

Michael Fremer

Be Careful What You Wish For!

Will vinyl adventures never cease? A volunteer for a Christian charity referred to us by a neighbor stopped by recently to pick up some old clothing and other goods we were donating to help victims of Hurricane Katrina victims along the Mississippi Gulf. Catching a glimpse of my record collection, he said, "I've picked up thousands of records at people's homes and I have no idea what to do with them."

"Bring them over and let me see what's there," I said. "If there are collectibles, we can sell them for the charity."

A few weeks later, he backed up his truck to my garage and unloaded thousands of records in crates and boxes. I thought the deal we'd made was that he'd bring them by and I'd look first, but no, it was dump and run.

The next morning, about 45 minutes after I'd started thumbing through them, dust balls in my hair and up my nose, I had to admit that there were *no* collectible or desirable records. Not a single one—unless you want every Jerry Vale, Bobby Vinton, and Jim Nabors album, and every *Reader's Digest* boxed set of big-band and easy-listening music ever made. This was the largest collection I'd ever seen of the lowbrow junk you find at any Goodwill or thrift store, but with none of the occasional treasures sometimes found lurking in the shadows of *The First Family*, or *The Eddy Duchin Story*, performed by Carmen Cavallaro. I should have called Guinness—or quaffed one.

Well, there *was* one nice box: *The Nat King Cole Story in Stereo*, three beautifully packaged Capitol LPs, but the condition was merely good, and sonically it didn't compare to the 45rpm test pressings that Chad Kassem's Analogue Productions will soon issue.

Among the wreckage

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were boxes of 1960s-era evangelical Christian records on the Word label, out of Waco, Texas, featuring some of the unintentionally coolest covers I've ever seen. I found a home for those at Manhattan's Archive of Contemporary Music (www.arcmusic.com).

But the waste of garage space, and the coming months of hauling to the curb each garbage day another small batch of worthless PVC until it's all gone, are worth it just for the laugh I got when I opened a box containing a trove of **Word LPs** and **VHS tapes**, including this neat stack of three: *Charlton Heston Presents The Bible Volume III*; *Billy Graham Crusade: Fresno, California, December 8, 2001*; and, strategically positioned between them and labeled in large caps, **BRITISH IRRITABLE BOWEL SYN-**

DROME VIDEO.

No-Frills Record-Cleaning Machine for \$59.99!

Though it's probably been around almost as long as his Veg-O-Matic, Ron Popeil didn't invent the **Spin Clean Record Washing System**—but he could have. Don't laugh: Popeil's products "really, really work!" I own and weekly use one of his ridiculously inexpensive Showtime rotisseries, and it truly is set-it-and-forget-it terrific, and easy to use and clean. Acoustic Sounds' Chad Kassem suggested I check out the Spin Clean because it's cheap and it *really, really works*.

There's nothing set-and-forget about the Spin Clean, but it's cheap and it *really, really works*. It's not nearly as convenient or as efficacious as a vacuum cleaning system, but compared to playing dirty records? No contest. It's basically a plastic bath into which you pour a specified amount of water and add a measured amount of supplied washer fluid, the chemical composition of which is "secret," though it's claimed to *not* contain soap, phosphates, or alkalines. (The instructions say to just use "water," but it's better to use inexpensive, easily obtained, reverse-osmosis-purified water such as Aquafina.) More important is the claim that the formula encapsulates the dirt and keeps it suspended in solution, instead of redepositing it on the record. This claim was verified, as the dirt ends up falling to the bottom of the vat. Spin Clean also claims that the same vat of water can be used to clean up to 50 records. At the end of the cleaning session, remove the brushes, squeeze out the fluid, and let dry. It wouldn't hurt to rinse the brushes before using in fresh RO water. In fact, before pouring fluid in the vat, I'd rinse the *new* pads in clean water, just to be sure they don't contain glue or other dirt left over from the manufacturing process.

Three sets of slots hold a pair of rollers that allow you to clean 7", 10", and 12" discs. The rollers hold the record in the fluid just above the label, while the grooved area fits securely between a pair of velvet-like brushes



that clean both sides simultaneously. Your job is to rotate the record with your open palm, contacting only the edge. Rotate the disc three or so times, then carefully remove it, let the excess fluid drain off into the vat, then dry the LP with one of the supplied soft, cheesecloth-like wipes (you can wash these, but *don't* use fabric softener). It's not the drying that removes dirt and fingerprints—the brushes and fluid do the work, so you won't be rubbing dirt in again as you dry.

It takes but a few minutes to spin-wash and dry a record. You have to be careful to not lose patience and press too heavily with the cloth in hopes that you'll dry the record faster—you won't. The cloths become saturated after a few records, so make sure you have extras on hand if you plan to clean many records in one session. But trust me: You'll quickly tire of the routine, so don't expect to clean more than a handful at a time unless you're a glutton for punishment.

While Spin Clean claims you can clean up to 50 records per vat of fluid, I suggest playing it safe and refreshing

the vat more often. The fluid is relatively inexpensive. \$59.99 gets you the machine, brushes, rollers, and a 4-oz bottle of concentrated fluid—enough to fill the vat 14 times, or to clean 700 LPs. A 16-oz bottle of fluid costs \$20, the washable drying cloths \$10 for a package of five.

The Spin Clean worked very well. I cleaned some dirty, fingerprint-encrusted records, and when I removed them from the vat, all dirt and fingerprints were gone. Drying with the cloths isn't the most convenient method, but not everyone wants to spend hundreds of bucks on a vacuum machine, and the Spin Clean got the job done. Just don't tempt fate and clean too many records before changing the fluid or cleaning the brushes.

Thanks, Chad! And now for something much more expensive . . .

Concert Fidelity SPA-4B Phono Equalizer: \$14,000

Some audiophiles feel that if they're spending a lot of money on something, they want it to be packed with a lot of stuff. Others feel that less is more, and

are willing to pay for the editing work that goes into providing less: shorter circuit paths, and fewer components that accomplish all that more complex designs can—and perhaps more.

Both approaches can yield exceptional results, as proven by Jeff Nelson's stuff-heavy Boulder 2008 phono preamplifier, and Peter Mares' elegant and deceptively simple Connoisseur phono preamp, whose chassis is nearly empty. (Lyra's Jonathan Carr now builds a new version of the Connoisseur using design principles drawn from Mares' work.)

Silicon Arts Design & Concert Fidelity's resident audio purist, Masataka Tsudo, has been building tube and solid-state electronics for more than 30 years in Nagano, a region known as "the Switzerland of Japan" for its meticulous manufacturing. He designed this solid-state moving-magnet/moving-coil phono preamp as he's designed all of his other products, basing it on the philosophy of less is more. Their website states: "Our designs implement our unique Direct Signal Path Technology (DSPT), which follows Einstein's maxim that things should be

made as simple as possible but no simpler!" When you look inside, don't be surprised to find a lot of empty space, with all essential signal-path circuitry hugging the rear of the chassis, near the input and output jacks. Tsudo has kept these signal paths extremely short: the leads of the input and output jacks are soldered directly to the circuit board.

Tsudo chose his components on the basis of their sound quality, and, like the legendary Mares, conceived and built the circuit not on a flat board but three-dimensionally—although, unlike the tiny, impossibly tangled maze inside the Connoisseur, the SPA-4B has *two* circuit boards, as well as custom-designed and -built power transformers.

The SPA-4B features three class-A push-pull stages based on J-FETs, the first an MC head amp capable of providing 20–30dB of gain, depending on the modules inserted into the multipin connectors on the rear-mounted board. The second and third stages provide a total of 40dB of gain with no negative feedback applied, but RIAA equalization applied between them. Tsudo's design puts the loading resistors in



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series with the cartridge, which is unusual. Most load the cartridge output in parallel, whether via DIP switches or plug-in resistors. Take the resistors out and you still get a signal, usually with a default load of 47k ohms.

Masataka Tsudo believes the series-resistor approach results in better linearity and avoids the energy loss he says parallel resistors produce. However, placing the resistors in series means the actual gain results from the ratio of the cartridge's internal impedance to the sum of the impedances of the resistive load and first-stage negative

feedback loop. Therefore, the design of the MC stage—which is intended for only MC cartridges of low internal impedance—features plug-in modules that simultaneously alter the gain and the load resistance. Tsudo prepares these modules for the specific cartridge or cartridges specified by the buyer, using circuit simulations based on the cartridge's specifications of internal impedance and output voltage. However, since published specs and actual performance don't always match, variations in the output level and internal impedance specs can profoundly affect

the sound.

The SPA-4B's rear panel has both fixed and variable outputs, as well as separate inputs for each, with rear-mounted volume pots for the variables. There are also both MM and MC inputs.

I was supplied with a variety of modules that provided 20 or 25dB of gain with loading impedances of 30 and 50 ohms. Given the Lyra Titan's 5.5 ohm internal impedance and 0.5mV output level, the 20dB/30 ohm module should have been ideal. But that resulted in insufficient gain. I had to turn the volume up to where noise and hum became problems. I tried the 25dB module, with only marginally better results.

There was no point trying the Ortofon A90, which outputs 0.27 mV and has a 4 ohm internal impedance, or the 0.3mV Transfiguration Orpheus L (currently under review), so I contacted the Concert Fidelity's chief operating officer and vice-president of marketing, Nori Sayanagi, who lives one town over from me. He suggested that a 25dB/100 ohm module be sent in place of the supplied 20dB/30 ohm module, which, he said, "many people have found optimum with Lyra cartridges." I inserted the 25dB/100 ohm module and did a lot of listening.

But while there was more gain with the new module installed, there still wasn't enough to completely overcome the residual noise and low-level hum that intruded during low-level musical passages. With most music it wasn't usually audible, but still, it was difficult to believe that the SPA-4B was producing anywhere near 65dB of gain.



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I tried a variety of shelf positions to make sure the hum wasn't being generated externally. I changed interconnects, power cords, and line conditioners, and used a cheater AC plug, but the hum clearly wasn't the product of a ground loop.

The shame of the gain/noise problem was that, otherwise, the sound produced by the Concert Fidelity SPA-4B was exceptionally clean, open, well extended, superdetailed, fast, and delicate—just what you'd expect and demand from so costly a product. The transient speed and delicacy of the sound extended from top to bottom of the audioband. And as well as being well-extended and muscular, the bass was taut and exceedingly well defined.

The SPA-4B's transparency and freedom from grain and edginess were exceptional, especially given its airy, open top end. The midrange, though hardly lush, was anything but lean. Massed orchestral strings had a lovely, natural sheen and plenty of textural detail. Classical guitar sounded abso-

lutely mesmerizing. I could go on in greater specificity about the Concert Fidelity's considerable virtues, especially its huge, open, airy soundstage, but the noise level was unacceptably high and too often became a distraction. If the SPA-4B had trouble with a 0.5mV signal, I don't see how it can be suitable for cartridges of lower output.

Nori Sayanagi did say that Concert Fidelity can provide modules offering 28 and 32dB of gain, and that the matching CF-080 LS hybrid line-stage preamp provides an additional 12dB of gain (switchable to 18dB in future versions) and, when used with the SP-A4B, can produce enough gain for Lyra cartridges.

I'd say, then, that the SPA-4B is probably best used with Concert Fidelity's own preamp, but that using it with other preamps is questionable. Certainly the darTZeel NHB-18NS preamplifier has enough gain, is exceptionally quiet, and has proven itself compatible with a wide range of phono preamps. Concert Fidelity has a less purist, more widely compatible phono preamp in the works. If it can combine 80% of the SPA-4B's magic with a more acceptable signal/noise ratio, sufficient gain, and a lower price, well, I'll be all for listening to that!

Meanwhile, here's another purist phono preamp, but for a lot less money...

**Sutherland Engineering
The Hubble: \$3800**

Ron Logan Sutherland has been designing phono preamps for decades, starting at least as far back as when analog died, and probably even earlier. Before that he was involved with electrostatic loudspeakers. (He was the "Logan" in Martin Logan.) The Hubble is his latest and, he thinks, best overall phono preamp.

Like previous Sutherlands, the Hubble is battery-powered: 16 alkalines charge two banks of 16 1200µF capacitors each, for a total of 19,200µF per channel. The power source is located very close to the amplification circuitry, which appears to be op-amp based. Sutherland claims that a set of batteries provide 1000 hours of service. At \$2.99 per D-cell battery, each thousand hours of use costs at most \$40, and considerably less if you buy batteries in bulk. Considering the price of a really top-quality AC cord added to the price of a good AC-powered phono preamp,

IN HEAVY ROTATION

- 1) Neil Young, *Official Release Series Discs 1-4*, Reprise 180gm LPs (4)
- 2) Jim O'Rourke, *The Visitor*, Drag City LP
- 3) Frank Sinatra and Sextet, *Live in Paris*, Reprise/Mobile Fidelity Sound Lab 180gm LP
- 4) Sufjan Stevens, *The Brooklyn Queens Expressway: Original Soundtrack*, Asthmatic Kitty 180gm LP
- 5) Fuck Buttons, *Tarot Sport*, ATP 180gm LPs (2)
- 6) Nirvana, *In Utero*, Sub Pop/ORG 180gm LP
- 7) Nellie McKay, *Normal as*

- Blueberry Pie: A Tribute to Doris Day*, Verve 180gm LP
- 8) The Rolling Stones, *Get Yer Ya-Ya's Out! The Rolling Stones in Concert—40th Anniversary Deluxe Boxed Set*, ABKCO LPs (2), CDs (3), DVD-V (1)
- 9) Califone, *All My Friends Are Funeral Singers*, Dead Oceans LPs (2)
- 10) Blood, Sweat & Tears, *Child Is Father to the Man*, Columbia/Sundazed 150gm LP

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you'd have to log something like 100,000 hours on the Hubble before the batteries would cost you anything at all. (Okay, that's a convoluted way of approaching battery cost, but I like it, and I'm in charge here!)

If you're worried about accidentally leaving the Hubble on and blowing through \$40 worth of batteries faster than you can say "Pomegranate Margarita," don't be. Sutherland has come up with a neat workaround for your senior moments and drunken/stoned stupors: Each rightward toggle of the control switch adds an hour of run time, as monitored by a series of yellow LEDs. The most you can waste is four hours. Toggle the other way to turn off. When the LED blinks, you have—well, the Hubble has—10 minutes left.

The Hubble is pure dual-mono from input to output—purer than some others, Sutherland says, in that it uses two identical circuit boards containing *everything*, whereas some dual-mono designs have, for each channel, circuits that are electrically identical but laid out differently for reasons of cost and/or convenience. The Hubble's two channels share only the power-control circuit board, batteries, and substantial chassis.

Sutherland keeps configurability both versatile and closely held, with pairs of gold-plated sockets for each channel located directly adjacent to the signal paths. Four options of gain (45, 50, 55, and 60dB) and six of loading (10k, 4.75k, 1k, 475, 200, and 100 ohms) are contained on plug-in cards: two values per board. Inverting the boards switches between that board's values. Leave the card bay empty and you have the Hubble's default MM loading of 47.5k ohms. In addition,

CONTACTS

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Spin Clean Record Washing System, PO Box 15200, Pittsburgh, PA 15237-0200. Tel: (800) 931-5850. Web: www.spincleanrecordwasher.com.

Sutherland Engineering. Web: www.sutherlandengineering.com.



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Sutherland provides a pair of blank cards so you can roll your own load impedance. The Hubble ships with a 100 ohm load and 60dB gain installed.

Remove eight knurled screws from the bottom plate, lift off the cover, install the batteries, and you're good to go. Leaving the cover off doesn't expose dangerous voltages, which makes experimenting with loading and gain easier and more convenient.

The Hubble was *very* quiet. Music poured forth from jet-black backgrounds. This is hardly surprising with battery power, though if a component's solid-state devices are noisy, you'll hear noise. The Hubble's were relatively quiet.

The Sutherland house sound has always been on the warm, rich side to my ears, and the Hubble was no exception—but it was more on the neutral, more exuberant side of warm than what I remember of the other Sutherlands I've heard. The top end, while not exactly *wide* open, was pleasingly so, giving cymbals a welcome amount of shimmer and air, though never the last word in either department, regardless of loading. But turn up ORG's sonically ideal new 180gm pressing of Nirvana's *In Utero* (LP, Sub Pop/ORG) and listen to it through the Hubble and you won't worry that you're missing *anything* from the drum kit and guitars—even though there is, ultimately, more to be had.

However, thanks to its fully devel-

oped and weighty bottom end, where the Hubble really excelled was in instrumental body and textures. Horns were meaty and harmonically fully fleshed out, toms and kick drums throbbed, pianos had woody sounding boards, and singers exhibited life below their necks. Add to the considerable weight macrodynamic exuberance and robust bass definition and punch and you have a strong foundation on which to build a big, stable sonic picture—which the Hubble did with considerable gusto.

The Hubble's basic tonality was rich, lush, generous, and not at all "solid-state sounding," as detractors like to call transistor sound. My only quibble was with the somewhat reticent-sounding very top, which limited the full development of cymbal shimmer and flute air, etc., though how this will play out in your listening will depend on your system, cartridge, and preferences.

High-frequency attacks were reasonably fast and clean, but the sustain of musical sounds seemed somewhat stinky and overdamped, failing to linger as long as it could have. This might account for both the Hubble's high organization skills and its slight deficit of air and shimmer—and I was using the Lyra Titan *i* cartridge, which is hardly reserved on top; the Ortofon A90, which is about as neutral as they get; and the Transfiguration Orpheus L, about which I can't say because that's next time.

While it isn't cheap, the Sutherland Engineering Hubble is a worthwhile contender at \$3800 and even beyond. It's Ron Sutherland's best, most balanced effort, and will prove an ideal fit in many systems—but not in ones already lurking at the dark end of Sound Street. ■