

ATC SCM100SL AT LOUDSPEAKER (HI-FI+ 80)

Equipment+

by [Jason Kennedy](#) | Aug 23, 2011

Categories: [Floorstanding](#) | Products: [ATC Loudspeakers SCM100SL AT](#)



In the once smoky, now merely claustrophobic world of professional audio you don't come across many passive loudspeakers with separate power amps. I've visited one exception which proved the rule and that was Abbey Road where B&W were sponsoring the monitoring, but in most instances you get a pair of nearfield monitors on the desk a bigger set of speakers further away, and both will be actively powered. It makes a lot of sense in that environment because they take up less space and offer more control, and when you are playing at high level all day you want a monitoring system that can take the punishment without sharing the pain. The studio and the PA world is where ATC made its name and where it continues to have fun, designing custom made systems for concert halls and the like. The guys running ATC, Billy Woodman and Bob Polly, give the impression that they don't give a monkeys about the domestic audio world. But contrarily the company keeps on building variations on its pro themes for us end users and the SCM100SL AT is one of those. It's a floorstander, or tower version, of the stand mounted active 100 litre three-way that has been in the range for quite a while and which also exists as a pro model. The tower design gets rid of a less than beautiful stand and produces a more substantial looking speaker, real wood veneer extends nearly to the ground where it has a black plinth which accepts spikes or glides if you'd prefer not to nail these heavyweights to your polished wooden floor.



The actual drive units are fixed to a baffle that's also in black and adds another 34mm to the braced 18mm thickness of the cabinet. This provides an edge for the grille to slide onto, an arrangement that ATC recommends you use when listening because the grille is designed to eliminate diffraction at the sharp baffle edges. ATC makes two of the three drive units in this speaker at its facility near Stroud in Gloucestershire, only the tweeter is brought in. ATC started out as a drive unit maker and has continued on this path for the independence and flexibility that it provides.

The tweeter is a 25mm soft dome with a neodymium magnet while the mid is ATC's classic 75mm dome, a key driver in the company's range and a fundamental reason why these speakers are so revealing. Like the bass driver it has flat edge wound OFC wire in a short voice coil that operates in a long magnetic gap for maximum control. Another control factor is the use of massive motor assemblies/magnets combined, in the bass driver, with ATC's Super Linear rings which sit between the main magnet and the voice coil, the latter suppress eddy currents in the voice coil which allow for increased impedance and in sonic terms a reduction in third harmonic distortion. This is probably why pianos have more body, attack and dynamic range than is usually the case. It's impossible of course to separate what the drivers contribute from the amplifiers in an active loudspeaker, this like the rest of the Tower range has a 350 watt class A/B tri-amp pack on its back and an electronic crossover between input and amps. The direct connection from power amp to drive unit is the major advantage of active loudspeakers, the amps are tailored exactly to the requirements of the speaker and there are no crossover components between the two. The other side of this coin is that active crossovers are more complex than passive ones which makes it harder to build truly transparent examples. If you want real world dynamics however there is no other route this side of the full range horn that can do the job, and no full range horn that I've heard has the bass extension on offer from the 12inch bass driver on this speaker. This monster is the reason for the overall girth of the SCM100SL, that is girth in terms of size and prodigiousness in the bass, if you want to feel the earth move this is the device to achieve that end.

Despite their size they are remarkably easy speakers to accommodate inasmuch as they are not as fussy about placement as the average large passive design. Specifically you can put them quite close to a rear wall and, room shape allowing, this doesn't result in exaggerated bass. The front firing port helps here as does the fact that they are voiced for transparency and precision rather than flattery, a situation that can give the impression that they are tone lean. But play a few more pieces and you discover that they merely reflect the original balance with greater accuracy than usual and that some recordings have considerably more low end on them than others. This point gets to the heart of what these speakers are about, the differences between recordings, this rather than fidelity to an oft non-existent absolute is what all hi-fi should be about. With purist recordings of acoustic music it's possible to have some idea of what a high fidelity result might sound like but in all other cases there either is no absolute sound or it's nearly impossible to know what it is. In a studio recording for instance what you have is a construct made largely on a

what the mastering engineer heard in his studio, a place that has pretty alien acoustics by domestic standards and monitors that are more like these ATCs than most domestic loudspeakers. So the scale of difference between the sound of recordings is the best way to differentiate audio components even if this is at odds with aspects of tonality timing. And on this front this speaker is supreme, the degree of exposure is so great that you have to be very careful that you are not just discovering the limitations of the partnering source and preamp.

But with a Townshend Rock 7 turntable, Funk FXR tonearm and Van den Hul Condor cartridge extracting information from a slab of vinyl it's difficult not to get into the groove so to speak. The music shines through in no uncertain terms thanks in part to the ease with which these speakers can play at higher levels, classic Led Zeppelin always sounds good but it sounds a lot better when reproduced with an amp and speakers that are able to unleash it at the appropriate volume without struggling to do so. This is not merely a headbanger's speaker which is fortunate because I don't go in for that sort of thing so much these days, equally engrossing is the degree of realism they can impart to a fine acoustic recording like Keith Jarrett's Jasmine. Here the speaker's ability to reproduce piano comes into its own by placing Herbie and Charlie (Haden not Watts) in the room, the piano's heavy structure providing a solid foundation for the music.

Imaging doesn't always seem like a strongpoint with these speakers but again it becomes apparent over time that a lack of material doesn't have pinpoint stereo information but that which does produces solid images that stretch both wide and deep. It's a recording thing again, a multitracked rock album from the seventies is not likely to have been made with this factor very high on the agenda but a contemporary jazz one delivers a precise image in the context of a vibrant sound.

They can also conjure up complete concert halls with LPs that in many respects sound ancient, Alfred Brendel's 1971 rendition of Beethoven's Piano Concerto No. 4 is a good example. Here the sense of the hall's scale is palpable, it's clearly an enormous space thanks to the low frequency extension and control of the loudspeakers. You cannot achieve this precision at low frequencies with a passive system, you may be able to produce a more refined sounding mid and top but there will always be the question of whether that refinement is a product of some smoothing factor in the amplifier, cable and loudspeaker.

These full scale monitors are from the warts and all school of transparency, there is no sweetener at all so if you like a clean, refined sound it will need to be delivered by the recording and source. This is the way that it should always be of course but rarely do pure hi-fi companies have the balls to deliver it with as little compromise as ATC.

TECHNICAL SPECIFICATIONS

Tweeter: 25mm soft dome

Midrange: ATC SM-150 s soft dome

Bass: 314mm SL doped paper

Active filters and overload protection.

6 year warranty.

Finish: any veneer to order

Max SPL : 115dB

Crossover Frequencies : 380Hz & 3.5kHz

Connectors : Male XLR

Filters : All active

Amplifier Output : 200w LF, 100w Mid, 50w HF

Cabinet Dimensions (HxWxD): 1070x397x560mm

Weight : 68kg