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Staying Analog In An Increasingly Digital World

Hand in hand with sound quality goes ease of use.

October 22, 2008, by Bennett Prescott

This explosion of the digital sound reinforcement product sector over the last half-decade or so has produced a tempting array of solutions.

I've watched these developments carefully, worked with most of the offerings, and seen other companies utilize these powerful tools to great benefit.

My sound company recently started looking for a set of new consoles to support our expanding activities, so I began talking in earnest with manufacturers over what they could offer me in return for my money.



After carefully weighing a number of factors, I'll be taking delivery of an analog VCA console from the great folks at APB-DynaSonics, headquartered in New Jersey.

This article briefly explains my decision to buy an analog mixing console in today's market and why I'm pretty sure I'm not insane for having done so (contrary to the opinions of many!).

"But Bennett! How could you resist the allure of the brand new Hobart R2CZ?" Let me assure you, it was a difficult decision.

First of all, I'm not buying analog, or writing this article, because I hate digital. I'm a well-known advocate of DSP and the flexibility available in essentially every digital mixer. I've got racks full of the stuff myself; it's great problem solving equipment that I use on nearly every show.

The issue here isn't one of whether or not digital is a good thing, but one of whether or not it's the right decision at this point in time for my company.

One of my first considerations when I began this hunt was budget. I discovered early on that I could sink around \$10-\$20,000 into a new mixing board. This immediately narrowed my possibilities. If I'd had \$40,000 to spend, or \$4,000 to spend, my decision to buy analog might have been different.

I'm sure I'm not alone in looking into a new desk at this price point, and I think my observations are valid for many small sound companies.

I won't try to dodge the issue; one of the main reasons I'm staying analog is sound quality. I don't side with people who believe digital audio equipment automatically sounds like junk. I've heard too much fine sounding digital gear for that to be true.

However, digital consoles in the price range I can afford have often left something to be desired in my opinion. Any time you pack that much complexity and power into something so compact and affordable, quality compromises have to be made.

The analog desk I have acquired has some of the cleanest, clearest sound output I have ever heard, and what's more, it continues to sound good even if you abuse it with excessive levels or radical EQ. I have no qualms about putting this desk on any show, at FOH or monitors, headliner or opener, acoustic or rock.

Hand in hand with sound quality goes ease of use. My company works with a lot of artists and many other companies throughout each year. While I am fairly comfortable mixing on nearly anything, I'm not buying just for me. This console is going to be used by BE's hot off the bus, late for sound check.

The last thing they or I need to be doing at that juncture is learning yet another user interface. With an analog layout, every switch and knob is in plain sight, they're all labeled, and if you've seen one VCA console you can pretty much work with any of them.

True, at the end of the night I'll be resetting most of those controls by hand one at a time, but at least I know where they are and what they need to be reset to.

The choice of an analog board was also driven by my need for a reliable, easily repaired mixer that would still be with me a decade from now. I don't have enough equipment that I can afford to let some of it sit around the shop being repaired and this board in particular is too large an investment not to pull its weight at every show I book.

Therefore, reliability during and after the gig is an enormous issue in my mind. I always carry a spare console in case of failure, of course, but there's no way I can afford to carry a spare identical console. If my FOH desk goes down, I'll be finishing the show on something considerably less capable and probably rack-mounted. I'd like to avoid that, for obvious reasons, so I take reasonable steps to avoid console failure.

First of all, I buy redundant power supplies for my consoles, an option for every analog console I considered. The number of digital consoles with that option in the sub-\$20K category is slim. In fact, there may only be one. I don't believe just because a power supply is running a digital console it's any less likely to fail, so I find the lack of this option untenable.

Digital consoles crash, an issue analog gear is generally exempted from. Some digital equipment kicks the bucket more gracefully than others. The high dollar ones tend to lose the control surface, but keep passing audio, which is better than the alternative. The ones in reach of my checkbook drop everything, including audio. All the advertising about "only five seconds to reboot" is fantastic, but that's five seconds that could be in the middle of a

song or an important speech.

If this was rare I'd be less nervous, but it's impossible to work with digital gear on a regular basis without having had some of it crash on you. I've spoken to many of my colleagues about this, and while some have been far luckier than others, there's no escaping this basic truth.

Now that's not to say that there aren't occasional problems with analog consoles as well. However, the console I bought is modular in banks of eight. You could take a chainsaw to everything right of the master section and the thing would still be usable for whatever channels you didn't hack up. Hot sun, dust, and moisture aren't going to gum up any motorized faders or short delicate little digital pathways. Hell, I had an analog console catch on fire once, opened it up, replaced some resistors, and used it on a show that evening.

I can even carry spare channels on the truck at minimal expense. On a digital console, an internal failure of even small magnitude could cost you your entire surface, and it's not like you can take it to just any electronics technician for repair. A digital mixer also tends to have a lot riding on it. Lose that surface and you're down all your channels, all your compressors, all your EQ, and so on.

Two other motivating reasons for my analog choice are flexibility and ease of signal chain modification. With digital, you're stuck with whatever's built into that console from the get go. Don't like the compressor on the console you have? If you don't have the cash for high-dollar digital, you're stuck with your console's stock dynamics, unless you want to haul around outboard.

When I compare costs between analog and digital, I include all the outboard I have to carry with an analog mixer. If I've got to carry it for my digital mixer, too, a lot of cost and size advantage is lost. Analog gear is inherently flexible. I can use whatever effects and dynamics I want, connected in any order.

I can even use two comps on my lead vocal, something I've found to be difficult to impossible to accomplish on the majority of digital consoles, at any price range. This patch anything, anywhere capability has helped me out on any number of tough shows.

The final reason I chose analog is its longevity. Near and dear to the heart of any small business owner is return on investment. How long is the gear that you buy going to keep its value? I worried that if I bought a new digital console, in just a few years it might be obsolete, unsupported, or no longer rider-friendly.

I've mixed on several-decades-old analog consoles on many occasions without complications, but the marketplace for digital gear is in constant flux. I would be concerned that by the time I'd recouped my investment in a digital console it would be so far surpassed by current offerings that I wouldn't be able to pay someone to take it off my hands.

Out of no particular devotion to analog gear, I therefore find myself with an entirely analog signal path, from a mic on the stage through my console and processing out to my speakers. It just so happens that my speakers, from tiny portable boxes to line array, have internal all-analog processing and amplification.

This is for many of the same reasons I chose analog mixers – first and

foremost fidelity and reliability. The designer of these speakers believes strongly in analog, and has used it to great advantage to make each speaker sound good both during normal use and during periods of heavy limiting. The components inside are not easily prone to failure, even in that hot vibrating environment, with the added advantage that field repair and diagnostics are simplified.

Conveniently, the company that makes my speakers also makes rackmount analog processing for integrating their speakers into a coherent system.

I'm living in an analog world and loving it. My systems sound better than ever, and I certainly feel that I've made the right decisions for my company. I've got the proper tools not only to take on my gigs for today, but for the next few years, and I know and trust them to make my clients look good every time.

Digital processing in all its many forms is a wonderful tool, but like anything in live audio, it's not a one-size-fits-all solution, and laying it on too thick can have real drawbacks.

Bennett Prescott is a frequent contributor to the ProSoundWeb [Live Audio Board](#), owns a sound company in New York state and represents EONA ADRaudio in North America.

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