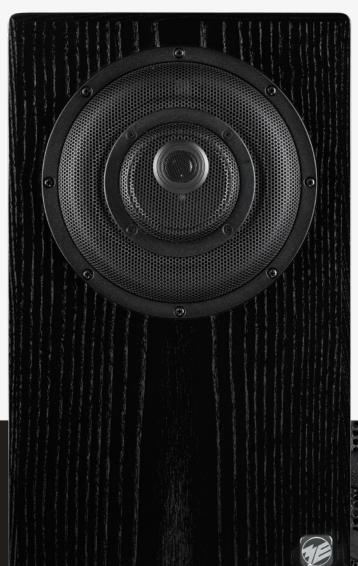


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RL944K RL944K1



ACTIVE 3-WAY COAXIAL

LOUDSPEAKER WITH CARDIOID

RADIATION CHARACTERISTIC

STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKER

SOUND REINFORCEMENT SYSTEMS



The RL944K is a specialist for small rooms and short listening distances. So it is designed for both the professional user in the outside broadcasting van, small audio, video and film studios and for the discerning music enthusiast, who is not willing to make a compromise in a small living room.

By the cardioid radiation characteristics within the frequency range from 35 through 250 Hz the reflections on the back walls behind the speaker can be minimised. 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 optimised for listening distances between 1 and 2.60 m (3.3 and 8.6 ft). As the bass system a very linear 200 mm (8") long throw driver in a cardioid cabinet is employed, delivering excellent impulse fidelity. Due to the special construction a low frequency reproduction is possible that is not expected from such a small cabinet. Therefore the RL944K is a real full-range speaker and in an outside broadcasting van an additional subwoofer can be spared. The 100 mm (4") cone is mounted together with the 19 mm (3/4") dome tweeter coaxially in front of the bass system allowing a precise steering of the focal perspective. 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 colouration. By the great consequent optimisation for short listening distances the RL944K allows realistic depth arrangement even in outside broadcasting vans and facilitates correct miking. Therefore the RL944K 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 RL944K1 is a more compact cabinet variant of the RL944K, that is employed when not enough room is available. Be it a video wall or an outside broadcasting van. As an alternative to the standardly provided MOSFET amplifier in an upright standing enclosure the 19" compatible Class D amplifier RL-Amplifier is also available.

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



RL944K RL944K1 General Active 3-way coaxial loudspeaker for listening distances

between 1 m and 2.60 m (3.3 ft and 8.6 ft)

Maximum SPL

from $100 \, \text{Hz} \dots 6 \, \text{kHz}$ $110 \dots 113 \, \text{dB} / r = 1 \, \text{m} (3.3 \, \text{ft})$

Bandwidth $35 \text{ Hz} \dots 20 \text{ kHz} \pm 3 \text{ dB}$

Calibration:

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

Directivity Index

from 100 Hz ... 10 kHz Increasing from 2 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 ≤-40 dB

Nominal input level $+6 \, \text{dBu}$ adjustable Input impedance $\geq 10 \, \text{kOhm}$ RC balanced Electronic crossover frequencies $800 \, \text{Hz}$ and $3.8 \, \text{kHz}$

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

Woofer200 mm (8") coneMid-range unit100 mm (4") coneTweeter19 mm (3/4") dome

Operation and clipping indicator LED on front side

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

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

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

Temperature requirements

 $\begin{array}{lll} \text{for use} & +15^{\circ}\text{C} \dots +35^{\circ}\text{C} \\ \text{for storage} & -25^{\circ}\text{C} \dots +45^{\circ}\text{C} \\ \text{humidity} & 45\% \dots 75\% \\ \end{array}$

RL944K (Amplifier in loudspeaker cabinet)

Dimensions (h x w x d) 481 x 285 x 330 mm (18.9 x 11.2 x 13 inch)

Weight 24kg (52.9lbs)

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

with holding device; optional without holding device

RL944K1 (Amplifier in separate enclosure)

Connection cable Speakon NL8

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

Dimensions (h x w x d)

Loudspeaker 398 x 254 x 245 (15.7 x 10 x 9.6 inch)

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

Weight

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

Design of the cabinet

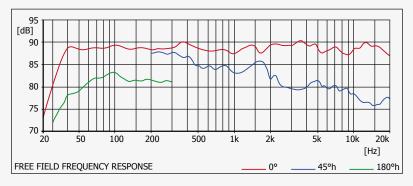
Loudspeaker MDF wood in ash black veneered; optional other veneers or colours

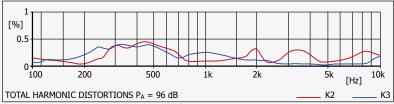
with holding device; optional without holding device

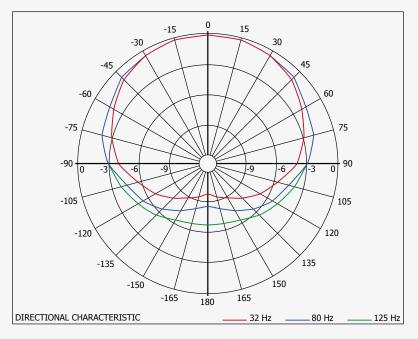
Standard amplifier enclosure MDF wood with scratch proof structure coating black RAL9005;

optional other colours

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









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STUDIO MONITORING - HIGHEND LOUDSPEAKER - SOUND REINFORCEMENT SYSTEMS

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