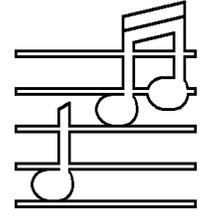


# AUDIO BASICS



AN IRREGULAR NEWSLETTER OF AUDIO INFORMATION

FEBRUARY, 1997

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## Evaluate Surround Sound Systems with Your Eyes Closed

We have spent quite a bit of time recently *listening* to surround sound systems of all types, trying to understand why the industry (and far too many consumers) is so infatuated with them even though the sonic quality is so universally awful.

We have come to the conclusion that everyone is *looking* at the audio portion of their home entertainment system and nobody is *listening* to realize how unentertaining their multichannel low-fi audio really is.

Let's face it folks, if what you are trying to do is to equal the sonic quality you get at your local TXH theater or even at a "live" theatrical performance equipped with wireless body mics and a "killer" P.A. system, that isn't hard to do. Any Oriental receiver and decent speaker system from the early 1970s will beat "modern" injection molded plastic seven channel surround sound complete with refugee from a car radio chip electronics and more blinking lites and controls than ever. If you want the bass just like that from a passing pickup truck, you got lotsa salesmen with sub-woofers for sale, all making loud and impolite low frequency noises (both the salesmen and the sub-woofers), none reproducing music.

Of course if you go in that direction, you have been "marketed" into forgetting that hi-fi means high fidelity and have been convinced that a crude but loud approximation of Arnold blasting through the back of your kitchen in his flame-thrower tank is really important to enhancing your life-style.

There must be all of twenty movies out there now in which noise from all directions is much more important than music and true high fidelity reproduction of voice and ambient details. But after you have watched *Waterworld* and *The Rock* a couple dozen times, then what are you gonna do with your whiz-bang and likely now obsolete multichannel decoder-processor? It will be right there with your closet camera, your closet full size VHS camcorder, and your closet computer.

You can escape the marketing trap by evaluating the sonic quality of a proposed surround sound home entertainment system with your eyes tightly closed (and your ears open). Then the exciting visual images won't be there to make you forget that the musicality and sonic reality of the surround sound processor is what it says it is - really processed. Listen with your eyes closed and you will quickly realize that what you are hearing is that same old mass produced low-fi sound the marketers have been trying to sell you for years, be it in a "brown box" stereo console of the 1950s or a chrome plated plastic rack system of the 1980s or a teeny-weeny mini system of the 1990s.

To the marketing folks, it is the packaging that is important, not the contents. And if you buy their package by looking, and not listening, then there will come a day when high fidelity is gone, and all you will have left will be the glittery wrapping paper, but with the joy and emotion of real music no longer possible to achieve because it has been sold out for cheap thrills.

Long ago I gave you Van Alstine's definition of marketing: "Using fraud and deception to sell crud to fools." I see nothing in the promotion and selling of multi-channel surround sound systems instead of striving for perfection in high fidelity to change my observations.

If you could only experience once the overall emotional impact of a well recorded laser disc with a good TV projector flanked by a pair of true high fidelity loudspeakers driven by true high fidelity stereo equipment you would ash-can those scum processors immediately. I use a Pioneer CLD-D704 laser disc player taking the digital audio output into a Fet Valve TOPP-DAC, a Fet Valve SL preamp, and a Fet Valve 350hc power amp driving a pair of **biró** L/1 loudspeakers, flanking an Advent 750 five foot projector screen. I experience movies much better at home than in any local movie theater - and with the sonic experience there is no comparison at all.

Hey, they want to sell you seven channel processed sound so they can sell you seven little lousy speakers! Don't you get it? More isn't necessarily better. Get two channels that truly play music before thinking of more.

## Unfinished Business – Free Speakers!

In the last issue (10/95) of *Audio Basics* we offered a free set of Baltic 30 bookshelf speakers. The speakers were won by Frank Lee for his high school technology department. He e-mailed me the following response convincing me to award him the speakers:

Subj: Free Baltic 30 speakers  
Date: Sat, Oct 28, 1995 4:11 PM CDT  
To: avahifi@aol.com

Please send your free Baltic speakers to my classroom. I teach teens, 15 and 16 year olds, many of whom are infatuated with sound systems - electric guitars, CD players, and deep throated car/van thumper systems. Some of these students seem to be clever barefoot engineers. So I am incorporating sound technologies into my classroom projects and equipment. For example:

- \* Students will make a simple "guitar" - wind their own coil pickup for a one string electric slide guitar - our tribute to Les Paul.
- \* I am looking for a Edison Gramophone to introduce the Sound Technologies unit.
- \* We will listen and evaluate to 78's 45's and closely compare LP vs CD as well as Tube vs Solid State.
- \* We will listen to the track recording revolution, and electric guitar classics.
- \* We will observe and edit sounds on a media integrated Power Macintosh.
- \* I intend to wire my classroom for ProLogic sound, cable TV and Netscape Internet surfing. We will be a WEB site.

Many of these projects are only just starting and little is funded. The public school system is providing now only the 32" Philips monitor and the PowerMac, and hopefully, a shared phone line. I am winding my own guitar pick-ups in my spare time until I can get one to work properly. I have a small collection of my own Radio Shack speakers and odd old amps to donate. Several students have donated speaker frames - blown units for possible repair.

I have a Super 70i rebuild that I wired from your kit and Frank Van Alstine completed in 94. I will loan this to my classroom during the school year. I also have an original factory wired Dyna PAS 3 in fair physical condition, but it pops and wasses. I am saving my money for a Super Pas 4i. This will be used with the 70i during the school year with the classroom PowerMac as the CD source and a HiFi Hitachi VCR. (PLEASE DON'T raise the Pas 4i price before January 95. This will be my Christmas present come the new year. Also, I will trade in the old Dyna PAS 3 if you will accept it – *certainly FVA.*)

I have interested an audio engineer from Polk Audio, a speaker manufacturer based here in Baltimore. Mat Polk the founder lives a mile from me. His engineer will be coming to consult with my students on our classroom projects.

As you can see, ANY equipment that I can raise, borrow or build has great value in my classroom. These Baltics may not be much to serious and funded audiophiles, but they will "Hot-In-The-House" items to my sound crews and will add to what ever system we can assemble.

Thanks for considering proposals for such a free offer. It verifies what is clear from reading your literature and using your equipment. Your heart and integrity run through far more than your electronic circuits.

Frank Lee  
Technology Education  
Dundalk HS

## Remember our E-mail Address

Write us at [avahifi@aol.com](mailto:avahifi@aol.com) – isn't that easy to remember. We check in every couple of days or so and will do our best to answer the questions you post there. For example, we can e-mail you our current used equipment list. If you are on America on Line, you just need to send e-mail to avahifi.

## B&W Speaker Blowout!

Unfortunately, we have terminated our relationship with B&W. Several things have happened to cause us to drop the line.

Since the founders and true music lovers John Bowers and Peter Haywood passed away, B&W management have been drifting towards "marketing" and away from "music" and there seems to have been no voices (except ours) speaking out in protest.

The first sign of retreat from care of music was B&W's introduction of the plastic "Rock Solid" promotional line of speakers. These had, in our opinion, a bright, hard, irritating sonic quality totally free of virtues. We declined to carry the line and returned the samples. The Rock Solids have been very successful in the marketplace showing, of course, that nothing succeeds better than bad taste.

Then in 1996 the fine 600 series line was completely replaced with new 601, 602, 603, and 604 models that seem to have been designed by Dilbert's boss. The tweeters are horn loaded (honk honk), the woofers have hard reflective edges, and the sonic balance of the whole bunch is bright, bright, bright, with a muddy midrange and nonexistent to boomy bass, depending upon the price. The sound was so surprisingly grim that we performed a critically measured pulse analysis. The test results showed large peaks, dips, and underdamped resonances compared to pre-

vious models which confirmed our subjective evaluation. We asked to return our original sample order after evaluating them. We were ignored and the test measurement data we sent them was ignored too. They were too busy selling speakers to those who evaluate by looking rather than listening I guess. Who am I to protest after successfully selling their products for over 20 years and essentially redesigning the 801 crossover for them free of charge. We unloaded our samples and never reordered that series.

B&W didn't help things by telling us we couldn't sell speakers to anyone living more than 100 miles from our shop. Our clients living in rural areas became simply out of luck – evidently you cannot buy B&Ws at all unless you live close to a big city. Our past promotional efforts in their regard were no longer appreciated.

With the *Audio Basics* market eliminated (you live too far away), the low end eliminated (the "revised" 600s just are not up to our standards), all we had left was local sales of high end B&Ws.

Mithat Konar took care of that last spring when he came in with his new **biró** L/1 speakers at \$1499 a pair that blew away the rest of the B&W line up to and including the 801 Series IIIs.

Although the 801s have a louder (but not cleaner) deep bass response, in every other respect the L/1s make the 801s sound like a good PA speaker. With the B&W 801s you listen to speakers, with the **biró** L/1s you listen to music. Since the L/1s are 1/4th the price of the 801s and are less expensive than any of the other premium B&Ws except the P4s there went the rest of my B&W sales. People would come in to listen to B&Ws and buy the **birós** every time.

So, my B&W sales have essentially gone to zero, which made their marketing guys very unhappy. They have decided I shouldn't be a dealer anymore, and they are probably right. They did promise me access to parts and service so I can service (and provide warranty service) to my past customers, and I intend to hold them to that promise.

However, in line with their previous inattention to my observations, they also declined to buy back my remaining inventory, and this is where you can get a good deal, namely:

**35% off retail price of all remaining B&Ws in stock (and all I have are good speakers in perfect condition).** Shipping is additional and will be figured on an actual cost basis. Call us now at 612-890-3517 for a price quote on available B&W products.

A final note, the B&W Model 302 at \$250 a pair list price remains a very good little speaker and is worth your attention for a second system. It has good definition and musicality and a very low price. It is of completely different design than the failed (in our

opinion) new 600 series and shows that there is still someone in Worthing who listens.

### **It is with great pride that we announce a major design upgrade for the Audio by Van Alstine Fet Valve power amplifiers.**

- The Fet Valve 350hc (\$1499) replaces the Fet Valve 300hc and older medium power models.
- The Fet Valve 550hc (\$1799) replaces the Fet Valve 500hc and older high power models.
- For a limited time, we can make these magnificent new musical circuits available to you on a retrofit basis, regardless of what Fet Valve chassis you have now, at a substantial savings in cost.

### **What do new Fet Valve 350hc and 550hc power amplifier circuits sound like?**

They sound significantly more spacious providing a realistic sense of live ambiance and hall presence. The bass is more powerful, tighter and of astonishing definition, and with even more reach than before. The midrange and high end are almost impossible to describe with words. The senior editor of *Sensible Sound* in a recent review said that our  $\Omega$ mega III power amplifier has the best high end he had ever heard, and at the time he said that, he was right. But with the Fet Valve 550hc and 350hc we have outdone ourselves and can offer an even closer presentation of live music. You will listen as if you actually were at a live unamplified acoustical concert and enjoy all the nuances that have nearly always kept the hi-fi system from achieving that level of enjoyment.

### **What did we do to get this incredible improvement in musicality?**

We spent nearly two years of detailed mathematical computer analysis of our circuits and nearly all possible variations looking at real factors which are important musically, but have been impossible to measure within the limitations of real world test equipment.

We were able to come to an understanding of where the most significant remaining limitations were, and how to resolve them - a very difficult process as every topology change can be a trade-off if the knowledge of what is really happening is not available.

When the circuit analysis results suggested that we were getting close to perfection, then we started building the prototypes and listening, dealing with different musical aspects separately.

First we made significant improvements in the linearity of the first triode section, and the first listen told us we were going in the right direction - the high end came alive.

Second, we redesigned for a new vacuum tube in the application, providing more current and greater voltage swing. That gave the Fet Valve amplifiers a huge sense of spacial definition and wonderful transparency.

Third, we took better advantage of the new tube's characteristics to enhance the design of our patented transimpedance amplifier section, providing outstanding improvements in dynamic range, bass, and overall coherence.

Finally the whole package was analyzed again, and optimized to make all the sections work together as perfectly as possible by fine tuning time constants and making optimal parts choices.

The results tied all of the enhancements together presenting the most perfect power amplifier we have yet to experience. The new Fet Valve amplifiers are so close to live that we wonder if it can be done better at all.

The Fet Valve 350hc and 550hc are not here to bring you high fidelity my friends, they are here to take you to the live, musical experience with all its beauty. The results are very special.

**Special Audio Basics Upgrade  
Prices Valid Until 3/31/97**

Fet Valve 300hc to Fet Valve 350hc                    \$300.00  
 Fet Valve 500hc to Fet Valve 550hc                    \$300.00  
 (deduct \$100 if you purchased your 300hc or 500hc between 1/1/96 and 10/31/96)

Because our new circuits won't fit in our older chassis, the following upgrades include complete new AVA chassis. We salvage and recycle the expensive non-wear items from your existing chassis such as power transformers, high current power mos-fets, high reliability capacitors, some hardware, etc., but provide new chassis, new audio boards, and a complete new 3 year AVA limited warranty.

Fet Valve 200, 300, or 300i to Fet Valve 350hc    \$900.00  
 Fet Valve 500 to Fet Valve 550hc                    \$1075.00  
 (you save about 40% from new amplifier prices)

**AVA Used Equipment List 2/10/97**

**Omega III DH-100 Preamplifier. \$350.00.** New AVA circuits in used DH-100 chassis with tone controls, phono, tuner, CD, and tape inputs, tape and line outputs, precision stepped volume and balance controls, one year AVA warranty.

**Omega III Pat-4 Preamplifier. \$395.00.** New AVA circuits in very clean used Dyna Pat-4 chassis with tone controls, phono circuits, CD, tuner, spare, special, tape in, tape out, and two sets of audio out jacks.

Has headphone jack, mono-stereo switches, tape monitor switch, precision volume control, precision balance control, one year AVA warranty.

**Omega III FM/AM Tuner in Hafler SE-130 chassis. \$299.00.** 12 FM and 6 AM station presets, digital readout, search and scan, mute, one year AVA warranty.

**Omega III FM-5 FM Tuner in Dyna FM-5 chassis. \$250.00.** All AVA Super Tuner circuit boards - great sounding simple to use analog tuner. 6 month AVA warranty.

**Transcendence Two Pat-5 Preamplifier in very clean Dyna Pat-5 chassis. \$250.00.** Great sounding discrete solid state full function preamp with dual tape monitors, EPL loop, phono circuits, switchable tone controls. Our best discrete tuner prior to the Omega III series. One year parts and labor warranty. Can be upgraded to a new Omega III Pat-5 for \$250 extra with a 3 year parts and labor warranty.

**1986 Mos-Fet 250C Amplifier in Hafler DH-200 chassis. \$295.** Quiet, powerful, and clear. One year parts and labor warranty.

**Omega III Double 400** ultra high current high powered amplifier in Dyna St-416 chassis with AVA black faceplate, 16 big-die power mos-fets for safe 1/2 ohm load driving capability, quiet cooling fan, shielded toroid power transformer, 250 watts per channel plus, super smooth, super powerful, super durable. \$1695.00 with new 3 year parts and labor warranty. This is a special amp built for FVA's own use.

**New Omega III 200 Amplifier in excellent used Dyna St-150 chassis with black AVA faceplate, and shielded toroid power transformer.** 100 watts per channel and 300 v/μS slew rate state of the art active feedback circuit set. A smaller chassis version of our own new chassis Omega III 200 with equal performance and the same new 3 year parts and labor warranty at a \$150 price savings. \$549.00. Can be built as Omega III 240 amp with 120 watts per channel for \$100 extra.

**Complete Super 70i Vacuum Tube Power Amplifier** with all new tubes, AVA mother board, AVA jack sets, and in great working order. One year parts and labor warranty (except tubes). \$799.00.

Add \$30 shipping for big amplifiers, \$18 shipping for small amplifiers, \$12.00 shipping for preamps and tuners anywhere in the continental USA.

Our new Winter/Spring 1997 36 page catalog (blue cover) is available for free. Call us at 612-890-3517 or write if you didn't get it yet. Thanks for your interest, we will have much more to say in *Audio Basics* soon, stay tuned.

*Frank and Darlene Van Alstine*