## Review of TAD' Micro Evolution One by Neil Garder, 01/2018 on:

## the absolute sound

## TAD ME1 Loudspeaker Little Marvel



The TAD ME1 (ME for Micro-Evolution) is the third stand-mounted compact loudspeaker to be rolled out by Japan's Technical Audio Devices in recent years. Led by the Reference Series CR1, a beryllium-driver three-way of ravishing sonic quality and physical beauty, the procession continued with the Evolution Series CE1—nearly as formidable in some aspects, but at a more approachable, though still heady price. I've reviewed both of these fine efforts (Issues 205 and 256, respectively), and now it's my good fortune to write about TAD's latest offering. The ME1 is the company's smallest Evolution Series compact to date, and its least expensive as well. Yet in some ways it could also be its most impressive.

The ME1 is a three-way, stand-mounted monitor that measures sixteen inches tall. It's a bass-reflex configuration that is in many respects the physical spitting image of the CE1, only better proportioned. The ME1 has been scaled down impeccably. Where the CE1 always seemed a little top-heavy and precariously perched on its floor stands, the ME1 represents a speaker of uncommon balance. Its much smaller footprint will allow it to work well within the tighter confines of more modest listening spaces.

Among the ME1's features is its star transducer, the redoubtable CST (Coherent Source Transducer)—the concentric driver that has defined TAD's Reference and Evolution efforts. In the ME1's case, TAD has engineered a new and smaller version of this design; the tweeter is an ultra-light casting of high-rigidity beryllium. (In contrast, the beryllium tweeter of the CR1 is formed using the more costly vapor-deposition process.) The tweeter is then concentrically inset in a new 3.5" magnesium midrange. Compare this with the CE1, which uses a 5.5" magnesium mid, and the CR1, which sports the expensive (but worth it) 6.5" pure beryllium midrange.

For the ME1 the CST was designed to cover the bandwidth from 420Hz to 60kHz. In addition, the directional characteristics of this coaxially configured midrange and tweeter have been matched to eliminate audio interference (i.e., frequency suckouts centering around the crossover region), on-axis beaminess, or that familiar cupped-hands honkiness that has plagued many concentric designs from the past. Thankfully the ME1 handily dodges these colorations. The woofer is a new 6" MACC (Diaphragm Multi-Layered Aramid Composite Cone), based on a diaphragm made from "Aramid fabric and non-woven materials that are separately formed then laminated for enhanced strength and low internal loss."

The robustly built cabinet is constructed with a birch-ply frame and bracing, plus MDF outer panels. Thick (4mm) steel plates are added to the left and right sides of the cabinet to further reduce unwanted resonances. TAD explained that the cabinet's internal space was analyzed to optimize placement of the damping and to reduce standing waves. At a glance the enclosure might appear to be a sealed-type but the ME1 is actually a bass-reflex design of a very stealthy order. Like the CE1 it fools the eye with its bi-directional ADS (Aero-Dynamic Slot Port), a clever feature that uses flared openings along each side hidden beneath the aforementioned panels. The ports vent to the outside through narrow vertical openings. This symmetrical layout reduces the effects of a port signature (such as chuffing) in addition to moderating standing waves within the enclosure.

The enclosure is beautifully appointed, with a deep lustrous finish and high-quality dual binding posts that cinch a cable easily and properly. The raked stands are very stable, sturdy, and rigid, and bolt to the underside of the ME1, complementing the speaker to a tee

The crossover network is no less carefully executed. The CST driver uses a polypropylene film capacitor and a non-inductive resistor, among other select parts. The 6.5" woofer filter uses a low-loss coil with superior magnetic properties, a low-loss electrolytic capacitor, a non-inductive wire-wound resistor, and an air-core coil in a configuration designed to lower resistance.

As I am well acquainted with the TAD brand it didn't surprise me that the sonic voice of the ME1 remained familiar—another way of saying that the ME1 was a speaker that just doesn't phone it in. Like its larger siblings, it retains a full-bodied, big-boned character that smoothly spans a wide frequency spectrum. Intensely dynamic, it performs with a power that is rare among smaller speakers. Tonally it is highly disciplined, well balanced, and predominately neutral—it won't play fast and loose with a recording. Great recordings are as musically satisfying as can be, while lackluster efforts are revealed, warts and all. Low-level timbral details are conveyed with naturalistic delicacy and realism.

Its midrange is quite neutral with a slightly warmer character, the treble a little less warm, resulting in an overall balance that I'd describe as intense but approachable. A company that produces both professional and consumer lines, TAD doesn't make shy, recessed, restrained, or laid-back products, and anyone who has spent time in a recording or mastering studio knows that studio monitors seldom sound laid-back. Rather, such monitors tend to be incisive listening tools—cool and critical to a fault. If anything, they tend to be neutral-to-forward in personality, which is what the ME1 turned out to be. Put another way, if you were seated in a symphony hall, the listening perspective would be closer than mid-orchestra, more like a Row C or D seat. Personally, I prefer this orientation; others may seek something a little more reserved.

Prior experience with TAD's CST led me to expect excellent imaging, and the ME1 did, indeed, produce near-ideal point-source coherence—a sensation of crystalline focus and image integrity. Images were individuated with the precision of a julienne slicer. The TAD also possessed a vast palette of tonal color that allowed the finest timbral distinctions to rise to the fore. During Glinka's "The Lark," for example, each note of the concert grand piano was portrayed with lush expressiveness, appearing to hang in the air an instant longer, while the resonance from the soundboard was fuller and more present. There was a starry twinkle to the piano's upper-octave arpeggios and more weight to bass chords. Dynamics were wide open, not piercing or aggressive, but incisive in the manner of a real concert grand.

I was transfixed by the way vocals nested unwaveringly within the venue's soundspace. Singers were replicated with nuance and sensitivity as the ME1 captured each vocal inflection, from deep chest sounds to airy falsetto. The speaker didn't favor male or female singers either. There was Frank Sinatra, his throaty baritone caressing the ear during "Angel Eyes" and "In the Wee Small Hours," or Jane Monheit's version of "A Case of You" with its rich, humid timbre. During Martin Zeller's *Cellist 6 Suites & Violoncello Solo Senza Bassocello* [MA Recordings], the cello was appropriately resonant, not bloated but full, and carefully balanced between the instrument's natural woody warmth and the aggressiveness of the bowing. The ME1 struck a fine balance between the light and dark of the cello personality, yet never lost sight of the instrument's timbre and physicality. Perhaps the most impressive aspect of the ME1's résumé was the ease with which it reproduced the gravity and scale of an orchestra. This might be a real eye-opener for compact-monitor fans, who may have thought their own fifteen-inch-tall two-ways were adequate for the task of bass reproduction. For them, the sheer oomph and drive of the TAD's power range might come as a shock.

As I listened to a couple of EMI-ASD chestnuts, Holst's *The Planets* (LSO/Previn) and Britten's *Four Sea Interludes* (LSO/Previn), the ME1 imparted an authority to the wind and brass sections and to the timpani and doublebasses that was exhilarating in its authenticity and ability to convey the acoustic of the hall. When the orchestra rose to a crescendo in the closing few bars of "Jupiter," I could feel the ominous welling up of low frequencies beneath my feet.

Similarly, when it comes to establishing and holding a rock beat, the ME1 really punched my dance card. Electric bass lines retained pitch control and linearity across the lower octaves. Drum kits with their assortment of drumhead tunings and "skin" sounds have rarely been more completely individuated. Port noise or overhang was never an issue even at higher levels. However, even the finest smaller monitors ultimately run low of bass firepower at some point. Thus sub-forty-cycle bass, while perceivable to a degree, became more of a challenge as the ME1's responsiveness and focus began to soften and waver slightly, especially at low volume levels.



The ME1 has very few obvious drawbacks, and its shortcomings are mostly attributable to the limits of its modest dimensions. However, its top-end still retains some residual dryness, and can't quite summon up the same velvety harmonics of the CR1 or the barnstorming macro-dynamics of the CE1. In spite of the stellar imaging I've written about, soundstage width and depth were only adequate in my smallish listening space. But I'd imagine better results could be had in larger rooms. Finally I can understand how some listeners might not cotton to the sharp specificity of a concentric driver. The precision with which it draws boundaries around images seems natural to me, but it may seem mechanical to others. (Experimenting with speaker positioning is very helpful in finding an ideal balance between too much focus and too little.)

A lot is expected from TAD loudspeakers. And having now reviewed three of its compacts I can put them in perspective with one another. The CR1 leads this pack, as its \$42k price would imply. Its uncompromising quality and performance remain a high-water mark for a stand-mounted loudspeaker. It has earned its flagship title. The CE1, in spite of its high-octane performance, is still the odd duck of this trio: It's a little awkward visually, cooler in character, and frankly a little pricey in its segment. The ME1, however, gets it just right, emulating much of what is so musically satisfying about the CR1, and doing so at a cost that is more than justified in a highly competitive category.

So satisfying is the ME1 that, in the right room at the right levels, you'll easily hear what all the hubbub over the CR1 was about. It can utterly destroy preconceptions about what a small speaker can do. Pound for pound, the ME1 is truly one of the greatest little loudspeakers to hit the audiophile market in years.