



*Exklusive Hi-Fi-Komponenten*  
MADE IN GERMANY

**mbi 121**  
**Radialstrahler Compact**  
Owner's Manual

## Preface

Dear customer,

We are glad that you decided to become an owner of the world's best loudspeaker: the Radialstrahler.

This speaker is a handcrafted product carefully fabricated in our Berlin factory. Like all handmade products every speaker has something special that makes it unique. During the handcrafting procedure of this speaker we took attention even to the smallest detail to become perfect.

Each system is measured and recorded in all technical details to fulfill the highest demands on sound quality.

The Radialstrahler is a State-of-the-Art advanced technology product, which is outstanding in sound quality and appearance.

This omni-directional speaker is a breakthrough to a new world of music enjoyment: you will get a 3-dimensional experience.

We are sure you will explore a new dimension of listening pleasure.

Wolfgang G. Meletzky  
and all staff members involved in the creation of  
this excellent product.

## Contents

<b>1.</b>	<b>Speaker set up .....</b>	<b>5</b>
1.1.	Prearrangement .....	5
1.2.	General set up tips .....	5
1.3.	Speaker positioning.....	5
1.4.	Set up and fine-tuning .....	6
<b>2.</b>	<b>Connecting speaker / power amplifier .....</b>	<b>8</b>
<b>3.</b>	<b>Sound optimization and adjustment of Radialstrahler .....</b>	<b>10</b>
3.1.	Spikes .....	10
<b>4.</b>	<b>Removing the cover .....</b>	<b>12</b>
<b>5.</b>	<b>Cleaning the speaker.....</b>	<b>12</b>
<b>6.</b>	<b>The mbl 121 .....</b>	<b>13</b>
<b>7.</b>	<b>Specifications .....</b>	<b>14</b>

### **Important Information!**

**Attention:** Keep the speakers away from high humidity, vibration, excessive dust and direct sunlight. Excessive heat or cold will affect the speaker's functionality. The permitted operating temperature is 10°C up to 50°C. Avoid extreme variations in temperature. Do not operate the speaker near other electric appliances (for instance neon light and motors).

**Do not touch** the membrane of the tweeter and the midrange driver.

### **KETI, CE-Marking**

This product conforms to the requirements of the EMC directive and low-voltage directive. Your MBL component complies with the household power and safety requirements in your area.



### **Warranty**

MBL affords a **full warranty**. Please pay attention to the details given in the **warranty card** which accompanies the unit. Warranty is only issued, if you send back the **warranty card**.

# 1. Speaker set up

## 1.1. Prearrangement

A simple "clapping test" will give you important information on the acoustic conditions in your room. Walk up and down in the area where you want to set up the speakers and clap your hands loudly. Pay attention to the echoes reflected. If they are either extremely loud or extremely long (flutter effect), the room's reverberation is high and it is recommended to work with dampers.

To damp the room use sound absorbing elements like carpets and curtains. Diffusers like plants or bookshelves between the corner of the room and the speakers help to improve the acoustic pattern.

## 1.2. General set up tips

For best performance the speakers should be set up in front of a hard part of the room (e.g. a solid wall or in front of non-vibrating windows).

If possible, set up the speakers on the longer wall.

Shelves or hi-fi racks located between the speakers (also at the wall) should not be higher than 1 meter (40 in).

## 1.3. Speaker positioning

Transfer your room dimensions (longer and shorter side of the room) on a handmade drawing (note the example given on page 7).

Set the speakers on the drawing.

To find out their optimal position proceed as follows:

### **Stereo base (a)**

At first define the **stereo base**, that is the distance between the speakers (**a**). The stereo base should be at least 2 meter (80 in) up to 3.5 meter (140 in).

### **Back wall distance (b)**

The distance between the back wall and the speakers (**b**) should be at least 0,8 meter (32 in).

**Side wall distance (d)**

Now evaluate the distance between each speaker and the respective side wall (**d**).

If you set up the speakers on the longer side of the room (recommended) use the following formula:

$$d = b \times 1,32$$

**Note:**  
1.32 variable up to

If you prefer a setting of the speakers on the shorter side of the room:

$$d = \frac{b}{1,32}$$

**Note:**  
1.32 variable up to

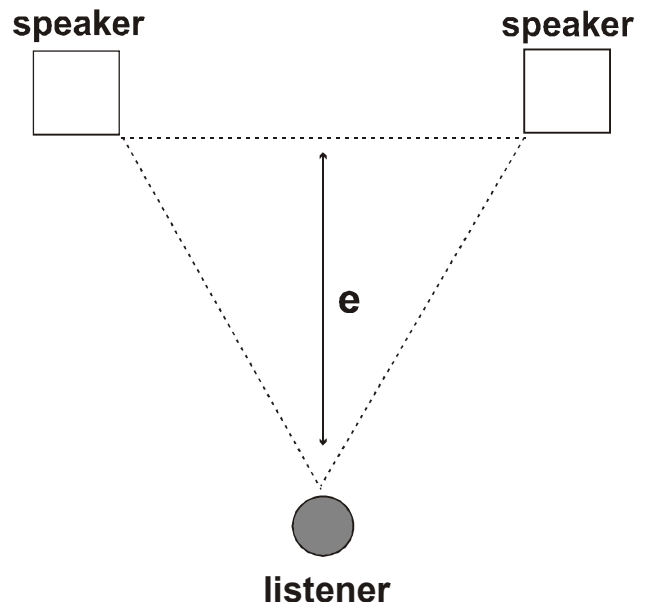
**Listener's position**

Eventually find out the optimal listener's position.

The distance between the listener's position and the speakers (**e**) should be at least 1meter (40 in).

The distance from the rear wall to the listener's position (**c**) should be at least 0,8 meter (32 in)

If the resulted data do not fit to your room, change the distance (**b**).

**1.4. Set up and fine-tuning**

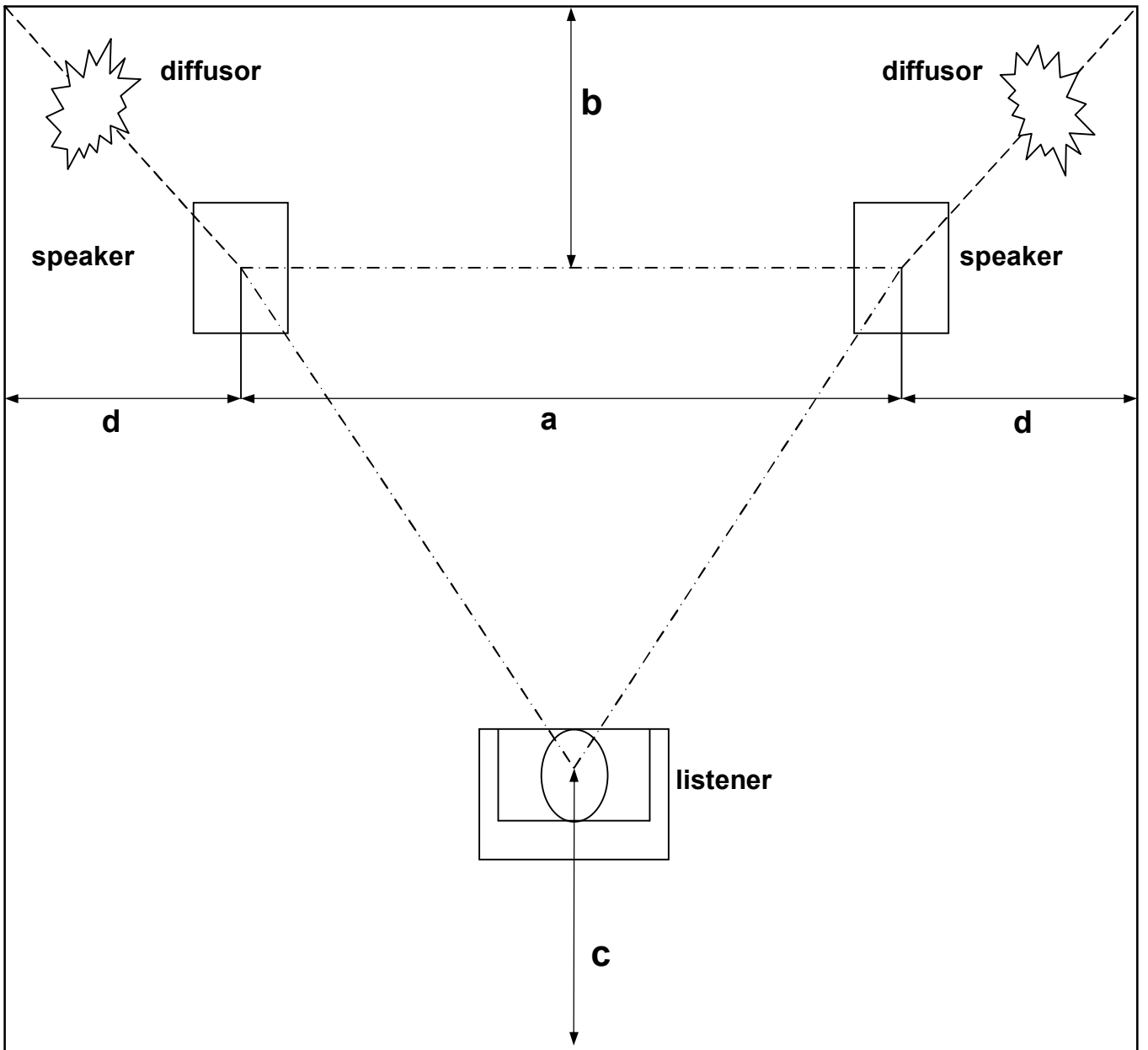
After you figured out the speaker's position, install your hi-fi system and set up the speakers.

For a fine-tuning move the speakers.

If you have chosen the optimal configuration, you can screw the spikes on the Radialstrahler's feet (depending on what type of floor you have).

If you have normal carpeting or solid flooring, you won't have to use the spikes (see **Sound optimization**).

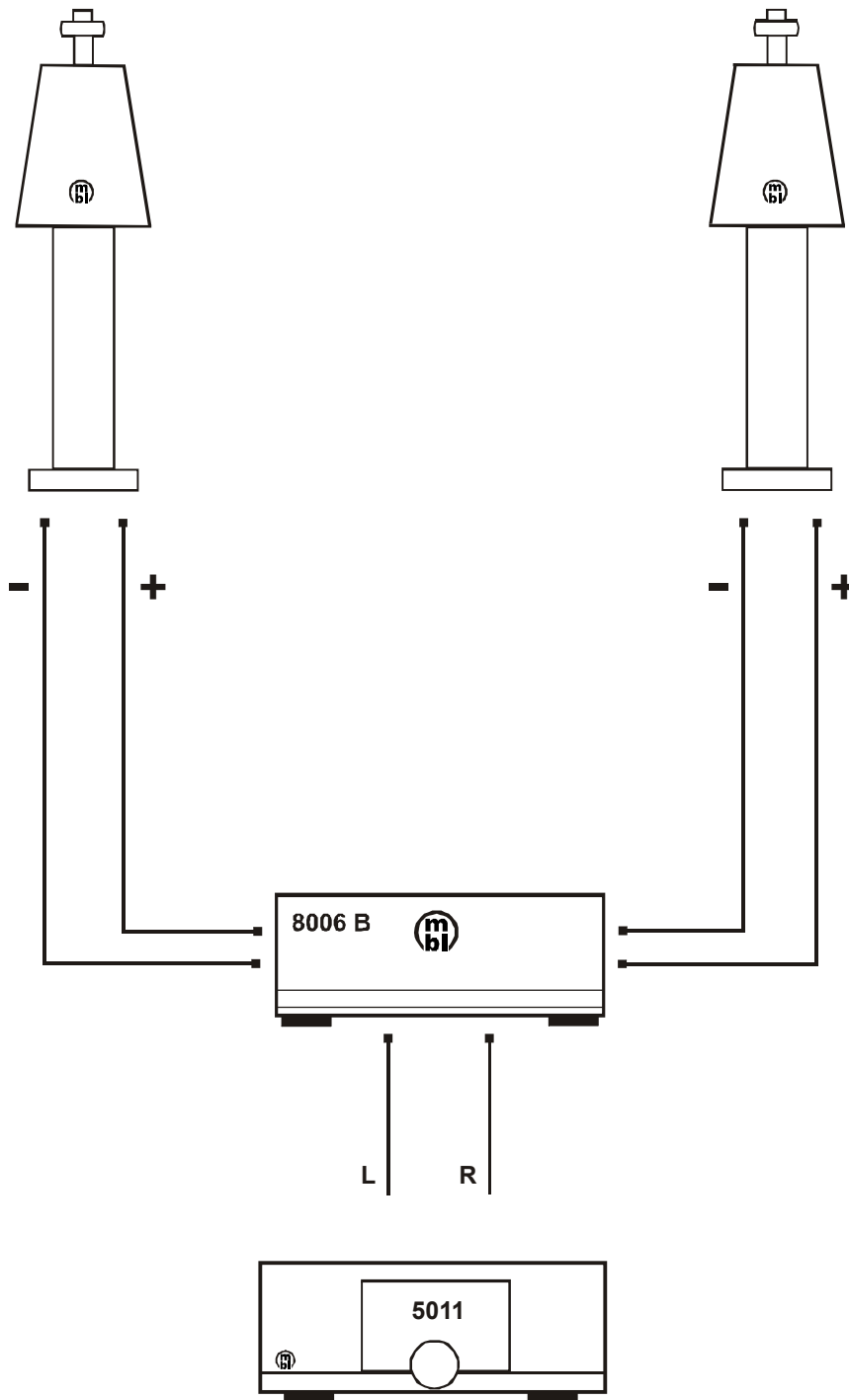
Run in the speakers for at least 100 hours and do another fine-tuning, if necessary.



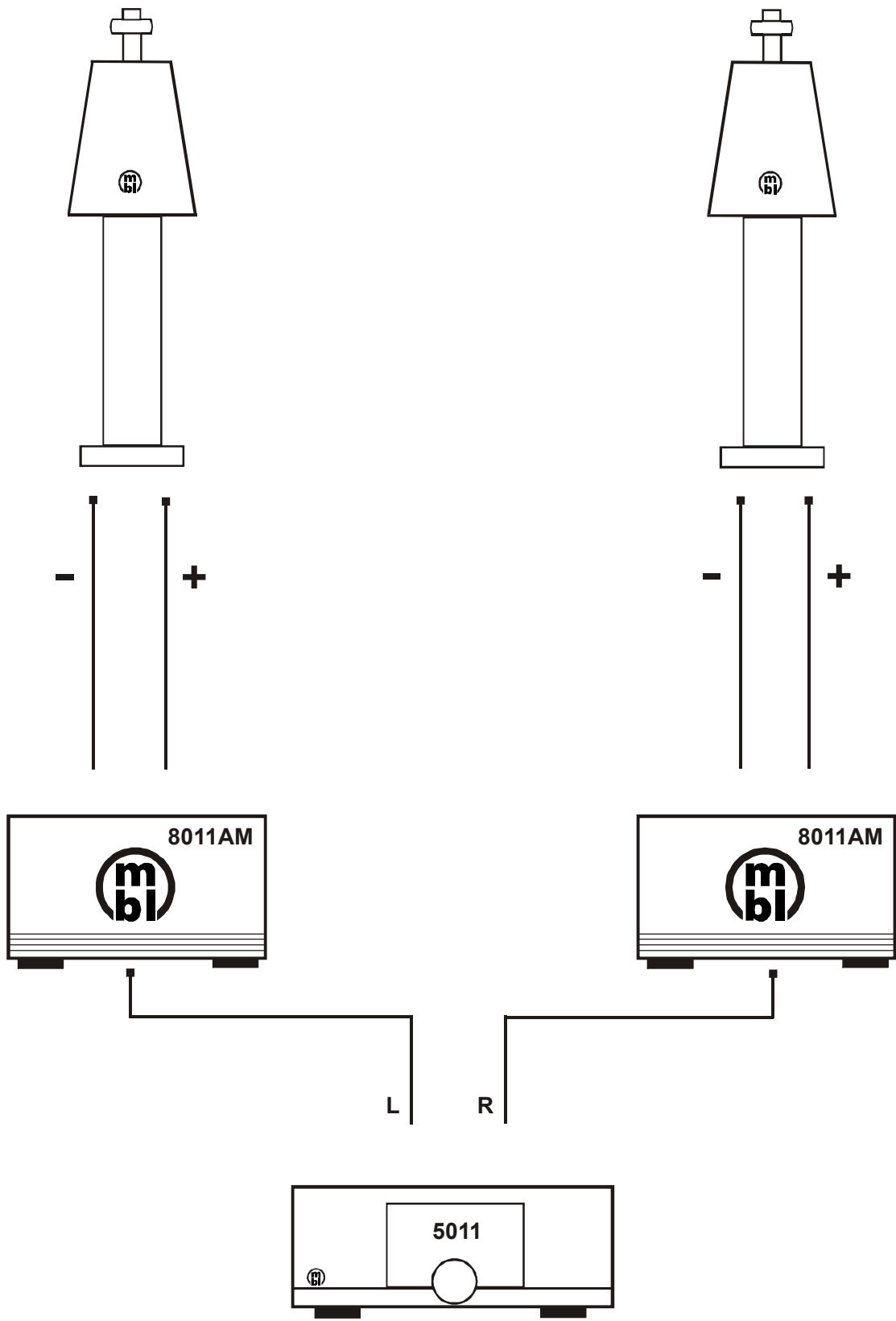
**Fig.1:** positioning of the Radialstrahler Compact

## 2. Connecting speaker / power amplifier

**Attention:** Please connect the plus terminal (red) of the poweramp with the plus terminal (red) of the speaker. The power-amp's minus-terminal (white or black) must be connected to the speaker's minus-terminal (white or black).



**Fig.2:** Configuration with 1 power amplifier mbl 8006 B



**Fig.3:** Configuration bi-amping, 2 power amps mbl 8011M

### 3. Sound optimization and adjustment of Radialstrahler

#### 3.1. Spikes

To adjust the bass response to your room you can use the enclosed spikes (Fig.4).



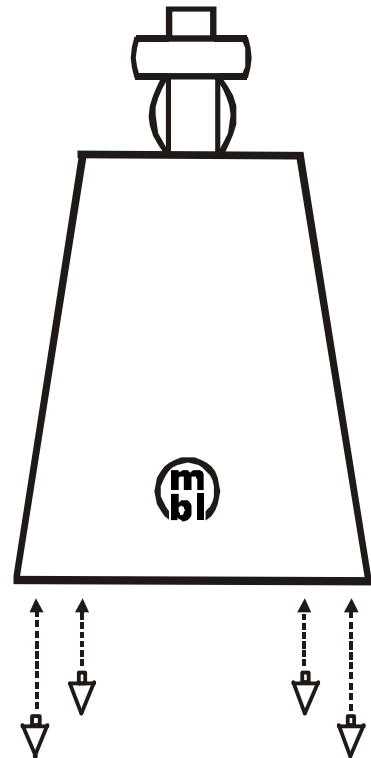
**Fig.4:** spikes and plates

#### 3.2 Place the mbl 121 on a rack

To achieve optimum listening pleasure make sure that the mbl 121 are placed on a height of 0,7 m (27,5").

For individual bass adjustment you can use the enclosed spikes.

Screw the spikes into the inserts located on the bottom plate of the speaker. (Fig.5)



**Fig.5:** screwing spikes into speaker's bottom plate

### 3.3 Place the mbi 121 on speaker stands

It is especially recommended to place the mbi 121 on speaker stands.

To attain optimal stability you should fill the speaker stand with silicone sand.

If you prefer a strong bass, place the speaker stand directly on a solid ground without using spikes.

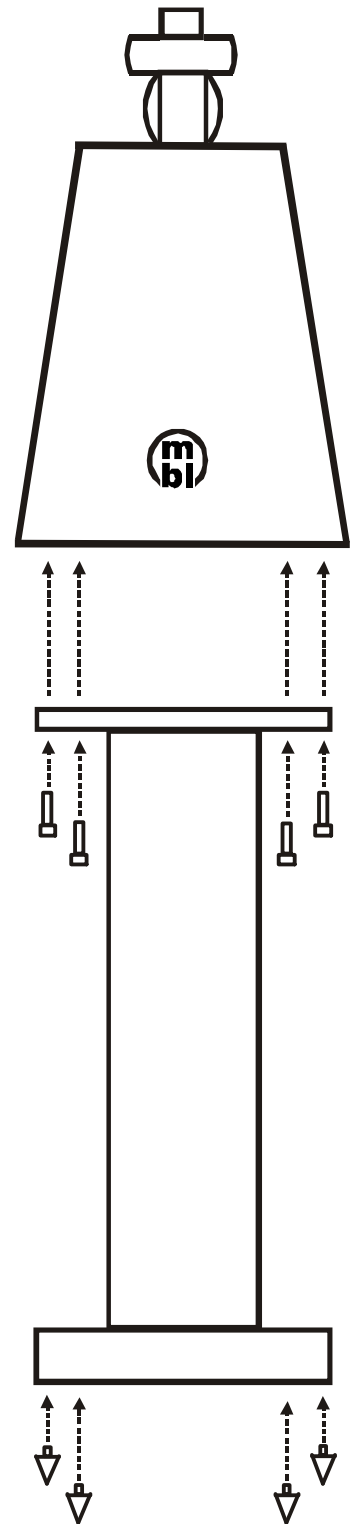
To achieve a tighter bass with more impact, screw the spikes into the speaker stand's feet, so that the speaker stand stands on the spikes. (Fig.7 bottom) To protect your floor it is recommended to use the enclosed plates. (Fig.4)

In case that the floor is covered with a thick carpet, the speaker stand does not stand firmly. Due to this reason the bass may sounds uncontrolled without definition. Use the spikes to avoid this.

After positioning the stands, screw stand and speaker together (Fig.7 top) with the enclosed screws. (Fig.6)



**Fig.6:** screws



**Fig.7:** mounting speaker stand and spikes

## 4. Removing the cover

1. Cautiously pull the cover a little forward to unsnap it from the cabinet.
2. Then release the snap-in on the back of the cover by pulling it upwards.
3. Now the cover is removed from the speaker.

## 5. Cleaning the speaker

To clean the speaker from dust and dirt is only required for optical reasons. Normal dirt does not affect the sound.

At first remove the cover. (see 4.)

### **Tweeter and midrange driver**

To clean the magnet housing of the tweeter and the midrange driver use a **soft** cloth or shaving brush.

**Do not touch the membrane of the tweeter and the midrange driver!**

### **Cabinet**

Clean the **piano** finish cabinet with a gentle suds, then dry with a soft cloth. Clean the **satin** finish cabinet with a cloth moistened with lukewarm water, then dry with a soft, lint free cloth.

**Caution:** The cloth must **never be dripping wet!** If water or other fluids enter the cabinet, you risk damaging the unit.

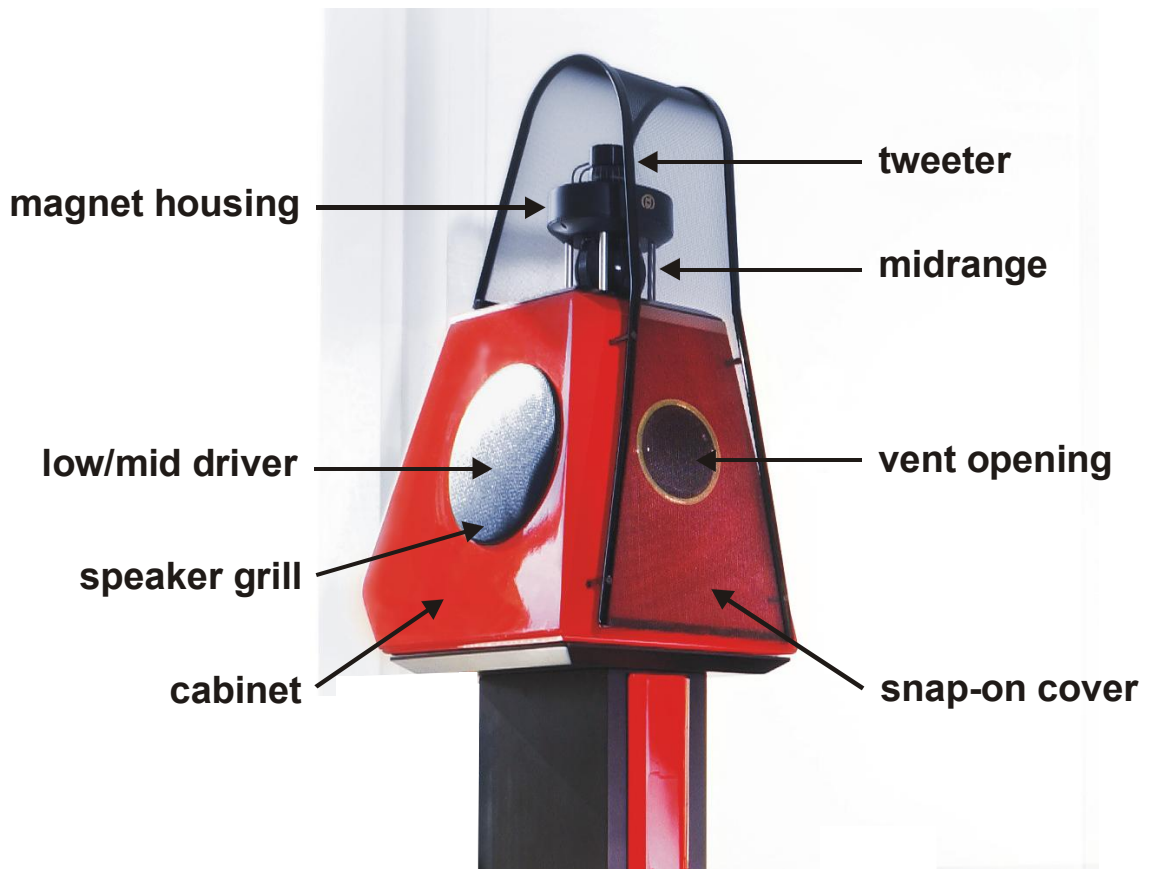
### **Cover**

Clean the cover with a soft shaving brush.

**Never** use scouring pads, steel wool, scouring powders or harsh chemical agents, alcohol, thinners, benzine, insecticide or other volatile substances, as these will destroy the finish of the cabinet.

**In all instances of malfunction or questions please contact your local MBL-dealer.**

## 6. The mbi 121



**Fig.9:** The mbi 121

## 7. Specifications

	<b>mbl 121 Radialstrahler Compact</b>
<b>System</b>	3-way
<b>Frequency range</b>	49 Hz to 30,000 Hz
<b>Impedance</b>	4 $\Omega$
<b>Efficiency</b>	82 dB @ (2.83V/ 2 $\pi$ )
<b>Crossover frequencies</b>	600 Hz / 3500 Hz Linkwitz-Riley, 4th order
<b>Power handling</b>	280 W/ 400 W
<b>Midrange low</b>	Double push-push 2x140 mm/5.5" Aluminium
<b>Midrange high</b>	Radial MT50, CFK (MBL)
<b>Tweeter</b>	Radial HT37AI, CFK (MBL)
<b>Finish</b>	Black, silver, veneer ( <b>satin/piano</b> )
<b>Dimensions</b> (W x D x H)	280 x 350 x 430 mm (H = 570 mm with cover) 11 x 13.5 x 17.5 inch (H = 23 inches with cover)
<b>Weight</b>	20 kg, 44 lbs each

Design and specifications are subject to change without notice.





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