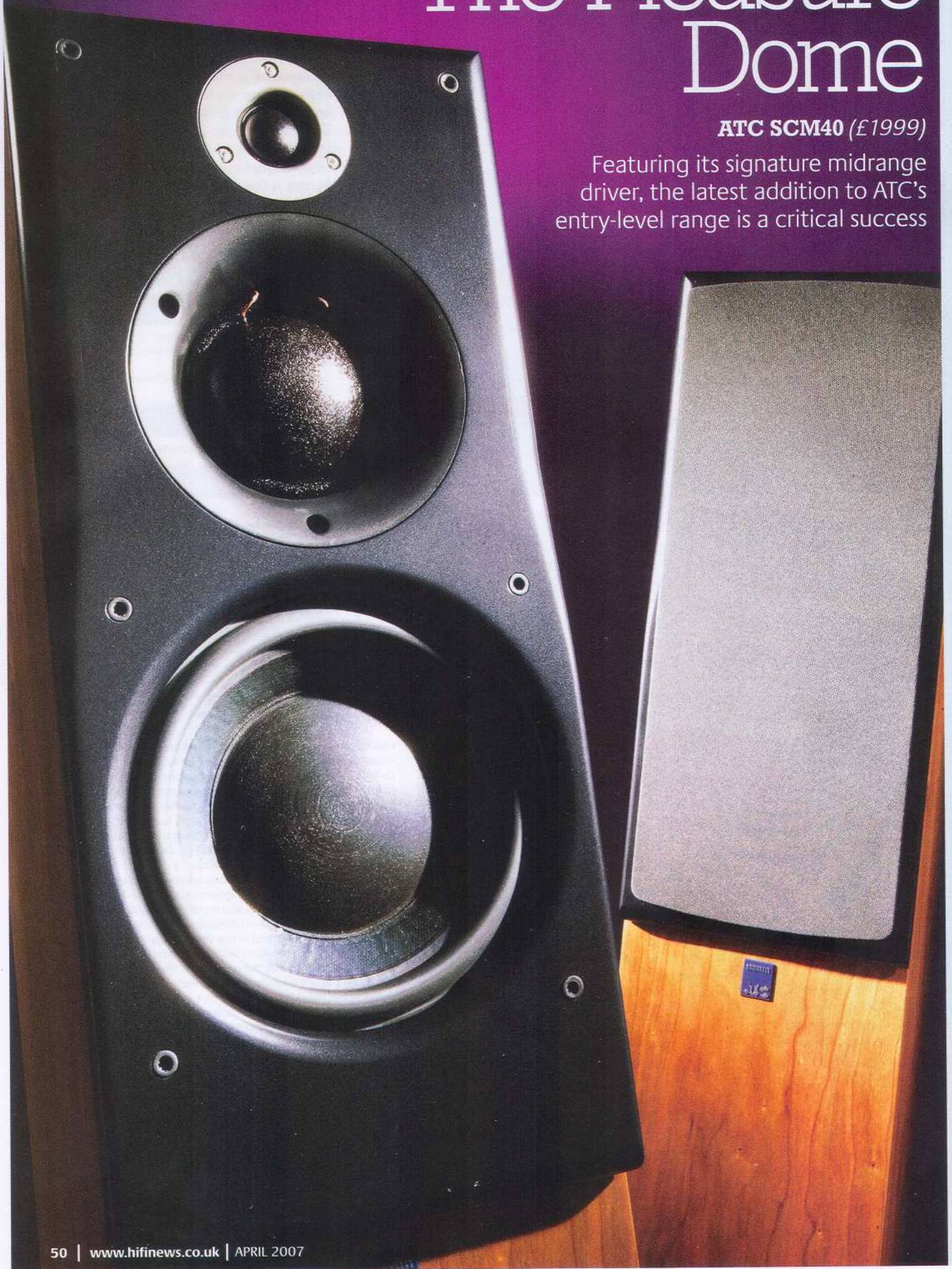


The Pleasure Dome

ATC SCM40 (£1999)

Featuring its signature midrange driver, the latest addition to ATC's entry-level range is a critical success



The day these speakers were delivered, BBC Radio 4 carried a consumer news item about a £9 DVD player from Argos. With pricing like that, the man in the street might wonder at a so-called 'Entry Series' scaling up to two-thousand pounds. *Hi-Fi News* readers, though, will be aware that ATC's work is principally in the professional sector, as its website picture gallery shows – LA's Disney concert hall is one recent example.

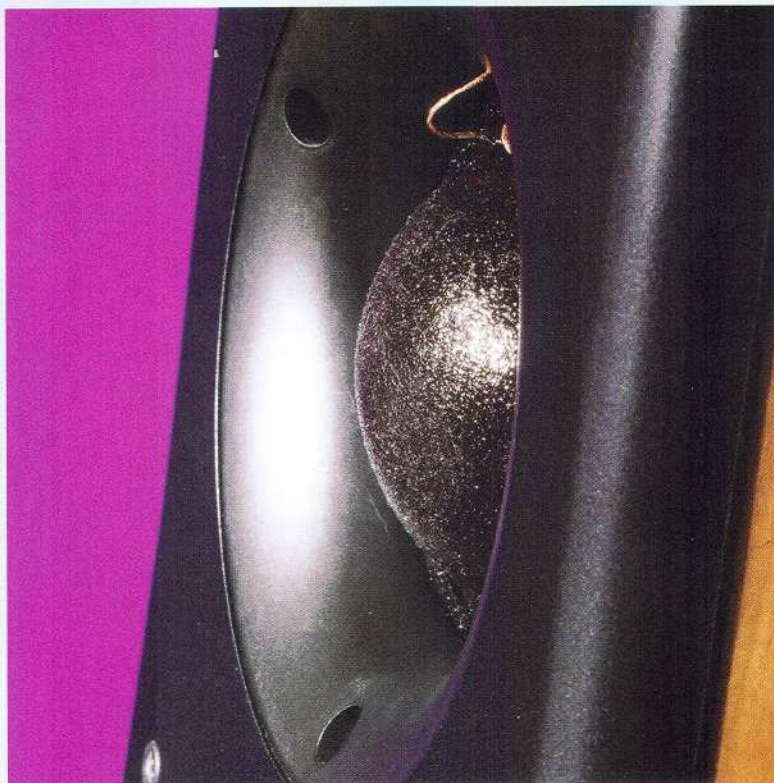
The SCM40 is the only speaker in the series with three drive units and floor mounting; the SCM7, SCM11 and SCM19 are two-way standmounts, the numbers signifying their internal volume in litres. The SCM11 supersedes the SCM12, a *HFN* Awards category winner in 2003, and is £50 cheaper.

The massive containers, 43 inches high, imply a two man lift, and indeed there are rugged carrying straps at each end. 'Coffins' suggested Paul Miller, and so it felt on an icy afternoon – would floral tributes be in order too? Like any child with a new toy, I wanted to open the boxes but allowed them to acclimatise to room temperature first.

NEW CROSSOVERS

The SCM is a 965mm-high cherry-veneered Medite rigid monocoque cabinet construction, 230mm in face width and 315mm deep. Internal damping is with bitumenized damping pads and loose acrylic fibre. The new crossovers for the range feature metallised polypropylene capacitors, large air-cored inductors and ceramic wire-wound resistors for superior power handling and clarity.

The baffle-mounted drive units comprise a 25mm neodymium soft dome HF unit with alloy wave guide, a dedicated ATC 75mm coil studio mid soft dome and 180mm bass driver. These may be bi- or tri-wired by



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removal of one or both of the Z-section linking straps located within its terminal box. The colour-coded terminals are angled for easy access, and allow spade, bare wire or banana-plug connections.

The 535m-deep 'graphite grey' (black!) double baffle has rounded edges for reduced diffraction; this radiusing increases partway up the bass driver to give a sculpted curve effect. When it reached me, slight damage had exposed the core material at the top corner of one unit, so this finish is vulnerable.

ATC suggests removal of the basic woven grille for serious listening (it has six plastic fixing pegs) as, kept in place, it adds some nasality to the sound. The 75mm midrange dome was slightly tacky to the touch, and so it would be advisable to keep dust away by replacing the grilles afterwards. With them off, the silver-grey HF face plate tends to stand out visually, as do two exposed Litz wire loops on the mid driver. On the whole, this is a functional looking construction, with little of the aesthetic allure of, say, Sonus faber designs. That said, the arrises on the attractively grained outer veneer were immaculate, as was the sheen on the baffle.

SPIKES AND SET-UP

ATC's web picture suggests spikes that would shred any carpet; in fact there is an accessory pack with eight modest spikes and four grey satin finish alloy caps to conceal the threaded ends of the front pairs. For stability, there are 59mm front wings to the black Medite base-plate. Since each speaker weighs 23.5kg it is best to establish by preliminary listening the best room positioning, shuffling them around the floor. ☺

ABOVE: The dedicated 75mm mid soft dome driver is mounted on a baffle with rounded edges in a bid for reduced diffraction

LEFT: Each cabinet sits on an MDF base-plate with provision for four levelling spikes



RIGHT: Speaker can be tri-wired or bi-wired when appropriate links are removed

In my 62 cubic metres room I set my own speakers just over 2m centre to centre and one metre from the rear wall, angled in by 20° and firing across the shorter room dimension. This approach initially worked quite well with the SCM40s, although I changed it later. Spiking is very necessary: it focuses the sound stage depth, and low register instruments. Lock the nuts and a further clarity is obtained. Three spike inserts rather than four would have made this task much less fiddly!

PROFESSOR JOHNSON I PRESUME?

Although I had a hand in the booklet for our *Test Disc III*, I prefer to use *Reference Recordings RX-1000*: I'd rather hear four in/out of phase/absolute phase versions of 'Stormy Weather', sung by Eileen Farrell, than the dentist's drill, Harrier jet and Mike Skeet's garage door! I also believe channel and phase confirmation should start any test CD. Keith Johnson's wander around a studio set up with three pairs of selected microphones, armed with woodblock and cymbal, gives a fantastic sampling of spatial reproduction, voice timbre and articulation, and tonal changes brought about by distance. The SCM40 was exemplary here.

BELOW:

Cut-away of the mid soft dome driver showing the massive magnets and voice coils for which ATC has become legendary

Having reinstated my turntable after this month's Pro-Ject review [see p28], I could not resist – before burn-in – listening to a 1961 Philharmonia/Karajan track (EMI) of Waldteufel's *Skaters Waltz*: the SCM40s exposed the tonal change at an edit at 0m 47s as clearly as my ESL-57s. Already one could get a feeling for the listenability of the SCM40s: the way the senses immediately engaged with the music. This is a nominal 8 ohm speaker with a flat impedance curve for easy



load, for which the designer suggests 50 to 300W of amplification. At this stage I had them hooked up to my normal DNM PA3S, only 23W/ch. I did not feel there were any inadequacies with it, although there was always the feeling that the sound hadn't quite escaped the cabinets: the eye was drawn to them from time to time. And perhaps the sound was a little clinical. The solution was to reduce the toe-in to 8° and widen the spacing until there was the illusion that they were truly 'passive', ie not the sources of the sound.

Prokofiev's *Peter and the Wolf*, in the Lyon Opera Orchestra recording with Patrick Stewart narrating (Warner/Erato 4509 97418 2) is an excellent test for speech and instrumental timbres. There is slight sibilance but it is not excessive; each wind solo can be located in the ambience and when Stewart says 'three horns' that's what we hear – not one, not five. Maybe pushed by the producer, the 'rifles' (tympans and bass drum) create a volley of sound. The flautist's narrow escape from disaster, some 25s into track 3 is mildly endearing. The children's mock military marches (piano) in the coupled Debussy *La Boite à Joujoux* (Toy Box) should make you smile. They did here.

With the DNM amp the difficult Ashkenazy Schubert LP, which troubled the Pro-Ject Xpack, sounded a little shallow to begin with, although the fine nuances of phrasing and dynamics were excellent.

I would say the 'timing' of the SCM40 was outstandingly good were it not for the fact that, in the context of a long thesis on valid parameters for loudspeaker design on the company's website, Billy Woodman finds terms such as 'pace, rhythm and slam' too subjective, too easily misconstrued.

TIME TO BI-WIRE

The integrated amplifier made by ATC's near neighbours AVI is rated at 175W (both channels driven) which seemed more appropriate, but my initial reactions were not that favourable. The sound with a single set of cables (Kimber 4PR then, better, Chord Odyssey 2) gave a slight overall masking, and the focus of Stewart's



MASSIVE MAGNETS

ATC began in 1974 manufacturing drive units and its first loudspeaker appeared four years later. Then in 1985 premises were established in Stroud where to this day, founder Billy Woodman unstintingly restores old farm machinery in his free time! The massive voice coils and magnets in ATC's hand-made drive units have become legendary in both the domestic and professional scenes for their combination of power handling, ruggedness and lack of coloration. The flat response characteristics and low distortion typically makes for a range of revealing speakers that require the most musical amplification and sources. This new 'Entry Range' reflects general improvements in its domestic products, and ATC continues to work to acclaim in the professional recording world, largely in the States.

voice was too spread. Prising out the lower linkages for bi-wiring was quite tricky until I discovered that by undoing all terminals, the four straps tumbled out, so one reinstated just those required.

Bi-wiring brought back the kind of focus I had enjoyed with the DNM PA3S, albeit with a somewhat fuller sound. The Prokofiev was now much as before; certainly the drums could more readily be located in the soundstage. The iconic *Kind of Blue*, however, gave the bass a boomy character, other than in the two 'Flamenco Sketches' tracks, on Sony's Columbia Legacy reissue (CK 54935).

By using its pre-to-power outlet I was able to use the DNM 3D-Six as a phono stage, replaying the Schubert. This did nothing to alter the impression of shallowness. And now Ashkenazy seemed to be thumping his way through the music, his timing mannered. The joys

of reviewing! At least floorstanders absolve the writer both of sorting out stands and finding the correct spelling of Blu-Tack.

FURTHER IMPROVEMENTS

Either the AVI or the stranded cables (or both) were not helpful partners for these speakers. Indeed, they had introduced harshness – to Miles Davis's solos, for example – and had made the system very 'hi-fi'. At best they illustrated the benefits of bi-wiring here.

After more hours of music, the SCM40 continued to improve. The Bartok Sixth Quartet mentioned in my Pro-Ject review showed wonderful integration and tonal accuracy in the pizzicato movement; the finale was dissonant but utterly musical. It set the seal on my time with a speaker I will regret having to return; I don't feel that about most non-electrostatics. Ⓟ

FOR:
Neutrality
and spatial
control

AGAINST: Fiddly to
level on four
spikes



ABOVE: Above the mid driver, which uses soft-dome technology developed by ATC in 1976, sits the new 25mm neodymium tweeter with alloy wave guide

Free of any bloom or coloration, the SCM40 is nonetheless critical of poor source material and requires careful partnering in amplification (ATC suggests 50–300W) and cabling. If these are neutral the listener will be rewarded with a lasting product that conveys all the musical flow and expression in a performance, with definitive portrayal of fine detail and – if present in the recording – all the dimensions and ambience of soundstaging. Excellent value and not just an 'Entry' level choice.

FEATURES



SOUND QUALITY



BUILD QUALITY



VALUE FOR MONEY



Hi-Fi news
OVERALL RATING **19/20**

Review system breakdown

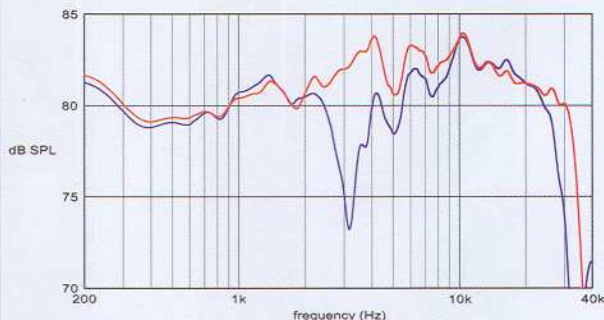
SOURCE: LP12/OL Conqueror/Zyx R1000, Meridian 508.20
AMPLIFIERS: DNM 3D-Six/PA3S, AVI Lab Series integrated
CABLES: DNM interconnects and speaker cables, Kimber 4PR and Chord Odyssey 2 speaker cables

Contact numbers

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Hi-Fi News lab report

Just as with the smaller SCM 11 we reviewed in February's *HFN*, ATC's claimed sensitivity of 85dB for the SCM 40 is significantly greater than the 81.5dB we measured. As the response traces show, one speaker displayed a distinct notch in output around the crossover between mid and treble drivers due to its tweeter being wired with the incorrect polarity. ATC claims a 'flat impedance curve allowing easy loading for amplifiers' but the SCM 40 actually has a conventional impedance characteristic with three peaks corresponding to the resonant frequencies of the bass, mid and treble drivers. It does not present a particularly difficult load but its minimum in-band impedance of 5.11 ohms makes the 8 ohm nominal rating a little over-optimistic. KH



Hi-Fi News lab specifications

Sensitivity (at 1m for 2.83V rms)	81.5dB	
Impedance modulus min/max (20Hz-20kHz)	5.1ohm @ 5673Hz	20.3ohm @ 34Hz
Impedance phase min/max (20Hz-20kHz)	-47.0° @ 50Hz	17.7° @ 652Hz
Frequency response error (200Hz-20kHz, each speaker)	±5.3dB	±2.4dB
Pair matching (200Hz-20kHz)	±4.8dB	
LF extension (-6dB ref 200Hz)	43Hz	
HF extension (-6dB ref 10kHz third-octave smoothed)	30.6kHz	
THD 100Hz/1kHz/10kHz (90dB 1m)	1.45%	0.19% 0.06%