

# the Stereo Times

The Complete Audiophile Magazine

VITUS AUDIO SIA-025

Product Of The Year 2011 Award  
The Absolute Sound Magazine



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## Sound Application SA-1 AC Filter *Best I've Heard?*

January, 2012



### Associated Equipment:

#### Analog Front End

Bergman Sindre turntable and arm airbearing, H-Cat phono stage p-300

#### Digital Front End

Exemplar/Oppo BDP-83 Universal Blu-Ray Player Weiss Dac202 DA converter H-Cat DAC DA converter, Mac Powerbook Pro and Weiss and H-Cat dacs

#### Amplification

Sanders Sound

These days getting electricity to our audio systems has grown into a major concern. It's hard to believe that just ten or fifteen years ago, my only concern with electricity was finding a close enough AC outlet in which to plug our stock power cords, or I occasionally worried about whether lightening was possible. When lightening was around, sometimes I'd unplug everything. In short, I focused only on having electricity and avoiding lightening. Some did have to worry about low voltage, an increasingly common problem, but fortunately, I never faced this problem.

Later, I bought an Electronic Specialists Suppressor to suppress spikes in voltage. The computer I'm writing this review on is presently plugged into it. Also, at some point I decided to try a Square D isolation transformer and have been sliding down the slippery slope since, using a wide variety of different devices to get isolation from noise and voltage spikes on the AC lines. Early on in this trip, I did



Magtech Amplifier H-Cat DF-100.2 Power Amp  
Sanders Sound  
Magtech Amplifier H-Cat DF-100.2 Power Amp

### Loudspeakers

Tidal Contriva Diacera SE

### Cabling

Synergistic Research  
Tesla Series Speaker Cables, Interconnects and AC cords,  
Exemplar Charged cables and Interconnects

### AC Conditioners

Synergistic Research  
PowerCell 10SE

### Accessories

Stillpoints Rack and Component stand,  
Synergistic Research Galileo Active Universal Cells,  
Synergistic Research ART resonators,  
Synergistic Research MIGs, Acoustic Revive RIQ-5010 (2 sets),  
Acoustic Revive RR-77 Subsonic Resonators (2), AVM Anti-Resonance Paint Tweak

notice improvements and could, in comparisons, pick the best sounding, but I also learned that there were costs. In more than a few instances, on removing the device, I got better sound. I do think few manufacturers could not beat the old Square D, but possibly our world now is rife with RFI and EMI noise, making these devices more and more necessary.

This is a review of a Sound Application SA-1 AC filter, one of basically four different filters they make. In the early 1990s, I had my first Sound Application AC filter. I vividly remember this one, as it saved my stereo system from a lightening strike. My wife and I were returning from dinner and, as I stepped out of the car, lightening struck a water heater just about 20 feet from me and over my head. I could find no evidence in our garage of the bolt, but entering the house I could. Our golden retriever was shell-shocked, the telephone wasn't working, the garage door opener would not work, and all the outlets in the garage were not working.

It was only belatedly that I thought of my sound system, which was fully on. I rushed upstairs with dread, but all was normal. The Sound Application had isolated it. We later discovered that the lightening had struck a hole in the gas line to the water heater a mere six feet from my stereo system, and it was aflame but in a direction where it contacted no wood. We were lucky.

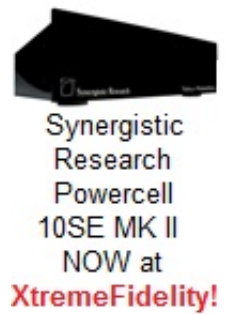
The review sample, Sound Application AC filter, looks largely like my older units (yes, I had four different units over several years), although there have been many, many improvements I am told but, of course, I can make no comparison of sounds I heard then versus now. Among its many subtleties are: the SA-1 has a bandwidth of two GigaHz, there are no series components, such as daisy-chained outlets, the digital and analog outlets are separated with the substantial filter circuit feeding both sets of outlets, capacitors are matched to within one PicoFarad or .01 to .05 percent, and many film and foil capacitors give 90 db of noise reduction. One product design resonated with me, "All Sound Application products have massive spike/surge protection that has been tested in the very real world, multiple times with direct lightening strikes." I can vouch for this.

So what is new with the SA-1? Since the first Sound Application AC filters in the 1990s, they look little different, but in reality they have changed greatly inside. Talking with Jim Weil convinces you that he has explored all aspects of wire, insulation, capacitors, outlets, connections, vibration, digital noise within the box, wire routing, and even screws. He talks about \$100 per foot, very low noise wire that was not even available in the past. He loves to talk about conductivity being quite low on many electrical connections, including wall outlets and on plugs at either end of power cords. He rails against plating and the virtues of quality brass that is not readily available any longer. It seems to be very expensive capacitors and wire that make the difference between his less expensive and more expensive filters. The Sound Application SA-1 is their top of the line unit capable of taking high power amplifiers.

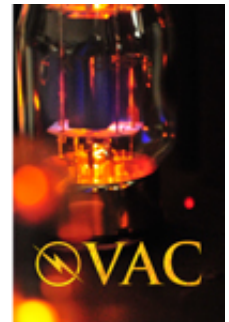
Looking at the pictures of the Sound Application you will notice a set of three duplexes at either end of the unit. One is labeled Analogue and the other Digital. I had an experience that underlines the



importance of how these differ. Physically, the difference is 1-½ inches of wire from the main filter board to the digital outlets versus 8 inches to the analogue outlets. The concern is radiation of digital noise. The digital outlets have very short leads from the circuit board that reduces digital noise getting into the analogue outlets. It may seem extreme, but sonically not at all – it is clearly audible, which was the result of a fortuitous mistake on my part. I misunderstood what Jim Weil told me on my unmarked unit and installed the analogue device power cords into the digital duplexes and visa versa. On making it right, I was rewarded with much improved performance in all of the finer attributes of this AC filter. This is just another of all the careful consideration of all factors contributing to pure AC with the Sound Application.

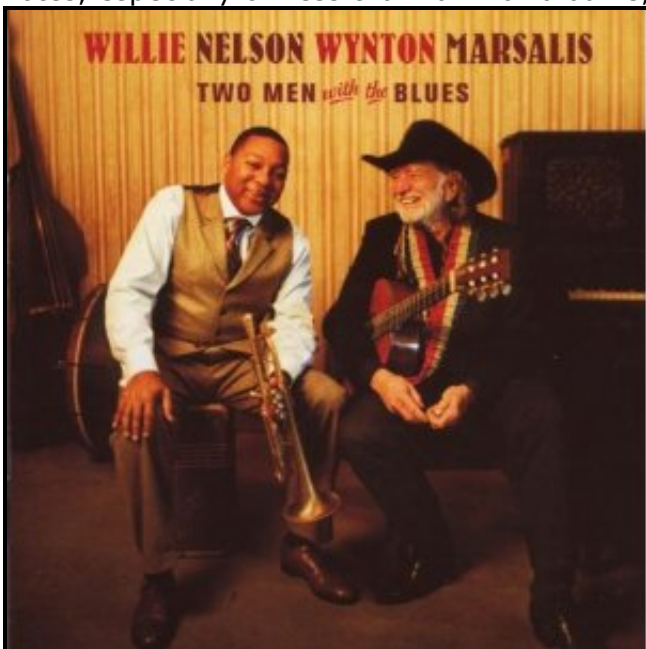


I still remember when I first got this generation of Sound Application filter up and running my entire system. This was after several weeks of breakin at the manufacturer. The sound stage was more encompassing although somewhat less wide than had been the case with my previous AC isolation. While it was satisfying, I knew that with time there would be much improvement. Another major improvement was using the Hubble HBL5362 wall outlet (apparently a stock outlet but with limited availability) provided by Sound Application with every unit and used for all the outlets in the filter box. I had been too impatient to put it in earlier, but it made a dramatic further gain in clarity and sound stage precision. Frankly, this greatly validated my respect for Jim Weil's total commitment to greatest conductivity, to avoiding plated conductors, and to getting the purist AC possible.



Now with many several months of use, I have come to appreciate the effortless sound of this filter, the extension and sweetness of high frequencies, the control and deepness of the bass, and the detail that comes through with its low noise. The dynamics are very impressive and startling. Loud first notes, especially on less than familiar albums, repeatedly startle me.

It is the clarity, low noise, and clean top end that most impresses me with the Sound Application. Early on I put three StillPoints Ultra Stainless steel isolation feet under it. I was rewarded with greater openness, depth, and precision in the sound stage. Jim was surprised with this, but as yet has not tried the StillPoints. With the StillPoints, the proper outlets used for digital



and analogue, and now well broken in, it further brings out the benefits of my sound stage. On Willie Nelson and Marsalis' *Willie Nelson and Wynton Marsalis Two Men With The Blues* - Blue Note Records [TOCP-70541 Japan], and indeed on all the live records that I



have dug up, one can definitely estimate the distance from the artists to the audience and often even hear conversations that were heretofore been unheard. The sense of being there is palatable.

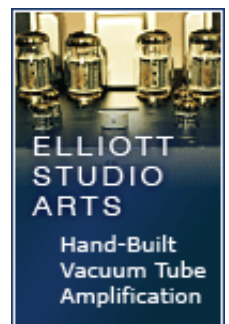
I have not been bothered by pops coming across the electrical lines, but now I have heard none at all. Similarly, I had always thought I was getting the true timbre of instruments, such as the ripeness of brass, but relatively speaking this is greatly improved. Especially in complex peaks, such as with the Basie Big Band on *Sinatra At The Sands* [Vicy 94366 Japan SHM] or on the Amersat Swan Lake



Duo selection on the K2 Sampler *This Is K2 HD Sound* [FIM K2 HD 078], the complexity and the timbre remain on loud passages. There is no confusion in the sound. But it is the stringed instruments in this and other symphonic records that are most striking. In many instances you can hear individual violins. Also, you can hear the string character as the bow is drawn. I have only twice been so close to the instruments in recitals that I have heard this. Of course the mikes are close and capture it. What happens to it without the Sound Application is the real question. Is it lost in the noise for the AC lines getting into the system? Whatever the explanation, hearing it lends authenticity and the sense of being there and close to the performers. Overall, I would characterize music reproduction with the SA-1 as vivid and real. Certainly I hear none of the smearing and dulling that so often troubles me with other AC filtering.

I requested the Sound Application JCR1, lowest price unit for comparative purposes. Unfortunately with such a short notice the only such unit I could get was extremely well broken in. At first turn on, I could hear the similarity of the sound. Only the very well broken in character of this unit, held me back for thinking the more expensive SA-1 might not be necessary. This was, however, only an initial thought. After spending a day with it, I noticed less purity of the timbre of instruments as well as less convincing far left and right soundstage instruments. The sensation of being there fell well short of that offered with the SA-1. Apparently, the wire in the JCR1 was used in the Martian land rovers and was the best available at the time of its conception. The signal to noise ratio for the wire used in the SA-1 is far lower and shows in the speed and low noise with that unit. The JCR1, however, shows the ultimate even greater superiority of the SA-1 with several years of break in.

I held off writing this review until I returned to my big room and system in Texas and for further break in by the SA-1. Using the H-Cat electronics I had used in New Mexico, I just sat a marveled at the



authenticity of the soundstage before me as well as the ease of the music. I was set to thinking of why I had sold my original units and must confess that I probably just decided to move on to something else. Sound Application has certainly come a long way since the 1990s. I certainly have heard no other AC filtering unit that can compete with the SA SA-1. I was thwarted in using my new BMC gear. One of the M1 amps had stopped working and I sent it back for repairs. On its being returned, I found the other amp had the identical problem. I also learned that my two amps were the only ones with this problem. This all kept me from having much confidence in using the BMC gear.



The first amp was simple repaired by replacing the thermistors on the AC input. The question was why these failed. It turned out that an old practice that I used was responsible. I lifted the grounds on the amps and all other electronics except the line stage. I removed these after BMC suggested that they might be responsible for the amps failing. After both had been repaired and the cheaters removed, they have been flawless. But having them working properly resulted in my finding that unlike the other amps I have tried, they do not benefit from being plugged into any transformer and other AC conditioner or filter. One has to suspect that the input design of the BMC makes this so. I have stopped using the Sound Application with these electronics.



Apart from my BMC electronics, the Sound Application SA-1 has added the thrill of realism to my music enjoyment. Although it is expensive, if you can give it a listen, hopefully with it in the system and without, I strongly recommend you do so. It is the most dynamic and transparent AC filter, I have heard.

## Norm Luttbeg



### Sound Application SA-1

Price: \$14,000.00 USA

Website: [www.soundapplication.com](http://www.soundapplication.com)

Telephone: 510 525-1065



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