



REVIEW



GROUP TEST: 10 HXEIA BASE / LIBRARY

ATC SCM19



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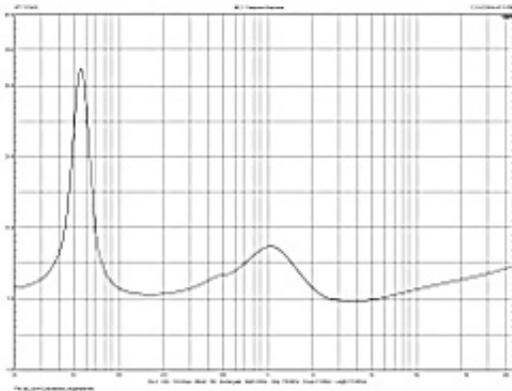
Generally ...

The SCM19 owned Entry series of well-known manufacturers, a number which has been much discussed and considered highly successful as an attempt to "go down" some of the characteristics of the large monitor of the company to an audience that would lower costs. It is a two-way speaker, two speakers, with an enclosed cab, which uses a soft dome tweeter, inch, with neodymium magnet for high frequencies and a woofer 150 mm manufactured by itself and uses ATC

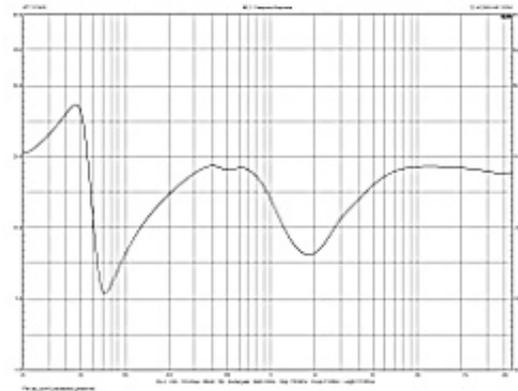
level pipeline voice coil and bearing the classic large soft dome and driven by a magnet three kilos. The cabin of the speaker is kalokataskefasmeni dichromate finish and curved edges and terminals good quality and support bi-wiring.

Measurements

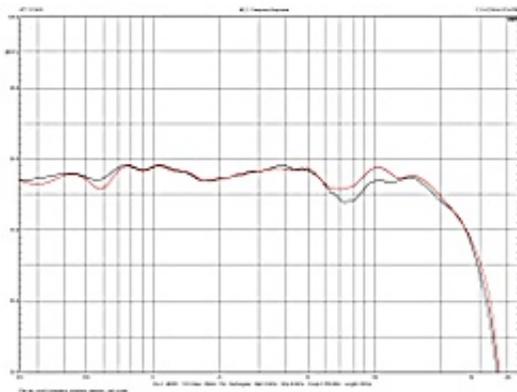
The maximum value of the impedance SCM19 is 38.3 ohm at 56Hz, while the minimum value of 5.70 at 3.9kHz. The frequency at which the lower impedance, phase corresponds to -14.4 degrees while, overall, the phase ranges from -50.8 degrees at 74Hz up to 46.8 degrees at 57Hz. This behavior indicates that the SCM19 be an easy load for the amplifier, which should be noticed by the relatively low sensitivity. The positioning of the shield causes the speaker 2.5dB attenuation at the frequency range of up to 6KHz 15kHz. The two speakers pair appeared with minimal differences not climbed over 1dB.



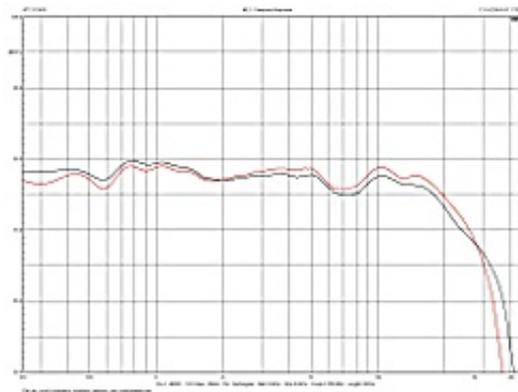
Measure impedance



Phase impedance



Sensitivity chart (dB SPL/2.83V/m). Anechoic measurement axis, with the protective cover (black curve) and without (red curve)

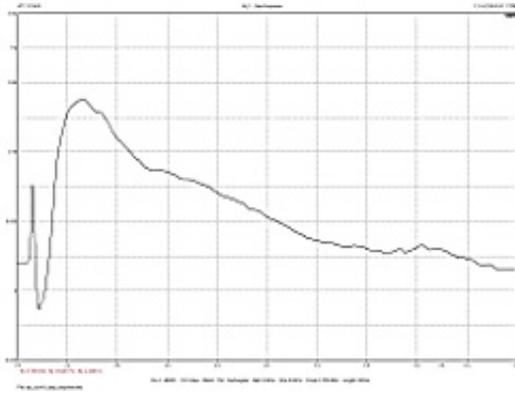


Sensitivity chart (dB SPL/2.83V/m). Anechoic measurement axis, comparing the two speakers pair

As seen from the step response, the two loudspeakers are in phase with very little time delay between them (0.12ms), excellent cooperation and damping at low frequencies which have little variation.

Speaker To proved very fast and the diagram damped spectra the regions slower in 3.7msec, located around 1.5kHz and 6.5kHz.

The average sensitivity of the speaker SCM19 is 83dB while the response of the speaker runs from 50Hz up to 26kHz. The maximum error occurs in the relevant chart is about 2dB for midrange from 600Hz up to 1.7kHz. Beyond that, the variations above and below the average sensitivity of +/- 1 to 1.5dB, performance is the best test.



Step response

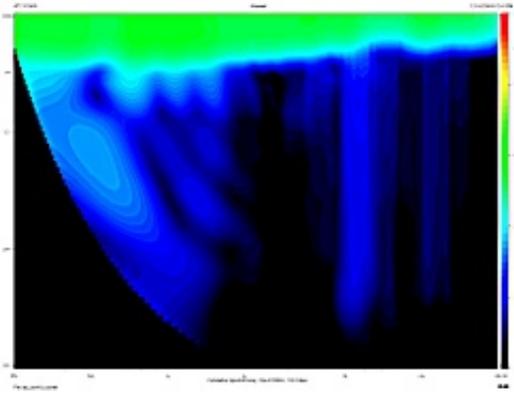
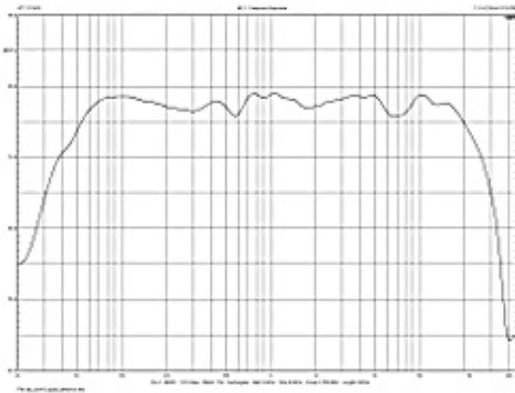
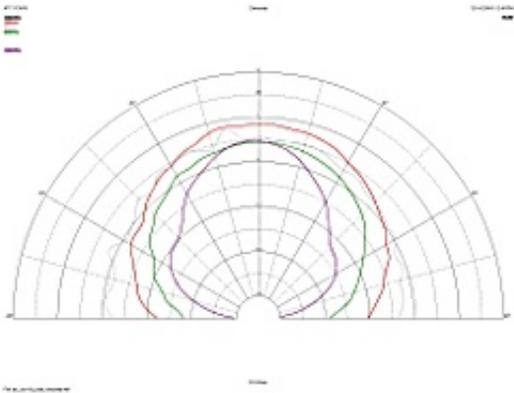


Chart CSD (damped spectra) anechoic measurement in acoustic axis

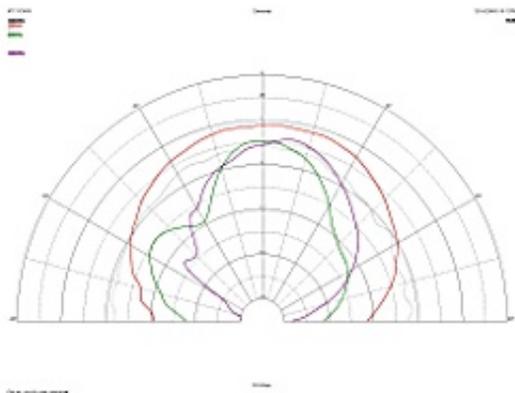


Sensitivity chart (dB SPL/2.83V/m). Psefloanichoiki measurement, combination of far field / near field. Intersection near field / far field: 250Hz

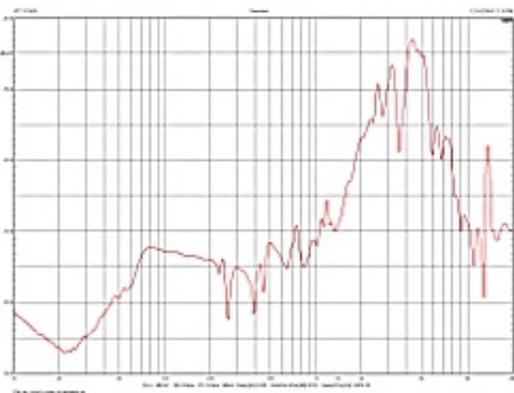


Polar response in the horizontal plane. Angle: -90 / 90 degrees. 500Hz (gray curve), 1kHz (red curve), 2kHz (green curve), 10kHz (purple curve)

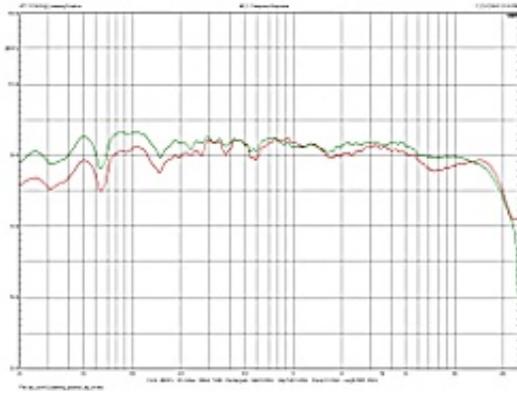
The polar diagrams reveal a calm speaker which in low and middle region has a range of +60 / -60 degrees in both the horizontal and the vertical plane (for drop-6dB) while at high frequencies narrows smoothly and without major problems . The baffle shows resonances at 2.6KHz with level-49.5dBm/ s ², at 3.2Hz with the level-47dBm/ s ² and 4.4kHz with the level-43dBm/ s ².



Polar response in the vertical plane. Angle: -90 / 90 degrees. 500Hz (gray curve), 1kHz (red curve), 2kHz (green curve), 10kHz (purple curve)



Level accelerations measured from the point between tweeter and woofer (10mV/m/s²)



Frequency response at the listening position. Input Signal: MLS 512k, level 85dB SPL, without digital equalization (red curve) and with digital equalization through Copland DRC205 (option: flat, green curve)

Hearings

From the earliest moments of hearing, feeling they listening to the SCM19 is one of calm and homogeneity. The speaker behaves with respect to the program creates a perfectly balanced image that is neither too far nor near the listener and offers great potential to questions of detail and focus both the width and the depth of the hypothetical stage. Low, control is very good fronts and size, characteristics which can be improved by using tabs, without significant problems because the woofer has tremendous journey and can meet the requirements set by the processor. It's worth noting that the SCM19 was the only speaker who withstood the flat setting without the need to reduce the level! The middle region is distinguished for its analysis, balancing pleasantly between the character of the monitor and the restful sound and the speaker will satisfy listeners very vocal works with the immediacy and precision in articulation and refocus of voices. Tall, sounded transparent and neutral, but with a hint of excessive control tend to shorten the depreciation without-however-be tiring even at relatively high levels.

Finally ...

... The SCM19 is the most complete speaker test on the side of the homogeneity and parallel seems to have considerable potential for high levels without colors. If you are looking for a speaker that approximates the best possible way the case "accuracy" is relatively small in size and has a reasonable price, your search can end here. This, clearly, for the best speaker of the test.



Price: EUR 1,500

info: Location Sound, tel: 210-364.6154-5, Web: <http://www.locationhiend.com> , <http://www.atc.gb.net/>

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