INSTRUCTION MANUAL

SONAMP® A 8 0 0 SUBWOOFER AMPLIFIER



Introduction

Thank you for purchasing the Sonance Sonamp® A800 subwoofer amplifier. When properly installed, this amplifier will give you many years of entertainment pleasure. To get the most out of your new amplifier, please read this manual thoroughly before you begin installation. To achieve the best performance, Sonance recommends that this amplifier be installed by a Sonance Authorized Dealer/Installer.

Important Safety Instructions

Basic safety precautions should always be followed when using your A800 amplifier, to reduce risk of fire, electric shock, and injury to persons:

- 1. Read and understand all instructions.
- 2. Retain these instructions for future reference.
- 3. **Follow** all warnings and instructions in this manual and marked on the product.
- 4. Any service or repair required must be performed by qualified factory-authorized personnel.
- 5. Do not use the amplifier in a high-humidity environment or near water for example in a wet basement, or near a wet bar or swimming pool.
- 6. Always provide adequate ventilation for the amplifier. Allow a minimum of one (1) inch above and three (3) inches behind the amplifier. Do not block the cooling vents on the amplifier case.
- 7. The amplifier should be situated away from heat sources such as heat registers, radiators, stoves, or other appliances that produce heat.
- 8. The amplifier should only be connected to a power supply of the type marked on its back panel. The power supply cord should be routed to avoid damage from contact with sharp objects or being stepped on.
- 9. Unplug the amplifier during thunderstorms or when it will be unused for extended periods of time.
- 10. Exercise care to avoid spilling liquids on or in the amplifier.
- 11. Do not place the amplifier on an unstable table, stand, or cart. Improper placement of the amplifier may cause it to fall on an adult or child causing serious injury, as well as damage to the amplifier.
- Do not expose the amplifier to dripping or splashing. Do not place objects filled with liquids, such as vases, on the amplifier.
- 13. Cleaning: To clean the amplifier, wipe it with a soft cloth. Do not use solvents, as they may damage the amplifier.
- 14. Non-Use Periods: Unplug the amplifier's power cord from the electrical outlet when the woofer will be unused for a long period of time.

- 15. Damage Requiring Service: The amplifier should be serviced by qualified service personnel when:
 - A. The power cord or plug has been damaged
 - B. Objects have fallen, or liquids have been spilled into the amplifier
 - C. The amplifier has been exposed to rain.
 - D. The amplifier does not appear to be operating properly or exhibits a marked change in performance.
 - E. The amplifier has been dropped or appears to have been damaged.
- 16. Servicing: The user should not attempt to service the amplifier beyond that described in these instructions. All other servicing should be referred to qualified service personnel.
- 17. Storms: To prevent damage to components, unplug all electronic equipment during thunderstorms.



WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLI-ANCE TO RAIN OR MOISTURE. THE APPLIANCE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. NO OBJECTS FILLED WITH LIQUIDS SHALL BE PLACED ON THE APPLIANCE.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO AUTHORIZED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user 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.



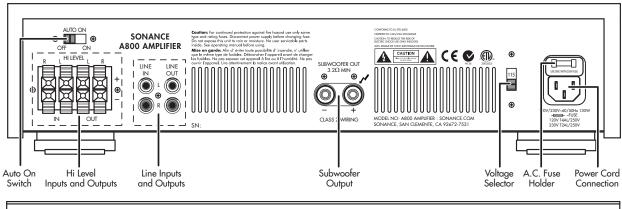
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

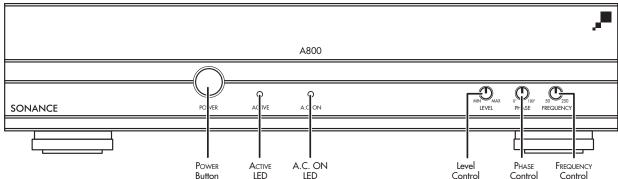
Box Contents

Your Sonance A800 Amplifier box should contain the following items:

- (1) Sonance A800 Amplifier
- (1) IEC Power Cord (120V version only)
- (1) 230V fuse (T2AL~250V)







A800 Subwoofer Amplifier Front and Rear Panels

Rear Panel Features

Power Cord Connection

The A800 features a removable IEC power connector. (A power cord is included only with the 120V version of the amplifier.) Plug the female end of the power cord into the Power Cord Connector on the amplifier rear panel and plug the male end into a grounded wall socket. Do NOT plug the amplifier's power cord into a convenience outlet on any other audio or video component

IMPORTANT: DO NOT PLUG THE POWER CORD INTO THE WALL OUTLET UNTIL ALL SYSTEM CONNECTIONS HAVE BEEN MADE AND VERIFIED.

Note: If you need to use an extension cord, use only a heavy-duty (14-gauge or larger) extension cord to avoid starving the amplifier of all the current necessary for full-power operation.

A.C. Fuse Holder

120V versions of the A800 amplifier is shipped with a 4 amp AC fuse installed. 230V versions have a 2 amp AC fuse installed.

To replace the fuse, unplug the power cord from the Power Cord Connector and use a screwdriver to remove the fuse holder.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE, REPLACE THE FUSE WITH ONLY THE SAME TYPE AND RATING.

Voltage Selector

The A800 can operate from either 120V/60Hz or 230V/50Hz current. The Voltage Selector is factory-set to the proper voltage for the region the A800 is shipped to.

Changing the Voltage

If you want to use the A800 in a different region than it was originally shipped, you can change its operating voltage.

IMPORTANT: Remove the power cord from the amplifier and the wall outlet before changing the voltage

- 1. Remove the power cord from the wall outlet and from the amplifier's Power Cord Connection.
- Insert a flat-blade screwdriver or similar tool into the empty power cord socket and gently pry the fuse holder out of its socket.
- Install the proper fuse for the region where the amplifier will be operated:

120V current = 4A, 250V (T4AL~250V) fuse 230V current = 2A, 250V (T2AL~250V) fuse

- 4. Replace the fuse holder back into its socket above the power cord connection.
- Use a flat-blade screwdriver or similar tool to change the Voltage Switch to the proper setting for the region where the amplifier is being used.



6. Replace the power cord with one that is correct for the region where the amplifier is being used.

Line Inputs and Outputs

The A800 amplifier has LINE INPUTS and LINE OUTPUTS. Use these connections if your receiver or preamp has a line-level subwoofer output. If the subwoofer output is mono you can connect it to either the A800's Left or Right LINE INPUT.

If your system has a separate preamp and power amplifier you can use the A800's LINE INPUT and LINE OUTPUT jacks to connect the amplifier between the preamp and power amp.

IMPORTANT: IF YOU ARE USING THE A800'S HI LEVEL INPUTS (SEE PAGE 3), DO NOT MAKE ANY CONNECTIONS TO THE LINE LEVEL INPUTS.

HI LEVEL Inputs and Outputs

CAUTION: DO NOT CONNECT THE A800'S HI LEVEL INPUTS TO AN AMPLIFIER WITH A FLOATING GROUND OR A BRIDGED OUTPUT. BEFORE USING THE HI LEVEL INPUTS, CHECK THE OTHER AMPLIFIER'S DOCUMENTATION.

If your system's electronics do not have preamp outputs or subwoofer outputs you can connect its left and right speaker outputs to the A800's HI LEVEL Inputs. Then connect the A800's HI LEVEL Outputs to your left and right speakers. Always make sure to connect the A800's "+" terminals to the electronics' and speakers' "+" terminals, and its "-" terminals to the electronics' and speakers' "-" terminals.

IMPORTANT: IF YOU ARE USING THE A800'S LINE LEVEL INPUTS (SEE ABOVE), DO NOT MAKE ANY CONNECTIONS TO THE HI LEVEL INPUTS.

AUTO ON Switch

When this switch is in the *ON* position the A800 will automatically turn <u>ON</u> when it senses a signal on either of its inputs. The amplifier will remain on for approximately 15 minutes after the signal has ceased. If you want to manually turn the amplifier <u>ON</u> and <u>OFF</u>, set the AUTO ON switch to the *OFF* position. This allows the amplifier to be switched <u>ON</u> and <u>OFF</u> by the front-panel POWER button.

Subwoofer Output

The A800 amplifier features a binding post speaker connector that can accept bare wire and wire terminated in pins or single banana connectors. The amplifier can drive a single Original Series Large speakers in-wall or in-ceiling woofer, or two Original Series Large speaker woofers connected in parallel.

NOTE: IF USING SINGLE BANANA CONNECTORS, BE SURE THE SUBWOOFER OUTPUT TERMINALS ARE CLOSED (ROTATED FULLY CLOCKWISE) BEFORE INSERTING THE CONNECTOR.

If you use bare wire, make sure you strip only enough wire (½" or 13mm) to fit into the hole in the terminal. Before inserting the wire, twist all strands tightly to prevent strays that could cause a short circuit between the "+" and "-" terminals. To make a secure connec-

tion, insert the wire in the direction of terminal rotation (clockwise) to force the wire around the terminal post.

Front Panel Features

Power Button

When the rear-panel AUTO ON switch is in the *OFF* position, the POWER button turns the A800 <u>ON</u> and <u>OFF</u>.

ACTIVE LED

The ACTIVE LED illuminates whenever the A800 is operating.

A.C. ON LED

The POWER LED indicates that the A800 is connected to an active power outlet and the rear panel fuse is good.

LEVEL Control

The LEVEL control sets the subwoofer's volume. When setting the A800's LEVEL control by ear, find a volume setting where the bass sounds balanced on both music and films. Listen to several different music recordings and film soundtracks that contain strong bass passages and find a setting for the LEVEL control that doesn't over-emphasize the bass or make it sound weak.

The most accurate way to set the LEVEL control is with calibrated test noise or test tones and a sound-pressure level (SPL) meter or real-time analyzer. There are several CDs and DVDs that contain subwoofer test signals. If you use an SPL meter, set the A800's LEVEL control so that the subwoofer plays at the same volume as the system's other speakers.

PHASE Control

The Phase control can be adjusted from 0° to $180^{\circ}F$ (- 18° to $82^{\circ}C$). At the $0^{\circ}F$ (- $18^{\circ}C$) setting, a positive input voltage will cause the subwoofer's speaker cone to move *out* (towards the room). When the Phase control is at the $180^{\circ}F$ ($82^{\circ}C$) setting a positive input voltage will cause the subwoofer cone to move *in* (away from the room). This allows you to better match the timing of the woofer with the timing of your left and right speakers so that their signals all reach your ears properly aligned (in phase) with each other.

There is no absolute correct setting for the PHASE control. When the woofer is properly in phase with the left and right speakers the sound will be clearer and have maximum impact in the midbass range. This will make percussive sounds like drums, piano and plucked strings sound more life-like.

The best way to adjust the PHASE Control is to listen to music that you are familiar with and adjust the control so that drums and other percussive sounds have maximum impact.

FREQUENCY Control

The FREQUENCY control adjusts the amplifier's internal crossover between 50Hz and 250Hz. The crossover's slope is 12dB/octave. The higher you set the FREQUENCY control the higher in frequency the connected subwoofer will operate.



Stereo Applications

Use the FREQUENCY control to achieve a smooth transition of bass frequencies between the subwoofer and your main speakers. Generally, the frequency should be set at a lower value if your main speakers have larger woofers, and should be set at a higher value if your main speakers have smaller woofers.

When setting the FREQUENCY control by ear, listen for the smoothness of the bass. If the bass seems too strong at certain frequencies (especially if your main speakers have larger woofers), try lowering the FREQUENCY control setting; if the bass seems too weak at certain frequencies (especially if your main speakers have smaller woofers) try raising the FREQUENCY control setting.

Ideally, the FREQUENCY control should be set to the frequency where your main speakers' low-frequency response roll-off is -3dB. However, this is usually impossible to determine without sophisticated test equipment since each listening room has a different influence on your main speakers' bass performance.

Theater Applications

Connect the A800 to the receiver's LFE output. Set the FRE-QUENCY control to 250Hz and use the filtering in the receiver.

Built-In Limiter

The A800 has a built-in limiter that prevents overdriving the amplifier. This allows the subwoofer to produce optimium bass output while maintaining long-term reiliability. The limiter has no user or installer adjustments.

Specifications

A800

Power Output: 90 watts RMS @ 4 ohms

Power Output (program): 150 watts @ 4 ohms
Frequency Response: 35Hz - 250Hz +/- 1dB
Total Harmonic Distortion: .05% 20Hz - 300Hz @ 8 ohms

Signal-to-Noise Ratio: 95dB (w/22kHz A-WTG filter)

Input Sensitivity: 45mV for 90 watts RMS @ 4 ohms (stereo inputs);

90mV (LFE input)

Input Impedance: 20k ohms

Power Consumption: 160 watts maximum (4 ohms,

full power); 13 watts idle (no

signal)

AC Fuse: 4A (T4AL ~250V)

Heat Output: 98 BTU/HR @ 8 ohms

(rock music); 140 BTU/HR @ 4 ohms (rock music)

Dimensions (WxHxD): 16 3/4" x 4" x 13 1/2"

(425mm x 102mm x 343mm)

Dimensions w/Rack Ears (WxHxD): $19" \times 4" \times 13 1/2"$

(489mm x 102mm x 343mm)

Rack Space Requirements: 2U

Shipping Weight: 20 lbs (9.1kg) each



Technical Assistance and Service

If you have any questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., PST.

If your product should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

- 1. Prior to calling note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
- 2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

IMPORTANT: You must have prior authorization to return your amplifier to Sonance!

- 3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. It is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
- 4. Contact a package delivery service such as United Parcel Service or Federal Express to arrange prepaid (not collect) shipping. Do not use the U.S. Postal Service.

IMPORTANT: Freight collect shipments will be refused.

- 5. Write the Return Authorization Number on the outside of the shipping carton.
- 6. Ship the packaged unit to:

Quality Assurance Department Sonance 212 Avenida Fabricante San Clemente, CA 92672-7531



LIMITED FIVE (5) YEAR WARRANTY

Sonance warrants to the first end-user purchaser that this Sonance-brand product ("Product"), when purchased from an authorized Sonance Dealer/Distributor, will be free from defective workmanship and materials for the period stated below. Sonance will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or remanufactured Product or a reasonable equivalent.

EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY SONANCE. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. No one is authorized to make or modify any warranties on behalf of Sonance.

The warranty stated above is the sole and exclusive remedy and Sonance's performance shall constitute full and final satisfaction of all obligations, liabilities and claims with respect to the Product. IN ANY EVENT, SONANCE SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Sonance's express warranty.

Your Product Model and Description: Sonamp® A800 Subwoofer Amplifier.

Warranty Period for this Product: Five (5) years from the date on the original sales receipt or invoice or other satisfactory proof of purchase.

Additional Limitations and Exclusions from Warranty Coverage: The warranty described above is non-transferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat or cold or humidity, outdoor installation), or from service or repair which has not been authorized by Sonance.

Obtaining Authorized Service: To qualify for the warranty, you must (1) contact your authorized Sonance Dealer/Installer or call Sonance Customer Service at (800) 582-0772 within the warranty period, (2) obtain a return merchandise number (RMA), and (3) deliver the Product to Sonance shipping prepaid during the warranty period, together with the original sales receipt, invoice or other satisfactory proof of purchase.



System Notes:



©2009 Sonance. All rights reserved. Sonance and Sonamp are registered trademarks of Dana Innovations. Due to continuous product improvement, all features and specifications are subject to change without notice. For the latest Sonance product specification information visit our website: www.sonance.com

SONANCE • 212 Avenida Fabricante • San Clemente, CA 92672-7531 USA • (800) 582-7777 or (949) 492-7777 FAX: (949) 361-5151 • Technical Support: (800) 582-0772

www.sonance.com