

# EARTHQUAKE EARTHQUAKE

Audio Product

*Simply  
The  
Most  
Amazing  
Subwoofer  
I've  
Ever  
Tested.*

*There  
Might  
Be  
Better  
Subwoofers  
On  
The  
Planet,  
But  
I Haven't  
Heard  
Them.*

*For  
The  
Ultimate  
In  
Gut  
Wrenching  
Bass.*

**SUB100 & SUB120  
Down Firing  
Powered  
Subwoofers**

**Operation  
Manual  
&  
Technical  
Guide**



**Nova**  
Power From The Heavens

A Home Audio Division

Of Earthquake Sound Corporation.

[www.earthquakesound.com](http://www.earthquakesound.com)

## On A Personal Note...

Dear Valued Customer,

Welcome to the eclectic world of Earthquake High Fidelity sound systems; you are about to experience the "S" series subwoofer/s. This system is designed to dramatically enhance your enjoyment of music and films at home, by adding power and impact to low frequency sound effects.

Earthquake Sound Corporation is located in the heart of the Silicon Valley. It specializes in manufacturing high end Home and Car audio products ranging from the smallest driver to the loudest subwoofer system. In its dedication to excellence, Earthquake has maintained extensive programs in research and development to provide you with the highest quality audio products.

This owners manual is designed to better acquaint you with the Kompessor subwoofer system, and to guide you through the phases of system design and application. It is imperative that you read this manual in its entirety. EARTHQUAKE technicians and staff are looking forward to answer any questions you might have, please call (1-800-576-7944).



*Joseph Jacob Sahyoun*

## Safe & Proper Handling Of Your Subwoofer.

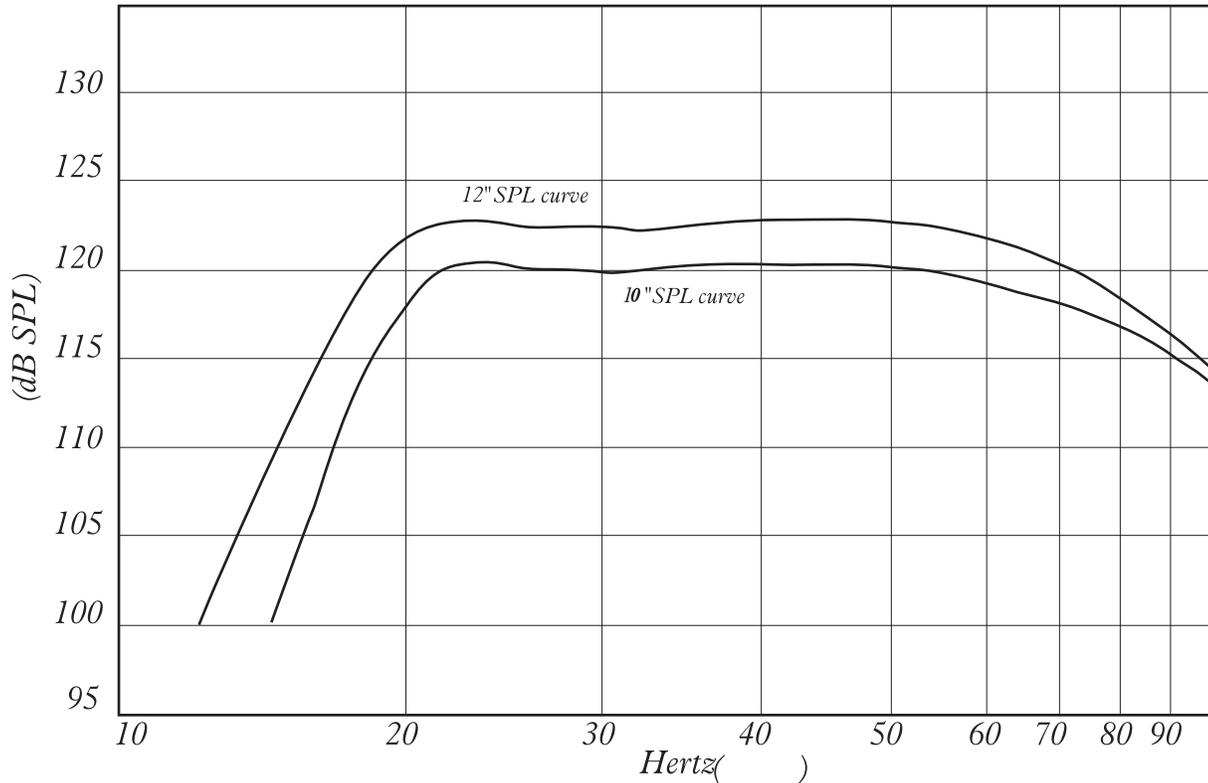
The "S" subwoofer system weighs over 40 Lbs. It is considerably heavy for an average person to carry or maneuver. To prevent injuries, and eliminate any possible damage to your subwoofer, we encourage you to employ the help of a friend when unpacking the unit; further we suggest the following:

- #1. Always wear a back support belt when carrying / lifting the subwoofer.
- #2. If possible, get someone to help you move the subwoofer around.
- #3. Do not apply pressure or push against the face of the speaker; this will cause irreparable damage to the cone and suspension.
- #4. When carrying the subwoofer, make sure that the speaker is on the other side, away from your chest (eliminating the chance of pushing against the face of the speaker).
- #5. Do not drop the subwoofer, or subject it to sudden shocks. This will damage the external finish and weaken the enclosure, creating air leaks.
- #6. Avoid exposing the subwoofer to moisture. Water will damage the wood structure as well as the amplifier and speakers.
- #7. Cleaning the subwoofer is best done using soft cloth; if needed, use mild detergent with water. Like with any other electrical unit, always unplug the subwoofer before cleaning it.

## Warning: Safe Listening Level.

CAUTION: this subwoofer system is capable of generating high sound pressure levels. You should exercise caution when operating this subwoofer system. Long term exposures to high levels of sound pressure will cause permanent damage to your hearing. Sound pressure levels exceeding 85dB can be dangerous with constant exposure. Set your audio system to a comfortable loudness level. This subwoofer system is designed to generate high levels of low frequencies (110 dB to 128 dB at 15 Hz to 20 Hz) and this will transmit a tremendous amount of vibration into walls, shelves and the structure; thus causing sheet rock flexing, glass and other objects to fall off shelves. Earthquake Sound Corporation does not assume liability for damages resulting from the direct use of the subwoofer, and urges users to play it in moderate levels.

## SUB-100 & SUB-120 Performance.



## Connecting Your Subwoofer

### Low level -RCA- audio input connection:

This is the best way to drive an audio signal into the subwoofer. Today, all signal processors (5.1/6.1 and more advanced ones) come equipped with built-in pre-amplifier outputs (RCA) that include a subwoofer output. Generally, the SUB/OUT is in mono format. As shown in the photos across, connect the SUB/OUT from the processor to the subwoofer using a "Y" connector to feed both RCA inputs of the subwoofer. We strongly recommend that you use the best available RCA connectors and cables. High quality cables are normally triple shielded, and the connectors are gold plated with forceful grasping (refer to Earthquake line of accessories- SI superior Interconnect - at [www.earthquakesound.com](http://www.earthquakesound.com)).



### High level audio input connection:

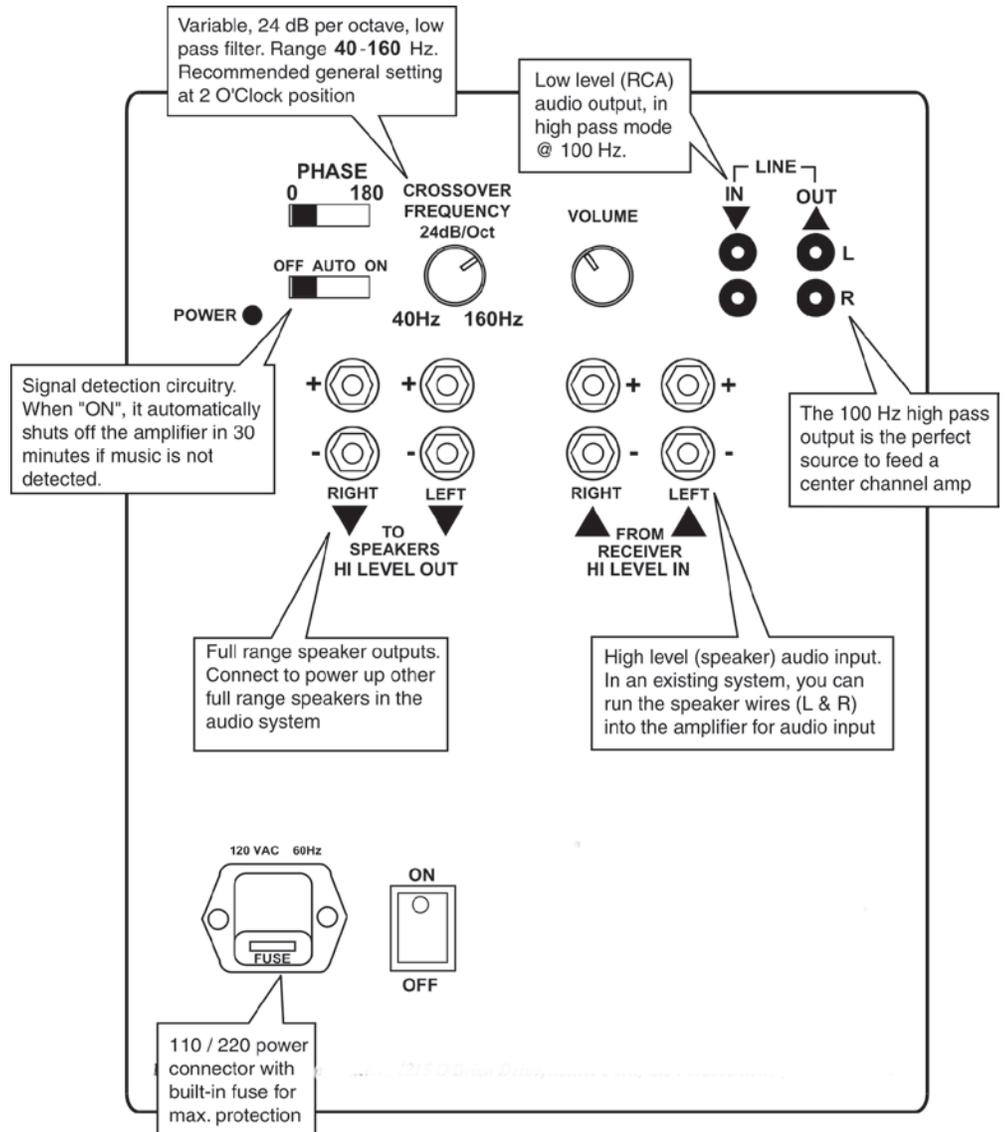
This is the least desired way to drive an audio signal into the subwoofer. Older stereo systems are not equipped with pre-amplifier audio outputs, normally they come with stereo speaker outputs (left & right). Using "banana" plugs, connect the speaker outputs to the corresponding Subwoofer high level inputs (marked "FROM RECEIVER"). In this configuration, the front stereo speakers (towers) can be powered up by connecting them to the subwoofer speaker outputs. The amount of power (watts) driven into the stereo speakers (towers) is identical to the amount of power (watts) fed into the subwoofer from the stereo system (ratio 1:1).



# Built Tough.

## Amplifier:

- \* Rated power output: 200 watts
- \* Dynamic power output: 250 watts
- \* Frequency response: 20Hz to 180Hz
- \* Crossover slope: 12dB / Octave
- \* Typical THD: less than 0.09%
- \* Input sensitivity: 50mV to 2.3 V
- \* Input impedance: 47,000 ohms
- \* Power supply: 115 V / 230 V
- \* Fuse rating: 1 ampere



## SUB-100 Driver:

- \* 10" long excursion subwoofer
- \* 1.5" high temperature voice coil.
- \* Sensitivity: 89 dB 1W/1M
- \* Free air resonance 28Hz

## SUB-100 Enclosure:

- \* Dimensions (WxHxD, legs included): 12" x 16" x 15 1/4"
- \* Weight: 36 Lbs

## SUB-120 Driver:

- \* 12" long excursion subwoofer
- \* 2" high temperature voice coil.
- \* Sensitivity: 88.5 dB 1W/1M
- \* Free air resonance 22Hz

## SUB-120 Enclosure:

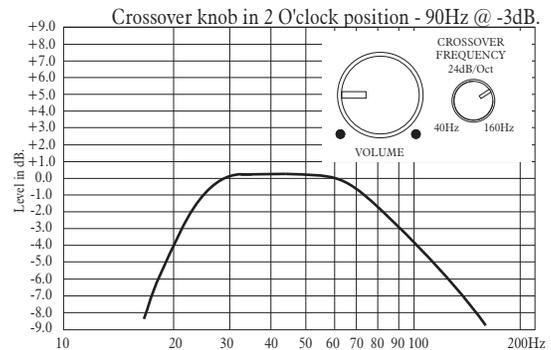
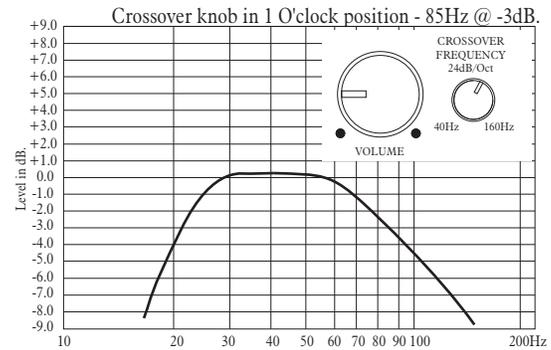
- \* Dimensions (WxHxD, legs included): 14" x 17" x 17"
- \* Weight: 42 Lbs



# Setting Up Your Subwoofer.

This subwoofer is a "true subwoofer, it must never be operated above the subharmonic / harmonic frequency range. The subwoofer frequency response is limited by the built-in crossover (with an upper end of 160 Hz); however, in most applications, the crossover should not be set above 80Hz to 95Hz. It is equipped with a fourth-order Linkwitz-Riley filter which will block vocals from interfering with its performance.

When setting up this subwoofer as a part of a home audio system, users must understand that the subwoofer requires different settings: one for music, and one for playing movie tracks. In order to set up the subwoofer for music, users must recognize the frequency response of their existing speakers (tower & surround sound) and the limitations of these speakers, i.e. the diameter (size) of the speakers and the SPL.



## For music setting:

- 1- Position the subwoofer in the corner of the living room.
- 2- Turn the unit around to expose the controls.
- 3- Turn on your audio system, and switch your surround sound processor to "MUSIC" mode, and equalize the rest of your audio system.
- 4- Connect the subwoofer to the processor, using high quality (triple shielded) RCA cables.
- 5- Set the crossover to 150Hz - maximum position, volume at minimum (0).
- 6- Gradually raise the main volume knob (between the 10 O'clock to 2 O'clock) position, optimizing for the subwoofer performance. That is when the Optical Compression Circuitry works best, allowing the amp maximum output with minimal distortion.
- 7- With the crossover open to 160Hz, you will hear vocals coming out of the subwoofer. Gradually reduce the crossover point until vocals are eliminated (typical crossing point of 80Hz).

To control the volume level of the subwoofer, use the surround sound processor output controls; do not use the main volume knob on the subwoofer (keep it between 10 & 2 O'Clock position). Once you set up the proper mix of low frequencies and subharmonic response, that does not encroach on the rest of the speakers. Now you are ready to set up the subwoofer for home theater use.

## For movie viewing:

This subwoofer can be set up to your liking. There are no rules of thumb to how much bass is required. Often, users like to feel the overwhelming bass, it brings the actions and events closer to real life. When viewing movies, a 10dB gain above music setting is often pleasant, it brings movie viewing close to life.

If you desire to have a crossover setting for music, different than the setting for movie viewing. We suggest to cross the subwoofer at higher frequency setting, and use the processor to control the desired lower crossing point.

## Five (5) Years Limited Warranty.

Earthquake warrants the original purchaser that all Factory Sealed New Audio Products be free from defects in material and workmanship, under normal and proper use, for a period of five (5) years from the date of purchase (as shown on the original bill of sale with serial number affixed/written on it). The five (5) years warranty period is valid only if the product is properly installed by an Earthquake authorized party, and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation. If the product is installed by a non-authorized party, a ninety (90) days warranty period applies.

(A) Five (5) years limited warranty plan coverage guidelines:

- First year: Earthquake pays for labor, parts, and ground freight (only in US mainland, not including Alaska and Hawaii) back to customer.
- Second year: Earthquake pays for labor and parts only, customer must pay freight both ways.
- Third, fourth & fifth year: Earthquake pays labor only. Customer must pay for parts and freight both ways.

(B) Warning:

Products (sent for repair) that are tested by Earthquake technicians and deemed to have no problem, will not be covered by the five (5) years limited warranty. Customer will be charged a minimum of one (1) hour of labor (ongoing rates) plus shipping charges back to customer.

(C) Earthquake agrees to repair or replace - at our option - all such defective products/parts subject to the following provisions:

- Defective products/parts have not been altered or repaired by other than an Earthquake factory approved technician.
- Products/parts are not subjected to negligence, misuse, improper use, or accident, damaged by improper line voltage, used with incompatible products, or have its serial number or any part of it altered, defaced or removed, or have been used in any way that is contrary to Earthquake's written instructions.

(D) Warranty Limitations:

Earthquake warranty does not cover products that have been modified or abused. Including but not limited to the following:

- Damages to speaker cabinet and cabinet finish due to misuse, abuse, or use of improper use of cleaning materials/methods.
- Bent speaker frame, broken speaker connectors, holes in speaker cone, surround & dust cap, burnt speaker voice coil.
- Fading, deterioration of speaker components & finish due to improper exposure to elements.
- Bent amplifier casing, damaged finish on the casing due to abuse, misuse, or improper use of cleaning material.
- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled & returned to Earthquake with a copy of the sales invoice.

(E) Service Request:

To receive product/s service, contact Earthquake service department at (510) 732-1000 and request an RMA number (Return Material Authorization), items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number, and a brief description of the problem you are experiencing with the product. In most cases, our technicians might be able to resolve the problem over the phone, thus eliminating the need to ship the product.

(F) Shipping Instructions:

Product/s must be packaged in its original protective box/s to minimize transport damage. Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse product improperly packed. Original bill of sale must accompany product returned for service. We encourage you to include with the package a written description of the problem. Ship product to: Earthquake Sound Corp. 2727 Mc Cone Avenue, Hayward, CA 94545. Ph (510) 732-1000. You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

(G) Disputes Resolution:

All disputes - between clients and Earthquake Sound Corporation - resulting from the five (5) years limited warranty policy must be resolved according to the laws & regulations of the county of Alameda -California.

# Warranty Registration Card.

Cut along dotted line & return to Earthquake Sound Corporation. 2727 Mc Cone Avenue, Hayward, CA 94545.

Required Information:

First name: \_\_\_\_\_

Last name: \_\_\_\_\_

Street address: \_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone number: (\_\_\_\_\_) \_\_\_\_\_

Model number: \_\_\_\_\_

Date of purchase: \_\_\_\_\_

Purchase price: \_\_\_\_\_

Serial number: \_\_\_\_\_

Dealer name: \_\_\_\_\_

Dealer address: \_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Voluntary information:

Birth date: \_\_\_\_\_ Married: \_\_\_\_\_ Single: \_\_\_\_\_

How did you learn about our product? \_\_\_\_\_

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\_\_\_\_\_

Your Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Place  
Stamp  
Here

To: Earthquake Sound Corporation.  
2727 Mc Cone Avenue,  
Hayward, California 94545.  
Ph (510) 732-1000.

