



Ultra Series
Soundbar/ On-wall LCR Speakers
OWNER'S MANUAL

Introduction

Congratulations on your purchase of an RBH Ultra Series speaker! Your speaker is the result of many years of research and development dedicated to producing high quality products for home audio systems.

This manual contains features, setup recommendations and specifications for the RBH Ultra Series speakers. We recommend you thoroughly read through the material contained in this manual before connecting your soundbar speaker. This will ensure you have a good understanding of how to setup your speakers for optimum performance and allow for years of listening enjoyment.

Ultra Series Soundbar On-wall / LCR Speakers

Innovative and proprietary inverted aluminum cone 4-inch woofers and aluminum dome tweeters with textured phase plugs come together to deliver the finest audio performance in the thinnest profile on the RBH Ultra Series Ultra-3 on-wall soundbar/LCR and the Ultra-1 on-wall surround speakers.



Ultra-3 On-wall Soundbar/LCR Speaker: It's fast to mount. And...it can be custom-sized to match TV widths of 47- to 76-inches which fit most popular sizes.

Ultra-1 On-wall/Surround Speakers

Break-in Period

Allow 10-15 hours of listening time to adequately break-in your RBH Ultra Series speaker. As the speaker breaks-in, the driver suspension will loosen. The result of break-in will be an increase in low frequency response, improved definition, and increased clarity and detail.

Care and Cleaning

The unique grille for the Ultra Series has been designed to be as lightweight and acoustically transparent as possible and is held in place by magnets embedded in the frame of the cabinet. If the grille requires cleaning, carefully lift the grille from the speaker and lightly vacuum any dust if necessary using a soft brush attachment. The cabinet has a durable finish that should only require dry dusting or cleaning with a dry cloth. Avoid the use of abrasive or solvent-based cleaners and harsh detergents.

Features

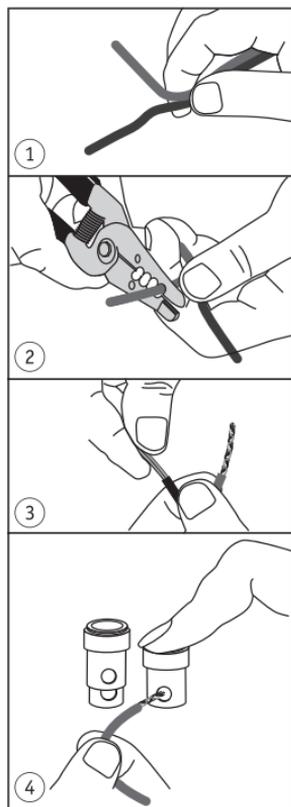
Fast to mount. The Ultra-3 can be custom-sized to widths of 47- to 76-inches to fit most popular sized on-wall TVs. Both the Ultra-1 and Ultra-3 have a contemporary design, magnetic-mounted black fabric grille, and are only 1-5/8 inches deep. The enclosure features internal bracing and sealed separate internal chambers for each channel to produce the finest quality and performance. Innovative and proprietary inverted aluminum cone 4-inch woofers and 1-inch aluminum dome tweeters with textured phase plugs make big sound from the thin cabinet possible. Our ez-wire terminals and fast mounting, including direct screw-through mount holes (hidden until needed), make the Ultra Series speakers easy and quick to install. The Ultra Series speakers provide effortless, quick, and brilliant sound.

Attaching Speaker Wires

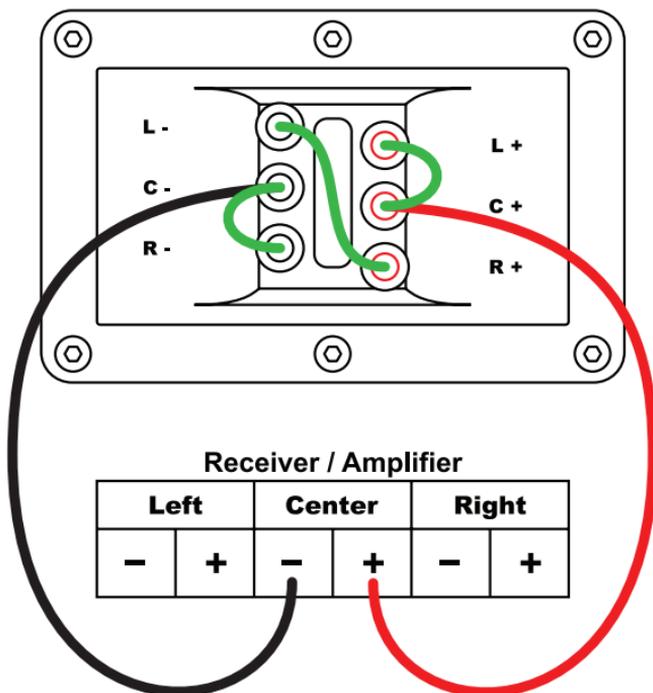
The Ultra Series speakers use spring-loaded speaker wire terminals to firmly hold either a pin connector or bare speaker wire. To obtain the best connection, it is important to slightly tug on the wires after they have been secured in the terminals. Since the Ultra-3 soundbar speaker contains the LEFT, RIGHT and CENTER channels, connect each one of these channels from your amplifier. Using 16-gauge or larger speaker wire, connect the RED "positive" (+) terminal of the LEFT speaker connector to the RED "positive" (+) terminal of your amplifier's LEFT channel. Connect the BLACK "negative" (-) terminal of the left speaker connector to the BLACK "negative" (-) terminal of your amplifier's left channel. Repeat for the right and center channels.

WARNING: Make sure that no bare wires from any of the connections touch each other or any other terminals as this could cause a short and damage your equipment.

1. Remove the last 4 inches of the speaker wire jacket at the end of each cable to allow easier pull-through and connection flexibility of the + and - individual wires.
2. Use a wire stripper to remove about 3/8-inch of insulation from the end of each + and - wires.
3. Twist the ends of each conductor to secure loose strands.
4. Connect the positive (+) wire to the red terminal on the front of the speaker by pressing down on the red positive (+) terminal's tab, inserting the end of the positive conductor, and releasing the tab.
5. Repeat this procedure to connect the negative (-) conductor to the black negative (-) terminal.



Ultra-3 Single Channel Wiring Diagram

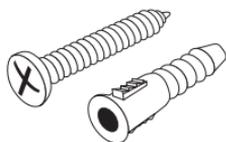


How to wire all channels of the Ultra-3 for use as a single channel.

On-wall Installation

To mount your Ultra Series speakers on a wall, determine a suitable location and complete all wiring to the speaker location before mounting the speaker to the wall. Be sure to check for wiring and drywall screw locations behind planned pilot hole locations. Do not ceiling-mount. There are two mounting methods:

1. To mount using the embedded keyhole mounting brackets:
 - a. Use the included template and choose a mount position for the speaker (horizontal or vertical). Tape the template to wall, making sure it is level (when horizontally mounting) or plumb (when vertically mounting) and positioned correctly, centered with the TV. Mark on the wall the pilot hole locations through the template and then remove the template. Leave a minimum of one inch (25 mm) space between the speaker cabinet edge and the TV edge. Keep in mind that, when mounted, the speaker will “lock” into position 5/16-inch lower than where the pilot holes are drilled.
 - b. Pre-drill 1/8-inch pilot holes in the marked locations from step a above. If drilling into a wall stud (ideal), it is recommended to use #10 mounting screws (included). If there is no stud where a pilot hole is located, drill a 1/4-inch pilot hole through the drywall, then install a wall anchor (included) into the pilot hole. Insert a #10 mounting screw into either the pilot hole or the wall anchor, leaving the inside edge of the screw at least 1/8-inch from the wall or anchor.
 - c. Feed speaker wires through the terminal port from the back of the speaker. Gently center the rear “+” keyhole bracket over the screw heads then push towards the wall slightly and then down to lock the speaker into position.
 - d. Attach each wire to the appropriate spring-terminal binding post.
 - e. Test for speaker function and attach the magnetically-held grille.



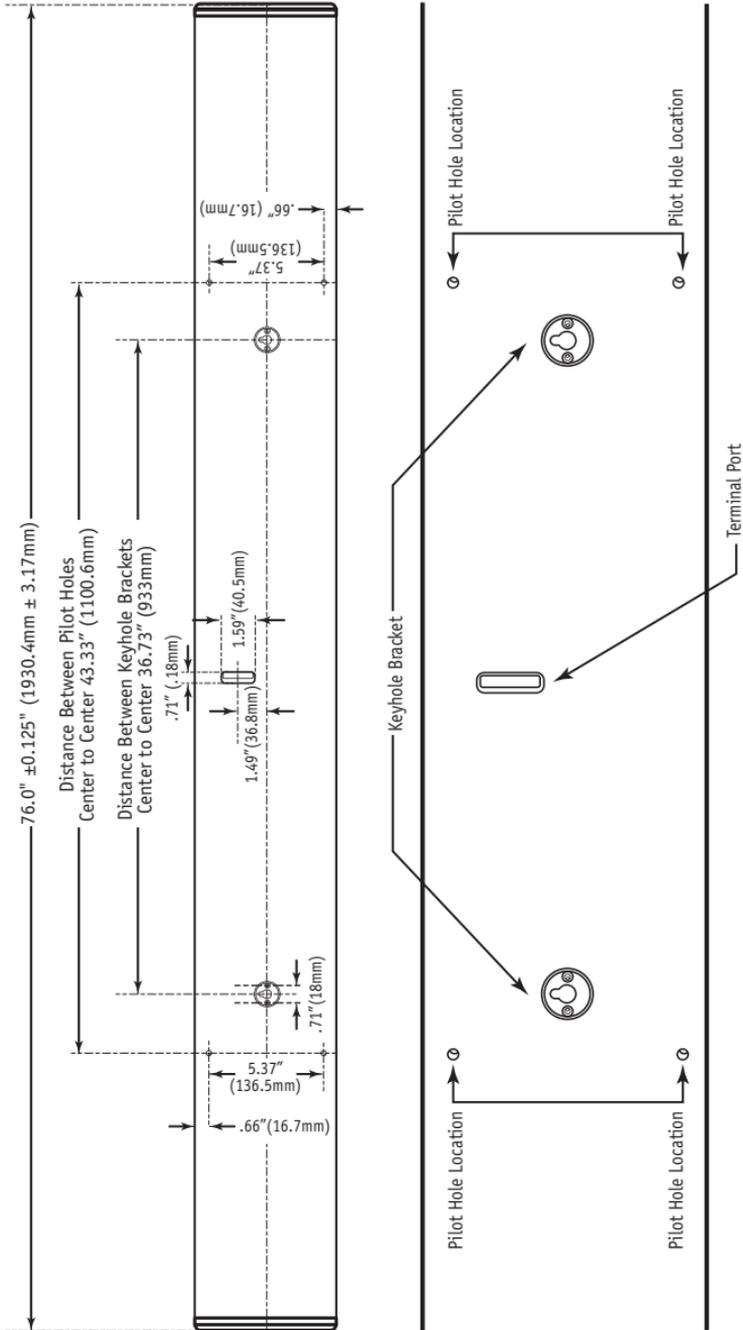
#10 screw (x2) and anchor (x4) for keyhole mounting. Anchor can also be used for through-cabinet mounting with #8 coarse thread bugle head black drywall screw



#8 x 2 1/2-inch bugle head black coarse drywall screw (x4) for through cabinet direct to wall mounting.

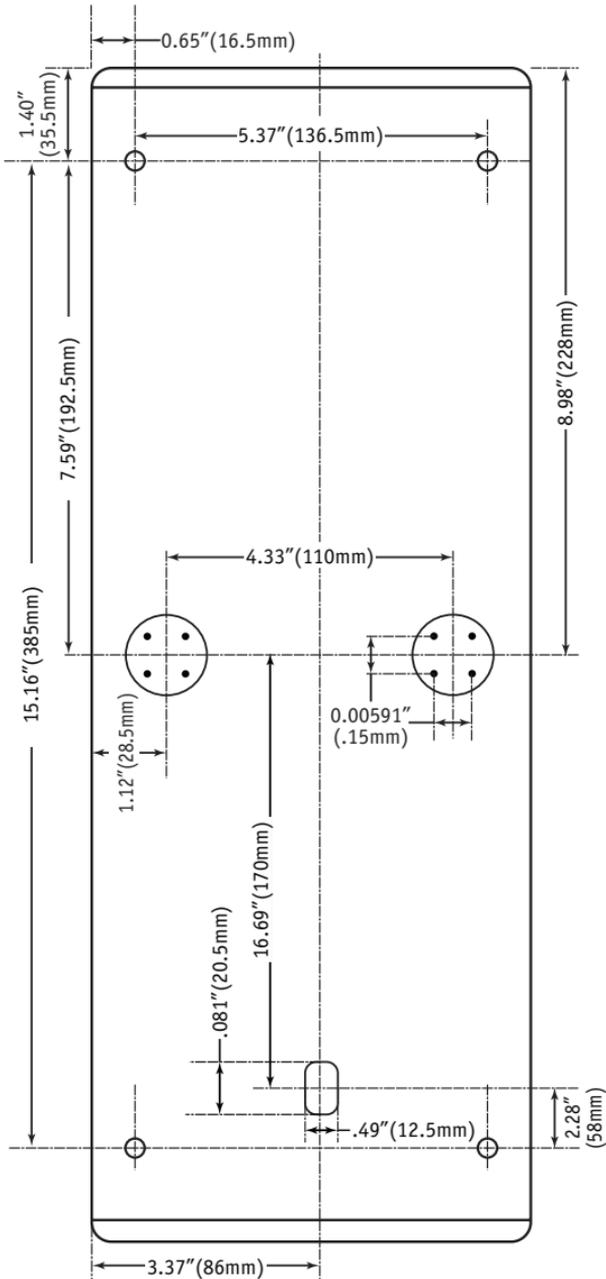
See next page for placement of keyholes and pilot holes on the Ultra-3 speaker.

On-wall Installation (continued)



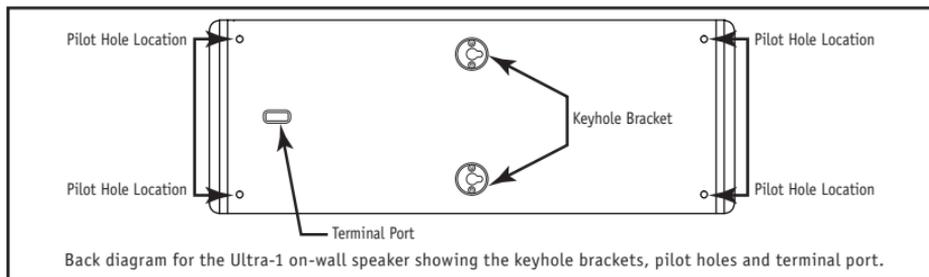
Back diagram for the Ultra-3 soundbar showing the keyhole brackets, pilot holes and terminal port.

On-wall Installation (continued)

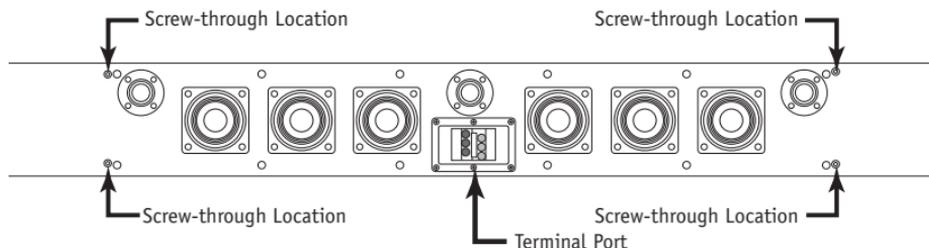


Back diagram for the Ultra-1 on-wall speaker showing the keyhole brackets, pilot holes and terminal port.

On-wall Installation (continued)



2. To use the “screw-through ez-mount” method, (allows for tighter fit to edge of TV):
 - a. Using a finger or the eraser-end of a pencil, locate the covered screw-through locations and depress slightly so they can be located, (see drawing below).
 - b. Insert 2½-inch black drywall or cabinet screws (included) into the center of depressed locations.
 - c. Align the speaker as desired. Use a level to be sure the speaker is level or plumb, or align the speaker with the edge of the TV. Then slightly start each screw to mark the locations on the wall, then reverse the screws to allow removal of the speaker but leave the screws in the cabinet’s pilot holes.
 - d. Drill a ¼-inch diameter hole through the screw-marked locations on the wall, then insert the drywall anchors (included). If the screw-marked location happens to be a wood stud, no pilot hole is needed since a wall anchor will not be used in that location.
 - e. Feed the speaker wires through the terminal port from the back of the speaker and pull through the front of the terminal port, then re-mount the speaker by securing the screws into the drywall anchors or stud(s).
 - f. Attach each wire to the appropriate spring-terminal binding post.
 - g. Test the speaker function and attach the magnetically-held grille.



#10 screw (x2) and anchor (x4) for keyhole mounting. Anchor can also be used for through-cabinet mounting with #8 coarse thread bugle head black drywall screw



#8 x 2½-inch bugle head black coarse drywall screw (x4) for through cabinet direct to wall mounting.

Room Setup Suggestions

In order to obtain the best possible sound from your speaker system, it is important to determine where the Ultra Series speakers will sound best in your listening room. Room reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with speaker placement to determine which location offers the best overall sound. Of course, this will be dictated by the TV placement for sound-bar use. As a general guide, use the room layout diagram and the following descriptions when setting up a home theater system. Some speakers shown in the diagram below may not be applicable to your particular system.

The Ultra-3 soundbar speaker is designed to be used as a LCR (Left-Center-Right) speaker with flat-panel TVs such as plasma and LCD TV monitors. This will usually dictate placing the Ultra-3 below or above the TV.

The Ultra-1 on-wall speaker is designed to be used as a surround speaker or as a left or right main speakers positioned vertically on either side of the TV.

The Ultra Series speakers sound best when mounted to a wall. Another mounting option for the Ultra-3 is mounting to the TV itself using our SB-39 universal brackets (available separately) to accommodate articulating TV mounting brackets.

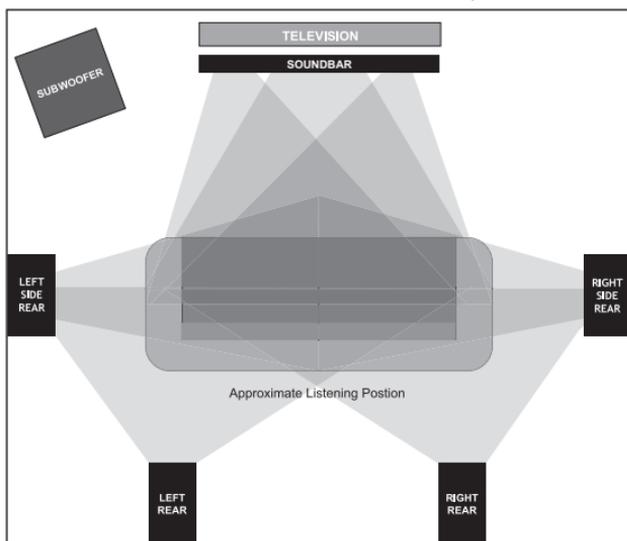
Surround Speakers

The surround speakers may be placed either above, behind or to the sides of the listening position. The listening position should be centered between the surround speakers for best performance.

Subwoofer

Placement of the subwoofer will largely determine quality, quantity, and extension of the bass frequencies within your listening room. Bass frequencies are reinforced by close room boundaries. Placing the subwoofer in a corner will make the subwoofer sound louder and boost the very lowest frequencies. Placing the subwoofer away from walls will provide the least reinforcement, making the bass sound subjectively thinner than if the woofer were close to a wall.

Good results can usually be obtained by placing a subwoofer along a wall 1-3 feet from a corner. Experiment with subwoofer placement and the sub-amplifier controls to achieve the proper bass balance.



Specifications

Model	Ultra-3	Ultra-1
Speaker Type:	On-wall/LCR Soundbar Speaker	On-wall/Surround Speaker
Frequency Response:	100Hz-20kHz \pm 3dB	100Hz-20kHz \pm 3dB
Sensitivity	84db (2.38V @ 1M)	84db (2.38V @ 1M)
Recommended Power:	20-120 Watts	20-120 Watts
Woofers:	(6) 4" (102mm) Proprietary Inverted Aluminum Cone Woofers	(2) 4" (102mm) Proprietary Inverted Aluminum Cone Woofers
Tweeter:	(3) 1" (25mm) Aluminum Diaphragm Neodymium Magnet Tweeter with Textured Phase Plug	(1) 1" (25mm) Aluminum Diaphragm Neodymium Magnet Tweeter with Textured Phase Plug
Crossover Frequency:	3,000 Hz	3,000 Hz
Crossover Slope:	12dB/Octave	12dB/Octave
Impedance:	8 Ohms x3	8 Ohms
Finish/Color:	MDF/Matte Texture Black with High-gloss End Accent Caps	MDF/Matte Texture Black with High-gloss End Accent Caps
Grille Color:	Black Fabric	Black Fabric
Dimensions:	7.25" to 47" (1838mm to 1194mm) W 6.6875" (170mm) H 1.625" (41mm) D	6.6875" (170mm) W 18" (457mm) H 1.625" (41mm) D
Distance Between Keyholes:	14.625" (372mm)	
Weight:	9.5 lbs. (4.30 kg) 47" Wide 12.5 lbs. (5.74 kg) 63" Wide 16.8 lbs. (7.62 kg) 7.25" Wide	3.85 lbs. (1.75 kg)

Troubleshooting

Situation:	Probable Cause:	Solution:
No sound from speakers.	Speaker wire not connected. Speaker selector on amplifier is not on.	Make sure wire is connected at both the speaker and the amplifier observing proper polarity. Activate proper selector on amplifier.
No sound from one speaker.	Balance control on receiver or pre-amp is not centered. Speaker wire not securely connected.	Place balance control in the center. Check all connections at amplifier and speakers.
Very little bass and/or imaging.	Speakers are wired out of phase.	Check entire system for proper polarity and make adjustments as necessary.

Warranty

Your RBH Sound Ultra Series speakers are covered by a limited warranty against defects in materials and workmanship for a period of 5 years from the original date of purchase.* This warranty is provided by the authorized RBH Sound dealer where the speaker was purchased. Warranty repair will be performed only when your purchase receipt is presented as proof of ownership and date of purchase. Defective parts will be repaired or replaced without charge by your dealer's store or the location designated by RBH Sound authorized to service RBH Sound products. Charges for unauthorized service and transportation cost are not reimbursable under this warranty. This warranty becomes void if the product has been damaged by alteration, misuse or neglect. RBH Sound assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from the failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of this express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

* The Ultra Series speakers are not intended for outdoor use. If used outdoors, it is at owner's discretion and this warranty is void.

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