

## Nature of sound.

When as a loudspeaker manufacturer you have a product in your range that is repeatedly referred to with the greatest respect as a classic by experts, journalists of the specialist press, professionals in recording studios and music lovers then you can be satisfied and just a bit proud. Because here “classic” certainly doesn’t mean relying on the “traditional”. Because standstill is always a step backwards, we insist in the design of the new Zerobox 107 on the retention of the tried-and-tested, while improving on this using the latest knowledge.

To be exact the new Zerobox 107 is a 1.5 way system in the guise of a two-way system, as the Manger sound transducer is essentially responsible for reproducing the music as authentically as possible. Only below 160 Hz do the two woofers specially designed for the Zerobox 107 kick in to support the sound transducer in its demanding task. Only the lowest octave between 80 Hz and 40 Hz is reserved for the woofers on their own. And this constellation also ensures the ideal of a punctiform sound source.

The demands placed on the crossover are particularly strict to ensure that the woofers can continue the transient of the Manger sound transducer for a natural reproduction with absolute temporal precision. A 3rd order filter with a precise time delay preceding the woofer driver provides optimum interaction of the sound components. A closed cabinet also supports this effect and allows the woofers to decay in a controlled and ideal way. And to ensure that not a trace of the musicality is lost along



the way, only top-quality state-of-the-art components are used in the Manger sound transducer. New findings in the field of physics and materials technology have meant that the Manger developer can’t rest on his laurels. The Zerobox 107 has also been sensibly overhauled in other areas. The specific use of the latest high-tech damping materials from the automotive industry, in addition to the continuously optimised internal struts, means that the cabinet remains unmoved even when subjected to extreme pressure.

Tried-and-tested technology is however not completely forgotten. Three sound transducers are used in every Zerobox 107. This specially designed Manger arrangement does not serve, as is often believed, to achieve surround sound, but to simulate a quasi infinitely large sound baffle. In this way effects that would otherwise be caused by a narrow cabinet front are totally suppressed, and instead it exclusively serves the undisturbed sound propagation of the front sound transducer.

The Zerobox 107 was singled out for the highest praise and declared a “Reference Speaker” by the German magazine “Stereoplay” as early as 1999. That the new version will continue the success of our classic model and not only maintain its qualities but also improve on them is a certainty. Because neutrality will continue to find an ever growing circle of listeners. Music in its most natural form, just as the musicians played it, without any artificial technical additives, moves us and fascinates us, because we can feel the music directly.

# Manger Zerobox 107 IIe data sheet

## Driver

Three Manger sound transducers (MSW, W05, 8 Ohm) – patented broadband sound transducer with bending-flexible sandwich diaphragm, 70 mm double voice coil (0.4 g in weight) and 15 extremely powerful neodymium magnets for impulsive dynamics and concentric sound propagation (point sound source).

Two Vifa woofers (20 cm), custom-built carbon fibre-paper diaphragm driver for a dry and natural bass.

## Crossover

Crossover frequency 170 Hz

MSW: High-pass 1st order filter, Mcap + Mcap Supreme capacitors, air coils, MOX resistors

Woofer: Low-pass 3rd order filter, MKP capacitors, vacuum-impregnated Zero-Ohm transformer coils in the signal path

## System data

Impedance: 4 Ohm

Rise time: 13  $\mu$ s

Sensitivity: 90 dB 1W/1m

## Cabinet

Cabinet made of medium-density wooden fibreboard. The cabinet interior is fitted with complex braces and lined with polymer resin damping panels. Trapezoidal cabinet design to suppress standing waves in the cabinet's interior.

## Dimensions and weight

110 x 26 x 34 cm (H x W x D), 43 kg

## Finishes

- silk matt lacquer: black, white and aluminium (silver).
- silk matt veneers: alder, beech, cherry.
- fine wood veneers: Macassar ebony, Santos rosewood, Poplar burl, Birdseye maple. Other veneers on request.
- Piano High Gloss black: a high-gloss polyester lacquer applied in several layers.



Macassar  
ebony



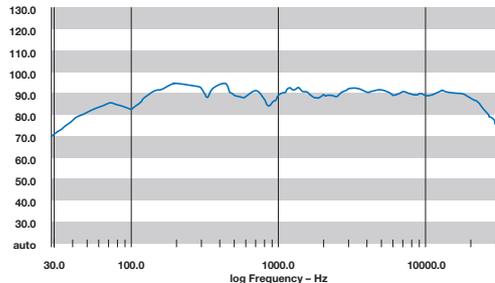
Santos  
rosewood



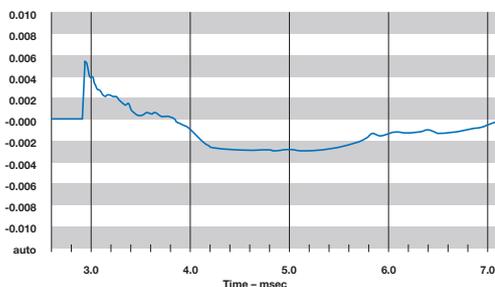
Birdseye maple



Alder



**Frequency Response:** A very balanced frequency response is important of course, but it still isn't everything. Linear from 40 Hz to 25 kHz (-3dB).



You can hardly get more perfect than this: The arrangement of the sound transducers, the extremely fast rise time of the MSW and the special filter technology provide the whole system with optimum transient and decay. The Zerobox 107 itself never dominates and always emphasises the actual music.