## **Headphones and Earphones**

### MartinLogan Mikros 90 On Ear Headphones

Written by Stephen Hornbrook Published on 25 February 2013



# Introduction to the MartinLogan Mikros 90 Headphones

Not wanting to be left out of the lucrative headphone market, MartinLogan has released the noise isolating Mikros 90. Instead of going the exotic, high-end route of designing a pair of electrostatic headphones tomimic their famous loudspeakers, MartinLogan has created a pair of lightweight, portable headphones called the Mikros 90 that at only \$299, fall directly into the low-priced high-end headphone sector.

With the Mikros 90, MartinLogan has taken a minimalistic approach to the design. They are primarily made of black leather with a few polished aluminum accents. The soft leather gives them a luxurious feel while adding some comfort. The aluminum allows for a solid construction without too much weight. Overall the design has an organic feel with the curved head band and egg-like ear pads

#### MARTINLOGAN MIKROS 90 HEADPHONES SPECIFICATIONS

o Design: On-Ear Headphones	
Transducer: 35mm Dynamic Driver	
o MFR: 6 Hz - 22 kHz	
Nominal Impedance: 26 Ohms	
o Sensitivity: 98dB (at 1kHz with 1m)	W Input)
o Max Input Power: 300mW	
Max Output: 112.83 dB SPL	
o Noise Isolation: 92.05% (-22dBSF Input, 30cm)	Lat 1kHz with 1mW
o Weight: 5.4 Ounces	
o Connector: Right Angle Gold-plate	d 1/8" Plug
o Cord: 4'	
Marophone Frequency Response:	180 Hz - 10 kHz
o Mcrophone Pickup Pattern: Omni [	Directional
o Mcrophone Sensitivity: -42dB	
o MSRP: \$299 USD	
o MartinLogan	
<ul> <li>SECRETS Tags: MarginLogan, Hear</li> </ul>	dphones, Audio

#### The MartinLogan Mikros 90 Headphones: Design, In Use, and Rating



Connecting the headphones to a source is a short and very thin cable with a right angle mini plug that feels sturdy and robust. For portable devices, it is hard to argue with the right angle plug. I did find the plastic housing to be slightly too large in diameter for my iPhone case. The iPhone case is a rubber material and was able to stretch just enough for it to fit, but hard plastic cases might have a bit of trouble. The cable features an Apple approved omnidirectional microphone, volume and track controls towark with your iPhone. It is always handy to have this control when your phone is hidden away in your pocket.



The Mikros 90 employ noise isolation to keep your interest focused on the music and not outside noises. There is no active noise cancelation at work here, just good 'd acoustic rejection of environment sounds. The Mikros 90 is an on-ear headphone that actually sits on top of your ears as opposed to around the entire ear. Since I often wear glasses, this technique puts a bit too much pressure on the top of my ears where my glasses sit and can be quite uncomfortable after about an hour of listening. They do, however, provide a fairly good amount of noise isolation through their closed back design. Coworkers will appreciate not being able to hear your music unlike a noisy open back headphone design. I was unable to hear the click of my keyboard as I typed away at work when listening to the Mikros 90, even at low volume levels. The trick is to let the headphones nestle intoyour ears and since the earpads rotate, it doesn't take much fiddling to find the sweet spot that isolates the most noise. Bass response and overall sound quality is by far the best when you have the Mikros positioned in the sweet spot. If they shift off your ears there was a noticeable drop in bass volume.



The Mikros 90 use a 35mm dynamic driver with a range from 6-22,000Hz to achieve a sound quality that I would call balanced and well-rounded. Listening to a lossless encoded version of Miles Davis' Kind of Blue, the bass line was quick and tight without overwhelming the rest of the band. High end treble like the shimmers of a cymbal sounded a bit rolled off. These are not bright sounding headphones and those seeking to hear the tiniest details of a recording may want to look elsewhere. However, if you want a full, never throaty midrange where Miles' trumpet fills the soundstage, then the Mikros 90 might fit your bill. The soundstage was contained within the aura inside my head, which I find typical of a closed back design. I have yet to hear a closed headphone with a wide open soundstage. Left to right soundstaging gave each instrument their proper place and sounded bigger than what you might expect from the compact size of the Mikros 90. Front to back depth was probably the Mikros 90's biggest weakness. There wasn't that extra dimensional depth given to each instrument that makes the sound of something like Coltrane's tenor sax feel alive and tangible.

The Mikros 90 captured Bon Iver's atmospheric sound with precision but, again, I wanted a bit more depth and detail to the sound. His voice was full and had great body without sounding like he was singing into a plastic bucket over my head.

Having 98dB sensitivity rating the Mikros were very easy to drive. My iPhone was able to pump out Cee Lo Green at volume levels much higher than I would ever listen too. The bass line was

always there to anchor the music but there were times where I could have used a little more lowend to the beat. These are certainly not bass heavy headphones, so fans of dance and R&B might have to look elsewhere. At the same time, they are not overly bright and fatiguing and would allow for extended, everyday listening.

MartinLogan took a seemingly unexpected route with its first pair of headphones. Instead of producing over the top, power hungry electrostatic headphones that attempt tomimic their speaker legacy, they have given us a delicate, light weight, easy to drive headphone. The Mikros 90 faces a lot of competition at the 200-400\$ price range, the PSB M4U comes tomind, but I believe they will find some happy owners with this design. The sound is balanced, full, and dynamic, playing at high levels with ease and never fatiguing. Comfort-wise, I got used to the on-ear design and it does make for a rather compact and lightweight design that makes for easy travel. However, wearer of glasses should give these a trial run since they could be prone to discomfort over an extended listening period. If you have dreamt of owning a pair of MartinLogan floor standing speakers but perhaps never had the space for them, I'd suggest getting the speakers and a smaller couch. The Mikros 90 are a nice design on their own but I am worried they could be a bit too far from the MartinLogan lineage to lure in current ML customers. For those new to the MartinLogan brand, the Mikros 90 are certainly worth checking out if you want something with a more sophisticated, neutral sound than the ever popular Beats by Dre

#### MartinLogan Mikros 90 Headphones Rating

