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PMC TWENTY.26

WHY PMC'S NEW
FLOORSTANDER
SCORES A HIT FOR
UK LOUDSPEAKERS

FOCAL ARIA 905

JEFF ROWLAND CONTINUUM S2

MONITOR AUDIO SILVER 8

REVOX JOY S120

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PMC TWENTY.26 loudspeakers

by Paul Messenger

PMC's Twenty.26 is the fifth and latest stereo pair in PMC's mid-price Twenty series, and appears to have a concept and numerous elements in common with the much more costly fact.12. However, many of those commonalities are in truth illusory; the only component the two models actually have in common turns out to be just the stainless steel spikes – even their associated locknuts are different!

That said, both are slimline three-way floorstanding designs, both use PMC's trademark 'advanced transmission line' (ATL) bass loading technique, and both feature 50mm diameter midrange drive units. These midrange dome drive units are both based on some very interesting research carried out at the National Physical Laboratory, by PMC's Oliver Thomas, alongside its resident physicists (see page 16). A radical non-intrusive laser-based method was used to optimise the shape of diaphragm and faceplate for the smoothest pattern of sound distribution. The difference between the two versions is that the fact.12's version is made in-house by PMC, while the later version developed for the Twenty.26 has been re-engineered for less costly manufacture and is made by an outside supplier. Otherwise, it's pointless trying to list all the differences between the two models.

The Twenty series currently consists of five stereo pairs – two standmounts and three floorstanders – plus centre-front 'dialogue' and subwoofer speakers for AV surround sound users. As previously stated, the range-topping Twenty.26 is a three-way design. Its bass unit is a 170mm cast alloy frame and a 125mm diameter doped paper cone with an unusually large (c90mm) dust cover. The 50mm dome-shaped midrange unit and 27mm tweeter both have soft fabric domes that are inherently rugged, even though both are also protected by perforated metal grilles.

Perhaps the most obvious distinction between all the stereo Twenty series models and the overwhelming majority of the competition is that they lean 'backwards' a few (actually only five) degrees. This is not only rather stylish, but also means that the voice coils of the three drive units approximate a vertical line more closely than would be the case if the drivers were mounted on a vertical baffle. This might well help simplify the crossover networks, which inevitably tend to be complex in a three-way design such as this, especially since PMC has always favoured steep (4th order) filtering. Indeed, the fact that the electrical and acoustic crossover points (measured at 500Hz for both and 4/3.5kHz respectively) are so similar is an indicator of the steep filtering, evidenced by the crossover points at 380Hz and 3.8kHz.

To stop the backward tilting enclosures from falling over – and also to ensure a solid foundation for the floor spikes – a hefty black-painted Medite/MDF plinth is supplied, with the rearward extension required to handle the tilt. This is bolted securely to the base of the speaker, albeit not so tightly as to crush the cork washers that add a measure of decoupling. The shiny stainless steel spikes come complete with matching lock nuts that may be tightly fastened.

The rear panel accommodates no fewer than three terminal pairs (just as a three-way arguably should), fitted through a large and removable metal plate that accommodates the crossover network and components, and also acts as some form of heatsink. The speakers are supplied with the terminals linked by gold-plated rods, but these can be removed for bi-/tri-wiring or bi-/tri-amping. ▶





“The only component the two models actually have in common turns out to be just the stainless steel spikes – even their associated locknuts are different!”

▶ When my reference PMC loudspeakers are installed in the listening room, I normally ‘float’ the speakers on Townsend Seismic Corners, and also use Vertex AQ links between the terminals. The same Seismic Corners aren’t practical with the Twenty.26, partly because they’re much lighter, but mainly because the rear of the loudspeaker’s plinth forms a semicircle and therefore lacks corners. However, it was possible to use the Vertex AQ links, and history suggests that these are often a rather effective indicator to the underlying qualities of a speaker system, as we shall see later.

I carried out my admittedly limited, but nonetheless useful portfolio of measurements, and as usual these proved an impressively accurate predictor of the loudspeaker’s overall character. The in-room far-field frequency response stayed within $\pm 4\text{dB}$ from 60Hz up to above 20kHz, and within an even more impressive $\pm 2\text{dB}$ from 900Hz up to 20kHz under similar conditions. One particularly distinctive trait is that the broad presence band (1.5kHz-5kHz) is notably restrained and laid back.

Under far-field in-room conditions, the sensitivity registers 87-88dB, which is slightly above the 86dB claimed by PMC. However, PMC’s eight-ohm load claim looks somewhat optimistic, as our measurements reveal that the impedance is actually close to four ohms between 100Hz and 200Hz – a decidedly power-hungry part of the audio spectrum. However, there is some compensation in a bass end that extends at full level right down to 20Hz. Indeed, under far-field in-room conditions, the sub-70Hz bass is arguably a little too strong, thanks in part to a c50Hz room mode, and in part to its 11ft transmission line being tuned to a very low 24Hz.

I spent a long time listening to the Twenty.26s – partly, I’m happy to admit, because they always sound unusually and exceptionally easy on the ears. Having them simply doing their thing in the listening room turned out to be hugely enjoyable, since they proved well able to communicate both speech and music with admirable quality and perspicacity, yet they never ever seemed to sound unpleasantly loud or aggressive. This is a difficult trick to pull off in reality, so much so that I can’t think of a speaker that manages it quite as effectively. I did spend a couple of brief hours with a pair of PMC fact.12s, and that time was sufficient to reveal the superiority of the more costly model, which has slightly sharper timing and more expressive dynamics. It’s also probably true that the fact.12s are slightly less forgiving than the Twenty.26s, but I guess that goes along with the same territory.

Arguably a more relevant point of comparison is my old pair of PMC OB1i loudspeakers. The OB1i is effectively the predecessor of the Twenty.26, as it’s a three-way



What is RAOS?

Loudspeaker companies have used laser interferometry for many years to examine the mechanical behaviour of enclosures, diaphragms and so on, but the National Physical Laboratory’s RAOS (rapid acoustico-optic scanning) approach avoids any mechanical contact and actually measures changes in the air’s refractive index in front of a loudspeaker producing an audio signal. These correspond to the pressure variations in the air, which are the actual soundwaves themselves of course, establishing the detailed directivity of a loudspeaker more rapidly and less invasively than traditional techniques. Ollie Thomas (son of PMC proprietor and founder Peter Thomas) has been working with the NPL to apply RAOS in several recent designs, examining, for example, the shape of the 50mm midrange dome’s front flange, an ideal problem since the technique is currently only applicable above 500Hz.

transmission-line loaded floorstander of similar height. A major difference, however, is that it uses a 75mm dome midrange sourced from Vifa, as PMC’s own 50mm unit was still just a gleam in designer Peter Thomas’ eye when the original OB1i made its debut more than a decade earlier. Another significant difference is that the OB1i has a conventionally vertical rather than a backwards tilted enclosure, and it somehow also looks a little less fashionable and up to date, a rather more nebulous but nonetheless relevant observation. ▶

▶ The Twenty.26 is indeed an improvement over the OB1i, but the margin is perhaps not as big as one might anticipate. Indeed, when listening at modest levels some listeners actually preferred the earlier model, perhaps because it projects the upper midband a little more strongly. Where the Twenty.26 scores is in its superior overall smoothness, especially through the broad midband, which is certainly smoother, if also a little more restrained. Measurement tends to confirm this, showing that the OB1i is significantly less even (and indeed more forward) between 600Hz and 2kHz, and also rather stronger in the upper bass (80–180Hz).

The Twenty.26's combination of a smooth and slightly laid back midband is certainly rather unusual, yet also proved decidedly seductive. This speaker shows absolutely no tendency to shout or become aggressive, yet it's also invariably highly informative and full of detail. The result is a sound quality that remains easy on the ears even when playing music at relatively high levels, while still delivering plenty of explicit detail at more modest levels.

The latter has much to do with this speaker's impressively wide dynamic range and fine reproduction of low level information. That in turn may well be down to improved control over enclosure vibrations, perhaps due to the extra reinforcement and stiffening provided by the additional vertical dividing panels that are used to create a transmission line.

Stereo imaging is about as good as it gets, with well layered perspectives on material with appropriately simple miking. Fine details and airiness were convincingly portrayed, and some clues to various recording studio techniques could also often be heard. Coloration here is also very low, probably thanks mainly to the very smooth delivery of that new midrange unit, which ensures that the voice band is generally and rather unusually even, as well as restrained.

Earlier in this review, I mentioned that introducing Vertex AQ's terminal links was usually a good guide to the quality of a speaker. Doing so did indeed create a significant improvement, confirming the Twenty.26's underlying qualities. This is unquestionably a superb loudspeaker, with the sort of restrained and laid back balance that ensures it will never become aggressive even when playing music at high levels. It can become a little untidy when loud, revealing plenty of power handling but also minor timing limitations compared with the fact.12. However, at any normal level it's beautifully balanced, with ample bass weight and an excellent dynamic range. PMC's Twenty series has proved to be its most commercially successful to date. With models like the Twenty.26 in that range, it's not hard to see why! Highly Recommended. +



TECHNICAL SPECIFICATIONS

Freq response: 27Hz – 25kHz

Sensitivity: 86dB/W (measured at 88dB/W)

Effective ATL: 3.3m (11ft)

Impedance: 8 Ohms (measured 4 ohms min.)

Drive Units: LF: 177mm cast frame with doped 125mm paper cone. MF: 50mm twenty-series dome. HF: PMC/SEAS 27mm soft SONOLEX dome

Crossover frequencies: 380Hz, 3.8kHz

Input connectors: 3 pairs 4mm socket/binders

Size (HxWxD): 106.2(+25 spikes) x19x43.9(+16 grille)mm

Weight: 22.5kg

Available finishes: walnut, amarone, diamond black, oak

Manufacturer: Professional Monitor Company

Tel: +44 (0)8704 441 044

URL: www.pmc-speakers.com