

# Atma-Sphere MA-1 Mk II.2 Amplifier

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For much of its history, High-End audio design was the preserve of the eccentric, the iconoclast, the freethinker. As the mainstream of the industry has become more corporate, few of the old individualist types are around except in the low-power single-ended triode circles. It's refreshing, then, to find that Atma-Sphere Music Systems' Ralph Karsten survives as a throwback. For some 20 years, Karsten has pursued one goal: creating powerful, reliable output transformer-less (OTL) tube amplifiers.<sup>1</sup> OTL amplifiers have earned a fearsome reputation for unreliability, even explosiveness, but Karsten's unique, patented, differential design is inherently electrically stable. The MA-1 MK II.2s (hereinafter the MA-1s) are the 150-watt little brother of the huge MA-2 monoblocks, upon which HP and JV bestowed Golden Ear Awards in Issue 121. Tube cultists will find the MA-1s shiny chrome chassis, bias meters, and long rows of output tubes things of iconic beauty. Like all Atma-Sphere amplifiers, this is a pure Class-A, zero feedback, all-triode design - but that is not all. Karsten describes his amps:

The [MA-1 consists of] a pair of SE triode class A amplifiers wired together in a differential bridge circuit. The amps are independent; there is a separate power supply for each triode output section..., making it fundamentally different from push-pull designs in that regard. Unlike either push-pull or SE, the amp has only a single stage of gain, since the OTL nature of the beast means that we don't have to boost the signal to an extremely high voltage and then step it down again in the transformer (a hidden advantage of OTLs: greater simplicity if done right). A benefit of the design of the output section is that its output impedance is dramatically lower than typically expected.

This unique design sounds in many ways different from any other tubed amplifier I know. If you believe that tubes make the sound slow, sweeter than live music, and gently rolled off in the top octave, the MA-1 will dash your preconceptions. The first impression, which never changes, is of tremendous transient accuracy. The Atma-Spheres start and stop with a singular sort of authority. There is essentially nothing in the signal path except the tubes (four drivers and 13 power tubes per monoblock), with no output transformer to slow things down; and the experience of transients through these amplifiers is unique. They do not sound "fast," as do some solid-state monsters; such a sound is usually indicative of a spotlight mid-treble. The Atma-Spheres react naturally and immediately to the steepest and most demanding transients, and this trait is dominant in shaping the amplifier's sound.

Even more surprising, the MA-1's transient excellence is apparent throughout the audible spectrum. Conventional wisdom has it that an OTL tube amp cannot provide controlled and well-defined bass, especially on a speaker like my Apogee Duetta Signatures. This was not the case. Bass torture-tests like the British 12" single Future Sound of London's "My Kingdom" [EBV/Virgin] and "The Battle from the *Gladiator* soundtrack [Decca 467-094-2] are tracked with the kind of definition and light-footed articulation normally heard in live music, when acoustic and amplified bass instruments present a naturally expansive blooming sound as the low-frequency wave moves through actual space. Scott LaFaro's bass solo in "Israel" on the Bill Evans Trio's *Explorations* [OJC 037] was captured exquisitely - I found myself holding my breath waiting for what would come next as the sound swelled into the room from deep in the soundstage. Who says that tube amps (and planar speakers) can't play power rock 'n' roll in a satisfying way? I slapped on Deep Purple's *Made in Japan* [Warner Bros. 2WS 2701], a souvenir of my head-banging teenage years, and the MA-1s brought it all home on the Apogees. Ian Gillian's banshee shriek, the frenzy of Ritchie Blackmore's Fender Stratocaster/Marshall amp assault, and the churning, thick textures of Jon Lord's overdriven

Hammond organ were all guts, forward motion, and fortitude.

The dynamic variations in music may be small or large. They may be sullen or gradual. The myriad varieties of dynamic contrast make unique demands on audio components. When paired with any reasonably suited speaker, the Atma-Spheres, in large part owing to their superb way with transients, accommodated them with offhanded ease. Dynamics in the top octaves were not even gently compressed, and there was an exceptionally high degree of dynamic continuousness throughout the spectrum.

The timbral balance of the Atma-Spheres was nearly without flaw. Throughout the midrange, there was a lucidity and a balanced completeness of harmonic content that I've seldom heard from electronics at any price. Tonal colors had the sort of complexity and completeness that allowed the best recordings to sound shockingly lifelike. The combination of transient accuracy and harmonic truthfulness when the violins and xylophone declaim the first allegro section of Copland's *Appalachian Spring* [Reference Recordings RR-93CD], for a split second, almost fooled me into looking around for the instruments. With the MBL 1551/1521 digital front end and the MA-1s, the massed strings on the Copland CD were reproduced with a fidelity I had not thought possible within the confines of conventional digital playback; the MA-1 precisely captured the character of the sound I heard at the recording sessions for this disc.<sup>2</sup> The individual instruments kept their distinctiveness within the acoustic space of their respective sections.

Bass is, as noted, exceptionally tight and defined, not unlike the best solid-state amps. The MA-1's bass does not have the sheer impact of a monster like the Plinius SA-250 Mk IV, though in comparison to any other tube amplifier of similar power rating, it is quite remarkable. On the Apogees, *Gladiator* and *The Thin Red Line* [RCA 63382-2] are stirring, but the sheer force of the Plinius or the Jeff Rowland Design Group 8T is not present. However, the Apogees's power hunger and the extraordinary demands of those CDs make exceptional demands on any amp. No 150-watter can be condemned for clipping confronted with such a torture test at levels of 95 dB and over. More sensitive speakers let the MA-1s show their solidarity and outstanding pitch definition at any bearable loudness level.

In the treble, the MA-1 is almost a revelation. The top octave seems to extend to infinity, and does so with a combination of delicacy, airiness, and refinement that set it in a class by itself. Mallet percussion instruments, such as the xylophone, glockenspiel, and triangle, can sound muffled or lost when electronics lacks extension and upper octave finesse. These instruments add spice and punctuation to Keith Johnson's splendid recording of *The Sorcerer's Apprentice* [Reference Recordings RR82-CD], and through the Atma-Spheres, they are perfectly defined in space, floating gently over the other instruments and the space the orchestra inhabits. The lower treble is where the Atma-Sphere exhibits its most readily detectable character trait. In the 2.5 to 4 kHz range, there is a gentle uplift not readily apparent on first hearing; it becomes apparent only with time and comparative listening. This presence-range bump adds a hint of glamour and excitement to the best recordings, a bit of life and energy to flatish-sounding ones.

Questions of transparency and detail retrieval are often incorrectly conflated into one inquiry. While a component cannot be transparent without excelling at the retrieval of low-level detail, electronics that focus on detail retrieval to the exclusion of balanced performance will never sound truthfully transparent. That requires fidelity, in the dictionary sense of the term, to the timbral characteristics and spatial context of the music. The Atma-Spheres' exceptional transient response and harmonic completeness also contribute to their exceptional sense of genuine timbral transparency.

While the MA-1 has great transparency of timbre, in terms of fidelity to the character and intensity of instruments and voices, there is a minor disjunction in terms of the amps'

transparency in the arena of physical space. It possesses a commendable degree of interstitial "blackness" between instruments, but this is not the same as pure quiet. There is a slight but pervasive darkness to the sound; this is not to be confused with a rolled-off treble or a want of dynamics in upper frequencies, neither of which is present. The space between and around instruments was apparent in a way that only the best electronics can manage, but it was not quite as energized as you'll find with, say, the latest generations of Audio Research amplifiers. This darkness emerges most audibly, and paradoxically, in silences and on extremely low-level passages, particularly on LP. There the Atma-Spheres impose a slightly absorptive quality upon the air around instruments, and is this trait that imparts the darkness. Curiously, this does not seem to have a negative effect on the amps' ability to delineate the size, shape, and volume of a recording venue. There they are superb, on nearly the same plane as the dizzyingly expensive (\$38,000) FM Acoustics Resolution Series 611 I once had in residence for a few weeks.

As for data retrieval, I have not heard the Atma-Spheres' superior, though that FM Acoustics 611 may be their equal. Little things that add a subliminal completeness to music, whose absence you don't notice till you hear them, constantly surprised me. On King Crimson's "Larks' Tongues in Aspic Part I" [*Larks' Tongues in Aspic*, Editions EGKC6], the sound of percussionist Jamie Muir's thumbs striking and releasing the tines of the kalimba are unmistakably differentiated from the clear, bell-like sound of the instrument, yet are part of a seamless whole.

Given the transient response, treble extension, and detail retrieval these amps possess, it should come as no surprise that their soundstaging is exceptional. In layered depth and the creation of a virtual soundfield, the Atma-Spheres are at the top of the class. Their ability to illuminate the deepest corners of the stage is especially striking.

I have struggled to come to grips with what is perhaps the most compelling aspect of this amplifier's performance - its ability, singular in my experience, to recreate the feel, the atmosphere, of recordings. The dreamworlds created for Julee Cruise by David Lynch's lyrics and Angelo Badalamenti's music on *Floating into the Night* [Warner Bros. 9 2589-1 (LP)] and *The Voice of Love* [9 45390-2 (CD)] are somehow more ethereal, yet more solid and real through Karsten's amplifiers. One can almost smell the perfume in the air during de Falla's "In the Generalife" from *Nights in the Gardens of Spain* [EMI ASD 545]. What is at work here is, I believe, "immediacy." While the term necessarily implies "speed" (in the sense of transient response), where the MA-1 metaphorically holds four aces, the ability to capture finely drawn shades of tonal and dynamic intensity and extremity is also required. These things the Atma-Spheres possess, and Karsten has balanced the required elements with a masterly touch. The result is an immediacy and engagement that is, at times, dazzling.

Ultimately, the MA-1s have a sound that has the most engaging and seductive midrange of a good SET amplifier, but without the usual tradeoffs of bass woolliness, top-octave softness, and general system incompatibility. With the MA-1s, one never senses that something is missing from the music. Their tonal and transient faithfulness, articulation, and broad bandwidth combine to create a liveness and truthfulness to the heart of music.

CPCC Top Gun power cords added background silence, clarified low-level detail, and cleaned up and tightened up every aspect of the sound. Slipping three Ultra DynaFeet under each amplifier for vibration isolation resulted in slightly better bass definition, but the Aurios Media Isolation Bearings had a more dramatic effect. Articulation and clarity were substantially increased from top to bottom, as all those tubes were now decoupled from environmental vibrations. Shun Mook's tube resonators added an extra degree of focus, since they address internally generated resonances.

It is worthwhile to contrast the MA-1 with another fine tube amplifier of similar power rating. The AudioValve Challenger 140, at \$8,000/pair and 140 wpc, is a natural point of comparison,

despite the difference in price. As fine as the AudioValves are, and I do not detract a word I wrote about them (Issue 120), the Atma-Spheres have a greater profundity. Perhaps the best way to think about the sonic differences between them is that the AudioValve is more Apollonian in character - a bit lighter and airier - while the Atma-Sphere is of the Dionysian persuasion - intensity and drama are more to the fore.

The most surprising thing about the MA-1 is that, despite its "exotic" OTL technology, it places few demands on the user and can find a home in almost any system. All it requires is an occasional bias check, a reasonably uniform load to drive - no plus-and-minus 60 percent nominal impedance, please - and a tolerance for the insane amount of heat they give off.<sup>3</sup> Even taking it on account its small deviations from the absolute, the MA-1 is one of those rare pieces of equipment that makes perfectly clear the difference between hearing and truly understanding musical experience. It is a singular achievement.

## PAUL BOLIN

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### MANUFACTURER INFORMATION

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### SPECS

Power rating: 150 watts/channel into 8 ohms/145 watts into 4 ohms

Power bandwidth: 2 Hz - 75 kHz within .5 dB

Frequency Response: (1 watt): 1 Hz - 200 kHz within .5 dB (-3dB @ 1 Mhz)

Phase Shift: less than 1 degree @ 20 kHz

Power supply storage: 600 Joules/chassis

Output section rise time: 600V/micro-second

Power consumption: 500 watts/chassis

Tube compliment: 14 6AS7s and 4 6SN7s per channel

Input impedance: 100k/ohms single-ended; 200k balanced

Output impedance; 1 ohm

Signal-to-noise ratio -95 dB

### ASSOCIATED EQUIPMENT

Sota Cosmos turntable; Graham 2.0 Pickup arm;  
Van den Hul Grasshopper GLA-IV, van den  
Hul/Shinon Red Boron and Transfiguration Spirit  
Phono cartridges; Graham Silver and Siltech PH-  
8 Gold SE phono interconnects; MBL 1511 and  
Metronome t-20 CD transports; MBL 1521 and  
Metronome C-20 DACs; CPCC Green Hornet and  
Kimber Illuminati Orchid Interconnects; Plinius  
M14, Jeff Rowland Cadence, and FM Acoustics  
Resolution Series 222 phono stages; Jeff  
Rowland Coherence II and Plinius M16 line  
Stages; Apogee Duetta Signature, Silverline  
Sonata and Coincident Speaker Technologies  
Super Eclipse loudspeakers; Nordost QuattroFil  
And Siltech SQ-80 G3 interconnects; Nordost  
SPM shotgun, Siltech LS-288 Gold, LS-120 G3  
And LS-80 G3 speaker cables; CPCC Model  
Eleven and Top Gun power cables and Top Gun  
Super Power block

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<sup>1</sup>Karsten's OTL designs share nothing with amplifiers based on Julius Futterman's circuitry.

<sup>2</sup>During the period I had the Atma-Spheres for review, I did not have access to an HCDC-equipped digital playback system.

<sup>3</sup>During the auditioning period, one power tube conked out and a driver tube became microphonic. These were the only problems over months of listening to a total of 36 tubes. Neither failure affected the amps' operability.

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