rbh®

IMPRESSION SERIES

FREESTANDING SPEAKERS

Owner's Manual

INTRODUCTION

Congratulations on your purchase of Impression Series speakers! The Impression Series is the result of many years of research and development dedicated to producing high quality products for home audio and home theater systems

This manual contains features, setup recommendations and specifications for the Impression Series speakers. It is recommended you thoroughly read through the material contained in this manual before connecting your speakers. Doing this will ensure you have a good understanding of how to setup your speakers for optimum performance and allow them to provide you years of listening enjoyment.

SPEAKERS

BREAK-IN PERIOD

Allow several hours of listening time to adequately break-in your Impression Series speakers. As your speakers break in during the first few hours of listening, the driver suspension will loosen. Following this initial break-in period, there will be an increase in low-frequency response, improved definition, and increased clarity and detail.

CARE AND CLEANING

To maintain your speaker and/or subwoofer appearance, we recommend carefully wiping it with a clean, damp, and soft cloth. To help clean dust from the grille cloth, we recommend using a vacuum with a brush attachment.

FEATURES

The Impression Series includes the R-55, a sleek tower, the R-515, an LCR/surround channel, and the R-5, an elegantly-matched bookshelf speaker. Impression Series cabinets are constructed of medium density fiberboard (MDF) because of its inert properties which prevent cabinet diffraction and sound coloration. All Impression Series models are then finished in your choice of a gorgeous high-gloss black finish or phantom black, a satin finish which resists scratches and smudges and is designed to keep distracting reflections at bay in low-light theater environments.

At the heart of the Impression Series speakers are high performance crossover networks which allow each speaker component to operate at its optimal performance. The Impression Series tweeters feature higher power handling through the use of magnetic cooling liquid and, to further protect the tweeters against being over-driven, a self-resetting polyswitch is used. Finally, five-way binding post terminals which accept a variety of speaker wire gauges are used to ensure a good and solid electrical connection.

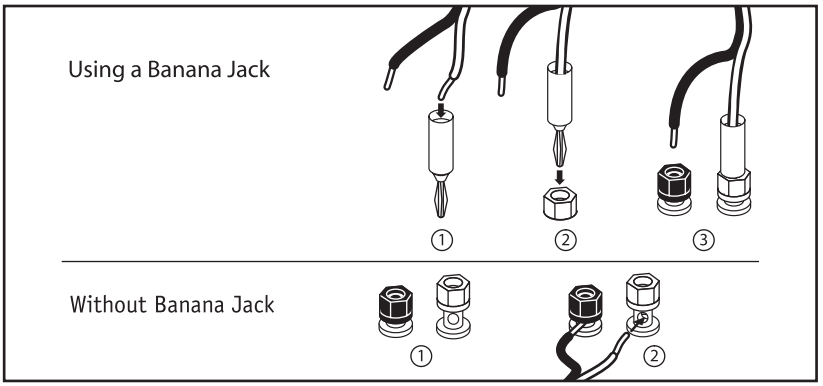
The Standard Impression Series features poly-mica woofer cones which resist flexing and contribute to an accurate reproduction of the audio signal. Upper-midrange and treble frequencies are delivered by high performance 1-inch fabric-dome dome tweeters.

The Elite Impression Series features aluminum cone woofers which are extremely light and unbending. Featuring trickle-down technology from our award-winning Signature Series, these woofers provide a noticeable improvement in performance and sound quality. Combined with a 1-inch reference-grade nano-silk dome tweeter, the end result is nothing short of amazing.

ATTACHING SPEAKER WIRES

If using a banana jack, attach the matching positive or negative wire and push directly into the binding post's top hole.

If you're not using a banana jack, simply loosen the binding nut to allow the hole in the side of the terminal to become exposed. Strip ¼-inch to ½-inch of the insulation from the end of the speaker wire and insert the exposed wire end into the hole in the side of the terminal. Tighten the binding nut by turning the nut clockwise until the speaker wire is secured. Repeat for the other speaker wire(s) as necessary.



ROOM SETUP SUGGESTIONS

In order to obtain the best possible sound from your speaker system, it is important to determine where the 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. We recommend experimenting with speaker placement to determine which location offers the best overall sound for each speaker. As a general guide, use the room setup diagram shown on pages 6-7 and the following descriptions when setting up a home theater system. Some speakers shown in the diagram may not always be applicable to your system.

For more configurations, see our web page at http://rbhsound.com/surrounds_setups.php

Front Main Speakers
As a starting point, place your left and right tower speakers at least 15 inches from the wall and 7-feet apart from each other. The distance from the listening position to each speaker should also be close to the distance that separates the two main speakers. Slightly angling the speakers inward towards the listening position may give a more spacious and realistic sound stage.

Center Channel Speaker
The center channel speaker should be placed in the center between both left and right main speakers. Often this positioning dictates placing the speaker either directly above or below a television monitor. The center channel speaker may be placed in a horizontal (lying down) or vertical (standing) position.

Rear 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 you may want to experiment with angling the surround speakers either towards or away from the listening position. The optimal location for surround speakers is about 5-6 feet high on the walls to the left and right of the listening position.

Subwoofer
To optimize the output from your subwoofer, it is important to determine where it will perform its best in your listening room. Sound reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with subwoofer placement to determine which location offers the best overall performance.

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 close to a corner will make the subwoofer sound louder and boost the very lowest frequencies.

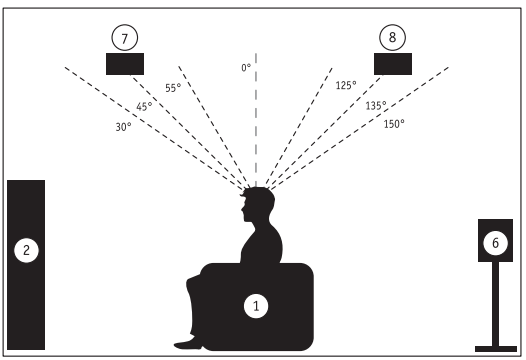
Placing the subwoofer away from walls will provide the least reinforcement, making the bass sound subjectively thinner than if the woofer were closer to a wall. Good results can usually be obtained by placing a subwoofer along a wall 1-3 feet from a corner. Experiment with placement of the subwoofer and the sub-amplifier controls to achieve the proper bass balance.

ROOM SETUP SUGGESTIONS (continued)

IMPORTANT NOTICE REGARDING BASS MANAGEMENT: It is important the signal being sent to the subwoofer be a non-boosted or "flat" signal. Check the settings on your receiver or processor to make sure any "bass boost", "super bass" or "loudness" is set to Off. In most cases a home theater receiver or processor will determine the crossover frequency through bass management settings. In this configuration, connect the receiver or processor to the LFE (Low Frequency Effect). Your subwoofer will now reproduce the bass frequencies as they were intended. Use the subwoofer level control and the individual bass management control within the receiver or processor to adjust the subwoofers' volume if necessary. Once set, the volume controls should not need to be altered as the subwoofers' volume will track with the master volume control of your receiver or processor. Use Line Input only if bypassing your receivers internal processing to deliver a full signal to your subwoofer which is then managed by the subwoofers' crossover and volume controls.

STANDARD 7.2.4 SETUP WITH OVERHEAD SPEAKERS

1. Listening/seating position
2. Left and right front speakers
3. Center speaker
4. Subwoofer(s)
5. Left and right surround speakers
6. Left and right rear surround speakers
7. Left and right top front overhead speakers
8. Left and right top rear overhead speakers



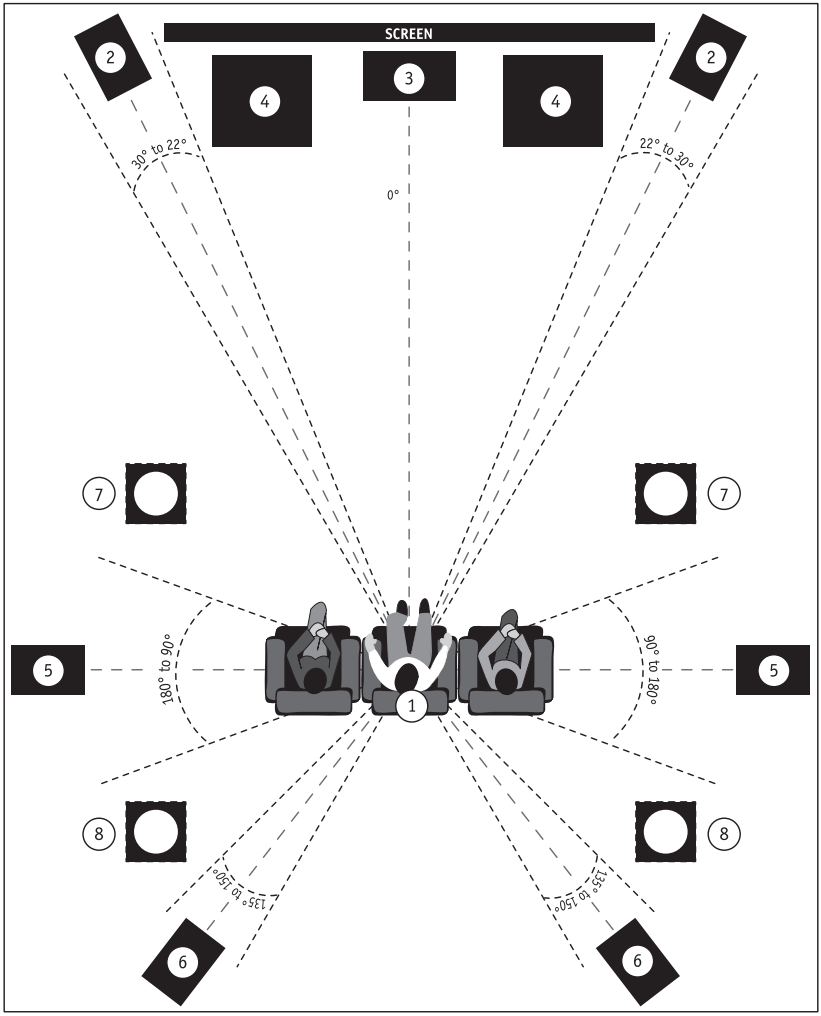
7.2.4

This number represents the number of traditional speakers (front, enter, surround, etc.)

This number represents the number of subwoofers you can connect to your receiver

This number refers to how many overhead or atmospheric speakers used in this setup

ROOM SETUP SUGGESTIONS (continued)



Speaker positioning for Dolby 7.2.4 and Dolby Atmos borrowed from Dolby Laboratories, Inc. Dolby Atmos is a registered trademark of Dolby Laboratories Licensing Corporation.

TOWER SPEAKER OUTRIGGER INSTALLATION

Use these attractive outriggers for the Impression Series R-55 tower speakers to create a wider support base for the cabinet. These outriggers make your tower speakers more stable, and are ideal when placing them on a carpeted floor.

Package contents include:
(A) 1 each back outrigger
(B) 1 each front outrigger
(E) 4 metal spike feet
(E) 4 each top cap nuts
(E) 4 each threaded adjustment washers
(C) 4 each metal feet rests
(F) 4 each protective pads
(D) 6 each wood screws

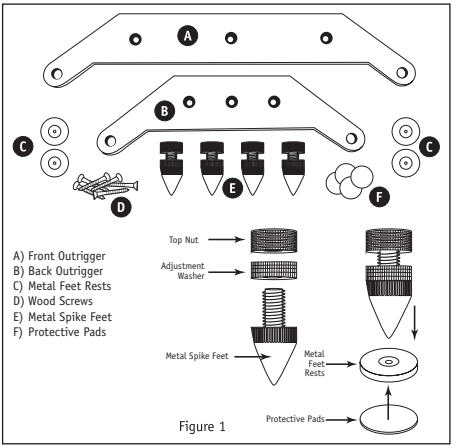


Figure 1

The metal spike feet work best for carpeted surfaces. Also included is a protective metal disc (and a paper pad that attaches to the metal disc) to prevent damage to tile or wood floors.

Attach the tower speaker outrigger plates to the bottom of the speaker with the wood screws provided, as shown in figure 2 below. The larger plate should be at the front of the speaker and the smaller plate at the back of the speaker.

NOTE: To prevent scratching or damaging of the cabinet, turn the tower upside down on a soft surface when attaching the outrigger feet.

Adjust the level/height of the speaker by adjusting the metal spike feet, (screwing them into the outrigger to lower or unscrewing to raise). When best position is found, lock each metal spike foot into place using the adjustment washer.

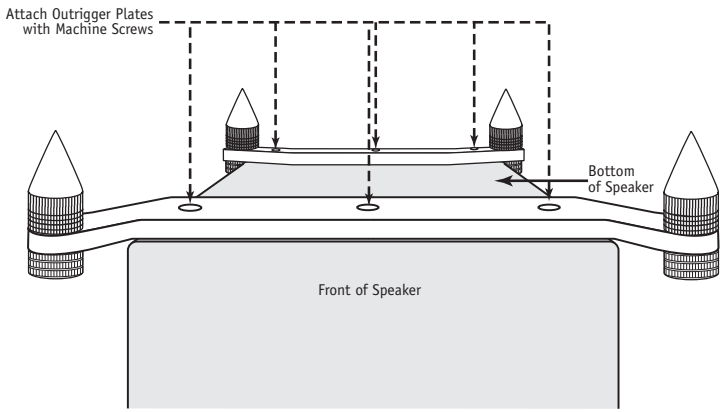
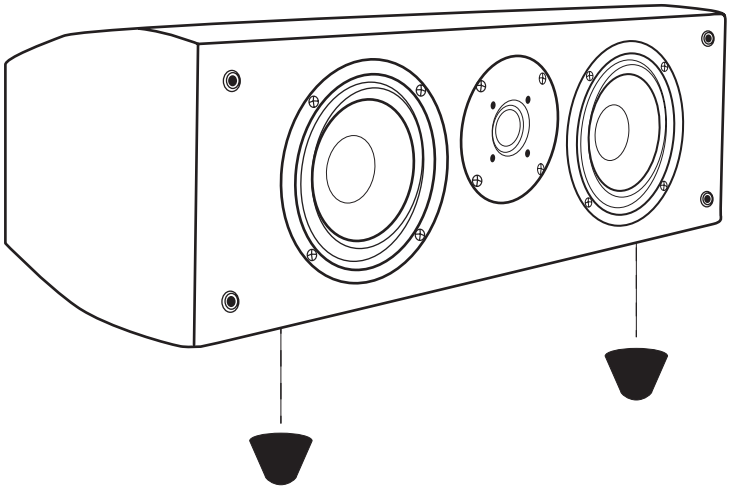


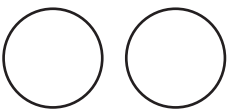
Figure 2

ADJUSTMENT FEET FOR LCR SPEAKER

Two dome adjustment feet and two double-sided tapes have been provided so the R-515LCR speaker can be positioned to aim up, down or to make it level. Simply place the domed adjustment feet anywhere along the side of the speaker facing down until you get the angle desired. Space the domed feet equally to distribute the weight of the speaker, see the illustration below. The domed feet can be used with or without the double-sided tape provided.



Dome Adjustment Feet



Double-sided Tape

SPECIFICATIONS

Model	R-55 Tower	R-515 LCR/Surround	R-5 Bookshelf
Frequency Response:	37Hz – 25kH	57Hz – 25kHz	57Hz – 25kHz
Sensitivity:	87dB	87dB	85.5dB
Recommended Power:	50-250 Watts	25-175 Watts	25-125 Watts
Woofer:	(3) 6½" (165mm) Poly-mica (2) 5¼" (133mm) Poly-mica	(2) 5¼" (133mm) Poly-mica	(1) 5¼" (133mm) Poly-mica
Tweeter:	(1) 1" (25mm) Fabric Dome	(1) 1" (25mm) Fabric Dome\	(1) 1" (25mm) Fabric Dome
Tweeter Protection:	Yes	Yes	Yes
Impedance:	6 Ohms	6 Ohms	8 Ohms
Crossover Frequencies:	120Hz / 3000 Hz	3000 Hz	3000 Hz
Dimensions:	8.8125" (224mm) W 47.25" (1200mm) H 12.25" (311mm) D	7.125" (181mm) W 21.625" (550mm) H 8.625" (219mm) D	7.125" (181mm) W 12.5625" (319mm) H 8.625" (229mm) D
Cabinet:	High-gloss Black or Phantom Black	High-gloss Black or Phantom Black	High-gloss Black or Phantom Black
Weight:	52 lbs. (23.59 kg)	15.16 lbs. (6.88 kg)	10.51 lbs. (4.77 kg)
Speaker Bracket Holes:	N/A	N/A	2.36" (60mm) (Center to Center) 1/4-inch 20 Thread
Warranty:	5 Years	5 Years	5 Years

SPECIFICATIONS

Model	R-55E Tower	R-515E LCR/Surround	R-5E Bookshelf
Frequency Response:	35Hz – 30kH	55Hz – 30kHz	55Hz – 30kHz
Sensitivity:	88dB	88dB	86dB
Recommended Power:	50-250 Watts	25-175 Watts	25-125 Watts
Woofer:	(3) 6½" (165mm) Aluminum (2) 5¼" (133mm) Aluminum	(2) 5¼" (133mm) Aluminum	(1) 5¼" (133mm) Aluminum
Tweeter:	(1) 1" (25mm) Nano-silk Dome	(1) 1" (25mm) Nano-silk Dome	(1) 1" (25mm) Nano-silk Dome
Tweeter Protection:	Yes	Yes	Yes
Impedance:	6 Ohms	6 Ohms	8 Ohms
Crossover Frequencies:	120Hz / 3000 Hz	3000 Hz	3000 Hz
Dimensions:	8.8125" (224mm) W 47.25" (1200mm) H 12.25" (311mm) D	7.125" (181mm) W 21.625" (550mm) H 8.625" (219mm) D	7.125" (181mm) W 12.5625" (319mm) H 8.625" (229mm) D
Cabinet:	High-gloss Black or Phantom Black	High-gloss Black or Phantom Black	High-gloss Black or Phantom Black
Weight:	55 lbs. (24.95 kg)	17 lbs. (7.71 kg)	11 lbs. (4.99 kg)
Speaker Bracket Holes:	N/A	N/A	2.36" (60mm) (Center to Center) 1/4-inch 20 Thread
Warranty:	5 Years	5 Years	5 Years

TROUBLESHOOTING

Situation:	Probable Cause:	Solution:
No sound from speakers.	Speaker wire not connected.	Make sure wire is connected at both the speaker and the amplifier observing proper polarity.
No sound from one speaker.	Speaker selector on amplifier is not on.	Activate proper selector on amplifier.
	Balance control on receiver or pre-amp is not centered.	Place balance control in the center.
	Speaker wire not securely connected.	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 Impression 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 locations authorized by RBH Sound 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.

WARRANTY REGISTRATION

Please fill out and submit the registration form found online at http://rbhsound.com to register your speakers and/or subwoofers.

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