# PADTUOUAKE LARINUUAKE

# Sub-80



150 Watt Self Powered Subwoofer

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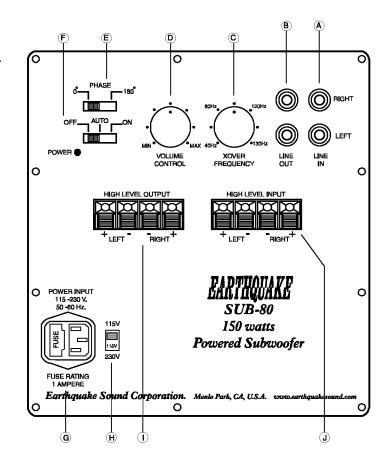
### Dear Customer.

Congratulations on your choice of the SUB-80 self powered subwoofer system, one of Earthquake's newest designs in bass reproduction units.

With integral high-power amplifier - 150 watts, the SUB-80 subwoofer combines tight bass extension with high output levels. Acoustically, it is designed to match the I series bookshelf speakers, and with the addition of the C series center speakers, the full home theater experience can be easily enjoyed (CinePetite Quatre / Cinq).

# Key Connections and Controls:

- A) LINE IN RCA Input jacks, accept up to 1.4 volts of audio input signal (mono and stereo).
- B) LINE OUT RCA High pass filtered RCA output jacks with left and right line output signals. The line out RCA's are not functional when the line in signal (going into the subwoofer) is derived from a subfiltered output of an external processor.
- C) XOVER FILTER The 12dB/Octave variable crossover filter is designed to control the subwoofer cut-off frequency (range from 40Hz to 130Hz).
- D) VOLUME CONTROL Manual adjustment of the sound level of the subwoofer. Always start at MIN position and slowly increase the volume to reach the desired subwoofer level.
- E) PHASE SHIFT 0 to 180 degrees subwoofer phase shift switch.
- F) POWER SWITCH For operating the amplifier in automatic or manual power on. In automatic mode, the SUB-80 will turn off in 15 minutes if no audio signal is detected.
- G) H) POWER INPUT The SUB-80 operates in 115V and 230V environment. A sliding switch located near the power plug allows for both operations.



- I) HIGH LEVEL OUTPUT High pass filtered output terminals designed to power up stereo satellite speakers.
- f) HIGH LEVEL INPUT Clamp style input terminal, accepts high level audio input from the main or front system speakers (up to 10 volts).

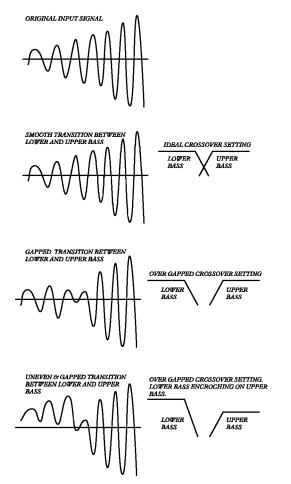
# Listening Room & Subwoofer Positioning:

Subwoofer positioning is integral to the successful application of any surround sound system. It is very important to keep in mind that the proximity of the subwoofer to a wall or a corner contributes to an increase in efficiency (SPL) because of the "mirror effect" also referred to as "corner loading".

It is therefore advisable that you place the SUB-80 near a wall, or preferable in the corner of the room. That will increase the subwoofer effect by 2 to 3 decibels, without raising the volume control of the SUB-80.

# Fine tuning:

The fine tuning process includes creating a smooth transition of music between the subwoofer and the next speaker up: usually a woofer or a midrange. As shown in the graph below; a smooth transition between lower and upper bass is directly relative to the crossover setting and the capability of the next woofer up to reproduce lower frequencies. Keep in mind that vocals extend down to 70Hz, adjust your SUB-80 accordingly.

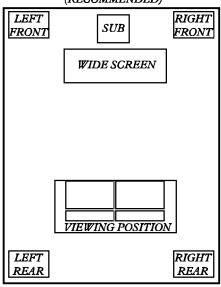


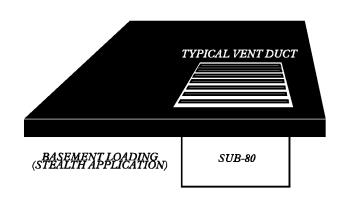
# CORNER LOADING (HIGHLY RECOMMENDED) SUB WIDE SCREEN RIGHT FRONT VIEWING POSITION RIGHT

# CENTERED POSITION (RECOMMENDED)

REAR

REAR







# Operating and Controlling the SUB-80:

- \* Secure all connections before powering up / plugging in the AC cord into the subwoofer.
- \* Connect the input signal to either the RCA line in (A) or the High level input terminal (f); these two input devices can not be used simultaneously, choose the one that best matches the output of your existing audio system.
- \* If needed, connect the RCA line out (B) to another amplifier to drive satellite speakers (front or rear). The RCA line out has a high pass filtered signal at about 70Hz (5dB/Octave cutt-off).
- \* The High level output (I) for satellite speakers is fitted with high pass filter (70Hz). It is only powered when the main or front speaker signals are driven into the High level input (J). These terminals are marked with red and black to indicate the (+) & (-) respectively.
- \* Adjust the subwoofer low pass filter cut-off to near 100Hz at first, slowly bring down the crossing point until you eliminate any vocals from emanating from the subwoofer. An ideal crossing point range from 55 to 70Hz.
- \* In case the SUB-80 becomes out of phase with the satellite speakers, flip the phase switch to correct the problem (maximum bass is only achieved when the sub is in phase with the rest of your speakers).

### Cautions:

- \* Do not place the subwoofer in an environment exposed to dust, excessive moisture, or heat. Direct exposure to sun light deteriorated the subwoofer finish, and may cause the amplifier to overheat.
- \* To prevent electrical shocks, never open the subwoofer cabinet before disconnecting the power cord from the amplifier's main socket.
- \* In the event of a blown fuse, replace it with a similar value. Overfusing voids warranty and will destroy the amplifier.

# Features and specifications:

# Amplifier section:

- \* Rated power output: 100 watts
- \* Dynamic power output: 150 watts
- \* Frequency response: 23Hz to 180Hz
- \* Crossover frequency: 40Hz to 130Hz
- \* Crossover slope: 12dB per Octave
- \* Typical THD: less than 0.09%
- \* Input impedance: 47,000 ohms
- \* Input sensitivity: 50mV to 2.3V
- \* Power supply: 115V/230V(50Hz/60Hz)
- \* Fuse rating: 1ampere

# Speaker section:

- \* 200 watts 8" subwoofer
- \* 1.5" high temperature polymide voice coil
- \* Pressed paper cone
- \* Santoprene surround
- \* 480z high density magnet
- \* 89dB 1w/1m
- \* Free air resonance 38Hz
- \* Ots 0.516

#### Enclosure section:

- \* Dimensions (WxHxD -feet included) 24cm x 34cm x 35cm / 9.5" x 13.5" x 13.75"
- \* Weight 8.5 Kg / 18.7 lbs