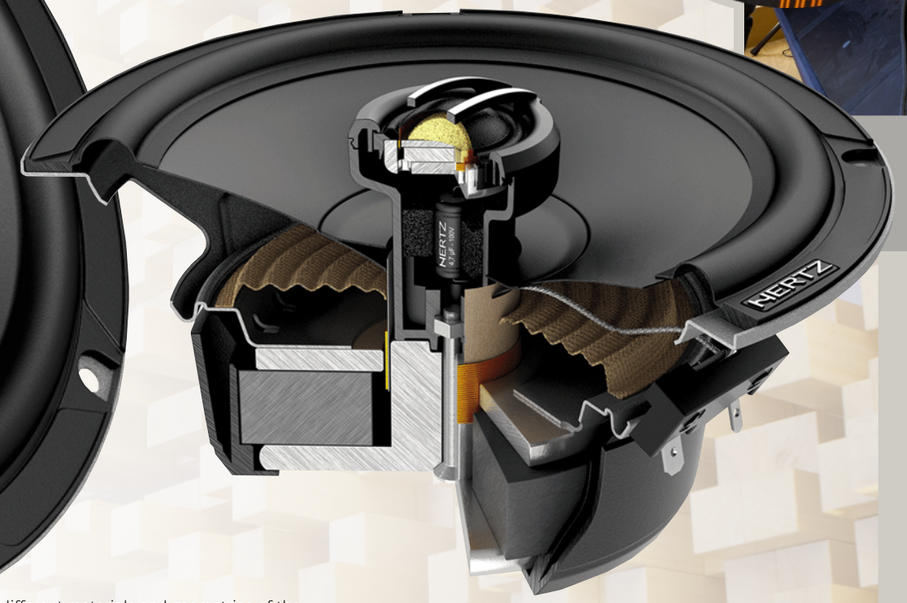
YOUNG GUNS

HERTZ CENTO PRO CPX 165 COAXIAL SPEAKERS PUT THROUGH THEIR PACES



Italian manufacturer Hertz has long been committed to bringing breakthrough technologies to the mass market at reasonable price points. This fresh pair of 6.5" 2-way coaxial speakers features many of these. We were lucky enough to receive a pair for review, as well as access to the product manager responsible for bringing them from drawing board to the real world, Luca Girotti.

Having spent many years in the car audio industry, I am pretty cynical when it comes to some manufacturers' "key product information". Merely stating that a magnet has been optimised for performance is a nothing statement and if true, very patronising, assuming zero knowledge from the potential consumer or in this case journalist. Fortunately for Driving Sounds Magazine readers, I have been around audio electronics and related noise-making products all of my working life, which is a very long time! I was therefore keen to squeeze a little more information from Luca about the development of the Cento range.

In actual fact, the optimisation of the motor assembly in the Cento line is key to the incredible performance of these speakers considering their target market price point. How was this achievable? In true Hertz style, the "off-the-shelf" approach to technologies was discarded in favour of a "pure research" route. Hertz developed their own Finite Element Analysis (FEA) tool. This allows them to "try out" different materials and geometries of the magnet/motor system and analyse their virtual performance at all volume levels. In this way, proper materials/geometries were selected that would suit the marketing brief. For the Cento range, Hertz were looking to create an affordable speaker that would deliver extraordinary reproduction of contemporary high-energy music at both high and low level. Luca and his team used their knowledge and experience to define the key musical elements of contemporary music to define the performance characteristics they were looking for. These included high–energy, fast bass response and a lack of harshness at the top end. Mid-range needed to remain clear and unmuddled.

> *"Hertz were looking to create an affordable speaker that would deliver extraordinary reproduction"*

A venting system integrated into the tweeter bottom plate and the volume inside the tweeter pole works as a resonance chamber, offering a low resonant frequency avoiding colouration and a smooth transition from woofer to tweeter. Luca tells me that the 4kHz crossover frequency stated in the specification is more a result of measurement standards than real life. He affirms that the smooth roll-in of tweeter frequencies results in an extremely linear handover to higher frequencies. A lot of effort went into the seemingly simple tweeter design with the surround bezel shaped to help with all important dispersion characteristics. Tetelon is the material chosen for the tweeter cone. Luca sidestepped my request for a detailed description of what Tetelon is. He did however, confirm that the material has been developed over a long time and employs a secret mix of natural and synthetic fibres chosen to balance rigidity with damping.

Hertz Cento CPX 165 2-way coaxial speakers, £149.99 inc vat – A veritable bargain!

"Pure research"

The woofer features a pressed paper cone while a generous butyl rubber surround allows the cone to move a comparatively long way helping with punch and bass extension.

The 6.5" coaxials (CPX 165's) were mounted in some boxes we had kicking around. I connected the speakers to a Marantz PM6005 amplifier that was fed with signal directly from a Macbook on which I played a hi-res (24 bit, 96kHz) source from Qobuz via a MOTU Microbook. This has an SPDIF output enabling me to remain digital from source to amplifier which takes care of the D/A conversion.

I have reviewed these speakers in a newsletter I mail out to interested parties on a monthly basis (Driving Sounds Club). I did this before I had communicated with Luca and used a favourite track of mine to test them with. I now realise that these speakers are not necessarily designed for my favourite music, but for that of my teenage daughter who is very into Grime at the moment (amongst many other things!). Much of this genre is well recorded from purely digital sources and a lot of effort goes into post-production. Regardless of how engaged or otherwise I might be with this genre, I am willing to give anything a go. In fact, I did ask Luca to give me an idea of tracks used during the all-important listening phase of the development programme but he declined, preferring to keep specific detail a mystery. He did however confirm that they have a standard playlist that caters for specific listening of target groups.

So it was, I busted into my daughter's bedroom at the crack of "teenage dawn" (11:22 am) and requested some tracks that might put the Cento's through their paces. Her first suggestion was "Shutdown" by Skepta.

This rhythmically and vocally hectic track is based around fairly minimalist music content. Every noise on it apart from the voice is digitally produced. The vocal, of which I understand very little, is definitely the star with every syllable enunciated and reproduced perfectly. The instrumentation is the supporting cast and it is very well constructed in my opinion. A repeating four-note motive is played in unison on bass synth, and a variety of other keyboard instruments. These include what sounds like a church or fairground organ at the beginning and later another keyboard that sounds like a heavily soused children's toy piano. Percussion features a kick drum-type sound that reinforces the synth bass along with a gated white noise snare with high-end clicks and hi hat. This is interspersed with what sounds like a sample from Super Mario. In truth there is not much danger of the track being overwhelmed with mid-bass as this is left completely free for the vocal. The bass is very strong yet perfectly balanced with nothing masked or covered up by it.

The second track suggested by my "token youth" was "Die For You" by The Weeknd. This has an altogether different style carrying a distinctly R&B flavour. Again, musically the accompaniment is fairly minimal with a heavy bass riff underpinning a slightly robotic vocal suggesting Autotune has been deployed for effect! Not an awful lot happening up top, but lots of sounds flying around the soundstage. The Cento's handle this track really well demonstrating their ability to reach down low without overloading other parts of the audio spectrum. The vocal is much softer and sung rather than shouted and the overall effect is very pleasing.

In conclusion, these two contrasting tracks demonstrate different attributes of the Cento's. Fast controlled and powerful bass balances perfectly with the other content available with nothing lost or forgotten. Eventually, my daughter joined me and was visibly engaged by the sound of these tracks and driven to recommend other things she felt would work. This is always a great sign of a dynamically pleasing sound. I felt obliged to throw some of my favourites at them and they cope with a wide spectrum of music although, I wouldn't listen to Debussy on them. Hertz Cento's are a great pair of speakers for those with a tendency toward young people's music.