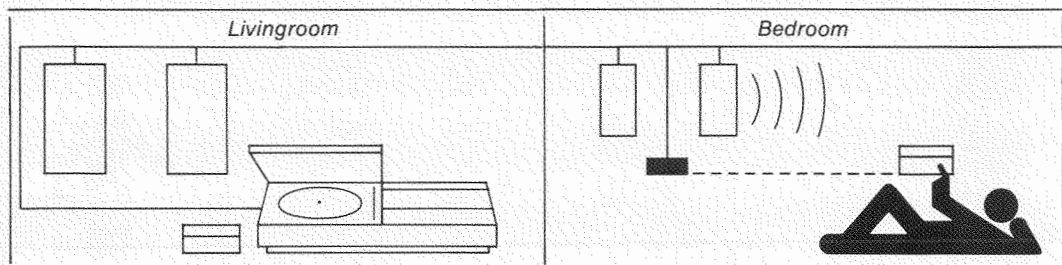


BANG & OLUFSEN

BEOCENTER 7700



This new Beosystem 7700 from Bang & Olufsen means that you now have a music system which gives you hi-fi sound of excellent quality – with the minimum of operating problems. The system consists of the Beocenter 7700 and Master Control Panel 7700. You can play records, tapes and AM/FM radio just by pressing a single button, either on the Beocenter 7700 or, if you prefer to control the system from your armchair, on the Master Control Panel.

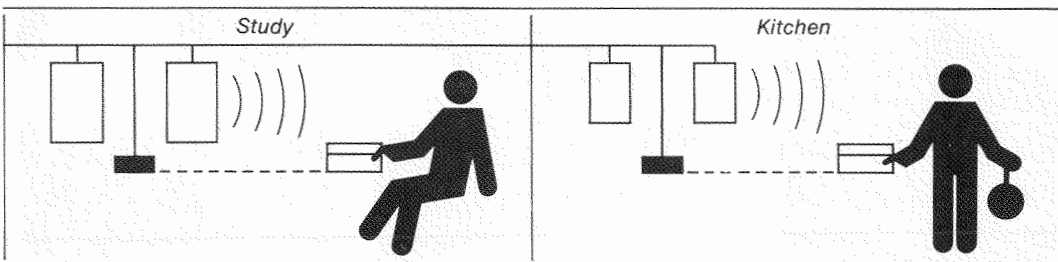
And nothing is left to chance. Every time you touch a button the Beosystem tells you what's going to happen. And it tells you clearly, so that even at a distance you're never in any doubt as to whether your instructions have been received or not.

This manual tells you how to operate the Beosystem 7700 and how to make the most of the music system's numerous possibilities. You'll be doing yourself a favour by reading it: not only will you discover how easy it is to get high quality hi-fi, you'll also find out how many advantages the Beosystem actually provides.

For instance, you'll see just how flexible the Beosystem 7700 really is: how easily you can extend the system, so that you can both listen to it and operate it from other rooms. It's simply a matter of connecting up Bang & Olufsen's Master Control System to a pair of speakers in each room. The Master Control Panel takes care of the rest. By touching a button in, say, your bedroom, you can tell the Beocenter 7700 in your sitting room what to do next.

But whether you want music in one room or in a number of rooms, the Beosystem 7700 will satisfy your music requirements for many years to come.

Should any difficulty arise, or if you want additional information, get in touch with an authorized Bang & Olufsen dealer. You won't face problems there either.



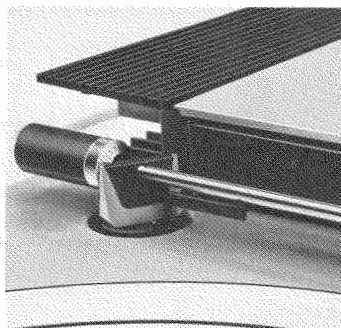
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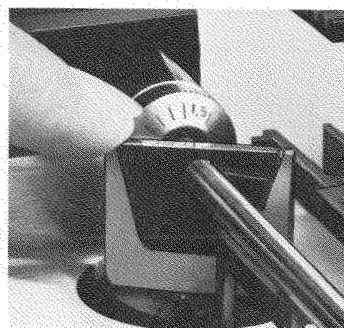
Setting up

Great care has been taken to protect the Beocenter 7700 against damage during transport.



Assembly after transport

Turn the three transport screws clockwise as far as they will go. Lay the platter on the turntable. If you ever want to remove the platter, lift the record spindle and then insert your fingers under the rim of the platter. Keep the packaging for any subsequent transport.

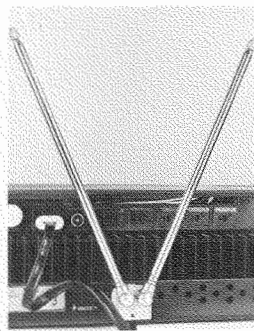
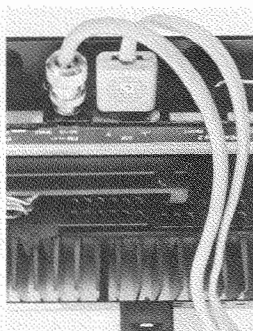
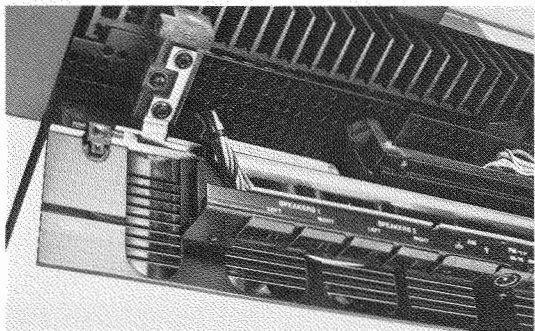


Placement

With the dust cover open, the height requirement is 36 cm. The depth, including leads and plugs, is 38 cm. The width is 72 cm.

Stylus pressure

The recommended stylus pressure for the MMC 4 is 12mN, 1,2 grammes. Stylus pressure can be adjusted between 0 and 2 grammes by turning the counterweight.



Mains

The Beocenter 7700 can be switched between 110, 130, 220 and 240 volts, 50-60 Hz, using the switch on the base.

The power supply must not be cut off on account of the remote functions. Use  to switch off.

This Beocenter fulfils the conditions stated in the EEC Directive 76/889 concerning radio frequency interference.

Speakers

A total of 4 speakers can be connected to the Beocenter 7700. The sockets are located on an easily accessible panel on the back which you can tilt up when inserting the plugs.

SPEAKERS 1 is for a pair of speakers in the same room as the Beocenter, SPEAKERS 2 for a pair in another room. We recommend using speakers designed for not less than 40 watts continuous load, impedance not less than 4 ohms.

FM and AM aerials

Let your dealer advise you as to which aerials are best in your particular case.

For both FM and AM reception, aerials should be placed high and clear of obstructions; you may use a communal aerial.

If you can use an indoor FM aerial with its inherent limitations, you can purchase Bang & Olufsen's FM aerial, type 8902010. It fits into a holder on the back of the receiver and the cable plugs into the 240-300 ohm socket.

FM level adjustment

In switching between FM, tapes and records, it is an advantage if the average volume level stays the same, so that you don't have to adjust VOLUME every time you switch.

The FM level can be adjusted with two switches on the base of the Beocenter, L for the left channel, R for the right.

Extra tape recorder

The TAPE 2 sockets are for an extra tape recorder with phono plugs. Connect PLAY and REC with the corresponding tape recorder plugs.

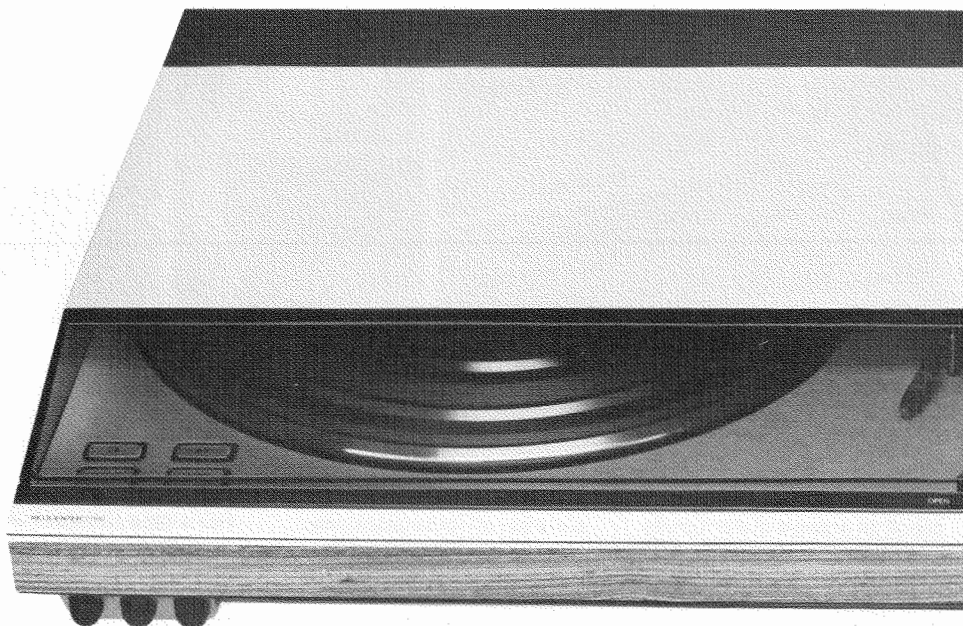
For a tape recorder with DIN socket and DIN signal level, use cable 6270212 which has a built-in attenuator.

For a tape recorder with a fixed DIN signal cable and LINE level, use an adaptor type 7229017.

External tone correction

The LINE socket is designed for an external unit such as an equalizer, tone filter or noise reduction. If the unit in question has phono plugs, use cable 6270215.

If no external unit is connected, make sure the 4-pin plug is plugged into the socket, otherwise the Beocenter 7700 remains silent.



Brief operating guide

The buttons for operating the Beocenter 7700 are split into groups. The buttons which you use in daily operation are placed on each side of the display panel.

Volume

Increase volume, hold **[▲]** down.
Decrease volume, hold **[▼]** down.
The volume is indicated by figures 0:0 to 6:0.

Return to programmed volume level

Press **[RESET]**.

Sound pause

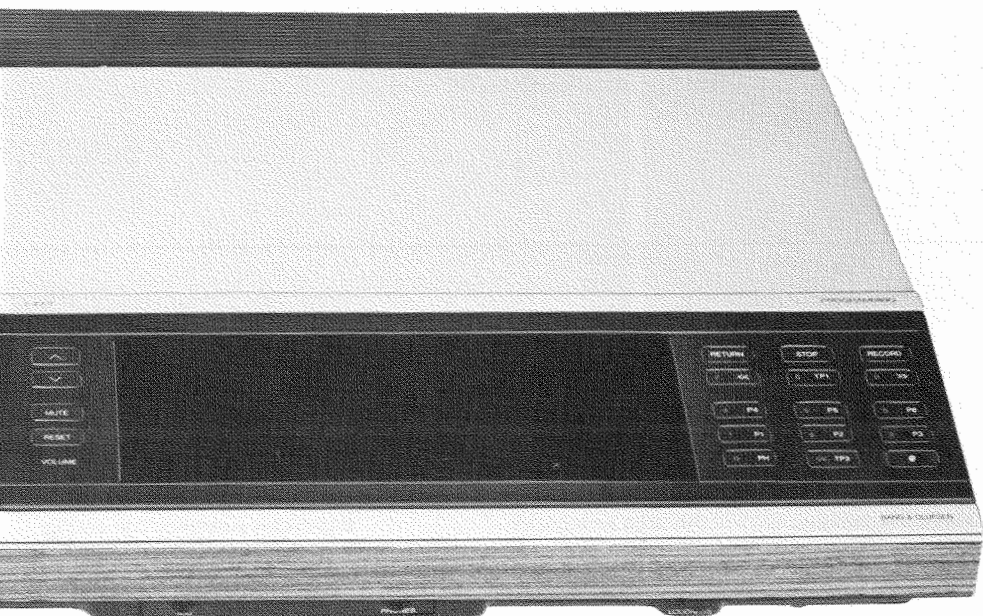
Press **[MUTE]**.
To restore volume, press **[MUTE]** again.

Radio

Press one of the buttons **[P1]** to **[P6]**.

Playing records

To start, press **[PH]**.



Tape playback

To start, press **[TP1]**.
To stop, press **[STOP]**.
Return to start, press **[RETURN]**.
Rewind, press **[<<]**.
Fast forward wind, press **[>>]**.

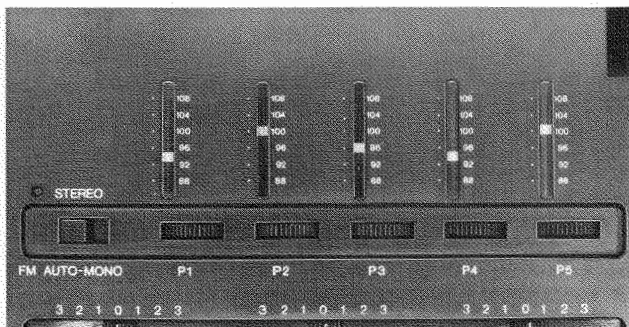
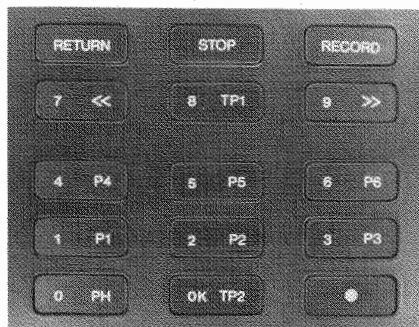
Tape recording

RECORD OPEN must be lit.
Press **[RECORD]**. READY FOR RECORDING lights.
To start recording, press **[RECORD]** again.
RECORDING lights.
To stop, press **[STOP]**.
If you decide you don't want the programme recorded after all, return to the beginning by pressing **[RETURN]**.

Switching off

Press **[●]**.

Cassettes are inserted under the large metal cover, which is also where you find the additional operating controls.
Press PROGRAMMING.
A key to radio, record player, tape deck and programming controls is printed on the inside of the cover.



Complete operating instructions

Radio

Programmes are selected with buttons **[P1]** to **[P6]**.

P1 to P5 are for FM stations which you pretune with 5 separate dials.

Press **[P1]**, set the FM switch to MONO **[AFC OFF]** and use the P1 dial to tune to the station you want, tuning until the two indicator lights are equally bright. Tune P2 to P5 to other stations in the same way.

Lastly, set the FM switch to AUTO.

Long and medium waveband

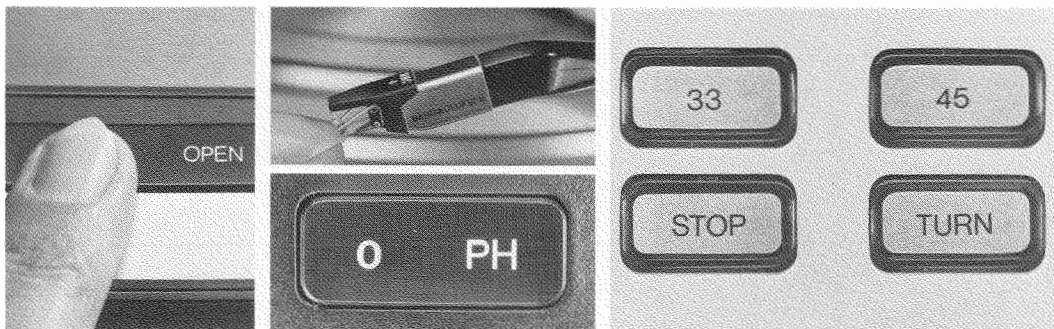
You can tune P6 to any FM, LW or MW station on the large calibrated scale. Press **[P6]** followed by **[LW]**, **[MW]** or **[FM]**. Tune in the station you want with the large tuning knob.

FM automatic

With the FM AUTO-MONO switch you can choose between two functions: FM AUTO, automatic. This is the normal position for listening to FM radio. It provides automatic fine-tuning to the FM station and smooth transition between FM stereo and mono. FM MONO. For picking up weak FM stations. Mono reproduction, without automatic fine-tuning.

FM stereo indicator

Lights up for FM stereo broadcasts.



Playing records

Press **OPEN** to raise the dust cover.

The pick-up has a fixed stylus guard which you can tilt up and down with your fingernail. Make sure it is locked in the up position before playing a record.

Start the record player by pressing **PH**.

The Beocenter 7700 registers whether a 30 cm or a 17 cm record has been put on and automatically selects the correct speed, 33 or 45 r.p.m. If there is no record on the turntable, the display flashes **UUUU**.

Pause

Press **PH** again.

To continue playing from the same place, press **PH** again.

You can also move the pickup to another place on the record before pressing **PH** again.

Stop

To stop before the end of the record:

Press **STOP** on the record player, switch to another programme, e.g. **P1**, or switch off with **●**.

Special records

17 cm 33 r.p.m.: press **PH**, then press 33 on the record player.

30 cm 45 r.p.m.: press **PH**, then press 45 on the record player.

25 cm 33 r.p.m.: move the pickup to the lead-in groove, then press **PH**.

Wiping records

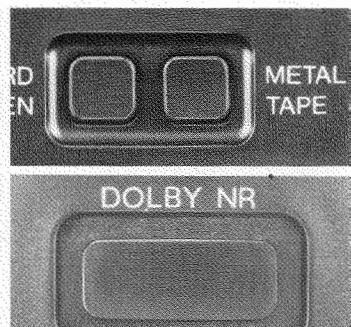
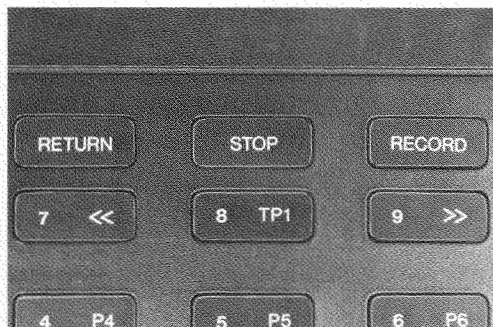
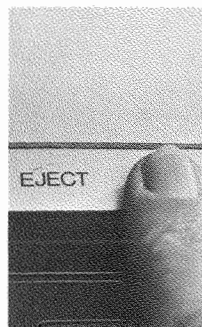
Pressing **TURN** makes the turntable rotate without moving the pickup, allowing you to wipe the record with a soft cloth. There is no need to use an anti-static mat (e.g. carbon plate) under the record, as the platter itself ensures maximum static discharge by means of excellent metallic contact with every type of record.

Centre adaptor

Fits records with large centre holes and is pressed down automatically with normal records.

17 cm records

Automatic pickup cueing depends on the centre adaptor accurately sensing the record's weight. A 17 cm record is lifted up very briefly and therefore it must have a clean centre hole, completely free from label paper, so that it can slide down by its own weight.



Tape playback

Open the cassette holder by pressing **EJECT**. Insert the cassette and start playback by pressing **TP1**.

Pause or stop

Press **STOP**. Resume playback, press **TP1**.

Return

To repeat playback, press **RETURN**. The tape stops and automatically rewinds to the place where you started playback. The tape is then played back again.

Winding the tape

Rewind, press **<<**. Fast forward, press **>>**. Buttons **<<**, **>>** and **TP1** can be pressed in any order without using **STOP** in between.

Automatic stop

When a tape has been played, wound or rewound to the end it stops automatically. The Beocenter 7700 remains switched to **TP1**.

Tape type

When a cassette is inserted the Beocenter 7700 automatically adjusts to ferro or chrome tape by checking the holes on the rear edge of the cassette. You only need to use the **METAL TAPE** button in recording. Ferrochrome tape is treated as ferro.

Dolby B[®] noise reduction

Dolby noise reduction is a system which suppresses tape hiss. It is based on the fact that tape hiss has a sound characteristic which makes it most noticeable when playing back quiet treble notes and in pauses. The system operates by boosting the quiet treble notes in recording and damping them correspondingly in playback, thereby reducing tape hiss and ensuring cleaner sound reproduction.

When playing back a tape recorded with Dolby B noise reduction, press **DOLBY NR**.

Tape counter

The electronic tape counter is on the lefthand side of the large display panel. No matter where the tape is wound to when you insert a cassette, the counter automatically starts at 0000. If you wind back past 0000, the counter counts down from 9999.

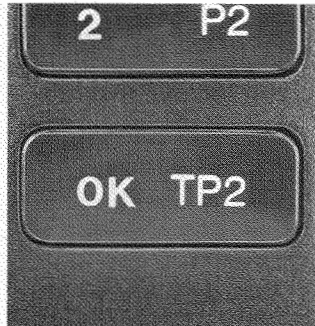
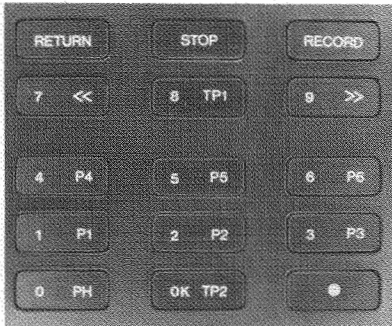
Resetting the counter

If for recording purposes you wish to make a note of a counter reading on a cassette, set the counter to read 0000 at the beginning of the tape. Press **<<**. When the tape has finished rewinding, press **COUNTER RESET**.

Time table

Counter readings are purely informative, intended for use in making notes, e.g. on the cassette, so that you can find various places on the tape. Readings depend on tape thickness and cassette type, C 60 or C 90. Therefore the time table should only be regarded as a general guide.

*Trademark of Dolby Laboratories Licensing Corporation.
Noise reduction system manufactured under License from Dolby Laboratories Licensing Corporation.



C 60 cassette

Min.	Counter
0	0000
5	0545
10	0995
15	1380
20	1725
25	2045
30	2340

C 90 cassette

Min.	Counter
0	0000
5	0562
10	1045
15	1470
20	1860
25	2215
30	2550
35	2860
40	3160
45	3440

Memory

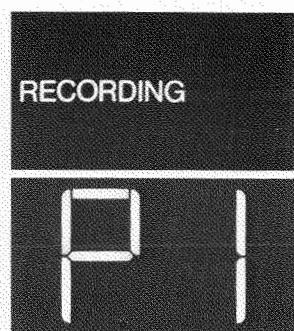
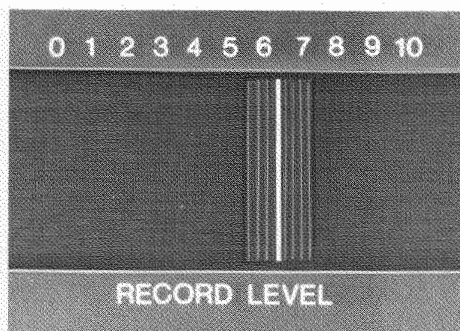
You get a memory function by combining **COUNTER RESET** and **RESET**. When in playback the tape reaches the place you want memorized, press **COUNTER RESET**. You are then free to use **STOP**, **<<** and **>>**. To return to the place which has been memorized, press **RETURN**.

Automatic counter address

Say you want to start playback from reading 573, which you have noted on a cassette. Insert the cassette and press **<<**. When the tape has finished rewinding, press **COUNTER RESET**, **COUNTER ADDRESS** and the red digits **5** **7** **3** and **OK**. Once the tape stops winding, start playback by pressing **TP1**.

Keying error

If you have keyed in the wrong number, do not press **OK**. Key in the correct number, then press **OK**.



Tape recording

You cannot record straight away on a tape inserted in the Beocenter's cassette holder; the RECORD OPEN indicator has to light up first. This is to prevent accidental erasure of previous recordings.

The indicator lights when you press **RECORD OPEN**. The function is cancelled by pressing again.

If the cassette is secured against recording, the flap on the rear edge removed or **RECOPEN** has not been pressed down, RECORD OPEN will not light up and the display will flash **|||||** to indicate that you cannot record on this tape.

Tape type

The Beocenter 7700 automatically adjusts for ferro or chrome when you insert a cassette. For metal tape, press **METAL TAPE**. The indicator lights up. To cancel, press **METAL TAPE** again.

The Beocenter 7700 is adjusted to the following types of tape: Ferro, IEC standard, e.g. BASF LH I.

Chrome, TDK-SA.
Metal, TDK-MA.

If you use tapes which follow other norms, treble reproduction can be slightly louder or softer. Ferrochrome is treated as ferro, i.e. automatically adjusted.

Dolby B

If you want to record with Dolby noise reduction, press **DOLBY NR**.

Recording level

Select programme, e.g. **P1**, and press **RECORD**.

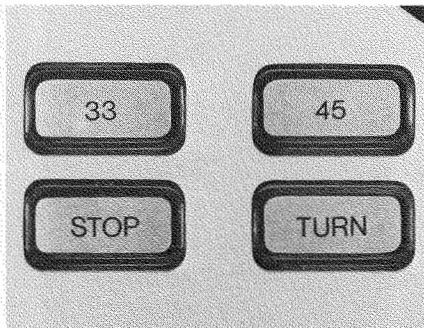
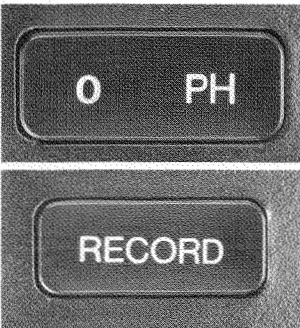
READY FOR RECORDING lights up, indicating that the Beocenter is on recording-pause.

Adjust the RECORD LEVEL cursor so that the Peak Program Meter's green squares flash. You can let the red squares flash during the loudest passages, depending on which type of tape you use. The better the tape, the more powerfully it can be recorded without causing distortion.

Start recording

Press **RECORD** again. RECORDING lights up.

The Beocenter 7700 safeguards recordings against accidental interruptions. For instance, if you try to switch to another programme, the display flashes **|||||** to indicate that it cannot do it.



Recording from a record

Press **[PH]** **[RECORD]** **[RECORD]**.
To adjust the recording level to the record before recording, press **[PH]** **[RECORD]**. The record starts and **READY FOR RECORDING** lights up. Adjust the **RECORD LEVEL** cursor. Now press the record player's **[STOP]** button and when the tonearm is back in its rest position, press **[PH]** **[RECORD]**.

Stop or pause

Press **[STOP]**. A 4-second pause is introduced at the end of the recording for the sake of the **RETURN** function.

Instant stop

Stop without 4-second pause, press **[STOP]** twice.

Extended pause

The 4-second pause between recordings can be extended by keeping **[STOP]** pressed down for as long as you want the pause to last.

To resume recording

Press **[RECORD]** again.
If you pressed **[STOP]** twice, you have to press **[RECORD]** twice.

Return function

If you want to record something else instead of the recording you've started, press **[RETURN]**. Recording stops and the tape rewinds to the beginning of the recording.

Counter/clock

The four digits on the lefthand side of the display panel constitute the tape counter in tape playback and recording. When the tape deck is not in operation, the four figures, with : in the middle, function as a clock. Manual switching is with **[COUNTER/CLOCK]**.

Microphone

On the front of the Beocenter 7700 is a socket for a monomicrophone.

It can be used in two ways:

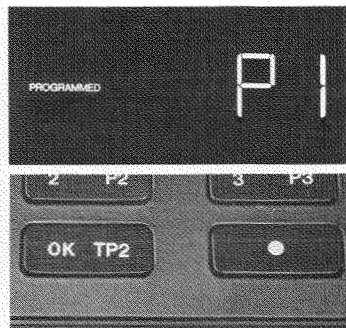
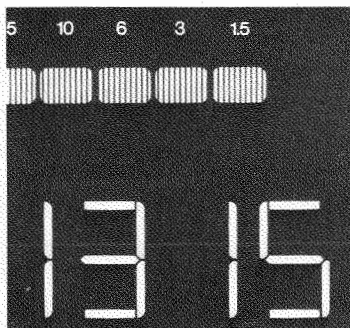
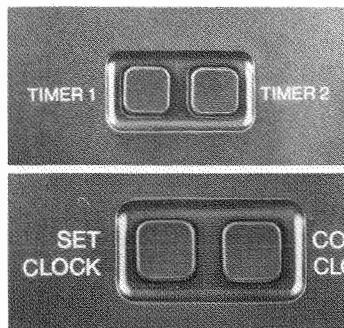
- * With the Beocenter 7700 as microphone amplifier.

- * For recording on tape.

Press **[P1]**.

When recording on tape, adjust the volume to avoid acoustic feedback, i.e. speaker howl.

Remove the microphone jack when not using the microphone.



Programming

With **TIMER1** and **TIMER2** you can programme the Beocenter 7700 to perform one/two of the following functions within the next 24 hours:

- * Switch on a radio programme.
- * Switch on the programme at the same time every day.
- * Switch to another programme than the one you're listening to.
- * Start playback of a tape.
- * Start playback of a record.
- * Start recording on tape.
- * Switch off after recording on tape.
- * Switch off the Beocenter 7700.

Setting the clock

When you switch on the Beocenter 7700 the clock will read 00:00.

Set the clock to the right time as follows: e.g. your watch is at 13:14. Press **SET CLOCK** and red digits **1 3 1 5**.

When it is 13:15 on your watch, press **OK**. If you have pressed the wrong numbers, do not press **OK**. Key in the right numbers, then press **OK**.

If the clock flashes **□□□□**, it is because you have keyed in a figure greater than 2400. After a power-cut the clock will read 00:00 and need re-setting.

Programming. Example 1

You want programme 1 switched on at 7:15: Press **P1** **TIMER1** and red digits **7 1 5** and **OK**. Until 7:15 you can listen to other programmes or switch off with **□**.

Example 2

You want to listen to programme 1 at 7:15 every day: press **P1** **TIMER1** **7 1 5** and keep **OK** pressed down for about 2 seconds, until the display switches back on.

Example 3

To have programme 1 switched on at 7:15 and off again at 7:45, use **TIMER 1** and **TIMER 2**. Press **P1** **TIMER1** **7 1 5** **OK** and **●** **TIMER 2** **7 4 5** **OK**.

Example 4

You want to record programme 1 (or any other radio programme), starting at 9:15, when you'll be out.

Press **P1**, insert a cassette, switch on **RECORD OPEN** and set **RECORD LEVEL** to the level you normally use for recording radio programmes. Press **RECORD** **TIMER1** **9 1 5** **OK**.

The Beocenter 7700 switches off automatically when the tape has run out.

To stop the recording at 9:30 instead, use **TIMER 2**. Press **●** **TIMER 2** **9 3 0** **OK**.

Keying error

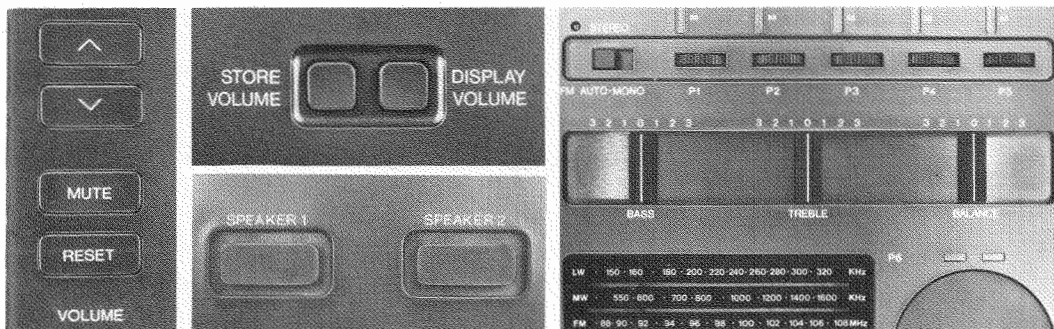
If you key in the wrong time, do not press **OK**. Key in the right time, then press **OK**.

Cancelling

Press **TIMER1** **0** **OK** or **TIMER2** **0** **OK**.

"Programmed" indicator

When the Beocenter 7700 has been programmed and is switched on, **PROGRAMMED** lights on the display panel. The indication disappears when the programmed operation has been carried out, but not if the Beocenter is programmed to repeat the operation every day.



Programming check

With the Beocenter 7700 on ST.BY you can check the times and programmes it is programmed to.

Press **TIMER1**; the first two digits flash.

Press **TIMER2**; the last two digits flash.

PROGRAMMED flashes or, if it is a program to be repeated daily, lights continuously.

Finish off the programming check by pressing **OK**.

Additional operating information

Preset volume

You can turn the volume up and down with **VOLUME** **▲** and **▼**. Volume is indicated in steps of 0.2, from 0.0 to 6.0.

You can also use **RESET** to get the same volume every time you switch on. Having set the volume at e.g. 3.00, press **STORE VOLUME**. The maximum volume which can be preset is 4.0.

When the Beocenter is on ST.BY you can turn the volume down with **VOLUME** **▼**. This is the volume you get next time you switch on.

Volume check

Press **DISPLAY VOLUME**.

Mute

You can shut down the sound with **MUTE**—if you have to answer the phone, for instance. Volume can be restored in several ways. By again pressing **MUTE**, by selecting a programme or by making an adjustment.

If you do not rescind the MUTE function, the Beocenter automatically switches to ST.BY after half an hour.

Speakers

Select speaker pairs with switches **SPEAKERS 1** and **SPEAKERS 2**. Speakers are cut in by pressing the corresponding button and cut out by pressing again.

Headphones

You can connect stereo headphones to the PHONES socket on the front of the Beocenter.

Bass

Moving the cursor to the right turns up the bass, moving it to the left turns it down.

Treble

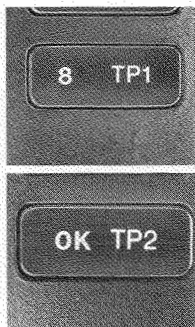
Moving the cursor to the right turns up the treble.

Balance

Controls balance between left and right channels.

Loudness

The switch is on the righthand side, on the front. When the switch is down, playback is adjusted to the human ear; the high and low notes are boosted at low volume. With the button up, playback is linear, irrespective of the VOLUME setting.



Operating from another room

The Beosystem 7700 can be extended, so that you can listen to and operate the Beocenter from other rooms.

This is done by setting up a small Master Control Link and an extra pair of speakers in whichever rooms you want covered by the system. With the Master Control Panel you can operate the Beocenter in your living room by pressing a button – even though you're in the bedroom, for example.

Remote switch

On the bottom of the Beocenter 7700, on the left, is a REMOTE OFF-ON switch, which should normally be set to ON.

REMOTE OFF is used with a Master Control Link in the same room as the Beocenter.

External tape recorder, recording and playback

Copying

With an extra tape recorder connected to TAPE 2 you can copy from one tape to another or record on two tapes simultaneously.

Copying from the external tape recorder

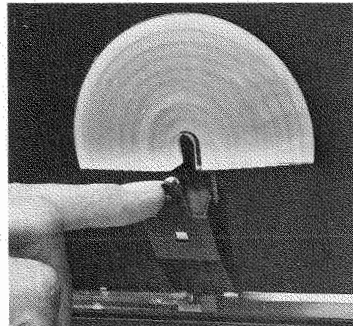
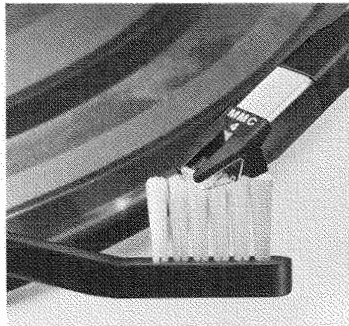
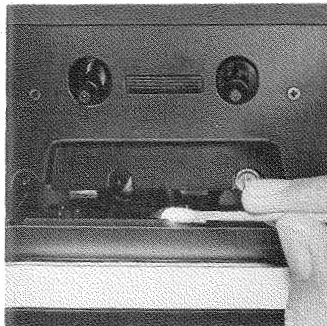
Press **[TP2]** and set the external tape recorder to playback. Operate the Beocord's built-in tape deck as described in Tape recording.

Copying from the built-in tape deck

Press **[TP1]** and set the external tape recorder to record.

Simultaneous recording

Select programme, e.g. **[P1]** and set both tape recorders to record.



Maintenance

Tape heads

To ensure a pure sound quality, the two tape heads and the capstan must be kept free from tape dust. Use one of the cleaning fluids available for this purpose.

Avoid using methylated spirits, which may contain substances that attack rubber and plastic.

Cleaning the stylus

Sound distortion may be due to dust on the stylus. Use the brush supplied, brushing forwards from the bottom of the metal housing. Brush carefully and make sure the stylus guard is up. Beware of chemical cleaning fluids, which can contain solvents which can damage parts of the cartridge.

Replacing the cartridge

Hold the tonearm firmly with one hand, while carefully moving the cartridge from side to side and pulling outwards with the other.

Dust cover

We recommend Ajax Window Cleaner or its equivalent for cleaning the transparent dust cover. Do not use spirits.

Metal surfaces

The chassis and turntable can usually be kept clean with a dry cloth.

Be careful not to touch the stylus. Grease stains can be removed with a lukewarm detergent solution on a soft cloth. Wipe dry with a clean cloth.

Teak and rosewood

If wood surfaces seem grey and dry, you can apply a thin layer of teak or rosewood oil not more than twice a year.

Record player light

The lightbulb on the inside of the dust cover can be replaced without using tools. Push the black bit down and pull out the lightbulb with its two pins, without twisting. Order number 8230088.

1. The first part of the text discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the text outlines the various methods and tools used to collect and analyze data. It highlights the need for a systematic approach to data collection and the importance of using reliable sources.

3. The third part of the text discusses the challenges and limitations of data collection and analysis. It notes that while data is essential for decision-making, it is not always perfect and can be subject to errors and biases.

For the UK market only.

IMPORTANT

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

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug 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 in 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.

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.

