

HP's Workshop

HP's 2007 Golden Ear Awards



Linestages

Conrad-Johnson Anniversary Reference Triode Series III

The third-generation of c-j's ART is here, and just about in time for the company's thirtieth anniversary. It was introduced a decade ago to celebrate the occasion of 20 successful years for c-j's founders, Bill Conrad and Lew Johnson, former Federal Reserve economists, who fell for the musical magicks of tubes long before they decided to make a business out of their designs.

The ART grew out of an experimental linestage the men kept in the lab as a reference by which to measure the quality of their work. It is a product from which I have learned how to listen more deeply into the soundfield. In its first two iterations, I found I was able to define two fundamental aspects of reproduced sound for the first time. One was the key concept of continuousness, itself slippery and difficult to describe for those who haven't encountered it. The other phenomenon, still not widely understood in my opinion, is the relationship between a component's dynamic envelope and its character.

A word, first, about the dynamic envelope. Think, if you will, of the entire frequency spectrum that can be reproduced by a component, especially an electronic one. Music, especially the unamplified kind, is capable of expanding and shrinking

dramatically—hence the designations from the softest to the loudest (the *p*'s the softest, as in *pppp*; the *f*'s the loudest, as in *ffff*)—and capable of doing this in any portion of the frequency range. The first-generation ART did not have much in the way of bottom bass and almost no contrast down yonder, but what it did have was a significant expansion in the upper middle bass (where there is considerable musical energy, not by coincidence). In this respect, the c-j had a “golden glow,” not unlike that to be found in Boston's Symphony, which has its own resonant patterns in this very same range. That original ART also exhibited audible tube rush at the lower frequencies, which intermodulated with the music signal. But there was no denying its midrange magic and lack of distortion.

I think all of us guys who review gear (and we are mostly guys) have a sobering experience when we hear significant improvements to gear we earlier vigorously applauded when we hear in them the future. Which leads me back to one of the basic HP Audio Principles: You cannot imagine how a great component can be bettered until you hear it bettered. Looking back now upon the first ART (reviewed for *Fi* magazine) and the second generation, I wonder, given the strengths of the latest ART, if I was too forgiving. Of course, I wasn't, at that time.

In the second-generation ART [reviewed in Issue 129], the tube noise was reduced to a figurative vanishing point, and the frequency response extended, with much definition and impact, into the 30Hz region. This also changed the dynamic envelope and shifted the emphasis on dynamic swings further down the spectrum. This had the effect of changing the “character” of the c-j house sound, reducing the euphonic golden glow, and allowing something closer to the individual character of different halls to shine through more clearly, and at the same time, allowing this reviewer to wrestle with the concept of continuousness, which was now more obvious and less ambiguous. The fact that the noise reduction and some other

Conrad-Johnson Anniversary Reference Triode Series III preamp



circuitry improvements extended the response and dynamics of the upper octaves allowed me to hear the fact that sound was of a whole cloth. Sallie Reynolds, in that issue, likened continuousness to a waterfall (where the water seems or is of one flow).

I wouldn't be giving this product a Golden Ear if I didn't think the third generation was another significant improvement, one that moves the ART into the category of elite gear that, while not sounding real (nothing does), sounds less unreal than all but a handful of the best of today's design work.

So what has been wrought here?

First, the price has gone up. No surprise there, given the pressure on the individual components that made up the workings of electronic (and other) gear. Part of this, sez Lew Johnson, comes from the increasing competitiveness of the burgeoning Chinese industry and part from recent developments in Common Market countries where lead in audio gear has been banned, forcing designers to look for alternative, and more expensive, materials. The original ART was priced at just under \$15,000; the second generation, introduced four years later, was a thousand dollars higher. The III will set you back \$25,000. It includes both parts and circuit upgrades.

Some of Lew Johnson's notes: All of the polystyrene capacitors have been replaced with Teflon CJD capacitors, and "this accounts," he says, "for nearly all of the price increase in the unit. Do a web search on 2.0 microfarad Teflon capacitors and you'll find them retailing for more than \$300 each." The ART III contains 32 of that value, and smaller ones, too.

The two cascaded regulated power supplies have been replaced with a single one for each channel with "greater capacitance...the result is that the tube stage now sees twice as much capacitance directly as in the other ARTs."

Johnson says revisions in the ground paths have resulted in lower overall noise and that similar adjustments to the audio circuit have improved high-frequency transient response.

Consider this Part One of the review, with the second to follow (if all goes well) in the next issue. One of the reasons for the delay is the result of an intensive effort over the past several months on my part to assemble a total system that represents a breakthrough in reduction of the distortions and colorations that make present-day reproduced music sound so, well, so unreal, so unlike a simulacrum of the real thing. (Many of those products are getting their Golden Ears here, instead of there.)

Price: \$25,000. conradjohnson.com

Joule Electra LA-150 Mk II

Not everyone, putting it mildly, has 25,000 dollars to live with and experience the component whose lack of an electronic "signature" is at the current state-of-the-art, a component in which the line between the music and the illusion of the music becomes paper-thin. Nevertheless, a master designer—and make no mistake, Judd Barber of Joule Electra is that—can use his craft to achieve a wizardly concatenation of the ingredients that make up a linestage to get a kind of musical magic. This unit is so seriously seductive that many a veteran listener will accept its version of the musical "truth" and be happy exploring old

favorites in his collection. Part of what makes a great-sounding component has to do with balance, that is, the relationship between the spectra of sound. The LA-150, in its new edition, has bottom-octave response—and this includes the dynamic, as well—that you seldom get in any linestage, much less one at \$5200 or so. Oh yes, you can have deep, deep bass (vide, the Burmester 011 preamplifier), but you almost never, in any price range, get the explosive transient dynamics you get here. (Try the last minute of Cut 9 of *The Thin Red Line* soundtrack.)

What is more remarkable—and to these ears, a bit of legerdemain—is the midbass response, which is even more propulsive, dynamic-contrasty, and three-dimensional. It almost never happens that you get this kind of jolt from the bottom two octaves without one of them being obscured, usually the very bottom (that is, below 40Hz). There is a price to be paid for this, but first let me suppose that I know why Barber has done this. Most speaker systems these days, and maybe even the one that Barber himself uses, really do not have much in the way of a bottom octave, and among their number are some highly touted and highly expensive big systems, say, from out West. With the LA-150, you're going to think your speakers have bottom-end response like they never did before. And it won't sound "wrong," either. That's because Barber has elicited from the electronics a correspondingly alive and dynamic upper midrange, though not enough of one to make you think it's a euphonic coloration, so skillful is the design. And all this is bathed in glorious "tube" sound, like a darker version of the classic gear when Audio Research ruled the waves, and with even lower distortion.

If you have something like c-j's latest ART on hand, you'll soon enough become aware of a diminishing top octave (yes, most high-frequency transients do get through) in this unit, and of the loss of focus in that awesome midbass. But then again, you may think the c-j sounds, by comparison, a bit anemic in the midbass, until you ears make the adjustment to its rightness there. This I mean as a tribute and compliment to Barber, whose window on the world of sound is entirely convincing when taken by itself as, you might say, its own singularity.

A few more thoughts. According to Barber, the original linestage, introduced six years ago, used a Russian 6C45, a single triode, as the gainstage (which probably, Barber thinks, accounted for a harsh sound that made me disregard the unit). The Mark II version uses a 6350 instead (a tube used elsewhere in the circuit), and with very little feedback.

The unit comes with a remote I am not nutso about. The level and balance adjustments are not subtle, unless, as I learned from Barber, you touch the controls only lightly, as an experienced typist might. It is a plain, utilitarian-looking piece of gear.

What is interesting about the LA-150's price is this: Given the radically increasing cost of its internal electronic components (resistors, capacitors, even wire), thanks to developments on the international market, five thousand has become almost an entry price for real high-end electronics. That the LA-150 sounds the way it does represents a victory of design witchcraft over commercial realities. **Price: \$5250. joule-electra.com**



Amplifiers

Western Electric WE-97-A

Offhand, I can't think of any company's first electronic component that can immediately take its place in the rank of classic designs, but this high-powered triode amplifier from the revived Western Electric is a formidable contender. To be sure, this is not a product of the Western Electric of old, but rather its new incarnation courtesy of one Charles Whitener, who just over a decade ago bought the rights to the name (and that of Westrex) from AT&T, as well as to the much admired and sought after 300B tube, itself in the category of legend among hard-core searchers after the Grail. And at the cool price in 1996 of \$1200, why not?

This amplifier, a monoblock, will set you back a not-so-cool 50 grand, and for stereo, of course you'll have to have two, not one. (The early buzz was that a solo amp would cost \$90,000, so perhaps there was a divine intervention.) For that 50, you'll get eight 300B tubes and a 100 or so watts of RMS power into 8 ohms. Whitener says it won't be long (say, the Winter Consumer Electronics Show) before a tubed CD player, linestage, and phonostage

come along. Further down the pike, the company will also offer an amplifier built around the even more legendary 308B, "the highest powered class A triode power tube ever developed," Whitener says. The WE-97 was the work of the design team of Chiwai Lau (who has designed electronics for his company, Canary Audio), David Evett (the front panel), John Cheves, the production engineer, and Whitener himself. An old audio hand, one David Berning, will work on the company's future projects (he has retired from the National Institute of Standards and Technology). The amplifier was the logical result of Whitener's reintroduction and manufacture of the 300B tube in 1996. He says this: "Assembling amplifiers is no great feat. The trick is in the topology."

Up until now, the only triode amplifier that I thought as uncolored as some of the best tubed designs was the Sapphire 300B, a minimally powered unit with exceptional sound at the frequency extremes, and an across the board neutrality and lack of tonal coloration that left me wishing for more. The 97 provides the missing more. And it does something that startled me. It captured (on the Nola Grand Reference Mk IV Series II, one amp for each of the four towers!) an ambient field that

all other amplifiers, at best, merely suggested. I'm not sure how to describe this, since in normal usage, we audio reviewers sometimes use slightly hyped language in an effort to get across the way something strikes us. I have, in the past, for instance, described the way some components (vide, the c-j ART) can focus in on a singer or player and give a sense of the three-dimensionality of that particular instrument. Here, we get the 3-D effect, but that extends to the backside of a human voice or played instrument. I am trying to suggest that, with no loss of focus and no euphonic second harmonic, we can actually hear "behind" images in the soundfield, an effect no doubt occasioned by the 97's retrieval of extremely subtle ambient cues, the kind you take for granted when you're listening to unamplified music. With this amplifier, the 3-D effect extends to the rear stage, where images are just as vivid as they are in the foreground with the best electronics. It's as if you've suddenly both extended and expanded the depth of the soundspace so its field is as large as that of the original hall, and all this in a listening room not majestic in size. And there is not a trace of "bloat" in this effect. Smaller spaces remain smaller.

To top it off, there is not, in my present setup, a problem with the midbass, which so often happens in triode amplification, and the fundamental bass, including pedal points and thunder (even the real life volcano eruption on "The Lost World," courtesy of Hearts of Space), actually becomes frightening in its reality. Yes, frightening.

And no, I haven't nearly finished its evaluation with other speakers and other electronics, nor have I gone in depth with Whitener about the tubes and why he says that they have an impulse response far better than that of any other tube and one he believes that gives the 300Bs a

unique advantage. More to come. **Price: \$100,000 per pair.** westernelectric.com



Joule Electra Destiny ZVN-350 amplifier

Joule Electra Destiny ZVN-350

This 300-watt monoblock design from Judd Barber comes without transformers and is a worthy competitor to the Western Electric, with or without its beautifully-built and sonically enhancing \$4000 stands, and for about \$70,000 less for the pair. If you suspect I shall have a Battle of the Giants, you suspect correctly. **Price: \$25,000 the pair.** joule-electra.com

Burmester 911 Mk III

Quite simply one of the best-sounding solid-state amps to thus far lighten our doorstep. It is an advance over the earlier Burmester electronics in that it is not only close to completely neutral but it shows no trace of the normally ubiquitous transistor texture and grain in the upper octaves. More interesting yet, to these ears, is how happy it is driving all sorts of speakers, from the ultra-revealing Kings to the sweetly euphonic Coltranes. An amp for all seasons, and virtually all setups. **Price: \$17,220.** burmester.de



Turntables

Blue Pearl

One of the frustrations of the latter-day analog age is the skyrocketing costs of turntables, even when playing the vinyl LP is now the rage in some parts of the world—check out turntable sales in eastern Europe. The frustration for this writer is that, given both the politics of reviewing and those celestial costs, it is well-nigh impossible for me to hear all of the serious contenders in order to put some sort of context or ranking to their individual excellences. So some must remain mysteries. It's okay for a given reviewer, say Michael Fremer of *Stereophile*, to say that Australia's Continuum is the best in the world, but really, how can anyone buttress or butt heads with that assessment? And really, why pay \$100,000 for a turntable when the long playing record, at least in this part of the globe, is no longer the predominant playback medium? Indeed, you might ask, why pay the \$82,000 being asked for this table from Britain, which comes *sans* arm and cartridge, but happily we suppose, with the arm mount. (We used, in its evaluation, the Graham Phantom and our reference, the superb DynaVector XV-1S. Cost: \$8500.)

There is a detailed story behind the 'table, and the mechanical wiz who worked on getting it workable, one Martin Easton, of the old country, which we will tell in the more elaborate review to come. But a few tidbits, sufficient one hopes unto the day. The table, constructed out of Blue Pearl, a form of granite, weighs 300 pounds, and its platter a hefty 26. It is driven by a separate Maxim motor, and its platter floats on opposing magnets, though it is belt driven through its three speeds. Its importer, Bruce Fethering of Acoustic Dreams, says its speed is accurate with 0.001 per cent, thanks to a digital speed regulator which sends out its code 15,000 times per revolution. Hmm.

Thus far, there have been a few glitches, upon which we shall report on the day. What does it sound like? Well, it is by far the smoothest sound of any table in my experience, with a bottom end that, unlike the last Clearaudio Everest's, is deep and extended, like that of one

of the Joule OTL amps (specifically, the Grand Marquis and the Destiny), great tube bass, not transistorized sound as was the Clearaudio's. In this sense, the Blue Pearl has an overall character different from and superior to the EAR Disc Master's: It sounds like there's more there there, with the Blue Pearl. **Price \$82,000.** acousticdreams.net

EAR Disc Master Magnetic Drive

I have been debating whether or not to give this remarkable product a richly deserved Golden Ear. Why not? The near hen's teeth scarcity of units in the United States—would you believe there are just five? Additionally, the review sample I have on hand has given us no end of grief because of a slipping belt that is not an easy fix. But these are, I am going to assume, the sorts of problems that can and will be cured. Otherwise, and you have my word on this, I'll get back to you with a (lack of) progress report. Oh yes, the price of the table has risen to \$17,500, up from, in the importer's words, "\$16,000 before the price increases for the entire line that took place in January, thanks to greater manufacturing costs and the plummeting value of the dollar."¹

The strength of the design lies in the complete absence of turntable motor noise, a situation I likened, analogistically, to being in a car that rides above the surface of the highway. Yes, you might hear turntable noise if your LPs were poorly mastered, but on the best discs, the silences allow one to hear far more deeply into the bottom octave where greater dynamics and weight are to be found. In this sense, hearing a magnetically driven table might be likened to the complete absence of low-frequency generated motor noise common to every CD (but of course, without the glories of analog sound). Further experience with the table, particularly in comparison with the mightily expensive British Blue Pearl, reveals a distinct sonic personality, light at the very bottom and far from ice-cream rich and smooth.

Price: \$17,500. info@ear-usa.com (reviewed in Issue 163)



Blue Pearl turntable

¹Clearaudio, clearly the more experienced builder of 'tables, has a \$100,000 magnetic-drive turntable now on the market, which I have not, sad to say, had on hand for a comparison. If anyone had told me back when the high end was new that turntables would reach such dizzyingly high prices, I would have responded "Yeah, when cows jump over the moon." Well, mooooo, Bossie.



Pickup Arms

Compact Disc Players

EMM Labs CD-SA Two-Channel Player

Quite simply, the best two-channel CD (and two-channel SACD) playback device of the many, many we've tested in Sea Cliff over the past year. Quick reminder: In the evaluation of CD players I undertook [Issue 153], I came to see that the best digital and the best analog sounds existed in two parallel universes—that is, as Wilma Cozart Fine had argued with me when doing CD versions of her Mercury classics, each at its best brought out different strengths of the music itself. The trick to getting great digital is reducing the multitude of distortions that came part and package with the original transfers and players. The Ed Meitner design comes closer to that goal than any other player I've heard, and does so to the point that you can listen with pleasure, and for hours and hours. More on this to come.

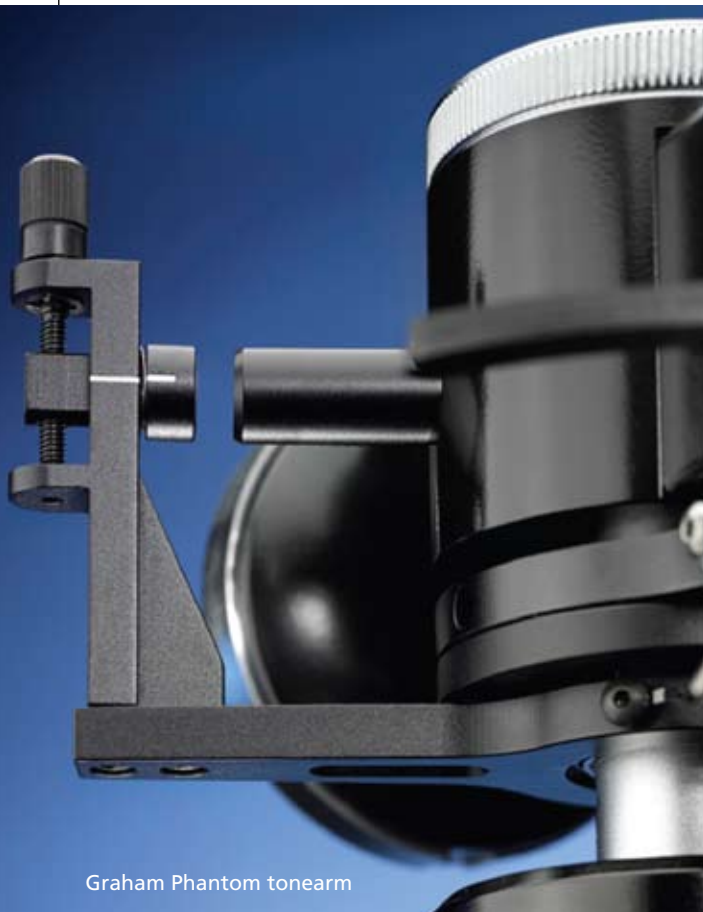
Price: \$10,000. emmlabs.com

Interconnects

Nordost Odin

I wouldn't have guessed that Nordost could improve upon its Valhalla designs by an order of magnitude, and so it was with some skepticism that I approached the new Odins, especially after I learned of their jaw-dropping price: \$16,000 for the first meter of the interconnects (considerably, considerably less per meter for longer lengths) and \$20,000 for the first meter of their speaker cables. This would seem to close the case for shorter cable lengths. Nor would I have guessed that the Odins would make the Valhallas sound like, say, the very best solid-state amplifier (perhaps a Keith Johnson/Spectral design) and the Odins like the super-powered Western Electric triode WE-97s. I never thought the Valhallas a bit "threadbare"—and am deeply chagrined to say that's how I feel about them now. More to come. **Price: Interconnects, \$16,000 (per pair, one meter; \$2000 per pair each extra half-meter pair). Speaker cables, \$20,000 (per pair, one meter; \$3000 each extra half-meter pair). info@nordost.com**

²Graham says that one of the things that makes his unipivot design different is that the pivot point extends downward, rather than upward as with competing models. The arm itself, he notes, is made up of a combination of lightweight and heavy materials for the supporting structures, and these include tungsten carbide, ceramic, aluminum, and brass. Graham also says he hasn't gotten round a classic bug-a-boo of unipivoted arms, that is, the necessity "for some sort of lower-weight balance to keep the arm upright...with the unfortunate by-product of applying an immediate counter-force to any lifting of the arm from its normal 'rest' position, with unpredictable results upon its tracking force." He calls it Magneglide, and it's explained on his Web site.



Graham Phantom tonearm

Graham Phantom B-44

Bob Graham has been at the forefront of unipivoted arm design for many a year, and this time he has got it exactly right.² Earlier Graham models, much admired by the high-definition "precision" school of sound (those who want to hear every detail in the recording, even at the expense of the music itself), sounded too tight, too white, and too dry on top, with not a little bit of chatter. I never got the sense of a relaxed sound, which is what the real thing has in spades. But with the Phantom, he has designed an arm whose presence I cannot hear in the highest resolution systems. The fine adjustments here really do help you zero in on optimum performances with the widest imaginable possible range of moving-coil designs. **Price: \$4300. graham-engineering.com** (see Editors' Choice, Issue 165, along with Wayne Garcia's review this issue)



Speaker Systems

Hansen King v.2

This sophisticatedly sculpted and designed multidriver speaker system, used anew with some of the latest deluxe high-end designs (from Conrad-Johnson, EMM, Audience, e.g.), reveals even more plainly its overall coherency and lack of the colorations that so plague cone-type drivers. With most multidriver speaker systems, discontinuity runs rife and, in terms of listening ease, ragged on the ears. Not The Kings, which are as untroubled and smooth as still waters, so much so that they allow you to ignore their own “sound” and concentrate either on the other components feeding them, or on the music behind it all.

This may sound obvious, but if you've listened to so-called full-frequency-range multidriver designs, you'll know that few truly are capable of wide bandwidth response, either in the frequency or dynamic domain. The Kings go down flat to a point below 30 (amazing) Hertz, and up as far as the ear cares to hear. And the soundfield they project can be as big as the recording requires, or as delicate and sculpted. There are two minor burbles: a slight loss of focus in a narrow band between 80 and 100Hz, which may or may not be dependent on the way we have them set up in Room 2— even so, this is far from obvious and you'll only hear it if you listen over hundreds of hours. The designer, Lars Hansen, urges their placement in a larger acoustic environment (say, Room 3 here in Sea Cliff). I don't think the domed tweeter perfectly blends with the cone drivers, but once again, the discrepancy is one nit you'll have to pick to hear—meaning that in normal listening, The Kings speak with one voice. I haven't been able to find a descriptive term to describe that voice, its “character” (and

it does have something of one), but be derved if I know words to nail it. There is no box coloration. The upshot? A reference, and that's all there is to that. **Price: \$74,000 (effective July 1).** hansenaudio.com (reviewed in Issue 168)

Marten Coltrane

Talk about a seductive sweetheart of a speaker system, the hybrid Coltrane is just that. The top end is handled by a diamond tweeter and is as transparent and sweet-sounding as any I've heard, but not as dynamic as, say, the dual Heil arrangement on the Burmester B-100s (that said, almost nothing else can match the Burmester for true high-frequency dynamic levels). The lower frequencies are attended by two ceramic drivers, whose essential colorations are euphonically just glorious, but maybe too rich for those with diabetic ears. I haven't heard other makes of speakers that use ceramics in their drivers (Kharma, for one), and I only superficially auditioned a diamond tweeter ensconced in an Avalon system at a Consumer Electronics Show. I can tell you there's not much in the way of extreme bottom response below 40Hz, but the speaker is so nicely balanced you'll not likely miss it, unless you are big on Mahler or on full pipe organ recordings. The Coltrane never sounds raw or ragged, and it keeps dynamic swings in check. **Price: \$50,000.** ear-usa.com (see Editors' Choice, Issue 165)

Burmester B-100 Hybrid

Out of the blue, at least for this company, whose solid-state electronic designs have been among the world's best, comes a speaker system worthy of those electronics. Burmester's earlier attempts to come up with a speaker the equal in sound to its electronics were, well, there's no kind way to put it, mostly a mess, at least in terms of continuity and coherency. With the B-100, there is radiation pattern discontinuity because of the side-firing woofers, a phenomenon that can be minimized (if not eliminated) by exceedingly careful placement. But in terms of character, it speaks with one voice, and its dual high-frequency Heil drivers allow the widest range of dynamics in the top octaves this reviewer has heard from any speaker. Its character is decidedly neutral, perhaps ideally so, since it can sound rather cool and chilly with high-tech transistors (excluding Burmester's own lovely 911 Mk III) and warm and inviting with blockbusters like Joule's Destiny, a 300-watt monoblock design sans transformers. **Price: \$69,950.** burmester.de (see Editors' Choice, Issue 165)



Burmester B-100 Hybrid
loudspeaker