



ONDA

Technical Data

Full Active 2-Way Loudspeakersystem
with MANGER Bending-Wave-Transducer ®

Full Range Transducer: MANGER-Transducer®
Woofer: 2x 170mmØ / HDA-Membrane

Active Electronics with Adaptive Output Impedance System

Sensitivity for 90dB SPL @1m: 245mV (adjustable)
Input Impedance: balanced, 5kOhms
Input Overload: 24Vpp
Signal to Noise Ratio: -96dBA
Power RMS: 100+50W
Continuous Max. SPL@1m: 103dB
Frequency Response (-6dB): 33Hz-30'000Hz
Crossover Frequency: 280Hz
Roll Off below 300Hz: 0dB - 3dB/Oktave

Signal input: XLR F/3P
Voltage: 115/230V (50-60Hz)
Power Consumption: 10-100VA

Box Material: MDF Nextel anthracite
Baffle Material: CREANIT®, white, light grey
other colours optional

Net Weight: 31kg
Dimensions: HxWxD 1174x352x216mm

Technical adaptations are subject to change without notice

K L A N G W E R K ®

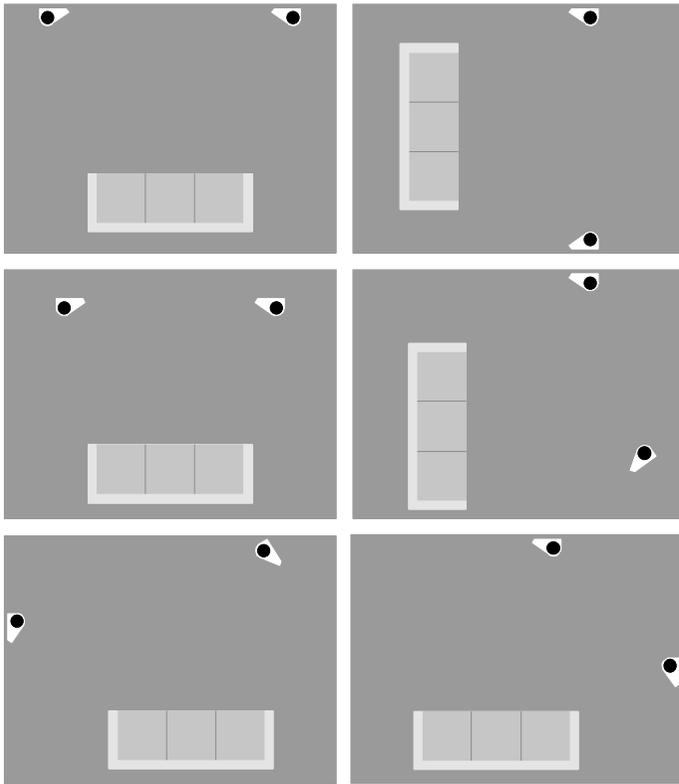


ONDA

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stereós (greek) = full bodied, spatial
 phōné (greek) = sound, voice

A reproduction of music seems particularly realistic, when the space where the music has been recorded can be felt. Stereophonic recordings deceive the ear-brain-system to create this feeling of space. In order for the deception of the ear to be particularly realistic, the speakers must have a specific impulse and phase behaviour, a precise position in the space and in relation to the listener.

ONDA is able to simulate a virtual sound stage in a surprising variety of positions and rooms. The simulation is so precise that the speakers disappear as sound sources. It is though they open the virtual sound stage for the music. This stage can be far larger than usual, permitting a more intense and detailed feeling of sounds.

The precise reproduction of stereofonic recordings is the basic of a perfect multichannel (surround) reproduction. ONDA can be combined with our modular system ENDO to a multichannel system. Both are technically identical but have a different shape.

Enclosure

The enclosure of ONDA doesn't sound. It helps the transducers to sound. The stiffness of the MDF-structure and the decoupled and curved baffle from CREANIT® reduce resonances. Creanit is an artificial stone with high density and high inner damping. It is robust because the colour is in the material. It can easily be restored and even changed. It is available in white and a light grey. Any colour is available by enamelling the baffle. The form of the enclosure allows an optimum work of the speakers, either on the wall and in free space.

MANGER- Bending Wave Transducer®

This legendary bending-wave-transducer is the closest approach to the ideal of an acoustic point source. Its membrane is radiating sound in the same way that the inner ear receives it. The movement is comparable to a stone which is thrown in a pool of water. Travelling waves move from the center to the surround and are damped as they extend from the center. The effect is an exact representation of the incoming signal at every point of time. The transducer works faster, more accurate than a conventional dynamic speaker and covers nearly the whole frequency range. Music is reproduced in a stunningly realistic way and you can listen to it without fatigue.

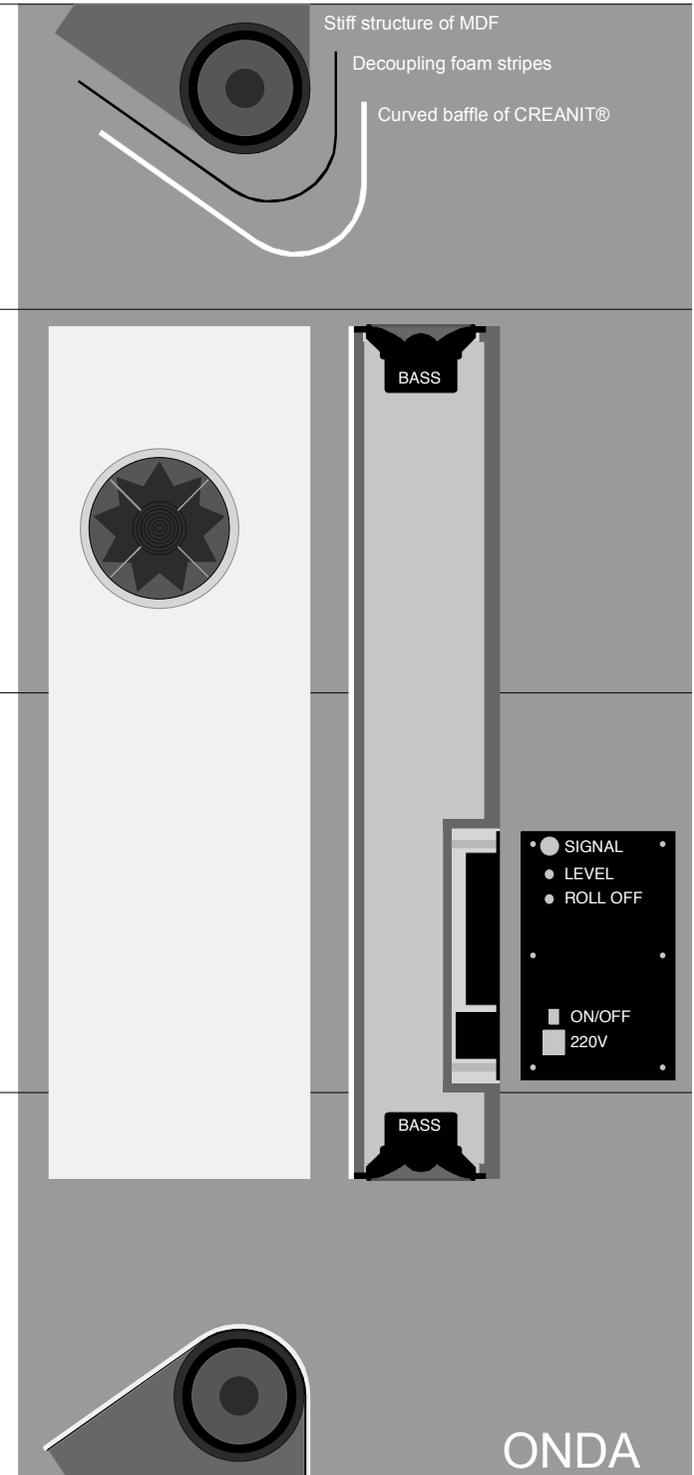
Electronics - Active Technology

The amplifier and the speaker form an electro acoustical unity. The active speaker is the consequent solution because both parts are conceived together. The two frequency domains of ONDA are separated and linearised before the amplification, instead of afterwards as in a passive speaker. The active technology permits a more precise and elegant filtering without signal losses. Each frequency domain (MANGER Transducer and Woofer) has its own power amplifier with a special design. The motion of the membrane is regulated by an adaptive output impedance system and the speakers are protected from overload. A Roll-Off control allows the loudspeakers output to be adapted when it is positioned in front of a wall. High quality components are used throughout the design.

Woofers

At the low end of the frequency range, the MANGER transducer is reinforced by two relatively small dynamic woofers. Their membrane material is HDA (High-Definition Aerogel) which is very light, stiff and has a high inner damping. Small membranes have a better linear cone movement. The position of the woofers at both ends of the enclosure eliminates cabinet resonances because the forces produced on the enclosure are canceled. The position helps also to stimulate less room resonances.

The Active Technology with impedance control has particularly in the bass section several advantages: The reflex system can be designed preciser, the excursion of the membranes is reduced and the air volume is halved. The bass is integrated seamless in the sound of the system und has the same velocity and precision which is initiated by the bending wave transducer. Bass reproduction is surprisingly deep and powerful for such a relatively small enclosure.



INVITATION TO LISTEN

ONDA