Momkng PMC's first 20 years is a range called – aptly – ‘twenty’. Here’s the baby in the range: will owners want to keep it long enough to test the 20-year warranty?

Review: Ken Kessler Lab: Keith Howard

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eith Tonge, PMC's Product Manager, is a fount of company lore. For a dyed-in-the-wool anachrophile like me, who once worshipped IMF and Radford transmission-line speakers, I was fascinated by certain of his recountings. Like how co-founder Peter Thomas is a transmission-line obsessive who collects the damned things, with a near-complete gathering of IMFs, TDLs and others lost in the mists of time [see p122].

Which leads me circuitously to the twenty.21, the latest of PMC’s compact transmission-line designs. Maybe Peter realised long ago that sheer size mitigated against the sales of boxes like IMF TLS80s. While PMC also makes studio monitors big enough to party in, I heartily concur with what he’s produced for the rest of us, as if toprove that transmission-line technology – which was, ironically, conceived to deliver the maximum bass from the smallest enclosure – could be applied to manageable boxes.

For me, the twenty.21 follows extended use of the DB1+ standmount from the range below it; they served me well when reviewing sub-75W amplifiers, from NADs to PrimaLunas. Those sold for circa-£700 at birth, so the ‘21 doubles the tariff. And yet it’s not much larger at a room-friendly 325x152x277mm (HWD), with another 6mm for the grille.

It is, however, the baby of the family, all of which are two-way transmission-line designs. Next up is the slightly larger twenty.22, followed by two floorstanders: the 923mm-tall twenty.23 and the 1030mm-tall flagship, the twenty.24.

THE ATL SPECS

Common to all is the ferrofluid-cooled 27mm Sonolex soft-dome tweeter, made to PMC specifications by SEAS and unique to this series of speakers. SEAS’s designers worked directly with Peter to ensure that the tweeter would achieve a smooth response down to the 1.8kHz crossover point, with 24dB/octave slopes.

The crossover common to all models uses a military-grade glass-fibre board chosen for its rigidity, to guarantee that the location of each component is identical to that of the reference. The boards bear thick pure copper tracks, and gold through-plating for enhanced reliability and better performance. All components – including Solen audiophile-grade capacitors – are chosen for transparency and are precision-matched, PMC undertaking appropriate testing to ensure that speaker pairs will be identical when despatched.

This model and the smaller floorstander use the tweeter with the 140mm M13 woofer, while the .22 and the .24 are fitted with the 170mm M17 woofer. Both were developed by PMC specifically to suit the new ATL (Advanced Transmission Line) twenty designs, and are made in-house with, again, an eye to quality and consistency. They employ lightweight, stiff paper cones with matte doping, and are fitted to a cast alloy chassis.

TIME ALIGNMENT

All of the models’ cabinets are slightly sloped at a 5° angle in parallelogram form for physical time alignment of the drivers. Available for the two standmounts models are optional, dedicated 610mm stands that complement the angle. The cabinets are made from 18mm Medite finished in oak, walnut or amarone veneers as standard or this glorious ‘Diamond Black’. All models offer bi-wiring capability, via nicely-made multi-way gold-plated terminals.

The series’ name resoundingly celebrates the company’s anniversary, 20 years of ATL loudspeaker design and the presence of a confidence-inspiring 20-year-warranty. PMC’s professional background [see boxout] means that the company has always prized durability, given that studios are far more harsh environments than domestic listening rooms.

Where these differ from utilitarian pro models, aside from the luxurious finishes, are in such details as the magnetically fixed grilles, the types of binding posts
Sound that was only marginally improved by further tweaking.

‘A SCREAM!’

Along with the Howes Quads and II-eighty monoblocks fed by the Audio Research REF 5 preamp and PH5 phono stage, I gave the PMCs a burst of the NAD315BEE integrated. Sources included an iPod Classic, Marantz’s CD12/DA12 and Linn LP12/Ekos/Arkiv analogue front end. Wiring was YTER. At no point, did the PMCs seem to want for more. They’re so accommodating that I suspect you could dig out a 20-year-old solid-state receiver of the same vintage as PMC itself and still have a right rocking good time.

Nothing beats a good scream, so Johnnie Taylor’s ‘Who’s Making Love’, from the Stax 50th Anniversary box set, was followed by massive doses of Wilson Pickett. The richness of the horn section on Pickett’s killer take of the Robert Parker classic ‘Barefootin’’ immediately accomplished two things. The first was to assure the listener of the general musicality and euphony. While I have no doubt that the clarity and precision would satisfy a knob-twiddler at some 48-channel mixer, the brass at around 1m 28s – which can screech like a banshee – simply sounded sharp and clean. As for the PMCs, they’re so accommodating that I suspect you could dig out a 20-year-old solid-state receiver of the same vintage as PMC itself and still have a right rocking good time.

Taylor’s scream – chilling. Underneath it, Duck Dunn’s fast-plucked bass, to the right a sassy horn section, Steve Cropper’s guitar dead ahead, voices far left. It coalesced into a wall of soul goodness: no overhang, just snappy attack, while the lower registers were tight enough to rattle my memory bank.

How so? Because I haven’t heard coffin-sized IMFs in a decade or so, but I certainly recall how they belied the myth that transmission-lines have plentiful but flabby bass. The .21’s lower octaves had punch, kick and real depth. And it wasn’t just impressive for a small box. It was, as the current vernacular states, massive.

It was clear that the narrow baffle, the dome tweeter and other elements were contributing to an incredibly wide, open and precise soundstage. Carla Thomas’s exquisite ‘I Like What You’re Doing (To Me)’ filled the room, left-to-right, with sounds clearly positioned outside of the speakers. Male backing vocals to the right, distaff singers to the left, Thomas in the centre, instruments array across the back: in many ways, this little box behaves like a mid-sized panel speaker.

The brass, which can screech like a banshee, was simply sharp and clean

PMC’s BBC Roots

PMC was formed in 1990 by Peter Thomas, previously an engineer at the BBC, and Adrian Loader, who worked for FWO Bauch, an audio distributor versed in both professional and domestic hardware. Peter worked with KEF on the design of the massive KM1 monitor, and still owns a pair, housed in PMC’s museum. They produced their first loudspeaker, a large studio monitor called the BBS-A, based on Peter’s years of hands-on experience with BBC requirements. The first production versions were sold to the BBC and Metropolis Studios.

The BBC still uses the BBS at the Maida Vale studios, and employs PMC speakers in other locations as well. As PMC delights in pointing out, its domestic customers listen to recordings monitored on PMCs from Brian May, Robbie Williams, Tori Amos, Tony Bennett, Stevie Wonder, Coldplay, Elton John and audiophile favourite Eleanor McEvoy. Films which have been mastered on PMCs include The Dark Night, Independence Day, Terminator 3 and other sonic spectacles.
PMC twenty.21

PMC’s claim of 87dB sensitivity for the twenty.21 is confirmed only by the simple average of our FFT data, which gives undue emphasis to high frequency output. Using the standard pink noise measure sensitivity falls to below 85dB – a figure more consistent with the twenty.21’s perceived sensitivity, which is distinctly below average albeit fair for a speaker of these compact dimensions. The reason for the significant difference between the mean and pink noise figures is clear from the on-axis response measurements [see Graph 1, below, measured at tweeter height with grille removed] which show a distinct shelving up of output in the tweeter passband. This suggests that the twenty.21 will deliver its most neutral tonal balance when listened to somewhat off-axis. Despite this treble shelf the response errors are fair at ±4.5dB and ±4.4dB respectively (200Hz-20kHz) and the pair matching is tight at ±0.9dB over the same frequency range. Bass extension of 59Hz (~6dB re. 200Hz) is fair for the size of cabinet.

PMC could have improved the sensitivity by lowering the twenty.21’s impedance but appears to have preferred to ensure that it presents a benign load to its partnering amplifier. A minimum modulus of 6.4ohm is consistent with the 8ohm nominal rating, and the minimum EPDR (equivalent peak dissipation resistance) is 3.0ohm at a high 4.6kHz. Of more practical significance is the dip to 3.8ohm at 425Hz, which confirms that the twenty.21 is easy to drive. The cumulative spectral decay waterfall [Graph 2] shows reassuringly fast initial energy decay but some well-damped resonance activity around 1kHz, probably due to cone breakup in the bass-mid driver.

HI-FI NEWS VERDICT

At this price point, there are so many terrific speakers on the market that you’d have to be a masochist to find a stinker. The twenty.21’s easy driveability and manageable size add real-world appeal to the purely audiophile benefits of sublime sound, rich, rewarding bass and terrific imaging. With this in mind, I’m keeping a pair as my £1000:£2000 reference. Consider the sleek styling a sop to ‘er indoors.

Sound Quality: 85%

HI-FI NEWS SPECIFICATIONS

- Sensitivity (SPL/1m) 2.83V rms – Mean (IC/Music) 86.8dB/84.7dB/83.9dB
- Impedance modulus min/max (20Hz–20kHz) 6.4ohm @ 9.2kHz
- 41.9ohm @ 1.7kHz
- Impedance phase min/max (20Hz–20kHz) ~58° @ 2.8kHz
- 42° @ 79Hz
- Pair matching (100Hz–20kHz) ±0.9dB
- LF/HF extension (~6dB ref 200Hz/10kHz) 59Hz / 35.4kHz / 36.0kHz
- THD 100Hz/1kHz/10kHz (for 90dB SPL/1m) 1.8% / 0.5% / 0.1%
- Dimensions (HWD) 325x152x277mm

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