

Review of TAD' ME1, by Jeff Fritz, 11/2017, on :



TAD Micro Evolution One Loudspeakers



I sauntered into the display room of Technical Audio Devices Laboratories (aka TAD) at Munich's High End in May of this year, hoping to see something big and awesome from the venerable Japanese company -- maybe an update of the Reference One Mk.2, their flagship loudspeaker, or some new model of cutting-edge electronics built to impossibly precise standards. Instead, I saw the littlest speaker the company makes.

It wasn't the first time I'd seen it.

TAD began showing prototypes of the Micro Evolution One (ME-1) at the 2016 Consumer Electronics Show, so I was vaguely familiar with it. But the first time I saw it, no stand-mounted speaker of small dimensions was going to win a second glance from me. After all, the Music Vault -- my largish, custom-designed listening room -- is acoustically equipped to handle the sound output of such large speakers as Rockport Technologies' Arrakis and Magico's Q7. The ME-1 was no more than a blip on my hi-fi radar -- a small blip.



When I walked into TAD's room at High End 2017, I was a bit tired. I sat down more to take a break from walking the halls than to listen to whatever system was playing. But listen I did, at first casually, and it wasn't long before my ears perked up. Dang, that's pretty good. I found a better seat and listened more intently.

I ended up staying half an hour, marveling at the ME-1's sound -- punchy midbass, airy treble, and a midrange as pure as the driven snow.

That very night, from my hotel room on Munich's Leopoldstrasse -- where Doug Schneider and I have stayed ever since we began covering High End in Munich, many years ago -- I e-mailed Lionel Goodfield, public relations and marketing consultant at MoFi Distribution, TAD's US representative: "Hi Lionel, I am in Munich and just spent some time listening to the ME-1! Man what a great speaker. It was in a huge room and sounded terrific. Can you send a pair ASAP? Let me know when you can have these here. Thanks!" The ME-1 was the only product I saw or heard at High End that I just had to get in for review.

It took a bit of time, but Lionel came through, and the TADs made their way to my listening room. When they arrived, I thought, I can't even remember the last time I reviewed a stand-mounted speaker. My hopes were cautiously high.

Design

In the ME-1 (\$12,495 USD per pair), TAD has essentially shrunk the drivers and cabinets of their other speakers while sticking to their core philosophies. For example, while the ME-1 is tiny -- just 16.2"H x 9.9"W x 15.8"D -- it's still a three-way design, as is every TAD model. All else being equal, a three-way will handle more power and output more sound than a two-way.



Also like all other TAD speakers, the heart of the ME-1 is its Coherent Source Transducer (CST). In this driver a 1" beryllium-dome tweeter is nestled inside the magnesium cone of a 3.5" midrange driver. You may have heard this configuration also called a coaxial or coincident driver. Compared with the CSTs in other TAD speakers, this one itself has been miniaturized. For example, the CST used in the Compact Evolution One or CE-1 (\$19,995/pair) measures 5.5" in diameter, with a 1.375" tweeter at its center. The ME-1's tweeter is specified to reproduce highs up to 60kHz -- about twice as high as your better hard-dome designs. That beryllium tweeter in the center alone covers from 2.5kHz on up. The CST is crossed over to the 6.5" woofer at 420Hz. This woofer features TAD's Multi-layered Aramid Composite Cone (MACC), and vents to the outside world via what TAD calls a Bi-Directional Aero-Dynamic Slot (ADS). Essentially, the ME-1 (and the CE-1) has flared slots in its inner side panels -- you don't see them from the outside. The output from the vents is routed to the front and rear of the enclosure by the outer side panels -- which you do see, and which are offset from the cabinet proper for this purpose. TAD claims that this reduces port noise as well as internal standing waves.



The cabinet itself is made mostly of MDF and Baltic birch plywood, and is further reinforced by a 4mm steel plate, and this little chunk of speaker is as dense as that construction sounds. Although not much larger than, say, an Audioengine speaker, each ME-1 weighs a stout 44 pounds. On the rear panel are two sets of heavy-duty, five-way binding posts, connected by jumpers. The finish is first-rate, a high-gloss black with textured black side panels, with every detail attended to.

Its specifications indicate that the ME-1 will play down to 36Hz and can accept a maximum power input of 150W. Its sensitivity is specified at 85dB (2.83V/m), its nominal impedance at 4 ohms. The ST3 speaker stands (\$1795/pair) are optional but are made specifically for the ME-1. Bolted together, speaker and stand comprise a solid unit that doesn't easily tip over. Each stand weighs 35.3 pounds and places its speaker's bottom 25.7" above the floor -- optimal for this design.

Setup

The TAD ME-1s ended up 11' 10" apart, 5' from the front wall, 5' 3" from the sidewalls, 12' from my listening position, and toed in so that their tweeter axes crossed about a foot behind my head -- very typical positions for speakers in my room. The ME-1s were a cinch to set up, with none of the head-in-a-vise imaging problems that plague lesser designs.

My electronics included a vintage stereo amplifier, Coda Technologies' Model 11, which outputs 100Wpc in class-A. The Coda was driven by a Hegel Music Systems HD30 digital-to-analog converter with built-in volume control, so no separate preamp was needed.

Cables were Explorer-series models from Siltech. Music streamed from an Apple MacBook Pro laptop running Sierra 10.12.6, Roon, and Tidal, as well as an Oppo Digital BDP-103 universal BD player.

Listening

The TAD ME-1s had arrived right on the heels of the Dynaudio Contour 60, a full-range loudspeaker that I really cottoned to, with a honey of a tweeter and voicing that will make most people's music collections sound nonfatiguing, even inviting. As soon as I inserted the littlest TADs, it took all of about five seconds for me to hear some jarring differences between them and the Dynaudios. It was all about that TAD tweeter. Scads of detail were immediately revealed -- so much that I was caught a bit off guard. Was this little guy going to scream at me with brightness, or was there so little bass that all I would hear would be the top end?

Neither, it turned out. I got down to some serious listening.



The first thing I cued up was Neil Young's iconic Live at Massey Hall 1971 (16-bit/44.1kHz FLAC, Reprise/Tidal). From the beginning of track 1, "On the Way Home," the ME-1 revealed a ton of information that most speakers gloss over. For instance, a mere four seconds in, on the left side, a voice calls from far out in the audience. Through the ME-1s I could clearly hear this voice reverberating throughout Toronto's Massey Hall, accurately establishing in my room a convincing illusion of the size of this 2765-seat venue. It gave me an instant reference point for mapping that all-important sense of acoustic space captured by excellent live recordings. The applause begins just a couple seconds after that voice calls out, but the amplitude of the clapping doesn't peak until 15-17 seconds in. The TADs let me track this change with their smooth increase in output, mirroring the dynamic range of the recording absolutely perfectly. This told me a few things. First, the voice at the beginning emerged from a wash of audience noise with a degree of clarity that I don't think I'd heard before. The ME-1s, I'd come to conclude, were super revealing -- they could drill down deep into a recording to let me know what was just above the noise floor. Second, the TADs were imaging freaks. It seemed I could hear into the corners of Massey Hall, and sense the dimensions of that large space and where sounds were coming from within it, even if those sounds seemed to originate from beyond the outer edges of the speakers. Third, the ME-1 could effortlessly track dynamic swings, with no sense of strain or compression. In short, live recordings of music sounded a few degrees closer to live. And I now had a tool with which to explore sound in the most microscopic way.

Enamored of the sense of space I heard with that Neil Young album, I wanted to explore space even more -- even artificial space. I cued up Lana Del Rey's latest single, "White Mustang," from her Lust for Life (16/44.1 FLAC, Interscope/Tidal). I hit Play and my room was immediately awash in the atmospheric sounds of this recording. The smallish ME-1s could send a seamless blanket of sound to all corners of my Music Vault, making the soundscape drape over and into every crevice of the space. At 2:21 into "White Mustang," the whistling sounded crystal clear, reinforcing my suspicion that the TADs could unsort all elements of a recording and place each one perfectly within a vast soundfield. As I listened to the rest of the Del Rey album, I could easily identify the different effects added to her voice from track to track to create the unique sound -- dubbed "Hollywood sadcore" by critics -- that Del Rey fans have come to crave.

And so it went. I continued listening to music that changed the spatial characteristics of my listening room, giving me a new experience in sound each time. Next up was Enya -- a welcome pick-me-up after Del Rey -- and her classic "Orinoco Flow," from The Very Best of Enya (16/44.1 FLAC, Warner Music Group/Tidal). Yes, the TADs were able to cast their spell over this track, too, sending waves of music crashing into and washing over the listening room. What surprised me, though, was that the lowest notes in this song were reproduced with more sustained energy and dynamic propulsion than I expected. There was a firmer foundation to the music than I would have imagined the TAD capable of. Those little woofers could move some air! This led me to my next area of exploration, the midbass, and just how far the littlest TADs could dig into the bass -- or not.

I cued up the title track of Donald Fagen's Morph the Cat (24/96 AIFF, Reprise/HDtracks), cranked up the volume, and listened to the first 30 seconds about ten times. At first, the drums sounded pretty typical of what I'm used to hearing from small, stand-mounted speakers. Hmm. Nothing special seems to be happening. Then I realized that I hadn't really cranked up the volume, but only increased it a moderate amount, maybe unconsciously protecting the little TADs from the damage that my big, bad Coda Model 11 might do them. But I figured, Hey, these are here for review, and I've got to know what they're capable of.



I cranked up the volume to deliver peaks of well over 90dB and listened some more. Then I bumped it up yet again. Although I finally got to a volume that I dared not venture past, what I heard was pretty doggone awesome, especially considering the ME-1's size. At the loudest volumes the TADs were punching some weighty kick-drums into my room, and not losing an ounce of composure when voices and other sounds entered. It was kind of weird -- in this respect, the TADs were almost like active speakers with some kind of protection circuitry to automatically keep them from overloading. The ME-1s got plenty loud, then stopped getting louder, but up to that point their sound character never changed or, amazingly, even hinted that they were nearing their limits. I surmised that the ME-1 contains some pretty squared-away drivers -- perhaps when they finally overload they just blow. But I never got them to that point.

Should I write the almost obligatory paragraph telling you that the ME-1s can't be expected to reach the depths plumbed by the largest floorstanders, then give you an example of some deep-bass-heavy music that didn't quite measure up through the TADs? No, I don't think I will. Far more useful is to know that, in my room, the ME-1s were more than competent down to 40Hz, and had plenty of midbass punch in the critical octave of 40-80Hz. Are they good candidates for a fine subwoofer or two, from, say, JL Audio or Paradigm? You betcha. Give me an afternoon and a pair of JLA Fathom f212v2s, and I have no doubt I could weave together a sound that would rival anything at any cost. Yes, that's conjecture, but I've been around this stuff long enough to know that competent midbass from the main speakers is a necessity if you're going to seamlessly integrate their output with the output of subs; you can dial in a lower crossover frequency, to ease that job of integration. Still, lest you think a sub a necessity with the ME-1s, with most music it isn't. If, as I do, you believe that music lives in the midbass, the TAD ME-1s have you covered all on their own.

I didn't really have a good comparison speaker for the TAD ME-1. The Dynaudio Contour 60s (\$10,000/pair) are large floorstanders -- anyone who buys them probably won't be looking at the ME-1s. More useful, I think, is to tell you where the TADs fit in the grand scheme of speaker shopping:

From 40Hz up, the TAD ME-1 was world-class in every regard. I don't think you can outclass the top end of its bandwidth with anything at any price -- its treble was ultra-precise, yet floated into my ears with no artifacts and no hardness. At all. Not much more you can ask for.

The ME-1 was also able to dig as deep into music's "presence" range -- 4-6kHz -- as any other speaker I've heard in my room. The midrange is as clear as mountain water. Above 6kHz, the TAD invisibly transitioned, and never shouted at me in the process. The CST driver didn't sound like two separate drivers crossed over to each other; if you can hear any discontinuities between those conjoined drive-units, you have better ears than mine. The ME-1 produced more detailed sound than any soft-dome-tweetered speaker you're likely to hear, yet maintained its easy listenability at any volume I dared play it at. This was in stark contrast to the many hard-dome-tweetered speakers that sound offensive past a certain output level.

Last, though I'm sure the ME-1's port contributes some contour to the bass -- the speaker's sound is not lightweight. But the rise in the low end was not easily perceptible, and never during my listening gave the music a heavy, bogged-down feel. This indicates to me that the extended time TAD spent voicing the ME-1 was well worth the effort. They've gotten the tonal balance just right -- not easy to do with a small speaker.

Conclusion

The TAD ME-1 is one of the finest loudspeakers I've had in my room. From 40Hz up, it rivals anything else at any price. This jewel of a speaker -- the build quality is of the highest order -- will give you expertly voiced sound that belies the size of its cabinet, and will play at output levels that will do justice to your most raucous musical selections. The pair of them imaged like lasers, and could cast a soundstage as wide and as deep as my room allowed. Nor is this merely a great small-room speaker -- that description would be a huge disservice. It filled my Music Vault with full, rich, detailed sound that never fatigued me and never bored me.

As most of you know, I'm on the hunt for a new pair of speakers. I've got some other models lined up to listen to, but I can tell you that the only hesitation I have in buying the ME-1s right now is knowing that TAD's CE-1 -- the next model up from the ME-1 -- might be a touch better still. Regardless, the bar has been set high. These speakers just blew me away.

. . . Jeff Fritz