# musikelectronic geithain



Studio Monitor Loudspeaker MO-2



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

#### Our loudspeaker

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 you 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.

#### Studio Monitor Loudspeaker MO-2

The loudspeaker of the type MO-2 is a compact studio monitor of our MO series. It is qualified for the use in nearfield and middle-field applications as well as in outside broadcasting vans. With multichannel application we recommend the supplement by one of our active bass loudspeakers, BASIS 1...4. Because of the construction in an active coaxial two-way technology we can ensure sound colour compatibility to our studio control monitor loudspeakers. Moreover, by that constructive measure we can achieve high naturalness and homogeneity of the irradiated sound event. Also with regard to the localisation definition and the feasibly minimum imaging of phantom sound sources the MO-2 is seamless matched to all the loudspeakers of the RL and MO series. The directivity index was determined in such a manner that an operation is feasible up to 1m minimum basis width.

The loudspeaker unit is supplied with a 160 mm cone low-frequency driver and a 25 mm high-frequency dome driver

arranged coaxially. They are powered by separate MOSFET power amplifiers with an active crossover and electronic protection circuit in the back part of the cabinet. The MO-2 contains symmetric XLR input with calibrated input level adjustment.

According to the position of the monitor box the amplitude/ frequency curve can be well matched in the low- and in the high-frequency range as well as in the region about 300 Hz by means of the controls on the back side.

The status of operation and also the status when the maximum level is overridden will be signalized by a two-coloured LED. The loudspeaker is magnetically shielded for compensating stray fields.

The design of the box is finished in MDF with true veneer. Various special stands and holds are available as optional extras. The corresponding appliances are integrated in the case

#### **Specifications**

General active two-way monitor for use in medium

audio-, video production studios

Maximum SPL

from 100 Hz ... 6 kHz  $\frac{108 \text{ dB...}112 \text{ dB/ r}}{108 \text{ dB...}112 \text{ dB/ r}}$ 

Bandwidth 46 Hz...20 kHz  $\pm$  3 dB

Calibration:

Acoustic output level /  $P_E = -14 \text{ dBu}$  83 dB / r = 1 m

Directivity index

from 200 Hz...10kHz increasing from 1 to 9.5 dB

Inherent noise sound level < 7dB(A) / r = 1m

Total harmonic distortion

/ measured at 96 dB, r =1m,

from 80 Hz...10 kHz <-45 dB

Nominal input level +6 dBu adjustable

Input impedance > 10 kOhm / symmetrically

Nominal output power

of the MOSFET-amplifier

LF 80 Watt / 4 Ohm ( 100 W peak ) HF 80 Watt / 4 Ohm ( 100 W peak )

Electronic crossover frequencies 2.6 kHz

Operation and clipping indicator LED on front side

Input connector XLR 3F

Loudspeaker systems

Woofer 160 mm cone Tweeter 25 mm dome

Power requirements Europe 230 Volt (±10%), AC, 50 Hz

USA & Canada 115 Volt (±10%), AC, 60 Hz

Japan 100 Volt (±10%), AC, 60 Hz

Power consumption max. 100 Watt at full load

Temperature requirements

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

Dimensions (H x W x D) [mm] 398 x 254 x 245

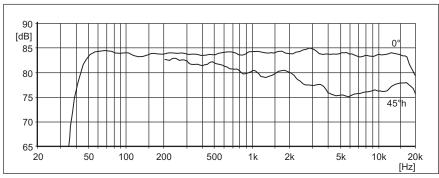
[inches] 15.66 x 10.00 x 9.64

Weight 11 kg

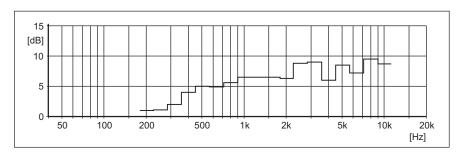
24 lb

Design of the Cabinet MDF wood, black veneer, different colors optional

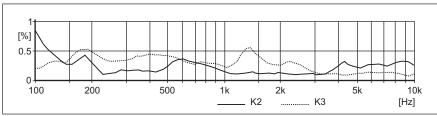
Magnetic shield optional



Free field frequency response



Directivity index



Total harmonic distortion P<sub>A</sub>= 96 dB

#### accessories

floor bracket stand: top edge box:

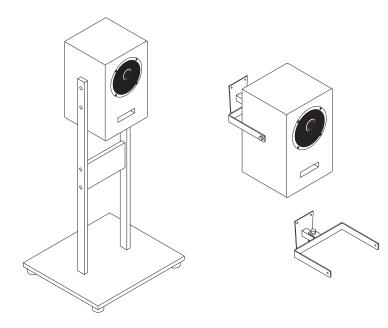
1156 mm 1386 mm

1516 mm

1656 mm

wall holder:

25° turning; inclining





# musikelectronic geithain gmbh studio techniques - sound reinforcement systems

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Nikolaistrasse 7 Tel: (+49) 34341 3110
04643 Geithain / Germany Fax: (+49) 34341 31144
www.me-geithain.de e-mail: info@me-geithain.de