

hi-finews

GROUP TEST

Are you in the market to perk-up your pick-up? Our in-depth group test features seven very special moving-coil models at different rungs on the upgrading ladder. Credit cards on standby

CHOICE PICK-UPS £515-£1070

TESTED THIS MONTH

ZYX R-50 BLOOM	£515
AUDIO-TECHNICA AT33EV	£569
BENZ MICRO ACE SL	£595
HEED ZENE	£699
DYNAVECTOR KARAT 17D3	£749
ORTOFON CADENZA RED	£795
CLEARAUDIO TALISMANN V2 GOLD	£1070



Cutting-edge gear, cherry-picked by the *Hi-Fi News* editor



The pinnacle of sound quality within its peer group



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If you haven't been seduced already, it's probably just a matter of time. Moving-magnet cartridges can be very good, but somehow a decent moving-coil will always trump them: typically giving musicians a more tangible presence within the soundstage, and presenting fine detail in a more vibrant and natural way. Moving-magnets can start to sound matter of fact by comparison.

The good news is that there are now more moving-coils to choose from than before, and in real terms they can be better value for money too. Our group test here covers the price band in which, arguably, the performance-versus-price equation is most favourable. Many of these models feature materials and technologies that once came only with massive four-figure price tags.

SWITCHING COMPONENTS

For the listening sessions in this review, each of the seven cartridges was carefully installed in my SME Model 10 turntable. With the use of multiple M2 headshells, the camera-like precision of the SME arm made it possible to switch cartridges

quite quickly for comparison, while repeatably aiding the correct set-up for each one.

Also included in the system was the Acoustic Signature Tango 2 phono stage, which is a good all-round performer but also offers sensible loading adjustment if required. From here the signal went via Vertere Pulse interconnects to the line inputs of the stalwart Classé CAP-2100. Speakers were the long-serving Dali Ikon 6, bi-wired with Chord Odyssey speaker cables.

MUSIC TRACKS

Album selections for the review included the classic 1976 direct-cut *The King James Version* [Sheffield Lab LAB 3], a live recording, of course, which captures the horns and rhythm section of the Harry James big band in a supremely natural way. The leader's trumpet solo on the 'Corner Pocket' remains a good test of tracking ability, too.

Christine Collister's *Love* [Rega ENS 002] is a painstaking analogue studio recording from 2006 with some unusual and revealing instrumental sounds as well as demanding vocals. Though recorded

in 1978, *Dire Straits* [Vertigo 9102 021] and particularly 'Sultans Of Swing' still seems to test any product's ability to give the finer nuances that make the difference between a communicative, musical performance and a plodding ordinary one.

Coming up to date, a recent audiophile vinyl issue of *Folk Art* by Joe Lovano's Us Five [Pure Pleasure PPAN BST91528] is a truly demonstration-standard recording, and the long bonus track 'Jazz Free,' not on the original 2009 Blue Note CD issue, proved especially revealing, with its gamut of percussion sounds from the group's two drummers and the vibrant interaction of the whole group as they move into pure improvisation.

Finally, there was that all-time classical favourite, *Sir John Barbirolli Conducts English String Music* [EMI ASD 521], from the old Kingsway Hall, which tests a system's ability to recover space and atmosphere, as well as its ability to make a string orchestra sound truly glorious. ↻

REVIEWS BY STEVE HARRIS
LAB REPORTS BY PAUL MILLER

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ZYX R-50 Bloom-H (£515)

Established for around 20 years now, the ZYX brand is the brainchild of Hisayoshi Nakatsuka, who had previously developed the Alpha Genesis cartridge line for Monster Cable. The most exotic ZYX models feature diamond cantilevers, cryogenically-treated gold coils and gemstone bodies.

Yet even the entry-level R-50 Bloom still claims quite a few special features. ZYX says that its particular coil-winding arrangement gives a more symmetrical output and calls this 'Real Stereo'. The compliant pivot block or damper is made from a pure material free from any powder filler, which is said to eliminate a source of low-level noise.

ZYX says that a non-metallic body is essential to reduce eddy currents which could influence the generator but also argues that that the cartridge frame should be electrically connected to the headshell. The cartridge's low mass is intended to give wide tonearm compatibility. Finally, the grain orientation of the diamond, parallel with the sides of the cantilever, is said to reduce wear. The cantilever is of 'black' aluminium, presumably specially hardened.

The 'H' version has a specified output of 0.48mV, double that of the standard R-50 Bloom, and so it's no longer a 'low-output MC' [see Lab Report]. Alignment proved easy thanks to the flat front face, and tracking force was set a little over the prescribed 1.8g.

LIGHT AND OPEN

On first hearing, there was something refreshing about the sound of the ZYX R-50. It had a light and open quality, presenting a wide soundstage that was a little recessed, and yet with a sense of unforced treble detail within the image that did give quite a good feeling of depth perspective. It made most instruments sound smooth and easy on the ear. Bass, however, was not its strong point, seeming to lack both power and clarity.

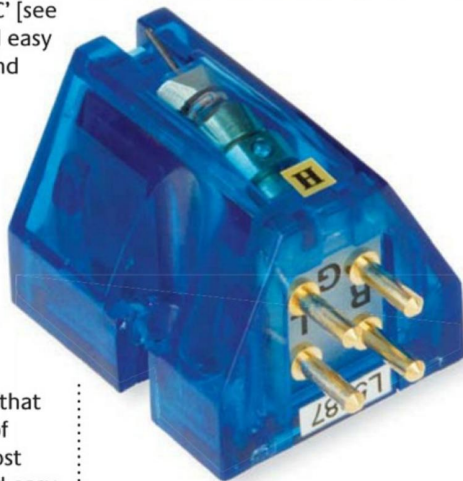
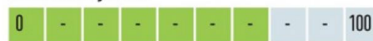
RIGHT: Open-sided lugs rather than threaded holes mean that the choice of mounting screws isn't critical

That light, smooth balance was apparent when the rhythm section kicked off the *King James Version* with 'Corner Pocket', giving a feeling of fluid movement in the music. Similarly, on Christine Collister's 'Time In A Bottle,' the ZYX made the guitar sound plangent and a little thin, rather than full-bodied, while Collister's vocal had a slightly lightened quality, rather than its full dark intensity.

With Dire Straits' 'Sultans Of Swing' the bass guitar was soft and indistinct, even sometimes lacking a clear sense of pitch, while the drums sounded insubstantial, especially compared with the Dynavector or Clearaudio. On 'Jazz Free', the drum sounds were well spread and convincing enough, but when Esperanza Spalding played fast double-bass notes low down, the result was a almost a blur.

With the Barbirolli LP, the opening chords didn't have an instant feeling of real space around the strings, but the ZYX still achieved a pleasing, sunny overall effect.

Sound Quality: 70%

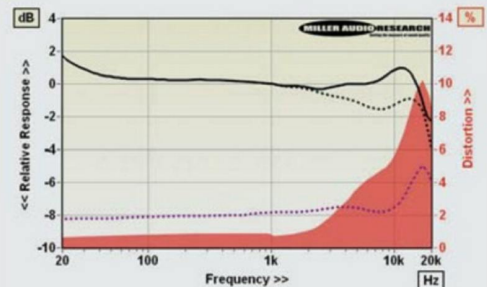


ABOVE: ZYX's body underside covers the generator assembly as much as possible, helping to keep out dust



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Distinguished by the letter 'H' stuck to its underside, this high output version of the R-50 has an even *higher* output than ZYX suggests (0.48mV) at 0.73mV/1kHz re. 5cm/sec. Furthermore the vertical compliance of our R-50 was rather lower than expected at just 6cu which, with the R-50's lightweight 5g plastic shell, means heavyweight tonearms are *de rigueur* unless the system resonant frequency is not to be pushed too high (18Hz in the SME V). Tracking is also affected, the R-50 cutting loose beyond 60µm (80µm at 1.8g is specified) while failing to traverse the +15dB/300Hz groove with total security. Nevertheless, its lateral response is very flat and extended, including a slight +1dB bass boost, and this plus its uniform distortion trend [see Graph] promises a dynamic central imagery. The vertical response is only slightly rolled-off but L/R distortion is less symmetrical. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	High output MC / 5.0g
Recommended tracking force	1.8-2.5mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	0.73mV / 0.06dB
Compliance (vertical/lateral)	6cu / 12cu
Vertical tracking angle	29 degrees
L/R Tracking ability	65µm / 50µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.95-15.5% / 0.75-10.2%
L/R Frequency resp. (20Hz-20kHz)	+1.5 to -2.2dB / +2.8 to -0.5dB
Stereo separation (1kHz / 20kHz)	28dB / 18dB

Audio-Technica AT33EV (£569)

If the AT33EV has a retro look about it, that's hardly surprising. It is an evolved version of the AT33ANV, launched in 2006 in anticipation of Audio-Technica's 45th anniversary as a celebratory update on the long-running AT33 series. This year, Audio-Technica has marked its 50th anniversary with a new flagship model, the AT50ANV, along with the lower-cost AT150ANV. However, the AT33EV remains in the range, being, as the UK distributor puts it, 'the continuation of an old favourite.'

So the AT33EV is still visibly descended from the original AT33E of 1982. This had a beryllium cantilever and a super-elliptical stylus, and was quickly followed by the AT33ML, fitted with a finer 'micro-line' tip. The AT33ANV introduced a new duralumin cantilever, but the EV uses a tapered version of this to give reduced moving mass, with a straightforward elliptical stylus.

In the generator, left and right coils are still arranged in Audio-Technica's characteristic 'V' formation, rigidly held in a resin moulding. Though it looks reassuringly big and solid, the AT33EV weighs just 6.9g.

The body is an aluminium casting, sandwiched by a hard synthetic resin top and bottom, to 'suppress parasitic resonance'. Set-up is straightforward with the long brass bolts supplied, and I found that the suggested optimum tracking force of 2g was just fine.

BRINGS GLAMOUR

It didn't take long to discover that the AT33EV had a strong character of its own. It gave a big, wide stereo stage that seemed both flattened and quite forward, giving a kind of full-frontal effect. Its tonal balance was subjectively mid-forward and glamourised – though it didn't become over-bright in the treble, as it always sounded smooth and controlled. But with a big band or orchestra, or complex rock, it could start to sound as if the stage

RIGHT: Longer than usual brass bolts are provided to pass through the mounting holes in the cartridge body

was overcrowded, almost tending towards a 'wall of sound' effect. Bass was firm and fairly well detailed if not particularly agile.

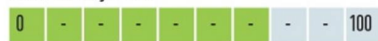
With the Harry James cut, the Audio-Technica certainly seemed to add its own shine to the brass, yet with this very three-dimensional recording, it did give some plausible depth in the soundstage.

On the opening of Christine Collister's 'Time In Bottle,' Gary Bennett's guitar almost glistened. Collister's vocal came well forward as if with some presence emphasis, and with a good feeling of focus and clear placement in the soundstage.

Turning to Dire Straits' 'Sultans Of Swing,' Knopfler's guitar rang out brightly, though the rhythm guitars were spread rather amorously across the soundstage. The rhythm didn't take off in the way it could with the Benz or Heed, for example.

With the Barbirolli recording, the Audio-Technica gave the strings a lustrous quality. With the double-basses sounding out well, there was a good sense of width and some depth in the acoustic.

Sound Quality: 65%

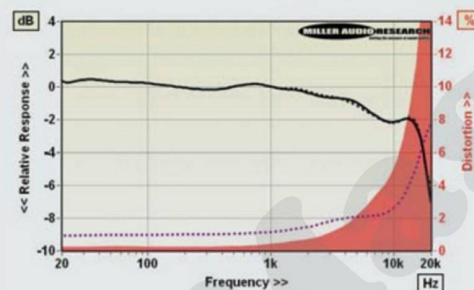


ABOVE: Chunky, straight sided body design allows A-T to provide a helpfully foolproof push-on stylus guard



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The excellent vertical/lateral symmetry of the AT33EV's response and distortion trends suggests its soundstaging will be broad and its 'character' very consistent from central vocals out to backing instruments at the periphery. When precisely aligned, distortion is almost entirely 2nd harmonic and just 2% (unequalised) at 1kHz/5cm/sec, a figure maintained below 10kHz (vertical) and 4kHz (lateral, equalised) at -8dB re. 5cm/sec. The response is not quite as bright as A-T suggests thanks to a shallow dip to -2dB/10kHz and -5dB/20kHz [see Graph] but its 0.3mV output and fine tracking to 70-80µm are bang on specification, as is the 0.4dB channel balance and idealised 23° VTA. Compliance is also symmetrical at 18cu in both planes but while this and the 6.9g body mass suggest medium mass tonearms, users should also consider the extra mass of those long cartridge bolts. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 6.9g
Recommended tracking force	1.8-2.2mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	0.3mV / 0.4dB
Compliance (vertical/lateral)	18cu / 18cu
Vertical tracking angle	23 degrees
L/R Tracking ability	80µm / 72µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.35-16.5% / 0.25-22%
L/R Frequency resp. (20Hz-20kHz)	+0.6 to -7.0dB / +0.4 to -3.8dB
Stereo separation (1kHz / 20kHz)	27dB / 21dB



Benz Micro ACE SL (£595)

Before founding his own cartridge brand in Switzerland, Ernst Benz had been a leading supplier of diamond styli, and had even acquired the American Empire company. With a background in aircraft instrumentation, he also created his own watch brand, which still thrives. He retired in 1994, selling the cartridge business to his long-term collaborator, Albert Lukaschek, who heads the Benz Micro operation today.

In Benz Micro's extensive range the base models are the low-output Gold MC and high-output Silver MC, both with basic elliptical styli mounted on aluminium cantilevers. Next step up from these is the ACE, which comes in high and medium-output versions as well as the low-output ACE SL reviewed here. For this model, the aluminium cartridge frame is enclosed by an acrylic body, but the generator with its tiny coils is exposed below.

As with the more expensive Glider, the ACE now falls into what Benz Micro calls its 'S' Class, and uses a proprietary 'pure iron cross coil' system, the coils claimed to be of lower mass than previous models and matched to the cantilever. The cantilever in this case is a 0.28mm-diameter boron rod, on which is mounted a 6x40µm line-contact nude diamond stylus.

Recommended tracking force is 1.7 to 2g, with an optimum of 1.7 to 1.8g; I ended up setting it at just under 2g.

TELLING DETAIL

The Benz didn't give an instant impression of dynamic fireworks or glittering detail, yet it did reveal inner dynamics and detail. It could bring out the subtleties of guitarists' finger and plectrum sounds or reveal the individual singers in backing vocals while instruments took their natural places within a realistic soundstage. It conveyed a performance as a whole, so that listening to the most familiar track you could be made newly aware of its emotional power.

RIGHT: Threaded screw holes ensure easy fixing while the sharp body lines and front slot aid alignment and cueing

On the Christine Collister album, the ACE sounded spacious and unhurried, allowing the singer unfettered expression. The voice was less forcefully emphasised than with, say, the Clearaudio, yet there was space around it, with the accompaniment tangibly supporting.

'Sultans Of Swing' had a fluid, relaxed swing. Compared with the Audio-Technica it had clarity and freedom from muddle. Knopfler's vocal was clear and fairly upfront, while his guitar had just the right bite and ring.

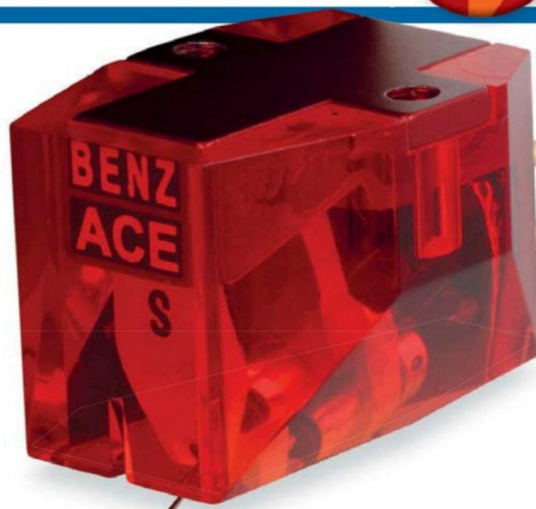
With 'Jazz Free,' there was a sense of musicians playing together with the lightning-fast responses of deep rapport. Bass drum sounds had 'oomph,' while Spalding's hurrying double-bass was well defined.

Elgar's *Introduction and Allegro* had a more introspective quality than with the Clearaudio or Dynavector. There was depth and distance in the recording venue, with a deep bass that told of the resonances in the building too.

Sound Quality: 80%

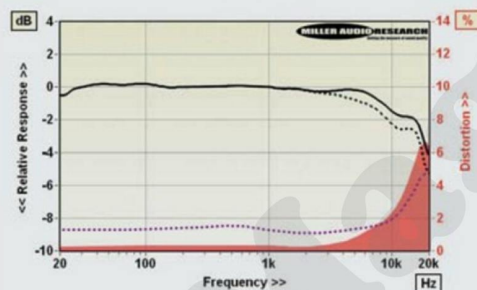


ABOVE: Benz Micro's familiar exposed generator has a boron rod cantilever and line contact stylus, as in the ACE SH



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As with all Benz MCs [HFN Aug '09, Nov '10 and Sept '11] the ACE is phase-inverting, so you may choose to ignore the colour-coding on its rear pins. Moreover, this SL version is clearly a low-output/low impedance version of the SH [HFN Sept '11] offering -15dB lower sensitivity (540µV vs. 3.2mV), superior stereo separation (35dB vs. 28dB at 1kHz), tighter channel balance (0.06dB vs. 0.3dB) and VTA (23 vs. 26°). The ideal tracking weight is slightly higher at 2g but the 25cu compliance and tracking performance (good to 70µm or +15dB/300Hz) is broadly unchanged. Unequalised distortion is low at 2.3% (re. 1kHz/5cm/sec) while the equalised trend [red infill, below] hovers at or below 1% through bass and midrange (re. -8dB). The lateral/vertical responses are far better matched in the SL, promising more consistent imaging across the soundstage. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 8.8g
Recommended tracking force	1.7-2.0mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	0.54mV / 0.06dB
Compliance (vertical/lateral)	25cu / 25cu
Vertical tracking angle	23 degrees
L/R Tracking ability	72µm / 68µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.42-6.2% / 0.32-6.2%
L/R Frequency resp. (20Hz-20kHz)	+0.5 to -4.2dB / +0.8 to -2.4dB
Stereo separation (1kHz / 20kHz)	35dB / 31dB



Heed Zene (£699)

Brothers Zsolt and Alpar Huszti started importing British hi-fi brands into Hungary in 1987, and in 1991 Zsolt launched his own StandART speaker. By this time, the two were working with Richard Hay of Ion Systems, who'd earlier been the creator of Nytech amplifiers and receivers. They began assembling Ion's Obelisk amplifier in Hungary, where it sold well.

When Ion ceased trading, the Hungarians formed Heed Audio (the name means 'bridge'), and continued 'in the spirit of Ion' with their own Heed Obelisk Pro. More amplifiers followed, along with the Orbit turntable power supply. Hay's son Robert became Heed's enthusiastic UK distributor, and more recently Richard has again taken an active part in the business.

Heed is very much an analogue-enthusied electronics company, but doesn't claim to be a specialist cartridge manufacturer, and consequently turned to an outside supplier for the Zene. You'll have already guessed its origin from seeing the pictures on these pages. Heed explains that the name Zene simply means 'music', and says that the cartridge is 'hand built to Heed's specification by Benz Micro in Switzerland.' That specification includes a solid boron cantilever and 'micro ridge type' stylus, and it seems that the Zene is essentially a variant on Benz's ACE model series.

Optimum tracking force is given as 1.7g; I ended up near to the specified maximum of 2g.

COHERENT SOUNDS

Unsurprisingly then, the Heed sound was closely comparable with that of the Benz Micro, with a real ability to portray a coherent musical performance. Listening to rock or jazz tracks, you could feel positively that a bassist and drummer were playing together as one. For me, the Heed could be just a little bright, an effect that I thought of as a slight increase in the hint

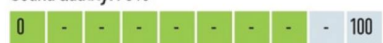
RIGHT: Mounting screws thread into the top of the metal chassis which is cloaked by the black acrylic body

of coarseness that the ACE displays compared with Benz Micro's more expensive models. But this was still a minor shortcoming in view of its general ability to put the music over.

On the Harry James direct-cut, the Heed conveyed a sense of swing and punch, although it had a more mid-forward sound than the Benz Micro Ace. Bass was supple, quick and authoritative, the drums clean and full of vigour. Saxes and brass were clearly positioned in a spacious soundstage. On 'Sultans Of Swing' the Heed produced a foot-tapping rendition, swinging along fast without sounding *too* hurried. Bass guitar could be heard to be playing notes rather than just producing great blobs of bottom end.

With Joe Lovano's 'Jazz Free' I felt that the upper mid showed a slightly glazed quality, but the Heed seemed to capture the spirit of the music, eg, a moment when the rapport between pianist and bassist gelled into a little episode of their own.

Sound Quality: 75%

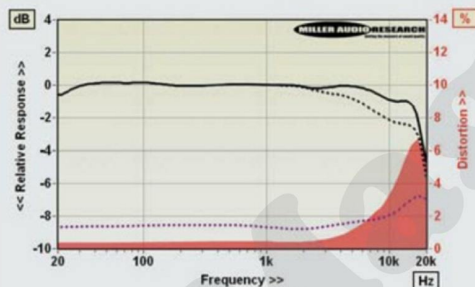


ABOVE: Viewed from below, the open base with exposed generator confirms the Zene's Benz Micro origins



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To all intents and purposes, the Heed Zene behaves like an OEM version of the Benz Micro ACE SL [p39]. Bodyweight, boron cantilever, line contact stylus, 25cu compliance, 23° VTA, 70µm tracking limit and the phase-inverted 550µV output are all comparable. Even the general 'shape' of the response and distortion profiles is the same [see Graph, below], right down to the slightly 'brighter' presence region of the right-hand channel! So let's look at the subtle variations. For starters, the Zene has a poorer 0.5dB channel balance and slightly weaker high frequency separation (27dB vs. 31dB) but its lateral response is just that bit stronger around 10kHz which may give it slightly more 'fizz' stage front. Heed suggests a conservative 1.7g downforce for the Zene but, as with other Benz Micro's, setting your arm up for 2.0g will typically give more secure results. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 8.8g
Recommended tracking force	1.7-2.0mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	0.55mV / 0.5dB
Compliance (vertical/lateral)	25cu / 25cu
Vertical tracking angle	23 degrees
L/R Tracking ability	76µm / 68µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.52-6.2% / 0.41-5.2%
L/R Frequency resp. (20Hz-20kHz)	+0.2 to -4.8dB / +0.8 to -2.4dB
Stereo separation (1kHz / 20kHz)	35dB / 27dB



Dynavector Karat 17D3 (£749)

A professor of engineering at the Tokyo State University, Dr Noburu Tominari started the Dynavector company in 1975. He developed the first successful high-output moving-coil cartridge, the ancestor of today's Dynavector 10X5 model.

Dr Tominari's next cartridge innovation came with the first of the Karat series in 1980. Most cartridges then, as now, used a diamond stylus mounted on a metal cantilever 5mm or more long, but in this design the cantilever was shortened to 2.5mm and made of solid diamond or ruby.

During the 1980s the Karat Diamond and Ruby gave way to the Karat 17D2, and then to the Karat 17D2 Mk II. By now the cantilever was of solid diamond, 0.25mm diameter and 1.7mm long, while the stylus was described as 'Micro Reach' with a minor or scanning radius of only 2µm.

Dynavector has continued with refinements to Dr Tominari's final flagship design, the XV-1, and to the Karat model. For the Karat 17D3, a new magnetic circuit gave a higher output of 0.3mV instead of 0.2mV. The stylus was now described as a small size micro-ridge, while the maximum playing weight increased from 2 to 2.2g.

That short cantilever and sloping body front mean you need to take care in setting up, and you must use the supplied mounting bolts, as these are M2.6 instead of the usual M2.5 size. They thread into blind holes with a depth of only 5mm, so length is critical too.

UP TO SPEED

Living up to its reputation, the Dynavector produced a sound that was powerful, clear and detailed. It gave an impression of vitality and speed, with sometimes breathtaking levels of detail and a sense of solid presence. Its bass performance was powerful, yet fast and clean, never sounding exaggerated.

However, on some recordings I felt that the tight teamwork between bass and drums was

RIGHT: Dynavector provides short mounting screws to fit into shallow blind threaded holes in the cartridge top

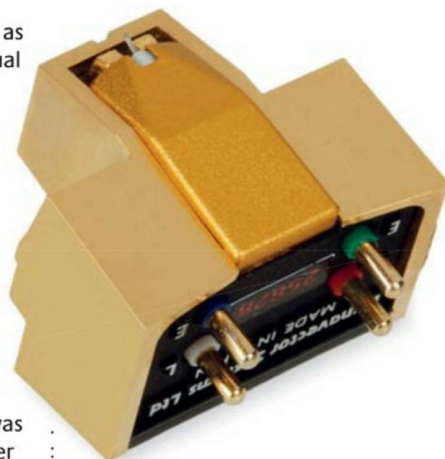
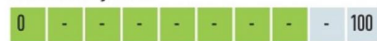
not as well brought out as it could be, and occasionally that detailed presentation could give an impression of busy-ness.

Starting with the *King James Version*, the Dynavector presented the big band with vibrant dynamics, though the leader's 'Corner Pocket' trumpet solo was perhaps too spitty.

On Christine Collister's 'Time In A Bottle,' the Dynavector revealed that fascinatingly inky quality in the singer's voice, and dealt well with the often-problematic cello-as-bass, making it sound well-founded and balanced. Playing 'Sultans Of Swing,' though, the Dynavector gave an impression that it had upped the tempo, with a hurrying urgency compared with the Benz or Heed, while Knopfler's vocal now sounded thrusting rather than relaxed.

But *Jazz Free* brought out the 17D3's most endearing aspects, with ear-tingling percussion sounds and genuinely reedy sax timbres. Esperanza Spalding's bass was intelligible even when scurrying along in the lowest register.

Sound Quality: 75%

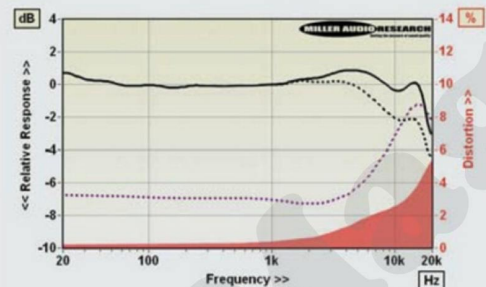


ABOVE: Unusual swept-back body shape and ultra-short cantilever tend to conspire against easy alignment



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There is much to commend this longstanding, innovative design with its ultra-short diamond cantilever and beautifully mounted stylus, but tracking performance is not high on the list. Even at 2.1g (recommended downforce is 2.0g), the 17D3 struggled to achieve the 65µm level and showed clear evidence of mistracking through the +12dB/300Hz test. The +15dB and +18dB bands were quite beyond its grasp, so heavily-modulated LPs will not be its forte. Distortion also increases with level – figures around 4.5% at 1kHz/5cm/sec (unequalised) are about twice the expected value. Sensitivity is only moderate, the 350µV output achieved with a below-average 0.85dB channel imbalance. Its lateral response proved strongest (promoting solid central imagery), the +0.9dB lift through the presence band adding a little extra 'pizzaz' [see Graph, below]. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 5.8g
Recommended tracking force	1.8-2.2mN (2.0mN)
Sensitivity/balance (re. 5cm/sec)	0.33mV / 0.85dB
Compliance (vertical/lateral)	15cu / 11cu
Vertical tracking angle	28 degrees
L/R Tracking ability	65µm / 60µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.38-8.5% / 0.27-5.4%
L/R Frequency resp. (20Hz-20kHz)	+0.8 to -3.1dB / +1.2 to -2.8dB
Stereo separation (1kHz / 20kHz)	25dB / 19dB



Ortofon Cadenza Red (£795)

Ortofon started building moving-coils in 1948, and made no other kind of cartridge until 1969, when its first moving-magnets appeared. So the Cadenza Red has a long pedigree.

That distinctive body shape first appeared in 1998, with Ortofon's 80th anniversary cartridge, the MC Jubilee. The same metal casting was used for the Kontrapunkt series from 2002, and again in the current Cadenza range launched in 2009. While the top model Cadenza Black has a boron cantilever and Shibata stylus like the MC Jubilee, the Bronze uses Ortofon's Replicant stylus. The Cadenza Blue effectively replaced the Kontrapunkt B, using a ruby cantilever and FG stylus.

Finally, the Cadenza Red comes with a more basic line-contact 8x40µm stylus on an aluminium cantilever. A new coil-winding technique has been used and the pole-pieces re-designed, while the body's central fill-in section is now metal, as well as the main shell.

When mounted, the cartridge pivots on the small ridge on its top, and the result is a rigid three-point fixing. Care has to be taken to keep the cartridge perfectly vertical, and as the bolts thread into blind holes, they need to be the right length. The brass ones supplied are fine for most arms, but need to be shortened for thinner headshells such as the Thorens 309 type. Once installed, the cartridge clearly worked well at the recommended 2.5g downforce.

CALM AND ORDERLY

From the start, the Cadenza Red dispensed an air of calm. It was tonally neutral, with a smooth and natural mid and treble. It wasn't over-bright, and those who seek a strong treble presence might find it a little 'polite'. But it wasn't lacking in life or musical communication.

Bass was accurate, extended and open-sounding, helping the cartridge's ability to offer realistic stereo perspectives. It never sounded forced or flurried, but in its

RIGHT: Ridged top creates a firm three-point mounting, but care must be taken to maintain correct azimuth

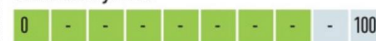
unstressed manner made you want to carry on listening.

Starting again with *The King James Version*, the Ortofon brought the band to life invitingly. It conveyed the sound of the acoustic double-bass more convincingly than the Clearaudio, for example. Brass had real attack, yet without sounding congested or hard. It sounded really lucid on James' 'Corner Pocket' trumpet solo.

It wasn't as if the other cartridges in the group had audibly mistracked here, but the Ortofon sailed through with a naturalness that came from its really secure tracking. 'Sultans Of Swing' became a well-balanced, truly rocking performance too. The bass was not heavy but seemed absolutely solid, while the drumming had urgency and precision.

With the *English String Music* disc the massed strings sounded energetic but never harsh. Although the bass was not over-prominent, it had a free-breathing quality which helped bring a fine sense of distance and depth in the soundstage.

Sound Quality: 80%

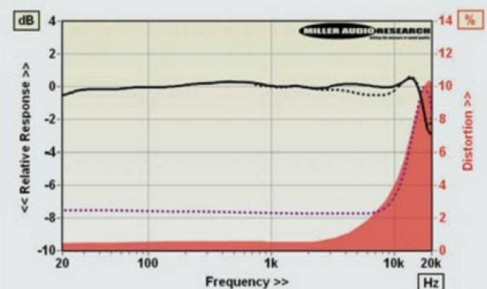


ABOVE: Recessed signal pins are a little fiddly to wire up but make the connections look neat once installed



HI-FI NEWS LAB REPORT

Affordable sibling of the Cadenza Blue [*HFN* Mar '10], this Red shares the same heavyweight (10.7g) body but is equipped with a 'cheaper' aluminium cantilever and line-contact diamond. It's fractionally less sensitive at 385µV but the symmetrical 15cu compliance is ideal for medium/heavy mass arms and, at a substantial 2.5g downforce it tracks like a trooper, surmounting pitches up to 75µm and securely navigating the +15dB/300Hz test groove. Unequalised distortion is just below 3% (re. 1kHz/5cm/sec) and equalised distortion below 2% through bass and midrange through lateral and vertical cuts (re. -8dB). Distortion increases sharply towards ~18kHz [see Graph] but this is a reflection of the Red's wide frequency bandwidth rather than its linearity. Its response shows the familiar 'Cadenza peak' at 12-14kHz, but less emphasised here at +0.5dB. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 10.7g
Recommended tracking force	2.2-2.7mN (2.5mN)
Sensitivity/balance (re. 5cm/sec)	385µV / 0.03dB
Compliance (vertical/lateral)	15cu / 15cu
Vertical tracking angle	26 degrees
L/R Tracking ability	75µm / 75µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.65-16.1% / 0.49-10.3%
L/R Frequency resp. (20Hz-20kHz)	+0.4 to -2.8dB / +0.5 to -2.7dB
Stereo separation (1kHz / 20kHz)	35dB / 22dB

Clearaudio Talismann V2 Gold (£1070)

Clearaudio is now a major turntable brand, but it was founder Peter Suchy's first high-end moving-coil cartridge that got the German company started in 1978. And although the Talismann V2 Gold is the most expensive cartridge in our group (and it went up in price from £950 as this test was under way!), it's only the second model up in Clearaudio's current MC range and described as 'the entry-level into the latest V2 generation'.

All V2 series cartridges have a boron cantilever fitted with Clearaudio's Micro HD (High Definition) line-contact stylus, use the proprietary eight-magnet generator system, and have the coils of 24k gold wire which give the Talismann V2 Gold its name.

While the Concerto V2 and Stradivari V2 have wood bodies, the da Vinci V2 is cased in anodised aluminium and the top of this line is the Titanium V2. All these exhibit Clearaudio's distinctive star-shaped top plate, as does the current Goldfinger flagship, where the body as well as the coils are made of gold.

By contrast, the Talismann Gold V2 is a simple brick shape. The body material is hand polished ebony wood with a small inset metal top plate. There is also an 'internal metal alloy resonance damping block'. With its long cantilever, the Talismann V2 is easy to align. I installed it with tracking force set to the recommended 2.8g.

DRAMATIC FORCE

Giving an immediate impression of strong dynamics, the Clearaudio seemed to take hold of the music in a fairly dramatic way, rather than just letting it flow out. It had a sound that seemed subjectively rather forward in the upper mid, but also with a heavy bass. Although it could be forceful it often did not appear particularly detailed. Background vocals, for example, could sometimes be heard as a somewhat opaque blend, rather than as clearly individual voices. Its

RIGHT: Nylon bolts are provided to prevent heavy-handed users stripping the wooden threads of mounting holes

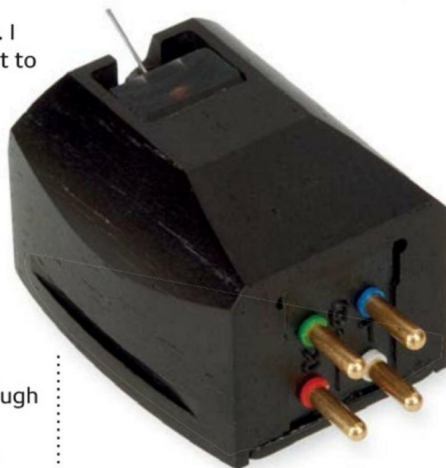
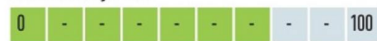
bass quality seemed over-full rather than well-controlled.

That bass character was evident on 'Corner Pocket,' which had the Harry James band striding out with a deliberate almost marching quality, rather than an easy swing. The brass sounded impressive but with rather a blaring quality.

In an upfront presentation of Christine Collister's *Love*, the guitar was full-bodied, but the cello-as-bass a little overpowering. Collister's vocals were strong and forthright, but the spatial separation between voice and accompaniment could have been clearer. Dire Straits' 'Sultans' also sounded powerful and upfront, yet it was neither hurried as with the Dynavector, nor relaxed like the Benz or Ortofon. Bass guitar sounded heavy, monotonous even.

From the opening chords, the Elgar *Introduction and Allegro* sounded 'imperious' rather than inviting. The massed violins had a hint of stridency, and the Clearaudio didn't quite capture the sense of a big acoustic space.

Sound Quality: 70%

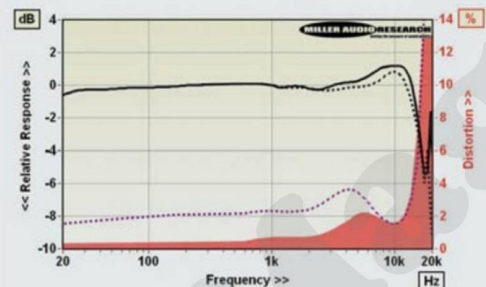


ABOVE: Not an optical illusion, the cantilever arm really is that long, extending beyond the cartridge front



HI-FI NEWS LAB REPORT

Along with the Ortofon Cadenza, this Clearaudio MC is another heavyweight MC with a low-ish 11-15cu compliance suited to medium/high effective mass tonearms. The recommended tracking force is also high at 2.8g but this delivers about the best groove security of our test this month, the Talismann just managing the 80µm track while handling the 300Hz groove right up to +15dB with aplomb. It only just loses its grip on the top +18dB band. A standard ±45° stereo sweep test gives a very smooth response, the MC slowly rolling off beyond 13kHz but, as we saw with the Aurum Beta [HFN Sep '11] there's what looks like a cantilever bending mode at the top of its frequency range (18-19kHz) revealed by the lateral/vertical sweeps. These are otherwise well matched [see black traces, below]. Distortion is also symmetrical across lateral/vertical cuts – a good sign. PM



ABOVE: Frequency response (black) vs. distortion (red); lateral (L+R, solid) and vertical (L-R, dashed)

Generator type/weight	Moving Coil / 10.8g
Recommended tracking force	2.6-3.0mN (2.8mN)
Sensitivity/balance (re. 5cm/sec)	680µV / 0.62dB
Compliance (vertical/lateral)	11cu / 15cu
Vertical tracking angle	30 degrees
L/R Tracking ability	>80µm / 75µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.55-8.5% / 0.50-9.5%
L/R Frequency resp. (20Hz-20kHz)	+1.1 to -8.7dB / +1.5 to -13.5dB
Stereo separation (1kHz / 20kHz)	25dB / 24dB



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GROUP TEST VERDICT

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Our test group quickly revealed the sheer diversity, in design approach *and* sound, to be found in this market today.

Audio-Technica's AT33EV hits you immediately with a big soundstage and quite good inner detail, yet it somehow puts a gloss of its own on the music, which can seem a little artificial and even become tiring. Although inspiring affection, the AT33EV is a less worthy contender than Audio-Technica's ATOC9 ML3, which costs only a little more.

Turning to the ZYX R-50 Bloom-H, this too has a signature sound that's intriguingly different from others in the group. Listening to the more upmarket ZYX R-1000 Airy 3 XH some years ago, it seemed to me that the 'Airy' name was well-chosen, and this lower-cost ZYX similarly gives an open, inviting stereo spread. This light and delicate presentation may suit many ears, although I felt it somehow lacked solidity and might not be the most satisfying in long-term listening.

LOSING OUT ON PRICING

At the other end of our price scale, the Clearaudio Talismann V2 Gold was also almost opposite to the ZYX in sonic terms. It gave a strong, assertive performance, though with bass that seemed over-full. Possibly it might have shown to greater advantage in a Clearaudio turntable system. But in our group context, it did not show the superiority that would have justified its (recently much increased) cost.

Heed's newly-launched Zene can give a thoroughly enjoyable and rhythmically persuasive musical performance. Sometimes it could appear slightly over-bright,

but offered vitality and realism. Inevitably, the badge-engineered Heed is more expensive than the Benz Micro upon which it is based, and this is its principal drawback.

Dynavektor's Karat 17D3 had an impressively dynamic and detailed sound, though it could occasionally sound just *busy* rather than musically integrated. Its bass was well-controlled and springy. After listening with it mounted normally, I tried the importer's recommendation, adding nylon washers to each bolt above and below the headshell, plus more as spacers at the front to give a three-point contact. Actually, due to the SME's headshell's cutaway underside, I had to use a stack of three washers for the 'outrigger'.

This did give a softened sound with stereo perspectives that were a little more laid-back and relaxed, if with a loss of punch in the bass, which will suit many systems.

OUR TWO WINNERS

Subtly different, perhaps, from the higher-output ACE SH reviewed last September, the Benz Micro ACE SL

is clearly another winner at its price point. Above all it has a cohesive, all-of-a-piece quality that seems to let the music speak for itself.

The other winner in this group is the Ortofon Cadenza Red. It has something approaching the outstanding bass quality of the pricier Cadenza Blue, and in this respect at least it outperforms the Benz Micro ACE, even though it is otherwise slightly restrained and finer-grained. It also offers much of the Cadenza Blue's detail and fine stereo imagery, yet with a slightly warmer, more rounded character.

The Cadenza Red gives an initial impression of correct balance and proportion. And this first impression, for once, is well borne out in the longer-term listening satisfaction which this model should provide. ☺

'The Benz Micro ACE SL is clearly another winner at its price point'



ABOVE: (Clockwise from top) the Ortofon Cadenza Red and Benz Micro ACE SH offer outstanding performance while the Dynavektor Karat 17D3 is uniquely exciting

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