

# AVM Ovation CS 8.2

A new brand – or at least new to the UK – and an almost-baffling catalogue of products: can AVM’s flagship network music system cut it in a competitive market?  
 Review: **Andrew Everard** Lab: **Paul Miller**

The nature of the global hi-fi market is such that certain brands have a following in some territories but are unknown in others. Read some of the hi-fi magazines from around Europe and you will find rave reviews of products – usually made locally – that look very interesting. All well and good until you try to get a listen back here in Blighty, only to discover that there’s no UK distribution, meaning a trip and a retailer willing to ship internationally, or a calculated risk in buying ‘blind’ from an overseas vendor.

One of those ‘big elsewhere’ brands is German company AVM, but now it’s on sale in the UK via speaker manufacturer PMC, in whose stable it is joined by Canadian company Bryston. A range of products from the bafflingly comprehensive AVM catalogue forms the first tranche of AVM models being promoted by PMC, of which this £11,695 Ovation CS 8.2 is the flagship all-in-one digital audio system.

## TUBE AND CLASS D HYBRID

That slightly nebulous description is just about the only one able accurately to cover what the CS 8.2 actually is – unless, that is, you’d prefer the rather unwieldy ‘integrated CD player/network player/DAC/receiver’. In fact, even within the AVM Ovation lineup (which sits above the entry-level Inspiration and midrange Evolution ranges) there are no fewer than four models with network music capability.

Things start with the £7830 SD 6.2 analogue preamp with built-in network playback, while the same money will buy you the MP 6.2 media player with CD and network playback, both of these models also having six digital inputs for use with external sources. A heady £9450 buys you the CS 6.2 model, which fuses the specification of the SD 6.2 and MP 6.2 while adding an FM radio tuner and –

**RIGHT:** Modular construction eases production and service upgrades. Switchmode PSUs (left) with extra HT supply for the tube pre (top right) are surrounded by digital boards, inc. ES9018 DAC (centre). Pascal Class D amps lie beneath

more to the point – a rated 500W/4ohm of Class D power amplification, while a further £2245 gets the model here, complete with a valve line stage using AVM’s proprietary 803T tubes.

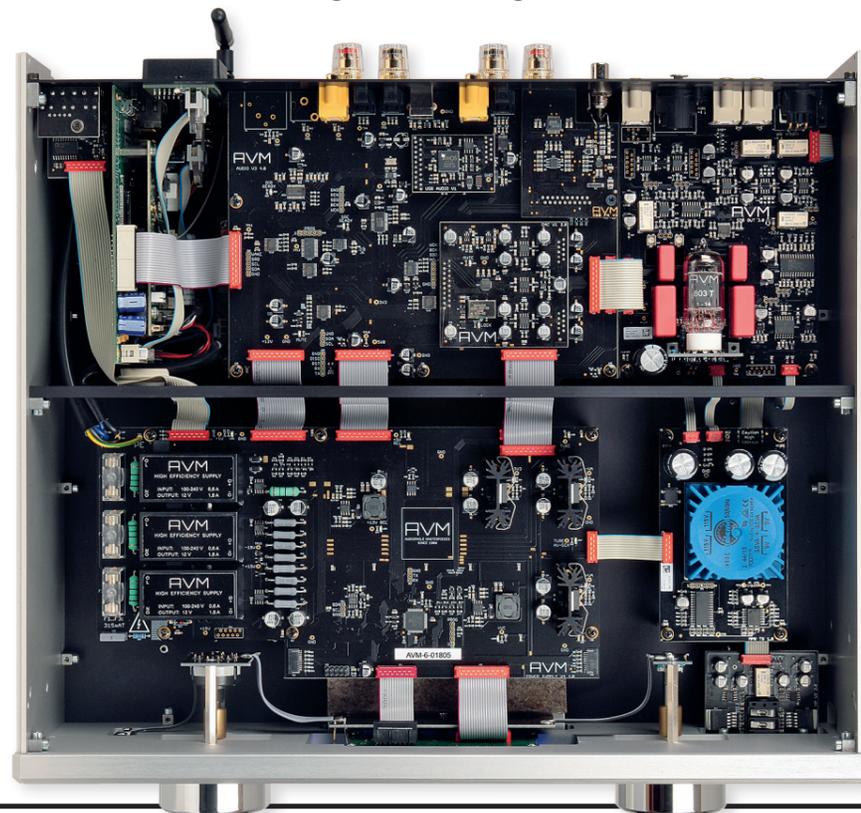
## BIG ON VALUE

Still with me? We’re only scratching the surface of the AVM offering, for there are 12 models in the Ovation range, including two stereo power amps and a choice of monoblocks at up to £24,500/pair, and there’s a similar choice in the Evolution line. Only the Inspiration line is relatively simple. But even here there are two streaming products, starting with the SD 2.2 preamp – I think it’s called covering all the bases!

It’s a tribute to AVM’s industrial design that the quality of styling and construction is maintained across its full offering. And

the bigger Ovation models certainly both look and feel all the money, with a precision to the controls and that old ‘hewn from solid’ impression created by the casework. Yes, the Ovation CS 8.2 is at the top end of the all-in-one systems market, but initial impressions are big on perceived value, not least due to the solid flight-case in which the products are delivered – not just for reviewers, but for all customers.

For all its complexity and capability, the layout of the Ovation CS 8.2 appears relatively simple, its front panel kept clear by the use of five ‘soft keys’ below the display, which change their function according to the mode in use, labels appearing on the panel to identify what each does. The dominant controls are the source selector and the volume knob, both machined from solid aluminium and running on smooth ball-races, while a



power/standby button and the slot-loading CD transport opening complete the fascia.

## IN THE PALM OF YOUR HAND

Internally, the layout is busy but logical, as is made clear in our ‘top-off’ view [p40], but it’s worth noticing that AVM’s design philosophy is based around a modular approach, meaning that its products should be simple to service, and can be upgraded in the future – should improvements become available – simply by replacing modules.

When discussing the product with AVM boss Udo Besser [see boxout on p43], it was noticeable that on several occasions he pulled out various sections of the circuitry to explain how the layout was designed and implemented, AVM’s modular design being a part of his ‘do it once and do it right’ way of thinking.

A simple RC 3 remote handset is supplied with the CS 8.2, although even this is a high-quality aluminium-cased piece, but for complete control the

company offers two options. The £490 RC 9 remote will be familiar in its form to Cyrus owners, as that company has used a version of the same basic device. It comes with a charging station, operates on either infrared or radio frequencies, and offers a full colour display of the functions of the device being ‘driven’, including bi-directional feedback.

Alternatively the company offers its free RC 5 app for Android and iOS. This runs on a smartphone or tablet, and puts the entire control of any of the company’s network-enabled products in the palm of the user’s hand. It’s a particularly well-sorted and comprehensive app, allowing not just basic operation but also set-up and other desirable refinements.

At the rear, digital inputs are provided on USB-B, two optical and one coaxial socket, plus a USB-A port for the connection of storage devices, while networking is accommodated via the usual screw-on rubber stub antenna for Wi-Fi,

**ABOVE:** Bold, chromed rotaries govern input selection and (digital) volume while a row of buttons allows menu items to be navigated via the display above. The slot drive is for CDs only

and an Ethernet port. As ever, I’d suggest the wired network connection, as it’s less prone to buffering and other disturbances, especially when playing anything beyond CD bit-rates. Finally, as well as UPnP streaming, the Ovation CS 8.2 can also access streaming services, including Qobuz and Tidal, plus Internet radio.

## PLUG AND PLAY

The asynchronous USB input offers a choice of ‘Lo Res’ and ‘Hi Res’ modes – no drivers are needed for the former, but it’s limited to files of 96kHz and below. To play higher rate files, up to 384kHz/24-bit and DSD 128, you need to select Hi Res and, if you’re using a Windows computer, download drivers from the AVM website. No drivers are needed with Macs.

It’s also worth noting at this point that the CS 8.2 offers a choice of playing digital files at their native sample rate or upsampling or downsampling them, as well as having two filter settings. In practice, the incoming data rate is shown on the display, and then one of those ‘soft keys’, labelled as ‘CONV’, lets you choose the sample rate and applied filter setting. ‘Steep’ and ‘Smooth’ indicate the way the filter works at the upper end of the frequency band, and once chosen for a given input, this setting is memorised.

One analogue line input is available, on a choice of balanced XLRs or conventional RCAs, and for external amplification there are both XLR preouts and a choice of fixed or variable RCA outs, too. These variable outputs can also be used with an active subwoofer with its own filtering. One pair of speakers can be connected to the unit, and there are various other connections for integrated system control. ➔

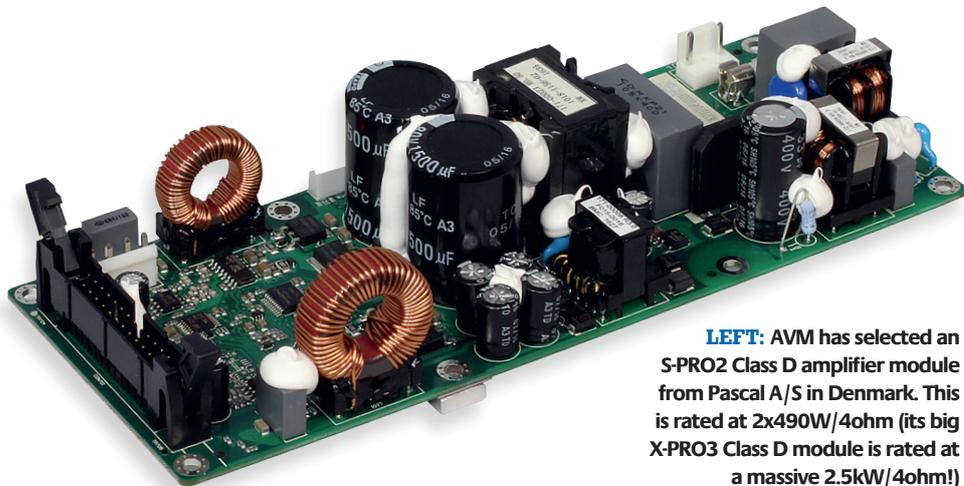
“AVM’s modular design aim is to “do it once and do it right””

## AUDIO VIDEO MANUFAKTUR GMBH

Based in Malsch, some 75km west of Stuttgart in Southern Germany, AVM was founded in 1986 by graduate engineers Günther Mania and Robert Winiarski. AVM acknowledges the vital importance of sound quality, but it’s also very aware of the ‘lifestyle’ element of its offerings. ‘We believe that any kind of music – classical, jazz or pop regardless – has been composed to bring joy and emotions to the listener,’ the company says, adding that ‘Technical equipment such as amplifiers and loudspeakers must try to transport these emotions and joy into the living room’.

And its products need to complement their owners’ lifestyles, too. ‘Hi-fi components are not only technical things but primarily a part of our customer’s home. We attach importance to a worthy and beautiful appearance, [and] try to make all our components easy to use.’ The connection with the UK’s PMC grew out of a common international distributorship. Having heard his speakers demonstrated with AVM electronics, founder Peter Thomas brought the brand into the UK, where it was launched to the public at the Bristol Show in February.

## ALL-IN-ONE SOLUTION



**LEFT:** AVM has selected an S-PRO2 Class D amplifier module from Pascal A/S in Denmark. This is rated at 2x490W/4ohm (its big X-PRO3 Class D module is rated at a massive 2.5kW/4ohm!)

All of which means that using the CS 8.2 can be as simple or as detailed as you want, for the basic story is that it's completely 'plug and play', especially if using it with a network connection and the app, or with a Mac connected to the USB-B input. Very little familiarisation is required, and anyone who's ever used a network player or a USB DAC should be able to get going very quickly indeed.

However, despite the apparent simplicity, it's possible to dig deeper into the CS 8.2 and make a range of finer adjustments. I've already touched on the digital set-up options, covering the filters and sampling rate selection, but you can also delve into the menus and adjust sensitivities for both the analogue and digital inputs (the latter only when a digital source is connected), and the internal CD player and FM tuner.

It's possible as well to set 6dB of attenuation on any input, as PM notes in his lab report [p45], you may well find that facility well worth having, giving the high overall gain on offer here, not least to give some room to manoeuvre on the volume control. Without it things can tend to get a bit 'sudden'.

Tone, balance and loudness controls are also available in the menu, complete with a bypass function, and you can also turn off the power amp section and choose between fixed and variable preamp outputs when the CS 8.2 is used with external amplification. You can also adjust the display brightness, skip unused inputs, change input labelling, and so on.

See what I mean about comprehensive? It's as far from a hair-shirt design as you're likely to get, but all that clobber doesn't

mean it stints on performance – even though the sound isn't quite the 'grab you by the lapels' sort you might be expecting. Start-up is leisurely, with the unit performing a self-test routine and then showing 'Waiting for tube warm-up', this legend changing letter by letter into upper case as a countdown, and then some more relays click and you're good to go.

### **TOTALLY CAPTIVATING**

And all this smoothness of operation is borne out in the sound of the Ovation CS 8.2. AVM is upfront about the kind of sonic signature it aims for, which – to simplify greatly – is one designed to deliver maximum musical enjoyment without that brain-frying sense of everything being hurled at you. Yet you soon realise that

there's no shortage of detail, definition, soundstaging, imaging and all that other hi-fi stuff, while the music also has a wonderful feeling of flow and involvement, making it hard not to be totally captivated.

Yes, there's that 'sweetening' PM reveals in his lab work, but the CS 8.2's sound never seems overly tailored or artificial. Instead there's just a very enjoyable smoothness and warmth to the way it goes about things, and if you want it even softer you can always resort to the appropriately-named filter position.

But for all that, there's never any feeling that the sound here is lush or excessively mellifluous. Even with a warm recording like the LSO String Ensemble's reading of the Vaughan Williams *Tallis Fantasia* [LSO Live LSO0792; 96kHz/24-bit] the CS 8.2 manages to combine a level flow of the music with a convincing view of the finer details of both the recording and the

**'Even at realistic gig levels, AVM's amplification keeps its cool'**

## UDO BESSER

The owner of AVM since 2010, Udo Besser was previously occupied at Burmester for 15 years, rising to managing director. That he is taking very seriously the move of his brand into the UK market was demonstrated at the very start of the review process: our sample of the Ovation CS 8.2 was accompanied by a flying visit from Besser himself, who stripped the product down on editor PM's listening room floor and talked us through the design.

Among the case of components he'd brought to illustrate his points was the disc drive used here, for not only is it a pure CD unit rather than the DVD-ROM models found widely even in high-end rivals, it's also built by TEAC to AVM specifications, and damped with felt cladding to further improve the performance.

The same goes for other components, but above all Besser says that parts and layouts are selected purely on sound quality, and 'We don't develop unnecessarily complicated circuits that need a lot of compensating components to function correctly – we prefer a simple, straight circuit design where every component has its own clearly defined task.'

Ask him about what the Ovation CS 8.2 'all-in-one' doesn't have, such as MQA compatibility, and Besser is admirably candid, saying that the company will include such features in response to public demand, but is focused on doing what it does right now as best as it can. Thanks to the product's modular design, he says, 'Anything is possible...'



## ALL-IN-ONE SOLUTION



**ABOVE:** Coaxial, optical (x2) and USB digital inputs are joined by wired and wireless LAN, USB-A (HDD), FM radio and RCA/XLR line inputs. Coaxial and optical digital outs join fixed RCA and variable RCA/XLR line outs in addition to 4mm speaker terminals

performance, with string textures particularly vibrant and no shortage of rhythmic vitality.

With one of my favourite current test tracks, Foy Vance's 'She Burns' from *The Wild Swan* [Gingerbread Man/Atlantic 0825646161850], the soundstage image is solid, and the voice well resolved, even though the deep, deep bass line trades a little definition for the admirable extension on offer here. That said, there's no spit or brittleness anywhere in evidence, the big, bold sound is both subjectively impressive and exceptionally easy to enjoy.

### AN ORGANIC WHOLE

Play Valentina Lisitsa's glorious set of piano works by Philip Glass [Decca 478 8079] and there's both admirable scale to the instrument and fine rhythmic drive in those tight, fast repeating figures. True, other players and amplifiers may make the leading edge and the decay of each note even more apparent, but few reproduce the sound in as organic a manner as is delivered here, both musically and as a listening experience.

The more I listened to the Ovation CS 8.2, the more I appreciated its sonic virtues in the context of the many high-end network players and amplification I have enjoyed over the years. Any initial doubts about the smooth, rich sound here soon dissipate when you stop making listening a forensic activity, and instead let yourself enjoy the music, for the way this system delivers what you're playing or streaming is highly persuasive.

Speakers are both controlled and driven with true conviction, though you'll definitely need that attenuation setting unless you have hugely demanding speakers in a massive room. And even if you decide to pump up the likes of Gov't Mule's take on 'Shine On You Crazy Diamond' [Dark Side Of The Mule; Provogue PRD 7446 2] to anything near realistic gig levels, you'll find AVM's amplification keeps its cool.

Well, actually it runs quite warm, helped by that valve line stage, but it does prove capable of making speakers shift lots of air while delivering glorious instrumental textures, each note of the guitar solo crunching with the electromagnetic bite of string and pick-up, while the rest of the band pounds out the rhythm lines and the crowd roaring, yelling and whistling.

Whichever of its multiple source options you choose, that's the trick the AVM CS 8.2 pulls off. So, notwithstanding caveats about the (more) conventional network player/amp system almost £12k would buy, it's a seriously impressive package. ☺

### HI-FI NEWS VERDICT

Yes, the sound of the CS 8.2 is undoubtedly tailored, and is the antithesis of the 'take no prisoners' warts 'n' all approach. However, its presentation is hugely satisfying, deceptively easy to enjoy and above all entirely musical. Throw into the pot the flexibility on offer, and the indisputable quality of build and style, and this is a product perfectly suited to its target market – and really rather special.

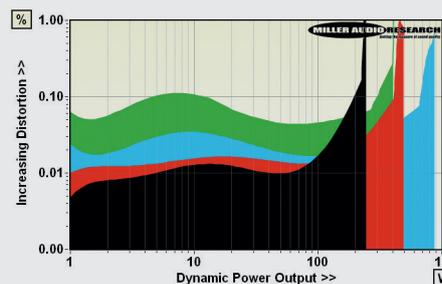
Sound Quality: 85%



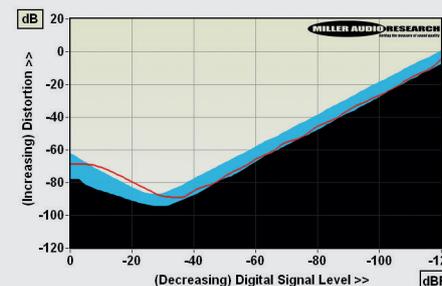
## AVM OVATION CS 8.2

The combination of AVM's 803T-based tube preamp and Pascal S-PRO2 Class D amplifier module(s) results in a very high overall gain of +53.8dB, so the 'Attenuation' option which brings this down to +48dB will be essential in normal use (an overall gain of 40-45dB is more common). AVM's 500W/4ohm spec. amounts to 2x235W/8ohm and 2x460W/4ohm in practice with 240W, 470W and 870W achievable under dynamic conditions into 8, 4 and 2ohm loads [see Graph 1, below]. The Class D modules are current-protected and so output into low (1ohm) loads is 'limited' to 405W. The 'character' of the CS 8.2 is shaped, as a matter of design, by both distortion and response, the latter showing a sweetened treble that's already -1dB/10kHz before rolling away to -3.1dB/20kHz and -27dB/100kHz. This is mirrored by the amp's output impedance which is a uniform 0.013ohm through bass/mid but increases sharply above 10kHz to 0.2ohm/20kHz and 2.4ohm/100kHz.

The response and time domain behaviour of all digital inputs is further modified by the choice of Steep (standard FIR) and Smooth (low-order IIR) filters, the latter offering minimal pre/post transient ringing for an even 'sweeter' treble (-4.25dB vs. -1.3dB/20kHz with 44.1/48kHz media). Jitter is the very low <20psec expected of an ES9018 DAC but distortion, through the tube preamp stage, is higher at 0.002-0.013% over the top 40dB of its (digital) range through bass and mid, increasing to 0.0045-0.08% at 20kHz [see Graph 2]. Distortion is typically 10-15dB higher on the right channel, possibly a proximity effect of the right hand tube/pre PCB to the Class D module. Finally, the ~80dB A-wtd S/N ratio (re. 0dBW) is a little below average, but, as mentioned above, the amplifier's gain is very high. PM



**ABOVE:** Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) loads. Maximum current is 20.9A



**ABOVE:** Distortion vs. digital signal level over a 120dB range at 1kHz (black, left; right, red) and 20kHz (blue)

### HI-FI NEWS SPECIFICATIONS

Continuous power (<1% THD, 8/4ohm)	245W / 460W
Dynamic power (<1% THD, 8/4/2/1ohm)	240W / 470W / 870W / 405W
Output impedance (20Hz-20kHz)	0.013-0.195ohm (45ohm, pre)
Freq. resp. (20Hz-20kHz/100kHz)	+0.0 to -3.1dB/-27dB (Analogue)
Digital jitter (S/PDIF at 48kHz/96kHz)	20psec / 12psec
A-wtd S/N ratio (re. 0dBW/0dBFS)	80.7dB (Analogue) / 106.1dB (Dig)
Distortion (20Hz-20kHz; 0dBW/0dBFS)	0.005-0.084%/0.012-0.065%
Power consumption (idle/rated o/p)	34W / 560W (3W standby)
Dimensions (WHD) / Weight	430x130x355mm / 12kg