

TEST



October 2011

HECO

Celan GT 702



- + Very good dynamics
- + Good precision
- + Elegant appearance
- + Fair price

A visually attractive, extremely well-manufactured floorstanding speaker with a harmonious and high quality sound for a reasonable price.



HECO Celan GT 702



Heco's Celan GT 702 is the continuation of a success story - the "Celan" speaker series has always been seen to combine high quality technology with down-to-earth prices. The story begins, in terms of pricing at least, at 799 EUR (RRP) with the presentation of the GT 702 at the IFA. According to Heco, the three-way bass reflex speaker is set to offer even more dynamism, transparency and attention to detail. With load values of 220 watts (long-term) and a full 350 watts (short-term), as well as a 92 dB efficiency level, the speaker, in theory, promises a lot. We have naturally examined it in greater detail in the following test.überprüft haben.

Workmanship and technology

The Celan GT has been revised and optimised in almost every conceivable detail. One such detail is the newly developed tweeter, which features a 30 mm polyfibre compound dome, aluminium front panel with wave control horn and double magnet system. This juxtaposition of concepts may sound complex, so to put it in plain text: The new tweeter promises higher load values, enhanced connection to the midrange, increased transparency, radiance and vitality, as well as optimised spatiality. Interfering factors have also been minimised. The bass-midrange consists of a kraft paper cone, which is typical for Heco sound transducers, while the dust cap is also paper-based. Other features include a coated fabric surround and 25 mm voice coil for a high load capacity. An advantage offered by the kraft paper cone is its extremely low weight and simultaneous high material rigidity, which in turn produces an excellent level of sound fidelity and a high load capacity. The woofer also features a paper cone, large dust cap, longthrow surround and, in this case, a 32 mm voice coil. The bass range here demands more elaborate material, not only with regard to the strength of the magnets, but also the voice coil, as this is exposed to significantly higher loads: Power is predominantly converted in the bass range. In order to ensure optimum rigidity and long-term stability, the baskets used for the woofer and midrange speakers have been manufactured from die-cast aluminium. The rear of the speaker includes two bass reflex ports which are encased in aluminium. The terminals here can be used to choose between a + 2dB treble level adjustment and a linear setting. Bi-wiring/bi-amping configurations are naturally supported. The speaker is available in a high quality Piano Black, Piano White and Piano Espresso high gloss finish, which combines high depth with a perfect surface quality. The speaker rests on a solid base, under which spikes/spacers can be mounted (height-adjustable spikes or optional rubber spikes) to ensure the speaker has optimum purchase on any surface and that it doesn't cause any scratches (rubber spikes). The chassis units are equipped with a solid aluminium ring and are screwed firmly in place. The housing, which is manufactured from MDF, exhibits an interesting shape that tapers towards the rear. The workmanship of the housing corners is flawless. Considering the overall workmanship of the Celan GT, we are left with the impression of a much more expensive construction.

Sound

The Celan GT can be described as an extremely successful development, as it is capable of adding something to numerous sound disciplines. This is necessary, however, as the competition doesn't sleep and products are being enhanced on a continuous basis. The Celan GT 702 adds something special to the overall degree of spatiality, especially in the treble range. Generally speaking, the newly developed tweeter is a real hit - it sounds velvety yet detailed, creates an airy sense of space and boasts a high level of efficiency. Furthermore, it is very resilient and doesn't generate any disruptive artifacts, even when operated at an extremely high level. Acoustic enhancements are also obtained thanks to the improved housing construction. The speaker is now even more resistant to vibration at high levels; in fact, housing noise is an alien concept to the Celan GT. However, it should be ensured that the beautiful sound transducers are not positioned directly near a wall. A minimum distance of around 50 cm should be taken into account due to the two bass reflex ports which are accommodated at the rear. Speaking of bass reflex ports: In theory, bass reflex speakers offer a high level of efficiency and a rich bass response. In reality, however, so-called flow noise can be generated around the bass reflex ports that negatively influences the sound pattern, especially when operated at elevated levels. Whether such flow noise occurs depends on how well the bass reflex tubes have been constructed in terms of their shape and cross-section. Heco's developers have obviously done their homework here, because the Celan GT generates a powerful, deep bass range; disturbing flow noise is nowhere to be heard, even when the bass is cranked up. The bass response has also been optimised in comparison to its predecessor; even the smaller GT 702 (which is ranked below the GT 902 in the series) can hold its own without an active subwoofer.

What is particularly impressive is the structural gain in the bass range. Perhaps the Celan GT 702 doesn't play quite as sumptuously, but the bass appears more credible and less superficial thanks to the enhanced structure. The transition between the bass and midrange generated by its predecessor is no cause for complaint by any means. The homogeneous and coherent sound is outstanding in the Celan XT. While the XT sounds somewhat "fuller" overall, the GT is able to add something in terms of precision and detail. The GT still sounds warm and very pleasant, however it simultaneously enhances the perception of individual nuances across all frequency ranges.

The sound emanates very nicely from the speaker; the ideal room dimensions are around 15 to 35 square metres, thereby making the application possibilities of the Celan GT 702 very flexible. We previously raised the issue of efficiency: We can report positively on this aspect as well, as the efficiency level is relatively high. In the interest of an optimum audio yield, however, we would nevertheless recommend using a powerful amplifier as the "driving force".

Audio impressions in detail: The Celan GT 702 stood its ground from the very beginning when playing Icarus (The Flight) by Flutlicht. The bass-rich and dramatic trance track was reproduced exquisitely. The warm impact generated by its predecessor has been significantly reduced, meaning the Celan has become quicker and more neutral. The bass is no longer as voluminous and there is no dough-like quality; the bass arrives quickly and very precisely with the necessary degree of hardness. The speaker was also compelling with "Celebrate" by Zhi-Vago. The bass is hard and arrives with pinpoint accuracy. The bass response is also very good. The vocals are charismatic and incorporated very well into the overall sound pattern. The Celan GT 702 further demonstrates its optimum playback qualities with the trance classic "Komodo (Save A Soul)" by Mauro Picotto. The structure of the track is clear, while the bass is once again hard and accurate. The group delay is excellent, as no frequency is left lagging. While the level of spatiality is very good, the speakers should be set up according to a classic stereo triangle and positioned accordingly. You can then enjoy a freely unfolding, genuine degree of spatiality. In "Unfinished Sympathy" by Massive Attack the bass is very powerful, forceful and deep - because it is intended as such on the track. The vocals are also incorporated exquisitely here; they are focussed at the front of the sound pattern without detracting from other sections of the piece. The Celan GT 702, however, doesn't cope quite as well with "Upside & Down" by Thumb - the result is somewhat shrill and undifferentiated at high levels in the upper midrange and treble frequencies. This affects the audibility of the electric guitar; admittedly it is mixed aggressively, but it shouldn't really impair the differentiation level. This is completely the opposite with the Goldfrapp remix of Depeche Mode's dark hit single "Halo": David Gahan's voice sounds charismatic, while the dark, mystical nature of the song is established in a very three-dimensional manner, which is further manifested through the integration of the female vocals. The bass is reproduced spontaneously and generates a rich expressive power. We were excited about the presentation of Bryan Ferry's "It's All Over Now, Baby Blue": The beginning is full of promise, as is the rest of the track: Playback is lively, with power and verve. Ferry's voice emanates cleanly from the chassis to ensure a proper stage character. The harmonica, which is an important element for this style of song, is reproduced exquisitely. The level of detail is excellent and only tapers off slightly towards the rear levels. Just how the attractive Heco sound transducer copes with an emotionally profound piece of music was presented by Andrea Bocelli's "L'Attesa". The instrumental intro is compelling with a sense of finesse and a fine degree of spatiality. Andrea's voice, which emerges shortly afterwards, has the right volume and a comprehensible structure. The vocal expression is natural and no nasal or hissing elements interfere with the purity of the reproduction. When the gifted singer's voice soars towards the higher frequencies, however, the speaker loses some of its sharp focus, which is typical for this price class. The vocals are distributed well throughout the room, but they no longer seem so precisely targeted.

The speaker stands its ground well when compared to the competition. Anyone for whom space is at a premium can alternatively look at Magnat's Quantum 803, which is a sophisticated, elegant shelf speaker priced at 499 EUR/unit. For the money invested you acquire a similar level of exquisite workmanship and a very subtle, differentiated sound. If you are looking for solid, powerful eruptions and excessive, coarse dynamics, you may prefer a different speaker to the Quantum 803. The predecessor model we tested was Heco's Celan XT 901. The sound produced was more voluminous, silkier and warmer, whereas the GT is more neutral, accurate and has a greater attention to detail. The group delay function has also been optimised. Fans of an excellent price/performance ratio can also give the 4 Quadral Argentum a look (priced at 459 EUR per unit), however it cannot keep up with the Celan GT in terms of depth and level stability.

Conclusion

The Celan GT 702 creates a very solid impression as soon as it is unpacked. The level of workmanship is outstanding and details such as the sturdy base, the chassis bezel and the connecting terminal are compelling. The sound produced by the speaker is pleasant, precise and spatial. The degree of efficiency is impeccable, while the bass reflex ports cause virtually no flow noise whatsoever. Thanks to its harmonious and coherent acoustic design, the Celan GT 702 is able to reproduce virtually all genres of music with exceptional quality.