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Introduction



Congratulations on your purchase and thank you for choosing Burmester.

You have chosen a product that combines absolute fidelity and uncompromising quality with technical innovation and maximum versatility. Before using the device for the first time, we recommend that you read through the entire manual at least once so that you can make full use of the capabilities of this exceptional audio device.

Should you still have questions, please speak to your dealer or contact us directly. We're always happy to discuss any special requests you may have, no matter how unusual. We love a good technical challenge.

We wish you an exceptional listening experience. The Burmester Team

The Concept

- The Burmester 948 is the first high-end power conditioner that completely isolates a hi-fi system from both high and low-frequency power line noises.
- Its active DC compensation (patented) eliminates low-frequency line noise, which causes transformer hum and impairs the sound.
- The 948 is equipped with eight AC outlets (four filtered, four unfiltered) for connecting all the components of a hi-fi system.
- The 948 also has two power filters; this enables you to keep the power supplies for your digital and analogue components separate.
- With the 948, you can also switch on your entire hi-fi system remotely.
- The system's star-shaped earthing provides effective protection against earth loops.
- Thanks to its extremely robust additional equipotential bonding conductor, the 948 guarantees optimum earthing.
- The highly effective overvoltage protection protects both the 948 itself and all connected devices from power surges.
- The 948's switching display shows the current mains voltage or a DC component in the mains grid.

Storage

Please read this operation manual in full and keep it in a safe place.

Intended Use

This device is intended for use in home audio systems.

Permissible Operating Conditions

Please take care to only ever use your Burmester device under the following conditions:

Maximum altitude: 2000 m Humidity: < 50% Temperature range: 20-30°C



Unpacking, Connection and Use

Unpacking the Device



CAUTION: RISK OF INJURY DUE TO HEAVY WEIGHT

The device is very heavy and can cause injury if it falls.

→ The device should only be unpacked and set up by persons who are experienced in handling heavy loads. If necessary, have a second person help you unpack and set up the device.



WARNING: SUFFOCATION HAZARD

Your Burmester device is shipped in plastic bags to protect its surfaces.

 \rightarrow Keep these bags out of reach of children in order to prevent suffocation.



ATTENTION: DANGER DUE TO IMPROPER INSTALLATION

 \rightarrow Consider the following points when choosing where to position the device:

Never use the device outdoors. Avoid exposure to direct sunlight as well as excessive heat, cold, moisture and dust. Ensure adequate ventilation. Never place the device on an enclosed shelf. Do not cover the slots or openings on the device. These are important for ventilation. Do not expose the device to dripping or splashing water, and do not place containers of liquid on the device. Likewise, never place open fire sources, such as lit candles, on the device.

To avoid damaging the housing, do not use any pointed or sharp objects to open the packaging.

Scope of Delivery

SCOPE OF DELIVERY

The scope of delivery for the device includes:

1	Packaging with power conditioner 948	
1	Equipotential bonding conductor	
1	Power cable	
1	Set of warranty documents	
1	Operation manual	

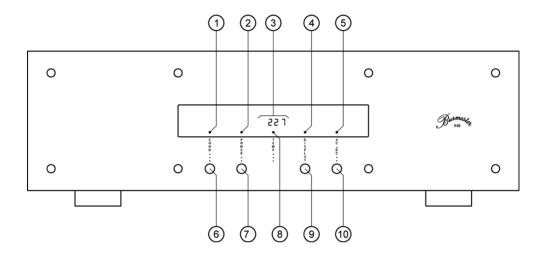
PLEASE CHECK THE DELIVERY FOR COMPLETENESS AND DAMAGE.

→ If parts of the delivery are missing or if you notice any damage when unpacking the device, please do not connect it; consult an authorised dealer instead.

WE RECOMMEND KEEPING THE ORIGINAL PACKAGING FOR FUTURE TRANSPORT, MOVING, ETC.

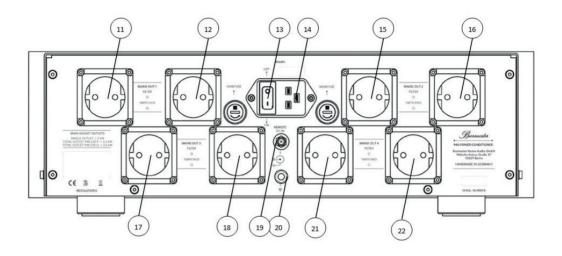
Functional Overview

FRONT PANEL



1	Conditioner LED indicates active conditioner function		
2	POWER LED illuminates when device is on		
3	Display indicates mains voltage in V or DC component in mV		
4	Stand-by LED indicates stand-by mode		
5	AC DC LED illuminates when display showing DC voltage		
6	Conditioner button activates conditioner function		
7	POWER button switches power conditioner on and off		
8	TEMP LED illuminates when operating voltage is exceeded		
9	Display button switches display on and off		
	AC DC button switches display from showing mains voltage in V to DC		
10	component in mV		

REAR PANEL (230 V EU-VERSION SHOWN)



11	AC outlet MAINS OUT 1
12	AC outlet MAINS OUT 1
13	AC mains switch
14	AC input terminal
15	AC outlet MAINS OUT 2
16	AC outlet MAINS OUT 2
17	AC outlet MAINS OUT 3
18	AC outlet MAINS OUT 3
19	Remote input terminal for turning on the power conditioner remotely
20	Earth connection for additional equipotential bonding
21	AC outlet MAINS OUT 4
22	AC outlet MAINS OUT 4

Connecting the Device

All the connection terminals are located on the rear of the device. All components of the music system must be switched off before connecting the device.

CONNECTING THE DEVICE

Make sure the **AC mains switch (13)** is set to OFF. Connect the power cable's device plug to the **AC input terminal (14)**. Then plug the mains plug into the wall outlet. In order to ensure optimum listening pleasure, you should connect the side of the mains plug that is marked with a dot, to the 'hot' phase of the wall outlet. The 'hot' phase is also marked with a dot on the 948's AC outlets. If you are having difficulty finding the 'hot' phase of your AC wall outlet, please contact your authorised dealer.

CONNECTING THE EQUIPOTENTIAL BONDING CONDUCTOR

In order to ensure that it is safely connected to the earth when discharging overvoltages, this device is equipped with an additional equipotential bonding conductor.

This equipotential bonding conductor is required for the safe operation of the 948. Connect the conductor to the 948's **earth connection (20)** by simply plugging it in, then connect the mains plug on the equipotential bonding conductor to a wall outlet.

MAINS VOLTAGE

Prior to connection, check to see if the mains voltage specified on the back panel of the device above the AC mains terminal matches the mains voltage for your household.



WARNING: DANGEROUS VOLTAGES

Before connecting the device, make sure that the protective earth contact in your mains socket is in operation. If the protective earth contact is missing or not connected correctly, this poses a risk of fatal injury!

Contact a professional if you are in any doubt.

During operation, the AC outlets conduct dangerous voltages. Never touch them when the power conditioner is connected. Always use prefabricated power cables to connect the AC outlets.



WARNING: POWER CONNECTION

Use the three-core power cable supplied with the device to connect it to the power supply. The protective earth contact must never be disabled. At the factory, the mains voltage is set to the national standard for the country in which you purchased your Burmester device. If you intend to operate your Burmester device at a different mains voltage to that set at the factory, you will need to send your Burmester device to our Sales team or our factory in Berlin so that the mains voltage can be adjusted accordingly.

If you are uncertain of the mains voltage at your installation site, please make sure you check with your authorised Burmester dealer prior to installation.

AC OUTLETS/FILTERS

The device is equipped with eight AC outlets for connecting hi-fi equipment; these are divided into four groups. The markings on the rear panel indicate which filters need to be connected to which AC outlets (FILTER). If you wish to connect the power filters to the AC outlets differently, please contact your authorised dealer.

The standard version of the device offers unfiltered mains voltage for the AC outlet groups **MAINS OUT 3 (17, 18)** and **MAINS OUT 4 (20, 21)**. The AC outlets in the groups **MAINS OUT 1 (11, 12)** and **MAINS OUT 2 (15, 16)** have separate power filters. The DC compensation affects all eight AC outlets.

The maximum output **per AC outlet** must not exceed 2,000 W @ 230 V, 1,550 W @ 120 V and 1,300 W @ 100 V. The maximum permissible **total output** for all connected devices is listed in the technical specifications at the end of this operation manual (**maximum power output**).

NOTES ON CONNECTION

In order to optimise the operation of your 948 power conditioner, we recommend connecting your audio equipment as follows (other combinations are also possible):

MAINS OUT 3 and 4	All types of amplifiers, incl. subwoofers
MAINS OUT 2 (FILTER2)	digital-to-analogue converters, dig. tuners
	Digital devices, e.g. CD players, DVD players,
MAINS OUT 1 (FILTER1)	record players, FM tuners
	Preamplifiers, phono preamplifiers,

When using very powerful amplifiers with a continuous power consumption of more than 500 W, we recommend connecting these directly to the parallel wall outlet. Because it runs in parallel, the 948 power conditioner will also affect this outlet, and thus all the devices connected to it.

Operating the Device



CAUTION: RISK OF INJURY TO CHILDREN

This device poses various injury risks if used improperly. Never leave your children unattended with the device. This device is not intended for use by children.



WARNING: DANGEROUS VOLTAGES

To fully disconnect the device from the mains, you have to unplug the mains plug.

OPERATING CONTROLS

With the exception of the AC mains switch, all the operating controls are located on the front panel. The device must be connected to the mains power in order to enable operation. We recommend checking all the connections before switching it on.

AC MAINS SWITCH

The **AC mains switch (13)**, which switches the AC power to the unit on and off, is located on the rear panel above the AC mains terminal. When the switch is moved to the ON position, the transformer is connected to the mains, the AC outlets are switched on and the **stand-by LED (4)** lights up.

POWER BUTTON

The **POWER button (7)** switches the power conditioner on and off. This can only be done when the AC mains switch is in the ON position.

The **display (3)** lights up to indicate when the device is switched on. When the device is switched off, the **stand-by LED (4)** lights up to indicate that the device is in stand-by mode.

PLEASE NOTE: ALWAYS SWITCH THE DEVICE OFF USING THE POWER BUTTON BEFORE SWITCHING THE AC MAINS SWITCH TO OFF.

CONDITIONER BUTTON

Pressing the **conditioner button (6)** switches the power conditioner's automatic DC compensation on and off. The **conditioner LED (1)** indicates when this function is active. The DC voltage figure shown on the **display (3)** will be reset to zero.

AC DC BUTTON

Pressing the **AC**•**DC button (10)** toggles the power conditioner's **display (3)** between showing the mains voltage (**AC**•**DC LED (5)** off) and the DC component of the mains voltage (**AC**•**DC LED (5)** on).

DISPLAY BUTTON

The power conditioner's **display (3)** can be switched off using the **display button (9)**. All of the device's functions will still remain active. Pressing the **display button (9)** again will turn the display back on.

REMOTE INPUT

The **REMOTE input terminal (19)** is located on the rear panel of the device, beneath the **AC input terminal (14)**. This input enables you to switch the 948 power conditioner on and off from your preamplifier or digital-to-analogue converter. This function is only available when the power conditioner's REMOTE input terminal is connected to the REMOTE output terminal of the preamplifier or the digital-toanalogue converter via a suitable cable. Please note that we do not include this remote cable in the scope of delivery because the required cable length varies for each individual customer. You can obtain a cable of the required length from your authorised Burmester dealer.

The devices that are connected to their respective AC outlets will be turned on at the same time. The markings on the rear panel indicate which AC outlets the remote on/off function needs to be connected to (SWITCHED). In the standard version, the remote function only switches the power conditioner on and off.

For other remote on/off function options, please contact your authorised dealer.

ERROR PROTECTION

The 948 is equipped with various protection circuits that are designed to protect it and the devices connected to it in case of a failure.

OVERHEATING

If the device exceeds the maximum permissible operating temperature, the overheating protection will automatically switch off the DC compensation. This **TEMP LED (8)** will light up to indicate this event, while the **conditioner LED (1)** will go out.

Once the unit has cooled off, the DC compensation can be reactivated by pressing the **conditioner button (6)**. The 948 will not allow you to switch it back on until the temperature has dropped below the maximum permissible limit.

OVERVOLTAGE PROTECTION

The 948 contains overvoltage elements that restrict overvoltages with peak surges of up to 20,000 A.

Important Notes

HEAT BUILD-UP

Be careful when touching the housing - it may get quite warm during operation.

RESETTING

If the unit does not respond when you press the control keys on the front, it can be reset to normal operation by switching it off and back on again using the AC mains switch on the back.



WARNING: OPERATION DURING THUNDERSTORMS

During thunderstorms and when there is a risk of lightning strikes, disconnect the device from the power supply by unplugging the power cable from the device or the mains socket. It is not sufficient to switch off the AC mains switch on the back of the device. To be safe, you should also unplug all connected components from the power supply.



WARNING: REPLACING FAULTY FUSES

If you cannot switch on the device even though the mains voltage is connected, this may be due to a faulty fuse. There are a number of potential causes for this problem. Have the device checked by your dealer. Only authorised personnel are permitted to change the fuses.

WARRANTY

We provide a three-year warranty on this 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 warranty application must have been submitted properly. Opening the device, modifying it or dismantling outlets will void the warranty.

CARE

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

BURMESTER POWER CABLE

For the cleanest power supply, we recommend our triple-shielded power cable, the BURMESTER-POWER. This power cable comprises three high-purity copper wires with minimal resistance that have been wrapped together. The cable is tripleshielded, which provides it with outstanding electrical and magnetic insulation. Using the BURMESTER-POWER will give your entire hi-fi system a clear and detailed sound.



Technical Specifications

Width	482 mm
Height	155 mm
Depth	400 mm
Weight	approx. 13 kg
Standby power	< 1 W
Power when on	10 W
Warranty	
Upon submission of warranty documentation	3 years

NOMINAL VOLTAGE RANGES/MODELS

948-230-F (Plug-F)	220-230 V~, 50/60 Hz
Maximum power output	3,300 W
Maximum power consumption	3,500 W
948-230-G (Plug-G)	220-230 V~, 50/60 Hz
Maximum power output	2,600 W
Maximum power consumption	2,800 W
948-120-B (Plug B)	110-120 V~, 50/60 Hz
Maximum power output	1,550 W
Maximum power consumption	1,800 W
948-100-B (Plug B)	100 V~, 50/60 Hz
Maximum power output	1,300 W
Maximum power consumption	1,500 W

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

PLEASE NOTE: THE DIMENSIONS DO NOT INCLUDE THE LENGTHS OF THE PLUGS USED FOR CONNECTION.

DISPOSAL

It is illegal to dispose of this device with household waste (grey bin, yellow bin, organic waste bin, paper or glass).Instead, it must be handed over to a municipal collection point or voluntary returns system.





VERSION: BA_948_EN_1-7_2201

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