

# INSTRUCTION MANUAL FOR BEOCORD 1800

The BEOCORD 1800 has no output amplifier and is therefore well suited for operation with a hi-fi stereo amplifier such as the BEOLAB 5000 or BEOMASTER 1400.

## **Here are some of the main features of the BEOCORD 1800:**

Meets minimum specifications for DIN 45 500 standards.

Fully transistorized pre-amplifier secures good signal-to-noise ratio, minimum distortion, and economical operation.

Separate tape heads for erase, record, and playback functions with associated pre-amplifiers. This feature permits interference-free before-the-tape and off-the-tape monitoring of recordings, both mono and stereo, with a pair of low-impedance headphones plugged into the headphone jack or with a separate stereo output amplifier (for instance a BEOLAB 5000 or BEOMASTER 1400) connected to the line output or to the radio output.

Faders (slide potentiometers) for individual control of each channel.

Records and plays back 4-track mono and stereo.

Two pointer instruments (moving-coil meters), each of which indicates the sum of signals in each of the two tracks which can be recorded simultaneously. These instruments help you to secure constant OPTIMUM RECORDING QUALITY.

The BEOCORD 1800 has some special features:

- Successive but synchronous recordings of vocal parts, with accompanying music if desired (known as sound-on-sound).
- Echo may be added to recordings.
- Synchronous signals may be recorded on two tracks one of which can be a pilot signal for automatic lantern-slide control.
- Language laboratory: Recording a foreign-language text on one track and a synchronous translation or conversation exercises on the other track.

## **ADDITIONAL SPECIAL FEATURES:**

Built-in splicing groove in tape head cover.

Photo-controlled stop device for use during programme scanning; also operates if tape breaks and at end of tape.

Large reels (7 in. - 18 cm).

Tape counter, resettable at the touch of a button.

Pause control.

Transistorized automatic cut-out circuit.

Synchronous motor - 3 speeds.

DIN and American standard plug-and-jack connections.

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## CONNECTING THE BEOCORD TO THE MAINS

**Transport Securing.** The mechanical part of the BEOCORD 1800 is locked by means of two hexagonal screws, one in either side. First the plastic hoods are removed, then the screws are turned to the left and taken out.

The Beocord is connected to the AC mains by means of the mains lead, which is in a compartment under the bottom.

The Beocord is equipped with a mains voltage changeover switch; check that it is set for your local mains voltage.

The mains voltage changeover switch can be set for 110, 130, 220, and 240 volts.

BEOCORD 1800 type 4133 is for operation on 60 Hz mains.

BEOCORD 1800 type 4138 is for operation on 50 Hz mains.

**NOTE!** For the sake of necessary ventilation the dust cover should be fixed to the tape recorder only when the latter is out of function.

### JACKS

5

(located to the left and right on the control panel)

**Headphone Jack** – for headphones with impedances between 5 and 500 ohms.

For before-the-tape and off-the-tape monitoring.

14

**Microphone Jack** – balanced input for low-impedance (200 ohms) stereo or mono microphone.

A mono microphone connected to this input will work into the left channel.

15

**Microphone Jack** – balanced input for low-impedance (200 ohms) mono microphone. This input works into the right channel only.

A stereo microphone connected to this input will provide an inverted sound picture. The left sound signal will be picked up on the right channel and the right sound signal on the left channel. Used to provide a properly oriented sound picture when using suspended microphones.

Two mono microphones plugged into jacks (14) and (15) may be used instead of a stereo microphone.

### JACKS

24

(located under the bottom of the Beocord)

**Radio Input.** Input for a radio set or tuner equipped with a DIN standard tape recorder output jack. A type 0961014 cable should be used for making the connection, enabling you to record from, and play back through, the radio set without changing cables. By using a type 6270019 cable you can have off-the-tape monitoring in conjunction with the output amplifier of the radio set you have connected to your Beocord. This cable is a twin cable and has an additional plug for insertion in the line output jack of the Beocord. The radio input (24) connects directly to the gramophone input (26); these two inputs work into the same pre-amplifier for which reason only one set – either the radio or the record player – may be connected to them at the same time.

The BEOCORD 1800 is equipped with a radio pre-amplifier which is switchable between two different sensitivities, L and H. Switching is performed through a hole in the bottom plate. The switch should normally be in the L position.

- 25 Radio and Gramophone Input.** This input, common to radio and gramophone, has American standard jacks and permits recording only. These jacks are wired in parallel with the DIN standard inputs for radio (24) and gramophone (26).
- 26 Gramophone Input.** The best way of connecting the record player, in order to avoid unplugging of cables etc., is to connect it to the radio set or amplifier, feeding the desired programme to your Beocord in this manner. However, a record player with a built-in pre-amplifier (e. g. a BEOGRAM 1000 VF) or a crystal pickup may be connected directly to this input, but this requires that the radio pre-amplifier has first been switched to the H position; also note that no cable from the radio set may be left connected to the Beocord (see section 24, Radio Input).
- 27 Line Jack.** This jack is wired for both signal input and signal output and is normally used for interconnecting two tape recorders for copying or for simultaneous recording (for copying, see page 13), or you may use it for connecting your Beocord to a hi-fi stereo amplifier having line input. A type 0961014 cable should be used. By using a type 6270019 cable you can have off-the-tape monitoring in conjunction with the output amplifier of the radio set you have connected to your Beocord. This cable is a twin cable and has an additional plug for insertion in the Beocord radio jack.
- 28 and 29 Line Jacks.** These jacks are wired in parallel with the DIN standard jack (27). They are American standard jacks. (28) is signal input; (29) is signal output.

## CONTROLS

### 0

**Main Switch and Speed Selector.** To start your Beocord, turn this knob to the desired speed. There are three tape speeds with intermediate «off» positions. The three speeds,

- I: 4.75 cm/sec ( $1\frac{7}{8}$  in/sec),
- II: 9.5 cm/sec ( $3\frac{3}{4}$  in/sec),
- III: 19 cm/sec ( $7\frac{1}{2}$  in/sec),

are suited for, respectively,

- I: Recordings of speech
- II: Recordings from gramophone and radio
- III: Exacting recordings, for instance of music from a microphone.

Meters (12) and (13) will show white light when power is applied to the Beocord.

**IMPORTANT:** When the Beocord is not in use or is used as an amplifier only, the control (0) and the tape control lever (4) should always be set at 0. In these three positions, the rubber intermediate wheels in the Beocord are disengaged, thereby avoiding deformation and consequent mechanical noise. However, should you forget to set these two controls to 0 and deformation therefore result, you can regenerate the wheel by letting the Beocord motor run for some time before use.

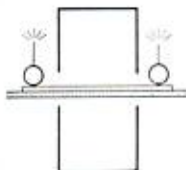
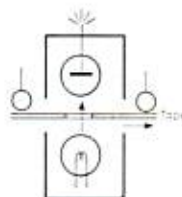
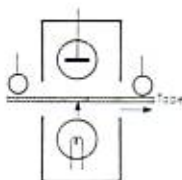
- 2 **Cut-out for Automatic Stop Feature.** Operates only when the tape coating is removed (see section Automatic Stop on page 9).
- 3 **Tape Counter.** Should be reset immediately after a tape has been inserted.
- 4 **Tape Control Lever.** This controls the fast forward and rewind functions as well as the normal forward motion.
- IMPORTANT:** Always leave the tape control lever at neutral (zero position) when the tape transport mechanism is not in use.
- 6 and 7 **Volume Controls** for headphones, (7) left and (6) right channel. To obtain balance, increase or decrease volume of one channel.
- 8 **Pause Control.** Permits stopping the tape momentarily. Can be locked for pauses of some duration. Used for tape editing etc.
- 9 **Volume Controls** (left and right channels) for echo, sound-on-sound, and line signals.
- 10 **Volume Controls** (left and right channels) for gramophone input.
- 11 **Volume Controls** (left and right channels) for microphone input.
- 12 and 13 **VU Meters.** Show red light when a recording is in progress. Their pointers indicate the volume level of the programme being recorded, regardless of whether it is obtained from one or more sources. For correct recording, pointer deflections should stay inside the white scale sector, with only very brief excursions into the red sector.
- 16 **Pushbutton Control for Echo, Sound on Sound, and Line Signal.**
- 17 and 18 **Playback Pushbuttons.** Control these functions: left or right channel only, stereo, and adding the two stereo channels together to make a mono signal.
- 19 **Monitor.** With this button depressed, you can monitor the signal being recorded before recording (before-the-tape monitoring); with the button released, you can monitor the signal after it has been recorded on tape (off-the-tape monitoring).
- 20 **Amplifier.** This button when depressed applies power to the Beocord amplifier without placing the transport mechanism into operation. This feature is of practical importance during adjustments of recording level and when an output amplifier is connected to the line output (see under P. A. on page 13).
- 21 and 22 **Record Buttons.** Left channel: button 21, tracks 1 and 4. Right channel: button 22, tracks 3 and 2.
- 23 **Synchro-playback Control** for synchronizing two recordings on separate tracks.



## OPERATION

### Inserting Tape

### Automatic Stop Programme Scanning



Place the full reel on the left-hand turntable (see pullout sheet). Slide the tape down along the vertical edge of the control panel, thereby also feeding it around the two slack absorbers and into the gap in front of the tape heads. Pull the tape into the gap on the empty reel (which should be placed on the right-hand turntable and, putting a finger on the tape end, turn the empty reel through one turn and a half. When using thin tapes, such as triple-playing tapes, the tape may show a tendency to twist. This can be avoided by bringing the tape outside the slack absorbers during fast forward and rewind and letting it slide in the fixed tape guides.

The BEOCORD 1800 is equipped with a combined **photo-electric** and **metal-foil-contact** stop device.

The automatic stop device when actuated releases the tape control lever (4) and returns it to its neutral position, both from normal forward tape motion and from fast forward and rewind.

The control (2) selects between two functions of the automatic stop device.

**PHOTOSTOP 1.** In this position, the automatic stop is actuated by

Metal foil or metal coating not less than 30 mm long;

End of tape;

Tape breakage;

Clear window in tape coating.

These facilities enable rapid and accurate programme scanning; for example, you may place metal foil between large sections of a programme (concertos) and clear windows between small sections (movements).

You can make a clear window by removing the coating over a length of approx. 10 mm, either by scraping it off with a sharp knife or, in the case of polyester and mylar tape, by dissolving the coating with trichlorethylene.

**(Note:** Trichlorethylene gives off dangerous vapours. It attacks many plastics).

Programme scanning is possible on tapes with recordings in only one direction (for example tracks 1 and 3). The clear windows will give stop in both directions and undesired stop in the other tracks (for example tracks 4 and 2).

**PHOTOSTOP 2.** In this position, the automatic stop device is only operated by

Metal foil or metal coating not less than 30 mm long.

Use this function when you wish to wind a tape with clear windows through quickly without stopping at each window.

### Mode of Operation

A small filament lamp and a photo element are placed on opposite sides of the tape and will operate in the PHOTOSTOP 1 position when the tape coating no longer prevents the passage of light. In the PHOTOSTOP 2 position, the filament lamp is switched off.

A pair of sensor contacts will operate when in contact with a conductive surface on the inner side of the tape.



## Balance

It sometimes happens while making stereo recordings that one channel is weaker than the other one, causing some of the realism of stereo reproduction to be lost. Input level controls (9), (10), and (11) permit adjusting each channel separately and may consequently be used for balance adjustment while recording stereo programmes (the two sections of each volume knob are individually adjustable). For playback via headphones see sections 6 and 7 on page 8.

## Location of Recordings on Tape



The BEOCORD 1800 has facilities for locating recordings on the tape as follows:

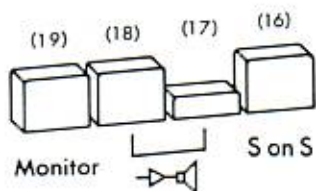
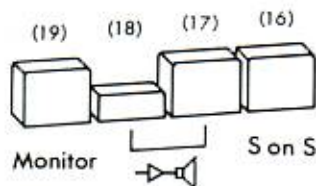
**Mono:** You can make mono recordings in four tracks – two tracks in either direction as shown in the sketch. You may record the four tracks in any desired sequence, but you will naturally prefer to record on track 1 first and after rewind on track 3, thereafter, after reversing and turning over the reels, recording on tracks 4 and 2.

**Stereo:** Two stereo recordings can be made, one in either direction. Track 1 will be the left channel and track 3 the right one, and after reversing the reels track 4 will be the left and track 2 the right channel.

## Tape Motion

Tape motion is controlled with the tape control lever (4). To make the tape move at the chosen speed, move the lever straight forward. For fast tape motion, move the lever diagonally to the left or right, for rewind and fast forward, respectively. Returning the lever to neutral will stop all tape motion. In the automatic stop functions the lever will automatically slip back into neutral. The lever can be operated only if a tape has been inserted in the Beocord and the metal foil at the tape end has been guided past the tape heads and photostop.

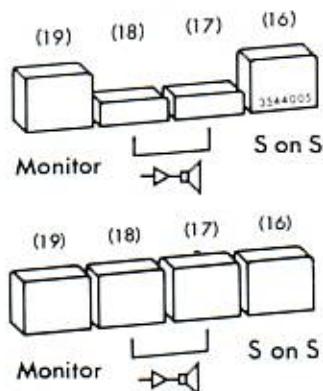
## Playback of Pre-recorded Tapes



To play back pre-recorded tapes, both mono and stereo recordings, with the tape inserted in the Beocord, move the tape control lever (4) straight forward, causing the tape to move forward at the speed you have selected with the knob (0). – The desired programme is selected with pushbuttons (17) and (18), and the tape tracks will be played back as follows:

a. (18) depressed: Track 1 or 4, left channel on both outputs.

b. (17) depressed: Track 3 or 2, right channel on both outputs.



**Record Mono  
Tracks 1 and 3**

**Record Mono  
Tracks 4 and 2**

**Record Stereo**

c. (18) and (17) depressed: Tracks 1 and 3 or 4 and 2 are played back through the left and right outputs, respectively (stereo).

d. (18) and (17) released: Tracks 1 and 3 or 4 and 2 are played back together through both outputs.

When a radio set is connected to the radio jack, the playback volume level should be adjusted with the volume control on the radio set. For headphone listening, volume is controlled with knobs (7) and (6).

To record a mono programme, depress record button (21) or (22) while moving the tape control lever (4) straight forward. This will lock the record button in its depressed position, and the tape transport mechanism will start up. The button (21) will release only when the tape control lever is returned to the neutral position. You may find it practical to use the pause control (8) seeing that tape transport does not begin until you have released the pause control again. The meter (13) or (12) shows red light on record and white light on playback (see sections 12 and 13 on page 8).

Recording level is adjusted with the input level control for the programme source you have selected: (9) echo, sound-on-sound, and line; (10) gramophone or radio; (11) microphone. The knobs of these controls are divided into two sections: the left half (L) controls the left channel and the right half (R) controls the right channel. The three input level controls may be operated simultaneously for mixing and fading. To do this, pull back the knob for the programme you wish to attenuate, pushing forward the knob for the programme to be accentuated. You can monitor the recording by means of the monitor button (19) which when depressed will switch from off-the-tape to before-the-tape monitoring.

This makes it necessary that you switch the Beocord for playback, using buttons (18) or (17) and knobs (7) and (6) if you are using headphones and, if an amplifier is connected to the line output, knob (9).

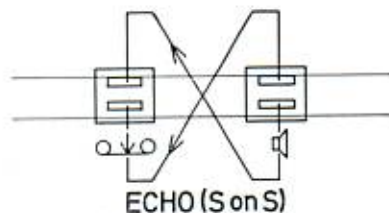
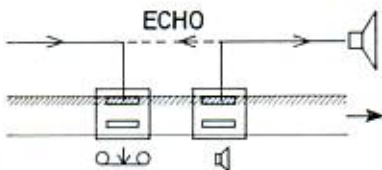
Recordings in tracks 4 and 2 can be made after reversing and turning over the reels: Track 4 with record button (21) and track 2 with knob (22) depressed.

To record, press down both record buttons (21) and (22) while moving the tape control lever (4) straight forward. Input level controls (9), (10), and (11) permit adjusting each channel separately and consequently may also be used for balance adjustment during recording of stereo programmes, adjusting the two knob sections (L) and (R) individually with respect to each other. Recording level may be checked on both meters, (12) and (13), both of which will show red light. For monitoring, both buttons, (17) and (18), should be depressed.



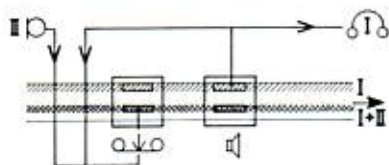
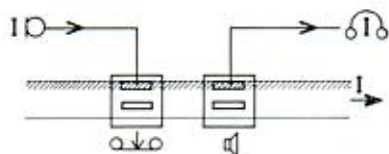
## Special Applications

### Record Echo



## Sound on Sound

### (Multiplayback)



For the rest, the procedure is as described under Record Mono.

Location of stereo programmes is shown on page 10. Stereo recordings can be made in both directions of the tape.

To add echo to a programme during recording, depress the S on S button (16). This will cause the programme just recorded to be fed back from the playback head to the record head (see sketch).

**Record Echo, track 1 or 4:** Depress button (16) and adjust echo signal level with recording level control (9), using the right section (R) of the knob.

**Record Echo, track 3 or 2:** Depress button (16) and adjust echo signal level with recording level control (9), using the left section (L) of the knob.

**Record Echo Stereo:** Depress button (16) and adjust echo signal level with recording level control (9), using both sections (L) and (R) of the knob.

Do not increase the echo signal to the point where it is stronger than the original signal as this will ruin the recording.

Each of the three tape speeds produces its own type of echo.

The echo signal will be crossed over into the other channel as shown in the sketch.

To make sound on sound or trick recordings you transfer a recording from one track to another whilst making another recording on the other track. In this way, for instance, you can sing in 2-, 3-, or 4-part harmony with yourself. The sound on sound feature can be employed for mono recordings only when both tape heads and both tracks are in use at the same time. The procedure is as follows:

1. Record the first part on track 1 as a conventional mono recording and rewind the tape to the point where you began recording.
2. Record the second part on track 3 with the S on S button (16) depressed, causing the first part to be transferred to track 3. Recording level of the transferred signal is adjusted with recording level control (9), right section (R) of the knob. While recording the second part on track 3, track 1 should be monitored (button (18) depressed) with headphones plugged into jack (5). Button (19) should be depressed.

3. Now record the third part on track 1, this time adjusting the recording level with knob (9), left section (L) of the knob. Then record the fourth part on track 3, etc. etc. All these recordings should be made with the button (16) released.

In the same way sound on sound recordings can be made in tracks 4 and 2.



By proceeding as described above, you can record any desired number of parts, but the quality of the final result depends on the quality of each individual recording. Since not only the desired programme will be recorded but also a certain unavoidable amount of basic noise, repeated re-recording will cause the noise to become audible and, ultimately, objectionable. This inconvenience can be limited by:

- a. using the highest tape speed;
- b. using programme sources having as little noise as possible;
- c. recording at the highest possible level (without overdriving the tape); and
- d. recording the main part at last so that it will be clearest.

Alle programme sources (except sources connected to the line input jack) and intermixings between them may be used. The only restriction is that they must be mono programmes.

#### **Synchro Playback Synchrobox**

This function may be used to synchronize two recordings on separate tracks which you do not want to mix by sound-on-sound recording. This feature can be utilized for control of a lantern-slide projector, with narration recorded on one track and control impulses on the other; or for language instruction, with exercises on one track and translations on the other track – or the other track may be left free for individual exercises.

To prepare for lantern slide control, proceed as follows:

Record the narration for your slides on track 1 as a conventional mono recording. Rewind to where the narration begins. Plug a B & O Synchrobox into the radio input (the radio pre-amplifier should be in the L position).

Depress buttons (22), record; and (23), synchro, while moving the tape control lever (4) straight forward. To play back track 1, depress button (18). On hearing the part of the narration where you wish a change of slides, record a pilot impulse on track 3 of the tape by pressing the red button on the synchrobox for approx. 1 second. After having laid down the entire programme, rewind the tape; and both slides and sound will now be reproduced synchronously when the synchrobox is switched to playback and connected to the lantern-slide projector (see also Synchrobox Instruction Manual).

In the same way synchro playback recordings can be made in tracks 4 and 2.

#### **P. A (Public Address System)**

When using the BEOCORD 1800 with an output amplifier connected to the line output for reproduction of taped music for entertainment of large assemblies, conventions etc. – and if you wish to be able to make general announcements or page individual persons on such occasions – you can click-lessly cut out the music and cut in a microphone by depressing button (19). The button (20) should be depressed during this function. Microphone level is adjusted with knob (11).

## **Copying**

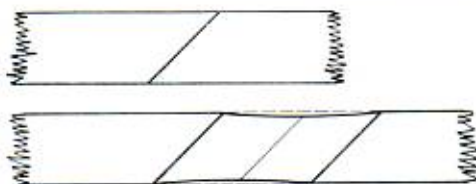
You can copy from one tape recorder to another by means of a type 0961014 cable, both mono and stereo.

The Beocord from which you wish to copy should be set for normal reproduction (see section Playback on page 10) and a type 0961014 cable plugged into the radio input jack (24). The type 0961014 cable should be plugged into the line input (27) of the Beocord you wish to use for the recording. Otherwise proceed as described under Record Mono and Record Stereo.

## MAINTENANCE

### Tape Splicing

Tape ends to be spliced should be laid together in line with each other and cut diagonally, preferably with non-magnetic scissors or cutters so as to avoid clicks



when the tape is played back. Then position the tape ends so that they only just touch each other. Place the adhesive tape (use only special-purpose splicing tape) on the back (bright side) of the recording tape parallel with the cut and press it carefully into place. Care should be shown in removing any excess of adhesive tape so that the joint will in no place be wider than the recording tape – if anything, it should be a trifle narrower (so that it will clear the tape guides). The track on the top of the tape-head cover may be found useful when holding the tape ends together while cutting and splicing the tape.

### Cleaning of Tape Heads

The tape heads must be kept free of dust and dirt if maximum recording and playback quality is to be realized. Even small particles of dust can impair the quality of a recording, and if this has happened there is nothing you can do about it. It is therefore necessary to clean the tape heads as often as possible and in any case always before making recordings of any importance.

To do this, remove (lift up) the tape-head cover, dip a pipe cleaner, or a match with some cotton wool wrapped around it, in alcohol and rub it against the front of the tape heads. The tape must be removed from the heads during this operation and should not be put back until the alcohol has evaporated completely.

**NOTE:** Certain makes of tape are fastened with adhesive tape at one end. If this is not removed before use, the adhesive will stick to the tape heads and completely ruin recording and playback.

### Magnetization

You are advised against touching tape heads, tape guides, or components on the tape-head bridge with metallic objects as this will often cause the said components to become magnetic, which will in turn introduce hiss on the tape while making recordings. If this nevertheless happens you should contact your dealer, who can perform the necessary demagnetization for you.

### Tape

Your BEOCORD 1800 has been adjusted for SCOTCH 215 Tape. If you wish to use a different type of tape it can be necessary to readjust the Beocord if you wish it to meet its specified data.

### Service

Your BEOCORD 1800 will, apart from cleaning of tape heads, tape guides, and capstan shaft, require no regular overhauls as it has self-lubricating bearings. For this reason you are advised against attempting lubrication of any kind; this may cause defects in the Beocord.



**TECHNICAL DATA****BEOCORD 1800****Type No. 4133 and 4138****Meets Minimum Specifications for DIN 45 500****Dimensions and Weight**

DIMENSIONS: 450 mm wide, 358 mm deep, 225 mm high incl. of cover  
 ( $17\frac{3}{4} \times 14\frac{1}{8} \times 8\frac{7}{8}$  in.).

WEIGHT: 16.2 kg (35.64 lbs.).

**Power Supply**

VOLTAGE: 110 – 130 – 220 – 240 volts AC.

FREQUENCY: Type 4133: 60 Hz. Type 4138: 50 Hz.

POWER CONSUMPTION: Max. 50 watts.

**External Connections**

INPUTS: Microphone: 50–200 ohms balanced – 35  $\mu$ V/1000 Hz.

Radio: Low-impedance: 47 k ohms – 2.5 mV/1000 Hz.

High-impedance: 100 k ohms – 50 mV/1000 Hz.

Gramophone: As radio input.

Line: 47 k ohms – 250 mV/1000 Hz.

OUTPUTS: Headphones: 0.8 V at 47-ohm load.

1.8 V at 470-ohm load

(with volume control).

Radio: 1.25 V – 25 k ohms.

Line: 1.25 V – 7.5 k ohms.

**Tape Transport**

TAPE SPEEDS: 19 – 9.5 – 4.75 cm/sec. ( $7\frac{1}{2}$  –  $3\frac{3}{4}$  –  $1\frac{7}{8}$  in/sec.).

NUMBER OF TRACKS: 4.

REEL SIZE: Max. 18 cm (7 in.).

Playing Times: Tape Speeds	4.75,	9.5,	19 cm/sec.
360 m (1200 ft)	4 × 120	4 × 60	4 × 30 min.
540 m (1800 ft)	4 × 180	4 × 90	4 × 45 min.
720 m (2400 ft)	4 × 240	4 × 120	4 × 60 min.
1080 m (3600 ft)	4 × 360	4 × 180	4 × 90 min.

For stereo, divide above times by two.

FAST FORWARD AND REWIND: Approx. 170 sec. in each direction with LP tapes  
 of 540 m (1800 ft).

TAPE COUNTER: 3-digit readout with pushbutton reset.

WOW AND FLUTTER (wow frequencies above 4 Hz attenuated 3 dB/octave):

Tape Speed	RMS Value	Peak Value
19 cm/sec.	< 0.07 %	< 0.2 %
9.5 cm/sec.	< 0.11 %	< 0.3 %
4.75 cm/sec.	< 0.18 %	< 0.5 %

TAPE SPEED: Max. deviation 1 %.

TAPE STOP: Functions at end of tape, if tape breaks, and where tape coating has been removed. Also useful for programme scanning.

SLACK ABSORBER: Compensates for jerks when tape is stopped and started.

## Amplifier

### FREQUENCY RESPONSE:

19 cm/sec. 20-20,000 Hz ( $\pm 2$  dB 30-18,000 Hz)

9.5 cm/sec. 20-15,000 Hz ( $\pm 2$  dB 30-13,000 Hz)

4.75 cm/sec. 30- 7,500 Hz ( $\pm 2$  dB 40 - 6,000 Hz)

Equalizing: DIN 45513 1966-67, NAB 1965.

DISTORTION: < 3 % over tape with VU meter at 0.

SIGNAL-TO-NOISE RATIO: > 57 dB as measured according to DIN 45405.

> 62 dB as measured according to IEC 123-A.

CROSSTALK: > 60 dB/1000 Hz, > 50 dB/10,000 Hz mono.

> 55 dB/1000 Hz, > 45 dB/10,000 Hz stereo.

ERASURE: 70 dB with 100 kHz push-pull oscillator Entire tape is erased on stereo.

TRICK FACILITIES: Sound on sound, synchro playback.

P.A.: Amplifier may be used without simultaneous operation of tape transport mechanism.

All measurements concerning the tape operation were made with SCOTCH 215 Tape with nominal data.

## Semiconductors

32 transistors.

1 thyristor.

## Accessories

SYNCHROBOX: Type 4001.

MICROPHONE, STEREO: Type BM 5.

MICROPHONE, MONO: Types BM 6, MD 8 or BEOMIC 1000.

RADIO CABLE: Type 0961014.

MONITOR CABLE: Type 6270019.

FLOOR STAND: Type 6002.

BOOM: Type 6003.

TAPE RECORDER TROLLEY: Type 4009/3019.

**Technical data is subject to change without notice.**

This BEOCORD is designed for

## LOW NOISE TAPE

The specifications will therefore be improved on the following points:

**SIGNAL-TO-NOISE RATIO:** 60 dB measured according to DIN 45 405

**FREQUENCY RESPONSE:** 4.75 cm/sec. 40- 7.500 Hz  $\pm$  2 dB

9.5 cm/sec. 20-13.000 Hz  $\pm$  2 dB

19 cm/sec. 20-18.000 Hz  $\pm$  2 dB

The **LOW NOISE** matching relates to the record function only. Your BEOCORD is therefore excellently suited for playing back standard tapes previously recorded on another tape recorder.

This supplementary sheet applies to these models:

BEOCORD 1800, Type 4132, as from series 09

BEOCORD 1800, Type 4138, as from series 04

BEOCORD 2400, Type 4129, as from series 07

BEOCORD 2400, Type 4134, as from series 04