# How to use this manual

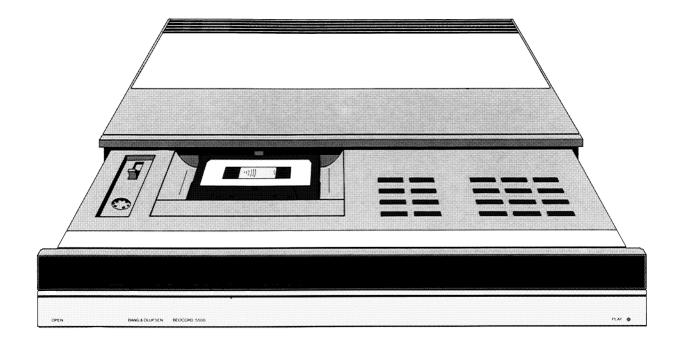
This manual explains how to set up the Beocord 5500 tape recorder and how to make use of all the functions available.

- It also explains the meaning of the cues and symbols on the display panel on the front.
- The instructions refer to the buttons in the drawer. Each button to be pressed is indicated as a small box with the appropriate text or symbol inside it.

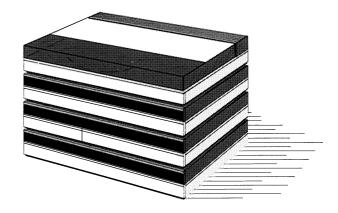
For operation with the Master Control Panel 5500, please refer to the manual accompanying the Master Control Panel 5500.

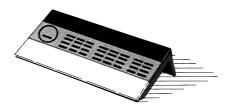
• The index at the end of the manual lists all the buttons and controls available and gives the page numbers on which each one of them is referred to.

Setting up, 6	Special features and functions, 18
Gaining access to tape compartment and buttons, $8$	Displayed cues and symbols, 21
Switching on and off, 9	Using the Beocord 5500 in conjunction with Beosystem 5000, 22
Playing back, 10	Maintenance, 23
Controlling the tape, 11	Index of buttons and controls, 24
Recording functions, 13	Technical specifications, 25



## Beosystem 5500





The Beosystem 5500 is easy and very convenient to use – you can in fact operate the whole system without leaving your chair. The Master Control Panel 5500 is the key to the system and it communicates with the brain of the system, the Beomaster 5500. Together they form the basis of the system. The other units in the system, the Beocord 5500, the Beogram 5500 and the Beogram CD 5500, are modules with which you can extend your Beosystem 5500 or use in conjunction with other systems, if you like.

## Table of contents

Setting up	6
Where to put the tape recorder	6
Removing the transport screws	6
Connection to receiver	7
Stand-by mode	7
Gaining access to tape compartment and buttons	8
Switching on and off	9
Playing back	10
Controlling the tape	11
Using the automatic tape reverse function	11
Repeating a tape	11
Rewinding and winding	12
Stepping through tracks	12
Memorizing specific points on the tape	12
Recording functions	13
Selecting source to record from	13
Automatic recording	14
Manual recording	14
Manual adjustments during automatic recording	15
Changing the maximum recording level	15
Changing the automatic recording start level	15
Peak hold	16
Inserting blanks of individual lengths	16
Locking the recording function	16

Special features and functions	18
HX Professional	18
Using Dolby NR*	18
Automatic tape type selection	19
Locking the tape recorder in manual mode	19
Reading off signal level in left and right channels	19
Erasing tapes	20
Displayed cues and symbols	21
Using the Beocord 5500 in conjunction with Beosystem 5000	22
Maintenance	23
Index of buttons and controls	24

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

# Setting up

#### Where to put the tape recorder

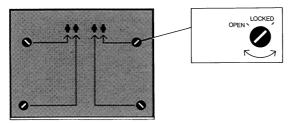


The tape recorder must be placed horizontally on a stable surface. Make sure to put it in a place where ventilation cannot be impeded. Avoid placing it in direct sunlight or near radiators or other sources of heat.

If your Beocord 5500 is to be used in conjunction with other units in the Beosystem 5500, you may place them on top of each other, as in a rack system, or next to one another.

Make sure that the drawer in the tape recorder can open freely.

#### Removing the transport screws



Before using the tape recorder you must remove the four plastic transport screws underneath it.

Carefully turn the tape recorder upside down. Using a coin turn each screw anti-clockwise to the position marked OPEN. Then remove the screws and insert them in the four holes provided for safe keeping.

If you ever have to carry the tape recorder again, we strongly recommend that you reinsert the four transport screws and turn them to the position marked LOCKED.

#### **Connection to receiver**



Plug the 7 pin DIN cable into the TAPE 1 socket on the Beomaster 5500.

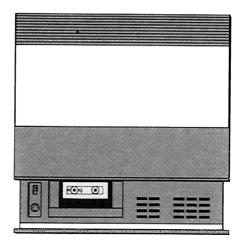
For use with another receiver, e.g. one having a 5 pin DIN socket or phono sockets, do as follows:

Unscrew the two extra pins with grooves using a tiny screwdriver and plug the cable into the 5 pin DIN socket on the receiver. If your receiver has phono sockets, connect an adaptor (Bang & Olufsen part no. 7229017) and plug it into the phono sockets on your receiver.

## Stand-by mode

Once connected to the mains supply, the tape recorder is in so-called stand-by mode and ready to be operated. If connected to the Beomaster 5500, it can be remote-controlled by using the Master Control Panel 5500. The stand-by mode is indicated by a tiny red light on the display panel on the front.

## Gaining access to tape compartment and buttons



Gently tap the left-hand side of the front panel where it is marked OPEN to open the drawer.

The tape compartment, all the buttons, the LINE/MIC/AUX switch and the MIC/AUX socket are now visible.

The cassette must be loaded with the tape slots facing you and side 1 (or A) facing upwards. Unload the cassette simply by lifting it out of the compartment. The cassette cannot be unloaded while the tape is moving, or while the tape recorder is in recording pause mode.

To close the drawer, gently tap the left-hand side of the front panel again.

The drawer may be left open both during playback and recording, if you like. When the tape recorder is switched to stand-by, the drawer will close automatically, however.

# Switching on and off

**Switch on** by gently tapping the right-hand side of the front panel where it is marked PLAY. If there is a cassette in the compartment, playing will start immediately.

You can also switch on just by pressing any of the buttons in the drawer. The tape recorder will then immediately carry out the function desired, e.g. start rewinding if you pressed [<<]. **Switch off** by gently tapping the right-hand side of the front panel again. This will make the the tape recorder revert to stand-by mode.

Within approximately 30 minutes of tape stop, the tape recorder switches off automatically and reverts to stand-by mode.

## **Playing back**

Please ensure that you have placed a cassette in the tape compartment with side 1 (or A) facing upwards.

Start playing by pressing PLAY and stop playing by pressing STOP.

If you want playing to start at the beginning of the tape, press <u>START GO</u>. The tape will then be rewound, if necessary, and playing will start immediately. If you let the tape recorder stop automatically after playing a tape to the end and you don't remove the cassette, you only have to press [PLAY] to start playing the tape again. The tape recorder then automatically 'turns' the tape and starts playing it, or, if the automatic tape reverse function is cut out, rewinds the tape to the start of the current tape side, and then starts playing it again.

## Controlling the tape



## Using the automatic tape reverse function

The tape recorder automatically reverses the tape at the end of the first side and within one second starts playing or recording again, as the case may be. You don't have to turn the cassette manually. In order to ensure correct play or recording, however, it is essential to load the cassette with side 1 (or A) facing upwards.

If you don't want the tape to be reversed au-

tomatically, press <u>AUTO REV</u>. Press <u>AUTO REV</u> once more to cut in the automatic tape reverse function again.

The automatic tape reverse function is indicated by tiny arrows on the right-hand side of the front display.

You can 'turn' the tape at any point just by pressing TURN.

#### Repeating a tape

If you want to play a tape two consecutive times, press PLAY a second time.

Both arrows indicating the automatic tape reverse function will now be lit. This means that at the end of side 2 the tape recorder will automatically 'turn' the tape and continue to play from the start of side 1.

If the automatic tape reverse function has

been cut out, the tape recorder will repeat the current side only, i.e. rewind when it reaches the end and then start playing the same side once more.

The repeat function will be cancelled if you use any button which stops, rewinds or winds the tape.

#### **Rewinding and winding**

The buttons  $\leq and \geq are$  used to rewind or wind a 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

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.

You can step through the tracks, forwards or backwards, by pressing <u>ADVANCE</u> or <u>RETURN</u> the number of times required to step to the track you want.

Note: pressing **RETURN** only once takes you

to the beginning of the current track.

The use of this function is indicated on the front display. Supposing you press <u>ADVANCE</u> four times to step forwards by four tracks, the display will first indicate four steps and then three, two, one, as the track desired is being approached.

#### Memorizing specific points on the tape

Specific points on the tape can be memorized for easy retrieval. This can be done both during recording and playback.

When you are at the point you want to memorize, press <u>MEMO SET</u>. Recording or playback continues unaffected.

When you later want to find the memorized point, press <u>MEMO GO</u>. The tape will then be rewound to that point, and playing will start from there.

If you are recording, you first have to stop recording before you can activate MEMO GO.

If you press <u>MEMO SET</u> once more to memorize another point, the first one will be cancelled.

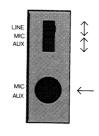
Unloading the cassette cancels any memorized points.

# **Recording functions**



## Selecting source to record from

Before recording, make sure that the <u>LINE/MIC/AUX</u> switch to the left of the tape compartment is set to the correct position:



- **LINE** if recording from one of the other units in the Beosystem 5500, or from any other system to which your Beocord 5500 is connected and which is also designed for LINE level
- **MIC** if recording from a microphone connected to the MIC/AUX socket to the left of the tape compartment
- AUX if recording from any other source connected to the MIC/AUX socket, e.g. another tape recorder

We recommend that you get into the habit of always leaving the LINE/MIC/AUX switch in its LINE position whenever you have finished a recording.

#### Automatic recording

If you use the automatic recording facility, you don't have to think about adjusting the recording level. The tape recorder does so automatically.

Press <u>AUTO REC</u> to switch to automatic recording mode. Play the source you want to record from, allowing the tape recorder some time to adjust to the recording level. Then press <u>AUTO REC</u> again to start recording.

Press <u>STOP</u> to pause recording. The tape recorder now inserts a blank of 3.5 seconds on the tape before it stops. Press <u>AUTO REC</u> again if you want to resume recording, or press <u>STOP</u> again if you want to leave the recording mode.

During automatic recording the tape recorder automatically ensures that the recording level does not exceed a certain, predetermined value. For further details, see the paragraphs »Changing the maximum recording level« and »Changing the automatic recording start level«.

#### Manual recording

Using the manual recording facility means that you override the automatic recording level adjustment and adjust the recording level manually.

Press MANUAL REC to switch to manual recording mode. You can now read off the level of the source you are going to record from.

Press **<u>REC LEVEL</u>** to see the current setting of the electronic 'potentiometer' on the display. Press  $\underline{\land +}$  or  $\underline{\lor -}$  if you want to raise or lower the setting of the 'potentiometer'.

Each time you press either button the level is raised or lowered by one step of 2 dB. Within a few seconds the display gives you the signal level again. Press MANUAL REC again to start recording. Press STOP to pause recording. The tape recorder now inserts a blank of 3.5 seconds on the tape before it stops.

Press MANUAL REC again if you want to resume recording, or press STOP again if you want to leave the recording mode.

If you are recording from a microphone, we recommend that you use the manual recording facility described in this paragraph. This is because the microphone input is equipped with an automatic adjustment facility of its own (AGC).

### Manual adjustments during automatic recording

You can of course do manual adjustments to the recording level any time during automatic recording.

Press **REC LEVEL** to see the current setting of the electronic 'potentiometer'. Press  $\frown +$  or

 $\boxed{}$  if you want to raise or lower the setting of the 'potentiometer'.

You have now disabled the automatic recording function. Just press <u>AUTO REC</u> again when you want to revert to automatic recording.

#### Changing the maximum recording level

The maximum recording level is the level at which the 'potentiometer' setting will be lowered automatically during automatic recording. This ensures that your tapes will never be overloaded.

When the tape recorder leaves the factory, the maximum recording level is set to +2 dB.

You can raise or lower this level so that it suits the tapes you are using.

Press <u>STOP</u> and, while keeping the button depressed, press <u>PPM MEMO</u>. You will now see the preset maximum level on the display. Within two seconds press  $\frown +$  to raise the level or  $\frown -$  to lower the level.

If you disconnect the tape recorder from the mains, the maximum recording level will be reset to +2 dB.

### Changing the automatic recording start level

The automatic recording start level is the position which the 'potentiometer' is set to whenever an automatic recording is started.

When the tape recorder leaves the factory the automatic recording start level is set to -4 on the level scale.

You can change this start level if the source you normally record from is either weak or strong. If your source is weak you will have to raise the level, if your source is strong you will have to lower the level.

Press <u>STOP</u> and, while keeping the button depressed, press <u>REC LEVEL</u>. Within two seconds press  $\frown +$  to raise the level or  $\frown -$  to lower the level.

If you disconnect the tape recorder from the mains, the automatic recording start level will be reset to the preset level, i.e. -4.

#### Peak hold

The highest signal level occurring during a recording will be retained on the display while that recording is still in progress. This is also referred to as 'peak hold'.

You can delete the latest peak hold readout by pressing <u>AUTO REC</u> again if you are in automatic recording mode or <u>MANUAL REC</u> if you are in manual recording mode. The peak hold readout will then be reset.

Even if the tape recorder has already switched to stand-by mode, you can still obtain a readout of the highest signal level occurring during the latest recording. Just press <u>PPM MEMO</u> to reveal it.

### Inserting blanks of individual lengths

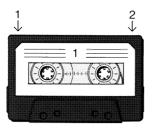
When you press <u>STOP</u> for the first time to pause a recording, the tape recorder automatically inserts a blank of 3.5 seconds. You can override this function and insert blanks of any length desired, or no blanks at all.

Press <u>STOP</u> to pause the recording and keep the button depressed for as long as you want the blank to last. If you want the blank to be shorter than 3.5 seconds, press <u>STOP</u> once. Then press <u>STOP</u> immediately again and keep it depressed for the one or two seconds you want the blank to last.

If you don't want any blanks at all, simply press STOP twice in quick succession.

#### Locking the recording function

Locking the recording function is useful if you want to avoid the risk of erasing a particular tape by accidentally making another recording on that tape. After loading the cassette press <u>REC LOCK</u>. Now you cannot use the recording function until you remove the cassette from the compartment.





Of course, you can also remove one or both latches on the edge opposite the tape slots on the cassette. The latch in the left-hand side corresponds to side 1 (A), the latch in the right-

hand side corresponds to side 2 (B). This ensures that the tape recorder cannot record on the appropriate side or both sides of the tape.

## Special features and functions

#### **HX** Professional

Your Beocord 5500 features the HX PRO recording system. HX PRO stands for Professional Headroom Extension.

This automatic circuit, which was developed by Bang & Olufsen in cooperation with the Dolby Laboratories, ensures optimum saturation of the tape, whichever type you are using.

You don't have to use any buttons or

controls, nor do you have to play back your HX PRO tapes on a tape recorder equipped with the HX-PRO recording system, to be able to benefit from it.

HX-PRO

#### Using Dolby NR

Your Beocord 5500 is fitted with Dolby B and C noise reduction facilities. Before making a recording you must decide whether you want to use Dolby B, Dolby C or no Dolby at all.

Press  $\boxed{\text{DOLBY NR}}$  repeatedly to switch between the three settings: Dolby B > Dolby C > Dolby off > Dolby B > ...., etc.

During recording the Beocord 5500 places a code on the tape, which ensures that the same Dolby setting is automatically selected when the tape is played back on the Beocord 5500.

You can override this code, if for some reason you want to play back a tape using another Dolby setting than the one with which the tape was recorded. Press DOLBY NR to switch to the Dolby setting of your choice, e.g. Dolby B, but do not release the button. Keep DOLBY NR depressed for 1.5 seconds until the appropriate cue disappears from the display. Then release the button. When you play back the tape recorded with e.g. Dolby C codes, the DOLBY C cue will blink, but the DOLBY B cue will glow constantly.

Next time you press **DOLBY NR** the locked Dolby setting will be released.

### Automatic tape type selection

You can use any type of tape in your Beocord 5500: metal, chrome or ferric.

Whichever type you choose, the tape

recorder will register it automatically and make the necessary adjustments. Tape type adjustment is based on the IEC standard.

#### Locking the tape recorder in manual mode

You can, if you wish, lock the tape recorder in manual recording mode. This means that when you do recordings using the remote control, or when you programme the tape recorder to record from the radio, the recording will take place with the automatic level adjustment cut out.

Press **STOP** and while keeping it depressed,

press MANUAL REC. The Beocord 5500 will now do manual recordings only.

If you want to restore the automatic recording function, press STOP and while keeping it depressed, press AUTO REC.

If you disconnect the tape recorder from the mains, the automatic recording function will also be restored.

## Reading off signal level in left and right channels

You can read off the signal levels in the two channels separately.

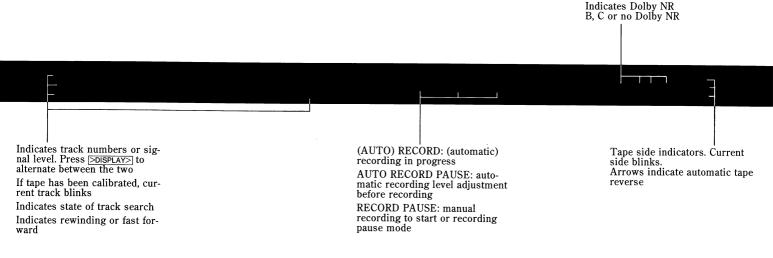
Press  $\underline{STOP}$  and, while keeping the button depressed, press  $\underline{<}$  to see the left channel or  $\underline{>}$  to see the right channel. Proceed to play or record by pressing the appropriate button. The left or right channel, as the case may be, will be retained on the display until you press [STOP]. Then you will see both channels again simultaneously.

#### **Erasing tapes**

Tapes can be erased in different ways:

- by recording without switching on a source to record from.
- by setting the recording level to 0. To do so use the manual recording facility. This setting mutes the incoming signal totally.
- by setting the <u>LINE/MIC/AUX</u> switch to MIC or AUX, provided of course the MIC/AUX socket is vacant.

# Displayed cues and symbols



The display on the front of the Beocord gives information about the operational status of the system.

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

# Using the Beocord 5500 in conjunction with Beosystem 5000

The Beocord 5500 can of course be used in conjunction with the Beosystem 5000 as well. However, if you want to operate it using the Master Control Panel 5000, the functions available are of course restricted to those available on the Master Control Panel 5000. The following instructions imply that you have connected the Beocord 5500 to the TAPE 1 socket in Beomaster 5000.

#### Playback

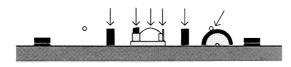
Start playing:	Press TAPE 1
Stop playing:	Press STOP
Rewinding or winding:	$\operatorname{Press}{\color{black}{\leqslant}} \operatorname{or}{\color{black}{\gg}}$
Stepping through tracks:	Press RETURN or ADVANCE
Finding a specific track:	Press TRACK, required number, then TAPE 1
Programming tracks:	Press TRACK, required number, then STORE, TRACK, required number, then STORE, TRACK and so forth
Recording	Use buttons with green text on primary panel:
Start recording:	Press RECORD twice
Pause or stop recording:	Press TAPE STOP once or twice
Return to start of latest recording:	Press [RETURN]

## Maintenance

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 avoid dust and fluff building up on them.

Use a tape head maintenance kit or simply a wool stick dipped in a rinsing fluid designed for this purpose. The cleaning process must be carried out while there is no cassette in the compartment.

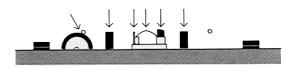
Do not use denatured alcohol to clean any parts of the Beocord 5500.



Cleaning the tape head and pinch rollers is easier when they are in an exposed position.

Press [STOP] and while keeping it depressed, press [PLAY]. Then release [STOP].

The tape head and the right-hand pinch roller are now exposed, enabling you to clean them as prescribed.



Press TURN to expose and clean the left-hand pinch-roller.

During this process the pinch rollers will be turning.

Press **STOP** when you have finished the cleaning process.

## Index of buttons and controls

#### **Front panel**

Left-hand side (OPEN) 8 Right-hand side (PLAY ●) 9

#### Drawer

LINE/MIC/AUX switch 8, 13, 20 MIC/AUX socket 8, 13, 20

#### **RECORD buttons:**

#### **CONTROL buttons:**

 START GO 10

 TURN 11, 23

 AUTO REV 11

 >DISPLAY> 21

 MEMO SET 12

 MEMO GO 12

 <<>> 12, 19

 PLAY 10, 11, 23

 RETURN 12

 STOP 10, 14, 15, 16, 19, 23

 ADVANCE 12

# **Technical specifications**

Beocord 5500		
Type no.	4931/4932/4934/4935	
Compact cassette	C46-C60-C90-C120	
Recording system	HX PRO	
Noise reduction system	Auto Dolby B and C	
Tape switch	Auto ferro/chrome/metal	
Tape head	Sendust	
Wow and flutter DIN	<0.15%	
Wow and flutter WRMS	<0.09%	
Speed deviation	<±1.5%	
Fast forward and rewind	75 sec.	
Frequency range chrome	30-18,000 Hz ±3 dB	
S/N 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	
Channel separation	>35 dB	
Erasure	>70 dB	
Erasure frequency	96 kHz	-
Radio input, Line	100 mV/28 kohms	
Microphone input	0.03 mV/3 kohms	-
AUX input	100 mV/28 kohms	
Radio output	880 mV/1 kohms	
Power supply	4931: 220 volts	
	4932/4935: 240 volts	
	4934: 100 volts	
Power frequency	50-60 Hz	
Power consumption	Max. 25 watts	
Dimensions W x H x D	42 x 7.5 x 32.5 cm	
Weight	8.35 kg	

#### Subject to change without notice

This Beocord fulfils the conditions stated in the EEC directive 82/499 concerning radio

frequency interference.

#### 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.

BANG & OLUFSEN DK-7600 STRUER DENMARK

3504347

03-88