

ME 800K

musikelectronic geithain



STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKER

SOUND REINFORCEMENT SYSTEMS



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With the launch of the new 800 line, Musikelectronic Geithain opens a new chapter in the history of development of its studio and high-end loudspeakers. The new high-performance systems set sound and technology standards for both studio application and home audio. The experience from three decades of loudspeaker making was incorporated into the development of these products, applying well-proven and consequently refined solutions such as our *MCDS Coax (Minimum Colouration Directivity Steering Coax)* and our *K Technology (K = "Kardioid")*. Top-level quality is guaranteed due to complete fabrication in our Saxon manufacture.

The 4-way concept of the ME 800K comprises two 15-inch woofer systems, a 6.5-inch high-performance midrange system and a tweeter array with three vertically arranged 1-inch tweeter calottes. The directivity of the system has been optimised for listening distances of between three and eight metres, rendering a natural sound image in stereo and multichannel operation. Two 1000 W and two 500 W amplifier modules supply the bass, mid and treble channels with sufficient power. The resulting overload safety ensures that even signals with highest peak levels are not limited. Also, sound pressure levels of up to 126 dB can be performed without audible distortions throughout the effective frequency range. A room compensation network, integrated into the amplifier electronics, allows control of the room-dependent frequency response.

The vertical arrangement of the 15-inch woofers provides a directivity index that ensures realistic bass presence even at listening distances of up to eight metres. Our reliable K Technology

minimises rearward-directed room reflections in the bass range and simplifies the positioning of the ME 800K in the listening room. If required, both 15-inch bass units can be operated as subwoofers via the LFE input.

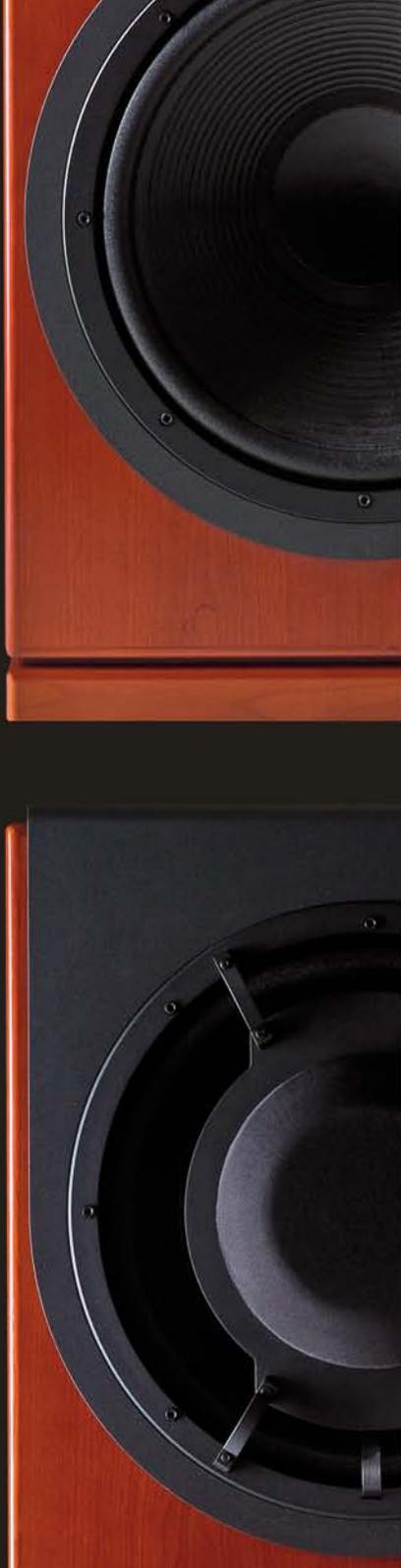
The low-discolouration and low-distortion characteristics of the 6.5-inch high-performance midrange system result from the intelligent combination of several construction details. The cone loudspeaker, for example, runs without contact to the enclosure, thus avoiding the problem of cabinet resonances. Instead the midrange system is operated with a rearward-directed acoustic flow resistor in order to achieve the desired directivity.

Frequently used wave guides in front of tweeter systems facilitate easy directivity control. However, they tend to produce unavoidable discolourations due to short-time reflections on the inner horn surface. We take a different approach – using a tweeter array and doing without horn loudspeaker systems for sound level enhancement. The tweeter unit that is arranged coaxially in front of the midrange system guarantees the trademark low-colouration reproduction of sound events with our loudspeakers.

All these features make the ME 800K so unique in the loudspeaker market. It is ideal for large listening distances and for acoustically less attenuated rooms.

„Those who aim at state-of-the-art equipment, ..., are best served by far with the outstandingly neutral and ultra high-definition Geithain speaker. With its terrific coax and the unique bass cardioid, the ME 800K is the stroke of genius par excellence.“

Wolfram Eifert Stereoplay 01/2010



TECHNICAL PROPERTIES



GENERAL

Active 4-way High-Performance-Loudspeaker for hearing distances between 3 and 8 m

MAXIMUM SPL
TO IEC 268-1
PROGRAMME MATERIAL

≥ 120 dB
126 dB peak / r = 1 m (3.3 ft)

BANDWIDTH

25 Hz ... 22 kHz - 6 dB

CALIBRATION: ACOUSTIC OUTPUT LEVEL / $P_E = -14$ dBu

90 dB / r = 1 m (3.3 ft)

DIRECTIVITY INDEX
FROM 100 Hz ... 10 kHz

increasing from 6 to 10 dB

INHERENT NOISE SOUND LEVEL

≤ 10 dB (A) / r = 1 m (3.3 ft)

TOTAL HARMONIC DISTORTION
MEASURED AT 100 dB / r = 1 m (3.3 ft)
FROM 100 Hz ... 10 kHz

≤ -45 dB

NOMINAL INPUT LEVEL

+6 dBu adjustable

INPUT IMPEDANCE

≥ 10 kOhm RC symmetrically

ELECTRONIC CROSSOVER FREQUENCIES

160 Hz, 550 Hz and 2.2 kHz

OUTPUT POWER PWM-AMPLIFIER

LF1 AND LF2

max. 1000 Watt / 4 Ohm

MF

max. 500 Watt / 4 Ohm

HF

max. 500 Watt / 4 Ohm

POWER REQUIREMENTS

90 ... 132 V, 55 ... 65 Hz; 190 ... 265 V, 45 ... 55 Hz

POWER CONSUMPTION

42 VA at standby; max. 1500 VA at full load

MAINS CONNECTION

Euro cold-unit connector with HF-filter

OPERATION AND CLIPPING INDICATOR

LED on front side

INPUT CONNECTORS

2x XLR 3F (programme- and LFE input)

LOUDSPEAKER SYSTEMS

WOOFER

2x 400 mm (15") cone

MID-RANGE UNIT

1x 160 mm (6") cone

TWEETER

3x 25 mm (1") dome

DIMENSIONS (H x W x D)

1160 x 500 x 430 mm (45.6 x 19.7 x 16.9 in)

WEIGHT

88 kg (193.6 lbs)

TEMPERATURE REQUIREMENTS

FOR USE

+15°C ... +35°C (59°F ... 95°F)

FOR STORAGE

-25°C ... +45°C (-13°F ... 113°F)

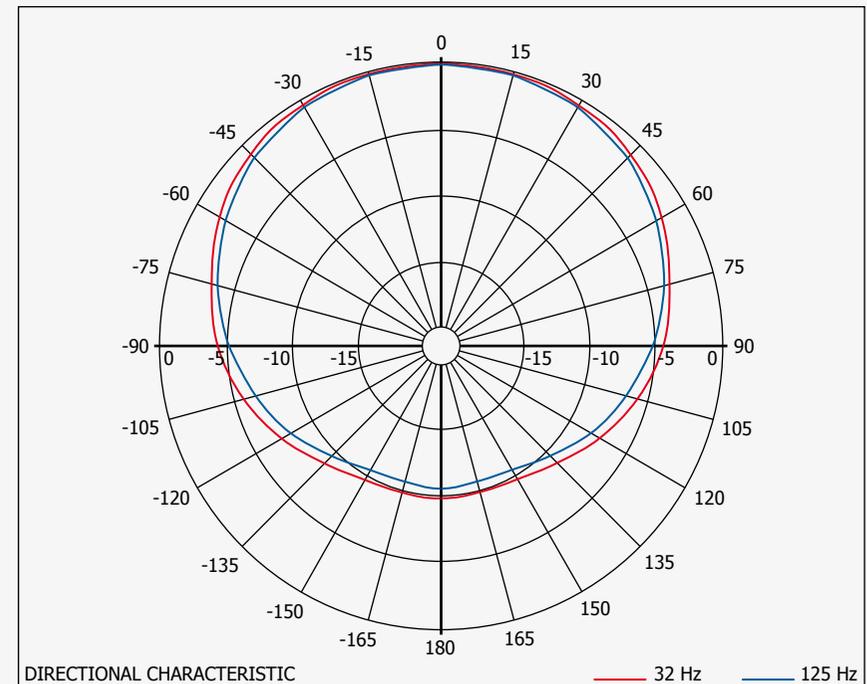
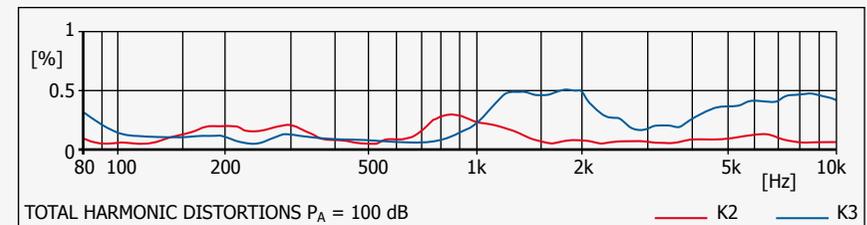
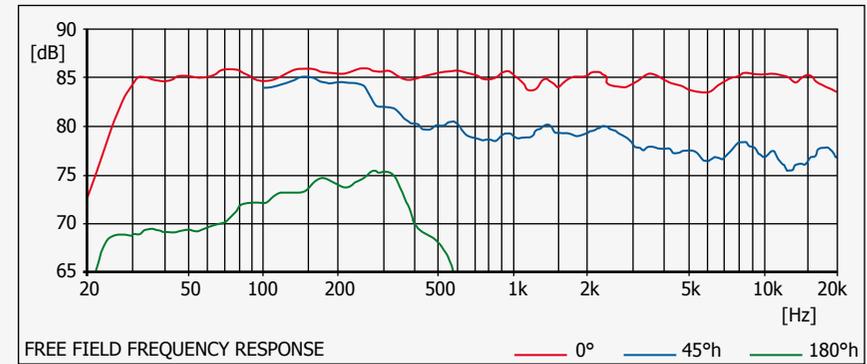
HUMIDITY

45 ... 75 %

DESIGN OF THE CABINET

MDF-wood in ash black veneered,
different veneers or colors optional

Acoustic diagrams



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