

musikelectronic geithain RL 930K



Active 2-way Coaxial Loudspeaker with cardioid radiation characteristic

STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKER

SOUND REINFORCEMENT SYSTEMS

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 930K

The RL 930K 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 5 metres. Low and middle frequencies are reproduced by a specially designed 10-inch cone loudspeaker. In the treble range, the RL930K uses three vertically arranged 1-inch tweeter calottes that are positioned coaxially in front of the woofer/midrange system. The RL930K, a two-way studio monitor, features our K Technology (cardioid radiation characteristics in the bass range), which has proven reliable since many years. This technology makes it easy to position this loudspeaker, even with respect to bass difficulties, and it considerably reduces distracting rearward-directed room reflections. Thanks to the powerful integrated analogue amplifiers and the high system sensitiveness, this loudspeaker combines the flawless homogeneity of a two-way system with a dynamic range that is otherwise limited to mostly larger three-way designs. 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 RL930K 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 5 m |
|---|---|
| Maximum SPL from 100 Hz 6 kHz | 113 118 dB / r = 1 m (3.3 ft) |
| Bandwidth | 38 Hz 20 kHz ± 3 dB |
| Calibration: Acoustic output level / PE = - 14 dBu | 89 dB / r = 1 m (3.3 ft) |
| Directivity index from 100 Hz 10 kHz | increasing from 3 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 | ≤ - 45 dB |
| Nominal Input level | + 6 dBu adjustable |
| Input impedance | \geq 10 kOhm RC symmetrically |
| Nominal output power MOSFET-amplifier LF HF | 180 Watt / 4 Ohm 100 Watt / 4 Ohm |
| Electronic Crossover frequencies | 2,2 kHz |
| Power requirements | 230 Volt $\sim \pm 10$ %, 50 Hz 60 Hz 115 Volt $\sim \pm 10$ %, 50 Hz 60 Hz (Optional) 100 Volt $\sim \pm 10$ %, 50 Hz 60 Hz (Optional) |
| Power consumption | 35 VA at standby; max 300 VA at full load |
| Operation and Clipping indicator | LED on front side |
| Input Connector | XLR 3F |
| Mains Connection | Euro cold-unit connector |
| Loudspeaker systems Woofer Tweeter | 260 mm (10 [°]) cone 3x 25 mm (1 [°]) dome |
| Dimensions (H x W x D) | 477 x 350 x 310 mm (18.8 x 13.8 x 12.2 in) |
| Weight | 24.6 kg (54.2 lbs) |
| Temperature requirements for use for storage Humidity | + 15°C + 35°C (59°F 95°F) - 25°C + 45°C (- 13°F 113°F) 45 75 % |
| Design of the Cabinet | MDF-wood in ash black veneered, different veneers or colors optional with holding device, optional without holding device |



ACOUSTIC DIAGRAMS





musikelectronic geithain gmbh

STUDIO MONITORING - HIGHEND LOUDSPEAKER - SOUND REINFORCEMENT SYSTEMS SYSTEMS

Nikolaistraße 7 04643 Geithain / Germany

Tel: +49 (0) 34341 3110 Fax: +49 (0) 34341 31144

E-Mail: info@me-geithain.de

www.me-geithain.de