



“PHENOMENALLY IMPRESSIVE”



BY WES PHILLIPS

Anthem's big multichannel preamp-processor/tuner garnered universal praise upon its release, which was not surprising as it offered immense amounts of flexibility, premium-quality parts and construction, and a promise of software *and* hardware upgradeability.

That promise has now become a reality. Anthem's AVM 20 v2.0 replaces the DSP board of the original AVM 20 with a new one built around Motorola's 56367 processing chip. The new DSP plug-in offers the unit a long list of new functions including the company's proprietary AnthemLogic-Music and AnthemLogic-Cinema modes, Dolby Pro Logic II, Dolby Digital Surround EX, DTS Neo:6, DTS-ES Matrix, DTS-ES Discrete, and THX Ultra2/THX Surround EX with four optional modes. The AVM 20 v2.0 offers a unique list of THX audio setup options that give its THX processing an unusu-

al set of adjustments. These include back surround speaker delay fine-tuning for 7.1 setups and Boundary Gain Compensation, in addition to a full list of bass-management capabilities with the ability to tailor crossover-frequency settings independently for each speaker group (fronts/rears/surrounds/center/su b-woofer) in 5-Hz increments.

The new DSP module is available to owners of the original AVM 20 for \$300. The AVM 20 v2.0 requires new operating software, which is available [as a free download] from Anthem's website.

GROUND CONTROL TO MAJOR TOM

To get a good idea of just how packed with features the first version of the AVM 20 was, check out Jeff Fritz's review of the unit (available on the Anthem website). In fact, I received the unit Jeff reviewed and, after having lived with it

for several months, I replaced the DSP board myself and updated the flash software. That makes me sound like a real techno-wiz, but the process is simple enough for any ham-fisted klutz to master. This is not particularly relevant for most consumers, however, since the price of the upgrade includes dealer installation.

I'm glad I had time with the unmodified unit. Even before the upgrade, the AVM 20 was phenomenally impressive. It did have a few shortcomings, however, which v2.0 neatly resolves.

To begin with, v2.0 has THX Ultra2, which adds one or two interesting wrinkles to Ultra's basic surround processing—especially when using a 7.1-channel system to play back material recorded for 5.1 channels. The AVM 20 v2.0 employs ASA (Advanced Speaker Array), which

ameliorates some of the phase problems endemic to Ultra2's two adjacent back surround speakers and allows the user to establish the pair's relative positions to one another.

"... sound was enveloping ... I was knocked out, not merely by the power of the orchestra – but by the transparency and complete absence of specificity in the surround and back channels ... a convincing illusion of direct orchestral sound ..."

THX Ultra2 uses seven channels of amplification to play back any multichannel-encoded format through a fixed seven-speaker/single-subwoofer system. In either THX Ultra2 Cinema mode or THX Ultra2 Music mode, any 5.1-channel format is detected automatically and then Ultra2's proprietary processing blends the directional and ambient surround information to the system's four surround speakers: two dipole speakers on the sidewalls and two monopoles at the rear.

In addition to allowing the user to establish the precise location of the back channels, Ultra2 allows for the use of an extended subwoofer (Ultra2 spec calls for a sub flat to 20 Hz, down from THX's 12 dB roll-off below 35 Hz). The specification also features switchable Boundary Gain Compensation (BGC) that alleviates boomy bass as a result of near-wall listening positions (or, for that matter, subwoofer placement).

Pro Logic II is now available on the v2.0, which includes Pro Logic II Music, which replaces the "acoustical environments" (Hall, Jazz Club, Church, *et cetera*) from v1.0—even though Anthem didn't go overboard with these, I never met a serious listener who used any of them. Pro Logic II, on the other hand, is pretty useful—as are Anthem's proprietary matrix decoders, AnthemLogic-Cinema and AnthemLogic-Music.

The upgrade also includes DTS Neo:6 Music and DTS Neo:6 Movie, which I found less satisfying than Anthem's or Dolby's offerings.

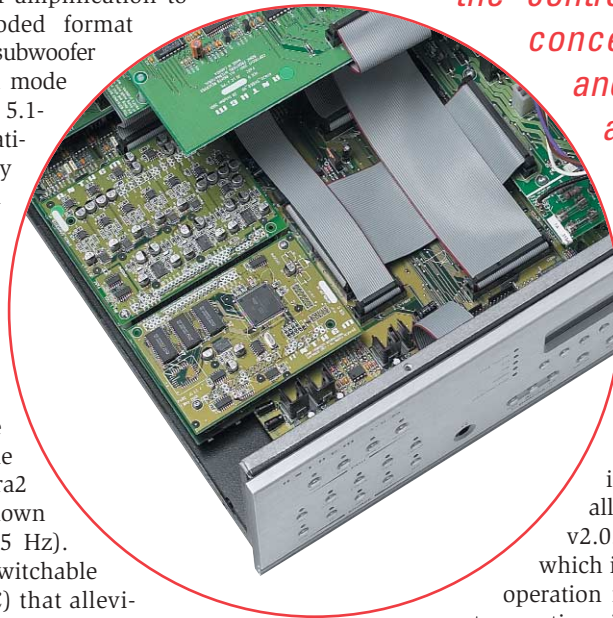
Dolby Digital Surround EX is also available, although it differs from THX Surround EX primarily in not offering THX's Re-Eq, Timbre Matching, and Adaptive De-Correlation—all of which, I am loathe to give up, so I prefer using the THX function suite.

The AVM 20 v2.0 offers a new setting called Academy Mono, which sums everything to the center-channel speaker and applies the Academy Curve (rolled-off top-end and attenuated bottom end). It's well suited for mono movie soundtracks made before the mid '70s.

But most people are most chuffed by the AVM 20 v2.0's bass-management features. The unit allows the user to set the crossover point for FL, FR, C, surround L/R, and back L/R individually. In addition, the user can now set (actually, *must* now set) the subwoofer's low-pass frequency somewhere between 25 Hz and 160 Hz (employing 5-Hz increments).

Bass-management controls also include a variable subwoofer phase adjustment and polarity adjustment.

"If you're a discerning control-freak or a multichannel enthusiast, the AVM 20 offers all the control features you could conceive ... if you're like me and tend to lose focus on all the gizmos in the throes of the music and film lust, it doesn't require that you pay close attention."



FATE GAVE WHAT CHANCE CANNOT CONTROL

Reading the list of new functions is probably more taxing than actually using them on the AVM 20 v2.0. Once you set the unit up—which is quick and intuitive—most of its operation is transparent or intuitive. Initial set-up options include the ASA and BGC adjustments—after that, the only option you are likely to activate when needed is the unit's ability to switch off THX's Re-EQ when playing back soundtracks that are already equalized. Even this doesn't take a genius, since it's easy to do on the fly, and (at least to my ears) obvious when necessary.

Play back a Dolby Digital or DTS DVD and the Anthem will figure out what processing is necessary. If you've set the unit to the THX suite, it will even synthesize 5.1 soundtracks to 7.1 playback without any prompting.

"... astounding ... absolutely convincing... Chances are once you experience it, you'll crave it, too."

If you're a discerning control-freak or a multichannel enthusiast, the AVM 20 v2.0 offers all the control features you could conceive—but if you're like me and tend to lose focus on all the gizmos in the throes of music and film lust, it doesn't require that you pay close attention. The Anthem will take good care of you.

And that's a good thing, because it's easy to lose track of details when listening to multichannel music discs like Telarc's superb Hovhaness compilation (*Mysterious Mountain; Hymn to Glacier Peak; Mount St. Helens; Storm on Mount Wildcat* [Telarc SACD 60604]) featuring Gerard Schwartz and the Royal Liverpool Philharmonic Orchestra. Using the analog multichannel outputs of my Sony SCD-CE775 (which, of course, means that the AVM 20 converted the analog signal to digital, processed it, and reconverted it to analog), the sound was enveloping and overwhelming, especially during Mount St. Helen's spectacular eruption.

Listening to five channels of Magnepan panel speakers (with monopole surround duties supplied by my trusty old Dynaudio Microns), I was knocked out, not merely by the power of the orchestra (aided by the Polk PSW650, which doesn't quite meet the Ultra2 20 Hz cutoff, but who's perfect?), but by the transparency and complete absence of specificity in the surround and back channels—in other words, the combination of the Anthem's SSP and Telarc's mastering rendered a convincing illusion of direct orchestral sound informed by a hall's acoustic.

I tend to be pretty critical about getting the wall reflections right in the music-surround context. When an engineer (or processor) gets it wrong, I tend to mutter foul imprecations about "two channels being enough" and other old foggy guff. When an engineer (or system) gets it right, I tend to glower in silence.

Glower. (Silence)

Maybe there's something to this music-surround stuff after all.

WHO CAN CONTROL HIS FATE?

Of course, I have no reservations about surround for video playback and here the AVM 20 v2.0 really proved a winner. I caught a few minutes of *The Right Stuff* on DirecTV recently and it drove me to watch the whole thing on DVD. There's a new edition due any minute, but the copy I have is the old one and Ultra2's 7.1 remix of the soundtrack proved convincing.

Ummm, did I say, "convincing?" It was *astounding*. The jet flyovers and all the big sound effects that are integral to the story of the Mercury program were absolutely convincing. If the point of a film's surround effects is to take you out of your world and immerse you in that of the film (and who'd argue *that* point?), Ultra2's back surround speakers add to that overall effect far more than I would have believed.

Movie-theater surround sound isn't designed to come from two side-wall mounted speakers (or two sides and two backs, for that matter), it comes from multiple speakers carefully equalized and adjusted to spread the sound over a huge area. In that sense, 5.1 surround was a compromise from the get-go, which is why THX specified dipoles for the surrounds—they diffuse the sound. But even when properly adjusted and located, two speakers don't begin to simulate that huge, diffuse surround experience you get in a theater. In Contrast, Ultra2's 7.1 array does a darn-good imitation of it.

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Now that I've experienced the Anthem AVM 20 v2.0's Ultra2 playback, I've become enthusiastic about adding the two additional channels to my system. Contrast that with the ennui with which I greeted the concept!

Chances are once *you* experience it you'll crave it, too.

WHAT CAN ITS JOYS CONTROL?

The only preamp/processor I've auditioned that could be remotely compared to the Anthem AVM 20 was the TAG McLaren AV32RBP192, which costs almost twice the AVM 20's price. The TAG featured superior video switching to that of the Anthem, which I feel adds a slight amount of grain to video images. Video imaging is one of the areas where TAG has a fanatical attention to detail, however, and that doesn't come cheap.

The TAG also manages to cram its functionality into a case that is about one-third the height of the Anthem. Hey, I'm an audiophile so I tend to ignore such decorating niceties, but not everyone is as forgiving. However, the AV32RBP192 is hard on my aging eyes—the Anthem's huge front panel and larger video display are a *lot* easier to navigate and read.

In terms of sound quality, I'd be hard pressed to distinguish between the two. The TAG sounds great, but so does the Anthem. Where the Anthem edges somewhat ahead of the TAG is in its adjustability. I was able to tune my speaker system to my room and to manage the bass (particularly by matching my subwoofer to the speakers and to my room) with a greater degree of ease with the Anthem. If you have high-resolution loudspeakers all around—and a great-sounding room—this might not seem all that important to you. However, those of us who must compensate for real-world deficiencies (in budget or room), this is not a minor consideration. Especially at half the price.

EVENTS CONTROL ME

Anthem has managed to take a great product and improve it—as promised and under budget. The new preamp/processor/tuner retains everything that was promising about the original while improving the few areas that users even mildly objected to—that's impressive.

If you aspire to an excellent home-theater system that could satisfy picky audiophiles as well as hard-core *cineastes*, the Anthem AVM 20 v2.0 should leap to the head of your must-audition list. Or maybe you should just take the plunge and take one home—it really is *that* sure a thing.