the audiophile void

Joan Salez Jiamonds & Rust

Can an Audiophile Iome Iheatre ind Happiness with Video?



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SONY

Individual Reactions May Vary

Some people appreciate the difference between compact disc players. So do we. Audition the critically acclaimed Sony CDP-XA7ES.





New Products Guest Editorial Mark Block Obscura David Nemzer

RECORDINGS



John Hellow New vinyl releases from Classic Records and DCC prove that there is still a great deal of pleasure to be found in LPs.

AN IMPRACTICAL GUIDE TO HOME THEATRE

William M. Hart

Pushed on by his insatiable quest for audiophile perfection, yet dubious of ever attaining his goal, our Hero-Author braves the troubled oceans of Home Theatre, which are clouded by too many formats, standards yet to be resolved, and an enemy fleet of mid-fi, mass-market equipment.

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Satellite and Subwoofer Speakers: The "Overnight Success" of the '90s.

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Overnight, it seems, virtually everyone has discovered the advantages of the satellite-subwoofer speaker concept—*especially* for use in the home theater.

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MX-100 Powered Subwoofer

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ANNIVERSARY



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the audiophile voice



Into the next millennium...Series 2000

Boulder tales ar el irmous step for-Brand with the all rev. Series 2000. Previou v. remote chickled preample fiers suffered interference from the microprocessor into the audio path.

A fresh approach to preventing this annoyance is Boulder's elegant three



piece chassis design. The 2010 Isolated Balanced Preamplifier uses optical coupling between the microprocessor base and the typ audio cases, one each for left and right.

To complete the scatter, a tripe power supply has separate transfermers ture allows speaker relocation by ard regulators or left channel, right channel and divital.

Building on the leaendary discrete 990 nam stage, Boulder proudly presents the 993 with improved siew rate, cascoded input stage, and potted case. The 2010 Freamplifier generously uses elgritee 1993 stalles.

Volume control in 01. 0.5 or 1.0 dB steps is accomplianed over a 100 dB range vitneut distortion or hiss by a proprietary solid-tate circuit.

The new standard in preamplifier clarity and accuracy has arrived.

Boulder finally delivers what has long been needed in Digital to Analog Converters, respect for the analog.

By using Boulders new chassis design and building the audio path with ten 993s, the 2020 Advance D/A Converter has more thought given to the analog that ever before.

Violtal palaried drive to the file converters assures the lowest distortion and noise possible to lay.

A unique divital time advarce fea advancing time in only one channel.

The Series 2000 Sectionalized Remote Control operates both products, expanding as your system grous.



Bruide Seres 2000 5 an audio perfection sto dream come true.

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Boulder



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Myryad Amplifier

Imported by Audio Influx, the remote-controlled MI120 integrated amplifier from Myryad Systems, a new UK firm founded by Chris (co-founder of Arcam) and David Evans, offers 60 wpc, 8 ohms, and 120 wpc, 4 ohms. Design features include gold-plated signal-relay contacts and short, direct signal paths. \$899.00. Data: 201/764-8900.

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Most so-called "dampers" just change an unwanted vibration's frequency; these actually absorb the resonance by turning it to heat. These arrays of elasticized polymer plates, tuned between 40 Hz and 2 kHz, are available in versions for home speakers, OEM speakrs (NEAR's 50Me and 15M use them), speaker stands, or custom install and in-wall. Data: 707/794-1512.



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ogy. Incredibly accurate home theater and two channel stereo can now be accomplished with one system and <u>without sacrifice</u> to either! With Acousta-Reed Bass, subs are no longer needed. simplifying placement

and installation. And with our one piece dome tweeter, high frequency extension is superb with the open and natural character of live music! In the Nov. 95 issue, *Stereo Review's* Julian Hirsch said:

"For a small, affordably priced speaker with a pair of 3-inch woofers, such performance is nothing less than amazing...In fact, if I had to sum up the sound of the AP-.7 in a few words, I would describe it as "balanced, natural, and uncolored."

Those adjectives are overused in the hi-fi world, but they are the right choice for this speaker!" These comments were made while reviewing our smallest bookshelf speaker. Imagine what our larger models can do! Call today for a free brochure or visit our new web site on the internet at the address shown below:

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ETTERS

Trading Punches Dear Editor:

lust received Vol. II, No. 3 of The Audiophile Voice. My congratulations for a job well done. I thought for sure that I'd beat you to the punch by getting Sound Off out before The Audiophile Voice hit the street. I was wrong! You did a yeoman's job in bringing out the new "standard size" magazine in a relative short amount of time. As difficult as it is to do (and you don't know how difficult!), there is a time to keep one's mouth shut (mine) and let someone who worked very hard (you) savor a moment of panegyric tribute from one of his harshest (but fair!) critics. Again, Gene, my congratulations and I wish you at least another 25 years with the same magazine.

Enclosed is the latest issue of [my magazine] Sound Off. Per your advice, I've concentrated on the spelling. I hate the damn details (spelling, for example), but that's part of the game. After writing a first draft of the above paragraph congratulating you (for getting out the first 100%-Gene Pitts version of The Audiophile Voice), I read your latest edition in more detail. Very nice job. My only negative comment would be that I am wondering why you printed two letters to the editor, particularly the first one. No wonder that guy wanted his name and address withheld. But, hey, I'm rooting for you.

Joe Cierniak, Editor/Publisher Sound Off magazine 1 Glen Circle Glen Burnie, MD 21061

Joe Cierniak writes/edits/publishes a little newsletter, Sound Off, and I think he's pretty well got his priorities in the right order. For

example, if you get a copy of Sound Off, you'll notice that his title "Editor" on the masthead of his magazine comes before his other title. "Publisher." Joe likes to razz other editorial types in his n-letter, but doesn't do it gratuitously, as some other publications have been known to do, thereby risking their own existence because they think the skewered editor at the other mag prizes serenity above an easy victory in a libel suit. I don't think loe always has the physical facts of publishing strongly in hand, since his form of desktop publishing has different procedures than Big Publishing (i.e. where above 500,000 readers pay for each issue). but his ethical and moral positions are the right ones. These positions are what count in my book, because in the end they are what give a publication credibility.

In case you missed it, loe is razzing me, perhaps too gently, with those "concentration on spelling" and "name withheld" comments. We had far too many typos and misspellings in the last issue of TAV to suit either him or me. While I will easily admit that I am not a Champion Speller, nor even a very good speller as editors go, I had suggested to loe a year to two back that he start to use one of the modern word processing software programs because they were a great help with the basic stuff. He had been trying to do the whole job on a standard typewriter, as I recall. During our last issue, there was some procedural glitches where we in the office introduced misspellings into otherwise perfectly good manuscripts and at other times where our corrections didn't get onto the final page. That other comment, about the perhaps too congratulatory letter, doesn't take into account that I didn't GET any other letters. Anyway, write loe and maybe he'll

Introducing The *Tower*[™]Series By Henry Kloss.

Cambridge SoundWorks' now Tower series speakers combine musical accuracy, very natural tonal balance, precise stereo imaging and an incredibly dynamic presence – all without reinventing the laws of physics.



No Magic Formula. No Secret Ingredients. No Mumbo Jumbo.

In 1988, we changed the way people bought speakers when we introduced our *Ensemble* speaker system by Henry Kloss (founder of AR, KLH & Advent) – selling it factory-direct. In 1996, we're changing things again.

No Mumbo Jumbo.

We don't claim our designs are based on amazing scientific breakthroughs. No mystery material. No magical formula. No revolutionary technology.

We offer carefully fine-tuned designs, based on years of experience, using the best materials. But we aren't obsessed with materials. We're obsessed with sound.

Our *Tower* series has the wide range, precise stereo imaging and natural tonal balance of our acclaimed *Ensemble* series – and adds improvements in efficiency, dynamic range and "presence."

The result is somewhat unusual: speakers combining the dynamic presence of high-efficiency studio monitors, and the precise musical accuracy and pinpoint imaging of low-efficiency "reference" speakers.

Tower III by Henry Kloss*

Touer III is a two-way design using a wide-dispersion tweeter and a single 8" woofer. Like the more expensive models in the *Touer* series, it combines high sensitivity and outstanding dynamic range with the natural, widerange sound (including terrific bass) that results from a generously-proportioned cabinet. It has been meticulously "voiced" by Henry Kloss for superb octave-to-octave tonal balance and precise stereo imaging. These benefits come at a much lower cost than superficially similar models through a combination of Henry Kloss' design expertise, plus Cambridge Sound/Works' highly efficient direct-to-the-consumer sales policy. *Touer III* is the most affordable highperformance floor-standing speaker we know of.

Like other models in the series, *Touer III* is magnetically shielded and features removable black grilles, fully-finished cabinets (front and rear) and goldplated binding posts. It is finished in black ash vinyl. **Factory-direct price: \$599 pr.**

Tower II by Henry Kloss™

Touer II is a three-way system that is substantially larger than *Touer III*. It features two 8" polypropylene woofers, a 5 1/4" polypropylene midrange driver, and a 1" soft-dome tweeter. A flared low-frequency vent is located at the lower rear of the enclosure.

The large cone area of *Tower II's* multiple drivers contributes to an effortless sound quality, giving music a strong feeling of "presence" that is easier to hear than describe. That presence, along with *Tower II's* smooth, musical octave-to-octave tonal balance and precise stereo imaging, produce what we think is the finest speaker system ever offered for under \$1,000. *Tower II* is finished in vinyl that simulates black ash or Vermont walnut. It is bi-wire/bi-amp capable.

Factory-direct price: \$999 pr.

"Selling direct allows Cambridge SoundWorks to price speakers hundreds of dollars below the competition." Inc. magazine

Tower by Henry Kloss™

The flagship of our new series is a three-way, bipolar model named *Tower by Henry Kloss*. The bipolar dispersion pattern helps eliminate the usual "point source" effect of direct-radiator speakers, and ensures a proper stereo effect in a variety of listening positions. *Tower* features two forward-facing 8" woofers; a forward-facing 5 114" midrange driver; a 1" soft-dome

tweeter; and separate rearward-facing midrange and tweeter units identical to those used in front. A flared low-frequency vent is at the lower rear.

Because it has even more cone area, *Tourer's* feeling of "presence" is, if anything, stronger than that of *Tourer II*. That presence, when combined with the three-dimensional sound of *Tourer's* bipolar design, results in sound that is nothing short of incredible – *spectacularly* realistic Available in lacquered walnut or black ash veneers, we think *Tourer* is one of the finest speakers ever offered. It is bi-wire biamp capable. Factory-direct price: \$1,499 pr.

CenterStage by Henry Kloss™

CenterStage is a two-way, three-driver center channel speaker that complements our Tower speakers. It matches the tonal balance of all three models. Its bass reach is significantly greater than most center speakers, thanks to its dual-vent enclosure. The dynamic range of its long-throw drivers is enough to handle the most demanding of video soundtracks, while their dispersion is broad enough to include all listening positions. It is finished in black vinyl. Factory-direct price: \$349

The Surround® by Henry Kloss

You can create a complete home theater sound systems using *CenterStage* and any of our *Tower* speakers combined with our high-output dipole radiator surround speaker, *The surround*. Available in black or white. **Factory-direct price: \$399 pr.**

Satisfaction Guaranteed

All three *Tower* speakers and *CenterStage* are backed by our Seven Year Parts and Labor Warranty and our 30-Day Total Satisfaction Guarantee.



favor you with a copy. I think you'll like it.

Validate Whose Subscription? Dear Editor:

I guess that we all "puff up" slightly when we encounter something that appears to validate our own discoveries or revelations. I built my own speakers. The black art has owned me for over 30 years. All of these years have been spend in the same 17x22x12-foot listening room trying to construct a coherent sound stage. I have always viewed Speaker drivers, enclosures, crossover components, and room as co-equal parts of an acoutix whole.



I began arranging all but the bass drives vertically suspending in as nearly free space as possible years before thatr approach appeared in the marketplace. I felt validated.

In the last year, I saw my choice of high and mid drivers used in two highly thought-of systems costing over \$12,000. I felt validated.

In my first issue of *The Audiophile Voice*, you reviewed the Paragon Regent loudspeaker system which uses CFAC 14-gauge foil inductors and Solen caspacitors, as do I. Again, I felt validated.

Isn't it strange that, even though the quality of music reproduction I have achieved is (to my ear) the best I have ever heard, it is of importance to me that someone I don't know from a load of coal, using acomputer that I couldn't operate arrives at the same conclusion. Why isn't the sound enough?

Ed Heath Lexington, IN

The Editor responds: Dear Ed:

Well, friend, I'll tell you, I think the reason the sound isn't enough is because of a Corrolary to Baranek's Law. You remember Leo's Levity about Loudspeakers, don't you? Quoting from a notably Altsheimer's afflicted memory, the quip actually runs something like the following:

"It has been remarked that if one makes one's own choice of cabinet design, selects the drivers and other components, and actually does the construction, installation, and final finishing, then the frequency response of the finished loudspeaker plays very little part in determining one's accessment of the quality of the resulting loudspeaker system."

Now, lest you think that I am quibbling with you, let me hasten to add that I think you've beaten the odds on the question raised by Mr. Baranek, since it appears you have gotten deeply enough into the black art to be at least partially immune to the bite of the dreaded "Let's Market It!" Bug.

Rotel Report





The RDP-980 Digital Processor (top) and the RDD-980 remote-controlled CD Transport provide state-of-the-art digital performance without a state-of-the-art price. Suggested Retail Prices: RDP-980 (\$599), RDD-980 (\$699)

A LOT MORE A LOT LESS

The digital dilemma answered at last.

Digital separates really do provide superlative sound. The only problem is that most of them begin by separating you from the contents of your wallet. That's hardly an enticing prospect for those of us who constantly balance our quest for musical excellence with minor annoyances like rent and the IRS.

Fortunately, Rotel has the answer. Our new RDD-980 Compact Disc Transport and RDP-980 Digital Processor combine exceptional sound, unique convenience, and affordability. How affordable? Let's just say that you'll have enough money left over for some wonderful concert tickets...or that CD buying binge you've been putting off!

Synergy.

The RDD-980 CD Transport and RDP-980 Digital Processor boast circuit sophistication and sound quality far beyond their modest prices. They're a perfect match. But, they'll also work spectacularly on their own in your music or audio/video system.

Perhaps best of all, they're from Rotel, where dependable excellence is a tradition. See and hear them both at your local Rotel dealer. And be prepared to believe.

RDP-980 Digital Processor

The RDP-980 reveals musical nuances with a faithfulness formerly reserved for only the most expensive processors.

That's not the end of the RDP-980's capabilities. It switches up to 5 digital sources using coaxial or optical links. It handles sampling frequencies of 32kHz, 44.1kHz, and 48kHz for compatibility with any digital source. And, it features full remote input selection, phase inversion, and output muting.

The RDP-980's high isolation power supply includes two shielded transformers, one for the digital stages and one for the analog circuitry, and 17 individual local voltage regulator/filter capacitor arrays. The glass epoxy circuit board isolates signal traces and ground planes on separate sides for minimal interference.

Jitter? The RDP-980's specially selected optical input modules and high speed, wide bandwidth coaxial amplifiers minimize it. Additional circuit stages precisely synchronize all digital inputs and outputs to the RDP-980's master clock to effectively eliminate it.



The analog stage features high precision metal film resistors throughout. Close tolerance polypropylene foil and epoxy-dipped ceramic capacitors complement the FETbased operational amplifiers.

The result? A spacious, detailed, and totally non-fatiguing presentation of all your digital sources.

RDD-980 CD Transport

Rotel's RDD-980 CD Transport begins with Philips' highly regarded CDM-9 laser mechanism, long respected by critical audiophiles for precise tracking and immunity from external vibrations.

We didn't stop there. We suspended the mechanism in the center of the RDD-980's substantial chassis for even better damping of resonances that could cloud delicate musical information. We thoroughly isolated the motors, tracking servos, digital circuitry, and the information display with a multi-segment, dual transformer power supply. We minimized minute internal supply variations with precise voltage regulators, oversized heat sinks, and high grade capacitors. We included both coaxial and optical digital outputs, full remote control capabilities, and housed it all in well-shielded heavy gauge all-metal chassis.



Rotel of America

54 Concord St. North Reading, MA 01864-2699 tel 800-370-3741 fax 508-664-4109



Notes from a Skeptic

It has become conventional a u d i o p h i l c reviewer wisdom that "everything used makes a difference." Place a batch of rubber blocks on your CD

transport—wow, the noise floor is lowered! Put some expensive magic dots on your wall—yeah, what soundstage width! Turn your Shun Mook puck a quarter of a turn—I don't know what I heard, but I sure heard something. Amazing! My skeptical nature, however, leads me to another conclusion. You know the old saying, "If everyone believes it, it must be wrong."

The fact is, everything can't make a difference. There have to be some things that have no effect, or

have an effect below the threshold of human perception. Isn't that just common sense? We recognize that to be the case in other areas of human endeavor, so why not in audio? Some

products are snake oil. Some manufacturers are selling the emperor's new clothes. If you believe everything makes a difference, I believe you're just playing with yourself.

There are many well-understood reasons to explain the audiophile penchant for hearing things that just plain aren't there, but we're so defensive about our **Mark Block**

golden ears that we are afraid to admit that s o m e t i m e s s u b j e c t i v e judgments aren't perfect. It seems that to do so would be to give

ammunition to the enemy—the dreaded objectivists at *Stereo Review, Audio* and the AES. So the truth, which inevitably lies somewhere in the vast, boring DMZ between the two camps, is ignored by both sides.

The audiophile credo of "damn the measurements, listen to your ears" began as a necessary reaction to the closed-eared objectivists who were foisting highfeedback, solid-state receivers and direct drive turntables on we-the-consumer and claiming that this

> crap was state of the art. Measurements don't lie? Neither do statistics, until they're used in a dishonest or ignorant way. Measurements may not lie, but they can deceive; what to measure

"I'm skeptical; I don't think everything makes an audible difference."

> and how to interpret the measurements are somewhat subjective calls limited by the current technology and the prevailing scientific paradigm (i.e., the bias and ignorance of the supposedly objective measurer).

> Audio objectivists, however, seemed unwilling to admit that there was anything new to be learned about either electronics or human hearing. The high-



Now You Can Stop Kicking Yourself For Selling The Originals.

 ${
m No}$ audio equipment in history has achieved the legendary status of the Marantz vacuum-tube electronics. So timeless are the sonic and aesthetic attributes of this classic trio that, almost four decades after their introduction, pristine examples are still eagerly sought by committed music

lovers and audiophiles alike.

Fortunately for those remorseful souls who parted company with their beloved originals, Marantz proudly announces the reintroduction of the Marantz Classics. The Model 7 preamplifier, Model 8B stereo and Model 9 monaural power amplifiers sound as remarkable today as when they first defined the state of the art during the Golden Age of Stereo.

These recreations are true to the originals in every way. In many instances, parts like transformers and meters have been sourced from the very suppliers who furnished them over a generation ago. Faceplates, knobs and switches are identical, and even the Marantz logo has been restored for absolute accuracy. All wiring is point to point; no circuit boards have been substituted for the sake of convenience or cost. Only genuine safety improvements, like detachable IEC power cords, standard fuses, and contemporary speaker terminals in place of archaic output taps, differentiate these modern units from their predecessors.

Ultimately, these jewel-like components could have you listening to music from a whole new perspective, while providing the kind of satisfaction that comes from possessing a timeless classic.

So instead of kicking yourself, you can sit back and enjoy the company of a long-lost friend.



naranty

end audiophile revolutionaries were, back in the '70s and early '80s, clearly on the side of the angels. Now the revolution is over. Practically speaking, we won. Yet the new audio scene is hardly a vision of heaven: It's a purgatory of silly tweaks and outrageously expensive components, and it's on the verge of going to hell.

As Pogo said, we audiophiles have met the enemy and he is us.

The pendulum must now swing back a little; we must own up to our excesses or the revolution will continue on its path to senselessness. (I'm starting to sound like an apologist for Mao or Stalin. The comparison may be uncomfortably apt.) Reviewers and hobbiests alike must start recognizing—and making an attempt to avoid—some of the most common phenomena that account for tweakoid nonsense:

1) The placebo effect.

Need I go into this well-known problem? It's why

we_have_control groups_in drug_testing. It's why anecdotal evidence of medical "cures" inevitably proves to be unreliable. Patients given placebos do get better. Likewise, audiophiles given Shun Mook pucks really do hear improvements in their systems. They're not making it up, but that doesn't mean that the pucks are actually doing anything. I'm not saying that reviewers who promote these things are necessarily wrong, but let the buyer beware; it would be a mistake for the reader to trust that recommendation.

Look at how reviewers typically make their evaluations. A manufacturer comes over with \$5,000 worth of tweaks (which some reviewers consider a "permanent loan"), and spends hours indoctrinating the reviewer while installing the stuff. Then the reviewer plays some music (often in the presence of the manufacturer) expecting to ascertain whether the system now sounds "better" than it did before the indoctrination. Where's the control in that reviewer's methodology?

Before reviewers recommend that we spend thousands of dollars on stuff that makes no logical or scientific sense, wouldn't it be nice if the they actually controlled for the placebo effect? Well, that would be too much like work, it would cost the





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magazines time and money, and it might end up embarrassing an advertiser—not to mention the reviewer himself when he finds out that the placebo produced the same beneficial effects as the real thing.

1a) The power of suggestion.

(A subcategory of the placebo effect, AKA "The Emperor's New Clothes.") When a manufacturer, dealer, friend or reviewer tells you that a certain component is the greatest thing since Cameron Diaz, you're going to be predisposed to like it. You're going to bring it home and run your finger along it and smile, visions of Cameron perhaps dancing in the faceplate. In such a heightened state of manly awareness, you will enjoy your system more. A few glasses of good Cabernet will probably produce the same auditory illusion—and might even make your wife or girlfriend look almost as good as Cameron (mine already does; right honey?)—but will leave you feeling a trifle less energized about things in the morning.

A good example of "The Emperor's New Clothes" occurred, infamously, in the computer world last year. The best selling software on the Windows platform was a program that purported to increase RAM without the expense of actually adding any additional memory chips. Millions of copies of the software were sold, and most users were, apparently, satisfied with the performance increase they achieved. The problem was that the program didn't really do anything; it just provided a seemingly impressive control panel that let the user think it was working. Imaginations did the rest.

Let's try and get rid of at least a few of the more common problems.

2) Cognitive dissonance. This phenomenon is the result of conflicts between our thoughts and our actions. It explains, among other things, why a frat brother feels more loyalty towards his chosen Greek affiliation after going through the torture of hazing; or why a battered woman chooses to stay in an abusive relationship; or why a well to-do customer returns to a snobby store like Gucci or [fill in your favorite audio salon here] after being treated like someone who just crawled out of a toxic dump. The cognitive dissonance of high-end audio goes something like this:

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> Sam Tellig Stereophile Magazine November 1996, Volume 19, Number 11.

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> Clark Johnsen Positive Feedback Magazine Summer 1996, Volume 6, Number 4

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Recommended Component, Stereophile, April 1996 (Vol. 19, No. 4)

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Carver TFM-35x THX Amplifier

Stereophile Guide to Home Theater, Fall 1996 (Vol. 2, No. 3), Robert Deutsch

"It's very modestly priced but doesn't sound like it...There are two groups of audiophiles to whom I particularly recommend the TFM-35x: those who are drawn to the tonal qualities of tube amplifiers but don't want the responsibility of their care and feeding, and those who are attracted to the sound of the Carver Lightstar Reference but deterred by the price...In the right system, it can give the big boys a good run for their money."

Carver AV-806x Multi-channel Amplifier

Recommended Component, Stereophile, April 1996 (Vol. 19, No. 4)

"I was expecting competent performance; what I got instead was magic,' enthused TJN [Thomas J. Norton] about the six-channel Carver... 'My favorite current multichannel amp."

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—I just paid five grand for a bunch of cables;

—If I don't hear a huge improvement, then I'm an idiot; —I'm not an idiot;

—Therefore, there has got to be an improvement.

Our brains react to that kind of pressure in predictable ways. The

most common reaction is that we will hear a difference, come hell or high-end water cables. That resolves the cognitive dissonance, and let's us move on with our lives.

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t dealer. 116 West Fourth St, Hanford, CA 93230 (209) 582-0324 CIRCLE NO. 31 ON READER SERVICE CARD of someone who's just bought them.

3. Confirmatory bias.

Research indicates that we tend to steer ourselves into finding evidence that supports our beliefs and preconceived ideas, while ignoring that which does not. Those who believe in, say, the theory that the color green absorbs stray laser light and improves CD sound will tend to listen harder and hear subtle nuances after they've used a green marker on a CD's edge. They can't help but subconsciously look for evidence to support their position. The believers may be right or they may be wrong, but, again, they are not to be trusted. Period.

And even if you don't necessarily believe in the "green theory" or any other theory, most of us want tweaks and upgrades to work because they support our deeper belief that the objectivists have their ears up their asses. So don't we all, as "audiophile experimenters," come to our equipment evaluations loaded with tons of biased baggage? Why is that so hard to admit? The really hard part is to produce valid experiments that take the bias into account. Remember, a scientist's job is to attempt to falsify theories. One who attempts to support a theory is merely a promoter. We could use a few more scientists in audiophile land.

We're all familiar with the highend magazine habit of publishing rave "preliminary reviews." And what typically comes of them? The reviewer finds a new flavor of the month before the final review gets written—if it gets written. Too many of these articles are simply the result of biases running rampant and reviewers reacting emotionally rather than skeptically to the equipment being evaluated.

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CARMEN LUNDY Self Portrait

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Carmen's powerful and emotional voice is supported on this release by Cedar Walton, Ralph Penland, Gary Herbig, John Clayton, Jr., Ernie Watts and Nathan East. Three tracks feature a full string orchestra arranged by Grammy Award-winning arranger Jeremy Lubbock. The XRCD version of <u>Self Portrail</u> also features a bonus track, previously unavailable the U.S.

OSCAR CASTRO-NEVES

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TOM COSTER

From The Street

Known for his work with Santana as well as his incredible solo projects. Tom's knack for fusing rock. tunk and jazz is unparalleled. Add to his talents those of Mark Isham. Michael Brecker, Dennis Chambers and Sheila E, and <u>From The Street</u> is a musical experience not to be missed. It happens in speaker evaluations (with differences between transducers being clearly audible even to untrained listeners) and it most certainly happens with components whose sonic signatures can fade to the infinitesimal.

Moi?

So just because I'm aware of the these pitfalls, does that make **me** immune to them? No, sadly, and that's precisely the point. The subconscious mind plays tricks on the conscious part. Our senses can be fooled. Judgments can be powerfully affected by subtle biases. Anyone who doesn't



For dealer inquiries, please call: AUDIO BY MEYER 1754 MAIN STREET • JACKSONVILLE, FL 32206 TEL/FAX 904/355-0368 understand that is a fool. Unfortunately, I don't have the time or the means to conduct double blind listening sessions with the equipment that comes to me for review; all I can do is promise to be always skeptical.

This brings up a tough question, over which I admit to feeling some congnitive dissonance: Why bother? If I can't as a reviewer live up to minimally acceptable scientific standards, why continue to do it in a half-assed fashion? Because I believe that my subjective experiences can be helpful to fellow audiophiles. That's all.

I recently attended a speaker "shoot out" with The Brass Ear and The Fish. Our favorite speaker on this night—the ESP Harp—was better than the competition in ways that cannot, I believe, be adequately conveyed by test measurements or objectively scored trials. Everything we played that night sounded more lifelike, more dramatic, more real-more like music—through the Harps. The performances kept drawing us in, and we found it difficult to nitpick the speaker in hi-fi terms. In that regard, the Harps were so much better than the competition that normal hi-fi criteria like bass and treble (and even imaging) seemed almost pointless to discuss.

But as impressed as we were that night, the proper response would be to file away the experience under the heading: REQUIRES FURTHER ANALYSIS. The fact that I've heard ESP speakers sound awesome at several hi-fi shows would lend support to our findings, but it also could have resulted in a confirmatory bias creeping into the listening. That Audiophile Voice reviewer Bill Wells went ga-

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M O N D I A L D E S I G N S L I M I T E D 20 Livingstone Ave., Dobbs Ferry, NY 10522 • 914-693-8008 • Fax 914-693-7199 ga over the more expensive ESP Concert Grands in the pages of this magazine several years ago is also good supporting evidence that the designer at ESP knows what he's doing, but my dealings with that designer (as copy editor of Bill's review and as a journalist reporting on CES shows) could have affected my reactions in a thousand subtle ways. If I were reviewing the speakers (I'm not), I'd have to listen hard for a few more weeks, then repeat the comparisons. I'd mix up the order. Then repeat again. I might invite someone else over—someone unaware of my opinions—to get a "fresh ear." Of course, as an audiophile, I'd say that I'm positive I heard what I heard. As a reviewer, however, I wouldn't jump to conclusions. And neither should you.

ANIMADVERSIONS ON NOTES FROM A SKEPTIC

The Editor, an unrepentant Objectivist, responds:

When I took up this publication, my Editorial Mates, both back at *Audio* and at other magazines, twitted me about "selling out to the enemy," and I have no doubt but that Executive Board of The Audiophile Society has been wildly congratulated for subverting one of the opposition's ring-leaders, or at least taking him captive.

However, I think that this Religious War between of the Subjectivist and Objectivist Reviewers is

The Editor thinks that lack of an objective stance is killing the high-end.

helping to kill off the general public's interest in highend equipment specifically and in hi-fi gear generally. It makes no sense to the civilians since both reviewer camps look crazy.

So, I want to respond to Mark's guest editorial to discuss an extremely important question: How do you know if someone is hearing something? How do you know that his eyes aren't fooling him? Do you just believe him? Or are you, like friend Mark, a skeptic? But don't, Gentle Reader, let the somewhat argumentative tone of my response to Mark's Notes put you off. This is truly important stuff.

I think we ought to invent some new Straw-Man manufacturer that everyone can happily bash. While



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800 255,4228 2 07 610,388,1869 2 610,388,6172 fax info@balanced.com World Radio History still at *Audio*, I charted a new universe, with different Laws of Physics from this one, from which various Magicians (read "Marketing Managers") got their copy and engineers their operating principles.

However, I know of only two ways to be certain whether someone is actually hearing something, as opposed to just seeing what's connected or repeating the Marketing Magician's Cant. The first is to teach me how to hear it, while the second is to demonstrate—out of the range of *all* known bias mechanisms, including seeing what's connected—

Either teach me to hear something or show me you can hear it in blind tests.

that he can hear it. I will gladly run an article by anyone who comes up with any other valid method.

I don't think it fair to say the objectivists are "closed-eared," Mark, just more skeptical than credulous. There are, I think you agree, various items which combine to influence the buyer's final evaluation. It may be that what you describe as poor sound was state of the art, if reliability in an integrated amp is higher on the buyer's preferred-trait list than two tape loops.

And we objectivists never said that measurements were more important than what we both heard. No, I said "Science in the service of listening." I said that 'cause no subjectivist ever answered Klipsch's Question: How do you know what you're hearing unless you measure? At the very least, don't experimenters have to get the other things, like color of the grille cloth, per Wharfedale's famous experiment, out of the way so they can't bias the hearing?

A few years ago, there was an article in *The New York Times* about how glasses for wine tasting were chosen. It turned out that there was an interaction between the various shapes of wine glasses and the wines. I.e., the "wrong" glass doesn't allow the particular wine to be smelled—NOT tasted properly, accurately, "to best effect." There is a name for this, synesthesia; I do not mean to say that the two things can or should be separated in the home listening experience, though I think reviewers should do that for the reader. Viz: Wharfedale color effect above. Let me say, too, that while I am very willing to pay extra for a fine finish on my new speakers, I do



the audiophile voice World Radio History



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One of the ADST family of companies. Museum quality brochure available upon request not think that finish will influence the actual sound of the system, however much it influences my satisfaction.

One more word on measurement, too many subjectivists and objectivists don't learn the basics of either electronics or human hearing. I mean, how many audiophiles actually have copies of any basic text about these subjects or even an electronics dictionary in their library? I strongly agree that the industry is hurting, though I believe it's because there are too many tweaks that don't make any difference and too much credulity by reviewers and too much willingness by editors to publish reviews of halfbaked products and too much desire from the manufacturers' Marketing Magicians to have tiny differences blown up into Revolutionary NEW Principles of Physics. Frankly, I never saw any reason to invent a new Principle of Physics; just doing right by the standard already-known ones is plenty tough and worth a good review! Anybody ever hear of Occam's Razor, a basic idea about not inventing Complicated Theories when the simple ones do just fine to explain everything we hear?

Something like the Placebo Effect is why deer hunters get shot while out in the woods with their buddies! And aren't we shooting ourselves in the wallet if we don't, at least, read up on and maybe eliminate even just the known effects or--more Hero Reviewer like—admit that we didn't? But getting to know what we can hear is an endless process.

I suggest Mark's "Cognitive Dissonance" is actually a form of self-abuse. But there is a truly worse end to this for our industry (one worse than having an objectivist as the editor of this magazine). The guyand it's always a guy-does admit it. "Hey, I got

Why can't high-end people admit it when they can't hear something?

burned. That &%\$#\$^ salesman at the store (or the reviewer in the magazine) lied to me." Or, also worse, the guy says, "Shit! I can't hear this stuff the salesman (or reviewer) said was going to put my system over the top; I must not be an audiophile." But in either case, the guy's next \$5,000 is NOT spent in a hi-fi store, or even on a \$30 subscription to TAV, and we wonder why this hobby and some magazines are imploding?



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But why are the things that some reviewers "discover" always written up as making large differences in the resulting sound, when the magazine's reader finds they makes little or no difference? Also, why is there no consistency, as in the old days, where speakers were ALWAYS half the Equation of Good Sound? Why can't we writers/editors say, "This amp does sound good amongst all amps, but I'd rather spend my money on speakers 'cause it's more good-system cost-effective."

Regarding Mark's "Flavor of the Month," a marketing manager I know said of another firm's speaker: "It can't be a High-End Product; they didn't re-engineer it between getting the review and releasing it to market!" He said I could steal and publish that but not to give him attribution.

So, Mark, let me say in public that I think your skepticism is extremely commendable, but I've suspected that you were a Closet Objectivist ever since I met you. However, as a comment on your New Religion, may I say that I can't figure out what a "placebo" speaker would be. Is it one that doesn't make sound?

Anyway, I don't think this "Guest Editorial" exchange is the last word on this topic, and I hope that other theorists will wade in—for publication.





the audiophile voice

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Aesthetix Benz Cartridge Demagnetizer

"Everyone who's into analog is sure to want one of the cute batterypowered cartridge demagnetizers from Aesthetix." Las Vegas '96 WCES report by Richard J. Rosen and Lonnie Brownell

Stereophile, April 1996, Vol. 19 No. 4

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BSCURA

High

David Nemzer

I'm into the fifth day of my analogue vacation in this digital world. It's about 7:00 a.m. and I've just come out of the woods of the northern-most part of the Adirondack wilderness in upstate New York for a look at civilization. There has not been a piece of vinyl between my fingers in the past month since I can't air-condition my listening room at home because of the great renovation that essentially removed the walls that enclosed the room. With the room's exposure to the sun, I would need a one-ton unit to cool me and the Melos Hi-Current amps to a range that would be reasonable. Problem is that it costs a ton so-like other big tubers I know-we shut down for the summer. Right now, the oliday

only vinyl I've been exposed to is this 38-year-old portable phono that sits on the shelf of the boathouse I'm in. The records available are just as old and very scratched. Yet the listening is fun because the mood of the surroundings makes the music overcome the scratches. You look out at a perfect setting in this part of the woods and the scratches almost disappear. Plus, being the radio nut I am, I have brought a large assortment of different portables with us for this trip. After all, we are approximately 350 miles due north from NYC proper. My radio adventures this trip have been quite revealing and again point up the importance of how the digital world is taking over. It even affects the maps I used to get here and travel around with. Modern maps show you how to get to point b from point a; very clean, very concise, and yet something is missing because once you leave the major listed highways, there are no other roads listed. (No "Blue Highways" of Mr. William Least Heat Moon, David?—Gene) No extra information, no nuances. It's like there is no air or hall, and no info. My god! It's spreading! So now

the audiophile voice

I'm collecting maps from the '50s along with vinyl from the '60s, so I don't lose all this information. You may not think it's relevant, but just as digital people have begun to forget about all that vinyl one might listen to, so has the digital age bypassed these small towns and small roads, and they too will be forgotten and ignored and also finally lost.

So here I sit under my Coleman lantern reading yet another letter in *Stereophile* from some misguided digital map reader who is carrying on about why is there a column about vinyl in the magazine! Or another letter about how distorted tubes are and how perfect his transistors are. No variation, no life, no chances. I really believe that these people would find a live performance troubling. I mean every time the live orchestra plays the same piece of music, it will sound different. Every time you hear a musical performance given different circumstances—it will affect you differently. Not me, give me those pops, those skips, those tube blow-ups (ahh, that smell!) like vintage wine!

You can't give up on the past for the sake of progress in this digital listening world. If you break the memory

connection to the past, to what you first loved about music, then you no longer listen to music, you listen to equipment. So here I sit, in the dark woods of the Adirondacks, where I went to forestry college 35 years ago (please, no cracks about wood between my ears)

(well, then, David, how 'bout ones about Mr. Johnson's Wood Effect affecting your . . . ?) , and had my first live encounter with jazz on a 35°-below-zero winter night. When Illinois Jacquet played in a restaurant; where the Lake Placid Sinfonetta was formed in 1917 by members of the Boston Symphony Orchestra, and later staffed by members of the Eastman School of Music; where Bela Bartok composed his "Concerto for Orchestra" as well as several other compositions. Finally, it was where I had my first stereo-made up of an RCA portable chassis and two drive-in speakers (volume pots included-talk about balance!) replacing the original ones. I also used to scan the dials of my tube AM radio hunting for anything (but usually signals from Canada) that sounded classical, which coupled with the beauty of the woods transported me to another place. No way high end, but in every way high enjoyment.

So, let's stretch the boundaries of an audiophile magazine and have a fast shoot-out between a couple

of the best dedicated portable radios out there. "What?" you say. "This has no place in high-end audio!" you say. Well, you must be one of those guys who thinks Wes Phillips' series on auto sound is also misled. Forget it. Almost everyone I know has heard something in the car that almost caused an accident when they reached for a pen to write down what the title of that music was and, as a result, almost went off the road. And don't tell me you didn't hear about the audiophile who electrocuted himself while trying to write down the name of that piece of music while in the tub? Come on , admit it, we're all low-fi in the privacy of our lives!

In one corner of the great shoot-out are the highly respected Grundig Satellit 700 and YB-500, each a radio capable of pulling a station from just about anywhere in the country or the world, \$600.00 of digital perfection, with numerous bells and whistles, such as bass and treble controls, memory for hundreds and hundreds of stations—long wave, short wave, AM, FM, mw—you name a station and this baby will get it.

In the other corner is the poor boy of portables, the beastly wonder of American salesmanship (watch them laugh at you when you ask for this sucker at The Wiz),



the General Electric Super Radio, a long-range, highperformance model, which comes in at the killer list price of \$69.95! This is an analogue tuner with a string pointer on the dial that is never closer than a half inch from the actual station, offers mono-only FM, and

has mono-signal dual ear headphone jack. It's big, it's ugly, it's cheaply made, in China at a maker's cost that can't exceed \$20.00, has two speakers, one a 6-inch woofer and the other a separate 2-inch tweeter.

Which would you choose? Are you a digital baby or will you admit to your actual age and go for "the string?"

Well, for me and my soulmate Wes, I'd opt for GE's Black Beauty at almost 90 percent less than the Grundig. (Actually I've seen this radio on sale for as little as \$39.95.) With all its operating faults and cheapness, it still can sound magical—almost tube-like. I'm not kidding; you can really crank up the volume and the GE still puts out good sound. Most importantly, as with all pure-analogue tuners, you can fine tune the signal and get a more pleasing sound—especially on a weak signal—than any other radio out there. You could even give many straight FM tuners a good run for their money. Are we talking high end? No. Are we

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even talking hi-fi? No. What I promise is a great radio experience (no earphoned Walkmans included) almost anywhere in the country—the more remote, the better the experience. If you're old enough to remember what radio was to this country and your youth, the GE Super Three will give you a thrilling ride down memory

lane. For \$40! And if it's too low fi for you to own, give it to your grandchildren.

An excellent source of good information for these radios is the C. Crane Co., whose phone number is 1/800/522-8863. Although their catalog looks amateurish, the infomation isn't.

Enough of the craziness, let's shift gears to the heights of high end. Here is a recording right out of the "Obscura" secret decoder ring-controlled vault. This is probably the greatest recording of the king of instruments and a wonder of technical splendor. Gentlemen, I give you—no, I dare you to find Accordiorama, the Hohner accordion symphony orchestra with Rudolph Wurthner, conductor, on Vanguard VSD2105.

Now, before you call up *TAV* to cancel your subscription, find this record and listen to it. Remember



that everything you hear was produced by accordions. You won't believe this recording, and if you stop telling all those stupid accordion jokes long enough to really listen, you will have had a true obscura experience. Unbelievable soundstage, great stage width, bass that you will not believe and yes, beautiful music!

> Vanguard has long been one of the great "un-sought-after record labels that most everyone (except Chad Kassem at Acoustic Sounds) has ignored.

> I must say that when I told Chad about this one, he acted like I never spoke. You can get most of the Vanguard catalogue

for peanuts, and I would absolutely look for their "stereo demonstration discs" of recordings made in Europe. Some of them were great and they listed for \$2.98! Good hunting.

As for me, it's time to put the computer into screensaver mode and start preparing for the September holidays of my fellow believers. To transistor lovers, it's September 23rd, the first day of autumn. To both the true believers and to the chosen people, it's Septuberfest, the opening day of the 1996-97 tube listening season.

BETTER LOUDSPEAKER TECHNOLOGY

VMPS announces a step forward in dynamic driver design: the rigid diaphragm, planar magnetic **Dynaribbon Midrange** which operates in *push pull*.

This unique hybrid combines the best features of ribbon and dynamic technologies, greatly reducing or entirely eliminating the diaphragm flexure, low power handling, diaphragm noise, low efficiency, and restricted output levels so characteristic of even the finest electrostatic, ribbon, and floppy membrane dynamic transducers.

The **Dynaribbon** is available exclusively in the floorstanding VMPS **FF-1** (\$6800/pr) and **FF-3** (\$4200/pr) **Focused Field Arrays**, two of the best sounding fullrange systems known to us regardless of price.

Write, phone, or fax for a list of VMPS dealers, plus literature, price sheets and test reports on all of our 15 models.

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the audiophile voice

With VideoQuest Cables, It's What You See On The Screen That Counts.

Now that "Performance Video" is a hot topic, more people know that every step from the source to the screen is important, and that many of those steps are wires. But, with many logical sounding stories of engineering competence, pretty graphs and even prettier cables and plugs...how can you know whose cables are worth using? The answer has always been to look for yourself...this time "look" really means look!

Looking Backward or Forward?

A

In 1976 Polk Audio woke up the US audio world with a most unusual speaker cable. Since then, many cable suppliers have introduced

By itself this chart means nothing, It's what you see on your screen that counts.

innovative and often effective ways to reduce the various types of cable-induced distortion. There have been some bad ideas and some just plain "make it big and they will buy" products...but, there has also been real progress.

Unfortunately, the video arena includes companies touting how their cables solve problems that had been solved by others decades ago. After all, a lot of very competent people have been supplying the world of high-frequency communication for a very long time!

These backward-looking companies claim that "characteristic impedance" is important. This is awfully safe ground ... everyone has agreed about this since before most of us were born. CATV cable at the hardware store gets this part right, there's no reason to pay a premium for old news. However, there are many other significant, and often more important variables.

When a OSS receiver, VCR or video camera has "\$" outputs, Video S/Two will outperform composite cables,

It is ironic that some of the same designers who properly argue that "while measurements are important, they don't tell the whole story," are now retreating to the test bench instead of working to provide new solutions.

Composite, RGB, Y/C (S), YIK (DVD), RF --- We've Got Them

VideoQuest cables use a combination of the best techniques and materials available from today's highfrequency cable industry, with our own design innovations to "push the envelope."

After 18 years of designing distortion mechanisms out of audio

cables, and eight years doing the same for video, digital and RF cables, VideoQuest continues to expand the boundaries of this frontier.

VideoQuest Video Two Pushes the Envelope

 Twin-axial construction includes two identical conductors, ensuring equally low distortion paths for positive and negative...something not possible with conventional coaxial construction.

Hard Cell Foam (HCF) insulation minimizes dielectric



How does a signa become distorted?

involvement (the way insulation creates distortion by storing and releasing energy). HCF also minimizes damage caused by applying hot plastics to the surface of metal. And, HCF minimizes cold-flow (the deformation of a material under pressure, changing the cable's electrical characteristics and compromising performance).

Video Two's twin-axial construction uses special Silver Plated Long Grain Copper and Hard Cell Foam dielectric.

 Special Silver Plated Long Grain Copper reduces distortion and improves signal flow...which in the world of audio would cause a bright and irritating sound. However, in the high frequency domain, SP-LGC provides a dramatic and cost-effective improvement over even the highest grades of pure copper.

Etc., Etc., Etc.

There are many more technical details and underlying theories as to how to reduce distortion in video cables. For more of this information, please ask for our Cable Design brochure...or better yet, go "see" the cables for yourself.



Pore Ear Pan

LP Reissues From Classic and DCC

John R. Hellow

o provide you with some historical prospective, I began writing this article in late 1994, after having received the news from the folks at Classic Records that they had acquired the rights to reissue on vinyl, portions of the Verve jazz catalog. At that time, their goal was to issue 10 recordings from this catalog between January, 1995 and September, 1995. It took a little longer than that to complete the cycle with the release of "Johnny Hodges: Blues A-Plenty" and "Sonny Stitt: Blows the Blues" in

December 1995. Since then, Classic has acquired the rights to portions of both the Columbia and RCA jazz catalogs and has issued several recordings of note from those catalogs. Starting with a mastering session on November 18, 1994, for "Coleman Hawkins: Alive at the Village Gate," through a session I attended on May 17, 1996, I have visited Bernie Grundman Studios on four occasions to listen to jazz tapes and lacquers from these catalogs. I thought it might be useful to describe those experiences here, to provide you with a point of reference when you listen to these recordings at home, to assure you that the original vinyls of these recordings

Classic Records' reissues of these Verve jazz LPs are great improvements.

do not hold a candle to their contemporary counterparts and to explain some of the differences between the way that master tape, lacquer and vinyl sound.

In the second section of this article, I'll cover a pair of recordings from a principal competitor for your vinyl dollars, DCC Compact Classics, and the 10th anniversary reissue of the "Jennifer Warnes: Famous Blue Raincoat" by the Classic Records team.



It's All the Same Flavor and It's Good

On November 18, 1994, I had the very distinct pleasure of attending the disc mastering session for "Coleman Hawkins: Alive at the Village Gate." Approximately 21/2hours of that session dedicated were to mastering one side of the reissue, which includes "All Things Are You" and "Jericho." I also had the

opportunity to discuss the mastering process with Bernie Grundman and the team goals of Classic Records in this reissue process.

First of all, Bernie Grundman Studios is a state-ofthe-art mastering facility. Virtually every piece of electronics in the mastering suite is custom designed by the studio staff and is either constructed in-house or implemented by an outside contractor. These custom components include the cutter head (built by the same person responsible for the original Westrex heads), cutter head amplifiers, the RIAA equalization stage, the equalization board, and the electronics for the Studer tape transport.

The Classic Records team is a stickler for detail. For starters, in every instance they have procured at least the original vinyl version of each recording. In some instances, they have procured an import version or subsequent pressing, which may have been considered superior to the original issue. The team goal with respect to each reissue is to ensure that the sound quality of their release exceeds that of any previous version of the recording.

Both Mike Hobson and Bernie Grundman indicate that their goal is not that the reissue sound exactly like the master tape. Honestly, in most instances you
would not like the sound of unequalized studio jazz recordings. Consequently, Classic's goal is not to produce a vinyl reissue identical to either the master tape or the first generation of vinyl; rather, their goal is to provide the most pleasing recording that is available by working with the master tape. As Mike says, "Mastering is the last best chance to fix problems" in

the original recordings. For example, on "Ella Fitzgerald: Clap Hands Here Comes Charlie," the Classic Records' initial master lacquer was cut almost flat off of the master tapes. During the perfor-

Hodges and Stitt both turn in worldclass jazz on these reissues by Classic.

mance, Ms. Fitzgerald was very close to the microphone, which produced an excessive amount of sibilance in the recording. When the original lacquer was cut by Verve, substantial filtering was provided at 13.5 kHz to eliminate the sibilance, and a low-pass filter below 55 hz was inserted for bottom end problems. Unfortunately, while the high-frequency filtration eliminated the sibilance, it also eliminated much of the sense of space

and air that had been captured on the master tape. Bernie Grundman indicates that these early filters also created a substantial degree of phase distortion in the initial issue. Even though many hours of work were vested in the first lacquer master, the Classic Records team went back into the studio and took another crack at "Clap Hands, Here Comes Charlie" using a little equalization so as to eliminate the sibilance, but not so much as to interfere with the exceptional transparency and sense of space that is available from the original master tape.

To get started with the "Coleman Hawkins: Alive at the Village Gate" reissue, we listened to the original vinyl issue of this recording, which really gets the feet stomping. Hawkins' group was truly "on" for this series of performances and jammed without any of the hitches that usually intrude in live jazz. The original vinyl was in fine shape and appeared to be a very close facsimile of the master tape. That is what I heard until rapid level-equalized A/B comparisons were made between the master tape and the first-generation vinyl. While the first-generation vinyl was a reasonable replica of the master tape at the outside edge of the

record, once the last inside inch

or so was reached, things changed and the sound stage collapsed in comparison to the tape. I am not sure that these deficiencies in the original vinyl would have been so obvious had it not been compared directly with the master tape.

After listening to both the original pressing and the master tape, Bernie decided that "All Things Are You" and "Jericho" needed a little bit of equalization at the bottom end to help focus the sound. Before equalization, the acoustic bass had a tendency to overpower Hawkins' horn and the cymbal work. With this slight touch of equalization he proceeded to cut this side of the lacquer master. After the lacquer

master was cut, we did an A/B

comparison of the master lacquer with the master tape. In all honesty, I have to say that I preferred the master lacquer. That light touch of equalization to the bottom end did help to focus both the cymbals and Coleman Hawkins' location in the recording venue, as well as making it easier to follow each performer, including the acoustic bass.

The collapse of the sound stage, so evident on the inner portion of the original vinyl, doesn't occur on the reissue master lacquer. How does the pressing that will reach your ears fare against the original tape and the new lacquer? Side A of the test pressing that I received for this recording was not made from the lacquer that was mastered during the session I attended. When that lacquer was cut, the audience applause at the beginning of the first cut was faded down as the



music began. The original pressing from Verve had the audience applause faded up before the music began. Consequently, to maintain fidelity to the original pressing, this lacquer was recut with only the change to audience applause.

Focussing on side A, cut two, "Jericho," the test pressing is not quite as incisive as the master lacquer and lacks the ultimate degree of transparency present on the tape and lacquer. However, my home system allows this recording to bloom dimensionally in ways not evident when listening to either the tape or master lacquer on the studio system. The words "holographic" and "palpable" come immediately to mind while listening to this cut. Also, there is no ascertainable collapse of stage dimensions on the inner portion of either side of this reissue, as compared to the original Verve pressing. You should truly enjoy this recording. It will literally transport you to the Village Gate on August 11 to 13, 1962.

I have also spent a good deal of time listening to Classic's pressings of "Duke Ellington/Johnny Hodges: Back to Back" and "Ben Webster/Coleman Hawkins: Encounters." These are both truly excellent recordings. The Ellington is transparent and alive, and the cymbal work is absolutely amazing. A number of cuts contain

low-level cymbal work that is very easy to follow even with the other performers working hard in the foreground. Also, stage depth is very good. For example,

There is an expecially strong sense of space on **Encounters**.

you can tell that the drummer was situated in the back left corner of the stage with Harry "Sweets" Edison on trumpet in front and to the outside left of the drummer. The acoustic bass appears slightly left of the middle back of the stage. Duke Ellington and his piano appear on the right side of the stage near the back, with Johnny Hodges on sax in front and to the far right. The guitar is inside and to the front of them. One interesting item you might listen for on Side A is the echo off the left wall of the stage from Mr. Ellington's piano during solos. On my system, the echo is only easily discernable when the tonearms's VTA for this recording is set just right.

The performances are world-class renditions of some Ellington favorites. My only criticism of this recording is the way the performers appear to be laterally placed within the sound stage. While the bass player is in the center of the recording, there appear to be significant gaps on either side of the bass player with Messrs. Ellington, Hodges, and the guitar player too close together on the right and the trumpeter and drummer too close together on the left. In fact, I had an opportunity to listen to a test pressing of an alternate master lacquer of Side A, which did seem to do a better job of spreading the performers laterally across the width of the stage. It, however, lacked the depth and transparency of the master lacquer that was chosen for pressing Side A.

Bernie swears that both of these lacquers are identically cut. We recently spoke about how two lacquers, cut the same way one-half hour apart, could sound so different. I speculated that a change in cutter head temperature could produce such a difference. Bernie confirmed that even small temperature changes in the coil will alter its inductance and changing the way the lacquer sounds. That is why multiple lacquers are cut for each recording side, test pressings are produced and auditioned to determine which lacquer will be used for the production copies. Never trust a review from a test pressing unless the reviewer is sure that the same lacquer will be used for production.

the audiophile voice World Radio History The Webster/Hawkins recording impressed me with some of the best sax playing I have ever heard. After the first cut on Side A, of a tune I didn't particularly care for, it's all warm, cozy,



bluesy, liquid,

candlelit dinner sax. The sense of venue is readily apparent in this recording. You can hear the reverberation of the saxophones, not just off the back walls but off the side walls as well. Additionally, even though both Webster and Hawkins play tenor sax, and their different styles are very obvious, the individual characteristics of each saxophone are easily resolved in this recording. Both Hawkins and Webster occupy entirely separate spaces in the center portion of the recording, and their duets and their interplay are truly a joy to hear. I have several other Webster and Hawkins individual recordings, but frankly, none of them compare to this particular duet. The synergism between these two during the session is a rare event. It's been my experience in attending live performances by several virtuosos, that the sum tends to be less than the parts. That is not the case here. My only technical criticism of this recording would be that the piano and drums have a tendency to sit on the speaker enclosures and do not provide the degree of palpability or dimensionality associated with the two saxophones.

In January, 1996, the Classic folks invited me to attend the mastering session for "Sonny Rollins: The Bridge," truly one of the landmark jazz recordings of our time. Unfortunately, as I was soon to learn, they had not checked with Bernie Grundman about what was involved in mastering "The Bridge." Upon my arrival at the studio, I was surprised to learn that Bernie did not want anyone in the mastering booth while he worked on the lacquer. This was because "The Bridge" was recorded over several sessions, with different levels and the set-ups involved for each track of the master. When RCA produced "The Bridge," it did so from a second-generation tape that was level-matched and equalized from the original session master. Because Grundman cuts his lacquers directly from the session tapes, the equalization and level matching between tracks must be done on the fly for each side of the pressing. Consequently, no interruptions can occur during the cutting of a lacquer. This technique differs dramatically from live jazz recordings of single sessions and classical pieces.

Bernie, being a gracious host, offered to put on the session tapes for "The Dave Brubeck Quartet: Time Out" and a rejected lacquer from the remastering session for that recording, so that I could have a chance to hear what he had decided to do with the tape. We listened to the session master both with and without the equalization used for the final master, and then compared them to the rejected lacquer. Listening to the tape both equalized and unequalized again reinforced the notion that limited amounts of equalization can go a long way to make a recording sound better than the original performance because of room limitations, problems with microphone placement and other considerations that affect live sound. Without equalization, "Time Out," while remarkably transparent, had a tendency to sound thin and relatively lifeless. Equalization restored the lower fundamentals of the performance and provided additional warmth. This also has the effect of making the tape hiss that is annoying on the session master, less objectionable on the vinyl, because this EQ tips the spectral balance of the performance away from the top end. The rejected lacquer was a very close facsimile of the equalized

It's wonderful to have a first-rate LP of Rollins' historic **The Bridge.**

session master, and listening to the final product confirms that what you will hear is very close to what Grundman was trying to achieve with this recording.

By the way, comparing the production vinyl with the CBS Master Sounds Gold CD reissue of Brubeck's "Time Out" indicates that CBS also did a very good job with their remastering of this disc. However, the sense of venue, so readily evident on the master tape and the production vinyl, is absent from the CD reissue. On May 17, 1996, I was again invited to attend a mastering session at Grundman Studios, this time for "Sonny Rollins:Now Is The Time," RCA LSP-2927. Once again the Classic Records folks, proving they are not infallible, failed to check with Grundman about

Both **The Bridge** and **Now Is The Time** were EQ'ed and level-matched on the fly.

outside attendance at the mastering session. Just as with "Sonny Rollins: The Bridge," each track on the master tape was cut slightly differently, changing the position of the instruments, track-to-track level and equalization. Consequently, each track as it was being transferred to lacquer, had to be equalized and levelmatched on the fly, making it highly impractical to have someone in the booth during mastering. However, Bernie did spend an hour and a half explaining and demonstrating how he would cut the first side.

This recording is an interesting project for Classic Records, as it is the first reissue of a recording that first appeared in RCA's catalog as a Dynagroove

recording. It is also one of the few 30-ips, threetrack tapes that Bernie has had to deal with from the RCA catalog.

We compared the original session's master tape with a first-generation Dynagroove 1-S pressing. The three cuts we listened to were "Now the Time," ls " Remember Clifford," and "Blue N Boogie." "Now Is The Time," the first track of side one of the disc, was cut at a much higher level than any other track on the disc. It is



probably the best transfer from tape to the original vinyl, although cymbals are not as extended as on the master tape, and the stage collapses noticeably relative to the master tape.

On "Blue N Boogie," cymbals on the original are muted and muddy, and Rollins' sax sounds like the play trumpets we used to make as kids by cupping a hand or using an empty toilet-paper roll, as compared with the sound of the real sax on the tape. The sax's dynamics are limited on the vinyl, but literally explode into the room on the tape. Finally, with the tape, but not the original vinyl, the stage opens up appreciably, and the cymbals are extended and airy.

The third cut, "I Remember Clifford," on the original vinyl is probably the best of the three in the way it captures the character of Sonny Rollins' sax. There is not much difference in the sax between the master tape and this third track. However, and again, the top end is much more extended on the tape, as is the weight of the recording's bottom end.

The final version of this disc from Classic Records will likely feature much more consistency in the characteristics of the instruments, the recording level, and stage dimensions, as compared with the original. Grundman indicates this 30-ips, three-track tape "Now is the Time" is one of the better tapes that Sonny Rollins did for RCA, including "The Bridge" and "Our Man In Jazz." While it isn't as musically important as "The Bridge," you will for the first time hear what Sonny Rollins actually intended with "Now Is The Time," something that was virtually indecipherable

when you played the original Dynagroove pressing.

DCC's Assortment

DCC Compact Classics has released "The Oscar Peterson Trio: West Side Story" on vinyl, DCC LPZ-2021, issued originally by Verve in 1962. Peterson's jazz renditions of some of these songs from "West Side Story" are very inventive and lyrical. My three favorites on this recording are "Somewhere," "Jet Song," and "Maria."

> The Peterson Trio for this performance included Oscar, Ray Brown, and Eddie Thigpen. I'll get this out right up front—on a scale of 1 to

10, for both performance and the quality of the sound, I'd give this recording 11s. It is, without a doubt, one of the most interesting jazz performances you will ever hear and reveals Peterson for the genius he was in arranging music from another genre. The sound on my system is also nothing short of phenomenal. Ray Brown's bass is thunderous yet taut, and the character of the bass, especially in "Somewhere," where Brown bows and then plucks the bass, is readily evident. In "Jet Song," you can hear Ray Brown singing along with his bass in the concluding solo. In "Tonight," the group really gets into it. There's great interplay and Peterson's piano is exceptionally well played and recorded. However, there is a little weird echo at the end of this particular track and I don't know where it came from. This recording gets vaulted into my list of must-haves, along with Classic's "Belafonte at Carnegie Hall." But here, the music is genuinely good.

The other DCC I recently received is "Creedence Clearwater Revival: Willie and the Poorboys," LPZ 2019. For the record, as a kid I hated Creedence Clearwater Revival, didn't care for their music at all. I received "Cosmos Factory" from my cousin Dennis as a gift on my 13th birthday; I still haven't opened it. Therefore, I began consideration of this DCC reissue with some trepidation. Imagine my surprise to find that I genuinely liked this music. People and their musical tastes do change. At the time Creedence was popular, I was into Hendrix and acid rock, and Creedence was just a well-known garage band. Now I can appreciate their vocal

harmonies, for example in "Cottonfields," and their awesome transitions, for example, between "Poor Boy Shuffle" and "Feeling Blue." "Fortunate Son," the first track on side two, is also very good. I suggest you listen to the guitar interplay and note the different characteristics of the two electric guitars. My wife entered the kitchen as I was playing this, and it was interesting to watch as she began to bob and weave to this music. Our five-year-old son loves this record.

Sound quality here isn't the greatest, although I would bet that Steve Hoffman coaxed as much as he

Creedence Clearwater on DCC is first-rate. could off the original master tape for this recording. Everything sounds like it's got a little haze over it, the image specificity isn't outstanding, and there's not a whole

lot of depth. However, this reissue did change my mind about a group I had dismissed. Maybe it's time to open that vintage sealed copy of "Cosmos Factory," or perhaps DCC will reissue that one as well.

Finally, Classic Records has reissued "Jennifer Warnes: Famous Blue Raincoat," an audiophile favorite

that appeared on both the Cypress and Private Music labels. This is an interesting reissue for Grundman, as he was the mastering engineer on the originals. Also, Ms. Warnes had more of a hand in the mastering of this recording than she did in the originals, therefore one shouldn't expect huge differences in the reissue versus the originals. My original pressing of this recording is on the Cypress label, and I have always considered it very good. Bernie indicates that he and Ms. Warnes

had two specific goals in the reissue. First



all, Jennifer of wanted more extension in the bottom end of the recording. and Bernie always had had a problem with the way that the sibilants had been handled in the original mastering and wanted to take a second crack at toning them down a bit. The reissue does satisfy both of those goals. One added benefit of the reissue concerns how ambient information is handled. For example, in the song

"Famous Blue Raincoat" on the Cypress pressing, Ms. Warnes' voice is fairly dry, without much sense of space. The reissue rectifies this fault admirably, adding additional dimension to her voice. The same is also true in "Joan of Arc" in both Ms. Warnes' voice and Leonard Cohen's voice. Additionally, the abstract sound effects that constitute the prelude to "Joan of Arc," a series of chimes and string tones, have a richer harmonic texture and present a bit more detail than on the original.

Is this reissue of "Famous Blue Raincoat" a must own? I would suggest that it's a must own if you don't have your own personal copy of the original vinyl, which was fairly difficult to come by at the time. If you like the music, I would definitely suggest that you pick up this reissue, as I think it does a better job of attaching Ms. Warnes' voice to a living, breathing body than the original.

What's up next? Can't say for sure, but I'll try to focus on other labels such as Mosaic, Mobile Fidelity and Analogue Productions, and maybe some of the great EMI/Toshiba Blue Note reissues. The Blue Notes may be particularly interesting with Classic negotiating for titles from that label.

An Impractical Guide To HOME HEATRE

William M. Hart

A t the very moment when high-end audio is enjoying an apparent renaissance-witness the spate of killer turntables, exotic tube amps and fanciful speaker designs-there are also clear signs that purist, two channel, audio-only systems are already relics. To be sure, much of today's renaissance in purist audio depends upon incremental improvements to existing, and in some cases "obsolete," technologies, extracted at high cost to manufacturer and consumer alike. By its nature, the cult of purist audio is self-limiting both in price as well as objective: The majority of uninitiated consumers can't be bothered, because for them listening is mostly an "ambient experience," while audiophiles are somewhat elitist and treat most mass market products (AKA "mid-fi") with disdain.

But, for the die-hard audiophile, nothing seems to rankle more than "home theatre," which has attracted the very consumers that high-end audio has put off. Legions of the great unwashed, who wouldn't know a DAC if one bit them, are gleefully scooping up ubiquitous Japanese boxes bearing the THX standard and buying sub-woofers. These are the very consumers who, in the past, rejected even the simplest upgrade to their audio systems because, in their words, they "just couldn't hear the difference."

It isn't just the displacement of consumer dollars on home theater equipment that threatens purist audio; it is the technology itself. This market was the first to introduce discrete multi-channel sound using a data compression scheme, Dolby AC-3, that has received mixed though admittedly incomplete reviews. (Widescreen Review has been in the vanguard of critical commentary on emerging multi-channel audio for-



mats. Its editor, Gary Reber, has been strident in his criticism of the industry for adopting a standard unheard by, and without the participation of, the highend community. Although Reber is a strong proponent of a competing proposed format, DTS, neither the DTS consumer hardware nor software yet exist for it to even be considered a rival format at this point).

Early reports on AC-3 seem more positive than originally predicted; this has less to do with any real qualitative advance in audio reproduction than with the psychoacoustic effects of a multi-channel system that benefits from discrete rather than matrixed delivery. It remains to be seen whether the trade-off in



sonic purity resulting from the enormous signal compression of AC-3 is worth the benefit of greater channel separation, with less interchannel leakage. AC-3, in its present configuration, may only have utility for movie soundtracks, not for critical music listening. And, while waiting for multi-channel audio formats to settlein, we also await the advent of the Digital Video Disc. This will ostensibly replace not only VHS, but the venerable LaserDisc, yielding improvements which may produce less satisfactory pictures than the format(s) it is replacing (of course, format changes do offer software manufacturers the opportunity to resell their inventories. How many home video iterations of your favorite movie can you be forced to buy?). Those among audio's cognoscente have been here before. How many of us still hold dear the vinyl record, whose mainstream market obsolescence occurred nearly a decade ago? I am not ignoring the resurgence of vinyl as a boutique commodity; its existence as a cult market item only proves the point. My tube-based, vinyl-only system, driving a pair of electrostats, is not just a monument to technologies past; it is the result of a carefully chosen set of compromises that reveal a certain musical truth. Add to this the engineering quality, limited production heritage and pure "funk" value of classic hi-fi componentry, and it is easy to understand why so few of us are willing to embrace home theatre technology. Especially when that technology represents an agglomeration of mid and low-fi Japanese black boxes, coupled to a glorified TV, and patched together with a multi-channel audio processor that is designed to put more, not less, into the signal path.

Perhaps the real hallmark of a true audiophile is the desire to reach the pinnacle of performance, regardless of (one is tempted to say, as in the pursuit of many rarefied things, "precisely because of") the cost, difficulty or obsolescence. As a devotee of vinyl and a tube amplifier buff since the early seventies, I came to "high-end" video with some skepticism and the same insatiable quest for perfection that frustrates (and feeds) my audiophilia. Here's what I learned about good pictures (and accompanying sound) in the past couple of years.

What passes for home theater in the mass market is no closer to replicating the real theatrical experience

than a rack audio system is in transporting the listener to the recording venue. Of course, the "real" experience in both instances often pales by comparison to our (actual or imagined) recreations. The reason for this is simple: They just don't make conventional televisions big enough. Front projection is mandatory-and not just any projector, but one with a sufficiency high scanning rate to enable the use of a line doubler or quadrupler. Because the

NTSC television standard is based upon an interlaced signal and scans no more than half the 525 lines every fifteenth of a second, those scanning lines—which are seemingly unobtrusive on a 19-inch television become completely distracting on a large (read at least 7-foot diagonal) screen.

Enter the so-called line doubler, a device which de-interlaces the NTSC signal through a complex of data processing techniques and generates an RGB output doubling the conventional NTSC scanning rate. This signal is much more amenable to presentation on a large screen. While the scanning lines remain (and other artifacts can often be introduced or exaggerated through the doubling process), they are (hopefully) much less obtrusive. A basic truth: High-end video does not begin until one is in the league of component projection-TV with line doubling (or some would argue, quadrupling).

One of the chief obstacles to this approach is, of course, the cost. Projectors capable of displaying a de-

interlaced signal were, until recently, priced well over the \$10,000 mark. The SONY, NEC and RUNCO datagrade projectors all seem to do the job pretty well by – current standards. The RUNCO has been the only one of these three that is specifically marketed to the home theater enthusiast, but none of them are easy to install or set-up without competent help. The Vidikron line, with its sexy Pinin Farina styling, gets truly serious at the \$45,000 price level; while its lower priced model has its advocates, J. Gordon Holt chief among them, it seems to get less play than the others at the under 20k price point.

When one adds the almost obligatory Faroudja line doubler, at a minimum price of \$10,000, you begin to appreciate why most people are not running state of the art video in their homes today. Of course, there are other line doublers, almost all of which are touted as being "as good as" or "almost as good as" the Faroudja.



(This is reminiscent of the introduction, so many years ago, of the Audio Research SP-3 pre-amp. When it was compared to its competition at the time, there was even among competitive manufacturers, admittedly no contest, although everybody still offered a "competitive" unit).

Sony does make a line doubler at a little less than half the cost of the original, \$15,000 FaroudJa, and there is even a cheapskate bargain (No, Sam, you don't

spray it with anything): the DWIN doubler for a measly \$3,500 dollars, which, I am told, if properly adjusted, doesn't look like hell. The Hippocratic oath applies in spades here because the process of "line doubling" can also introduce other assorted nasties. When I first installed my system about two years ago, I tried the NEC IDC-2000, which not only had a somewhat soft picture, but also seemed to smear color during those first revelatory moments of Dorothy's entry into Oz. The RUNCO doubler, built upon the NEC, was also a bit soft looking at that time, although I only previewed it in a dealer showroom and could not vouch for the correctness of the setup. My early views of these products may now be outdated because they are continually being improved by their manufacturers; choose wisely, however, because these products remain expensive due to limited demand and there is no real established used trade in them. Last year, Faroudja introduced a line quadrupler, at \$20,000, whose minimal horizontal scanning rate requirements

the audiophile voice World Radio History (62.9 kHz) exceed the scanning rate of a number of otherwise acceptable data-grade projectors, mine included. Upgrades may not be possible; buy the wider bandwidth projector at the outset.

Here, even more than in high-end audio, most dealers seem to be incapable of maintaining a properly set-up system. If the dealer's showroom installation is poorly set-up, I would seriously question whether to

rely on that dealer. I know Dealer this seems unfair but if a deal-Inadequacies er seriously expects you to shell out the \$25K or more

typically required for the most basic hi-end video system (and I am not including furniture, room treatment, seating or the cost of the accompanying audio system, let alone installation), the least the dealer can do is prove, on its own premises, that it is capable of properly setting up and demonstrating first-rate video.

Meaningful comparisons of projector and line doubler set-ups in a dealer showroom will probably be next to impossible in most instances. All of the systems are set-up as systems, and their picture will depend as much upon proper adjustment as the hardware. I have participated in a number of demonstrations of quite costly systems in dealer showrooms that looked awful because of poor system adjustment. Although one trade association, the Custom Electronic Design & Installation Association (CEDIA), is supposed to ensure that its members are well versed in proper video installation and setup, I originally found that association to be incapable of fielding a straightforward call to locate a dealer/member who knew how to calibrate a monitor. I don't know if they have improved in the past two vears.

Joe Kane, formerly of The Perfect Vision fame, has filled the gap through his Imaging Science Foundation. Joe and his partner, Joel Silver, train dealers in proper setup and calibration techniques based on strict application of the NTSC standard. While I suspect that the expertise of their trainees varies, this is not a "do-it-yourself" enterprise, and you will need help from a competent dealer/installer. Perhaps the dealer can give you a customer reference if you are a serious, gualified buyer; given the penchant we all have to show-off our systems, you might be able to verify the dealer's capabilities first hand in a real home, rather than in a showroom environment.

A large, acoustically correct room is importantlarge, because you want to get as much viewing distance from the screen as pos-

sible. Even an additional Room foot or two can make a huge Requirements difference. You must also

install the system in a room that can be completely darkened, since the light output from even the best projectors is barely acceptable, particularly once the brightness has been turned down to achieve a film-like image. It also bears emphasis that the screen must be a low-gain design; the trade-off in gain becomes apparent in a smoother visual presentation without noticeable hot-spots.

Light leakage from doors, windows and LED displays can be insidious, but the effort to ameliorate stray light sources will make a significant difference. So too will the color of the walls visible from the viewing area. (Theaters are dark for good reason, even with the much higher light output of projected film.) In effect, the black level, which determines the richness and "guts" of the picture, can only be as dark as the ambient light of the room.

By the way, if you are using a direct-view TV, different rules apply. The set should be backlit with a lamp at 6500 degrees Kelvin, the NTSC color temperature of white. This is to give your eyes a neutral reference; tungsten light bulbs are 3200 degrees Kelvin-quite yellow compared to the color temperature of the TV screen. Your brain will tend to use the room light as a reference, which will make your video picture look artificially blue.

Many TV sets come from the factory adjusted to an even hotter, bluer temperature (as high as 9000 degrees). The resulting picture will tend to "pop"



Faroudja Line Doubler

impressively from the background, but long-term viewing will be fatiguing. Calibrating the set's color temperature and its ability to consistently display "white" at the correct temperature will require tools (including a color analyzer) which most of us do not have. Imaging Science Foundation members are trained to provide these calibration services, and newer sets make the adjustment job a bit easier.

Your choice of signal sources is somewhat limited. Besides a roof antenna or local cable providers, PVRO -the big dish- is Sources also viable if you have the space for it. Small dish systems like DSS use digital compression, and some pixelization effects (digital blocking patterns) are visible.

In pre-recorded formats, LaserDisc is about the only way to go and that may or may not change with the eventual introduction of the new DVD format. Among LaserDisc players, the aging LDS-2, still Pioneer's top consumer offering at \$3,500, has a terrific picture but only a Toslink digital audio output and no AC-3 capability. I had mine modified at modest cost (less than \$500) to add a coaxial digital output as well as an RF jack for AC-3. This was well worth it, considering that a new AC-3 ready player with an arguably comparable picture would cost at least \$3,000. (No further player modification will be necessary for the eventual DTS consumer audio format, since it relies on the conventional digital audio outputs of the LaserDisc system). RUNCO offers a THX certified laser player that is AC-3 capable for about \$5,000 (less if you opt



The best video set-up disc.



for a model without the built-in D/A converter). Dealers should permit home trial of any of the more costly players. Unlike audio components, video test signals are somewhat useful here. Joe Kane's "A Video Standard" LaserDisc is about the only source most of us have for these.

On the "audio for video" front, my favorite nonissue last year was whether to THX or not to THX. (This year it seems to be whether to AC-

3 or not.) Most movie soundtracks consist of a pastiche of sounds and effects without a coherent natural "acoustic." It for Video is fine to use "musical" speakers, so long

Audio

as they can take the pounding that many aggressive soundtracks deliver. (My Quads are totally unsuited for this purpose; more dynamically capable speakers can do just fine if you are prepared to pay for at least four of them). THX speaker configurations do not, to my ears, sound as musically natural as better audio speaker designs, however their primary purpose is not supposed to be the reproduction of music, other than what is incidental to the film. Room placement is also a consideration.

Optimal set-up for video at the sides of the screen (and typically employing a center channel speaker) is hardly ever correct for music listening, so if you intend to use the same system for both audio and video you will have to be prepared to relocate your speakers, depending upon usage. I have yet to hear a system that is truly optimal for both music and video listening, regardless of the price of the components. (While Meridian has made serious strides to process music in a variety of multi-channel formats using a center channel, I am still not convinced that this digitally-based system has the subtle refinement and air of my tubevinyl stereo system.)



The center channel speaker has great utility for soundtracks and will help salvage dialog that might otherwise be buried in sound effects. (The "Ride of the Valkyries" scene in Apocalypse Now is a notorious example. Here not only the center channel, but the THX mode, seem to help). Of course, a center channel destroys the "phantom" image that we all strive for in audio and replaces it with a distinct, active locus of sound that many will find intrusive for conventional music reproduction. Meridian takes a different view, which can be traced back to the pre-stereo days of hifi. Two channels may not necessarily be better than three, but you better make sure that great attention (and money) are paid to the center channel amplifier and speaker. The solution to all of this is simple: two audio systems, one for video and one for music listening. The advent of AC-3 only reinforces the conclusion

that two systems are necessary. My experience in having lived with AC-3 is that it sacrifices airiness and subtlety for a greater in-your-face presentation. That works well for certain movie soundtracks, but not necessarily for music.

This begs the question whether surround sound is appropriate for music listening. I have experimented with it for many years, with surprisingly good results: In conjunction with a system I used in the mid-eighties (Sequerra-



CWD's Wildwood for a rear projection system.

tweeters, old Quads and a servo woofer, driven by ARC tube amplifiers), I ran a small surround sound system for "ambiance." In the late Chuck Lamonica's words, "You could kiss every note." However, I am currently using a "straight" stereo for music: Well-tempered turntable with upgrades and Marigo clamp; Parnassus cartridge; ARC SP-10 II pre-amp with NOS tubes; ARC Classic 60 amp (with Sovtek 6550's) and Crosby-modified Quad 63s on Arcici stands, wired with MIT CVT interconnect and OCOS cable (along with obligatory small but costly damping, clamping, brick, cone, sand and other assorted tweak paraphernalia). On small scale choral works, jazz combos and string pieces, this system is very difficult to beat (although it still lacks the oomph and deep bass of big, dynamic speakers). I have tried various subwoofers over the years with both the old and new Quads, without much success. My Velodynes are currently tied to the video system and make for a truly moving experience. Video system bass, while deep and dynamic, is much less critical since it does not require a "natural" presentation of musical sounds in most instances. Good deep bass is not only difficult to do, but almost impossible to correctly create in a hybrid (electrostatic/dynamic) system such as the ones I have generally used for phonograph playback.

I am using the Snell speaker system in a THX configuration for video. It does a terrific job of delivering the impact of big action soundtracks coherently, at high decibel levels, and at a fairly reasonable cost. It can also create a convincing soundstage from certain source material, but still pales in comparison to my vinyl/Quad-based system in delivering a "non-mechanical" presentation of music. It sounds a little dry and does not soundstage or image in the same way that we have come to associate with a high-end music system.

ly) than the Snells but which, due to mismatches front

to rear, have been totally unimpressive in the surround

front and rear within appropriate limits. This has the

effect of making the surrounds seem more palpable

without unnecessarily exaggerating the front to rear dif-

ference. Full range surrounds are probably the best,

THX specs notwithstanding. (Many processors, includ-

ing my erstwhile Fosgate 3A and my current Meridian,

permit a rear channel subwoofer to achieve this with

unless you are investing in some pretty substantial bass

reproducers all the way 'round. Although one of the

best and most elegant audio systems for home theater

that I have heard to date is the "all digital" Meridian

You should also be prepared to use subwoofers

I also tend to jog the gain upwards in the rear channels, keeping the amount of delay time between

effect that they (fail to) create.

THX surrounds.)

There are some caveats if you have the money and inclination to use the highest grade audiophile speaker systems. First, I firmly believe in mating, as closing as possible, the voice of each speaker in an effort to create as seamless a surround "envelope" as possible. Of course there is nothing to prevent you from using audiophile quality dipole speakers in the rear channels, or any other combination of front and rear speakers. However, I have heard systems using speakers far more exotic (and cost-

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system, I still find it more impressive for movies than for music. But, just to put my listening biases into perspective, I recently spent a long evening with the Genesis IIs driven by Manley 400s and still thought my Quads presented a far more natural, open mid-range.

Surround processors are now a product in flux due to the advent of Dolby AC-3 and the probable intro-

duction of rival multichannel Surround audio formats. Merdian's fairly Processors costly modular approach (the Models 563 processor and 562V

multimedia controller at a combined cost of over \$5,000) allows for an add-on decoder. EAD has also introduced a line of processors with an AC-3 decoder module (and other decoders, as they become available). The most costly modular system is, at least for now, the Theta Casablanca, at over \$10,000. Very few processors are a substitute for a truly great audio preamp, however highly touted as all-for-one system "control" centers. However, the high-end community is now taking multi-channel sound seriously. The PAV

Proceed (\$4,195) ergonomically may be the nicest of all, and they announced an add-on device to handle discrete multichannel audio formats. Audio Research introduced a \$2,500 processor which not only leaves the front channels intact, but avoids any use of Dolby processing, and from several reports this processor is not only "musical," but preserves a high degree of dialogue intelligibility in the center channel. In non-discrete multichannel processors, I have long had one favorite, described below.

The Lexicon line, to my ears, always sounds a bit too processed, has its adherents. The upper end of that line-the CP3 plus (\$2,995)probably has the most flexible surround parameters of all consumer processors, and was recently recast with AC-3 upgrades available.

For cost effectiveness, the Fosgate Four was always a good bet. It doesn't sound unnecessarily artificial and, although a little noisy, is fairly warm and natural sounding, as well as being relatively cheap at under \$1,000. (At used equipment prices, it should be a bargain.) I lived with the Four for almost a year replacing it with the much more costly Fosgate Three A, which offered THX processing, faster steering and a slightly harder, brighter sound. I could live with the Four again

easily, and adjusted to the Three A only after a long break-in period (of the device, as well as my ears).

Last year, I cast off the 3A in favor of the Meridian, which sounds airier and has incredible (if not overwhelming) bass, requiring critical adjustment to avoid overloading the room. I thought the Fosgate manual was terrible until I tried reading the Meridian bookletits verbiage is more complex than the processor's algorithms. I have yet to compare the Fosgate with the latest top-of-the-line offering, the Citation processor.

All of my video equipment (being essentially industrial in origin)

lessly once setup. (| only recently suffered a failed

worked flaw- Once up and running, you may encounter some problems...

convergence board on my NEC projector which was replaced at my home by an apologetic service technician at fairly nominal cost). The same cannot be said of many of the audio components I've used in the



A ceiling mount, as in the author's system, is often the only option.

video system, since of course I used "audiophile quality" amplifiers, subwoofers and the like. (We seem to tolerate equipment failures in high-end audio in inverse proportion to price). You will also encounter noise problems, due to the complexity of a system of this type, that can be maddening to trace and ameliorate. There are no simple fixes to this, and much time can be devoted to the re-routing of cables and re-configuring of AC plugs to minimize the hums, buzzes and other





CWD's Woodmore

strange noises that are an i n e v i t a b l e result of all of those audio c h a n n e l s hooked up to a processor which is connected to the audio outputs of a video s o u r c e

which, in its turn, is connected to a video system operating

on its very own ground(ing) rules. My current video system, which seems to be in a constant state of flux, is basically as follows: NEC 6PG Projector, Sony Line Doubler, Pioneer LDS-2 laser player, Meridian 565 Surround Sound Processor with 519 AC-3 demodulator, Audio Research amplification consisting of Classic 60, Dual 75A and VTM-120 Amplifiers, Snell 500 surround speakers and two Velodyne subwoofers (ULD18 II and F-1500).

What happens when you put all of this together? Assuming that the system is properly set-up and calibrated, at least with the best source material, you can achieve a film-like result that can be simply astounding. Coupled with sound that far exceeds almost anything in a commercial movie theater, the experience easily beats all but the great movie theaters (of which we have almost none in New York City). Of course this is under optimal conditions.

Much program material can look truly bad when projected on a large scale-line doubler notwithstanding. Many line doublers can also introduce artifacts that accentuate basic problems with scanned video. My pet peeve is line flicker (AKA aliasing) in which the program material tracking the scanning lines breaks up into an unstable moiré pattern. This is most evident on program material containing horizontal lines that parallel the scanning lines of the TV signal (such as truck grills, brick wall grouting or Venetian blinds). [As a film editor who supervises Rank Cintell film transfers every week, I should add that the only way to eliminate these "beat frequency" moiré patterns is to soften the fine detail of the image when transferring the film to videotape. I find, however, that a soft, almost out of focus image is usually just as annoying as flickering lines. As Bill mentioned, letter-boxing an image reduces the picture size, which has the effect of creating more fine detail, detail the NTSC signal is ill-prepared to handle. —Mark BlockI.

The Faroudja is somewhat less susceptible than

other line doublers to this problem, but will not eliminate this effect altogether. It is most exaggerated on heavily letter-boxed programming, where the picture information is already reduced in size. Although, datagrade projectors permit variable aspect ratios, and you can reformat a letter boxed program to effectively enlarge the image, this is the same as magnifying a poor, grainy newspaper photo; the glitches just get larger. The resolution of dreaded pan and scan programs (however criticized for failing to embody the complete theatrical image) and those formatted in the 16:9 aspect ratio are typically much better (the Age of Innocence on letter boxed LaserDisc is an exception). The worst (so far): Patton, which even contains a disclaimer to this effect on the outer jacket. Best looking and sounding discs so far: Pioneer's (CAV) Natural Born Killers; Criterion's Seven. Long the most overrated: Jurassic Park (strident sound and an "etched" looking picture); long one of the best without hyperbole, THX or AC-3: the wide-screen Apocalypse Now.

Question: Is it worth the trouble and expense?

Answer One: That is an absurd question coming from someone who spends thousands on cables and little tuning dots.

Answer Two: Of course it is, if you like film. I don't know if there is any meaningful difference between repeated playings of recordings like Casino Royale and movies like Terminator 2. Both are used as demonstration pieces, however lacking in substance. There are many great films that deserve repeated viewing; also, technical aspects in the production of a great many films, like their audio recording counterparts, are worthy of closer scrutiny. I am fortunate in having a neighborhood video store that rents LaserDisc.

The obvious difference between the high-end audio-only and the high-end home theater system is that they aim at fundamentally different aesthetic objectives. Admittedly, the video system is still no substitute for a first class audio system. You should have seen the smile break out on my face when, after having neglected the hi-fi for several months of movie watching during my honeymoon with a high-end video system, I fired up a record and heard unadulterated recorded music (how's that for an oxymoron) for the first time in months. At the same time, I can now feed my appetite for films without having to tolerate the consistently poor facilities for commercial viewing in Gotham City. And, because the sweet spot is much less of an issue than in thoroughbred audio, I can share the experience with others. With a good home theater system, the heavy processing and ultimate lack of purity that is endemic to the surround sound approach is not only tolerable, it becomes a powerful accompaniment to the total experience.



Mark Block

ow that Liberal political correctness has become politically incorrect in the pendulum of our current national mood swing, it's a little tricky to assess the work of Joan Baez, Queen Mother of folkie protest music. No question, she's an icon. But isn't she a somewhat embarrassing one?

Not necessarily. She was, remember, one of the first champions of Bob Dylan's tumultuous folk/rock rebellion. And let's not forget her stirring presence at the civil rights marches of the great Dr. Martin Luther King. In our prevailing political climate, it's easy to overlook that Baez was, for the most part, on the right side-sorry, the correct side-of the big issues. Back in the early '60s, the civil rights movement was not about quotas, the looting of Korean businesses, or ever-larger Federal handouts. It was about basic equality: The right to be served in a restaurant, the right to attend state universities, the right to have our laws applied impartially to all citizens. (And back then, the right to a fair trial wasn't about a certain dreaded black millionaire murdering his white wife and getting off Scott free.) The Vietnam War? Don't get me started. Only an unreconstructed nutcase could still believe that the Domino Theory was worth 500,000 American casualties. Baez stood up for what was right, and she made a difference, so don't relegate her to the scrap heap of antiquated causes.

That said, I don't particularly feel compelled to relive that era through her music. "Been there, done that," as they say. Unlike her lover and protege Bob Dylan, Baez put



ORIGINAL MASTER RECORDING"

oan Baez Diamonds and Rust MFSL UDCD 646 ROCK

her politics before art, so the Baez oeuvre is over-stuffed with paeans to causes now won—and doesn't that get old fast! Which brings us to Diamonds and Rust, which was Baez' big, mainstream crossover album, with nary a protest song in earshot. If there is a timeless classic in the Baez catalog, this is it.

The late '60s and early '70s were a time when folk music became folk/rock—thanks (or no thanks, depending on your attitude toward electric instruments) to Bob Dylan and his disciples-and folk singers became "singer/songwriters." On Diamonds and Rust, Baez not only covered the works of several popular singer/songwriters—lackson Browne, Stevie Wonder, John Prine, Janis Ian and, amusingly, Dylan himself-she forged her way into their ranks with the brilliantly confessional title track, an ode to her troubled relationship with Dylan.

The song is both romantic and raw, pretty vet scarred, and haunting in its emotional honesty. How honest? She sings that Dylan thought her poetry lousy. That's a rather brutal thing for an artist to admit. (Back then, people cared about poetry. To put it in crass, upto-date terms, imagine Madonna singing about how Dennis Rodman thinks she's a lousy lay.) For a "bad poet," Baez writes a mean lyric: "Now I see you standing with brown leaves falling around / And snow in your hair / Now you're smiling out the window of that crummy hotel / Over Washington Square / Our breath comes out white clouds, mingles and hangs in the air / Speaking strictly for me we both could have died then and there." Baez has shared with us a brief but compelling diary entry about the flowering then decay of a relationship, distilled to pith and essence.

the audiophile voice

The rest of the album, however, has its problems. While the famous Baez soprano works so well in venues ranging from small coffee houses to large, outdoor festivals and rallies, she doesn't really have the ability of the great interpreters to bring fresh insights to songs dealing with complex emotions. A lyric from "Diamonds and Rust" is apropos here. Referring to Dylan she sings, "... you who're so good with words / And at keeping things vague /... I need some of that vagueness now." Yes, Dylan can be vague and obscure, but also ambiguous, in the sense of conveying multiple meanings and emotions. Baez needs not vagueness but ambiguity. She needs to sometimes convey shades of grav rather than blacks and whites.

Her simple, sing-song inflections are soothing and reassuring when delivering a protest song (whose message might otherwise seem too dangerous), but that same delivery can leave otherwise good material sounding banal. Jackson Browne's "Fountain of Sorrow" has moments of profound desolation-"When you see through love's illusions, there lies the danger / and your perfect lover just looks like a perfect fool"-but Baez sings it like an older sister trying to reassure an unhappy sibling after a failed puppy love.

Baez natural singing voice has a superior, condescending air that used to irritate her right-wing enemies no end; Al Capp created the Little Joanie Phoney comic strip character in response to Baez' political persona. On D&R it takes the profundity out of the lyrics. Lines from John Prine's "Hello in There" should leave you feeling a little chilled: "But old people just grow lonesome / Waitin' for someone to say / Hello in there." From Baez's lips, the words seem to be spoken at a press conference in an old-folks' home; we hear the sympathy in Baez' voice, but we feel somewhat removed from the pain.

Unlike Al Capp, I don't question the sincerity of Baez' passionately held beliefs; I question the passion of her sincere but limited performances. Covering Dylan's "Simple Twist of Fate," which was new at the time of D&R, she suddenly breaks into a funny parody of Dylan's nasal whine. What's even funnier (but not funny ha-ha) is that the song just as suddenly comes alive with fire and feeling. Replacing her sweet, bland country/rock tone with Dylan's strange punchiness, Baez sounds, briefly, passionate. The feeling even remains when Baez kicks back into her own voice-as if the freedom to sound weird rather than pretty has loosened something up for her.

But by the next song, Dickie Betts' "Blue Sky," we're back to dull, insipid monotony. In any case, the value of this Allman Brothers song has always been the guitar solo interplay between Betts and the sublime Duane Allman. Baez' guitarists here, Larry Carlton and Dean Parks, are out of there element, and Baez' vocal does nothing to salvage things. Other musicians on hand for D&R are top notch session men-Jim Gordon, Larry Knechtel, Wilton Felder, Joe Sample and Tom Scott. Gordon had just come off a Derek and the Dominoes tour, and was finally being recognized as one of the best drummers in the business. (Tragically, he was to suffer a mental breakdown, murdering his mother while in a delusional state, and is now in an asylum for the criminally insane. Talk about bad things happening to good people.) Musicianship is first rate, if not inspired, and the band navigates from country to rock to jazz with a breezy ease.

I don't mean to sound hard on Baez, for D&R is pretty, pleasant, listenable and sometimes brilliant. Besides the title track, another Baez-



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Quality Service and Distribution, Inc. 33 McWhirt Loop, No. 108 Fredericksburg, VA 22406 Tel (540)372-3711 Fax (540)372-3713 penned cut, "Winds of the Old Days," is guite good, and "Dida" is something of a classic in its own right-a precursor, perhaps, to the lyricless vocals of New Age rockers Enva, Dead Can Dance and others. The last track, an "I Dream of Jeannie/Danny Boy" medley, is an interesting showcase for Baez' vocal instrument; if you like this kind of froth, Baez does it beautifully.

Besides being one of the most approachable of Baez' albums, Diamonds and Rust established her as a First Lady of our then-infant Audiophile Nation. Released in 1975, D&R was one of the original "audiophile approved" rock recordings featuring a female vocalist-in other words, primo demo material. (D&R was later supplanted by albums from Ricki Lee Jones, then Jennifer Warnes, then Holly Cole. Amanda McBroom? She ain't no rocker.) Mike Kay, eminence grise of Lyric Hi-fi, chose D&R to play as I shopped for a turntable and speakers-my first exposure (initiation?) to high-end back in the late seventies. (A faux marble Kenwood KD-500 with Grace arm was chosen, and while Thiel speakers with an outboard equalizer caught my fancy, the staggering thousand dollar price for the pair forced me to settle for DCM Time Windows from another dealer. Life was simple then!)

You'll remember that 1975 was around the beginning of the infamous Aphexed LA studio sound, but producer Bernie Gelb and engineer Rick Ruggieri at A&M studios seem to have avoided the worst of the second harmonic fuzzies. The sound is warm and nice and easy on the system. Imaging is even acceptable by modern standards, with only one example of questionable ping-ponging (the strings on the title cut). Stage width sometimes extends well outside the speakers, by the way.

Hearing it now in all its Mo-Fi majesty, I'm struck by two things:



how smooth, agreeable and perfectly natural the vocals are; and how bandwidth limited the recording is (particularly the drums). | understand now why I liked those old Thiel speakers, which garnered a reputation for a hard, bright top end. Not on this recording! I don't think it has any treble above 10 or 12 k.

But the midrange is, pardon the cliche, magic. Baez double tracks many of the vocals, and that added intricacy-which is, for the most part, inaudible through mid-fi receivers and most car stereosadds greatly to my enjoyment of the album. The depth that Baez lacks in her interpretative ability is certainly ameliorated by the tricks she performs with multi-tracking. "Children and All That Jazz," the worst song in the bunch here, is the most transparent, impressive recording, and what Baez does with the double tracking actually makes the song kind of fun to listen to. The "Jeannie/Danny Boy" track, not normally my cup of stea, has some tremendous vocal dynamics, and can give your midrange drivers quite a test. Most old LP copies of the album have worn, mistracked inner grooves on this cut, so the CD is probably your only way to really hear what the engineers put down on tape. D&R is definitely a recording that benefits from a neutral, high resolution system-and from Mo-Fi's remastering.

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Jon Tiven

A spite all the mea culpas about being "fat, forty and proud of it," the return of these Sex Pistols means the complete repudiation of Malcolm McLaren and the total vindication of the group's musical side, which Malcolm fought to diminish in the eyes of the public/press. Certainly the "political" side of the group was important, but what made it work was that the

McLaren suggested they write a song about "Submission," Rotten, Lydon and Matlock didn't have any interest in Malcolm's sexual pecadillos so they decided to write about a "submarine mission." The subtext to most of the Pistols' work was more about how silly other rock bands were, although performed with so much swagger that many missed the point.

> So what of their return? The first recording is a live effort from one of their first shows in England, and thankfully it lives up to the





Pistols were truly a classically great and original rock band. Their musical points of reference were far different from their peers—they had obviously done their share of listening to the New York Dolls and The Stooges—but their ability to write original songs and play them with verve and precision made lyrics like "I'm A Lazy Sod" work.

They were misunderstood and taken too seriously, particularly one Sid Vicious who turned the tongue 'n cheek message into a self-destructive lifestyle. When

promise of their first (and only real) album, released 20 or so years ago. They had the good sense to put the original group together, as the four of them-Rotten, Jones, Matlock, and Cook-created the great noise that started the punk rock movement in England. The only caveat is that their repertoire is limited to their album and B-sides, which sound punchier here than on the original album thanks to Matlock playing bass on all the songs (he was kicked out of the group before completion of the album, and Jones played bass on some of Never Mind The Bollocks). Chris Thomas produced, and did was he does best-make everybody sound extremely present and accounted for.

I was fortunate enough to be able to witness both of the New York shows last August, and in

fact the band was "stronger" musically and Lydon's presence as vocalist and entertainer

The original punkers are back!

was astonishing. After having made such a point of this group doing it strictly for the dough, it must be said that when these guys were at the top of their game,

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E. R C. C. R E.

All quotes from Ken Kessler, HiFi News & Record Review, January 1996



they were, without question, one of the great rock bands of all. Matlock and Cook were tight and muscular, Rotten's singing and

This new album sounds punchier than the original.

dancing were completely original, and Jones provided the foil and din for Lydon's vibrato. Outside of this context, all four have merit individ-



Ace reviewer and guitar wizard in his own right, JonTiven (left) with his favorite Sex Pistol, Glen Matlock.

ually but that sum is nothing compared to what they have to offer as a unit. One would hope that they lap up all the positive press they've

At their best, the Pistols are a great rock band.

been getting in respectable publications, and so much enjoy the celebrity of again being Sex Pistols that they take the opportunity to record that second studio album.

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Ross Wagner

uv this disc. Recordings (and music) don't get much better.

The idea is simple enough. A record company digs through its recordings of Handel oratorios and operas,

comes up with 13 drop-dead soprano arias, assembles them with love, good taste and care onto one CD, and launches it into the marketplace.

Harmonia Mundi has done exactly that task with the "Handel Arias" (HMU907149).

Let's get to the music first. (We're in this for the music, right?)

Handel, as you know is the 18th-century chap responsible for "The Messiah," which some consider a Christmas (and Easter) cliché. To me, whatever the season, it is beautiful. "The Messiah" does cast a long shadow, however, obscuring a substantial

soprano, mezzo-soprano body of Handel's dramatic music. Harmonia Mundi, addressing this issue squarely, has recently released many of these less-known, but no less beautiful Handel works.

The producers of this compi-

lation, drawn from the full-length versions, have shown restraint by including only one selection from the aforementioned "Messiah": "He Was Despised," (Remember how they sing it ? "Despised" becomes three distinct syllables..."De-spise-ed.") Happily, the "Messiah" aria occupies only 11 of the generous 77 minutes of this album. We have over an hour to showcase 12 other flowers from Handel's garden.

I noticed three selections from "Theodora," Surely, I

thought, the heroine must be Justinian's empress of Byzantine mosaic fame. You know, the lady who could show Hillary Clinton a thing or two about influencing the politics of her time from a position alongside her husband, and coming out of the 6th-Century history books smelling like frankincense and myrrh.

HANDEL

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RIAS

Alas, I am thinking of the wrong Theodora.

Handel's Theodora is a

saintly young Christian woman who. at the end of the third century, falls in love with a Roman soldier. Didymus. Bad move. Didymus, to demonstrate his love for Theodora, by converting to Christianity in spite of strict Roman rules to the contrary. Another bad move. The matter goes before Valens, the Roman President of the City and the Heavy in this opus. He sen-

Handel Arias Harmonia Mundi 907149

Classical

tences Didymus to death. Theodora rushes into the courtroom and pleads to die with her lover. Valens, clearly an accommodating sort and one who has a sense for a good story line as well, grants her wish. So ends this tragedy.

It should be as no surprise that "Theodora" spawns arias like "Angels Ever Bright and Fair," "With Darkness, Deep as is my Woe," and the most sublime of all, "Oh! That I on Wings Could Rise." (No, rock

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fans, this isn't a tune from the latest Eagles album.) Handel serves up a gorgeous and touching melody for this aria, and Lorraine Hunt makes it all very believable. Listen to the music as the words,"Swiftly sailing through the skies," are sung. Note that the same syllable is sung over several notes, creating the sense of sailing. This is "word painting" and the music is said to be "melasmatic." It works, big-time.

Many of my favorite arias are here: The sprightly "Va Col Canto" and the exquisite "Amo Tirsi" from "Clori, Tirsi e Fileno," the exuberant "Qual Nave" from "Radamisto," and the utterly charming and dance-like "Ogni Vento" from "Agrippina." Do we need to pick a single favorite? Enjoy all of them. My thanks to Harmonia Mundi for these beautiful revelations!

One could not hope for a more perfect vocal vehicle for Handel (or the baroque period in general) than Lorraine Hunt, whose mezzosoprano voice graces all of the selections on this disc. Her presentation is passionate but never cloying. She exhibits control and precision while maintaining the warmth and humanity so essential to these arias. This is not grand opera, and Lorraine Hunt and Nicholas McGegan, the conductor, know the difference. Never overly dramatic, Ms. Hunt knows how to use the range and dynamics of her voice to create a moving theatrical event.

Despite the fact that the recording is really an assemblage of selections recorded in different halls, at different times, by different engineers, sound quality is surprisingly consistant. Surely a good part of the credit goes to McGegan, whose musical vision is maintained throughout. Applause to the firstrate recording engineers as well. I recognize the names of Tony Faulkner and Peter McGrath from other well-recorded albums. I am less familiar with Hugh Davis and Brad Michel. All have done a fine job here, as have Robina Young, the producer, and Doug Schwartz and John Polito who did the mastering. Credit to Messrs. Davies, Levins, and Witt for the seamless editing.

There is, as you might expect, some variation in hall ambiance from cut to cut, but not so much as to be distracting. Stage width is sufficient, consistent, and appropriate to the modest scale of the the orchestral forces. no easv task...remember, four different halls, etc., etc. Depth is good, but not cavernous. And no 7 second decay here, not appropriate, rather a sense of intimacy about this recording, essential to its charm.

If you can get a copy of the "highlights" disc of Theodora (HMU907188), see if you notice variations in sound quality from the equivalent cuts included in the disc



here reviewed. That album provides somewhat more ambiance, greater stage width (especially at the rear of the stage), and more depth as well. What is the explanation for this? According to Paul Witt at Harmonia Mundi, there was no tinkering other than normalizing gain levels when the selections were assembled onto the Handel: Arias album. Yet, after carefully matching levels, listeners to my system continued to hear the differences described. however subtle. Puzzling. As you might expect, the more ambiant version was preferred by most, but a passionate minority of listeners were drawn to the intimacy and warmth of the Handel: Arlas version. Your choice.

In any case, the sense of intimacy is enhanced by Conductor McGegan's choice of original instruments of the period. You will notice and will enjoy the reedy, slightly nasal quality of the sound. The scale is purposely kept on the small side. Even the scale of the organ, which used in a few of the selections, is small. It is a "positive" organ, my musical guru, Dr. Rancatti, speculates . . . a nice little job on wheels, not much bigger than a celeste. Roll it onto the stage and play. It does not overwhelm other musical forces.

One caveat here, and it relates to the use of original instruments in the orchestra. Prepare to be disappointed if you play this disc on a "hot" system or through speakers or electronics not properly broken in. The sound will be particularly pinched and thin. Discontinue listening to this disc immediately; you are not hearing an accurate rendering of this music. If your system is neutral, the disc will be presented at its best. However, if it's on the warm side, the sound will be fine, but lacking the slight astringency that is the charm of original instrumentation.

A further note: Sometimes, on hearing "serious" music, we become reverential and keep the volume low out of "respect." Au contraire. This Compact Disc sounds considerably better when played at higher gain levels. The music opens up just enough to do justice to the dynamics of Ms. Hunt's voice and the instrumental subtleties are better revealed. This disc is drawn from six different complete Handel operas and oratorios now on Harmonia Mundi. If you can't make it through a multi-disc album, choose a "Highlights" version. Harmonia Mundi serves it up any way you like it. This music soothes the ear and feeds the soul.

Handel: Arias is a winner in every way. Buy this disc.

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Edward Tatnall Canby

hese days if you want to know not only what you are hearing but where and, especially, WHEN, you must watch your ®s and ©s, down in the very small lapel print. I played this Nimbus of offering with the handsome cover straight through in, so to speak, the present tense—until I discovered the microscopic ® 1996 and ©1984 that told me I was listening a dozen years back, in early digital.

Yes, and now evidently refashioned as a sort of digital antique. We are well into that stage of audio history. I don't doubt there is real improvement here over 1984. Nimbus is surely in touch with the latest in British digitalia even if the old CD masters must retain their original musical acoustics, more or less. But there are other differences that matter for any listener at all concerned with the sound of music.

The Scottish Chamber Orchestra, with or without conductors, has attained mini-celebrity status in its almost quarter century of existance, if not quite on the scale of the Nimbus publicity exuberance. As of now,



it is an excellent small professional ensemble of conventionally trained performers, with celebrity soloists when and if; this would have been rated as progressive, even radical, around, say, 1938. (I would have done so—such small ensembles were just beginning to appear in competition with the major symphony orchestras.) Today these Scots remain blithely unaware of such later unthinkables as the use (and performing technique) of so-called period instruments. Indeed, they lack even one of the great innovations of the 1930s, the continuo arrangement. I can hear none, and none is listed in the liner notes, so far as I can see.

Not to be condemned for this, definitely! These are good players, as of 1984, and widely staisfactory today for vast numbers of listeners, both live and via audio and video. And I like that old pro, the soloist Oscar Shumsky. In spite of an enormous history of virtuoso appearances worldwide, he is a modest and very musical player here, if in a generalized and not really "Bach-ish" style.

On the other hand (back in 1984), the recording people had personality problems on their hands—a "leader," the chief of the violins (concertmaster in the U.S.) who makes it clear at once that he is of the passionate school and Shumsky's opposite. The very first thing we hear on the CD is a loud and inappropriate flourish from this man, where he should blend with his cohorts. Glad I wasn't recording director, having to cope with that sort of situation! The man is also the second violin solo in the two-violin "Concerto in D Minor."

All this and much more is a living (so to speak) part of the high-end audio you hear on your equipment, whoever you may be, whatever sort of music. But always look first for the © and the ® down in the fine print.

J.S. Bach: Violin Concertos, Double Concerto for Violin & Oboe. Nimbus NI 7031 6

Massical

the audiophile voice World Radio History



Michael Tearson

he classical banjo? Well, yes, and in John Bullard's capable hands, the concept is a natural.

In a 21-selection program of Handel, Scarlatti, Dowland, Robert de Visée, Mateo Albénez, Roncalli, and a lot of J.S. Bach, Bullard's banjo is either solo, in duet, or trio with guitar and cello, plus duets with vibraphone and harp guitar.

The unusual nature of the texture of these pieces rendered on banjo is best and most easily illuminated in a simile; the sound of the banjo relative to the guitar is very much like that of the harpsichord relative to the piano. In fact, the three Handel compositions and the Bach two-part inventions here have been transcribed from harpsichord works. The analogy fits like a fine suede glove.

Bullard's work is wonderful, his playing inspired and spirited. He is a man on a mission and he is fueled by that. John Patykula on classical guitar, Steve Bennett harp guitar, William Comita cello, and Greg Giannascoli vibraphone are Bullard's collaborators (or rather co-conspirators) and all participate with taste, clarity and vigor.

> Unusual? Yes, but very natural in the hands of this master.

Plassical

Classical music on banjo is an idea that many would reject out of hand. In fact, I had to cajole Editor Gene Pitts to let me write about it! [Editor's amused response: Gee, Michael, I don't think "cajole" is quite the right word, as I felt that I was sort-of blackmailed into running this so as to get a review I really wanted, which is the one of William Brooks that appears in the rock & pop review section.—Gene Pitts] But it works. And Tony Trischka's appreciate notes are quite an endorsement.

This recital of John Bullard's is thoroughly a delight, and it is beautifully wrought both in performance and technically. *The Classical Banjo* is a wonderful and surprising album.





JAZZ Diana Krall Only Trust Your Heart GRP 9810

Bill Wells

Wow! What a nice surprise I received recently while on my way to work. On the radio was a new female artist that I had not heard before. To my ears, her sound was very impressive. Even though this was a rather brief interlude, I could tell that this particular artist had some pretty nice pipes. As such, I knew that definitely I would want hear more from her—and soon!

I first heard Diana Krall with my Audi's sound system fairly well cranked up (my typical early morning drive-to-work routine). Not only did I hear Krall, I also heard some other very familiar instrumental background sounds as well. Instinctively, I nudged the volume up just a bit, to extract even more of the sound (and feeling) that was coming through my car's sound system.

What immediately struck me was Krall's smooth, relaxed manner. Along with her somewhat laid-back style, Krall provides an up-tempo delivery as well as an interesting phrasing technique. Krall's sound has a kind of quiet, natural gusto that somewhat reminds me of the outstandingly righteous and always gutsy Ms. Ernestine Anderson. Krall's delivery is not as gritty, but she provides just enough of that type of style to complement her overall relaxed presentation. (In fact, the tune that I heard on the radio that particular morning was very much in the vein of Anderson's swinging bebop style which always grabs my ear)

Sufficiently teased by this cut, from Krall's CD, I decided to take a quick exit off the freeway and headed



straight for the funky Electric Fetus (my favorite local record shop) to pick up a copy of this new CD. Much to my dismay, I discovered that what I had been listening to was an early promo copy for radio play. In fact, Krall's CD wasn't due for release for another two to four weeks. Damn!

Well, I can honestly tell you—the wait was definitely worth 'it! In addition to a lot of very nice vocal material, Krall's background accompaniment is firstrate. For starters, the inimitable Messrs. Ray Brown and Christian McBride, on acoustic upright bass, are ever present as is the ever-soulful, distinctively unique, Stanley Turrentine on saxophone. Lewis Nash rounds out the group, providing a nice percussive accompaniment on the drums.

Krall's opening cut on this recording has a nice funky be-bop swing to it (the oft-heard R&B/jazz tune "Is You Is Or Is You Ain't My Baby"). It is on this particular cut that Sir Turrentine is provided an opportunity to remind his long-time followers that he's still got that special something. However, what really impressed me about the overall style and technique employed by Krall on this particular number, was her ability to allow these other artists to strut their stuff yet remain the center focus. She comes across as being very comfortable sharing the limelight while remaining in control at all times. This is a trait not often found in newer artists and signifies Krall's overall maturity as a performer.

Another feature of Krall's style is her ability to take various rockin'/boppin' songs and put her rather relaxed and sensuous touch to them. In particular, check out her rendition of "Only Trust Your Heart." Krall takes this cut for a nice smooth groove surely to

appeal to many listeners. Her vocal phrasing and delicate piano work blend so very nicely that it bears repeated listening.

A similar touch is provided on the very popular tune "Broadway." On this cut, Krall not only slows down the pace a bit, she also turns over a fairly large segment to bassist (McBride) and percussionist (Nash). Both instrumentalists lay down some very juicy and highly stylish licks which adds substantially to the overall effectiveness of this piece. (If you



can listen all the way through this piece without tapping your foot and/or popping your fingers, well, I'm sorry, but you must have a hole in your soul!).

Even though Krall does not present a real strong bluesy approach, there is a soft huskiness in her sound that adds a delicious character to her vocalizing. Further listening to Krall has provided me with glimpses of yet another highly regarded jazz singer the renowned Etta James. For example, listen closely throughout the tracks titled "The Folks On The Hill," "Squeeze Me," and "All Night Long" for what I'm referring to. Fortunately, Krall does not come off so much as an Etta wanna-bee that you can't enjoy her own interpretation and presentation.

Also, despite Krall's tendency to snatch subtle nuances from a number of other well-known female jazz vocalists, she does have a sound of her own. However, at this point, Krall's sound is not so highly stylized that it is easy to quickly distinguish her from any other good female vocalist. Hopefully, as she matures and settles into her career, she will allow the "real" Diana to emerge.

More recently, during a segment on late-night TV ("Jazz Central" on Black Entertainment Television— B.E.T.), Krall was the featured artist for the week. During this program, she stated her strong admiration for such artists as Carmen McRae, Shirley Horn, Nancy Wilson, and several other similar singers. Listening to Krall's new recording, as well as viewing this taped

television segment, has made it clear to me just how much these singers have influenced her final overall sound.

Fortunately, for her and for us, Krall handles these influences in a manner that is not at all distracting. In my opinion, I find her overall sound, and the overall presentation, to be both quite pleasing personally and very enjoyable.

One other aspect of her presentation that I should bring to your attention is her fine piano work. At times, it is possessed of a subtle delicacy and

finesse. Yet, when needed, Krall can bang out some very solid licks that enhance the delivery of and bring a strong sense of rhythm to any given number. You will notice that she is very accomplished and thoroughly at home when striking the ebony and ivory.

The sonics on this Compact Disc are first rate. Each of the artists are captured in a very natural manner. Both staging and image placement, of each of the various artists on this recording, are presented as they should be for a jazz ensemble such as this. Also, for the most part, the miking was also done in such a manner as to also provide a very solid, intimate feel to the resulting performance.

On all counts, I must give this recording an solid "buy" recommendation. In fact, based on what I've heard on this recording, as well as the reaction of various friends, I am already eagerly anticipating Krall's next release. So, come on, Ms. Diana, please do it again . . . soon!



Rick Taylor

ou'll need the insert to figure out who plays on what song, but I don't think it really matters 'cause the core of the Groove Kings is always present and you will be having too much fun to worry about it anyway. Sweetman is a saxophone player who has spent many years perfecting the raw, nasty, sleazy, "Damn, don't it grab ya?" '50s sax sound. I think he graduated Phi Beta Kappa from that school and ain't gone back since. (Man, this music does change one's attitude!) This is a working band that has ties to Luther Johnson, Buddy Ace, Freddy King, and Hound Dog Taylor—just to mention a few. The members have come together after

Austin

Blue.

Backalley

growing up (musically) in strip joints, back alley bars, jazz joints, and seedy hotels from Galveston to Gary, from East Orange to West L.A. With this heavy an upbringing, they have put together a sound that is honed to the max, true to the R&B that gave it birth, while adding anything and everything they picked up along the way. This CD is an example of all the pain and pleasure that this type of music has to offer. (It's a ride and I recommend safety belts.)

This could be a very easy review to write, say somethin' like "Buy the CD, play the first song "Jest Smoochin'," and thank me in the morning! From the

> very first note to the last "please play longer" riff, this CD delivers. A true sense of the working class, gut wrenchin', raw blues is on display, and don't ask me where the stripper is. (I've been asked too many times already.) As you recover from the first track, number two comes on, and you realize there is a whole band that's going to give you another dose of pure R&B. Just when you think there is no more, track 3 starts and now you have a sultry, smooth, sexy display of excellent musicianship, glowing all over a large soundstage. Every time I've let this

SWEEPMAN with his SOUTH SIDE GROOVE KINGS BLAEl

recording soar with female ears present, serious listening ends and the dancing begins. The music here does move your feet and whatever is attached to them.

Sweetman

Wildchild!

Austin Backalley Blue

02752

Enough. I do not review each and every song as some do, I try my damnedest to give you insight into

what's going on over the entire record as far as performance and sonics go. It's so easy to be completely enraptured with this CD that a song-by-song listing seems totally ridiculous. This session on Wildchild! (Mapleshade-American roots music) is not only up to Mr. Sprey's standards but packed with some of the best raw saxophone I've ever heard. You get a great sax plus a full measure of great guitar licks being traded back and forth between two guitars, great drums, a trumpet and a partridge in a pear tree. It's all there! This bands fires up its engines and runs all day and night without missing a beat. My initial notes read " Track 9-STROLLIN' THE DRAG: Does a sax ever get nastier? Such overtones, my soulmate wishes I was that good! Track 10-CRAZY HORSE:

Heavy-duty dose of R&B fun which gives a purpose for having legs. Total playing time 48:19 seems like hours and I wish it never stopped." This is a real keeper, bop til ya drop, and everything else that goes with great music and having a blast listening to it!

A few words about the sonics are needed. If you have ever listened to any of the fine music catalog Mapleshade has, then I don't have to say much. This recording is loaded with talent and Mr. Sprey has captured all of it, the true-to-themusic sense one gets when listening to a recording

from Mapleshade and a few others. It's all here in a big way. Air, extension, attack, a soundstage that's true to life, and the ever present "in your face" imaging! Mapleshade's recording technique is top-notch and equal to or better than anyone else's. There, now you know how I

feel about what Mapleshade does, and having said that, I can get back to listening to the Sweetman once again. (This music is almost illegal—totally id altering!)



QUIPMEN

BALANCED AUDIO TECHNOLOGY VK5 LINE STAGE

Over the many years as an audio enthusiast/hobbyist, I have continually (and relentlessly) made efforts to put the best components that I could reasonably afford into my various two-channel stereo rigs. It now seems that, in addition to

high-end products are almost cost prohibitive. This is not to say that all (or most) of the really good stuff is priced out of reach for most enthusiastic audiophile-type consumers. It just seems increasingly true that only those who are very

Bill Wells

wide range of serious audiophiles. For the most part, I try not to make judgments as to whether any of these products are really worth their price for admission, leaving that determination up to the end-user or purchaser (reviewers excluded).



being a hobbyist, I have achieved both the distinct blessing and sometime curse of being an audio equipment reviewer.

On a personal level, the good news is that I now have access to some of the very finest high-end audio gear available. Yet, on a more practical level, the bad news is that many of these specialty, well positioned financially (or those who are willing to make significant sacrifices) are able to place themselves in the high-end sweepstakes and partake of the sumptuousness of sound produced by these gems.

As for yours truly, I am always on the lookout for those so-called breakthrough products that sound great and are within the grasp of a Having provided this scenario as a backdrop, let me now move on to the essence of this review.

DISCOVERY

In terms of discovery, I cannot take full credit for having come across this product. Actually, the

the audiophile voice World Radio History folks at Esoteric Speaker Products (ESP) in Bend, Oregon were the first to alert me to this new product and the emerging high-end audio component manufacturer named Balanced Audio Technology (or BAT for short). According to the ESP group, BAT's newly developed all-tube, fully balanced linestage (dubbed the VK5) was something quite special and truly worthy of my perusal.

I immediately made my initial contact to BAT headquarters (located in Wilmington, DE) to learn more about their new VK5. At the time of this initial call, I was happy with the linestage that resided in my reference system. Additionally, I had on hand several other top contenders that I was quite pleased with, so my call to BAT would prove to be most interesting and enlightening.

Right from the start, my discussions with a key representative from BAT were most intriguing. In fact, he was quick to acknowledge the sonic accomplishments of the various units that I had on hand. However, he also felt that the VK5 would more than hold its own against these formidable competitors. Needless to say, this inspired me to suggest that perhaps I was just the person who should convene a head-to-head showdown of these units.

As my talks with the folks at BAT progressed, I learned that an earlier prototype linestage had been developed. According to Steve Bednarski, business partner of BAT's head electronics guru Victor Khomenko, this earlier unit was not particularly user-friendly and had not quite ready for the consumer market. The later VK5 became the realization of Victor and Steve's collaborative efforts.

Fortunately for serious audiophiles, BAT was entering the new VK5 into the high-end audio market at a very competitive price-point. At its suggested retail price of \$4,000, it would fall directly in line with other notable high-end, alltube linestages or preamps. For example, the new BAT unit would be going up against the likes of the superb Audio Research LS 5 and LS 22, the long-time industry favorite and highly renowned CAT Signature, and the outstanding Sonic Frontiers SFL-2, just to name a few with roughly similar pricing.

At the time of my final negotiations with BAT to secure a review unit, I had a number of these previously mentioned units on hand. This would provide me with an excellent opportunity to hear for myself just what the audible differences were. Based on my previous experiences with these units, I had become quite familiar with each of them and was generally aware of their strengths and weaknesses. I was reminded of one of the all-time favorite childhood tales. However, in this case, I was dealing with audio equipment, not a hot cereal (i.e. porridge). True to the storyline, however, one unit was just a bit too soft through the highs, another was just a wee bit too robust in the upper bass and lower mids, another was just a bit too forward through most of the mids, and finally one was just right!

From a physical perspective, the one common feature among each of these units was the full complement of tubes in their circuitry. However, these units differed significantly in their topology as evidenced by their interconnect cable interface configurations. For instance, both the ARC and BAT units were designed for fully balanced operation. The Sonic



Balanced Audio Technology VK5 line stage, \$4,000. Balanced Audio Technology, 800 First State Blvd., Wilmington, DE 19804; phone 302/999-8855; FAX 302/999-8188.

ASSOCIATED COMPONENTS

Preamps and linestages: Audio Research LS5 Mk2, Convergent Audio Technologies Signature, Sonic Frontiers SFL-2; amplifiers: Audio Research D400 MK2, RE Designs LNPA 150 mono blocks, Sonic Frontiers 160 mono blocks; analog: Well Tempered Reference turntable, Audio Research PH2 phono stage, Sonic Frontiers SFP1 Signature phono stage, Blue Oasis moving-coil cartridge, Cardas Heart moving-coil cartridge; digital: Audio Research CD1, Sonic Frontiers SFD-2 DAC, PS Audio Lambda CD transport, Theta Data Basic CD transport; loudspeakers: ESP Concert Grand loudspeakers, Paragon Regent and Jubilee loud-speakers, Audio Physics Step monitor speakers;

cables: NBS Pro interconnects, speaker, digital, and a.c. power cables; Transparent Music Wave Reference interconnects, digital, speaker, and phono cables; Audio Research balanced digital cable; A.R.T. Millennium 5000 speaker cables and coax digital cable, and Ultra Resolutions Technology fiber-optic digital cable; accessories: A.R.T. Q dampers, ASC Tube Traps, Audio Physics Phono Demagnetizer, Bedini Ultra Clarifier, Goldmund cones, Shakti Stones, Solid Steel equipment stand, and Ultra Resolutions Technology Cornerstone vibration platform.



Tel. (416) 730-0955 Fax (416) 250-1830 Frontiers was capable of accepting both balanced and single-ended inputs and outputs. And, finally, the CAT was designed strictly for single-ended operation.

With these differences noted, my initial thoughts were that perhaps one design approach would render distinct advantages over the other. However, based on my comparative listening evaluations, I was unable to conclude that one approach was clearly superior to another. For me, the issue is not whether a unit is balanced or single-ended, tube or solid-state, hybrid or whatever. What really matters is how the music is conveyed to the listener.

Please note that in the BAT literature, they point out that the VK5 is fully capable of running singleended ("unbalanced") components by merely using special XLR-to-RCA adapters. These are available from the factory at a nominal cost. This approach provides additional flexibility for VK5 users. Also, according to BAT, there is no degradation of sound with this arrangement. (I did use these adapters when using single-ended amplifiers from Sonic Frontiers and R.E. Designs with no discernible problems).

At this point, I have now had numerous opportunities to compare the various units on hand to the VK5. Based on my extensive longterm listening, I can unhesitatingly state that the overall performance of the VK5 has served notice to each of these units. It should be noted that not long after the arrival of the BAT VK5, each of the comparison units mentioned underwent varying degrees of change. For example, the ARC unit has now gone through two levels of improvement (i.e. Mk2 and Mk3 designations), and both the CAT Signature and Sonic Frontiers SEL-2 have taken on Mk2 designations. Without necessarily wanting to spoil the rest of this review, I will tell you that the folks from BAT have literally knocked the cover off the ball with their first time up to the plate (or should I say, their first time at bat . . . no pun intended!?).

MUSICAL Satisfaction

Listening to music reproduced through the BAT VK5 is a most satisfying experience. In this regard, the VK5 has raised the bar in terms of excellence for reproducing music in my high-end audio system. Its overall performance is something for the listener to behold as well as for other units to reckon with. For me, the VK5 has literally brought my system closer to achieving the illusion of the real thing. No, I am not suggesting that my reference system can now get me all the way there musically. But most definitely, my listening experiences and overall enjoyment have been significantly enhanced since the VK5 has graced my home with its presence.

The first thing that I observed when picking up the shipping carton containing the unit was its considerable heft. As I removed the VK5 from the shipping container, I was impressed with its solid feel and appearance.

From a user's perspective, the front panel design is relatively straight-forward with a soft, elegant look—nothing fancy but certainly not on the stark or utilitarian side. Inspection of the interior circuit layout revealed a sophisticated and tidy arrangement that immediately brought about a sense of confidence and high expectation. On the back panel, I found things to be laid out in a very organized manner and consistent with the logical ergonomic approach used for the front.

A general description of the VK5 would be to state that it is a true all-tube, fully balanced differ-

the audiophile voice World Radio History ential design with no solid-state devices in the signal path. Additionally, the unit is a dual mono design with zero feedback. One of the nice user features is the "Sleep" mode available via a front panel switch. This allows the listener to disengage the VK5 from a full operational state, yet keep its internal components thematically active and ready for quicker turn-on than if the unit were in a completely turned-off condition.

For those of you really interested in a full rundown of the technical specifications, design approach and overall philosophy behind the development of the VK5, I suggest a quick call to BAT Central. The chief designer, Victor Khomenko, has put together a white paper that is easy to read and will provide you with a far better understanding of his overall design strategy and product development approach. The number to call is 1/800/255-4228. Either Steve Bednarski or Victor can enlighten you as they did for me previously.

Shortly after its arrival, I installed the VK5 into my system and allowed it to burn-in with FM white noise running through its circuitry for several days. During this relatively inactive period, I took the time to assemble a batch of my favorite LPs, along with a few particularly good CDs. I made sure that when the VK5 was ready, I too would be ready with the appropriate software. When the time finally arrived, I was more than ready to rock and roll with the VK5.

As an analog junkie, most of my early listening sessions were done using vinyl as my primary input source. This was due to my long-term familiarity with analog as a playback medium, and my intimate familiarity with the various LPs selected for use during this review. As time went by, I also used digital playback in my listening evaluations. Fortunately, I had the highly musical and well-respected Sonic Frontiers SFD-2 digital-to-analog converter in-house for critical listening and evaluation. This, along with the very musical Audio Research CD-1 player, I was able to really enjoy CDs in my system. (Thanks to recording companies such as Chesky, Clarity Recordings and Mobile Fidelity, I was able to use both LPs and CDs of the same recording for comparative tests).

OK, so just what did I hear when I finally got the VK5 up and running in my reference system. First and foremost, I noticed that the noise floor was surprisingly low (especially for an all-tube unit). Turning the volume pot way up on the VK5 and placing my ear directly in front of my speaker(s) revealed very little hiss. Hum was not even a factor—it did not exist. Obviously, something right was happening. By comparison to the units that I had in-house, the VK5 was noticeably quieter.

As I ventured further and delved deeper into other dimensions of the VK5's overall sound, I was literally struck by its wide range of sonic attributes. In the past, I have used a number of preamps with differing design approaches (including tube, solid-state and hybrid). What I was getting immediately with the VK5 was a combination of strengths that made me feel as though I had neither a tube nor solid-state unit in my system. Instead what I was experiencing seemed to be the best of these two designs.

RANGE OF VIRTUES

Bottom-line, the overall performance of my reference system was enhanced by the insertion of the VK5. Not only was it quieter, it was also noticeably more open, transparent, articulate, and detailed—yet



generally smoother throughout the entire frequency range. The neutrality of the VK5 further provided a sense of naturalness and realism to reproduced music. Along with this, music's harmonic structure and overall timbre was now coming through my system more accurately (and beautifully) than ever before.

Several of my friends, who are regulars at some of my listening sessions, also commented that to their ears, the VK5 seemed to really open things up and breathe new life into my system. Additional comments made by these listeners had to do with the VK5's overall clear sound, its speed, quickness, and agile character, its taunt bass with outstanding control and clarity, and the superb extension in the upper frequencies with an open airy quality.

When it came to vocals, the VK5 quickly slammed the door on the in-house competition with its dramatic realism. The VK5 simply seemed to remove itself from the overall sound, so much so that voices simply flowed from my speakers. Truly, the affect was captivating and almost startling at times.

During one particular late night listening session with the VK5 in my system, one friend literally shouted, "Yes! I'm there—it's live!" At the time of this emotional outburst, we were listening to Mary Stalling's *Fine and Mellow* LP on the Clarity Recordings label. While listening to Stallings and her ensemble through the VK5 line stage, we observed that her voice sounded right on and very authentic.

In particular, Stalling's voice was delivered through the VK5 with a rich quality and superb tonal intonation. Her peculiar nasally tone became even more evident than before. Beyond listening to Stallings, her accompanying instrumentalists were also treated royally by the VK5, which added extra enjoyment to the total musical experience. During this listening session, we observed how harmonically and tonally correct the VK5 presented music. Additionally, the soundstage produced by this unit was quite convincing and spatially correct. For example, on the Stalling's LP, a saxophone was emanating considerably off to the left (slightly outside the speaker). The effect was natural and remained throughout most of the performance. Image specificity was pinpoint and rock-solid.

However, at one point during the first selection on this Stallings LP, the saxophonist performs a brief solo. At about the time this occurs, the performer steps forward ever so slightly and nearer to one of the microphones. Prior to this, the sound of the sax is ever so warm and full, slightly laid-back and very seductive. Immediately after stepping forward, the sound of the sax, became clearer, more direct and distinct. The sound was very lifelike and quite impressive. The VK5


revealed these spatial clues in an easily detectable manner.

Moving on to other instruments on this recording, the acoustic bass was reproduced in a naturally big, warm, round, and full manner. This was done without any bloat. The VK5 clearly followed this instrument's overall timbre. It was a thrill to hear such clarity on this instrument, as this bassist moved up and down the fingerboard as well as the plucking and bowing of the strings.

With the VK5, it was fairly easy to detect the size of the cavity of this instrument. Just as importantly, the VK5 allowed individual notes to emerge with clarity and distinction. Each note was delivered with a sense of bloom and articulation. Double chording and bass runs from this recording became thrilling. With some of the other linestages I've tried in my system, although these passages have been reproduced very well, in comparison to the VK5, their sound was somewhat blurred and not nearly as authentically rendered.

The piano work on this LP was also delivered in a most convincing manner. This instrument's full array of

musical sounds provided me with additional insights as to how well the VK5 handled the critical midrange and overall transient attack. The tonality, the fullness, the weight, and the dynamics of the piano through the VK5 made it all seem so quite real. Additionally, there was little, if any, observable glare to the piano.

As the keys were struck, the sound came alive with clean, clear crispness. The initial transient attack and trailing edge of the piano notes were very natural and authentic. The sound easily projected into the room in a naturally dynamic manner. At all times, the VK5 presented musical passages with great power when called upon to do so, yet it maintained its control and finesse throughout the total musical presentation of the piano.

Reproduction of the higher frequencies further demonstrated the VK5's overall superior performance. Along with its open airiness, there was substantial clarity, detail, and delicacy. As one listener put it, cymbals reminded him of "pebbles splashing in a pond." The sound of the cymbals simply shimmered and floated in space, often seeming to cover the back wall behind the speakers. For the most part, through the VK5 the sound of this recording simply lifted me (and the other listeners) into the musical heaven!

Another recording that I am particularly fond of which lets the listener get a good measure of what natural acoustic jazz reproduction

From design, engineering, and sonic perspectives, the BAT VK5 line stage is one killer product, a "keeper" from every standpoint!

> should sound like is Alvin "Red" Tyler's *Heritage* LP on Rounder Records featuring Johnny Adams. On the feature cut titled "I'll Only Miss Her When I Think Of Her," the VK5 treated Adam's voice (and the wonderful accompanying quintet) with sonic purity and delicacy. In fact, the sound was so sumptuous that my friends and I simply could not stop at just one listening.

> Repeated listening revealed even more about the VK5's capabilities. On this particular recording, first we observed outstandingly clear and articulate vocal presentation. Next it was the superb rendition of the acoustic bass, with its tender throbbing and sensuous purring. Lastly, it was the gentle

brush work and sweet, delicate cymbals which were delivered all quite seductively. All told, once again musical ecstasy was the treat for all those at my home for this most serious of listening sessions.

The VK5's observable sonic attributes were readily evident as I moved from LP to LP and from CD to CD. In fact, as different types of musical recordings were used, the VK5 continued to tease and please. At times, the VK5 can be sweet, docile and even-tempered. At other times, provided it is given the appropriate musical input, it can provide a realistic portrayal of hard hitting, bombastic fusion, pop or rock. Overall, the VK5 can easily boogie and get down to business with the best of them.

For example, the highly acclaimed early 1970's Weather

Report Sweetnighter LP recording (Columbia) provides a ton of high-energy fusion that is full of angles, twists, turns, hard-pounding instrumentation, searing notes that ping and zing plus many other sonic acrobatics and treats. These elements, along with a host of recording tricks (i.e. reverb, overlaying, etc.),

make this recording good for testing the capabilities of a linestage.

Using the VK5 with this particular recording, I got noticeably tighter and more articulate bass, with superb weight and control, yet it was as strong as I have ever heard. The overall sense of rhythm and pace were enhanced by the VK5's superb rending of the com-The broad plex bass lines. midrange was more transparent, open and spacious. Through the VK5, it was a treat to be able to more readily pick out hidden treasures that had appeared only marginally with the other units. Additionally, the high frequencies were more extended with corresponding increased amounts of air.

At various times throughout this recording, the performance swells with the soundstage taking on enormous proportions. With all the busy instrumentation going on, it is easy for musical sounds to blur and lose their distinction. Throughout these passages, the VK5 provided a degree of control and openness that allowed individual instruments to be rendered with clear distinction. The VK5 enabled me hear all of the many intricate sounds and listen deeply into the resulting soundstage, and this proved to be one of its greatest assets.

Also, on the title cut of this LP, there is a series sounds rang-

ing from hand-clapping and bongos that are immersed in the total soundfield. The VK5 clearly pulled these out and presented their realism. With several of the other top-rated linestages, these sounds were

not as clear and thus harder to distinguish. With the VK5, it became readily apparent just which particular instrument was being played as well as its relative location on the soundstage.

CLASSICAL MUSIC

At this point, I decided to move on to classical music. One musical treat that I used to further test the VK5 was the superb Clarity Recordings LP of Igor Stravinsky's *Petrushka* performed by the Redwood Symphony. This is a masterful composition and arrangement that at times has the music presented at very low levels, quickly followed by a strong, dynamic musical swell.

The VK5 seemed quite a home with this type of music as well. Throughout the performance, the VK5 provided superb dimensionality of the orchestra's full soundfield. Additionally, the VK5's superb rendering of resolution and fine inner detail allowed me to easily pick out what was happening on the stage. This along with the inter-transient silence and sharp attack on the transients themselves gave the music a very convincing portrayal of real instruments before me.

The overall tonal balance was quite accurate with no sections of the orchestral instruments on the perceived soundstage standing out. Only when a given set of instruments were called upon, through a particular passage, did the VK5 present their sound in a proper perspective relative to the emphasis of

The BAT VK5 compellingly captures the heart and soul of reproduced music

that passage. When it was time for things to get loud, the VK5 was there. When it was time to settle down into a more gentle approach, the VK5 line stage handled all of this with ease.

With every type of music that I put in my system, it was better served by the VK5. Although I am not aware of the existence of any linestage today that is perfect, based on my experiences to date, the VK5 has taken a significant step along the continuum in that direction. Hopefully, with continuing design and parts improvements, the VK5 will too get even better.

Did I find anything that I didn't like about the VK5? Nope! However, there was one area where I was able to make an improvement. Basically, I substituted the detachable stock a.c. power cord with a line cord from NBS Audio. Immediately, the improvements were obvious. With the new power cord attached, the VK5 sounded quieter, cleaner, and clearer, and it gave somewhat better low-level resolution and inner detail. Musical notes throughout the spectrum seemed to emerge from a quieter background. Overall, the results were subtle, but in all ways, they were favorable. After switching back and forth several times between the two, I retired the stock a.c. cord—permanently!

CONCLUSION

As I said, I had a number of other superb linestages in-house when the VK5 arrived. Despite my total enthusiasm for the new BAT

unit, this does not mean that I am no longer impressed by these other units. In fact, they remain favorites of many highend audiophiles. And, I must remind you that I did not have the opportu-

nity to compare the VK5 to the very latest version of these other units.

So where does this leave me in my overall assessment of the BAT VK5 linestage? If you haven't figured it out by now, let me reiterate. I am totally impressed with the VK5. For me, it captures the heart and soul of reproduced music in a compelling way.. Without question, it is the very finest unit of this type that I have had the opportunity to experience in my reference system.

Since arriving at my home, the VK5 has been a constant source of enhanced musical pleasure. It does so many things right that I simply can not, and will not, take it out of my reference system. As the saying goes, "it's a keeper!"

Also, from a design, engineering, and sonic perspective, this is one killer product. BAT has my praise for developing and delivering such a fine product. Anyone serious about accuracy of musical reproduction should check this baby out . . .immediately. The rewards are great, the price right!







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World Radio History



OHM 300 Speakers



he size of these speakers (49-5/8 inches overall height by 13-5/16 inches wide by 17-5/16 inches deep) doesn't exactly permit them to fade away into visual nonexistence, but the quality of the sound that emanates from them encourages a lot of oversight. To my eyes, they're not beautiful; to my ears, they are. But, way binding posts, spaced to allow insertion of a standard dual-banana plug, are located on the enclosure bottom, and are aligned 45° to the vertical (or horizontal, depending upon your viewpoint) to make connections a little easier. This location was selected because either the wide or narrow sides of the speakers can face

James T. Frane

really, that's what speakers are all about—making good sound—and these do.

These rosewood veneer-covered systems are almost three feet high, and their vertical edges are gently rounded. The side walls are made of 11-ply birch plywood to which are bonded a 3/16-inch thick damping layer (composition unspecified) and a half-inch thick layer of wafer board. Internal bracing adds both to the weight and the stiffness. When tapped by knuckles any place on the enclosure walls, there is a sense of great solidity. The 105-pound weight of each enclosure reflects their sturdiness.

The speaker enclosure is bass reflex-loaded, with a downward facing port in the bottom surface of the cabinet. Two gold-plated, five-

the audiophile voice World Radio History the listening position, and wires connected in this manner are less visible, irrespective of orientation. The current production uses red and black plastic knobs, with the + and - molded in, to eliminate confusion. Styled casters hold the speaker cabinets 2-3/16 inches off the floor, providing some acoustic loading of the reflex port. The presence of the casters is greatly appreciated when one moves these speakers around.

The main driver is a downward-facing cone mounted on the top of the enclosure. It is designed to radiate all frequencies directly from what would in an ordinary system be the back side of the cone. The initial configuration of this concept was developed by the late Lincoln Walsh. With the orientation in which it is mounted, sound leaves the outer cone surface around 360° horizontally, except for those sections of the driver frame that interfere plus where some purposely placed damping material is used to tailor the sound. A soft-dome, one-inch super tweeter resides above the magnet of the full-range driver, and is aimed horizontally at a 45° angle to the face of the enclosure. The speakers are mirror images of one another. The super tweeter has a crossover to limit its lower frequency output below 14 kHz, and is covered and surrounded by damping/absorbing material over all but the dome.

An 11-inch diameter by 9fi-inch high expanded metal, cylindrical cage, which is lined with an open cell foam, covers both drivers and is screwed to the enclosure top around the hole into which the full-range driver faces. The cage is set back a half-inch from the front edge of the cabinet. The entire enclosure top is covered by black double-knit cloth stretched over a framework of metal rod fastened to a 5/8-inch thick particle board base. This base is separated from the cabinet top by an elastomer damping layer around its periphery, and is attached by four posts that insert into plastic recesses in the cabinet top surface.

The Ohm 300s were a pleasure to audition.

The rated frequency response is 20 Hz to 20 kHz, +/- 3 dB. Impedance is a nominal 6 ohms with a 4 ohm minimum. Minimum recommended amplifier power is 80 watts with a 300-watt maximum power and dynamic peak power of 600 watts. Rated sensitivity is 86 dB with a 2.8 v input, which is equivalent to a nominal 1 watt into 8 ohms.

The owner's manual comprises one side of one page and contains mostly placement recommendations. Along with this one page, however, is an 18-page booklet entitled "In Search of Spatial Fidelity." This

booklet describes the sense of hearing and interpretation of sounds and then addresses the means by which the Walsh driver-based Ohm speaker reproduces sound. This booklet talks about the rear and side quadrants of the driver being muted with Tufflex sound blocking material so that the speaker is essentially omnidirectional in the bass and lower midrange, becoming increasingly directional at higher frequencies. Measurements with a sound level meter using pink noise confirmed the omnidirectional output up to the top octave.

SPEAKER PLACEMENT

The placement recommended by Ohm is along the long wall of a room at least two

feet from the corners and different distances between each speaker and the side walls, and no more than two feet from the wall behind them. I tried the speakers at my usual speaker locations, spaced eight feet apart, nine feet from the listening spot to each speaker, and three feet between the back of the speakers and the wall behind them. I found this location to work very well. Moving them closer to the recommended two feet from the wall behind them made only minor differences in low bass and imaging.

LISTENING

Perhaps the most impressive characteristic of these speakers is that they produce very deep bass without boosting the mid- to upper-bass frequencies. The bass is heard only when it is really present, unlike some speakers that provide an illusion of bass by boosting the 60- to 80-Hz region. Even male voices sounded natural. The enclosure is tuned to 16 Hz, and I measured output at 25 Hz within 1 dB of the 1-kHz output in my room, with very little variation between! This clean bass increases the feeling of involvement in music that contains truly deep low frequencies, such as much acoustic jazz and classical orchestral music. Bass is outstanding for its tautness, depth, and power, as well as for not muddying the lower midrange.

The sound stage forms a horizontal arc from one speaker to the other; i.e., the stage center appears farther from the listener than do the edges. The Ohms also image very well, making differences in recording and mastering quality evident.

The 300s displayed excellent dynamics; a case in point was Tchaikovsky's "1812 Overture" performed by the Israel Philharmonic Orchestra, conducted by Leonard Bernstein (Time-Life CMD-01A). The cannon had a solid sonic impact with no apparent distortion, although the amplifier meters were registering past the 400 watt/channel marks.

The 300s recreated an extremely involving orchestral spread with well-recorded music, such as "Romeo and Juliet" by Serge Prokofiev (Mercury Living Presence 432 004-2). The placement of the instrumental sections was correct and the balance of frequencies was very good. The 300s did not call attention to themselves as specific sound sources, but evenly distributed the sound across the space between them. While they didn't create a holographic image forward of the plane of the speakers, they certainly could do so between and behind them.

On the Chesky Jazz Sampler and Audiophile Test Compact Disc, Volume 1 (JD37), there are a number of tests that help in the evaluation of speakers. In the leftright imaging test, the positions of the speaker vary from center to beyond the left and right speakers. The 300s did very well in this test, making it easy to identify the announced position. The off-stage right and left positions can be vague with many speakers, but were specific with the Ohms. The "Up" test (a rising sound) curved slightly inward at the top, and "Over" formed a shallow vertical arc.

The performance was often beyond the outside edges of the speakers, as on Two of a Kind with Paul

NOTES

Manufacturer: Ohm Acoustics Corp., 241 Taaffe Place, Brooklyn, NY 11205-4383; Phone: 718/783-1111; Fax: 718/857-2472. Price: \$3,995 per pair base; \$4,295 in rosewood, as reviewed.

ASSOCIATED EQUIPMENT

I drove the speakers with a Carver TFM-55x power amplifier controlled by a Carver CT-17 tuner/pre-amplifier. Other speakers were Mach One M-Two two-way, acoustic suspension speakers with front baffle driver placement. Interconnect cables were by Monster Cable, and speaker cables were Kimber 4PR. A Sony CDP-C315 CD player, Dual CS5000 turntable used with Shure V15-V cartridge, and the Carver tuner were used as signal sources. A combination of acoustic jazz, vocals, classical, and vintage rock music was used for listening.



Desmond and Gerry Mulligan (RCA 9654-2-RB). Highs were always smooth and extended, with good integration of the super tweeter with the main full-range driver. Sound was good from any position between the speakers. If you like to listen at live levels, the low sensitivity will probably make you want a powerful amp.

The sound of "I'm Confessin' " from Jazz at the Pawnshop (Prophone PRCD 7778) was as if I was looking through a wide doorway, defined by the width of the speakers, into the performance space. The ambiance and the sense of the room size were marvelous. The vibes seemed just a few feet away. Janis Joplin's soulful voice and her back-up instruments and singers were only a few yards in front of me (Janis Joplin, 18 Essential Songs on Legacy/Columbia CK67005). Her voice sounded right, but sometimes either the mix allowed it to wander or she moved.

Yo Yo Ma seemed to occupy a space in my room, with the presence of the full richness and texture of the cello (Bach, Six Suites for Unaccompanied Cello, CBS Masterworks M2K37867).

CONCLUSION

The sound from the 300s, as some of the sound is reflected, has a different character than forward-firing

speakers. There is more ambiance with the slightly delayed reflected sound. With the 300s, you hear the music as you might from a little greater distance than with my reference M-2s. There is a bit more blending and spread of the sound, but not so much that the performers' locations on stage are lost. The individual sound and sharpness of string plucks and percussive attacks are plainly present. The bass is stronger and deeper than the M-2s, as would be expected from speakers so much larger (and more costly). The appeal of their styling is a matter of individual taste. Woodworking is one of my hobbies, and I prize fine fit and finish in loudspeakers, as well as their artistic styling. I found the 300s lacking in some particulars. While the rosewood veneer was real, it was coarsegrained and I found the coating (lacquer or varnish) to be too thick and too glossy. The vertical surfaces to which the veneer was bonded were not perfectly flat near the top edges of these particular systems, which showed in the finished product.

The 300s are not intended for background music because they encourage you to stop reading or writing or talking and just listen, they can be that involving. There are many good performers in this speakers' \$4,000 price range, but I believe the Ohm 300s have only a few sonic peers at the top of this group. They are a pleasure to listen to.



Volume 2, Issue 5 World Radio History



Timbre TT-1 and TIP Jitter-Reduction and Reclocking Unit

Bill Brassington

Vestion: Do small companies get a break if they have an exceptional product, but do not have the 6 figure moneys to advertise in big magazines? **Answer:** Hardly ever.

Question: Are there politics in the high-end field

today? Answer: You betcha. Many wonderful small elec-

Answer: You betcha. Many wonderful small electronic companies have gone by the wayside just because they did not know how to play the high-end game. It's very sad because we have a lot of talented designers out there who have designed equipment that is as good as, and in many cases better than, the biggest high-end companies out there.

So here's a big hats off to Timbre principals David Goldstein and John Kukulka who have hung in there



and continued to bring their Timbre product to all the trade shows and who many times came up with some of the best sound at those shows. Many manufacturers are using the Timbre as their reference DAC, both in and out of the shows, and many reviewers, respected audiophiles, and underground gurus have bought the product for their own use. This is a DAC that just about does it all. I'm not saving this is it forever, because, like computers, things are changing all the time. But, for right now, this DAC competes with the very best out there and yet costs only \$3,295.

> On top of a really decent price, Timbre is nice to deal with

the audiophile voice

World Radio History

because David and John have a hands-on relationship with all their customers. They never blow you off when you call, and they are willing to help you optimize your equipment whenever given the chance. They are a small company with a big sound and a big heart. The TT-1 is rounded, sexy-looking, and very user-friendly. It comes in machined aluminum black and silver. They paid strict attention to vibration and jitter and the proof is in the sound (neutral).

THE SOUND

This DAC, at \$3,295, can be put in a top-of-the-line system and you'll not be embarrassed. In fact, the more resolution your system has, the more the DAC tells you, and it will do it in a nice, neutral way. It is so clean, uncongested and smooth that you really find out just how wrong your old processor was. Not too much bass, no forward mid-range or tilted-up treble . . . just the facts, man, just the facts. A Sergeant Friday in an aluminum case . . . from choral to jazz, Timbre has managed to keep everything in its place, and nothing is overdone.

Female voices have the fullness and timbre (no pun intended) that they should have. Violins and pianos take on harmonies I've never heard before out of a DAC. The last time I heard this kind of music was with a cartridge on vinyl. The bass is the best and most neutral around. It is fast and tight, without hanging on like the bass of so many other DACs.

With the other top-of-the-line DACs I have had, you'd think at first it is better in the bass, only to find out later that it is interfering with the lower-midrange and on up. I love good, deep bass, but not to the extent that it muddies up the rest of the music.

The treble extends way out and never gets hard or glary. It takes on a smooth, liquid, delicious sound. Horns, brass strings, etc., never sound congested or analytical. The detail is all there in the right ways, and the sound stage is huge and deep when used with the right equipment and proper setup.

We're getting there, folks. More processors are coming out and getting closer to vinyl than ever before. The Timbre is one of these processors.



Timbre Technology TT-1 and TIP Jitter-Reduction and Reclocking Unit; all-aluminum chassis; size, 18fi x 12 x 3 inches; weight, 24 lbs.; color, black or silver; warrantee, three years parts and labor (transferable); price, \$3,295; balanced, \$3,895. Timbre Technology, 1600 Gypsy Hill Rd., Gwynedd Valley, PA 19437; phone, 215/540-9812.

Associated Equipment

Sonic Frontiers transport SFT-1; Sonic Frontiers preamp SFL 11; Sonic Frontiers DAC SFD-2; EAD CD 2000 DAC CD Player; Balanced Audio Technology VK-5 preamp; Balanced Audio Technology UK-60 mono-block amps; Lamm Audio 200-watt M2-1 mono-block amps; ESP Harp speakers; Platinum Reference I speakers; Apogee Centaurus Ribbon Mini Monitor speakers; Velodyne F1500R subwoofer; Purist Proteus interconnect and speaker cable; ASC Tube Traps; Townshend Seismic Sink, Power Wedge Design Line Conditioner; Jack By bEE; Marigo Tad Power Purifier; Bear Traps Anti-Resonance Systems; VPI Bricks, Black Diamond Racing Cones and The Shelf platforms; Cascade Engineering interconnect and SPK wire; Target R-6 lead-filled stands, etc. A special thanks to DJ from Black Diamond Racing for the cones, to Mike Roberts from ESP for the speakers, and to Jack By bEE for the Tad Purifier: all improved the sound reproduction in my system.

TT-1 DAC Specifications

Inputs: 2 Coaxial, 75-ohm input impedance; 1 ST glass fiber optic, AT&T compatible; 1 EIA Toslink; optional balanced, transformer-coupled, 110-ohm AES/EBU (replaces one RCA coaxial input).

Outputs: 1 Coax left and right; 1 buffered Coax left and right; balanced with XLR connectors.

Selector Switches: Digital selection of input source and signal polarity.

Resolution: 20 bits minimum, 64 times oversampled.

Total Harmonic Distortion and Noise: -97dB.

Power Transformer: Dual-voltage toroidal.

Power Regulation: Multiple fully regulated supplies with more than 100,000-µF filter capacitance.

Printed Circuit Board: Proprietary board material, manufactured to military specs. Silver solder throughout.

Enclosure: Thick, non-magnetic aluminum.

Vibration Dampening: Special cabinet construction and assembly procedure to minimize external mechanical vibration effects. Liberal use of sound deadening material on all case work, circuit board, and circuit elements.

Connectors: Rhodium-plated RCA and optional gold-plated connectors.

QUIPMENT ALTIS REFERENCE TUBI DIGITAL AUDIO PROCESSOR



ark! the numbers soft and clear Gently steal upon the ear. Pope, Ode on St. Cecilia's Day.

So soft, so sweet, so delicately clear That finer, simpler music ne'er was heard. Byron, **Don Juan**.

Bit Stream! Here it was, the Altis CD Processor, confronting my long-standing bias against Philips' single-bit technology. Previous experiences with this technology usually ended with my return to multi-bit. Bitstream processors, in spite of some clear technological advantages, tend to audibly compress the music in complex passages. I always begin listening to these processors with considerable trepidation. Was this going to be another such experience? Happily, it was not! Ladder DAC decoders are not inherently superior to bitstream decoders; in the best-executed digital-toanalog convertor designs, each approach has its advantages. However, most high-end designers here in theUnited States, seem to prefer the ladder DAC approach.

Recently, at an Audiophile Society demonstration, I asked the manufacturer of a well-respected line of highend processors why he chose multibit; I expected a rational scientific explanation. Far from it! The explanation was neither scientific nor rational. I responded, "So then it was a marketing decision!"

THE ALTIS SPECS

The digital-to-analog Altis Reference uses a "Differential Bit Stream Processor" with 20-bit, 8x-over



The internal layout is composed of four sections: On the left is the power supply, in the center is the digital circuit, to the right is the four-tube analog output, and the front section is the control and display assembly.

DESIGN CONSIDERATIONS

The unique design characteristics of the Altis are quite impressive. In a departure from typical processor designs, a microprocessor controls not only the front panel display but the input, output and decoding circuitry as follows:

The operating system contained within the microprocessor determines during the start-up procedure whether or not a.c. polarity is in correct phase; if not, the microprocessor automatically corrects it, relieving the user of any concern. The microprocessor checks for correct analog and digital voltages within the unit; if the voltage is unacceptable, an error is displayed and identified.

If there is an abnormally high level of jitter in the incoming digital data stream, the system will auto-

sampled converter resolution, a proprietary "Accufilter" that operates in both the time and frequency domains, and a four-triode tube (12AU7), class-A, audio output with no feedback. Digital inputs provide for both 75ohm coax (SPDIF) and SMA-type glass fiber-optic cable and the common three sampling frequencies, 32, 44.1, and 48 kHz, are available. The unit provides stereo analog outputs of 5.2 V rms on unbalanced RCA phono jacks and 10.4 V rms on balanced XLR jacks. [Editor's Note: The maximum for output level in the Standard is 2.5 V rms.] More than 10 feet of solid-silver Siltech cable is used for internal wiring. The massive power supply includes a large custom El-form isolation transformer and six discrete regulators. Panel controls are Standby/Operate, Panel Brightness, Input Select and Phase Invert. The massive, ruggedly built, 40-lb. chassis is 19 inches wide by 4.78 inches high by 15 inches deep.

matically attempt to correct the condition, otherwise an error is displayed and identified. The Altis programmed micro-processor, together with their "Accufilter," is able to shift automatically between a frequency-domain filter and a time-domain filter; the choice is made by

1 admit to a bias against Philip's Bit Stream D/a technology.

looking at the volume of "0s" and "1s" in the digital data stream. This singular capability (according to Altis' Howard Mandel) is what contributes to the absence of audible compression and hardness in the music so often associated with digital audio.

World Radio History

When the Altis Processor detects that the Altis CD transport is in use, it automatically syncs to the clock speed of each individual CD, rather than the SPDIF standard clock speed. If a different transport is used, the Altis Processor counts the frequency of the incoming clock and creates an entirely new, jitterfree clock based on the SPDIF standard clock speed.

SOUND CONSIDERATIONS

I have to eat crow about bit stream. The success of a design depends on its execution and Howard Mandel has succeeded beautifully. This is the finest sounding CD processor I have yet heard. And that's without its CD partner the Altis transport!

After a week-and-a-half of burn-in, I was ready to do some

This tube-based processor is, in a word, excellent; it's musical and accurate.

serious listening. I warmed up my Vaic VV30B single-ended, monoblock amps for a couple of hours before I began my listening session. The Vaic is an amplifier of such outstanding sonic qualities that it quite handily sorts out the differences among various pieces of equipment. As I went through one CD after another, I was struck by the excellence of the Altis. Here is a tube processor that has the speed of solid state providing impressive transients but without the hardness often associated with transistors. It has the "richness" of tubes without the coloration. It is both musical and accurate.

Antal Dorati's performance of Stravinsky's *The Firebird* (Mercury

one of the better contemporary "big band" recordings I've heard. Try track 3 "Jessica's Day" and 10 "Moten Swing." The dynamics, especially in the upper bass and lower mid-range, rocked the room. I felt vibrations in the sofa 11 feet away.

You must be thinking, "from a single-ended amplifier" ?

432 012), particularly cuts 2, 18 and 19, is reproduced with excellent resolution and transparency throughout the frequency range. Extended response and clarity in the upper treble come to mind, my notes also have phrases such as "impressive impact" and "dynamics and transient response with no compression."

On "Daddy Trane & Cousin Wayne," *Denon High End Hi Fi Recordings* (Denon GES 9515) I was struck by the natural reproduction of percussion—drums, cymbals and saxophone—a "you-are-there" quality. Balance, neutrality, and speed with a complete absence of hardness were the hallmarks.

Clark Terry, Frank Wess, and Bob Lark with the DePaul University Jazz Ensemble 1 get together on *Big Band Basie*

(Reference Recordings RR-63CD). This is Well, the Vaic is no ordinary, puny SE amp. Here, the sound of a big band was reproduced by an excellent CD processor and exceptional single-ended monoblocks in its full dynamic range, without limiting or compression.

Ken Kessler gets his kicks with contemporary music-rock, jazz, etc.-when reviewing equipment; my standard for the ultimate reproduction is with large forces, full orchestra or opera. In Puccini's Turandot (London 414 275,6), on tracks 1 and 2 of the second CD, there is an exchange between Turandot (Sutherland) and Calaf (Pavarotti) accompanied by the full orchestra and chorus. It is an extremely complex combination for any CD processor to reproduce. The Altis clearly delineates all the forces without any sign of compres-



Altis Reference Tube Digital Audio Processor, silver or black face, \$4,950. Manufacturer: Altis Audio, 34 Tunnel Rd., Newtown, CT 06470; phone 203/270-8727; FAX 203/270-8709. U.S. Distributor: Fanfare International Inc., 500 East 77th St., New York, NY 10162; phone 212/734-1041; FAX 212/734-7735.

ASSOCIATED EQUIPMENT

Vaic High End Model 30B (SE) monoblock amplifiers; MET 9 MK II Ribbon loudspeaker; Quartessence speaker system, (Purist Audio Design); EAD CD-1000 Series III CD player; Croft OTL monoblock amplifiers; Croft dual-mono preamp; Linn-Sondek LP 12, Lingo, Itok tonearm (modified by Mod Squad); Lyra Clavis Da Capo MC cartridge; Krell CD-1 player; Revox B77 reelto-reel tape recorder; Kenwood KT-917 stereo tuner; Nakamichi 582 stereo cassette; Purist Audio Design Maximus and HD1 interconnects; Digital Link unnamed new flat-design speaker cables; Discovery interconnects, and various accessories.

the audiophile voice World Radio History sion: Sutherland and Pavarotti are heard in the prime of their careers (1973), their voices reproduced unstrained and with supreme clarity. Verdi's *Otello* (London 440 245) was recorded in 1954 with Renata Tebaldi and Mario DelMonaco, the definitive Desdemona and Otello of the 20th Century in the title roles. This was among London/Decca's

The Altis Reference provides clarity, balance, speed, dynamics, and exceptional resolution.

first stereo recordings using coincident mikes. One hears the full impact and dynamics of the raging storm in the dramatic opening scene. The Altis makes the most of the natural depth and stereo spread, which I believe is best recorded using coincident stereo microphones. The clarity and bell-like quality of Tebaldi's youthful lyric soprano are stunningly reproduced in the famous act 4 arias "Mia madre ...," "Piangea Cantanda ..." and "Ave Maria " It was late in the evening and I was listening with my eyes closed, lost in the drama of the scene where Otello kills Desdemona. The reproduction of DelMonaco's voice was so life-like that for a moment I had the illusion that he was there singing in my living room. I awoke suddenly to the realization that I was listening to a recording!

Although I listened to a number of other CDs during my sessions, two in particular deserve comment. Back in the late '50s (the end of the mono era and the beginning of the stereo era), I bought several mono LPs in London's series entitled *ESPANA: The Music* of *Spain.* Volume 1 of the series featured Ataulfo Argenta conducting La Orquesta Nacional De Espana (London LL 1585), which was also recently released in stereo on a gold CD by Classic Records (London CSCD 6006). The two versions made an interesting comparison. Both have a touch of hardness not uncommon in some of London/Decca's recordings from the 1950s. Surprisingly, the original

> vinyl still comes off quite well and at times sounds very much like the stereo CD. Where they differ is in passages that decidedly benefit from the stereo presentation; the

Altis showcases the exceptional width and depth of the sound stage. The early stereo technique of London/Decca makes this gold CD a demo disc of that era.

The other interesting comparison was Witche's Brew (RCA Living Stereo) on both vinyl (LSC-2225) and gold CD (LSDCD-2225) reissued by Classic Records. In the "Witche's Ride" from Hansel and Gretel, I was struck by the unexpected similarity of LP and CD. Yes, there are differences but they are rather minor. Balance and neutrality are virtually identical. The bells, 25 seconds into the cut, are slightly more apparent on CD. Mid-bass is a bit more prominent on the LP, the overall reproduction a hair more polite. This is perhaps Altis' finest moment. It attests to the exceptional quality of the processor's reproduction. It seriously challenges the claim that CD reproduction can never match the best in LP reproduction.

CONCLUSION

Howard Mandel has designed several unique solutions (e.g. microprocessor control, the "Accufilter,"



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High Performance

Review, Winter 1992/93



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ESOTERIC SOUND, 4813 WALLBANK AVE., DOWNERS GROVE, 60515 etc.), which successfully attack some of the common design limitations of digital audio processors. The quality of construction and components (the use of silver Siltech for internal wiring is a case in point) significantly contributes to this succes of the design.

That this is a tube digital audio processor belies its neutral sound. If you're expecting a euphonic midrange, you won't find it in this

If you're looking for a new high-end processor, then you owe it to yourself to listen to this Altis unit.

processor. Neither will you find softened transients or steely violins. What you will find is clarity, balance, speed, dynamics, and an absence of compression and hardness, sound both musical and accurate, the product of exceptional resolution and transparency. If the Reference errs anywhere in the musical spectrum, it is on the side of taut bass at the expense of "full" bass. (Howard brought over his new transport after I had finished my listening sessions. A brief audition of the resulting Altis pair appeared to reveal bass both "full" and taut.)

No, I haven't heard all of the better high-end processors in audio land. And no, the Altis Reference is not perfect. But in my view, it sets a new standard in digital reproduction. It is the digital processor to beat! If you are in the market for a new, high-end processor, you owe it to yourself to include this one in the handful you audition.

Were Pope and Byron alive today, the opening quotations might well have been their comments as audiophiles. QUIPMENT

You, I am sure, have heard the old joke, "What do you feed a 500-lb. parakeet?" "Anything he wants."

Also, wouldn't you think that if Donald Trump showed up at a real estate developers' conference, even the people that didn't respect him would listen to him? How about this, in the spring of 1995, Sony (the 500-lb. parakeet and the Donald rolled all into one) premieres a reasonably priced, high-end speaker system, the SS-M9, with in excess of a \$100,000 Japanesemarket-only electronics at the Los Angeles Hi-Fi Show and hardly anybody notices.

It suggests to me that something is not quite right within the group of gurus relied upon by the audiophile community for news. I cannot remember any write-up of the 1995 Hi-Fi Show that even mentions Sony's premiere of the speakers. I had prepared such an article describing the Sony room as having some of the best sound at the show, but given, at that point in time, this magazine's irregular publication schedule, it was pulled when it became clear that the article would not appear until almost a year after the show.

Needless to say, when the new Editor contacted me to review the Sonys, I jumped at the opportunity. I have been listening to the speakers for well over three months now and am seriously considering purchasing the review pair.

The design and construction of these speakers (made in the USA, by the way) should leave no doubt as to Sony's commitment to high-end audio. The speakers are the brainchild of Dan Anagnos, formerly of Polk Audio. Nothing that has come from Polk Audio would prepare you for the fact, or would lead you to believe, that their design staff was capable of a product with the qualities of the SS-M9s. Sony provided Dan with carte blanche in terms of the design of these new speakers. That does not mean, however, they are a cost-no-object design. At a retail price of \$3,500, some speculate that these are a loss leader for Sony. Anagnos assures us that they are not. They are designed to a price point, but Dan and Sony have been able to do more at this price point than any dynamic speaker design to which I have been exposed.

John Hellow

I do want you to read the whole review, but for those of you that like summaries, be advised that these speakers satisfy four of the five requirements that I have for a speaker system, and any qualms I have with regard to the fifth requirement are only slight. In no particular order, these speakers:

1. Cover the vast majority of the audible frequency range, in that they will reproduce music with great accuracy between a 20 Hz and about 14 KHz;

2. They are holographic in a way that is exceeded by very few speakers with price tags under \$10,000 and not many speakers costing over \$10,000;

3. They are extremely neutral, and

4. My wife likes both the way they look and sound.

The one area where they could be improved concerns their high-frequency extension.

They lack a little air and openness at the top end, but this is a niggling concern given their ample attributes in other respects. It would not stop me from buying these speakers. As an added benefit, they retail for \$3,500 the pair, subject to substantial discounts from the large audio-video chains where you can purchase them.

As evidence of Sony's commitment to the highend, these loudspeakers were designed around Pass Laboratory's preamp and single-ended amplifiers, a fairly high-end analog signal source, and the Sony cost-noobject CD transport (available only in Japan) and the Theta Gen V-A DA converter.

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WHAT HATH SONY WROUGHT?

These speakers are a substantial 145 lbs. each. From the pictures accompanying this article, you will see that they are truncated triangles with a four-surface front panel, which is used to align the voice coils of the two 8-inch woofers, the 5-inch cone midrange, and a 1-inch dome tweeter. There are only two surfaces in the enclosure which are parallel, the extremely small top and the ample bottom of the enclosure. The front panel width is minimized with respect to each driver to reduce diffraction effects. The cabinets do have substantial volume, being 22 inches deep. While the speakers will rise 42 inches above your carpet, they will not dominate a room because of their narrow tops.

The front baffles and rear of the enclosure are a 1fiinch, constrained layer-damped affair, two layers of MDF sandwiching a layer of EAR composites, while the side panels are 1-inch MDF. Internally, in strategic places, the side panels are damped with Sorbothane. The cabinet contains four internal cross-braces to improve cabinet rigidity. Also, the main cabinet is

filled with a synthetic wadding, while the separate midrange chamber is filled with long haired wool.

> The driver complement is not particularly exotic. While the 8inch woofers and the tweeter are sourced from VIFA and the midrange from SEAS, all are built to Sony specifications. Driver baskets are cast magnesium. The midrange driver spider and magnet structure are damped with Sorbothane. The midrange and woofer diaphragms are mineral-filled polypropylene, and the silk dome of the tweeter is polymer-impregnated. The magnet structure of the tweeter is also damped with Sorbothane. The tweeter voice coil sits in a sealed enclosure, as does the midrange unit. Consequently, both the and tweeter the midrange unit are isolated from the change of internal cabinet pressure caused by the excursion of the woofers. The

design is rear-ported, with two 3-inch wide port tubes situated at the back bottom of the cabinet. The port ends have flared venturies to improve air flow and minimize port audibility.

The speaker includes two pairs of binding posts of fairly robust manufacture that allow for bi-wiring, but include jumper plates for those not of the bi-wire persuasion. The crossover is distributed over three separate glass-epoxy circuit boards, one board each for the woofers, the midranges, and the tweeters. One area where Sony has paid a particular degree of attention to detail concerns the parts orientation on its circuit boards since they wanted to minimize the interaction of passive components. For example, when two inductors are near each other, they are oriented in such a way as to minimize the interaction of their magnetic fields.

The crossover is a fourth-order design (24-dB per octave). Parts quality is good, but not exceptional. For example, the polypropylene capacitors used in the design are metalized rather than film and foil. Electrolytics, when used in the midrange and woofer crossover, are bypassed by metalized polypropylenes, and are low ESR designs. Ceramic 100-watt resistors

Sony's SS-M9 speaker is, they say, not a loss leader, though they are a bargain.

are used. All parts in common between a pair of speakers are matched within 3%, which is better than with most other speaker manufacturers.

Sony retained Straight Wire to design the internal wiring harness for the speakers. Midrange and woofer modules use the same stranded conductor, but a twisted pair is used for the midrange with a twisted quad for each woofer. The tweeter uses a single strand of 18gauge OFHC copper wire in a twisted pair to minimize inductance.

Dan Anagnos has indicated that Sony is considering a signature version of the speakers, which will focus entirely on the parts used in the crossover. Instead of metalized polypropylene, film and foil polypropylenes or polystyrenes would be used; instead of 14-gauge round-wire inductors, foil inductors would be used; instead of the ceramic resistors currently used, Mills or Caddock resistors would be used. In fact, Dan has built crossovers using these components and indicates that such crossovers do enhance the design's transparency and already holographic imaging ability. However, the parts cost associated with such crossovers would almost double the retail cost of the speakers.

the audiophile voice World Radio History



One option I pitched to Dan, for those of us that like to tinker, is to have Sony provide blank crossover boards with the speakers, and a parts schematic, so that we could build our own personal signature boards for substitution. This assumes we are willing to waive the warranty associated with the speakers.

Dan also worked with felt and acoustic foam on the midrange/tweeter baffle to further minimize the diffraction effects. The foam worked fine, the felt caused the speaker to sound lifeless. Unfortunately, the marketing folks wouldn't allow Dan to cover the front baffle with foam, ruining the furniture quality look of these speakers. Did I mentioned that these speakers are finished in some of the nicest natural cherry you will ever see? They are really quite elegant and my wife greatly prefers them to the dark rosewood on my ProAc DBSs.

On a final note concerning construction, I don't understand why Sony used solid-core wire for the run from the terminals to the tweeter crossover, and from the tweeter crossover to the driver. I believe a run of finely stranded Litz wire for the tweeter may be advantageous, further improving its imaging and extension.

Finally, the bottom of the cabinet has three strategically placed, threaded inserts for Sony's spiked feet. The spikes are approximately half-inch thick stainless steel, 2-inches long, and come to an extremely sharp point (which will dull if moved more than a couple of times). They can be locked in place and adjusted with a knurled locking nut. The bottom-heavy cabinets and three spiked feet make these some of the most stable speakers I have experienced. For example, some of the new Hale's designs can be knocked over by simply nudging them. Not so with these Sonys.

Sony's goal with this design was to minimize resonances, which in Sony's words "cause colorations, alters timbre, and destroys speaker's ability to disappear or present a truly believable, three-dimensional, palpable image." Rap these cabinets and you will hear very little except the sound of your hand. Even more impor-



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SET-UP

The speakers are somewhat sensitive to the speaker cables used and are very revealing of interconnect differences. I atributre the speaker cable sensitivity to a 16ohm impedance peak in the upper midband. The speakers otherwise present their nominal 4-ohm load. I expect inductive cables and high output impedance tube amps will not work well with these speakers. As far as single wiring the speakers, I preferred the WireWorld Polaris II (an exceptionally good value) over the Monster Sigmas. The Polaris seemed to significantly tighten the bottom end of the speakers and provided a little more high frequency extension. In bi-wire configuration, I preferred the WireWorlds on the bottom and Sigma's on top. In terms of interconnects, the Magnans revealed themselves as the imaging champions of the group, but seemed to exacerbate the already polite top end of the Sonys. The FMS interconnects give up a bit to the Magnan in terms of imaging specificity and palpability, but were more dynamic and extended. The surprise interconnects were the WireWorld Atlantis IIs, which at \$90/meter pair sacrificed a little to the FMS interconnects (\$600/meter pair) in terms of image palpability and grainlessness. In some respects, the Atlantis IIs sounded better than the WireWorld Gold Eclipse IIs, which retail for \$1,000/meter pair.

I situated the Sonys in my family room, which is separated by a one-foot stepdown from a large kitchen and dining room combination. I placed the speakers eight feet apart, five feet from one side wall, and 3fi feet from the other side wall. They sit approximately two feet from the stepdown into the family room; the wall behind the speakers is over 20 feet away.

The Sony speakers like large rooms. The drivers need 11 feet of listening space to properly integrate. (See the sidebar from Dan Anagnos concerning Sony's design decisions which led to the requirement that listening occur at least 11 feet from the speakers). The speakers seem to image the best when they are angled such that, from 11 feet, they are not pointed directly at the listener and the inside face of each cabinet is visible. Sony recommends that you sit on the tweeter axis with your ear 38 inches from the ground. I did not find the speakers to be critical in this regard. You must remove the speakers' covers for any truly cirtical listening. While cosmetically attractive, they ring like a bell. Fortunately, they are very easy to remove and replace.

THEY SOUND GREAT

I listened to a fair mix of digital source material and analog source material. For example, in Roger Waters' Amused To Death (Columbia/Legacy CD, Columbia vinyl), various events occur beyond the outside edges of the speakers well in front of the plane of the speaker system and well behind the plane of the speaker system. It's a great recording for speaker set up. In the first cut, "The Ballad of Bill Hubbard," two dogs begin barking, one very prominently in the foreground, and one in the background. With my ProAc EBSs, which I consider a very good imaging speaker, the prominent dog in the foreground sounds as if he is several feet beyond the right edge of the right speaker and about three feet in front of the speaker plane. The second dog, in the background and very faint, also sounds slightly out-



side the right edge and slightly behind that speaker. With the Sonys, from which you are sitting 11 feet away, the prominent foreground dog seems to be three feet in front of you, eight feet off the plane of the speakers, and well out beyond the right wall. The vinyl version of this recording causes the dog to sound a little more palpable. In the case of the dog in the background, it now seems to be coming from a great distance behind the speakers and well out past the right edge of the speakers.

If a system does not accurately reproduce the sound stage, some aspects of this recording can sound very phasey, that is, disembodied. For example, also in the first cut, a leopard or jaguar growls about a



minute into the recording. With the ProAcs, the jaguar extends slightly out beyond the right edge of the right speaker, but occupies a fairly large area that overlaps with the speaker. With the Sonys, the jaguar is now well out past the right edge of the speaker, well in front of the speaker and clearly appears separate from the speaker enclosure. There are many television voice inserts, some from popular shows from the 1960s, that are interspersed with various cuts of this recording. On the Sonys, the voices appear more intelligible and all of every conversation can be clearly understood.

Finally, in terms of the bass response of the speakers with regard

to this recording, cut 12, "Three Wishes," involves the voice of a very deep-chested genie that will challenge the bottom end of any speaker system with which I am familiar. The ProAcs do not have much output below 42Hz, although what is there is outstanding, and as a consequence the genie's voice lacks body. The Sonys are very well-defined and tight into the low 20s, and the genie literally moves around as he speaks and some of the furniture now rattles.

On the Classic Records (RCA LSP-6006) *Belafonte at Carnegie Hall*, the last cut, "Matilda," individual voices of audience members participating in Harry Belafonte's sing-a-long are now readily evident, as are Belafonte's movements, including simple head motions, as he saunters around stage. At one point, where Belafonte asks the upper balcony to sing a segment of the song, the height of the upper balcony is very evident.

One of my favorite recordings to test a speaker system is Dire Straits: Love Over Gold, the "Telegraph Road" cut. In particular, I listen for the quality of Mark Knopfler's voice, the realism of his guitar, and the extent of the artificial ambiance associated with this record. The Sonys handle all three of these aspects like few others that I have heard. Also, at the end of "Telegraph Road," when the group really starts rocking, some speakers will have a tendency to fall apart, the piano will disappear, when in fact you know it's still playing. Such is not the case with the Sonys. They can unravel some of the most complex orchestration ever recorded. No matter how loud the recording gets or how much is going on, you will be able to continue to follow individual instruments or voices.

In two respects, the Sonys have few peers: Their holographic imaging capabilities, and the quality and





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Volume 2, Issue 5 World Radio History quantity of bass information. The Audio Artistry Beethovens may be a tad better in both these respects. but that system is about \$25,000 and at least bi-amplification is required. On well-recorded material, the



Sony SS-M9 Loudspeaker, about \$3,500 per pair. Manufacturer: Sony, 1 Sony Dr., Park Ridge, NJ 07656; phone 201/930-6365; fax 201/930-6563.

ASSOCIATED EQUIPMENT

Equipment used for evaluating the Sony SS-M9s included the Goldmund Mimesis 8 amplifier; Klyne SK-5A preamplifier; Goldmund Mimesis 12 D/A converter; Pioneer PD-S95 CD transport with modifications; pneumatically isolated Goldmund Studio turntable with T3F arm, Signet ART-1, and Wilson-Benesch Carbon-1 cartridges; Monster Sigma speaker cable, and WireWorld Polaris II speaker cable. Interconnects included FMS MicroWave, Magnan Signature, WireWorld Gold Eclipse II, Transparent Ultra, XLO Signature, and WireWorld Atlantis II.

Sonys utterly disappear and you are transported to the venue of the performance.

The Sonys do seem a little polite at the top end, and high frequency overtones seem to decay a little too

quickly. I wonder how they would sound with the old Sequerra T-1 ribbon tweeters. The truncated triangle of the T-1s would mate nicely on top. Additionally, they are not quite as transparent through the midrange as the ProAcs, nor are they quite as dynamic. However, if EBSs were currently offered by ProAc, I would expect that they would cost in excess of \$8,000. Raw driver costs for the midrange and woofer are several hundred dollars apiece. I wonder what Anagnos could do with a \$10,000 system that used ATC drivers. If I worked at Wilson Audio, Audio Artistry, or Avalon I would seriously worry about that.

Finally, Sony needs to do something to get these speakers into high-end showrooms where they can be demonstrated on appropriate equipment. In Southern California, they are available at Ken Crane's, a great place for buying televisions but not stereos. To say that I am enamored with these speakers would be an understatement, and I hope you are able to listen to them at some



the audiophile voice World Radio History

Design Brief

Daniel P. Anagnos, Chief Design Engineer, Sony Electronics, Inc.

I would like to offer a bit of elucidation regarding the sloping front baffle of the SS-M9 (as well as the other Sony ES Series M-speakers). The sloping baffle profile is not a cosmetic or aesthetic design trait. It is a necessary and functional engineering design feature, the purpose of which is to time-align the individual transducers prior to the crossover filtering. It is our belief that in order for the system to achieve proper transducer blending; ideal off-axis response; smooth, gradual phase shift without aberration, and generally excellent time-domain performance, it is necessary for each transducer's energy/time response (the arrival profile of a transducer's energy over time) to be coincident at the listening position (typically three meters). As a result, the phase match of all of the M-speakers' transducers is within 15 degrees over a two octave or larger frequency span centered about the crossover point. This is necessary regardless of the order or phase characteristics of the crossover itself. We have given equal emphasis to time-domain and frequencydomain characteristics (on- and off-axis) as both are critically important to achieving musical and believable sonic performance. It is worth mentioning that all of the electroacoustic measurements used in the design of the M9 were performed under conditions more representative of realistic, typical listening situations. Instead of the more-common one-meter, 2.83-V rms measurements, Sony has devised proprietary measurements performed at three meters, with 20-watt (average) input levels. These measurements are completely anechoic (i.e. free from room effects) from 20 Hz to 20 kHz.

Because the individual transducers are timealigned at a distance of three meters on-axis with the tweeter, proper blending or coherence occurs when the listener is positioned such that he or she is three meters from the loudspeaker baffle at a height equal to the tweeter's vertical distance from the floor. Listening at different heights or, more significantly, at closer distances will sacrifice some coherency of sound due to the (not yet sufficiently corrected) offsets between the acoustic centers of the individual transducers. This relative offset would also be visible in the loudspeaker's energy/time response and step-response measurements if they were performed at distances less than three meters or significantly off-axis from the tweeter.

Theoretically, it would have been possible to align the transducers' acoustic centers (i.e., time-align) at shorter listening distances (one meter, for example); however, this would require either a much more dramatic front baffle slope or larger transducer separation or both. We have opted to limit the front baifle slope to less than 15° in order to keep the tweeter's output within a 30° "on-axis" window relative to the listener; thus, high frequencies (above 10 kHz) are not attenuated by listening too far off-axis (all tweeters will exhibit some high frequency roll-off when listened to off-axis). We also have opted to keep the individual transducers mounted as close as possible in order to minimize blending problems caused by phase shiftinduced aberrations at the crossover point. The ideal transducer mounting would be coaxial; but, since this is not practical (or problem-free), we have chosen the transducer spacing to be as close as possible to a half wavelength at the crossover frequency. This is particularly important at the higher midrange-to-tweeter crossover point. The closer transducer spacing and further (three-meter) listening distance combine to minimize anomalies near the crossover point both on and, very importantly, off-axis (since this directly contributes to the loudspeaker's power response).

In light of the technical points made above, I should emphasize that electroacoustic measurements and computer simulations, while very important and necessary, are really just tools. Throughout the design process of the M-series speakers, critical listening was the single most important activity and constituted most of the development time. Our ears really are the final criterion by which we judge performance.

The philosophy behind the design of the SS-M9 (as well as the other M-speakers) is simple: The loudspeaker's purpose is to convey, in as natural and as musical a way as possible, the emotion of the music being reproduced. The loudspeaker should disappear completely, leaving one listening to music, not hi-fi equipment. It must be accurate, but also effortlessly musical and unimposing. We have attempted to attain this balance in an "affordable" high-end product in which value does not mean compromise. All of the advanced technology within the M9 is utilized exclusively as a means to that end. QUIPMENT

GOOD THINGS DO COME IN SMALL PACKAGES

With the revitalization of interest in analog playback, many of us have looked to upgrading our phono systems or investing anew in a respectable LP playback system. For some of us who never left vinyl land, the evolution of new turntables, arms, cartridges, and dedicated electronics has become interesting territory for exploration. Les Turoczi

lowed by the Weathers FM cartridge and turntable system, then to a Thorens with SME and Ortofon combo, and yet on to the Technics SP-10 with a few other arm and cartridge blends, etc. The first truly enjoyable and relatively hassle-free phono system for me, however,



came about 20 years ago with the purchase of a Linn Sondek LP-12, with Grace 707 arm and Shure V-15 Type III cartridge. Today, I still use that Linn turntable and continue to appreciate its benefits. It has been upgraded within the past two years, so that it is now the LP-12 with Lingo power supply, Cirkus and Trampolin mods, and sports a NAIM Aro unipivot tonearm. For almost two years, my cartridge has been the high-output Benz Glider moving coil, although very recently I changed to a Spectral MCRIIB lowoutput moving coil.

My odyssey

in search of better record listening began as a teenager in the late 1950s, when records were the main form of "hi-fi" software. A Garrard changer and G.E. Variable Reluctance II magnetic cartridge started my quest for musical nirvana. As years passed, I moved on to a Dual changer and Shure cartridge package, folThe most current path of my odyssey has to do with phono stage evaluations, and the Benz PP-1 is central to that exploration, as you will see shortly.

For general information, the balance of my sound system includes the Nestorovic System 12 speaker system, which is a satellite and subwoofer package; a Jeff Rowland Consummate Line Stage with Phono Stage II; a pair of Nestorovic NA-1 tube monoblock amps on the satellites, and a pair of Electron Kinetics Eagle 400 solid-state monoblocks on the subwoofers. A Jeff Rowland SVX3 electronic crossover is employed for the subwoofers only; the satellites run full range. A Barclay Bordeaux CD player is used as a transport and feeds an Audio Alchemy DTI along with their active digital cables, finally running into a PS Audio Ultralink DAC. There is a Magnum Dynalab Etude FM tuner, and

This Benz phono stage is small, very small, but it provides very big sound.

Nakamichi 700ZXL cassette deck as well. The cabling and speaker wires are Cardas Hexlink, throughout most of the system, except for a run of Van den Hul First, Carbon Fiber interconnects between the Ultralink DAC and the Consummate line stage. The listening room is 14x23x8 feet with wall treatments and a few Room Tunes units, along with dedicated power lines, which are separated for digital and non-digital applications.

The Linn-Aro-Glider phono system was used through the Rowland Phono Stage II piece for almost two years, when I decided to try other phono stages to see if recent developments could enhance overall record playing performance. Borrowing a few things

from friends did demonstrate that there was room to grow, even though the Rowland piece did a respectable job, especially at its relatively modest price point. Among the choices available to me was the \$1,350 Benz Lukaschek PP-1. Other friends on the West Coast were very happy with the Lukaschek and recommended it for consideration in my quest. Garth Leerer of Musical Surroundings in Oakland, CA, the distributor, was kind enough to loan me the most recent version, the PP-1 Revised. Most of you have probably seen photos of this unit. It is a truly small solid-state, phase-inverting design, merely 6x2.5x1 inches, but convincingly executed in appearance and construction. The size of the unit is quite intentional, to keep circuit board traces to minimum length and thus improve the already excellent signal-to-noise performance. I found the PP-1 to be dead quiet, with flawless operation during the period I had the unit for review. Incidentally, according to Mr. Leerer, the Revised version incorporates a few minor changes to improve the power supply circuitry. The PP-1 has very high gain capabilities (62 dB), yet as I discovered, it cannot be overloaded and can also readily handle a broad range of cartridge outputs—from such things as the high-output (1.0-mV) Glider to the low-output (0.2mV) Spectral cartridge.

Upon initial installation of the Lukaschek, using a pair of Cardas Hexlink interconnects between the phono stage and Consummate, I noticed that the sound seemed somewhat closed-in and bass-shy. It did take about two weeks of being constantly on to overcome most of these initial limitations. I would recommend that any final evaluations be conducted after a fair amount of break-in time passes. Incidentally, the unit has no on-off switch and does derive its power from a 24-V "wall wart" converter.

Since the two cartridges in my collection were spec-ed to have 47-kilohm loading and my Rowland phono stage was set for that, I was concerned about how the non-adjustable setting of 22-kilohm from the Benz PP-1 would impact on performance, particularly since I was making direct comparisons with the Rowland. The Rowland's input impedance is adjustable, via insertion of resistors of the desired loading value, therefore I tried listening with the Rowland at 47-k, 22-k, 10-k, 2-k, and 100ohms, each time comparing against the Benz. The Rowland performance at 47-k and 22-k was essentially the same, differences being so small as to possibly be indicative of the influence of the loading resistors, as much as anything else. That made



Benz Lukaschek PP-1 Phono Preamplifier, Revised, \$1,350. Distributor: Musical Surroundings, 5856 College Ave., Suite 146, Oakland, CA 94618; phone 510/420-0379, FAX 510/420-0392.

ASSOCIATED EQUIPMENT

Linn Sondek LP-12 turntable with Lingo power supply, Cirkus and Trampolin mods; NAIM Aro unipivot tonearm; Spectral MCRIIB low-output moving-coil cartridge; Nestorovic System 12 satellite and subwoofer speaker system; Jeff Rowland Consummate Line Stage with Phono Stage II; two Nestorovic NA-1 tube monoblock amps on the satellites and two Electron Kinetics Eagle 400 solid-state monoblocks on the subwoofers; Jeff Rowland SVX3 electronic crossover; Barclay Bordeaux CD player; Audio Alchemy DTI; PS Audio Ultralink DAC; Magnum Dynalab Etude FM tuner; Nakamichi 700ZXL cassette deck; Cardas Hexlink cabling and speaker wires except for Van den Hul First Carbon Fiber interconnects between the Ultralink DAC and the Consummate line stage, and Room Tunes. me feel comfortable about using the Benz, with its established 22-k setting in direct comparisons to my Rowland at 47-k, which had been my long-standing listening situation. Clearly, as the load resistance dropped lower in the Rowland resistor-substitution tests, the sound suffered and convinced me of how important it is to be sure that you maximize your system by complying with the suggested specs from cartridge makers.

My listening tests included a wide range of records, including some old war-horses, as well as a few of the "hot" items frequently seen in magazine reviews. Discs that were used extensively included Ella's Clap Hands, Here Comes Charlie from Verve, Norman Del Mar's version of Britten's Noyes Fludde on Argo, Testament from the Turtle Creek Chorale on Reference Recordings, Keith Jarrett's Koln Concert on ECM, Reiner's treatment of Respigi's Pines and Fountains of Rome on the Classic reissue, Rough Mix from Pete Townsend and Ronnie Lane on Atco, various Joni Mitchell discs, David Crosby's If Only I Could Remember My Name, selected older Pat Metheny records, and a few others that are in my stable of regular evaluation choices. Lots of other "non-audiophile approved" LPs were auditioned during those times when simply listening for pleasure was the primary item on agenda.

I must note that while I have enjoyed the Benz Glider cartridge for about two years, and it is indeed a high-value performer, the newest Spectral offering (designed by Keith Johnson) was able to provide refinements that really enhanced the overall phono playback, although these refinements do come at a fairly significant increase in cost. The transient excellence from the Spectral, as well as the superb imaging, and tonal coherence were much appreciated. The Spectral is now my permanent phono cartridge, but for those of you who are

looking for a somewhat more reasonably priced, high-output moving coil, the Benz Glider is bound to please.

As I went through a few months of listening comparisons, now running the Spectral cartridge exclusively, I concluded that the Benz Lukaschek PP-1, Revised offered improved mid-range articulation and definition, especially notable on large chorus intelligibility. Voices, either in solos or in groups, were also easier to understand, particularly when there was a lot going on in the overall passage. For spatial rendering, the Benz PP-1 appeared to illuminate the rear of the soundstage very effectively. Also, the higher treble performance was more open, although there was, on rare occasion, a hair more sibilance on voices on certain discs.

Regarding the lowest octave, I never did get the Lukaschek to plumb the deepest bass as authoritatively as the Rowland could. I cannot call the Benz bass-shy, per



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se, but the greater strength of the Rowland there was clear. My subwoofers are quite capable of showing everything happening in the lowest bass regions, so in those systems that do not cover the 20-Hz region with this level of authority, this may be moot.

I would define the overall essence of the Benz PP-1 phono stage by saying that it provides a sweet and smooth rendition of recordings. I use the word "sweet" cautiously, because I mean it to convey a sense of ease in listening, without implying saccharine sweetness. Based on my tests of overall tonal balance, I would place the Benz PP-1 just slightly to the lighter side of neutral, while the Rowland would have to be deemed just to the darker side. In the final analysis, however, the Benz PP-1 outperformed the older Rowland Phono Stage II in multiple and important ways.

I should note that in my earliest trials of the Benz, I had failed to properly ground the unit to the turntable and a small amount of r.f. interference did bleed through. Of course, that disappeared once the grounding was done effectively. By the way, if you are using an mc cartridge that works best into very low loading impedances, perhaps in the 100-ohm range, you may wish to arrange for a trial audition of the PP-1 in your system, since its internal setting for 22-kilohms may play a role in tonal balance parameters, among others.

If you are looking to spend around \$1350, keep life uncomplicated, and enjoy your record collection with renewed pleasure, then the Benz Lukaschek PP-1, Revised deserves your serious attention. It is a quality piece of audio equipment that should benefit the majority of phono systems; you know, the ones belonging to the "real world" category.

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Ken Kessler, HiFi News & Record Review, September 1995

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