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Not Another Room Setup Suggestion

Yes, yet another room set-up for optimizing your sound room for the best possible performance.

This one suggests that you consider using the short dimension of your listening room rather than the more popular long dimension.

It must be stressed that the whole point of this and the other room set-ups I have mentioned is to try and reduce the room colorations from affecting your listening environment and distracting from the fidelity of the recording. Most people do not realize how critical this "room-speaker interface" really is in attaining quality sound. The listening room is the final component in any audio system.

One of the advantages obtained with this "long dimension" arrangement is that it allows you to place the loudspeakers fairly wide apart providing a more realistic soundstage size. (Most recordings are made with the listener at the apex of an equilateral triangle.) Also, with this technique the loudspeakers are still a long way from the side walls so the early side wall reflections are lengthened (a good thing) in time. A further advantage is the reduction of comb-filtering effects present in the room. Comb filtering is defined as two sound waves interfering, one delayed in time relative to the other. Putting the listening chair near a boundary assists in reducing the comb-filter effects at low frequencies. There are still comb-filtering effects going on but they are generally above 4 thousand cycles (which is less bothersome) rather than between 80

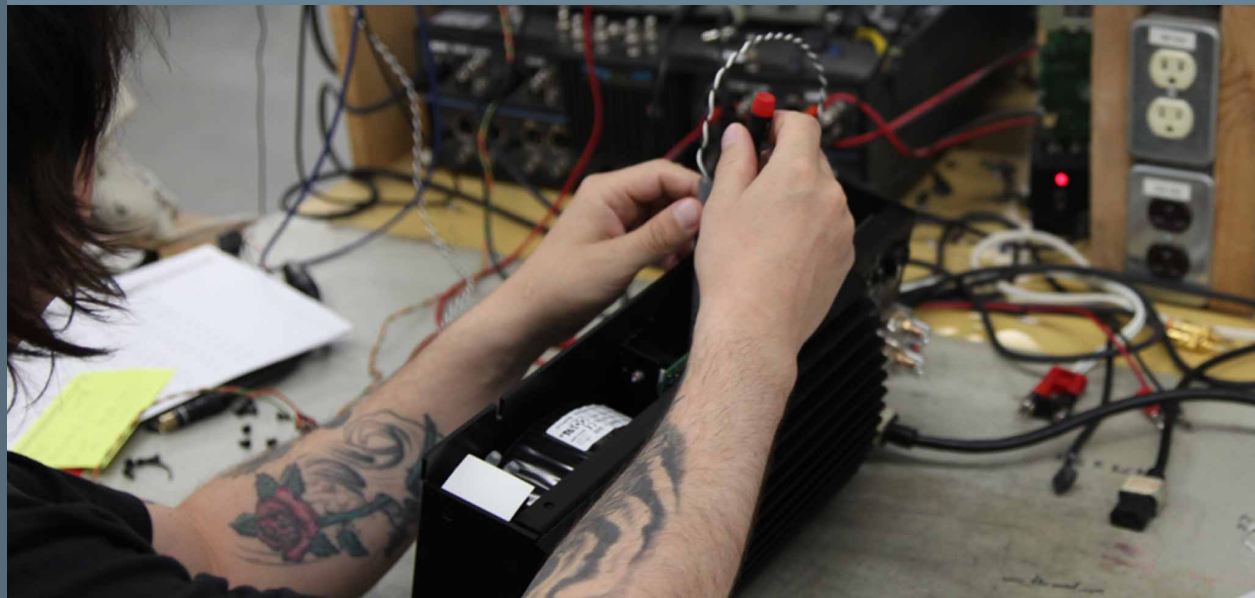
and 500 cycles which occur if your seated out in the room.

When you place the loudspeakers make sure the distance from the rear wall is different than the distance from the side wall. Example: if your 2 feet from the back wall be about 3 feet from the side walls, if 3 feet from the back wall then 4 feet from the side wall, etc. This helps reduce the proximity effect of the two surfaces from affecting the speaker response at low frequencies.

You can have as much as a 6dB rise at some frequencies if these distances are identical. and as much as a 9dB rise if a third surface (floor) is also within this same distance.

There is one final advantage of this type of set-up which is less obvious. As we move towards multi-channel sound and the need to accommodate 5 loudspeakers equal distance from the listening position using the long dimension concept more easily accommodates the rear channels distance requirement.

Other factors to consider are: do not place any acoustic absorption materials, on the rear wall behind your head and sit as close as possible to the rear wall (6 inches to a foot). Spread the speakers at least as far apart as you are from them, (if your 9 feet away spread the speakers at least 9 feet apart) and angle them in so they are pointing directly at you. Place acoustic absorption material in the front corners of the



room and some on the center wall between the speakers if required. Some acoustic absorption in the rear corners of the room can also help.

So hey, give it a try and see if the results warrant a total flip-flop of all the furniture, pictures and rugs in your listening room.

Professional Vs. Audiophile

Many times I get asked how Bryston has been able to bridge the gap between what is perceived to be two distinct and different markets - the Professional and the Audiophile. As you know, Bryston has been fortunate enough over the years to be well accepted in both of these demanding and sometimes different marketplaces. Our experience on both ends of the reproduction chain (studio Vs home) has allowed me some insights into the differences and similarities between these two areas which few manufacturers get to observe. I would like to offer a few observations regarding the Professional market as it relates to the Audiophile market as far as equipment choices are concerned.

The equipment choices for a system in a recording studio are the same as the requirement in a "state-of-the-art" playback system in your home namely; reproduce the input as accurately as possible. Professional recording engineers are attempting to record sounds as accurately as possible. They may have different methods (equipment choices, microphone techniques, microphone placement, or microphone types) but the purpose is the same. Capture a space and moment in time and allow the listener to experience that moment in his home environment. I do not think that the recording end of the chain is at odds with the playback end if accuracy of this "moment in space and time" is the ultimate goal. It is true that professional users de-

Q: What is Damping Factor?

A: Damping factor is a measure of how firmly an amplifier controls cone motions in a speaker. It is possible for speaker cones to continue to resonate for a brief moment after a recorded musical note stops, blurring the music or changing the frequency response. An amplifier with high damping factor, (over 100), keeps this from being an audible problem.

Q: What is Input Sensitivity and Impedance?

A: Input sensitivity and impedance are simply measures of compatibility between an amplifier's gain

and a preamplifier's output signal size. Most amplifiers have input sensitivity around 1 Volt for full power output, and an input impedance of over 10,000 Ohms. That means they will respond correctly to the preamp's output without noise or distortion problems, and not add an undesirable load to preamp's output stage. Thus, when you turn your preamp's volume knob, sound will be at an expected level, not suddenly blasting, or on the other hand, failing to get loud enough even when the control is turned all the way up."



mand playback monitoring systems which do not break when being played at realistic levels, do not color the sound or voice it in a specific manner, or reduce their ability to assess what exactly is recorded on the master. I do not see this parameter as being contrary with the audiophile attempting to playback, in his home, the "intent" of the engineer. Maybe in the past, systems that were capable of playing reliably at realistic levels without dynamic compression necessitated the use of large systems. These systems somehow did not deliver the kind of staging, imaging and micro-dynamics that audiophiles have hungered for, but "the times they are a changing".

The fact that Bryston amplifiers for example, have achieved acceptance from both the professional studio engineer and the audiophile is predicated on the assumption that accuracy remains the foremost concern.

An accurate amplifier is an accurate amplifier no matter where it is being utilized. Same for the loudspeaker etc. The success of a given product in both the studio and home listening environment is a direct result of recording engineers and audiophiles alike being able to agree on the merits of accuracy in the playback chain. I had a very prominent engineer say to me just

the other day, "wouldn't it be nice to know that the amplifiers and loudspeakers I am using as recording equipment where in fact the same amplifiers and loudspeakers the listener was using in his home environment". This ability to "Close the Loop" between the recording and playback side of the industry is certainly a desirable goal. If you consider the film industry and companies such as DTS, THX, Dolby Digital etc. you recognize that they are attempting to provide systems which in fact will playback the film in your home in a manner that serves the "intent" of all the people involved in the film (director, sound engineers, actors etc.). I feel music should be the same. I want to know what I hear in my home is as close a rendition as possible to the intent of the producer.

In closing, I would like to point out that we at Bryston perceive the difference in audio equipment as the difference between "Production and Reproduction". If your goal is to reproduce the input, then your choices of equipment will be different than someone who desires to produce a particular sound or result because they may personally prefer it.

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