

# REFERENCE LINE



unique high end audio

## Mono/Stereo Power Amplifier Mono/Stereo Endstufe



mbl 9007 | mbl 9008 A | mbl 9011

ENGLISH ▶

DEUTSCH ▶

OWNER`S MANUAL  
BEDIENUNGSANLEITUNG

## Important Information!

**Attention:** The unit must be protected against humidity, vibration and excessive dust and should not be exposed to direct sunlight or intense sources of heat (radiators). Do not operate the unit in the immediate vicinity of sources of electrical interference (e.g. fluorescent lamps or electric motors). The permitted operating temperature is 10°C up to 40°C (50°F up to 104°F). Avoid extreme variations in temperature.

Do not operate the unit under condensation! After exposure to low temperatures allow the unit to warm up for at least three hours.

Do not open the unit and do not make any alterations to it.

If you wish to place the unit on a rack, you must ensure sufficient ventilation. Minimum clearances of 10 cm (4 inch) above the unit and 2 cm (0,8 inch) on all sides must be observed. The ventilation openings of the unit must not be covered with tablecloths, magazines, curtains and the like in order not to interfere with the heat dissipation.

Make sure that no fluid-filled vessels (glasses, vases...) are put on the device to prevent water from ingressing the device, and the device is never exposed to splash water.

**NEVER** switch power amplifier on when no speaker is connected!

## 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

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.



Page	
3	<b>1. Placement</b>
3	<b>2. Connecting Power Amplifier(s) to Speakers and Preamplifier</b>
4	2.1 General Information Wiring
5	2.2 a) Connecting to speakers in stereo mode, single wiring
6	2.2 b) Connecting to speakers in stereo mode, bi-wiring
7	2.2 c) Connecting to preamplifier in stereo mode
8	2.3 a) Connecting to speakers in mono mode, single wiring
9	2.3 b) Connecting to speakers in mono mode, bi-wiring
10	2.3 c) Connecting to preamplifier in mono mode
11	2.4 a) Connecting to speakers in stereo mode, bi-amping (2 power amps)
12	2.4 b) Connecting to preamplifier in stereo mode, bi-amping (2 power amps)
13	2.5 a) Connecting to speakers in mono mode, bi-amping (4 power amps)
14	2.5 b) Connecting to preamplifier in mono mode, bi-amping (4 power amps)
15	<b>3. Installation</b>
15	3.1 Power Switches
16	3.2 Mains Voltage
16	3.3 Fuses
16	3.4 First Operation
16	3.5 Standby Mode and Sleep Mode
17	3.6 Remote switching-on
17	<b>4. Maintenance</b>
18	<b>5. Troubleshooting</b>
19	<b>6. Views</b>
19	6.1 mbl 9011 Views
20	6.2 mbl 9008 A Views
21	6.3 mbl 9007 Views
22	<b>7. Specifications</b>

## 1. Placement

Please ensure that there is sufficient ventilation and flow of air on all sides of the amplifier. There must be a minimum space of 10 cm (approx. 4") above the amplifier so that the heat can escape.

**Note:** Never completely cover or operate the amplifier in a place with insufficient flow of air. If you do, the amplifier may over-heat.

In case you wish to operate two or more amplifiers never stack them. You may place them on shelves or fit them under a cabinet. Remember to keep the minimum space of 10 cm (approx. 4") above the amplifier.

Keep the amplifier away from humidity, vibration, excessive dust and direct sunlight. Do not operate the amplifier near other electric appliances (for instance neon lights and motors).

## 2. Connecting Power Amplifier(s) to Speakers and Preamplifier

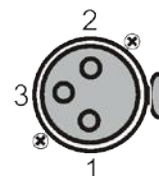
To connect your power amplifier(s) properly to your loudspeakers and your preamplifier please refer to the following descriptions and diagrams.

**Attention!** The power amplifier works fully balanced, if operated as mono block. The minus-terminals are not connected to ground. Therefore, never connect any ground-related potentials, as is common with active and semi-active speaker systems (including active subwoofers).

**Advice:** Remove all cables from inputs that are not in use.

Pin assignment of XLR plug

- 1 =  $\perp$  ground
- 2 = + in phase
- 3 = - off phase



## 2.1 General Information Wiring

### **Please note when wiring your amps mbl 9008 A and mbl 9011:**

In the planning of high quality music systems, the cabling plays an important role. Users should pay particular attention to the selection of the proper cable and cabling structure. This is especially true when the music system works with high-quality amplifiers with high bandwidths, such as the mbl 9011 or mbl 9008 A.

Increasingly, it should be noted that some cable manufacturers offer quite exotic cable types in addition to well-functioning cable designs and recommend alternative cabling types and structures. However, this does not always lead to the desired optimization of the sound, but on the contrary can lead to a deterioration of the sound quality or even cause damage to or destruction of individual components of your music system.

To prevent this, when using our amplifiers mbl 9008 A or mbl 9011, please consider the following points. We expressly point out that non-observance can lead to sound degradation and malfunction or damage to portions of your music system:

1. The plus conductor and minus conductor of your speaker cable must run together in a common cable. A separate routing of the lines would lead to the formation of a magnetic field, which would be greater, the greater the distance between the lines. This would increasingly occur, particularly at higher frequencies, since the magnetic field is proportional to the square root of the frequency.
2. All signal cables between the individual components of the music system must be shielded. Never use unshielded or "floating shield" cables, even if they are currently highly touted by some cable manufacturers. Non-compliance leads to interference of radio signals from mobile phones and mobile phone masts, Wi-Fi radio waves, DECT signals or other RF signals.
3. Input cable to the power amps should never be laid parallel to the speaker cables, since this would lead to interference of the output signal in the input signal. If at all possible, please cross the input cable and the speaker cable at 90 degree angles to minimize this potential.

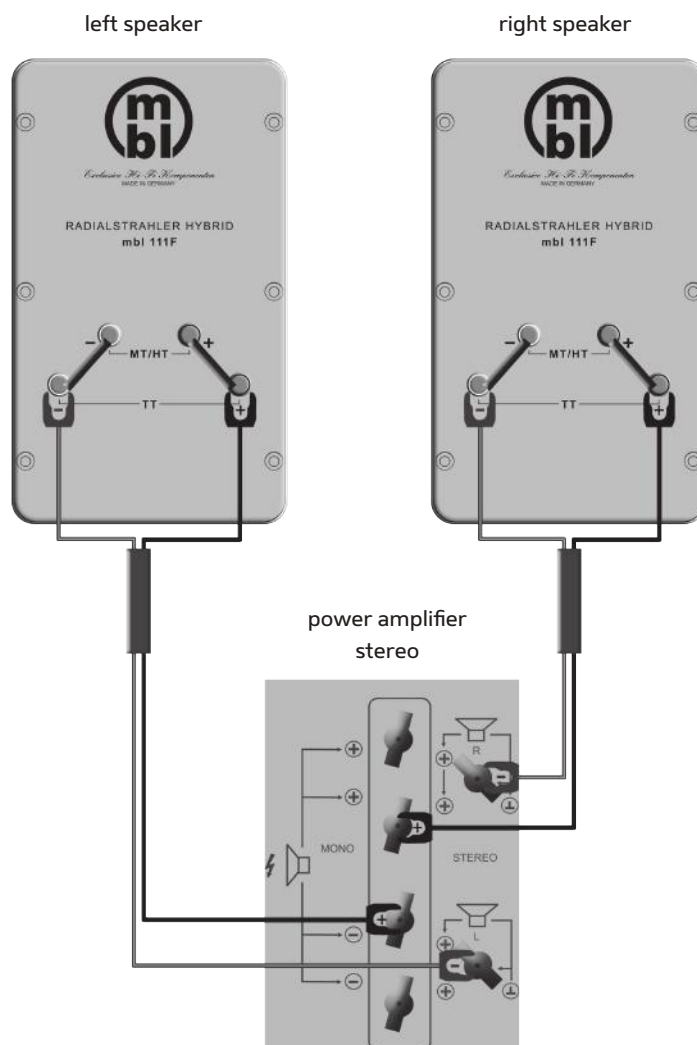
Strict observance of the above points will ensure that no high frequency magnetic field is created which might intersperse in the input signal and lead to the intensification of magnetic positive feedback and oscillation. Such effects could otherwise result in damage to or destruction of the output stage, harm loudspeaker parts/drivers, etc.

## 2.2 a) Connecting power amplifier to speakers in stereo mode, single wiring

Note the imprint **STEREO** on the back of the power amplifier.

If you want to connect one power amplifier to your loudspeakers in single wiring mode, use the STEREO connectors on the back of the power amplifier. Connect the right speaker to the terminal area marked with R and the left speaker to the terminal area marked with L. Connect the minus terminal of each speaker with the respective ground connector (⊥) of the power amplifier. Connect the plus terminal of each speaker to the respective plus connector (STEREO) of the power amplifier.

### Example with mbi 111 F Radialstrahler Hybrid



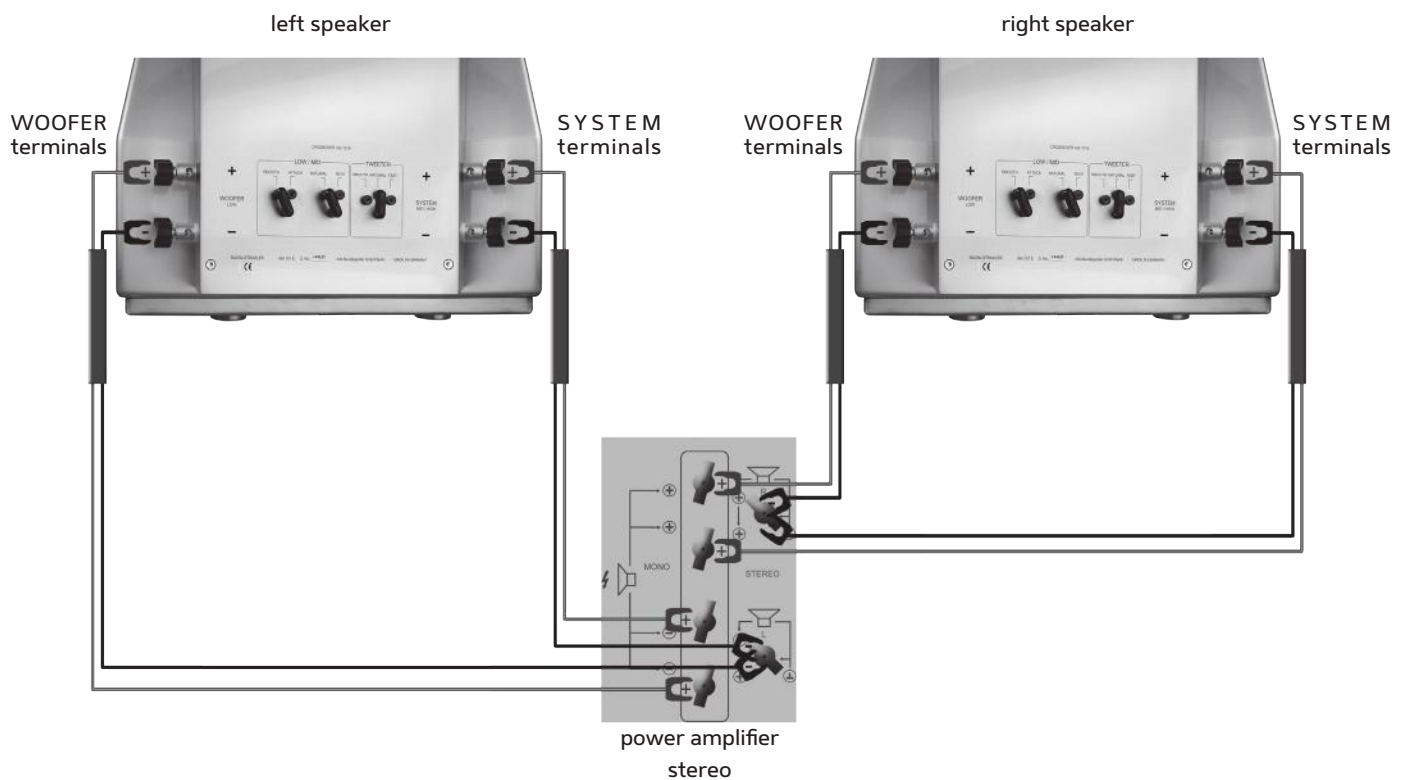
## 2.2 b) Connecting power amplifier to speakers in stereo mode, bi-wiring

Note the imprint **STEREO** on the back of the power amplifier.

If you want to connect one power amplifier to your loudspeakers in bi-wiring mode, use the STEREO connectors on the rear side of the power amplifier. Connect the right speaker to the terminal area marked with R and the left speaker to the terminal area marked with L.

Connect both minus terminals (WOOFER and SYSTEM) of each speaker with the respective ground connector ( $\perp$ ) of the power amplifier. Connect the plus terminals of each speaker to the respective plus connectors (STEREO) of the power amplifier.

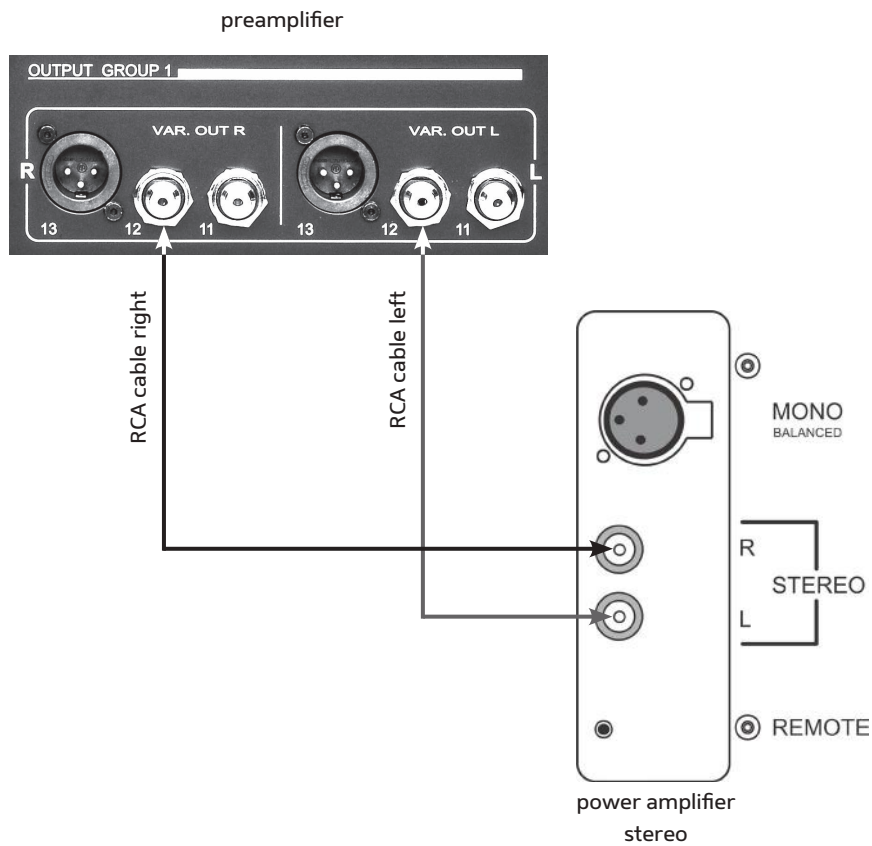
### Example with mbl 101 E MKII Radialstrahler



### 2.2 c) Connecting power amplifier to preamplifier in stereo mode (Unbalanced Stereo)

Connect the preamplifier's output to the power amplifier's input with RCA cable.

**Note:** Right channel „R“ (red) and left channel „L“ (white).



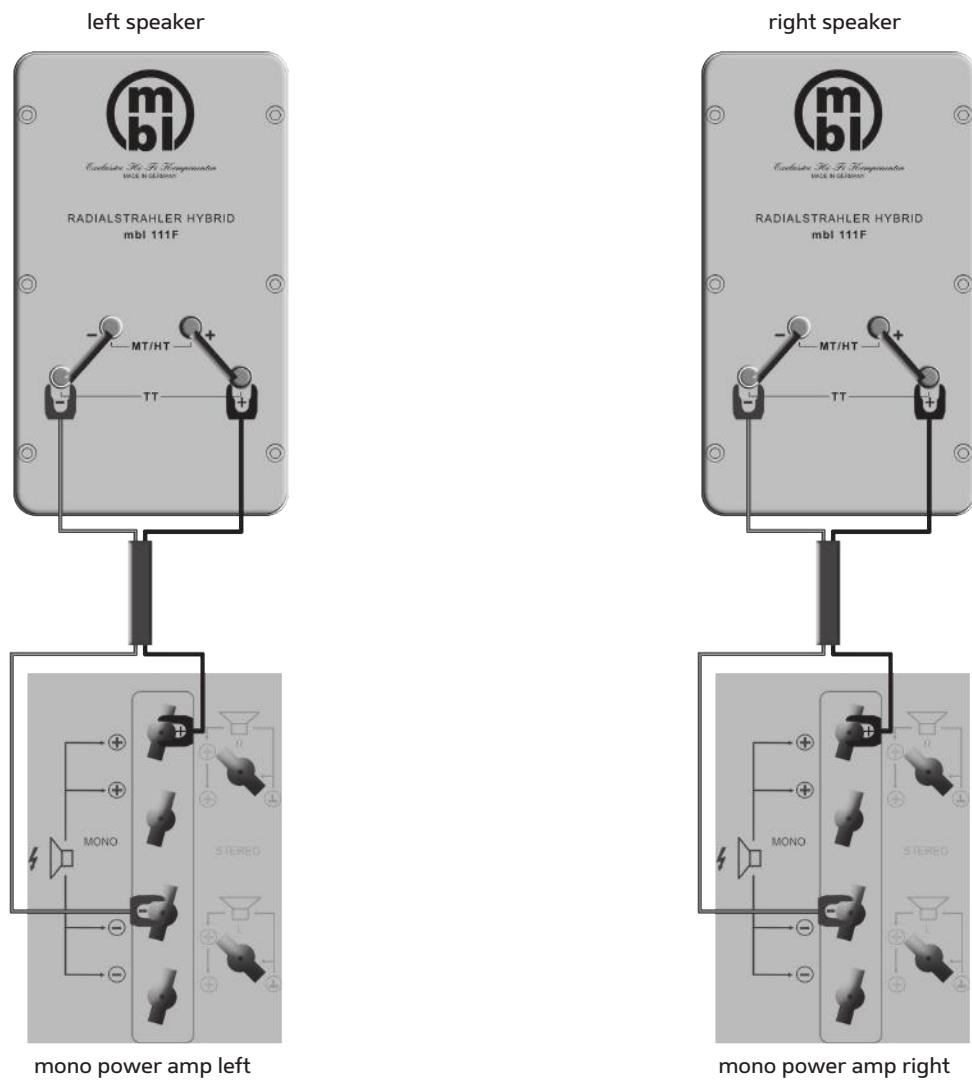


### 2.3 a) Connecting power amplifiers to speakers in mono mode, single wiring

Note the imprint **MONO** on the back of the power amplifier.

If you want to connect two power amplifiers to your loudspeakers in single wiring mode, use the MONO connectors of the power amplifiers. Connect the plus terminal of each speaker to the respective plus connector of the power amplifier and the minus terminal to the minus connector.

#### Example with mbl 111 F Radialstrahler Hybrid

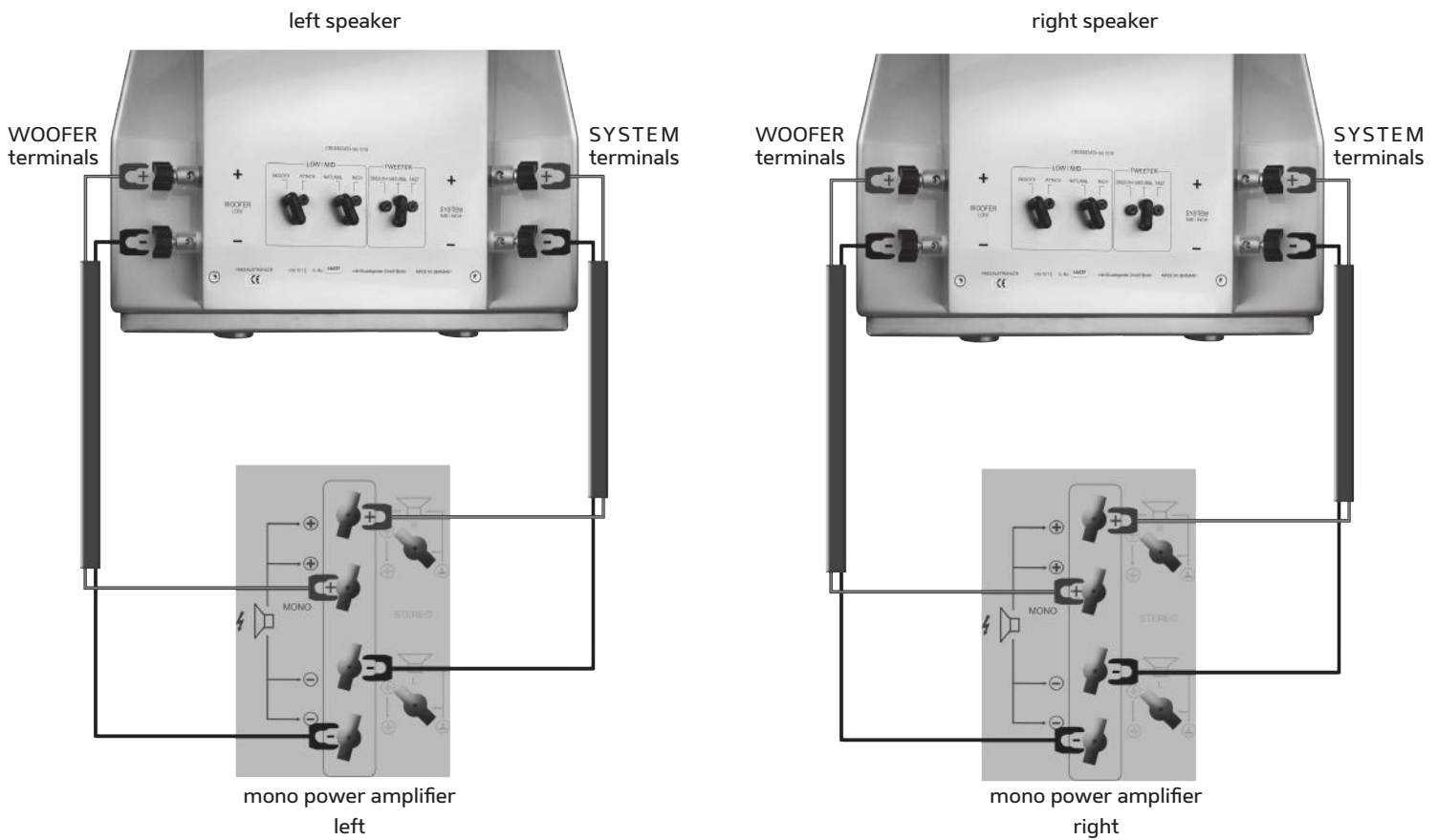


### 2.3 b) Connecting power amplifiers to speakers in mono mode, bi-wiring

Note the imprint **MONO** on the back of the power amplifier.

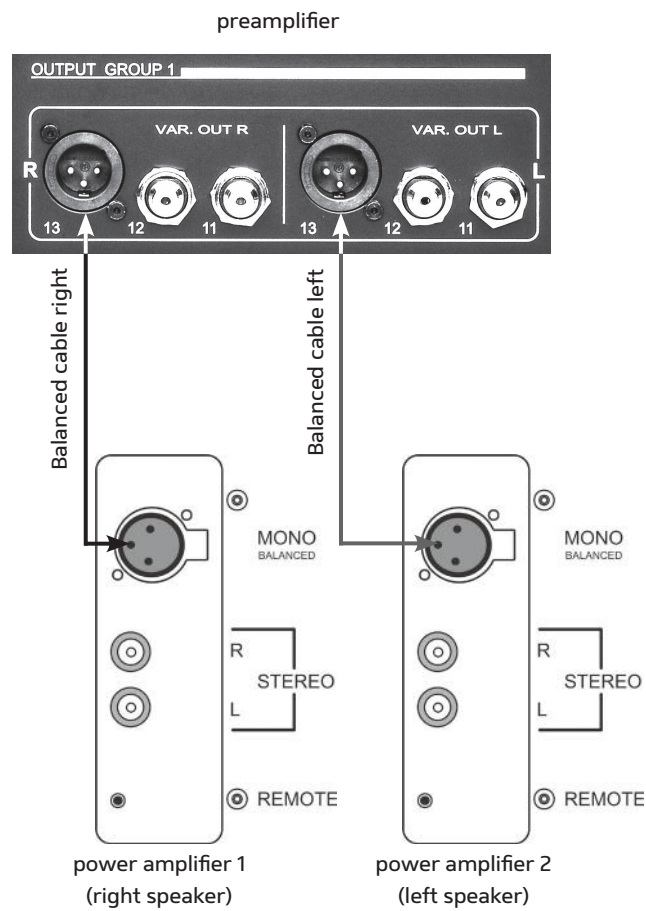
If you want to connect two power amplifiers to your loudspeakers in bi-wiring mode, use the MONO connectors of the power amplifiers. Connect each loudspeaker to one power amplifier. Connect the plus terminals (WOOFER and SYSTEM) to the respective plus connectors and the minus terminals to the minus connectors.

#### Example with mbi 101 E MKII Radialstrahler



### 2.3 c) Connecting power amplifiers to preamplifier in mono mode (Balanced Mono)

Connect the preamplifier's output to the power amplifier's input with balanced cable. Connect the right channel "R" of the preamplifier to the input of the power amplifier for the right speaker. Connect the left channel "L" of the preamplifier to the input of the power amplifier for the left speaker.



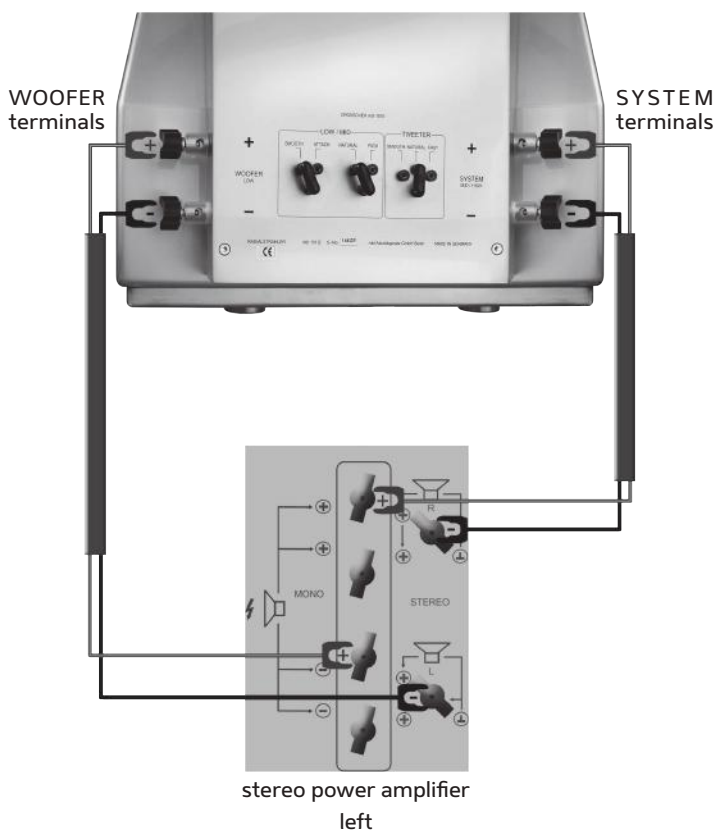
### 2.4 a) Connecting power amplifiers to speakers in stereo mode, bi-amping (2 power amplifiers)

Note the imprint **STEREO** on the back of the power amplifier.

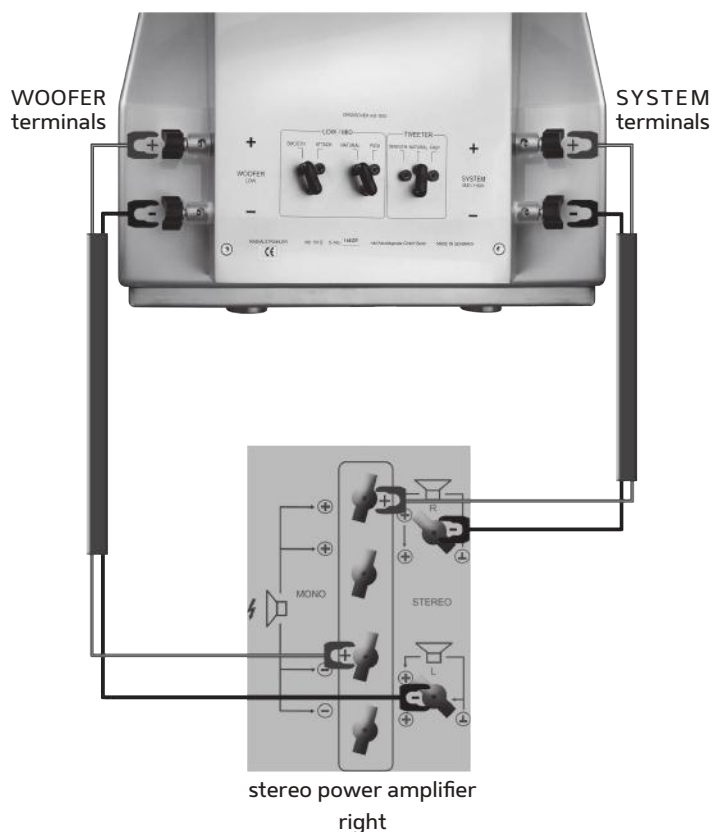
If you want to connect two power amplifiers to your loudspeakers in stereo mode, use the STEREO connectors of the power amplifiers. Connect each loudspeaker to one power amplifier. Connect the plus terminals (WOOFER and SYSTEM) to the respective plus connectors and the minus terminals to the ground connectors (⊥).

#### Example with mbi 101 E MKII Radialstrahler

left speaker



right speaker

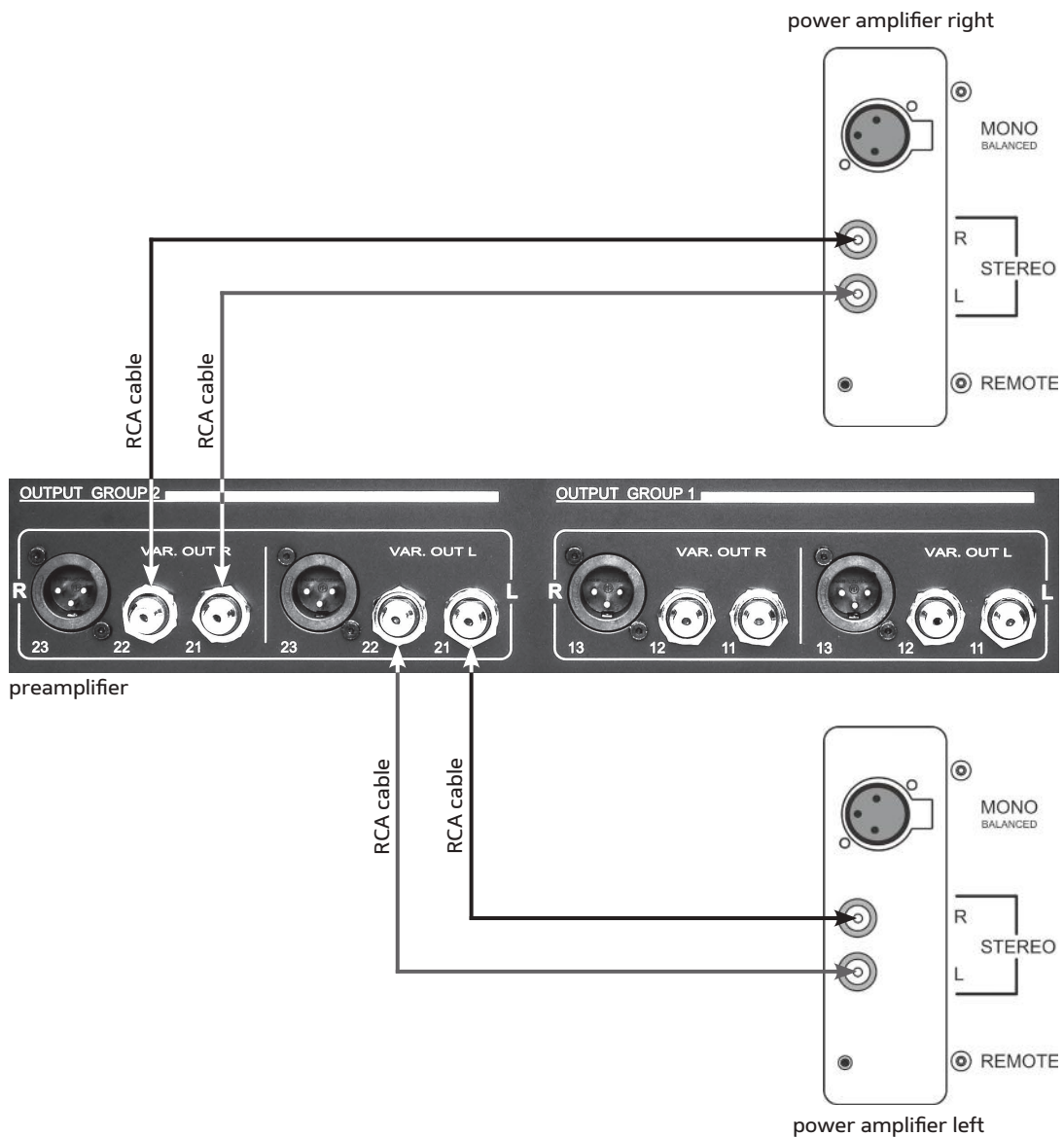


### 2.4 b) Connecting power amplifiers to preamplifier in stereo mode, bi-amping (2 power amps)

This mode requires that the respective preamplifier has 2 outputs of completely the same quality (e.g. mbl 6010 D or mbl 5011). Use RCA cables for the connection of preamplifier and power amplifier.

**Right amplifier:** Connect one right stereo channel "R" of the preamplifier to the stereo input "L" of the power amplifier and the second stereo channel "R" of the same output group of the preamplifier to the stereo input "R" of the power amplifier (right speaker).

**Left amplifier:** Connect one left stereo channel "L" of the preamplifier to the stereo input "L" of the power amplifier and the second left stereo channel "L" of the same output group of the preamplifier to the stereo input "R" of the power amplifier.



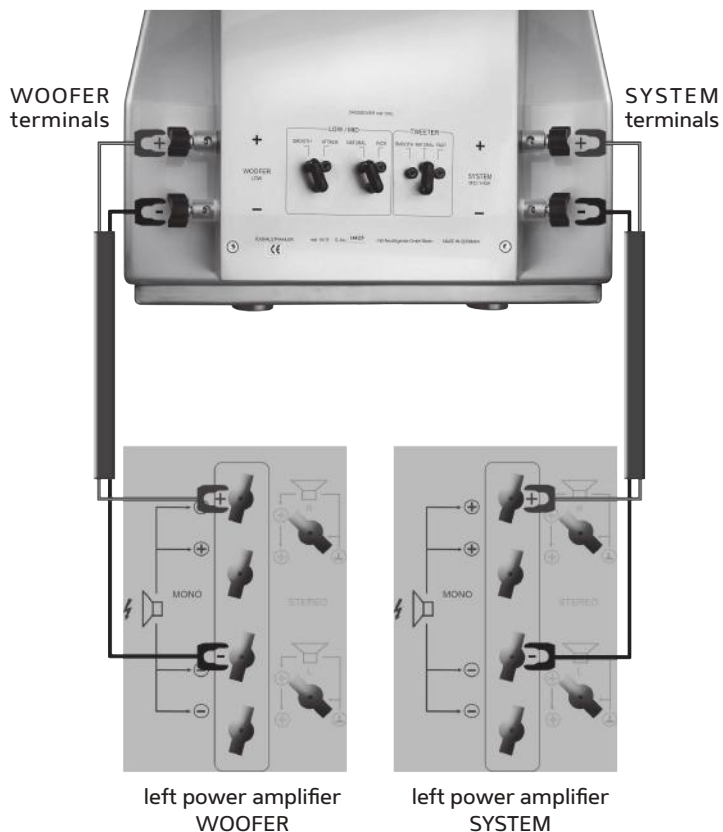
### 2.5 a) Connecting power amplifiers to speakers in mono mode, bi-amping (4 power amps)

Note the imprint **MONO** on the back of the power amplifier.

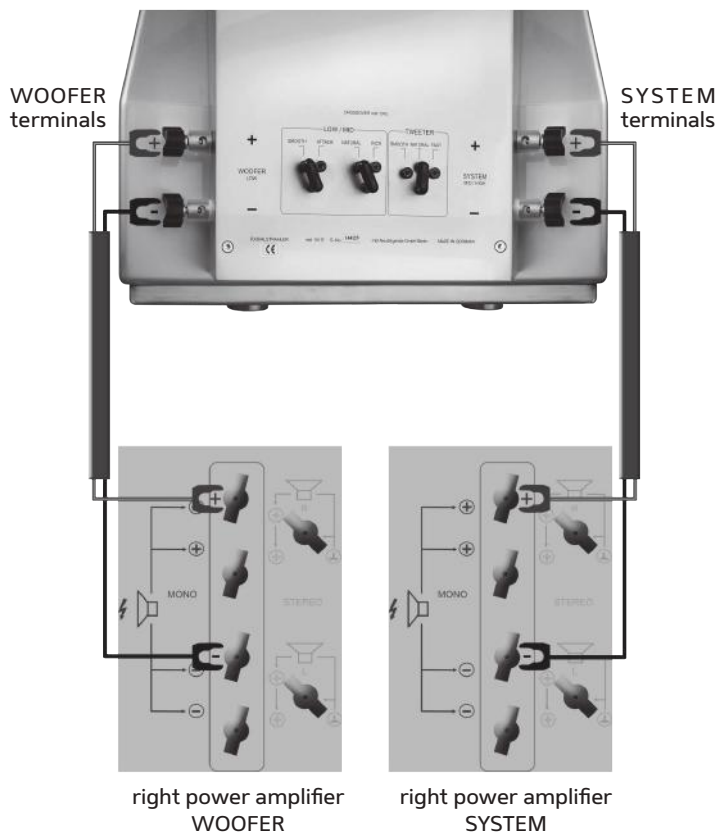
If you want to connect four power amplifiers to your loudspeakers, connect SYSTEM and WOOFER separately to each power amplifier. Use the MONO connectors of the power amplifier. Connect the minus terminal to the respective minus connector and the plus terminal to the respective plus connector.

#### Example with mbi 101 E MKII Radialstrahler

left speaker



right speaker

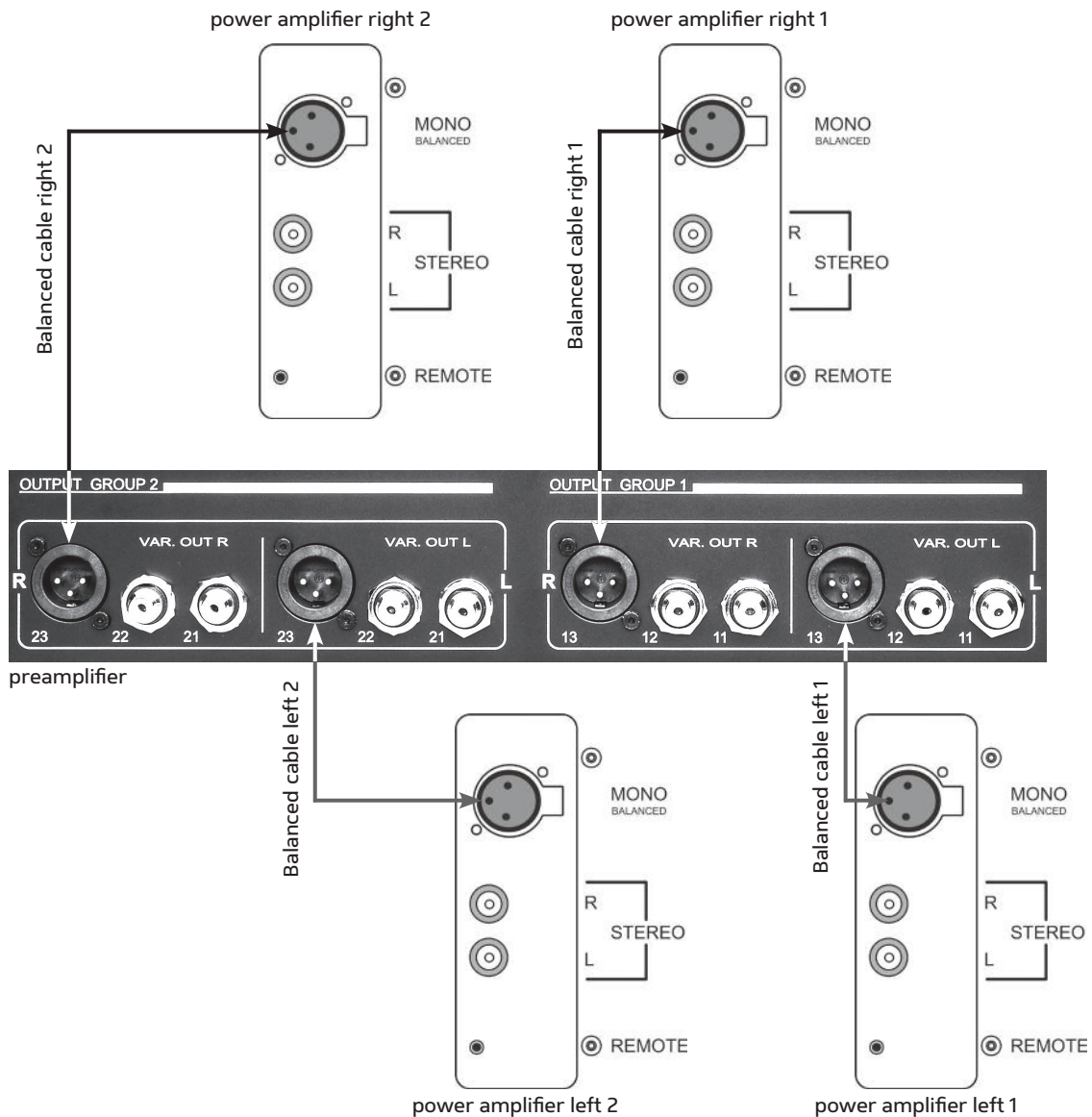


### 2.5 b) Connecting power amplifiers to preamplifier in mono mode, bi-amping (4 power amps)

This mode requires that the respective preamplifier has 2 outputs of completely the same quality (mbl 6010 D or mbl 5011).  
Balanced-cables are used for the connection of preamplifier and power amplifier.

Connect the preamplifier's output-channel 1 (right) with the input "Mono" of the first power amplifier. Connect the preamplifier's output-channel 2 (right) with the input "Mono" of the second power amplifier (right speaker).

Connect the preamplifier's output-channel 1 (left) with the input "Mono" of the third power amplifier. Connect the preamplifier's output-channel 2 (left) with the input "Mono" of the fourth power amplifier (left speaker).

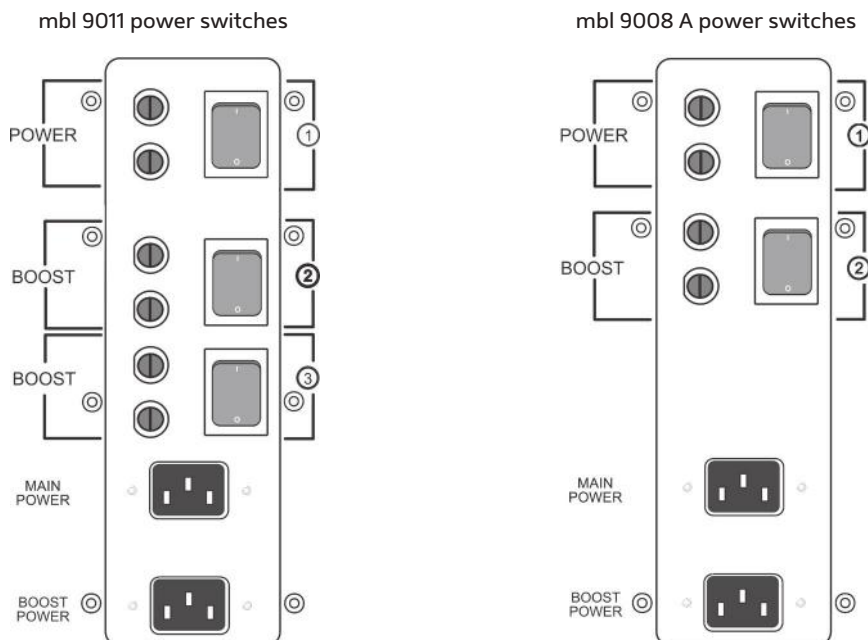


### 3. Installation

#### 3.1 Power Switches

The mbi 9011 has 3, the mbi 9008 A has 2 and the mbi 9007 has 1 main power transformer(s) to produce high power output and to provide optimal impedance matching. They are switched depending on the respective load. The power amplifiers are equipped with a separate shielded transformer, supplying the voltage amplification stage.

Due to the high maximum output power capability (when the "Boost"-switches 2 or 2+3 are switched on) high current flow in the primary supply area is created. Therefore you need a second power cord for the „Boost“-operation.



#### Recommended power-switch positions for different loudspeaker impedances

Power switch	Speaker load mono	Speaker load stereo	Power amplifier
Power switch 1	8 Ω	8 Ω / 4 Ω	mbi 9011/9008 A/9007
Power switch 1+2	8 Ω / 4 Ω	8 Ω / 4 Ω / 2 Ω	mbi 9011/9008 A
Power switch 1+2+3	8 Ω / 4 Ω / 2 Ω	8 Ω / 4 Ω / 2 Ω	mb 9011



### 3.2 Mains Voltage

The mbl 9011 is equipped with 4, the mbl 9008 A with 3 and the 9007 with 2 low-dissipation toroidal transformers. They operate at 230 Vac or 115 Vac, 50/60 Hz. The rear side indicates the selected mains voltage which has been pre-set by the manufacturer. Change this setting only, if you want to use the amp in a country with different mains voltage. A change of the mains voltage is done inside the unit by using solder bridges. Always have a qualified service technician or a qualified dealer to do this for you. This procedure is not a warranty service.

### 3.3 Fuses

**Caution:** Disconnect the power cord from the electric outlet before checking the fuses!

The fuse holders for the primary fuses are located next to the power switches on the rear side of the amp. The holders take 5 x 20 mm fine-wire type fuses. Two fuses are needed for each power switch. You must change the value of the fuse, if you use a different mains supply (230 Vac/4 AT or 115 Vac/8 AT).

Inside the amp, next to the transformers, are the fuse holders for the secondary fuses. Their value is 10 AT (5 x 20 mm fine-wire type), irrespective of the mains voltage.

### 3.4 First Operation

Make all necessary connections (input, output, mains) and press the power switches (on the rear side of the amp). mbl 9011/9008 A: Always activate power switch 1 first.

When the amp is switched on, the blue LED's on the front panel will light. In addition to the blue LED's a yellow one will be illuminated between them.

### 3.5 Standby Mode and Sleep Mode

To switch "on" and "off" the standby mode press the standby switch on the left side of the amp. When the amp is in standby mode the blue LED's on the front panel are not lighted, only the yellow LED lights. (mbl 9007: the blue LEDs on the front panel glow in low intensity).

When the amplifier is in standby mode only the input electronics are held at operating temperature. No music can be heard in this mode. We recommend this mode for turning off the amplifier (20 W power consumption).

**mbl 9007:** With the sleep button of the mbl 9007 you can toggle between sleep and standby mode. In sleep mode the blue LED's on the front panel are off, only a yellow LED in the center is on. In this mode the power consumption is reduced to 4 VA. In both modes no signal appears on the speaker terminals.

### 3.6 Remote switching-on

The power amplifiers mbl 9008 A and mbl 9011 have the ability to be switched on and off remotely by use of a preamplifier. You will find the remote-socket on the back of the amplifier. You can connect this remote socket with the remote-out sockets of your preamplifier. When you switch on the preamplifier, a 10 V switching voltage is supplied to these remote-out sockets. When you switch off the preamplifier, this output is set to 0 V. A suitable connection cable can be made on request. Your hi-fi dealer will be happy to give advice.

## 4. Maintenance

### **Always unplug the unit before cleaning!**

To clean the exterior surfaces of your mbl power amplifier use a dry, soft cloth. To wipe off fingerprints and other grease spots use a soft, wet cloth moistened with a mild detergent dissolved in water.

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

**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 cabinet's finish.



## 5. Troubleshooting

### a The amp does not work, power switch is not illuminated

- Check if the power cord is plugged in the "Main Power"-socket and the power switch 1 is switched on. It is necessary that you activate power switch 1 first. Note that the power cord must be connected to the AC wall socket as well.
- Disconnect the power cord and check the primary fuses on the rear side of the amplifier (mbl 9011/9008 A: next to the power switches, mbl 9007: next to the power cord connector). To open the fuse holder take a screwdriver, insert it in the slide of the safety lock, push and turn a quarter of a rotation. Now take off the cover. Remove the fuse, check it, and exchange, if necessary. Fuse type and value see "Mains Voltage". If the spare fuse blows too, please contact your dealer or service department.

**Danger!** Before removing/installing any fuses, switch off the power amplifier and disconnect it from the mains circuit!

### b No music

- Check if the standby switch is in the "standby" position.

### c You hear music, but something is wrong

- Check if you plugged in more than one inputs (symmetric and RCA). Disconnect all inputs that are not in use. See also "Connecting power amplifier to preamplifier".
- Check if the speakers have been connected correctly. See also "Connecting power amplifier to speakers".
- In case there is not enough power output, you should check, whether you have activated the sufficient number of power switches to control the speaker load.

### d Power switch is illuminated, no music or distorted music

**Attention!** Only authorized MBL-dealers may proceed with the following!

Check the secondary fuses inside the amp:

- Disconnect power cord(s) first!
- Remove the 4 screws on the left side panel (looking from the front). Lift the side panel.
- Remove the fuses from the fuse holders and exchange them, if necessary.

In all instances of malfunction please contact your local MBL dealer first.

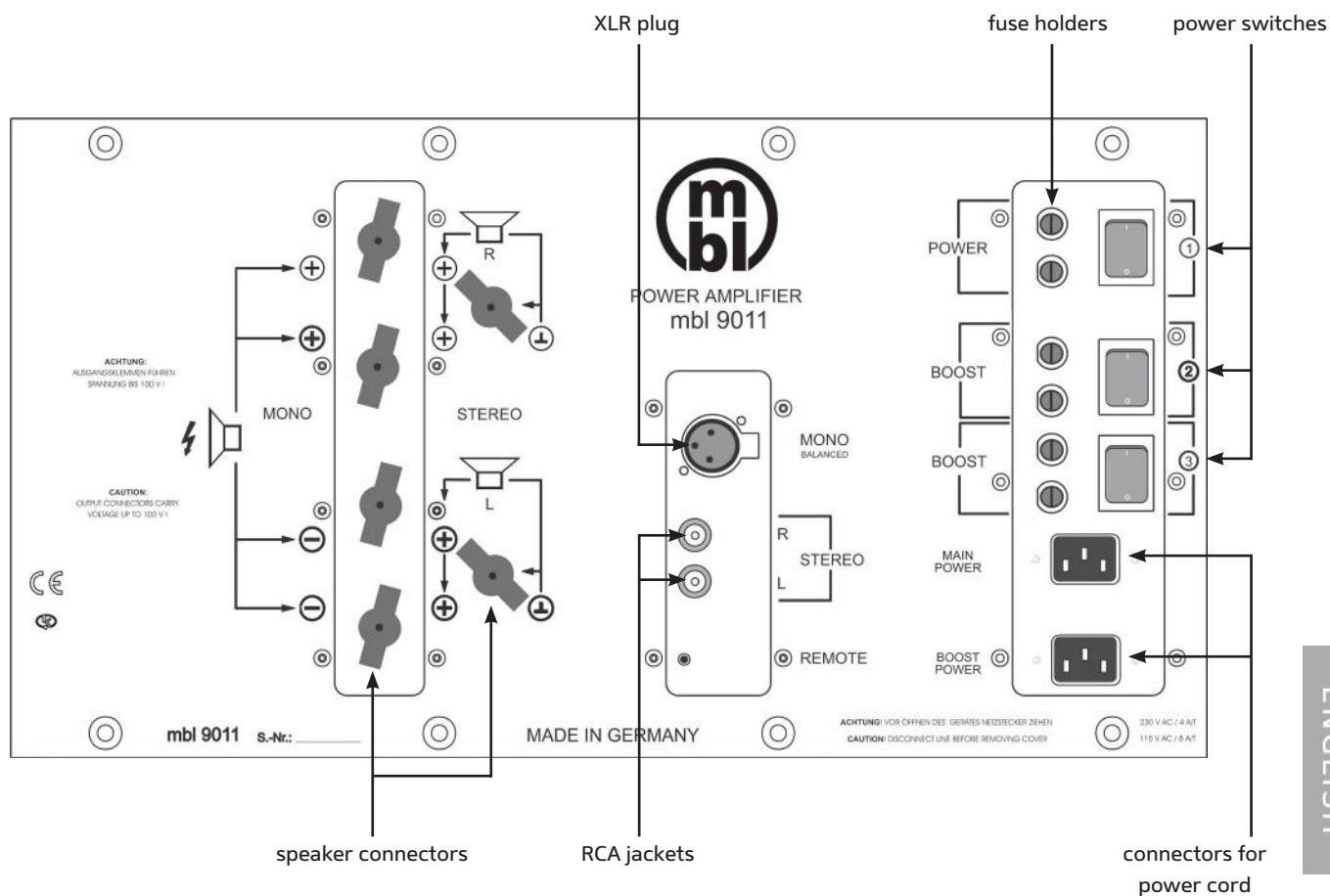
## 6. Views

### 6.1 mbi 9011 Views



standby switch

function indicators



XLR plug

fuse holders

power switches

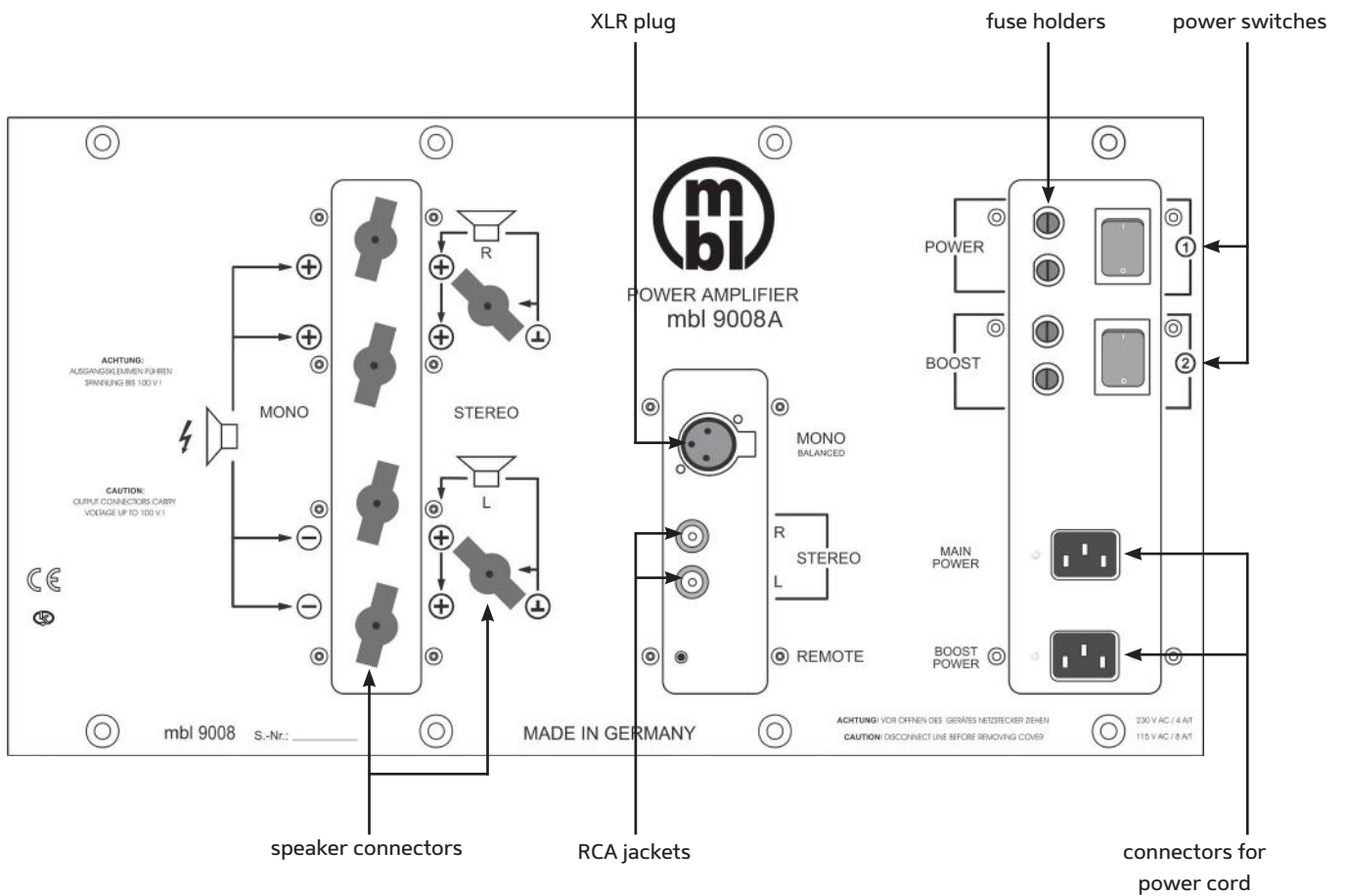
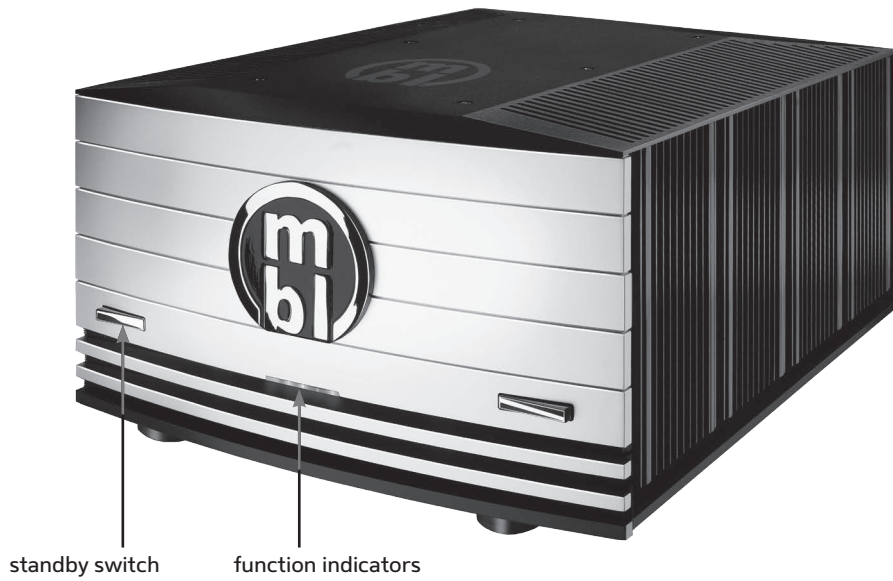
speaker connectors

RCA jackets

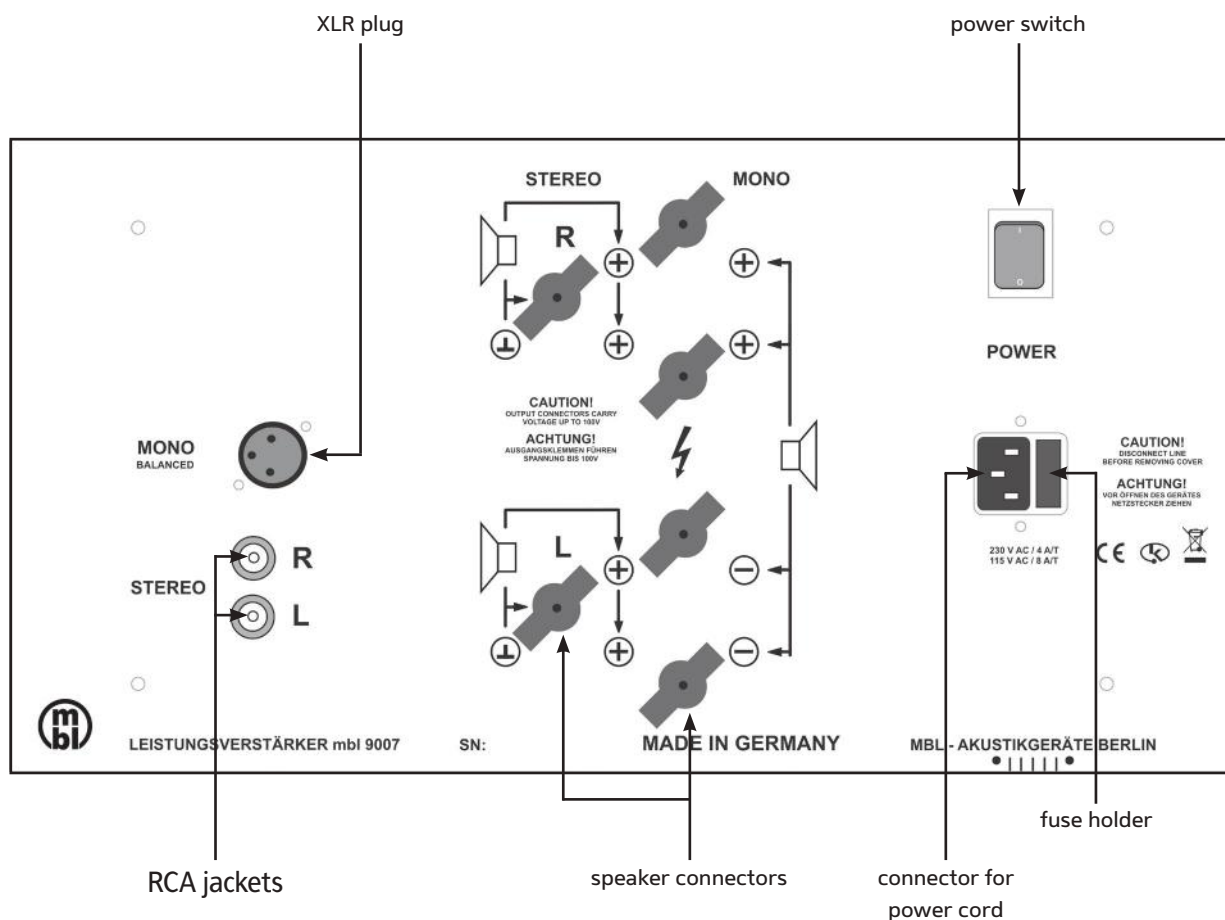
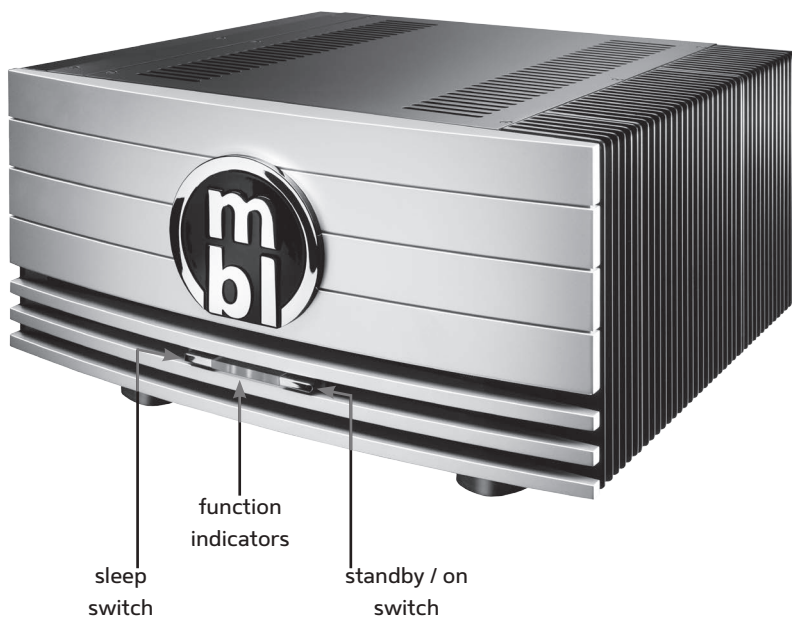
connectors for power cord

ENGLISH

6.2 mbl 9008 A Views



6.3 mbi 9007 Views



ENGLISH



	mbl 9011	mbl 9008 A	mbl 9007
	Mono / Stereo	Mono / Stereo	Mono / Stereo
Peak Pulse Power	5.000 / 2.400 W (2 Ω)	2.200 / 1.200 W (2 Ω)	1.900 / 1.000 W (2 Ω)
Rated Power	1.390 / 330 W (2 Ω)	1.000 / 330 W (2 Ω)	
	840 / 210 W (4 Ω)	840 / 210 W (4 Ω)	570 / 210 W (4 Ω)
	440 / 130 W (8 Ω)	440 / 130 W (8 Ω)	440 / 130 W (8 Ω)
Output Voltage max.	100 / 50 V peak	100 / 50 V peak	100 / 50 V peak
Output Current max.	50 A peak	40 A peak	30 A peak
S/N ratio unweighted	114 / 113 dB	114 / 113 dB	114 / 113 dB
S/N ratio A-weighted	118 / 123 dB	118 / 123 dB	118 / 123 dB
Frequency Response	DC - 200 / 320 kHz	DC - 200 / 320 kHz	DC - 200 / 320 kHz
Distortion	<0.001%, 4Ω, 1kHz, 50W	<0.003%, 4Ω, 1kHz, 50W	<0.003%, 4Ω, 1kHz, 50W
Input Impedance	20 kΩ, XLR (Mono)	20 kΩ, XLR (Mono)	20 kΩ, XLR (Mono)
	10 kΩ, RCA (Stereo)	10 kΩ, RCA (Stereo)	10 kΩ, RCA (Stereo)
Damping Factor	300 @ 1 kHz (4 Ω)	300 @ 1 kHz (4 Ω)	300 @ 1 kHz (4 Ω)
<b>Power Consumption</b>			
1. on	20 VA (Stand-by)	20 VA (Stand-by)	20 VA (Stand-by)
	100 VA (Idle Mode)	100 VA (Idle Mode)	100 VA (Idle Mode)
	600 VA max (4Ω, Mono)	600 VA max (4Ω, Mono)	600 VA max (4Ω, Mono) 4 VA (Sleep mode)
2. on	1.200 VA max (4Ω, Mono)	1.200 VA max (4Ω, Mono)	
3. on	1.500 VA max (4Ω, Mono)		
	2.600 VA max (2Ω, Mono)		
Line Voltage	220 - 240 Vac, 50/60 Hz	220 - 240 Vac, 50/60 Hz	220 - 240 Vac, 50/60 Hz
(factory set)	or 110 - 120 Vac, 50/60 Hz	or 110 - 120 Vac, 50/60 Hz	or 110 - 120 Vac, 50/60 Hz
Dimensions (WxHxD)	480 x 320 x 910 mm	480 x 320 x 660 mm	480 x 260 x 480 mm
	19 x 13 x 36"	19 x 13 x 26"	19 x 9 x 19"
Weight	90 kg, 198 lbs	60 kg, 132 lbs	34 kg, 75 lbs

Design and specifications are subject to change without notice.

## MBL Reference Line High End Audio Components



mbi 1621 A CD Transport



mbi 1611 F D/A Converter



mbi 101 E MKII Radialstrahler



mbi 6010 D Preamplifier



mbi 9011 Mono/Stereo Power Amplifier



mbi 9008 A Mono/Stereo Power Amplifier



mbi 9007 Mono/Stereo Power Amplifier



mbi 101 X-treme Radialstrahler System

For best performance we recommend the High End Audio components of the MBL Reference Line.

Your MBL dealer will help you to choose the best components for your perfect High End Audio system.

ENGLISH