INSTALLATION/OWNERS MANUAL

Acoustic Audio Powered Subwoofers

Introduction

Introduction

Thank you for your purchase. Your new Acoustic Audio powered subwoofer was designed and manufactured to deliver refined musical reproduction and vivid home theater excitement. Acoustic Audio products are constructed using the finest quality components and we are proud of our custom designed drivers and electronics. Much effort has gone into the design of your new sub as to help you achieve years of maximum performance and pleasure. Every Acoustic Audio loudspeaker undergoes rigorous testing and quality controls at the factory to ensure years of listening pleasure. Please take a moment to read this manual prior to installing your new subwoofer. The information provided will help you obtain maximum performance.

Though this manual will refer to your receiver, the instructions and recommendations apply to all consumer amplifiers as well as A/V receivers. Acoustic Audio powered subwoofers are designed for indoor use only.

Important

It is important to turn off the power to your receivers power supply before connecting the subwoofer to your system.

Placement

Indoor Placement

Your Acoustic Audio subwoofer can be placed in many convenient locations in your home, but must be placed on the floor. Do not attempt an installation that would elevate the subwoofer above floor level. You should experiment with various placements. Small changes in the placement location and adjustments to subwoofer controls can produce large apparent differences for Room Acoustics. For Example, directing the woofer of a forward firing sub toward one's typical listening position and adjusting the low pass filter to 140 Hz can make the sub very directional. This means you perceive exactly where the sub is located within the room. This is not a desirable result for the most realistic audio experience.

The common thinking regarding subwoofer placement and performance is to position and adjust the subwoofer in such a way that the subwoofers low frequencies encompasses the entire room with deep powerful bass and provides the most realistic imaging experience. The amount of bass perceived increases as you move the subwoofer closer to an intersecting wall surface and the highest level of bass results are realized from placement in a corner, but should be no closer than 3" from the wall surface. The floor and corner placement (loading) are actually an important part of the Subwoofer's design. Attempt to place the subwoofer in or near the corner closest to your system's receiver to ensure the shortest possible wire or cable runs, which will result in superior performance.

Connecting Speakers

Connecting & Adjusting Your Subwoofer	IMPORTANT - When you make connections, make sure that the power switches of all components, including subwoofer, are OFF.
Power Cord	The attached power cord is to be used with a standard AC wall outlet (110 volt AC outlet capable of supplying at least 250 Watts)
Power Indicator LED	This LED light glows RED when the subwoofer is OFF or in standby mode. When the subwoofer is ON or receiving an audio signal in Auto On mode the LED will glow green.
Power Switch	This subwoofer has an AUTO ON feature for your convenience. When the subwoofer is set in the Auto-On mode it is not necessary to power your subwoofer completely off when not in use. In AUTO ON, the subwoofer stands by until it detects an audio signal input, then the Subwoofer turns on automatically. A few minutes after audio input signals cease, the Subwoofer automatically returns to standby mode. The subwoofer has been designed in a way that you can leave the Auto-On feature active without causing any harm to your subwoofer.
Fuse	This fuse protects against minor internal and external faults. The fuse value is indicated on the rear amplifier plate near the fuse itself. If the POWER switch is ON and the power indicator LED is unlit, unplug the power cord from the AC outlet and check the fuse by unscrewing the center piece from the holder. IMPORTANT: If the fuse malfunctions, replace it with another fuse of the same type, value and current rating. This information can be found on the fuse.

Connecting Speakers

Speaker-In Terminals	Option 1. These terminals are for making connections using speaker wire (High Level).
Line-In Jacks	Option 2. (Recommended) This jack is for input connection using an audio cable (Low Level). (see options 1 & 2 description on the following page)
Low Pass Frequency (LPF) Crossover	This feature adjusts the frequency limit for low audio signals. This control helps you adjust the system's low frequency balance to blend your subwoofer with the other speakers within your system. An example: If you adjust the control to the subwoofers low setting, the filter limits frequencies above that from being reproduced or heard from the subwoofer. This can be a desired setting if you are using the sub in combination with tower or floor-standing speakers. If you are using satellites speakers with 5.25" cones sizes or under, you will want to move the frequency up to slightly overlap the lowest frequency the satellites can produce. For example, if your satellite frequency response is rated at 80 Hz to 18 kHz then you may choose to move the LPF control higher to blend the highest frequency of the subwoofer slightly past the lowest frequency of the satellites. Therefore you would set your sub's LPF control to 90 Hz creating a mid bass coupling between your sub and the rest of your speaker system.
Volume Control	Balances the loudness of the Subwoofer relative to the Front speakers and compensates for room effects on the Subwoofer's output. It should not be necessary to set the level control to maximum volume to achieve a well balanced installation, but you may need to adjust when changing between music CD's and DVD's

Connecting Speakers

⚠ CAUTION

Note: Acoustic Audio recommends you use at least 16-gauge speaker wire for Option 1 when hooking your receiver speaker outputs in making an audio connection to your Subwoofer.

Important: Use Option 1 or Option 2, but not both.

OPTION 1. Connection with speaker wire - Connect speaker wires from the Receiver's front left and right speaker outputs to the Subwoofer's Speaker Level-In connections. Connect left channel to left input and right channel to right input. You have the option of connecting your main speakers to the speaker B outputs on your receiver if it is so equipped; otherwise, if so equipped you have the option of connecting your main speakers using the connections on the Subwoofer. This will send the audio signal to the main speakers while funneling the low bass frequencies to the subwoofer. To take advantage of this option, connect your main speakers to the right and left outputs on the Subwoofer. Be sure you take care to maintain proper signal polarity by connecting the red wire to the red terminal, and black wire to the black terminal. (see page 11 for Option 1 Diagram)

OPTION 2. Connection with audio cable (Recommended) - This connection employs a left/right audio cable. To use this option, your receiver should include a subwoofer Out jack, which is typical of receivers equipped with Dolby Digital and DTS 5.1 decoding. Make sure the subwoofer out on the receiver is on. Locate the subwoofer output jack on the back of your receiver. Using a standard audio cable, connect the subwoofer output on the back of your receiver to the line-In on the back of the subwoofer. If your receiver is equipped with only one subwoofer out jack, a Y-splitter adaptor may be required. Most models include this adaptor. (see page 12 for Option 2 Diagram)

Troubleshooting

Distortion/Knocking	If you believe you hear obvious distortion or knocking sounds, immediately lower the volume level of your receiver. Those sounds often indicate that either the receiver or the subwoofer is being over driven and damage can result in playing CD's and DVD's at high volumes. You should avoid turning the bass to maximum levels, and refrain from using the Loudness button when the volume level is high. This can lead to costly loudspeaker failure. Distorted or unnatural sound can also indicate poor connections. Check the connections. If the sound remains poor or distorted, the subwoofer may have a problem.
Humming Sound	If you experience a hum when plugging the power cord into an electrical outlet, you are experiencing an electrical interference in your house's wiring. Plug the subwoofer into a different AC outlet in the room, one that isn't supplying power to your components (A/V receiver, TV, cable box, etc.) You should also invest in a set of quality RCA cables that are shielded from electrical interference.
No Power	If your unit will not power ON the first step is to check the fuse. If the POWER switch is ON and the power indicator LED is unlit, unplug the power cord from the AC outlet and check the fuse by unscrewing the center piece from the holder. If the filament is broken the fuse must be replaced. IMPORTANT: If the fuse malfunctions, replace it with another fuse of the same type, value and current rating. This information can be found on the fuse.
No Sound	Make sure your unit is on. Using your receiver's adjustment settings set the Subwoofer Out setting to ON, and set speaker mode to your corresponding speaker setup (i.e. 5.1 channel).
Sub Shuts Off	If your subwoofer keeps shutting off or is getting hot, be sure to check your wiring for correct connections. Also make sure the speaker wires are in phase (+ to +, - to -) and that no speaker wires are touching one another. These conditions will create an overload on either your receiver or your powered sub. The powered sub has built-in circuitry to detect any improper signal transfers and will automatically shut the unit down.

Specifications - Audiophile Series

	GENERAL FEATURES
	• Gain Control for Level Adjustment • Adjustable Low Pass 40 Hz to 140 Hz • High Level Inputs • Low Level Inputs • Signal Sensing ON/OFF
	SPECIFICATIONS
PSW6	Driver: 6.5" Down-Firing Subwoofer With PVA Treated Cone Amplifier: A/B Class Amplifier - 250 Watts Peak Power/125 Watts RMS Frequency Response: 30 - 250 Hz Sensitivity: 96dB @ 1W/1M Dimensions H/W/D: 11.10" x 9.25" x 10.04"
PSW8	Driver: 8" Down-Firing Subwoofer With PVA Treated Cone Amplifier: A/B Class Amplifier - 300 Watts Peak Power/150 Watts RMS Frequency Response: 26 - 250 Hz Sensitivity: 97dB @ 1W/1M Dimensions H/W/D: 12.4" x 9.4" x 10.2"
PSW10	Driver: 10" Down-Firing Subwoofer With PVA Treated Cone Amplifier: A/B Class Amplifier - 400 Watts Peak Power/200 Watts RMS Frequency Response: 25 - 250 Hz Sensitivity: 97dB @ 1W/1M Dimensions H/W/D: 12.4" x 11.4" x 12.4"
PSW12	Driver: 12" Down-Firing Subwoofer With PVA Treated Cone Amplifier: A/B Class Amplifier - 500 Watts Peak Power/250 Watts RMS Frequency Response: 24 - 250 Hz Sensitivity: 98dB @ 1W/1M Dimensions H/W/D: 13.8" x 13.4" x 14.6"
PSW15	Driver: 15" Down-Firing Subwoofer With PVA Treated Cone Amplifier: A/B Class Amplifier - 600 Watts Peak Power/300 Watts RMS Frequency Response: 22 - 250 Hz Sensitivity: 99dB @ 1W/1M Dimensions H/W/D: 14.6"x 16.5" x 18.5"

* Power handling is based on amplifier volume never being set above the point of audible distortion.

Specifications - Home Theater Series

	GENERAL FEATURES
	• Gain Control for Level Adjustment • Adjustable Low Pass 40 Hz to 140 Hz • High Level Inputs • Low Level Inputs • Signal Sensing ON/OFF
	SPECIFICATIONS
RWSUB6	Driver: 6.5" Down-Firing Subwoofer With Poly Zirconium Cone Amplifier: A/B Class Amplifier - 250 Watts Peak Power/125 Watts RMS Frequency Response: 30 - 200 Hz Sensitivity: 97dB @ 1W/1M Dimensions With Grille H/W/D: 11.10" x 9.25"x 10.04"
RWSUB8	Driver: 8" Down-Firing Subwoofer With Poly Zirconium Cone Amplifier: A/B Class Amplifier - 300 Watts Peak Power/150 Watts RMS Frequency Response: 25 - 200 Hz Sensitivity: 98dB @ 1W/1M Dimensions With Grille H/W/D: 12.4" x 9.4" x 10.2"
RWSUB10	Driver: 10" Down-Firing Subwoofer With Poly Zirconium Cone Amplifier: A/B Class Amplifier - 400 Watts Peak Power/200 Watts RMS Frequency Response: 24 - 200 Hz Sensitivity: 98dB @ 1W/1M Dimensions With Grille H/W/D: 12.4" x 11.4" x 12.4"
RWSUB12	Driver: 12" Down-Firing Subwoofer With Poly Zirconium Cone Amplifier: A/B Class Amplifier - 500 Watts Peak Power/250 Watts RMS Frequency Response: 23 - 200 Hz Sensitivity: 99dB @ 1W/1M Dimensions With Grille H/W/D: 13.8" x 13.4" x 14.6"
RWSUB15	Driver: 15" Down-Firing Subwoofer With Poly Zirconium Cone Amplifier: A/B Class Amplifier - 600 Watts Peak Power/300 Watts RMS Frequency Response: 21 - 200 Hz Sensitivity: 99dB @ 1W/1M Dimensions With Grille H/W/D: 14.6"x 16.5" x 18.5"

* Power handling is based on amplifier volume never being set above the point of audible distortion.

Specifications - High Definition Series

GENERAL FEATURES

- HD Certified
- Gain Control for Level Adjustment
- Adjustable Low Pass 40 Hz to 140 Hz
- High Level Inputs and Outputs
- Low Level Inputs
- Signal Sensing ON/OFF
- Available In 3 Different Finishes (Black, Ash, Cherry, and Light Maple)

SPECIFICATIONS

HDSUB10	Driver: 10" Front-Firing Subwoofer With Kevlar Cone Amplifier: A/B Class Amplifier - 600 Watts Peak Power/300 Watts RMS Frequency Response: 24 - 200 Hz Sensitivity: 97dB @ 1W/1M Dimensions With Grille H/W/D: 14.4" x 13.4" x 13.9"
HDSUB12	Driver: 12" Front-Firing Subwoofer With Kevlar Cone Amplifier: A/B Class Amplifier - 800 Watts Peak Power/400 Watts RMS Frequency Response: 22 - 200 Hz Sensitivity: 99dB @ 1W/1M Dimensions With Grille H/W/D: 15.9" x 15.2" x 14.7"
HDSUB15	Driver: 15" Front-Firing Subwoofer With Kevlar Cone Amplifier: A/B Class Amplifier - 1000 Watts Peak Power/500 Watts RMS Frequency Response: 21 - 200 Hz Sensitivity: 99dB @ 1W/1M Dimensions With Grille H/W/D: 19.3" x 18.5" x 16.5"

* Power handling is based on amplifier volume never being set above the point of audible distortion.

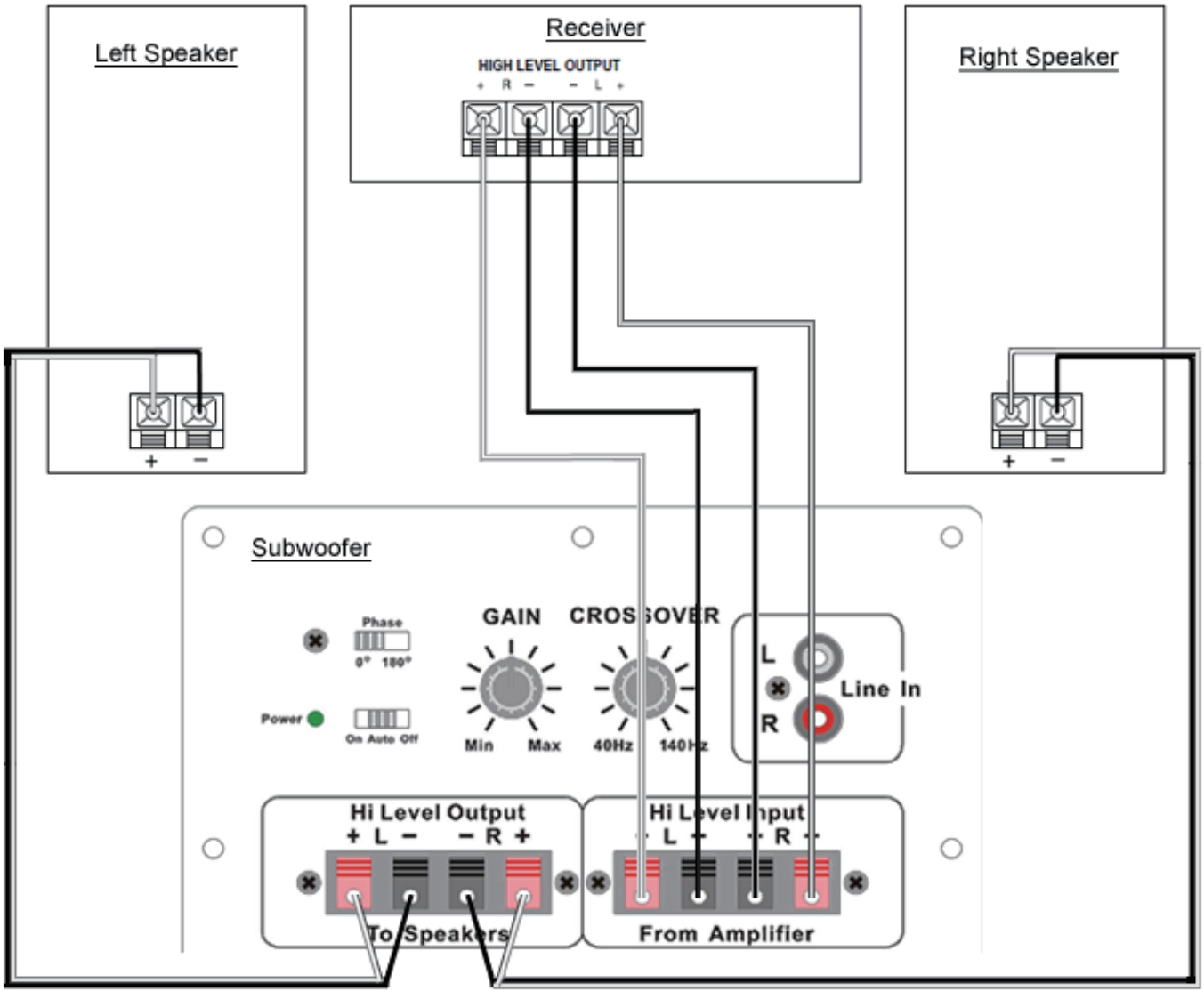
Specifications - Cinema Series

	GENERAL FEATURES
	• Gain Control for Level Adjustment • Adjustable Low Pass 40 Hz to 140 Hz • High Level Inputs/Outputs • Low Level Inputs/Outputs • Signal Sensing ON/OFF • Available In Black or Cherry
	SPECIFICATIONS
CS-PS65	Driver: 6.5" Front-Firing Subwoofer With Polypropylene Cone Amplifier: A/B Class Amplifier - 250 Watts Peak Power/125 Watts RMS Frequency Response: 30 - 200 Hz Sensitivity: 96dB @ 1W/1M Dimensions With Grille H/W/D: 12.10"x 9.10" x 9.60"
CS-PS8	Driver: 8" Front-Firing Subwoofer With Polypropylene Cone Amplifier: A/B Class Amplifier - 300 Watts Peak Power/150 Watts RMS Frequency Response: 26 - 200 Hz Sensitivity: 97dB @ 1W/1M Dimensions With Grille H/W/D: 12.4"x 9.4" x 10.2"
CS-PS10	Driver: 10" Front-Firing Subwoofer With Polypropylene Cone Amplifier: A/B Class Amplifier - 400 Watts Peak Power/200 Watts RMS Frequency Response: 25 - 200 Hz Sensitivity: 97dB @ 1W/1M Dimensions With Grille H/W/D: 12.4"x 11.4" x 12.4"
CS-PS12	Driver: 12" Front-Firing Subwoofer With Polypropylene Cone Amplifier: A/B Class Amplifier - 500 Watts Peak Power/250 Watts RMS Frequency Response: 24 - 200 Hz Sensitivity: 98dB @ 1W/1M Dimensions With Grille H/W/D: 13.8"x 13.4" x 14.5"
CS-PS15	Driver: 15" Front-Firing Subwoofer With Polypropylene Cone Amplifier: A/B Class Amplifier - 600 Watts Peak Power/300 Watts RMS Frequency Response: 22 - 200 Hz Sensitivity: 99dB @ 1W/1M Dimensions With Grille H/W/D: 14.6"x 16.5" x 18.5"

* Power handling is based on amplifier volume never being set above the point of audible distortion. All specifications subject to change without notice.

Option 1 - Wiring Diagrams

Speaker-In Terminals (High Level)

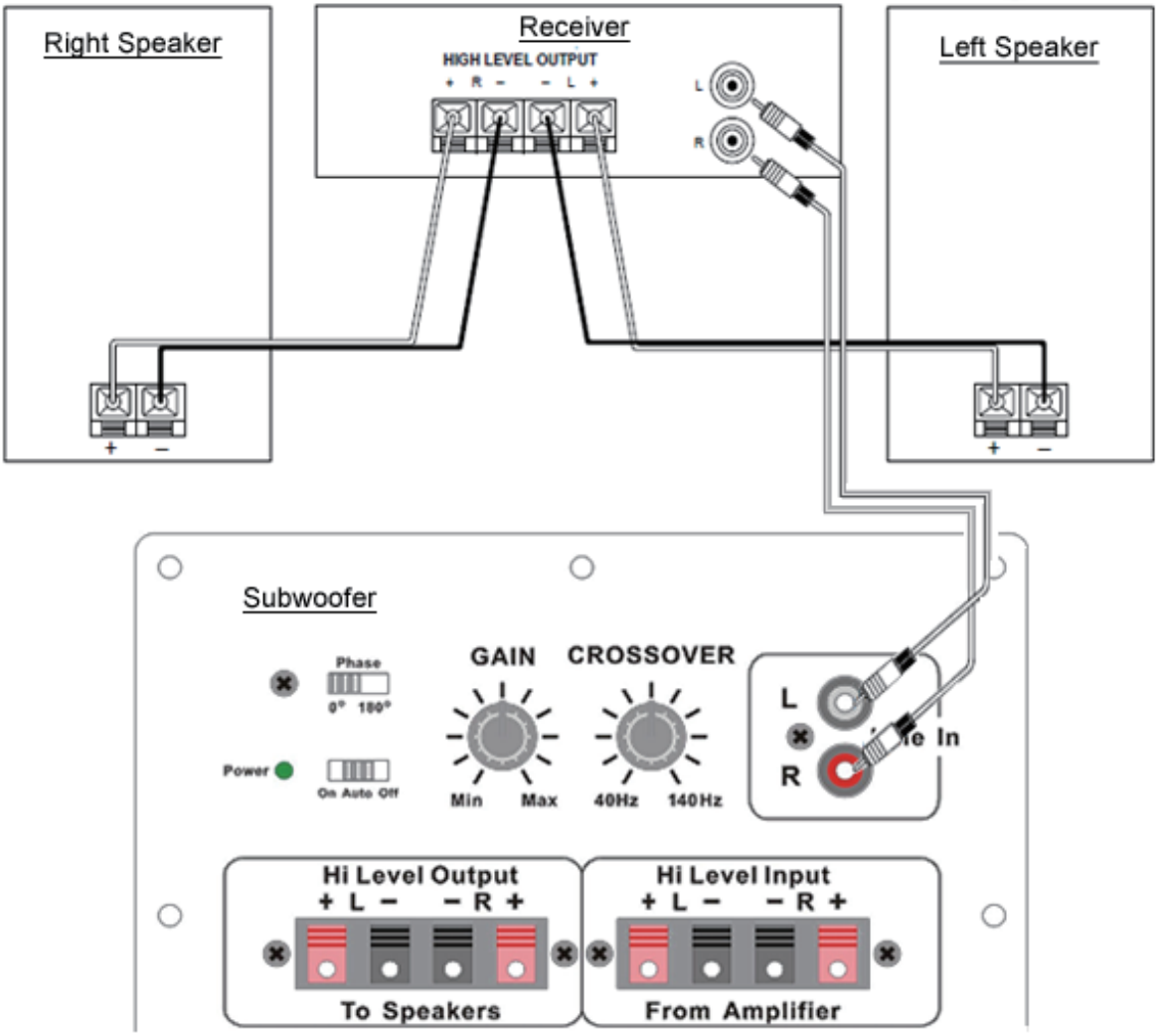


For illustrative purposes, some diagrams have (+/-) terminals intentionally reversed!

Wiring Diagrams - Option 2 (Recommended)

Line-In Jack (Low Level)

*If your receiver is equipped with only one sub out jack, a Y-splitter adaptor may be required (pictured to the right)



Wiring Diagrams - Connecting 2nd Subwoofer