Klipsch La Scala - Folded-Horn Speaker Enclosures

Paul Wilbur Klipsch was a pioneer in high fidelity audio reproduction. His studies on the distortion of sound reproducers led to the design of high efficiency speaker systems based upon the acoustic amplification of horns. Adapting normal cone speakers to horn diffusers, he was able to achieve the sound pressure levels usually found from live instruments in a concert hall at considerably small displacements of cones. In this way he could obtain a dramatic reduction of all the causes of non linearity and of distortion usually coming from cone speakers otherwise driven close to their maximum dynamic range.

His first speaker system introduced in 1946 was the legendary Klipschorn. Still in production after 70 years with just minor changes, this model is simply the best system for reproducing the loud bass sounds of organ, as the low C in the introduction of ‘Also sprach Zarathustra’. The only drawback, other than its price, comes from the need for a very special acoustic hall. Klipschorn uses two concrete walls meeting in a corner as extensions of each bass horn. Two Klipschorn speaker systems, needed for stereo reproduction, ask then for three walls free from obstacles.

In 1963 Paul Klipsch introduced his ‘La Scala’ model, a self contained version of the Klipschorn, no need for walls as reflecting surfaces. In the years the model evolved

slightly, with mid-range and tweeter horns moved from the side to the top of the folded bass horn. Among other variants we find several finishes, even with a grille on the upper unit, and the elegant and well proportioned ‘Belle Klipsch’.

By the way Paul Klipsch accepted the challenge of designing also more conventional speaker enclosures. His ‘Heresy’ model, originally designed to operate as center speaker between two ‘Klipschorn’ systems, offered the same clear sound of other Klipsch systems, of course at considerably lower sound pressure level. ‘Cornwall’ bass reflex was introduced in 1957 to replace ‘Heresy’ as more powerful center speaker. With the exception of the response at extreme low frequency notes, ‘Cornwall’ speakers were almost as perfect as any Klipsch horn speaker could be. Indeed their extra wide radiation pattern made them ideal for stereophony in small rooms, the listener seating even between the speakers, in the same plane.

In the second half of the sixties, when I was still student with a very limited budget, stereo hi-fi magazines used to write of innovative solutions, electrostatic or ion speakers or even dynamic suspension enclosures. Not a word on Klipsch other than in their ads. In those years I knew an exceptional hi-fi dealer, Mr. Raffaele Trombone, who had in his shop a matrix switch capable of connecting every available sound source, turntable or tape recorder, to any selectable amplifier and to every loudspeakers in the showroom. Here I could enjoy for the first time the impressive experience of comparing some music, percussion, organ, pianos and other instruments, played from the most appreciated enclosures, JBL, Altec and others and at the end from a couple of ‘La Scala’. The dramatic presence of these latter suddenly made unacceptable at all the sounds of other speakers. For over than two weeks I had no desire to switch on my Sansui system. One year later, collecting all my savings and earnings of little jobs made for maintaining the G20 computer of Polytechnic, I bought my first couple of ‘Heresy’ at the price of 330.000 Italian lire, about 530 US dollars of 1970. At that time a car, the Fiat 500, was sold for 410.000 lire. About one year later I could swap the ‘Heresy’ enclosures with a pair of ‘Cornwall’, probably the best compromise I ever owned as per price, size, presence and radiation pattern. In 1973 I swapped them with a pair of ‘La Scala’, still in use today. The only difference today is that I replaced my monster Marantz 500 amplifier, I had bought in a desperate attempt to better drive a couple of AR speakers, with a 10 + 10 W homemade vacuum tube amplifier.

‘La Scala’ enclosures were specified for a conversion efficiency of 105 dB at 1 watt / 1 meter. They could handle 100 W continuous and up to 400 W peak. Among other remarkable specs we find 121 dB max sound pressure level, comparable with those of many musical instruments.

Emilio Ciardiello, August 2016