



Dear Nuance Customer:

I'm happy to have this opportunity to talk to you directly. It gives me a chance to update you on what's current at Nuance in terms of product development and communication.

The people of Nuance Audio love music, and are fascinated with the art of reproducing it accurately. We long-ago decided to make our living developing leading products in an industry that we love. In turn, we share a commitment to improving our customers' musical experiences, and to make a positive difference in their lives.

We want to make sure that you get the maximum enjoyment from your Nuance products. This insert is intended to help you connect and position your speakers so they can deliver the best sound possible. However, it can't cover every room or system setup problem. So, if after reading you still have some questions or specific setup concerns, please contact your local dealer, or feel free to contact me directly at the telephone or fax numbers below.

Please take the time to setup your speakers carefully. A few moments invested now will return a lifetime of enjoyment.

On behalf of all my friends that I have the great pleasure to work with.

Yours truly,

George A.F. Baker
Chief Executive Officer

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Setup and Operating Suggestions for Nuance Powered Subwoofers.

You have just purchased a remarkable subwoofer, and to get the most out of it, it's important to take a few moments to read and review the following information.

Setting up your Nuance Subwoofer is very straightforward, but please follow the steps below to ensure that your subwoofer is set up correctly. You will be listening to your enhanced loudspeaker system in a few minutes.

Nuance powered Subwoofers produce a strong magnetic field. Do not place within 40" (1 metre) of televisions screens, computer equipment or magnetic media (disks).

There are no user-serviceable parts inside your Nuance Subwoofer. To protect against the risk of electrical shock, do not remove the amplifier from the cabinet and do not use near bathtubs, sinks, swimming pools, in wet basements, rain or other sources of moisture. If service is required, please refer to you authorized Nuance retailer or call Nuance directly at (905) 305-8438.

Nuance Subwoofers have a built-in amplifier and must have adequate ventilation for cooling purposes. Do not place near heat outlets such as furnace registers, space heaters or other sources of heat.

TO PREVENT ELECTRICAL SHOCK, MATCH THE WIDE BLADE OF PLUG TO WIDE SLOT OF ELECTRICAL SOCKET AND FULLY INSERT.

The lightning flash with arrowhead symbol within an equilateral triangle is to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons. The exclamation point within an equilateral triangle is to alert the user to the presence of important operating maintenance instructions in the literature accompanying the product

Before Playing.

Allow your Nuance subwoofer to warm to room temperature if it has recently been exposed to cold temperatures. The special rubber compound used in the woofer surround stiffens at low temperatures, which will reduce performance and may cause damage.

Room acoustics and Subwoofer placement.

The frequency response and output level of your new subwoofer are largely affected by placement in your listening room. Typically, your subwoofer will play louder, but bass will not be as tight or fast in room corners, and not as loud but with more defined, tighter bass further out in the room. However the placement of your subwoofer will not effect stereo imaging as low frequency sound is largely non-directional.

If your listening room is unusually large, and you are using a pair of subwoofers in stereo, you may prefer to place each subwoofer adjacent to the main speaker of the same channel.

Before you connect.

Please inspect your Nuance subwoofer as you remove it from the carton to verify that you have received it in good condition. (Remember to keep the packing material, the carton, and this Owner's Manual for future use if needed.)

Installation.

BE SURE TO TURN OFF ALL THE POWER IN YOUR STEREO BEFORE PROCEEDING WITH THE INSTALLATION OF YOUR NEW SUBWOOFER.

Depending on your current system, your Nuance subwoofer may be installed either by using High Level or Low Level inputs. The High Level inputs are hooked up to the speaker terminals on your receiver/amplifier keeping polarity correct while the Low Level inputs are hooked up to the pre-out jack, if available, on your receiver/pre-amplifier.

Step-by-Step Procedure.

Turn all of your audio equipment OFF.

Determine which method of connection, High or Low Level you wish to use to hookup your subwoofer to your receiver/amplifier.

Low Level Input Method:

PLUG IN YOUR SUBWOOFER TO AN A/C OUTLET AFTER ALL OF YOUR CONNECTIONS HAVE BEEN COMPLETED.

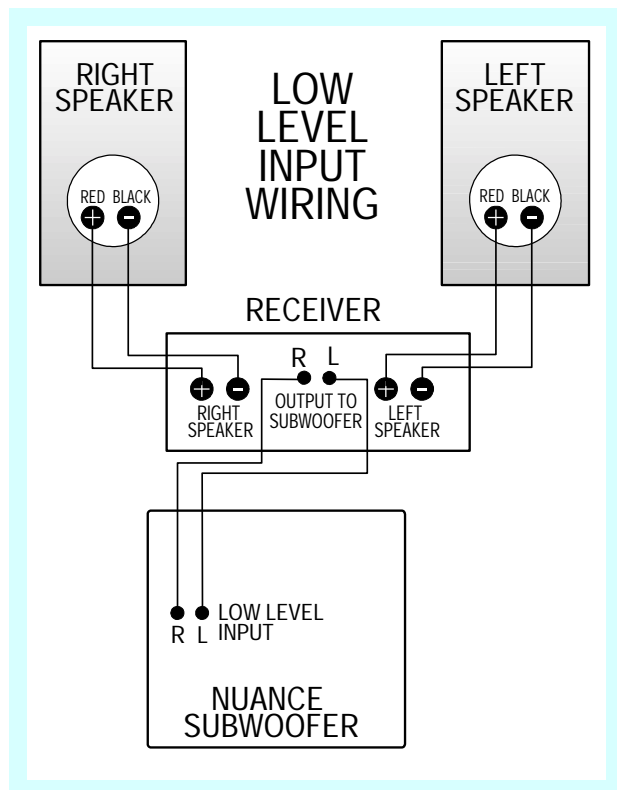
This is the preferred method of installation if your receiver has a subwoofer output or a pre-amp out jack. All cables connected to low level inputs should be standard RCA to RCA shielded interconnects.

With shielded interconnects, you're free to position your Nuance subwoofer anywhere in the room, without degrading the signal from the receiver/amplifier.

You will not be using the "High Level Outputs to Speaker" connectors on the Nuance subwoofer panel for this set up option.

Connect your main speakers to your receiver/amplifier in the normal way described in your receiver/amplifier manual.

Using a shielded RCA interconnect, connect the subwoofer output from your receiver/amplifier to the RIGHT (RED) channel input of your subwoofer. If you have a left and right subwoofer output from your receiver/amplifier you should connect both. For single outputs, you may use a "Y" connector, but it is not necessary.



High Level Input Method: (not with N500 amp)

Be sure that you have adequate speaker wire (in equal lengths). For the High Level Input method of connection you'll need wire sufficient in length to go from the receiver/amplifier to the subwoofer and then to the speakers. Allow some extra in case you wish to move your main speakers or subwoofer.

Use no less than 16 gauge wire (about the same thickness as lamp cord). If you require lengths in excess of 20 feet (6m), please refer to your Nuance dealer for the appropriate wire.

Expose 3/4" (20 mm) of wire at each end. (Note that one lead is colored or otherwise marked to allow for proper phasing). Twist the strands tightly together.

After connecting, tighten each terminal securely so that they won't loosen during use.

Connect your main speakers to your Nuance subwoofer panel while keeping the correct polarity, connecting the RED terminal (+) to RED terminal (+) and BLACK terminal (-) to BLACK terminal (-).

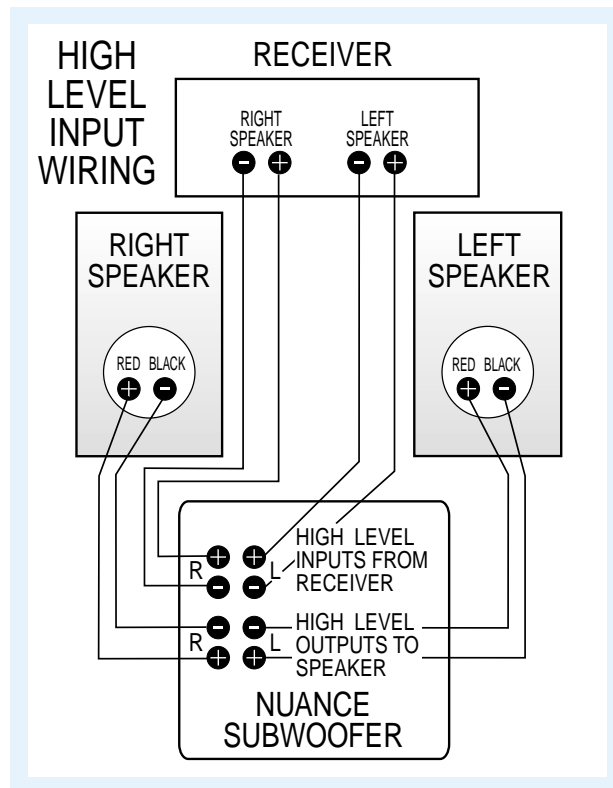
Now connect your amplifier/receiver speaker outputs to

the Nuance subwoofer panel connectors marked "High Level Inputs from receiver" while keeping the correct polarity connecting the RED terminal (+) to Red terminal (+) and BLACK terminal (-) to BLACK (-).

This hookup method will serve to increase the dynamic range of your main/satellite speakers especially if they are smaller "bookshelf" or "compact" models. It will also lower distortion by reducing the low frequencies handled by your main speakers.

Finally, the stereo image may also be enhanced because you will reduce the interference between the bass from your main/satellite speakers and the bass from your subwoofer.

**IMPORTANT:
THE AMPLIFIER OF
YOUR NUANCE
SUBWOOFER
POWERS ONLY
YOUR SUBWOOFER.
YOUR MAIN
SPEAKERS WILL
STILL BE POWERED
BY YOUR AMPLIFIER
OR RECEIVER,
REGARDLESS OF THE
CHOSEN
CONNECTION
METHOD.**



Operating Adjustments.

Now that all of the connections have been completed, assume your normal listening position and have another person perform the following adjustments:

1. Turn your Nuance Subwoofer volume and crossover controls to their middle positions (in the center of the dial).
2. Set the loudness, bass and treble controls on your main amplifier/receiver to the flat or neutral position
3. Play a familiar CD, record, or video soundtrack that has substantial low frequency content.
4. Slowly rotate the volume level control clockwise to achieve the correct balance between the extreme low frequencies of your subwoofer and the midrange and treble signals of your main/satellite speakers. Your Subwoofer volume control is designed to control the output balance between your subwoofer and your main/satellite speakers and *should not* be used as a substitute for the bass or loudness controls on your amplifier /receiver.
5. Rotate the crossover frequency adjustment control to determine when bass becomes "boomy", or contains too much mid-bass, indicating that you have gone to far. Reset the control to a lower frequency position for the best balance point.
6. You may wish to experiment with various room positions for your subwoofer or have a friend switch the *phase control* on the Nuance subwoofer panel (*not available on S-100*) while you listen from your favorite seating position. Choose the switch and/or room position that delivers the best sounding bass.

IMPORTANT: IF THE BASS BECOMES "BOOMY" OR "RASPY", OR IF POPPING NOISES OCCUR, REDUCE THE VOLUME TO AVOID DAMAGE

How to adjust for the smoothest integration between your subwoofer and main/satellite speakers:

Play music with male vocal content at the level you normally prefer. Adjust the crossover control until the vocals become smooth and natural sounding. If the sound is heavy or chesty, reduce the volume control level on your Nuance subwoofer panel until the balance appears to be correct. If the voices are too thin and sharp sounding then increase your volume control (on the subwoofer panel) , or change the crossover frequency, until the balance improves.

Very accurate voice articulation can be achieved along with great bass extension and output if the satellite speakers are connected through the passive crossover. This connection is highly recommended, particularly when using the low level inputs. If more bass is desired, slowly advance the bass control on your main amplifier or receiver.

The added volume of available bass from your Nuance subwoofer will impress you, and you may be tempted to leave the setting fairly high. You will soon discover that you prefer a setting that allows the bass to "blend" naturally with your main speakers. Different placements in your room will change the subwoofer's output and/or ability to blend naturally with your main/satellite speakers. Feel free to experiment.

The recommended placement for the most natural sound with the highest articulation potential is at least 2 feet from a corner, 1-3 inches from the wall, and in line with your front main/satellite speakers.

TO PREVENT ELECTRICAL SHOCK, DO NOT PLUG YOUR SUBWOOFER INTO AN EXTENSION CORD OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED.

Safety Procedures and Precautions.

Ensure that you connect your subwoofer *only* to the type of power supply intended on the amplifier faceplate, and ensure that the power cord cannot be walked on or otherwise damaged.

Ensure that objects or liquids are not allowed to penetrate the enclosure. Your subwoofer is finished in a durable vinyl and from time to time should be gently wiped clean with a damp cloth to remove dust or stains.

**PLEASE
READ AND FOLLOW
THESE SAFETY
PRECAUTIONS TO
AVOID ANY SAFETY
PROBLEMS WHICH
COULD BE
CAUSED BY INCOR-
RECT
USE.**

1. *Read Instructions* - All the safety and operating instructions should be carefully read before the product is operated.

2. *Follow Instructions* - All operating and usage instructions should be followed.

3. *Retain Instructions* - These safety and operating instructions should be retained for future reference

4. *Heed Warnings* - All warnings in the product and in the operating instructions should be adhered to

5. *Attachments* - Do not use attachments not recommended by the manufacturer as they may create hazards.

6. *Water and Moisture* - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.

7. *Accessories* - Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall causing serious injury to a child or adult, and serious damage to the product.

8. *Heat/Ventilation* - slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of this product and prevent it from overheating, these openings must not be blocked or covered. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. The product should be situated away from heat sources such as, radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

9. *Power Sources* - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company.

10. *Ground or polarization* - This product may be equipped with a polarized alternating current line plug (*a plug having one blade wider than the other*). This plug will fit into the power outlet only one way. This is a safety feature. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet.

11. *Lightning* - For added protection during a lightning storm, or when it is left unattended and unused for long periods of time, unplug your subwoofer from the wall outlet. This will prevent damage to the product due to lightning strikes or power-line surges.

12. *Powercord protection* - Power supply cords should be routed so that they are not likely to be walked on or be pinched by items placed upon or against them, paying particular attention to cords at the plugs, convenience receptacles, and at the point where they exit the product.

13. *Overloading* - Do not overload outlets, extension cords, or integral convenience receptacles as this can result in the risk of fire or electric shock.

14. *Objects and Liquid Entry* - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill liquid of any kind on the product. Cleaning - unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp (not wet) cloth for cleaning.

15. *Servicing* - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all service to qualified service personal.

16. *Damage Requiring Service* - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

I) if the power supply cord or plug is damaged.

II) if liquid has been spilled, or objects have fallen into the product.

III) if the product has been exposed to rain or water.

IV) if the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

V) if the products been dropped or damaged in any way.

VI) if the product exhibits a distinct change in performance despite verifying that all system connections are correct.

17. *Replacement Parts* - If replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or have the same characteristic as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

18. *Safety Check* - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

Nuance Record of Purchase.

**PLEASE
COMPLETE AND
MAIL YOUR WAR-
RANTY CARD
ENCLOSED WITH
THIS PRODUCT.**

While you have this guide and the information handy, please record and save the following for your future reference.

Thank you.

INFORMATION NEEDED FOR SERVICE.

MODEL

SERIAL NO.

DEALER NAME

STORE LOCATION

TELEPHONE NO.

DATE PURCHASED

NUANCE SUBWOOFER SPECIFICATIONS

(common for all models, except as noted.)

System Type:	Compression Balanced Design, Ported Enclosure.
Amplifier Type:	Discrete mosfet output stage, Class AB operation, Low-noise J-Fet op-amps, Thermally compensated bias network, Digital ready, Driver compensated EQ circuitry, Automatic on/off once activated.
Rated Power:	S-100: 100 Watts N-100: 100 Watts N-200: 200 Watts N-500 500 Watts
Low Pass Crossover:	Precision Variable Electronic Crossover
High Pass Crossover:	Passive Filter, 120 Hz, 18 dB/octave
T.H.D.:	Less than 0.1% at rated power
Inputs:	Line/Low Level - mono or stereo RCA Type High Level - Stereo speaker binding posts
Input Impedance:	10K Ohms (low level), 390 Ohms (high level)
Input Sensitivity:	0.3V RMS (low level)
Input Sensitivity:	25 Watts @ 8 Ohms (14V RMS) (high level)
Maximum Input:	10V RMS (low level)
Maximum Input:	100 Watts / Channel @ 8 Ohms (high level)
Protection:	Intelligent overdrive protection circuit, Internal Fuse
Power:	120V AC 60 Hz 260 VA Where required: 230V-50/60~ Internal Fuse

Specifications are subject to change.