



“... flawless ... stunningly tangible
... among the world’s best.”



BY PASCAL TRAN

In 1859, British naturalist Charles Darwin published his seminal work on the origin of species, which launched the evolution theory. In order to survive, an animal or a plant species must adapt to environmental stresses, which leads to a process of natural selection, or evolution. Creationist doctrine notwithstanding, living species are not born out of nothing. But what about audio visual components? Must they face the same challenges in order to ensure their survival and success in the market? One thing is certain, the home theatre natural environment is in constant evolution, and the components that inhabit it must adapt to provide consumers with the latest functionality, or else fade into oblivion, or extinction. In other words, home theatre components are also clearly governed by the principles of natural selection.

Québec Audio & Vidéo documented the birth of the AVM 20, a tremendously successful surround sound processor, in an earlier review. Anthem now offers its direct descendant, the AVM 30, which I have had the pleasure of reviewing. Since this processor certainly did not come out of nowhere, but is rather the result of numerous creative improvements by its maker, I will now address its evolution.

Let us watch together a film board short entitled “*The AVM 30: A Continuously Evolving Species Native to Canada*” and observe the AVM 30’s behaviour in its natural habitat — the home theatre.

GENEALOGY

The Anthem line is produced by Sonic Frontiers International, a Canadian company previously renowned for its

line of high-end tube electronics. With the launch of its first 5.1 surround sound processor, the AVM 2, Anthem continued to pursue its line of tube products while also delving further into the home theatre ecosystem. The second generation of Anthem surround sound processors, the AVM 20, was reviewed by Québec Audio & Vidéo a few years ago. One of the features which has contributed to the longevity of this SSP is the ability to update its internal software and accommodate hardware upgrades. The advent of the Dolby ProLogic II algorithm is one example of a change that the AVM 20 was easily able to integrate via an upgrade in its digital processing circuitry. The second version of the AVM 20 is THX Ultra 2-certified and available for a price only slightly higher. This being said, version 1 of the AVM 20 is still supported

by Anthem—there have been 12 firmware upgrades, all of them free, while version 2 of this SSP is now at upgrade number 14. All of the updated versions of internal software fix operational problems or offer new capabilities, including several decoding modes, more flexible bass management as well as multiple speaker configuration possibilities for music and home theatre modes. Of course, the AVM 30 inherited all of these upgrades and capabilities in addition to new ones, and is priced even lower than its predecessor, the AVM 20.

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ECOLOGY

In his review of the AVM 20 (available on the Anthem website), my colleague François Lemieux provided a detailed description of the physical features of this component. Since the vast majority of his observations also apply to the AVM 30, there are certain aspects upon which I will not dwell. As with the AVM 20, the AVM 30 is THX Ultra 2-certified and is fitted with the same, albeit slightly improved Motorola 56367 processor, twice as fast as the AVM 20's original Motorola 56366 processor. This new processor supports the Dolby Pro Logic IIx algorithm, which will be offered as a free firmware upgrade. In addition, it boasts one megabyte of memory on the motherboard, twice as much as the AVM 20, allowing for more flexibility in accommodating future versions of AVM software.

Just like its ancestor, the AVM 30 is fitted out with AKM AK4382 D/A converters, capable of 24-bit/192-MHz resolution, and its analog output stage relies on Burr-Brown OPA2134 op-amps. All of this means that Anthem has retained all the capabilities that accounted for the AVM 20's very high performance, while providing the AVM 30 with superior brainpower. Connections are also improved as far as video switching is concerned, with four video inputs and two outputs compared to the AVM 20's two inputs and one output, making it easier, for instance, to use a front projector [for movies] and a television in the same room. Finally, aesthetically speaking, the AVM 30 has been fitted with a blue display panel and blue and red LEDs to satisfy contemporary tastes.

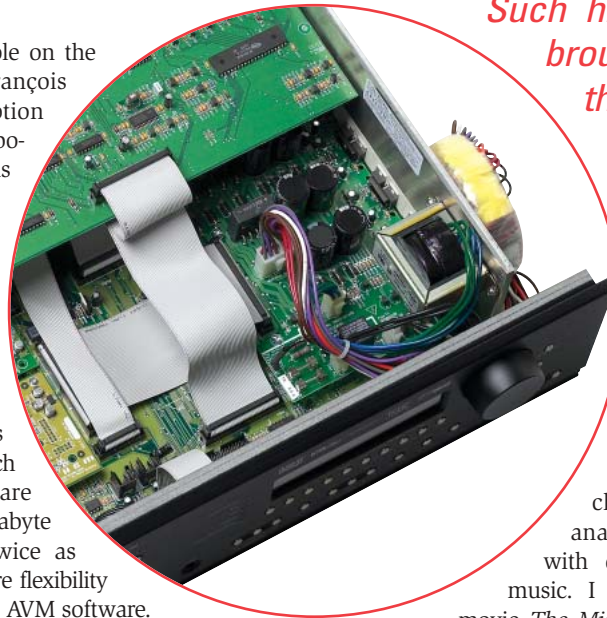
BEHAVIOUR

First, I hooked up the AVM 30 to my seven-channel amp and two speakers using XLR balanced cables. When I turned on the system, I could hear a very audible noise coming out of the front speakers. After checking every connection without success, I realised that the problem was coming from the tuner and that all I was hearing was a really bad FM signal, without an antenna and most likely at an off-station frequency! In the end, the AVM 30 turned out to be very quiet, even with my ear right up to the speaker I could hear no buzzing whatsoever. I then calibrated sound levels and delays, set up bass management, and chose processing type by source. The AVM 30 offers various signal

processing modes: Stereo, Anthem Logic (Music, Cinema), Pro Logic II (Music, Movie), Pro Logic, DTS Neo:6 (Music, Cinema), All-Channel Stereo, All-Channel Mono, Mono Academy, Dolby Digital EX, DTS ES, THX Surround EX and THX Ultra 2 (Music, Cinema). For 5.1 and 6.1 sources, my preference was for the THX Ultra 2 mode.

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In order to pin down the sound characteristics of the AVM 30's analog converters, I decided to start with digitally transmitted two-channel music. I played the soundtrack from the movie *The Mission*, by Ennio Morricone, which combines orchestral music, South American native instruments and choir music. Compared to my present processor, the AVM 30 produced a deeper, more open stage and more precise stereo image. In addition, its greater transparency and higher resolution opened a wider window onto the music. A great start! I decided to continue with the *Crouching Tiger, Hidden Dragon* soundtrack, which revolves around cello solos composed and performed by Yo-Yo Ma. Once again, every instrument was well represented and well placed on the vast, projected soundstage. Due to the high transparency, the cello was stunningly tangible on the front stage. Such high resolution clearly brought out the texture of the rubbing of the bow against the strings and the musicians' breathing, which reinforced the impression that I was actually hearing a live performance. I noticed no obvious sound colorations. This ability to faithfully reproduce two-channel music had me convinced that the AVM 30 was going to offer outstanding home theatre performance.

With great pleasure, I then replayed the superb *Master and Commander* DVD, a Dolby Digital 5.1 soundtrack. This excellent movie describes the pursuit and epic battle between an aging ship of the British navy and a state-of-the-art French man-of-war off the coast of South America. It is a remarkable account of life aboard a warship during the Napoleonic wars. The AVM 30's reproduction was flawless. The limited dimensions of my listen-

ing room seemed to become infinite during scenes in high seas, then shrink to simulate the claustrophobic atmosphere of the ship's hold. Sound seemed to come from a plethora of speakers surrounding me, so completely seamless and enveloping was the sound bubble. The movie became so real that during scenes in the ship's hold, I felt like speakers had suddenly appeared on the ceiling — I could literally feel footsteps overhead on the ship's deck. The chaos of the naval battle scenes was faithfully reproduced, preserving not only the incredible dynamics of the gun shots, but also the intelligibility and individuality of the numerous voices.

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According to *Marvel Comics* mythology, the future of mankind involves mutations. That is why I decided to dust off the two THX-certified *X-Men* DVD's to put the AVM 30 to the test. These movies are chock full of very dynamic surround sound effects, often juxtaposed with orchestral music and dialog. I was totally absorbed by the AVM 30's reproduction. Everything that had previously thrilled me was there — the vast and impeccable soundstage and sound that was neutral, precise, detailed and dynamic. Thus it was with renewed bliss that I watched *X-Men* one more time.

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I finished my listening session with *Tomb Raider: The Cradle of Life* in Dolby Digital 5.1. This movie banks on the same recipe as its predecessor: the martial arts prowess of the heroine executed in exotic locales. Once again, the AVM 30 painted extremely believable soundscapes, in particular during a crucial scene involving the crossing of a gloomy swamp in search of the cradle of life, where cries and fearful whines erupt from all parts.

LIKELIHOOD OF SURVIVAL

Given its remarkable performance, its outstanding flexibility and its adaptability, it is clear that the AVM 30 sits at the top the food chain. This surround-sound processor is without a doubt among the world's best and with its array of capabilities, which in no way interfere with its musical performance, is easily capable of driving even the most complex systems.

The best compliment I can bestow upon this outstanding piece of equipment is to mention that I will not be shipping it back to the manufacturer since I have decided to purchase it. I will therefore be able to test, at will, the full extent of its capabilities, a task which, due to the wide array of possibilities, I was not able to fully complete during this review. In the past, Anthem has demonstrated its desire to adequately support and improve its existing products by regularly launching hardware and firmware upgrades. This trend will continue with the release of an HDMI internal switching module which ensures DVI compatibility, IEEE 1394 digital inputs for SACD and DVD-A signal processing as well as 720p, 1080i or 1080p video transcoding of S-video signals, or components with HDMI input and components. The AVM 30's outstanding existing capabilities combined with the potential for future upgrades make it a dominant species in the surround sound processor ecosystem. A must listen, even if your budget far exceeds its going price.

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