RRussound









Acclaim™ 5 Series OutBack

Outdoor Loudspeaker Installation Manual

INTRODUCTION

Introduction

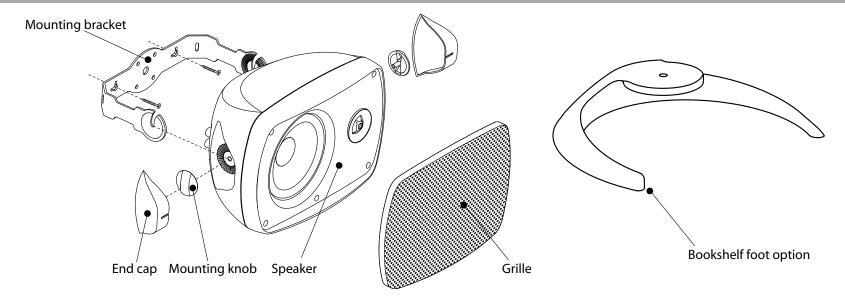
Thank you for selecting the Russound Acclaim 5 Series Outdoor Speakers. Like all Russound speakers, they combine acoustic technology with durability and will provide years of musical enjoyment.

The Acclaim 5 Series line provides solutions for background music and dedicated music listening. They combine premium acoustic materials with advanced drivers to deliver exceptional performance in every application.

A key benefit to using these speakers is the high-efficiency design, which means less amplification power is needed - less power does not mean quiet!

The speaker comes with two installation options: a free-standing base and a bracket mount. The base attaches to one end of the speaker and provides a stable vertical placement option for shelf or table. The bracket mount accommodates flat surface and corner locations, plus the bracket accepts U-bolts for attaching the speaker to a pole. Once the bracket is installed, the speaker slips into slots on the bracket so you don't have to hold the speaker in place while securing it. The bracket and speaker have knurls for secure alignment to the desired angle.

Designed and built to withstand the rigors of outdoor environments, the 5 Series outdoor speakers will provide years of trouble-free service. They work in a wide range of temperatures and be unaffected by extremes of humidity. A corrosion-resistant aluminum grille and bracket coupled with the speaker's rugged environmental design assures durability in any kind of weather. Sealed enclosure offers greater durability against the environment's rigors.



Speaker assembly

The bracket has screw slots to accommodate both wall and pole installation options. The speaker sits in the speaker bracket's "C" openings and is pivoted into place and secured with the mounting knobs. End caps provide a cosmetic covering over the bracket's attach points.

An included bookshelf foot option mounts in place of the bracket for an attractive upright shelf installation for a speaker pair.

Painting the speaker

The speaker mounting bracket, enclosure, end caps, and grille can be painted. If you paint the speaker, do not get paint on the speaker drivers. Also be sure to minimize paint buildup so as not to clog the grille holes.

- 1. Gently pull off the speaker grille, making sure not to distort it.
- 2. Mask the speaker terminals and baffle (the area on the front of the enclosure that houses the drivers).
- 3. Paint the bracket, enclosure, end caps, and grille separately. Spraying is ideal, but if you can't spray the paint, a roller with a short or medium nap will work better than a brush. Apply one or two light coats.
- 4. While the paint is still wet, clear any clogged holes in the grille with bursts of compressed air.
- 5. After the paint has thoroughly dried, remove the masking. Gently press the grille into place on the speaker, using even pressure around the edge.

WIRING INFO

Speaker cable

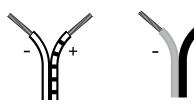
The amount of wire needed varies with speaker placement. Label speaker wires with left, right, and location.

Use Russound AW series speaker cable or any reputable brand of 16 to 12 gauge multi-stranded wiring for amplifier- to-speaker connections.

Wire is measured in gauges: the greater the number, the smaller the wire. The gauge of wire needed is determined by the distance between the amplifier/receiver and the speakers. The longer the run, the heavier the gauge needed. Use the following chart as a guide:

<u>Length</u>	Minimum Gauge
0' to 100'	16
50' to 150'	14
100' to 200'	12

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 dotted line on one conductor. Use and mark these as the Positive (+) conductor.



Typical usage of speaker wire conductors

Prewiring

Run a separate 2-conductor stranded copper speaker cable of at least 16 AWG (1.5 mm) from the amplifier to each speaker. Be sure to use cable with the appropriate fire resistance rating for the application.

When running a speaker cable parallel to an AC power cable, keep them at least 12 inches (30 cm) apart to minimize electromagnetic interference. If the speaker cables must cross AC wiring, cross them at right angles.

Leave about 2 feet (0.6 m) of cable at each end for connecting to the speakers and amplifier. Label the cables so you will know which cable connects to each keypad or amplifier output channel.

- Avoid running speaker wires close to house electrical wiring for any distance. If you have to run them parallel, leave two feet between the wiring. Speaker wires should cross AC lines at a 90° angle.
- The entire path between speakers and amplifier should be clear and unobstructed. Confirm the placement for the wall port close to the intended location of the amplifier or receiver.
- Label speaker wires at each end with left and right and location.

Impedance matching for amplifiers and speakers

If you intend to use more than one pair of speakers at a time it's important to consider both the impedance of the speakers and the capabilities of the amplifier or receiver. Not all amplifiers or receivers can safely operate two sets of speakers at once.

Installing the mounting bracket

The speaker can be installed horizontally or vertically. For a horizontal installation, install the mounting bracket with its end "C" slots at the top. Also, when installing the speaker outdoors in the horizontal position, locate the mounting bracket high enough so the front of the speaker will point down toward the listening area.

Note: The bracket must be securely attached to the mounting surface. For an exterior plywood wall with siding, use rust-resistant screws long enough to penetrate the siding and plywood. For a standard interior hollow wall, we recommend screwing the bracket to the wall studs whenever possible. If the speaker must be mounted between studs, use a minimum of two hollow-wall anchors to secure the bracket. For a masonry wall, use suitable anchors.

Installation on wood

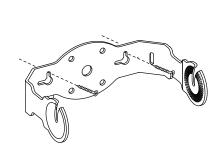
- 1. Using the mounting bracket as a template, mark the locations of the mounting screws.
- 2. Drill pilot holes for the screws.
- 3. For an exterior wall, apply a ring of caulk or sealant around each hole.
- 4. Screw the bracket to the wall or other surface.

Installation on a hollow wall

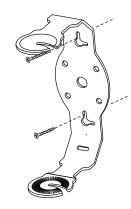
- Once you have determined roughly where to mount the speakers, use a stud finder to locate the wall studs and mark their location.
- 2. Using the bracket as a template, mark the mounting screw locations.
- 3. If you are attaching the bracket to studs, use a small drill to make pilot holes for the mounting screws. If you are using hollow-wall anchors, use a drill of the size recommended by the anchor manufacturer.
- 4. Screw the mounting bracket to the wall studs with the screws provided, or secure the wall anchors in the wall and attach the bracket to them.

Installation on masonry

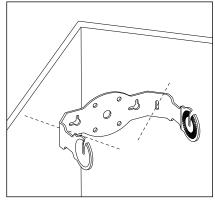
- Using the mounting bracket as a template, mark the locations of the mounting screws.
- 2. Use a masonry drill to make pilot holes for the anchors.
- Insert the suitable masonry anchors into the pilot holes and attach the mounting bracket with screws.



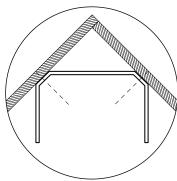
Mounting bracket horizontal position



Mounting bracket vertical position



Mounting bracket corner position



Corner position (view from top)

INSTALLING THE BRACKET ON POLE / SHELF FOOT

Installing the mounting bracket on a pole

The speaker can be installed horizontally or vertically on a pole with up to 1" $(2.54 \, \text{cm})$ inner diameter with two standard $5/16 \, \text{x} \, 1-3/8 \, \text{x} \, 1/2$ " U-bolts with 5/16-18" threads. For a horizontal installation, install the mounting bracket with its end "C" slots at the top. Also, when installing the speaker outdoors in the horizontal position, locate the mounting bracket high enough so the front of the speaker will point down toward the listening area.

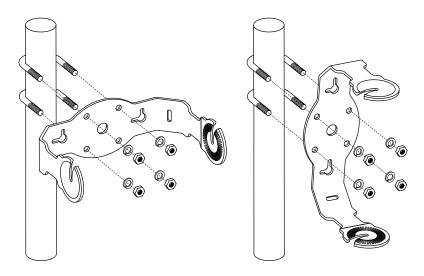
Installation on pole

- 1. Pass two standard U-bolts behind the pole and slide bracket over ends.
- 2. Attach bracket with lock washers and bolts, and tighten.

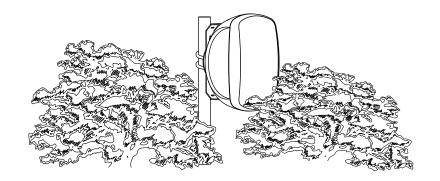
Installation on in-ground pole

The speaker can be mounted on an in-ground pole with buried cable. First, consult your local utility companies to learn of existing buried cables, pipes or lines. Be aware of any local building code requirements that may be applicable.

- Drive a 1" (2.54 cm) pipe into the ground at the prequalified location.
 Determine the length and location for the cable trench and dig below the frost line. Use either direct buried speaker cable or cable run through conduit.
- 2. Pass two standard U-bolts behind the pole and slide bracket over ends.
- 3. Attach bracket with lock washers and bolts, and tighten.
- 4. Leave about 2 feet of cable at the speaker end for connections and adjustments.



Mounting bracket horizontal position Mounting bracket vertical position

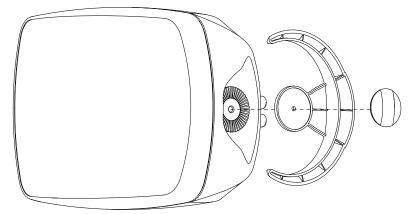


Speaker mounted on in-ground pole

Installing the bookshelf foot

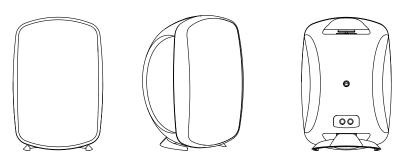
The bookshelf foot attaches to one end of the speaker, holding the unit in a vertical position.

- 1. Align the foot over the end screw on the bottom of the speaker.
- 2. Snug the foot up to the speaker and secure with the mounting knob.
- 3. For a clean look, place the other mounting knob over the other end screw.



Mounting knob holds foot in place

Attaching foot to bottom of speaker



Bookshelf foot on bottom of speaker

ATTACH THE SPEAKER

Attaching the speaker to the bracket

- 1. Thread the knobs halfway into the ends of the speaker, leaving about ¼ inch (6 mm) of their threads exposed.
- 2. Slip the knob threads into the "C" slots in the mounting bracket.
- 3. Rotate the speaker to show the terminals.

Connecting the speaker

- 1. Strip 1 to 2 inches (2.5 to 5 cm) off the end of the cable jacket. Then strip ½ inch (1.3 cm) of insulation off each wire.
- 2. Twist the wire strands together so there are no strands separated from the bundle.
- 3. Connect the wires to the speaker terminals, being sure to observe proper polarity. For standard speaker cable with red and black wires, connect the red wire to the red positive (+) terminal and the black wire to the black negative (-) terminal.

Note: Some speaker cables may have other ways of designating polarity. Cable with a clear jacket may has a copper-colored wire for positive and a silver-colored wire for negative. In a cable with white and black wires, the white is positive and the black is negative. Cable with both wires the same color may have grooves, ribs, or stripes on the positive wire.

4. Check to make sure there are no stray strands of wire outside the terminals. If there are, remove the wire, twist the strands together, and reconnect the wire to the terminal.

Final Assembly

- Rotate the speaker to the desired angle. If you are installing the speaker outdoors in the horizontal position, rotate it so the front points down toward the listening area.
- 2. Tighten the knobs on both ends.
- 3. Slip the end caps onto the ends of the speaker, from the rear to the front.





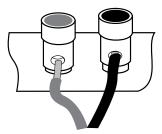


Mounting knob attached



End cap in place

Speaker attached to bracket



Insertion of speaker wire on back of speaker

CONNECT TO AMPLIFIER / TROUBLESHOOTING

Connecting the amplifier

- 1. Make sure the amplifier is turned off.
- 2. Strip 1 to 2 inches (2.5 to 5 cm) off the end of each cable's outer jacket. Then strip just enough insulation off each wire to allow inserting the wires fully into the amplifier's speaker terminals.
- 3. Twist the wire strands together so there are no strands separated from the bundle.
- 4. Connect the wires to the speaker terminals, being sure to observe proper polarity.
- 5. Check to make sure there are no stray strands of wire outside the terminals. If there are, remove the wire, twist the strands together, and reconnect the wire to the terminal.

Speaker care

These sealed construction speakers are made of durable materials that need very little care. Occasionally wipe them with a soft, damp cloth. Do not use any harsh detergents, chemical solvents, or abrasive materials on your speakers, and do not spray water or other liquids into the grilles.

Troubleshooting Guide

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/station 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.

Muffled sound from single point stereo speaker:

• Check polarity of speaker connections. One channel may be reversed.

Any other problems not listed, discuss with your dealer or call Russound.

TECHNICAL SPECIFICATIONS

Model: 5B45

Description: 2-way Outdoor Loudspeaker Pair

Woofer: 4" (100 mm) IMPP cone Tweeter: 1" (25 mm) Teteron™

Mounting Options: Bookshelf foot, pole, flat or corner surface

Dimensions: 9.5" x 6.25" x 6.25" (24.13 x 15.87 x 15.87 cm)

Terminals: 12 gauge spring terminal

Grille: Aluminum Bracket: Aluminum

Bookshelf foot: Yes

Recommended Power: 10 - 100 watts RMS

Sensitivity: 88 dB SPL (2.83V @ 1m)

Frequency Response: $80 \text{ Hz} - 20 \text{ kHz} \pm 3 \text{ dB}$

Nominal Impedance: 8 ohm

Unit Weight: 3.9 lbs. (1.8 kg)

Model: 5B55

Description: 2-way Outdoor Loudspeaker Pair

Woofer: 5.25" (133 mm) IMPP cone

Tweeter: 1" (25 mm) Teteron

Mounting Options: Bookshelf foot, pole, flat or corner surface

Dimensions: 11.25" x 7.5" x 7.5" (28.57 x 19.05 x 19.05 cm)

Terminals: 12 gauge spring terminal

Grille: Aluminum
Bracket: Aluminum

Bookshelf foot: Yes

Recommended Power: 10 - 125 watts RMS

Sensitivity: 90 dB SPL (2.83V @ 1m)

Frequency Response: $72 \text{ Hz} - 20 \text{ kHz} \pm 3 \text{ dB}$

Nominal Impedance: 8 ohm

Unit Weight: 5.4 lbs. (2.4 kg)

Model: 5B65

Description: 2-way Outdoor Loudspeaker Pair

Woofer: 6.5" (165 mm) IMPP cone

Tweeter: 1" (25 mm) Teteron

Mounting Options: Bookshelf foot, pole, flat or corner surface

Dimensions: 13" x 8.75" x 8.25" (33.02 x 22.22 x 20.95 cm)

Terminals: 12 gauge spring terminal

Grille: Aluminum **Bracket:** Aluminum

Bookshelf foot: Yes

Recommended Power: 10 - 150 watts RMS

 $\textbf{Sensitivity:} \quad 91 \text{ dB SPL } (2.83 \text{V} \ @ \ 1 \text{m})$

Frequency Response: $64 \text{ Hz} - 20 \text{ kHz} \pm 3 \text{ dB}$

Nominal Impedance: 8 ohm

Unit Weight: 7.1 lbs. (3.2 kg)

Model: 5B65S

Description: Single Point Stereo Outdoor Loudspeaker

Woofer: 6.5" (165 mm) IMPP cone
Tweeter: (2) 1" (25 mm) Teteron
Mounting Options: Pole, flat or corner surface

Dimensions: 13" x 8.75" x 8.25" (33.02 x 22.22 x 20.95 cm)

Terminals: 12 gauge spring terminal

Grille: Aluminum

Bracket: Aluminum

Bookshelf foot: No

Recommended Power: 10 - 150 watts RMS

Sensitivity: 91 dB SPL (2.83V @ 1m)

Frequency Response: $62 \text{ Hz} - 20 \text{ kHz} \pm 3 \text{ dB}$

Nominal Impedance: 8 ohm/8 ohm

Unit Weight: 7.2 lbs. (3.3 kg)

All Russound Acclaim 5 Series Speaker products are guaranteed against all defects in materials and workmanship for five (5) years from the date of purchase. Proof of Purchase must accompany all claims. During the warranty period Russound will replace any defective part and correct any defect in workmanship without charge for either parts or labor.

Russound may replace returned speakers with a product of equal value and performance. In such cases, some modifications to the mounting may be necessary and are not Russound's responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by Russound. The unit must be returned to Russound at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damage resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by Russound.

Russound products are sold only through authorized Dealers and Distributors to ensure that customers obtain proper support and service. Russound reserves the right to limit the warranty of products purchased from an unauthorized dealer or other source, including retailers, mail order sellers, and online sellers, to ninety (90) days from the date of purchase.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the speaker(s) in a corrugated container with at least 3" (7.6 cm) of resilient material to protect the unit from damage in transit.

Before returning the unit for repair, call Russound at 603.659.5170 for a Return Authorization number. Write this number on the shipping label and ship to:

Russound

ATTN: Service 5 Forbes Road Newmarket, NH 03857 This Warranty Does Not Cover:

- Damage caused by abuse, accident, misuse, negligence, or improper operation (installation).
- Products that have been altered or modified.
- Any product whose identifying number or decal, serial #, etc. has been altered, defaced or removed.
- · Normal wear and maintenance.

Due to our continual efforts to improve product quality as new technology and techniques become available, Russound/FMP, Inc. reserves the right to revise speaker systems specifications without notice.



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Models: 5B45, 5B55, 5B65, 5B65S