

Coltrane in Hifi+ (USA) no 35-04

by Roy Gregory

Some things seem obvious, and being obvious, it tends to follow that conclusions (at least) should be simple. Solutions, on the other hand, are quite a different matter.

Take the matching of hi-fi for instance. Speakers a little warm? Just add a classically lean and dry solid-state amplifier and harmony will be restored. Or will it? It's the kind of tonal juggling that reached its pinnacle with cable "matching", the application of tone controls by stealth. Only it wasn't very stealthy when it came to the other aspects of musical reproduction. Overall coherence suffered appallingly and out went the baby with the bath water.

Which brings us to the Coltrane – and the perils facing the reviewer, especially when confronted with an extraordinarily expensive product. However, before we get to those, there's the small matter of the perils that face the reader...

Drinking by the label is a habit as old as it is dangerous – yet that does nothing to diminish its attractions. On the face of it, the notion that you can discern the character of a product by the ingredients from which it's built is indeed an attractive one. Think of all the time and trouble that can be saved with those bothersome auditions. Push-pull EL34s? It's obviously going to have a lovely open mid-band and a chronic lack of low-frequency authority. Mosfet output stage? Big, warm and soggy. Such critical/technological shorthand lays the user open to considerable embarrassment – should they ever bother to ascertain the accuracy of their assumptions. Take the Marten Design Coltrane for example. The seasoned reader of hi-fi magazines could barely fail to notice its considerable similarities to the highly regarded Avalon Eidolon Diamond, reviewed in the last issue: There's the identical choice of mid and high-frequency drivers (especially THAT diamond tweeter). Then there's the near identical price, the dimensions and even, if we stretch a point, the general shape of the cabinet and the positioning of its port.

But the reality is entirely different, the whole quite distinct from the sum of its parts. Perhaps it's best summed up by the difference in the feet supplied with the two speakers. The Avalons rely on a simple tripod of stainless-steel cones: no fuss, no bother, barely visible in fact. In contrast, the Martens are set solid atop substantial steel outriggers with four adjustable carbon-fiber cones and matching carbon-fiber footers. The whole kit and caboodle adds up to a significant statement of intent as well as a bold styling feature in itself. Where the Avalon seeks self effacing simplicity, hiding its light under a bushel and its diamond tweeter under a grille, the Marten wears its heart well and truly on its sleeve. So don't be fooled by the obvious: These speakers sound as different to one another as the details



of their approach and presentation. Just like the KEF Reference and B&W Nautilus designs it would be a mistake to assume that their similarities are anything more than superficial.

So, now we know what the Coltrane isn't (an Eidolon Diamond clone) perhaps we should discern what it is. As discussed, the Marten speaker uses the diamond tweeter and inverted ceramic dome midrange familiar from the Eidolon. However, here they are combined with a pair of 228mm ceramic bass-units. A large and extravagantly flared port positioned in the rear underside of the cabinet loads these and together they deliver a -2dB point at 20Hz in room. The drivers are mounted on a carefully sloped and profiled wooden baffle. This is constructed from two 30mm thick planks, each in turn assembled from 40mm hardwood strips. The planks are bonded together with glue that acts as a damping layer, thus creating a constrained layer. The combination of the disruptive, random structure of the grain in the wooden strips and the self-damping characteristics of the structure should make the baffle as near inert as reasonably possible, especially with a wooden



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strips and the self-damping characteristics of the structure should make the baffle as near inert as reasonably possible, especially with a wooden construction. The baffle on the review pair was in a beautiful Oak, but is also available in Maple, Cherry or Walnut, although whether there are sonic differences between the various finishes the Lord alone knows.

The cabinet itself is a boat shaped monocoque molded from inch-thick laminated carbon-fiber, a construction that is lightweight and random, bestowing low energy storage and excellent self-damping, as well as a superb, high-gloss surface. The curved and tapered cabinet walls should help reduce parallel surfaces and resulting standing waves, especially between the top and bottom faces where the longer wavelength threatens the greatest damage, coinciding as it does with the longest panel dimension (at least in a conventional box). The crossover is a hybrid design, second-order on the bass leg, first-order on the tweeter. Component quality is exceptional, with hand wound, foil inductors, copper to roll-off the bass and a pure silver version for the midrange. The single capacitor that introduces the tweeter is a custom made silver-in-oil design. The company has clearly extended its attention to detail well beyond the exterior of the speaker. In Marten's quest for the last word in audio performance, they employ Bybee Quantum purifiers on each of the drive units, small, in-line components that are the tweakers' toast of the moment amongst speaker builders. There are WBT binding posts for the bi-wire inputs, positioned sensibly lowdown on the speaker's curved rear. There is no grille in the conventional sense, although each driver has an integral mesh guard to prevent attention from prying fingers and high velocity objects.

There's one other thing you'll find along with the terminals; a six position rotary control, that allows you to trim bass level in 0.5dB steps. Unfashionable in the UK and Europe, such controls are actually seriously sensible with genuine full range speakers. Given the balancing act that nature imposes on bass and treble, the ability to adjust one or t'other by way of room compensation is pretty much essential if you want to avoid more incompatibilities than perfect matches. It works for the Revels at the top – and it works for the Martens at the bottom. Don't knock it 'til you try it. The control afforded was really useful when it came to setting up the speakers in my smallish but well behaved listening space. Initially sounding lean but beautifully focussed and detailed, an extra half-dB of bass output filled things out nicely, fleshing out the images and tonal palette, but more importantly, locking in the timing. Suddenly the speaker and the music gelled into a coherent whole, with seamless top-to-bottom continuity, all the different elements bound together with a single sense of purpose.

Which brings us round to the question of system matching. Suddenly being confronted by a pair of £30K

speakers is not a little intimidating, imposing its own special strictures on the reviewer. After all, they threaten to throw a pretty intense spotlight on the rest of the system – which in turn sends reviewers scurrying for partnering equipment of similarly stratospheric pedigree. Which is why, on the face of it, the presence of conrad-johnson's flagship ACT 2 pre-amp might be considered a blessing, especially as it forms a common presence with the recently departed Eidolons, along with the Prem 350. However, as experience was to prove, this was far from the case. Which is where we came in...

On paper at least, the c-j would appear to dovetail perfectly with the Marten speakers. Ceramic drivers have a reputation for superb resolution at the expense of some leanness; conrad-johnson have always got the colour, harmonic energy and presence of music just right. Combine the two and you'd expect a perfect synergy. Unfortunately, that's not what you get. Instead, for no reason that I know, these individually excellent products simply do not gel, the speaker seemingly revealing weaknesses in the pre-amp, the pre-amp being equally ruthless with the speaker. But use either in alternative systems and the results are spectacular*.

What this tells us is that the Coltrane is a demanding and potentially difficult partner – not unlike its namesake. Not only is it critically revealing of partnering equipment, telling you exactly what happens with every adjustment or change you make, but it's picky, picky, picky about what it plays with. Which leaves you wondering where to start.

The first thing to consider is resolution and clarity. Just like a horn speaker which demands speed from its partnering equipment and ruthlessly reveals sloth, the Martens will pounce on any smudging or rounding in the driving chain. But to compound matters they also deliver a genuinely wide bandwidth signal from a mean efficiency of 89dB and a nominal impedance of four Ohms. And whilst those figures might not seem too frightening, and there are no sharp dips in the impedance plot, it can get down to a minimum value of 2.4 Ohms, depending on the setting of the bass contour, and that starts to mean real power. It quickly became apparent that the Hovland RADIA was less than comfortable when asked to deliver serious orchestral crescendos at decent levels. Which simply compounds the problem, leaving you looking for an amp that is both detailed and agile as well as immensely powerful. I had limited time to effect a cure but was fortunate enough to obtain the use of a second RADIA, which satisfied all but my basest urges. I can see a return fixture coming on, for which I have a feeling that the likes of a Karan 450 or Spectral mono-blocks might well be in order.

Once I had the second RADIA things started to fall into place, the standard arrangement of Vibe/Pulse and Valhalla cabling proving ideal, although once again, the



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use of a coherent Valhalla/Thor mains loom was of considerable benefit, discontinuities anywhere in the system proving seriously detrimental to performance. Source components were the VPI TNT 6, JMW 12.5 and Lyra Titan or Koetsu Jade Platinum cartridges for vinyl, the Wadia 861SE for silver discs; phono-stage was the Groove Plus.

This speaker is all about speed, detail and resolution in the service of leading edge and dynamic definition. In some respects they mirror the speed of response, lack of boxy colouration and top to bottom coherence that electrostatic listeners love, but deliver a far more balanced overall performance, and far more bass. In the sense that it embodies certain "electrostatic" qualities, the Marten indeed echoes the performance of the Eidolon Diamond, but in both cases these aspects are simply part of a much greater whole, and neither speaker sounds at all like the other. If the Avalon is the master of harmonic and acoustic coherence, perfectly preserving the energy profile and tail of each note, the Marten leans towards dynamic range and scaling. However, what separates both of these designs from the crowd, the thing they do have in common, is their ability to carry their attributes and strengths across their entire operating range. There, all similarities end.

From which you should be able to deduce that the Coltranes (again, not unlike their namesake) is rarely a relaxing listen. More like riveting. Partly because they're not the last word in harmonic development, their speed and lightness of touch give the sound a pacey, energetic, almost driven quality, while the dynamic tracking and coherence ensures that the different elements in the music stay well and truly bound together. If you want a speaker that "times" (in the hi-fi sense) then the Marten won't disappoint. I suspect that it's their temporal coherence that makes them so critical of partnering equipment, as any slowing or disturbance of the signal stands out a mile. Although, having said that, it still doesn't explain the frankly bizarre antipathy that exists between this speaker and the c-j pre-amp, at least in my system...

Working at their considerable best, the Martens present a compelling musical viewpoint that's worth the effort it takes to get right. Their superb levels of detail and resolution mean that every nuance in a recording is laid bare, but don't get the idea that they pull the performance apart. Instead, they give you the benefits of a close-up view without moving you any closer to the players. The easiest way to hear and appreciate the effect is to play a familiar vocal. Suddenly it will stand clearer of the mix than you're used to. The shape of words, the flow of syllables and the way they're inflected is far more apparent, as are singer's accents. I'd never noticed the Americanization of Scar-bor-O in the Simon and Garfunkel song, but here it stands out a mile. Playing Nanci Griffith's 'Listen To the Radio' the lyrics

are immediately intelligible, the guitar is a "0018 Martin" and you can hear each individual backing voice, separated by pitch, sex and position. Bigger choirs too, with the speakers resolving individual voices with ease. And it's this ease that's important. Make the resolution and detail too obvious and it cries out for attention. The secret is to contain it within the whole, which is where the Coltrane succeeds so admirably.

Along with that resolution comes speed and transparency, the well-known double-edged sword of high-definition hi-fi. Too fast and it becomes obvious; too transparent and it becomes obvious; too direct or purposeful and it becomes hectoring. Which is where balancing the speaker as well as the system driving it becomes critical. The Coltrane is quicksilver quick and agile. Rapid sprays of notes won't trip it, sudden shifts in level or pace are negotiated with panache. Ricci's Carmen Fantasie (Decca SXL2197) is the perfect example, the Martens reveling in the maestro's flashing bow-work and virtuoso precision and control. It's a recording that teeters over into glassy hardness at the slightest provocation but the Coltranes control the leading edge bite with just enough grip to keep it properly lively but also just the right side of uncivilized.

In spatial terms, the Martens throw a large and extremely coherent soundstage, underpinned by their deep and beautifully defined bass. Once again however, that soundstage is particular in style, favouring the sound sources themselves at the expense of the space between them and the overall acoustic. Playing the Reiner/Chicago Symphony recording of Prokofieff's Lieutenant Kije the individual instruments that combine to create the opening bars of Birth Of Kije are pinpointed and focussed, precisely in space, the side-drum and fife particularly crisp and quick. Listen and you'll hear their echoes spread across the rear wall, fading out stage right. But that's the point, you have to listen, knowing that it's there. Likewise, the low strings that open the second movement, Romance, are full of texture and vibrance, a low throbbing grate of bow on strings. The harp and chimes are placed and stable, their notes extending effortlessly up until they fade naturally with the upper reaches of the recording, rather than being shut in by the system. The limitations of the tape are clear yet accommodated. Far from being a problem, they simply become another piece of information that's slotted into the completeness of the whole.

This last point is important. What's interesting is the way that the speaker manages to make you aware of faults and anomalies yet at the same time does so without shoving them down your throat. Over-micing of soloists is a classic example. The Yepes Rodrigo, the Du Pre Elgar, especially the aforementioned Ricci Bizet are all cases in point. The soloist is spot-lit and over-voiced by the recording – essential to maintain any sort of instrumental balance under less than perfect



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reproductive circumstances. The Martens would need no help in separating the various strands, but not all speakers (and systems) are created equal. Instead the Coltranes make you aware of the artifice, yet somehow manage to still incorporate and integrate the musical contribution. In part this has to be due to their spatial coherence, front to back rather than side to side. As quick and dynamic as the Martens are, they are NOT forward or overly immediate; in the same way that despite the measured bandwidth, they are not bright.

Things spatial are of course inevitably linked to things fundamental, and bass that is both deep and informative is a precursor to accurate stereo perspectives and acoustic volume. The impressive width, depth and height achieved by the Coltranes underlines the fact that the -2dB claim of 20Hz in room is no idle boast, while the speed of the drivers and rigidity and shape of the box make that bass tactile and clean, devoid of waffle or clogging warmth. Instead, the extension creeps up on you, leaving you unawares and unprepared until the music demands its presence. Then it steps forward with gusto, rumbling with dramatic air and texture, detonating with impressive force, or simply throbbing shapelessly if that's all the tape contains. But the best bit is the way that bass instruments are located in space just as precisely as the mid-band ones. Drums have volume and shape, tension in their skins and when someone larrups a timpani with a pair of dirty great mallets you can feel the energy it generates. The lower registers of Starker's 'cello as he plays the Bach Suites (Speakers Corner/Mercury SR3-9016) pulse with a deep, woody vitality that underpins and drives the flowing phrases. The urgency and purpose in the playing elevates the pieces well beyond the prosaic readings they so often receive, replacing the gentile with a poise and intensity that captivates the listener. Something a little less cerebral? The ramped power and impact of the Gladiator soundtrack, whether the explosive battle scenes or the scale of 'The Might Of Rome', are limited only by the capabilities of the driving amplifiers. With both RADIA running flat-out the bass was at once mighty and controlled, helping to anchor the rest of the range securely in place. Yet it was clear that the speakers would have happily accepted, even demanded, more sheer drive and headroom from their partners in crime. Memories of the awesome Levinson 33Hs spring unbidden to mind...

It would be remiss, even foolish, of me to ignore the name of this speaker, especially given just how appropriate it occasionally seems. Let's leave the last word (musically at least) to John. His 1962 album *Ballads* (Impulse Stereo AS-32) says it all. The drums are quick and tight, insistent and busy behind the more languid rhythms of the bass and McCoy Tyner's piano. The bass itself is actually upright, rather than thudding pitchlessly on the floor, with a shape, position and size to the instrument, shape, pitch and size to its notes. But it's

Coltrane's sax that's telling. In amongst the easy intimacy of the quartet, he stretches out long flowing lines that contrast sharply with his more familiar work. Yet the Martens faithfully mark the odd sharp corner, the occasional pulsing repeat that he just can't help throwing into the mix. Just listen to the unfettered agility of his playing on the more up-beat 'All Or Nothing At All', gliding effortlessly across the tracks of those busy, complex drums; it's pure Coltrane – both the musician and the speaker.

Fed properly, the Marten Design Coltranes are mightily impressive beasts. Easy to upset, easier to get wrong, there's a sublime directness to their communication which places them somewhere on a continuum that stretches from the Avalons at one end to the better Wilsons at the other. Where the Eidolons are all about the musical performance and the Wilsons are all about the recording, the Martens embrace the process. What they tell you about is the system, the recording and the performance. It doesn't make them either equal to or better than the competition: It does make them distinctly different. Authoritative and commanding they demand attention both to their treatment and their performance, but then, if you really want to know it all (and you can afford the results) you should audition the Coltranes. It might well be love at first sight – just be prepared for a torrid affair before the settled period of wedded bliss.

*The Problem was finally traced to the earthing arrangements in my early RADIA's output stage (since modified to current spec thus resolving the situation). Nevertheless this serves to demonstrate just how critically revealing the Coltrane really is: Music is either right or very wrong.