

Factory Tour Feature Article



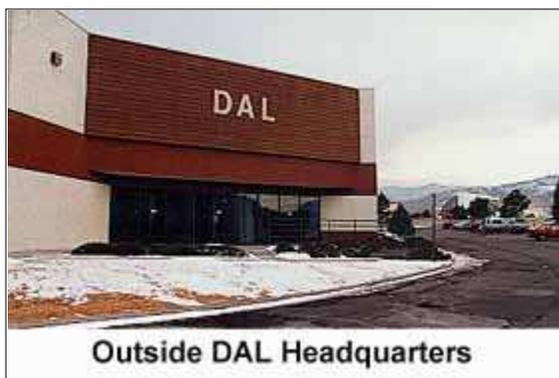
June 1997

Dunlavy Audio Labs (DAL)

*Please Note: **Clik4Pik** spots will show you additional pictures*

Like a drop of rain, the life cycle of a successful high-end company seems to follow along a circular route. First, a brilliant designer dreams and then builds that dream on a kitchen table. Second, as sales trickle in he moves his emerging empire to the basement. Third, the cars are ousted from the garage and a mini production line is set in their place. Fourth, after deciding to take the plunge (as well as securing the home equity loan,) a small shop is rented, and one or two full-time employees are added. Fifth, as sales finally begin to fully offset costs, larger quarters are secured. And, ultimately, the sixth and final step is reached -- acquisition by huge international firm and the ultimate return of said designer to the kitchen table.

Fortunately not all companies follow that cycle to its conclusion. Dunlavy Audio Labs (DAL), headquartered in Colorado Springs, Colorado, is the second significant audio company founded by John Dunlavy, the first being Duntech, currently based in Australia (with whom Mr. Dunlavy is no longer affiliated). In 5 short years DAL has moved to the penultimate step in the audio evolutionary cycle and seems content with staying there. And why not? Mr. Dunlavy is able to design speakers that meet his goals, while living in a beautiful location, and all the while retaining control of his own company. Sounds good, no? Well, to see just how good, your ever ready reporter decided to check out a day in the life of this Magnate of the High-End. Luckily, just before I broke in to DAL HQ, camouflaged in black and wielding a Minox camera, John Dunlavy graciously agreed to escort me around his lab. In addition he agreed to subject himself to an interview, as well as ship a pair of his SC-III loudspeakers back with me for a review (the interview will appear next month, with the review of the DAL SC-III speakers the month after that). So, what follows is a tour of the DAL headquarters and production facilities. Enjoy!



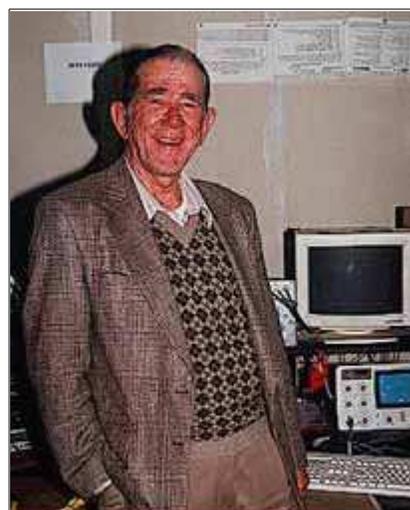
Outside DAL Headquarters

For those of you not familiar with Colorado Springs, it's the home of the Air Force Academy, Cheyenne Mountain (better known as the Strategic Air Command, you know, those guys that track Santa Claus each Christmas), the Broadmoor Hotel and Golf Club (past host to both the men's and women's US Opens), and Pike's Peak (NOT the highest of Colorado's 54 14,000'+ peaks, just the most famous). Oh, and the home of Dunlavy Audio Labs.

DAL occupies over 30,000 square feet on the west edge of town. By the way, 30,000 square feet is more than 2/3rds of an acre, in other words, this is a serious facility. Under this rather large roof are the corporate headquarters, testing facilities (including 2 anechoic chambers), a design lab, 2 dedicated listening rooms, production and shipping areas, and a massive wood shop. And yes, that's Pikes Peak you see in the background.

After passing DAL's security (Joan Dunlavy's 8 month old poodle), I met John himself. As you can see, he enjoys his work.

As we walked around the facility I was struck repeatedly by how organized the DAL operation is. Each and every component that goes into each and every DAL speaker is tested and re-tested. Each driver is measured, with the majority being rejected. Those that do pass are assigned a serial number which is stored for future use (this is especially handy for those occasions when a driver is blown. DAL can pull the specs of the driver based on serial number and ship out an *exact* replacement). Besides cataloging the performance of each driver, measurements are used to pair match drivers within an extremely tight .1 dB



John Dunlavy

window. This matching applies to the drivers on a single speaker as well as to the drivers used in each pair of speakers. With such tight matching to the design spec, as well as pair matching, when you hear a pair of DAL loudspeakers, regardless of how you feel about it, you know you are hearing what John Dunlavy intended.

As you would expect, DAL crossovers are subject to equally strenuous assembly and testing standards ([Clik4Pik](#) of the Driver Testing Area). All internal wiring is of John Dunlavy's own design, and is based on his ULC-1 interconnect wire or the Z6 speaker wire, depending on location and use. Each individual crossover is matched to a virtually infinitesimal degree.

As with the drivers, each crossover is assigned a serial number, which is stored in DAL's computer ([Clik4Pik](#) of the crossover assembly).



DAL Cabinet Makers "Hard at Work"

At least on the day I was at DAL the wood shop contained nearly as many employees as the entire rest of the operation. Every cabinet undergoes a quality control regimen similar to that of the drivers and crossovers. I was quite surprised at the care and meticulous attention the cabinetry receives at DAL. After watching these craftsmen work I have a newfound respect for cabinet makers ([Clik4Pik](#)).

Like the rest of the DAL assembly line, cabinets are cataloged and stored for future use. Here you see finished cabinets for everything from the SC-I (the small boxes near the left edge of the picture), to the SC-II (just to the left of center, in the oak finish), to SC-III (on the right side of the picture) and the SC-IV (the tall ones on the left side of the picture). I really wish I had been able to take this picture from a boom. What you see are about 20 cabinet pairs, but what I saw was about 100 cabinet pairs. The picture, unfortunately (or perhaps the photographer) was just unable to capture how beautiful these boxes are, standing at attention like good soldiers,

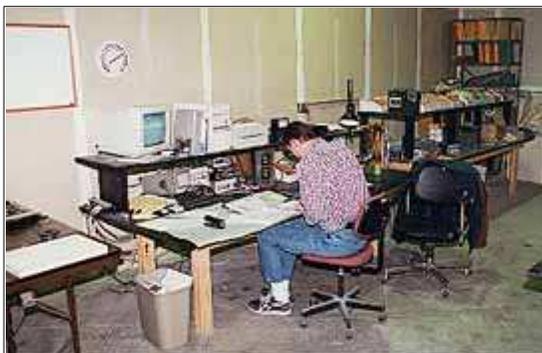
and filling the back half of a rather large room.

Assembling a speaker like the SC-V is not an easy task (although from the smiles I saw at DAL, it is enjoyable). After the drivers are selected, tested and matched; and after the crossover is wired and tested; and after the cabinet is built and checked, all the pieces are put together by hand. For the SC-V, the cabinet is placed on a dolly while final assembly takes place. In talking with John, he mentioned that one of the reasons they selected Colorado Springs as



Is this one of YOUR next speakers?

their headquarters was due to the local workforce. With the Air Force Academy close, as well as a major technical university, people with skills and a strong work ethic can be found. Considering the craftsmanship that goes into building even the smallest of the Dunlavy line, it's a good thing they have found a group of people with the necessary skills ([Clik4Pik](#) of more assembly). [Clik4Pik](#) of a pair of SC-III's (in Rosewood) and a pair of SC-II's (in Black Oak), in the final stages of assembly.



The wall in front of the test bench is one side of one of the anechoic chambers

Next comes final testing. Each and every pair of DAL speakers is placed in an anechoic chamber and measured. Besides passing spec by plus or minus 2 dB, each pair of speakers must match within a plus or minus .25 dB range! [Clik4Pik](#) of the test bench at the other chamber.

Even though there is no way a picture can capture how large and intimidating an anechoic is, Here's a shot of the smaller of DAL's 2 chambers. This chamber is roughly 20 feet on each side, with several feet of foam covering each and every surface.

On my way out the door I noticed a couple of pair of speakers in the hallway. Andrew Rigby, Marketing Director for DAL said they were the original SC-V and SC-VI's. With a couple of shots left on the roll I thought I'd get you a couple of pictures of the finished products at DAL. So, here's the SC-V ([Clik4Pik](#)). And, with Andrew providing scale once again, here's a picture of the SC-VI's ([Clik4Pik](#)).

After spending the day at DAL, I have to say I am very impressed with the care and professionalism they put into building



Andrew Rigby - Marketing Director at DAL, attempting to give scale to an anechoic chamber

every pair of speakers. This is no garage operation. Each step in the production process is executed with a fanatical devotion to detail. As a final example of that detail, even after all the measuring, storing, graphing and matching that goes into each speaker, no speaker leaves DAL until John Dunlavy personally reviews and signs the spec sheet.

By the way, on the way home I just had to take a quick pic of the sunset. If you believe in natural signs, then this should show you just how fantastic my trip to DAL was.

...*Todd Warnke*

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