# EQUIPMENT REVIEW

# AVM Evolution SD 5.2 preamp/streaming DAC

*by Alan Sircom*

AVM's Evolution range is the company's 'performance' line. It is set above the two Inspiration integrated models, but below the cost-no-object Ovation line. To many, that represents the sweet spot, combining all the best properties of the high-end range without significant compromise, or big price tickets. But it's a big sweet spot, with the Evolution range spanning 13 models: two CD players, two DACs, two receivers, three integrated amps, two preamps, one stereo power amp, and a set of mono power amplifiers. We went for the big Kahuna, the top Evolution SD 5.2 streaming DAC (with built in tube line stage), and it came coupled with the MA3.2S mono power amps. We're focusing primarily on the SD 5.2, however.

There's good reason for this focus. The SD 5.2 represents yet another way the future of audio encroaches on our present. A few years ago, products were neatly delineated: DACs were DACs, preamps were preamps, and so on. That's all changing. This DAC can be used as a streamer, or even a preamplifier. In fact, it will probably be used as all three. While there is still an argument to say this whole new world of streamed and networked audio is little more than an extra shelf on your equipment rack, devices like the Evolution SD 5.2 periodically come along and challenge that concept. Rather than adding to the kit list, this potentially slims down your equipment list by combining several key devices in one.

The SD 5.2 also points to the process of potentially winding down line-level analogue sources. This is to many people all they need from a preamplifier today; two line level inputs, with all the digital audio sources dealt with from inside the one box. Why just two line inputs? Because the chances are the only analogue audio sources you are still using today are a turntable and maybe an FM tuner. Everything else is now in the digital domain, and we possibly need to switch our thinking from 'preamplifier' to 'hub'. And the SD 5.2 is a digital hub that comes with two line inputs and a tube output stage. In 2015, that counts as 'job done!'

This 'digital hub' aspect should not be downplayed. There are seven digital inputs on offer, here. They range from conventional S/PDIF optical and coaxial inputs, through AES/EBU, USB (Type A and B), and LAN/WLAN network connections. It can process virtually anything from MP3 up to 32bit/192kHz PCM and 2.8MHz DSD, is UPnP and DLNA compatible, and it can stream an internet radio source via ▶

▶ vTuner. It has 'on the fly' switchable digital filtration. It even has tone controls and a decent Class A headphone amp. It also features an optional RC9 bi-directional remote handset common to a number of systems (such as Cyrus and Electrocompaniet), or its own RC S app for iOS and Android.

The analogue side is well covered, too, as the DAC features the same line stage used on other Evolution devices. This means it features AVM's own custom made AVM 83T version of an ECC83 double-triode in the line stage, with its own high voltage generator supply. The SD 5.2 has the option of balanced or single-ended output. We went the XLR route because it sounded moderately better, especially with the MA3.2S power amps. These deceptively powerful small boxes pump out an impressive 420W per channel, thanks in part to using switching (Class D) circuits. However, the company has chosen a more conventional power stage for the MA3.2S, with each one sporting a 750VA transformer and more than 50,000μF of reservoir capacitance.

Installation is (mostly) straightforward, with only pairing the RC 9 to the SD 5.2 requiring a cursory read of the manual. Paring requires you to fully power the SD 5.2 down, navigate to the pairing command on the handset, then power up the SD 5.2 as you press 'pair' on the handset. The rest is automatic.

In a way, reviewing the SD 5.2 is four reviews in one; as a preamp, as a DAC, as a streamer, and as a complete entity. But, equally, it should be considered as just the one device, because that's what you are paying for. If you end up with a great DAC, but a lousy preamp, or a great preamp and a clunky streaming section, the device is significantly hobbled as a result. Fortunately, whether viewed as a series of sections, or as a complete whole, the SD 5.2 acquits itself extremely well.

What comes across quickly when listening to the SD 5.2 is a sense of consistency across all the inputs, whether digital or analogue. There's AVM's signature 'warm, yet fast' sound common to all. Whether this suggests a good analogue stage bringing diverse sources into line or just good, solid engineering smarts across the board is ultimately academic; it's the consistency that counts. It means no harsh, grating jumps as you move from internet radio to UPnP server, and it means no abrupt differences in quality between USB and S/PDIF.

This almost makes the choice of filter redundant, but for two things. First, the upsampling or filter choice seems to be a personal one on the part of the listener. Some will prefer 'CNV' or conversion (upsampling 44.1kHz files at 88.2kHz, 176.4kHz, or even 192kHz), others will prefer 'NAT' or 'native' sampling rate, with either a 'smooth' or 'sharp' filter, but the choice seems to come down to the tastes of the listener, rather than determined by the system itself. This choice also seems to vary according to source (up to a point; user preference appears uppermost), so you may find a sharp filter works for internet radio and upsampling for UPnP server sources. The choice is yours, driven by the multifunction buttons on the front panel. Fortunately, your choice on each digital input is remembered by the AVM.

AVM's sense of sophisticated, unflustered balance means the SD 5.2 is one of those devices that doesn't put anything to shame, but wins out thanks to its broad spread of performance. The highlighting of specific aspects of a product's presentation usually occurs because that product is emphasising the aspect you are highlighting. Sometimes, you could replace 'emphasising' with 'shouting'. And sometimes, the aspect highlighted is all it does best. 'Great imaging' can mean 'all it has is great imaging'. ▶

## TECHNICAL SPECIFICATIONS

**Preamp Input sensitivity:** 20 mV to 350 mV (adjustable)

**Input impedance (line):** 10 kOhm

**Frequency response:** <2Hz - >38kHz, 30 Hz - >20 kHz

**TIM:** 0,01% (mostly K2)

**Sampling frequency:** upsampling switchable up to 192 kHz / 24 Bit

**DAC frequency range:** <20 Hz – 20 / 80 kHz (depending on input sampling frequency)

**Deemphasis:** yes, automatic

**Input format Dig in opt/coax S/PDIF:** 33 kHz – 96 / 192 kHz

**DSD (via USB):** 16–24 Bit 64DSD (2,8 MHz)

**Asynchronous USB input:** galvanically isolated 48 kHz /16 Bit (no driver needed), 192 kHz /24 Bit (no driver needed for Mac, but driver required for PC)

**TIM (related to digital 0):** 110 dB(A)

**Streaming Formats Supported formats:** MP3, WMA, AAC, OGG Vorbis, FLAC (192/32 via LAN), WAV (192/32 via LAN), AIFF (192/32 via LAN), ALAC (96/24 via LAN) UPnP 1.1, UPnP-AV and DLNA compatible server, Microsoft Windows Media Connect Server (WMDRM 10)

**DLNA compatible server:** NA

**Radio Database:** vTuner (automatic updates)

**Dimensions (W x H x D):** 430 × 130 × 370 mm

**Weight:** 10kg

**Price:** £5,100

**Manufactured by:** AVM

**URL:** www.avm-audio.com

**Distributed in the UK by:** C-Tech Audio

**Tel:** +44(0)7738 714619

**URL:** www.c-techaudio.co.uk

The AVM is harder to pin down, because it's uniformly good, and the SD 5.2 hangs on to the concept that the best products shouldn't have a sound. OK, so devices without character or flaw have never proved possible to date, and the AVM is no exception, but it both hides its limitations well and most are sins of omission. The sound lacks a little bit of ultimate transparency, especially on internet and streamed sources, and especially when playing classical music. For example, Neeme Jarvi's short-lived time with the Scottish National Orchestra in the late 1980s produced some fine work, including an excellent take on Prokofiev's Lieutenant Kijé suite [Chandos]. This is a recording that is highly polished and sparkles with energy and ambience. On the AVM it remains highly polished, but it's as if some of the 'sparkle' is a little distant. It's not 'veiled', though, and for someone who wants more of that heightened transparency should look toward AVM's solid-state SD 3.2 variant.

In truth, I'm more impressed by what the SD 5.2 does so well, because there is so much good going on inside this AVM device. It does have excellent imagery, presenting an extremely three-dimensional soundstage. It does have oodles of detail, but in a coherent manner. It does that rooted-in-place solidity that many 'next gen' digital devices struggle with so much. It does have a projected vocal articulation that gives you a somewhere between 'in the studio' and 'third row of the stalls' presentation. It does have effortless dynamics and great musical flow. And it does have a good foot-tapping nature. All of these things can be found in exaggerated form in other devices, but few give you the full package in one. I found this worked even with resoundingly difficult tracks, like 'Heaven,

How Long' from indietronica star East India Youth [*Total Strife Forever*, Stolen]. This can sound like someone worthy singing over a Tangerine Dream album (and later a Hawkwind track) if not well handled, and here it took on the sophistication and energy that's buried in the track.

The AVM Evolution SD 5.2 is the perfect example of audio done right for 2015. It's a fine replacement to about three or four separate devices in one simple box. It's a joy to use, sounds excellent, and takes charge of all of your audio system as one good sounding hub. Highly recommended, for today and tomorrow. +