# OWNER'S MANUAL

# BassX-W10

Powered In-Wall Subwoofer





### SAFETY INSTRUCTIONS



### CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



**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.

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 products 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 swimming pool, 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.

### APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.

**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.

- **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. Non use 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.

## Congratulations on your purchase of the BassX-W10 Powered In-Wall Subwoofer System!

### **System Description**

The BassX-W10 will provide the excellent performance and reliability that SpeakerCraft products have been recognized for. To receive the best performance from your BassX-W10 System, please carefully read the instructions in this manual. For technical inquires, please call 1-800-448-0976 or e-mail us at techsupport@speakercraft.com.

### Innovation At Its Best...

The BassX-W10 delivers the room-filling, thundering bass demanded by today's home theater systems, while remaining completely recessed in the wall 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-W10 Mounting Bracket to be expandable, allowing it to fit through the smaller drywall cut-out hole and adjust to various wall stud spacing.

For new construction applications, simply attach the mounting bracket to the studs, then cut the drywall around it, using the template supplied. The BassX-W10 Enclosure (P/N ASMX3102) is also available and is recommended for new construction applications.

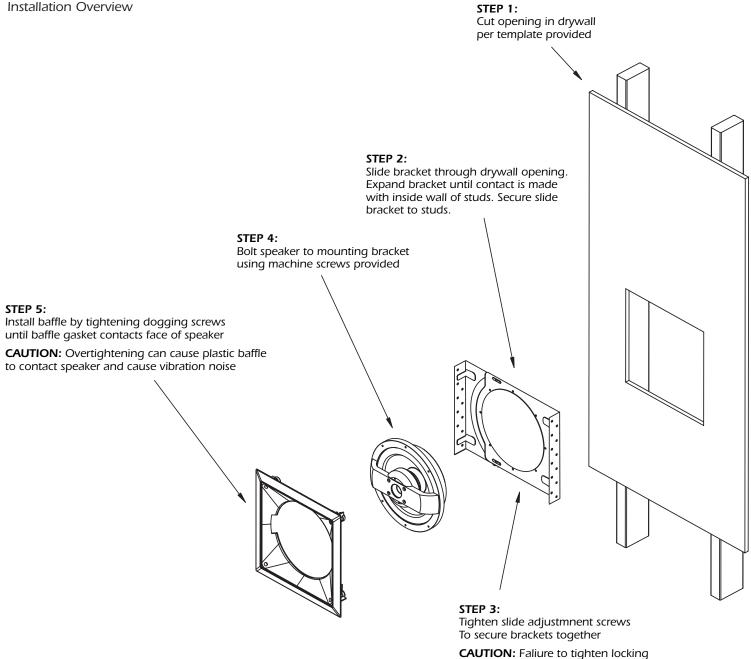
For retrofit installation, simply cut out the drywall using the template included, adjust the bracket to it's smallest size allowing it to fit through the hole in the drywall. Now simply mount the bracket to the studs. BassX-W10 AcoustaCell (P/N ASMX3101) is also available and is recommended for retrofit installations.

### 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.

Please use Diagram 1 for a quick installation overview, which will be explored in greater detail throughout this manual.

### DIAGRAM 1



### **CAUTION**

• The BassX-W10 is designed to work only with the BBXW10 amplifier. To insure maximum sound quality and performance, use only this amp.

screws, can result in vibration noise

- The installation bracket must be aligned accurately in the center of the cut out hole in the drywall. This is to insure proper alignment with the woofer and baffle.
- Please follow the instructions below carefully. For technical inquires, please call 1-800-448-0976 or e-mail us at techsupport@speakercraft.com.

### SYSTEM COMPONENTS

- Included in this Carton:
  - BassX-W10 Subwoofer
  - BBXW10 Amplifier
  - Installation Bracket
- Baffle
- Mounting Hardware
- Grille
- Paint Mask
- System Options:
  - BassX-W10 Enclosure (ASMX3102) for New Construction installations
  - BassX-W10 AcoustaCell (ASMX3101) for Retrofit Installations

### SYSTEM DESIGN CONSIDERATIONS

- The BassX-W10 System provides accurate bass to any audio system, and is designed so that it will work in conjunction with your other audio components. The BBXW10 amplifier can be connected to any preamplifier or receiver that has low level (line out), speaker (high level) or LFE outputs. The BBXW10 has a pass-through feature that allows the input signals to be fed out of the unit to other amplifiers or system components.
- The Subwoofer should be mounted low on the wall, free from obstructions. The lower you mount it, the more bass there will be.
- Every practical effort should be made to eliminate possible noise on or inside the wall surrounding this subwoofer. Steps must be taken to ensure that the wall and anything attached to the wall into which the BassX-W10 is mounted is secure.

We recommend using acoustical spray foam instead of insulation in the bays that surround the BassX-W10. The foam will be able to get into all those small gaps and will absorb most of the vibration from the subwoofer. If foam is not available, stuff the wall with as much insulation as possible. Using adhesive foam strips between the stud and drywall is also an option that could be used to keep the drywall from resonating on the studs. In addition, extra drywall screws can be used to mount the drywall to the studs.

To reduce vibration even more, we recommend not hanging anything directly over the BassX-W10. If there is no way around it, steps will need to be taken to ensure that pictures, mirrors, shelves, etc. do not vibrate on the wall. The use of rubber grommets, adhesive tape, extra mounting screws, foam padding will help in these types of applications.

• Once connected, use the controls described under "Installation and Operation of the BBXW10 Amplifier" to adjust the system so that it will blend seamlessly with the other speakers in your system.

### INSTALLATION

### 1. Mounting Bracket Installation - New Construction

- Mounting the BassX-W10 subwoofer requires that you first install the Mounting Bracket and speaker wire that is to be run to the BBXW10 amplifier's location. **NOTE:** It is critical to insure that the drywall (or any wall material) is well dampened and tight to avoid resonance.
- The Mounting Bracket has been designed so that it can be screwed between two studs in the wall. As with any in-wall speaker, be sure the subwoofer does not share any stud bays with electrical outlets or switches. Attach the bracket with the included drywall screws so that it aligns flush with the front of the studs.
- After installing the mounting bracket and pulling the speaker wire from the BBXW10 amplifier location, you can now hang the drywall. Keep in mind that the mounting bracket is not a "Pre-Construction Bracket" or drywall ring. Carefully mark and cut out the hole for the subwoofer before mounting the drywall.

**NOTE:** It is very important that the mounting bracket aligns exactly in the center of the cut out hole in the drywall, or the speaker and baffle cannot be connected to the bracket!

### 2. Mounting Bracket Installation - Retrofit

• Find the studs in the wall using a good stud finder. Locate the exact center between the studs by drilling a small hole as close to center as can be determined. Using a stiff wire (a coat hanger works well) bent to 90° feel for both studs through the hole. By turning the wire around you should be able to determine the middle location between the studs.

**NOTE:** It is very important that the mounting bracket aligns exactly in the center of the cut out hole in the drywall, or the speaker and baffle cannot be connected to the bracket!

• Once the center has been determined, use the cut-out template supplied with the subwoofer to mark and cut out the hole in the drywall.

### 3. Wiring

■ Connect the speaker wire to the woofer, be sure to connect the "Positive" wire to the terminal marked (+) and the negative wire to the terminal marked (−). **NOTE:** Make sure the binding posts (wire connectors) are tightened firmly or they may rattle. The other end of the wire should be connected to the amplifier in the same manner to the 3-way binding posts marked "SUBWOOFER OUT". Make sure that the amplifier is unplugged when connecting any wires or cables to it.

### 4. Installing the Subwoofer

• Line up the woofer with the corresponding hole in the mounting bracket and secure the woofer to the bracket using the hardware supplied. **CAUTION:** DO NOT OVER TIGHTEN THE SCREWS OR THEY MAY STRIP.

### 5. Mounting the Baffle

- The baffle has been specifically designed to mount to the drywall. Place the baffle into the drywall cut-out and position it. As you tighten the screws, the mounting tabs (dogs) turn out behind the drywall and clamp the baffle to the drywall.
  CAUTION: BE CAREFUL NOT TO OVER TIGHTEN THE SCREWS OR THE BAFFLE WILL WARP, AND THE DOGS MAY BREAK OFF.
- Once the baffle is in place, you can gently push the grille into the slot on the baffle. Due to the nature of the system, the grille is designed to fit very tightly.

### INSTALLATION AND OPERATION OF THE BBXW10 AMPLIFIER

### 1. Placement

#### 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.

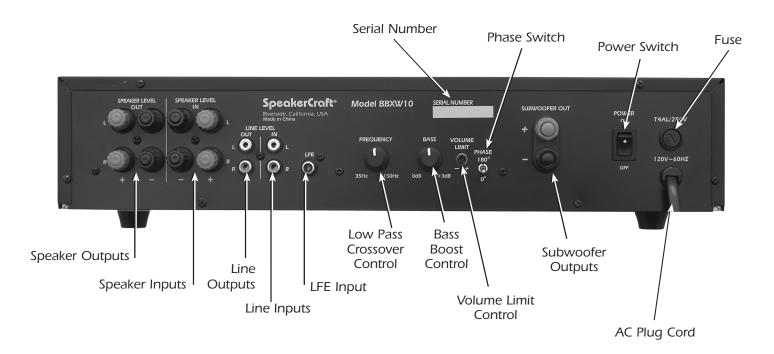
### YOU SHOULD KNOW

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

### 2. Installation of BBXW10

Please use Diagram 2 to familiarize yourself with the rear panel of the BBXW10.

### **DIAGRAM 2**BBXW10 Rear Panel



### a. Auto Sense Power On

- The amplifier is turned on and off by sensing audio signals coming from the receiver or pre-amp through the input connections.
- NOTE: The amplifier's front power switch must be turned on for the Audio Sense mode to operate. Once the power is switched on, the auto sense mode automatically is activated. The "Active" LED on the front of the amplifier will not light up until an audio signal is sensed. The amplifier will then be operating. At the moment that either the Left, Right line level input jacks, the speaker input connectors or the LFE input jack receive a signal, the amplifier will then turn on. Once the signal stops, the amplifier will turns off in a few minutes. If you will be away for a long period of time, you may wish to turn off the main power switch or unplug the unit from the outlet.

### b. Connecting the Subwoofer to the Amplifier

- **CAUTION:** Only make connections when the amplifier is turned off.
- You MUST use a minimum of 14 gauge speaker wire. There are 2 outputs on the amplifier, one positive and one negative outputs. The 3-way binding post outputs on the back of the amplifier allow for a variety of ways to connect your subwoofer to the amplifier, including stripped wire, spade connectors, etc.

### c. Connecting the Audio Inputs

- **CAUTION:** Only make connections when the amplifier is turned off.
- Line Level Inputs (Left & Right) The line outputs from a preamplifier or receiver can be connected to the line level inputs of the BBXW10 with RCA cables. If your system has only one subwoofer output, you can plug it into either the left or right line inputs. Using these inputs will crossover the audio signals that are sent to the Line outputs at a fixed high pass of 75Hz.
- LFE (Low Frequency Effects) Input If your preamplifier or receiver has an LFE output, you can use the LFE input. Be aware that using the LFE input bypasses the amplifier's low frequency adjustable (low pass) crossover.
- Speaker Level Inputs (Left & Right) These inputs can be used if your preamplifier or receiver does not have a subwoofer or set of line output jacks. Connect the left and right pair of main speaker output wires from you amplifier or receiver to the speaker level input connectors of the BBXW10 amplifier. Then connect a left and right pair of speaker wires from the BBXW10 speaker output connectors to you main speakers.

### d. Connecting the Audio Outputs

- Line Level Outputs (Left & Right) Sources connected to the line level inputs can be forwarded to other receivers or amplifiers line level inputs. By doing this you can pass-on the audio signal for use by another component. Connect RCA cables to the line level output sections of the BBXW10 and the Line level inputs of a receiver or amplifier. Please note that the BBXW10's high pass crossover will be in effect removing the audio below 75Hz to the connected component.
- Speaker Level Outputs (Left & Right) Connect a left and right pair of speaker wires from the BBXW10 speaker output connectors to you main speakers. This method will filter out the low frequencies below 75Hz and send them to the subwoofer. The high frequencies above 75Hz will be sent to your main speakers. The main speakers will still be powered by your system's amplifier or receiver.

### e. Connecting the AC Power

• Plug the 3-prong plug directly into a 120V AC 60Hz wall outlet. If you wish to plug the amplifier into a preamplifier or receiver's switched outlet, make sure it is rated at least 600 watts. However, it is always safer to plug the BBXW10 directly into an AC outlet.

### **DIAGRAM 3**BBXW10 Front Panel



### 3. Amplifier Operation

Please use Diagrams 2 & 3 to familiarize yourself with the front and rear panels of the BBXW10.

**CAUTION:** Please read all the following instructions, otherwise damage may be caused to your system.

### a. Protection Circuitry

- If the "Protection" circuit in the amplifier is activated, it indicates one of the following situations has occurred:
  - **i.** The amplifier detects that the subwoofer is in danger of overheating and has temporarily shut down to protect the woofer. The amplifier will return to "Active" without any intervention necessary.
  - **ii.** A fault in the wiring, the speaker, or the amplifier. If the amplifier remains off, turn the power button off and then on. If the amplifier returns to the protection mode, turn the amplifier off and refer to the troubleshooting section of this manual.

### b. Front Panel Controls

### 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. **NOTE:** Turning the volume up slowly will prevent possible damage to the woofer from the system being run too "hot". Very little movement of the knob is needed. **CAUTION:** If a popping sound (clipping) is audible through the subwoofer, it is being over driven, reduce the volume of the amplifier, or speaker damage may occur!

### c. Rear Panel Controls

• The following controls allow you to blend the sound wave output of the BassX-W10 to the output of the main speakers in your system.

### i. Power Switch

The switch marked "Power" on the rear panel of the amplifier will turn off all amplifier circuitry and override the auto sense mode in the off position. **NOTE:** See paragraph v., below, before turning on the amplifier.

### ii. Low Frequency (Low Pass) Crossover

Use this control to adjust the upper frequency limit of the BassX-W10. The purpose is to control the overlap of the BassX-W10's upper frequencies and the main speaker's lower frequencies. If the you are using the built-in high frequency (High Pass) crossover by connecting speakers to the speaker output connectors this control will not affect the fixed 75Hz setting.

### iii. Bass Boost Control

This control allows you to increase bass response between 50 and 100Hz for certain types of audio that lacks in bass, such as old recordings etc.

### vi. Polarity Control

This control allows you to match the arrival times of the sound waves of the BassX-W10 and the main speakers to your listening area. While the system is playing, flip the switch to the 180° and back to 0° until the bass sounds louder or less boomy. Depending on placement and room acoustics, this control may or may not have any affect.

### v. Volume Limit Control

Use this control to adjust the maximum volume setting for your BassX-W10 system. With the Volume Limit control and front mounted volume control turned all the way down (counterclockwise), turn on the subwoofer and start playing audio through your system. Turn the system up to the highest comfortable level – WITHOUT DISTORTION. Now turn up the sub woofer volume on the front panel of the BBXW10 subwoofer amplifier all the way. No bass should play. Next SLOWLY turn up the volume limit control until the subwoofer is playing at its loudest level WITHOUT DISTORTION. Return levels to normal. Now anyone can safely turn up the subwoofer all the way without damaging the system.

### **TROUBLESHOOTING**

The BassX-W10 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 Tech Support at 1-800-448-0976 or e-mail us at techsupport@speakercraft.com.

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.
	Rear Volume Limit Control is set to 1/2 way or 12 O'clock
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 rear panel must be on. A signal must be playing into the input jacks, or speaker inputs.
The Protection Circuit cuts in 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 Circuit cuts in 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 – BassX-W10 Subwoofer & Baffle

**Driver:** 10" Long Throw Woofer, Treated Pulp Cone with Butyl Rubber Surround

Type: Cast frame reverse magnet

Impedance: 4 ohms

**SPL**: 86 dB

Frequency Response: 20 Hz

Baffle & Grille Color: White

Cut-Out Dimensions: W 11½" x H 11½" (for baffle)

Dimensions: W 13½" x H 13½" (includes subwoofer & baffle)

Weight: 6 lbs. (subwoofer only)

### SPECIFICATIONS – BBXW10 Amplifier

Type: Mono Class A-B dedicated subwoofer amplifier

Power Output: 250 watts per channel

Crossovers: Variable Low Pass Crossover 35Hz to 150 Hz, Fixed High Pass Crossover at 75Hz

THD @ 10 Watts: 0.1%

**Input Sensitivity:** 8.6 mv

Input Impedance: 33 kOhms

Auto Off Time: > 15 minutes

Auto On Sensitivity: 2.5 mv

Signal to noise ratio: > 70dB

Dimensions: H 3¾" x W 17" x D 11½" (add ¾" for feet & 4" for rear panel connectors)

Weight: 16 lbs.

### LIMITED LIFETIME WARRANTY – BassX-W10 Subwoofer

SpeakerCraft Inc. warrants to the original retail purchaser **only** that the BassX-W10 Subwoofer 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.

### LIMITED TWO YEAR WARRANTY - BBXW10 Amplifier

SpeakerCraft Inc. warrants to the original retail purchaser **only** that the SpeakerCraft BBXW10 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.