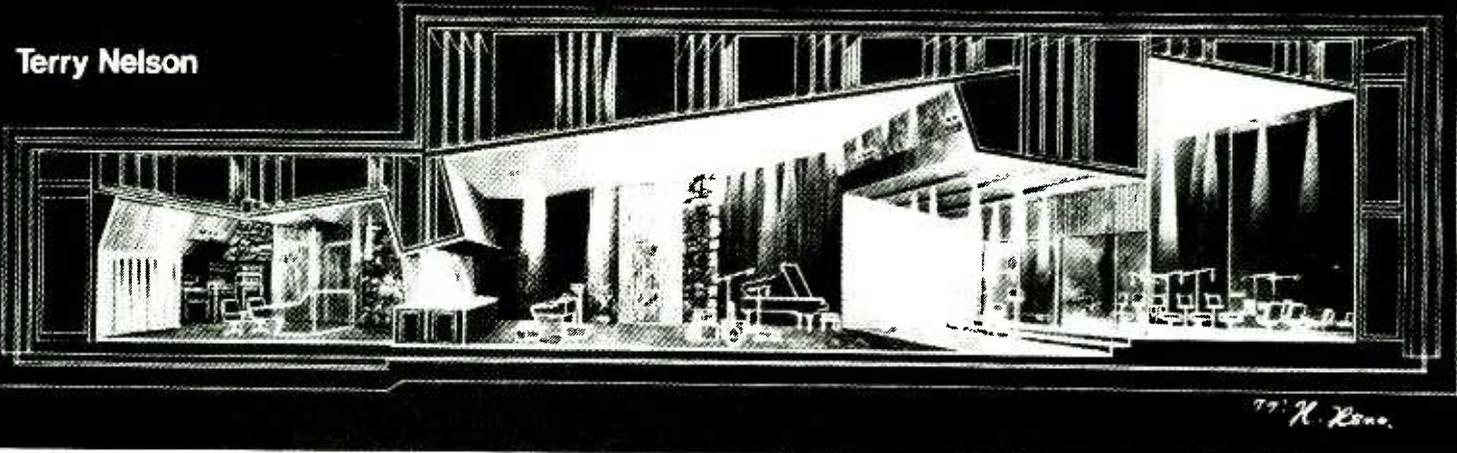


Tom Hidley on PA

Terry Nelson



Over 200 studios have now been acoustically designed and constructed by Tom Hidley of Eastlake Audio. Here, Terry Nelson interviews Tom Hidley and examines his attitudes toward live performance environments and PA

THE NAMES Tom Hidley and Eastlake are no strangers to the studio business, but with the new PA system at the London Palladium and the recent opening of the Virgin Venue Club in London, the Hidley / Eastlake reputation will no doubt start making inroads into the PA field! Being in Montreux last year for the Jazz Festival, I went to see Tom at his apartment overlooking the Casino in order to discuss his views on the present situation of sound reinforcement and how he felt the subject should be handled.

TN Is your approach to PA similar to that of studios and control rooms, ie, an acoustic environment?

TH Yes, though I don't have the wealth of experience and background in PA work that I have in recording studios and control rooms. To start with, let's briefly discuss the principles of a control room which is to, as accurately as possible, give a framework of reference to what is happening on the other side of the glass—good, bad or otherwise, you want to know. The only way you can know is that your control room frame of reference is one that is not going to lie to you, it's not going to colour it or have excessive reverberation times in any given point in the room to enhance the sound, and it's not going to have a monitor that plays tricks on you. Things should be as accurate and smooth

as possible in the general listening area so that folks sitting on the left and right of the balance engineer really hear the same thing the engineer does, so again, the game and guesswork is taken out. Now, if you hear a pure sound in a recording studio and you walk back into the control room and you open a fader, well, our opinion is that without application of eq or any signal processing other than just running it through the console and up to the monitor, it really ought to sound pretty much the same as the microphone would hear it, at whatever distance that microphone is from the instrument that's generating the source. If that's the case, one can say that whatever is happening in the studio room acoustically is reflected to a degree in the sound that comes through the microphone, depending on how close-miked it is and certainly on the quality of the microphone; it's ability to handle transients, it's broadrange response, power handling, are all then reflected in what finally happens when it gets to the console. The fader is opened and the console's ability to handle the energy coming from the microphone without getting in trouble at the front end plus the characteristics of the monitor amp/speaker system to get the signal aurally into the room, decide what the original signal will sound. At this point it will be very desirable that the

signal—after having passed from instrument to loudspeaker—be as accurate as possible. If it's accurate you can then intelligently work with signal processing to achieve whatever effect you might like. So, when you sit in the control room and listen to pretty much undoctored, unprocessed and unplayed with sound it should sound pretty natural—and pretty natural to the guy at the left, right, front or back of the room.

Now what difference really is there between that listening environment and that of an auditorium? Why should people that go to an auditorium to listen to professionals perform on stage not have the same reality, if you like, as what you hear in a control room? Can it be done?—of course it can be done. What is the criterion?—cost, budget. It is obviously a much larger area and so must be handled slightly differently. Now perhaps one might take exception to that and say that it has to be handled very differently! OK, that is possible depending on the auditorium but the end result and concept that you are after, I think, should be the same. The guy at the front or back of the hall, sides and middle, ought to have his money's worth. He ought to hear that act as it sounds in control room conditions. Obviously that is a broad statement! You could say the microphones that are used on stage are not the same as in the studio, you don't have the control acoustically onstage that you have in the studio. Granted. But why not design a stage as the backside of an open-faced studio? Here we are talking about a 2-dimensional

studio that has walls and floor, but an infinite ceiling via trapping: you pretty much control the first and second order reflections at all frequencies and in some instances you can get a handle down on the 40Hz region that enables these frequencies to be dissipated once the microphone has seen them so that it doesn't become rumble and mud to the other microphones on the floor. Why can't the same principle be applied on a stage? After all, you have a ceiling, floor, back wall and two side walls but no front to it at all—no glass between it and the audience, and once you get into the cubic volume of the audience area; if you can dissipate the reflected energy coming back to stage you have then effectively got a 2-dimensional stage. So my gripe would be that if you are not in a situation where it is a classified historic building, and you are not allowed to touch one stick of wood or geometry that presently exists, then you can work with the stage and develop a studio environment with trapping and control reflected energy from the first and second order reflections. That stage can then be developed to present to the audience a good sound and providing that quality mics are used and that the stage has not been confined within three dimensions, then in fact that purity coming from the stage at the source should be—theoretically—able to be achieved with the same kind of quality that you would get in a recording studio. That's the first step; how to handle the source and how to get the source to be able to perform within a good environment. Next step, simulating con-