

*Burmester*

## OWNER'S MANUAL

909 MK5 POWER AMPLIFIER



REFERENCE LINE

**BA\_909MK5\_1-3\_2305**

**Dear Audiophile,**

**Thank you for choosing this Burmester audio component. We sincerely appreciate your trust in us.**

**You have purchased a unit which excels in musical fidelity and combines uncompromising manufacturing quality with technical innovation and the highest degree of operating flexibility.**

**We recommend reading this user manual at least once in its entirety before initial operation. This will enable you to make full use of all capabilities of this outstanding audiophile instrument. Should you have any further questions, please contact your dealer or us directly.**

**Talk to us about your special requests, even if they seem out of the ordinary. We happily accept technically reasonable challenges.**

**Enjoy your enhanced listening pleasure.**

**Your Burmester Team**

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## UNPACKING and SETTING UP

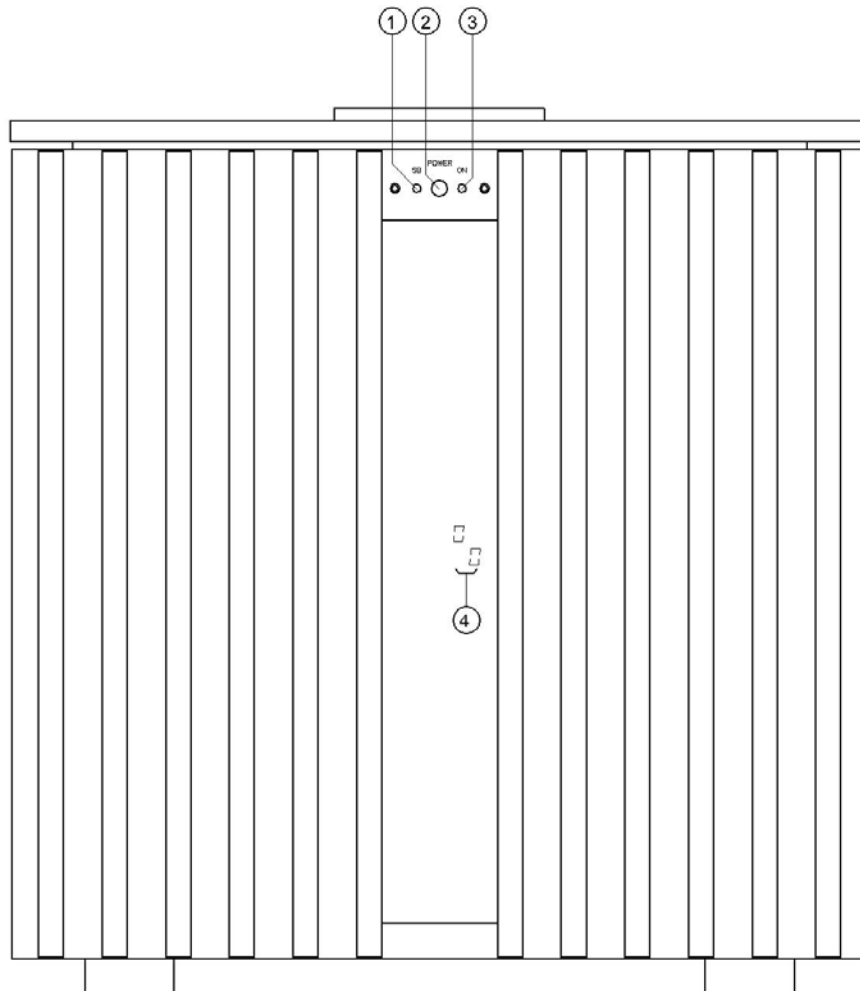
**CAUTION:** The power amp 909 is very heavy. To avoid injuries while unpacking it is suggested that only personnel with experiences in heavy weights unpack the units.

**CAUTION:** The unit is shipped inside a plastic protective cover. Make sure that children do not play with it to avoid the danger of suffocation.

<b>Unpacking</b>	To avoid damaging the housing, please do not use pointed or sharp tools to open the box. Please make sure that the content of the box is complete. If something is missing or you notice any damage while unpacking, do not hook up the unit. Instead, contact your authorized dealer.
<b>Content of the box</b>	The box contains the following: <ul style="list-style-type: none"><li>• 1 power amp 909</li><li>• 1 power cord</li><li>• 2 adapter plugs (XLR – RCA)</li><li>• 1 REMOTE cable</li><li>• 1 owner's manual</li></ul>
<b>Packaging</b>	We recommend keeping the original packaging material in case of a move or future shipping.
<b>Setting up</b>	<p><b>Too low or too high temperatures may cause damage inside of the power amp. Therefore we recommend you leave the unit to adapt to room temperature, before using it for the first time.</b></p> <p>Carefully remove the unit from its packaging and set it up in an appropriate location. To protect the power amp 909 from overheating make sure that the location offers sufficient air circulation around the unit. Also, avoid excessive exposure to sun, dust and humidity. Please make sure that your desired location for the power amp is stable enough to carry its weight.</p> <p>Ventilation ducts and openings in the housing serve to keep the unit cool. They must not be covered up with magazines, tablecloth, curtains etc.</p> <p><b>If the power amp has to be operated in an extremely warm environment it may be necessary to supply additional ventilation. Avoid operating the unit in an excessively humid environment like bathrooms etc.</b></p>

**VIEWS OF UNIT**

**FRONT VIEW**



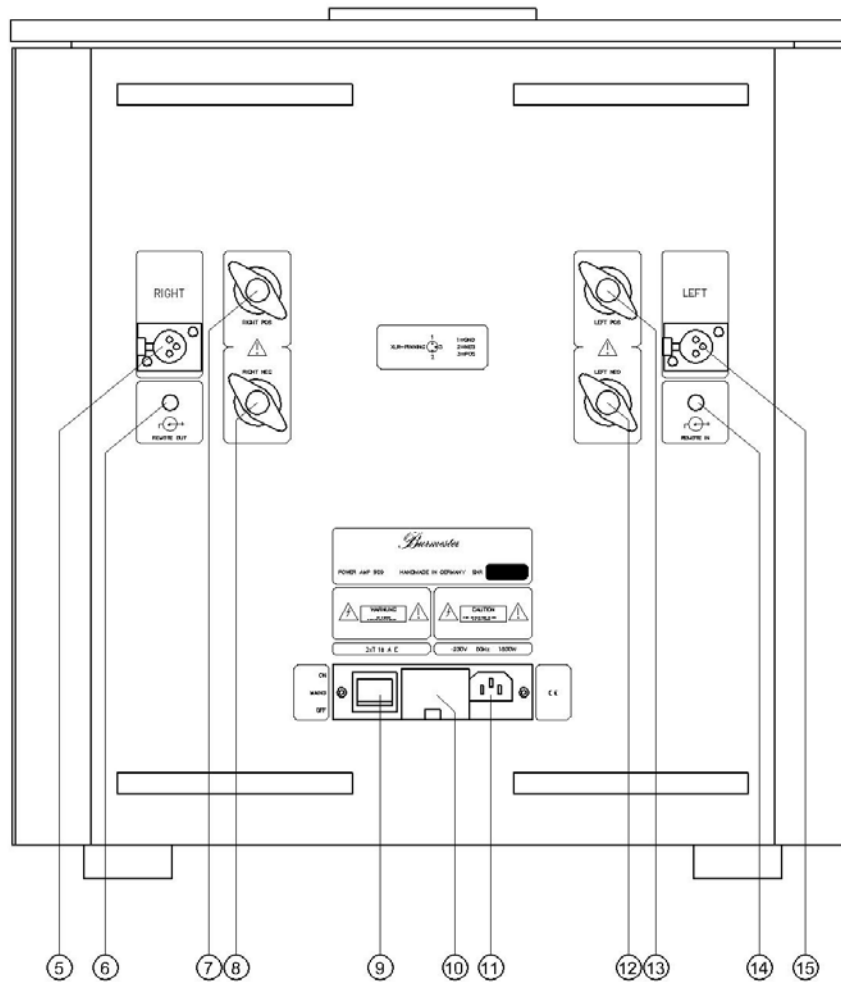
**(1) STAND BY LED**

**(2) POWER button**

**(3) POWER LED**

**(4) ERROR display**

REAR VIEW



- |   |   |
|---|---|
| (5) Input, right channel                        | (11) AC mains input                             |
| (6) REMOTE output                               | (12) Loudspeaker output, left channel, negative |
| (7) Loudspeaker output, right channel, positive | (13) Loudspeaker output, left channel, positive |
| (8) Loudspeaker output, right channel, negative | (14) REMOTE input                               |
| (9) AC mains switch                             | (15) Input, left channel                        |
| (10) Fuse carrier (now inside)                  |   |

## CONNECTING

The connectors of the power amp 909 are located on the rear panel. We strongly recommend leaving all components switched off while connecting the power amp. For optimal connections also pay attention to the manual of the driving unit.

**AC mains input**      **Before connecting the power amp please check that the input voltage of the 909 is equal to the local voltage of your wall outlet.**

The **AC mains input (11)** is located on the rear panel. Make sure that the **AC mains switch (9)** is set to OFF. Connect the power cord with the **AC mains input (11)** and plug it into the wall outlet.

**Inputs**      The 909 offers two balanced **Inputs (5)** and **(15)**, which will be connected to the corresponding outputs of your pre amplifier/surround processor.

The pinning of the balanced inputs (XLR 3pin) is: **PIN1=GND, PIN2=NEG, PIN3=POS.**

We strongly recommend using balanced connections to take full advantage of the extraordinary sound quality.

If necessary, the inputs can be converted to unbalanced mode by using the supplied adapter plugs.

**CAUTION: Do only connect a unit with its own volume control to these inputs. Otherwise serious damage to your ears and equipments may occur.**

**Binding posts**      We utilize the same binding posts for our power amplifiers as for our loudspeakers. These high-grade terminals for speaker cables have proven their sonic excellence and functional convenience a thousand times over. Speaker cables can be connected via pure-copper spade plugs or via banana plugs. We recommend using pure copper spade plugs.

**CAUTION:** The binding posts of power amplifiers may carry dangerously high voltages. Do not touch them while the power amp is switched on.

**Outputs**      **CAUTION:** We strongly recommend leaving all components switched off while connecting the power amp. This will avoid shorting out cables that have not yet been completely hooked up. Connect the speaker cables to the power amplifier only after ensuring that they are hooked up correctly to the speakers.

Before turning the amp back on, make sure that all cables have been connected firmly and correctly with respect to polarity (POS, NEG) as well as frequency (LOW, HIGH/MID). After a new hook-up, we recommend increasing the volume slowly until you are sure that everything is connected correctly.

**IMPORTANT:** Only connect the speaker cables to the intended binding posts of the power amp/loudspeakers. Never insert the speaker cables into a wall socket / AC mains.

**Remote**      Connecting **REMOTE OUT (6)** to the corresponding REMOTE IN-jack of another BURMESTER-unit offers to switch on or off this other unit simultaneous by the 909. In this case, the 909 has the master function.

Connecting **REMOTE IN (14)** to the corresponding REMOTE OUT-jack of another BURMESTER-unit offers to switch on or off the 909 simultaneous by the other unit. In this case, the 909 has the slave function.



## OPERATING CONTROLS

The operating controls are located on the front panel except for the AC mains switch.

**AC mains switch**      The **AC mains switch (9)** is located on the rear panel and connects the 909 from the AC supply when it is switched to ON.  
When it is set to OFF the unit is completely disconnected and the LEDs on the front panel remains dark.  
Switching to ON activates the stand by mode and the **Stand by LED (1)** on the front panel illuminates.

**POWER button**      The **POWER button (2)** on the front panel switches the 909 into operating mode or back into stand by mode. In operating mode the **Stand by LED (1)** and the **POWER LED (3)** are illuminated. In stand by mode only **Stand by LED (1)** lights up.  
After switching to operating mode the protective circuits of the 909 take a few seconds to check all circuits of the power amp before enabling the speaker outputs.

## PROTECTIVE CIRCUITS

The protective circuits of the 909 operate outside the signal path. When the amp is on, these circuits constantly check for errors with respect to temperature, DC offset and overload.

**Temperature**      In the event that one of the channels of the power amp exceed their maximum allowable temperature the overheat protection switches off the output relays and the **POWER LED (3)** goes out. The unit is switched into stand by mode and the **ERROR display (4)** shows a 1. As a precaution, we recommend to lower the volume and wait a while before turning the 909 back on by pressing the **POWER button (2)**. The 909 can only be switched back on after the temperature has fallen below the allowable limit.

**DC offset**      If the DC voltage at the speaker outputs of the 909 exceeds the allowable limit, the speaker relays will be switched off and the **ERROR display (4)** shows a 2. In this case we recommend to lower the volume level. The 909 will re-enable the speaker outputs automatically as soon as the DC offset falls within the allowable limit.

**NOTICE:** If both errors (temperature and DC offset) occur at the same time, the **ERROR display (4)** shows a 3. In both cases the upper error display refers to the right channel, the lower error display to the left channel.

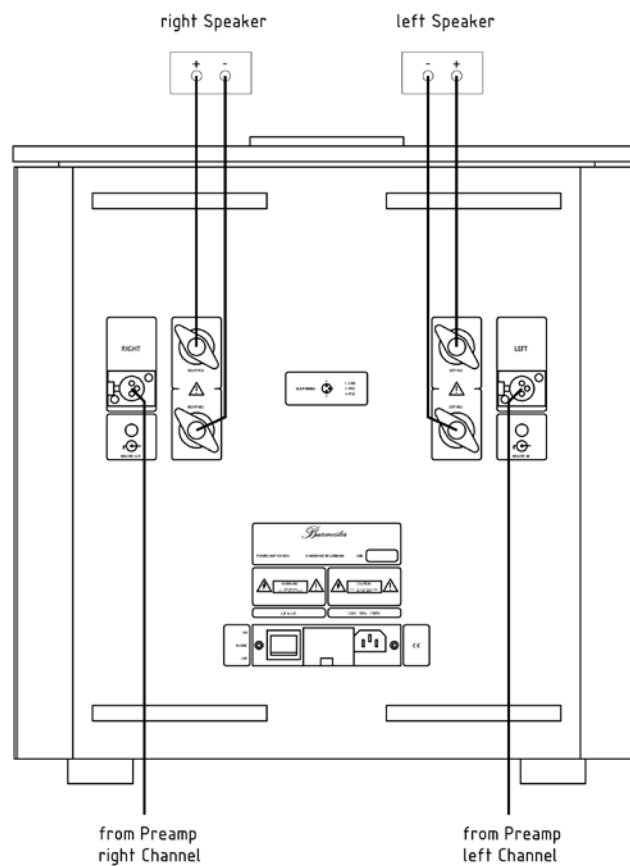
**Overload**      If the current, which is flowing through the power transistors of the 909, exceeds the allowable limit, the speaker relays will be switched off and the 909 automatically switches into standby mode after a few seconds.  
In this case we recommend to lower the volume level and check all connections from the 909 to the speakers. Usually a shorted connection is the reason for this error.  
The 909 can only be switched back on by pressing the **POWER button (2)**

## WIRING DIAGRAMS

**STEREO operation** In STEREO mode each channel will be connected with the corresponding channel of the stereo signal.

To use the 909 in **STEREO** mode make the following connections:

- (5) input, right channel
- (7) positive loudspeaker binding post, right channel
- (8) negative loudspeaker binding post, right channel
  
- (15) input, left channel
- (13) positive loudspeaker binding post, left channel
- (12) negative loudspeaker binding post, left channel



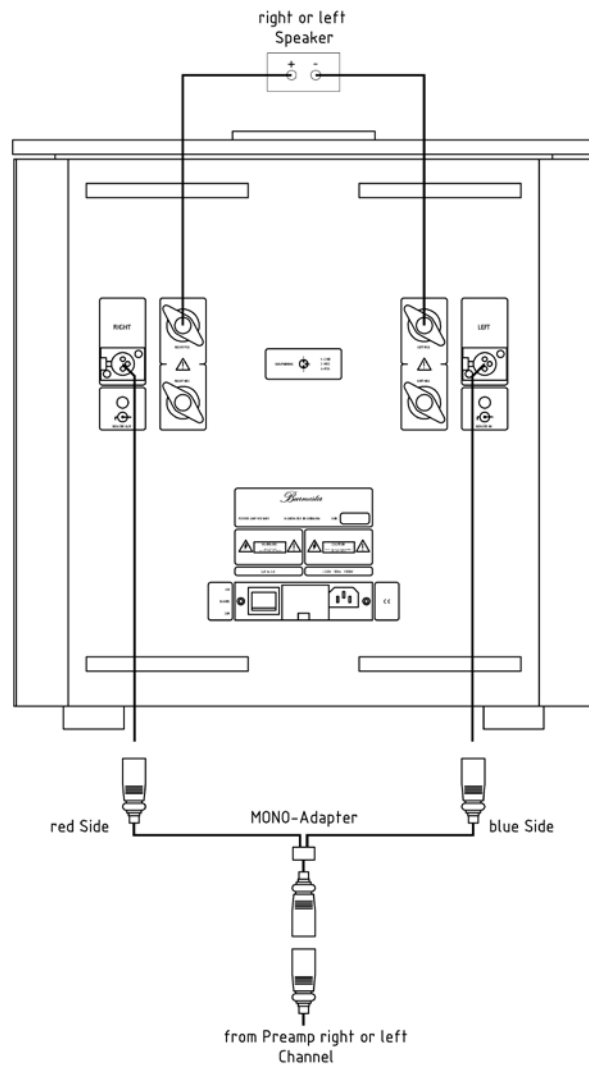
**MONO operation**

In MONO mode a MONO adapter is required which is available on request at your local dealer.

To use the 909 in **MONO** mode make the following connections:

- (5) MONO adapter, red side
- (7) positive loudspeaker binding post
- (8) not connected

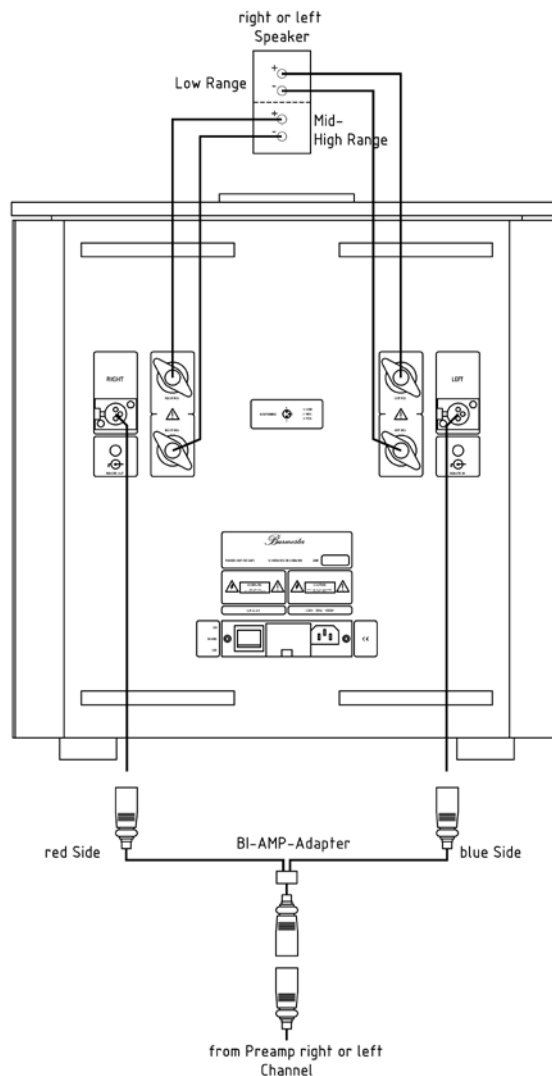
- (15) MONO adapter, blue side
- (13) negative loudspeaker binding post
- (12) not connected



**BI-AMPING operation** In BI-AMPING mode a BI-AMPING adapter is required which is available on request at your local dealer.

To use the 909 in **BI-AMPING** mode make the following connections:

- (5) BI-AMPING adapter, red side
- (7) positive loudspeaker binding post, high/mid
- (8) negative loudspeaker binding post, high/mid
  
- (15) BI-AMPING adapter, blue side
- (13) positive loudspeaker binding post, low
- (12) negative loudspeaker binding post, low



## GENERAL INSTRUCTIONS

Please read the owner's manual carefully and keep it safely. If you have any questions, we ask you to contact your local authorized dealer.

**Operating temperature** An operating temperature that is too high or too low may cause malfunctioning. We therefore recommend letting the unit settle for a while after unpacking before connecting and operating it.

**Setting up** When choosing a place for your equipment please observe the following:

- Avoid direct sunlight.
- Do not expose the equipment to excessive heat, cold, humidity or dust.
- Provide adequate air circulation; avoid placing the equipment in enclosures.
- Slots and other openings in the housing are for ventilation. They must not be covered up.
- Please make sure that the component is not exposed to dripping water or splash water, also don't place boxes with liquid onto your component.
- Open flames like candles must not be placed on top of any electronic unit.

**Mains voltage** Check before operating the unit to see if the mains voltage setting shown on the back panel below the AC mains input conforms to the voltage of your household power supply. Any changes should only be done by an expert only.  
For AC connection please use only the three-pronged power cable provided.  
The grounding pin should not be bypassed under any circumstances. Connect the component only to a wall outlet with fully functional grounding pin.

**Comm. operation** Before installation, switch off all other components of your hifi system. Switch them back on only after making sure that all connections have been made correctly and completely.  
Never try to operate the equipment when it has obviously been damaged or if liquid has gotten into it.

**Terminals** The pins of the connecting terminals on the back panel must not be touched under any circumstances. Static discharges may damage the electronic circuitry inside the unit.

**Interconnects** We supply balanced as well as unbalanced interconnect cables and speaker cables to ensure highest quality signal paths for our components. The impedance of our cables is ideally matched to all BURMESTER components.

**Heat development** Be careful when touching the housing – it may get quite warm during operation.

**Reset** If the unit does not react when pressing the control keys on the front panel it may be reset to normal operation by switching it off and back on using the AC mains switch in the back.

**Lightening strikes** During the summer months, malfunctions often occur due to voltage spikes in the power lines after lightning strikes. Completely unplugging the power cord offers the only effective protection. Merely switching the unit off does not suffice since voltage spikes are able to arc over separated contacts.

**Fuses** The fuses are located inside the unit and should only be changed by a qualified technician.

**Warranty** We provide a three-year warranty on your Burmester device. In order for the warranty to be valid, the device must have been connected and operated properly without overloading, the mechanical integrity of the device must not have been compromised and the device must have been registered. The warranty expires if the device has been tampered with in any way or if parts of the housing, connections or terminals have been dismantled.

Please register your product with the serial number in the warranty certificate at: [www.burmester.services/warranty](http://www.burmester.services/warranty) and activate your warranty extension.

**Care** Never clean the housing with a wet cloth or chemical cleaning agent. Always make sure that no liquid gets into the housing.



This symbol on the equipment points to important notes, which can be found in the owner's manual.



This symbol on or inside the equipment warns of dangerously high voltage.



If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal, which is not harmful to the environment.

**CAUTION:** The unit must only be opened by qualified experts. Opening the unit provides the chance of encountering dangerously high voltage. Therefore the power cord must always be unplugged before opening the equipment.

## TECHNICAL DATA

<b>Dimensions</b>	Width x Height x Depth	<b>482 x 500 x 485mm</b> <b>(19.0 x 19.7 x 19.1 inches)</b>						
<b>Weight</b>		<b>app. 80kg</b> <b>(app. 176 lbs)</b>						
<b>Mains voltage and fuses</b>	for 200V – 254V 50/60Hz	<table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"><b>F1, F3:</b></td> <td style="text-align: right;"><b>slow 2.5A E</b></td> </tr> <tr> <td><b>F2, F4:</b></td> <td style="text-align: right;"><b>slow 1.0A E</b></td> </tr> <tr> <td><b>Unit fuse 2x</b></td> <td style="text-align: right;"><b>slow 16A E</b></td> </tr> </table>	<b>F1, F3:</b>	<b>slow 2.5A E</b>	<b>F2, F4:</b>	<b>slow 1.0A E</b>	<b>Unit fuse 2x</b>	<b>slow 16A E</b>
<b>F1, F3:</b>	<b>slow 2.5A E</b>							
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	for 100V – 127V 50/60Hz	<table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"><b>F1, F3</b></td> <td style="text-align: right;"><b>slow 3.15A E</b></td> </tr> <tr> <td><b>1F2, F4</b></td> <td style="text-align: right;"><b>slow 2.0A E</b></td> </tr> <tr> <td><b>Unit fuse 2x</b></td> <td style="text-align: right;"><b>slow 16A E</b></td> </tr> </table>	<b>F1, F3</b>	<b>slow 3.15A E</b>	<b>1F2, F4</b>	<b>slow 2.0A E</b>	<b>Unit fuse 2x</b>	<b>slow 16A E</b>
<b>F1, F3</b>	<b>slow 3.15A E</b>							
<b>1F2, F4</b>	<b>slow 2.0A E</b>							
<b>Unit fuse 2x</b>	<b>slow 16A E</b>							
<b>Power consumption</b>	max.	<b>1.500W</b>						
	idling	<b>60W</b>						
	stand by	<b>4W</b>						
<b>Output power</b>	at 4Ohm	<b>2 x 600W; 1x 1930W</b>						
	at 1Ohm	<b>2 x 1250W; 1x 3200W</b>						

**PLEASE NOTE:** The dimensions do not include the length of binding posts and the space needed for plugs of interconnect cables.

The technical data and design of this product are subject to change without notice.

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