

DROP DEAD GORGEOUS

The Amazing Atma-Sphere MA-2 Mk. II Monoblock Power Amps

by Jonathan Valin

This has been a lucky month for yours truly. First I got to review the best high-powered stereo amplifier I've heard, the amazing \$8995 Audio Research VT-200, and now I get to review the best high-powered monoblock amplifiers I've heard, the amazing \$18,700-a-pair Atma-Sphere MA-2 Mk. IIs.

Actually, I came to the Atma-Spheres before the ARC, right after finishing my review of the Goldmund SR-M monoblocks (still my favorite solid-state amps). At the time I was preparing a review of the Maggie 1.6QRs, which mate up so well with the Goldmunds. Just for the heck of it, I threw the Atma-Spheres in in the Goldmund's stead (well, at twenty-six tubes per block you don't "throw" the Atma-Spheres in anywhere), thinking that a bit of the old ultra-tubularity might make for an interesting contrast. As it turned out, it wasn't the contrast between the amps that floored me but the similarities.

By this I don't mean that the amps sounded identical. What I mean is that the qualities that I expected to lose, that one generally expects to lose switching from transistors to tubes—to wit, a certain amount of transient speed, a bit of inner detail, treble extension, control in the bass—weren't lost. If anything, the Atma-Spheres sounded even "faster" and more extended than the Goldmunds, every bit as detailed, and a helluva lot more beautiful in tone and timbre. What the hey was going on?

Since I knew that the SR-Ms were unusually wideband amplifiers, with an extremely high slew rate, I took a look at the MA-2 Mk. IIs' spec sheet, and guess what? The Atma-Spheres had a power bandwidth of, get this, DC to one megaHertz (-3 dB)! (This in a tube amplifier!) And a slew rate of 600 volts per microsecond!¹

Slewing and bandwidth like this are unprecedented coming from glass bottles. But then the Atma-Spheres are anything but ordinary glass amps. For starters, they are missing the one item most responsible for putting the brakes on tube-amp speed—an output transformer. Yup, the MA-2s are output transformerless (OTL) amps. But wait—there's more. The Atma-Spheres aren't just OTLs; they're fully differential, all-triode, class A, negative-feedback-free, single-gain-stage, two-hundred-and-twenty-watt OTLs—latter-day iterations of the Circlotron circuit marketed in the Fifties by E-V (and original patented by Cecil Hall).²

Although Jim Bongiorno used a modification of the Circlotron in his solid-state GAS amps in the Seventies, it is Atma-Sphere's designer, Ralph Karsten, who resuscitated the Circlotron as a fully differential triode-tube circuit. Karsten has been perfecting this design—and this design alone—for almost twenty years. Although Balanced Audio Technologies has (relatively recently) joined the Circlotron sweepstakes on the tube side, I can tell you for a fact that BAT's amps, lovely sounding though they are, aren't in the same league as Karsten's masterpieces.

What the MA-2s sound like are giant, inexhaustible, much lower in distortion and much more controlled-and-extended-at-the-extremes, single-ended-triode amplifiers. Which is to say they have the exquisite tonal beauty, tremendous dynamic verve, and uncanny "directness" of low-wattage S-Es, without the inevitable roll-offs in the treble and bass, the excessive second harmonic distortion, or the bump-your-head power ceiling. Moreover, unlike most OTLs (or S-

Es), the Atma-Spheres will work with any load from 4 ohms up. (I'm currently using them with the Maggie 20Rs—scarcely an easy speaker to drive, given their power requirements. The MA-2s are also said to be a superb match with Dr. Roger West's SoundLabs electrostats—once again, speakers that are anything but easy on the ol' output stage.)



Rather than beginning with a checklist of sonic pluses and minuses, let me start by telling you about a real-life experience I had with these amps (fed by the c-j ART, driving the Maggie 20Rs). For almost thirty years now—ever since I “borrowed” the record from my then-girlfriend, now-wife Kathy—I’ve been high on Artur Rubinstein’s rendition of the Chopin Ballade in G Minor on LSC-2370. In my book about RCA recordings, I said of this great performance that it seems uttered in a single breath, like one of Proust’s long, languorous sentences. The sound of the disc, on the other hand, has always struck me as less than top-drawer, “lacking just a bit of weight in the low end and overall scale and focus to qualify as one of the best RCAs”—to quote myself. One night a few months back, I had a couple of audiophile chums over to listen to the Maggies and the Atma-Spheres. One of them, a certain “bottom-feeding” conniver who will go nameless here, made a crack about Chopin’s piano music, which had heretofore left him cold. I immediately dug out the Ballades album and, without paying much attention, smacked the disc inside down on the turntable—a classic “so, there” move. (This is beginning to sound like a Seinfeld episode, or the prelude to one of Wayne’s Fi Personals—see back page of this issue.)

After only a few bars, my pal, the bottom-feeder, slumped back in the sweet spot. “This is gorgeous,” said he. “And the recording! It really sounds like Rubinstein’s in the room.”

And the truth is it really did sound as if Rubinstein were in the room. Too much so, in fact. The illusion of piano and pianist was so lifelike that instead of wallowing in my triumph (like Chopin cares, right?) I was seized with the horrible feeling that I’d put the wrong disc on the ‘table—that I’d inadvertently misfiled a different, far better-sounding recording of the Ballade in the RCA jacket. (An event not unprecedented in the Valin household.) Even though the phrasing was unmistakably Rubinstein’s, I actually went over to the turntable to double-check. (Of course, I didn’t tell anyone why I was doing this.)

Understand, this is a recording I thought I knew by heart, but the way it was transformed (and that’s the only word for it) by the Atma-Spheres proved that I didn’t. I’m not talking about small differences in bass weight or image focus or dynamic scale, although all of these things were

certainly changed; the Atma-Spheres worked a difference in gestalt, in the overall presence of Rubinstein's piano and piano-playing. For a few magical minutes, the Steinway and Ruby seemed born again.



As the ARC VT-200 does (although not in quite the same way), the Atma-Sphere MA-2 Mk. II's reproduce instrumental action—the way the image of that Steinway changes in response to the dynamic nuances of Rubinstein's playing (and the register he is playing in)—with sensational

realism. Additionally, and in this regard it is arguably superior to the VT-200, there is a single-ended-like “directness” to its sound, which has something to do with a class A-triode's way of focusing instrumental images and, in the Atma-Spheres' case, the absence of an output transformer.

The 6550-based VT-200 reproduces instrumental images with a slight haziness, forwardness, and softness of focus that actually works on behalf of the illusion of “action,” in the same way that a snapshot of a subject in motion taken with a 90 millimeter lens at, say, one-sixtieth of a second on 400 speed film preserves, via its slight blur, closeness, and grain, that very sense of a thing in motion. The Atma-Spheres' class A triodes do not blur instruments to this degree, and do not reproduce action in quite the same way. The slight haze, forwardness, and softness are lifted, as if the same snapshot was taken with a 60 millimeter lens at one-five-hundredth of a second on 50 speed film. Because of the triode tube's finer grain structure, instrumental colors are more saturated; backgrounds are dead quiet; instrumental images are less ephemeral, more robustly three-dimensional; and instrumental outlines are naturally soft but more cleanly cut. Although dynamic changes via the Atma-Spheres, are, as they should be, directly tied to the height, width, and volume of instrumental images, those images aren't typically pulled forward beyond the plane of the speaker (unless they were miked that way), as they are via the VT-200's pentodes. Rubinstein's piano stays back a bit (although never reduced in impact or size), more accurately reflecting its distance from the microphones (which in this case were close, elevated six-to-eight feet away, but not right on top of the sounding board). Because it tends to image from the plane of the speakers back, the Atma-Spheres' presentation may not be quite as immediate as that of the more free-wheeling VT-200, but unless you enjoy a consistently up-front sound or are used to sitting on top of instruments at concerts or clubs the Atma-Spheres will seem every bit as lifelike.

When it comes to soundstaging, the Atma-Spheres take second place to none. Their superb focus means that individual instruments in, say, string, wind, and brass choirs are finely imaged front-to-back, side-to-side, floor-to-ceiling. A big, various, exciting piece like Lutoslawski's Concerto for Orchestra (the Kletzki LP on London), which mixes large-scale antiphonal effects and grand percussive tuttis with exquisite wind-horn-or-string miniatures of astonishing harmonic subtlety, is reproduced with breathtaking scope, drive, clarity of inner line, and tonal beauty. The Atma-Spheres create wall-to-wall 'staging in the best sense—the sense in which the 'stage is not filled with tiny ranks of tiny players, reduced in height and robbed of action, but with staggered rows of life-sized musicians who actually seem to be playing their instruments instead of sitting by them. On Brian Wilson's Imagination [Warner Bros.], not only is every vocal line (and all ninety-six tracks of 'em are Brian) clearly reproduced in layered space, so are the potted-in ambient effects—the artificial echo, the duration and cut-off of the echo— associated with each line. Thus, when Wilson whoops it up on "Let Him Run Wild" in classic Beach Boys' harmony, you can actually hear his fifty-five-year-old voice go a bit flat, as he strains for the high hard one, and then hear the echo of that flattened note, just before the track is abruptly potted out. That's how focused the Atma-Spheres are.

The MA-2 Mk. IIs don't merely bring superior focus to the soundstage. Instrumental harmonics are also in better focus. The odd-order distortions which brighten and grain-up the sonic picture via pentodes (and much solid-state) are markedly reduced. For instance, the upper register harmonics of female vocals, particularly when the singer is singing forte, are typically exaggerated by pentode and solid-state amps. You hear this not only as a tinge of brightness or, in worst cases, sibilance, but also as a concomitant defocusing of the singer's voice: the stereo image suddenly flattens out and splays upward as if the singer is singing entirely from her head, rather than projecting forward in a soft-edged, expanding sphere, as if she is singing from chest, throat, and head. (See Figures 1 & 2).

As of this writing, the Atma-Spheres are the only high-powered monoblock tube amps (and the c-j ART the only preamp) I've heard that doesn't odd-order-distort a female voice in this way—that doesn't slightly flatten, coarsen, and splay image and action.

As long as we're talking about harmonics, let me say a word about the Atma-Sphere's tonal balance. That word is, gorgeous. This thing is as flattering to instruments as any amp I've heard, single-digit triodes not excepted.

Unlike the VT-200, the MA-2 Mk. IIs are rather to the darker side of dead-central neutral, in part because they are a bit more recessed in the midrange and upper midrange, and a bit fuller in the bass. In those bottom octaves, the MA-2s exceed their tube competition in

control, extension, and inner detail. These things have the definition and slam of transistor amps in the critical mid-to-low bass, with the tone color and bloom of triode tubes. In addition to being as powerfully authoritative as the VT-200 in the midbass, the Atma-Spheres simply allow you to hear more of what's going on down at the very bottom—and where it's going on. Timps, double-basses, electric bass, contrabassoon, tuba, piano have tremendous color, vitality, definition, and

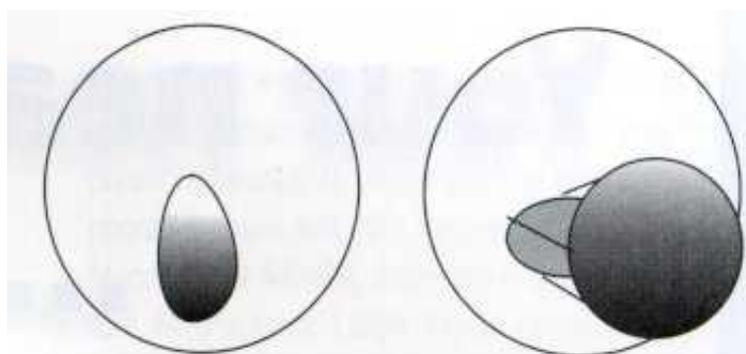


Figure 1.

Figure 2.

Figure 1. The way a typical stereo images a female voice in its upper registers.

Figure 2. The way a female voice sounds through the Atma-Sphere/ART.

focus— contrabasses, for example, bloom at the mid-to-back right of the stage, rather than being pulled forward closer to the right front of the stage as they are by the VT-200. The fact that an OTL can produce such high-quality low end is really kind of amazing.

In the midrange the Atma-Spheres are just beautiful sounding. Although not as bloomy or as effervescently detailed here as is the VT-200, neither are they as bright, forward, and uncritically forgiving. (These things will tell you, more accurately than the ARC, how well a recording was mixed and mastered, although like a flattering mirror they don't insist on the flaws.) Heifetz's Guarnerius, Primrose's Strad on the Benjamin Romantic Fantasy I mentioned in the ARC review, dance with richer colors and fuller bodies than they have via the ARC, if not quite the same astounding up-front immediacy and breathy detail. In the upper midrange, the Atma-Spheres are the very essence of triode liquidity. I've already mentioned the unusually realistic way they handle upper octave female vocals, and this holds true for strings, brasses, and winds, as well.

In the very top octaves, the Atma-Spheres are well nigh perfect. Although they have a slight glint of added energy in the lower treble, they do not soften the metal of cymbals, bells, triangles as the ARC does (ever so slightly). Moreover, they are every bit as extended on top as the remarkable VT-200, floating that bell-tree I mentioned in the ARC review on the same plush cushion of air.

So where are the rubs? Well, I've mentioned the slight glint of brightness in the lower treble (which can, depending on the recording, add a bit too much sparkle and sting to certain instruments or instrumental overtones), the slight darkness of the overall balance (which subtracts a bit of the bloom and immediacy the VT-200 is so good at recreating), the bit of recession in the midband (roughly a Row G presentation), and, well, that's about it, unless throwing the most expansive soundstage I've ever heard, filled with instruments of lifelike size, color, energy, and presence, counts against it. Of course, the MA-2s are very expensive, at nineteen grand the hand-made, hard-wired pair. And although I haven't experienced a problem with my little stable of speakers, theoretically they won't work with certain very low impedance loads (unlike the imperturbable ARC amp). However, if you have a loudspeaker that is 4-ohms or up and can afford to pay for the very best, the Atma-Sphere MA-2 Mk. IIs have your name written on either chassis. (And if you don't have nineteen grand, you can "settle" for the VT-200. Either way, you'll be one supremely happy music lover.)

In concluding, let me note that, unlike some fly-by-night OTL and S-E manufacturers of recent memory, Ralph Karsten's been in business, hand-building these beauties, for almost two decades. God willin' and the river don't rise, this is one specialty-audio manufacturer you can trust will still be there well into the next millennium. Bravississimo, Atma-Sphere!

Fi Specs Sheet Product Type

Tube, OTL monoblock amplifiers

Manufacturer

Atma-Sphere Music Systems

160 South Wheeler

St. Paul, MN 55105

Ph.: (651) 690-2246; Fax: (651) 699-1175

Net: www.atma-sphere.com

E-mail: Ralph@atma-sphere.com

Price: \$18,700

Warranty: Two years (one year on tubes)

Dimensions: 28" x 17" x 10" (L, W, H)

Weight: 103 lbs. (each chassis)

Number of years in business: 20

Number of dealers: 13

Features

Handcrafted, point-to-point wired; user-selectable input impedance; dual AC power cords; user-adjustable DC offset and bias (via built-in meter); XLR and RCA inputs; "star" grounding; forty 6AS7 output tubes, twelve 6SN7 driver tubes

Supplied Accessories

Shorting pins (for unbalanced operation), power cords

Manufacturer's Specifications

• Power Output: 220 watts per channel into 4 or 8 ohm load • Power Bandwidth: 2 Hz to 75 kHz -.5 dB, 1 Hz to 1 MHz -3 dB (1 watt, open loop) • Output Rise Time: 600 V/microsecond

Fi Component In A Nutshell

Pitch Range: Outstanding

Timbre: Outstanding to State-of-the-Art

Dynamics: Outstanding

Duration: Outstanding

Staging: State of the Art

Imaging: Outstanding

Clarity: Outstanding

Value For Dollar: Excellent

Overall Rating: Outstanding

Other Components I Should Listen To: Audio

Research VT-200

Musical Fare: Superb on every kind of music, at any dynamic level

Associated Equipment

Analog Front End: Clearaudio/Souther Reference record player, Clearaudio Gold Coil Accurate cartridge, c-j Premier 15 phono stage preamp, ARC PH-3SE phono stage preamp, Transparent Reference phono interconnect • Digital Front End: Goldmund Mimesis 36 CD transport, Audio Note DAC-4 Signature, Transparent Reference-XL digital interconnect • Preamp: conrad-johnson ART, ARC Reference One • Speakers: Magneplanar MG20R, Shun Mook Bella Voce Signature, Magneplanar 1.6QR, Martin-Logan reQuest • Speaker Cable: Transparent Reference XL, Nordost SPM • Interconnect: Transparent Reference XL, Nordost Quattro Fil

Accessories

Bybee conditioner, Townshend Sinks, Bright Star sandboxes, RPG Diffusor system, ASC tube traps, Shun Mook pucks

¹ By comparison, the ARC VT-200 has a (remarkable-for-pentode) power bandwidth of 12 to 120 kHz (-3 dB) and a slew speed of 25 volts per microsecond.

² The Circlotron can be freely described as a kind of single-ended/push-pull circuit: two separate amplifiers per channel (the single-ended parts) are joined together at output, with one amplifier handling the positive half of the wave cycle and the other the negative. Current loops back and forth between the two amplifiers (the push-pull part) in a self-referential, self-balancing circle (ergo, Circlotron)—in the Atma-Sphere MA- 2, without the mediation of an output transformer.

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