

BassX

Powered Subwoofer System



OWNER'S MANUAL

Congratulations on your purchase of the BassX Powered In-Ceiling Subwoofer System!

The BassX will provide the excellent performance and reliability that SpeakerCraft products have been recognized for. To receive the best performance from your BassX System, please carefully read the instructions in this manual. If you have any questions, please contact SpeakerCraft Customer Service at (800) 448-0976.

Innovation At Its Best...

The BassX delivers the room-filling, thundering bass demanded by today's home theater systems, while remaining completely recessed in the ceiling behind a flush mounted grille. The performance of high power, floor standing subwoofers has finally come to architectural speakers.

Flexible Installation Options...

Since every installation is different, we created the BassX Mounting Bracket in two sizes, 12"-16" and 16"-24", allowing it to fit into virtually any ceiling. For new construction applications, simply attach the New Construction Drywall Ring to the bracket and dry-wall around it. Retrofit installation is easy as the ingeniously designed bracket can be folded to fit through the cut-out hole in the drywall. Both the New Construction Drywall Ring and Mounting Brackets are sold separately.

Create a Virtually Invisible Home Theater System...

When combined with the AIM™ series of fully pivoting in-ceiling speakers, a complete high performance home theater system can now be mounted into the ceiling of a room. Valuable floor space no longer has to be sacrificed to obtain the performance needed for a sensational home theater system.

Quality You Can Depend On...

SpeakerCraft is the name you can trust for accurate sound reproduction. We've manufactured nearly four million in-wall speakers, and pledge that every product we build will give you the highest level of workmanship and sound performance.

SAFETY INSTRUCTIONS

	<p>CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</p>	
<p>CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.</p>		

<p>APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE</p>
<p>CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.</p>
<p>ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.</p>

▪ **Explanation of Graphical Symbols**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and other instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimmingpool, etc.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

PORTABLE CART WARNING

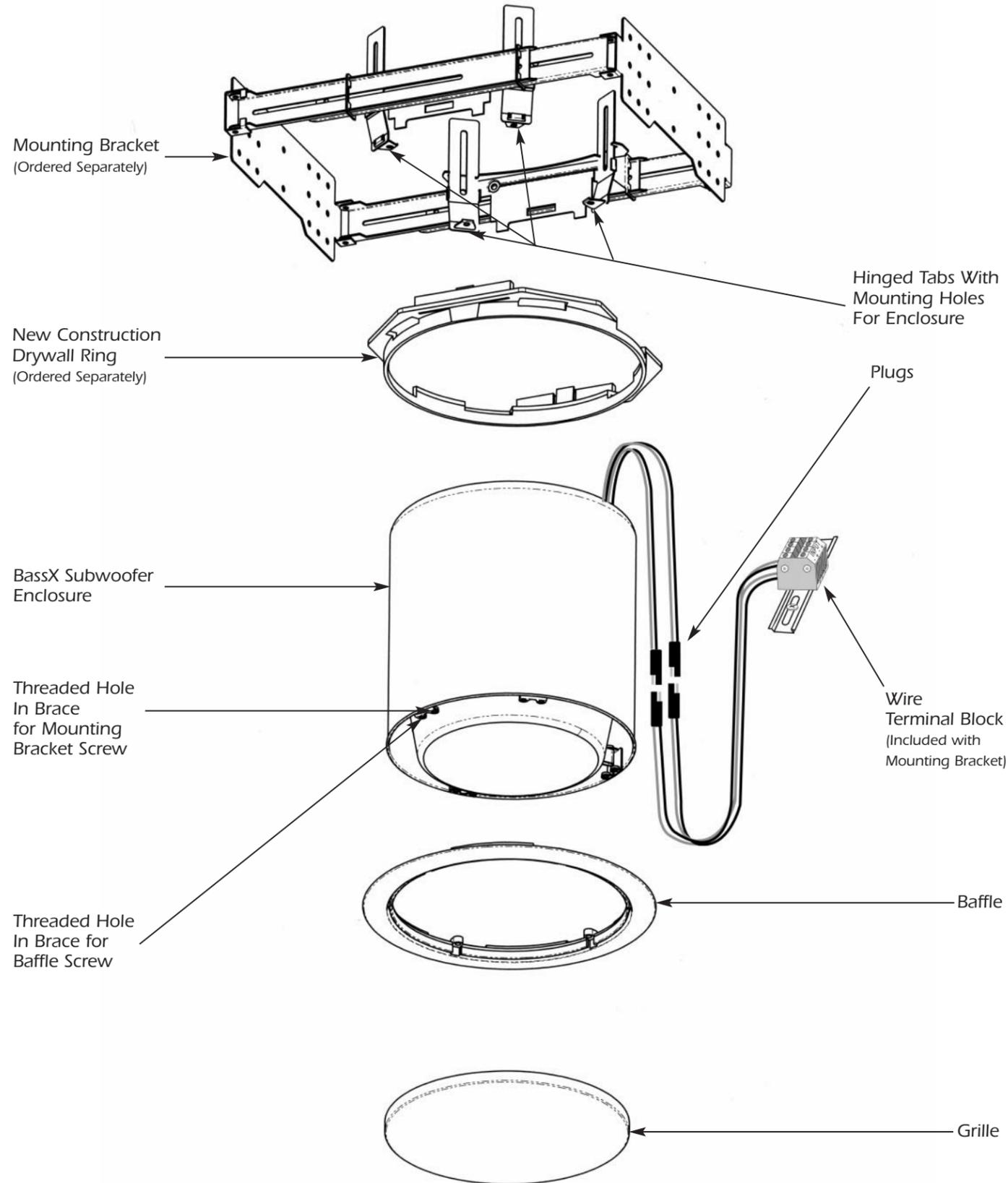


7. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** - The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.

10. **Power Source** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. **Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
13. **Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. **Object and Liquid Entry** - Care should be taken so that objects do not fall into and liquids not spilled into the inside of the appliance.
15. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
 - a. The power-supply cord or the plug has been damaged; or
 - b. Objects have fallen onto, or liquid has been spilled into the appliance; or
 - c. The appliance has been exposed to rain; or
 - d. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - e. The appliance has been dropped, or the cabinet damaged.
16. **Servicing** - The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. **Grounding or Polarization** - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

Please use the diagram below to identify system components mentioned throughout this manual.

DIAGRAM 1



CAUTION

- Installation of the BassX System ordinarily requires lifting the Enclosure above your head. The weight of the Enclosure is approximately 35lbs. **IF YOU ARE UNSURE OF LIFTING THE BASSX ENCLOSURE, DO NOT ATTEMPT TO INSTALL IT.** It is recommended that you have the assistance of another person when installing the Enclosure.
- The BassX Enclosure is designed to work only with the BB2500 amplifier. **DO NOT OPERATE THE BASSX ENCLOSURE WITH ANY AMPLIFIER OTHER THAN THE SPEAKERCRAFT BB2500.**
- Do not play sine wave information, such as the tones found on test CDs, into the BassX System. Failure to do so in a controlled manner may lead to damage.
- Please follow the instructions below carefully. If you should have any questions, please contact SpeakerCraft Customer Service at (800) 448-0976.

SYSTEM COMPONENTS

- **Included in this Carton**
 - BassX Subwoofer Enclosure
 - BB2500 BassX Amplifier
 - Baffle
 - Grille
 - Paint Mask
 - Screw Pack for Mounting Enclosure
 - Screw Pack for Mounting Baffle
- **Purchased Separately**
 - Mounting Bracket Kit (12"-16" or 16"-24") - **REQUIRED FOR INSTALLATION**
 - New Construction Drywall Ring

SYSTEM DESIGN CONSIDERATIONS

- The BassX System provides accurate bass to any audio system, and is designed so that it will work in conjunction with your other audio components. The BB2500 amplifier can be connected to any preamplifier or receiver that has low level left and right outputs or a LFE output. The BB2500 has a pass-through feature that allows the left and right input signals to be fed out of the unit to other amplifiers or system components. The output signal is a true pass-through, as the BB2500 amplifier does not have a high pass crossover.
- Once connected, use the front-mounted controls described below to adjust the subwoofer so that it will blend seamlessly with the other speakers in your system.

INSTALLATION OF THE BASSX ENCLOSURE

I. Overview

- Mounting the BassX Enclosure requires that you first install a BassX Mounting Bracket and Wire Terminal Block (included with the Bracket). This kit must be ordered separately.
- The Mounting Bracket has been designed so that no tools are required for the initial placement of the Enclosure. There are four hinged tabs that hold the Enclosure into place once it is pushed past them. When pushed all the way up, three of the tabs are held in place by magnets until they are pulled down. This feature makes removing the Enclosure easier in the unlikely event that it needs to be done.
- After installing the BassX Mounting Bracket, you should have also mounted the Wire Terminal Block (included with the Bracket). The end of this terminal has two plugs that will be attached to a corresponding set on the BassX Enclosure.

II. Installation

- Use the Height Gauge to once again make sure that the Mounting Bracket is set to the correct depth. The Height Gauge was included in the Cut Out Template that came with the Mounting Bracket.
- Attach the plugs from the BassX Wire Terminal to the plugs on the BassX Enclosure. Since the wires are in parallel, either plug from the Enclosure can be connected to either plug on the terminal side.
- Pick up the Enclosure and push it up into the opening of the Mounting Bracket. Once it clears the hinged tabs on the bracket, one of the tabs will fold down into place (the one without the magnet). With the can resting on one tab, hold the Enclosure with one hand and drop the other tabs down into place with your other hand if necessary. Once all the tabs are down and the edge of the enclosure is resting on **ALL FOUR** tabs, you can remove your hands.
- **Note:** In the unlikely event that the enclosure must be removed, simply push it up slightly and then push the tabs up against the magnets. This will keep them out of the way and allow you to slide the Enclosure down through the opening.
- Rotate the Enclosure until four of the holes on the bottom of the Enclosure are aligned with the holes in the tabs. **Note:** There are four sets of braces with two holes each on the Enclosure. Either of the two holes on the brace can be used for securing the Enclosure to the Bracket. The remaining set of holes will be used for mounting the Baffle. Be careful that you use the same set of holes on each brace (i.e. the first hole in the brace in the clockwise direction).
- The tabs may not immediately line up with the holes. You may need to slightly push or pull the slides that the hinged tabs are attached to before you get a good match. A little bit of "persuasion" is sometimes necessary to get them to line up.
- With the tabs and the holes lined up, use the screws from the pack marked (A) to mount the Subwoofer Enclosure to the Mounting Bracket. These four screws will be used to secure the Enclosure to the Bracket. Use one screw in each of the tab locations and tighten them down. Once all of the screws are in place, it is a good idea to check the mounting of the entire assembly by holding the sides of the Enclosure and trying to move the assembly. A little bit of movement is expected and acceptable. However, there should be no large movement or sliding of the horizontal or vertical slides. If there is sliding of the rails, remove the Enclosure and refer to the installation instructions included with the Mounting Bracket.

III. Mounting the Baffle

- Line up the Baffle with the remaining holes in the Enclosure braces. Use the screw pack marked (B) to mount the Baffle to Subwoofer Enclosure. Screw the Baffle into place until it rests against the edge of the ceiling. At this point, you may notice a gap between the top of the ceiling and the bottom of the Enclosure. This gap will not effect the acoustic performance of the BassX and exists so that the assembly can be mounted into a variety of ceiling depths. Although not necessary, in some cases you may wish to seal the opening. Instances would include keeping blown insulation away from the opening. In such a case, you can seal the space with a duct tape or similar durable tape.
- Once the Baffle is in place, you can place the grille into the slot on the Baffle. Due to the nature of the system, the grille is designed to fit very tightly. You will find it more difficult to place than other SpeakerCraft grilles, but it will fit.

INSTALLATION AND OPERATION OF THE BB2500 BASSX AMPLIFIER

I. Placement of the BB2500

DO:

- Place the amplifier with the feet resting on a solid flat level surface.
- Place the amplifier in a well-vented area to provide proper cooling. In areas that lack proper ventilation, such as tight cabinets or racks, it may be necessary to install small fans to create air movement.

DON'T:

- Don't block the ventilation holes on the top or bottom of the amplifier. Never place it on carpeting or similar material.
- Don't place the amplifier in any other position other than horizontal with the feet down. Never place on its side or resting on the back where the terminals are located.
- Don't place the amplifier near heat sources, or in an area that it would be exposed to moisture.

YOU SHOULD KNOW

- The power supply may cause a hum to be heard in some components if they are placed very close to the amplifier.

II. Installation of BB2500 (See DIAGRAM 2 on Page 7)

a. Power Mode Selection

- The amplifier is turned on with one of the two following methods - Audio Sense or Voltage Trigger. Determine which is best for your application.
- **Note:** The amplifier's front power switch must be turned on for the Audio Sense and Voltage Trigger modes to operate. Once the power switch is depressed, it allows the selected mode to be engaged. **The "Active" light will not light up until either an audio signal is sensed or a voltage signal is received. The amplifier will then be operating.** If you will be away for a long period of time, you may wish to turn off the main power switch.
- **Audio Sense (RECOMMENDED):** Use this selection when you want the amplifier to turn on when the amplifier's main input receives an audio signal. At the moment that either the left, right or LFE input jacks receive a signal, the amplifier will then turn on. Once the signal stops, the amplifier waits approximately 10 minutes and then turns off.
- **Voltage Trigger:** Use this selection if you wish the amplifier to turn on when it receives voltage (12 volts) from an external source, and then turn off once that voltage has stopped. Some components have voltage outputs that are designed for this use. In addition, there are devices that can be used as part of an automated system that will provide voltage to enable the mode. The voltage source must be connected to the voltage trigger input jack on the back of the amplifier with a 3.5mm mini-plug.

b. Connecting the Speaker Wires

- **CAUTION:** Only make connections when the amplifier is turned off.
- **You MUST use a minimum of 14 gauge speaker wire.** There are 4 outputs on the amplifier, two positive outputs and two negative outputs. The outputs are in parallel, meaning each positive terminal delivers the same signal as does each negative terminal. The 5-way binding post outputs on the back of the amplifier allow for a variety of ways to connect your speakers to the amplifier, including stripped wire, spade connectors, banana plugs, etc. The instructions included with the Mounting Bracket detail connecting the wires to the Wire Terminal Block, which is included with the Mounting Bracket (purchased separately).

c. Connecting the Line Level Audio Inputs

- **Caution:** Only make connections when the amplifier is turned off.
- **Left and Right Inputs** - The left and right outputs from a preamplifier or receiver can be connected to these inputs. If your system has only one subwoofer output, you can plug it into either the Left or Right inputs.
- **LFE (Low Frequency Effects) Inputs** - If your source has a LFE output, you can use the LFE Input. Be aware that using the LFE Input bypasses the amplifier's Low Pass Crossover.

d. Connecting the Line Level Audio Outputs

- Sources connected to left and right inputs can be forwarded to other components or amplifiers by connecting to the corresponding output sections to the right of each input section. Please note that the BB2500 has no high pass crossover. The signal from these terminals is exactly the same as the one that is delivered to the BB2500 left and right inputs.

e. Connecting the AC Power

- Plug the 2 prong plug directly into a 120V 60Hz wall outlet. **Caution:** Do not plug the amplifier into the preamplifier or receiver's switched outlet. If you wish to have the amplifier turn on once the preamplifier or receiver is activated, use one of the turn on modes, voltage or audio sense.

III. Amplifier Operation

a. Power Switch

- The switch marked "Power" on the front panel of the amplifier will turn off all amplifier circuitry no matter which turn on mode is selected. Refer to the **Power Mode Selection** section for further information.

b. Active LED

- When lit, the "Active" LED indicates that the amplifier is operating. Refer to the **Power Mode Selection** section of this manual for further information.

c. Protection LED

- When lit, the "Protection" LED located on the front of the amplifier indicates one of the following has occurred:
 - The amplifier detects that the subwoofer is in danger of overheating and has temporarily shut down to protect the woofers. When this happens, the "Protection" light will be activated. In a very short time, the amplifier will once return to "Active" without any intervention necessary.
 - A fault in the wiring, the speaker, or the amplifier. The "Protection" light will be activated and remain on. If the light remains on, turn the power button off and then on. If the amplifier returns to "Protection", turn the amplifier off and refer to the troubleshooting section of this manual.

d. Front Panel Controls

- The following controls allow you to blend the sound wave output of the BassX to the output of the main speakers in your system.

i. Volume Control

Use this to match the output of the subwoofer to that of the main speakers in the system. We recommend that you play a variety of material before selecting a setting. Start with the control in the "Off" position (completely counterclockwise) and slowly turn it up.

(Access to the following two controls is gained by removing the front panel that is held on by two screws. These controls should only be adjusted once and then the panel should be replaced. This will keep the controls from being inadvertently adjusted at a later time by those unfamiliar with the system.)

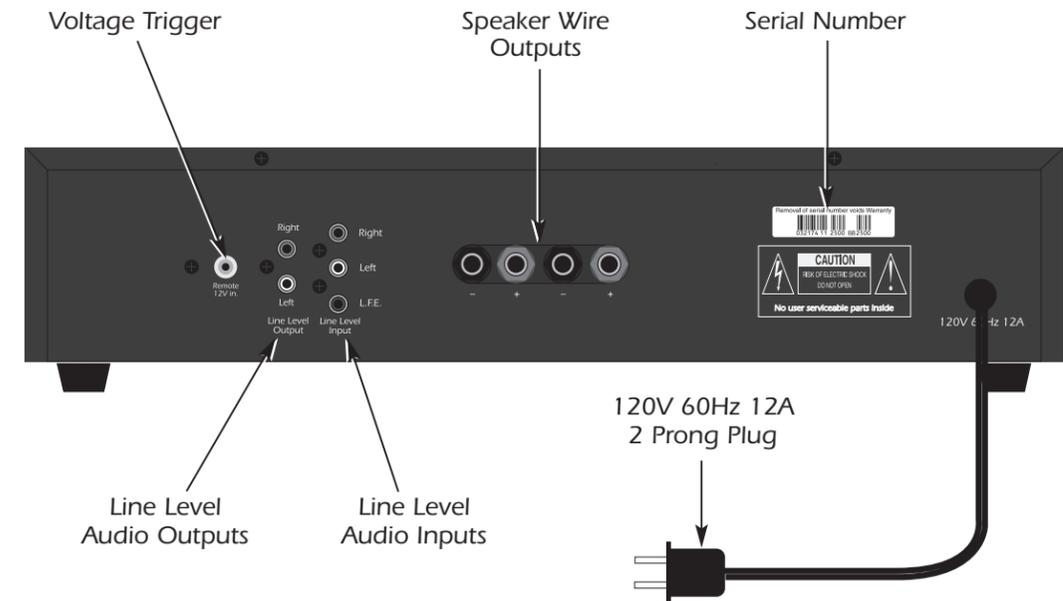
ii. Low Pass Crossover

Use this control to adjust the upper frequency limit of the BassX. The purpose is to control the overlap of the BassX's upper frequencies and the main speaker's lower frequencies.

iii. Polarity Control

This control allows you to match the arrival times of the sound waves of the BassX and the main speakers to your listening area. While the system is playing, slowly turn the knob until the bass sounds louder or less boomy. Depending on placement and room acoustics, this control may or may not have any affect.

DIAGRAM 2



TROUBLESHOOTING

The BassX Subwoofer System is designed to function trouble-free. Most problems occur because of operating errors. If you have a problem, please check the troubleshooting list first. If the problem persists, contact your authorized SpeakerCraft dealer or SpeakerCraft Customer Service at (800) 448-0976.

The Problem	Possible Causes And Solutions
No sound is heard.	Audio cable to the amplifier is not connected properly or the cable is bad. Use another cable that you know is good. Check all speaker wire connections and plugs.
A hum or buzzing sound is heard.	The sound may be caused by a ground loop in the system. Try to eliminate this by reversing the AC plugs of other components in the system. Try plugging the amplifier into another outlet. Other causes may include faulty cables.
The amplifier will not turn on.	The amplifier must be plugged into a live outlet. The power switch on the front panel must be on. A signal must be playing into the input jacks.
The "Protection" LED lights up momentarily and then turns off.	The circuitry in the amplifier has detected that the amplifier or subwoofer is in danger of overheating. Normally, this would happen infrequently and momentarily. If it persists, the amplifier may not be ventilated appropriately. Move the amplifier to a better ventilated and/or cooler location. Note: The amplifier may feel cool at the top, but still be overheating. Do not use the temperature at the top of the cabinet as a gauge for amplifier temperature.
The "Protection" LED lights up and does not turn off.	There may be a fault in the wiring, the speaker, or the amplifier. Turn the power switch off and then on again. If the amplifier immediately returns to the Protection mode, turn it off and check all of the wiring, including all connections at the amplifier, at the subwoofer, and any connections made to the wall.

SPECIFICATIONS

Amplifier:	1,000 Watts RMS
Drivers:	(2) 8"
Magnet:	56 oz.
Crossover:	Variable Low Pass Crossover 40Hz to 120Hz
Enclosure:	Dampened Steel
Finish:	Powder Coated
Weight:	35 lbs.

BB2500 BASSX AMPLIFIER - LIMITED TWO YEAR WARRANTY

SpeakerCraft Inc. warrants to the original retail purchaser **only** that the SpeakerCraft BB2500 Amplifier will be free from defects in materials and workmanship for a period of two years, provided the product was purchased from a SpeakerCraft Authorized Dealer.

BASSX SUBWOOFER ENCLOSURE - LIMITED LIFETIME WARRANTY

SpeakerCraft Inc. warrants to the original retail purchaser **only** that the BassX Subwoofer Enclosure will be free from defects in materials and workmanship, provided the speaker was purchased from a SpeakerCraft Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the SpeakerCraft Authorized Dealer from whom they were purchased, or to the SpeakerCraft factory at the address listed on this installation instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the Factory or SpeakerCraft Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, SpeakerCraft or the SpeakerCraft Authorized Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, SpeakerCraft, at its sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, SpeakerCraft assumes no responsibility or liability for such modification. All replaced parts and product become the property of SpeakerCraft Inc. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by SpeakerCraft. This warranty also excludes normal cosmetic deterioration caused by environmental conditions. This warranty will be void if the serial number on the product has been removed, tampered with or defaced.

This warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will SpeakerCraft be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if SpeakerCraft Inc. or a SpeakerCraft Inc. Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply.

All implied warranties on the product are limited to the duration of this expressed warranty. Some states do not allow limitation on the length of an implied Warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

