

## musikelectronic geithain

# RL 941



Active 2-way Coaxial Loudspeaker in vented box

STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKER

SOUND REINFORCEMENT SYSTEMS

#### The Reference Class - Active Studio-Monitors made by musikelectronic geithain

#### **RL Series**

From compact two-way loudspeakers to large main control studio monitors and compatible subwoofers – we offer the ideal solution for any case of application. The RL Series studio monitors are the achievement of long-year and consequent development efforts with only one aim: absolutely precise and discoloration-free reproduction of any sound events. Listening, acoustic measurements, profound understanding for music and the knowledge of the irrevocable laws of physics form the foundation of our products – instead of any belief in miracles, fancy trends or marketing strategies.

#### If you don't do it all yourself ...

We are crusaders for the sake of loudspeakers. That is the reason why we develop and manufacture all the components of our loudspeakers ourselves. From amplifier electronics to chassis — every detail of the product is of true in-house manufacture. Incidentally, this strategy also ensures the high continuity and stability of value of our devices. That is the only way to provide a loudspeaker which will master professional requirements even after years of application. The high in-house production depth, going hand in hand with the perfection of our developments

and their permanent control, allows us to offer products throughout decades, while the customers are always able to extend their systems with acoustically identical products.

#### **Active and Coaxial**

Active multi-way technology with integrated analogue crossover and powerful amplifier and the application of our special coaxial technology are the basis for all studio monitors. Sound radiating from one point has benefits that cannot be denied: extremely homogenous and discolouration-free sound image, unrivalled directional accuracy and depth, and fatigue-free listening.

#### All of one piece

Our loudspeakers are team players instead of sound "loners". The task of choosing which loudspeaker best matches an individual monitoring situation will be influenced by listening distance, required threshold frequency and maximal sound pressure level - however, not by sound differences. Consequent use of our products will therefore allow an almost identical sound image, no matter if you work in an OB van or in a main control room.

#### **Active Studio Reference Loudspeaker RL 941**

The RL 941 has been designed for both the professional user at medium-size to large audio, video and film studios and for the discerning music enthusiast. The directivity index has been optimised to listening distances between 2.5 and 4 metres. Low and middle frequencies are reproduced by a specially designed 8-inch cone loudspeaker. In the treble range, the RL941 features three vertically arranged 1-inch tweeter calottes that are located coaxially in front of the woofer/midrange system. The bass reflex system, designed to deliver optimal transient fidelity, ensures a precise and dry bass reproduction down to a threshold frequency of 40 Hz. Thanks to the powerful integrated analogue amplifiers and the high system sensitiveness, this loudspeaker combines the flawless homogeneity with a dynamic range that is unrivalled in a two-way system. The result is that non-linear distortions stay extremely low even at high reproducing levels. Moreover, the loudspeaker features group delay time optimisation. Summing up all the constructive measures, the RL941 achieves the seamless sound compatibility with all other products made in the our manufacture. The highly neutral tone quality, excellent spatial performance and depth arrangement, together with fatigue-free monitoring of even most complex sound events are typical ME Geithain characteristics of this loudspeaker.

The power amplifier module with electronic crossover is integrated into the rear wall of the cabinet and can be swung out for maintenance purposes. An intermittent LED signalises overmodulation. If the maximum level is exceeded, the output level will be attenuated by 20 dB in order to protect the components from overloading. For adapting the frequency response to the acoustic characteristics of the reproduction room, a low-frequency room compensation can be achieved within two continuously variable frequency bands.

A variety of special stands and racks is available as accessories. According fixing elements have been integrated into the loudspeaker cabinet.

#### **TECHNICAL PROPERTIES**

General active 2-way-monitor for hearing distances between 2,50 and 4 m Maximum SPL from 100 Hz ... 6 kHz  $110 \dots 116 \, dB / r = 1 \, m \, (3.3 \, ft)$  $38 \text{ Hz} \dots 20 \text{ kHz} \pm 3 \text{ dB}$ Bandwidth Calibration: Acoustic output level / PE = - 14 dBu  $89 \, dB / r = 1 \, m \, (3.3 \, ft)$ Directivity index from 100 Hz ... 10 kHz increasing from 2 to 13 dB Inherent noise sound level  $\leq$  7 dB (A) / r = 1 m (3.3 ft) Total harmonic distortion measured at 96 dB / r = 1 m (3.3 ft)from 100 Hz ... 10 kHz ≤ - 40 dB Nominal Input level + 6 dBu adjustable Input impedance ≥ 10 kOhm RC symmetrically Nominal output power of the amplifier LF 150 Watt / 4 Ohm HF 100 Watt / 4 Ohm **Electronic Crossover frequencies** 1.8 kHz 230 Volt  $\sim$   $\pm$  10 %, 50 Hz ... 60 Hz 115 Volt  $\sim$   $\pm$  10 %, 50 Hz ... 60 Hz (Optional) Power requirements 100 Volt  $\sim$  ± 10 %, 50 Hz ... 60 Hz (Optional) Power consumption 30 VA at standby; max. 180 VA at full load LED on front side Operation and Clipping indicator Input Connector XLR 3F Mains Connection Euro cold-unit connector

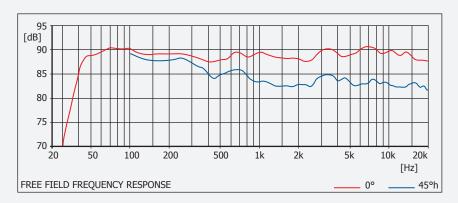
 $\begin{array}{ccc} \text{Loudspeaker systems} & & & \\ \text{Woofer} & & 205 \text{ mm (8") cone} \\ \text{Tweeter} & & 3x \text{ 25 mm (1") dome} \\ \\ \text{Dimensions (H x W x D)} & & 398 \text{ x 254 x 345 mm (15.9 x 10 x 13.6 in)} \end{array}$ 

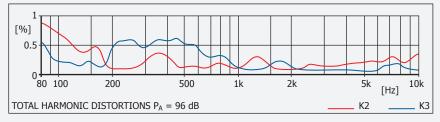
Weight 18.6 kg (40.9 lbs)

Temperature requirements for use  $+ 15^{\circ}\text{C} \dots + 35^{\circ}\text{C} (59^{\circ}\text{F} \dots 95^{\circ}\text{F})$  for storage  $- 25^{\circ}\text{C} \dots + 45^{\circ}\text{C} (- 13^{\circ}\text{F} \dots 113^{\circ}\text{F})$  Humidity  $+ 45 \dots 75^{\circ}\text{M}$ 

Design of the Cabinet MDF-wood in ash black veneered, different veneers or colors optional with holding device, optional without holding device









### musikelectronic geithain gmbh

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