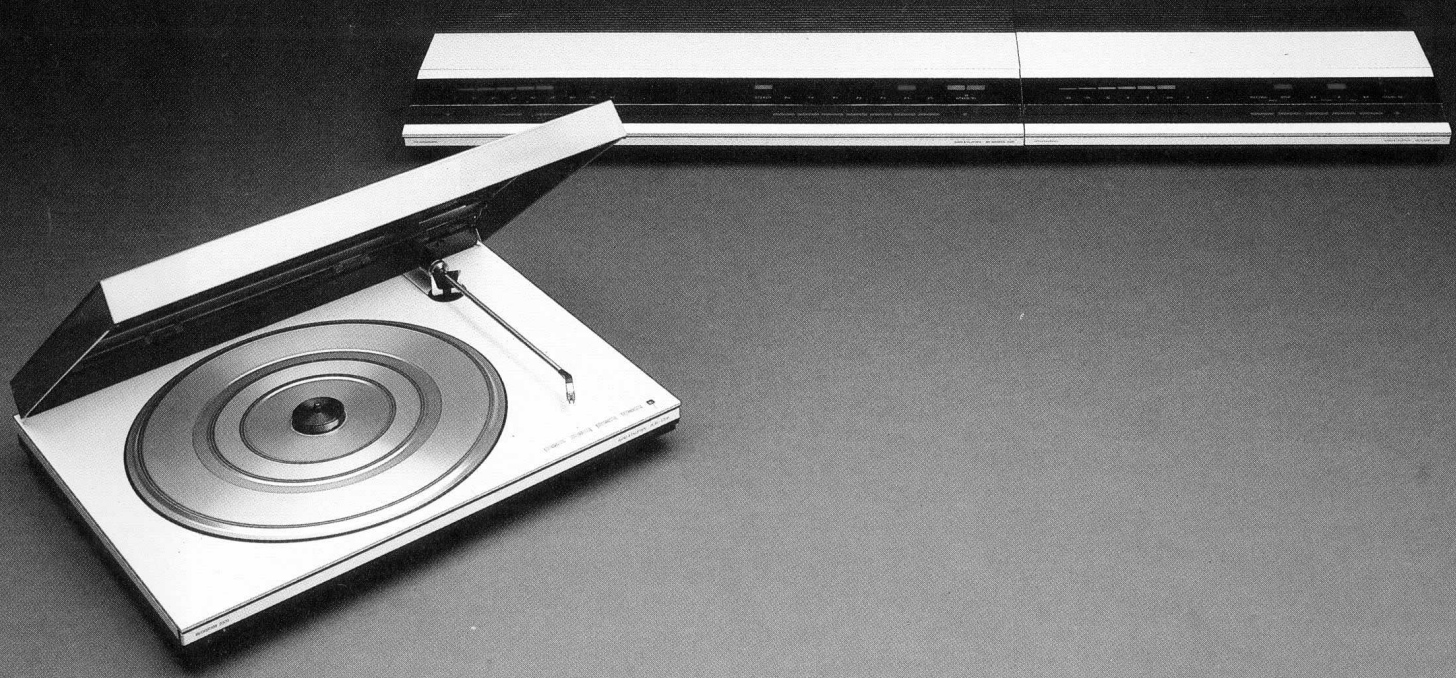
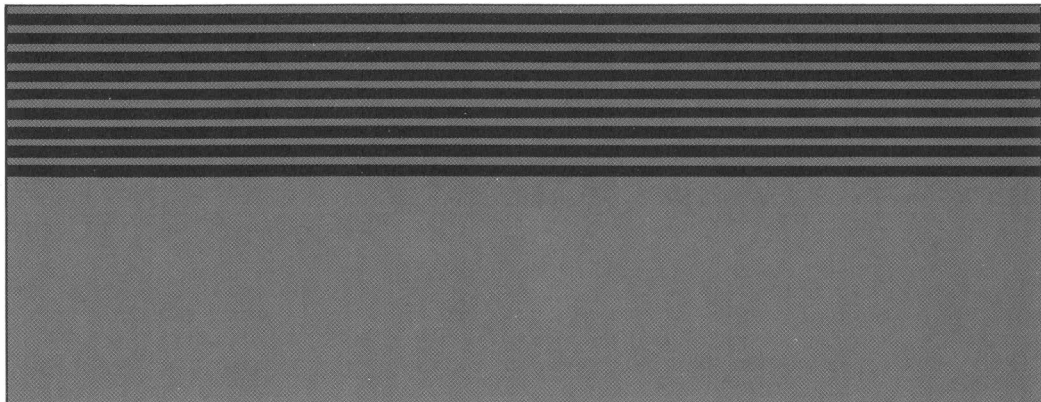


BANG & OLUFSEN

BEOGRAM 2000

Beogram 2000



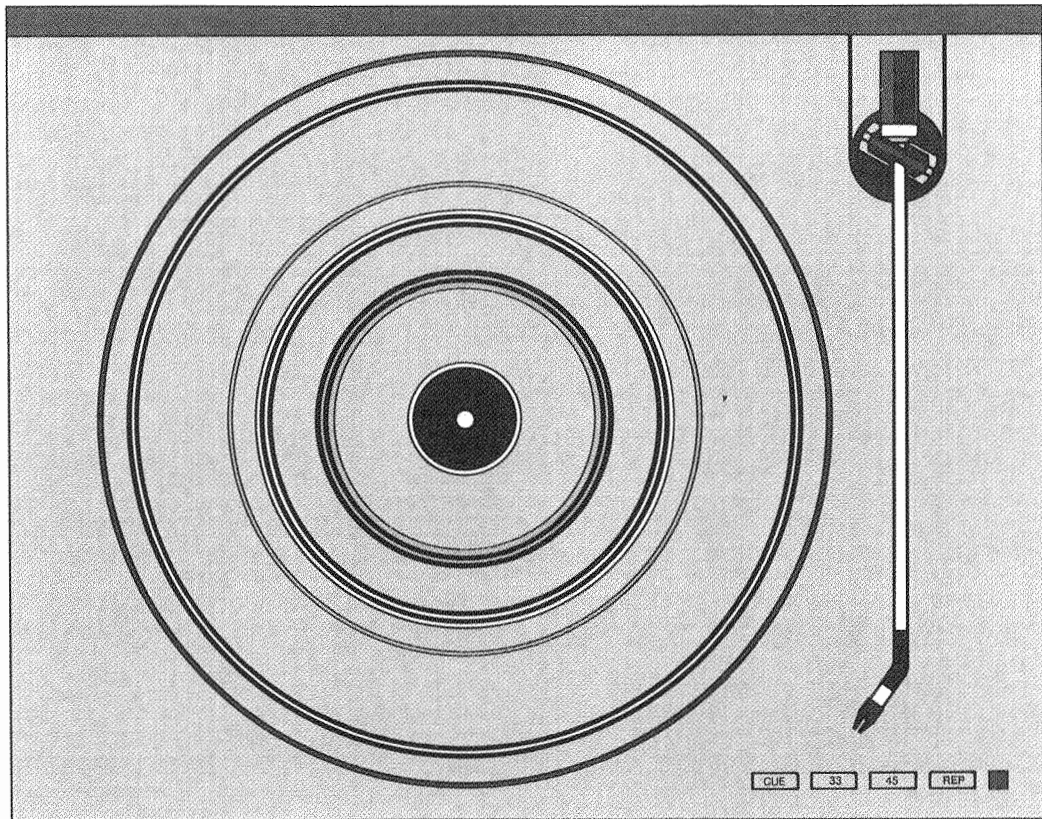


Beogram 2000

User's Guide for
record player

Keep the flap open
while you read on

- | | | |
|---|-----------------------------------|---|
| 1 Setting up after unpacking | 9 Playing a record | 18 Adjusting antiskating |
| 2 Adjusting stylus pressure | 10 Stop play | 19 Cleaning the record player |
| 3 Where can you place your
Beogram record player? | 11 Pause during play | 20 Tips about record care |
| 4 Connecting up | 12 Moving to another track | 21 Beomaster 2000 receiver |
| 5 Switching on | 13 Repeating a record | 22 Beocord 2000 cassette deck |
| 6 Switching off | 14 Cleaning a record | 23 Trouble-shooting: »What if...?« |
| 7 Opening the dust cover | 15 Cleaning the stylus | 24 Glossary of buttons and terms |
| 8 Putting a record on the platter | 16 Removing the cartridge | 25 Technical specifications |
| | 17 Balancing the tonearm | |



Keep the flap open while you read on...

Before you do it your way, try it our way

Hold the booklet in one hand. Use your index finger to keep the flap open. Or let the booklet lie open on a flat surface.

In this way, you will always see the drawing of the Beogram's operation facilities as well as the Guide's table of contents. Keep these in view as you move through the instructions in the booklet.

The table of contents lists activities you might want to carry out. Numbers next to each activity refer to operating instructions for that activity.

Individual operation facilities are explained at the back of the booklet. You can also use them as an index to the activities described within.

This User's Guide is designed to help you get to know and learn to use your Beogram easily and quickly. It answers questions about activities you might want to do, for example: how do you switch on, how do you play a record, how do you clean a record before play, etc. Your Beogram is not difficult to operate. On the contrary! Try it, you'll see.

Congratulations!

You are now the proud owner of the Beogram 2000 automatic record player. It is one of the components of Bang & Olufsen's classical, one-touch, integrated hi-fi system: the Beosystem 2000. Other components in the Beosystem 2000 are the Beomaster 2000 receiver and the Beocord 2000 cassette deck. (See **21**, **22**)

Your Beogram 2000 is fitted with Bang & Olufsen's Datalink system. This means that when the record player is connected to the Beomaster 2000 receiver or a Beomaster with Bang & Olufsen's electronic Datalink system, the components can »talk with« each other; so that you get music just by touching one button on the receiver or on the record player.

For example, to hear a record, just touch **[PH]** on the Beomaster 2000 or touch **[PLAY]** on the Beogram 2000 record player. Your one touch: activates the record player, makes it decide at what speed the record should be played, and starts playing the first track.

At the same time, the Beomaster automatically selects the record player as source, amplifies its sound signals and feeds them to the connected speakers. In short, after a few seconds you will hear music.

Of course, if you don't have all the components of the Beosystem 2000 (or other Bang & Olufsen products which have the electronic Datalink system), you will have to operate the other components separately.

To ensure automatic, one-touch operation of all functions, connect your Beogram 2000 record player to a Beomaster 2000 receiver.

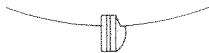
1 Setting up after unpacking

Great care has been taken to protect the record player against damage during transportation. In particular:

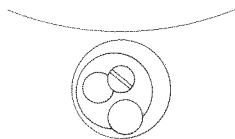
1. The turntable platform is prevented from rotating by three rim-brakes.

2. The inner chassis, which is mounted on a pendulum spring suspension, is locked rigidly and thus prevented from moving by three transport screws.

You can see that the rim-brakes and transport screws are intact. When locked, a rim-brake will look like this:



When locked, a transport screw will look like this:



You can also check, by trying to rotate the turntable platform and by pressing it. If the transport safety devices are intact, the turntable platform will not rotate and the system will be rigid and will not move freely up and down.

The three rim-brakes and the three transport screws must be unlocked before you put the turntable platter onto the turntable platform. Here's how:

The rim-brakes

Using a screwdriver, turn the brake clockwise, until the brake-slot for the screwdriver is parallel to the rim of the turntable platform, and there is complete free space between the turntable platform and the rest of the chassis. (For geometers: you will have turned the screwdriver 90 degrees).

Repeat until all three rim-brakes have been unlocked. To check, rotate the turntable platform with your hand. It will move freely.

The transport screws

Using a screwdriver, turn the screw anticlockwise until it loosens. (2 or 3 turns)

Push the protective plate aside, so that the head of the screw can go down through the hole.

Using a screwdriver, turn the screw clockwise down through the hole until it tightens. (Several turns)

Repeat until all three transport screws have been unlocked, and then locked into their new positions.

To check, press the turntable platform. The entire turntable mechanism will move freely up and down, with a »springy« action. Place the turntable platter on the turntable platform.

If you ever need to transport your Beogram record player make sure the rim-brakes and transport screws are locked in their transport positions.

First, remove the turntable platter. To do this, lift the spindle in the middle of the turntable platter until you can insert the tips of your fingers under the rim of the platter. Then lift off the platter. The rim-brakes and transport screws are now visible. Secure them, using the reverse of the procedures described above.

For safe transportation, always transport your Beogram in its original packing and carton. □

2 Adjusting stylus pressure

The Beogram 2000 is fitted with Bang & Olufsen's integrated tonearm and pickup cartridge combination. The cartridge is the MMC 4.

The tonearm is factory-adjusted for the recommended stylus pressure of the MMC 4. This is 1.2 gr. (12 mN).

If you upgrade your pickup cartridge to a Bang & Olufsen MMC 2 or MMC 1, you will need to adjust stylus pressure to 1 gram (10 mN).

To do this, hold the tonearm firmly with your left hand.

Using your right hand, gently turn the black section of the tonearm's counterweight anticlockwise until you see 0.5 (gr) on its calibrated scale.

Now turn the counterweight clockwise until you see 1 (gr). (Turning the counterweight down to 0.5 then up to 1, ensures precise adjustment).

To fine adjust, align »1« with the white mark on the tonearm bearing.

If you upgrade your pickup cartridge to an MMC 1 or 2, you will also need to adjust antiskating. See 18. □

3 Where can you place your Beogram record player?

Position your Beogram record player horizontally on a flat, stable surface in any convenient location, providing it is well away from direct heat from sun-filled windows, fires and radiators.

The Beogram should be close to,

and not further than 100 cms away from the receiver to which it is to be connected. (See 4).

Leave at least 40 cms free space above the record player if you want to be able to open the dust cover all the way. (See 7). □

4 Connecting up

Before connecting up, make sure that the three rim-brakes and the three transport screws have been unlocked. (See 1).

The cable for connecting your Beogram record player to a receiver is permanently attached to the record player. It is fitted with a special Bang & Olufsen 7-pin plug.

If your receiver is a suitably automated Beomaster, place this plug in the DIN socket marked PHONO. The cable is about 1 metre long.

If your receiver has an ordinary 5-pin DIN socket:

You can convert the Beogram's 7-pin plug to a 5-pin plug.

Here's how:

Use a tiny screwdriver to unscrew the two »extra« pins. There is a slot for the screwdriver at the end of each »extra« pin. Turn the screwdriver anticlockwise.

Remove both pins. Plug the »converted« 5-pin DIN plug into the **low impedance** pickup input on your amplifier or receiver.

If your receiver has phono plugs:

Unscrew the two »extra« pins on the Beogram's 7-pin plug. (See above). Connect optional adaptor type 6270208. Plug the adaptor's phono plugs into the **low impedance** pickup input on your receiver or amplifier.

Power requirements: 190-265 volts, 50-60 Hz.

If necessary, your authorised Bang & Olufsen dealer can adjust the Beogram 2000 so that it uses 110 volts power supply.

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

The Beogram's electric cable is permanently attached to the record player. □

5 Switching on

When the Beogram 2000 is connected to the mains power supply it is in its »stand-by« position. This means that it is ready for action. There is no »on« button.

When you press **PLAY** (see top drawing), the record player starts to play the record on the platter. (See 9).

6 Switching off

Look at the top drawing. If a record is in play (see 9), press **STOP**. The record player automatically stops playing, returns the tonearm to its resting position and goes

7 Opening the dust cover

Lift the hinged dust cover gently. It will open to an angle of about 80 degrees. You will need at least 40 cms free space to open the lid freely.

If the record player is connected to the Beomaster 2000 receiver you will also hear the music.

If there is no record on the platter, when you press **PLAY**, the turntable platter will start rotating. After a few seconds it will stop. The tonearm will stay in its resting position. □

into stand by. If the Beogram is connected to a Beomaster 2000 and no other programme has been selected the entire system will go into stand by after 30 minutes. □

To protect your records, keep the dust cover closed both during and after play. This prevents dust from collecting on the record or the turntable platter. □

8 Putting a record on the platter

Open the dust cover. (See 7). Take the record out of its sleeve. (See 19).

Hold the rim of the record with both hands and carefully place it on the platter.

If your record has an **ordinary centre hole**, the Beogram's centre

adaptor will be pressed down automatically when you let go of the record.

If your record has a **large centre hole**, the Beogram's centre adaptor will remain up to accommodate it. □

9 Playing a record

Open the dust cover. (See 7). Put a record on the platter. (See 8).

Check that the stylus guard is up. Close the dust cover. Touch **PLAY**.

The record player automatically registers the size of the record, determines the speed at which it is to be played, starts rotating, moves the tonearm to the lead-in groove and lowers the stylus into that groove.

Within seconds you will hear the music (if your Beogram is connected to a Beomaster 2000 or if the record player input is selected

on the amplifier or receiver to which the Beogram is connected). At the end of the record, the tonearm returns to its resting position and the record player goes into stand by. (See 13, Repeating a record).

To play a maxi-single, that is a record which is LP-sized but which requires 45 rpm: put the record on the platter. Touch **PLAY**, then **45**.

To play a single which requires 33 rpm: put the record on the platter. Touch **PLAY**, then **33**. □

10 Stop play

Play a record. (See 9).
To stop play before the end of the record. Touch **[STOP]**.

The tonearm returns to its resting position and the record player goes into stand by.

If you let the record play to the end, the tonearm will also return to its resting position and the record player into stand by. □

11 Pause during play

Play a record. (See 9).
To make a pause during play, press **[CUE]**.
The tonearm lifts off the record.

The record continues rotating.
To resume play from the same place, touch **[CUE]** again. □

12 Moving to another track

Play a record. (See 9).
Touch **[CUE]**. The tonearm lifts off the record. The record continues rotating.
Gently move the tonearm to the track you want. The arm is now

hovering above the correct track.
Touch **[CUE]** again.
The arm lowers the stylus into the track. Within seconds you will hear the music. □

13 Repeating a record

Play a record. (See 9).
When you can hear the music, touch **[REP]** (for repeat). A tiny red light next to the buttons blinks to indicate that the record will be repeated.
At the end of the last track on the record, the tonearm will automatically return to the first track and start playing again.

If you interrupt play, for example by pressing **[CUE]**, the repeat instruction will be cancelled.

You can instruct the record player to repeat the record which is in play, up to seven times, consecutively. Touch **[REP]** the number of times you require. The repeat light will now glow constantly. □

14 Cleaning a record

You should remove dust from the record before play.

Here's how:
Put the record on the platter.
Touch **[CUE]**.
The turntable starts rotating, the tonearm moves towards the lead-in groove and hovers just above the first track. You can now clean the record.

Use a record cleaner of reputable brand, in the manner prescribed by the record cleaner manufacturer.
When you have finished using the record cleaner, to resume playback, touch **[CUE]** again.

It is not necessary to put an anti-static mat on the Beogram's turntable platter since the platter itself provides ample anti-static protection. □

15 Cleaning the stylus

Fluff and dust can build up on the tip of the stylus and cause distortion during play. Here's how you should clean the stylus:

Hold the tonearm firmly with one hand.

Using the little brush supplied, make three or four gentle sweeping strokes **from the back** of the cartridge towards the front.

16 Removing the cartridge

The cartridge is plugged into the tonearm via four tiny pins. The cartridge and tonearm meet just where the black section of the tonearm ends.

You will get a good safe grip if you hold the tonearm on this black section, just where the tonearm bends.

Hold the tonearm firmly with one hand.

To protect the stylus lower the stylus guard.

Now hold the cartridge body with the other hand.

Always start from the back, with every stroke. If you brush in any other direction you might cause damage to the cartridge's cantilever and stylus.

Beware of chemical fluids for cleaning records and styli. They can contain solvents which will damage parts of the cartridge. □

Carefully move the cartridge from side to side while you pull outwards.

The cartridge will unplug after a few seconds.

To reconnect the cartridge or plug in a new MMC cartridge, reverse the procedures described above. Make sure the stylus is pointing down. To protect the stylus make sure the stylus guard is down.

When the cartridge is connected, you will hear a little »click«. To adjust stylus pressure, see **2**. See also **17**, Balancing the tonearm and **18**, Adjusting antiskating. □

17 Balancing the tonearm

The tonearm balance is factory-adjusted for the MMC 4 cartridge. Since all the cartridges in the new lowmass MMC range have identical weight and mass, it is not necessary to adjust tonearm balance even if you upgrade to an MMC 2 or an MMC 1. In this case, adjust stylus pressure (See **2**), and anti-skating. (See **18**).

If you think someone might have interfered with the counterweight and that the tonearm is not in balance, you can check and adjust balance in the following way:

(Read all the instructions before you start).

Press the cartridge's transparent stylus guard down. This protects your diamond stylus.

Using your left hand index finger, press down the centre adaptor until the notches at the bottom are no longer visible.

Keep your index finger on the centre adaptor and press **PLAY**. Now release the centre adaptor. The tonearm will move onto the edge of the turntable platter. The diamond will not be damaged if the stylus guard is down.

Now disconnect the record player from the mains power supply. The turntable platter stops rotating and the tonearm remains at the edge of the platter.

Hold the tonearm with your left hand.

Using your right hand, gently turn the black section of the counterweight clockwise until the front end of the tonearm flicks up and the tonearm is out of balance. Now turn the black section of the counterweight anticlockwise until the tonearm »floats«. That's when it is in balance or in »equilibrium«.

>

Look at the calibrated scale on the counterweight. Where is the 0 gram position? It should be aligned with the white mark on the tonearm bearing.

If it is not, hold the black section of the counterweight with your right hand and turn the calibrated scale with your left hand until »0« faces upward and is aligned correctly.

The calibrated scale for setting stylus pressure is at the zero position.

18 Adjusting antiskating

Your Beogram 2000 is fitted with a Bang & Olufsen MMC 4 pickup cartridge whose stylus pressure is 1.2 gram (12mN). The antiskating device on your Beogram 2000 is factory-adjusted to suit this combination. If you upgrade your pickup cartridge to an MMC 1 or 2 you should adjust the stylus pressure (see 2) and adjust the antiskating device to match the new cartridge.

To set stylus pressure, hold the tonearm in your left hand. Using your right hand, gently turn the black section of the counterweight anticlockwise until you see the required stylus pressure. For example, 1 (gr). Align it with the white mark on the tonearm bearing.

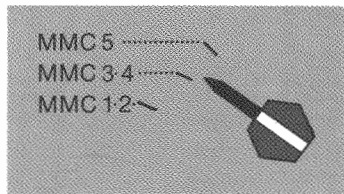
Connect the record player to the mains power supply. Press **STOP**. Flip the cartridge's stylus guard up. The record player is ready for action. □

Here's how: Disconnect the record player from the mains power supply. If there is a record on the platter remove it. The screw for adjusting the antiskating device is on the outside, underneath the bottom of the record player. Holding the platter in place with three fingers while keeping the dust lid down with your index finger, lift the record player up so that it rests on its >

back panel. Locate the antiskating screw and the cartridge indicator at the far right, directly underneath the tonearm bearing. (See diagram).

Using a screwdriver, turn the antiskating screw until the arrow points to the appropriate cartridge: MMC 5, MMC 3-4, MMC 1-2. That's all.

Gently lower the record player again. Connect to power supply. □



19 Cleaning the record player

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

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

Lower the stylus guard before wiping metal surfaces close to the stylus.

Grease stains can be removed with a lukewarm detergent solution on a soft cloth. Wipe dry with a clean cloth. □

20 Tips about record care

During the design and construction of the Beogram 2000 great care has been taken to include features which ensure minimum record wear and ensure that the record player treats your records gently.

Dust, dirt and static electricity are a record's worst enemies. If you can keep these to a minimum you can also help minimise record wear and thereby prolong the useful lifetime of your records.

Here's how:

Whenever possible, keep the dust cover of the Beogram 2000 closed. Of course it should be kept closed whenever the record player is not in use. But since your Beogram can play a record with the dust cover closed, and the two main operating devices are on the outside, why not get in the habit of keeping the cover closed during play as well?

Always keep your records in their proper covers. When removing a record from its inner sleeve make sure you do not get fingerprints on the playing surface. And make sure the playing surface is not rubbed excessively against the sleeve. This friction will create a static charge on the record and this will attract dust.

Here's how you should remove the record from the sleeve:

Hold the record sleeve so that its sides bend outwards, away from the record.

Put your hand in under the record, and put your four fingers on the record label. Support the edge of record with your thumb. Without touching the playing surface, slowly pull the record out of the sleeve.

When putting the record on the platter, hold the rim of the record with both hands. Avoid touching the playing surface. (See 8). □

21 Beomaster 2000 receiver

This receiver is the heart of the Beosystem 2000 music system. It is designed to match your Beogram 2000 record player in every respect. It incorporates Bang & Olufsen's electronic Datalink system which allows easy, convenient, one-touch operation of all functions on your Beogram record player (and any other connected component which has Bang & Olufsen's Datalink system, see 22).

For example, when your Beogram 2000 record player is connected to the Beomaster 2000, to hear music from a record all you have to do is touch the space marked **[PH]** on the Beomaster or **[PLAY]** on the Beogram. The hi-fi components do the rest.

Your one touch: activates the record player, makes it decide at what speed the record should be played, and starts playing the first track. At the same time, the Beo-

master 2000 automatically selects the record player as source, amplifies its sound signals and feeds them to the connected speakers. In short, after a few seconds you will hear music. At the end of play, the tonearm returns to its resting position.

If, at the end of play, no new instructions are given to the record player and no other programme source is selected on the Beomaster, after 30 minutes the entire system will go into stand by.

To enjoy this convenience of automatic, one-touch operation of all functions, we recommend that you connect your Beogram 2000 record player to a Beomaster 2000 receiver. See separate User's Guide for Beomaster 2000. □

22 Beocord 2000 cassette deck

This automatic cassette deck is designed to match the Beomaster 2000 receiver and your Beogram 2000 record player in every respect. It incorporates Bang & Olufsen's electronic Datalink system which allows easy, convenient, one-touch operation, whenever it is connected to the Beomaster 2000.

For example, to hear a tape, just touch **TP** on the Beomaster 2000 or touch **>** on the Beocord 2000 cassette deck.

Your one touch: activates the tape deck and plays the tape automatically. At the same time, the Beomaster 2000 automatically selects the cassette deck as source, amplifies its sound signals and feeds them to the connected speakers. In short, within seconds, you will hear music.

If you touch the **STAND BY** space on the Beocord cassette deck, the entire Beosystem will go into stand by. If, at the end of play, no new instructions are given to the deck, after 30 minutes it will go into stand by. Likewise, if no new instructions are given to the deck and no other programme source is selected, after 30 minutes the entire system will go into stand by.

To enjoy the convenience of automatic, one-touch operation of all functions, we recommend that you add a Beocord 2000 cassette deck and a Beomaster 2000 receiver to your Beogram 2000 record player. See User's Guide for Beocord 2000 and Beomaster 2000. □

23 Trouble-shooting: “What if..?”

The Beogram 2000 is easy and straight-forward to use. However, according to Murphy's Law: “If anything can go wrong, it will”. A recent survey shows that over ninety percent of all reported »electronic faults« were not faults at all; but errors in the way users had operated the device or set the controls. If anything goes wrong, before you call your dealer, see if this simple trouble-shooting section can help. Quite often, it's the simplest problems that are most annoying and frustrating. The “if only I knew how” sort of problems.

What if the sound from my record sounds just terrible?

Have you unlocked the three transport screws? (1)

Is there fluff or dirt on the stylus? (15)

Is the stylus pressure correctly adjusted? (2)

Is the stylus guard down? It should be up.

What if there is no sign of life in my Beogram 2000?

If the turntable does not rotate when you touch **PLAY**, check that the Beogram is connected to the mains power supply. (4, 5)

What if the Beogram is connected to the mains power supply but when I touch **PLAY the turntable platter still does not rotate?**

Have you unlocked the three transport screws and the three rim-brakes? (1, 4)

What if I want to play a maxi-single?

(A maxi-single is an LP-sized record which requires 45 rpm.). To play this record, press **PLAY**, then press **45**. (9)

What if I want to play a single (17 cm record) which requires 33 rpm.?

Press **PLAY**, then press **33**. (9)

What if I want to play a record which has a large hole in the middle?

Go right ahead. Put it on the platter. The Beogram has a centre adaptor which allows it to accommodate such records without problems.

Of course when you put a record with an ordinary-sized hole on the platter, this centre adaptor is pressed down automatically. Naturally, you've already noticed that! (8)

What if when I touch **PLAY, the tonearm moves onto the rotating record as it should but it doesn't seem to go beyond the lead-in groove and I can't hear any music?**

Check the position of the stylus guard. It is probably down and thus prevents the stylus from tracking the grooves. Touch **STOP**. When the tonearm moves into its rest position, flip the stylus guard up. Touch **PLAY** again and listen to the music.

What if when I touch **PLAY, the tonearm moves onto the rotating record as it should but I can't hear any music?**

Is your Beogram properly connected to an amplifier or a receiver? (4)

If this is not a Beomaster 2000 or a receiver with Bang & Olufsen's Datalink system, have you selected record player as input on your amplifier?

Are the loudspeakers properly connected to your amplifier or receiver? □

24 Glossary of Buttons and Terms

PLAY Plays the record on the platter. (5, 9)

STOP (Stand by) Puts the record player in its stand by position. A temporary »off« switch. If the Beogram 2000 is connected to a Beomaster 2000 receiver, when you touch **STOP**, the entire music system will go into stand by. (6)

CUE Causes the platter to rotate so that you can clean the record before play. The tonearm will hover over (or be »cued« over) the lead-in groove of the first track. To play the record after you've cleaned it touch **CUE** again. (14)

Lifts the tonearm off the record during play so you make a pause (see 11) or so that you can move (or »cue«) the arm over another track. When you have found the desired track, to play it touch **CUE** again. (12)

33 Selects 33 rpms as speed if you want to play a non-standard record. For example a single (17 cm diameter) which requires 33 rpms. (9)

45 Selects 45 rpms as speed if you want to play a non-standard record. For example an LP-sized record (30 cm diameter) which requires 45 rpms. (9)

REP Abbreviation for REPEAT. Allows you to repeat an entire record up to seven times consecutively. (13)

Terms

Antiskating A device designed to counteract the tendency of the tonearm to drift toward the centre of the record. The amount of skating force or tendency to drift will vary according to the stylus pressure applied. Thus if you change stylus pressure you should also readjust the antiskating. (2, 18)

Pickup cartridge The device at the end of the tonearm which converts the sound vibrations impressed on a record into an electrical vibration or signal. Beogram 2000 is fitted with an MMC 4 pickup. (2, 16)

Stylus Also called needle. The part of a pickup cartridge which picks up the information in the record groove. It is the only element that should touch the record's surface. (15)

Stylus pressure Also called tracking force. The amount of pressure necessary to ensure that the stylus keeps contact with the record groove. Expressed in mN (milli-Newtons) or grams. The MMC 4's recommended stylus pressure is 1.2 gr. or 12 mN. (2)

Tonearm Also called pickup arm. Its job is to hold the pickup cartridge and guide it across the record so that it can execute its functions. (12-17)

Turntable platter The round metal disc which supports the record and rotates at constant speed. (1)

Counterweight Device on the tonearm for counterbalancing or offsetting the weight of the pickup cartridge. (17)>

Beosystem 2000

Corporate name for the following Bang & Olufsen hi-fi products designed to work together as a complete system. Naturally, each product will also work with products from other manufacturers, but to enjoy the convenience of one-touch operation, they must be connected to the Beomaster 2000 or another receiver with Bang & Olufsen's electronic Datalink system:

- **Beomaster 2000** An automated Bang & Olufsen receiver, which is the heart of the Beosystem 2000
- **Beogram 2000** An automated Bang & Olufsen record player. Described in this User's Guide
- **Beocord 2000** An automated Bang & Olufsen cassette deck. (22)

Datalink An electronic system built into many Bang & Olufsen products which allows the separate components to »talk with« each other and thus offer easy, one-touch operation from any of the connected products. The Beosystem 2000 incorporates this electronic system. So does the Beosystem 5000, 6000 and 8000. Individual products from these music systems are therefore interchangeable and will work well together.

Primary panel Area outside on the front of the set on which the primary operating facilities are placed. Here you will find the **PLAY** and **STOP** buttons and can therefore operate the Beogram with its dust cover closed. (Top drawing, 5, 6, 9)

■ This is the only illuminated symbol on the Beogram 2000. Constant red light indicates that you have touched **REP** (for REPeat) several times and the record you are listening to will be repeated (up to seven times). Flashing red light indicates that you have touched **REP** (REPeat) just once and the record will be repeated once. Or that, of a series of **REP** (REPeat) instructions, there is only one repeat function left to be executed. (13) □

25 Beogram 2000 Technical Specifications

Type No.	5821-5823-5825
Wow and flutter, DIN	$<\pm 0.07\%$
Wow and flutter, WRMS	$<\pm 0.035\%$
Rumble DIN weighted	>75 dB
Rumble DIN unweighted	>55 dB
Speeds	33-45 rpm.
Speed deviation	$<\pm 0.2\%$
Power supply	5821-5825: 190-265 (90-130) volts 5823: 120 volts
Power frequency	50-60 Hz
Power consumption	<10 watts
Dimensions W x H x D	42 x 8 x 32.4 cm
Weight	6 kg

MMC 4 cartridge

Recommended tracking force	12 mN/1.2 gram
Frequency range	20-20,000 Hz ± 2.5 dB
Channel separation 1000 Hz	>22 dB
Channel separation 50-15,000 Hz	>17 dB
Channel difference	<2 dB
Stylus	Elliptical diamond 6 x 17 μ m
Cantilever	Tapered aluminium tube
Effective tip mass	0.4 mg
Compliance	25 μ m/mN
Sensitivity mV/cm/s RMS	>0.6 mV
Output 5 cm lateral RMS	>2.12 mV
Cartridge weight	1.6 gram

Subject to change without notice

Guarantee

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

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.

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 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.

