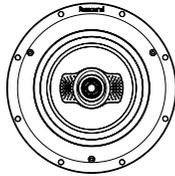


a sound relationship

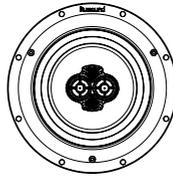
Russound

ARCHITECTURAL SPEAKERS

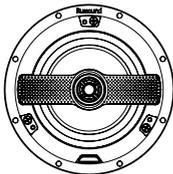
Guide To Products and Installation



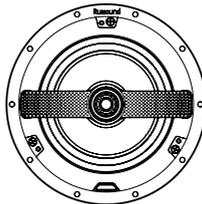
IC-610 - 6.5"



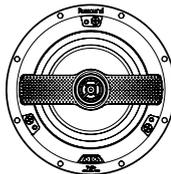
IC-610T - 6.5"



IC-620 - 6.5"



IC-820 - 8"



IC-630 - 6.5"

Thank you for choosing your speakers from Russound's Architectural Series of premium loudspeakers. They've been designed, manufactured and tuned with great care so your listening experience is as rewarding as possible. This range of speaker solutions provides excellent choices for any application - from budget-minded to audio-purist, in-ceiling and in-wall. They provide perfect choices for multi-room audio, home theater, primary listening and other applications.

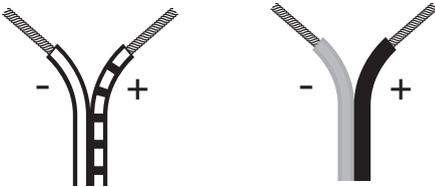
These new speakers incorporate the latest advances in material technologies as well as engineering innovation and design excellence. For example, on the step-up models, you'll find the Swiftlock™ tool-less installation feature to be a brilliant means to accomplish secure installations simply and easily. We wish you many years of musical enjoyment from your Russound speakers, indoors, outdoors or wherever your entertainment needs take you.

Speaker Wire

What kind to use: We recommend using premium, CL-2 rated, 16 to 14 gauge multi-stranded wiring for amplifier-to-speaker connections.

Selecting the proper gauge: Gauge relates to the size of the wire. The bigger the gauge, the smaller the wire diameter. The wire gauge needed is determined by the distance between your amplifier/receiver and the speakers. The longer the wire run, the heavier the gauge needed. For wire runs up to 150', use at least 16 gauge wire. For runs 100' to 200', use at least 14 gauge.

Note: Each speaker wire is like 2 wires in one. It is important that your wiring process has the same + and - relationship between your amp and your speakers for best musical performance. Keeping your speaker connections consistent. The standard colors on the terminals are red Positive (+) and black Negative (-). If the wire has transparent insulation, one conductor will be copper-colored (+) and the other silver-colored (-). If the wire has an opaque insulation, the conductors are differentiated by a series of ribs or grooves, a stripe, or a dotted line on one conductor. Use and mark these as the Positive (+) conductor.



Typical usage of speaker wire conductors

Installation Tips:

- If installing these speakers in a drop ceiling, keep in mind that T-bar or "drop ceilings" have thin fiberboard panels which can buzz or vibrate. If needed, reinforce the drop-in panel with wood or particle board.
- Some ceilings have pipes, ducts or AC wiring in the area. Local building codes may dictate the type of wire you need to use. Only wire that is rated for use in walls/ceilings should be used for that purpose.
- **Speaker Wire Paths**
 - Avoid running speaker wires close to house electrical wiring for any distance. If you have to run them to the same locations, leave two feet between the wiring. Speaker wires should cross electrical wiring at a 90° angle.
 - Label speaker wires at each end with Left and Right and room location.
 - **Impedance Matching for Amplifiers and Speakers**
Not all amps/receivers can safely operate two sets of speakers at once. If you want to use more than one pair of speakers at a time, consider the speaker's impedance and the rating of the amp / receiver you're using.

Use and Placement

For each room, think about what kind of listening is going to be going on there most of the time. In a Great Room, you want to be bathed in smooth even coverage through the room. In a Home Theater set-up, you want the breadth and depth of the imaging to be as much like that in a movie theater as you can.

If your Russound speakers are going to be your primary listening source in a room, you need to consider some other factors to ensure proper imaging. The term “stereo imaging” refers to a speaker system’s ability to project music so that it sounds like the performers are in a three-dimensional space between the speakers.

Russound’s Architectural Series Speakers are designed to provide full-sounding dispersion out to well-off the primary axis, so that listeners throughout the room are treated to full, rich music reproduction.

Speaker Placement in the Room

Your speaker’s low frequency bass reproduction is “helped” when ceiling speakers are placed close to a wall or ceiling. This is known as the boundary effect. Each nearby surface helps to amplify the perceived sound output. Avoid placing one speaker in a corner and another on a long flat surface. Better audio performance will result if both speakers are placed in similar positions and face a similar type of surface.

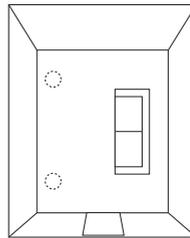
Ceiling speakers for surround sound purposes should be placed directly to the sides or behind the prime listening position, yet aimed toward the listener. This configuration is also suitable for TV/movie and music usage.

If the prime purpose of the surround system is to listen to music, the ceiling speakers should be aimed at the prime listening position.

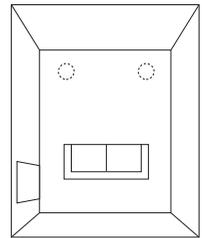
In-ceiling speakers may be used for rear surround sound channels by placing them just behind the viewers.

Refer to the details at below for sample In-ceiling placement options.

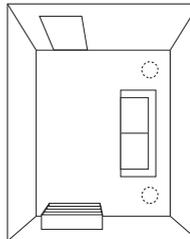
- *Good placement for serious listening:* Stereo pair In-ceiling. 6’ to 8’ (1.8m-2.4m) apart, on the long wall of a rectangular room, centered on the listening area.
- *Best placement for serious listening:* Stereo pair In-ceiling. 6’ to 8’ (1.8m-2.4m) apart, on the short wall of a rectangular room, centered on the listening area.
- *Good placement for background listening:* Stereo pair behind, above or to the sides of the main listening area. 6’ to 8’ (1.8m-2.4m) apart, centered on the listening area.
- *Surround sound:* The multiple surround locations can all be made to work as long as the speakers are properly positioned so that the listener is equidistant from the rear speakers - so they get a balanced representation of the audio.



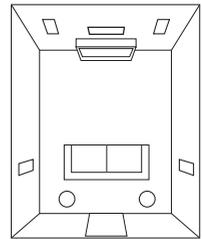
Good Placement
Serious Listening



Best Placement
Serious Listening



Good Placement
Background Listening



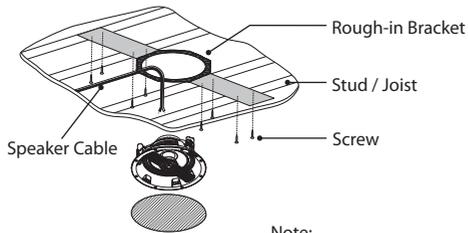
Home Theater
Surround Sound

Pre-wire or Pre-construction

Locate all obstructions (AC wiring, plumbing, duct work, studs, and joists). Route the speaker wire to the speaker location avoiding all obstacles. Watch out for closeness to AC wiring.

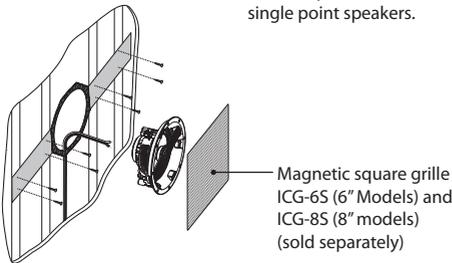
Russound offers Speaker Rough-In Brackets that can be fastened to the adjacent studs. Once the dry wall is installed, the opening is cut out. There are holes molded into the bracket for speaker wire tie-off to keep the wire from being lost during construction.

In-ceiling bracket Installation



In-wall bracket Installation

Note:
Run two pair conductors for
single point speakers.

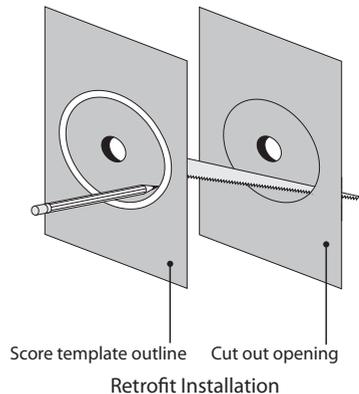


Make sure the speaker cutout (hole) doesn't extend further than 1/4" (0.6 cm) from the inside of the mounting bracket.

Retrofit Installation

Locate existing pipes, duct work, and AC wiring before cutting any holes in the ceiling.

1. Center the cardboard template between adjacent joists, avoiding all wiring, pipes, duct work, and lightly mark the outline with a pencil. Then use a keyhole/drywall saw or motorized spiral-cut tool to make the opening.
2. Score the outline of the template with a utility knife to prevent chipping. If dealing with lath and plaster or thick paneling, drill 1" (2.5 cm) holes in several places around the pencil outline. Use a fine-toothed keyhole saw or hacksaw blade with slow strokes to saw through and remove the inner surface.



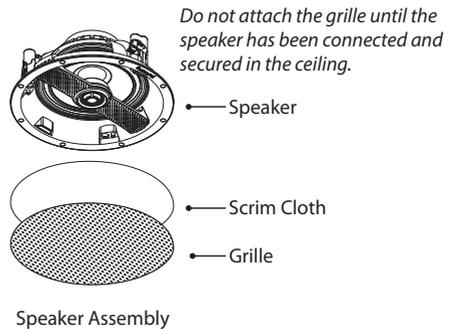
Additional Tips / Considerations

- Try to run speaker wires after AC wiring is in so you can separate the wires, avoiding induced noise caused by close parallel positioning of the two wire types.
- Secure speaker wires in place against a stud along vertical runs. Do not pierce the wire insulation. Allow a bit of slack for expansion of building materials.
- Route horizontal wire runs through holes drilled in studs at roughly equal heights.
- Speakers should not be installed until the wallboard is in place. In the meantime, leave several feet of wire coiled up and secured to the back side of the mounting frame. Excess length can be removed during final assembly.
- When installing the drywall, make sure the speaker cutout hole doesn't extend farther than 1/4" (0.6 cm) from the inside of the mounting frame.
- Speakers installed in ceilings should have a safety wire tied between the back of the speaker and the frame of the building. Use any strong insulated wire, connect it to the speaker frame or baffle so it doesn't interfere with the speaker's operation. The other end should be firmly attached to the joist or flooring above using a hook, nail, or other reliable fastener.
- Terminating the wires in an outlet box attached to a stud or retrofit junction box at the exit location. Use an outlet plate with speaker wire terminations.
- After the drywall is secured and finished, install the speakers as we've described.

Painting the Speaker Grille

Russound Architectural Speaker Grilles have a designer white finish that can be painted with ordinary latex paint. Remove the speaker grille from the speaker before painting.

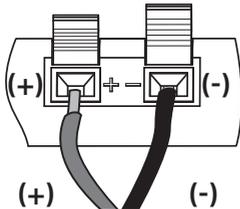
1. Remove the magnetic speaker grille and carefully remove the scrim cloth from the grille and set aside.
2. Paint the grille. Russound recommends diluting the latex paint with water 4:1 or 5:1 proportionally. Due to the fine mesh openings, using several layers of a thinner paint spray is recommended rather than using a single, thicker coat. A thick coat is likely to clog the speaker grille openings.
3. While the paint is still wet on the grille, and the grille is not attached to the frame, use a gentle burst of compressed air against the outside surface to clear the fine holes in the mesh.
4. After the paint has thoroughly dried, re-attach the scrim cloth, and attach the grille to the frame.



Installation

1. Connect the speaker wire to the speaker terminals:

- Leave about 2' (60 cm) of wire extending through the ceiling or wall cutout.
- Pull the conductors apart so the last two inches are separated and remove 1/2" (13 mm) of insulation from the end of each conductor.
- Twist the strands in each conductor into tight spirals.
- Attach the speaker wires to the red and black speaker terminals. Connect the Positive (+) conductor to the Red terminal and the Negative (-) conductor to the Black terminal. Make sure that no stray strands of wire are touching the other conductor or terminal.
- NOTE: Single point speakers have four terminals; Right(+), (-) and Left(+), (-). Run an extra pair of wires and observe proper polarity when making connections.

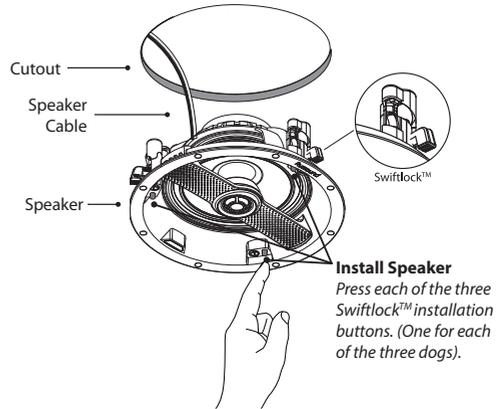


Insertion of speaker wire on back of speaker baffle

2. Center the speaker in the cutout. For the IC-610 and IC610T models: Rotate the frame as needed before tightening the mounting dog screws. Tighten the screws equally until the clamps secure the frame. Do not over-tighten.

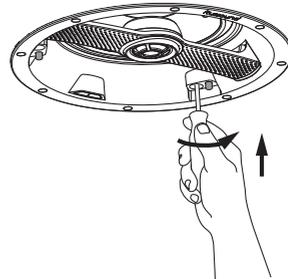
IC-620, IC-820, IC-630 and IW-620 models - These models feature the patented Swiftlock™ by Swarm attachment design. For these models position the speaker in the opening, rotate them to the desired position and hold them in place - and then press each of the three Swiftlock™ installation buttons. You will hear a resounding "click" letting you know the speaker is securely mounted in place.

3. Attach the magnetic grille.



Removing a Swiftlock™ Speaker

Removing a Swiftlock™ speaker is quick and easy. Simply insert a #2 Philips Screwdriver into the screwhead, push the screw in and turn the screw a 1/2-turn counter-clockwise to lock it into place.



Repeat for the other two Swiftlock™ mounting dogs

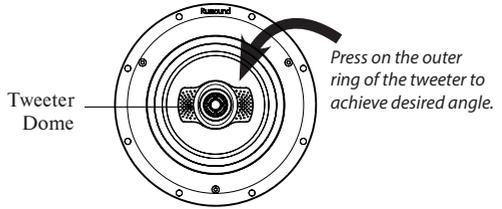
Listening Test

It's a good idea to test everything at this point.

1. Turn on your stereo system or music source. Make sure that the volume control is turned down and that the balance control is set to center.
2. Gently turn up the volume. You should hear music coming out of your new Russound Speakers! (If you don't, refer to the troubleshooting guide.)
3. Now rotate the stereo's balance control all the way to the left. Sound should only come out of your left speaker. If it comes out of the right speaker, skip to Step 5.
4. Rotate the balance control all the way to the right. Sound should only come out of the right speaker.
5. If sound comes from the right speaker when the stereo's balance control is turned to the left, you'll need to change the connections on the back of the amplifier/receiver. Note: Turn off the amplifier. Swap the wires attached to the left and right speaker terminals before turning the amplifier back on. Make sure to keep the (+) and (-) the same for left and right speakers.

Tweeter Adjustment

The IC-630 features a tweeter control that enables you to adjust the high frequency performance up or down in 3 dB steps - to help compensate for room acoustics. Also - in those models where the tweeters pivot they should be aimed toward the intended listener. Before installing the grille, gently press on the outside of the tweeter ring as shown to aim as you wish.



Tweeter Adjustment

IC-610 Specifications

Type	Two-way in-ceiling / in-wall
Tweeter	0.75" / (19mm) Pivoting Silk
Woofers	6.5" / (16.51 cm) Polypropylene cone
Cutout Dimensions Ø in (cm)	8.375 (21.27)
Frequency Response	50Hz - 20kHz
Impedance (Ω)	8
Magnet Structure oz (Kg)	11 (0.312)
Mounting Depth in (cm)	3.98 (10.1)
Overall Dimensions Ø in (cm)	9.37 (23.8)
Recommended Power	5 - 90 watts
Sensitivity @1W/1M	88 dB

IC-610T Specifications

Type	Single Point Stereo in-ceiling/in-wall
Tweeter	2 X 0.5" / (13mm) PEI
Woofers	6.5" (16.51 cm) Polypropylene Cone
Cutout Dimensions Ø in (cm)	8.375 (21.27)
Frequency Response	40Hz - 20kHz
Impedance (Ω)	8
Magnet Structure oz (Kg)	11 (0.312)
Mounting Depth in (cm)	3.98 (10.1)
Overall Dimensions Ø in (cm)	9.37 (23.8)
Recommended Power	5 - 90 watts
Sensitivity @1W/1M	90 dB

IC-620 Specifications

Type	Two-way in-ceiling
Tweeter	1" / (25mm) Pivoting Silk
Woofers	6.5" / (16.51cm) IM Polypropylene cone
Cutout Dimensions Ø in (cm)	8.375 (21.27)
Frequency Response	47Hz - 20kHz
Impedance (Ω)	8
Magnet Structure oz (Kg)	11 (0.312)
Mounting Depth in (cm)	4.22 (10.7)
Overall Dimensions Ø in (cm)	9.37 (23.8)
Recommended Power	5 - 100 watts
Sensitivity @1W/1M	90 dB

IC-820 Specifications

Type	Two-way in-ceiling
Tweeter	1" / (25mm) Pivoting Silk
Woofers	8" (20.32 cm) IM Polypropylene Cone
Cutout Dimensions Ø in (cm)	9.875 (25 cm)
Frequency Response	42Hz - 20kHz
Impedance (Ω)	8
Magnet Structure oz (Kg)	17 (0.484)
Mounting Depth in (cm)	5.06 (12.84)
Overall Dimensions Ø in (cm)	11.04 (28.1)
Recommended Power	5 - 120 watts
Sensitivity @1W/1M	92 dB

IC-630 Specifications

Type	Two-way in-ceiling
Tweeter	1" (25 mm) Pivoting Titanium
Woofers	6.5" (16.51 cm) IM Polypropylene with vapor deposited Titanium Cone
Cutout Dimensions Ø in (cm)	8.375 (21.27)
Frequency Response	45Hz - 25kHz
Impedance (Ω)	8
Magnet Structure oz (Kg)	11 (0.312)
Mounting Depth in (cm)	4.22 (10.7)
Overall Dimensions Ø in (cm)	9.37 (23.8)
Recommended Power	5 - 100 watts
Sensitivity @1W/1M	90 dB

TROUBLESHOOTING GUIDE AND WARRANTY

Before returning your Russound speakers for service, try these simple remedies first.

No sound from either speaker:

- Incorrect source selected on receiver or preamplifier.
- Mute button pressed on receiver.
- Wrong speaker output selected; many receivers have an "A" and "B" speaker switch. Make sure it is in the correct position.
- In-wall Volume control not turned up or wired incorrectly.
- If using a speaker selector, room or zone not turned on or improperly connected.

No sound from one speaker:

- Unsecured connection at either the speaker or amplifier - double-check all connections.
- Balance control turned all the way left or right - return it to center.
- Bad connecting cable between sound source and amplifier - try a new cable.
- Check for stray wire strands crossing the speaker terminals.
- Defective speaker - contact your Russound dealer or call Russound Tech Support at 603.659.5170.
- Any other problems not listed, discuss with your dealer or call Russound.

LIMITED LIFETIME WARRANTY

Russound/FMP, Inc. warrants to the original retail purchaser that this product will be free of manufacturing defects in material and workmanship for the following periods ("Warranty Period") and subject to the limitations and exclusions set forth below:

Lifetime

Volume controls, Architectural Series speakers, Flexbox speaker back boxes

Ten years from the date of purchase

Speaker selectors and impedance matching devices

Five years from the date of purchase

Landscape speakers, Outback™ speakers

Two years from the date of purchase

Multiroom controllers, keypads, source equipment, A-BUS devices, ComPoint devices, D-Series amplifiers, infrared products

One year from the date of purchase

P-Series amplifiers, touchscreens

Ninety days from the date of purchase

All B-Stock or factory-refurbished items

This Warranty is not transferable to subsequent purchasers/owners of the product.

This Warranty does not include service or parts to repair damage caused by improper use or handling, including but not limited to damage caused by accident, mishandling, improper installation, shipping damage, power surges, lightning strikes, abuse, negligence, or normal wear and tear, or any defect caused by repair to the product by anyone other than Russound or Russound's authorized repair facility.

Certain Russound products may permit access to third-party content providers and/or may support third-party technologies such as specific codecs or file formats. Russound reserves the right to discontinue support and/or access to such third-party content or technologies at any time and for any reason. Russound makes no representations or warranties whatsoever regarding ongoing support for any such third-party content or technologies.

This Warranty does not cover reimbursement for the costs of removing and transporting the product for warranty service evaluation, re-installation, or installation of any replacement product provided under this Warranty.

To obtain warranty service, contact the authorized Russound dealer/installer where

WARRANTY

you purchased your product or take the unit to the nearest authorized Russound dealer. Proof of purchase must be provided – claims made without proof of purchase will not be covered under this Warranty. The authorized Russound dealer/installer will test the product and if necessary, make arrangements with Russound for service. If there are no authorized Russound dealers in your area, you must contact Russound to receive a factory Return Authorization Number and shipping instructions. Purchaser is responsible for any shipping and handling charges for shipping the product to Russound. DO NOT RETURN ANY UNIT WITHOUT FIRST RECEIVING WRITTEN AUTHORIZATION AND SHIPPING INSTRUCTIONS FROM RUSSOUND. ANY PRODUCTS RECEIVED WITHOUT FOLLOWING THIS PROCEDURE WILL BE REFUSED AND RETURNED UNOPENED.

Upon examination, Russound will, at its sole option and expense, repair or replace any product found to be defective. Russound will return the repaired or replaced unit to you via its usual shipping method from the Russound repair center to your address in the United States of America or Canada only. Any shipping costs for addresses outside of the United States or Canada or any expedited shipping charges requested by the purchaser shall be the responsibility of the purchaser. In the event that a particular product is no longer available and cannot be repaired effectively, Russound, at its sole option, may replace it with a different model of equal or greater value, or refund the original purchase price paid.

THE FOREGOING ARE YOUR EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY.

This Warranty will be void if:

- the serial number on the product has been removed, tampered with, or defaced.
- the product was not purchased from an authorized dealer or reseller.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES. RUSSOUND EXPRESSLY DISCLAIMS ALL SUCH OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT, WITH RESPECT TO THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, RUSSOUND SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES EXCEPT TO

THE EXTENT PROVIDED (OR PROHIBITED) BY APPLICABLE LAW, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Notwithstanding the above, if you qualify as a "consumer" under the Magnuson-Moss Warranty Act, or applicable state laws, then you may be entitled to any implied warranties allowed by law for the Warranty Period. Further, some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of consequential damages, so such limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For the name of your nearest authorized Russound dealer, contact: Russound, 1 Forbes Road, Newmarket, NH 03857, or call 1 (603) 659-5170. Please be advised that Russound products are only sold via the Internet through a select group of authorized Internet dealers. These are listed at www.russound.com. Products offered on the Internet through unauthorized Internet dealers are not covered by this warranty and may be either:

- 1) goods acquired on a secondary or grey market
- 2) counterfeit or stolen goods
- 3) damaged, or defective goods

Please fill in your product information and retain this for your records. You may also submit your warranty registration information online on www.russound.com/warranty-registration, but you must still retain all proof of purchase information should warranty service ever be required.

Model _____

Serial No. _____

Purchase Date _____

ATTENTION: TO OUR VALUED CUSTOMERS:

To ensure that consumers obtain quality pre-sale and after-sale support and service, Russound products are sold exclusively through authorized dealers. This Warranty is **VOID** if the products have been purchased from an unauthorized dealer.

a sound relationship
Russound

ARCHITECTURAL SERIES

Guide to Products and Installation

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Russound
1 Forbes Road, Newmarket, NH 03857
Telephone: 603.659.5170
Email: tech@russound.com www.russound.com

11.27.18. Rev. 1