Three-way reflex-loaded floorstanding loudspeaker Made by: The Professional Monitor Company Ltd Supplied by: PMC Ltd Telephone: 01767 686300 Web: www.pmc-speakers.com Price: £8495-£8995





PMC twenty5.26i

An unchanged exterior hides PMC's crossover and driver upgrades made to its premium three-way floorstander Review: **Mark Craven** Lab: **Paul Miller**

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n The Who's 'Won't Get Fooled Again', Roger Daltrey memorably sings 'Meet the new boss – same as the old boss'. It's a phrase that sprang to my mind when confronted by PMC's twenty5.26i, as this floorstanding speaker is, outwardly, identical to its twenty5.26 predecessor launched in 2016, with cabinet dimensions matching to the millimetre. Yet PMC describes its new twenty5i series as a 'substantial re-engineering', improving performance without moving away from the signature sound of its forbear.

Aptly, the twenty5.26i is the 'boss' of the new lineup, and the only three-way model. Below it are the twenty5.21i and twenty5.22i standmounts, along with two

other two-way floorstanders (the twenty5.23i and twenty5.24i). There's also a new centre channel speaker for home cinema installations. Across the twenty5i series, buyers get a quartet of finish options. Walnut, Oak and a new

White Silk all keep the same £8495-perpair price point, while choosing Diamond Black adds a £500 premium.

GOTTA ROLL WITH IT

New to the series is the high-frequency drive unit. This 19mm tweeter, designed in conjunction with SEAS, places a soft dome within a 34mm roll surround. This pairing, says PMC, delivers both the wide dispersion of a 19mm tweeter with the improved midfrequency response of a larger driver. This has enabled a 1.7kHz crossover point to be used on the two-way twenty5i models, even if a higher 4kHz crossover is retained in this three-way design. The tweeter is mounted in a curved, fibre-glass 'HF dispersion plate' and protected by a grille.

Both the 50mm soft dome mid unit and 170mm 'g-weave' (woven glass fibre composite) bass driver – which cross over at 400Hz – are continuations from PMC's previous range. And once again, the latter feeds into PMC's take on transmission line bass-loading, with its 'ATL' chamber terminating in two front-facing Laminair vents [see PM's boxout, p45].

With only one of its drive units a fresh invention, and the cabinet design unchanged (as before, it angles backwards, reducing internal standing waves and offering a degree of physical time alignment), much of the twenty5.26i's boosted performance, claims PMC, comes from a new crossover and vibration-reducing plinth stand.

TAKE A STAND

The former incorporates 4th-order filters at each crossover point and uses hand-selected components mounted on 'military-grade' fibre-glass boards, all connected via

pure copper tracks. The new stand, meanwhile, is borne from research conducted during the development of PMC's Fact Fenestria floorstander. This 'anti-vibration' plinth is threaded for the supplied

stainless-steel spikes, with damping discs used to decouple the speaker from the floor. By targeting specific vibration frequencies, PMC believes it can radically improve performance.

When it comes to styling, the twenty5i series is quite domesticated, eschewing the industrial feel of PMC's SE series or towering aesthetic of the Fenestria. The look of the twenty5.26i isn't something that will set pulses racing, though, with hard lines and exposed driver fixings. Add the full-height magnetic cloth grille and you have a loudspeaker that's the definition of unflashy. The size is manageable enough – a modest 1040x192mm (hw).

PMC fits dual (or triple) binding post connections on its Fact series, and did the

RIGHT: A 19mm PMC/SEAS soft fabric dome tweeter crosses over at 4kHz to a 50mm soft-dome midrange and 400Hz to a 170mm long-throw 'g-weave'-coned bass/mid unit. Bass is reinforced via PMC's ATL (Advanced Transmission Line), tuned via 'Laminair' vents





Speakers with ports, ducts or other apertures in their cabinets are typically reflex designs, also known as 'vented boxes', and exploit the Helmholtz resonance to boost their low frequency output. This resonance, such as you might hear when blowing across the top of a champagne flute, offers the promise of better bass extension and sensitivity than might be achieved with a sealed box, but is traded against a steeper bass roll-off and poorer transient response. Transmission line bass loading is a variant of this technique first proposed by Arthur Bailey in Wireless World, 1965. Bailey's ingenious solution utilises the Helmholtz resonance while also damping any unwanted reflections or resonances within the enclosed air space by absorbing the rear radiation of the bass driver in a long (folded), damped and tapered duct. However, such a pipe has to be at least a quarter-wavelength in span to be effective, ie, 4.3m for 20Hz. This is rarely practical so in 'real world' designs the transmission line is cut short and vented, allowing some delayed, vestigal bass output to escape. PMC's ATL (Advanced Transmission Line) uses this technique, its claimed 3.3m effective length tuned to a notional 26Hz [see Lab Report, p47].

same on the 2014-era twenty.26 floorstander, but here a single set of connectors, coupled directly to the crossover board to reduce resistance and signal path, is provided. This arrangement is believed to outweigh the subjective benefits of a split crossover and bi-amping or bi-wiring.

Thanks to its controlled dispersion, tuned bass output and front-firing port, the twenty5.26i is 'more forgiving of difficult room conditions and placement constraints' than other loudspeakers, says PMC, and buyers 'will be able to achieve a superb sound throughout the room with little effort'.

I appreciate the optimism, but found it still took time with set-up to lock in a stereo image, not least because I felt the speaker's detailed delivery – more on this later – made it easier to detect less than optimal placement. Positioning close to a rear wall for a bass boost isn't discouraged, particularly as there's no rear port to contend with, but I tried to give them as much breathing room as possible.

TIGHT AS A NUT

PMC

Realism, transparency and musicality. This is the three-pronged mission statement of the twenty5i series and with that in mind it's hard to consider the twenty5.26i as anything other than a success. This new-breed floorstander picks up the baton from previous PMC speakers, impressing with the clean,

nuanced delivery, precise sense of rhythm and top-to-bottom balance the company's fans expect.

This clarity and timing was there to savour on the Queen track 'Another

One Bites The Dust' [*The Game*; Tidal Hi-Fi 44.1kHz/16-bit], one of the band's most disco-infused moments and so dry it sounds vacuum-packed. The big PMC speaker conveyed the tight-as-a-nut production and work of musicians at the top of their game. The punchy drum pattern and rhythm of the bassline were locked in perfect unison, while Freddie Mercury's rapid-fire verses fizzed from the centre stage yet retained a delicate reverb. His vocals are then layered during the chorus, and the interplay between them was scintillating.

RAISE A GLASS

With the Queen recording there was an enjoyably taut and unmuddied feel to the twenty5.26i's handling of the bass, but with Faithless's dance tune 'We Come 1' [Outrospective; BMG 74321 850832] I got more of an impression of how much that 170mm driver punches above its weight. Given a physical leg-up by the cabinet and the ATL architecture, it managed to range impressively deep but still sound lightningfast and responsive. This ability surfaced again and again throughout my audition, providing large scale, energetic footing to tracks that demanded it.

I could have happily fed the twenty5.26i a diet of electro-pop and dance music to savour its adroit handling of up-tempo music, and the slick manner in which it dots musical flourishes across its soundstage. But I changed the pace with Philip Glass's 'I. Opening', the first movement from his 1982 release *Glassworks* [Tidal Hi-Fi; 44.1kHz/16-bit]. Almost entirely a piano instrumental, with an unusual triplenote construction that gives it the air of falling forward, this let the delicacy of the twenty5.26i's mid and treble come to the G



fore, and its talent for dynamics as the music ranged from soft to forte.

Listen to more straightforward material that's not so skilfully mastered and you may feel you're not tapping into the twenty5.26i's obvious full potential. Yet even as I ran through a variety of relatively low-fi recordings, I was never 'disappointed' by what I heard.

AC/DC's 'It's A Long Way To The Top (If You Wanna Rock 'N' Roll)' [High Voltage; EMI 494 6712] does not have the holographic imaging of other compositions, but while the speaker did not have to dig deep, neither did its midrange driver gloss over the distorted guitar riffs, retaining the distinctive layering. The wide soundstage also stood out, with Malcolm and Angus Young's

LEFT: All PMC's twenty5i loudspeakers feature the same matt silver-finish alloy back panel that supports the crossover and single 4mm binding posts

guitar parts enjoying a breadth that mirrors their on-stage setup.

There's a cohesive nature to the twenty5.26i's performance that's addictive. The effect is that you can lose the sense you're listening to a set of speakers, the sextet of drivers instead forming a balanced, even whole, from pure-sounding bass at the bottom to grit-free highs.

PARTY PIECE

At the same time, the overall presentation favours transparency, insight and smoothness. You'd never consider these warm or rich, and occasionally the emphasis on midband precision seems to come at the expense of high-end sparkle. I can imagine some considering this speaker lacking in 'excitement', but counter to this is the pleasure you get listening to something that never seems to put a foot wrong. I also found it easy to drive with quite modest amplification, and tonally consistent with off-axis listening.

I finished my audition, as I knew I would, with 'Won't Get Fooled Again' [The Ultimate Collection; Polydor 065 234-2], which had me tapping my feet and air-drumming to Keith Moon's frantic rhythms. So for all the twenty5.26i's mature looks and neutral performance, that doesn't mean it's not suited to getting the party started. At one point Daltrey demanded I 'take a bow for the new revolution'. I'd doff my cap to this speaker. (b)

HI-FI NEWS VERDICT

Those seeking a speaker that works with the music, rather than unduly adding to it, will cherish PMC's premium-priced floorstander. Dynamic and detailed, transparent and well-timed, the twenty5.26i doesn't resort to bass bluster or overt treble to impress. There are more eye-catching rivals out there, but park your superficiality and you'll discover PMC's from-the-studio aesthetic suits the performance.

Sound Quality: 85%

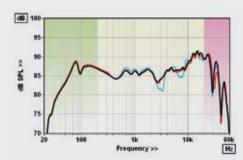


LAB REPORT

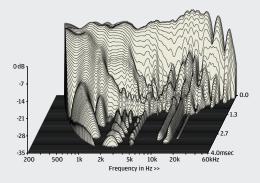
PMC TWENTY5.26I

Despite enhancements to the crossover and change of tweeter, PMC has retained the conservative 86dB sensitivity rating of its previous twenty5 flagship and, refreshingly, this is bang on the money with 86.2dB/2.83V achieved at 1kHz and 85.7dB averaged across a representative 500Hz-8kHz. The resulting responses for the review pair [Graph 1, below] show a rising treble output, and minor resonances [Graph 2], though this can be 'tempered' by listening a little off-axis. We've also seen a dip in output at 2kHz-4kHz before, but the ~3dB loss at 2.7kHz is relatively minor in this revised floorstander, these two features resulting in response errors of ±5.1dB and ±4.6dB, respectively. Adding the grille brings further unevenness to the presence band Iblue trace. Graph 11 but the pair matching between our two samples over the same 200Hz-20kHz was impressively tight at ±0.7dB. Bass extension is a useful 38Hz (-6dB re. 200Hz), the two 'Laminair' vents actually a single aperture for a transmission line that peaks at a high 86Hz - coinciding with a slight notch in the bass driver output [green shaded area, Graph 1]. Minor resonances in the line were detected at 160Hz and 260Hz.

The modest sensitivity is achieved via a slightly tougher load than might have been expected (or suggested by PMC's nominal 80hm rating) thanks to dips of 3.90hm/116Hz and 4.70hm/3.1kHz although the phase angles are within ±20° here. The biggest swoops in phase angle of +34°/3.8kHz and a significant –69°/60Hz occur at 7.00hm and 10.50hm, respectively, but these should not cause any partnering amplifier, of comparable quality, pause for thought. PM



ABOVE: Response inc. nearfield summed driver/port [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. Left, black; right, red; w. grille, blue



ABOVE: Major modes decay quite quickly, with just a suggestion of mid and treble driver resonances

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – 1kHz/Mean/IEC)	86.2dB / 85.7dB / 84.0dB
Impedance modulus: minimum & maximum (20Hz-20kHz)	3.9ohm @ 116Hz 30ohm @ 48Hz
Impedance phase: minimum & maximum (20Hz–20kHz)	-69° @ 60Hz 34° @ 3.8kHz
Pair matching/Resp. error (200Hz-20kHz)	0.7dB/ ±5.1dB/±4.6dB
LF/HF extension (-6dB ref 200Hz/10kHz)	38Hz / 28.2kHz/29.9kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	1.2% / 0.8% / 0.6%
Dimensions (HWD) / Weight (each)	1040x192x439mm / 25kg