

## Perfect presence.

In the final analysis the complete system is only ever as good as its individual components. And the whole effort would be pointless if the cabinet or the crossover did not provide the Manger sound transducer with the necessary precision and influenced the best possible reproduction. Particular attention was paid to this aspect in the development of the latest version of the Zerobox 103.

Cabinet wall thicknesses of up to 38 mm in those areas where longitudinal waves or transverse waves can cause resonance. And a cleverly devised system of internal struts to increase the rigidity of the cabinet.

Selected and specially manufactured materials for damping and calming of the cabinet's interior walls lead to the demanded result – without any trace of cabinet post-oscillation. Here in accordance with the good old Manger philosophy, a closed cabinet without a reflex opening in the bass range is preferred to prevent any disturbing resonance here.

The Manger crossovers are just as complex in detail. Separate crossovers for the sound transducer and woofer, so-called zero-ohm and transformer core coils, highest grade capacitors, as well as high cross-talk attenuation between the individual coils resulting from their arrangement define the state of the art.



The result is a deep and dry bass and musical resolution matching the original in every respect right down to the last detail. Because, as the name says, you shouldn't hear the loudspeaker "box", but only the music. This remarkable property is however still attributable to a stroke of genius by Josef W. Manger: the arrangement of the laterally radiating Manger sound transducers. This does not serve, as is often believed, to achieve surround sound, but the unhindered sound propagation of the front transducer, without any annoying effects that would otherwise be caused by a narrow cabinet front.

And the future has also not been forgotten. With its fast rise time and pulse precision the Manger sound transducer has been ahead of its time for ages and is therefore also in a position to cater perfectly for the new standards such as SACD and DVD-Audio.

Therefore our top of the range model still remains more than faithful to the Manger philosophy that music as the provider of emotions should reach the listener exactly as the musician created it. As Gerold Lingnau in the FAZ newspaper wrote:

*"In contrast to other loudspeakers, where they try to put themselves in the foreground, here it's nothing spectacular that confronts the listeners' ears, just the presence of the music – room-filling and true to life."*

# Manger Zerobox 103 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 (25 cm), custom-built carbon fibre-paper diaphragm driver for a dry, low and natural bass.

## Crossover

Crossover frequency 160 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: 91 dB 1W/1m

## Cabinet

Cabinet made of medium-density wooden fibreboard, two-part acoustically decoupled cabinet, the cabinet interior is fitted with a complex system of braces and lined with floating polymer resin damping panels.

## Dimensions and weight

121 x 31 x 38 cm (H x W x D), 57 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

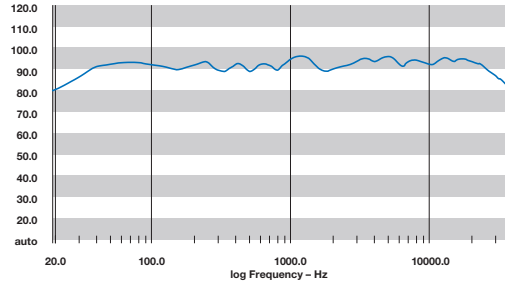


Santos  
rosewood

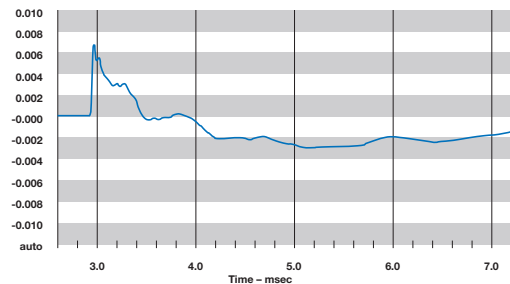
Poplar burl

Birdseye maple

Cherry



**Frequency Response:** A very balanced and wide frequency response. Linear from 32Hz to 25kHz (-3dB), or 32Hz to 35kHz (-10 dB). The Zerobox 103 is highly capable, particularly for the new audio standards.



**Almost perfect step response:** 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.