

With the Cardas EM5813, in-ear headphones just got a lot better

The Audiophile auditions a new audiophile headphone model, and it sounds like no other!



The Cardas EM5813 in-ear headphones
(Credit: Steve Guttenberg/CNET)

Cardas Audio has been making audiophile cables since 1987, so I was taken aback when I heard George Cardas was working on a headphone model. That was four years ago, when Cardas was approached by a major in-ear headphone manufacturer to make cables for them, but when George started listening to their headphones he was less than thrilled with the sound. One thing led to another, he thought he could do better, and decided to make his own headphones.

Prototypes were built, he listened, he measured, tweaked the design, made more prototypes, listened and measured. Most dynamic in-ear headphones use Mylar drivers, but he didn't like any of the units on the market. He experimented with different materials and liked what he heard with superthin polyethylene naphthalate (PEN) diaphragms, and designed his own 11.5mm drivers. The EM5813 Ear Speakers (479) are finally ready, and they sound like they were designed to attract serious audiophiles.

The EM5813s flatter every genre of music, the midrange is simply wonderful, and vocals sound better, more realistic and natural than from any headphones near this price. There's an open, less stuck-inside-my-head

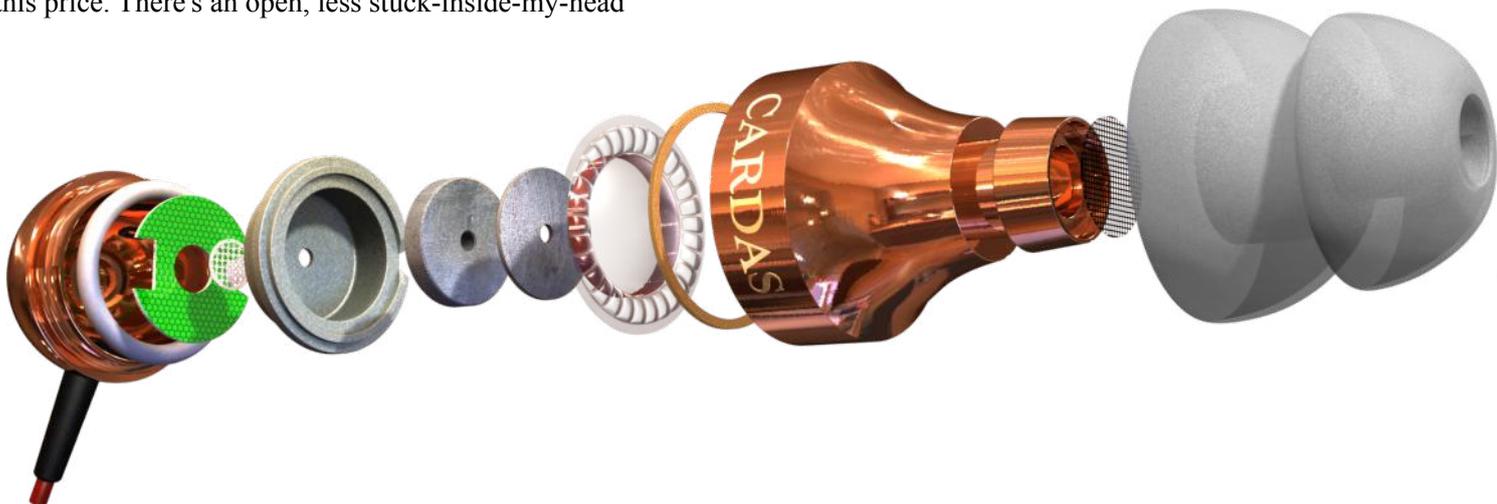
quality that's rare for this type of in-ear headphones. The EM5813s are incredibly detailed, but never to the point of making overcompressed recordings unpleasant to listen to.



I compared the EM5813 Ear Speakers with the \$400 Logitech UE 900 in-ears, which feature four balanced armature drivers (two bass drivers, one midrange, and one high-frequency driver), and the differences were very significant. First, the EM5813s' bass is more voluptuous, rich, detailed, and liquid, and drums sound more dynamically alive. Switching over to the UE 900, the sound thins out; it sounds smaller, less complete. These two pairs image really well, the sound is equally broad and spacious with both. The EM5813 Ear Speakers are less accurate overall, and probably have too much bass, but I definitely prefer them. Which is strange, because I usually go for a leaner, more accurate bass balance, but the music moved me more over the EM5813s. The UE 900s were more comfortable, mostly because the earpieces are much lighter, and the cable less bulky.

The EM5813 Ear Speakers come with two sets of tips, both the same size, white and blue, but the blue ones reduce bass output, and the headphones sound more accurate with the blue tips. I preferred the sound with the white tips.

With the EM5813s, the Ray Davies CD "The Kinks Choral Collection" was simply gorgeous. The massed vocals had more body and sounded more natural. The fullness isn't overly ripe or thick, it's pure and clear; you hear subtle differences between the the original and new Bob Dylan and Miles Davis SACD remasters with ease. Compared with my favorite in-ear model, the \$1,099 Jerry Harvey JH13 earphones, it was a closer contest: the EM5813s again had fleshier bass, but the JH13s' more transparent midrange and treble was evident in these comparisons. Still, the more I listened to the EM5813s, the more I loved them. There's a rare dimensionality to the sound that is addictive; other headphones sound anemic and spatially squashed once you get used to the EM5813s.



Up to this point I listened with my iPod Classic, but when I started using an external digital converter-headphone amplifier, the ADL X1 (review in the works), the EM5813s' bass definition firmed up and overall clarity improved. Dynamic impact, which was already spectacular with the iPod, was even better with the amplifier powering the EM5813s. Not that you need the ADL X1, but it's nice to see the EM5813s' sound potential extends beyond what's available over a phone or iPod. That's the mark of great headphones.

So the EM5813 Ear Speakers are perfect? Not quite. My biggest gripe is with the cable: it's too long, 60 inches, which is 12 inches longer than average, it's also thicker and heavier than any other cable, and it's not user-replaceable. As I move around the weight of the cable pulls on the earpieces, so I'm constantly having to reposition the cable to reduce the pull on the wires. I'm hoping Cardas will offer the EM5813s with a thinner, more flexible 48-inch cable; we'll see.

The sound is incredible, the four-year wait for the EM5813 Ear Speakers was worth it!

Topics: Reviews, iPod, High-End Audio, Sound

Tags: Cardas EM5813 review, Cardas cable, Cardas Audio, Cardas Audio EM5813 Ear Speakers, in-ear headphones

by Steve Guttenberg June 22, 2013 7:36 AM PDT



HEAD-FI SUMMER BUYING GUIDE

TYPE: Closed, universal-fit in-ear monitor

PRICE: € 479

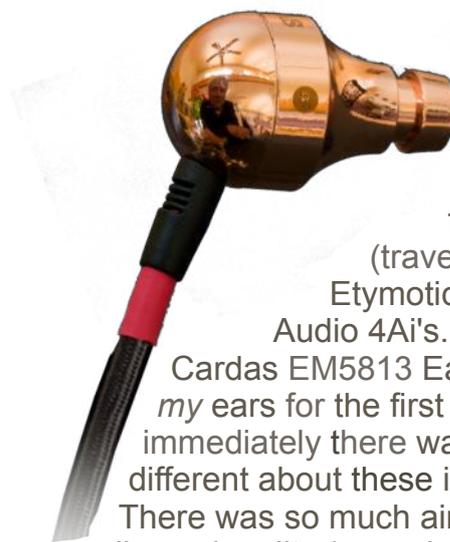
URL: www.cardas.com

Contributed by Michael Mercer

"The hearing system, musical chords and these Ear Speakers are reflections of the Golden Ratio. • "EM5813 mirrors the human cochlea and tympanic membrane. • - Cardas Audio

I wish I knew more about the Golden Ratio. All I know is that it's a pattern that naturally occurs in nature. Though a quick Googling would undoubtedly render more intel on the subject, I'd rather not pretend to know what I don't.

However, I do *have* a firm grasp on In Ear Monitor listening vs. on-ear and *over-ear*. I've experienced some incredible listening sessions with solidly engineered In Ear Monitors. My



current references are JH Audio's JH13 Pro Freqphase for long periods

(travel, etc.), and

Etymotic hf3's and Heir Audio 4Ai's.

When I slid the Cardas EM5813 Ear Speakers into my ears for the first time I could tell immediately there was something different about these in-ear monitors.

There was so much air, so much dimensionality (reproduction of spatial relationships between the instruments) that it didn't sound like an In Ear Monitor to me at all. The first night I heard them was after our first headphone panel at T.H.E Show Newport. When I saw George (Cardas) the next *day* I told him the best compliment I could pay his In Ear Monitors was that I fell asleep with them in *my ears!* That *never* happens to me, not *even* with *my* custom-fitted JH Audio's. Now, not knowing anything about the Golden Ratio, and without seeing the quote *above* (on the back of the packaging for the In Ear Monitors) I also told George that these In Ear Monitors basically sounded, I thought, like •an extension of *my* outer-ear. •

Now I know why he smiled from ear to ear. That was his design goal! Needless to say I believe he's achieved that impossible-sounding feat. The in-ears also come with Cardas's high end Clear Light Headphone Cable.

Now, we're still all individuals. I still recommend going out and trying these before you commit, but for 400 bucks, at this performance level, it's *easy* to recommend. I could wholeheartedly recommend *these* to anybody and feel confident about it. They're that musical. Or maybe it's better to say they don't necessarily have a sonic signature at all.

As long as the music *moves* you, hearing it through the EM5813 Cardas Ear Speakers should only move you more. They're like amplifiers for your ears. Pump up the music you love through these. I highly doubt you'll regret it. *They never* leave my bag.

-- by Michael Mercer