

BANG & OLUFSEN

BEOCENTER 9000

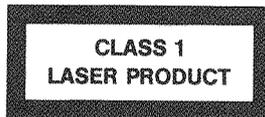
How to use this manual

This manual explains how to set up the Beocenter 9000 and how to use the various music sources available.

- We have arranged the manual so that you can easily find your way through it - with a table of contents which you can use as a directory when choosing what you want to do.
- The instructions refer to the sensi-touch operation panel. The individual steps in the instruction sequences are indicated by small boxes with the appropriate text or symbol inside them.
- The meaning of all the symbols and cues appearing on the display panel is explained in a separate paragraph.
- The best way to learn is by doing, so try your hand at a few simple commands. Until you feel confident, you may rely on this manual to tell you exactly what to do to carry out the functions of your choice.

We suggest you keep this manual handy so that you can refer to it when necessary.

COMPACT
disc
DIGITAL AUDIO



CAUTION: Use of any controls, adjustments or procedures other than those specified herein may result in hazardous radiation exposure.

The black and yellow label on the compact disc player serves as a warning that the apparatus contains a laser system and is classified as a class 1 laser product. In case of any trouble with the compact disc player, please contact your Bang & Olufsen dealer. The apparatus must be opened by qualified servicemen only.

The Beocenter fulfils the conditions stated in the EEC directive 82/499 concerning radio frequency interference.

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The Bang & Olufsen Beocenter 9000 is an integrated music system comprising tuner/amplifier, cassette deck, and compact disc player. It distinguishes itself by its timeless design and technologically advanced operation system, which actually guides you to the desired function.

The Beocenter 9000 is a so-called Beolink product, which means that it can be used as a master in a Bang & Olufsen Beolink system. In a Beolink system video and audio products are interconnected and they can be operated using only one remote control unit – the Beolink 1000.

For further information about setting up and operating the Beolink system, please refer to the special Beolink manuals.

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Licensing Corporation.

Principles of operation

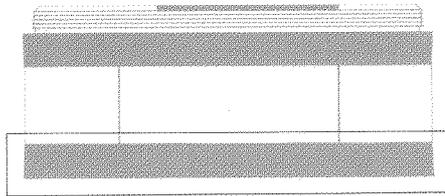
Display panel



The upper or display panel will tell you what is going on when you use the Beocenter. It will show you which source is playing and give you the exact operational status of the Beocenter.

For an explanation of all the cues and symbols appearing on the display, please see the paragraph "Displayed cues and symbols" on page 41.

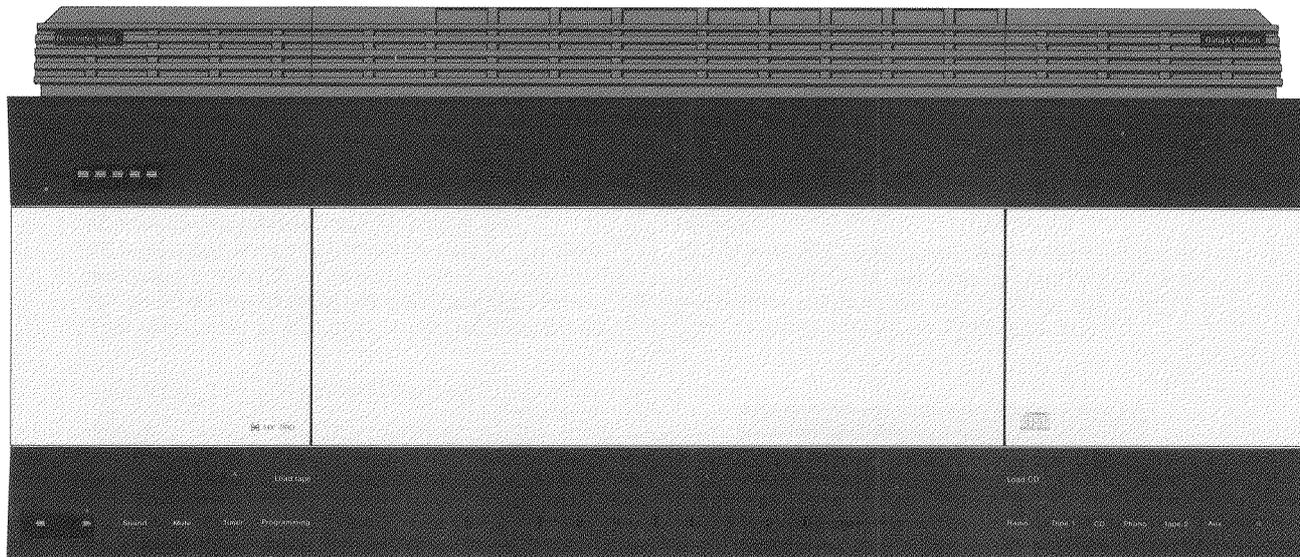
Operation panel



The lower or operation panel comprises all the controls required to operate the Beocenter. They need only a very light touch to be activated. However, you will find that not all the controls are visible or accessible at any one time, but only appear when they are appropriate to the source you are playing.

You will find that they appear in three levels:

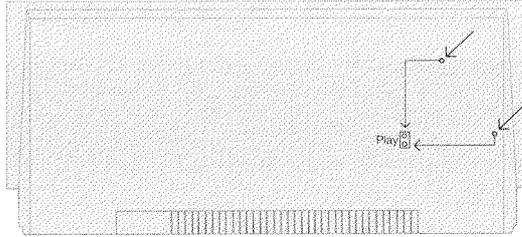
1. The first group or level of controls are accessible at all times. They are identified by grey print and are for selecting source, adjusting sound levels and programming.
2. The controls in the second level only become accessible when you have made your choice from the first level. Only those appropriate to the source you are playing will light up.
3. Likewise, the controls in the third level will only become accessible when you have made your choice from the second level - some of them for a limited period of time (some 3 to 9 seconds). If they disappear before you have finished your instructions, you will have to start again from the second level.



Making your Beocenter ready for use

Setting up

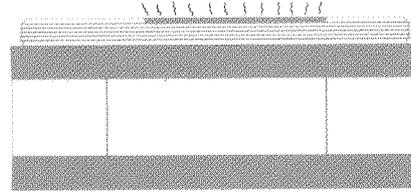
Removing the transport screws



The Beocenter is provided with two screws on the base which protect the compact disc unit suspension during transport. These screws must be loosened before you can operate it. To gain access to the screws carefully turn the Beocenter upside down. Remove the two screws with a screwdriver and place them in the two holes marked PLAY for safe keeping.

If you ever have to transport the Beocenter, we strongly recommend that you reinsert the transport screws in the holes marked TRANSPORT.

Placement



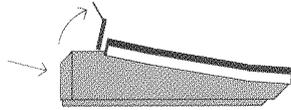
The Beocenter must be placed on a firm, horizontal surface. Do not obstruct the ventilation apertures in any way. Avoid placing it in direct sunlight, near radiators or other sources of heat.

Adjustment to room temperature

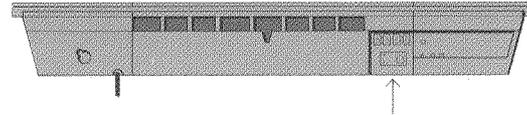
If the Beocenter has been exposed to low temperatures, e.g. during transport, and is then placed in a warm room, condensation can form within the mechanism. If this happens, it will not play

until the humidity falls to an acceptable level, so allow the Beocenter to acclimatize to normal room temperature for at least an hour or two before use.

Connections



Before using your Beocenter, you must make several connections. Lift up the hinged grille at the rear (left-hand side of Beocenter) and remove the plastic foam in order to reveal the sockets.

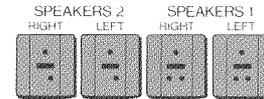


Loudspeakers

The two pairs of loudspeaker sockets allow you to connect one or two sets of loudspeakers as required:

SPEAKERS 1:

- 4-pin DIN sockets for
- loudspeakers in the same room as the Beocenter, or
- the Bang & Olufsen Beolab Penta power amplifier/loudspeaker module, or
- the Bang & Olufsen Beolab 150 power amplifier.



SPEAKERS 2:

- 3-pin DIN sockets for
- loudspeakers in an adjoining room, or
- Master Control Link installation.

Antennae

In order to pick up the FM and AM stations available in your area, you must connect both an FM antenna and an AM antenna.

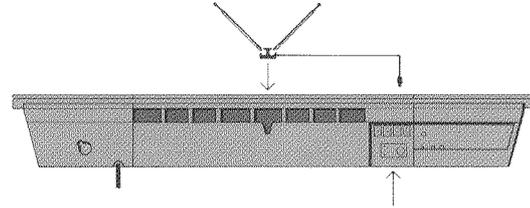
AM:

Socket for AM antenna.

FM:

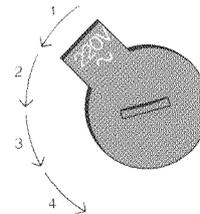
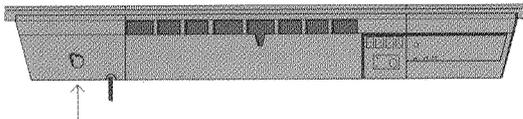
Socket for 60-75 ohm FM antenna.

If FM reception is good in your area you may rely on an indoor FM antenna to pick up the signals. The indoor antenna (part no. 8902010) is available from your Bang & Olufsen dealer. Attach it to the Beocenter as indicated on the diagram.



For an explanation of the other sockets, please see the paragraph "Auxiliary equipment".

Power supply



- 1: 220V
- 2: 130V
- 3: 240V
- 4: 110V

Before connecting the Beocenter to the mains, check that the mains voltage switch on the rear panel is set to the position corresponding to the voltage supply in your country: **220 V**, **130 V**, **240 V**, or **110 V**.

If for any reason you have to set the switch to another position, remember to **disconnect** the Beocenter from the mains beforehand. Use a screwdriver or a coin to turn the switch.

When you connect the Beocenter to the mains for the first time, or if there has been a power cut, **Clock** appears on the operation panel.

Please refer to the paragraph "Setting the clock" on page 34.

Power cuts lasting 20 seconds or less will not

disrupt the Beocenter and it will resume playing when the power is restored.

If you are recording, any power cut will interrupt your recording, but if the power cut lasts less than 20 seconds, the source you were recording from will resume playing.

Stand-by mode

Once connected to the mains the Beocenter is in so-called stand-by mode and ready for use. The stand-by mode is indicated by a tiny red light on the right-hand side of the display panel.

The Beocenter is designed to be left in stand-by mode when not in use.

Switching on

Switch on simply by selecting any of the sources available:

Radio : Turns on the radio station you were last listening to.

Tape 1 : Turns on the cassette deck.

CD : Turns on the compact disc player.

Phono : Turns on Beogram 9000 or any Bang & Olufsen record player with Datalink connected to the PHONO socket.

Tape 2 : Turns on any Bang & Olufsen tape recorder with Datalink connected to the TAPE 2 socket.

Aux : Selects the AUX socket as source. For further details please refer to the paragraph "Auxiliary equipment".

Whenever you switch on, the source selected will start playing at the preset sound level stored in the memory of the Beocenter.

You may also switch on by pressing **Mute**. This will turn on the source you were last listening to, at the previously adjusted level.

Switching off

Switch off simply by pressing  on the right-hand side of the operation panel.

The Beocenter then reverts to stand-by mode as indicated by the tiny red light on the right-hand side of the display panel.

Muting

Press  to make the sound disappear immediately.

This is useful if you want temporary silence without switching off.

Press  again to recall the sound.

The mute function only applies to the speakers connected to the SPEAKERS 1 sockets.

Automatic stand-by

Within 30 minutes of finishing a tape or a compact disc the Beocenter automatically returns to stand-by. If a tape or a compact disc

is left in pause for more than 30 minutes, the Beocenter will also return to stand-by.

Sound adjustments

Volume

To raise or lower the volume, press  or  on the left-hand side of the operation panel.

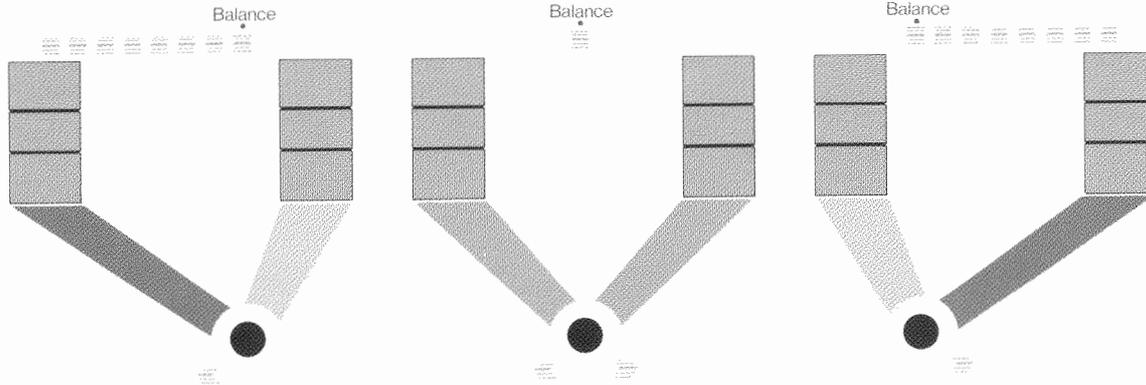
Bass, balance, and treble

The **Sound** control gives access to the bass, balance, and treble adjustments.

Press **Sound** once to gain access to bass, twice to gain access to balance, and three times to gain access to treble.

While the appropriate cue remains on the display panel, adjust the value by pressing  or  as required.

Pressing  lowers the bass and treble values, pressing  raises them.



If you are adjusting balance, pressing  shifts the sound towards the left-hand speaker, pressing  shifts the sound towards the right-hand speaker. This function enables you to direct the sound emerging from the loudspeakers towards your favourite listening position.

The current volume, bass, balance, or treble values can be read off on the display panel and are indicated by the appropriate cue:

Volume
Bass
Balance
Treble

followed by green striations. One striation indicates the medium setting for bass, balance, and treble. The maximum volume level is indicated by a full range of 15 striations.

Loudness

The loudness function is used to compensate for the human ear's lack of sensitivity to high and low frequencies when listening to low volume levels. It 'boosts' the low and high frequencies so that the music becomes more dynamic.

If you press  a fourth time, you will gain access to the loudness function as indicated by the flashing cue **Loudn**.

Press  on the left-hand side of the operation panel to cut in the loudness function. Now the **Loudn** cue glows constantly.

To cut out the loudness function, press  the appropriate number of times to step to the **Loudn** cue. Then immediately press  on the left-hand side of the operation panel. The **Loudn** cue will revert to flashing intermittently, indicating that the loudness function is cut out.

Programming functions

Presetting start-up levels

Whenever the Beocenter 9000 is switched on, the source selected will start playing at a preset sound level. You can adjust and preset this start-up level to suit your personal taste:

1. Adjust volume, bass, balance, and treble as desired
2. Press **Programming**
3. Press **Sound**
4. Press **Store**

Details worth knowing

- Volume can be adjusted while the Beocenter is in stand-by mode. This is useful if for instance you want to switch on at a level lower than the one preset for start-up. Just press **Sound** and then lower or raise the level using  or . Then switch on as usual.
- The Beocenter will not start playing at a volume level exceeding 11 on the full range of 15 striations on the display. If you have preset a start-up level higher than that, it will disregard your instruction.

Using the radio

The radio must be tuned to pick up the stations available in your area.

Automatic tuning

The automatic tuning function is useful if you are not familiar with the radio stations and their frequencies.

1. Press **Radio**
2. Press **Search**
3. Press **AM-FM** if you want to switch from AM to FM or vice versa
4. Press **<<** or **>>** on the right-hand side of the operation panel to search through the frequencies
The search process will stop automatically at the first station producing an acceptable signal
5. Press **<<** or **>>** again if this is not the station you want

Manual tuning

The manual tuning function is useful if you want to move slowly through the frequencies or if you

want to detune a station slightly because of noisy reception.

1. Press **Radio**
2. Press **Search**
3. Press **AM-FM** if you want to switch from AM to FM or vice versa
4. Press **Manual**
5. Tap or keep your finger on **<<** or **>>** until you reach the station or frequency you want

Tuning by keying in the frequency

If you know the exact frequency of a particular station, you can key in the frequency directly so

that you don't have to go through the tuning procedure.

1. Press **Radio**
2. Press **Search**
3. Press **AM-FM** if you want to switch from AM to FM or vice versa
4. Press **Freq**
5. Key in the frequency of the station you want, using three or four digits as required

Programming functions

Switching between stereo and mono on FM

If you are tuned to an FM station broadcasting a stereo signal, this will be indicated by the cue **Stereo** on the display panel.

The system will automatically switch to mono if the stereo signals are not strong enough to

produce an acceptable sound.

However, you can, if you wish, overrule this automatic function and select mono or stereo manually: press **Programming** and then **Mono**

Presetting radio stations

You can preset up to 20 stations. This enables you to select a particular station directly by

pressing the appropriate number.

1. Find the station of your choice using any of the three tuning methods
2. Press **Programming**
3. Key in the number on which you want to preset the current station
4. Press **Store**

Clearing preset stations

1. Switch on the radio
2. Press **Programming**
3. Key in the preset number you want to clear
4. Press **Clear**

Document your preset stations here:

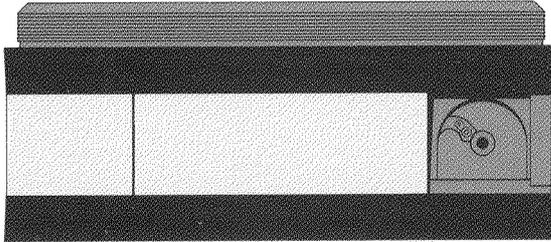
- | | |
|-----------|-----------|
| 1. _____ | 11. _____ |
| 2. _____ | 12. _____ |
| 3. _____ | 13. _____ |
| 4. _____ | 14. _____ |
| 5. _____ | 15. _____ |
| 6. _____ | 16. _____ |
| 7. _____ | 17. _____ |
| 8. _____ | 18. _____ |
| 9. _____ | 19. _____ |
| 10. _____ | 20. _____ |

Details worth knowing

- The display indicates AM frequencies in kHz with no decimals. FM frequencies are stated in MHz with one decimal.
- Automatic tuning on AM scans the AM band in precise steps of 9 kHz, which is the standard distance between AM stations. If tapping  or  repeatedly while on AM you can move slowly through all the stations.
- If tuning manually, you can step through the frequencies in minute steps of 250 Hz on AM or 12.5 kHz on FM by tapping  or  repeatedly.
- Stereo FM stations for which you have selected mono will be preset with the stereo function cut out.

Using the compact disc player

Loading a compact disc



Press **[Load CD]** to gain access to the disc compartment. The panel slides open and you will see the disc tray with the laser unit.

Place the compact disc on the tray with the label facing upwards.

Press **[Load CD]** again to close the panel.

If you start playing, the panel closes automatically.

Starting and stopping playing

Press **[CD]** to start playing the compact disc.

Playing begins at track 1 as soon as all information in the compact disc has been registered.

If you press **[CD]** and there is no disc in the compartment, the panel opens automatically within a few seconds, reminding you to load a compact disc.

Press **[Stop]** to stop playing.

The compact disc pauses until you press **[CD]** again to resume playing. If playing is resumed within 30 minutes, the compact disc will start at the exact point where you left it.

You can also stop playing by switching directly to stand-by mode.

Finding specific tracks or indexes

If you want to find a specific track on the compact disc, just press the number of your choice, e.g. [5].

If the tracks on your compact disc are sub-

divided into indexes, you can go directly to the index number you want. Press the appropriate track number, e.g. [2], then [Index], and then the index number of your choice, e.g. [2].

Searching through a compact disc

The [◀] and [▶] controls enable you to move through a compact disc if you want to find a specific point on the disc.

Keep your finger on [◀] or [▶]. Within ap-

proximately 5 seconds the search speed accelerates slightly. Lift your finger to stop searching.

Press [CD] to start playing.

Stepping through tracks or indexes

You can step forwards or backwards through the tracks and indexes, if any, on a compact disc.

Press [Search] and then [▶] or [◀] if you want to step through tracks.

Press [Index] and then [▶] or [◀] if you want to step through indexes.

Programming functions

Programming a sequence of tracks

You can programme the compact disc player to play specific tracks in any sequence you require. Before you start, make sure you have selected **CD** as your source.

Press **Stop** if you don't want the compact disc to be played while you are programming:

1. Press **Programming**
2. Press **Store** if you want to include a track number in a sequence, or press **Clear** if you want to exclude a track number from a sequence
3. Key in the track number of your choice
4. Repeat '2' and '3' to include or exclude other track numbers
5. Press **CD** to play the programmed sequence

You can include up to 30 tracks in a sequence. The tracks will be played in the order you have programmed them.

Cancelling a programmed sequence

If you want to cancel a programmed sequence, press **Programming** and then keep your finger on **Clear** until all the track numbers light up again.

Opening the panel also cancels a memorized track sequence.

Details worth knowing

- If you switch temporarily to another source while playing a compact disc and resume playing the compact disc within 30 minutes, it will start at the exact point where you left it.
- If you ask for a track number which does not exist, the compact disc player will try to carry out your instruction but within a second go on playing as before.
- If you ask for an index number which does not exist, the compact disc player will play the corresponding track number instead.
- Whenever you use **Programming** and then **Clear** to exclude one or more tracks when you are playing a compact disc, the remaining numbers displayed will be considered a programmed sequence. As soon as the current track ends, the compact disc player will start playing the sequence from the beginning and in strict numerical order.

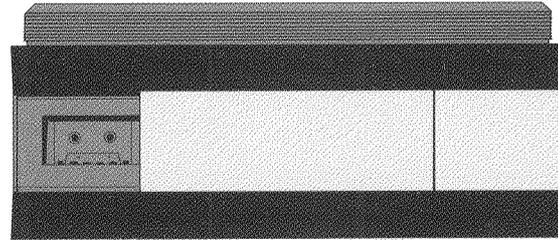
Using the tape recorder

Loading a tape

Press **Load tape** to open the sliding panel and reveal the tape compartment.

Insert the cassette with the tape slots facing you and side 1 (or A) facing upwards.

Press **Load tape** again if you want to close the panel.



Starting and stopping playback

Press **Tape 1** to start playback.

If you press **Tape 1** when there is no cassette in the compartment, the panel will open automatically, reminding you to load a cassette.

Press **1** if you want to find the beginning of the tape. The tape will then be rewound and playing will start immediately.

The tape recorder automatically reverses the tape at the end of the first side and within one second starts playing again. The tape side indicators on the display tell you which side you are on.

If you want to 'turn' the cassette to play the other side of the tape, press **Turn**.

Press **Stop** to stop playing.

The tape pauses until you press **Tape 1** again to resume playing.

You can also stop playing by switching directly to stand-by mode.

Finding specific tracks

The tape recorder will only be able to recognize the tracks on a tape if there is a pause of at least 2.5 seconds between them.

If you want to find a specific track, just press the number of your choice, e.g. [5]. The tape

recorder will then conduct a search, if necessary returning to the beginning of the tape. When it has found the track, it will start playing.

Note: You cannot ask the tape recorder to search for a track number greater than 48.

Rewinding and fast forward

Press [◀] or [▶] on the right-hand side of the operation panel to rewind or wind the tape quickly.

Provided you haven't cut out the automatic

tape reverse function, rewinding always means rewinding towards the start of side 1, and winding always means winding towards the end of side 2.

Stepping through tracks

You can step through the tracks, backwards or forwards, by pressing [Search] and then [◀] or [▶] on the right-hand side of the operation panel the number of times required to step to the track you want.

Note: pressing [◀] only once takes you to the beginning of the track you are listening to.

Programming functions during playback

Programming a sequence of tracks

You can programme the Beocenter to play specific tracks on a tape in any sequence you require. Before you start, make sure you have

selected **Tape 1** as your source. Press **Stop** if you don't want the tape to be played while you are programming:

1. Press **Programming**
2. Press **Store** if you want to include a track number in a sequence, or press **Clear** if you want to exclude a track number from a sequence
3. Key in the track number of your choice
4. Repeat '2' and '3' to include or exclude other track numbers
5. Press **Tape 1** to play the programmed sequence

You can include up to 30 tracks in a sequence. The tracks will be played in the order you have programmed them.

Cancelling a programmed sequence

If you want to cancel a programmed sequence, press **Programming** and then keep your finger on **Clear** until all the track numbers light up again.

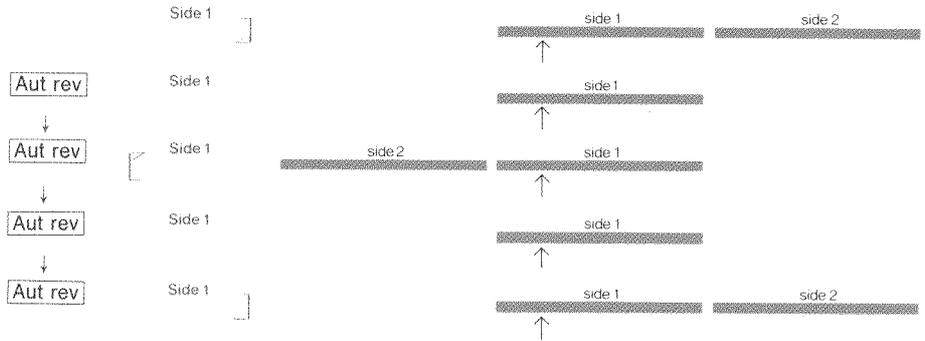
Unloading the cassette, using **Turn** or **Aut rev** also cancels all information about programmed sequences the tape recorder has previously registered.

Using the automatic tape reverse function

The Beocenter automatically reverses the tape at the end of the first side and within one second starts playing again. You don't have to turn the cassette manually.

The tape side indicators show which side is playing: **Side 1** is the side facing upwards, **Side 2** is the side facing downwards.

However, you can cancel the automatic tape reverse function so that only the current side will be played. The automatic tape reverse function is cut in and out in a cycle of four steps. Press **Programming** to gain access to **Aut rev**. Then press **Aut rev** repeatedly to step through the cycle:



During this step procedure the current side is played unaffected, as indicated by the cue **Side 1** which remains lit all the time. If you are on side 2 of the tape, the same cycle can be passed through, but in reverse order and with **Side 2** lit instead.

Whenever you load a cassette, the automatic tape reverse function is cut in.

Using Dolby NR

Tapes recorded on the Beocenter 9000 contain information about the use of Dolby noise reduction (Auto NR codes). When playing back the tape, the Beocenter registers this information and automatically selects the correct Dolby mode: Dolby B, Dolby C or no Dolby.

When playing back tapes not supplied with the Auto NR codes, you have to select the appropriate Dolby mode. Press **Programming** and then **Dolby** repeatedly to switch between the three modes.

Starting and stopping recording

Recording tapes on the Beocenter 9000 is easy and straightforward. All you have to do is start and stop the process.

The automatic adjustment function built into the Beocenter ensures that your tapes will not be overloaded.

1. Start playing the source you want to record from
2. Press **Record** to switch to recording mode
3. Press **Record** for the second time to start recording
4. Press **Stop** on the left-hand side of the operation panel when desired
A blank of 3.5 seconds is now inserted on the tape
5. Press **Record** again if you want to resume recording, or press **Stop** again if you want to leave the recording mode

If you don't want the blanks to be inserted on the tape, press **Stop** twice in quick succession.

If you want to return to the start of your latest recording, press **Return**. Then press **Tape 1** to hear it or press **Record** to resume recording.

During recording the recording level will be lowered automatically if the incoming signal exceeds a certain upper limit. This limit has been set to suit the majority of tapes available.

While in recording mode the Beocenter displays the recording level, as indicated by the cue **Rec Level**.

Programming functions during recording

Adjusting the recording level

You can of course override the automatic mode and adjust the recording level at your discretion any time you like while in recording mode.

To do so, press **Programming** and then **Level**. Immediately press  or  to lower or raise the level as required.

During the adjustment process you will see

that the level setting is shown on the display, as indicated by the cue **Level**. Each time you tap  or  the level is lowered or raised by 2 dB.

Within 3 seconds of adjusting the level, the display reverts to showing the recording level, as indicated by the cue **Rec Level**.

Adjustments BEFORE automatic recording:

This is useful if you want a recording to be made at a particularly low level or if the incoming signal is too weak to produce an acceptable recording.

After pressing **Record** for the first time (i.e. while in recording pause mode), lower or raise the recording level as required. Press **Record** again to start recording.

Recording proceeds in automatic adjustment mode, as indicated by the cue **Auto**.

Adjustments DURING automatic recording:

This is useful if you want to make temporary adjustments for particularly quiet or loud passages of music.

Remember to readjust the level before returning to automatic adjustment mode.

If you have lowered the level, you will have to raise it accordingly. If you have raised the level, it will be adjusted automatically as soon as you have reverted to automatic adjustment mode.

Press **Record** another time to revert to automatic adjustment mode.

Manual recording

You can override the automatic adjustment function entirely and adjust the recording level manually to any level you like.

After pressing **[Record]** for the first time (i.e. while in recording pause mode), press **[Programming]** as usual to gain access to **[Level]**. Keep your finger on **[Level]** until the cue **Level** blinks once and then adjust the level as required. Press **[Record]** again to start recording.

Recording proceeds in manual adjustment mode.

The automatic adjustment function is restored as soon as you leave the recording mode and initiate another recording.

Using Dolby NR

Before making a recording you must decide whether you want to use Dolby B, Dolby C or no Dolby at all.

After pressing **[Record]** for the first time (i.e. while in recording pause mode), press **[Programming]** to gain access to **[Dolby]**. Press

[Dolby] repeatedly to switch between Dolby B, Dolby C, and no Dolby.

During recording the Beocenter 9000 places a code on the tape (Auto NR code), which ensures that the appropriate Dolby mode will be selected when the tape is played back on the Beocenter 9000.

labelling Cancellling the automatic tape reverse function

You can cancel the automatic tape reverse function so that the tape recorder will record only on the current side of the tape.

After pressing **[Record]** for the first time (i.e. while in recording pause mode), press **[Programming]** to gain access to **[Aut rev]**. Press **[Aut rev]** to cancel the automatic reverse function.

Refer to the tape side indicators on the display and check that the current side is the side you want to record on.

For details about the automatic tape reverse function, please refer to the paragraph "Using the automatic tape reverse function" on page 28.

Details worth knowing

- **[Record]** is only available if there is a cassette in the compartment, and only if the current side of the tape can be recorded on (i.e. if you have not removed one or both tabs on the cassette edge to prevent recording on one or both tape sides).
- If you are recording a compact disc* or from an auxiliary Bang & Olufsen product with Datalink, recording stops automatically when the last track on e.g. the compact disc or the record has been played.

* Subject to copyright law

- It may be useful for you to insert a blank on the tape immediately before you start a recording. Once you find the end of the last recording, press **[Stop]** on the right. Now press **[Record]** twice and then **[Stop]** on the left. The tape recorder inserts a blank of 3.5 seconds and is now in recording pause mode. You can now switch to the source you want to record from and start recording as usual.
- Whenever you use **[Programming]** and then **[Clear]** to exclude one or more tracks from a tape, the remaining numbers displayed will be considered a programmed sequence. As soon as the current track ends, the tape recorder will search for the first track in the sequence and start playing the sequence in strict numerical order.
- You can override the Auto NR code if for some reason you want to play back a tape using a different Dolby mode to that in which the tape was recorded. Just press **[Dolby]** to step to the Dolby mode of your choice, but do not lift your finger until **Dolby** blinks once. The locked Dolby mode is now indicated on the display. It will not be released until you press **[Dolby]** again or unload the tape.
- Passages of low music, i.e. lower than -20 dB, lasting more than 2.5 seconds will be registered as pauses. This means that the track numbers of your recording may not coincide with the track numbers of the source of your recording.

Time programming

Setting the clock

If you want to use the time programming function, the 24 hour clock built into the Beocenter has to be set to the correct time.

The clock must be set while the Beocenter is in stand-by mode.

Press **Programming** to gain access to **Clock**. Press **Clock** and then key in the correct time, e.g.

2, **1**, **0**, **0** for 9 p.m. Press **Store** to memorize the information.

If you disconnect the Beocenter from the mains or if a power cut occurs, the clock will stop. When the power returns, you will have to set the clock to the right time, as indicated by **Clock**.

Programming play or recording instructions

You can programme the Beocenter to play or record any source you like at specific times within a 24 hour period or daily.

Programming must be done while the Beocenter is in stand-by mode.

1. Press **Programming**
2. Press **Play** or **Record** as required
3. Select the source you want to play or record, e.g. **Radio**, **2** or **CD**
4. Press **Clock**
5. Key in the time you want playing or recording to start
6. Press **Store**

If you want the programme to recur every day, keep your finger on **Store** until the display switches to showing the real time

Checking programmes

Programmes can only be checked while the Beocenter is in stand-by mode.

Press [Programming] to gain access to [Call]. Then press [Call] repeatedly to step through the programmes, which can be read off on the display panel.

? on the right-hand side of the display indicates the end of the programmes. Recurring

time programmes are indicated by a - (dash) in front of the start time.

When stepping through the programmes using [Call], you will first see the recording instructions and then the play instructions. The programmes will appear on the display panel in the order they have been entered, not in chronological order.

Cancelling programmes

To cancel a particular programme, follow the checking procedure. When you have found the

programme you want to cancel, i.e. when it is visible on the display, simply press [Clear].

“Timer”

The **Timer** cue on the display panel indicates that any programmed play instructions will be executed with both the speakers in the SPEAKERS 1 sockets and those, if any, in the SPEAKERS 2 sockets cut in. Once you press [Store] to memorize a play instruction, the **Timer** cue is automatically cut in.

You can cut out the SPEAKERS 1 sockets, if you wish, so that when the Beocenter starts playing at the specified time, the speakers in the SPEAKERS 1 sockets will be muted. To do so, press [Timer]. The **Timer** cue now disappears.

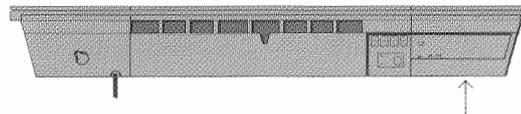
Press [Timer] to recall the **Timer** cue.

Details worth knowing

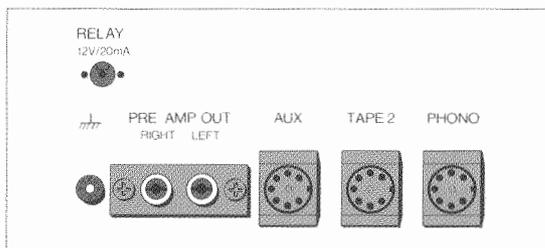
- If you select **[Radio]** in a programme and fail to key in a specific preset number, or key in a vacant number, the Beocenter will default to the station to which you were last listening.
- If you want the Beocenter to switch to stand-by at a specific time, you must programme a play instruction, using stand-by as your source.
- If you want to exclude a specific day from an otherwise daily programme, you must instruct the Beocenter to switch to stand-by at the exact time when it would otherwise start playing.
- The Beocenter can accept up to 12 play programmes and 6 recording programmes in its memory.
- Your programmes will be unaffected by temporary power cuts. However, you must remember to set the clock again when the power returns so that your programmes will be executed at the correct time.
- The Beocenter will not retain a programme in its memory once the instructions have been executed, with the exception of recurring daily programmes, which will of course remain in the memory until you choose to cancel them.
- If you happen to make a mistake or change your mind during a programming sequence, just discontinue the sequence and wait a few seconds until the controls disappear. Then start again.
- Programmed recording instructions will be executed with the loudspeakers muted, unless, of course, the Beocenter is already playing.

Auxiliary equipment

The sockets on the rear panel enable you to connect auxiliary audio and video equipment to your Beocenter. To gain access to the sockets, lift up the hinged grille at the rear (left-hand side of Beocenter).



Audio equipment



Record player

Use the 7 pin DIN socket marked PHONO. You can connect Beogram 9000 or any Bang & Olufsen record player with a 7 pin DIN plug.

If you want to connect a record player with phono plugs, you must use an adaptor (part no. 6270316), which is available from your Bang & Olufsen dealer. *Remember to connect the earth lead to the earthscrew marked* 

Press to select the PHONO socket.

Cassette deck

Use the 7 pin DIN socket marked TAPE 2. You can connect any Bang & Olufsen cassette deck with a 7 pin DIN plug, including the Beocord VHS 91 or 91.2 video tape recorder if used as an audio tape recorder.

Press to select the TAPE 2 socket.

Power amplifier

Use the phono sockets marked PRE. AMP. OUT - RIGHT for right channel, LEFT for left channel.

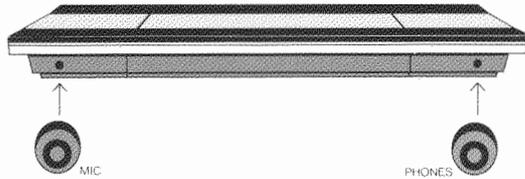
Remote Mains Switch

Use the socket marked RELAY. You can connect the Bang & Olufsen Remote Mains switch (type no. 4002) for switching on external equipment such as an amplifier or a lamp.

Miscellaneous equipment

Other equipment such as an auxiliary compact disc player or a reel-to-reel tape recorder can be connected to the socket marked AUX.

The two sockets underneath the operation panel enable you to connect a microphone and headphones.



Mono microphone

Use the socket marked MIC on the left.

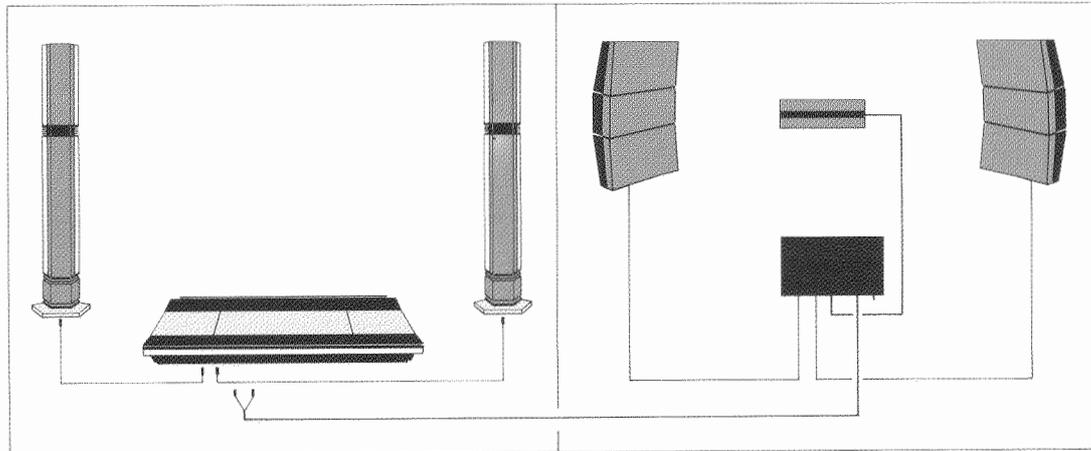
You can use the Beocenter as a microphone amplifier: press **Aux**, **8**.

To record from the microphone, select **Aux**, **8** as your source and then press **Record** twice to start recording (cf. page 30).

Headphones

Use the socket marked PHONES on the right. If you connect headphones, the speakers in the SPEAKERS 1 sockets will be cut out.

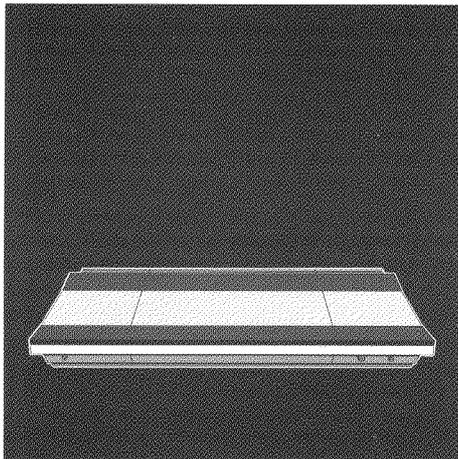
Master Control Link



You can connect a Master Control Link 2 to the SPEAKERS 2 sockets, which enables you to operate and listen to your Beocenter anywhere in your house.

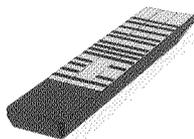
For further information about the Master Control Link, please contact your Bang & Olufsen dealer.

Remote control



The Beolink 1000 remote control enables you to carry out all the basic functions in your Beocenter from a distance.

If you have opted for the Bang & Olufsen Beolink system, you need only the Beolink 1000 remote control to operate the whole system.



Video equipment

This Beocenter is compatible with certain Bang & Olufsen video equipment. This means that you can operate your TV-set and video tape recorder via the Beocenter 9000.

Compatible Bang & Olufsen video equipment:

- Beovision LX 2500/2800 TV-set
- Beovision LX/L 2502/2802 TV-set
- Beocord VHS 91 or 91.2 video tape recorder
- Beocord VHS 82 or 82.2 video tape recorder

The TV-set must be connected to the AUX socket and the video tape recorder must be connected to the TV-set via the 21 pin A/V socket. Moreover, the TV-set must be equipped with a Datalink module. For further information about the Bang & Olufsen audio/video integration, please contact your Bang & Olufsen dealer.

Operation

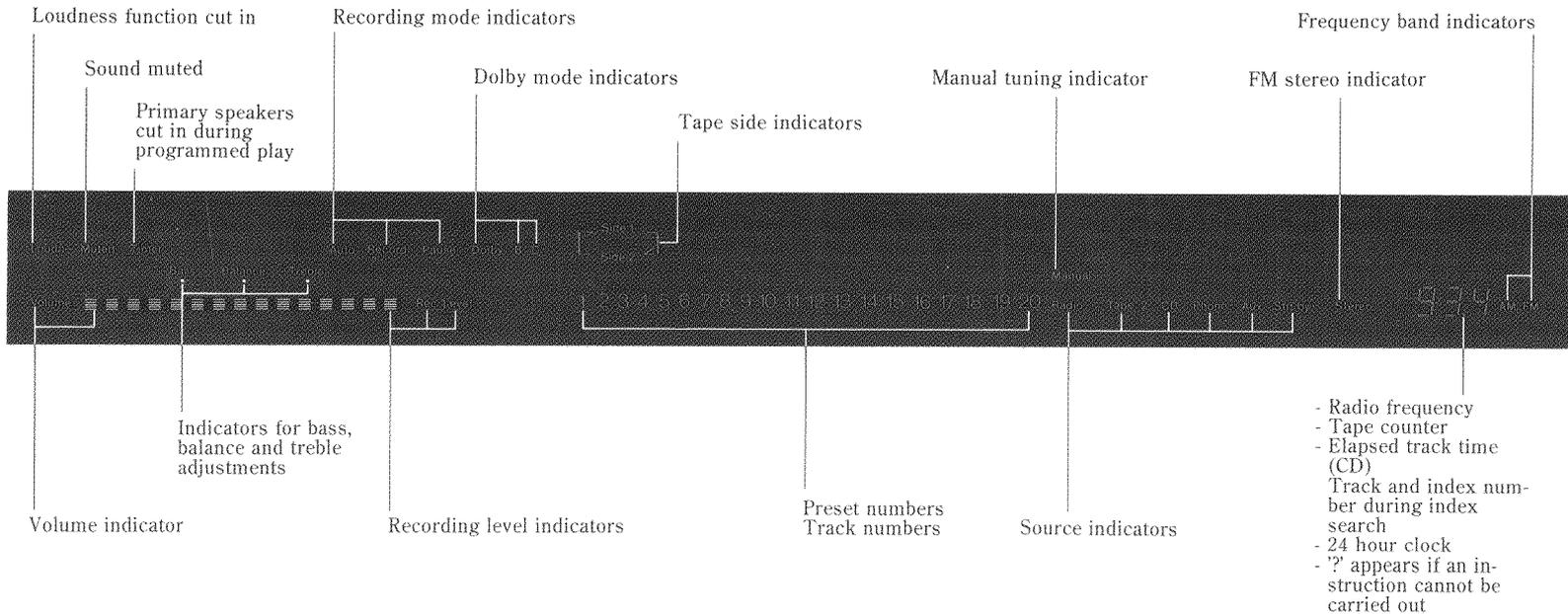
TV-set:

Switching on	Press Aux , 1
Selecting preset station	Key in appropriate number
Automatic tuning	Press << or >>
Switching off	Press ●

Video tape recorder:

Switching on	Aux , 2 Playback starts immediately
Stop playback	Press Stop
Rewinding or winding	Press << or >>
Switching off	Press ●

Displayed cues and symbols



The cues and symbols on the upper panel, the display panel, give information about the operational status of the Beocenter.

The cues and symbols displayed will not all be visible at the same time.

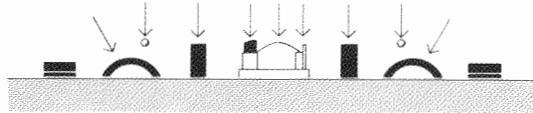
Maintenance

Surfaces

Use a soft, dry cloth to wipe dust off the Beocenter. Window cleaner on a dry cloth will do to remove any fingerprints and grease stains on the glass panels.

Never use denatured alcohol to clean any parts of the Beocenter.

Tape deck



The tape path, i.e. tape heads, pinch rollers and other parts which the tape touches during play or recording, should be cleaned every now and then to prevent dust and fluff building up on them.

Use the Bang & Olufsen Deck Care Kit (part no. 3634014) or a cotton bud dipped in a special fluid designed for this purpose. The cleaning process must be carried out while the tape compartment is empty.

Technical specifications

Beocenter 9000	
Type no.	2501/2504/2505
Amplifier	
Long-term max. output power IEC	2 x 80 watts/8 ohms
Power output 20-20,000 Hz IHF	2 x 30 watts/8 ohms
Total harmonic distortion IHF	<0.1%/30 watts 20-20,000 Hz
Dynamic headroom	1 dB/8 ohms
Intermodulation IHF	<0.1%
Response vs frequency, tape	20-20,000 Hz \pm 1.5 dB
Wideband damping factor	50
Signal-to-noise ratio:	
Tape A-weighted, 1 W IHF	>80 dB
Tape A-weighted, 30 W output	>95 dB
Channel separation 10,000 Hz	>60 dB
Output:	
Tape 2 - AUX	500 mV/1 kohm
External power amplifier	1 V/1 kohm
Headphones	Max. 8 V/220 ohms
Bass control at 40 Hz	\pm 10 dB
Treble control at 12,500 Hz	\pm 8 dB
Tuner	
FM range	2501/2505: 87.5 - 108 MHz 2504: 76 - 90 MHz
FM aerial impedance	75 ohms
Usable sensitivity stereo	19 dBf-2.5 μ V
50 dB quieting sensitivity stereo	40 dBf-28 μ V
Signal-to-noise ratio 65 dBf stereo	70 dB
Frequency response	20-15,000 Hz \pm 1 dB
Distortion at 65 dBf stereo	0.2%
Intermodulation stereo	0.1%
Spurious response	100 dB
IF response ratio	120 dB
Stereo channel separation	45 dB
Subcarrier product rejection	70 dB

AM range:	
LW range	2501 only: 150 - 350 kHz
MW range	520 - 1610 kHz
LW sensitivity 20 dB S/N ratio	2501 only: 80 μ V
MW sensitivity 20 dB S/N ratio	60 μ V
Tape recorder	
Compact cassette	C46-C60-C90-C120
Recording system	HX PRO
Tape head	Sendust
Wow and flutter DIN	<0.15%
Frequency range chrome	30-18,000 Hz \pm 3 dB
Signal-to-noise ratio CCIR/ARM	
Metal Dolby NR	B: >64 dB, C: >73 dB
Chrome Dolby NR	B: >65 dB, C: >74 dB
Ferro Dolby NR	B: >63 dB, C: >72 dB
Compact disc player	
Frequency range	3-20,000 Hz \pm 0.3 dB
Signal-to-noise ratio	>96 dB/100 dB A-weighted
Dynamic range	>96 dB
Harmonic distortion	0.003% at 0 dB 0.03% at -20 dB
Channel separation	>94 dB 20-20,000 Hz
Channel difference	>0.5 dB
Converter system	2x16 bit, 4 x oversampling 176,4 kHz
Low pass filter	Digital + analog
Damping above 20,000 Hz	>50 dB
Power supply	2501/2505: 110-130-220-240 voltage switch 2504: 100 volts
Power frequency	50-60 Hz
Power consumption	Max. 200 watts
Dimensions WxHxD	76 x 11 x 34 cm
Weight	14 kg
Subject to change without notice	

For the UK market only**IMPORTANT**

The wires in the mains lead supplied with this apparatus are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your unit, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.

International guarantee

This Bang & Olufsen product carries a guarantee against defects in workmanship and materials. It is a national guarantee, extended by Bang & Olufsen to the country in which the product was bought. The terms of the guarantee apply principally to the country of purchase but will be met by authorized Bang & Olufsen dealers in other countries. The guarantee period

applying to the country of purchase takes priority over guarantee periods applying in other countries, even where differences exist.

In order to obtain service under this guarantee from a dealer in a country other than that in which the product was bought, the guarantee form must be completed in full and presented to the dealer.

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