



musikelectronic geithain

**ME 100**

**ME 100C**



**Instructions for installation and use**

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## **1 Introduction**

Dear customer,

Thank you for the trust you have put in us by buying these speakers. You decided upon a quality product that in regard to tonal and technical characteristics complies to the utmost expectations.

The usual burn-in period is not required, because the speakers are artificially aged in-house.

**Please read the technical description and manual to take advantage of the capabilities of these speakers and ensure safe operation.**

## **2 Disclaimer**

Technical data and appearances are subject to changes without notice. Errors and omissions excepted. Musikelectronic Geithain GmbH assumes no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Musikelectronic Geithain GmbH products are sold through authorized fulfillers and resellers only. Fulfillers and resellers are not agents of Musikelectronic Geithain GmbH and have absolutely no authority to bind Musikelectronic Geithain GmbH by any express or implied undertaking or representation. This manual is copyrighted. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Musikelectronic Geithain GmbH.

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### **3 System description**

The 6.5-inch woofer system and the 1-inch tweeter system of the ME100 passive 2-way coaxial loudspeaker are integrated into a vented cabinet and feature excellent linearity. Its mid-treble range qualities are highly independent of room characteristics, which contributes to uncomplicated spatial positioning of the loudspeaker. The particular radiation characteristics allow a well-balanced listening experience for a base width between 1.5 metres and 3 metres (4'11" and 9'10").

The ME100 performs very well as front and effect loudspeaker in surround systems. As a centre speaker the ME100C was designed, which is better integrable due to its lesser height. In addition the speaker is inclinable up to 15° to the top with the height-adjustable feet at the cabinet bottom. Therefore a perfect alignment to the listening position is possible. The centre speaker doesn't fall behind the ME100 regarding acoustical and technical performance. In connection with a suitable AV receiver, the surround system can be complemented with our BASIS models.

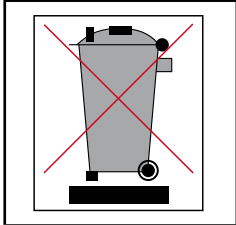
Optionally, a stand in matching veneer or colour with integrated cable duct is available.

The general concept of the passive 2-way coaxial loudspeakers ME100 and ME100C offers a high sound compatibility to the RL model range of active loudspeakers and convinces with its phenomenal spatial imaging and neutrality. Moreover, the monitors stand out due to their well-balanced and low-distortion sound pattern and their high dynamic qualities.

## 4 Basic information

### 4.1 Guidelines

This product complies to requirements of current European and national guidelines (2004/108/EG Electromagnetical Compatibility). The conformity is ascertained, corresponding declarations and records are deposited with the manufacturer.



Products built by us belong to B2C-class of the WEEE guidelines and must not be disposed with domestic waste.

### 4.2 Safety instructions

Like using any other electrical device you should observe the following operation guidelines, safety instructions and warning signs to ensure optimum functionality and safety of operation!

- ❖ Read these instructions carefully.
- ❖ Keep these instructions during the life cycle at a safe place. The instructions are an important part of the product.
- ❖ Heed all warnings. Follow all instructions.
- ❖ The product may only be used in accordance with the information provided in the user manual. Before and during the usage of the amplifier please ensure that all recommendations, especially the safety recommendations in the user manual, are adhered to.
- ❖ Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury, and damage to the product.
- ❖ Do not expose the device to direct sun radiation.
- ❖ Do not install the device in rooms with high humidity.
- ❖ Do not try to insert anything into device openings.
- ❖ The device shall not be exposed to dripping or splashing and no objects filled with liquids shall be placed on the device.
- ❖ Clean only with dry or slightly moistened cloth.
- ❖ Refer all servicing to qualified service personnel.

### 4.3 Unboxing

The speakers are shipped in proper condition. Unpack the speaker carefully and check for visible damages. In case of damages report them to your retailer. Keep the packaging, in case the speaker has to be transported in the future.

### 4.4 Delivery contents

- ◀ Speaker ME 100 / ME 100C
- ◀ Technical description and user manual

### 4.5 Cleaning

The speaker is made of real wood veneer and needs to be nurtured in the same way as furnishings. We advise quality wax polish to ensure durability of the veneer. Surfaces can also be cleaned with tidy, slightly dampened, fuzz-free, smooth cloth.

### 4.6 Environmental conditions

Ensure the following environmental conditions in your listening room:

- ◀ Operating temperature                      +15 °C ... +35 °C (+59 °F ... +95 °F)
- ◀ Storage temperature range                –25 °C ... +45 °C (–13 °F ... +113 °F)
- ◀ Relative humidity                            45 % ... 75 %

### 4.7 Guarantee acknowledgements

Opening the device by unauthorized personnel leads to all claims under guarantee expire. In case of destruction by overload, misuse or outside influences there are no claims under guarantee.

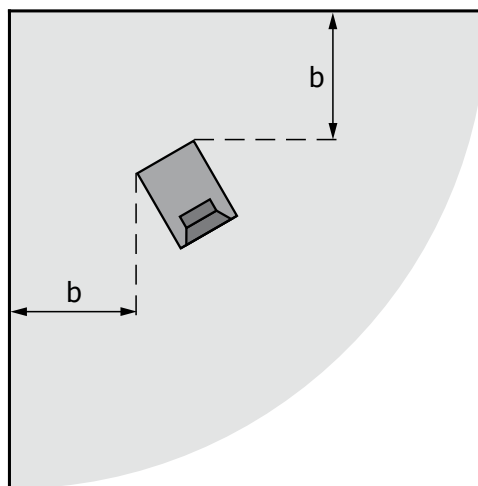
## 5 Positioning

Our speakers do not impose special requirements neither in stereo nor in multichannel set-ups. Nonetheless speaker positioning has influence on listening impression because every room is individually designed and furnished. The following advices are just guidelines that ease proper positioning. In addition we offer a measurement service to take advantage of the capabilities of your listening environment.

### 5.1 Positioning near walls

When speakers are installed near walls sound quality is physically affected. Every customary speaker behaves as a punctual sonic source in the low frequency range, with sonic waves spherical radiated without any constructional measures. Back wall reflections are unavoidable.

For optimum listening experience a minimum distance of 50 cm (19.7") to walls and furniture should be ensured. Avoid corner installations because unwanted bass accentuation could arise.



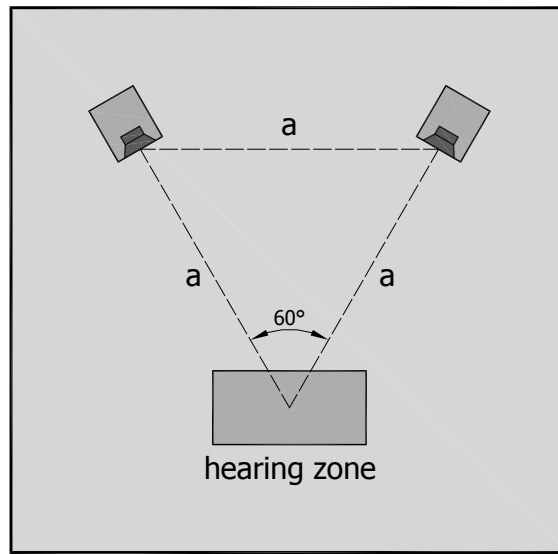
◀ Minimum distance to wall

$b \geq 50 \text{ cm (19.7")}$



## 5.2 Stereo operation

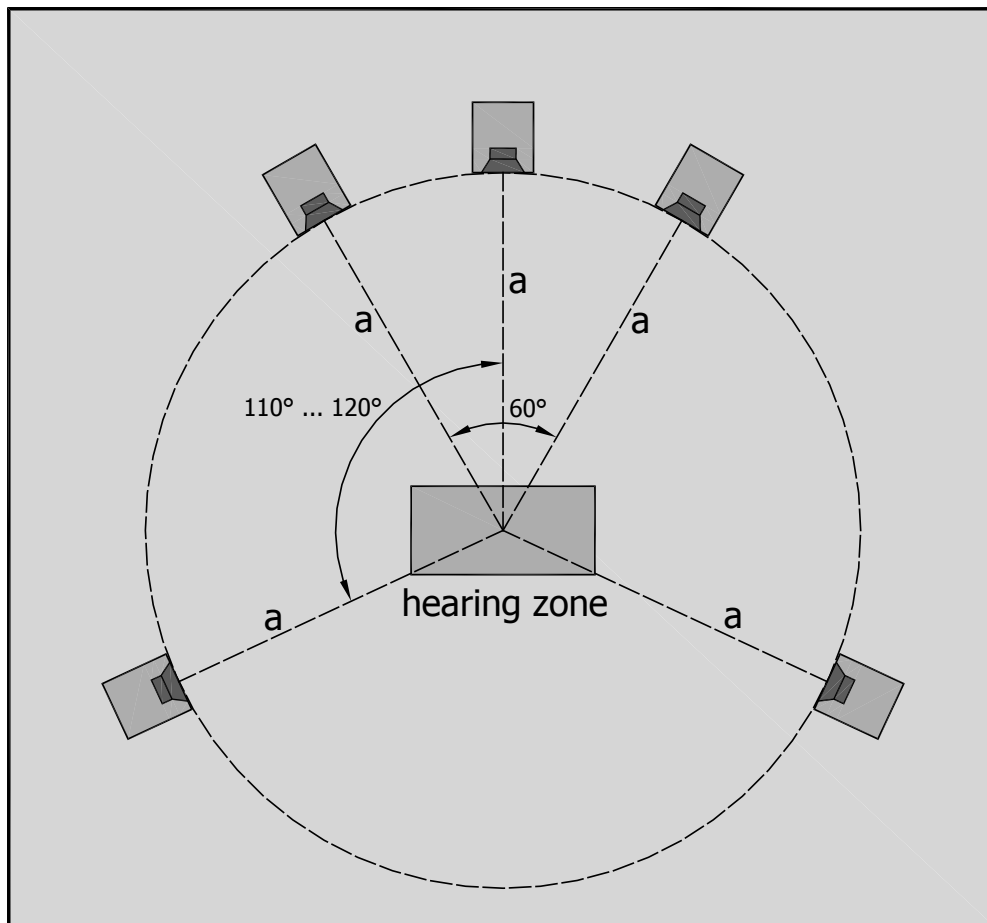
The optimum position of the speakers in your listening environment is the so-called stereo triangle (see figure). The base distance between the speakers and the distance to the hearing zone form an equilateral triangle (stereo triangle). A distance less than 1.5 m (4'11") or more than 3 m (9'10") should be avoided. For precise, spacial reproduction turn the speakers inside, directed to the hearing zone.



- ◀ Distance between speakers and your listening position  $a = 1.5\text{ m} \dots 3\text{ m}$  (4'11" ... 9'10")
- ◀ Adjust the speaker horizontally to the height of the ear at the listening position

### 5.3 Surround operation

In surround operation the stereo triangle (see Stereo operation) is extended to a circle. The hearing zone is the centre of this circle. Position all speakers in the same distance to the hearing zone. The centre speaker is positioned in the middle between both front speakers. Pay attention to positioning the front and rear speakers horizontally along one plane. The angle between centre and rear speakers should be about  $110^{\circ}$ – $120^{\circ}$ .



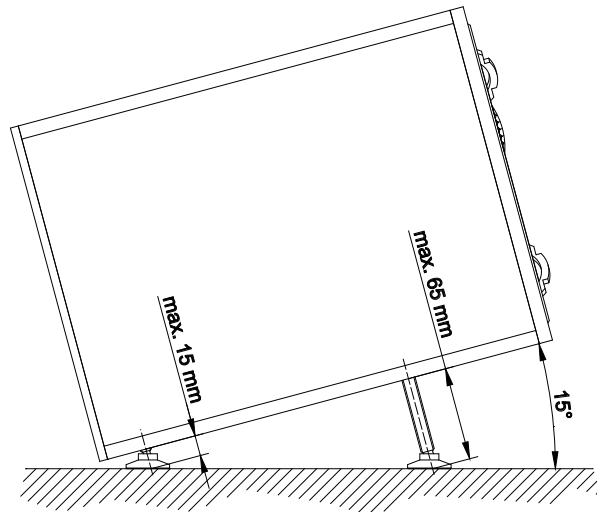
- ◀ Distance between speakers and your listening position  $a = 1.5\text{ m} \dots 3\text{ m}$  (4'11" ... 9'10")

In case installation in the prescribed way is not possible in your listening room most decoding devices allow adjustments of single speakers.

#### 5.4 Alignment of the center speaker ME 100C

In order to allow a perfect alignment of the center speaker ME 100C to the listening position, three height-adjustable feet, consisting of an M8 or M10 threaded bolt and a support surface supported in the ball joint, are located in the housing bottom of the loudspeaker. The design ensures that the feet of the feet are always flush with the ground at every adjustable tilt angle. The M10 threaded bolt of the front foot has a ejection length of 65 mm (2.6") and therefore a maximum inclination angle of 15° upwards is possible. Twist the two rear legs, with M8 threaded bolts and having a screw-in length of 15 mm (0.6"), out of the bottom of the enclosure only so that the support surface of both feet can move freely in the ball joint. As a result, these supporting surfaces can also assume the set tilt angle.

When aligning the ME 100C, pay attention to the maximum ejection length of the height-adjustable feet as they can be completely screwed out of the enclosure (see the next figure).



Do not operate the center speaker without the preassembled height-adjustable feet, otherwise air escapes through the threaded holes, affecting the reproduction quality.

When setting up the center speaker, make sure that there is at least 5 cm (2") space above the loudspeaker.

## **6 Connecting the speakers**

Our passive speakers are no difficult load to common amplifiers. An amplifier power of 80 W ... 150 W at 4  $\Omega$  is suggested. Due to the linearized impedance the operation with tube amplifiers is possible without difficulties. Your authorized ME Geithain dealer will gladly provide you with professional advice.

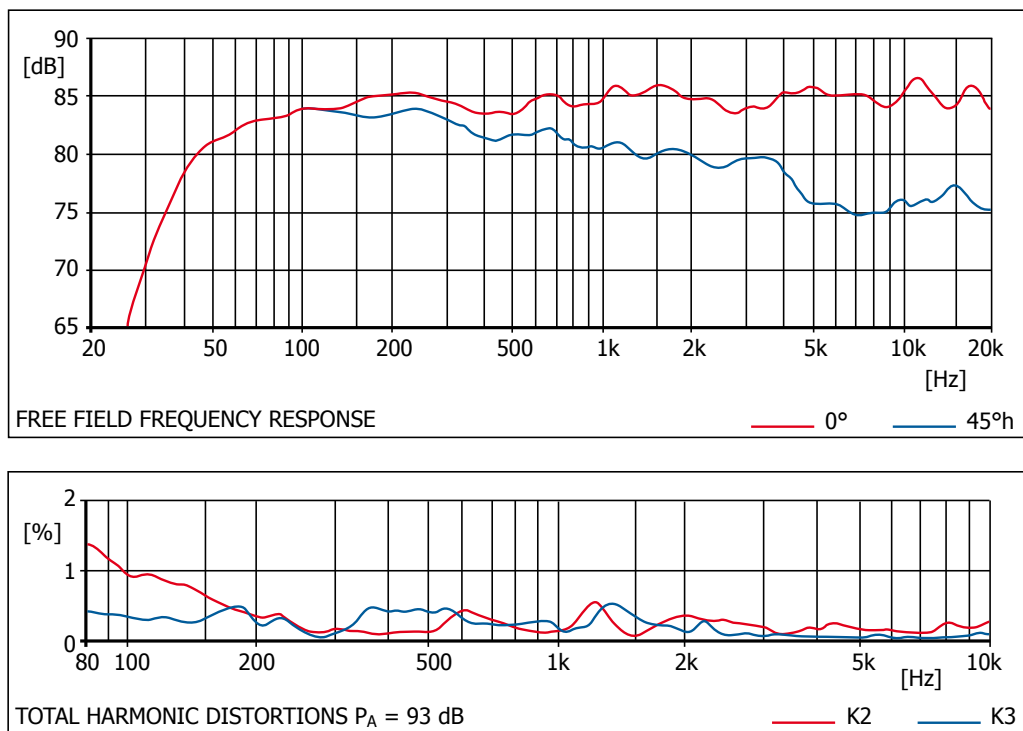
When connecting the speakers to an integrated amplifier or a power stage check the connection for the right polarity. The gold-plated screwed joints of the terminal are labelled with + and a -. Both mustn't be interchanged.

## 7 Specifications

General	Passive high-end coaxial loudspeaker for listening distances between 1.5 m (4'11") and 3 m (9'10")
Principle of construction	Coaxial 2-way system in vented cabinet
Maximum SPL	111 dB peak / $r = 1 \text{ m}$ (3'3") ( $4\pi$ )
Bandwidth	50 Hz ... 20 kHz $\pm 3 \text{ dB}$
Sensitivity	85 dB / $r = 1 \text{ m}$ (3'3")
Directivity index from 100 Hz ... 10 kHz	increasing from 1 dB to 8 dB
Total harmonic distortion measured at 93 dB <sub>SPL</sub> / $r = 1 \text{ m}$ (3'3") from 100 Hz ... 10 kHz	$\leq -40 \text{ dB}$
Impedance	4 $\Omega$
Electronic crossover frequency	2.5 kHz
Nominal power handling	100 W
Maximum power handling	150 W
Recommended amplifier output power	80 W ... 150 W
Input connector	gold-plated binding posts
Drive units	
Woofer	1 $\times$ 160 mm (6.5") cone
Tweeter	1 $\times$ 25 mm (1") dome
Environmental conditions	
for use	+15 °C ... +35 °C (+59 °F ... +95 °F)
for storage	-25 °C ... +45 °C (-13 °F ... +113 °F)
humidity	45 % ... 75 %
Dimensions (H $\times$ W $\times$ D)	
ME 100	398 mm $\times$ 254 mm $\times$ 345 mm (15.7" $\times$ 10" $\times$ 13.6")
ME 100C	254 mm $\times$ 398 mm $\times$ 345 mm (10" $\times$ 15.7" $\times$ 13.6")
ME 100 with stand	1,109 mm $\times$ 275 mm $\times$ 365 mm (43.7" $\times$ 10.9" $\times$ 14.4")
Weight	
ME 100	12 kg (26.5 lbs)
ME 100C	12 kg (26.5 lbs)
ME 100 with stand	18 kg (39.7 lbs)
Design of the cabinet	MDF wood in ash black veneered; different veneers and colours on request
ME 100	none; lateral mounting on request
ME 100C	with height-adjustable feet at the cabinet bottom
Stand	on request for ME 100

## 8 Acoustic measurements

All acoustic measurements are carried out under anechoic conditions with 1 m (3'3") distance.



## 9 Notes

BDA\_ME 100\_ME 100C\_17.05.2018\_ENV17



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