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James Michael Hughes auditions an integrated amp that builds on its manufacturer's redoubtable engineering prowess...

# **Sugden Audio Masterclass ANV-50**

# Integrated Amplifier £4,790 RRP

As all students of hi-fi history should know, a certain James Edward Sugden produced the first commercially available Pure Class A transistorised amplifier back in the nineteen sixties — at a time when the thermionic valve was rapidly being usurped by new-fangled solid-state designs.

Transistors offered smaller size, cooler running, and lower cost—partly due to the elimination of the output transformer. But old-fangled Mr Sugden wasn't having any of it. He was unimpressed by the solid-



state amps offered for sale back then. Their sound did not excite him at all.



With pure Class A, the output devices are biased to run at full-tilt all the time. The great classic valve amps were pure Class A, yet every single transistor model at that time – bar one – was Class AB or B. The exception? Sugden's ground-breaking A21. So why isn't every amp pure Class A today?

Well, along with certain key benefits, there are downsides. The main problem is heat, as pure Class A amplifiers tend to run very hot. A second drawback is high energy consumption. Even a modest low-powered 20W pure Class A design is likely to consume around 200W continuously or more than three normal light bulbs at once.



Pure Class A remains a viable option despite its low efficiency and thermal wastefulness. But inevitably, many electronics wizards have sought to design circuits that deliver the sonic benefits of Class A without the disadvantages. Sugden's Masterclass ANV-50 falls into this category. Launched to celebrate the company's fiftieth anniversary, its cutting-edge circuit design represented a radical rethink of what was needed. It was more advanced and quite different to anything the company had done before.

## **UP CLOSE**

A 50W pure Class A amplifier would usually be big and heavy, yet the ANV-50 is relatively compact and light at about 9kg. During normal use, case temperature rises just a few degrees above ambient. When idling, energy consumption is just 20W. According to Sugden, "The ANV-50 has at its heart, a 4W pure Class A amplifier coupled to an advanced 'ideal' output stage, which magnifies the output of the smaller amplifier and does all the heavy lifting. A comparator circuit senses any deviation between the 'magnified' output and that of the pure Class A 4W amplifier, correcting errors as necessary". It not only maintains signal authenticity, but it also improves load stability and reduces the output impedance to zero, the manufacturer claims.



The ANV-50's 1MHz switched-mode supply is said to be instantly responsive and very stable. Having a high-standing current and ample power reserves ensures near-instant response to signal changes – like a sudden transient – and is a key benefit of regular pure Class A amplifiers. The power supply in Class AB amplifiers is typically slower and less responsive because energy is drawn directly from the mains transformer and bridge rectifier. Hence, the large banks of electrolytic capacitors provide a current reservoir to offset this.

The ANV-50's build quality is excellent, with a steel chassis and aluminium top cover. The 10mm-thick alloy front panel looks solid and classy. The front comes in silver or black as standard, but a striking range of custom colours are available to order at an extra charge.



It has five line inputs but no phono stage. There's a fixed tape output, a variable preamp output, and a set of loudspeaker terminals. Power output is rated at 50W per channel into 8 ohms, doubling to 100W into 4

ohms. At just 110mV for full output, the quoted input sensitivity (gain) is on the high side. I usually favour high gain, but when partnering the ANV-50 with my 102dB-efficient Klipsch Cornwall IVs, the sensitivity was almost too high; to avoid excessive loudness, the volume control needed to be set to a low position. I even had to reduce the output of my DAC and phonostage to counter this.

In use, the amp was virtually silent in terms of mechanical noise/transformer buzz. There's a very slight residual hiss that's just audible with your ear close to the tweeter, but no hum. A remote handset is provided so that volume levels can be adjusted, but remote input selection is not possible. My ANV-50 had seen use before I received it, so no running-in period was necessary. Any 'warm-up' time needed is minimal.

### THE LISTENING

From the off, there's a bracing hair-trigger responsiveness that sounds arresting and engaging. Straightaway, a sense of speed and focus gripped me. The ANV-50 produces great transient attack compared to most amplifiers. There's a broader palette of tonal colours and subtler micro-dynamics. It creates the impression of everyone playing together in a very committed fashion, all deeply engaged with the music. This makes many other solid-state amplifiers sound slightly bland and vague.



Although only 50W, the Sugden is impressively powerful and gutsy. Yet it's just as capable of being delicate and refined, smooth yet incisive. I had no worries over power limitations as it never sounded even remotely over-stretched, but using 102dB efficient speakers helped here, of course. The amp is DC-coupled throughout; having no coupling capacitors in the signal path significantly extends the bandwidth. Sugden claims the ANV-50 covers from 8Hz to 86kHz.

Bass is deep and powerful but also fast and nimble. For what it's worth, claimed total harmonic distortion at 1W or 35W is just 0.05%. While the presentation is invariably smooth and clean, it's not especially euphonic. Tonality is full-bodied but never lush or rose-tinted romantic. You experience a keen sense of pace and forward momentum. Nothing feels lazy or loose about the ANV-50. It's taut, ripped, and purposeful – not flabby or slow. If it was a sports car, you'd describe it as nippy and manoeuvrable – highly responsive and



fast. And there's plenty of air and space, with no hint of congestion. Voices and instruments remain separate and distinct.

Of late, my regular amplifier has been a Unison Research S2K Class A single-ended tube amp. It offers a clean, inviting, relaxed sort of sound, and I like it very much. While not lacking urge or immediacy, it delivers a fluid presentation that keeps the music flowing smoothly and effortlessly. Compared to the S2K, the ANV-50 was clearly more assertive and determined in the way it portrayed things. Rather than letting the music unfold at a relaxed, even pace, it seemingly had everyone on their toes – creating an impression of concentration, with everything crisply focused. The music seemed more eventful as if there was more going on and more happening.



Another side effect was that the players' commitment seemed greater, with everyone trying that little bit harder. Musical phrases had more kick, attitude, and generous light and shade—more intention and meaning. How impressive that such a relatively low-powered amp should have such dynamic immediacy. It used to be said that only big, high-powered muscle amps could do this on account of their superior headroom. However, the ANV-50 demonstrates that this isn't automatically the case. It's definitely an amplifier that punches well above its weight.

Playing some **Oscar Peterson**, I heard a sharp, snappy 'take-that!' sort of abruptness when a brusque left-hand piano phrase suddenly burst forth. Musically, this expressed impetuosity – a feeling only conveyed when the reproduction equipment is capable of real snap and bite. The opening trill from *Prelude 14* (*Shostakovich's 24 Preludes and Fugues*), played by **Alexander Melkinov** (piano), was likewise astonishingly

explosive and vibrant. I experienced a real frisson; only a small select group of amplifiers could convey such startling immediacy. It really made me sit up.

By way of contrast, I next tried **ABBA**'s *Voulez-Vous* and was impressed by the layering of the voices. For once, I could hear the way the engineers attempted to suggest a sense of space and depth despite a fundamentally forward and upfront balance. Pop songs like this can often disappoint, seeming bright, glassy, and thin when played on hi-fi. We criticise the recording for not being good, despite a lot of care having been taken in the studio. The ANV-50 revealed this care, delivering results that were clean, crisp, and sophisticated.



Another recording from the late seventies that I have found challenging to reproduce was *Handel's Water Music* with **Christopher Hogwood** and the **Academy of Ancient Music** on L'Oiseau Lyre. It has always sounded tonally thin and lacking in substance. I bought it on vinyl when it was first released in 1978 and found the sound small-scale and cramped. When the recording came on CD in the late eighties, I bought it again hoping to hear an improvement but alas it didn't seem much better.

The recording location – Walthamstow town hall – is a large space. At a guess, it feels like the venue was simply too vast for the small number of players used, resulting in an emasculated sound. But using the ANV-50, things sounded much more solid and full-blooded than expected. Indeed, the presentation was surprisingly holographic, with space and depth. To be fair, the improvement I heard is partly due to my having better speakers and a better CD player now. Just the same, the sonic benefits of the Sugden seemed to act as a catalyst.

It's all down to the way the ANV-50 focuses on essentials: its ability to accurately reproduce the important things without its own foibles and limitations getting in the way. Therefore, it can reveal the fundamental core substance of the sound – its essence, so to speak. Listening to a new album feels like an adventure, while old favourites – things you thought you knew well – sound fresh, alive and newly-minted again.

### THE VERDICT

Ultimately, the Sugden's only clear limitation is that modest 50W power output — or is it? Given reasonably sensitive speakers, even that's not really a problem. In terms of sound, the Masterclass ANV-50 is easily one of the best amplifiers available at anywhere near its price. To get truly better results, you'd need to spend lots more. So it's a great amplifier and for many music fans, most definitely a keeper.





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