

Coming Sept. 8: Music Servers for organizing and indexing CDs...

# Audioletter

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**AUGUST MEETING RECAP** BY JOE PITTMAN

## John Yi with Crowson Technology



**George Pro with Pro Sound and Vision (left) and John Yi with Crowson Technology**

This month featured a presentation by John Yi with Crowson Technology from Santa Barbara, CA. Jerry Pomeroy was impressed by a demonstration of Crowson's patented tactile transducers at THE SHOW in Las Vegas last January, and since then was able to persuade John to squeeze in a presentation to the club while on a sales trip to the Northwest.

The purpose of the Crowson demonstration is to find out if vibration motion, or tactile effects can improve the listening experience with music only or movies. Crowson's Linear-Direct-

Drive™ technology efficiently drives a chair or couch vertically in the 1 to 500 Hz range and is the only transducer that accurately reproduces the ultra-low 1 to 40 Hz range. The transducer moves a couch or chair much like a subwoofer cone but with a small excursion. This is accomplished by small transducers (5" x 5" x 1" high) which fit under the rear feet of a couch and the Vibration Isolators under the front feet. Crowson's unique transducers are able to provide the power necessary to drive the load and maintain a small transducer size by utilizing a powerful

neodymium magnet and proprietary design. This technology is not the same as the competing ButtKicker which is attached to the couch or chair struc-



**A200 TES Stereo Amplifier**



**TES 100 Couch Kit which includes two TES Transducers and two Vibration Isolators (maximum load 1,000 pounds per kit)**

ture and utilizes a "shaker" or moving mass to induce vibration, which is not as efficient or accurate.

John suggests that we are sensitive to tactile motion in a primal way, probably since early man's survival was dependent on our ability to sense these low frequency vibrations (and sounds) to avoid being eaten. In addition, they found that we are even more sensitive when we are laying down because we are more vulnerable!

The Crowson Technology TES 100 Tactile Effects System currently



Front couch used the Couch Kit and A200 amp; rear couch used a Couch Kit and BMP-3S driving Matt Flora's Stellavox mono amps.



**DA-LITE Deluxe Insta-Theater 80" diagonal screen (\$610 plus shipping). Note the unique pneumatic scissors mechanism for raising and lowering the screen from the floor.**



**Hitachi PJTX100 3-chip LCD projector with 720p resolution (\$2800) on Jerry's tripod stand, with clever "Jerry-rigged" mounting platform.**

consists of a Couch Kit or Chair Kit. The Couch Kit includes two TES 100 Transducers and two Vibration Isolators (\$649). The Chair Kit includes one TES 100 Transducer and three Vibration Isolators (\$349). To power the transducers, Crowson has a stereo amplifier designed specifically for the TES 100, the A200. The A200 Stereo Amplifier has 85 wpc, integrated low pass filter, and overload protection (\$499). The transducers can be driven

by any amplifier with sufficient power, however, you will probably want to adjust the power fed to the transducers to fine-tune the effect. Crowson has the BMP-3S which provides Bass Management, Pre-Amplification and Stereo Effects (\$249).

John mentioned that their transducers can be integrated into furniture so that they can be concealed from view, Fortress Seating offers this as an option. Both Crowson and Fortress Seat-

ing will demonstrate this at CEDIA next September 9-11.

We set-up the first couch nearest the screen with a Couch Kit and A200 amp. The second couch was equipped with a Couch Kit and BMP-3S driving Matt Flora's Stellavox mono amps.

Jerry Pomeroy then played music and movie cuts while we played musical chairs (couches). Jerry's music samples:

- *Sounds of the West* (cow and horse sounds) and *William Tell Overture* (Lone Ranger Theme), Erich Kunzel Cincinnati Pops Round Up, CD Telarc, CD-80141
- *Me Missen You* and *Oh Well*, Sarah K Hobo, DAD (24/96 DVD-A) Chesky, CHDVD177
- *Alone Together*, Tierney Sutton Something Cool, SACD Telarc, CTLSA63548

After Break W/Videos: (audio from 2 channel PCM track on DVDs):

- *Kill Bill Volume 1*, Buena Vista, (DVD) DTS Demo DVD, Surround 9
- *I Robot*, 20th Century Fox (DVD) DTS Demo DVD, Surround 9
- *Sing Along*, Blue Man Group/Dave



**The Crowson A200 TES Stereo amp and BMP-3S on the bottom shelf of the Musical Fidelity rack.**

**TITLE TRACK** BY JERRY POMEROY

## Music Matters

I remember cruising the audio boutiques on Roosevelt Way, in search of better sound. I just knew something was holding back the great sound quality of my new JVC cassette deck. Yes, this story starts over 20 years ago. I thought new speakers would do the trick, so I was roaming from store to store in search of the “best sound”, hoping some new manufacturer had discovered magic powder and sprinkled it inside speaker cabinets—bingo, magic dust energized by my Heathkit W-5M mono-block amps! I could imagine a small violinist inside a speaker the size of KHorns, but could you fit bands like Pink Floyd, Genesis, Supertramp, or Chicago inside the cabinets and still have room to play the horns? This is what I was looking for: realism and presence. I was a young apprentice and had many years in front of me. I would learn the ways of an audio-holic, and my education continues today. Back inside the audio boutiques, as I listened to music I was trying to figure out how I could pay for a set of Quad ESL-63 speakers when a salesman came into the room and started talking to another customer about *source* and how important it was. I learned a few lessons that day which seem to be fundamental notes of audio-holics. The first was “there is no magic powder” and the second was “you will never get a more accurate sound than the source”. As I have gotten older my definition of source has gone back much farther than the turntable/record. The source is the *performance*, be it multi-tracked in a studio or live in a concert hall, a recording engineer is trying to capture the performance and preserve it by choosing and using the appropriate tools.

For those of us able to attend the Music Matters seminar at Definitive Audio on Roosevelt last month, we were presented with an opportunity to hear an awesome source. These were the personal recordings of Peter McGrath from Wilson Audio, played from his Genex GX9000 8-track recorder. Trying to explain how good original recordings can sound played back on the machine they were recorded on would be like trying to de-

was too distracting for me. Like a good subwoofer set-up when listening to music, you don’t notice it until it’s gone. I also think it may be beneficial to use the transducers while listening at low volumes—during set-up, when listening at low levels, it “sounded” like there was a subwoofer in the room. I’d include the effect of this device in the psychoacoustic phenomena category.

But when used in home theater, I would probably be inclined to crank them up a bit, especially if I’m watching *Jurassic Park*. However, low level listening should also be improved. I suspect you could justify these trans-

ducers just because you might listen at lower levels, thus prevent hearing loss, not to mention annoying your neighbors...

It took a lot of work and equipment to pull off this demo. I want to especially thank John Yi with Crowson for taking time from his busy schedule to speak to us and demonstrate his transducers and all the others that helped; George Pro for the projector and screen; Matt Flora for his Stellavox amps; Dick Mueller for set-up assistance; Jerry Pomeroy for his Denon 2910 DVD player and tripod stand; and Definitive Audio for the DVI cable and Musical Fidelity component rack. George Pro is the first Crowson dealer in the Pacific Northwest—for more info check-out [www.crowsontech.com](http://www.crowsontech.com) and [www.prosoundandvision.com](http://www.prosoundandvision.com). •

Mathews DTS Entertainment (DVD) DTS Demo DVD, Surround 9

- *Master & Commander Far Side of the World*, 20th Century Fox (DVD) DTS Demo DVD, Surround 9
- *Funk #49 and Life in the Fast Lane*, Eagles, Farewell Tour, Live From Melbourne (DVD) Warner Strategic Marketing, R2 970423
- *Jungle Sounds and Star Wars Episode I Phantom Menace Podrace Sequence*, THX Ultimate Demo Disc (DVD) Lucas Film (there is no catalog number for this disc)

I really enjoyed the demonstration. (Especially our first un-official home-theater-setup). When listening to music, I preferred the transducers set to a subliminal level; any higher and it

## TITLE TRACK, continued

scribe the taste of chocolate to someone who had never tasted it—some things you just need to experience. When I was notified about the Music Matters event, I wanted to go. This was an event with the intent to demo just how good music reproduction can be in a store.

Here is a recap of the event; The first room that Joe and I went into featured Linn LP12 with a Musical Fidelity kW Phono Stage, kW SACD player, kW 6112 tube pre and the kW 750 amp. If you haven't seen the new kW series electronics you need to check them out. They have an incredibly cool look, and the sound was great coming through Wilson Maxx2 speakers. Transparent line conditioner and cables were used throughout the system. The presentation in each room was about 40 minutes long, most of this time devoted to listening to music. Our DJ in this room was Michael Fremer from *Stereophile* magazine. The first thing he played was a piece from the Paul Anka *Rock Swings Big Band* CD. This was the time I knew I would really enjoy the evening. I had seen this CD at Borders just a few days earlier and thought it sounded interesting. I have since moved it to my music wish list. Two LPs were played in that room, the first being Mel Torme *Encore at Marty's Live*. The outside of the record was warped, and this was the first time Joe or I had ever seen the large 13" driver of the Maxx2 move. Several CD-r discs were played, namely Dionne Warwick *Walk on By* and Peggy Lee singing *Fever* (the version without reverb). I felt the star of this room was the second LP that Michael played: a 45rpm, CCR *Suzi Q*, I was impressed with the low noise floor of the system and how it just came alive with an exceptionally good source. There was a NagraV 24/96 hard-drive recorder in the room but the demo ran out of time before we got to sample anything from it.

We moved onto the the second room. This room featured Peter McGrath of Wilson Audio with his original 4-channel recordings on his GX9000 recorder and Phillip O'Hanlon from Halcro. The system in this room was EMM Labs CDSD transport, DAC6e processor and Switchman pre-amp modified to convert the discrete center channel information into the left and right Wilson Maxx2 loudspeakers that were driven by Halcro dm68 mono blocks;



**Chris Browder, B&W.**



**Michael Fremer, Stereophile magazine, with Wilson Maxx2 speaker.**

the rear Watt Puppy 7s were driven by a Halcro Logic MC20 two-channel amplifier. The AC line conditioner was Transparent Power Isolator, and Transparent cables were used throughout the system, less the transport/DAC cables which were EMM Labs. We first listened to a multi-channel SACD Elton John, *Tiny Dancer*, next a 4-channel/2-channel comparison playing Pancho Sanchez *Out of Sight* SACD, featuring Billy Preston, Ray Charles, and Sam Moore. It has also been added to my wish list. A few more tracks and Peter played some of his recordings. Directly quoting my notes: "Multi-channel is getting really good". It is hard to get a good two-channel recording, let alone doing four. Peter doesn't use any dynamic compressor or additional processors when he records, and as this always makes setup and recording harder, my hat goes off to Peter for paying attention to detail and striving to get the best recordings possible. Peter's recordings are very realistic, captivating, and dynamic. His microphone: the Schoeps KFM360 Spherical Microphone system. The mic system being composed of a sphere microphone that contains two pressure transducers and two additional figure-eight mics that sit outside the sphere along with a DSP-4 processor. This system is really cool, so if you would



**Dave Nauber, Classé.**



**Peter McGrath, Wilson, and Phillip O'Hanlon, Halcro.**

like to read more about it you can do a little on-line research at: [http://www.posthorn.com/S\\_kfm360.html](http://www.posthorn.com/S_kfm360.html).

To most of us this level of recording and playback is just unobtainable at this time, but remember 20 years ago the sound from the 45rpm *Suzi Q* was unobtainable to the average consumer.

I consider multi-channel music to be in its infancy, and expect it to get better in the years to come as more studios are set up correctly and a dominant standard for multi-channel mixing appears.

The last room we went into was set up as a 5.1 multi-channel theater listening room with B&W 800Ds and a HTM1D center channel in the front and 802Ds in the rear. All the electronics in the room were Classé Delta series, sourced by the soon-to-be-released CDP300 DVD/CD player. The CDP300 uses a transport made by Esoteric. The head of the project design team was Alan Clark, former head of electronics design for Linn Audio and responsible for the Unidisk. One of the distinguishing characteristics of the Delta series is the common LCD touch-screen control panel on the players and processors—it will even display video, a nice feature for navigation during playback of DVD-As.

B&W has updated their top speakers known as the diamond series (800D, 801D, 802D and 803D) now having a polycarbonate diamond tweeter and different bass drivers made of a carbonfiber sandwich with a lightweight high-strength foam called Rohacell in-between. The speaker cabinets look similar to the Nautilus series with the unique curved back but they have been changed to eliminate the seam in the middle of the back. This is probably a greater quality leap from the Nautilus to the Diamond than the Matrix-to-Nautilus was. I admit my bias—I currently have a set of 802Ns in my listening room. B&W is one of the great values in speakers and now I think they have made a major step up, possibly into *ultra* high-end.

It is really tough to sum up an experience like Music Matters—each demo had between 17-22 people listening. This is a sizable group yet it was one of the best-sounding group-listening events I have ever attended. This is what being an audiophile is all about: enjoying high-quality musical

reproduction. The point of high-quality reproduction should be that the end result is as close to the beginning source as possible. This is a sharp contrast to so many people who just listen to music from their iPod in glorious MP3 compression. Yes, the concept of accessible portable music has its place, but I hope that many of these people will come to appreciate high-quality audio reproduction when exposed to the ever-widening quality gap as engineers and manufacturers keep pushing the edge of high-quality audio ever upward. I applaud Definitive Audio for putting this event together.

So 23 years ago I wound up buying an LP12, not a set of speakers. It's been updated many times, the JVC cassette deck has long since been replaced by a Nakamichi Dragon, and I still believe that *source* is the most important thing. I keep telling myself that I have quit searching for magic dust but I still hope it will land on all the MP3 players. •

**TECH UPDATE** BY JERRY POMEROY

## OEL, Blue Ray HD/DVD

This month two things have caught my interest: a video display I first heard about four years ago but hadn't seen, OEL, and of course I can't resist the urge to ramble on about Blue Ray/HD-DVD.

**OEL display.** During my search for an HD radio tuner, I got to see one of the new JVC auto CD players with an OEL display on the front panel. OEL stands for Organic Electro Luminescent display. At first glance most people would think the display to be a very high quality, bright LCD; it's not! I did some research on OEL and will pass that along: some of the advantages are: very high light output, resulting in high-contrast displays that can be seen in daylight and color images viewable at very wide angles (the JVC I looked at was probably viewable up to 160 degrees both horizontal and vertical, without noticeable distortion); inexpensive to manufacture—it requires no backlighting so it's very efficient concerning power consumption; possible the most unusual feature of this technology could be how thin it is—so thin that some displays can be rolled up like a poster! This technology is currently available on some

car stereos from Pioneer, Sony, JVC, Kenwood, and LG cell phones. Expect to see it in the near future of laptops, PDAs, and GPS displays. With all these things going for it, a technology that is four years old...why don't we see it on everything? Current limitation of this technology for the consumer is 256 colors, but there is a rumor of the military having more.

**Blue Ray/HD-DVD.** This month Universal Music Group (UMG) signed on with Blue Ray Disc Association (BDA) citing what they felt to be a superior content protection system known as Advanced Access Content System (AACS) that was earlier adopted for use on the Blue Ray disc. To no one's surprise the other music label committed to Blue Ray format is BMG, a division of Sony. Together these two behemoth labels comprise over 40% of all CD sales. I wasn't able to find anyone talking about music release on HD-DVD. My guess is that from a marketing standpoint there is no need because HD-DVD players will be backward-compatible with DVD/CDs so they can play all the current DVD-A hi-res formats.

I bring this up because there has been very little talk about using either of the high-res formats for audio—remember Blue Ray can hold up to 50 gigabytes on one disc. •

## September Meeting (9/8/05) Preview

At the September meeting we will demo at least one music server and compare it in sound quality to the club's Sony SACD777. Music servers are one of the hottest products in audio this year, and not all servers compress the data in MP3 files like an iPod—this one doesn't. If you are like me and have hundreds of CDs around the house, a good way for you to organize them may be on a server or just an indexing system using CD changers. Expect to get involved in some basic discussion regarding copyright laws, and how they have been applied by the courts. This should be an informative meeting, so don't forget to bring a friend! •

## Bassists

Recently I was reading an interview, given a few years ago by David Friesen, a bassist we shall hear more about shortly. In it, he expressed one of the philosophies he felt strongly about, which was how important it is to be thankful for what we have. In the context of how David Friesen had struggled and gone without, and the perseverance and dedication he had practiced to become the kind of musician he is, it was a powerful statement. For a moment, I thought about all I had to be thankful for—my close relationships with my daughters and grandsons, my stereo system and the fabulous music it produces. I was jolted out of my reverie by the turntable announcing that the selected cut on the LP had been completed. I dutifully got up, went over to the turntable, lifted the arm, shut off the turntable motor, removed the record clamp, removed the LP, returned it to its sleeve, placed it in its jacket, and walked to the den to return it to its storage place, and select another LP that contained a cut I wanted to hear, and then returned to the turntable to start the process all over again. LPs are a pain in the you-know-what (rhymes with what).

Don't get me wrong. There is nothing like a quality LP being played over a great system, and I'm thankful for that—but really! I don't know whether I

have a good solution or not, but I am getting ready to record my collection on a computer hard drive, and, save for the most serious listening sessions, replace all of that fiddling around with the click of a mouse. I have purchased the computer which is fast, quiet, and has a 250 gig hard drive. The high-end card to be employed is the Card Deluxe from Digital Audio out of Minneapolis. The process now is making the final decisions as to which cuts to record. I am washing the LPs as I go, and am now in the M's in both the CDs and LPs. The ready-to-record start date is slated for January 2006. There is still a good bit of planning and "trial and error" as to the best methods for recording. No compression, of course. I'll keep you posted. I'm hopeful we'll wind up with something to be thankful for!

Let's move on to the bass players. There are, or were, literally thousands, but few that volunteered for the challenges of the leader role. Here are a few:

**Ray Brown: *Brown's Bag* 1976, Concord CJ 19**

The first time I saw Ray Brown, he was the bass player in Dizzy Gillespie's first big band in the middle forty's. I was

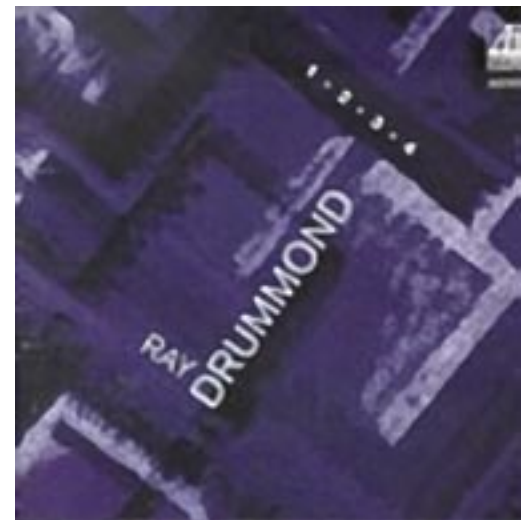


just a high school kid, and he wasn't much more than that. That band was electrifying, and one of the greatest thrills of my musical experiences. Ray later left Dizzy to go on the road with Norman Granz' Jazz at the Philharmonic. Later, he became a part of the famous Oscar Peterson Trio, and after that long stint, continued to perform in other groups, record, and then become the mainstay bassist for the movie studios in Hollywood. He was so well known, had the highest respect from everyone who knew him, and went on to become one of the preeminent jazz bassists of all time. One interesting note—Ray Brown was a friend and mentor to Diana Krall when she was an up and coming piano player. It was Ray who convinced her to try adding singing to her piano performances.

Although Ray Brown is on a zillion recordings, this is my favorite. He's accompanied by a stellar group of musicians including Blue Mitchell and Dave Grusin, among others. On the ballads, Dave Grusin gets near celeste-like tones from the Fender Rhodes, and with Ray's rich and mellow bass voicing, it is something to behold. To quote one writer, "The sound of Ray Brown's bass is a thing of awesome proportions". And this recording is so good it can serve as an excellent test record for comparing stereo components. Very highly recommended!

**Ray Drummond: *1\*2\*3\*4* (1999), Arabesque Jazz 0141**

Ray Drummond is accompanied here

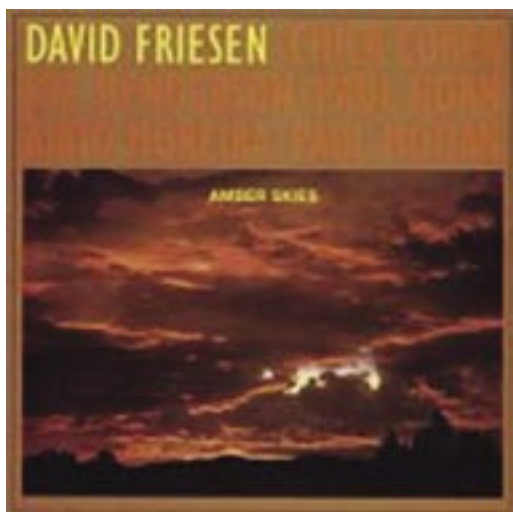


by leaders in their own right—Craig Handy on tenor sax, Stephen Scott, piano, and Billy Hart on Drums. It's

a well recorded session, and everyone definitely came ready to play. The music is a combination of standards, and compositions by Miles Davis, Wayne Shorter, and John Coltrane, among other notables. Ray Drummond has been plying his trade for almost forty years, and is exceedingly good at what he does. He gets a delicious big round sound out of his instrument, and is an excellent soloist as well as a classic accompanist. Although he has appeared on hundreds of recordings, this is only the 8<sup>th</sup> as a leader. A great group. Well worth owning.

**David Friesen: Amber Skies**  
1983, Palo Alto 8043

David Friesen is a very special person. Born in 1942 in Tacoma, WA, his mother having escaped from the Soviet Union when she was a girl by hiding in



a trunk. His dad was from Saskatchewan, Canada. His early musical years were spent in Seattle, playing at a coffee house, and The Penthouse, a Seattle Jazz Club now long gone. He joined the army, and while in the service in Denmark, met a girl who later was to become his wife. When he got out of the service, he worked for a year in a produce market in Copenhagen, and played music nights in order to save enough money to bring his new bride back to Seattle. When they got back, he worked in a shoe store days, and either played gigs or practiced nights.

Later they moved to Portland, and with the help of relatives, friends and plenty of sweat, opened a jazz coffee house there. There was a long and tedious period of meeting other musicians, and through them, meeting

name players. He got a break, and was introduced to Billy Harper who liked his playing, and hired him to go on a world tour with the band. Through that experience, he got a job on the road with Joe Henderson. He continued to expand his relationships and eventually met and played with most of the greats. He and his family still live in Portland, performing mainly on the West Coast, but in addition giving very successful seminars world wide.

This album, one of his many includes Chick Corea, Joe Henderson, Paul Horn, Paul Motian and Airto Moreira, all heavyweights, playing mostly his own compositions and a really nice version of Miles Davis' Blue and Green.

**Eddie Gomez: Next Future** 1993,  
GRP Stretch 1106

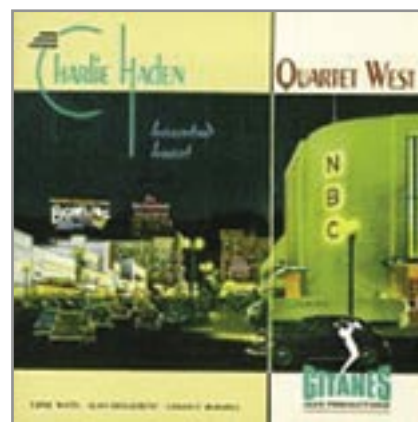
A great album with Chick Corea, Lenny White, drums, Rick Margitza, reeds, playing mainly Corea or Go-



mez tunes, with a couple of standards thrown in. Eddie played in the Bill Evans trio for many years, and then was associated with Chick Corea many years after that. A well known, top player.

**Charlie Haden's Quartet West: Haunted Heart** 1991, Verve 314 513 078

Charlie Haden is well known, so I won't go into all of that. This is really an interesting and enjoyable CD. It's theme, movies, and Hollywood in its heyday. Played by Charlie Haden's group, Quartet West (Ernie Watts, tenor, Alan Broadbent, piano, and Larance Marable on drums). It features music from the movies, and three of the numbers include (superimposed) the original recordings



of the songs sung by Jo Stafford, Jeri Southern and Billie Holiday. Unusual, and very nice.

Although we will be returning sometime in the future for more bassists, I don't want to leave without mentioning three other noted players, even though I do not have music where they are the leaders.

Jimmy Blanton was for many years the well known bassist in the great Duke Ellington Orchestra.

Ron Carter, on hundreds of recordings, but not a leader, was a member of Herbie Hancock's famous group VSOP.

Stanley Clarke—in and out of famous rock bands was the bassist in Chick Corea's Griffith Park Collection, with Freddie Hubbard and Joe Henderson, one of the best jazz groups ever!

Don't forget—Stacey Kent at Jazz Alley in September, and Karrin Allyson, Bill Mays, and McCoy Tyner coming there in October. Oh, and also the East Side Jazz Club the second Tuesday of September at Sherman Clay's.

Next time piano players. Take care. •

## Upcoming Events

Jan 5–8, 2006 **CES in Las Vegas**, more info at; [http://www.cesweb.org/about\\_ces/](http://www.cesweb.org/about_ces/)

Jan 5–8, 2006 **The Home Entertainment Show (THE Show)** will be in Las Vegas in 2006 at the St. Tropez Hotel next to the Alexis Park. For more info check out; <http://www.theshowlasvegas.com>

## dCS P8i CD/SACD Player with DSD upsampling

I had the opportunity to listen to the new dCS P8i CD/SACD player (\$13,000 approx.) at Definitive Audio. dCS is a British company that



**dCS P8i CD/SACD Player with DSD upsampling**

manufactures A/D, D/A and D/D converters and other digital equipment for consumers, professionals, and the military. This is dCS's first of three additional new "more affordable high end audio products". The P8i incorporates the RING DAC from the dCS Elgar DAC (\$15K), the audio board from the dCS Delius DAC (\$10K), and the DSD upsampling (CD's are converted to DSD) circuitry of the dCS Verdi La Scala transport (\$15K). This works out to half the price of the Verdi La Scala/Delius combo or a third of the Verdi/Purcell/Elgar Plus triumvirate. Which makes the P8i somewhat of a bargain from the dCS stable. In addition, the P8i includes 2 auxiliary digital inputs (should accept a 24/96 DAD signal) and a digital volume control to directly drive an amplifier.

Unlike other companies which use off-the-shelf chip-based DACs made by other companies, dCS makes its own DAC. It is only because of dCS's contracts with the UK military that the company could afford the R&D needed to design and build these precision devices. Now that's what I call trickle-down technology!

I listened to the P8i at the Seattle

store in the room with Wilson Maxx2's, Halcro electronics, and Transparent cables as used in the recent Music Matters demonstrations, plus a Watch Dog subwoofer. I spent a couple hours listening to my redbook CDs and SACDs and got a pretty good idea of the new units capabilities. Graham Skardon with Definitive told me that the unit had been broken-in and should be representative of the sound. After listening to a lot of music including

Eva Cassidy, Buena Vista Social Club, Duke Ellington Blues in Orbit, and Eric Clapton's *One More Car One More Driver*, it was exceptional. This player is among the best I've heard and should be considered when shopping in this rarefied price range. •

### **TWEAK OF THE MONTH** BY JOE PITTMAN

## ERS Paper

A perfect component should not be able to be improved by a tweak. Obviously, being perfect, it wouldn't need to be tweaked in the first place. And a tweak would probably be detrimental because it would change the performance and make it less perfect. And so it goes with tweaks in general—they *can* have a negative effect. Imperfect equipment in my opinion, is usually optimized by the designer to compensate for imperfection or, in most cases, compromise due to cost. If you are shooting a bullet at a target, for example, you must compensate for gravity and wind, remove these

influences and you will miss the target. Thus voicing of imperfect equipment can be changed by a tweak, again with negative affect, undoing a designers compensation. And so, the vast majority of equipment is not perfect, and can benefit greatly or poorly by tweaks. Caveat emptor.

Which brings me to my Denon 2900 universal player. Designed to a price point, the Denon at grand retail, is far from perfect and a target rich environment for tweaks. Its performance is improved by better power cords and power conditioning, isolation tables, support cones, cabinet damping, tube dampers, fuse upgrade, ad infinitum. I suspected that by reducing RFI and EMI it could be further improved.

I've been impressed with the darTZeel NHB-108 model one amp at Mike Lavigne's and after reading designer Herve Deletraz's white paper on the amp design at: [www.dartzeel.com/PDF\\_Files/AudioManuEN.pdf](http://www.dartzeel.com/PDF_Files/AudioManuEN.pdf), I'm convinced his use of a glass top on his amp to prevent internally radiated reflection of RFI/EMI back into the amp is a great idea and a step in the right direction. The problem with my Denon, and digital in general, is that a shielded cabinet is usually required to meet FCC requirements for minimizing RFI/EMI emission.

The Denon's metal cabinet acts as a Faraday cage, reducing RFI generation from escaping and conversely, preventing RFI from entering. Digital devices, especially universal players are filled with parts that generate RFI/EMI and parts that are sensitive to it. Ideally internal parts are shielded and or laid out to prevent interference or compartmentalized or completely separated in multiple cabinets. The Denon plays CDs, SACDs, DVD-As and DVDs, has video and multi-channel audio, it's cram packed! What amazes me is that it sounds as good as it does. But I was sure the cabinet was holding it back. I'd remove the case, but due to safety and the noisy drive it would not be a good option. Creating a new cabinet out of non-resonant and non-magnetic aluminum might be cool but time and cost would be prohibitive.

Digital has always sounded wrong to me. It has a pervasive amusicality. I've suspected that the high RFI/EMI radiation to be a primary culprit for some time now. RFI/EMI bounces around inside the cabinet like a microwave



**Particles embedded in ERS Paper**

oven. In fact that's a good analogy. I think, to me, that's what digital sounds like: microwave'd food, not as tasty as conventional analog food. Essentially, self-induced-distortions are one of the root causes of distortion in high-resolution audio in my opinion.

What if RFI/EMI could be absorbed/diffused/reflected like good room acoustics before the radiated noise could contaminate the signal? It should reduce/eliminate the added distortion pervasive to digital. ERS (Electromagnetic/Radio-frequency Suppression) paper can help. This

special paper was invented by Stillpoints (see [www.sillpoints.us/1Pages/ers\\_products.html](http://www.sillpoints.us/1Pages/ers_products.html)) and I purchased some sheets from the partsconnexion (see [www.partsconnexion.com/audiogon\\_pix/ERS\\_MAIN.htm](http://www.partsconnexion.com/audiogon_pix/ERS_MAIN.htm)).

First I placed ERS paper on top of the Denon and under it. There was a small change, hardly perceptible. Ideally it should be placed near the offending RFI/EMI emissions, and/or in between generating and sensitive parts. And since the metal case of the Denon is a shield,

the paper should have maximum effect inside the cabinet. (Be careful when placing this paper within a component because the paper has conductive particles embedded in the paper that could cause a short, so use at your own risk.) So I taped a sheet to the interior top side of the steel cover and a quarter sheet on each side. I used Scotch Safe-Release Painters Masking Tape so that the paper could be removed or relocated if necessary. Total cost was \$30.00. Sticky-back paper is available but its application is permanent.

Bottom line... Awesome! The noise

floor was reduced and the digital fog lifted. It was much more like real music. The temporal (time flow) aspects were much better. So not only was another veil lifted, but one of the most amusing aspects of digital, time distortion, was reduced. I'm sure that careful application of this stuff could work miracles.

If ERS paper worked so well with digital, could it help my Placette Passive Linestage I thought. So what the heck, I took it apart and applied the sticky-back ERS paper to every interior surface I could get to. Although the overall improvement was not as amazing as the Denon mod, it did remove another veil.

OK, this has been the best tweak for me so far. ERS paper plus Hal-O tube dampers plus IsoClean fuse and several other tweaks have combined to elevate my previously excellent Exemplar/Denon and Placette way beyond my expectations. These recent tweaks cost a little over one hundred bucks. Magic. •



**ERS Paper applied to the interior of the Placette's steel metal enclosure.**

#### **DISCOUNTS** FOR PNWAS MEMBERS

*Member discounts are available at these businesses:*

#### **First Impression Music**

[www.firstimpression.com](http://www.firstimpression.com)  
Order through club president Jerry Pomeroy.

#### **The Landing Discs and Tapes**

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206-524-5747

#### **Real World Acoustics**

Contact Brad Judah  
800- 514-5136 (leave message)  
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Seattle, WA 98105  
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#### **Pro Sound and Vision**

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Contact George H. Pro  
425-889-9499  
425-445-3308 (cell)

# Pacific Northwest Audio Society

Bringing Audio Enthusiasts Together Since 1978

## **PNWAS Mission Statement:**

- > To bring together people with a common interest in hearing music reproduced at its best, for their mutual edification and pleasure.
- > To facilitate the exchange and dissemination of accurate data concerning audio equipment and musical recordings.
- > To promote, sponsor, and cultivate the highest quality reproduction of music in the home.
- > To encourage maintenance of high standards in the performance, recording and transmission of music.

## **PNWAS Objectives:**

1. Provide a forum for meeting other audiophiles and exchanging information on musical recordings and audio equipment.
2. Demonstrate and compare such equipment and recordings.
3. Give members opportunities to become familiar with the techniques of audio manufacturing, testing, repair, recording, broadcasting, etc.
4. Explore related avenues as the membership deems appropriate.

## **Visitors Welcome!**

Meetings are held on the second Thursday of every month at 7:30 p.m. at 4545 Island Crest Way, Mercer Island, WA.

## **Dedicated on-line forum:**

<http://forum.audiogon.com/cgi-bin/fr.pl?1club&981759918&read&3&4&>

**Club website:** [www.pacificnorthwestaudiosociety.org](http://www.pacificnorthwestaudiosociety.org)

**E-mail:** [info@audiosociety.org](mailto:info@audiosociety.org)

**U.S. Mail:** Pacific Northwest Audio Society, P.O. Box 435, Mercer Island, WA 98040

**Annual dues:** \$35

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