

# EARTHQUAKE EARTHQUAKE® SOUND

The Sound That Will *Move* You



## Supernova MKVI & MKVII Subwoofers with IQ Digital Feedback Class “J” Amplifiers



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**The Sound That Will Move You**

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**WARNING:** This product is capable of generating high sound pressure levels. You should exercise caution when operating these speakers. 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. Earthquake Sound Corporation does not assume liability for damages resulting from the direct use of Earthquake Sound audio product(s) and urges users to play volume at moderate levels.

## About Earthquake Sound Corporation

For over 28 years, Earthquake Sound has been producing a variety of high quality audio products that have impressed audiophile communities around the world. It all started in 1984 when Joseph Sahyoun, a music freak and Aerospace Engineer unhappy with the existing loud speaker technology and performance, decided to put his advance engineering knowledge to use. He pushed technological boundaries to the limit to create the kind of subwoofer he could live with. Earthquake quickly created a name for itself in the car audio industry and became well known for its powerful subwoofers and amplifiers. In 1997, using his existing expertise in the audio industry, Joseph Sahyoun expanded his company to home audio production.

Earthquake Sound has since evolved into a leader in the home audio industry, producing not only subwoofers and amplifiers but surround speakers and tactile transducers as well. Engineered by audiophiles for audiophiles, Earthquake Sound audio products are meticulously crafted to reproduce each and every single note perfectly, bringing your home theater experience to life. With true dedication and full attention to details, Earthquake Sound engineers continuously develop new and better products to meet customers' needs and go beyond their expectations.

From mobile audio to prosound and home audio, Earthquake Sound has been selected as the winner of many prestigious awards based on sound quality, performance, value and features. CEA and numerous publications have awarded Earthquake Sound with over a dozen design and engineering awards. Additionally, Earthquake Sound has been granted many design patents by the USPO for revolutionary audio designs that have changed the sound of the audio industry.

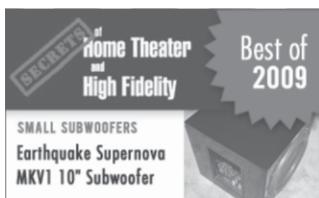
Headquartered in a 60,000 square foot facility in Hayward, California USA, Earthquake Sound currently exports to over 60 countries worldwide. In 2010, Earthquake Sound expanded its export operations by opening a European warehouse in Denmark. This accomplishment was recognized by the US Department of Commerce who honored Earthquake Sound with an Export Achievement award at the 2011 Consumer Electronic Show. Just recently, the US Department of Commerce presented Earthquake Sound with another Export Achievement award for expanding its export operations in China.



Joseph Sahyoun, US Secretary of Commerce Gary Locke, Abraham Sahyoun and Thomas Mygind



US Commercial Officer Sarah Fox and Joseph Sahyoun



# Safety Instructions

## Safety First

This documentation contains general safety, installation, and operating instructions for the Supernova MKVI & MKVII with IQ amplifiers. It is important to read this user's manual before attempting to use this product. Pay particular attention to the safety instructions.

## Symbols Explained:



Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

### CAUTION

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.

### WARNING

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

### NOTE:

Calls attention to information that is essential to highlight.

## Important Safety Instructions:

- 1) Read these instructions in their entirety.
- 2) Store this manual and packaging in a safe place.
- 3) Heed all warnings.
- 4) Follow instructions (do not take shortcuts).
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatuses that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. The grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments and accessories specified by the manufacturer.
- 12) Use only a compatible rack or cart for the final resting position.
- 13) Unplug this apparatus during lightning storm or when unused for a long period of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in a way such as: power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

## Unpacking System Components

- Keep the original carton and packing materials for future shipment or storage.
- Check for any visual signs of damage. If you encounter any concealed damage, consult your Earthquake Sound dealer before proceeding with unit installation.
- Retain the sales receipt as it establishes the duration of the limited warranty and provides information for insurance purposes.

## System Installation Considerations

There are several factors to consider before installing Earthquake Sound's Supernova Subwoofer.

- What are the intended listening zones?
- From where in each zone will the listener prefer to control the system? Where will the subwoofer be located?
- Where will the source equipment be located?

## Connection Tips

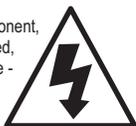
- Keep all power cords away from all signal cables to prevent humming from induced noise.
- Choose reliable signal cable cords (Earthquake Sound also specializes in high performance RCA cables and patches).
- All speaker wires that are ran through the walls should be twisted type to reduce potential hum noise pick-up.
- It is best to use a grounded electrical outlet to power the amplifier. Lack of input ground reference could be unsafe. Consult with your electrical contractor about proper grounding.

## Safe & Proper handling

The Supernova subwoofer is considerably heavy for an average person to carry or maneuver. To prevent injuries and eliminate any possible damage to your Supernova, we encourage you to employ the help of a friend when unpacking the unit. We further suggest the following:

- Always wear a back support belt when carrying/lifting the Supernova.
- If possible, get someone to help you move the Supernova.
- Do not apply pressure or push against the face of the speaker as this will cause irreparable damage to the cone and suspension.

This triangle, which appears on your component, alerts you to the presence of uninsulated, dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This triangle, which appears on your component, alerts you to important operating and maintenance instructions in this accompanying literature.



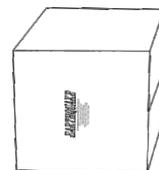
- When carrying the Supernova, make sure that the speakers/grilles are away from your chest, eliminating the chance of pushing against the face of the speaker.
- Do not drop the Supernova or subject it to sudden shocks. This will damage the external finish and weaken the enclosure, creating air leaks.
- Avoid exposing the Supernova to moisture. Water will damage the wood structure as well as the amplifier and speakers.
- Cleaning the Supernova is best done using soft cloth. If needed, use mild detergent with water. Like any other electrical unit, always unplug the unit before cleaning it.

## Unpacking the Supernova

The Supernova is packaged well for safety. We highly suggest having a padded surface and at least two (2) people to safely unpack the subwoofer.

### Step 1:

On a padded surface, carefully place the box in its side to remove the bottom packing tape and staples.



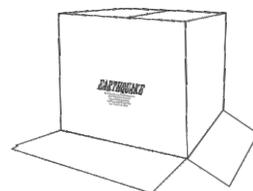
### Step 2:

Without tilting the box too much, tug the bottom flaps outward and keep the protective foam in place.



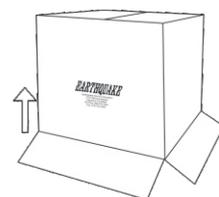
### Step 3:

Gently reposition the box upright.



### Step 4:

Slide the box off, minding the protective foam on the top, bottom and sides of the subwoofer.



## Introduction

Congratulations and thank you for choosing the Earthquake Supernova MKVI/MKVII Subwoofer with IQ digital feedback Class “J” amplifier as a key component of your audiophile system.

The MKVI & MKVII series utilizes the revolutionary and patented Class “J” amplifier circuitry, SLAPS (Symmetrically Loaded Audio Passive System) passive radiator and especially designed high excursion driver. All those components are encased in high quality cabinet specifically designed to reduce internal resonance and diffractions, allowing the Supernova to deliver a crisper bass and more accurate response.

Individually handcrafted in the USA, the Supernova MKVI and MKVII Subwoofer Series meets and exceeds all industry standards or performance and quality. With uncompromised “World Class” performance and superior technology, the Supernova MKVI and MKVII Subwoofer Series epitomizes the state-of-the-art in subwoofer design.

## What Makes a Supernova?

### IQ Digital Class “J” Amplifier



The IQ digital feedback amplifier incorporated the patented Class “J” circuitry which allows the amplifier to produce massive amounts of power with minimal heat production. This patented circuitry delivers high efficiency well exceeding 97% - typical Class AB amplifier runs at about 40 to 50%.

The IQ amplifier offers a room correction technique that surpasses all previous attempts. The intelligent “Back EMF” drive circuit interacts with the subwoofer and memorizes system tuning frequencies as well as system type. The information, which is stored in microprocessor, turns on a preset group delay curve that serves as a correction reference. This information deals only with time correction that moves the peaks and the dips in a room to a flat.

Once that is achieved, the user will then resort to the final correction: EQ the room. The IQ amplifier can either cut or boost the 20Hz, 30Hz and 40Hz frequencies by 6dB to produce a wider range of listening position that is unprecedented for the room.

Note that boosting the response at 20Hz is very demanding for most subwoofers. However, the Supernova MKVI and MKVII series is designed to take a boost at such low frequency.

### Proprietary High Excursion Drivers



The drivers used in the SuperNova are specifically designed for accurate reproduction of bass and sub-bass frequencies. With a massive moving structure, these drivers operated with extremely low distortion and impressive transient

response. Their performance is attributed to a non-conventional motor structure design that integrates components such as double stacked, high-gauge magnets, epoxy coated super spiders, high temperature copper voice coils and over 1” of single layer, thermally pressed poly-ether foam surrounds.

### SLAPS (Symetrically Loaded Audio Passive System)



Earthquake’s own patented SLAPS passive radiator technology dramatically increases the subwoofer’s efficiency and capability for ultra low frequency reproduction. The unique design of the SLAPS employs dual (identical)

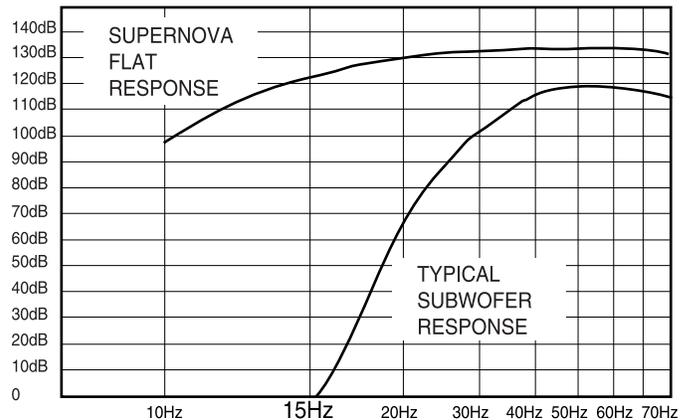
suspensions, allowing the passive driver to move the same amount of air in either direction. Coupled with the active driver, the SLAPS enables the woofer to move more than 4” peak-to-peak and adds an excess of 5dB at 15Hz, more than twice as loud at that frequency.

## THX Standards... One Octave Lower!

The Supernova performance well exceeds THX requirements of 105dB at 30Hz by far.

In flat more, the Supernova achieves 123dB at 30Hz and reaches upwards of 128dB when the bass boost from an audio processor (source) is used. Better yet, the Supernova is capable of producing 108dB at 15Hz and near 100dB at 10Hz. Keep in mind that typical subwoofer systems tend to fail in producing frequencies below the 20Hz mark.

The Supernova MKVI & MKVII series delivers an impressive amount of features aimed at fulfilling the promise of ground-shaking bass, as suggested by its name.



## Independent Test Report

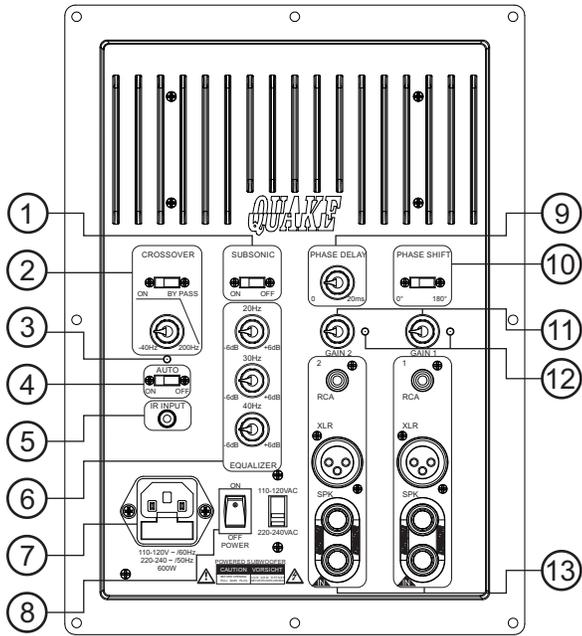
	MODEL	DRIVER	dB@40Hz	dB@35Hz	dB@30Hz	dB@25Hz	dB@20Hz	dB@18Hz
EARTHQUAKE	MKII-15	15"	117	117	116	115	102	98
B & W	4000-ASW	15"	115	115	115	114	102	N/A
BAG END	S-18E	18"	110	112	110	108	100	N/A
TRIAD	PLATINUM	18"	N/A	110	N/A	106	92	90
VELODYNE	F-1800R	18"	112	112	113	110	98	N/A
ENERGY	ES-18XL	18"	114	112	112	106	98	90
PARADIGM	SERVO-15	15"	112	110	110	106	96	90
BAG END	INFRA-18	18"	108	108	106	102	90	N/A
EARTHQUAKE	MKII-12	12"	113	113	113	106	98	
M & K	MX-5000	12"	N/A	110	N/A	106	92	
VELODYNE	HGS-12	12"	106	105	108	102	90	
LINN	AV5150	12"	N/A	110	N/A	104	N/A	

dB measurements as tested by WIDESCREEN REVIEW , Buyer's Guide, 2000

# IQ Supernova Amplifier

The IQ amplifier offers many unique features and technologies that allow it to deliver uncompromised performance, even under extreme conditions. The next few pages will describe in details the IQ built-in functions and their applications.

We strongly recommend that you review these pages and feel free to contact us if you have any questions.



- ① **SUBSONIC FILTER**  
Set at 25Hz with a 12dB slope, the subsonic filter is designed to protect the sub from very low frequencies that might be harmful. When ON, it prevents frequencies 25Hz and below from going into the amplifier.
- ② **CROSSOVER SWITCH**  
When ON, the low-pass crossover with 24dB/octave slope is activated to help precisely control the frequencies going into the amplifier, i.e. subwoofer. The crossover point can be set between 40Hz and 200Hz but we recommend setting them between 60Hz - 80Hz (1 o'clock position). You can also deactivate the low-pass crossover by setting the switch to BY PASS.
- ③ **LED POWER/SIGNAL INDICATOR**  
This LED indicator reflect the main power status of the amplifier as well as the state of the amplifier (whether the AUTO Sensing is on/off and whether signal is being fed to the amplifier). Note that this LED will only light up when the main power switch is in the ON position.

Signal Sensing	Is there signal?	LED Color
ON	Yes	Green
	No	Green
AUTO	Yes	Green
	No	Red
OFF	Yes	Red
	No	Red

- ④ **AUTO SIGNAL SENSING**  
This is a 3-way switch. When ON, the amplifier will remain on regardless of signal presence. When set to AUTO, the amplifier will only turn on when audio signal is detected. Additionally, the amplifier will go to sleep/stand-by if it does not detect any signal after 20 minutes. When set to OFF, the amp will remain off regardless of signal presence. Note that the MAIN POWER SWITCH must be ON for this feature to work.
- ⑤ **IR INPUT**  
Simply plug in the remote eye provided in the IR INPUT. Once plugged in, place the remote eye anywhere in the room where it is convenient for the user to control the amplifier using the included remote control.
- ⑥ **EQUALIZER/ROOM CORRECTION**  
Used to cut or boost the 20Hz, 30Hz and 40Hz frequencies by 6dB to assist in producing a wider range of listening preferences that are difficult to achieve without equalization. By fine tuning the frequencies, user can create a more well-balanced system response that match their specific audio needs and preference.
- ⑦ **AC POWER WITH BUILT-IN FUSE**  
Always replace the protection fuse with a similar value fuse. For your convenience, extra fuses are provided in the compartment located right below the plug. To access these extra fuses, simply unplug the power cable from the subwoofer, place a flat-head screw driver in the small notch and pry it open.
- ⑧ **MAIN POWER SWITCH**  
When switched to OFF, the amplifier will remain off as there is no AC power being fed into it. We highly recommend keeping this switch OFF when the amplifier is not being used for an extended period of time.
- ⑨ **PHASE DELAY**  
Ranges from 0 - 20ms (milli-second), this variable phase delay allows user to adjust the subwoofer's response so the subwoofer can be synchronized with the rest of the speakers.

### ⑩ PHASE SHIFT

This 0 - 180° phase shift switch allows the user to flip the Supernova 180 degrees out of phase if the sub is deemed to be out of phase with the rest of the speakers. When set properly and with the phase delay, out-of-phase side effects such as loss of sound pressure and reduction in overall system performance can be eliminated.

### ⑪ GAIN CONTROLS

These variable gain controls are infinite controls that do not have “starting” and “ending” position. Each click of the knob equals to 1dB adjustment. One click clockwise increases the gain by 1dB while one click counter-clockwise decreases by 1dB. Note that each input has its own independent digital gain control: GAIN 1 & GAIN 2. Both of those controls are internally mixed so they feed one combined signal into the amplifier. More on this feature can be found on the “Gain Setting Your Subwoofer(s) section on page 12.

### ⑫

#### CLIPPING LED INDICATORS

These yellow LEDs only light up when the input is clipped. Simply rotate the corresponding gain control knob three (3) clicks counter-clockwise to unclip the input and create a 3dB headroom (play).

### ⑬

#### INPUT SELECTIONS

There are two sets of inputs, each accepts three (3) input types: RCA, XLR and SPK (speaker level).

INPUT 1 is a dedicated stereo signal input. For example, if the system has 2 subwoofers, feed the left channel to the INPUT 1 of the left subwoofer and feed the right channel to the INPUT 1 of the right subwoofer.

INPUT 2 is a dedicated LFE input, designed to accept low frequency/low pass (already crossed) signal from the processor or receiver.

## Placing Your Subwoofer(s)

**Y**ou often hear the term “subwoofers are non-directional.” This is not true. It is harder to choose subwoofer placement when low frequencies are crossed. The wider the room, the more directional the subwoofer. The easiest solution is to use two (2) subwoofers, feed a mono signal to both and place them in the front, one of the left and another on the right.

While having two (2) subs is better than one, the MONO signal that drives those subwoofers keeps them from projecting the three dimensional images in the sub-harmonics. Using two (2) subwoofers allows you to cross the subs up to 150Hz sound quality, imaging and staging. In some applications, you might have small front speakers or planar speakers. The two-front-subwoofer system is an excellent solution to planar speakers’ low frequency response early roll off from 150Hz on down. When placing these subwoofers in a close proximity to the stereo satellite, the subs will enhance low frequency extension. It will be better to have a stereo subwoofer to help in the lower bass notes and their placement.

Suppose you have only one (1) subwoofer in the room and it is placed on the right side of the room. If a bass guitar player was standing on the left side of the stage and played an EE note (42Hz), then the sub will also respond to that from the right side of the room and completely destroy the stage.

To give you a three-dimensional front-end bass that allows you to have a low frequency dynamic stage, the IQ series amplifier used on the Supernova MKVI & MKVII subwoofers was designed with dual input circuits that use buffers to maintain your stereo separation on the processor side, while mixing stereo front signals to produce 3D bass.

On the next page, you will see illustrations showing the three (3) different suggested setups. In each of them, note the breakaway and the image separation represented by the black and gray arrows. The best response is achieved when the subharmonic frequencies are dynamically synchronized with the rest of the audio system, the black and gray arrows are identical



The black arrows represent the subharmonic frequencies.

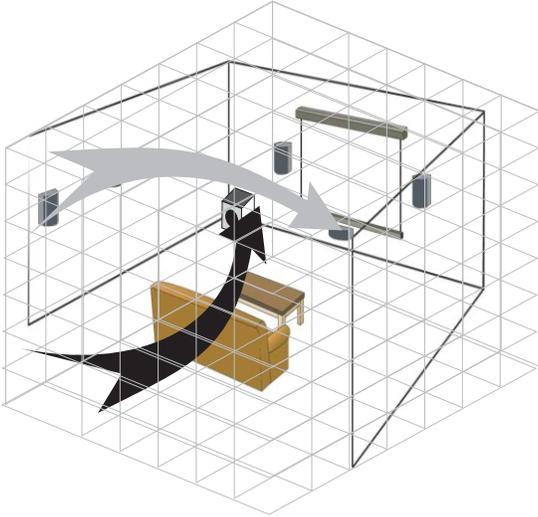


The gray arrows represent the lows, mids and highs as they follow the action.

## Placing Your Subwoofer(s) cont'd

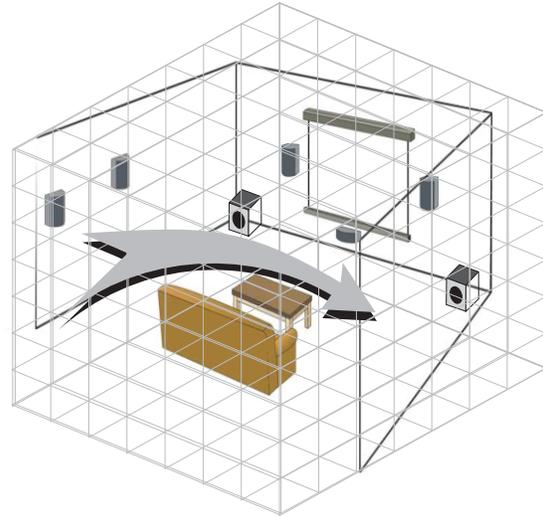
### SINGLE SUBWOOFER SETUP

This is a GOOD setup. The subharmonic frequencies (black arrow) always move towards the sub in the single sub setup while the lows, mids and highs (gray arrow) follow the action.



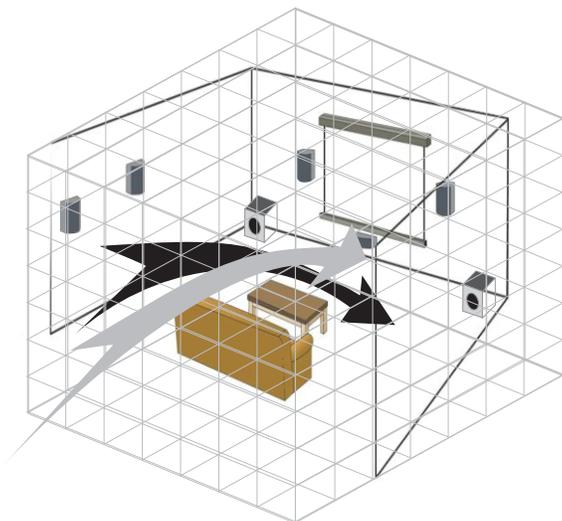
### DUAL SUBWOOFER SETUP WITH STEREO + MONO SIGNALS

This is the BEST setup. Notice how black arrow mimics the gray arrow. This illustrates fully complementary subharmonics to the lows, mids and highs.



### DUAL SUBWOOFER SETUP WITH MONO SIGNAL

This is a BETTER setup. In a dual subwoofer setup, the subharmonic frequencies (black arrow) always move towards the middle of the room while the lows, mids and highs follow the action (gray arrow).



In this setup, the stereo subwoofers keep the subharmonics dynamically synchronized with the rest of the audio system.

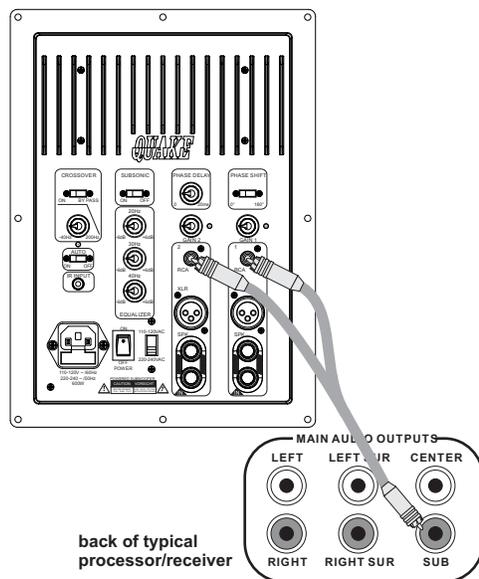
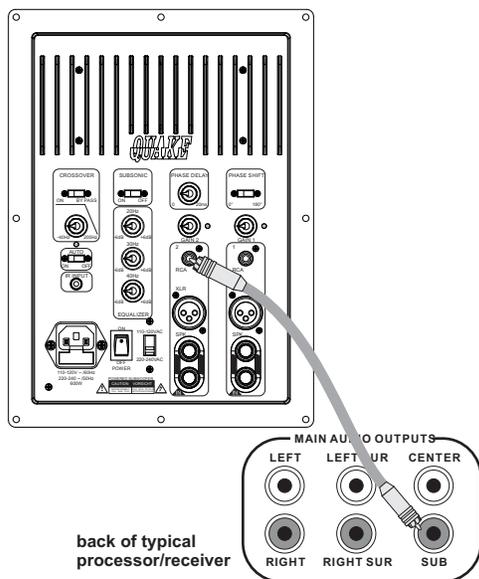
Notice the breakaway and image separation is less in this setup than the single subwoofer setup.

# Connecting Your Subwoofer(s)

## SINGLE SUBWOOFER SETUP

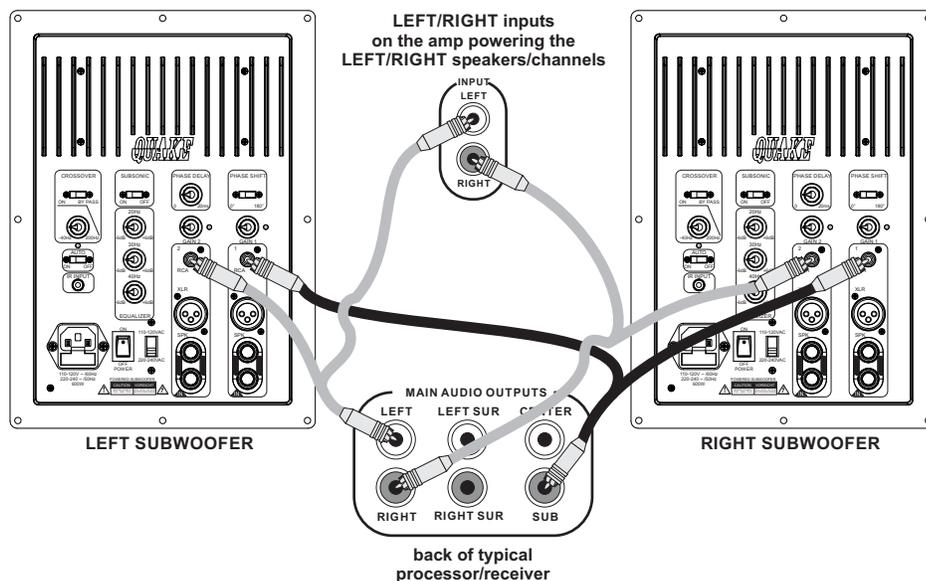
Be reminded that INPUT 2 is a dedicated LFE input designed to accept low frequency / low pass (already crossed) signal from processor or receiver. Therefore, if the processor/receiver has a SUB out, use INPUT 2 of the subwoofer.

Typically one RCA can feed enough signal to drive the IQ amplifier to its full potential. However, in some cases where the signal is too low for the IQ amp to produce its full output, you may use a "Y" connector to increase the amp's sensitivity.



**WARNING** When using only one (1) input, it takes a 250mV signal to fully power the amplifier. When signal is fed to both inputs at the same time, the amplifier required nearly half (1/2) the signal voltage to fully power up.

## DUAL SUBWOOFER STEREO SETUP



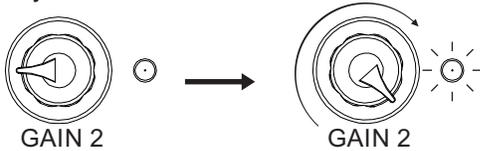
**NOTE:** This same wiring configuration can be duplicated for the XLR inputs. However, we do not recommend mixing input types even though we provide you with three (3) different input types.

## Gain Setting Your Subwoofer(s)

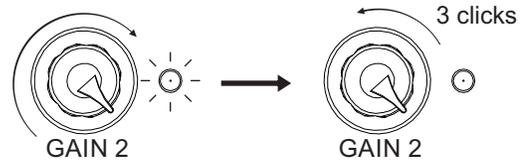
As previously mentioned, these variable gain controls are infinite controls that do not have “starting” and “ending” position. Each click of the knob equals to 1dB adjustment. One click clockwise increases the gain by 1dB while one click counter-clockwise decreases it by 1dB.

To properly set the gain of the amplifier, follow these simple steps:

1. Turn the gain knob clockwise until the corresponding clipping LED indicator light up solid yellow.



2. Turn the gain knob three (3) clicks counter-clockwise to unclip the amplifier. The clipping LED indicator will turn off once the amplifier is un-clipped.



If you need further assistance in setting your gain, please contact our technical support team:

tech@earthquakesound.com

US Toll Free: 800-576-7944

Fax: 510-732-1095

## Room Correcting with Your Subwoofer(s)

The proper room correction process involves correcting the phase and adjusting the equalization. This process requires two (2) people, one to make the adjustments to the amplifier and another at listening spot with a testing microphone or an SPL meter.

Step 1. Place the subwoofer at the preferred location in the room.

Step 2. Have the person holding the testing microphone or SPL meter sit on the theater seat/sofa.

Step 3. Load “White Noise Disc” or 50Hz continuous tone.

Step 4. With the amplifier’s phase delay and shift both set at 0, measure the SPL.

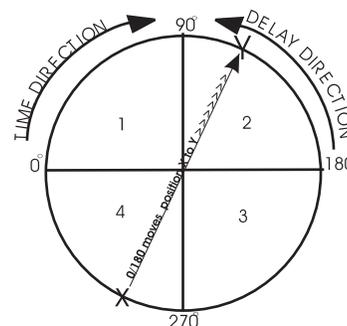
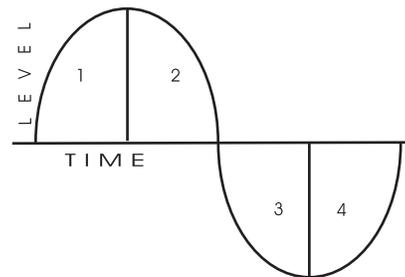
Step 5. Rotate the variable delay until the dB measure peaks (you will know that it has peaked when the measurement begins to go back down). Rotate the knob back to the peak position.

Step 6. Measure the angle of rotation of the phase delay knob in approximate degrees or fractions of a turn.

Step 7. Reset all adjustments to zero (0), flip the phase shift switch to 180° and redo step 4 through 6.

Choose the setting that has the maximum SPL with the minimum phase delay.

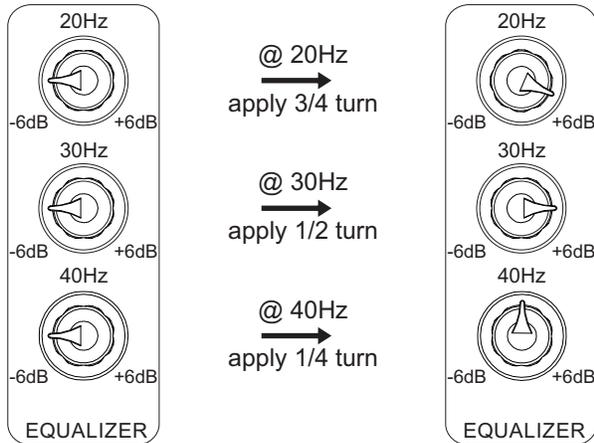
For example, if you need to rotate the phase delay about 1/2 of a turn with the phase shift at 0° while you only need to rotate the delay about 1/4 turn with the phase shift at 180°, then setting the phase at 180° is the best setting.



## Room Correcting with Your Subwoofer(s) cont'd

Now that you have corrected the phase of the subwoofer(s), the next step to room correction is setting the room equalization.

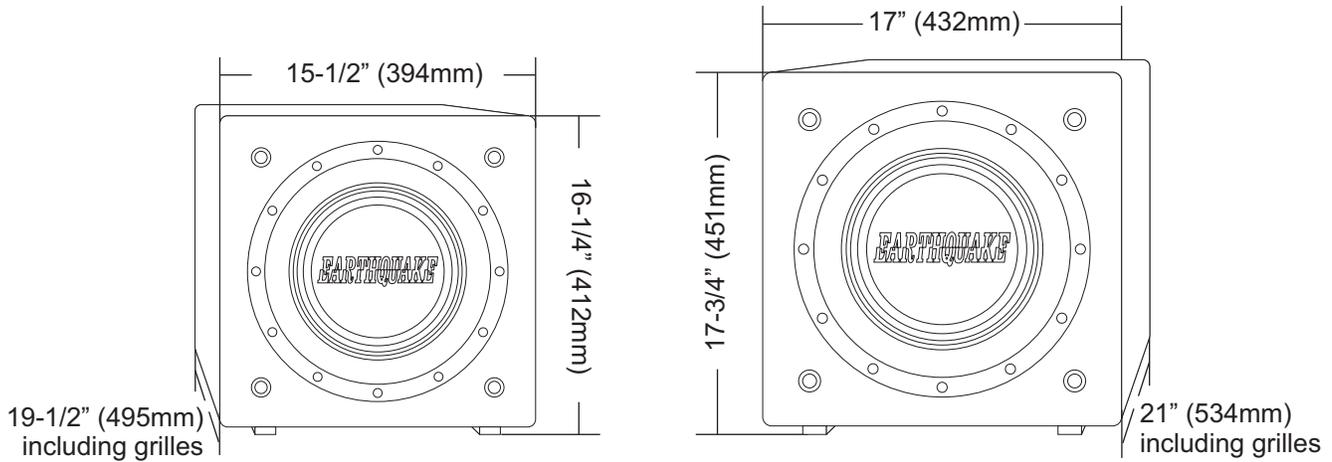
To properly set up the room equalization, you will need a Spectrum Analyzer or the following rule of thumb:



### **WARNING**

Boosting the response at 20Hz is very demanding for most subwoofers. The Supernova MKVI and MKVII series is designed to take a boost at such low frequency. However, if you are using the IQ amplifier to power another subwoofer, please consult with your subwoofer maker to determine if their subwoofer can withstand a boost at such low frequencies.

# Supernova MKVI Series Dimensions and Specifications



## MKVI-12 Black/Piano

1200W Peak (600WRMS)

18 kOhm

15 Hz - 155 Hz

Sealed with Passive Radiator

Black Ash Wood Veneer  
Piano Black

## MKVI-15 Black/Piano

1200W Peak (600WRMS)

18 kOhm

14 Hz - 120 Hz

Sealed with Passive Radiator

Black Ash Wood Veneer  
Piano Black

**Power Handling**

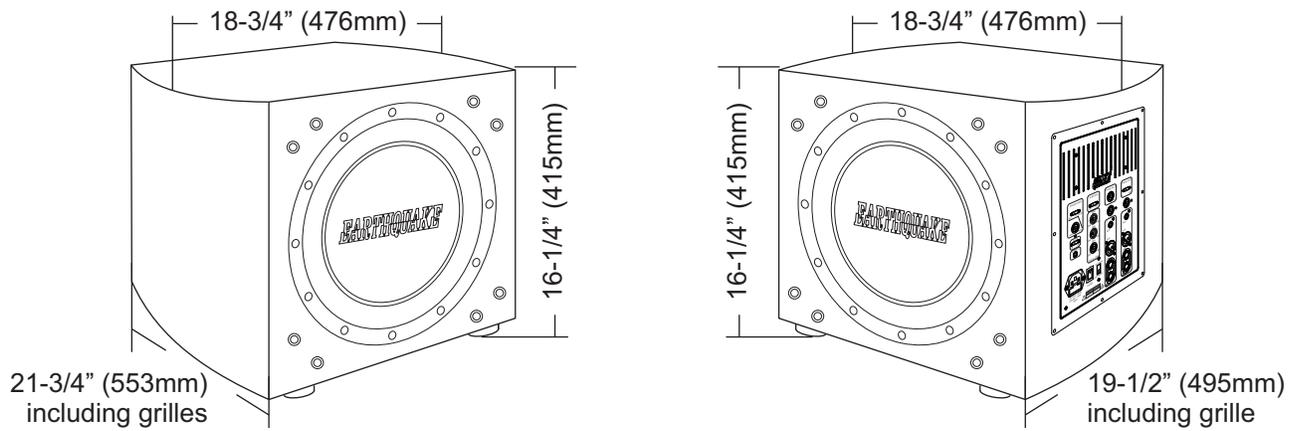
**Input Impedance**

**Frequency Response**

**Enclosure Type**

**Available Finishes**

# Supernova MKVII-12 Series Dimensions and Specifications



## MKVII-12Sealed

1200W Peak (600WRMS)

18 kOhm

15 Hz - 155 Hz

Front Firing

Piano Black

## Power Handling

## Input Impedance

## Frequency Response

## Enclosure Type

## Available Finishes

## MKVII-12P

1200W Peak (600WRMS)

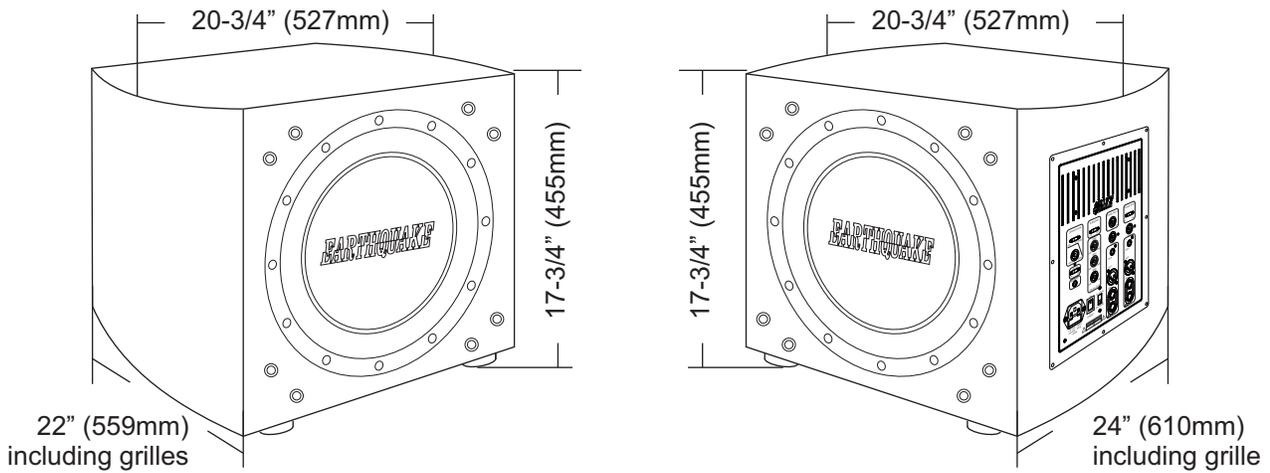
18 kOhm

14 Hz - 155 Hz

Ported with Passive Radiator

Piano Black

# Supernova MKVII-15 Series Dimensions and Specifications



## MKVII-15Sealed

1200W Peak (600WRMS)

18 kOhm

14 Hz - 150 Hz

Front Firing

Piano Black

**Power Handling**

**Input Impedance**

**Frequency Response**

**Enclosure Type**

**Available Finishes**

## MKVII-15P

1200W Peak (600WRMS)

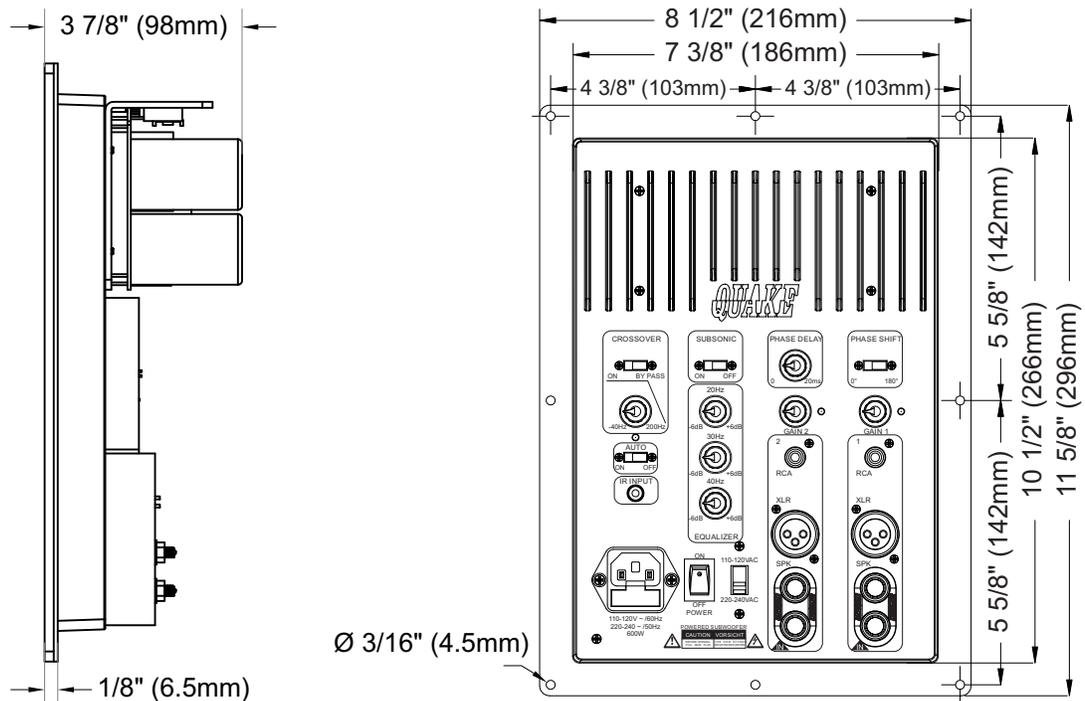
18 kOhm

13 Hz - 150 Hz

Ported with Passive Radiator

Piano Black

# IQ Amplifier Dimensions and Specifications



## IQ600

1 x 700 Watts @ 2-Ohm Mono\*  
 1 x 700 Watts @ 4-Ohm Mono  
 1 x 350 watts @ 8-Ohm Mono

**Power Output**  
 (1% distortion)

20Hz-2kHz **Freq. Response**

50 Volts / microsecond **Slew Rate**

350 W **Power Req.**

110-120VAC~/60Hz (fuse T6.3AL/250 V)  
 220-240VAC~/50Hz (fuse T3.15AL/250 V)

**Fuse Ratings**

## IQ1500

1 x 1500 Watts @ 2-Ohm Mono  
 1 x 1100 Watts @ 4-Ohm Mono  
 1 x 700 Watts @ 8-Ohm Mono

20Hz-2kHz

55 Volts / microsecond

1250 W

110-120VAC~/60Hz (fuse T15AL/250 V)  
 220-240VAC~/50Hz (fuse T8AL/250 V)

**Total Harmonic Distortion**

< 0.08% (1W/4Ohm)

**Signal-to-Noise Ratio**

> 106dB (balanced), 105dB (unbalanced) @ rated power

**Load Impedance**

2 Ohms or greater

**Damping Factor**

> 500

**Input Connections**

XLR / RCA • High-level

**Output Connections**

Binding posts • Locking mechanism

**Protection Circuitry**

Short circuit, open circuit, RF burnout, over temp, turn on/off transient protection, DC protection, limiter circuitry

\* Power output limiter

## 5 Year Warranty Information

**E**arthquake warrants the original purchaser that all Factory Sealed New Audio Products to 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 sales receipt with serial number affixed/written on it).

The five (5) year warranty period is valid only if an authorized Earthquake dealer properly installs the product and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation. If a non-authorized party installs the product, a ninety (90) day warranty period will be applied.

**(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. Shipping to us is not covered).
- **Second, 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(s) will not be covered by the five (5) year limited warranty. Customer will be charged a minimum of one (1) hour of labor (at the ongoing rates) plus shipping charges back to customer.

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

- Defective products/parts have not been altered or repaired by other than an Earthquake factory-approved technicians.
- 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:**

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 improper use of cleaning materials/methods.
- Bent speaker frame, broken speaker connectors, holes in speaker cone, surround & dust cap, burnt speaker voice coil.
- Fading and/or 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 receipt.

**(E) Service Request:**

To receive product 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(es) to minimize transport damage and prevent repackaging cost (at the ongoing rates). Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse improperly packed product. Original bill of sale must accompany product returned to service. We encourage you to include with the package a written description of the problem. Ship product to:

Earthquake Sound Corp.  
2727 McCone Avenue, Hayward, CA 94545.  
Tel: (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) year limited warranty policy must be resolved according to the laws & registration of the county of Alameda California.

## PRODUCT REGISTRATION

This Earthquake product can be registered by returning the Product Registration card attached to this manual. Please also retain sales receipt, which represents proof of purchase.

## Notes

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## For Your Records

Date of Purchase: \_\_\_\_\_

Authorized Dealer/Installer Info:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Serial Number:



**The Sound That Will *Move* You**

Earthquake Sound reserves the right to amend details of the specifications without notice.

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Earthquake Sound Corporation

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