Excerpt from TAS:

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The Year's Ears of Gold

Atma-Sphere MA-2 Mark II.2 Amplifier
The idea behind the Golden Ear awards is no to select what is necessarily the "best" component of the year, but rather to let you know what our reviewers found most interesting, or intriguing, or downright facinating in the course of their daily rounds. In other words, those components most likely to excite your curiosity and interest.

Had I confined myself, in the field of basic amplification, to the best or most impressive, then the Jadis JA-800 monoblocks would have gotten the nod. Or if I could have streached the definition of year to the breaking point - and in giving these awards, we do use the term "year" loosely - then I would have made a co-award for the Joule Electra Grand Marquis, the first output transformerless (OTL) amplifier that deeply impressed me. The Joule was, in actuality, historically anteceded by Ralph Karsten's Atma-Sphere OTL designs, one of which I heard some years ago. Without being unduly impressed.

The MA-2 Mark II.2 is something else. Karsten rates its output at 220 watts per channel - it's a monoblock - into 4, 8, and 16 ohms, without telling us just how he managed this seemingly magical feat.*

An OTL amplifier should deliver its maximum output into one impedance with an attendant drop-off in power at all other impedances. Indeed, that relationship between power output and the impedance curves has been one of the *bete noirres* of OTL design, given the fact that the impedance curve of any given speaker is hardly likely to be flat, whatever the "nominal" impedance of its particular design - Magneplanars, of course, excepted. And some speakers, from, say, either Dave Wilson or Arnie Nudell typically have quite sharp drops in impedance at some point in the lower frequencies, which could mean that an OTL would run out of steam down yonder. We might consider the case of Nudell's triumphant comeback design, the Genesis 350 Special Edition and the Joule - itself rated 160 watts or so into onto eight ohms - which clipped its brains out when faced with the low notes from the *The Thin Red Line*. The Atma-Sphere, on the newly arrived Special Edition, floated along, top to bottom, airily even as yrs. truly really cranked it.

The MA-2 is, Karsten sez, "all triode" (push-pull of course), all class A, and with differential operation from input to output, and zero global feedback at that! He further sez that it essentially has but one stage of gain and switchable input impedance (600 ohms on the low side for those preamplifiers, including Karsten's own that adhere to this "standard," and 200k/ohms on the high side when used with other preamps in balanced mode, 100 k/ohms when used in single-ended mode, no doubt for Robert E. Greene's delectation). And with a power bandwidth of 2 Hz to 75 kHz, a phase shift of less than a degree at 20 kHz, with a stated frequency response of one Hertz to 200 kHz within a half a decibel, and it's only down 3 dB at 1 MHz - measured at one watt, open loop. He also claims a slew rate - get this - of 600 volts per microsecond. (It may or may not be a matter of significance that there are no distortion figures in the basic specs.) As far as they go, these specs would do some Fancy Dan electronics proud and for a tube unit, are, well, out there.

The first thing one notices, once these 130-pound, fanless, 26-tubed monoblocks are in place - other than the ferocious amount of heart they throw - is their electrifying transient response. The same was true, to be sure, with the Joule Electra designs, but here we find ourselves with the impression of both effortless and unlimited power behind those transients, which can make the resulting sound quite easy on the ear. Some of the "bright hotness" we attribute to , lets say, the Mercury sound disappears with this amplifier. The transients are even faster and more refined in sound - the Classic redo of Mercury's fabulous complete recording of *The Firebird* prove the perfect case in point. The "edge" goes off the massed brass, but the brassiness of their sound remains. And there is so much backup power available that, upon the entrance of the brass choir fortissimo, you can even hear the volume of air behind the horns themselves, instead of an instrumental section that becomes less dimensional as the sound grows louder. Coming from another direction, you can take the sound of a solo marimba, which can be massive played *forte* , and hear its distinctive wooden timbres (not to mention something like its true size) as it is struck hard. With normal amplifiers, including many a tube unit and virtually all solid-state ones, a *forte* marimba glissando will sound not only somewhat metallic, but without its wonderful decay pattern (the real mark of the marimba) and at anything but its massive size. With most amplifiers, the harder you hit the marimba, the more two-dimensional, shrunken and metallic it will sound. (Source: Lionel Ritchie's "All Night Long" single LP from Motown.)

Even strings, hardly classifiable as transient rich instruments usually, gain, at their best, the kind of subtle sweetness and airy richness you get from a good ensemble in a good hall (again, note the sound of the London Symphony strings on the Dorati *Firebird*). The downside of this, in some cases, is that you can hear so deeply into a string section that sloppy ensemble work and slightly mistuned individual instruments will be just easy to hear, but, worse, obvious. Push the MA-2 hard enough and it *will* clip. (As it does on the new Genesis.) And that sound, which occurs high up in the spectrum, sounds like a spritz on massed strings and brass. But as a practical matter, unless you're determined to burn out the cilia in your inner ears, you aren't going to hear clipping.*

The MA-2 does have a characteristic coloration, one that is on the dark side. Not dark in the way of some earlier Madrigal/Levinson designs, the result of too much feedback, which can attenuate high-frequency air and bloom. But dark in the sense of a velvety background silence that doesn't seem to at all interfere with top-octave bloom and extension. Jud Barber's Grand Marquis OTL design, it's worth noting by way of contrast, does not have a "character" like this and is much closer to musically neutral (i.e., the way things are). I cannot resolve this seeming contradiction in what I am saying just yet, because my work with Atma-Sphere is yet a work in progress, like that with the Walker Proscenium Gold, and not near to my final thoughts.**

Given the right material and the right speaker system (say the PipeDreams), the MA-2 can create an illusion of real sounds that, at moments, are quite uncanny. Its ability to encompass quite wide dynamics while resolving , during *forte* and stronger passages, the quieter and more nuanced small dynamics from other instruments, is unsurpassed in my experience. Combine the dynamics and the clarity and accuracy of its reproduction of fast (and slow) transients, and you reach what I believe to be a new level of realism in home playback. And even on digital recordings. Let's take, for example, the Finlandia recordings of Sibelius' *Seventh Symphony* (with Berglund and the European Chamber Orchestra), as recorded by Tony Faulkner at Watford in London. During the opening bars, there are sounds from the low strings and woodwinds that really are close to facsimiles of what you'd hear in the hall, so "real" is their depiction. I could hardly believe my ears. (See Scot Markwell's sidebar for a listing of equipment in Room 1.)

There is also enough resolution for you to hear intonation errors in the viloins.

As happenstance would have it, I heard Loren Maazel lead the Vienna Philharmonic (at Carnegie Hall) through the Suite Stravinsky excerpted from *The Firebird*, just after playing the

Classic re-issue of Dorati's reading. And for the first time, I found the recorded sound preferable to the live. I never imagined that this could be so. (The Vienna evidently doesn't like Maazel, because they didn't play well for him that night. As a conductor, I find him despicable because I don't hear the love of music in his conducting - as say, with anything Bernstein did with the Vienna - but rather I sensed a patronizing contempt for the audience as well as the music. I guess you had to see the snide way he smiled when part of the crowd wend wild with the *Firebird* and an encore of the closing moments of Ravel's *Daphnis and Chloe* that bordered on the vulgar and was actually louder that the climactic moments of the Stravinsky.) This sonic realism from the PipeDreams did not materialize, by the way, until finally we able to get and install Nearfields's spikes under the midrange/tweeter towers. At this point, a kind of holographic - sorry I can't summon up a better word; others misuse it so - field became apparent, with an intense focusing and specificity, much like what one feels sitting close to the orchestra.

Something quite special is at play with this amplifier and part of the enchantments it weaves seem, given the similar strengths exhibited by the Joule, a function of OTL technology. Odd, don't you think, that such a relatively antique technology could get us so close to the state of the art and the real thing.

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*I wonder if the amplifier would begin to acquire that characteristic I called "authority", something I've heard only from monolithic tubes amplifiers, e.g., The Audio Research D-600 or the big Jadis. Given the heat the MA-2s throw off, I can't imagine a 400 watt version, if practicable, would be practical in most homes.

**The Barber does clip rather more easily on the highs with most systems - its behavior with the Genesis was atypical - but not if their impedance stays close to 8 ohms. And the Joule has the same kind of clipping sound that the Atma-Sphere can be forced to exhibit, what I've called spritzing in an effort to suggest a sort of tearing around the edges of high-powered, high octave orchestral instruments, the aural equivalent of split ends.

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