

ACE-bass patented technology to achieve superior infra-bass

There are huge problems in getting deep bass out of small boxes, and, so far, many attempts have been made to solve this issue. Leaving aside plain active sub-woofers, which do not deserve to be taken into consideration at all (regardless of their price and/or brand), serious designers of these devices have realised that, without the help of electronic means, there is **no** hope of obtaining a realistic infra-bass. Among the electronic methods that have been used, there are equalised systems, boosted systems, and different types of servo or feedback systems. However, most of these methods are limited to closed box systems (in our view, not the best for a sub-woofer), and many increase the distortion, instead of reducing it.

We managed to solve these problems comprehensively with our **ACE-bass** technology. This revolutionary electronic method provides the driver/s with tailor-made mechanical parameters **in real time**, to obtain a flat frequency response. Moreover, since the new synthesized parameters are more linear than the actual ones, distortion drops automatically. The result is a frequency response between +/- 0.5dB (in anechoic chamber), and a distortion at around a tenth of the usual: the “treated” driver becomes very close to an “ideal” loudspeaker.

ACE-bass is an acronym for “**A**mplifier **C**ontrolled **E**uphonic **b**ass”. It was invented by Karl Erik Ståhl, and presented at the 61st Audio Engineering Society Convention in New York, in November 1978, where it was rewarded as a milestone in hi-fi history.

This technique of creating the **ACE-bass** amplifier by feedback loops is unique and **patented** by **audio pro**. We would like to point out that **ACE-bass** has **nothing** to do, and **must** not be confused, with **any other** “electronic method”.

To understand the **ACE-bass** technology, some speaker theory will be necessary, so it is not for everyone. However, what is important for you to know is that with the **ACE-bass** technology, you can obtain an unbelievably deep and clean infra-bass from small loudspeakers in a small box and this is the case with our subwoofers!

Anyway, if you are interested in the technical explanation of the **ACE-bass** technology, please call us, and we'll email you a PDF of it.