

The van den Hul Condor XCM and Frog Gold Moving Coil Cartridges

by Jason Kennedy

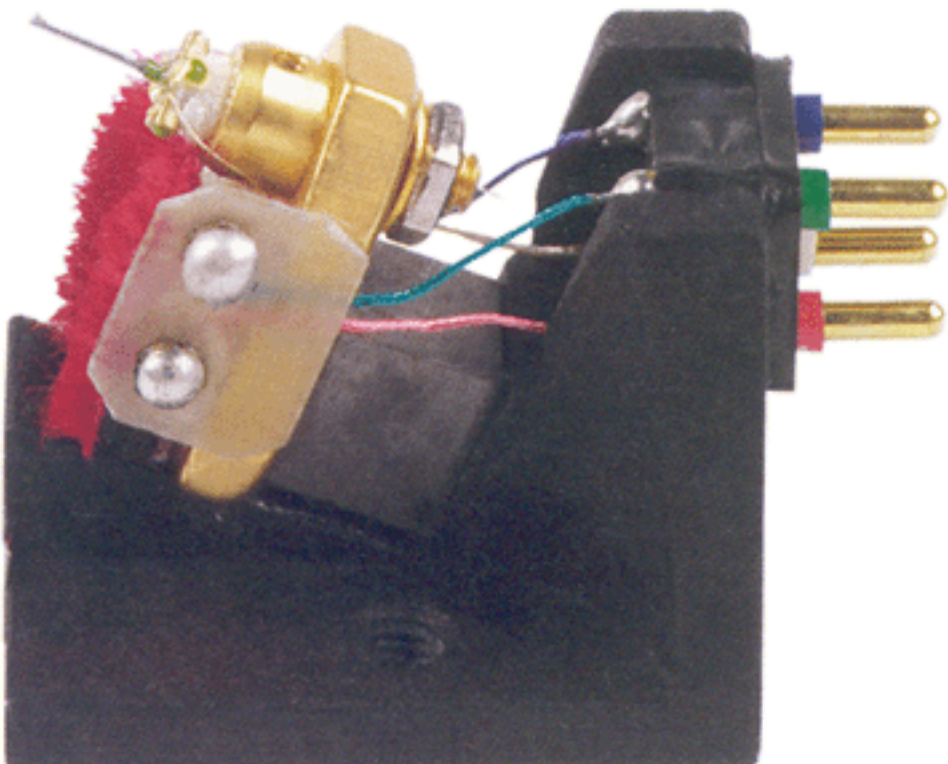
When you buy a loudspeaker you get to choose the veneer. When you buy an amplifier, if you are lucky you sometimes get a choice of black or silver for the front panel. But for most other audio components you get what the company makes. When you buy a van den Hul cartridge on the other hand, you get what amounts to a menu of choices that would leave most audiophiles scratching their beards. AJ van den Hul makes each cartridge by hand in a small room in his farmhouse in northern Holland. Each one is individual and can be tailor made to suit your musical tastes and analogue hardware. To the best of my knowledge he is the only cartridge maker in the world offering such a service. What's more there is no premium, all you have to do is make your selection from a series of choices, but the choices are perhaps not as obvious as you might hope. For instance do you want silver or gold coil wire? Plastic or metal cartridge body? If that's a problem, and for most of us it will be, you can let AJ work it out for you, just tell him the tonearm you use, the input impedance of your phono-stage and your taste in music and he can equate that to a cartridge that will be a perfect fit with both your record player and your records.

In simple terms he uses variation in compliance to match a cartridge to a specific tonearm - the lower the mass of the arm the higher the compliance being a general rule of thumb. But given that, all other things being equal, higher compliance means lower tracking force and thus lower groove wear, so he errs toward the softer side with suspensions, if the arm is up to the job. Output level depends on the amount of coil turns on vdH's cross shaped coil formers. AJ can add or remove coils to alter the output level to suit a given phono-stage or personal preference. While higher outputs can give a more robust sound a good phono-stage seems to get better results, overall, with lower outputs, so this was my particular choice. Then again we're talking about the half a milli-volt region, not silly low such as the point one you get from Audio Tekne and Audio Note MCs... By varying the length of the boron cantilevers he uses AJ can select a sonic balance between dynamics (shorter) and space (longer) that suits your listening preferences. Alternatively you can choose a point in between for a good mix of the two. Not so easily quantifiable are factors like the material used for the cartridge body (plastic or metal), and the alternative coil wire types available.

You can pick from copper, silver, gold and even platinum but the dearer metals do of course carry a price premium.

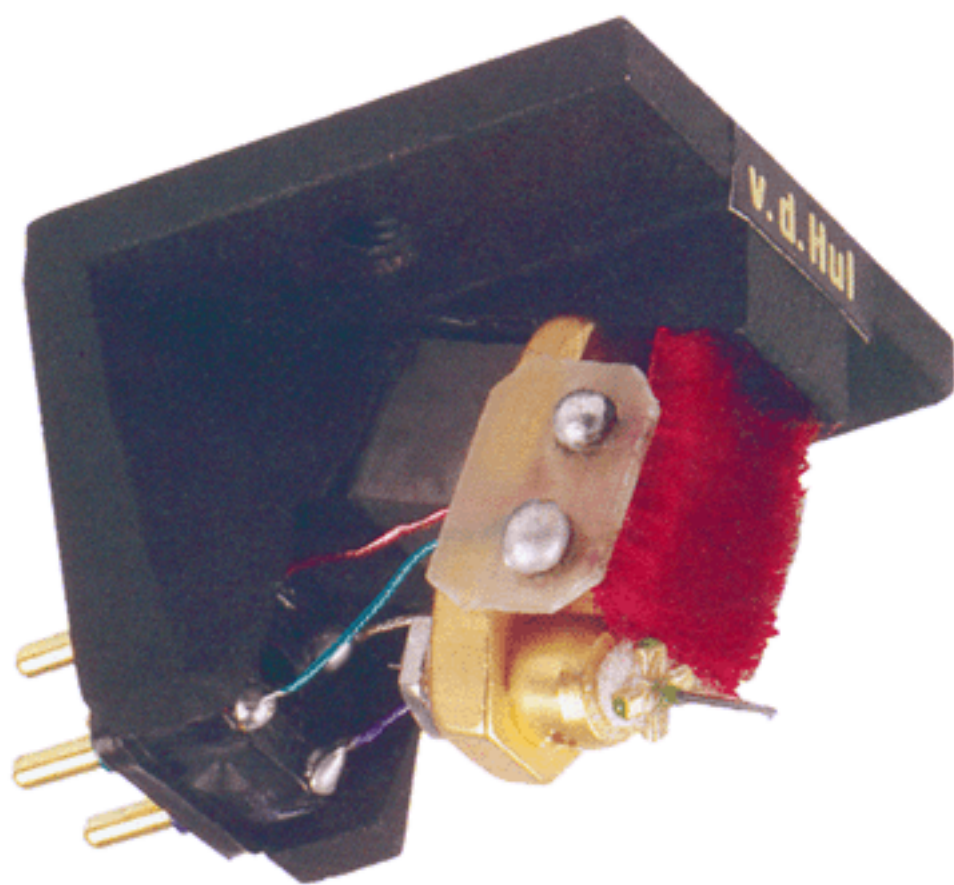
When pressed on the subject AJ explains the characteristics of these different metals thus: copper has a "pleasant harshness" but is not the best thing for "spacious reproduction". Silver produces a "more accurate picture", with copper's distortion being replaced by "more correct harmonic structures" and greater spatial resolution. Gold is "smoother" with "more detail on extremely low signal levels" and it offers gains in terms of "space and detail", however its sound is "a bit soft and mild for inexperienced ears", yet it is "very close to the real sound". Platinum is "the best" in all respects with "no harshness and resolution of extremely low level signals" although it's hard to get and hard to work with.

It is surprising given AJ's considerable enthusiasm for carbon cables as interconnect and speaker lead that there is no carbon coil wire option.



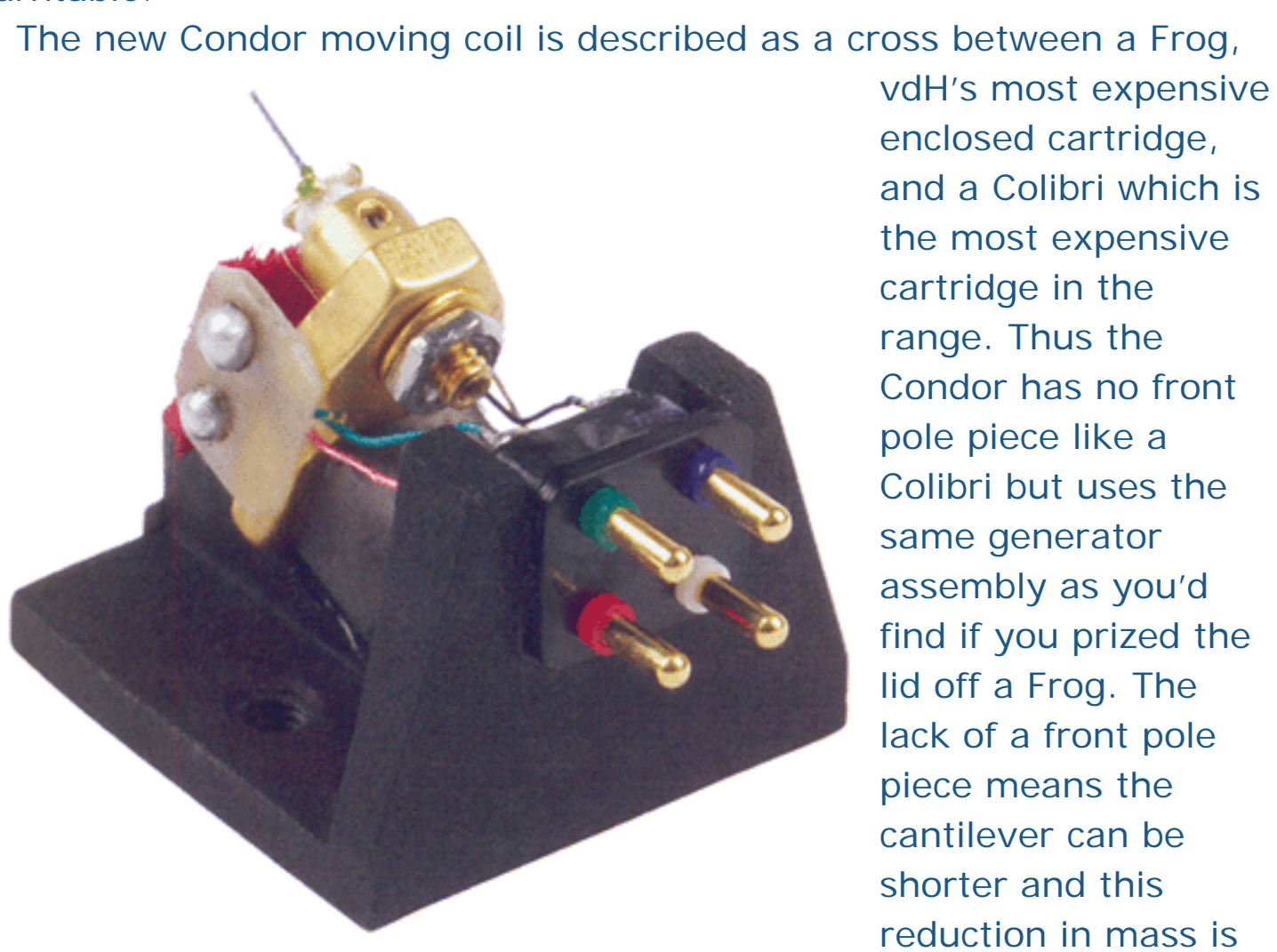
However when you realise how much spring there is in carbon filaments it is pretty clear that for mechanical reasons alone it is not an appropriate material for coil wire.

All of this variety might suggest that there is no absolute sound with van den Hul cartridges, but the same is true not only with transducers generally - loudspeaker designers have to make choices which go beyond attempting to get maximum accuracy in the process of building even a cost no object speaker - it's also true of nearly



all audio equipment. Components like capacitors have a character that is not defined by their value yet has a distinct influence on sound quality; unfortunately not one that can necessarily be directly measured against accuracy. After all this high fidelity holy grail is a moving target thanks to the variations in recording styles for starters.

So although it would be easier to say I want the best Condor you can make to AJ, that best cartridge is in fact the one that fits your system and tastes the best, not an arbitrary absolute. You could have one exactly like those that AJ uses on his Brinkmann turntable with its old school Technics tonearm but it wouldn't sound the same on your turntable.



The new Condor moving coil is described as a cross between a Frog, vdH's most expensive enclosed cartridge, and a Colibri which is the most expensive cartridge in the range. Thus the Condor has no front pole piece like a Colibri but uses the same generator assembly as you'd find if you prized the lid off a Frog. The lack of a front pole piece means the cantilever can be shorter and this reduction in mass is

further bolstered by a shorter aluminium support tube for the cantilever. The Condor's cantilever is 2 mm shorter than the Frog's and it achieves 4 dB greater separation, but then the cartridge does cost twice as much.

Further variations between these needles include the use of a damping pad on the Condor which has the remarkable effect of completely defeating needle talk, this is the quietest cartridge I've come across and a major boon for anyone who sits near an open turntable when playing vinyl. Not that near either - some cartridges can be heard a few metres away.

The greener of these two MCs has the protection of a case and the advantage of nearly twice the output level at 1.1 mV (*).

The Bespoke Experience

by Roy Gregory

Sitting in a tiny room watching AJ van den Hul, chatting away as he peers through his binocular microscope, hand building a moving-coil cartridge is a faintly unreal experience.

Watching him build one just for you - that's really out there...

The source of this experience was a visit by JK and myself to meet and interview this elder statesman of the cartridge and cable world, a visit that started at AJ's home, in one of the most congested listening rooms I've ever witnessed. This wasn't a listening room, it was a museum, every available inch of shelf and floor space crammed with hi-fi, cameras and recordings. One clear path led to the equipment, another to the single listening seat, positioned in front of the huge A Capella speakers, where we were able to experience, each in turn, the entire upper range of vdH cartridges, from Grasshoppers through Colibris to the new Condor, in a bewildering range of different guises and body materials. The maestro deftly switched headshells in his vintage Technics arm, able to swap between his current designs, experimental projects and examples of his earlier products. It was a fascinating experience which left me with a dramatic overview of the performance goals that continue to drive AJ to ever greater heights. It also left me with a high regard for the Colibri in particular.

Later, sitting downstairs he calmly announced his intention to build each of us a cartridge. Not just any cartridge but a Condor tailored to our individual systems and preferences. And if that wasn't impressive enough he went on to announce that this was actually a facility that was available to any prospective customer. All he needs is a little information regarding your listening preferences and the system context in which the cartridge will be used. As JK has related, you need to provide details of arm and phono-stage, and preferences as regards the sound. AJ will do the rest, just the same as he does with every cartridge he builds, selecting from his pool of parts the most appropriate combination, hand cutting the cantilever, adjusting the tension of the tieback and the resilience of the suspension rubber. It's as much about feel, intuition and experience as it is about materials and measurements.

With the cartridges duly built we retired upstairs for a listen, comparing the hand-tuned models to a standard Condor XCM.

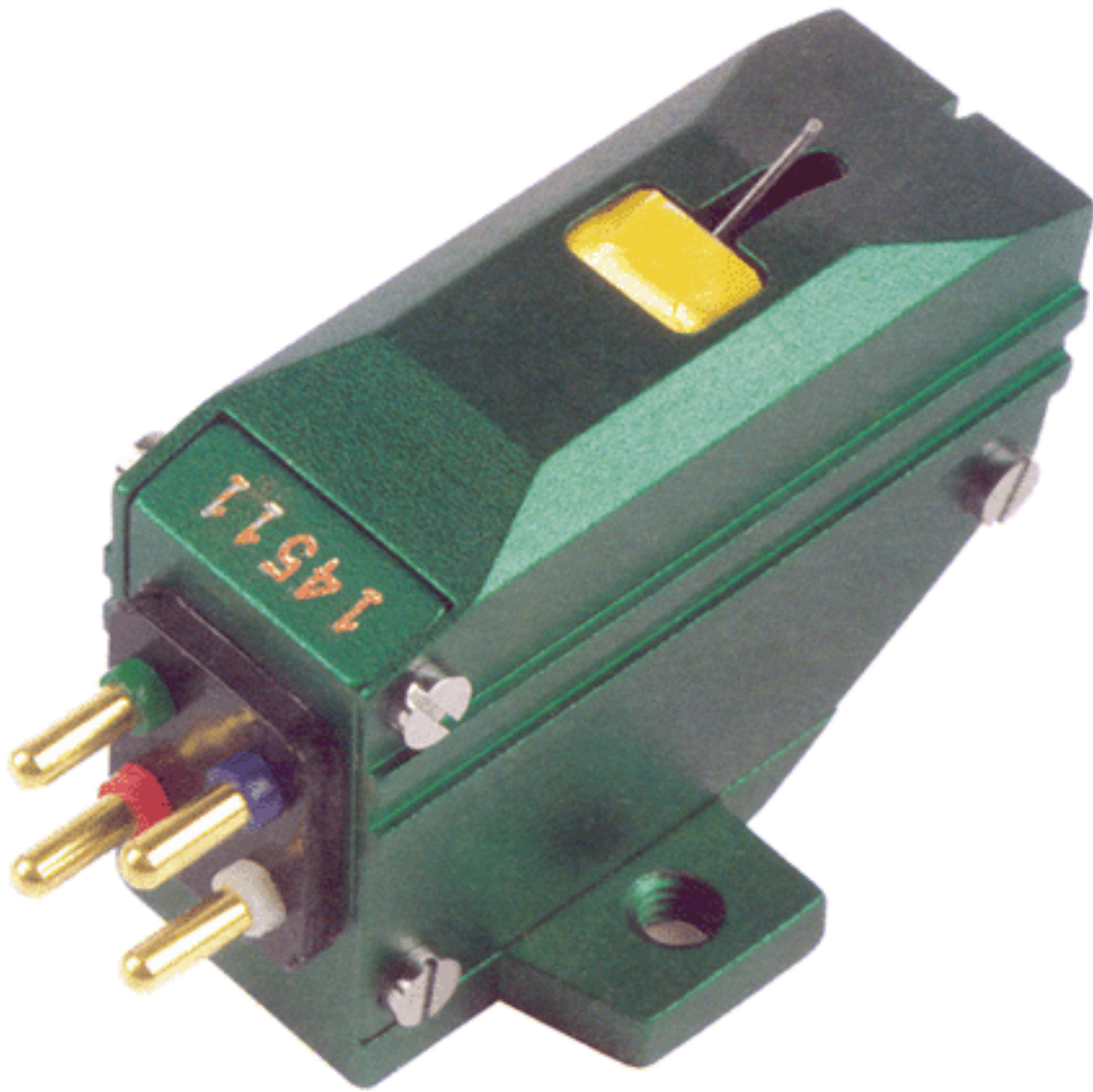
The first thing that was obvious was how different each sounded: JK's was dynamic and full of punch and body, where mine was more subtle with a greater sense of space and musical flow. Each suited our preferences to an almost uncanny degree, perhaps a reflection of how well AJ knows us both. But what was most impressive of all was the fact that sitting there, listening to my bespoke cartridge, there was no question in my mind that this was the finest sound I'd heard in AJ's system. Better than the Grasshoppers, better than the Colibris and much, much better than the standard Condor. What's more, I'm positive that JK felt exactly the same about his cartridge! That's quite

(*) Remark: The 1.1 mV output concerns a custom version of The FROG[®] Gold with quadruple layer gold coils. This version is available on special order. The standard version of The FROG[®] Gold has dual layer gold coils and delivers an output voltage of 0.65 mV. —A.J. van den Hul B.V.

It is more robust than and has enough signal to drive a sensitive MM stage should that be desired. Both designs feature van den Hul's type 1 tip with its distinctive V shape and fine line contact with the groove wall. They are also higher compliance designs (as coils go) and will track as low as 1.3 grams with ease. Their mass means they are suitable for medium mass tonearms, but as mentioned, the Condor's optional plastic body means that it can be built to suit old school low mass arms if that's what you have.

The Frog is more standardised in its construction, which keeps costs down, but AJ says he has built silver coiled versions in the past with about half the output. When installed in the Series V tonearm of an SME Model 20A turntable the Condor proved to be a powerful and revealing MC, combining much of the finesse of the Colibri with the energy of the Frog and adding a bit of muscle of its own. In its copper coiled, metal bodied guise (XCM), with a preference for a high 1 kOhm load impedance, this Condor produces a full bodied, three dimensional sound that has a reach out and grab it quality you don't often hear. It is

extremely insightful with phenomenal low-level resolution that leaves very few fine ripples in the groove wall unturned - in fact low level information is abundant, from the condition of the pressing to the finest nuances of sound. Take the pinnacle



of Tom Waits' career, *Swordfishtrombones*, with the Condor you get below the gravelly voice to the heart of the song. You also fully appreciate just how hard the drummer is pummeling the skins, not to mention the way the electric guitar slices into the mix alongside some of the most vivid percussion I've heard on vinyl. This cartridge manages to do the subtle stuff extremely well but has the dynamics to deliver the energy of the music just as effectively. We're talking here about a 'standard' Condor, the one sent for review not one that has been tweaked for any particular tastes or emphasis, but if anything solidity of image and dynamic impact are in the premier league and far too good for a premiership footballer, or his wife.

With the Keith Jarrett classic *Eyes of the Heart* the band and piano are up front and in the room with you, the saxophone is positively visceral and the timing is just as you would expect of a live ensemble of this quality (Charlie Haden, Dewey Redman and Paul Motian). The way Motian thraps the drums with his brushes creates a wall of sound energy that with speakers of the ATC SCM150ASL class makes for a very real experience. Distortion is vanishingly low so you can play as loud as the system/room will go without suffering. At least not until you go downstairs and find out how loud the other half thought it was.

Less spectacular recordings/pressings take on a new found lease of life as well, which is in many respects even more impressive. In this instance what has often seemed like a rather flat record of the Mahavishnu Orchestra live, an album which has to live up to the title *Between Nothingness & Eternity*, turned out to have a lot more dynamic and tonal contrast than expected. This clearly was the supergroup to beat them all, the explosive drumming of Billy Cobham matched by the speed and fluidity of John McLaughlin's guitar and backed up by some of the most imaginative musicians of the time. All this is present on this very late pressing but it's deep enough to elude most needles. Here the bass has grunt and the

a hike in performance when you consider the difference in price between a Condor and a Colibri. A hike that's cost you nothing more than the time it takes to jot down a few details and supply them along with your order.



Incidentally, AJ also suggests that you return the cartridge after 200 hours or so, just to have it tweaked - all part of the service. With listening completed the cartridges were packed in their wooden boxes, each inscribed in biro with the precise specification of the unit in question, but not before the cartridges had been "autographed" by AJ, with owner's name and date in writing so small that you needed the microscope to see it. What's on offer here is as far as I'm aware, an utterly unique opportunity. Optimising the pick-up to match not just the electro mechanical demands of your system but your own preferences as well, reaps an impressive dividend, a performance boost that elevates already impressive performers into genuine giant killers. After all, why have someone else's view of perfection when you can have your own?

stage opens up to reveal depth and width. The Frog on the other hand is a more lively creature with plenty of spring in its step and a somewhat greener carcass. Next to the Condor it seems a trifle brash but that's largely down to its higher output. Its signal level seemed to push the Trichord Delphini's headroom even when set for a high output MC.



Now *Eyes of the Heart* bristles with energy, the piano playing sounding not unlike Dollar Brand at times, the drumming is as vivid as ever and the band positively brims with life. All it takes to get an idea of the hall acoustic is a single cough from someone in the audience (there's always one!). Changing the input impedance to 1 kOhm brings the action even closer with a change in perspective that's quite dramatic. With this album at least the 100 Ohm setting seems more appropriate, giving a calmer result that takes the stage away from the listener. Joni Mitchell's *Court And Spark* has lovely full bass and her voice is strong and solid at 1 kOhm, but switching over to 100 Ohms relaxes the presentation, which in turn makes it less exciting but smoother and cleaner.

Having established its suitability for this impedance setting, the Groove (fixed 100 Ohm) was brought in to see if any more resolution could be extracted. Well, it certainly was, with Lambchop's *Bugs* revealing a very open soundstage, so much so that it seemed to have a halo. But this combined with a solid low frequency thump and a stereo image that was reminiscent of the Condor. There is less fine detail than with the nude cartridge but a smoother, less revealing top

end that makes this a more accommodating cartridge. Lesser recordings can be turned up without fear of searing treble and great ones still have plenty of sparkle. The bass is deep and round when it's called for and while it may not plumb the depths of its sibling, it does a pretty good job nonetheless.

These are both dynamic, powerful and revealing cartridges that turn in a compelling performance. Yes you can hear more through the Condor but you can hear plenty with a Frog and still have some money left to buy more vinyl to play. Such as Humble Pie's performance *Rockin' the Fillmore*. The atmosphere on here is electric. As Steve Marriot so aptly puts it "it's a gas, man", and he wasn't talking about neon!

TECHNICAL SPECIFICATIONS

Condor XCM

Weight: 9.25 g
 Tracking force: 1.35 - 1.5 g
 Output voltage: 0.55 mV
 Load impedance: 500 Ohms - 47 kOhms
 Compliance: To order depending on tonearm
 Price: See Advisory Retail Pricelist on van den Hul website

Frog Gold

Weight: 8.2 g
 Tracking force: 1.35 - 1.6 g
 Output voltage: 1.1 mV (custom version)
 Load impedance: 100 Ohms - 47 kOhms
 Price: See Advisory Retail Pricelist on van den Hul website

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