musikelectronic geithain

RL 944K
RL 944K1

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.

RL 944K
RL 944K1

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 Hz ... 6 kHz	 110 ... 113 dB / r = 1 m (3.3 ft)
Bandwidth	35 Hz ... 20 kHz ± 3 dB
Calibration: Acoustic output level / P_E = -14 dBu	 89 dB / r = 1 m (3.3 ft)
Directivity Index from 100 Hz ... 10 kHz	 Increasing from 2 to 10 dB
Inherent noise sound level	≤ 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 balanced
Electronic crossover frequencies	800 Hz and 3.8 kHz
Nominal output power amplifier LF MF HF	 180 W / 4 Ohm 100 W / 4 Ohm 100 W / 4 Ohm
Input connector	XLR 3F
Loudspeaker systems Woofer Mid-range unit Tweeter	 200 mm (8”) cone 100 mm (4”) cone 19 mm (3/4”) dome
Operation and clipping indicator	LED on front side
Power requirements	230 V ~ ± 10 %, 50 ... 60 Hz 115 V ~ ± 10 %, 50 ... 60 Hz (Optional) 100 V ~ ± 10 %, 50 ... 60 Hz (Optional)
Power consumption	Max. 300 VA at full load
Mains connection	IEC power connector
Temperature requirements for use for storage humidity	 + 15°C ... + 35°C -25°C ... + 45°C 45 % ... 75 %

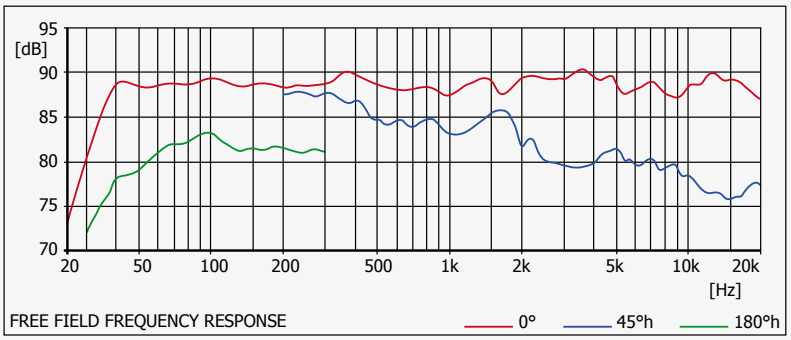
RL 944K (Amplifier in loudspeaker cabinet)

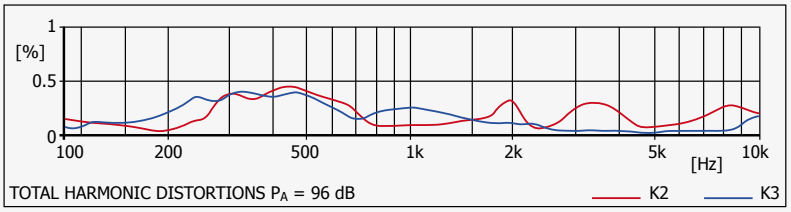
Dimensions (h x w x d)	481 x 285 x 330 mm (18.9 x 11.2 x 13 inch)
Weight	24 kg (52.9 lbs)
Design of the cabinet	MDF wood in ash black veneered; optional other veneers or colours with holding device; optional without holding device

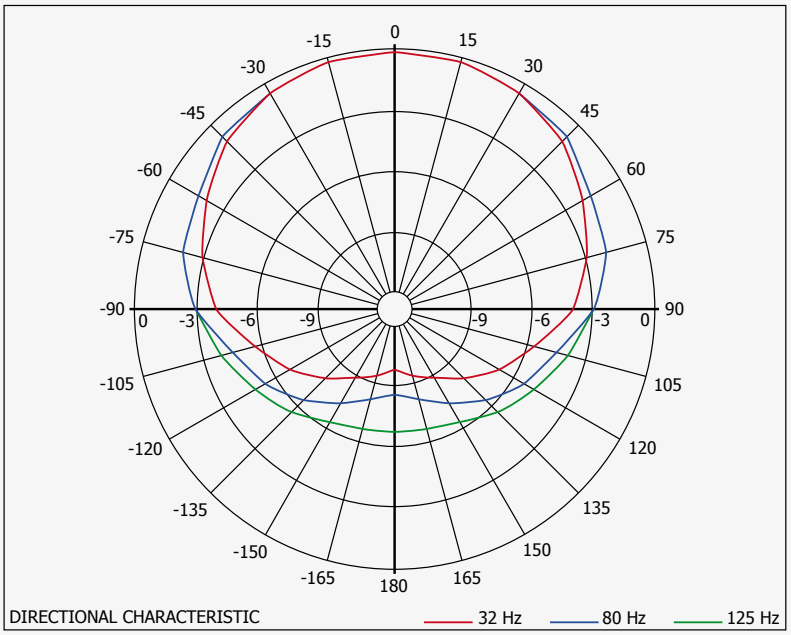
RL 944K1 (Amplifier in separate enclosure)

Connection cable loudspeaker - amplifier enclosure	Speakon NL8 Standard length 3 m (9.9 ft); optional other lengths
Dimensions (h x w x d) Loudspeaker Standard amplifier enclosure Highend amplifier enclosure	 398 x 254 x 245 (15.7 x 10 x 9.6 inch) 475 x 279 x 120 (18.7 x 11 x 4.7 inch) without base plate 495 x 320 x 260 (19.5 x 12.6 x 10.2 inch) with base plate
Weight Loudspeaker Standard amplifier enclosure Highend amplifier enclosure	 11 kg (24 lbs) 11 kg (24 lbs) 12 kg (26 lbs)
Design of the cabinet Loudspeaker Standard amplifier enclosure Highend amplifier enclosure	 MDF wood in ash black veneered; optional other veneers or colours with holding device; optional without holding device MDF wood with scratch proof structure coating black RAL9005; optional other colours MDF wood in ash black veneered; optional other veneers or colours

ACOUSTIC DIAGRAMS







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STUDIO MONITORING - HIGHEND LOUDSPEAKER - SOUND REINFORCEMENT SYSTEMS

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