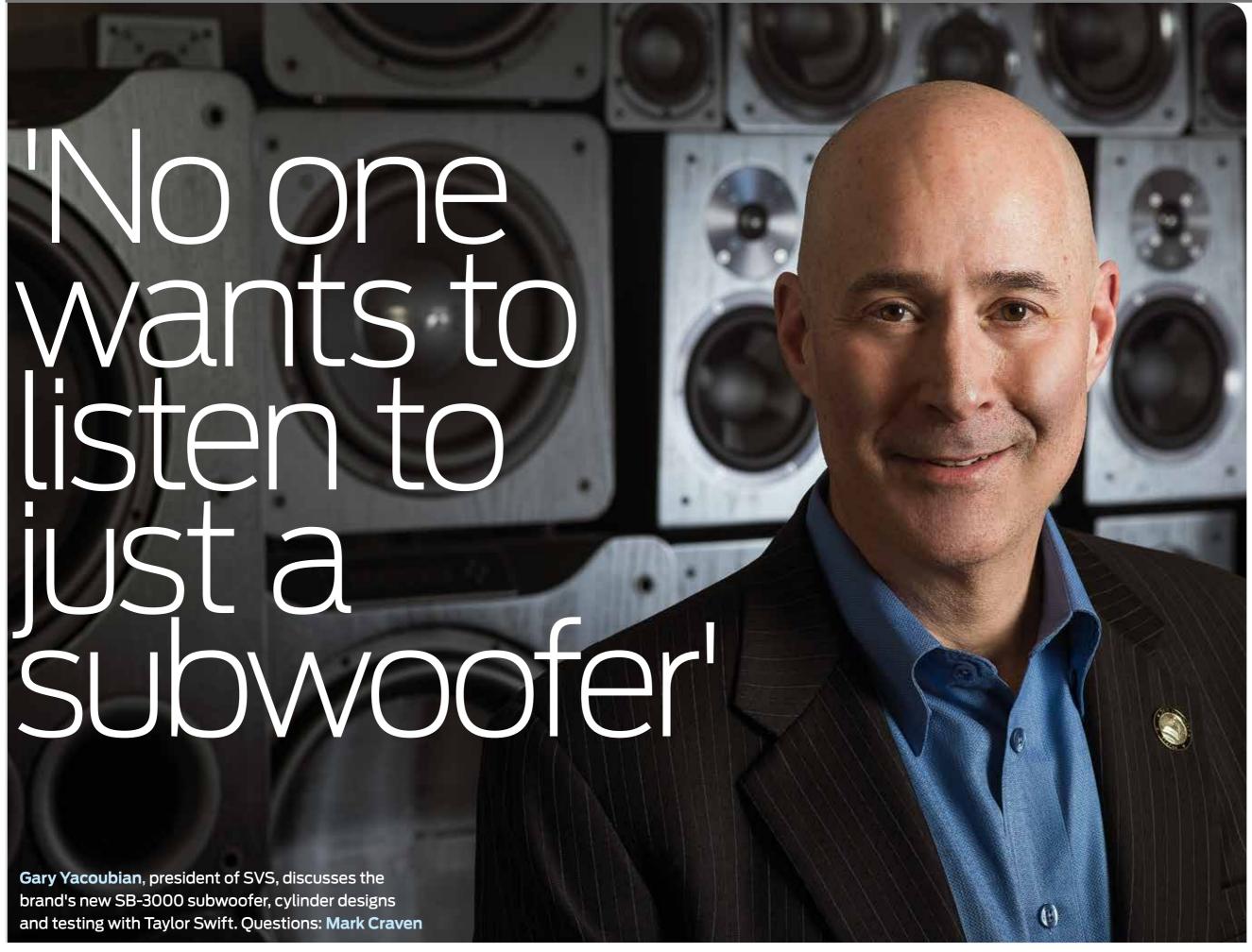
INTERVIEW SVS



Two years ago SVS launched the 16-Ultra series, then followed with the SB-4000. Now you have the SB-3000. Is this the normal way you work — trying out new tech on higher-end models and then trickling it down?

The 16-Ultra was our exercise in trying to bring reference performance to a price point where it hadn't been before. Obviously I'm biased – they're my children – but the PB16-Ultra won the EISA Award in 2017. It's an amazing subwoofer and really represents us well in that it's winning awards over products that cost two, three times as much. So we're really proud of that.

But we're challenging ourselves to extend reference performance to prices that include more people. Even though the SB16-Ultra is a steal at £2,500, not everybody has £2,500 for a subwoofer. So then came the SB-4000, using the same amplifier platform, just less powerful – 1,200W continuous rather than 1,500W continuous. But it's the same digital amplifier, exactly the same Analog Devices DSP to configure the subwoofer, and the same smartphone Bluetooth app control.

We brought that out at £1,800. I don't want to say 'making it cheaper' as it makes us sound like something we don't want to be, but we do want to include more people.

Now we come to the 3000 Series. This features an all-new 13in driver. It's completely unrelated, a design from the ground up that bears no resemblance to the driver that's in the 4000 Series. And it's a smokin' good driver. It's super-quick. It's light but it's capable of moving lots of air.

But a driver is really only potential. The question was could we extend that same 16-Ultra/4000 Series platform to an amplifier that would be in this price range of £1,275.

Did you need a new driver because you're using a less powerful amp? Why not just use the previous 13in design?

Because that driver is massively expensive. Putting that driver into any subwoofer is going to make it cost what the 4000 Series cost.

I consider the SB-3000 almost a little magic trick, in terms of what it does for the price and what it does for the size.

The hard part is to get the amplifier. It was lot of work to bring that platform to an 800W of [continuous] power design. And, again, it uses the exact same Analog Devices chip. Here's a good thing – the more products we have using things like that, there's a little bit of economies of scale.

About 10 months ago as the first prototypes were being measured our chief designer called me and said: 'Are you sure you want to do this? It's so close to the 4000 Series that it's probably going to cannibalise that world.' But I'm like, that's what we do. We're not one of these luxury car companies where they're afraid to have the lower model be better in anyway than the higher model. We want to keep pushing the envelope.

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When did work start on the 3000 Series? What's the timeframe for your subwoofer development?

The 16-Ultra was a massive project because it was a totally new driver, with an 8in edge wound voice coil that nobody's ever done – at least not in the consumer realm – and we'd never done 16in [drivers], because we don't like the way larger drivers behave in terms of their accuracy. Our team solved it with the voice coil, but that was a long, long project. A speaker design, if you really care about it, you're looking at every aspect of it, and going through prototype after prototype.

The amp was a new project too. So I would say the technology that ended up in the 16-Ultra took in the neighbourhood of three years to develop. You don't normally want to take that long. But the benefit was on the day we locked down the design of the 16-Ultra we were able to immediately get to work on the 4000 Series. We already basically had that 13in driver from the old 13-Ultra series, we did some modifications to it and we worked on making the amplifier that we'd developed fit into that price range.

The 3000 Series was always in my mind. So kind of in parallel, the driver development went on but we didn't think we'd be able to make the amp. There was a lot of back and forth.

I'm proud of the 3000 Series. It's rock-solid in execution, it has a really good low-frequency extension, it's quick and accurate and musical and that's what you want. We want to make subwoofers that totally kick ass, but we don't want to do it in a way that's not realistic. We don't want a subwoofer that draws attention to itself.

Some subwoofer brands go for 18in or even 21in drivers and some brands have dual configurations. Nearly all of yours are single driver, front-facing models...

I'm never going to criticise what other people do, but here's what I think. First of all, we like front-facing drivers for a lot of reasons. They're easier to install. Down-firing drivers can create their own problems in terms of room anomalies. But also somebody who wants to put it in a cabinet or something like that, they're totally out of luck if that have a downfiring driver. If it's front-firing it's much more flexible.

I also think in the audiophile world it's more direct in terms of its delivery. One of the things we try to do in all our designs is make sure that the subwoofer is interacting with the room as little as possible. In that way it will be in agreement with the passive speakers and create a convincing experience that works with them, instead of drawing attention to itself.

So we shouldn't expect to see an 18in driver in an SVS sub?

I'll never say never, but we had huge issues with these larger drivers and we finally figured it out with the edge wound voice coil we designed, but that voice coil, just to say, does consume some power, so it requires this massively powerful amplifier. In order to create a design with an 18in... We could do it – but would that even fit in someone's room? That's the question. My suspicion is you'd be better off with two of our SB-4000s than you would with an 18in version of our SB-16 Ultra.

As a brand, do you recommend that people always try and use twin subs in a room rather than one?

Twenty-five per cent of our subwoofers go out in dual configuration. The reason is not that you need all this extra horsepower to fill the room with bass, but to remove as much as possible room anomalies from bass cancellation and standing waves.

Usually dual is better. However, if you're compromising the technology in order to get two then you may be making a mistake. For example, our 2000 Series is our best-selling sub, but two of them is not going to be better than a single SB-4000, because the technology is just superior. And that matters too. Although if you had a room that was really messed up, then you might actually compromise on the technology and get two.

PC-4000

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The PC-4000: 'You really stepped up if

you put a cylinder in your room...

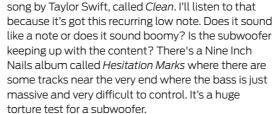
Or four, whatever. Three. It doesn't have to be symmetrical. In fact, asymmetrical can be better for subs. It's almost three anywhere in the room will make a huge difference. You don't even have to think about it. But I don't see that often. It's always usually



You have a combination of things you do. One thing, when you're measuring a subwoofer you have to go outside, because the waves are so massive you can't do it indoors. So we do a lot of measuring.

As far as films/discs go, I have a vast list and some are ones you wouldn't think of. I'll listen to Yo-Yo Ma playing Bach's cello suites to see, 'Does it sound like a cello?' That's the interesting thing. I'll listen to a





We try all different kinds of things but a lot of times, I'm like, does it sound like music? Is it convincing me that it's really happening? Mad Max: Fury Road – that's a great demo. Tron: Legacy – I don't think it did well for Disney but it's an excellent demo and really tests a lot of things about a sub.

What makes a good subwoofer?

First – low-frequency extension. That seems obvious, right? Subs should do that. But all our subwoofers, except one, extend below 20Hz, below human hearing. The SB-1000 we rate to 23Hz. And that's still pretty damn low.

Many of the subwoofers that live in the price range that we're in don't have the ability to deliver that level of deep bass so they exaggerate the mid-bass. And then you get this kind of boomy one-note bass and we don't want to do that.

Secondly, doing it at whatever volume level the user wants. Some subs limit the amplifier so that it can only play so loud. Passive full-range speakers just do what they are told, they're not smart, so when you're cranking up your home theatre the speakers are playing very loud whereas the sub will only play as loud as its limiter allows. At that moment where you want to impress your neighbours or have your neighbours call the police, the subwoofer sort of says 'I can't do any more', and that's the moment where you want it the most.

The third thing is an accurate frequency response - we use our DSP to have our response to be as flat as possible – and the fourth is speed and transient response. Our subs are really quick and it's something we're proud of. Even our ported subwoofers... ported designs aren't typically known for great transient response.

Lastly, seamless integration with passive speakers. Because no one wants to listen to just a subwoofer. Trust me. I've done it for hours. It's not fun, it's torture. What you want is a total experience.

If a sub does all that well, it's a great subwoofer and I don't care what brand it is. And then Taylor Swift sounds like Taylor Swift.

As well as your sealed and ported subs, you have the cylinder models - do they sell well?

It's something that people who have them really like. I think it's because they're just different and they're cool. We'll have retailers who say they just want to have it there to show people. Maybe five to seven per cent of our business is the cylinder. Not much. But they're great and they're a signature of what we do and I have more people come up to me and say I bought that cylinder from you, and they're proud of it, and they know I know that's a cool thing. You really stepped up if you put a cylinder in your room!



SVS makes both sealed and ported versions (pictured) of all its subwoofers

The ported ones drop a bit lower [than sealed models] and have a bit more output. We worked hard to blow away the assumption about the differences between ported and sealed; we've tried to narrow the gap. Sealed subs are known for not having great output but are usually less expensive and fit in rooms, so we've worked to give them a greater output and low-frequency extension.

And ported subs are typically so massive and the belief is that they're slower and less accurate. We've worked to have more nuance in terms of delivery. They do have a little more output than our sealed boxes but we roll that back a bit so you have accuracy and musicality and you don't feel that you can't play every kind of content.

What's next for SVS?

I'm interested in smart, wireless powered speakers, and we recently launched our Prime Wireless.

We think the audio world is one, except very few people, cares about great sound any more. Whereas we think people love great sound but nobody's talking to them. I'm interested to see if we can do

dominated by a belief that no | 'We are looking at trying to build wirelessness into our subwoofers so that it's just automatic'

more things and do things differently. But whatever we do it will always be about bringing great sound to more people and not being insanely expensive so you feel you have to mortgage the house.

What about wireless subwoofers?

You took the words right out of my mouth. We have a wireless adapter now and it works well, but we are looking at trying to build wirelessness into subwoofers so that it's just automatic – [whether] you can build the receiver into the sub so then you'd just need to add the transmitter.

Soundbar owners get wireless subs. A standard across AVRs and subwoofers would be great...

There's some stuff going on at WiSA [Wireless Speaker and Audio Association] that maybe could do that. If you have a soundbar you probably don't care about latency. But our customers do ■

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