



Henry Kloss:

The Man Who Changed Audio and Video -- Time and Time Again

Henry Kloss died early this month at the age of 72. If you're an audio- or videophile to any extent, you probably owe him a huge debt. I know I do. When I first became interested in hi-fi, I was lucky enough to purchase a pair of Kloss's Larger Advent Loudspeakers. No, that's not a typo -- that's the kind of company Advent was. At the time it made two models of loudspeaker: The Larger Advent Loudspeaker and The Smaller Advent Loudspeaker.

Combined with my beloved AR turntable (post Kloss), those remarkable speakers hooked me on the sound of reproduced music and gave me thousands of hours of musical pleasure.

Later in life, after having sold all my hi-fi gear to go and live in Peru, I purchased another AR turntable, an Advent receiver, and a pair of AR-3A loudspeakers upon my return to the States. Now that was a system to reckon with!

More recently, I reviewed Kloss's valedictory effort, the Tivoli Henry Kloss Model One Table Radio. One wasn't enough. Now I own two.

I couldn't even begin to guess how much musical pleasure I've derived from Kloss's well-designed, reasonably priced products over the years. But I'm not alone -- the man revolutionized the audio industry.

Let's go back to the early 1950s and survey the audio scene. Hi-fi was a burgeoning hobby and the LP record had newly arrived on the scene -- making it possible for enthusiasts to reproduce sounds across the sonic spectrum. Dynamic loudspeakers were huge boxes -- one capable of reproducing 40Hz needed to be about 14' tall. Movie theaters had 'em, but homes?

Edgar M. Villchur, a teacher at NYU, hit upon a novel approach. By sealing a speaker's enclosure, he could use the springiness of the trapped air, rather than the mechanical spring of a driver's suspension. "All I needed to do," he told Steve Birchall years later, "was to decimate the springy stiffness of the speaker suspensions, and reduce the size of the enclosure until the air spring was strong enough to replace the springs we threw away. It also turned out that within the compressions and rarefactions this air spring would undergo, the response was almost perfectly linear." Thus was born the compact, full-range, air-suspension speaker.

Except for one small detail. Nobody wanted it. After having been rejected by the two established speaker manufacturers he'd approached, Villchur was discouraged. Then he received an expression of interest in the design from a former student, Kloss, who was building Baruch-Lang speakers for mail order in his Cambridge workshop. In late spring 1954, Villchur demonstrated his prototype to Kloss, playing, among other LPs, an E. Power Biggs record with massive pedal tones. Kloss immediately grasped the possibilities and offered his Cambridge loft as a manufacturing facility. Acoustic Research (AR) was born with \$4000 Kloss raised from his friends and \$2000 from Villchur.

Kloss immediately threw himself into the partnership. Villchur credited him with 75% of the produc-

tion design of the AR-1. Villchur and a physicist friend, Tony Hoffman, contributed the rest. They managed to assemble two AR-1s in time to demonstrate them at the New York Audio Show in September 1954. Astonishingly, the critics didn't "get" it. Although they were impressed by the speaker's clean 32Hz bass response, they didn't understand why anyone would want "miniature" loudspeakers. Julian Hirsch was particularly puzzled, noting "The AR-1 had the lowest electro-acoustic efficiency of any loudspeaker on the market," but at least he recognized that "at 25Hz and below, it was more efficient than the Klipschorn, which had the highest efficiency of those tested." He grudgingly allowed that the AR-1 "established a new industry standard for low distortion bass." The public, however, had no problem grasping that the AR-1 delivered big speaker sound in a small package. And, while the speaker did consume a lot more power than the efficient designs it outsold, this was the golden age of great 40-50W tube amplifiers, which were easily capable of driving it. Villchur and Kloss had succeeded in taming hi-fi for the masses. With the AR-2, they lowered the price of the speakers to \$89/each. The model AR-3A introduced the dome tweeter -- which is now nigh unto ubiquitous.

Kloss left AR to found KLH in 1957. In the early 1960s, Kloss built the first high-selectivity FM radio - the KLH Model 8, now considered a design classic. He also designed the first successful audio product to employ transistors, the KLH Model 11 portable phonograph.

In 1967, he founded his own company, Advent, where he offered well-designed loudspeakers employing premium-quality components. His speakers were the reference standard of their era. In fact, the first issues of *The Absolute Sound* touted a pair of stacked Advents (an upside-down speaker on top of one standing right-side up) as its reference.

Kloss always claimed that the audio side of Advent was merely a means to produce the funds to develop his true passion, projection TV. Advent produced a two-piece projection system that ended up primarily in bars, where it displayed sporting events - ironically, this was before the VCR and the concept of watching movies on video existed. Kloss refused to take credit for "inventing" projection television, insisting that it was less an invention than a collection of practical electrical engineering knowledge. Despite this avowal, he is considered the creator of the industry.

Kloss also developed the Advent Model 200, the first cassette equipped with Dolby B noise reduction -- which, of course, was the missing element that made music recorded on cassette listenable. One of the two times I met him, he described his cross-country flight to persuade Ray Dolby to license him the technology. "I knew that if I didn't get some sleep on the flight over that I could never be sharp at that meeting," he told me. "So I went back to an empty row of seats in the middle and slept on the floor under them. The stewardesses thought I was insane, but I got eight hours of sleep!"

Kloss later founded Cambridge SoundWorks, a company that pioneered direct-to-the-consumer marketing before the creation of the Internet. The company advocated small satellite speakers and modestly sized centrally located woofer units, as well as surround-sound and computer speaker systems. Kloss sold the firm in 1997.

He wasn't done. While at Cambridge SoundWorks, he had developed a high-quality radio -- the Model 88 Table Radio -- which was reminiscent of his classic Model 8. In 2000, he went back to table radios one more time, creating the Tivoli Henry Kloss Model One Table Radio, a design that exploited advanced engineering techniques that allow cell-phones to deliver crisp, clear sound from marginal signals. To a generation raised on disposable portables, it's a revelation -- a \$99 radio that looks good, sounds good, and is built to last for another 20 years.

It's a fitting legacy for the man who never set his sights on anything less.

...Wes Phillips

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