warning in the previous section regarding the position of the logo to avoid damage to the tweeter dome.

LISTENING LEVELS AND POWER HANDLING

The power recommendation for the system assumes you will operate the amplifier in a way that will not produce distortion. All speakers can be damaged by even a modest amplifier if it is producing distortion. If you hear a gritty noise or other signs of strain, turn down the volume. Prolonged or repeated operation of your speakers with a distorted signal can cause damage that is not covered by the warranty. It is especially important that you do not overdrive the bass capability of smaller speakers. Watch for noises, such as pops, caused by the music's bass line. Use of the loudness control and/or full bass boost at louder volumes is likely to overdrive the woofer. Use such controls sparingly.

LIMITED WARRANTY

For five years from the date of purchase, Snell Acoustics will repair for the original owner any defect in materials or workmanship that occurs in normal use of the speaker system, without charge for parts and labor.

Your responsibilities are to use the product according to the instructions supplied, to provide safe and secure transportation to an authorized Snell Acoustics service representative, and to present proof of purchase from an authorized Snell dealer in the form of your sales slip when requesting service.

Excluded from this warranty is damage that results from abuse, misuse, accidents, shipping, repairs, or modifications by anyone other than an authorized Snell Acoustics service representative. This warranty is void if the serial number has been removed or defaced.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

If Service Seems Necessary

Contact the dealer from whom you purchased the speaker system. If that is not possible, call us at 978-538-6262, or write to:

Snell Acoustics
300 Jubilee Drive, P.O. Box 3717
Peabody, MA 01961-3717

We will promptly advise you of what action to take. If it is necessary to return your speaker system to the factory, please ship it prepaid in the original factory packaging. Please note that Snell Acoustics will not be held liable for shipping damage due to improper packaging. After it has been repaired, we will return it freight prepaid in the U.S. or Canada.



For EU Customers Only

This symbol found on the product indicates that the product must not be disposed of with household waste. Instead, it may be placed in a separate collection facility for electronic waste or returned to a retailer when purchasing similar product. The producer paid to recycle this product. Doing this contributes to reuse and recycling, minimizes adverse effects on the environment and human health and avoids any fines for incorrect disposal.

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