KRK SUBWOOFER PLACEMENT AND SETUP GUIDE

THE BASICS OF SUBWOOFER PLACEMENT

It is widely accepted that frequencies below 100Hz are generally omni-directional, which is to say it is almost impossible to detect where they are originating from in any given space. What is less commonly known is that the geometry of and objects within a room can greatly effect how the subwoofer will react. Here are some suggestions of things to keep in mind for proper subwoofer placement.

- Keep the subwoofer as near as is practical to the satellite speakers. This will reduce possible interference from time alignment issues.

- Keep the subwoofer away from corners and walls if possible. While the effects of proximity to solid surfaces can be overcome, it is often best to avoid those situations completely if possible.

- One of the easiest ways to determine the ideal placement of a subwoofer is to start with the subwoofer in the main listening position and move yourself around the room. Where the bass sounds smoothest, or even loudest, is usually a good spot to start with placing the subwoofer.

- Once you have the subwoofer in a place where it makes sense, sit in the main listening position and listen for the bass response. Move the subwoofer around by about a foot at a time until you find the place where the low end sounds the smoothest.

SUBWOOFER VOLUME AND PHASE ALIGNMENT

The next step is to configure the subwoofer volume and phase settings for your system. Here are some step by step instructions for how to do this.

- Start with your subwoofer crossover set to around 80Hz.

- Next, route a band limited pink noise tone through the system including the satellite speakers. 500Hz-1kHz will allow you to set the volume of the satellites without exciting the subwoofer. Using an SPL meter (or iPhone app), set the overall volume so that the level is something comfortable. Around 85dB should suffice.

- Run another band limited pink noise tone of 35Hz-70Hz through the system and set the volume on the sub to where it's hitting 85dB on the meter as well.

- Set the low pass crossover to the highest setting (near 130Hz). Run a band limited pink noise tone from 60Hz-120Hz and from the listening position, determine if 0 or 180 on the phase switch is loudest. Leave the switch in the loudest position.

- If your subwoofer has a variable phase knob, run a 70Hz test tone through the system. Flip the phase switch to either 180 or 0, whatever the opposite of what it was in the previous step, and adjust the variable phase until the bass level is quietest. Then flip the phase switch back to 0.

- Finally listen to some music you are familiar with and set the crossover level to a place where you only hear low end and no mid frequencies coming from the sub. A commonly accepted practice is to double the lowest frequency that the satellite speakers are rated for and use that as the crossover frequency.

Download subwoofer test tones:
www.krksys.com/krk-media-downloads.html

KRK SYSTEMS