



HPS-4000®

HIGH PERFORMANCE STEREO

Sound IS the Experience !™

THE POWER OF MUSIC

A critical marketing tool, remains largely unexploited

BY

JOHN F. ALLEN

HIGH PERFORMANCE STEREO™



HPS-4000®

HIGH PERFORMANCE STEREO

FIRST IN DIGITAL STEREO

This article was written by John F. Allen and originally published in BOXOFFICE MAGAZINE. Unauthorized duplication or publication without the written consent of both John F. Allen and BOXOFFICE MAGAZINE is prohibited.

HIGH PERFORMANCE STEREO™

NEWTON, MA 02459 USA • TEL: 1-617-244-1757

HPS® and HPS-4000® are registered trademarks of John F. Allen

THE POWER OF MUSIC

A critical marketing tool, remains largely unexploited

**By
John F. Allen**

I have often been reminded that silent movies were anything but silent. Motion pictures of the silent era were presented with orchestras or organs accompanying the films. Theatre organs were fitted with any number of elaborate and clever sound effects. Many of these instruments survive today and are often heard in special concerts. In recent memory, we have been treated to at least two opportunities to experience a film presented with a live orchestra. Presentations of Abel Gance's *NAPOLEON* and Disney's *FANTASIA 2000*, afforded audiences in selected cities the chance to hear a film at its best. Why? Because there were no ugly sound systems to get in the way of the music.

If one is uncertain just how important music is to motion pictures, just think of what it would be like to watch a film without it. It would be akin to watching a silent ballet. We wouldn't have the slightest idea what the dancers were doing jumping around the stage. Similarly, a film without music would be equally confusing.

Music is often used for important and subtle cues. Recalling a pivotal moment in *BORN ON THE FOURTH OF JULY*, a group of soldiers was under fire. John Williams' score for this scene was neither frightening or heroic. Rather, the haunting, tragic music became a gripping reminder of the futility and utter waste resulting from such a war.

Music helps set the mood and creates the emotional connection to the story. It is the glue that holds it all together. Without it, the motion picture experience would be pretty dull indeed. In fact, without music, I doubt the pallet available for creating and telling stories in movie theatres could be as rich and varied as it has become. Movies as we know them would simply not exist. So, obviously, the quality of sound reproduction, how well we hear it and how well we feel the musical score, are vitally important factors in how we will respond to a film.

In the August, 2000 issue, *BOXOFFICE* published a letter of mine detailing an experience I had with last summer's *DINOSAUR* - a film I had seen in two different theatres. I saw the film for the first time with a group of industry professionals in a theatre with a much better than average sound system. The second theatre was my reference theatre in

Framingham, Massachusetts.

With respect to the digital sound presentations in the two theatres; without exception, both I and the people I was with were unimpressed with the DINOSAUR mix, as heard over the better than average sound system in the first theatre. When the credits rolled, we ignored them, as most often happens, and began to walk around. We talked specifically about the “lack of punch” and the “lifeless sound.” One gentlemen remarked that someone else had also commented to him about the “lack of dynamics and punch” upon seeing this film in another theatre. I had liked the music, but was not overly impressed. There were occasional moments when I thought that the music sounded interesting, but it was entirely too dull and too much in the background. I liked the movie. But I did not feel that I needed to see it again, even though the animation was so outstanding. All in all, it had been a “ho-hum” experience.

After hearing this presentation, I decided to watch DINOSAUR again in my reference theatre. I was curious to know what it would sound like. However, I was not prepared for the emotional impact I was about to experience during the second viewing. In a few words, I was stunned by the difference. From the beginning, I was drawn into the film, into the sound and especially the music. The entire film had gained a flow that I realized had been missing in the first theatre. It was similar to the excitement of listening to a great symphony in a concert hall. I didn't want it to end. Remarkably, I cared more about the characters. The sound was very dynamic and had plenty of the kind of punch that had been so absent in the other theatre. The music sparkled. I wanted to know who wrote it (James Newton Howard). I wanted to buy the soundtrack CD. When the credits rolled, I stayed and listened to the very end. If there had been time, I would have watched the film again, maybe even twice. It was a totally different movie. When I got home, I couldn't sleep, still thinking about the wonderful experience that this film had been the second time. Subsequently, I did watch the film again in this reference theatre - twice on one occasion. When I bought the soundtrack CD, I played it almost continuously for over a week.

Music is the glue that holds it all together.

Obviously, I liked the music - an understatement. But had I not taken the trouble to watch the film a second time in a superior theatre, I would never have connected to it or discovered the score. Perhaps more importantly, I would not have thought to recommend it to others. The film simply worked in the better theatre and didn't in the other. It was a perfect example of the power of music and the importance of a first rate presentation.

In my experience, many other films were ultimately made successful by their scores. Indeed, were it not for their music, there are quite a few films I would not have found especially compelling, let alone worth seeing more than once. In no particular order, 1999's STAR WARS: EPISODE ONE is an example. Although the special effects were interesting and obviously well done, the story line left me somewhat cool. However, in my opinion, it was the score by my friend John Williams that pulled the elements of this film together and made it a totally satisfying entertainment. The pacing and melding of visual as well as sound effects, along with his exciting music, including choral forces, produced an experience I found so enjoyable, I saw the film ten times. Another film that had a similar effect for me was STAR TREK, INSURRECTION, with an absolutely wonderful score by Jerry Goldsmith. I went to the first show of the day and ended up staying for the next two. Music is equally important in lighter films. The incidental music and selected songs in the remake of THE PARENT TRAP were used so effectively, it could almost be called a musical. The clarity of the music made this a far better and more enjoyable film. Such clarity is only possible with a large and superior sound system.

Unfortunately, most audiences are deprived of the opportunity to connect with and enjoy films as much as they could.

While I'm at it, other favorite film scores of mine include Alan Silvestri's FOREST GUMP, Alan Menkin's and Howard Ashman's BEAUTY AND THE BEAST, James Horner's GLORY, Bernard Herrmann's NORTH BY NORTHWEST, John Barry's DANCES WITH WOLVES and Elmer Bernstein's TO KILL A MOCKINGBIRD. (In addition to these and other composers, credit also needs to be given to the countless arrangers responsible for so many wonderful orchestrations.) I could go on, but I will end this very incomplete list with SPARTACUS. I was 12 years old when Alex North's music for this film moved me to buy the soundtrack album before I owned any equipment on which to play it. I then proceeded to build my first stereo system. It truly was the beginning of my audio career.

My experience with DINOSAUR reminded me once again about the greater importance of sound quality, over anything else when presenting motion pictures. Unfortunately, most audiences are deprived of the opportunity to connect with and enjoy films as much as they could, due to the inadequate and poorly tuned sound systems found in too many of today's otherwise modern theatres. While it is often and correctly stated that dialogue intelligibility is the most important attribute of a motion picture sound system, I maintain that it is equally important that the sound system be able to reproduce the music with accuracy, crystal clarity, full dynamic range and lifelike natural tone. While the dialogue tells the story, it is, with some rare exceptions, the music that establishes the

all important emotional connection with each and every person in the audience.

One of the principal weaknesses of typical cinema sound systems having a direct impact on music quality, is the inadequate size of the woofers used in the main screen channels. They are simply too small. The smaller the woofer, the smaller the low frequency radiating area - critical for quality sound. As a rule of thumb, there is essentially no such thing as too much low frequency radiating area. However, theatres less than 70 feet long or 45 feet wide can get by with woofers with as little as four square feet of radiating area - though, I confess, I like to have more. Larger theatres, up to 80 feet long, would be better served with woofers providing at least six square feet of radiating area. Theatres larger than 80 feet long should be equipped with woofers having at least ten square feet of low frequency radiating area.

“For me, the future is a good TV screen.”

A woofer cabinet with two 15 inch drivers has a radiating area of about 1.6 square feet. In other words, the music we hear in most theatres would sound significantly better if the woofer sections of the main screen channels were tripled. Such an upgrade would give music reproduction a depth and richness that is impossible with today’s typical speaker configurations. In addition, all main screen speaker systems should be upgraded to three-way configurations - something I have been recommending for over twenty years. Larger and better surround speakers need to be installed and expertly placed in order to create the sense of envelopment, so important to the enjoyment of music. Sound system tuning is another issue and beyond the scope of this article. I will just repeat that present day methods do not work and are responsible for the mis-tuning (sometimes gross mis-tuning) of most of the sound systems in movie theatres around the world.

I firmly believe that if everyone who saw DINOSAUR had been able to do so in a theatre with a superior sound system, the film’s grosses would have been considerably higher and the prospects for its video release would have been equally enhanced. This, of course, would also be the case for many other films. To put it another way, as long as the typical undersized and underpowered sound systems remain unchanged in all too many movie theatres, everyone loses. Customers lose. Exhibitors lose. Distributors lose. Film-makers lose.

While writing this article, I received the following note from a former exhibitor:

“I just had a bad experience at a theatre. I wanted to see THE PATRIOT, so I went to a local cinema. It was a tiny theatre, though not bad. The screen and lenses were OK, but the picture

was out of the masking around two sides of the screen. The sound was fuzzy, with too much bass and muddy dialogue.

“Tickets were \$8.00 in the afternoon. I found the popcorn and candy too expensive. I did without, as I was not hungry anyway. Many of the clients brought their own food and complained about the too-high prices for everything. People around me were making rude comments all through the show.

“For me, the future is a good TV screen, a DVD player and good speakers. In short, I need a better (mine is sort of OK) home theatre. I would rather be comfortable in my own house with great sound, healthy snacks and no gross people to contend with. It doesn’t have to be that way when you go out to the movies. By the way, I loved THE PATRIOT.”

Despite the poor presentation and everything else, she still liked the picture. But is this any way to treat a customer? How can she be expected to go back? Just her comments about the poor presentation speak volumes about what needs to be done. She hasn’t lost her love of movies, just movie theatres. Is it any wonder that some people no longer attend? As exhibitors are faced with financial challenges including, in some cases, basic survival, new methods of attracting audiences to movie theatres need to be embraced and present ones need to be enhanced. While some have sincerely tried to remain current with sound technology, the state of the industry with respect to quality sound reproduction is not where it could be and is in need of great improvement. The power of music as heard through truly superior sound systems remains an unexploited resource. The means are available. The soundtracks are here. The rewards await us all!

Note: A complete discussion of the current state of cinema sound systems from the BOXOFFICE series can be downloaded at: <http://www.hps4000.com/pages/special/missing.pdf>

© Copyright 2000, John F. Allen. All Rights Reserved.

John F. Allen is the founder and president of High Performance Stereo in Newton, Mass. He is also the inventor of the HPS-4000® cinema sound system and in 1984 was the first to bring digital sound to the cinema. John Allen can be reached by E-mail at JohnFallen@hps4000.com.