

# **OWNER'S MANUAL**

BIO LOUDSPEAKER



LOUDSPEAKER



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#### Scope of Delivery

The cartons should contain the following:

- 2 plastic bags including the loudspeakers
- 4 self-adhesive protective felt rings for each loudspeaker
- 1 foam cylinder for the bass reflex tube for each loudspeaker
- 1 set of warranty documents
- 1 owner's manual

We recommend to keep the original packing at least for the time of your warranty in case the loudspeakers need to be shipped in the future.

#### Dear Audiophile,

thank you for choosing this Burmester audio component. We sincerely appreciate your trust in us. You have purchased loudspeakers which excel in musical fidelity and combine uncompromising manufacturing quality with technical innovation and the highest degree of operating flexibility. These speakers are capable of filling medium spaced rooms with dynamic sound. To sound their best and to avoid clipping, they should be driven by power amplifiers of the highest quality.

We recommend reading this user manual at least once in its entirety before setting up the speakers for the first time. This will enable you to make full use of all capabilities of these outstanding audiophile instruments. Should you have any further questions, please contact your dealer or us directly.

Enjoy your enhanced listening pleasure.

Your Burmester Team



## **UNPACKING**

#### **PLEASE NOTE:**

In order to prevent damage of the housing, please do not use pointed or sharp tools to open the cartons.

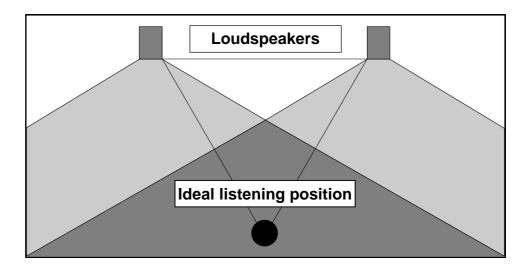
The loudspeakers are delivered in plastic bags protecting the surface of the speakers. Please keep these bags away from children to avoid danger of suffocation.

Check package contents for completeness when unpacking. If your package is incomplete or you notice any damage while unpacking, do not set up the unit. Please contact your authorized dealer instead.

## **SETTING UP**

# Setting Up Position

Carefully remove the loudspeakers from the cartons and set them up at your desired location. When selecting a place to set up your speakers please try avoiding direct sunlight, dust or dampness. The loudspeakers can easily be integrated into any living environment. You will achieve the best sound performance when the speakers form an isosceles triangle with the listening position (when seen from above).



The distance between the speakers should range from 2.5 m (8 ft.) to 4 m (14 ft.). The space between the speakers should remain free of obstructions if possible.

With regard to distance from the walls the rule applies that more distance improves the imaging and the bass reproduction decreases.

Our loudspeakers are designed in such a way that they do not require a bass boost by setting them up close to a wall; however, since rooms have very different acoustics, it may be necessary to choose a set-up close to the wall in some cases.

Although the bass reflex port is located at the rear, the loudspeaker may be moved to within 5 cm (2") off the rear wall, if the room situation does not allow a more open location.

**PLEASE NOTE:** Keep a minimum distance of 50 cm (20 ") between speakers and your television set. Otherwise the magnetic fields of the speakers could cause colour distortions in the T.V.

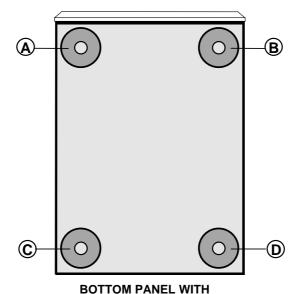


#### Self-Adhesive Felt Protectors

If the loudspeakers are positioned on a shelf or on a sideboard we recommend using buffers for decoupling. Buffers can protect the loudspeaker cabinets and your furniture from scratches and absorb vibrations. Suitable self-adhesive felt protection rings are included in the delivery. If the loudspeakers are placed upright the felt rings should be attached on the bottom of the cabinet. If the loudspeakers are placed in a horizontal position the felt rings should be attached on the bottom side of the loudspeakers.

#### Procedure:

Please put the loudspeakers on a soft base (carpet, blanket). Remove the protective foil from the felt rings and place their adhesive side close to the corners of the cabinet. Afterwards you can set the loudspeakers up at their designated positions in your listening room.



FELT RINGS (VIEW FROM BELOW) If you do not want to attach the felt rings (see A,B,C,D) permanently to the cabinet, you can leave the protective foil on the felt rings. However, we recomment to put the felt rings between the loudspeakers and the furniture on which they stand. Even when they are not attached permanently, the felt rings are able to absorb the vibrations of the speaker, and can also protect the cabinet and furniture from surface scratches.



## **CONNECTING**

#### **Binding Posts**

We use the same binding posts in our loudspeakers and in our power amplifiers. These high-grade terminals for speaker cables have proven their sonic excellence and functional convenience a thousand times over.

We recommend to use pure-copper cable lugs, but you might also use 4 mm banana plugs for the loudspeaker cable conection.

CAUTION: loudspeaker binding posts may carry dangerous high voltages. Do not let small children touch them while the speaker is connected to a running power amp.

## **Speaker Cables**

The wiring inside the loudspeakers consists of oxygen-free copper wire with 2,5 mm² cross-section. We recommend using cables of large cross-section between the loudspeakers and power amps to ensure optimal control of the speakers by the damping factor of the amplifier.

You will obtain the best result by using original Burmester loudspeaker cables, since they feature the same electical potential and tonal quality as our loudspeakers and Amplifiers.

#### Connecting

**CAUTION:** The power amplifiers have to be switched off while connecting the loudspeakers. This will avoid shorting out cables that have not yet been completely hooked up. Connect the speaker cables to the power amplifiers only after ensuring that they are hooked up correctly to the speakers.

Before turning the amps back on, make sure that all cables have been connected firmly and correctly with respect to polarity (plus, minus).

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 audio amplifier. Never insert the speaker cables into a wall socket/AC mains, since this will destroy the speakers.



## **BASSMANAGEMENT**

The bass reproduction of the B10 Loudspeakers can be adjusted to the listening room or to your personal taste in two different ways: via removable foam cylinders in the bass reflex tubes, and, in addition to that, via switch on the connecting panel.

We recommend to test both possibilities which are absolutely unique in this combination. Depending on the placement of the loudspeaker and the resulting standing waves (hum frequencies) in your listening room sometimes one and sometimes the other combination will achieve the best results.

Without foam cylinder in the reflex tube and with bass adjustment switch in "plus" position (right) the B10 will produce an increase of 5 dB in the low frequency band between 60 Hz and 80 Hz which is usually beneficial for free-standing loudspeakers. If the loudspeakers are placed close to the corners of the room, however, the bass will sound more pleasant and well-focused when the foam cylinder is inserted into the reflex tunnel and the bass adjustment switch is in "minus" position (left). In other cases it may turn out that only the use of the foam cylinder or the bass adjustment switch will achieve the best results.



## **Foam Cylinder**

You will find a foam cylinder in every reflex tunnel on the back of your loudspeaker. For an increase in the bass reproduction you can carefully pull the foam cylinder out of the reflex tunnel with your fingers.

Foam inserted: moderate bass Foam taken out: powerful bass

When the foam cylinder is placed inside the bass reflex tubes the B10 is turned into a closed box with 2-3 dB less sound pressure between 55 Hz and 110 Hz.



## **Bass Switch**

When the bass switch of the B10 is in the right position (+) the sound pressure level between 50 Hz and 100 Hz will increase by up to 2,5 dB. At the same time extreme bass frequencies below 40 Hz will be lowered in order to prevent excessive diaphragm amplitudes from the woofers.



## **PRECAUTIONS**

**Speaker Cables** 

We manufacture speaker cable in every desired length to achieve outstanding sound quality. The sound performance of our cables is optimized to all our Burmester components.

Burn-In

All drivers used in the loudspeakers have been thoroughly burnt-in and afterwards computer selected and matched in pairs. However, all mechanical systems need a certain break-in period to achieve peak performance.

You may know this phenomenon from a new car, which also needs a certain running-in time.

**Performance** 

These speakers are capable of filling large rooms with richly dynamic music. To sound their best and to avoid clipping (distortions of an amp operating at the limit of its capacities), they should be driven by power amplifiers of the highest quality.

Warranty

Burmester loudspeakers carry a regular 90 days year warranty. If you return the warranty certificate and(!) the warranty extension form the warranty will be extended to a period of three years. The warranty is void if the loudspeakers have not been connected properly and without mechanical overloading, if there has been mechanical damage to the speaker, if the speakers have been opened or altered or if drivers or binding posts have been removed.

**Maintenance** 

To maintain the loudspeakers only use a lightly damped or dry cloth. The membrane may be cleaned very carefully with a dry cloth. Never use a wet cloth or chemical substances to clean the loudspeakers.



This symbol on your loudspeakers indicates that important information can be found in the owner's manual.



This symbol on your loudspeakers is a warning of high voltages.



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.



# **FIRTS AID MEASURES**

Sound results which are not satisfying are not necessarily originating from a loudspeaker defect which can only be eliminated by a specialist. Sometimes you can easily help yourself.

Problem	Frequent Cause	Corrective Action	
There is no sound coming from one or even both loudspeakers	a) The electronics are still switched off b) A short circuit or an open circuit in the wiring	a) Switch on amplifier and/or source b) Check wiring and restore fault	
The sound seems to lack bass or imaging diffuse	Wrong polarity in the wiring of one of the channels	Swap the plus- and minus lines of the channel in question	
The bass is very loud and imprecise	The loudspeaker is placed too close too the walls	Increase the distance of the speakers and/or of the listening position to the walls	
The trebble appears a little bit too soft	The tweeters have not been angled towards the listening position	Angle the loudspeakers towards the listening position	

## **TECHNICHAL DATA B10**

Cabinet Dimension	Width x Height x Depth	220 x 390 x 280 mm
Weight	per loudspeaker	11,5 kg
Frequency Response	+/- 3 db	50 Hz – 24.000 Hz
Rated Power Handling		80 W
Sensitivity	2,83 V / 1 m	87 dB
Rated Impedance (DIN)		4 Ohm
Crossover Point		2.300 Hz
Warranty		90 days
	with warranty extension	3 years

Subject to change without prior notice

