VOL. 1, ISSUE 2

Published by Musical Concepts / Musical Design

AUGUST 1997

Single-Ended is here!

For years, we have modified Adcom and B&K amps, which by and large, have had single-ended front-end designs. Yet, we still preferred our complimentary Hafler modifications for the best sound. Not to say that there were not interesting things about the sound of those other components. Well, it occurred to us that we could make most things about Single-Ended sound interesting! So that is just what we did!

Frankly, we were stunned by our first design efforts. Then we refined from there. Then we did some field tests to make sure we were not alone in our opinions. We certainly weren't! Every listener who heard these early circuits flipped out over the sound. The phrase, "No Comparison", was heard alot. We concur! The sound of our new single-ended amplifier front-end is stunning! The bass is far more powerful with an incredible sense of energy. When you hear someone strike a large drum in person, it dramatically energizes the air around you with acoustical power. There is an almost electric sense of excitement. Our new design captures this sense of energy with captivating realism. If the rest of your system can reproduce it, the sense of unlimited dynamic range adds to a remarkable sense of being in the presence of a real event. You know! You'll get that "close your eyes and you're there" feeling.

Live music has a total sense of relaxation. There is no sense of stress. Our new design is stress-free and offers an incredible sense of ease. In addition, the amps play louder than ever without strain. You have to brutally clip these amps to hear any hardness or compression. High frequencies have an incredible sense of ease. They just seem to flow from the tweeter like a liquid stream of beauty.

In spite of the fact that we had added more refinement to our original complimentary front-end in the last several months, it still did not stand up to our new single-ended efforts. This has proven to be a nearly revolutionary change in performance, instead of evolutionary.

It is hard to explain this sort of fundamental change to those who are familiar with the earlier designs. So you'll just have to listen!

FREE INTERCONNECT!

How long is forever? Well, we don't know either, but we do know it took us almost that long to publish and mail our last newsletter, so we are extending the free interconnect offer for a longer period of time!

We're so excited about the sound of our new Signature series mods that we are giving away a 1 meter SuperConnect IV interconnect with any complete Signature mod purchase. Just purchase any Signature mod now thru Oct. 15, 1997. This is a \$69 value.

But wait, there's more! When you hear your new SuperConnect IVs and want more, we have extended our 20% off special on SuperConnect IV until Oct. 15, 1997!

MOD NOTES

SPECTRAL SDR-2000: Believe it or not, people buy \$9000 DACs and then want them modified. Oh well, who are we to complain? We have recently modified the top line Spectral DAC with a cost no object budget. We spent over \$1000 just in BlackGates. There was also the extremely thorough upgrade to the outboard power

supply. This was the HDCD version of the DAC for your info. We also did a wholesale replacement of the analog filter caps and an incredible number of film cap bypasses in the power supplies, both



external and internal. Yeah, this unit sounded real fine when finished - far superior to the stock unit - better than we had guessed possible. So if you've got one of these and an extra \$4000 in your pocket give us a call.

GENESIS DIGITAL LENS: Classified as a de-jitter device, this thin chassied unit is circuit board from one end to the other. It has a modest, but adequate power supply and chip after chip after chip. Well here was the perfect place for HyperFast diodes



and some choice BlackGate caps. We also replaced some larger power supply caps with our favored reasonably

priced caps and added some power supply bypasses. The owner was very favorably impressed with the new sense of naturalness, openness and solidity. It just costs a paltry couple hundred bucks!

SONIC FRONTIERS SFL-2: This two chassis line stage preamplifier from Canada was loaded with MIT Multi-Caps, large Solen power supply polypropylene caps and other alleged high-end components. Well, why didn't it move my fun meter off of the zero mark! I turned the system off, period! The meter is linearly calibrated from 1 to 10 by the way. However, after the rather extensive modification we performed this is

a nice unit. Yeah, we're talking 8.5 to 9 here. It was lavished with HyperFast diodes, new film coupling caps, many new film power supply bypasses, plus more. This was a stunning sonic turn around. The owner was delighted and made comments like, "another octave of solid bass", "much more dynamic", "completely mesmerizing listening". Then he brought in his whole system including powered subwoofers for maximum mods. This very thorough mod was about \$700.





JH's listening room... with Wilson Watt/ Puppy Speakers and Levinson 33s. The Millenium vacuum tube preamp/power supply is on the hearth and Luxman 3045 Triode amps with Futterman Mod are on the carpet(these could be yours, you know, we're taking offers!). Asc Tube Traps, floor to ceiling, and Roomtunes (not in picture) help in the acoustics department. The Levinsons and Millenium are in for mods (HyperFast Diodes, BlackGates and Musical Concepts film caps)

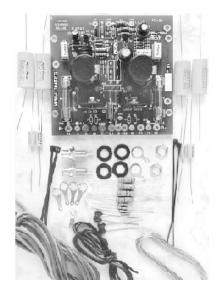
Tech Talk

THE OUTPUT IMPEDANCE OF A PIONEER CD PLAYER IS 470 OHMS,

OKAY! Recently, a customer was concerned about the output impedance of his Pioneer Elite CD player. We told him it was about 470 Ohms. Well, I guess he wanted to know if it was 469, 470 or 471 Ohms, so he called Pioneer Service and talked to an Engineer, or so he thought. The "Engineer" told him the output impedance was 22K Ohms. Truly, a little knowledge is a dangerous thing. The "Engineer" must have looked at the schematic and saw the 22K Ohm resistor from signal hot to ground. Voila! Not so fast! This approach assumes that the Audio Low Pass Filter(LPF)/Buffer has an infinitely high output impedance itself. That's a pretty bad assumption since it probably has less than 1 Ohm impedance. You see, the 22K Ohm resistor on the output of the LPF in parallel to the amplifier output impedance equals the real output impedance. The parallel combination of 1 Ohm and 22K Ohms is less than 1 Ohm. At that point, you have a 470 Ohm resistor in series with the output, primarily to protect the LPF from an output short. The 470 Ohm resistor **defines** the output impedance. If you don't exactly follow the previous explanation, think of this. It's not unusual for a preamp to have a 22K Ohm input impedance. If your CD player has a 22K Ohm output impedance, it will be in series with the 22K Ohm input impedance of the preamp. Since the signal available to the preamp is taken from the middle of these two impedances it will be reduced by one half. Who wants to throw away 1/2 of their signal? Get serious! So the next time you talk to an 'Engineer', maybe you should ask him or her if he or she really means 'technician'.

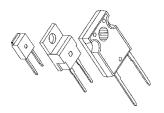
₩What's new...

PA-3... Well here it is, shown in reduced size 'cause this cheesy newsletter is only 4 pages you know! We're trying to pack a lot of sage knowledge into this thing. So what is the PA-3 and why is it better than a PA-2? Well, first off the driver stage is similar, but single-ended. It is current-sourced. We call it the Single-Ended Cascode Stage - SECS for short. The first stage is basically half of the PA-2 layout. It is a singleended differential amp with current source(Q2). New innovations are the DC offset control and the 'Soft Start/Turnoff' accomplished by C1. Perhaps, 'Anti-Thump' protection circuit is a more appropriate name. Also note the larger 'Snap-in' power supply caps, increased from 470uF to 1000uF each. The good news is that the



price is still \$239/kit and \$334/installed. The bad news is that the price will increase to \$299/kit, \$394/installed on October 15, 1997. This thing is way too good to sell at either price. This is by far the finest add-in board we have offered. The PA-3 modified Hafler is a serious threat to the most prized high-end, darling, beloved and overpriced amplifiers on the planet. Just take a listen!

BlackGate and HyperFast installations... continue to proliferate to include VAC tube amps, Bryston power amps, Magnum-Dynalab tuners, Energy powered subwoofer, Entec powered subwoofer, NHT subwoofer x-over, Parasound HCA-2200II, Muse power amps and more. Every customer has been delighted. Hey, the improvements wrought by the HyperFast diodes in the powered subwoofers is amazing, provided you're sending it a solid, high definition, powerful signal.





"WHAT HAVE YOU HEARD LATELY?"

Well, we did get into the Meadowlark Audio Heron loudspeaker (\$4000/pr). These babies are very attractive and weigh in at almost 100 lbs. The Herons are flat to 30Hz. Patrick McGinty, the designer, says he measures -3dB @ 20Hz in his listening room. These speakers are solid, fast and clear in the low end with a wonderfully natural midrange and a delicious top-end. The only caveat is that they extend so low that they can put your listening room into a tizzy at times. So fix all the vibrating things in the room and enjoy, ok! We're listening to the Wadia 27 DAC just now. It is here for HyperFast diodes and BlackGates. Our mod to the Levinson 33 amps included numerous HyperFast diodes, BlackGates, Musical Concepts film caps and more. More details in a later issue. Our evaluations are now being carried out with Wilson Watt/ Puppy speakers(\$18,000/pr.). We are very impressed with the neutrality and transparency. Component evaluations are quite easy with this level of transparency. Changes which might make slight differences on some speakers are very noticeable on the WWP. A lot of listeners have found this speaker just too dry and clinical. Ultimately, the WWP is not a 'warm' design, but rather it is very neutral. It will not be kind to the slightest dryness, brightness or grittiness in the remainder of the system. I think expensive, yet often so-so electronics, are more likely the reason for the reputation of a 'clinical and dry' sound. These listeners just haven't heard the WWP with Musical **Design** electronics. However; the WWP(\$18K) cannot compete with the Herons(\$4K) for projection of realistic acoustical power into the room, especially noticeable in the bass where the Herons seem to have no limits on dynamic range. This makes one wonder about the design choices in the WWP. Some might call this a 2-way with a subwoofer sort of sound. Still, if you simply love what the WWP does, it could become your 'ultimate' and pry that \$18k out of your pocket.



And, in the mail bin...

MAIL: Proving beyond doubt that Americans are more mobile than ever, we had to whack a lot of people off of our mailing list for various reasons. For one, we might be goof-ups because several returns listed "No Such Address" as the reason for return. So when you call, put the ham sandwich down, spit out the chewing gum and speak clearly into the mouthpiece. And what the Hell does "Attempted, Not Known" mean. It sounds like an "X-FILES" episode or something. Others, the vast majority, listed "FOE", meaning "Forwarding Order Expired". Don't ya feel special learning the Postal lingo. Thank God, none of them listed "Moved to Hale-Bopp".

A nice gentleman, has sent us some very complimentary letters asking to be on the mailing list. There is just one problem! He has never enclosed his address. This is important. If I could guess your address, I probably would have guessed the correct lottery numbers by now and I wouldn't be sitting in front of this stupid computer screen.

If you have friends who are not on our list, we'll put them on the list if they call. If you have friends who **were** on the list and they complain about **not** receiving the newsletter, tell them to send us the latest address. If they complain because they **do** receive the newsletter, tell them to move to *Hale-Bopp*.

"I am incredibly impressed with this equipment. The more I listen to it, the more I enjoy it. Pegs my fun meter every time I listen to it." G.G. Hoch, Ballwin, MO (Purchased DM-100 and SP-2B)[comment taken from warranty card]

USED COMPONENTS

- 2 CD-2(Used), minor cosmetic flaws, Orig. \$1495, Sale \$895
- 2 CD-2(Demo), minor cosmetic flaws, Orig. \$1495, Sale \$995
- 1 CD-2 Signature(Used, orig. ver.), some flaws, Orig. \$1995, Sale \$995
- 2 D-150(black, latest ver.), Demo, very minor flaws, Orig. \$1495 Sale \$1195
- 1 SP-1A Demo, good cosmetics electrically upgraded to SP-2B \$649
- 1 SP-2(black, latest ver.), Demo, minor flaws, Orig. \$995, Sale \$749
- 1 SP-2B(black, latest ver.), Demo, minor flaws, Orig. \$995, Sale \$850
- 2 DAC-1(black, not latest 1A), demo, minor flaws, Orig. \$995, Sale \$595
- 2 D-75(black, latest), demo, minor flaws, Orig. \$795, Sale \$595
- 1 DM-100(black, latest), demo, minor flaws, Orig. \$1195 Sale \$895
- 1 D-140 with latest "Special" update, awesome sound, Sale \$795
- 1 D-140i with latest "Special" update, awesome sound, Sale \$895
- 1 Hafler DH-101 w/MC-3T board, "Monster" power supply(Call) Sale \$695

Music Reviews

There will be no learned dissertations here, just positive reviews of music we like. The emphasis is on sound quality, but not above substance. We have added valuable descriptions of the sound quality, so you can judge whether your system is doing its job. Note: There was no room in this issue for comments on the following gizmos, but obviously we do approve. All discs are 'cleaned' on the *Nitty Gritty CD Cleaner* and spun on the *Bedini* before evaluation. We use the *AudioPrism CD Stoplight* (green ink pen) and *Blacklight* disc damper. Your comments are invited. **Important:** It has been said that 'Ye Editor' has eclectic tastes, some say weird tastes, so pursue the more adventuresome discs here at your own risk.

Some notes from Issue 1:

Some complained that the Ravel piece is out of print. While I can't promise I will get better at this, I have seen all four discs reviewed below in stores recently. Also, David Sutton, a Canadian reader, wrote that the *Holly Cole* disc has a much better Canadian pressing (**ALERT Z281020**). He added that most Canadian pressings are better than U.S equivalents. Take note, those of you living near the border. And, why is it that the American pressings always seem to be at the bottom of the list for sound quality.

THE DESMOND PROJECT, The John Basile Quartet [Chesky JD156]

My curmudgeon sensibilities nearly preclude my saying anything positive about 'musical instruments' that must be plugged into a wall socket. This is the single most depressing aspect of the discovery of electricity. On the other hand, audio components need it, so on balance, I approve. I refer, of course, to John Basile's electric Guitar



playing on this disc. A lot of fine guitar players have played the kind that plug in, but I always like them better playing the acoustic kind. None the less, Basile has done a great job here and elevated my opinion of electrically driven devices a bit.

This is one of the first Chesky 24-bit/96kHz recordings. There is a very good sense of space and soundstage. There is something about this recording that I can't explain to you, so go get it now. I think you'll be pleased with the way that you feel relaxed while listening. The combination of this easy-going sound and the style of music is somewhat mesmerizing.

This tribute to Paul Desmond is clearly a very laid-back affair. If you're short a few winks, this style of music

will take care of that. In fact, the liner notes call this 'midnight jazz'. Hey, it's not designed to speedup the bloodflow, but to slow it down. Still, when you're in the right mood or you're planning some midnight maneuvering, this is good stuff. Although it may seem that I've been a little hard on this disc, I can't help but recommend it. Your foot will tap a bit slower than usual, but it'll still tap and you can enjoy this disc over and over.

NIGHT AND DAY, THE COLE PORTER SONGBOOK, various artists[Verve 847-202-2] A tribute indeed! What greater tribute than to have the

greatest artists of your time, singing wonderful, sophisticated renditions of your work. The list just goes on - Louis Armstrong, Billie Holiday, Sarah Vaughan - you get the idea. If you are unfamiliar with the career of Cole Porter, this is a perfect primer. Ye editor is straying here from the goal of recommending terrific sounding CDs. Most of this music on this album was recorded in the 50's and 60's. This certainly isn't the album for you if you only want the ultimate recorded fidelity. There's even a few mono tracks. Yet, some of the tracks have a natural and true sound. There is little or no harshness here. So if you get listening fatigue with this CD, I think you should look at the hardware, room, etc. If you love music, and not just sound, you'll love this album. There is an absolutely delightful rendition of *Always True to You in My Fashion* by Blossom Dearie. If this doesn't crack you up, it can't be done, but feminists may be

offended. Fred Astaire has a haunting rendition of *I Concentrate on You*, which sounds like mono, but it hardly matters. I almost forgot that he had a singing career. Some of you, who are only familiar with these artists in the latter parts of their recording careers will be shocked at the beauty of these younger voices. An example is Shirley Horne's 1963 recording of *Love for Sale*. Lush! This album is your perfect ticket. You'll play it over and over, I think. **Bonus #1!!** There are some interesting, fold-out line notes provided. **Bonus #2!!** This is one of those 'Right Priced' CDs!



SUMMER WIND, The Ray Brown Trio, Live at the Loa,[Concord Jazz CCD-4426]

I suspect that this group needs little introduction. It doesn't get much better than Ray Brown, Gene Harris and Jeff Hamilton as you will hear when you spin this disc. This

is a live recording made in a club called the LOA, once owned by Brown, but now closed. The live venue does not distract from the recording quality in the least. In fact, the audience is having such a good time it just adds to the pleasure of listening to this CD. The recorded sound has good depth, spaciousness and soundstaging. At times, you will feel your attention can utterly focus on one instrument. You follow the emotional flow of Brown and Hamilton. You bask in the beautiful piano shadings of Harris. The recorded ambience is very clear, adding to the spacious character. One of my favorites is the slow, lush interpretation of Li'l Darlin', which puts you in a relaxed, satisfied frame of mind. Another cut in that vain is Mona Lisa(not on the LP). Then we have Gene Harris on piano playing Can't Help Lovin' Dat Man which draws an interesting audience reaction when it is announced. This fine sounding CD has an LP counterpart which is missing a couple of tracks by comparison. It would be interesting to compare the two.



MUSIC DE LA GRÈCE ANTIQUE, Atrium Musicae de Madrid, Gregorio Paniagua[Harmonia Mundi France HM.90.1015]

Yes, this is *Ancient Music of Greece*, and as such, it is not for wimps. Just kidding! This is where some may say ye editor's taste is a little past eclectic. What they won't say is that this is not an outstanding recording. How good is it? On a very good system, we're talking serious Goosebumps. The simply recorded voices are haunting and mysterious. The wide array of ancient instruments, with which you may be unfamiliar, sound beautiful in their 'organic' vividness. When you listen to these instruments, you are reminded of the sterile, rarely evocative sound of modern instruments. Although my daughter plays the flute, I would love to hear her play the pan flute. Why did we end up with these 'modern' instruments?

In the liner notes, Gregorio Paniagua states: "As far as I have been able to, I have reconstructed certain Greek instruments, lyres, aulos, citharas, and even a hydraulic organ. They are found by the hundreds (a further proof of the preponderant role of music in Greek society) in a variety of documents - vases, bas-reliefs, and paintings - depicting different phases of life."

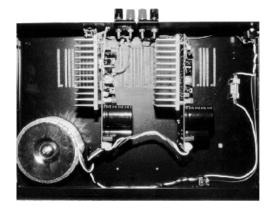
The CD opens with a veritable explosion of sound that will blow you right out of your chair if you have the volume too high, then it goes to silence. Paniagua says this, "...recreates the silence necessary to enter into contact with a music as remote and unknown as this." I liken this recording to browsing a great museum full of beautiful artifacts that, one after one, take your breath away. Imagine your reactions to the artifacts, from 'glorious' to 'curious'.



This recording is tremendously spacious. It sounds like it may have been recorded in a large building with little reverberation control. There is depth and focus galore. The choice of microphone technique would seem beyond reproach. From time to time, you hear birds nesting in the rafters. This should sound as clear as a bell, as though you were in that building. The sounds are mostly in the high corner of the right side of the soundstage. Yeah, it should sound as though it is well **above** your listening position. If the birds sound dull or muted this is not right. In *Second Hymne Delphique A Apollon*, there is a tremendous horn, like an Alpenhorn, and sounds of paddling water - interesting. The horn moves a tremendous amount of air. It has tremendous power if your system can generate it. I think mini-monitors need not apply. Then it all ends, as it began, with the tempo rising into a 'Katastrophe' of sound.

The BIG story!!! Single-Ended is here!!! All of our power amplifiers now have single-ended front-end circuitry. So, we now have the four amplifier models D-75B,

D-75.3B, DM-100B and D-150B. Not only that, but each amplifier channel is now on one single circuit card(except D-150B), including the power supply. This has tremendously reduced the internal wiring complexity, reducing many "wiring lengths". Simplicity is good! All of the virtues accorded to single-ended operation on page 1 are



clearly heard in these new models. The best news is that the prices are unchanged. The D-75B is \$795, D75.3B is \$1095, DM-100B is \$1195 and the D-150B is \$1495.

The T-1... has used HyperFast diodes and BlackGate caps since we started using these excellent parts. These were added to production units at the earliest moment without fanfare. There are exciting improvements in bass solidity and heft. Focus becomes more rock-solid and is maintained at high volume levels. If you have an earlier T-1(made before August 1996), updates with BlackGates and HyperFasts are available at \$200.

DAC-1A20... has a new PC board with dual 20-bit Burr-Brown PCM-1702s. The 20-bit BB DACs are extraordinarily dynamic and natural. **HyperFast** diodes are now standard. The HDCD compatible DAC-1A20 has a vivid, powerful, yet elegantly smooth sound, at the bargain price of \$1195. The latest 20-bit *Sequature* DAC-1A is loaded with BlackGate caps and other careful tweaks for only \$1995

We have good news for you! We have developed several updates, all at reasonable cost. **HyperFasts** and **BlackGates** are included in some updates! Or you could get real bossy and make us put them everywhere they are useful. Anyway, contact the factory with your questions, when you get feeling bossy!

SP-2B now sports Hyperfast Diodes..., a new Noble volume control, and a new operating point like we told you in the first Musical News. Wow, what a change! Some customers in rare circumstances had reported RFI interference. So we have rerouted some of the grounds and altered the input grid resistor. Not only did this greatly reduce RFI sensitivity, but the overall sound was just more relaxed, clear and dynamic. The SP-2B is still available at the original price of \$995. Now we can provide the SP-2B with Mullard NOS tubes, an incredible, superb sounding tube, at \$1095. Awesome! As with all NOS tube deals, we don't know how long this will last. Call if you just want the tubes for your unit or to replace any 6DJ8 type tube. These are \$100/pr. That sounds expensive, until you hear them!

It's only fair... to extend the promotion on our Aura cables since we have done so on the SuperConnects. So you get to buy Aura interconnect or speaker cable at 20% off until October 15, 1997? Sure, why not!

True story!! We have a customer(we had previously modified his Marantz CD player) that is moving to Egypt. He has been trying to get his system 'Up to snuff!' before leaving, so recently he purchased some of our Musical Concepts SuperConnect IV interconnect cables. He was so blown away by them, in comparison to his expensive Tara cables, that he just had to try our Musical Design Aura speaker cable. He was using the DH Silver Sonic cable. I think he loved the Auras even more than the SuperConnect since he told me on several occasions that he is getting up early in the morning to listen now. I take that as a huge compliment, since I know how much most of us like our sleep.

MUSICAL NEWS

Our Newsletter

MUSICAL DESIGN
MUSICAL CONCEPTS
49 JASON COURT
ST. CHARLES, MO 63304
&(636)447-0040, &(636)926-9266