



# AARON AT LARGE

## Audio Rot, Anthem & Rotel

If you've been in this hobby long enough you've probably had a case of Audio Rot. Like a growing dissatisfaction with a job, or a relationship, or some other less significant creeping malaise, Audio Rot sneaks up on you slowly. So slowly in fact, that you might not even be aware that you're a victim until it's suddenly, euphorically, gone. Try this handy self diagnosis: Have you found yourself listening to music less often and for shorter periods of time? Have you been buying fewer and fewer records or none at all? Have you (gasp!) considered selling some or all of your records and/or equipment? Is recorded music just not doing it for you right now?

If you answered yes to any of the above questions you may have a case of Audio Rot (also known as Audiophile Atrophy Disorder or AAD). Don't panic. Although frustrating and debilitating, the condition is usually not permanent. You've come to the right place. There's no judgement here. In fact, I too have suffered from the crippling effects of AR, and lived to listen another day. During a winter dominated by 80-100 hour work weeks, my stereo and I had drifted apart, passing in the night as silently as strangers. I could barely keep up with my e-mail, let alone do much listening. When I did listen the system sounded good, there was nothing overtly wrong, but the music just didn't pull me in, didn't make me stop reading and pay attention. I should have seen the warning signs. Music at home wasn't the priority it had been, and I wasn't making time for it, even when the work schedule slowed down. I was indifferent, complacent, apathetic, bored. It was the Rot all right, and I didn't even know it. Luckily, review gear started rolling in. First the *Anthem Amp-2* and *Rotel RCD 951* (see my column in the Winter/Spring 2000 issue). These helped, to be sure, as both were very good components, but I still wasn't compelled to listen to my audio system the way I am right now. In the past few weeks I've managed to put Audio Rot into full remission by turning a good sounding system into a great sounding, highly musical, system that makes me want to listen longer, louder, and more often than ever before. How? Well, the biggest improvement was also the cheapest, moving my speakers further into the room and closer to the side walls. If you're bored with your system, speaker repositioning is definitely the first thing to try. I assumed that I had the placement pretty much ideal. Don't make this mistake! Half an hour of tinkering proved me dead wrong, opening up the soundstage enormously, and smoothing out the bass, among other things. Since then, with the help of the equipment reviewed below, the system has evolved from a reasonably effective and satisfying collection of components to something more reminiscent of a living entity capable of creating not just sound, but music.

The word synergy has certainly been springing to mind a lot lately, the products listed below mingling with my own gear in a most harmonious fashion. I could pillage the audio reviewer's glossary and hurl terms like "liquidity", "transparency", and "openness" at you all day, but it comes down to a simple phenomenon. My system is currently able to represent what is perhaps best described as the ebb and flow, the sense of music breathing, the slippery elements that make it sound real, better than it ever has. If you want to re-ignite the fire in your music collection, read on.

**Rotel RCD-991 CD Player**  
Sugg. Retail: \$1799



If you read the last installment of this column (winter/spring 2000) you may recall that I not only raved about *Rotel's RCD-951* CD player, but also speculated that since the *951* was so impressive for the money that their flagship model, the *991*, might be equally outstanding at its much loftier price point. As luck would have it, the very product was already on its way to AIG for review, along with *Rotel's* "statement" stereo power amplifier (see below). With the *951* still on hand, the prospect of a comparison was very enticing indeed. Moving as fast as someone carrying an 85 pound power amplifier can, I hustled these babies into the car and sped home to begin breaking them in.

At exactly three times the price of the *951*, you'd expect the *991* to be better built than its little brother. It is, and it's also substantially bigger and heavier. At almost 5 inches high and 17 pounds the *991* cuts a chunkier figure than most CD players. A slightly more elegant faceplate and small, rounded buttons with translucent (but not illuminated) red surrounds also distinguish it from lesser *Rotel* CD players. The look is still unmistakably *Rotel*, but it's refined enough to indicate to onlookers that this is no ordinary Japanese budget box.

Indeed, a look inside confirms that the *991* was built to run with the big boys. Like the *951* the *991* is HDCD compatible, using the *PMD-100* digital filter/HDCD decoder from *Pacific Microsonics*. In this case the *PMD-100* is custom configured for the *991's Burr-Brown PCM-63* dual 20 bit DACs. Metal film resistors, polypropylene capacitors, high current op amps and what *Rotel* calls a "substantial, 5-segment power supply" featuring banks of British made Slit Foil capacitors round out what they call the "proprietary low-jitter circuitry".

No surprises around back either, the *991* featuring all the amenities you'd expect on a serious CD spinner. Outputs are numerous, including coaxial and optical digital as well as balanced and single ended analog. With a nod to minimalist circuit design, the *991* also provides a back panel kill switch for its digital outputs, removing this circuitry from the signal path if not in use. Never using the it as just a transport, I left the digital outputs turned off throughout the review period and, not having a preamp with balanced ins, used the single ended analog outputs exclusively.

I did, however, experiment with power cables, the *991's* detachable IEC cable allowing me to add yet another variable to the sound of my system (as if I needed another!). Speaking of variables, compulsive fiddlers and system tweekers will either be delighted or driven to stark, drooling bouts of madness by the *991's* adjustable dither feature. Using a button on the front panel, users can select the level of dither to be added to

the signal, allowing you to match the player's sound to your other equipment, your room, the shape of your ears, your mood, or the sound your fridge makes. In addition to a no-dither setting, there are seven settings which progressively add more ultrasonic (30-80KHz) weighted dither, and an eighth setting which adds low-level broadband dither "not weighted towards the ultrasonic range" which is intended to correct quantization errors only. More on fiddling with power cables and dithering with dither below.

Initial impressions indicated that the family resemblance between the 991 and the 951 was strong, with the former being more musically inclined than its smaller sibling. With a head for detail the 991 came off sounding more refined, making the 951 sound a touch coarse by comparison. Both players sound quite laid back and very smooth, but direct level matched comparisons confirmed that the 991 had the edge in the velvet glove department, by virtue of having little discernable edge at all. This was something that was apparent in listening sessions both short and long, the 991's superior liquidity making it less likely induce listener fatigue over the long term.

And listen long term I did, the 991 proving to be a very involving source, and a key player in the killer sounding system which killed my case of Audio Rot. Where the 951 sounded slightly veiled, the 991 was transparent, where the 951's soundstage sounded a little flat, the 991 was three dimensional with impressive depth, where the 951 sounded closed in, the 991 was light and airy. Tonally, they sounded very similar but the 991 was able to coax more complex tonal colours, and more believable instrumental timbre out of 16 bit digital. Massed strings were one of the 991's strong suits too, it's smoothness, detail and spatial rendering making it that much easier for me to fool myself into thinking I was sitting in a concert hall instead of my living room.

With the 991 fully broken in and producing wonderful sound, it seemed, by audiophile logic anyway, high time to start fiddling with the thing. First off, that detachable power cord was just begging to be detached. I detached it, all right. Detached it good, and put a chunky *Wireworld Aurora* power cable in its place. Now I'm not a real die-hard tweak, and I don't fully understand how a simple power cable, even if it is blocking out all the RF, EMI, and the rest of the crap in the line, can have such a pronounced effect, but I'll be damned if that cable didn't substantially improve the sound of this CD player. Like using a good power conditioner (which I was not at the time since AM had requisitioned my *Inouye SPLC-1* for our conditioner tests starting elsewhere in this issue), the *Wireworld AC* cable firmed up the bass, improved image focus, and darkened the sonic background significantly, improving microdynamics and giving the sense that subtle sounds were springing eagerly out of inky blackness. The quieter the music got, the more real it sounded. Suddenly, I was in tingle territory, and I liked it.

Although less of a surprise to me, *Black Diamond Racing* cones paired with matching "Those Things" carbon fibre platforms were similarly successful additions, further expanding the gap between the 991 and 951. The carbon fibre kicked the soundstaging up a notch, the sound benefiting from increased depth, ambient detail, focus, and a sense of delicacy and poise which seems to follow *Black Diamond* products wherever they go.

And, as if all this coning and cabling wasn't enough, there's still the matter of that little dither button. Sadly, you can't change dither settings via the remote control, which means each change necessitates a trip out of the listening chair to the player. The differences were quite subtle, but adding dither

increased the player's ability to dig low level ambient cues out of the bitstream, the delicate decay of sounds into acoustic space best preserved at the highest dither setting. There was a tradeoff, however, a very slight drying out of the midrange with increased dither, most noticeable on female vocals. My preference was for the former so I stuck with the high dither setting thereafter, and haven't messed with it since.

Buying an expensive CD player these days is no easy decision. If you've already read AM's review of the *Assemblage* upsampler elsewhere in this issue, you might already be in a quandary about your existing digital system, let alone what to buy in the future. If you plan to sit out the SACD and DVD-A wars until things are more stable, and still want to hear excellent 16 bit digital, the *Rotel RCD 991* is a great way to do it in style, without breaking the bank. If you're considering the *Arcam Alpha 9* (the current darling of the range, it seems) or other players in the \$2000 neighbourhood, I highly recommend giving serious consideration to the *Rotel* too. Does it sound three times better than the 951? Well, I don't think that it can be quantified quite so neatly, and the law of diminishing returns kicks in pretty hard above \$1k anyway, but I'd lean towards no. In other words, I don't think it's quite as screamingly good a deal as the 951, but with a little extra coin spent on a power cable and maybe some cones, it sounds superb and comes awfully close to matching the value offered by its little brother.



**Rotel RQ-970 BX Phono Preamplifier**

**Sugg. Retail: \$299**

**Anthem Pre 1P Phono Preamplifier**

**Sugg. Retail: \$1199**

Vastly different in both design and price these two phono preamps have also made major contributions to my blahs-busting system over the past several weeks. They both accept moving coil and moving magnet cartridges, but beyond that the similarities end.

Not surprisingly the *Anthem Pre 1P* is built much like the other products in the *Anthem* line. It's solid, big at 11" deep and 5.25" high, heavy (for a phono stage anyway) at 17.5 lbs, and it looks elegant and more expensive than it actually is, with the expanse of its vast silver, brushed aluminum face broken only by an LED and a power switch. Inside is a large, but sparsely populated circuit board dominated by the four dual triode tubes (two 6922/E88CC and two 12AT7/ECC81) which make up the *Pre 1P*'s input and output stages. The rear panel reinforces its aspirations to be "the ultimate entry level phono stage" featuring well spaced and very high quality RCA inputs and outputs, a grounding post, and a detachable power cord.

Suitable for cartridges with an output of 1mV or greater, the *Pre 1P* will not react favorably to low output moving coils unless a separate MC step-up transformer is used. Input impedance comes factory set at 47K ohms but can be adjusted by soldering the appropriate resistors to the *Pre 1P*'s solder pads (no dip switches are provided). There is no MC/MM switch either, the *Anthem* taking whatever you feed its input and applying 48

dB of gain.

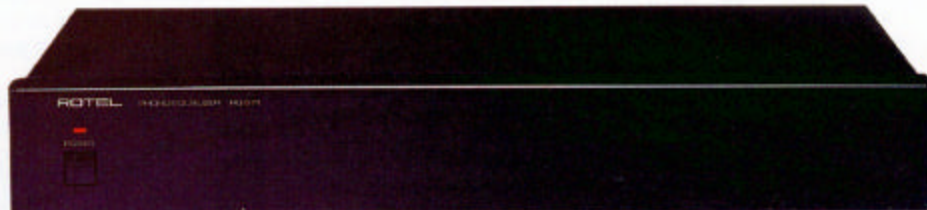
While it might not be able to lay claim to the title of "ultimate entry level phono stage", the *Rotel RQ-970 BX* still represents a phenomenal value, offering a level of performance entirely disproportionate to its price. Simple and small, the 970 is just under three inches high, only 7.75" deep, and weighs a scant 6.8 lbs. It boasts a grand total of two switches, one for power and another on the rear to select between MC or MM cartridge operation. Little information about its solid state circuit design is provided in the manual, but it does tell us that the little *Rotel* has an input sensitivity of 210 microvolts in MC mode and 2.5 millivolts with moving magnet cartridges. Input impedances are 100 and 47 K ohms, respectively. In other words, the 970 will work with a wide range of cartridges, including finicky low output moving coils like my *Audio Technica OC9*, quite a coup for a \$300 phono preamp. Judging by the manual and a peek inside, the *Rotel* does not seem to be configurable for custom cartridge loading.

Elated that I could once again use the *OC9* (with my *Rega Planar 3/RB 300* table), I listened to the *Rotel* first (it replaced my *Audio Alchemy Vac-in-the-Box*, which was never quiet enough to run the *Audio Technica* cartridge). While the 970 lacks the refinement of more expensive phono stages, it has no right to sound as good as it does. A great deal of what I'd heard the *OC9* deliver through the *Linn Linto* (Winter 98) was there. No, it didn't have the jet black backgrounds, the silky smoothness, or the supple, delicate microdynamics of the ultra-quiet *Linn*, but the sound was amazingly transparent and open, with great transient attack and excellent imaging. Very quiet in this configuration it had plenty of gain for the *OC9*, producing a big, dynamic, and airy sound which leaned just a touch on the bright side. Vocals and strings were rendered with convincing neutrality and body, bass was firm and profound, and the soundstage was plenty wide and extremely deep. I was impressed, and continue to be. I don't think there's another phono stage at or near this price point that will even run this cartridge, let alone sound this good with it.

Despite the fact that it lacked the necessary gain for the *Audio Technica* cartridge I gave the *Anthem* a whirl with it anyway. Yes, it was noisy, and sounded a little flat, but it nevertheless foreshadowed what was to come with a more suitable companion. Despite the mismatch, the *Anthem*, like a high quality, low ASA film, produced a very fine grain structure, digging out more detail (especially ambient cues) and smoothing some of the edges that the *Rotel* had left unbuffered. Able to image well outside the speakers, the *Anthem* was also very clear about exactly where instruments were located in space. It was with the much higher output *Shure V15 Type 5 MR*, however, that the *Pre 1P* really came alive (special thanks to Rob at *Applause Audio* for mounting and aligning the *Shure*, which proved a tricky match with the *RB 300* arm). Listening to *Giant Sand's Chöre of Enchantment* (Thrill Jockey 079) was certainly no chore through the *Anthem*. With the *Pre 1P* now deadly quiet and with gain to burn the sound was luscious, enveloping and highly musical. The quality of recording on this disc is truly outstanding, with the purity of vocal tracks being a particular highlight. The *Anthem* did them justice, producing spine tingling sound tinged by an eerie feeling of "you are there" reality. Highly three dimensional, the soundstage utterly evacuated the confines of my speakers, and took up residence in an enormous, amorphous pocket of space seemingly everywhere in front of me. Forget about the rear wall disappearing, the back half of my house was plainly missing. The phrase "wall to wall, and beyond!" appears in my listening notes somewhere around this time.

The *Rotel* sounded a little brighter by comparison, and, again there was a slight edginess to the sound that was absent with the *Anthem*. The *Pre 1P* was clearly the more musical preamp, but the gap was much smaller than the price difference would

suggest. The *Rotel* rendered the *Giant Sand* record with a compelling directness, taut, extended bass, and the killer transients I had heard with the *OC9*. The stunning vocals were still stunning, even slightly more neutral sans the *Anthem's* extra smidge of warmth, but a little less present. Soundstaging was also impressive, and huge when called upon to be, but the *Rotel* couldn't quite reach the fire alarm, and the sound did not evacuate the speakers in the same way it did with the *Anthem*. It's saying something, however, when a component can hold its own with a competitor at four times the price, and the *Rotel* was by no means embarrassed. My little *Audio Alchemy Vac-in-the-Box* would have run from the room crying if put head to head with the *Anthem*.



Moving on to a Reference Recordings LP of *Gershwin's Rhapsody in Blue* (not my favorite performance, but the sound...) was equally revelatory. Timbral bite and tonal colour are gorgeously captured on this LP and equally well rendered by the *Pre 1P*, as was the purity and ferocity of the piano. Not all the credit goes to the *Anthem*, but my system had never conveyed the sound of a big orchestra like that before. Dynamics, big and small, freedom from any kind of compression, and a mesmerizing naturalness and openness were all in plain evidence. The volume went up and up and up, and *Audio Rot* faded into a distant memory. "Wow" I wrote in my notes.

Quibbles? Well, let's remember that the *Anthem* is tube based so if you're a solid state kind of guy, its slight air of lushness and warmth, no to mention its big full bass, might turn you off. Otherwise, with a high output cartridge, the *Pre 1P* is a delight. A more expensive stage might buy you a little more refinement, resolution, and the ability to use low output MC cartridges (the *Linto* proves a good example at about \$1k more) but expect to pay for it. As for the *Rotel*, it's a no-brainer for someone with a modest vinyl system who wants to keep it that way, financially speaking. Paired with my *Planar 3/RB 300* and the *OC9* it completes a vinyl playback system that will slaughter any CD player I've ever heard, all for about \$1500 Canadian. In fact, I heartily endorse this combination (along with a *Ringmat* on the platter and *Black Diamond* cones under the table). Call it *Audio Rot* rebound if you like, but I bought the 970, the synergy just too good to deny (by the way *Audio Advisor* is blowing out *OC9's* for US\$199, so get one while you still can!).

#### **Rotel RB 1090 Stereo Power Amplifier** Sugg. Retail: \$2999

Let's be frank. *Rotel* isn't really known for their power amps. Well, not at this price, anyway...sure, great mid-market CD players, but *amps*? "Maybe for the home theater, but not for my audio system" is a common refrain. I'm sure some of you are turning up your noses at the very thought of a *Rotel* power amp feeding your speakers.

The *RB 1090* represents *Rotel's* all-out assault on exactly this kind of thinking, combining their trademark of high value with serious audiophile credentials. The *1090* is definitely a serious amp. It even looks serious, standing 9.5" tall and wearing all that intimidating heat sinking right on its big black face. Pick it up (if you can) and you'll know it means business, tipping the scales at just under 85 lbs. How many amps have you encountered that include wheels? No joke, tilt er' back a few degrees and this *Rotel* rolls on a pair of wheels tucked discretely under the back of the chassis. Considering the weight, it's a very clever design feature.

Responsible for all that mass is an electrical engine capable of producing 380 watts of juice into 8 ohms. Apparently stable down to 2 ohms, the 1090 pumps out over 1000 watts when confronted with that load. Essentially two separate power amps sharing the same box and (detachable) cord, the 1090 also has two totally independent power supplies fed by two 1.25 kVA toroidal transformers and four 22,000 uf Slit Foil storage capacitors. This enormous potential feeds an output stage with four pair (sic) of power transistors, each rated at over 200 watts with more than 17 amps current capability.\* Should you grow tired of the sound of the 1090 it's comforting to know that you can at least use it to power your arc welder.

Controls and connections are simple but allow considerable flexibility. Included are balanced and single-ended ins (I used the SE inputs exclusively), two sets of binding posts for each channel (well separated, but not of outstanding quality), and a



front mounted power toggle flanked by a clipping indicator for each channel. Build quality is very good, on par with that of the 991 CD player, but the amp isn't an exotic hand-built and doesn't look or feel it. Despite the manual's claim that the 1090 consumes 800 watts, it turns on gently and runs very cool with zero noise, electrical or physical. This leads me to suspect that this rating is based on the amp running at full capacity, which, unless you're the owner of *Apogee Scintillas* and have a penchant for metal (a pretty unlikely combination in itself), is something you'd be hard pressed to make it do for long. A class A/B design, the 1090 is (thankfully) not drawing that kind of power all the time.

Don't let its big size and big numbers give you the wrong idea. It will be easy for many to write off the 1090 as a simple brute, another megawatt amp with all the poise and finesse of a diesel locomotive, but anyone who spends some time with it will quickly realize that this beast wears velvet gloves and moves most gracefully indeed. In terms of watts, the 1090 is certainly overkill for most systems, including mine, but I think it's important not to fixate on its power rating, just as single ended triode freaks don't kvetch about underpowering their speakers. 8 watts? So what? It's beside the point. Forget the numbers, how does it sound?

It would be a shame to see an amp this good going only into the systems of people with "difficult" loudspeakers, because it sounds so damn good with easy loads like my *Energy Veritas* 1.8's (6 ohm nominal impedance and 87 dB sensitivity). I expected it to be effortless in the macrodynamic sense and to be possessed of powerful and well controlled bass, and it was. But I wasn't expecting the smoothness, the subtlety, the liquidity, the vast and enveloping soundstage or the sheer musicality

that emerged from the 1090. The impressive level of transparency and resolution was also an unexpected bonus, the *Rotel* painting an extremely neutral and balanced sonic picture with what seemed like as much detail as the source could provide. I listened to all the components reviewed above through the 1090, which not only helped me get a firm handle on their respective sonic signatures in comparisons, but also helped them sound their best. As a result, the comments made about the gear above can be applied to the 1090, which faithfully communicated all that musical information to the speakers. Like many excellent solid state amps, the *Rotel* has almost no sonic signature of its own, it just gets out of the way and does as it is told. Tonal and timbral colours emerged vivid and detailed, soundstages were appropriately huge and deep when called for, highs detailed, smooth and never fatiguing or etched, and bass deep, tight, and effortlessly powerful.

I mentioned earlier that one of the things that has re-energised my listening at home is the way my system has been able to communicate what is perhaps best described as the "ebb and flow" of music, the subtle cues that make it breathe, the tiny changes in scale and intensity that make it sound real, and therefore satisfying and involving. No small amount of credit goes to this amplifier. I've never before had the sense that the system was tracking the waveform with such scrutiny and agility, responding to every peak and valley in that wave instantly, as if it were anticipating it, no matter if it was a mighty broadband transient burst or the most delicate solo pizzicato. Maybe it's all that available current, or a divinely synergistic match with the 1.8's, but this amp sounds not only fast, but like it's reading a page ahead, knows what's coming and has long figured out exactly how best to deliver it. Combine that with the dynamic omnipotence of 380 watts and you've got a sledgehammer you

can tune your watch with, a top fuel funny car that can rip it up at the Nbergring, brute force and supple grace artfully fused. I've heard amps with more satisfying bass (the *Anthem Amp-2* I reviewed last time out comes to mind), silkier highs, more transparent mids, but none that make music as convincingly as this one.

Like the 991 CD player, the 1090 sounded its best with a little help in the AC department. In this case the *Foundation Research LC 1* dedicated power conditioner played an important part in coaxing the best possible sound from the 1090. Without it some of the subtle effortlessness evaporated, and the amp went from sounding magical to just plain excellent. If you're willing to spend \$3K on this amp then spend the extra few hundred bucks to get the most out of it. In the case of the 1090 it improved the sound enough to more than justify its \$695 price tag. Even if you were to consider it part of the 1090's price, this amp would still be a steal. Combine the breathtaking sound with the fact that it can drive almost any speaker on the planet, and it becomes a major heavyweight (literally!) at its price point and well beyond. If I hadn't spent some time with it my prejudices might very well have kept me from considering this amp a serious contender. If you're shopping, don't make this mistake.

**Dither Blither:** *The 991's user manual defines dither as "a very small amount of digital noise added to a signal to improve a CD player's overall sound quality [by improving] a digital-to-analog converter's linearity, particularly during very soft (low-level) musical passages." Comparisons were made with my Audio Alchemy DLC preamp (now significantly improved with a Power Station 2 power supply) and two identical runs of Ultralink Ultima interconnects.*