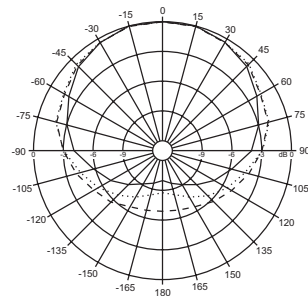


# musikelectronic geithain



## Studio Reference Monitor Loudspeaker **RL 944K / RL 944K1**

with cardioid radiation characteristic in bass range



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

### **RLSeries**

From a compact two-way monitor up to large loudspeaker-systems - we provide you with the best solutions for all kinds of professional use. The RL series' studio-monitors are the result of consequent development that needed many years and pursued only one aim: the highest degree of precise sound without any coloration regardless of genres. Hearing and measuring are the basis of our work. We build on profound musical comprehension and the knowledge of unalterable physical laws - not on magic tricks, new fashioned ideas nor marketing-strategies.

### **You have to do it yourself!**

We produce loudspeaker in accordance to our conviction. That is why we develop and construct all monitors ourselves - from A to Z, from the electronics of the amplifier to the voice coil of the transducer. A product, which components all come from our own manufacturing, has noticeable advantages for you as a professional customer. We are independent of third parties products and build our components just the way we require them - this proceeding can't be beaten in quality by mass-production. This strategy also leads to high continuity and a fixed (stable) value of our product range as well as it ensures that replacement parts

will be available for long-term. We believe that this is the only way to create a product which is worth your investment and satisfies your professional needs for many years.

### **Active and Coaxial**

Active multi-way technique with internal crossovers, power amplifier, and our special coaxial arranged transducers are the basis of all professional monitors of our RL series. As a result of this technology our speaker reveal a great depth and precise focus and low harmonic distortion. We used physiological effects of hearing to optimize the power concentration and directivity of sound. This degree of accuracy of sound is unmatched by any other.

### **Made from one piece**

All RL-loudspeaker from the compact RL 906 to the RL 900 A are tonal compatible with each other. Therefore it is your choice where you prefer to work; even within the same production you are independent from the studio environment. No matter if you work in a broadcast van or in a studio - the loudspeaker will not differ in sound, but only in their low-frequency cutoff and the maximum acoustic output.

## Active Studio Loudspeaker RL 944K / RL 944K1

The Studio Monitor Speaker RL 944K is an active three-way monitor with cardioids characteristic within the frequency range from 35 Hz through 300 Hz. It can universally be applied as the main monitoring speaker for sound and video studios. By this radiating characteristic the reflections on the back walls of listening rooms can be minimized.

The loudspeaker RL 944K1 is another variant of the RL 944K. RL 944K1 contains a stand-alone amplifier and is of smaller height of the box so that it is superior suited for the insertion in video walls and outside-broadcasting vans.

The unit for the medium and high-frequency range is combined in a coaxial manner with a long-throw bass system and is provided with a directivity index, which supplements in an excellent way that of the bass system. The directional characteristics have been optimized with regard to small basis widths and short listening distances. Hereby they are outstanding qualified for the use in outside broadcasting vans. The high-power long-throw bass system is driven in a compact cabinet so that optimum impulse behaviour can be reached. Moreover, with a series of

constructional measures we have provided that convincing lowest values of non-linear distortions and colorations could be reached. The whole system is superior by excellent localization behaviour. The three-channel MOSFET power amplifier with electronic crossover is integrated within the back wall of the cabinet and can be swing out for service purposes.

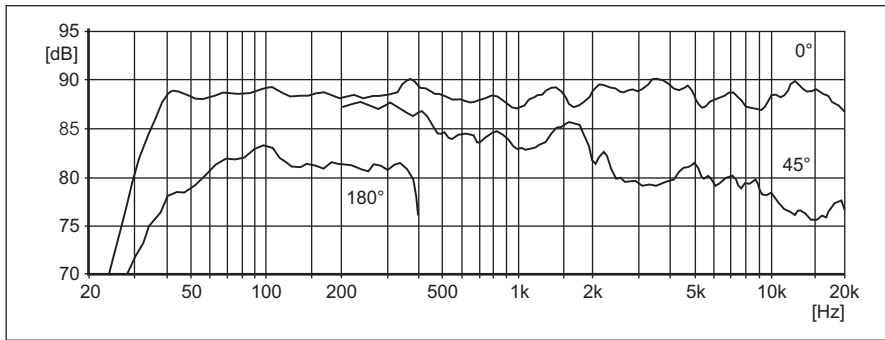
An intermittent LED lighting signals when the overload limit is reached. After crossing of the maximum level the output level will be reduced by 20 dB to avoid any overloading of the components.

The transfer characteristic can be matched to the acoustical conditions of the reproduction room as well as to the set-up situation by a low-frequent infinitely variable adaptation within two adjustable frequency ranges.

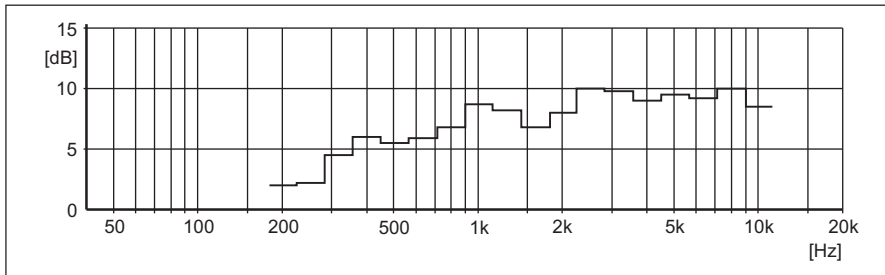
Various special stands and holding devices can be delivered as accessories. Appropriate fixing elements are integrated in the loudspeaker cabinet. Optionally, the loudspeaker can magnetically be compensated with regard to its scattering field.

## Specifications

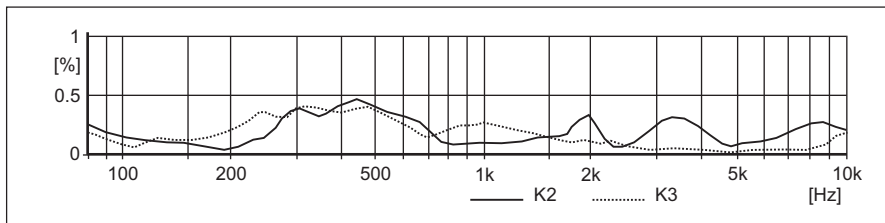
General	active three-way monitor for use in audio-, video production studios and broadcast vans
Maximum SPL from 100 Hz ... 6 kHz	110...113 dB peak / r =1m
Bandwidth	35 Hz...20 kHz $\pm$ 3 dB
Calibration: Acoustic output level / $P_E = -14$ dBu	89 dB / r =1m
Directivity index from 200 Hz...10kHz	increasing from 2 to 10 dB
Inherent noise sound level	< 7dB(A) / r =1m
Total harmonic distortion / measured at 96 dB, r =1m, from 80 Hz...10 kHz	<-40 dB
Nominal input level	+6 dBu adjustable
Input impedance	> 10 kOhm / symmetrically
Nominal output power of the MOSFET-amplifier	
LF	180 Watt / 4 Ohm
MF	100 Watt / 4 Ohm
HF	100 Watt / 4 Ohm
Electronic crossover frequencies	800 Hz and 3.8 kHz
Operation and clipping indicator	LED on front side
Input connector	XLR 3F
Loudspeaker systems	
Woofer	200 mm cone
Mid-range unit	100 mm cone
Tweeter	19 mm dome
Power requirements	Europe 230 Volt ( $\pm$ 10%), AC, 50 Hz USA & Canada 115 Volt ( $\pm$ 10%), AC, 60 Hz Japan 100 Volt ( $\pm$ 10%), AC, 60 Hz
Power consumption	max. 300 Watt at full load
Temperature requirements	
for use	+15°C to +35°C
for storage	-25°C to +45°C
Humidity	45 - 75 %
Dimensions (H x W x D) [mm] [inches]	481 x 285 x 330           (398 x 254 x 245 RL 944K1) 18.9 x 11.2 x 13.0       ( 15.7 x 10.0 x 9.6 RL 944K1)
Weight	24 kg                   ( 11 kg RL 933K1 ) 53 lb                   ( 24 lb RL 933K1 )
Design of the Cabinet	MDF wood, black veneer, different colors optional
Magnetic shield	optional



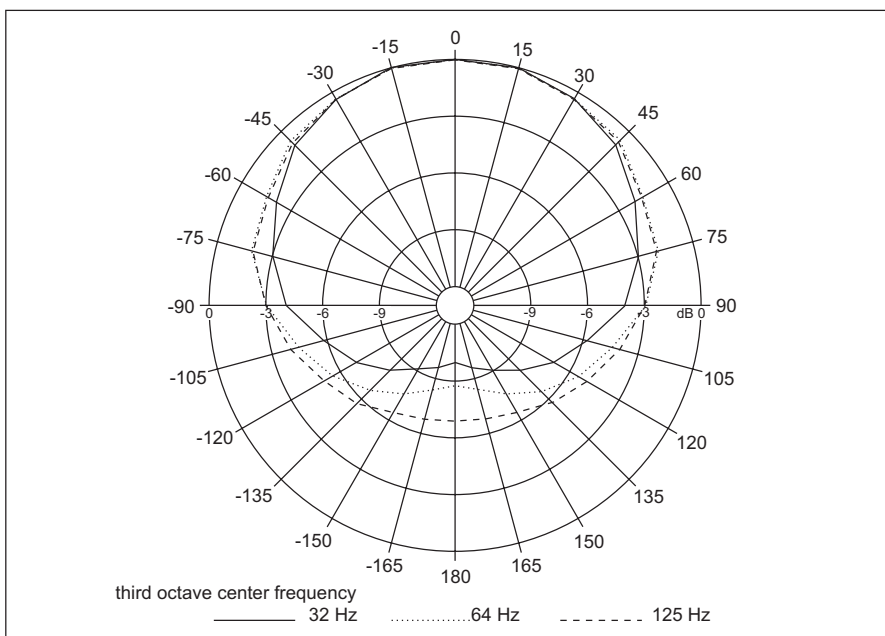
Free field frequency response



Directivity index



Total harmonic distortion  $P_A = 96$  dB



Directional characteristic



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studio techniques - sound reinforcement systems

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