

the ear

HI-FI MUSIC GEAR

hardware review



ATC SCM100SE

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In the studio world all loudspeakers are actively driven, Yamaha's once ubiquitous NS10 being the exception that proves the rule. In an active speaker the crossover is electronic and comes before the amplifiers which are directly connected to each drive unit. It's an approach that has huge advantages in so many ways yet despite the efforts of many brands over the decades has yet to make a significant impression on audio enthusiasts. The main barrier to acceptance being that you can't upgrade or tweak an active the way you can a passive where the amplifier and the cables can be swapped at will, budget allowing. ATC have a strong position in both the professional and domestic markets and have always made active loudspeakers, rather good ones at that, but they also make passives.

The active SCM100SE is an example of what ATC can do when given full rein, it's almost price no object, albeit in the context of other high end speakers of this size the price is not excessive. The 100 in the name indicates volume in litres so this is substantial box, the fact that it can accommodate a ten inch bass driver in the baffle gives you some idea. But it's not overly bulky and the piano black finish helps to reduce its physical impact in the room. This is still a proper speaker of course, one that weighs more than I do and stands nearly four feet high without spikes.

The drivers are all made in house at ATC's facility in Stroud, Gloucestershire and consist of a 25mm some dome tweeter, 75mm soft dome midrange and 314mm bass driver with a short coil in a long gap with a Super Linear magnet system. The amplification is made up of discrete components rather than chip based op amps and provides a total of 350 Watts to control the drive units. When you bear in mind that with a passive speaker the amplifier has to overcome the vagaries of a passive crossover before it can get a grip on the drivers this seems like an awful lot of power. But it provides control which translates into a more linear, lower distortion system that should be more revealing and less coloured as a result.

The cabinet is where the rest of the money goes in the SCM100SE, I particularly like the metal detailing which looks like nickel plating and gives this speaker a Rolls Royce feel. Apparently ATC wanted to nickel plate the metalwork but couldn't find anyone who could get an even result on the flat cover for the amplification, so they used an electroplating process that delivers the same finish (which isn't as yellow as the photos suggest). The amplifiers are rather



more discreet on this than regular ATCs where there are fins and handles protruding from the back, here they are within the box in the top rear corner beneath the aforementioned cover. Connections are lower down on the back and consist of an XLR input socket (there's no RCA option) and an IEC mains inlet alongside a chunky power switch. The latter is unusually old fashioned but its chrome finish fits in with the style of the cabinet overall. There are no LEDs to tell you when the speaker is on but you won't get much sound out if it's not.

Because the big reflex port is on the front you don't need to leave much space between this speaker and the wall, it has huge low end extension but it's so well controlled that you don't get problems with boundary reinforcement like you do with a passive speaker. In fact it does everything so much better than the majority of amp/speaker combinations that it takes a while to notice that something isn't right. The first track I played, Nils Frahm's 'Said and Done' (*Spaces*) had me hooked from the first note. ATCs have always been good at pianos, and this one can often sound edgy because he's hammering away at the same note through a PA, but hearing all the nuances of the playing gets you right to the crux of the matter and there is simply no alternative but to let yourself be carried by the music. This is not a romantic loudspeaker, quite the contrary it's an unusually neutral one, but I was using a BorderPatrol DAC SE and that has an uncanny knack for bringing out the heart and soul in the music. Brendell playing Haydn is equally entrancing so much so that I thought it wise to switch to a more neutral digital to



analogue converter, which in this case was an MSB Discrete. This let the ATC reveal a lot more detail and extended the bass rather nicely but lacked the charm of the tube rectified Border-Patrol. If you want to hear differences between recordings, source components and possibly more significantly preamplifiers, few speakers get close to the SCM100SE.

With further listening I began to appreciate just how relaxed this speaker is, not in a sense that it makes the music seem chilled out but in the way that you can play at almost any volume level and there is never any sense of strain. This is very rare with passive speakers and not guaranteed with active ones, I am quite familiar with non SE ATC actives and they are not as calm as this and nor are the backgrounds so inky black. It occurred to me around this point



that I wasn't going to find it easy going back to regular amp/speaker combinations and I've subsequently found this to be true. But one area that didn't quite hit home regardless of ancillaries was the crucial one of totally forgetting the mechanical element of reproduction and being able to completely immerse oneself in the music.

I said earlier that it took me a while to discover a problem and that turned out to be in the control amp department. The passive Townshend Allegri I usually use doesn't have XLR outputs so I used cables that had RCAs at one end and XLRs at the other, the sound remained as open and revealing as it ever was, but something wasn't right and eventually I figured it out. What this speaker needs is an active preamplifier with XLR if not balanced outputs. When I put an ATC CA2 preamplifier into the Allegri's place everything came together. What had previously seemed an extremely revealing yet emotionally cool loudspeaker became one that I couldn't put down, almost regardless of source and recording. Now 'Said and Done' was extraordinary in its emotional depth and power, the speakers delivering the detail of each note along with the indefinable musical message behind it. Which is a crude way of saying that now the music was truly moving in a way that it had not been previously. The ATC CA2 is not generally as revealing as the Allegri but its intrinsic match to the speakers make it a far better choice. It would be interesting to see if other XLR output preamps would be equally well suited but interestingly the genuinely balanced output of the MSB DAC did not work so well. This could be because DACs with volume controls rarely match standalone preamplifiers in sound quality terms or that the Discrete doesn't have the line driving powers that the CA2 does. With this in the system differences were still obvious but the emphasis was now entirely on the positive. Hendrix's 'Spanish Castle Magic' is a pretty crude recording but proved phenomenally effective thanks to the superb bass extension and clarity of the midrange. Zappa's 'The Torture Never Stops' has so much going on and an incredibly compressed guitar sound, all of which is made so much clearer by the SCM100SE, that and the way the track starts out so sumptuous and ends up

mired in filth, it's a great piece of music that has way more on it than most amp/speaker combos reveal.

Vinyl sounds brilliant too as you might suspect, it's not the most open sound around but it lets you hear precisely why this ancient format remains so popular. There's a track on Gwenifer Raymond's *You Never Were Much of a Dancer* with quiet acoustic guitar over what sounds like strangely high background noise, the bass extension and clarity on the ATCs reveals that noise to be a thunderstorm. The bass being lower than many speakers can really do justice to makes it so much more real. I also played the Classic Records pressing of *Led Zeppelin III* which is a favourite but was surprised that it seemed a bit dull, plenty powerful and inspired but not quite what I was hoping for. It set me on a search for an earlier pressing and when this was on the turntable it revealed what the fancy remaster was missing; energy. It is positively brash by comparison but the music is a lot more powerful and engaging and the drumming is in another league. And it's not as though it's bass light, there is some really fat low end at the end of 'Out on the Tiles'.

It should not be surprising that a really revealing and truly wide bandwidth loudspeaker should be so sensitive to the partnering preamplifier, but it's the way that this element changed things that caught me out. You could easily walk away from the SCM100SE thinking that it doesn't quite hit the spot if inappropriately partnered. Matching components is the key to building a great system, ATC have done the difficult job of matching amp to speaker, we just have to accept that they also know what's required on the preamplifier front.

The SCM100SE is an awful lot of phenomenal speaker for the money, it's presentation is effortless and its ability to resolve both the tangible detail and the more ephemeral soul of each piece of music is very hard to beat at any price.

Specifications

Type: 3-way reflex loaded floorstanding active loudspeaker

Amplifier output: HF 50W, mid 100W, LF 200W

Maximum SPL: 115dB

Dispersion: ±80° Coherent Horizontal, ±10° Coherent Vertical

Crossover frequency : 380Hz and 3.5kHz

Frequency response (-6dB) : 32Hz – 25kHz

Drivers : 22mm soft dome tweeter, 75mm soft dome midrange, 314mm short coil super linear magnet bass

Dimensions (HxWxD) : 1150 x 419 x 585mm

Weight : 79 kg/174 lbs each

Finishes: satin lacquered or high gloss black, white and a range of wood veneers

Manufacturer

Acoustic Transducer Company

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