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## HAPPY ANNIVERSARY!

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## PMC Twenty24 loudspeakers

By Jason Kennedy

**W**hen PMC launched the twenty series back in September last year company co-founder and designer Pete Thomas said that the range aims to maximise musicality through minimising colouration. Which doesn't seem all that revolutionary, but I don't recall hearing it before; engineers often talk about reducing colouration or distortion but not with the aim of improving that elusive quality, musicality. This might be because you can make a 'musical' loudspeaker that is far from evenly balanced or uncoloured, I would go so far as to say that some speakers seem to have greater musicality precisely because they have slightly odd colourations. One of the most extreme examples was Tom Evan's FR1, this had a single Jordan 'full range' driver in a small polystyrene cabinet with a flocked finish. These latter two factors were undoubtedly why it is a pretty rare product to find these days but, largely because single drivers do things that designs with crossovers don't, and possibly because of that lightweight cabinet it was a very fast, engaging and yes musical loudspeaker that had the most wayward of tonal responses. This isn't the only thing that Pete means when he talks about colouration of course, there are plenty of other often more obtrusive shortcomings with loudspeakers. PMC's particular bugbear often seems to be dispersion, they are very keen that what comes out of the speaker and hits the wall before it gets to your ears is consistent with the direct sound. It's something that other designers don't make a song and dance about, preferring to focus on frequency or time domain issues.

Musicality is a highly desirable quality for an audio component but also a rather ethereal one that cannot be produced by a pair of loudspeakers alone, it has to be there

in the signal and the amplifier needs to be able to work with the speaker effectively for it to be audible. Having said that some speakers are clearly more musical than others, and it's long been a quality I associate with PMC designs so it's perhaps merely a decision on Pete's part to emphasise this characteristic. Either way the biggest floorstander in the four strong twenty series range has musicality in spades, it is a very enjoyable and engaging loudspeaker in a rather distinctive cabinet.

The five degree lean or layback is what distinguishes the twenty series, five degrees may not sound like much but it makes for a high speed aesthetic with something of the 'Is it live or is it Memorex' about it. Raked speakers have been done before, most notably by Avalon and Audio Physic, but as it's not the easiest way to build a cabinet they are still a rare breed. Yet it has some obvious technical and aesthetic advantages, for a start you get free time alignment for tweeter and woofer, it also ends up being stiffer although the 'advanced transmission line' system (ATL) that PMC uses means that its boxes are already better braced than most.

It does pose a styling problem however, specifically with the terminal board, do you fit it so that the terminals stick out parallel to the top and bottom of the speaker or do you put them at right angles to the back of the cabinet so that they point downward. PMC went for the former approach which means that the colour coding on the top pair of terminals (for the tweeter) disappears into the box, I quite like the idea of terminals that point downwards as that's where the cables are usually coming from but I can see the logic of their choice.

On more important issues the twenty series has completely new drive units to existing PMC designs. It pricing overlaps with the i range but there are no common parts, it is more closely related to the fact models that sit above it in the hierarchy, notably in the crossover point which is a low 1.8kHz. This is because the dispersion of even a five inch diaphragm starts to narrow above 2kHz and as previously mentioned evenness of dispersion is a PMC goal.

A 27mm Sonolex soft dome tweeter that PMC co-developed with SEAS has the unenviable task of delivering everything from the crossover point up to a specified 25kHz, a job it seems more than equal to if the listening is anything to go by, although I make no claims to be able to hear 25kHz. The dome is pre-coated for consistency and ferrofluid cooled so that it can take the sort of abuse that this company expects of its drive units. The main driver is a six and a half inch natural fibre cone, mostly paper one assumes, with light doping and a cast alloy frame. Behind it is the mouth of a three metre ATL that vents out of the front rather than the rear of the cabinet as is the case with the i series, a change that is said to improve bass definition.

The twenty24 has a plinth that's offset to the back so that you see a shadow gap under the front of the speaker, it also stabilises what would otherwise be a potentially dangerous piece of furniture. PMC decouples plinth from cabinet with cork and rubber pucks and supplies stainless spikes, lock nuts and a spanner to tighten them up with. A laser cut spanner no less. A lot of expertise and attention to detail has gone into this speaker and it shows

in the fit and finish and even more so in the sound which is characterised by a wide open midrange that produces soundstages that tower over the speakers themselves. This quality is one that I associate with standmounts whose relatively compact cabinets are easier to control and thus attract less attention. But the quality of dispersion and the lack of cabinet colouration let the twenty24s disappear like EU loans to Greece, close your eyes and all you hear is a soundstage that's as big as the recording and the room allow.

It's more than a wall of sound too, it's a three dimensional scene where the sounds that musicians make take a clearly defined physical space. The sense of presence can be uncanny in its realism, way beyond anything you get with 3D TV and you don't even need to wear glasses, in fact you don't need to open your eyes. This also seems to be the case with a lot more music than usual, pianos are totally solid and grounded in the room while cymbals have air and life. This is an unflinchingly revealing speaker too, which can be a mixed blessing if your vinyl is worn or your system is on the edgy side. I got spectacular results with both my regular Leema Tucana integrated amp and Resolution Audio Cantata CD player/DAC as well as a Naim Uniti. The former has greater refinement and grip but the Naim has a musicality, there's that word again, and groove factor that sucks you in and won't let you go. In other words it worked a treat with the twenty24s which do indeed seem to have better bass definition that I remember with the i series, the bass times extremely well and manages to combine pace with power to highly entertaining effect. This is probably as much to do with the drive units and crossover point as the placement of the ATL vent, but whatever the reason it works.

The midband is dense with detail, some of it less desirable like tape hiss, but most of it adding to the sense of realism and energy. Image depth for instance can be massive with a good recording, one example being the recent 192k remaster of Antonio Forcione's debut *Meet Me in London*. This is one of the best hi-res recordings I've heard, with these speakers it places you in the studio with the musicians to an extent that is very rarely encountered, even with more expensive systems. But even regular 16/44 material is replete with space and an energy that makes for a very real musical experience. Sometimes the mid seems too forthright and explicit but this is not an issue with most recordings, if you listen to a lot of punk or thrash metal it's not perhaps the best speaker for the job but if your tastes are more catholic then you might have to work on the source, amp and cables to find a comfortable balance between energy and smoothness. I found myself noticing small differences between recordings and detail within familiar ones that was fascinating. The twenty24 gives you an awful lot of the fact's transparency and a bit more welly in the bass if not the same degree of revelation. But given the price gap, fact8 is twice the price, this makes the newcomer seem like phenomenal value and there's no doubt that it is.

Replacing the PMCs with a pair of luxurious oriental speakers at a similar price brought a number of things into sharp focus. One is that the twenty24 has a dry balance, the bass has no added juice or lushness to give the impression of body, secondly it is a phenomenally musical speaker that makes everything you play as exciting and engaging as it was the first time you heard it if not more so. You just can't ignore the music, even when the level is low it draws you in and won't let go. Finally it reveals differences between records with a precision and clarity that is rare and yet this does not get in the way of the enjoyment as it can with some speakers. I was wrong to suggest that



it's not a speaker for punk, if you like punk you like harsh, thin, high energy sound and that is what you will get with this speaker. Of course in all likelihood you won't see it like that because it's the sound of the music that you love.

The music I love includes the work of Led Zeppelin in their heyday a live performance of which was captured and released as *How the West Was Won* in a variety of formats including DVD-Audio. I managed to rip the hi-res material from my copy which means it's possible to hear it in full effect thanks to the wonders of computer audio. It's still short of power and weight but this does little to undermine the quality of playing that these PMCs make so clear, you can easily listen past the tonal balance and immerse yourself in the event. What really makes it work I suspect is the speaker's superb sense of timing, it's total lack of overhang means that nothing is smeared. So not only are the finest details preserved but they don't overstay their welcome.

Another old track that the iMac/Cantata combo has recently revived for me is Eminem's contribution to an early Missy ▶

## TECHNICAL SPECIFICATIONS

**Freq response:** 28Hz – 25kHz

**Sensitivity:** 90dB 1w 1m

**Effective ATL™:** 3.0m 9.8ft

**Impedance:** 8 Ohm

**Drive units:** LF lightweight doped  
6.5"/170mm cone with cast alloy chassis  
HF 27mm SONOLEX™ soft dome,  
Ferofluid cooled

**Crossover frequency:** 1.8kHz

**Input connectors:** 2 pairs 4mm sockets  
(bi-amp or bi-wire)

**Dimensions HxWxD:** 1028 x 184 x 419mm

**Weight:** 21kg 46.2lbs

**Manufactured by:** PMC Ltd

**URL:** [www.pmc-speakers.com](http://www.pmc-speakers.com)

**Tel:** 0870 4441044

Elliott album called *Busa Rhyme* (from *Da Real World*). It's possibly his finest recorded work thanks to the skills of producer Timbaland, and its the layers of sounds that he contributes that are illuminated by the twenty24. The vocal was always fairly clear but you can hear right down into the mix, I'm now certain that he used a broken bass cone to get the 'phat' bass beat on this killer track. It all comes down to the speed of the loudspeaker, what's more you don't need immense power nor state of the art ancillaries to achieve the result, which is a real bonus.

By combining low colouration with musicality PMC has managed to make a loudspeaker that can be everything to all men, well almost. Some will prefer a warmer balance others a heavier bottom end but few other speakers below five grand are as consistently revealing and entertaining as this stylish design. Its dynamic appearance gives a strong clue as to its sound but not its musical potential, it is one of those products that will have you delving through the old favourites so that you can hear them anew in a revealing but not clinical light. Pete Thomas has proved that reducing the right colourations can increase musicality, the gauntlet is well and truly down. +

