

hardware review

Dynavector XX-2A: MC with a magnetic personality

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Chris Frankland



Dynavector XX-2A moving coil cartridge

Dynavector has a strong pedigree and reputation for producing high-quality and well-respected cartridges and when I heard there was a brand new XX-2A model making its debut, I was straight on the phone to secure a sample.

Dynavector was founded in 1978 by Dr Noboru Tominari, who was previously a professor of mechanical engineering at Tokyo Metropolitan University. I remember it caused quite a stir when they became the first to introduce a high-output moving coil, the 10X, that you could use straight into a moving magnet input thanks to its use of ultra-fine wire, which allowed more coils to be wound on to the armature. And very good it was too. I also remember being mightily impressed by their Karat series of low output moving coils that featured gemstone cantilevers that were made from ruby and diamond. Indeed I used a Karat Diamond myself for quite a while in the early eighties.

Dynavector pride themselves on having continuously developed and improved the magnetic circuit in their cartridges. Two key elements of this are the flux damper, which was first introduced in the original XX1, and what they call 'softened magnetism'. The flux damper was introduced because Dynavector found there was interference between the vibration system (the moving parts) and the magnetic circuit. They discovered that even the smallest deviation in flux resulted in a change of magnetic force in the air gap and an increase in intermodulation distortion. The flux damper wraps a closing coil on the front yoke to stabilise the flux disturbance caused by the vibrations of the cantilever and coil.

Dynavector's 'softened magnetism' aims to counteract the large fluctuations in magnetic flux density that can be caused by today's high-powered magnets, which can affect sound quality. They attach a highly permeable material to the magnet to reduce magnetic resistance

and flux fluctuations while maintaining the magnetic force, which they say improves sound quality. The newest kid on the block for Dynavector is the DV XX-2A low output moving coil, which retails for £1,799. It continues alongside the XX-2 II and takes the company's quest for better magnetic circuits to the next level thanks to a brand new annealing process. The XX-2A is the first cartridge to include this.

Dynavector use pure iron for the magnetic circuit, which they say has high permeability and excellent stability. The downside is that the processing of the metal distorts its crystalline structure at an atomic level, leading to a loss of permeability. For the XX-2A, the iron has been



subjected to an annealing process, whereby the metal is heated and then cooled, which is said to rejuvenate its crystalline structure and drastically improve permeability and sound quality. In the XX-2A, Dynavector also use Alnico (aluminium, nickel and cobalt) magnets instead of the commonly used rare-earth samarium cobalt or neodymium magnets. Alnico magnets, they say, have lower magnetic resistance, which helps minimise fluctuations in magnetic force and in turn deliver a higher signal-to-noise ratio and improved transient response. It is interesting to note that guitar maker Fender also resisted change and stuck with their Alnico pickups, which they and many players preferred the sound of. Likewise many of the more traditional drive unit makers including Lowther and Tannoy use Alnico for its sonic qualities.

Other features of the new XX-2A include a 6mm solid boron cantilever with Pathfinder line contact stylus and a body machined from aluminium. Dynavector also use stainless steel bolts to secure the front and rear yokes of the magnetic circuit, torqued down by hand to ensure optimal performance. Output voltage is 0.28mV with a recommended load impedance of more than 30 Ohms. The UK importer suggested that 100 Ohms works well. Tracking force is recommended to be between 1.8 and 2.2g.

To hear what the XX-2A has to offer, I mounted it in a Pro-Ject Evo Premium arm on an X8 turntable, playing through an Avid Accent integrated amplifier and a pair of RussellK Red120 Se speakers. Mounting the XX-2A was a doddle thanks to the threaded holes in the body, meaning the bolts screw directly into it, obviating the need to faff about with nuts that you inevitably drop and spend ages searching the carpet for. Mind you, if you buy from a good retailer, they'll be doing that for you anyway.

Sound quality

I started by adjusting the Avid's phono stage in order to find the best load impedance in the system. I naturally started with the importer's recommended 100 Ohms. Played with that load impedance, I found performance was good but vocals seemed a little more recessive than when I loaded it with 30 Ohms. Piano also seemed more open and dynamic at this setting and drums



and cymbals were also sharper and punchier, while bass guitar lines seemed a little more tuneful. On balance, although the differences were subtle, I opted to stick with 30 Ohms, but you'd be well advised to experiment for yourself, as you may get different results in different systems and with different phono stages or transformers.

Before I settled down for some extended listening, I quickly tried different tracking forces and, as I often find, preferred the sound with the XX-2A tracking at the minimum of 1.8g. At that downforce, the sound was more open than at 2g, with cleaner vocals, snappier and more dynamic drum kit and percussion and more fluid, tuneful bass lines.

A favourite album of mine from jazz singer/songwriter/piano player Ben Sidran is *Bop City*. It is a superb recording that really helps sort the wheat from the chaff. On the track *It Didn't All Come True*, I was impressed straight away with how the XX-2A conveyed the relentless energy of the bass guitar line, which really drives the track along, while drums and percussion were clean and tight. Cymbals were conveyed both with good subtle detail but also great dynamics, conveying just how hard or delicately the stick was hitting the metal. Sidran's vocals were open and expressive, his piano sounded vibrant and full, and when his hands really flew over the keys, each note of fast-moving runs was easy to follow and savour.

Another stunningly recorded album with a bass line that will blow your socks off and give any system a workout is *Double Vision* from Bob James and the late, great sax legend David Sanborn. On this dynamic recording the XX-2A did not disappoint. Marcus Miller's seismic, rhythmic bass line was weighty, tight and tuneful, while Bob James's keyboards were nicely balanced in the mix and articulate. Sanborn is really at his best on this album and his power, phrasing and range came across well on the XX-2A, which managed to convey the sheer power of each note without harshness or glare. As if those musicians were not enough, you also have the legend that is Steve Gadd on drums and his dynamic, gutsy and skilful play was well captured, with a kick drum that really had physical impact. All in all, a great performance from the XX-2A on this.

For something simpler and totally acoustic, I was keen to hear what the XX-2A would make of the superb Rega recording *The Secret of Climbing* from Canadian singer/songwriter Stephen Fearing. Recorded in Rega founder Roy Gandy's living room with just two mics and no post-processing, it captures Fearing's vocals and custom Manzer Cowpoke guitar beautifully. I have heard him play live in very small venues on more than one occasion, so I know his sound and style well. On *Red Lights in the Rain*, the XX-2A certainly did justice to the recording and Fearing's vocals had the expressiveness I would hope for as well as a sense of his delightful phrasing and his great power. His guitar was open, articulate and I got a good insight into how each note was played and shaped the bloom and body resonances of that lovely guitar. The XX-2A managed to deliver the dynamics, power and impact when Fearing really pushed his voice and also the power when he played certain notes and chords louder on his guitar.

Dynavector XX-2A

I have always been a fan of Linda Ronstadt and one of my favourite albums of hers is *Hasten Down the Wind*. Although many Seventies recordings leave something to be desired, this one is superb. On the track *Lo Siento Mi Vida*, the XX-2A succeeded in conveying the emotion, range and sensuality of her superb vocals. There is breathtaking power in her voice, and when she really lets rip, the XX-2A did not falter. The guitars on the intro were also well differentiated, as was the backing vocal. The bass line was tight, with good weight and moved well. The XX-2A also managed not to lose the contributions of the pedal steel guitar, which can easily get lost in the mix.



Conclusion

The new Dynavector DV XX-2A turned in a strong performance on everything I threw its way from ZZ Top to Miles Davis. Its sound is detailed, dynamic, engaging and involves you with the music by providing great insights into what the musicians are playing and how. Vocals are natural, uncoloured and unrestrained with great emotion and range. Overall the sound of the XX-2A is pacy, tuneful and it is nimble enough to capture the rhythmic ebb and flow of the music. In other words, it keeps your foot tapping along nicely. The XX-2A at £1,799 excellent value for money and I can give it an enthusiastic recommendation if you're in the market for a cartridge at this price.

Specifications

Type: low output moving coil cartridge with flux damper

Body: aluminium

Cantilever: 6mm solid boron

Stylus: PF Line contact shape, stylus radius: 7 x 30 micron

Tracking pressure: 1.8 – 2.2g

Input load impedance: >30 Ohms

Output impedance: 6 Ohms

Nominal output voltage: 0.28mV (at 1KHz, 5cm/sec.)

Channel balance : 1.0 dB (at 1KHz)

Separation: 30dB (at 1KHz)



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