New—the SVP-2

The SVP-2 is an update of the SVP-1 full preamp. Many small revisions, parts changes and a completely new circuit board layout has brought the performance to a new level for a unbalanced/single ended full (phono + line) tube preamp, and at a sensible price.

- The SVP-2 has a extremely good sounding MC and MM phono section, and 4 line inputs, one up from the SVP-1, with the “digital” input especially attenuated for digital playback, so the volume knob can be at a usable position for usable loudnesses.
- It has paralleled main outputs to drive bi-amped or subwoofed speaker systems, and extra RCA sockets for phono cartridge loading.
- It sounds even better than the well reviewed SVP-1—which has beaten every other preamp played against it—including the AR Ref III!

Our new Canadian dealer MKOM wrote that they have a classification they call “Hot Sxxt” and when they heard the SVP-2 they went one further and said: “Holy Sxxt!” The full data sheet is available at: http://www.vacuumstate.com/index.tpl?rubrik=12

The SVP-2 is available from stock, right now!

Newsletter August 2008

Hello,

We have a brand new website! The URL is the same as the old one <www.vacuumstate.com> and some of the content is the same, but a completely new layout and a new On-Line shop. Take a look please.

I have just returned from a trip to the UK where I met with a dealer and several potential dealers, and took equipment to Roy Gregory of HiFi Plus magazine for review. He now has in his care our recently released SVP-2 full preamp, the dpa300B monoblock poweramps, interconnect and speaker cables. He has promised us reviews of the cables and the SVP-2 in their upcoming September 2008 issue...and a month later in the USA. The magazine comes out, and the review will be up on this site after Sept. 18th.

I already have a pre-print copy of the review to hand, but cannot release anything until the magazine is out. But ~I can say he likes them!

We have also started running adds in HiFi+, considering it a great place to be and certainly a leader amongst world wide hi-end magazines.

New—the dpa150

A new BIG tube amp—the monoblock dpa150. Our dpa300B amps sound amazing, but their 18 to 25 watts are not enough for many speakers, and/or bigger rooms, so development work on this amp is progressing…

With a unique circuit topology, and zero negative feedback, it’s been designed from the ground up to deliver 150 watts of wonderful music into any speaker in Class AB1—or switchable to 50 watts in Pure Class A1 differential mode like the dpa300Bs—and to enjoy driving such difficult loads as one ohm (!) Apogee Scintillas, complex multi-way "cones in boxes" such as Wilson’s, or full range electrostatics like the new Martin Logan CLX!

The prototype amp shown in the pix here used EL509 output tubes, but they have proved to be unreliable, and difficult to source, so we will be using four of the legendary and incredibly linear EL156 output tubes.

A completely no-holds barred amplifier, available later this summer, at a price not too much higher than the dpa300B..
NEW—the Vacuum State True Music Server, the TMS-1
Still at the pre-production prototype stage, our upcoming music server is a full on, high end shot at this section of the market. Amongst it’s features are:
• Non oversampling DAC
• Vacuum State internal or external Reference Master Clock
• Solid state or tube output section

Above is an early prototype, and looks nothing like the finished product will, but it’s pix is here so you can see it’s well beyond the vapourware stage. We have three prototypes with trusted clients for long term operational testing, and they are reporting great sound and reliable operation. The production unit will have a huge hard disc, and a CD drive, as well as a Vacuum State level of audiophile sound.

I have never been a fan of 16/44 sound from RBBCs, but this device is changing my mind—our digital designer claims it now sounds better than his Level 6 Upgraded SONY 555ES SACD player...

Not so new: The SuperReg Kit:
The Vacuum State SuperReg is an hi-voltage regulator for use in tube preamps, phono stages, poweramp front ends, and other lowish power applications where the absolute highest sonic qualities are required. As described in it’s own chapter in the TubePreamp CookBook, the SuperReg uses a high voltage adjustable current source feeding a high voltage adjustable shunt regulator, this unique SuperReg topology has been proven to sound considerably better than any form of series regulation when used with signal handling circuits. It offers millivolt levels of output regulation, extremely low noise, and a wideband output impedance of circa 10 milliohms.

It can be adjusted to your exact voltage requirements between 100 and 400 VDC, and supply up to 100mA into your circuits. 400V is the maximum safe voltage limit of the components used, but much more current can be obtained if you fit bigger heatsinks.

It needs to be powered from a DC supply between 50 & 100V higher than your chosen output voltage. Please be aware that it is only a regulator—it does not contain a transformer, diodes or filter caps.

Finished size is 122 x 88 x 25mm, mounting holes are at 108 x 76mm. High quality 10 turn cermet trimmers allow easy adjustment of the output voltage and shunt current.

You can use the SuperReg in hi-fi tube preamps, mic preamps, DAC output stages, tape recorders, poweramp driver stages, whatever—just expect a major step up in sonic qualities!

The SuperReg kit includes the PCB, five pages of instructions, and all parts—parts that fit the PCB perfectly, like trimmers with correct pin–outs and heatsinks that just click into place! It’s a real joy to build such a thing and if your time is worth anything, it’s most likely cheaper than wiring it up on tag board with parts you have to find…

Only 125 euro and you order from: http://www.vacuumstate.com/index.tpl?kat=5&lang=2&lay=art1&a=%2515%2508%25C1%25EF%25B9%25F7%2582&b=733640.6336988944
Our SilverWire interconnect cable won a 25 cable shootout in the Italian magazine VideoHiFi and then named it the "Cable Product of the Year". This I/C is available factory built or as a DIY KIT, and if you know of an interconnect that sounds better, let us know—because we (and the magazine's testers) don't. Unless it's our SilverFoil I/C—which in some systems is even better, and is also available built or as a KIT.

Full review (in Italian) at: www.videohifi.com/specialcavi/22_indiceprova.htm
English translation at: www.vacuumstate.com/various/Review%20Translation.htm

Cables and cable kits available ex-stock from our On-line shop at: http://www.vacuumstate.com/index.tpl?kat=3&lang=1&lay=art1&av=%2585%2518%2505X%25252C%2593%25B1&b=733640.6510932388

Vacuum State's top preamp, the fully balanced/differential RTP3D, has topped out a three part hi-end preamp review conducted by Brad Morrical in Positive Feedback OnLine, where it won over all competitors, most notably the far more expensive KONDO M7 with its associated silver wire MC step-up transformer! Although listed as a RTP3D in the review, Brad actually had only listening access to my own eight year old RTP3C, which, while obviously no slouch, misses the improvements of the new RTP3D. So what would Brad have said about the '3D? Full review at: http://www.positive-feedback.com/Issue26/preamps.htm

Jack Robert’s investigation into Allen Wright's designs continues with the $6,300 Vacuum State GmbH SVP-1 Preamplifier.

May 2008
“The first thing I noticed about the Vacuum State SVP-1 was how much it sounded like its big brother. I wouldn’t have believed this possible considering the price of the SVP-1. There was that unbelievable lack of coloration and the bass had real punch and yet it was very, very tight. Then, like its big brother, there was that unique ability to sound like neither a valve nor a transistor preamplifier. I don’t know how Vacuum State accomplishes this, but with both the SVP-1 and the RTP-3D they clearly have this quality.”

Full review at: http://www.dagogo.com/VacuumStateSVP1.html

We get Reviews!
News, ideas, comments

Having spent many painful hours focussing on cartridges in turntables, and aligning them to sound great, and not just match up with the latest protractor, I recently wrote up a “white paper” on the subject. It’s three pages long, and comes with it’s own protractor, so if you want to get something special out of your vinyl system, it’s well worth giving this a go. The anti-skate info is completely new!

The article is at:

and the protractor is at:

The protractor should best be printed out on a non humidity absorbing surface such as an clear plastic overhead projector transparency sheet. And then take your time to do it right—it will be worth the effort!

Oh the sound.... Really impressive! I love the extra air and the major improvement in bass texture. This is just in the little 2nd system, but was very readily apparent. Nice elegant alignment, thanks. RF (NZ)

There are many brands of cartridges on the market, often at hugely inflated prices, but as it’s such a difficult job to built something this intricate, small & precise, most of the brands all come out of a very small number of specialist facilities. And by far the most prolific European manufacturer is Benz Micro, right here in Switzerland.

Herr Lukaschek revealed they had some interesting ideas that hadn’t been put into production, and after testing some that seemed key, and specifying their very best parts—here, still wearing a Benz Micro logo, is the first prototype Vacuum State low output MC cartridge!

The most obvious differences over the top Benz branded models are that (1) it is nude and (2) it uses a brass structure rather than aluminium. Brass is much more rigid than Al, and also much denser—both properties resulting in a cartridge that keeps it’s body still in relation to the music driven cantilever motion—this in turn produces great dynamics and very fine macro & micro resolution.

Naturally this cartridge is heavier than an Al bodied one, and needs a relatively high mass arm, but as many arms need mass added to the cartridge to balance correctly, this will be easily accommodated.

And the kicker is that with direct purchasing, and direct selling, our price is far below that normally asked for such an extreme cartridge!

When Jay of Audio Revelation got his first one, his response was: “This is not your father’s Benz!”

If you consider it the latest Benz LP without the body, and for over $1000 less, you’ll be getting close to it’s sound and value! Ex stock for CHF/USD 2500/-

The RTP3D plays fine, actually I compared it with a Lamm L2 Reference preamp on Lamm ML1.1 poweramps, and the RTP3D was better in possibly every way, more transparent, dynamic, lively and detailed. Especially the balanced output was to be preferred.

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RvR (Holland)

I just got in the SWP and have been enjoying it and its phono stage very much: smooth, eloquent and very musical. I'm running an Origin Live Sovereign Table and Conqueror tonearm with Koetsu Urushi into it now. Its an excellent value preamp given its phono stage. JK (USA)

Woow! The L6 9000 is not comparable at all with the JLTI Upgraded player—it is not fair to say that some may like the one, some the other...The JLTI paints a nice image in front of you, with some (limited) depth. Very nice- quite dynamic. Good timbre. But the Level 6 9000ES is in a completely different league. Now I understand when they say it "energises" the room. Depth goes much, much further (and closer on some close instruments), as well as around you with the right recordings (who needs multichannel?). I can hear many more details that were hidden in the other case. The sound is much more dynamic, but relaxed at the same time. Voices have more body, images are more stable. Bass is more powerful but more detailed as well. Double basses can be seen complete - not just the strings as before. Now the system is more sensitive to cables as well - both interconnect and speaker.

I have just bought a house in the Pyrenees range - I had promised to myself to stop all spending and forget improving the hifi for some years. Now I do not worry - it cannot be improved upon!

JR (France)

Phono cartridge loading

If there is one thing that really annoys me, it’s the unthinking insistence of most moving coil cartridge users that the cartridge needs to be heavily loaded down to sound at it’s best.

I have heard of people loading a low output MC with with little as 10 ohms—to me this always kills the life and dynamics of any cartridge. Most manufacturers (and experts) recommend a wide range of loads for their MCs—but in our experience many (but not all) MCs sound far more alive with a 47kΩ loading that’s normally used with MMs! And all the five cartridge manufacturers that I know personally, all have told me privately that they use 47k on their cartridges at home.

I believe the main problem originates in that many MCs have a high frequency resonance, and this overloads certain MC phono stages—not so our designs. With around 40dB of overload margin, even the most resonate of cartridges cause no problems at all.

So please do not automatically load down (and perhaps choke) your wonderful cartridge—try 47kΩ as well as the normal lower values, and see which you really like for music—there may be a happy surprise in store for you.

Thin wire has no bass?

Another thing that really annoys me, it’s the (again) insistence of many audiophiles that thin I/Cs and speaker cables have no bass.

But even a very thin wire will pass DC perfectly well to light a light bulb—what no one seems to have understood is that wires in a signal carrying cable will move in response to the electrical/magnetic fields in the wire, and loosely held low mass thin wires will move far more than thick heavy wires, giving an appearance of less bass because the energy to move them has to be taken from the signal itself. The simple solution? Anchor thin wires in a way that keeps them still with respect to the other wires, then you’ll have the bass as well!
Silver Interconnects & Copper Speaker Cables

We have four nines SILVER foil... and four nines SILVER wire!

From these basic materials we hand build in Switzerland two AWARD WINNING conceptually different I/Cs, both sonically superb, and both available balanced or unbalanced.

SilverFoil—unbalanced

SilverWire—unbalanced

SilverFoil—balanced

SilverWire—balanced

But why two different I/Cs at similar prices? Which is the best? What are the differences? And most importantly—which one will be optimum for my applications?

The straight answer is that neither design is better than the other—they are just different and perform to their optimum in different situations, and with different equipment. The SilverFoil design has a high capacitance/low inductance topology with superb tonal balance across the range, and a stunning bass end. But it’s high capacitance requires the very best circuits in the driving stage of the signal sending unit—and some very highly rated machines are honestly just not up to it.

In contrast, and with (otherwise superb) equipment that cannot drive the SilverFoils to their optimum, the SilverWires with their very low capacitance/low inductance can have even more apparent resolution, but may sound less full in the bass.

Which will sound best in your system? Our experience, and those of our clients show that these theoretical explanations do not tell the whole story—we suggest you take a pair of each type and try them—and return the one you find less optimum.

But be warned—many clients have done this and kept both, finding one sounded better between their SACD/CD player and preamp, and the other better between preamp and power amps—and both much better sounding than the Super Well Reviewed, Mega Expensive I/Cs they had been using (and were very happy with) before the arrival of these! Order them through the On-Line shop.

Finally, we have speaker cables!

12 years ago, the SuperCables CookBook described an advanced cable using very thin silver foil. But the construction technique was onerous, and obtaining the silver foil to our required dimensions proved hugely costly, so we recently investigated using copper foil, and by using the new advanced (but much easier) construction method of the SilverFoil I/Cs—we now have a CopperFoil speaker cable that’s even better sounding than the book’s silver cables!

And of course they are available in KIT form, but please note, before you order, that it is extremely difficult to build them longer than 2 meters—although some really keen types have done three meters!

Available at:
On the SACD/hi-rez player front, we have started working on an Upgrade package for the very popular Marantz SA7x1, which has in stock form received great reviews around the world—but we believe we can make significant improvements to it, as it’s output stages are insanely complex, and their clock is nothing special.

DIY self install Upgrade KITS are available for the SONY models we cover, and will soon be available for these Marantz models—but for these you do need to have good experience working with static sensitive, surface mount components.

**Clocks**

Vacuum State has manufactured and sold our Reference MasterClock Module (RCM) for SACD & RBCD players for some years, and it certainly contributes to the sound of our Upgraded players. But never wanting to rest on our laurels, we have made some fairly major improvements recently.

These relate mostly to the power supply for the clock itself. We have always used a completely separate power supply for the RCM and now have focussed on making it as completely free from noise as possible, as any power supply noise adds jitter to the clock signal.

A further advance is that we are developing a new, unique clock that will be in a completely separate cabinet, and will feed the player by matched coax cable using BNC connectors.

This allows us to make an ultimate power supply without any need to worry about the space or temperature limits of having the clock inside the players case. This of course allows us a completely free hand with the clock design, and take it several levels ahead.

*Esoteric* make a $15,000 (?) external clock, and while it has great reviews, we believe they are going in the wrong direction—their rubidium source may have stunning long term frequency accuracy, but digital audio needs ultra-low short term jitter, not GPS satellite frequency accuracy.

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**Dealers & Agents Worldwide**

We have a growing number of representatives, of two types: the six in blue are Dealers, who stock finished products, can provide comparison demos, and (possibly) loaners for home demos. Those listed in black are Technical Agents who do Player Upgrades, may or may not stock products, but can provide warranty service on all I/S products. And will, as a professional service, build up and/or help out on kits.

**Links to the reviews, and full info on each product is on our website**

Full review at:

www.positive-feedback.com/Issue23/vsei_level5.htm

(Level 6+ review coming soon, also on Positive Feedback.com)

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