

## The Canadian Connection

The following letter was forwarded to Bryston. I felt it was a great follow-up to our previous newsletter regarding the impact that Bryston and PMC were making in the movie and film production business.

March 10, 1998

Bryston Limited

677 Neal Drive,

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Dear James,

Thank you for your fax of the "Bryston April Newsletter" from last week. Both Jane and I took great interest in seeing some of the films that have been involved with your product.

However, we would like to point out that at our little company, Tattersall Sound, some films of modest success have also been associated with Bryston and PMC. Two years in a row now Tattersall Sound has won Gemini awards for excellence in



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## Professional Surround Setups

We here at Bryston are extremely fortunate. We are one of the few companies in audio that experience first hand both the professional end of the business (recording studios, scoring stages, post production rooms etc.) as well as the home listening environment. As a result of this experience, I thought you might find it informative to understand how a number of music recording and movie scoring engineers set-up their surround monitoring systems when producing the CD's you listen to or the movies you see.

Typically, the front three speakers are identical. This is important because dynamic capabilities, image placement, sound staging and tonal characteristics will differ if the front three speakers are not similar. The distance from the listener to each of the 3 speakers should be carefully matched (see diagram) as a difference of just 1inch can result in amplitude and timing differences at about 500 Hz.

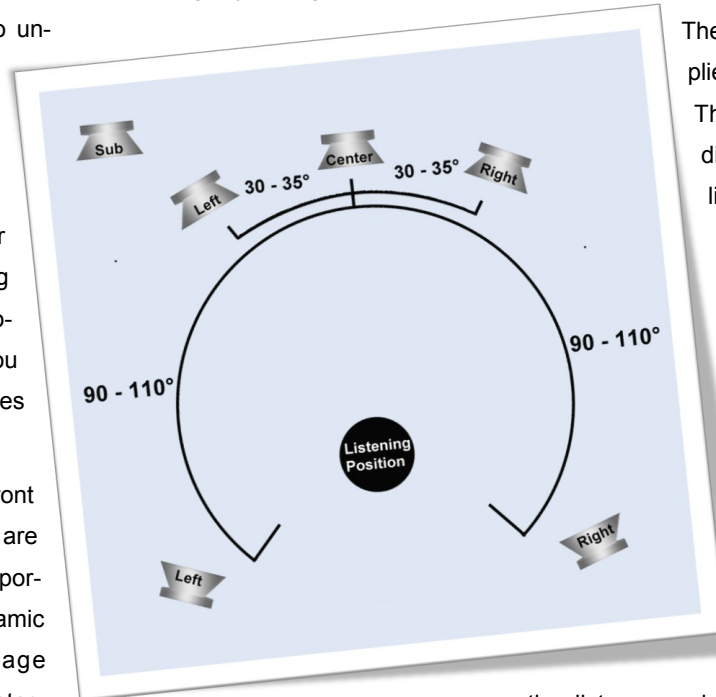
The 2 rear speakers should optimally be identical as well. There is some discussion on this point, dipoles vs. direct radiators, but if space and budget do not permit then the rears should be from the same manufacturer and have similar phase and frequency characteristics above 400 cycles.

The distance rule also applies to the rear speakers. They should be the same distance away from the listener as the fronts.

The other area to consider when setting up your surround system is the angle of the speakers from the listener. The center is directly in front and the left and right speakers should be at a 30 to 35 degree angle from

the listener and no further than 45 degrees (see diagram). The rear channels should be placed 90 to 110 degrees from the listener relative to the center channel.

Some set-ups also add a single or double subwoofer as the .1 channel (effects channel) in a surround 5.1



Canadian television, and all of the post production sound editing work was done on the Bryston/PMC monitoring systems.

The films, "Solidarity Songs: The Hanns Eisler Story", and "A Tale of Tanglewood" won best sound in a performing arts film or documentary. Also, this past year, a third film was nominated in the same category, "The War Symphonies: Shostakovich against Stalin", received a Gemini Nomination.

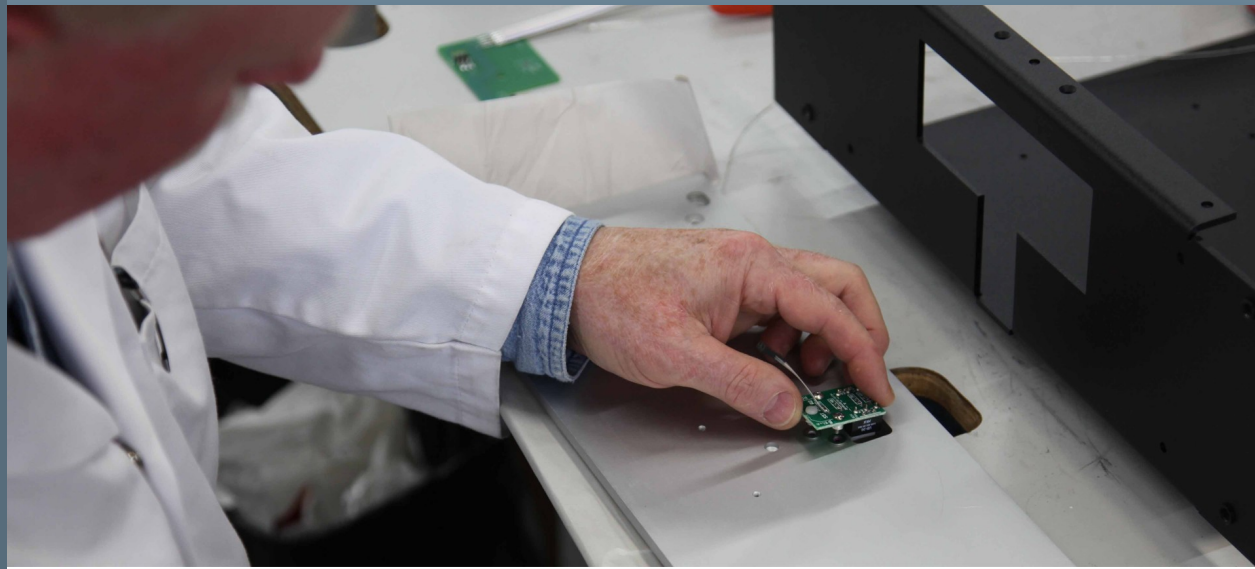
An additional two television shows, "Fast Track" and "The Hunchback", both for Alliance Communications, have received nominations by the Motion Picture Sound Editors Society in Los Angeles for excellence in sound editing. The awards ceremony for the MPSE's are at the end of March.

Also, for your records, two feature films, "A Cool Dry Place" and "The Hairy Bird," for 20th Century Fox, and Miramax are being worked on here at Tattersall.

You see, Bryston and PMC are having success here at home in Canada also!

Sincerely,

David McCallum



system. It usually depends on how much bass capability the main 5 channels have. A point to remember is that with 5.1 all the 5 channels are full bandwidth and therefore the rear channels have to be able to accept the same amount of power as the front and center channels.

The above set up is obviously the ideal if you wish to experience the sound exactly as the recording engineer intended. Like most of us though attempting to replicate this studio setup in the home will be a lot more difficult to accomplish. Hopefully, knowing how the music, sound effects and dialogue is recorded will assist you in coming as close as you can given your particular listening space.

# BRYSTON

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