

Solitaire

Anniversary Edition



T+A

Solitaire®-Loudspeakers

The Solitaire® name holds a very special place in the T+A tradition, and is only allocated to our very finest loudspeakers. In fact, the very first pair of Solitaires - produced back in 1983 - bore the genes which are shared by every series of our Solitaire speakers right up to the present day: unique scientific concepts, uncompromising quality and superb sound quality.

In 2011 we introduced the Solitaire CWT series, which reflected our first successful development of high-end transducers designed to minimise the adverse influences of ordinary living rooms on the final sound. From the fundamental range right up to the highest treble the Cylinder Wave Transducers generate cylindrical waves which have precisely the acoustic characteristics required. This design concept enables them to radiate a very homogeneous sound stage between the loudspeakers, at the same time minimising unwanted sound waves and reflections above and below the speakers.

In 2014 the CWT series underwent its first revision, and was assigned the supplementary designation SE to indicate its inclusion of drive units and crossovers which had been the subject of further development.

To mark our fortieth anniversary we carried out additional intensive development work to produce the Solitaire CWT 1000-40 as a symbol of our power of innovation. More than three years of exhaustive research lies behind the development of a unique technology which raised the spatial and imaging characteristics of floor-standing speakers to a new and unprecedented level: The "organic baffles" are machined from solid material, and incorporate accurately calculated sound guides for each individual drive unit. We invested enormous effort in the detail design, and succeeded in completely avoiding all screws, baskets or edges which could interfere with the sound.

The organic baffle of the CWT 1000-40 Anniversary Edition is machined from solid aluminium, and provides accurate dispersion and imaging characteristics combined with astonishing spaciousness. The sound frees itself completely from the cabinet, and it becomes impossible to locate the speakers.

The electrostatic treble unit, the mid-range drivers and the bass units have been further improved, and now have lower resonant frequencies, enabling them to generate sound at even higher pressures.

Our forty years of experience were reflected in the development of new baffles, but also in carefully optimised cabinet construction designed to eliminate structural sound and resonances:

For example, the cabinet walls and dividing floors are produced as multi-layer laminated wood panels employing materials of differing density; these measures significantly increase the rigidity of the cabinet. Multiple applications of priming lacquer are sanded between coats before the final lacquer is applied and given a last manual polish. The carbon version not only looks great, but also achieves enormous rigidity and freedom from resonance. In this process, real carbon fabric is laminated to the surfaces under high pressure and sealed several times in layers with PU special lacquer before the final lacquer is applied. Alternatively, you can order your Solitaire painted in any RAL hue and many special paint types. They are lacquered individually for you.

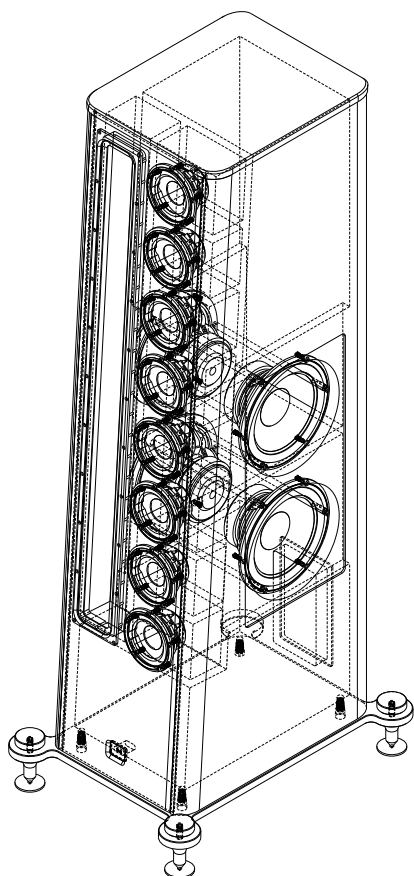
The substantial, solid aluminium baseplates are fitted with heavy-duty spikes which isolate the heavy cabinets completely from the sub-surface, and give them an elegant appearance in spite of their considerable size. The top cover and the lateral bass driver covers are also produced from solid aluminium.

The final result is that the Solitaire CWT 1000-40 Anniversary Edition represents a loudspeaker of extraordinarily high performance, capable of reproducing the entire acoustic spectrum. The speaker teases out the finest nuances as effortlessly as it reproduces music at extremely high levels. A loudspeaker which justifiably bears the Solitaire name.



Solitaire CWT 1000-40

Floor-standing loudspeaker



The Solitaire® CWT speakers are based on the principle of the Cylinder Wave Transducer, designed to generate a very homogeneous sound field between the speakers, but transmitting little mid-range and treble above the cabinet and downwards. This approach produces very little reflected sound, and therefore minimises the listening room's influence on sound quality, because it is the mid-range to treble area that carries the information which is crucial to the overall sound image, such as accurate orientation, spatial effects and dynamics. It is very difficult to design a loudspeaker of this kind since normal drive units such as dome tweeters and mid-range drivers are point sound sources, and cannot eliminate the room's influences.

For this reason we decided to take an entirely different path, and developed a unique electrostatic driver for the ultra-critical high-frequency range: the unit is relatively long and very slim, and this means that its radiation pattern in the horizontal plane is excellent, but its output is greatly reduced above and below the horizontal (line source). The membrane of the electrostatic unit is feather-light, and therefore offers extremely fast response; the signal passed to it is also zoned, with the result that it radiates a perfect cylindrical wave right up to the highest frequencies. We have achieved the same radiation pattern in the bass / mid-range by adopting an array of eight mid-range drive units (line array); a side-effect of the multiple drivers is that the maximum amplitude of each individual mid-range unit is very small even at the highest levels. This endows the bass / mid-range with enormous dynamic range, which matches the electrostatic tweeter perfectly.

For the bass we use long-throw drive units with an extremely low resonant frequency, operating in a sealed enclosure. This design offers simply the best possible peak handling and transient response characteristics. The large cone area and powerful drive systems of these units endow the speaker with an effortless ability to generate high volume levels even at very low frequencies.

The sophisticated double-sided crossover unit is fitted with the finest components, carefully selected. The crossover is accurately calculated, and fine-tuned for perfect timing, optimum transient response and peak-handling characteristics. These attributes ensure that the three frequency ranges are matched perfectly to each other. Since the entire vocal range is handled by the mid-range units alone, the loudspeaker produces a superb imaging and natural sound image.

The speaker cabinet is of extremely stiff, heavy construction, as it must not be permitted to oscillate or transmit carcass sound under any circumstances. This is accomplished by making the walls, the top and the internal partitions from multi-layer laminated material no less than 30 to 40 mm thick. The bass units are installed in pairs, screwed to each other in their own chambers, and de-coupled from the cabinet itself.



The Solitaire CWT 1000 - 40 has an organically shaped baffle made of solid aluminum. No loudspeaker basket, no screw or edge disturbs the sound dissipation. The imaging is perfect.

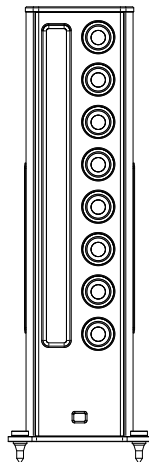


The massive anodized aluminum base plate effortlessly carries the 80 kg speaker and the heavy duty spikes decouple the case completely from the ground.



The Solitaire CWT 1000-40 housings are coated on all sides with lacquer or carbon fabric. Especially the carbon cases are very stiff and free of structure-born sound and resonances.

Specifications



	Solitaire CWT 1000-40
Principle	Floor-standing, 3-way, closed cabinet design
Nominal load, Watts	300
Music power, Watts	450
Impedance Ohms	4
Frequency range Hz	26 - 40 000
Sensitivity	88 dB
Bass drive unit mm	4 x 210
Midrange unit mm	8 x 120
High-frequency drive unit mm	Elektrostatic 50 x 960
Crossover frequency Hz	200 / 2000
Adjustments	woofer, midrange, tweeter
Dimensions H x W x D	135 x 32 x 46 cm / 53 x 12.6 x 18.1 inch
bottomplate	1,5 x 42 x 58 cm / 0,7 x 16,5 x 22,8 inch
Weight	80 kg / 177 lbs

Further technical information about the Solitaire CWT series can be found on our homepage.

Technical modifications reserved.

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