Medium-output moving-coil cartridge Made by: Charisma Audio, Canada Supplied by: Real Hi-Fi Ltd, UK Telephone: 01257 473175 Web: www.charismaaudio.com; www.realio.com



Charisma Audio MC-2

Canada's Charisma Audio builds on the success of its MC-1 cartridge with the addition of a new and more esoteric model to its range. Is its sound as colourful as it looks? Review: **Adam Smith** Lab: **Paul Miller**

ales of music on vinyl topped one million in 2014 – the first time since 1996 – and there are many who would argue that vinyl enthusiasts haven't enjoyed such a wide choice of hardware and software since the 1980s. When it comes to turntables, the market is not solely the preserve of the big manufacturers. There are plenty of smaller businesses fighting hard for a slice of the action and this is just as true when you look at the market for pick-up cartridges: surely one of audio's most challenging products.

One of the more recent arrivals here is Ontario's Charisma Audio, and its route to market has followed a somewhat different path to that of most of its rivals. It has now released its second product, the MC-2 cartridge retailing at £1150 and bigger brother to the original MC-1.

Charisma Audio was set up in 2000 by a group of audio enthusiasts who aimed to 'import premium quality stereo components with incredible performance but affordable prices into Canada'. The founder was Bernard Li, who had previously held the role of contributing editor to Audiotechnique magazine in Hong Kong. Li had been a vinyl enthusiast since the mid-1970s and had collected an impressively varied selection of LP replay equipment.

With names like Scheu
Analog, Well Tempered
and EMT within his
portfolio, Li then took
another step forward
by introducing his own
products. The first to carry the
Charisma Audio badge, in 2011,
was the Function loudspeaker
stand and this was followed by
a stylish metal record weight
called the Solid. So far, so fairly
conventional. However, I'll

RIGHT: This shot clearly shows
Charisma's rigid sapphire cantilever
emerging from the magnet's front yoke.
The cross-shaped 'moving coil' is also visible
on its compliant mount

wager eyebrows were raised at the release of Charisma Audio's third product, at the beginning of 2014, since it was none other than a moving-coil cartridge.

SAPPHIRE ROD CANTILEVER

This first design was the MC-1, retailing for £750 and offering a stylish machined body, a titanium alloy cantilever and a line contact stylus. It was well received and, in short order, the MC-2 followed. However, Li is clearly not a man to rest on his laurels, as the company's website is currently offering sneak previews of a prototype third model, the Reference One.

This was officially unveiled at the Toronto Audio and Video Entertainment Show in October '14 and it features an Amboyna Burl wooden body. The MC-2 moving-coil reviewed here is much closer to the MC-1 design. It still has the same machined aluminium body, giving it a relatively high overall mass of 12g but is finished in a pleasing shade of light turquoise blue (as distinct from the red of the MC-1). More importantly, the MC-1's

Charism Swoo titanium cantilever has made way for a sapphire rod on the MC-2 – although it is still tipped with the same super fine line contact nude diamond stylus.

The other notable difference is to be found in the MC generator, where 6N OCC copper wiring has been changed to single crystal high purity copper. Other than this, the two specifications are quite similar, although Charisma Audio specifies an increase of 5kHz in upper frequency extension for the MC-2, over the 20kHz limit of the MC-1.

Amusingly, the generator assembly in both models is the source of no small amount of speculation amongst vinyl fans. Many seem to have taken one glance at it and confidently announced that it's a Benz Micro construction. Bernard Li, however, is playing his cards close to his chest and not revealing his sources. Even Matthew Jameson of UK importer Real Hi-Fi, who has known Li for 15 years, is not privy to the whole story behind the cartridge's manufacturing heritage.

That said, however, he did manage to quash some of the internet rumours by confirming that no, it's not a Benz Micro, and no, it's not made in China!

Speaking directly to Li, he confirmed that he is very happy with the cartridge's design and it more than meets the

mystery supplier. His aim was to obtain an open and airy sound with good neutrality, and he cites the semi-enclosed body as a

strict criteria that he set his

strength here.

Having found some open-bodied designs too stark-sounding and enclosed models too dull, the halfway house approach has proved to be just the ticket. In addition, he also confirmed that his MCs are designed to offer a generous output, use high quality wiring and employ a well-damped suspension. This final criterion has resulted in the







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spacious, giving a

lovely sense of air'

use of a special rubber formulation that is claimed to be more flexible and less prone to ageing than standard polymers.

Regardless of who made it, the cartridge is very well constructed and finished, and comes in a neat wooden box with accessories in a small velvet

bag. These comprise hex-head M2.5 bolts for mounting plus a suitable allen key. The cartridge body features threaded holes and the depth of these is generous. I found no trouble mounting or aligning it – the chunky

body helping greatly in this respect.

GRIP AND INSIGHT

For evaluation purposes, I fitted the Charisma Audio MC-2 cartridge to an Audio Note Arm Two/II mounted on my Michell Gyro SE but also made use of an SME 309

tonearm on a Sony TTS-8000 turntable [see *HFN* Sept '14]. Both decks fed an Anatek MC1 phono preamplifier and then into a Naim Supernait amplifier and out through PMC Twenty.24 loudspeakers.

One of my regular cartridges for home use is an Audio-Technica AT-OC9MLII which

I appreciate greatly for its crisp and exuberant detail, and I soon realised that Charisma Audio's new baby is highly likely to appeal to fans of the OC9, too. It has a magnificent grip, insight and fabulous

sense of clarity that cuts right into the heart of recordings, but without ever 'spitting' or giving a sense of harshness.

Much as I love the OC9, it occasionally teeters on the edge of brashness unless carefully optimised. The MC-2, however, had no such issues, although it is worth LEFT: The vertical notch on the MC-2's front aids cueing (despite its curved profile) while the broad, flat top suface and threaded bolt holes promise a secure fit to all substantial tonearms

noting that it can be a little edgy until the recommended 50 hours of run-in time has elapsed. I spent a fairly solid weekend listening to it at first and Friday-night tracks revisited on Sunday afternoon were most definitely more fulsome and smoother.

With vertical tracking force set at the recommended 2g, the MC-2 proved to be a most capable performer. At all times it imparted a reassuring sense of being firmly locked into the groove and gave no hint that it was ever likely to mistrack or suffer from sibilance. Even some older recordings that were originally of less than high quality and had been well-used sounded more confident and focused when played along by the MC-2.

A STABLE FOCUS

At the top end, the line contact stylus tip makes its presence felt by simply not making itself obvious: *ie*, the treble was pure, clean and spacious, giving a lovely sense of air and depth to performances. Fortunately this did not seem to reflect any sense of artificial brightness but a feeling that the MC-2 was simply bringing to the fore what was *there*. Again, the underlying focus offered by the cartridge held images stable within the soundstage and offered a vivid window into the performance.

In midband and in spatiality terms, the MC-2 continued to impress. It set up a commendably vivid central image that projected beautifully out from the loudspeakers. Malia's performance on the track 'Claire Cadillac' from her *Convergence* LP with Boris Blank [Universal 374-593-2] was truly superb with each subtle vocal inflection easily distinguishable. The Charisma Audio cartridge offered an exceptional sense of realism and scale and, with my eyes shut, the notion of a truly in-the-room performance was very strong.

In terms of instrument definition, the MC-2 met all challenges with ease. It rendered every type of music with a lifelike and detailed perspective and typically ensured that very little was lost within the mix. Equally, everything that was there sat nicely defined within its own space, and never seemed to be vying for attention alongside other performers or instruments.

The upright bass and bass guitar that interplay superbly in Bert Kaempfert's 'A Swingin' Safari' from his *The Taste*Of Kaempfert box set [World Record →

BUILDING FROM SCRATCH

There are a surprising number of cartridge manufacturers who still build their own internal generator assemblies. In Europe, possibly the best known is Ortofon in Denmark, but further south we find Benz Micro in Switzerland and Clearaudio in Germany. Also in this part of Europe is van den Hul in The Netherlands, with A J van den Hul winding his cartridge coils by hand and finally tuning each cartridge individually. Moving East, Lyra creates its own designs under the watchful eye of Yoshinori Mishima, and Koetsu Japan still winds its own coils manually. More unusual are the offerings of Soundsmith in the USA. As the official re-manufacturer of Bang & Olufsen's replacement cartridges it has considerable experience in the construction of these moving micro cross designs, which are a variant of the moving-iron topology. The company also makes the remarkable Strain Gauge models such as the SG-200 [HFN May '10] based around a concept that dates back to the '60s.



LEFT: Another view of Charisma Audio's precisely aligned sapphire cantilever and exceptionally robust outer alloy body. The cartridge pins are gold-plated and well spaced to accommodate most tonearm leads/tags

Club SM190/195] were expertly intertwined by the MC-2 and it set the whole track bounding along with a joyful enthusiasm.

At the bass end, I found the Canadian newcomer to be eminently capable. As mentioned, it laps up rhythms and offers plenty of precise low end detail, all the time imparting just the right amount of warmth to the upper bass region. As a result, the sound offered by the MC-2 strikes a near perfect balance with its well-rounded bass never straying too far off course, sounding neither bloated nor over-blown.

At times, though, I felt a little more outright punch at the very bottom end might not have gone amiss. The drum strikes on Mazzy Star's 'In Your Kingdom' from Seasons Of Your Day [Rhymes of an Hour Records, Rhymes004] suffered from a slight lack of impact compared to the very best. A change of turntable from the Gyro SE to my Sony TTS-8000 did help out here, the Sony's direct-drive motor adding a frisson of extra bite.

A STRESS TEST

Ultimately, however, I never really found this to be a serious issue. Attempting a more strenuous test in the form of 'Waiting In Vain' from Bob Marley And The Wailers' Legend album [Island BMW1] saw the Charisma rise to the challenge superbly and pound out the track's fine bass line with aplomb. Again, that very last ounce of weight was a little reticent, but the sheer timing precision and the taut rhythms of the performance meant that this

never made its presence felt as a deficiency; the overall result was just too good to worry about.

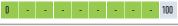
Again and again during my time with the MC-2 I found myself drawn to well-recorded music that was full of detail. The way in which the cartridge took these performances, spread them out into an expansive whole and presented them with precision and a sense of effortlessness was captivating.

The hands sweeping along the percussion chimes at the start of 'Giverny' from Chris Rea's On The Beach [Magnet Records WX 191] was nothing short of a masterclass in detail with its crisp insight and rock solid placement within the soundstage. Fortunately, as the track continued, things remained just as cohesive and controlled, with the MC-2's dependable gravitas and spatiality promising – and delivering – a splendid result. ©

HI-FI NEWS VERDICT

The Charisma Audio MC-2's bloodline may be something of an enigma, but to let this put you off securing an audition would be a grave mistake. This pick-up builds on the strengths of the MC-1 to offer an impressively well-rounded performance across all sorts of music. More importantly, while the asking price is hardly beer money, the MC-2's sound quality remains competitive with the best MCs at £1000.

Sound Quality: 85%



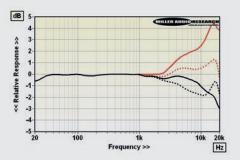
LAB REPORT

CHARISMA AUDIO MC-2

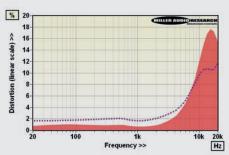
With a recommended tracking force range of 2.0g $\pm 0.1g$ and tested at 2.0g, this medium weight MC proved to be a more than adequate tracker, surmounting the 70 μ m groove pitch, clearing both channels at ± 15 dB (315Hz lateral cut, re. 11.2 μ m at 0.5% THD) and mistracking with equal symmetry at the top ± 18 dB level (5% THD). Indeed, and in all respects aside from its lateral and vertical frequency response, the MC-2's generator seems very symmetrical in design. It *looks* akin to a Benz Micro design but my measurements don't show a direct parallel with any of the Swiss brand's more recent models. So the MC-2 offers a very useable 635μ V output ± 100 significantly higher than its rated ± 100 with an acceptable ± 100 channel imbalance.

The fine line contact diamond is beautifully finished although the practical VTA (with parallel armtube) is closer to 26° than 20° just as the dynamic compliance is a little 'softer' at 17cu than Charisma's suggested 10µm/mN. A 9-10g effective mass tonearm puts the resonance at 8-9Hz, so I'd certainly recommend sticking with low to medium mass partners.

Unequalised distortion is a low 2.5% (1kHz/5cm/sec) while equalised THD varies from 0.6-20% lateral to 2-14% vertical [see Graph 2, below]. The lateral/vertical responses are reasonably symmetrical too but it's the L/R symmetry that's wayward here, the right channel markedly 'hotter' than the left at +3dB/10kHz versus -1dB/10kHz [see Graph 1, below]. Readers may view a comprehensive QC Suite test report for the Charisma Audio MC-2 pick-up by navigating to www.hifinews.co.uk and clicking on the red 'Download' button. PM



ABOVE: Frequency response curves (-8dB re. 5cm/ sec) lateral (L+R, solid) versus vertical (L-R, dashed). Black traces = left channel, red traces = right channel



ABOVE: Lateral (L+R, solid) and vertical (L-R, dashed) tracing and generator distortion (2nd-4th harmonics) vs. frequency from 20Hz-20kHz (-8dB re. 5cm/sec)

HI-FI NEWS SPECIFICATIONS

Generator type/weight	Moving coil / 12g
Recommended tracking force	1.9-2.1mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	635μV / 0.33dB
Compliance (vertical/lateral)	17cu / 19cu
Vertical tracking angle	26 degrees
L/R Tracking ability	75µm / 75µm
L/R Distortion (-8dB, 20Hz-20kHz)	1.1-23.5% / 0.61-17.5%
L/R Frequency resp. (20Hz-20kHz)	+0.6 to -2.9dB / -0.5 to +4.8dB
Stereo separation (1kHz / 20kHz)	28dB / 18dB