



Tom Oberheim is president of Oberheim Electronics, which specializes in polyphonic synthesizers for the professional market.

"The musician working in his private studio with an orchestra at his fingertips." This phenomenon, which began in the '70s, will continue to grow in importance in the '80s and '90s. More and more musicians will have a private studio in

which to work, akin to the traditional studio of a painter or sculptor. High-quality recording equipment will become more affordable. Automation will eventually enable the musician to control the recording process completely while performing. Signal processing will become more standardized, making the catalog of sound effects easier to learn and control.

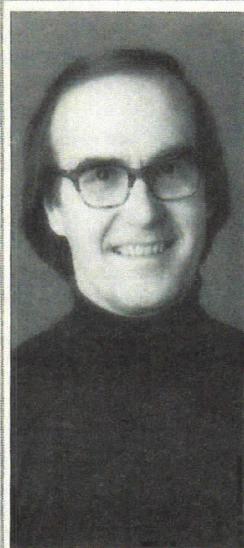
We will also see more use of computer-controlled musical instruments and expansion of the capabilities of analog and digital synthesizers. Composers, arrangers, and orchestrators will be able to hear the fruits of their labors immediately. Because of the increased interaction between the musician and the instrument, familiar musical styles will be enhanced and new ones will emerge.

Synthesizers not only will be much simpler to operate, but also will be more proficient in producing sound colors. Their current ability to imitate natural acoustic instruments will proceed, but additional signal processing and related

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circuitry will put them solidly in the category of a truly expressive musical instrument. Less and less will a synthesizer simply be just another electric keyboard instrument.

The result of these developments will be that popular music will become more personal artistically as musicians become less dependent on others for the production of their art. Let us hope that the methods for disseminating our musicians' work will also become more personal and less dependent on huge organizations whose major effort is spent on searching out and creating the "million seller."



Max Wilcox is an independent classical record producer, the U.S. audio producer for Unitel Munich's television productions, and contributing editor of The Audio Critic. From 1959 to 1976, he produced Arthur Rubinstein's recordings for RCA.

Leonardo, Copernicus, and Jules Verne were able to gaze into the future with a kind of vision that continues to dazzle the contemporary mind. Conversely, today's pop record producers are fortunate if they can guess what the teenage universe will be into as late as the summer of 1981. Somewhere between these vast extremes, the conservative adventurers of classical recording ply their trade.

Any prediction of the future of classical recording must be a mix of the prognosticator's experience and imagination. If an editor allows you to design your own yellow brick road, it might as well take you somewhere you would like to visit.

For me that idealized and perhaps even possible future is a place where music sounds musical and not electronic. Aha, audiophile recording? Yes—but since this is *my* imaginary time journey, let me redefine the already rather abused term "audiophile recording."

The invention of digital sound recording (preceded slightly by the reinvention of direct-to-disc) has given us recordings labeled "audiophile." What this should describe and define is a recording that is as accurate a reproduction of the original musical performance as modern electrical science will allow. By that standard Peter Bartók was making audiophile recordings in the 1940s. There have always been a few gifted practitioners of the art of recording who believed that beautiful and accurate recordings could be made by following a few simple steps:

1. Select a warm and resonant-sounding recording location.
2. Seat the musicians so that they are comfortable playing and can hear each other properly (no artificial physical separation).
3. Place a very few flat-response microphones (preferably omnidirectional) in positions that will capture the overall blend and balance of the group and give the desired ratio of direct to reflected sound.
4. Pass the microphone signals through the minimum amount of high-quality electronics necessary to get them to the recording storage device (tape, disc, digital recorder).
5. Have the musicians establish a

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balance in the hall or studio and have them listen to a test playback to confirm that their balance and sonority are being reproduced in the control room; then *leave everything alone.*

6. If a musical balance seems awry, let the musicians make the correction by rebalancing the performance.

7. Master the resulting recording from an edited version of the *original* sound source (without post-session mixing, equalization, and general second-guessing about the sessions, all then transferred to a second-generation version of the original).

8. Finally (and most maddeningly), carefully shepherd the recording onto a pressing that is clean and quiet enough to reproduce the original sound with a minimum of extra noise.

This is *my* definition of an audiophile recording. To my ears, relatively few of the examples available today have been recorded and processed in such a manner; to proclaim a recording "audiophile" simply because it is stored in a digital device does not make it so, no matter what the record jacket says. May this philosophy, none of which in any way originated with me, see widespread use in the future. Who knows? It might even turn some audiophiles on to music!