

## musikelectronic geithain

## RL921K1 RL921K1



ACTIVE 3-WAY COAXIAL

LOUDSPEAKER WITH CARDIOID

RADIATION CHARACTERISTIC

STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKER

SOUND REINFORCEMENT SYSTEMS

The RL921K is based on the timeless classic design of the legendary RL901K. Not only optically but also tonally the RL921K follows in the steps of its older sibling. Therefore it is the optimal solution in cases where the RL901K can not be used because of its size or short listening distances. The RL921K is aimed at professional users as well as music enthusiasts.

By the cardioid radiation characteristics within the frequency range from 30 through 250 Hz the reflections on the back walls of listening rooms can be minimized. In addition the transfer characteristic can be matched to the acoustical conditions of the reproduction room as well as to the set-up situation by an integrated room matching filter.

The total directivity index of the monitor was optimized for very short listening distances and base distance between two and three metres (6.6ft and 9.9ft). As the bass system a very linear 300-mm (12") long-throw driver in a cardioid cabinet is employed, delivering excellent impulse fidelity. The 100-mm (4") cone is mounted together with the 25-mm (1") dome tweeter coaxially in front of the bass system allowing a precise steering of the directivity index. As a result a realistic and steady spatial performance of the sound image around the listening position is achieved, with high homogeneity and smallest possible coloration. By the great membrane area the RL921K is in the highest degree level proof while at the same time it has the lowest distortions. Therefore the RL921K is a precision studio tool allowing fatigue free working for hours.

The three-channel MOSFET power amplifier with electronic crossover is integrated within the back wall of the cabinet and is hinged 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 RL921K1 is a shortened cabinet variant of the RL921K, that is employed when not enough installation depth is available. Be it a video wall or an outside broadcasting van. For maximum flexibility when choosing the mounting position the speaker is also available in a lying variant. As an alternative to the standardly provided MOSFET amplifier in an upright standing enclosure both the 19" compatible Class D amplifiers RL-Amplifier and RL-Amplifier 2 are also available.

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



RL921K RL921K1 General Active 3-way coaxial loudspeaker for listening distances

between 2 and 3m (6.6ft and 9.9ft)

Maximum SPL

Bandwidth  $30 \text{ Hz} \dots 20 \text{ kHz} \pm 3 \text{ dB}$ 

Calibration:

Acoustic output level /  $P_F = -14 \, dBu$  89 dB /  $r = 1 \, m$  (3.3 ft)

Directivity Index

from 100 Hz ... 10 kHz Increasing from 4 to 10 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 ≤-46 dB

Nominal input level  $+6 \, \text{dBu adjustable}$ Input impedance  $\geq 10 \, \text{kOhm RC balanced}$ Electronic crossover frequencies  $650 \, \text{Hz}$  and  $3.0 \, \text{kHz}$ 

Nominal output power amplifier

 $\begin{array}{ccc} \mathsf{LF} & & 180\,\mathsf{W}\,/\,4\,\mathsf{Ohm} \\ \mathsf{MF} & & 100\,\mathsf{W}\,/\,4\,\mathsf{Ohm} \\ \mathsf{HF} & & 100\,\mathsf{W}\,/\,4\,\mathsf{Ohm} \end{array}$ 

Input connector XLR3F

Loudspeaker systems

Woofer 300 mm (12") cone
Mid-range unit 100 mm (4") cone
Tweeter 25 mm (1") dome

Operation and clipping indicator LED on front side

Power requirements  $230 \text{ V} \sim \pm 10 \%$ , 50 ... 60 Hz

 $115V \sim \pm 10\%$ , 50 ... 60 Hz (Optional)  $100V \sim \pm 10\%$ , 50 ... 60 Hz (Optional)

Power consumption Max. 300 VA at full load Mains connection IEC power connector

Temperature requirements

for use  $+15^{\circ}\text{C} \dots +35^{\circ}\text{C}$  for storage  $-25^{\circ}\text{C} \dots +45^{\circ}\text{C}$  humidity  $45^{\circ} \dots 75^{\circ}$ 

RL921K (Amplifier in loudspeaker cabinet)

Dimensions (h x w x d) 550 x 380 x 370 mm (21.7 x 15 x 14.6 inch)

Weight 39.5 kg (87.1 lbs)

Design of the cabinet MDF wood in ash black veneered; optional other veneers or colours

with holding device; optional without holding device

with handles; optional without handles

RL921K1 (Amplifier in separate enclosure)

Connection cable Speakon NL8

loudspeaker - amplifier enclosure Standard length 3 m (9.9 ft); optional other lengths

Dimensions (h x w x d)

Loudspeaker 550 x 380 x 300 (21.7 x 15 x 11.8 inch)

Standard amplifier enclosure  $475 \times 279 \times 120 (18.7 \times 11 \times 4.7 \text{ inch})$  without base plate Highend amplifier enclosure  $495 \times 320 \times 260 (19.5 \times 12.6 \times 10.2 \text{ inch})$  with base plate

Weight

Loudspeaker 26.5 kg (58.4 lbs) Standard amplifier enclosure 11 kg (24 lbs) Highend amplifier enclosure 12 kg (26 lbs)

Design of the cabinet

Loudspeaker MDF wood in ash black veneered; optional other veneers or colours

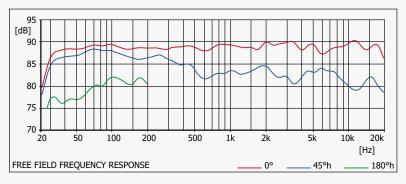
with holding device; optional without holding device

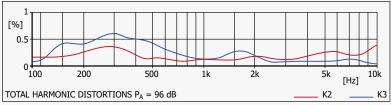
Standard amplifier enclosure MDF wood with scratch proof structure coating black RAL9005;

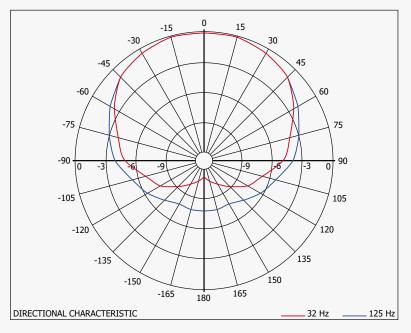
optional other colours

Highend amplifier enclosure MDF wood in ash black veneered; optional other veneers or colours

## **ACOUSTIC DIAGRAMS**









## musikelectronic geithain gmbh

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