

HERTZ MILLE PRO BREAKING THROUGH

A new range of speakers for discerning listeners



Italian car audio manufacturer Hertz is used to breaking new ground, taking fantastic new technologies that have been trialled at the highest level and then optimising for modern efficient manufacturing techniques. The new Mille Pro line is no exception where the very latest innovations in speaker technology are compiled, edited and rearranged to offer the perfect compromise between price and performance.

At the very high-end, such compromise is not always necessary as there exists a hard core of music lovers who will pay whatever it takes to get the best sounding equipment available. For the mainstream, we may have to wait a little longer for leading-edge technologies to become available at a price we can afford.

The Mille Pro line consists of four pairs of component speakers along with two pairs of coaxials, with new subwoofers to supplement these at a later date. The woofers feature V-Cone technology - this refers to the profile shape of the cone which has a somewhat deeper throat to accommodate the narrowing of the V shape. The V-Cone enables speakers to disperse sound wider so that the listener still gets the full audio range even when listening off-axis (i.e. not directly in front of the speakers). This technology has proven itself over time and is a major corrective for badly planned speaker positions in the modern car. Most standard speaker positions in cars point towards the knees or ankles of the front-seated residents and not the ears. The cones themselves are constructed from compressed paper pulp that has cotton fibres added to provide extra stiffness while remaining lightweight. The profile shape was developed using sophisticated computer modelling to optimise essential mid-range frequencies. The basket or chassis of the Mille Pro range has been specifically designed to avoid any possibility of resonance adversely affecting the natural open sound of the speakers. The basket is aerodynamically shaped to cancel the negative effects of back-waves reflecting from the surface behind the speakers that can cause cone distortion and phase cancelling. Air can move away from the rear of the cone quickly and efficiently but finds its way obstructed by the shape of the basket's "ribs" when reflected from a surface behind the speaker. A boundary-free surround has allowed Hertz to build-in extended excursion. This means the cone can travel further which helps with the dynamics of the speaker as more air can be moved. This in turn leads to better power handling and more control which gives the woofers a lot of scope for producing low tones and astonishing separation.

The tweeters are centre-ducted - a hole or duct is included in the centre of the tweeter which exits to a dampened chamber. This ensures better forward projection of high frequencies and a virtually resonance-free result that negates any danger of phase distortion, which is almost guaranteed with factory fitted tweeters! Another major benefit is the low frequency reach that enables crossover points to be tuned low when running actively. This helps to lift the stereo image by ensuring that more directional information is handled by the tweeters, rather than by the trouser-pointing woofers. A Tetolon soft dome tweeter cone is now standard amongst Hertz products as it has proven time and again to provide a rounded, yet highly detailed result without any sense of harshness. A large neodymium magnet offers high power handling capability, particularly important when listening to music containing high transients. As with the woofer, dispersion has been given all of the attention it deserves with a specifically designed faceplate that helps to throw the sound out wide rather than in a narrow beam which may miss your ears altogether as is the case in some cars!

Crossover networks are an art in themselves and as always, Hertz has put a lot of effort into ensuring that

the 3.5kHz crossover points are handled by high quality components that guarantee a stable and linear response especially at the critical crossover frequencies. Of course, if you choose to run these actively using individually amplified channels for each woofer and tweeter, then the world is your oyster as far as tuning the system is concerned. Having said this, Hertz has always provided first-class crossovers for passive systems and these are no exception. An attenuation switch is incorporated in the crossovers which come with the two and three-way systems to allow installers some level of control to compensate for mounting positions and of course, personal listening taste.

Amongst the range of Mille Pro component speakers, there are two products comprising a 6.5" woofer, crossover and tweeter (MPK 165.3 and MPK 165.3P). The "P" suffix indicates that it has an impedance of three Ohms rather than four and is slightly more sensitive. This means you get more output for your Watt or in other words, more oomph from your amplifier. I suspect this is for those not wishing to give up luggage space or channels of amplification for a subwoofer. Beside the two 6.5" models sits a 5" version (MPK 130.3). The issue with a smaller cone size is the low-end reach but Hertz manages to take these all the way down to a creditable 60Hz as opposed to 40Hz for the 6.5".

The range of component speakers is completed by a 3-way set (MPK 163.3) comprising 6.5" (MP 165.3) woofer, 3" mid (MP 70.3) and 29mm Tweeter (MP 25.30). 3-way passive crossovers (MPCX 3.3) are provided when using this set in a passive configuration. These have a surprisingly small footprint due to the incorporation of some efficient cooling vents making them easy to hide away. The crossovers have a +2dB level adjustment on the mid and tweeter to compensate for different taste but also mounting positions in the car which can affect the distribution of high frequencies. Crossover frequencies are set at 450Hz @ 6.5dB/octave, 5.5kHz @ 6.5dB/octave with the tweeter operating up to 22.5kHz. The 2-way products incorporate a crossover set at 3.5kHz @ 12dB/octave.

As most intrepid installers are restricted to using factory mounting positions, grilles are not provided as standard but are available as an optional extra for the MP 165.3 (MPG 165.3).

6.5" (MPX 165.3) and 6X9" (MPX 690.3) coaxial sets are included in the range too. This is an area where Hertz has excelled recently with the development of acoustic lens and ducting technology used to get the best out of the tweeters in an attempt to match the performance of many home hi-fi speakers systems. The boundary-free woofers are in keeping with the component sets ensuring class-beating bass response. Both sets are extremely sensitive and could notionally be run straight from a head unit although both are rugged enough to be run from an amplifier and then these speakers should really come to life!

A range of subwoofers is currently in development and should be available later in 2016 to complete the range.

Fortunately, I managed to get a chance to audition the MPK 165.3 versions from this range that are installed in a SEAT reviewed elsewhere in this issue. The big brothers of this range, the Mille Legends have become a huge favourite of mine over the course of putting this issue of the magazine together. I am happy to report the Pro range carries many of the sonic attributes of these and for the money, are an absolute steal! Do make sure you have a FOUR MASTER install them with the appropriate amount of sound treatment materials to get the best out of them though. □



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