

# SIGNATURE SX SERIES SPEAKERS AND SUBWOOFERS Owner's Manual

### Introduction

Congratulations on your purchase of a Signature SX Series model! Your speakers are the result of many years of research and development dedicated to producing high quality products for home audio and audio/video systems.

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

### **Break-in Period**

Allow several hours of listening time to adequately break-in the Signature SX Series speakers and subwoofers. As they break-in, the driver suspensions 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**

To maintain speaker appearance, we recommend wiping them down with a clean damp soft cloth. To clean dust from the grille cloth, use a vacuum with a brush attachment.

### Features

Sophisticated computer modeling and measurement techniques are used extensively throughout the RBH Signature SX Series speaker design process. At the heart of the RBH Signature SX Series speakers are proprietary aluminum woofers and midrange drivers. The special aluminum cone material combines stiffness, low mass and self damping properties in a manner that allows virtually uncolored presentation of program material. A powerful magnet, extended voice coil and bumped back plate give the bass/midrange drivers high excursion capability. This ensures accurate dynamic reproduction. For high frequencies, a premium quality silk dome tweeter is used. This tweeter uses liquid cooling to allow greater power handling.

Each Signature SX Series speaker features an extensive crossover network. Steep acoustic slope crossovers are used to integrate drivers. The use of steep crossover slopes allows for higher power handling, minimizes driver interaction anomalies, and maximizes the ability of each driver in their respective band of frequencies. The 5-way binding posts ensure a good, solid electrical connection to these crossover networks.

The Signature SX Series speaker cabinets are constructed of a minimum of <sup>3</sup>/<sub>4</sub>-inch medium density fiberboard because of its inert properties, thereby preventing sound coloration due to cabinet diffraction. The double thickness of the front baffles also prevents acoustic radiation.

#### Signature SX Reference Series

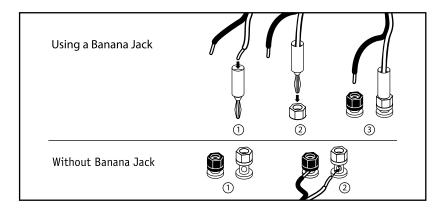
Setting the standard by which all other RBH speakers are measured, the Signature SX Reference Series offers the luxury of the Signature SX Series speakers with the extreme

### Features (continued)

performance of reference-grade components. The tweeter has a larger motor structure, increased power handling and improved resolution. The aluminum cone woofers that give the Signature SX Series its great bass to upper-midrange performance are replaced with an even more advanced aluminum cone woofer featuring a fixed-position phase plug. The addition of this phase plug extends frequency response and increases power handling, resulting in increased sonic clarity. The crossover network has been modified to accommodate the higher quality driver components resulting in amplified audio quality and power handling.

negative wire and push directly into binding post top hole.

If 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 of the insulation from the end of the speaker wire and insert the exposed wire end into the now exposed 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. Experiment with speaker placement to determine which location offers the best overall sound. 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 may not always be applicable to your individual system.

#### **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 be close to the distance that separates the two main speakers. 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 either 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.

#### Subwoofer

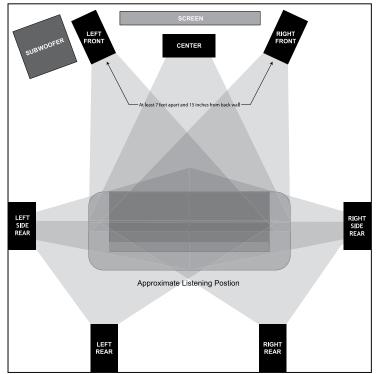
In order to obtain the best possible sound from your subwoofer, it is important to determine where the subwoofer will sound best in your listening room. Sound reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with subwoofer placement to determine which location offers the best overall sound.

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 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. To be sure of this, 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 Line Level Input of the powered subwoofer. Also, if your home theater receiver or processor's bass management provides the subwoofer with a low-pass audio signal (lowest bass) only, please use the LFE line level input of the subwoofer or make sure the subwoofer's crossover is set to the Off or Defeat position. Your subwoofer will now reproduce the bass frequencies the way they were originally recorded. 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.



NOTE: There are several different surround formats available. Dolby Pro-Logic, Pro-Logic II, Dolby Digital and DTS generally have a 5 speaker plus subwoofer requirement. Dolby Digital EX and DTS ES add a center rear speaker. Dolby TrueHD and DTS Master Audio available only on Blu-ray disc, generally have a 7.1 requirement. Please consult your audio/video professional to determine which system is best for you and how many speakers you will require.

### **Subwoofer Safety Instructions**



The lightning flash with the arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

When using your subwoofer, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury.

- 1. Read and understand all instructions in this users manual before operating the subwoofer and retain this user manual for future reference.
- 2. Follow all warnings and instructions in this manual and any marked on the back of the Subwoofer.
- 3. Never touch the woofer or push objects of any kind into the woofer.
- 4. The subwoofer should be connected to a power supply compatible with the power consumption requirements, see the specifications section of this manual.
- 5. If mounting the subwoofer on a stand, the wall, or other device only do so as recommended by an authorized technician.
- 6. Place the subwoofer a safe distance from all heat sources such as radiators, stoves, or heaters.
- 7. Do not operate the subwoofer near water—for example, near a bathtub, kitchen sink or in a wet basement; or a swimming pool.
- 8. Power supply cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them.
- 9. Any service or repair required must be performed by qualified, authorized technician.

### Subwoofer Amplifier Controls and Setup

This section describes the functions and/or use for each of the amplifier controls located on the back of the SX-10, SX-10/R, SX-12 SX-12/R, SX-88, SX-1010N, SX-1010N/R, SX-1010P and SX1010P/R subwoofers. Refer to the diagram of the on page 7.

1. Voltage Selector Switch: Before connecting the amplifier to any power source make sure the AC Voltage Selector is set to either 110V or 220V to match the power voltage in your area. Note: If switching voltage, also make sure to change the fuse (see #11).

## WARNING! If the voltage setting does not match the AC power supplied, damage to the Subwoofer Amplifier may result.

2. Volume/Gain Control: The volume/level control should be at the minimum setting (all the way counter-clockwise) before plugging the subwoofer into an AC wall socket. Once plugged in, turn the level control up one quarter of a turn (9 o'clock position) for an initial setting. The level control may be adjusted while playing to match the subwoofer level with the rest of the system.

IMPORTANT! The volume control should be at the minimum setting (all the way counter-clockwise) before plugging the subwoofer into an AC wall socket.

**3. Crossover Frequency Control:** The variable crossover frequency control allows you to set the low-pass crossover point of the subwoofer anywhere from 40-150 Hz. Experiment with setting the crossover frequency control at highest setting initially. Increasing the crossover frequency will allow more mid-bass output from the subwoofer. Decreasing the frequency will allow only deeper bass from the subwoofer. If using LFE In (#7), crossover control will not function.

NOTE: Read the Important Notice regarding bass management on page 4.

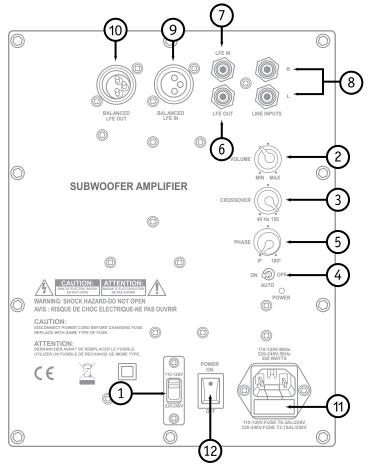
- **4. Auto Signal Tracking:** The subwoofer amplifier uses "smart" signal tracking circuitry. Once the power cord is plugged in and the switch set to auto, the amplifier automatically turns on when an audio signal is detected at the preamplifier or high level inputs and turns off when no signal has been detected for approximately 15 minutes.
- 5. Phase Control: This control changes the phase of the subwoofer. Changing the phase will change the way the subwoofer and main speakers interact with each other at the crossover frequency. Varying the phase position may result in more or less mid bass depending on the phasing between the main speakers and the subwoofer. Generally, the phase is left at the "0" position.
- 6. LFE Out: This RCA terminals is for "daisy chaining" to another subwoofer or amplifier. A full-range signal is sent through this terminal.
- **7.** LFE In: This line level input is used to connect to most receivers or processors. This bypasses the sub amplifier's internal low-pass filter. If your receiver or pre-amp has a subwoofer out, this is most likely the input you will need to use.
- 8. Line Inputs: These RCA terminal connections receive the pre-amp line out from an amplifier/receiver. This input uses the amplifier's internal crossover.
- **9. Balanced LFE In:** Impedance-balanced XLR female input connection to receive balanced pre-amp output from receiver. This input susceptibility to external noise.
- **10. Balanced LFE Out:** Impedance-balanced XLR male output to connect to another XLR LFE input amplifier.

11. Fuse Access: This is the power fuse access.

WARNING! In the event the fuse must be replaced, the replacement fuse must match exactly the original fuse value. If the replacement fuse is not of the same value, damage to the Subwoofer Amplifier may result.

CAUTION! Before replacing the fuse, disconnect the power cord from the power receptacle.

12. Power: Power on and off switch.



Signature SX Series Subwoofer Diagram for all subwoofers except the SX-1212P/R.

This section describes the functions and/or use for each of the amplifier controls located on the back of the SX-1212P/R subwoofer. See the diagram of the back of the subwoofer on the next page.

- 1. **Power:** Power on and off switch.
- 2. **Power In:** This is the amplifier's power input, and is designed for a Neutrik powerCON connector. Connect only the supplied power cord to this connector.
- **3. Circuit Breaker:** The circuit breaker prevents over-current damage to the amplifier. If tripped, first try to determine the reason why. Once the problem has been resolved, push to reset the circuit breaker and restore operation.

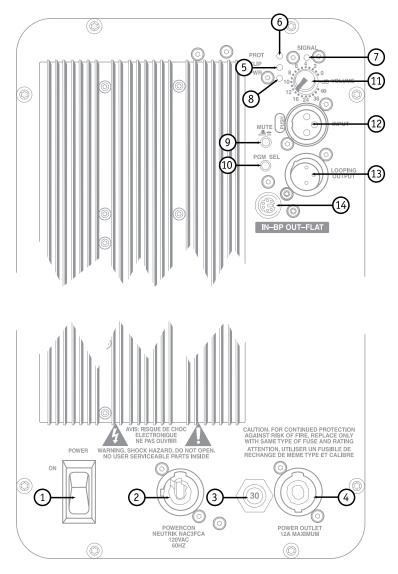
WARNING! In the event the fuse must be replaced, the replacement fuse must match exactly the original fuse value. If the replacement fuse is not of the same value, damage to the Subwoofer Amplifier may result.

CAUTION! Before replacing the fuse, disconnect the power cord from the power receptacle.

- 4. **Power Out:** This power output is designed to supply a maximum of 12 amps of current to another device.
- 5. **CLIP Light:** This LED light indicates the input being received is too high or the amplifier is being overdriven.
- 6. Protection Light: This LED light indicates two things; one, the audio signal has too much gain or the impedance of the speaker is too low (2 Ohms minimum), or there is a short in the speaker wire.
- 7. Audio Signal Light: This LED light indicates an audio signal is being received from the source.
- 8. Power Light: This LED light indicates power is being received.
- 9. Mute Button: Mutes the amplifier's output. Also used during programming DSP configurations.
- **10. DSP Program Button:** One of two DSP programs can be selected. With the button pressed in, a low-pass filter at 80Hz will be enabled. When the button is left out, the low-pass filter will be defeated. The amplifier power has to be cycled for these DSP settings to take effect.
- 11. Volume/Gain Control: The volume/level control should be at the minimum setting (all the way counter-clockwise) before plugging the subwoofer into an AC wall socket. Once plugged in, turn the level control up one quarter of a turn (9 o'clock position) for an initial setting. The level control may be adjusted while playing to match the subwoofer level with the rest of the system.

## IMPORTANT! The volume control should be at the minimum setting (all the way counter-clockwise) before plugging the subwoofer into an AC wall socket.

- 12. XLR Input: XLR input from a pre-amplifier's or receiver's XLR output.
- **13. XLR Output:** XLR output to supply another amplifier's XLR input.
- 14. PS/2 Port: Connection for computer inferface.



Signature SX Series Subwoofer Diagram for the SX-1212P/R.

### Tower Speaker Outrigger Installation

These attractive tower speaker outriggers produce a wider support base for the Signature SX Series tower speakers creating stability and are ideal when placing speakers on a thickly carpeted floor.

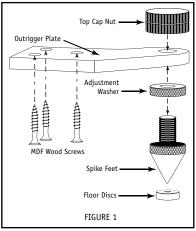
#### Package contents include:

4 each outrigger plates 4 metal spike feet 4 each top cap nuts 4 each threaded adjustment washers 12 each MDF wood screws 4 each floor discs

#### Installing the tower outrigger feet:

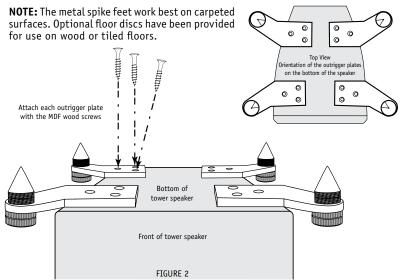
 Attach the tower speaker outrigger plates to the bottom of the speaker with the screws provided, as shown in figure 2 below. Rotate the outrigger plates so they are angled properly (as shown in figure 2 below) before attaching the spike feet, adjustable washer and top cap nut.

**NOTE:** To prevent scratching or damaging of the cabinet, turn the tower upside



down on a soft surface when attaching the tower outrigger feet.

- 2. Attach the metal spike feet using the top cap nuts and adjustable washer as shown in figure 1.
- 3. Adjust the level/height using the adjustment washer.



## **Specifications**

Model:	SX-10	SX-10/R	SX-1010N
System Type:	Powered Subwoofer	Powered Subwoofer	Passive Subwoofer
Frequency Response:	29Hz-150Hz (±3dB)	26Hz-100Hz (±3dB)	24Hz-180Hz (±3dB)
Sensitivity:	N/A	N/A	90dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	300 Watt Amplifier Included	350 Watt Amplifier Included	200-400 Watts
Woofer(s):	(1) 10" (254mm) Aluminum Subwoofer	(1) 10″ (254mm) Reference Aluminum Subwoofer	(2) 10" (254mm) Aluminum Subwoofers
Tweeter(s):	N/A	N/A	N/A
Tweeter Protection:	N/A	N/A	N/A
Crossover Frequency:	40Hz-180Hz (variable)	40Hz-180Hz (variable)	N/A
Crossover Slope	12dB/Octave	12dB/Octave	N/A
Impedance:	N/A	N/A	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	15" (381mm) W 15.25" (387mm ) H 18.5" (470mm ) D	15" (381mm) W 15.25" (387mm ) H 18.5" (470mm ) D	13" (330mm) W 30.5" (775mm ) H 20.375" (518mm ) D
Weight:	39 lbs. (17.69 Kg)	45 lbs. (20.41 Kg)	63 lbs. (28.58 Kg)

Model:	SX-1010N/R	SX-1010P	SX-1010P/R
System Type:	Passive Subwoofer	Powered Subwoofer	Powered Subwoofer
Frequency Response:	22Hz-100Hz (±3dB)	22Hz-150Hz (±3dB)	20Hz-100Hz (±3dB)
Sensitivity:	90dB (2.83V @ 1 Meter)	N/A	N/A
Recommended/ Rated Power:	200-500 Watts	350 Watt Amplifier Included	500 Watt Amplifier Included
Woofer(s):	(2) 10″ (254mm) Reference Aluminum Subwoofers	(2) 10″ (254mm) Aluminum Subwoofers	(2) 10" (254mm) Reference Aluminum Subwoofers
Tweeter(s):	N/A	N/A	N/A
Tweeter Protection:	N/A	N/A	N/A
Crossover Frequency:	N/A	40Hz-150Hz (variable)	40Hz-150Hz (variable)
Crossover Slope	N/A	12dB/Octave	12dB/Octave
Impedance:	4 Ohms	N/A	N/A
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	13" (330mm) W 30.5" (775mm ) H 20.375" (518mm ) D	13" (330mm) W 30.5" (775mm ) H 20.375" (518mm ) D	13" (330mm) W 30.5" (775mm ) H 20.375" (518mm ) D
Weight:	76 lbs. (34.48 Kg)	68 lbs. (30.85 Kg)	81 lbs. (36.74 Kg)

Model:	SX-12	SX-12/R	SX-1212N
System Type:	Powered Subwoofer	Powered Subwoofer	Passive Subwoofer
Frequency Response:	27Hz-150Hz (±3dB)	24Hz-100Hz (±3dB)	25Hz-200Hz (±3dB)
Sensitivity:	N/A	N/A	93dB (2.83V @ 1 Meter))
Recommended/ Rated Power:	350 Watt Amplifier Included	500 Watt Amplifier Included	200-500 Watts
Woofer(s):	(1) 12" (305mm) Aluminum Subwoofer	(1) 12″ (305mm) Reference Aluminum Subwoofer	(2) 12" (305mm) Aluminum Subwoofers
Tweeter(s):	N/A	N/A	N/A
Tweeter Protection:	N/A	N/A	N/A
Crossover Frequency:	40Hz-150Hz (variable)	40Hz-150Hz (variable)	N/A
Crossover Slope	N/A	N/A	N/A
Impedance:	N/A	N/A	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	17.7" (450mm) W 19.625" (499mm ) H 21.125" (537mm) D	17.7" (450mm) W 19.625" (499mm ) H 21.125" (537mm) D	17.75" (451mm) W 39" (991mm ) H 22" (559mm ) D
Weight:	53 lbs. (24.04 Kg)	58 lbs. (26.30 Kg)	110 lbs. (49.90 Kg)

Model:	SX-1212N/R	SX-1212P	SX-1212P/R
System Type:	Passive Subwoofer	Powered Subwoofer	Powered Subwoofer
Frequency Response:	22Hz-180Hz (±3dB)	20Hz-200Hz (±3dB)	17Hz-180Hz (±3dB)
Sensitivity:	92dB (2.83V @ 1 Meter)	N/A	N/A
Recommended/ Rated Power:	500-2400 Watts	500 Watt Amplifier Included	2400 Watt Amplifier Included
Woofer(s):	(2) 12″ (305mm) Reference Aluminum Subwoofers	(2) 12″ (305mm) Aluminum Subwoofers	(2) 12″ (305mm) Reference Aluminum Subwoofers
Tweeter(s):	N/A	N/A	N/A
Tweeter Protection:	N/A	N/A	N/A
Crossover Frequency:	N/A	40Hz-150Hz (variable)	40Hz-150Hz (variable)
Crossover Slope	N/A	12dB/Octave	12dB/Octave
Impedance:	4 Ohms	N/A	N/A
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	17.75" (451mm) W 39" (991mm ) H 22" (559mm ) D	17.75" (451mm) W 39" (991mm ) H 22" (559mm ) D	17.75" (451mm) W 39" (991mm ) H 22" (559mm ) D
Weight:	120 lbs. (54.43 Kg)	115 lbs. (52.16 Kg)	130 lbs. (58.97 Kg)

Model:	SX-44	SX-44/R	SX-441C
System Type:	On-wall Surround Speaker	On-wall Surround Speaker	Center Channel Speaker
Frequency Response:	70Hz-20kHz (±3dB)	70Hz-20kHz (±3dB)	60Hz-20kHz (±3dB)
Sensitivity:	88dB (2.83V @ 1 Meter)	88dB (2.83V @ 1 Meter)	89dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	75-150 Watts	75-200 Watts	75-150 Watts
Woofer(s):	(2) 4" (102mm) Aluminum Cone Woofers	(2) 4″ (102mm) Reference Aluminum Woofers	(2) 4″ (102mm) Aluminum Cone Woofers
Tweeter(s):	(2) 1″ (25mm) Silk Dome Tweeters	(2) 1.1″ (28mm) Reference Silk Dome Tweeters	(1) 1″ (25mm) Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	3,000 Hz	3,000 Hz	3,000 Hz
Crossover Slope	12dB/Octave	12dB/Octave	24dB/Octave
Impedance:	6 Ohms	6 Ohms	6 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	10.75" (273mm) W 11.5" (292mm) H 5.625" (143mm) D	10.75" (273mm) W 11.5" (292mm) H 5.625" (143mm) D	18" (457mm) W 6.75" (171mm) H 10.25" (260mm) D
Weight:	12 lbs. (5.44 Kg)	13 lbs. (5.90 Kg)	17 lbs. (7.71 Kg)

Model:	SX-441C/R	SX-61	SX-61/R
System Type:	Center Channel Speaker	Bookshelf Speaker	Bookshelf Speaker
Frequency Response:	65Hz-20kHz (±3dB)	55Hz-20kHz (±3dB)	55Hz-20kHz (±3dB)
Sensitivity:	89dB (2.83V @ 1 Meter)	87dB (2.83V @ 1 Meter)	87dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	75-200 Watts	75-150 Watts	75-200 Watts
Woofer(s):	(2) 4″ (102mm) Reference Aluminum Woofers	(1) 6½" (165mm) Aluminum Cone Woofer	(1) 6½" (165mm) Reference Aluminum Cone Woofer
Tweeter(s):	(1) 1.1″ (28mm) Reference Silk Dome Tweeter	(1) 1″ (25mm) Silk Dome Tweeter	(1) 1.1″ (28mm) Reference Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	3,000 Hz	2,700 Hz	2,700 Hz
Crossover Slope	24dB/Octave	12dB/Octave	12dB/Octave
Impedance:	6 Ohms	8 Ohms	8 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	18" (457mm) W 6.75" (171mm) H 10.25" (260mm) D	8.5" (216mm) W 13.75" (349mm) H 11.125" (283mm) D	8.5" (216mm) W 13.75" (349mm) H 11.125" (283mm) D
Weight:	18 lbs. (8.16 Kg)	17 lbs. (7.71 Kg)	18 lbs. (8.17 Kg)

Model:	SX-66	SX-66/R	SX-661
System Type:	On-wall Surround Speaker	On-wall Surround Speaker	L/R Speaker (Left / Right Main Speaker)
Frequency Response:	60Hz-20kHz (±3dB)	60Hz-20kHz (±3dB)	55Hz-20kHz (±3dB)
Sensitivity:	90dB (2.83V @ 1 Meter)	90dB (2.83V @ 1 Meter)	90dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	75-200 Watts	75-225 Watts	75-200 Watts
Woofer(s):	(2) 6½" (165mm) Aluminum Cone Woofers	(2) 6½" (165mm) Reference Aluminum Cone Woofers	(2) 6½" (165mm) Aluminum Cone Woofers
Tweeter(s):	(2) 1″ (25mm) Silk Dome Tweeters	(2) 1″ (25mm) Reference Silk Dome Tweeters	(1) 1″ (25mm) Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	3,000 Hz	3,000 Hz	2,700 Hz
Crossover Slope	12dB/Octave	12dB/Octave	24dB/Octave
Impedance:	4 Ohms	4 Ohms	6 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	16" (406mm) W 14" (356mm) H 8.5" (216mm) D	16" (406mm) W 14" (356mm) H 8.5" (216mm) D	8.5" (216mm) W 21.5" (546mm) H 11.1875" (284mm) D
Weight:	23 lbs. (10.43 Kg)	23.5 lbs. (10.66 Kg)	25 lbs. (11.34 Kg)

Model:	SX-661/R	SX-661C	SX-661C/R
System Type:	L/R Speaker (Left / Right Main Speaker)	Dedicated Center Channel Speaker	Dedicated Center Channel Speaker
Frequency Response:	55Hz-20kHz (±3dB)	55Hz-20kHz (±3dB)	55Hz-20kHz (±3dB)
Sensitivity:	90dB (2.83V @ 1 Meter)	90dB (2.83V @ 1 Meter)	90dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	75-250 Watts	75-200 Watts	75-250 Watts
Woofer(s):	(2) 6½" (165mm) Reference Aluminum Cone Woofers	(2) 6½" (165mm) Aluminum Cone Woofers	(2) 6½" (165mm) Reference Aluminum Cone Woofers
Tweeter(s):	(1) 1.1″ (28mm) Reference Silk Dome Tweeter	(1) 1″ (25mm) Silk Dome Tweeter	(1) 1.1″ (28mm) Reference Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	2,700 Hz	2,700 Hz	2,700 Hz
Crossover Slope	24dB/Octave	24dB/Octave	24dB/Octave
Impedance:	6 Ohms	6 Ohms	6 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	8.5" (216mm) W 21.5" (546mm) H 11.1875" (284mm) D	21" (533mm) W 8.5" (215mm) H 11" (279mm) D	21" (533mm) W 8.5" (215mm) H 11" (279mm) D
Weight:	26 lbs. (11.79 Kg)	25 lbs. (11.34 Kg)	26 lbs. (11.79 Kg)

Model:	SX-6100C	SX-6100C/R	SX-6300
System Type:	Dedicated Center Channel Speaker	Dedicated Center Channel Speaker	Tower Speaker
Frequency Response:	50Hz-20kHz (±3dB)	50Hz-20kHz (±3dB)	35Hz-20kHz (±3dB)
Sensitivity:	92dB (2.83V @ 1 Meter)	92dB (2.83V @ 1 Meter)	88dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	75-450 Watts	75-500 Watts	100-300 Watts
Woofer(s):	(4) 6½″ (165mm) Aluminum Cone Woofers	(4) 6½" (165mm) Reference Aluminum Cone Woofers	(3) 6½" (165mm) Aluminum Subwoofers (2) 4" (102mm) Aluminum Cone Woofers
Tweeter(s):	(3) 1″ (25mm) Silk Dome Tweeters	(3) 1.1″ (28mm) Reference Silk Dome Tweeters	(1) 1″ (25mm) Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	2,500 Hz	2,500 Hz	100 Hz, 2,700 Hz
Crossover Slope	24dB/Octave	24dB/Octave	24dB/Octave
Impedance:	4 Ohms	4 Ohms	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	46" (1168mm) W 8.5" (216mm) H 11" (279mm) D	46" (1168mm) W 8.5" (216mm) H 11" (279mm) D	8.875" (225mm) W 44.375" (1127mm) H 14" (356mm) D
Weight:	51 lbs. (23.13 Kg)	53 lbs. (24.04 Kg)	64 lbs. (29.03 Kg)

Model:	SX-6300/R	SX-8300	SX-8300/R
System Type:	Tower Speaker	3-way Tower Front Main or Rear Speakers	3-way Tower Front Main or Rear Speakers
Frequency Response:	35Hz-20kHz (±3dB)	25Hz-20kHz (±3dB)	25Hz-20kHz (±3dB)
Sensitivity:	88dB (2.83V @ 1 Meter)	91dB (2.83V @ 1 Meter)	91dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	100-350 Watts	100-400 Watts	100-500 Watts
Woofer(s):	(3) 6½″ (165mm) Aluminum Subwoofers (2) 4″ (102mm) Reference Aluminum Cone Woofers	(3) 8" (203mm) Aluminum Subwoofers (2) 6 <sup>1</sup> ⁄ <sub>2</sub> " (165mm) Aluminum Cone Woofers	(3) 8" (203mm) Aluminum Subwoofers (2) 6½" (165mm) Reference Aluminum Cone Woofers
Tweeter(s):	(1) 1.1" (28mm) Reference Silk Dome Tweeter	(1) 1″ (25mm) Silk Dome Tweeter	(1) 1.1″ (28mm) Reference Silk Dome Tweeter
Tweeter Protection:	Yes	Yes	Yes
Crossover Frequency:	100 Hz, 2,700 Hz	100 Hz, 2,500 Hz	100 Hz, 2,500 Hz
Crossover Slope	24dB/Octave	18dB/Octave	18dB/Octave
Impedance:	4 Ohms	4 Ohms	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	8.875" (225mm) W 44.375" (1127mm) H 14" (356mm) D	10.75" (273mm) W 50.375" (1280mm) H 16.5" (419mm) D	10.75" (273mm) W 50.375" (1280mm) H 16.5" (419mm) D
Weight:	66 lbs. (29.94 Kg)	89 lbs. (40.37 Kg)	90 lbs. (40.82 Kg)

Model:	SX-88	SX-T1	SX-T1/R
System Type:	Powered Subwoofer	L/R Front Main Speaker	L/R Front Main Speaker
Frequency Response:	35Hz-180Hz (±3dB)	50Hz-20kHz (±3dB)	50Hz-20kHz (±3dB)
Sensitivity:	N/A	92dB (2.83V @ 1 Meter)	92dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	350 Watt Amplifier Included	100-400 Watts	100-500 Watts
Woofer(s):	(2) 8″ (203mm) Aluminum Woofers	(4) 6½" (165mm) Aluminum Cone Woofers	(4) 6½" (165mm) Reference Aluminum Cone Woofers
Tweeter(s):	N/A	(3) 1″ (25mm) Silk Dome Tweeters	(3) 1.1″ (28mm) Reference Silk Dome Tweeters
Tweeter Protection:	N/A	No	No
Crossover Frequency:	50-160 Hz (variable)	2,500 Hz	2,500 Hz
Crossover Slope	N/A	24dB/Octave	24dB/Octave
Impedance:	N/A	4 Ohms	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	12.25" (311mm) W 13.5" (343mm) H 14.375" (365mm) D	13" (330mm) W 30.3" (771mm) H 19.5" (495mm) D	13" (330mm) W 30.3" (771mm) H 19.5" (495mm) D
Weight:	31 lbs. (14.06 Kg)	69 lbs. (31.30 Kg)	70 lbs. (31.75 Kg)

Model:	SX-T2	SX-T2/R	SX-T3
System Type:	L/R Front Main Speaker	L/R Front Main Speaker	L/R Front Main Speaker
Frequency Response:	22Hz-20kHz (±3dB)	20Hz-20kHz (±3dB)	22Hz-20kHz (±3dB)
Sensitivity:	92dB (2.83V @ 1 Meter)	92dB (2.83V @ 1 Meter)	92dB (2.83V @ 1 Meter)
Recommended/ Rated Power:	100-400 Watts	100-500 Watts	100-400 Watts
Woofer(s):	(2) 10" (254mm) Aluminum Subwoofers (4) 6¼" (165mm) Aluminum Cone Woofers	(2) 10" (254mm) Aluminum Subwoofers (4) 61/2" (165mm) Reference Aluminum Cone Woofers	(4) 10" (254mm) Aluminum Subwoofers (4) 6½" (165mm) Aluminum Cone Woofers
Tweeter(s):	(3) 1″ (25mm) Silk Dome Tweeters	(3) 1.1" (28mm) Reference Silk Dome Tweeters	(3) 1″ (25mm) Silk Dome Tweeters
Tweeter Protection:	No	No	No
Crossover Frequency:	2,500 Hz	2,500 Hz	2,500 Hz
Crossover Slope	24dB/Octave	24dB/Octave	24dB/Octave
Impedance:	4 Ohms	4 Ohms	4 Ohms
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes
Grille:	Black Cloth	Black Cloth	Black Cloth
Dimensions:	13" (330mm) W 61.5" (1537mm) H 19.5" (495mm) D	13" (330mm) W 61.5" (1537mm) H 19.5" (495mm) D	13" (330mm) W 91.5" (2324mm) H 19.5" (495mm) D
Weight:	132 lbs. (59.87 Kg)	146 lbs. (66.22 Kg)	195 lbs. (88.45 Kg)

Model:	SX-T3/R	
System Type:	L/R Front Main Speaker	
Frequency Response:	20Hz-20kHz (±3dB)	
Sensitivity:	92dB (2.83V @ 1 Meter)	
Recommended/ Rated Power:	100-500 Watts	
Woofer(s):	(4) 10" (254mm) Aluminum Subwoofers (4) 61/2" (165mm) Reference Aluminum Cone Woofers	
Tweeter(s):	(3) 1.1" (28mm) Reference Silk Dome Tweeters	
Tweeter Protection:	No	
Crossover Frequency:	2,500 Hz	
Crossover Slope	24dB/Octave	
Impedance:	4 Ohms	
Cabinet/Color:	Medium Density Fiberboard (MDF)/ Standard Satin Black Oak or Sandalwood, or 30 Different Custom Veneer Finishes	
Grille:	Black Cloth	
Dimensions:	13" (330mm) W 91.5" (2324mm) H 19.5" (495mm) D	
Weight:	222 lbs. (100.70 Kg)	

### Troubleshooting—Speakers

Situation:	Probable Cause:	Solution:
No sound from speakers.	Speaker wire not connected.	Make sure wire is connected at both the speaker and the amplifier observ- ing 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.

## Troubleshooting—Subwoofer

Situation:	Probable Cause:	Solution:
No sound from subwoofer.	Amplifier is not connected to constant power outlet.	Make certain the amplifier is plugged into an unswitched AC power outlet.
	Amplifier is not receiving an audio signal from receiver or processor.	Make certain there is an audio signal from receiver or processor.
	Amplifier fuse might be blown.	Replace fuse (if fuse is not readily accessible, consult your authorized RBH Sound dealer).
Performance is less than expected.	Crossover frequency is not adjusted correctly.	Adjust the crossover frequency by turning the crossover frequency control clockwise until the desired sound is obtained.

**NOTE:** You may also want to check with the manual provided with your receiver or pre amp for the correct subwoofer/EQ settings.

### Warranty

Your RBH Sound Signature SX Series speakers are covered by a limited warranty against defects in materials and workmanship for a period of 5 years, and subwoofer amplifiers 1 year 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 by locations 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.

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