# Shinjitsu Audio
# Little Hiro
# Manual

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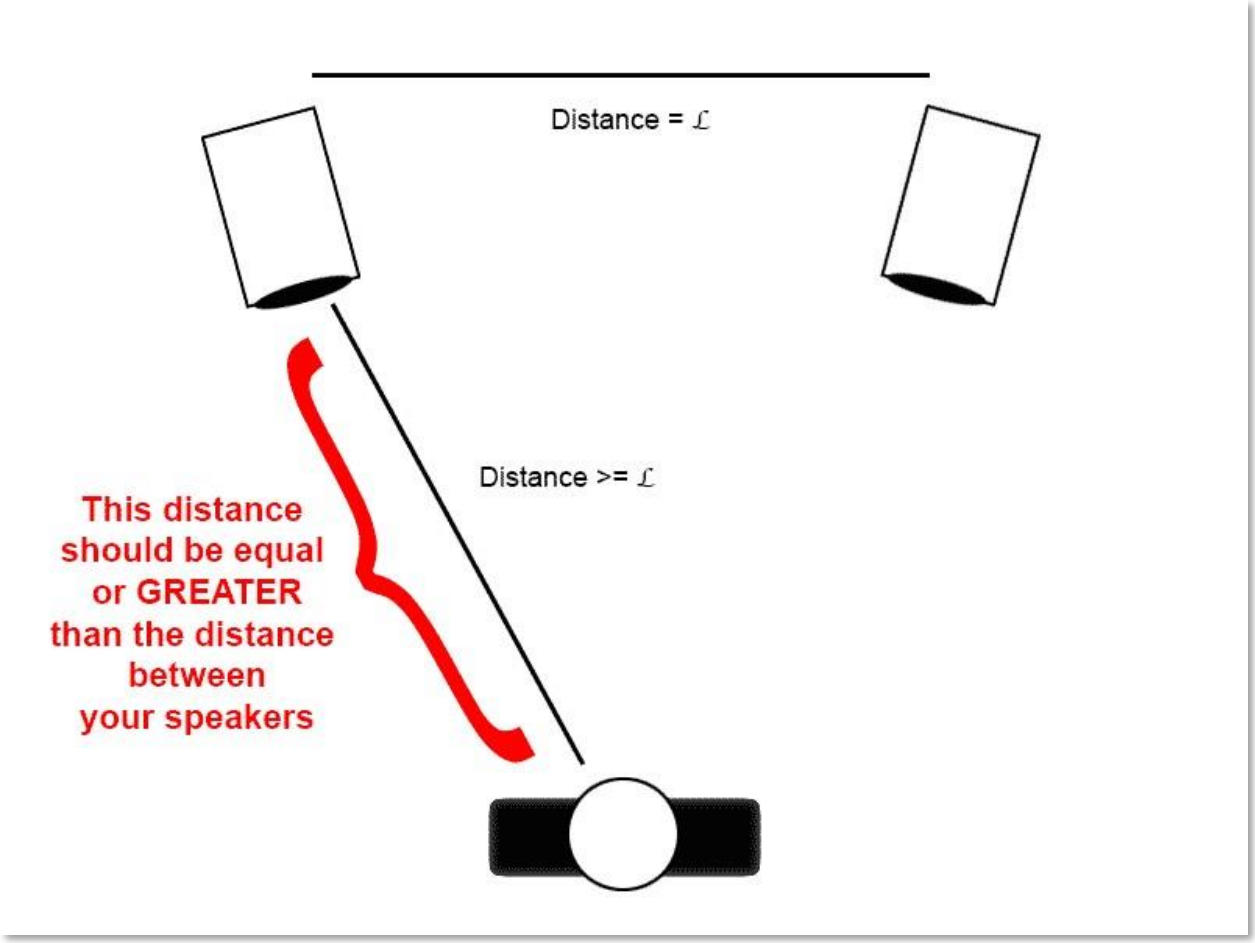
**Placement:**

Speakers should be placed equidistance from side wall, if possible, with at least 5 feet between them and ideally 24 inches or more from wall. Stands od 16 inches are recommended although floor placement tilted back creates deeper bass.

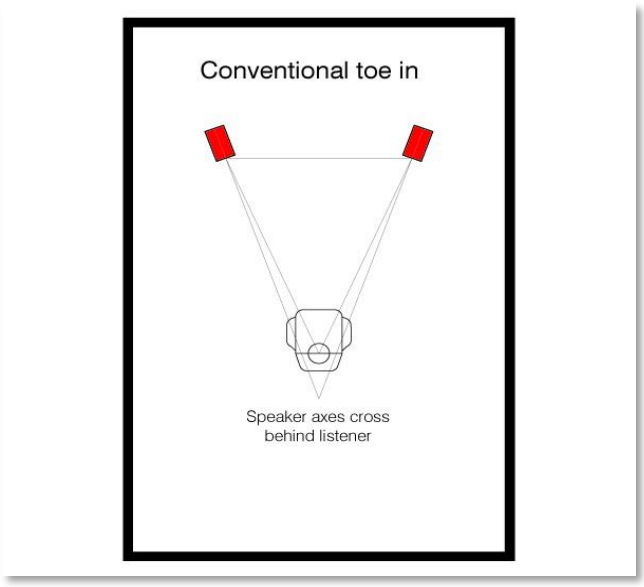
Speaker should toe in approximately 15 degrees or having the main drivers placed just outside your ears.

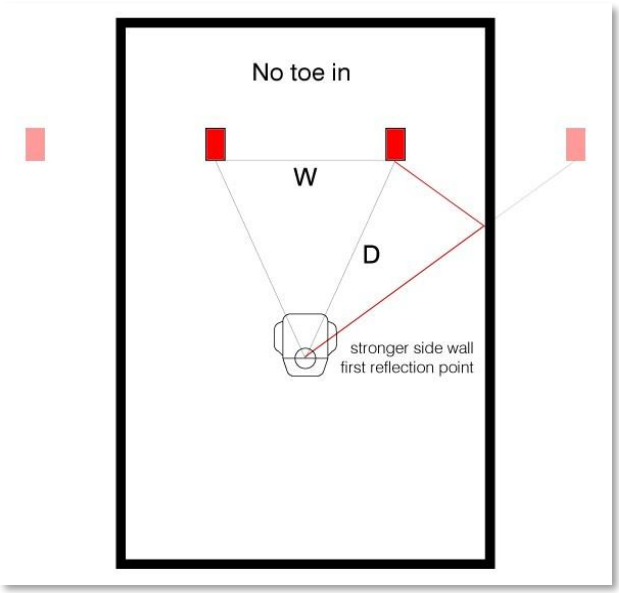



**Room Size:**

The ideal room should be rectangular or square with equal distribution of furniture. Of course, most rooms do not fall into this category so some balance adjustments or wall treatments may be needed. Speakers should be placed at least 2 feet from the back wall to minimize wall reflections and to present a deep soundstage. Bass impact and depth can be adjusted using back wall distances with closer to the back wall maximizing bass output. Bass boominess can be tamed by pulling the speakers farther out into the room. I severe cases when back wall placement must be less than 1 foot a small amount of wool or Dacron stuffing can be placed into the horn exit.

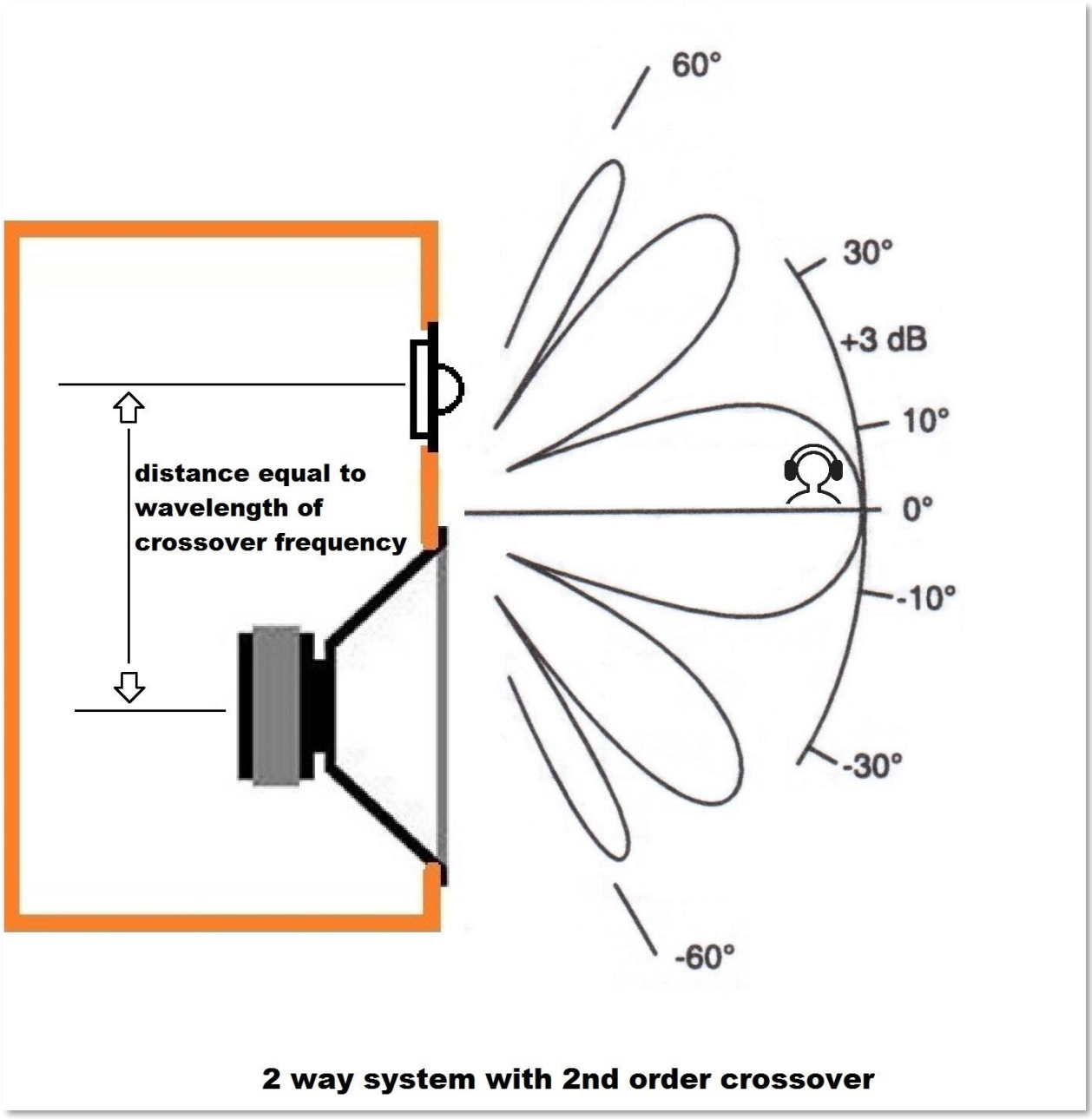
**Toe in:**
Speaker toe in can be defined as: pointing a loudspeaker inward toward the listener rather than aiming it straight ahead. Toeing-in the speakers can reduce the apparent size of the sound stage but allows more precise image definition. When toed-in, the speakers provide a more focused and sharply delineated soundstage. Excessive toe in can produce an overly narrow sound stage lacking in spaciousness and causing beaming of high frequencies.



**Rake or Tilt:**

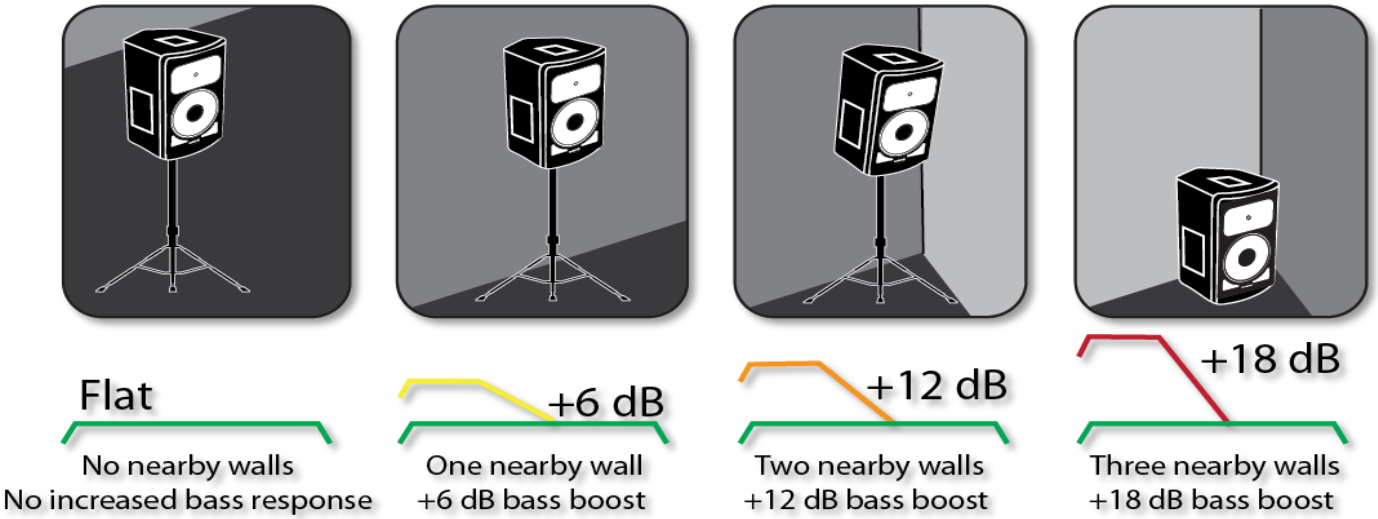
Speaker rake or tilt can affect how the high frequency balance is delivered. Too much tilt back can beam the high frequencies above you r ears resulting in decreased highs and prominent midrange. Too little tilt back can do the same. Ideally tilt should be adjusted using wooden blocks under the speaker front or by purchasing out Shinjitsu Audio Plinth. Tilt should be from 10 degrees to 15 degrees. This tilt will affect the polar response of the speaker as shown below:




**2 way system with 2nd order crossover**

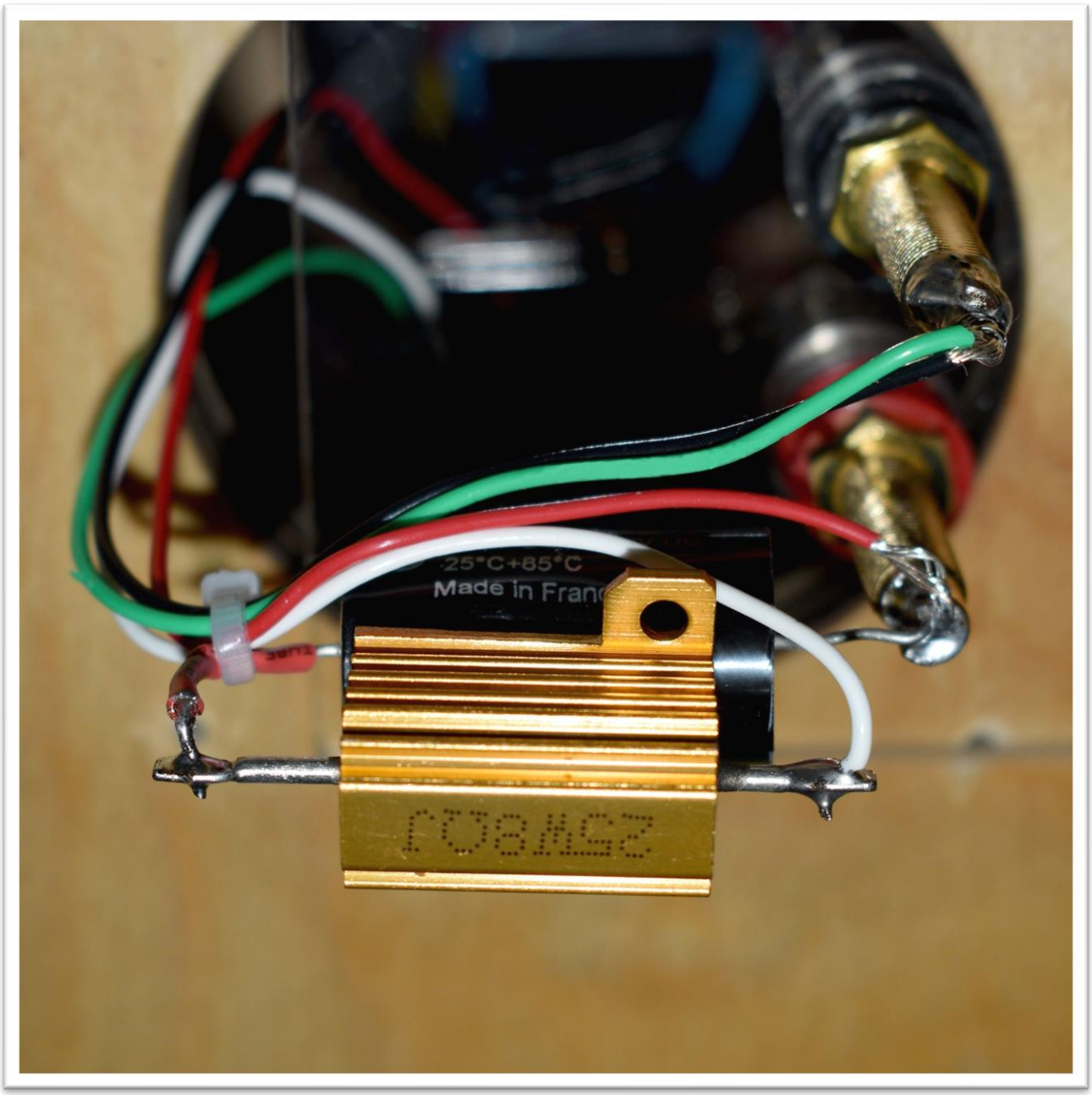
**Speaker Height:**

These speakers are designed to be floor standers. They must be placed on the floor to produce adequate bass reinforcement. Sever loss of bass will occur if they are placed onto speaker stands. Stereo imaging can be adjusted by using tilt back and back wall placement.



**Crossover:**

This speaker utilizes a third order crossover for the bass and first order for the horn. Polarity for the horn is reversed. There is but two coils and one capacitor for the main driver and one Solen Fast Metallized Polypropylene Capacitor on the high frequency horn to attenuate the upper mid and high frequencies. They are both high quality components. The horn can be adjusted in volume if you desire less or more highs via the supplied resistors. (See page 9 for more information.)



**Attenuation Resistor**

The speaker is supplied with a high frequency attenuation resistor accessible via the back-plate terminals. It is available for you to set the high frequency balance to suit your tastes and room. Lower values of resistor increase the high frequencies and higher values of resistors decrease the high frequencies. Bass be seemed to be enhanced as well with higher values of resistors. The supplied resistor is placed across the attenuation terminals.

**Horn connection**

The horn driver attachments are as follows: Black wire to the left terminal as seen from the REAR of the speaker. The red wire is attached to the Left terminal. Just behind the terminal lies the attenuation resistor # 2. This is a small value and can be changed. Larger values increase treble and smaller values decrease it.

**Cleaning and Maintenance:**

Dirt and smudges may be wiped off with a microfiber cloth dampened with glass cleaner. Do not spray cleaner on the horns or drivers. These will be damaged.  Small scratches and scuffs can be removed by using 220 grit sandpaper followed by Danish oil natural – apply with a soft tee shirt and rub off.

**Specifications:**

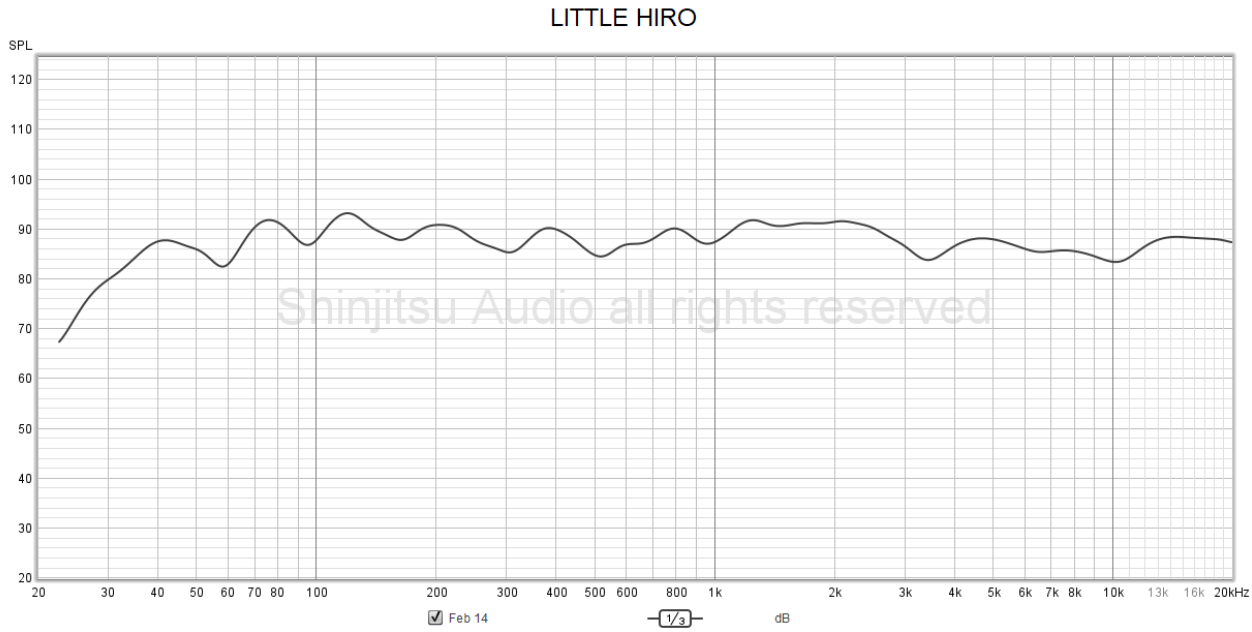
- Minimum Wattage required – variable depending on room size and musical tastes but should be at least 8 watts.

- Maximum Wattage: unlimited amplifier wattage but should not exceed 30 watts **continuous** which will achieve a SPL (loudness) of > 103 db which is quite loud in most rooms.

- Maximum SPL as tested: 103 db.

- Frequency Response: 32Hz to > 20 Khz +3 or -3 db.

- Frequency response graph at 3 meters using Omni Mic





**Frequency response at 1 meter distance from speaker and on 24 -inch stands.**



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