



# THE PROFESSIONAL

So tube amplifiers sound soft, have a loose bass, can only be used with selected speakers and spend most of their time in the workshop? Think again...

**W**hat was I thinking? Why should I want to heat up the room by connecting an amplifier with a whole armada of boiling tubes in my listening room, when outside it was already as more than 30C? Note to self: next time, plan reviews more careful around the calendar and the weather forecast! But then, such fears often cause resistance among those considering tube-based audio components – well, along with the fear of such products being designed mainly for visual appeal, rather than consistent performance.

Too often we have heard from sensitive souls that tube audio is lacking when it comes to reliability, the tubes themselves are costly to replace and tricky to match, and that the poor supply of spare parts means extended repair times. And if all that wasn't enough, buying a tube amplifier immediately places strict limitations on the choice of suitable speakers.

What sensible person would choose such an amplifier? Well, Karlsbad-based Octave has the answer: by rethinking the whole concept, it says it has developed something very unlike the common perception of such products – if you will, the sensible person's tube amplifier.

## Think different

Talk to Andreas Hofmann – owner, head, heart and soul of Octave – and the thinking soon becomes clear: but then Baden-born Hoffman is an autonomous developer and manufacturer of his own products, to an extent very rare in this industry.

Let's start with the transformers: manufactured in-house, using high temperature resistant enameled copper wire and low-loss cores, they're designed for long-term consistency, and magnetically shielded with special metal sheets, made in Europe and difficult to produce. Forming the link

between the amplifier and the speakers in the negative feedback loop, they are crucial to the sound, which is why Octave winds and finishes them by hand: the company has been manufacturing its own transformers since 1968, so has unique experience in this field.

To those surprised there are no separate taps for 4, 6 or 8 Ohm speakers, Hofmann's response is that these are bad for the phase and frequency response, thus affecting spatial imaging and tonality. Using optimized winding technology, the efficiency of Octave's transformers is much higher than usual, and the single tap merely decreases the power of the V80 at low impedances, which in practice has proved not to be critical. The design also gives the transformers very wide bandwidth, the frequency response extending to about 60 kilohertz.

To ensure longevity and resist user-abuse, the Octave V80SE is equipped with extensive protection circuits, to handle against overvoltage, overcurrent short circuits and even lightning. The transformers are thus more or less indestructible, even in the case of no-load operation. Extensive tube-friendly power management is

also included, as well as a circuit to ensure the tubes are never driven to their limit, extending their service life.

The oval power tubes used here have caused some sensation among fans of “glow in the dark audio” in recent years, with other manufacturers also installing these KT 150 marvels into existing amplifier circuits. It works, and though it adds little to the sound, it can be offered to the customer at a neat surcharge. Hofmann goes further, however: he has stepped up to the plate and completely adapted the old V80 design to the new possibilities – with resounding success, as we were soon to discover in the listening room.

After a short but impressive warm-up, lap the lab was the first stop for the Octave amplifier, with good (but by no means outstanding) results obtained. In particular, the crosstalk attenuation at ten kilohertz – rather unexpectedly – and the damping factor – as expected – were unlikely to knock an old fox like laboratory manager Uli Apel off his testbench stool. He did however note that, with the Octave driving the large Canton Reference 1K loudspeaker, there was almost no sign of limited bandwidth or uncontrolled bass. Such are the signs of a good tube amp – common prejudices notwithstanding.

But impatience was growing, so soon the V80 was back in the listening room, and after only a short listen we began to wonder which was challenging which – the speaker or the amp? Finally, the winner was the speaker, thanks to its almost unlimited dynamic ability, although the two formed an ideally matched team.

The Octave did everything you could expect from a really good amp for just under €10,000\*, its MC phono section more than up to the task of revealing differences in quality and character between different drive/arm/system combinations. For example, the Pro-Ject Perspex with Ortofon MC30 brought a positive charge to the atmosphere – never seeming to age, it simply does a really good job at an affordable price.

With CD, too, the Octave revealed all the subtleties of blues singer Doug MacLeod’s performances, while Marla Glen’s thick bassline on “Cost Of Freedom” benefited from the vice-like grip of perfectly the amp. Force, foundation, precision and swing: this is what the editor listens for in an amp, and the kind of voices often made somewhat sugary by

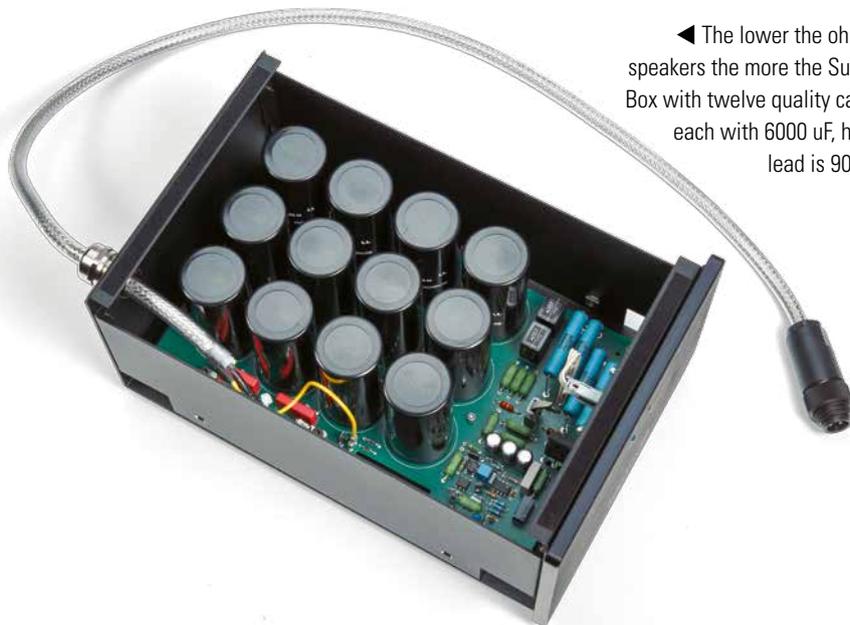
most tube amps, came through the Octave and Canon speakers gracefully, detailed, nuanced and simply credible. Even better, the character hardly changed even at high levels until shortly before the performance limit – a sure sign that someone has done his homework here.

**About beans and goosebumps**

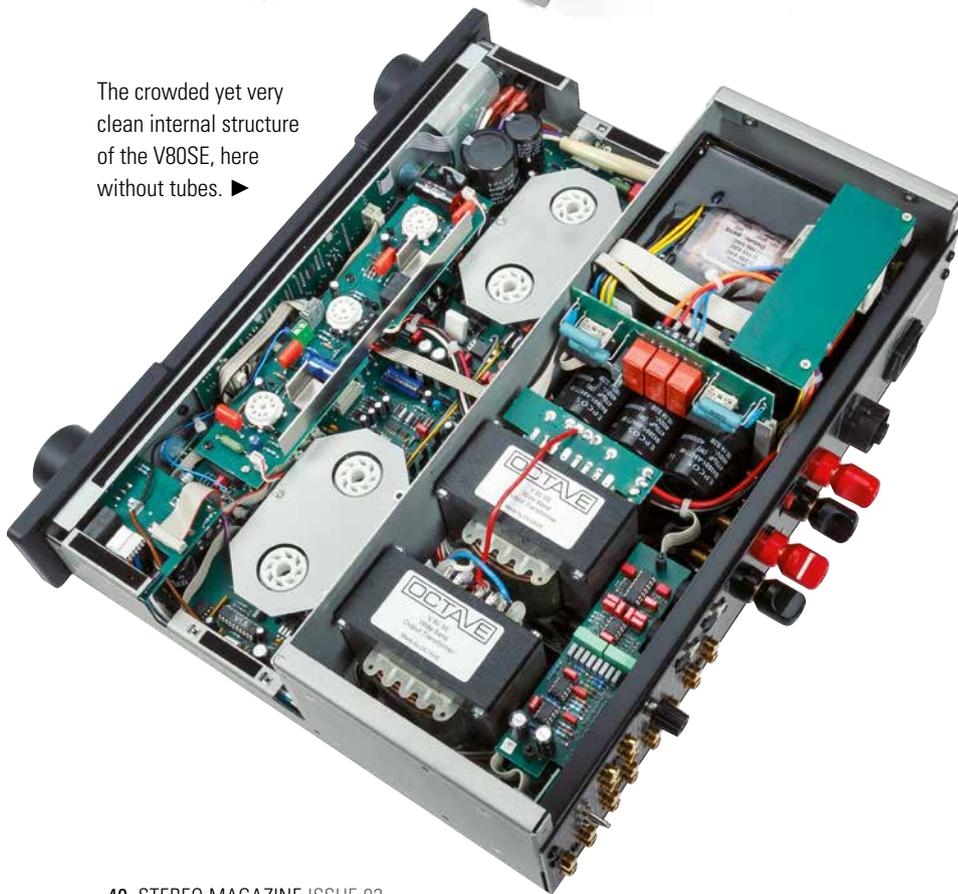
I am not sure about the acoustic bean counters – when a system excites me, I soon get goosebumps all over my body.

Here both came together: a flood of detail, the finest transient and decay responses, the joy of playing, everything was there. Yes, a muscular transistor amp may still deliver even more at very high levels, but otherwise – pack it in and take it home.

But wait, we still have one more thing. Wasn’t there another box in the Octave shipment, something rather small? Yes, it’s the company’s SBB – short for “Super Black Box” (though it is also available in silver) – and it’s available as an option at



◀ The lower the ohms of the speakers the more the Super Black Box with twelve quality capacitors, each with 6000 uF, helps. The lead is 90 cm long.



The crowded yet very clean internal structure of the V80SE, here without tubes. ▶

significantly more than €2000\*. What is it all about? We'll get to that, but isn't this an add-on too far? After all, the Octave amp performs so well that it matched the top rivals in its market-sector, so how can this extra box help? In the lab, connecting it brings only a marginal improvement to the V80's measurements – a few watts more power into a four ohm load – while at eight ohms nothing happens. Ok, back to the listening room, and try the V80/SSB combination with the Canton again speakers.

First, we listened again without the SSB "afterburner" – great, everything's perfect, what more is there to say? And then...

### VooDoo box? Never!

Well, good though the V80 is when used alone, here's the thing: with nine out of ten speakers, you won't be able to resist adding this little black box to it.

Why? Well, the quality of the electrolytic capacitors in an amplifier may be crucial to the sound, according to Andreas Hofmann: the types used by him are about twenty times as expensive as good standard merchandise. The SBB extends this thinking, upgrading the power supply by increasing the capacitance tenfold, with the intention of boosting the amplifier's ability to drive demanding speaker loads, all the way down to two ohms.

So, now it was our turn to sample some of this audio voodoo, and immediately we learned things about musical coherence



▲ Top switch selects headphones output, speakers or both; lower one saves power when the amp is on but not in use.



▲ Solid speaker terminals surround the unusually-located headphone connection.

– not that we'd noticed it was lacking in the initial listening. With the "unaided" V80, the new Canton was clearly the best speaker that ever came out of the Taunus region of Germany; now it revealed additional qualities. The soundstage imaging became more spacious, and at the same time more stable as the finest details at the heart of the music came to light.

Even better, the bass now showed no sign of fade, however long, fast and hard it was played – not even when we tried to provoke the wrath of the neighborhood or colleagues in other offices. Banished were any thoughts we'd been having of adding a power amp to the V80 in extreme situations, as the Super Black Box demonstrated that it is anything but black magic.

The performance was so much better that the Octave, with SSB "in harness", could now easily be counted among the very best amplifiers. Considering the depth of engineering and quality here, not to mention the sound, the price is absolutely fair.

*Michael Lang*



◀ Big egg: The selected KT 150 power tubes are given optimized working conditions in the V80SE, so can develop their qualities to the full.

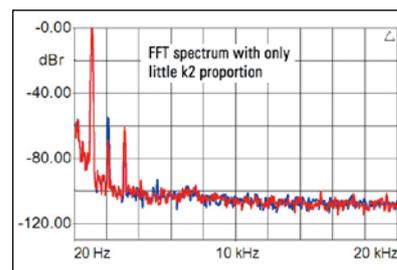
## OCTAVE V80SE (SBB)



From €9,250\*, Phono-MC €590\*, SBB €2,500\*  
 Dimensions: 46.5x16x46 cm (WxHxD)  
 Warranty: 3 years (at registration)  
 Contact: Octave Hi-Fi, Phone: +49 7248/3278  
 www.octave.de/en

Even the standard version provides many happy hours, with SBB a real bonus. Good MC option.

### MEASUREMENT RESULTS



**Continuous power** to 8 | 4 Ohm 68 | 35/46 watts per channel  
**Pulse power** to 4 ohms circuit breakers Watts per channel

**Distortion factor**  
 At 50 mW | 5 watts | Pmax -1dB 0.03 | 0.2 | 0.9%

**Intermodulation**  
 At 50 mW | 5 watts | Pmax -1dB 0.01 | 0.3 | 0.6%

**Signal-to-noise ratio** CD at 50 mW | 5 watts 71 | 87 dB

**Signal-to-noise ratio**  
 Phono MC 0.5 mV, 10 ohms 72 dB

**Channel separation** at 10 kHz 37 dB

**Damping factor** at 4 ohms 2

**Upper cut-off frequency** (-3 dB, 4 Ω) 60 kHz

**Connected load values** oriented to practical operation

**Crosstalk** Tuner/CD (10 kHz / 5 kOhms) 86 dB

**Volume control** clocking error up to -60 dB 0.3 dB

**Power input**  
 Off | Standby | Idling 0 | 2/ 193 watts

**LABORATORY COMMENTS:** Good measurement data in all relevant points. Rather atypical for a tube amplifier is the very low distortion, at least in the normal power range.



### FEATURES

Four line-level inputs, one of which is XLR, remote control, tape output, headphone output, pre-out, MC phono option, bias setting, power supply unit option, ecomode switches, German user manual

### STEREO - TEST

SOUND QUALITY CD	96%
SOUND QUALITY SACD	100%

### PRICE/PERFORMANCE



\*All prices listed are German retail prices incl. VAT valid at the time of evaluation.