Review of VDH The Grail & The Colibri Stradivarius by Michael Fremer, 10/2021 (08/2018) on :

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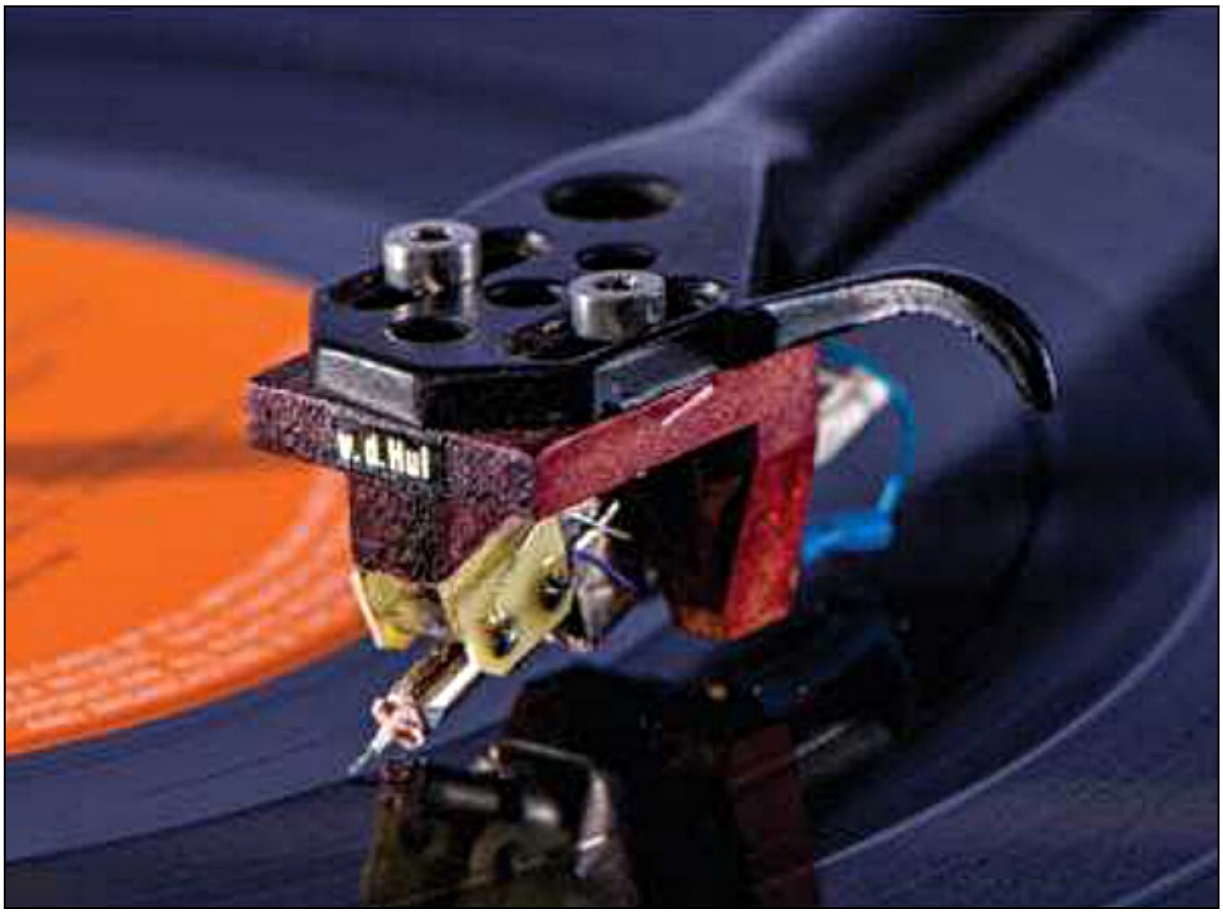
van den Hul The Grail phono preamplifier & Colibri Signature Stradivarius phono cartridge



Among the electrically connected, the phrase short circuit induces panic and horrific images of tripped breakers, blown fuses, acrid blue smoke, and melted circuit boards. Nonetheless, near short circuits are becoming popular among the analog set. Moving-coil cartridges of an inductance and impedance so low they're nearly short circuits are now more common, thanks to powerful neodymium magnets that help produce more and more electrical output from fewer and fewer turns of coil wire. Perhaps the most extreme example of this is the Haniwa HCTR01 Mk.II cartridge, which has an internal impedance of 0.4 ohm and an inductance of 0.3μH.

These new, high-efficiency circuits also permit the use of nonferrous formers that allow freedom from back-EMF, and thus wider dynamic range. Low-noise, high-gain phono preamplifiers, and those that use step-up transformers, are designed to deal with the typically low output voltages (eg, 0.2mV or 0.3mV) produced by these cartridges. While low-output MC cartridges are miserly producers of voltage, they deliver generous amounts of current. To take advantage of that, in the past few years some designers have produced phono preamps based on current amplification.

I first reviewed a current-amplification phono preamp in the July 2008 issue: the German company Aqvox's relatively inexpensive Phono 2Ci (then $1400). It was designed by Carlos Candeias, who further explored current amplification in his own B.M.C. Phono MCCI ($3890), which I reviewed in June 2013. The MCCI has since been updated; the newest version was in use this May at High End 2018, in Munich. In November 2014, on AnalogPlanet.com, I reviewed MR Labs' current-amplification–based VERA 20 MC ($4330 with its standalone power supply). Sadly, the owner of MR Labs, Maximillian Rotmann, a Swiss-born electronics engineer who lived in Florida, recently died. The company is now run by Rotmann's protégé, fellow engineer Nicholas L. Nagrodski. More recently, I bought CH Precision's P1 phono preamp with optional X1 outboard power supply ($48,000, footnote 1). The P1 has three inputs, two of them current based.

Like the cartridges of low internal impedance and inductance with which they're best partnered, current-amplification phono preamps are themselves close to being short circuits—at least, that's what the cartridge "sees." You just plug it in and play without having to worry about choosing a specific resistive loading for the cartridge. If your MC phono preamp isn't a current-amplification type, Hagerman Technology has provided a useful tutorial in how to load moving-magnet and MC cartridges, into which you can plug values to help determine the proper resistive loading (footnote 2).

Every amplification scheme, solid-state or tubed, has its pluses and minuses, but I have yet to figure out—or hear—any downside to current-amplification phono preamps. In fact, I'm a big fan of them—though I wouldn't be without the voltage-amplification Ypsilon VPS-100 and its associated outboard step-up transformers. That's another kind of magic.

van den Hul The Grail phono preamplifier

After using van den Hul's The Grail MM/MC phono preamplifier ($9350, footnote 3) for a few months, the only thing about it that didn't appeal to me was its name. I'm not into religious or mythological iconography. Otherwise, what's not to appreciate about this attractive, well-built, innovative, easy to use, sonically enticing phono preamp? Well, some think it's ugly. I disagree.

While the instruction manual doesn't specify that The Grail is a current-amplification phono preamplifier, it's described as having an "automatic adapting input stage . . . no matching resistors needed." For that reason, and owing to other of its design features, described below, I assume that it is one.

The Grail is a relatively compact, two-box design with a gracefully curved signal-processing unit housed in a thick metal case with a pebbly white finish and wooden side panels (very 1970s), and a somewhat less attractive black box of a power supply with a brushed-aluminum faceplate. They're connected by a generously long umbilical cord.

Both boxes are unusually heavy for their size, particularly the preamp itself. Perhaps that's because the RIAA deemphasis circuit uses an LCR network that includes inductors in series with the signal (and no resistors), plus capacitors and resistors in parallel—just as does my Ypsilon VPS-100 phono preamp. Inductors can be heavy, though the mass could be just the chassis and case. Other design features include: gold conducting paths on "special printed circuit board material," the specialness of which is not specified; feet of "selected wood" designed to dissipate energy; and an internal array of DIP switches for adjusting the level. If you need an MC gain different from The Grail's default setting of 56dB, remove the top panel, and set the appropriate combination of DIPs to achieve 64 or 73dB—enough gain for even the lowest-output MC.

On the rear panel are eight single-ended RCA jacks, one pair each for: MM input, MC input, output, and resistive or capacitive MM loading. The defaults for MM loading are 47k ohms resistive, 50pF capacitive; to change either, vdH advises soldering the desired resistors or capacitors into RCA plugs and plug these into the loading jacks—but, again, this would be for the MM input only.

van den Hul Colibri XGW Stradivarius Signature MC cartridge

Decades ago, Dutch physics professor A.J. van den Hul (footnote 4) used computer analysis to invent a new stylus profile, suggested as being uniquely good at digging details out of LP grooves. He's since sold more than a million of these van den Hul styli—installed in his own cartridges, through his retipping business, and in cartridges made by other companies.

Van den Hul's latest cartridge is a further refinement of his original Grasshopper, which was very popular in the 1990s. Like the Grasshopper, the Colibri, named for the tropical hummingbird, is a "nude" design: its cantilever is exposed, and there is no stylus guard, which make it somewhat impractical for anyone with cats, young children, and/or house cleaners—unless the turntable has a dustcover.

This latest Colibri is the XGW Stradivarius Signature ($11,995): The X indicates crosscoil, the G stands for the gold of its coil wires, and the W for wood (the cartridge's body is made of Koa wood). It features a new, more efficient magnet assembly that increases the previous Colibri's output of 0.38mV to a generous 0.7mV, though that specification doesn't yet appear on the cartridge's webpage. If vdH's The Grail is indeed a current amplifier, you really don't need such a high voltage output.

Van den Hul offers the Colibri in various iterations, including: coils wound with copper wire; high (0.38mV), medium (0.3mV), or low (0.22mV) output; and a body—more a support structure—of plastic or wood. Other specs include a recommended vertical tracking force (VTF) of 1.35–1.50gm, a load impedance of 50 ohms to 47k ohms (the latter absolutely not recommended by me), and loading of from 50 to 600 ohms (when loading is necessary). Van den Hul recommends using a tonearm with an effective mass of 10–16gm. The stylus is van den Hul's 1S (2μm × 85μm) mounted on a boron cantilever.

Van den Hul's website lists specs for the lower-output cartridges only, and I hesitate to repeat them here; the XGW Stradivarius Signature's output is nearly twice that of those cartridges, and must, at the very least, result in a different internal impedance—which, for some reason, was not specified on the review sample's box.

In any case, as long as it's relatively low, the cartridge's internal impedance won't matter. Nor will its loading—when plugged into The Grail or any current-based phono preamplifier.

Colibri: Setup and Sound

The Colibri XGW Stradivarius Signature's fully exposed motor made setup easy—I could see everything, and there were no surprises. I set a stylus rake angle (SRA) of 92°+ with the tonearm slightly above parallel to the record surface. I achieved maximum channel separation and minimum crosstalk in both directions when the cantilever, seen from the front, was almost perpendicular to the record surface. Measured with a digital oscilloscope, the separation was 30dB in one direction and 29dB in the other. No doubt, had I used the voltmeter-and-frequency-sweep method suggested by Soundsmith's Peter Ledermann, it would have been higher, but clearly, A.J. van den Hul, now nearly 80, can still build skillfully! At that age we should all have his energy and hand-eye coordination!

I found that a VTF of 1.5gm gave me the smoothest reproduction of vocal sibilants. Even so, for some reason there was occasional smearing of sibilants that should have been clean. I double- and triple-checked every parameter, but the Colibri XGW Stradivarius Signature turned out to be extremely sensitive to VTF. A few tenths of a gram more force, and careful attention to setting the antiskating, smoothed out some slightly ragged sibilants I heard from a test pressing of an upcoming reissue of Joan Armatrading's third, eponymous album (A&M/Intervention IR-029).

My previous encounters with top-shelf vdH cartridges have led me to expect speed, detail, and spotlit highs from the brand. That wasn't quite what the Colibri XGW Stradivarius Signature first communicated, through either The Grail or the CH Precision P1/X1. (All of the following listening impressions were audible through both phono preamps.) Instead, the Colibri first produced a surprisingly lush, rich, relaxing midrange that was texturally similar to that of Lyra's Etna and Etna SL, though not as highly resolved or, especially, as transparent as Lyra's Atlas and Atlas SL.

The limited-edition boxed set of Simon Rattle and the Berlin Philharmonic's cycle of Beethoven symphonies (10 LPs, Berlin Philharmonic BPHR160092) arrived just as I was leaving for Munich and High End 2018, and as soon as I got home I dug into it. Unlike the CD edition, which was recorded using multiple microphones, the vinyl edition was recorded using a dedicated stereo M/S pair. The lacquers were cut from the 24-bit master files. Buy the LPs, and you get the full-resolution files as a download. The packaging is as lavish as that of Rattle's recent Brahms direct-to-disc set.

As for Rattle's interpretations: I grew up with the early 1960s Berlin cycle conducted by Herbert von Karajan, which I have on vinyl and commercial 7.5ips tape. I find Rattle's overall style tidy, a model of tamped-down British understatement. Occasionally he bursts forth with the grandeur and swell of Karajan's stately performances, and I especially like how he handles the brass, but overall, these are relatively tame readings—especially when compared with Leonard Bernstein's cycle of live recordings with the Vienna Philharmonic made in 1977–79, and recently reissued (I haven't heard the reissue; I have the original).

Symphony 3 might be my favorite of the nine, and Bernstein's grand, dramatic take makes the hair on my neck stand up. Not so the Rattle. And despite the new set's minimal miking, the separation of instruments, and the string tonality and sheen in the Bernstein set were superior, as was the latter's overall soundstaging and image specificity. The Colibri's generously deep, wide soundstages (when the recording contained them) made these differences clearly audible.

The Colibri Stradivarius's lush, relaxed, well-textured midrange and its pleasing if not ultimate midrange transparency made for long evenings of pleasurable listening to classical and acoustic music, whether symphonic or chamber—or solo acoustic guitar. I greatly enjoyed more than a few original pressings of albums by John Renbourn and Bert Jansch from Transatlantic Records.

Mid- and high-frequency transients were fast and slightly spotlit, almost to the point where they ran in front of the rich midrange—but I heard that only occasionally, and with some recordings, especially those recorded live, it was beneficial in delineating the feel of space. The Colibri didn't sound too sharp and/or bright, just somewhat illuminated through a broad area comprising the upper midrange and lower treble, where it also had a smooth quality similar to that of Kuzma's KAR cartridges (footnote 5). The Grail's transparency and liquidity fired up my memory, but with far greater midrange grip and texture.

The Colibri's bottom end was more clean and fast than grippy and muscular. If your system can plumb the depths, you'll notice the vdH cartridge's inability to go deep or make the room shake. It sacrificed some bottom-end guts in exchange for low-frequency clarity and nimbleness, which would seem to make it a good candidate for high-performance, two-way speakers that don't go all the way down, but cheat a bit in the midbass to sound as if they do.

Macrodynamics were good if less than fully slamming, but microdynamics—low-level dynamic contrasts that give recorded music the semblance of reality—were among the cartridge's strongest suits. This was part of the Colibri's magic: a complete freedom from mechanical artifacts that many nights kept me up late, listening.

If I listened mostly to rock or hard jazz, the Colibri XGW Stradivarius Signature would not be my first choice of cartridge—especially for $11,995. For those kinds of music I'd opt for a Lyra Atlas SL ($12,995) or something less expensive, like the Ortofon A95 ($6499) or the Transfiguration Proteus ($6000), both of which deliver greater slam and visceral excitement, if not the same midrange sophistication.

If you listen mostly to classical music, you might find satisfaction with the van den Hul Colibri XGW Stradivarius Signature. But in one regard, its price bothers me: Today, more than a few cartridges are priced at or near $12,000—but why does a cartridge that last year cost $7995 in a lower-output version now cost $4000 more?

The Grail

I'm fairly certain that A.J. van den Hul himself didn't design The Grail. To my knowledge, that's not what he does. I assume someone else designed it to his specifications, or that it was at least a collaborative effort. But whoever was responsible for The Grail is a genius of phono preamplifier design, and a listener as well as a technician. This one is a real sleeper. It doesn't have the sophistication of features of the CH Precision P1 ($48,000 with X1 power supply), but sonically it competes with the P1/X1 at a little less than one-fifth the price ($9350), and throws in some liquid-midrange magic. Nor was it only with vdH's own Colibri XGW Stradivarius Signature cartridge that The Grail produced spectacular results, as I discovered when I ran a number of cartridges from other makers through it.

Like the CH P1, The Grail produced the "blackest" backgrounds, out of which sprang startlingly delicate yet believably solid three-dimensional images that were 100% free of unnatural etch, edge, or hyper-definition. In fact, in direct A/B comparisons with the CH P1/X1, The Grail sounded somewhat more liquid, though in some systems that might translate into a bit too soft and warm. In my system, either phono preamp would do, depending on the recording.

The Grail's transparency and liquidity fired up my memory. I pulled out such long-neglected LPs as Lightnin' Hopkins's In New York (Candid/Barnaby Z 30247), recorded November 15, 1960, at Nola Penthouse Studios. The Grail's rendering of it was slightly softer than the P1's, but that added a welcome depth that pushed Hopkins's voice back slightly on the stage, and gave it more texture and 3D believability.

I pulled out an original UK pressing of Jeff Beck's Truth, engineered by Ken Scott (Columbia SCX 6293). Wow! On that groundbreaking record (from which grew Led Zeppelin) The Grail dug deep, producing a fast, sizzling, yet liquid and transparent top end, naturally, and its combination of high resolution and background "blackness" rendered the subtle, ghostly echo Scott put way behind Rod Stewart's voice perhaps the best I've ever heard it.

If you're looking for an exceptionally fine-sounding, startlingly transparent, liquid yet gritty (when called for), super-quiet, high-resolution MC/MM phono preamplifier with enough gain to handle even the lowest-output cartridges, van den Hul's The Grail is a $9350 sleeper that you should definitely experience.

Double your treasure, double your fun?

Despite what audiophiles of modest means may think, I've met many in my world travels who not only can afford to drop $50,000 on a CH Precision combo of P1 phono preamp and X1 power supply, but have done just that. If you're one of them, maybe you can also swing a second set and run both sets as a stereo pair.

$100,000 for a phono preamplifier? It's crazy, but it can be done, and sometimes is. I've met those guys, too!

CH Precision offered to lend me a second P1 with X1 so I could hear the results. To make it work, I had to remove one amplifier card from each signal-processing unit. You could use just one channel of each, but when a customer orders the four-box version, only one channel is supplied. CH says it sounds better that way.

Reassembled, hooked up, and powered on, the modified units "know" what you've done: one then automatically submits to control by the other's settings.

If you read the review of the P1 and X1 in my April 2017 column, you'll know what you get with a single P1/X1, which is very special. Did I double my pleasure with two? The two P1/X1s didn't sound twice as good as one, but the four-box version was definitely even more dynamic, with even better bass control and slam, and a more relaxed and supple midrange. Overall, it produced bigger, more vivid sonic pictures against backgrounds that were even more quiet.

But even at an accommodation price, I'm not one of those who can afford a nearly $100,000 phono preamp. So back that second P1/X1 went to CH Precision.