



REVIEW hardware

benz micro

ACE H cartridge

as reviewed by Adam Goldfine



An Analog Odyssey

As far as I'm concerned, next to the real thing, there is nothing better than fine analog. My first audiophile epiphany came at the hands (or arm) of a turntable when I was about 22 years old. I had wandered into Stereo Exchange—at the time it was located in a second floor walk up on the East side of Broadway in NYC—where I heard Tim Hardin singing "Reason to Believe"; written and recorded by the folk singer in 1965 and later made famous by Rod Stewart. It was vinyl played back on a turntable—don't ask me which one—through Dahlquist DQ 10s. Yes! That's it! It blew my mind. It was the first time I had ever heard true high end sound; something that I knew must exist but had never been able to find. (Kind of like Neo in the *Matrix*). From that point on I was hooked.

The subject of this review is the ACE H, a high output, moving coil phono cartridge hand-made by Benz Micro in Switzerland. It's one of very few cartridges made by hand at this price point. ACE stands for Advanced Cartridge Engineering and is said to use a cost effective version of the stylus and generator from the next in line and somewhat pricier Glider (\$795), mounted in an acrylic body. It's available in low, medium, and high output versions. The body of the high output version is a sexy blue. At 2.5mV, it works well with low gain MC or MM preamps. I fed it into the all tube Music Reference RM-4+ phono-preamp with 36dB of gain, which was plenty.

The ACE H comes nicely packaged in an acrylic case containing the cartridge, secured by two screws, to a molded insert. The case also includes minimal directions and specs, two sets of mounting bolts (one long, one short), one set of mounting nuts, a non-ferrous screwdriver, a bubble level and a stylus brush. (I would forgo using the stylus brush to clean your stylus and recommend using the Zerodust instead.) The package also includes a pair of small Teflon washers, to protect the surface of your head shell from the head of the mounting bolts, but fashion be damned, I mounted the cartridge without the washers preferring the more intimate metal-to-metal contact.

Thanks to threaded inserts on the cartridge body, it was fairly easy to set up, though the combination of the transparent blue acrylic body and tapered bottom made sighting a straight edge to set the tangency somewhat of a challenge (especially when you are getting old enough that your eyes start doing funny things.) Mounting it on the Pro-Ject 9 tonearm requires using the available heavy counterweight for cartridges over 8 grams. It's available from Music Direct for \$30.

The very brief set-up instructions—basically a laundry list of settings—revealed a break-in period of 40 hours. 40 hours! Breaking in a cartridge isn't like breaking in a CD player where you just turn everything else off, shove a disc in the tray, set it to repeat, and then come back a week later with the deed done. You *gotta* flip these vinyl suckers and listen to 'em to make sure the needle hasn't gone off the deep end, so to speak. Who has 40 hours for that? Apparently I do.

So after adjusting the tangency and azimuth and roughing in the VTA I spent the next few weeks flipping records, getting this thing up to speed. Fortunately it sounded promising right out of the box and on more than one occasion I was seduced into just sitting and listening to the very musical sounds it was producing from vinyl. In fact I didn't feel the need to hurry up this process as I was enjoying its sound so much. Once I was certain it was broken-in, I did a quick realignment of the geometry settling on a VTA that left the arm roughly parallel to the record's surface. (By the way, the fiddly VTA adjustment on the Pro-Ject 9 tone arm is enough to make you want to throw it across the room and only gross, not easily repeatable adjustments are possible for all but the most patient and dedicated among us. Fortunately the ACE H didn't seem very sensitive to VTA with tracking force making a far more noticeable and dramatic difference.)

The sound of a cartridge, perhaps more so than any other component, is highly dependent on the system in which it is heard. In the case of a cartridge, a poor tone arm choice can be disastrous while a good one can be magical. Matching the mass and compliance of the cartridge to the effective mass of the tone arm is a given and some quick calculations proved this would be a good fit. But beyond that, every tone arm adds its own sonic signature so it's really the arm/cartridge combination you are listening to, and of course to a lesser degree, everything else in your system.



The Pro-Ject 9 arm was mounted on a Music Hall MMF-7 turntable. Music Hall sells the arm and table together with the option of a Goldring Eroica H high output moving coil cartridge. This combo is about as plug and play as a high-end turntable can get. I imagine, given the reasonable price and excellent performance of the MMF-7, Pro-Ject, Goldring combination there are many audiophiles with this exact set-up making it a particularly good context in which to review the ACE H. This is exactly the combination I had been listening to, prior to the ACE H gracing my door.

The Sound and the Fury

The most immediately noticeable quality of the ACE H is its resolution. Its ability to dig detail out of the grooves left me smiling from ear to ear as I heard all sorts of new musical information and tonal shadings that added a new level of richness to familiar recordings. On "Long Distance Runaround" from Yes's *Fragile*, (LP,

Atlantic/Analogue Productions AAPP 7211) the electric bass guitar runs in the chorus along with the sustained plucks and slides had a seductive combination of fast and well defined growl along with harmonically balanced sustain. The acoustic space in which the drums were recorded was distinct within the mix and the opening and closing high hat eighth notes that precede the first verse could be heard much earlier in the mix than I was used to. Initially I felt the bass was a bit lightweight in absolute terms but some experimentation with tracking force seemed to cure that as well.

Surface noise through the ACE H was noticeably less intrusive. I don't know that the surface noise was any lower in absolute terms but pops and ticks seemed more subdued and localized at the speakers, off stage if you will and less distracting from the music. In fact, time after time, even with somewhat noisy records, I found myself so seduced by the sound that the record noise would literally disappear. It was only when I consciously shifted my attention back to the noise that I would notice it.

By the way, if you regularly listen to vinyl and you don't have a record cleaning machine, stop reading this article right now and go buy one! Even the least expensive one you can buy will make maintaining your collection so much easier and your records will be much quieter.

On "Oh Daddy" from Fleetwood Mac's *Rumours*, (LP, Warner Brothers BSK 3010) Christine McVie's vocals were remarkably natural and present with just a hint of grain to remind me I was listening to a recording. The attack on the strummed guitar seemed slightly emphasized with a bit more steel and less of the woody resonance than is natural, while piano cords had solid weight if not quite the full tonal richness and harmonic structure of the real thing.

The opening piano on "Aja" from Steely Dan's *Aja* (LP, ABC Records AA 1006) was weighty and solid. Cymbal rolls were highly resolved but became a bit splashy as the rolls turned into crashes, as was the closed high hat work during the closing refrain. The saxophone sounded natural if a bit forward as if there was perhaps a bit too much midrange energy. Donald Fagen's vocals were natural though slightly recessed with a bit of chestiness.

One of my favorite rock albums of all time is Adrian Belew's *Lone Rhino* (LP, Island Records IL 9751). His work is so unique and appealing that he stands out like a sore thumb in today's homogenized rock music world. He's a hell of a nice guy too as I was fortunate enough to work with him during his King Crimson days. This work of sonic gymnastics has layers of well-recorded acoustic and electronic instruments, sounds and who knows what. Through the ACE H the sound was slightly forward with tight if somewhat lightweight bass. It unraveled the multiple complex lines without ever becoming confused or overloaded.

Part of Analogue Productions 45 RPM Revival Series, *The Intimate Art Pepper* (LP, Analogue Productions APR 3014) is probably some of the finest vinyl money can buy. If you love vinyl, then 45 RPM is the way to go. It comes closer to the master tape than anything else you are likely to hear. And this album features some fine playing to boot. On "Tin Tin Deo" the cymbals can sound a little over cooked with the ping of the attack unnaturally emphasized and this was no exception. Compared to the real thing the saxophone was a bit reedy, not as brash and metallic as when you hear it live and the piano, though excellent overall, was a bit thin and clanky sounding emphasizing the attack over the resonance.

The real torture test of any system is classical music. Most systems fall far short of creating a convincingly recreating a real orchestra playing full tilt and this was no different. On Stravinsky's Firebird Suite with Erich Leinsdorf conducting the Los Angeles Philharmonic Orchestra (LP, Sheffield Lab LAB 24) the soundstage depth was foreshortened and somewhat less distinct the further back you went. "Infernal Dance of all Kastchei's Subjects" is an extremely dynamic passage with massive opening chords that can startle you out of your seat. The ACE H was no slouch here, maintaining good pitch definition with the orchestra going full tilt. Reproduction of the ambient space was good. This piece has some dramatic dynamic changes and the cartridge tracked them nicely, never losing its composure though the sound did tend to congeal a bit as the orchestra reached full crescendo. Horns had nice bite and a sense of acoustic space. It clearly conveyed the unique timbres of trumpets, trombones and tubas. Bass drum attacks were impactful if missing some of the fundamental wallop that gives the real thing its drama. (To be fair an orchestral bass drum can reach a maximum sound pressure level of 115 dB, 5 dB more than a pipe organ!)

Prokofiev's Romeo and Juliet, Erich Leinsdorf conducting the Los Angeles Philharmonic Orchestra, fared slightly worse. (LP, Sheffield Lab LAB 8) On "Dance of the Knights"

The bite and pluck of strings was not quite as resolved as I would have liked and there was some compression on the crescendo of snare rolls causing the individual attacks to meld into one. It also suffered a slight loss of composure on extreme dynamic swings but this is an extremely dynamic piece. The bass drum had nice skin tone with a slight emphasis of the overtones over the initial attack. On the staccato "Act II Finale" I could hear a slight loss of composure with some filling in of the space between notes as the orchestra

reached its crescendo..

Lest you think I'm being hard on the ACE H, my comments are in comparison to the real thing and are meant to convey how this cartridge, as every other cartridge and component for that matter, differs from that absolute reference. In comparison to other electronic transducers this cartridge it was easy to conclude that the ACE H is an excellent performer and on a par with much more expensive units. But then something happened that let me hear just how good the ACE H really is.

ACT II or Just Plain A.C.T.

Cue the drum roll and enter stage right, the Wilson Benesch A.C.T. loudspeakers. Halfway through the review I received a pair of these extraordinary loudspeakers. (A full review will follow in the coming months.) After some break in I hooked them up to the ACE H. Knowing that the Triangle Zays 222 speakers, which I had been listening to, could be forward and somewhat aggressive sounding I was curious to see what this cartridge sounded like through a true reference quality loudspeaker.

I'll just sum it up straight away. With the Benz Micro ACE H playing through the Wilson-Benesch A.C.T. loudspeakers the sound was seductively realistic and natural enough that you could begin to make meaningful comparisons with the real thing. What I mean by that is though it didn't sound exactly like the real thing, it is close enough to warrant comparative discussions. And at moments you would swear you were listening to the real thing. (For example, if you were comparing a talented up and coming golfer to Tiger Woods, they would be enough in the same league that comparisons would be sensible and worth making whereas comparing me to the champion would be flat out ridiculous.)

Through the A.C.T. loudspeakers the opening guitar on "Oh Daddy" had just the right mix of steel and resonance. Christine McVie's voice was natural and present with still some, though less grain. She was practically in the room. (And I don't mean a reproduced sounding voice centered between the loudspeakers, I mean a real voice, *practically* in the room.)

On "Aja", the opening piano, especially the left hand cords, had the transparency, weight, and convincing harmonic richness—all approaching the real thing. Cymbal rolls had the exact balance of attack and metallic sustain on everything from delicate taps to crashing rolls. I was amazed at the ACE H's ability to simultaneously resolve the two different acoustic spaces of Wayne Shorter's sax playing against Steve Gadd's explosive drum work. The splashiness of the high hat work was still there but was clearly the result of too close miking and though Donald Fagen's vocals were still a tad recessed, the chestiness had mostly disappeared.

On "Adidas in Heat" the bass was now deep and solid, the acoustic piano richly reverberant and the saxophone natural. The complex sonic gymnastics of this track were laid out on a solid, richly layered and precisely placed soundstage.

Holy Mother of Pearl! At the end of "Tin Tin Deo" you can hear Art Pepper say, "That was good I think." Yeah it was! Everything was just right. It was all I could do to think about the sound as opposed to the music. It just makes you sit back and listen. I will say that it recreated a piano playing in my listening room in a way that very few components can. 45 RPM is the way to go.

On the Firebird Suite, the bass drum had real wallop, great depth and impact. Each horn was clearly distinct in a seductive and natural way. There was great soundstage depth, unraveling everything happening from front



to back with fantastic resolution and no hint of etch or artificial detail. What was truly thrilling was the way it would get loud without losing composure, fully resolving each instrumental line even as the orchestra reached full crescendo. The difference between the delicate reediness of the oboe and the richer resonance of the bassoon was as distinct as when you are listening to the real thing. Part of what gives the bassoon its unique, plaintive sound is a particularly strong formant, a resonance of between 440 and 500 Hz over much of its playing range regardless of the fundamental tone being played. This characteristic had never been as evident as when listening to this combination.

On Romeo and Juliet the bite of the massed strings had a just right quality relative to the bowed resonance. I could still hear some compression during the louder drum rolls, but they didn't meld into one. Soundstaging was precise, crisp, and deep. At one point I could hear the buzzing string of a single bass within the orchestra and place it exactly within the soundstage! Now that's resolution. During the Act II Finale, the staccato attack was dramatic and tight though the cartridge was still a little overwhelmed by the final crescendo. Cranking the down force up by .2 grams seemed to help without any loss of dynamics.

This One Is Just Right

The ACE H is transparent and neutral with a smooth top end and plenty of detail. I never found it to be either warm and rich or cold and analytical. Its remarkably clean and uncolored tonality allow it to convey the subtle harmonic differences that make a trombone really sound like a trombone and not just a horn with a different tonal range than a trumpet or a tuba. It's harmonically nuanced, well balanced and right. In fact its ability to convey subtle harmonic differences was astonishing and contributed in large part to its ability to realistically portray even large orchestras, provided the rest of your system is up to the task.

The bass is fast, weighty and highly resolved retaining the same harmonic nuance that makes the mids and highs so seductive. There may be a bit of emphasis in the lower midrange resulting in a slight chestiness on some but not all male vocals, but I would have to hear the cartridge in a few different set ups to pin it on the ACE H. I suspect the bit of grain I heard (and only on female vocals, the rest of the range was remarkably grain free) is due to slight speed variations with the MMF table. Some experimentation with the Pro-Ject Speed Box Mk. II electronic speed control produced some promising results but you will have to wait for *that* review for a full report.

To be clear, there is nothing wrong with the MMF-7, but it does have speed variations. In fact it is just for those speed issues that electronic controllers such as VPI's Synchronous Drive System are made. (If you want to know more about why small speed variations cause graininess listen to this excellent NPR interview with Jamie Howarth from All Things Considered, February 19th, 2007. <http://www.npr.org/templates/story/story.php?storyId=7489316>.)

To sum it up, the Benz Micro ACE H is a very fine performer. In fact it performs so well that unless the rest of your system is up to the task, you will never know how good it is. I don't mean to say that you need the best electronics and speakers to appreciate this cartridge, but if you do, the ACE H is a great system mate that will not leave you wanting for more.

Can you do better? Of course. If not there would be no market for the Lyra Titans or Benz Micro's own MC-LP Ebony or any of the other ultra expensive cartridges in the world. But you get a lot, if not most of that level of performance for a lot less money and can use the savings to buy music or better speakers, or better yet, treat your room, so you can really hear how good the ACE H is.

This cartridge has real synergy with the MMF-7 table and Pro-Ject 9 arm. Even without the benefit of the reference quality A.C.T. loudspeakers, it was clear that there is not an area of performance in which it doesn't outclass the Goldring Eroica H in this set-up. That's saying a lot since the MMF-7 with the Eroica is quite good, but the ACE H takes the performance of the table and arm to a new level of excellence. But, as with any cartridge, pay close attention to set-up and especially to the down force. Too much down force and the sound becomes thick and *uninvolving*. Just right and it was remarkably quick and detailed opening up the soundstage, adding layers of depth and dramatically increased low-level resolution.

If I you are buying an MMF-7, I unconditionally recommend forgoing the optional Eroica cartridge and ordering the ACE H. Yes it costs more, and in a proper world, more should be better and in this case it is. This will raise the total cost by \$350, but in my opinion it's a no brainer and more than worth it. The difference is not subtle. And if you already own an MMF-7 with the Eroica or similarly priced cartridge, eventually it will need to be replaced. Benz Micro will give you \$100 trade in credit for your old cartridge. Unless you are planning to spend a whole lot more on analog, it's a good place to end up. That being said, I wonder how the Glider would sound in my rig. **Adam Goldfine**

Specifications:

- Output Voltage: 2.5mV
- Weight: 8.8 grams
- Compliance: 15
- Serial # of review unit: 27531
- Cost: \$550
- Warranty: 2 years

Distributor

Musical Surroundings

web address: www.musicalsurroundings.com
