

Escalante Design Juniper Speakers

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NOT LONG AGO, I was leafing through my latest issue of *National Geographic* magazine, and I think I stumbled on an article that sheds light on the origin of this company's name. The item was about the Glen Canyon Dam that created Lake Powell by intercepting the Colorado River. Nearby is the Grand Staircase Escalante National Monument, and if one looks closely at a regional map, you'll find there is also a river

canyon tributary named Escalante. All of this is all part of a larger system that now forms Lake Powell.

Subject

The Juniper speaker is from Escalante Design which is (guess what?) located in Provo, Utah. This is their entry-level speaker and it is essentially a high-performance, two-way monitor utilizing by three drivers. They arrived at my door

impressively packed in a wooden crate held together with sheetrock screws. I also received a sturdy looking set of textured black-painted, 20 inch high aluminum stands which Escalante calls The Hoodooh (their MSRP is \$990). Packed along with the stands was a page of instructions and a plastic funnel; the sheet discussed the various things I could use to fill the stands and weigh them down, things like sand

or something similar. In lieu of that technique, I placed 12 pounds of dumbbell plates on each base. Later on, I replaced the HooDooh spikes with much sharper Target spiked feet that were able to pierce my carpet.

My first impression as I lifted the speakers onto their 20-inch stands was that these speakers are really not so mini for monitors; indeed, they weighed 52 pounds each. The speaker enclosures are unusual in that they are finished with textured, black semi-gloss paint, while the side panels are partially covered by a brushed aluminum decorative metal insert. Both of the mid-woofer drivers are 6.5 inches in diameter and work in concert with a Vifa compression ring soft-dome tweeter. It just so happens that I have reviewed other speakers employing this Vifa tweeter and I am definitely a fan of it. I have definitely heard some great things coming from this Scandinavian driver.

The company's literature goes on to describe the Juniper as a "mini-monitor using a patented *Direct Coupling* technology that defies the limitations of loudspeakers twice its size and twice its price." The proceeding is just a small portion of a much longer description of this product that I found on the Escalante web site. I e-mailed the Escalante Company and asked for a bit more discussion from them about the meaning of the term *Direct Coupled*, and I received what looked to be a 17-page patent application. The patent number given to the inventor, Budge Thierry R., is 6,816,598, and it seems to me that Mr. Budge has had a very interesting career leading up to this product and this company. He was formally with Talon Audio and later on with Dave Wilson at Wilson Audio. Now, I have to say that this was the first time that I have ever read through the details of what apparently is an entire patent; the text of this document is worded in heavy-duty legalese. If anything, this is a boring chore. It is far better to click on the supplied patent diagrams, they tell the story far more concisely. If you are curious enough, try surfing over to freepatentsonline.com and type in the patent number. What you will see is an Isobaric-loaded bass-reflex enclosure. The

term "Isobaric" refers to equalized pressure, which is accomplished here by using two similar 6.5-inch mid-range piston drivers within the same speaker enclosure. The output of the front panel driver is synchronized with the movement of the second internal driver to produce an acoustic reinforcement within the range of these drivers. This is accomplished by timing the relative position of these two drivers such that when one speaker cone moves

The imaging of the Juniper is flat, very clearly so, giving a very desirable portrail of the stage.

forward, the other is moving in the same direction. This keeps the internal volume and air pressure within this shared enclosure constant.

The Isobaric concept by itself is not new; what is patented here is the electronic network employed to accomplish the phase shifting of the signal that moves this mid-range driver pair. The rear-facing internal driver is firing into a duct that turns 180 degrees and terminates in the slotted opening on the front face of the speaker.

One other unusual aspect to this company's design was contained in an e-mail statement that indicated the Junipers needed a break in period possibly in excess of 250 hours. I was informed that fortunately the samples I received were demos and were broken in, though I did hear a very slight improvement a few hours after set up. I have more than a sneaking suspicion that such a long break-in interval is not all that unusual, but that speaker manufacturers almost never mention it. I can recall another instance where a speaker manufacturer alluded to an extended break-in period, but in that case it was in reference to their electrostatic panel.

Set Up

As is my usual method, I started out by placing the Juniper speakers four feet out in front of my 11-foot, 8-inch wall. Facing straight ahead, they approximated two points of an equilateral triangle, where my listening position was the third point. At first listen, I thought I was hear-

ing a tad too much bass. So, logically, I slid the speakers and their stands forward or out from the rear wall. I found that with a short move of only about 6 inches, the bass was better integrated and producing the spectrum of sound I was used to hearing. I mention this move in particular, because in my room, this is an unusually small distance for a bass adjustment. I made several more small moves to fine tune bass response during the course of this evaluation, being careful to move the Junipers only a short distance each time. The last placement found the Junipers spaced about 5.5 feet apart, canted inward (toed in) about 10 degrees, and 9 feet away from the listening position. I found I was able to fine tune treble response slightly by tilting the speakers backward on their stands a couple of degrees.

The imaging process is ordinarily very important to me and in this example what I heard was a little bit unusual. Typically, with most speakers, the performance stage between the speakers is concave, like a bowl; that is, I hear a curved stage that is deeper in the center. The stage with the Escalantes is different, as the shape of their stage is mostly flat. Now, this is an imaging quality that I have read about many times in audio magazines, but now, listening to the Juniper speakers, I have never experienced this quality so clearly. Every reviewer agreed this imaging ability is a very desirable portrayal of a stage. Well, in my little listening space, I think this is certainly an achievement. Of much greater importance to me, however, is not the shape of the stage, but what is going on within that space. And that's coming right up in my description, so stay tuned.

Listening

As weeks turned into months, this assortment of wires and boxes came very close to gelling into one coherent sound source. But a certain nagging something seemed to be eluding me. Part of this impasse was the Vifa tweeter which has to be intelligently handled, because while it is fast and revealing, it also has a tendency to be cold and over analytical. On the rear of their Juniper speaker, Escalante has placed a red switch; when actuated,

it boosts the tweeter out put by 2 dB. I tried it but I decided I liked it better with the circuit switched out. I think that on certain types of music and on a narrow slice of sound the mid-woofs are a fraction slower than that tweeter. When constant repositioning of the Junipers did not rid me of this impression, I finally found the solution in my inventory of audio gear. I suspected what was needed was a large power reserve and a conduit that could feed these transducers. I switched to my highly modified Hafler 500 Mosfet amplifier and a bit later on something that proved even more beneficial than that, a 10-foot pair of Esoteric Ultrapath speaker cables. (Don't go searching as I believe both of these companies are no longer active.) The Hafler with its 250 watts per channel easily had the power reserves to do the job, while of my six sets of speaker cables, the Ultrapath is my absolute bass reference wire. Then and only then, ladies and gentlemen, after making these gear changes, did the continuity I sought bloom in my room.

Understand, what was happening here was not just a function of raw power but rather it was all about proper control of good speakers; yes, even at low volume, it was about control. My gut impression was that after some fiddling what I had achieved was "integration" and "harmonic continuity." Perhaps, the closest single word I can come up with to signify this characteristic is "natural."

But again there was even more going on within these boxes; if I isolate the response of the bands dominant to these 6.5-inch mid-drivers, I hear something relatively rare and precious, but similarly hard to describe. One good word to explain it is sustain. The characteristic I am trying to describe to you is a set of true-to-life harmonic nuances which allows the reproduction of the music to decay naturally over the appropriate period of time.

This characteristic shows up very nicely using my acoustic bass reference recording. Let me state, for the record, that if you wish to test a speakers lower mid and very low frequency tonal integration, there is no better test disc than *Adagio d' Albinoni* as performed by Gary Karr

and Harmon Lewis. This originally came out on the Japanese Firebird label, but it is now available via the Cisco Music catalog (GCD8003) from Acoustic Sounds. Recorded in a cavernous Japanese cathedral, Karr's centuries-old Amati bass fiddle is accompanied by a large and sonorous pipe organ. The lowest register of the organ, in combination

On Albinoni's Adagio, I have never heard more natural organic warmth.

with the Amati string bass, energizes this stone-walled enclosure and supports long-period rolling waves of reverberation. If ever there was a test of musical sustain, this is it. You can clearly hear the warmth and wooden resonances of the Amati bass calling out as if with a sigh, and simultaneously you can thrill to a deep measured organ note, a repeating sound sensation that sounds like a heartbeat.

To cut to the chase, I have never heard this organic warmth portrayed more naturally than with the Juniper speakers from Escalante. As you might expect, most of the life and sparkle you hear in the performance is supplied mostly by the Vifa, one of my fave tweets. It balances quite nicely the spectrum of sound emanating from these mid-woofs.

Conclusions

This has been an informative and rewarding journey; in the process this review took on a life of its own. In retrospect, I think I have been just following wherever these speakers might lead me and along the way I experienced a few unexpected turns. Foremost, gentle reader, do keep in mind that what I am describing is a two-way monitor speaker so it will not do subterranean bass. You know, the old "laws of physics" thing. But then again, I don't believe that full-strength repro of the lowest bass is what the Juniper was designed to do.

So your Ko-Do drummer recording is probably best applied to some other system. It will do bass but it will not do *whacking* bass, meaning percussion of the heaviest duty. The overall sound is more polite than that and the sound stage image is usually a bit reserved, instead of in your face.

So what is the nature of the beast? Perhaps, I can best explain that by putting the Juniper in its appropriate setting. Picture a stormy night a soft comfortable easy chair and an excellent glass of wine. You let yourself be immersed in the sound swirling all about you, let's chose a string ensemble and imagine that it is performing Vivaldi's "Four Seasons." The tonality is clear and just a bit warm; like the wine, it is the perfect compliment to an evening when life is good. Semper Hi-Fi.

NOTES

Escalante Juniper Loudspeakers, \$4,990. Escalante Design, 3585 No. University Ave. Suite 200 Provo, Utah 84604; phone 801/373-4712, fax 801/373-4713, e-mail people@excalantedesigns.com, web site escalantedesigns.com.

Associated Equipment

Michael Yee Audio PA 3 power amplifier; Hafler 500 power amplifier; Audio Research SP-9 Mark 3 preamplifier; Marantz DV8400 Universal CD player; Magnum Dynalab FT101a tuner; DH Labs Reference 1, Audioquest 8TC and Esoteric Ultrapath speaker cables; DH Labs Silver Revelation and Wire World Eclipse 2 interconnects; Richard Gray RGPC Sub Station, Alpha Core balanced isolation transformer, and Audio Power Enhancer 1 power line conditioners; Michael Green Room Tunes, and Argent Acoustic Lenses.