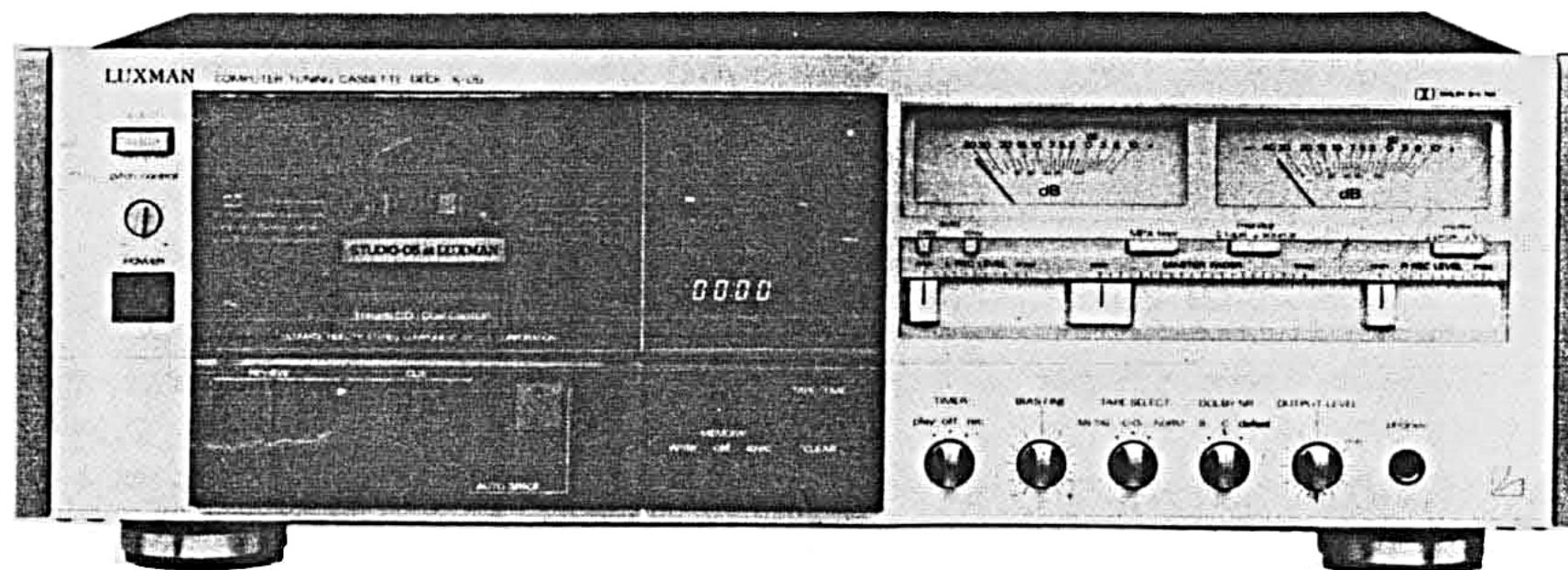


# LUXMAN

K-05/04

OWNER'S MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI



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**WARNING:** To prevent fire or shock hazard do not expose  
this appliance to rain or moisture.

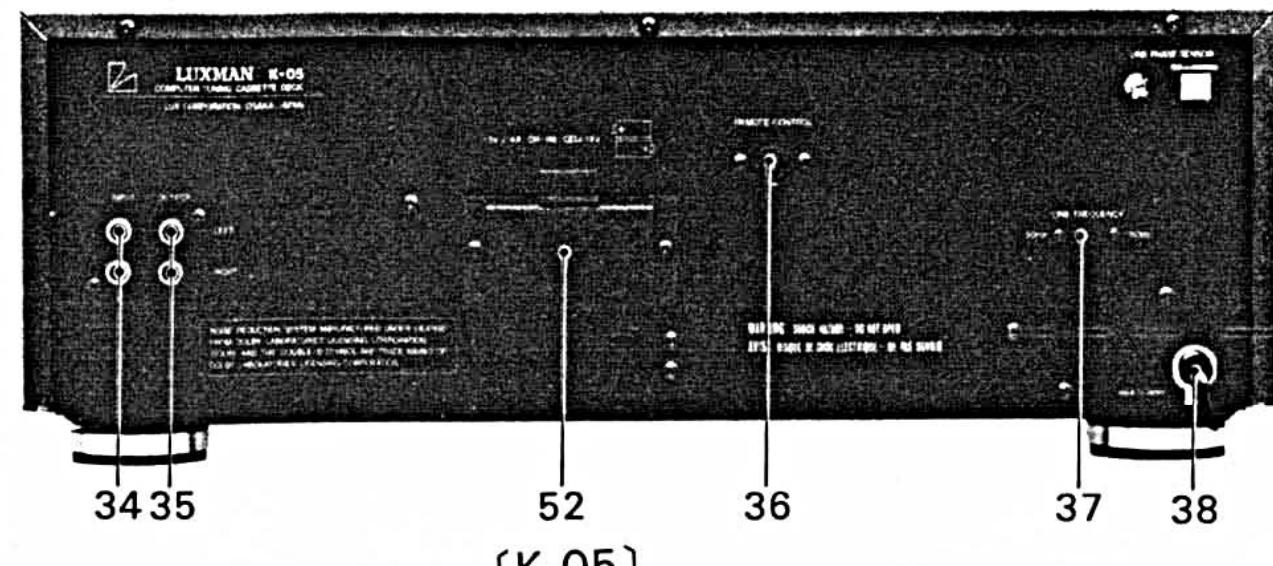
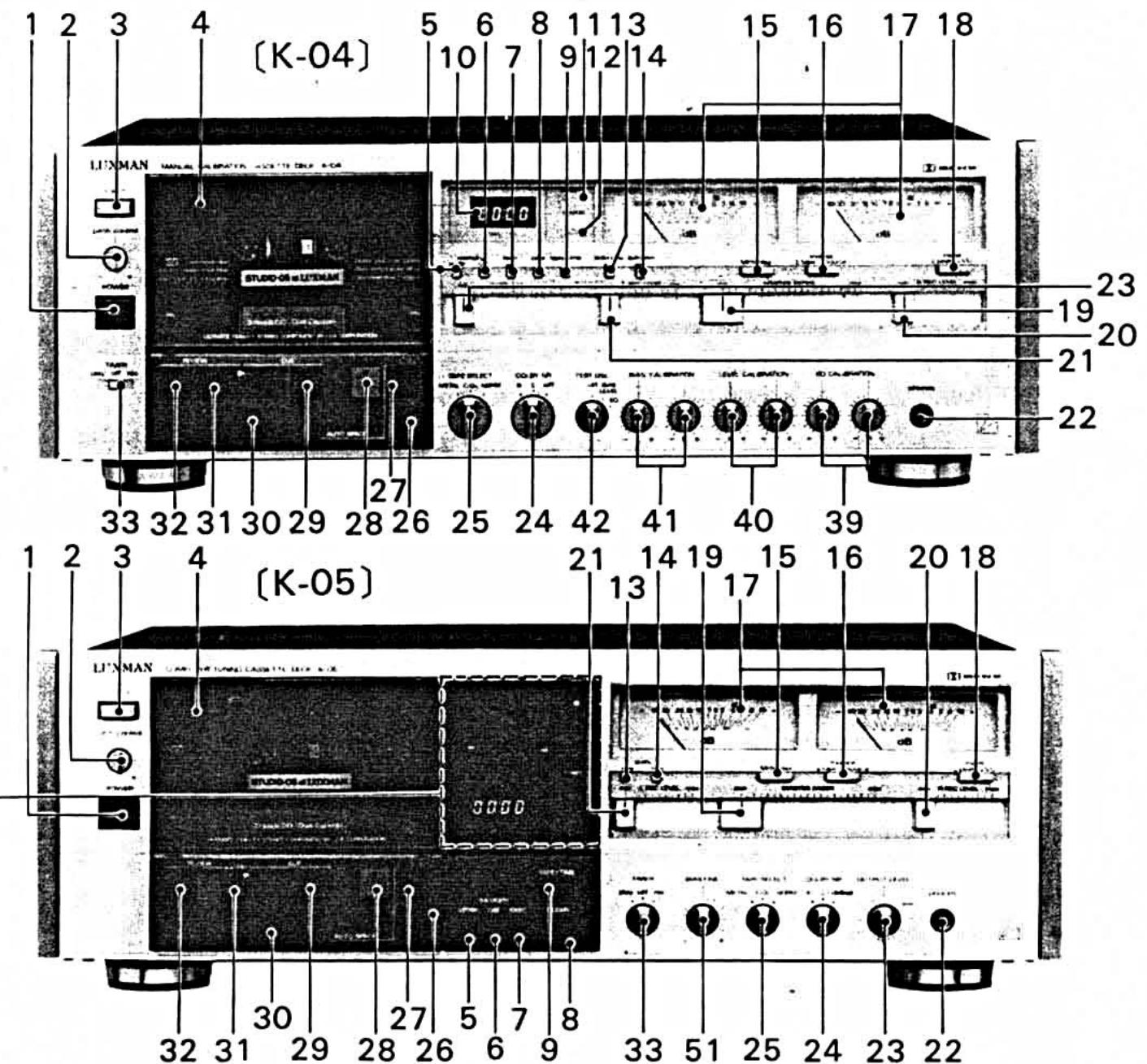
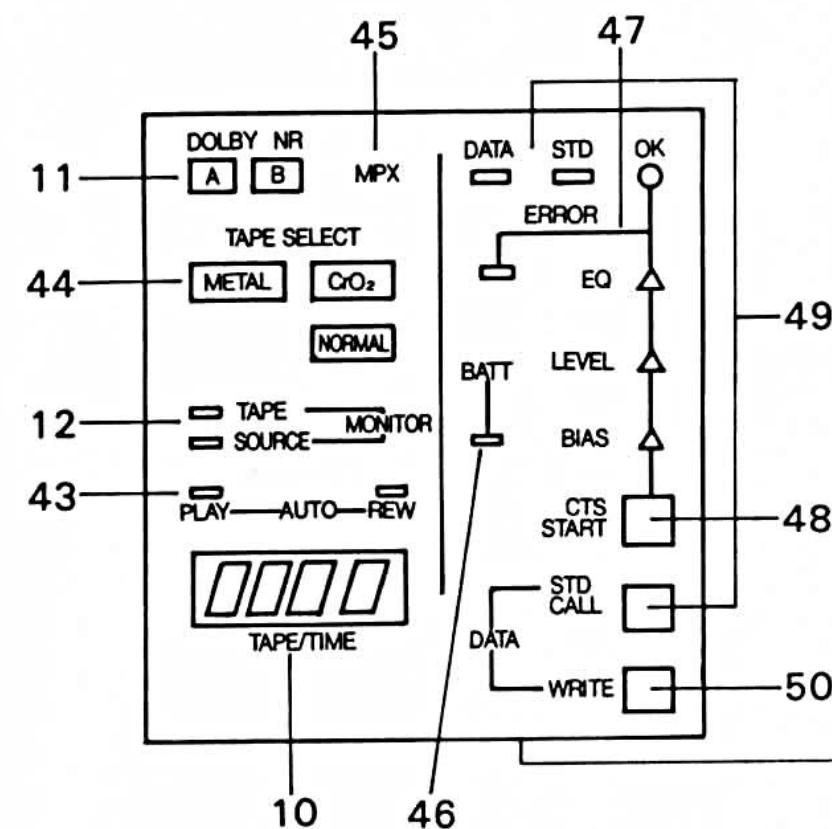
**ACHTUNG:** Um Feuer und elektrischen Schlag zu vermeiden,  
setzen Sie dieses Gerät auf keinen Fall Regen  
oder Feuchtigkeit aus.

**ATTENTION:** Pour éviter tout risque d'électrocution, n'ex-  
posez pas cet appareil à l'humidité.

## SWITCHES & CONTROLS

## SCHALTER UND BEDIENUNGSELEMENTE

## COMMUTATEURS ET REGLAGES



(K-05)

## NAME & USE OF EACH PART

### 1. Power Switch

Depress this button to turn on or off the power. When the power is turned on, the lamps in the level meters, tape counter and cassette compartment will light up. At the same time the pause button starts to blink, and eventually the deck is put into the 'STOP' mode. While the pause lamp keeps blinking, LUX's exclusive demagnetizer is put into function to degauss the playback head magnetized in the course of previous operation.

Note that some 6 seconds are needed to warm up the unit, and during this period even if the button for operation is pressed the deck does not function. The same can be applied to the timer operation as well.

### 2. Pitch Control

This permits to adjust playback speed within  $\pm 6\%$ . Normally set this knob in the center click point. To evade possible misuse, this is so designed not to function during recording process.

### 3. Eject Button

Press the button and the cassette lid opens to load or unload the cassette tape. Note that a mechanical lock is provided so that the "Eject" button should not function during recording, playback and pause. First, press the Stop Button, then press the Eject Button.

### 4. Cassette Lid

A press on the Eject Button in the "STOP" mode opens the Cassette Lid. Load a cassette tape in it, and press the cassette lid quietly for operation. Keep this lid closed even when this deck is not used, as otherwise dust may deteriorate the recording/playback condition.

### 5. Counter Memory Write Button

Depress this button, and the counter number displayed at that time is stored in memory.

At the same time the memory previously stored is automatically erased.

### 6. Counter Memory Call Button

Press this button to call and confirm the number of the counter once stored in memory.

### 7. Counter Memory Execution Button (Indicator)

Push this button to issue an order to execute the automatic function at the stored number. Various tape transport modes can be set up in combination with the auto function.

Refer to the sections of operation chart and "how to repeat playback"

### 8. Tape Counter Clear Button

When this button is depressed, the indicator of the tape counter shows the number of [0000]. This device is useful at the time of starting the recording or using the tape counter memory function.

With this unit it is possible to monitor the display mode in 2 ways, i.e., normal numeric addition and realtime count. To change the tape count mode, you have to use the tape count selector.

### 9. Tape Count Selector

This switch permits to select the tape count mode between digital numeric display (0000) and realtime indication (00:00). In the case of realtime indication, the color mark (:) is placed in between the 2nd and 3rd digits. To make the most of the counter memory function, see to it that the tape counter displays normal numeric addition.

### 10. Tape Counter

A precision 4-digit 7-segment fluorescent indicator provides electronic digital readout.

The tape counter can be read in 2 different modes by means of the tape count selector: one is normal numeric addition and the other is realtime display of tape running for recording and playback. In the later case the indicator counts in terms of seconds, and stops counting at the time of FF and REW modes.

### 11. Dolby NR Indicators

Indicate the position of the Dolby NR selector. When Dolby NR is not utilized, none of the lamps will light up.

### 12. Monitor Indicators

When the Tape Monitor Switch is depressed, the "source" indicator lights up, while the "tape" indicator lights up at the protruded position.

### 13. Auto Play Button

When this button is pressed, the tape is rewound and stops at the "0000" indication on the counter or at the tape end (the very beginning of tape), and then the tape transport mechanism is automatically put into the "PLAY" mode.

### 14. Auto Rewind Button

Should this button be pressed, the tape is automatically

rewound to the tape start position when the tape for playback or recording comes to the end (or to the memorized position). Or in case that the Counter Memory Execution Button is depressed, it stops at the "0000" indication on the Tape Counter.

### 15. MPX Filter Switch

When depressed, the MPX filter is activated to remove 19kHz FM stereo carrier leakage at the time of FM recording.

### 16. Monitor Switch

This switch selects reproduction of recorded sound and original program source before recording. Instantaneous off-the-tape monitoring is possible when this button is in the "protruded" position and you can enjoy instant comparison between original sound and recorded one. If it is depressed, monitoring of the input source is feasible.

### 17. Level Meters

These two large meters enable you to monitor recording and playback levels at both of the right and left channels, which is interchangeable between the "PEAK" and "VU" levels by means of the Meter Indication Selector. The "0 dB" position corresponds to 200nW/m the standard level of the Dolby NR system.

### 18. Meter Selector Switch

You can select the output indication of the Level Meter between the "VU" and "peak" values. When depressed, you can monitor the "VU" output.

### 19. Master Fader

This control varies equally the recording levels pre-adjusted for the right and left channels.

### 20,21. Recording Level Controls

The recording level from the line input can be controlled. Separate control is possible between right and left channels. The right knob (20) is for the right channel, and the left one (21) is for the left.

It is recommended to adjust the recording balance with the master fader (19) at its endmost max. position.

### 22. Headphone Jack

Connect the headphone for private listening or monitoring of program source. The headphone output can be controlled by the Output Level Control. The output is 50 mW (8 ohms).

### **23. Output Level Control**

This potentiometer controls the output volume level at the Output Terminals and Headphone Jack. But this control has nothing to do with the peak level indicator. Usually set it at the max. position for playback.

### **24. Dolby NR Selector (Noise Reduction)**

Use this switch to remove high frequency noises at the time of recording and playback. At the center "C" position the most up-to-date Dolby-C type NR system is activated, while at the "B" position the Dolby-B type can be utilized. At the "defeat (off)" position, the Dolby circuitry is bypassed, and you can enjoy original good performance without Dolby NR system.

When recording from FM program under Dolby NR system, it is recommended to activate the MPX filter to remove possible leakage of 19kHz carrier signals.

### **25. Tape Selector Switch**

You can make selection among various types of tapes, and set this selector to the position corresponding to the tape in use:

[NORM] : For playback and recording on the normal tape, e.g., LUXMAN XM-I, XN-I (Equalizer time-constant is 120 $\mu$ sec.)

[CrO<sub>2</sub>] : For playback and recording on the CrO<sub>2</sub> type tape, e.g., LUXMAN XM-II, XN-II, (Equalizer time-constant is 70 $\mu$ sec.)

[METAL] : For playback and recording of the metal particle tape, e.g., LUXMAN XM-IV, XN-IV (Equalizer time-constant is 70 $\mu$ sec.)

With the K-05, at the time of the "STD" mode, recording is possible according to the standard data of each kind of tape (Normal, CrO<sub>2</sub>, Metal), while at the "DATA" position the stored data can be utilized. Without stored data, the "DATA" Indicator will blink. Don't turn this selector while the CTS is being operated, as otherwise its function stops.

### **26. REC Mute Button**

While the button is kept depressed, the recording without signal is performed. This is useful to remove from your recording such unwanted programme sources as commercials in FM broadcasting, noise produced at the time when the stylus comes down and touches the disc surface, etc.

This function is activated only while the button is kept depressed. In addition, convenient "AUTO SPACE" function can be utilized by means of this button and the "PAUSE" button. While recording, first press the pause button and then

this button, and non-recorded blank space is automatically provided for 3 seconds on the tape. Then the unit is put into the "PAUSE" mode.

### **27. Pause Button (Indicator)**

When the button is depressed, the indicator lights up and the movement of the tape transport mechanism is temporarily halted during playback or recording. The playback or recording can be resumed at the next touch to the Play Button. Note that this button turns on the "AUTO SPACE" function in combination with the REC mute button.

### **28. Record Button (Indicator)**

Recording starts when both of the "REC" and "PLAY" buttons are pressed simultaneously.

When both of the "REC" and "PLAY" or both of the "REC" and "PAUSE" buttons are pressed simultaneously, the indicator LED lights up to show that the tape transport mechanism is in the "RECORD" mode.

### **29. Fast Forward Button**

This button allows to forward the tape quickly from the left reel to the right. At the end of the tape, the movement stops automatically.

In addition, so called "CUE" function (Reproduction in FF Mode) can be turned on for versatile use. For this purpose, during playback first press the "PAUSE" Button (27), and then this Button.

### **30. Stop Button**

When touched, the total movement ceases.

### **31. Play Button (Indicator)**

Press this button, and the deck is put into the "PLAY" mode and playback of recorded tape is feasible. At the same time the indicator LED lights up to show that the tape transport mechanism is in the "PLAY" mode.

### **32. Rewind Button**

This button is to rewind the tape quickly from the right to the left. Auto-stop mechanism functions at the end of the tape. Also, to enjoy a convenient "REVIEW" function (Reproduction in REW Mode), you can push this button just after the "PAUSE" button.

### **33. Timer Selector**

Convenient timer functions can be utilized by this switch. For normal use set it at the center "OFF" position.

### **34. Line Input Terminals**

These terminals are to be connected to the output of tuner or amp used as a recording source. The input sensitivity is 100mV.

### **35. Output Terminals**

Connect these terminals to the input terminals such as the monitor terminals of an amplifier for playback. The output voltage is 550 mV. The output voltage can be controlled by the Output Level Control.

### **36. Remote Control Socket**

The Remote Control Unit AK-10 or AK-20 (available on option) can be connected to this socket.

### **37. Power Frequency Synchronization Switch**

The circuitry for realtime readout of the tape counter is synchronized with the AC power frequency (50 Hz or 60 Hz). Select this switch at an appropriate position, if necessary, according to the local power frequency in your area. Be sure to turn off the power when you alter the position of this switch.

### **38. AC Power Cord**

Connect this cord to the power supply source.

### **[Followings only for the K-04]**

### **39. Equalizer Calibration Control**

In case of recording, equalization has to be adjusted to match the particular characteristics of the tape you use. With this control you can adjust an appropriate equalization value. This control has nothing to do with playback performance. For the details refer to the section "Manual Calibration".

### **40. Level Calibration Control**

This permits the adjustment of the recording level against tape sensitivity to meet the Dolby standard level. Like the case of the Equalizer Calibration this circuit does not work during playback. Also read the section "Manual Calibration."

### **41. Bias Calibration Control**

The bias current for recording can be adjusted to obtain an optimum result. Likewise, refer to the chapter "Manual Calibration."

### **42. Test Tone Switch**

To make the most of the good characteristics of the tape you can make an adjustment on "Bias-Level" and "EQ".

This switch provides the test tone for such purpose, and its signals are varied in "Bias-Level" and "EQ" respectively.

#### [Followings only for the K-05]

#### 43. Auto Function Indicators

When the auto play or auto rewind button is depressed, the corresponding indicator lights up to show that the required function is activated.

#### 44. Tape Indicators

One of the three indicators provided will light up to show at which position the Tape Selector is put.

#### 45. MPX Filter Indicator

This will light up when the MPX filter is turned on. Note that the MPX filter works in conjunction with Dolby NR system and that in case the Dolby NR circuitry is not turned on it does not function even when this indicator is lit.

#### 46. "BATTERY" Indicator

This LED blinks when the supply voltage becomes lower at the battery to retain memory. It stays lit if the voltage exceeds 70% of the rated value 3V, i.e., 2.1V. When it starts to blink, the stored data may be lost and change the 2 dry cell batteries (AA or UM-3) with new ones. The battery compartment is located on the rear panel.

#### 47. CTS Indicators

##### • "OK" Indicator

This LED lights up to show all are in good order on completion of the CTS (Computer Tuning System), i.e., automatic bias, EQ and recording level adjustment by a built-in computer. It blinks when the result of CTS adjustment is almost on the satisfactory level.

This light goes out at the time of storage by means of the CTS Memory Write function or switching the Tape Selector.

##### • "ERROR" Indicator

This LED lights up to denote the CTS could not obtain satisfactory results even after the maximum compensation is rendered to the frequency response of the tape in question. Normally this indicator does not light up as long as the operation is made correctly using the tape of average quality. The LED is put out when the tape mechanism starts to function, or when the Standard/Data Call or the CTS is activated, or when the Tape Selector is operated.

##### • "EQ" Indicator

To show that the CTS is under process to locate the

optimum EQ point.

##### • "LEVEL" Indicator

To show the calibration process of the recording level (the tape sensitivity) to meet Dolby standard level (200 nW/m).

##### • "BIAS" Indicator

To show the compensation process for bias current.

#### 48. CTS (Computer Tuning System) Start Button

When this switch is depressed, the deck is automatically put into the "RECORDING/PLAYBACK" mode, and the CTS (Computer Tuning System) is put into function. When the CTS process is over, the tape is rewound back to the starting point of the CTS's automatic test, and the deck is put into the "PAUSE" mode. Note that while the CTS is functioning the noise reduction system is bypassed though the pertinent indicator stays lit.

**Note:** Do not press this button during normal recording and playback. Especially at the time of playback if the safety tab remains affixed to the tape, your valuable recording is erased off.

#### 49. STD/Data Selector & Indicators

This is to select utilization of either the standard data (Bias, EQ and Tape Sensitivity) pre-incorporated or the memory data you put into storage. When the "STD" indicator lights up the standard data can be utilized, while when the button is touched to light up the "DATA" indicator the stored data can be referenced.

##### • "Standard" Indicator (STD)

This is to show that the standard data incorporated are used for the Recording Bias, Level and Equalization.

##### • "CTS Memory" Indicator (DATA)

This LED indicates that the data stored in memory are utilized. This LED blinks if the memory is called (the button is depressed) without previous storage.

#### 50. CTS Memory Write Button

After the CTS processing, this function is activated when the "OK" LED lights or blinks. When the knob is depressed, all the data obtained by the CTS are stored in memory afresh in place of the memory data previously stored. In total 3 different data can be stored (one each for Normal, CrO<sub>2</sub>, and Metal tapes).

#### 51. Bias Fine Control

This allows subtle adjustment of the bias amount selected

by the CTS Button and STD/DATA Selector. The peak bias can be obtained at the center click point. The endmost counter-clockwise position provides 15% under-bias, while the endmost clockwise position means 15% over-bias point. Usually set this control at the center click point.

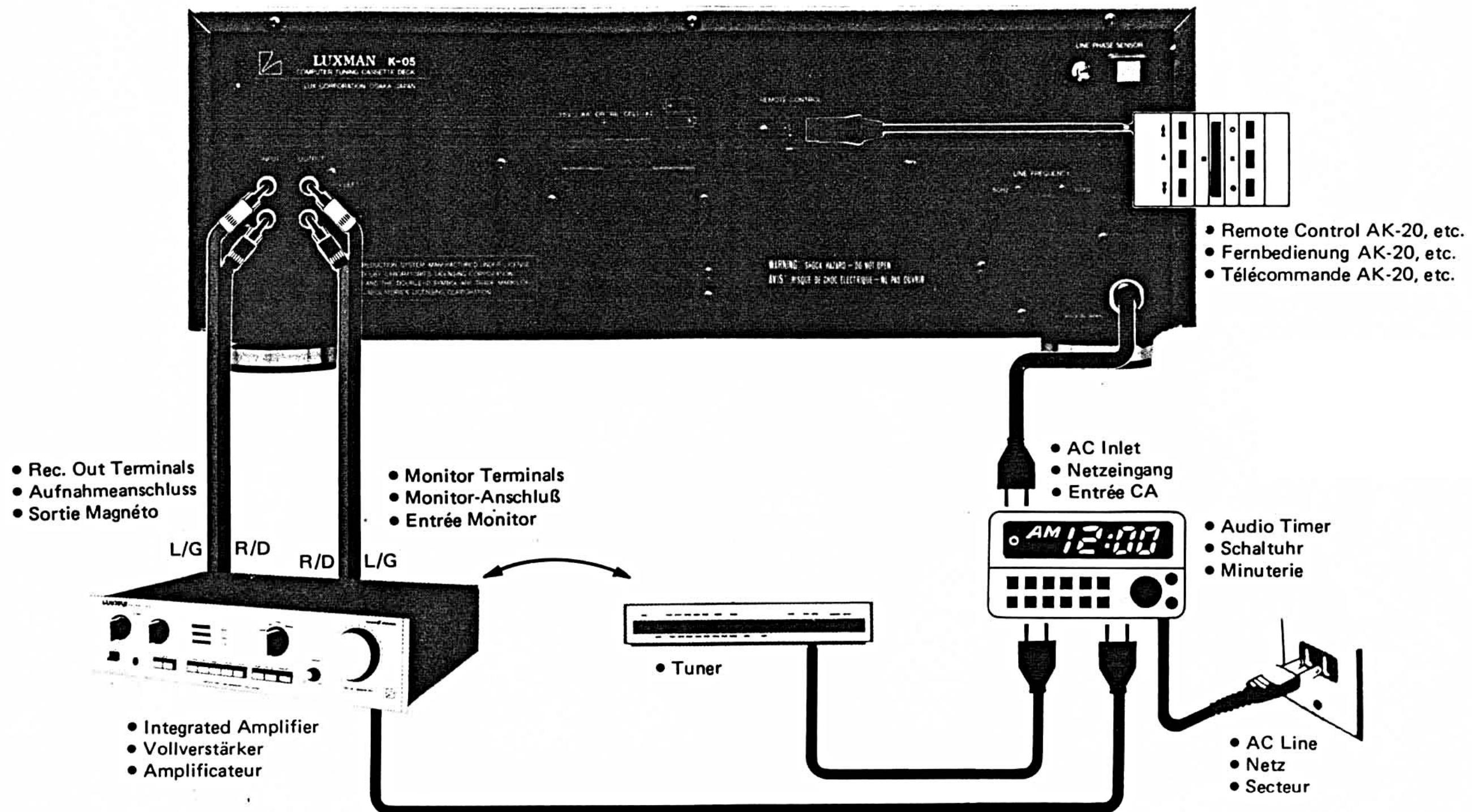
At the "under-bias" point the treble response is extended, while at the "over-bias" point the bass distortion is improved. Naturally, within the range of this fine-tune control no deterioration takes place in any characteristics. Make free selection of your favorite point to augment your pleasure of recording.

#### 52. Battery Compartment

This model has a data memory function. To operate the memory properly, the batteries must be inserted. Before starting to use this unit, insert the supplied two AA batteries in the battery compartment with care of polarity.

When the battery indicator starts to blink the stored data may be lost, and change the 2 dry cell batteries (AA) with new ones.

Be sure to replace batteries with power switch ON. This is to protect the memory from erasure. If the "DATA" Indicator starts to blink after replacement with new batteries, turn on the "CTS MEMORY WRITE" button after CTS processing, to store the data afresh.



## CONNECTION PROCEDURES

## ANSCHLÜSSE

## RACCORDEMENTS

### Connection to Audio Amplifier

Connect the Line Input terminals to the REC. OUT terminals, and the Output terminals to the Monitor terminals of an audio amplifier using the pin plug cord provided. During this procedure, be sure to keep the power switch turned off.

**Note:** The output of a tuner can be simply connected to the Line Input terminals, but that of a record player cannot be connected directly. Be sure to connect it through an audio amplifier.

### Connection to Power Supply

Connect the plug at the end of the Power Cord to the power supply source in your listening room. When an extra AC outlet (SWITCHED) is available with your audio amplifier, it is recommended to use this outlet since the ON/OFF operation of the power switch of the amplifier is common to that of the deck.

### Connection for Tape Dubbing Operation

Most of the current audio amplifiers are provided with the tape dubbing circuitry, which enables tape reprinting among two or three tape decks. Tape reprinting can be done easily without changing the connection when this function is utilized.

However, in case you want to make tape reprinting directly between this deck and another deck, connect the Line Input terminals to the Output terminals of another one, and another one is reprinted on this deck. When the Output terminals are connected to the Line Input terminals of another deck, reprinting from this deck is possible on another deck.

### Connection of Remote Control Unit

Connect the Remote Control Unit, which is available optionally, to the Remote Control Socket provided at the rear panel.

### Verstärker

Das Kassettendeck während des Anschlußvorgangs ausschalten. Verbinden Sie die linke und rechte LINE INPUT-Buchsen des Decks mit den Buchsen REC. OUT Ihres Verstärkers und die Buchsen OUTPUT des Gerätes mit den Eingangsbuchsen MONITOR des Verstärkers. Benutzen Sie hierfür die mitgelieferten Signalkabel.

**Hinweis:** Der Ausgang eines Tuners kann direkt mit dem LINE-Eingang des Gerätes verbunden werden. Für das Signal eines Plattenspielers trifft dies nicht zu. Verbinden Sie diesen mit dem Phono-Eingang des Verstärkers.

### Stromversorgung

Verbinden Sie den Netzstecker des Decks mit einer Steckdose.

### Tonbandüberspielungen

Zahlreiche Verstärker besitzen heute eine Überspielschaltung (tape-to-tape). Sie ermöglicht, Überspielungen von einem Bandgerät auf ein zweites oder drittes vorzunehmen, ohne die Anschlüsse zu verändern. Sie können Bandkopien aber auch direkt zwischen dem Gerät und einem anderen Tonbandgerät anfertigen. Für Überspielungen zum Gerät den Line-Eingang mit dem Ausgang des zweiten Decks verbinden. Wenn der Ausgang des Gerätes mit dem Eingang des zweiten Decks verbunden wird, ist der Überspielvorgang vom Gerät zum zweiten Rekorder möglich.

### Liaison à l'amplificateur

Relier les entrées ligne aux sorties magnéto de l'amplificateur et les sorties aux entrées magnéto. Durant ces raccordements, veiller à ce que le magnétocassette ne soit pas sous tension.

**Remarque:** La sortie d'un tuner peut être reliée directement aux entrées ligne, mais la platine doit être reliée à l'amplificateur.

### Liaison à la source d'alimentation

Relier le cordon secteur à une prise secteur située dans la salle d'écoute.

### Raccordement pour le repiquage

La plupart des amplificateurs sont équipés d'un circuit de dubbing, qui permet le repiquage d'un magnétophone sur un autre. Cette fonction est simple à réaliser et sans avoir à modifier les raccordements.

Toutefois si vous désirez effectuer directement le dubbing entre ce modèle et un autre magnétophone, relier les entrées de ce modèle aux sorties de l'autre magnétophone, dans ce cas le magnétophone sera repiqué sur ce modèle. Si les sorties sont reliées aux entrées ligne du magnétophone, c'est ce modèle qui pourra être repiqué sur le magnétophone.

## RECORDING

### Correlation between Tape Selector and Cassette Tapes

At the time of playback and recording of cassette tape, set the Tape Selector Switch to an appropriate position according to the list specifying the kinds of tapes.

### Direct Change from "Playback" to "Recording"

The logic circuit makes it possible to switch the "PLAY" mode direct into the "REC" mode if the cassette tape under playback operation retains the recording safety tabs. For this purpose, just retouch the "PLAY" button while depressing the "REC" button. Note that in this case tape keeps running in the playback mode for approx. 4 seconds.

### To Set Recording Level

To obtain the optimum condition for recording, the input level of the program source has to be adjusted. When the level is set too low, the playback sound becomes jarring, while on the contrary if too high, the playback sound will be distorted. Therefore, this setting is important to realize the least distortion and an excellent signal-to-noise characteristic.

With this deck, setting of the recording level is done by watching the Level Indicators after the deck is put into the "REC" mode (refer to the section "Stereo Recording"). Note that the maximum peak level should be set up within the range not exceeding +3dB.

### Auto Space Function

This convenient function automatically creates non-recorded blank space on tape for 3 seconds:

- 1) First press the "PAUSE" button when the recording of a music selection ends.
- 2) Then push the "REC MUTE" button, and the deck starts to function under the mode "NON-SIGNAL RECORDING" in 3 seconds. Then it is put into the "REC/PAUSE" mode.
- 3) Push the "PLAY" button to resume recording

### Stereophonic Recording

1. Load a cassette tape into the Cassette Compartment.
2. In case you are to record such programs as discs or FM broadcastings, set the input selector of an audio amplifier to the corresponding input which you are going to record, then set the tape monitor switch of the amplifier to the "monitor" position.
3. Press the Pause Button and the Record Button at the same time, and the machine is put into the recording mode with the Recording Indicator and the Pause Indicator lighting up. Now as the Recording Level Control is

turned clockwise, the Level Indicator starts to swing. Set the recording level as high as possible within the range not exceeding +3dB.

4. Press the Play Button, and the tape begins to run to record the input signals.
5. When the recording ends, press the Stop Button to cease the tape movement. In case you want to stop the recording temporarily, press the Pause Button, and the next press of the Play Button resumes the recording. When you want to cut announcements or commercials from the recording of FM broadcasting, press the Rec Mute Button. While you keep pressing this button, the deck is put into the mode of recording without signals.

### Remote Control Operation

The AK-10 makes it possible to operate remote control tape transport mechanism at the tape deck. The length of the connection cable is 5m (16.5 ft). The wireless control unit AK-20 is also available.

### How to record by means of CTS (K-05)

- 1) Turn on the power switch.
- 2) Push the eject button to open the cassette door and place a cassette tape into the compartment. In this case, put the recording side faced front and the window (tape exposed) faced downward, and confirm that the recording safety tab is retained.
- 3) Set the tape selector in the position corresponding to the tape used. Set the bias fine control to the center position and the timer selector to the "OFF" position.
- 4) Press the "CTS start" button, and the "BIAS", "LEVEL" and "EQ" indicators light up to show the CTS is in process. When all processing is accomplished, the "OK" LED will light up. Then CTS automatically rewinds the tape to where you started, and the deck is put into the "REC/PAUSE" mode.
- 5) Push the "CTS memory write" button to store in memory the optimum data pertinent to the tape used now or the same kind.
- 6) Confirm that the "DATA" LED lights up. In case the "STD" lamp is kept lit, the "STD/Data selector" button has to be depressed afresh to light up the "DATA" indicator.
- 7) After selecting the noise reduction system and the adequate recording level by means of the Rec Level Knob, press the "PLAY" button to start recording.

### Caution

- A) When the "error" indicator is lit, check the following points:
  - (a) If the tape selector is mis-selected.
  - (b) If the CTS is processed in the lead-tape portion.
  - (c) If the tape has reached the end before the completion of the CTS process.
  - (d) If the tape heads are dirty.

points:

- (a) If the tape selector is mis-selected.
  - (b) If the CTS is processed in the lead-tape portion.
  - (c) If the tape has reached the end before the completion of the CTS process.
  - (d) If the tape heads are dirty.
- B) The "CTS memory write" function supersedes the pre-stored data with the new input in each format of tapes (Normal, CrO<sub>2</sub>, Metal).
- C) One set of data can be stored in memory for each type of tapes (Normal, CrO<sub>2</sub>, Metal).
- D) When you use the same kind of tape (same brand), you need not press the "CTS start" button, and you can skip the steps (4) and (5).
- E) The CTS has nothing to do with the playback performance. Do not touch especially the "CTS start" button as your precious recording may be erased off. Also at the time of playback you need not call the CTS memory.
- F) During the CTS processing if the "rec. mute" button is depressed, such input is ignored, and the CTS continues to function.
- G) In the course of the CTS processing if one of the "pause", "FF", "REW" and "stop" buttons is depressed, the transport mechanism is put into the mode commanded, and the CTS ceases to function.
- H) When the CTS is commenced using a tape without safety tab, the CTS cannot function. This is to protect the recorded tape from accidental erasure.
- I) When the "CTS start" button is pressed, the "Counter Memory Execution" button is automatically changed to "OFF" even in case this button is set to "ON".

### Tape Manual Calibration (K-04)

With the K-04 it is possible to create an optimum sound recording. To take out the full potential of the tape in the marketplace, careful and well-balanced adjustment is needed among recording bias, recording level and recording equalizer. For this purpose the test tone has to be once recorded, and therefore prepare a new cassette tape or the like having recording safety tabs.

### Adjustment Procedures (K-04)

1. Set the Timer Switch to the "off" position, and select the tape position corresponding to the tape format you are going to use for recording. Then turn on the power and insert a cassette tape.
2. Press the Record and Play Buttons at the same time to

- put the deck into the recording mode. Then set the Test Tone Switch to the "BIAS LEVEL" position.
3. Turn the Bias Calibration Volume Controls (right and left) slowly and carefully, and finally set it to the very position where the meter needle shows its maximum swing.
  4. Rotate the Level Calibration Knobs (R+L) to obtain the "0" dB position by the meter needle.
  5. Then change the Test Tone Switch to the "EQ" position.
  6. Turn the EQ Calibration Controls (R+L) to obtain the "0" dB indication on the meters. In case the meter pointer does not reach the "0" dB even with the endmost clockwise turn of the EQ controls, or if an excessive adjustment is needed, first change the position of the Bias Controls slightly and then re-adjust the "EQ" Controls to get the "0" dB on the meters.
  7. Once more set the Test Tone Switch to the "BIAS LEVEL" position, and reconfirm the "0" dB indication on the meters. In case the meter pointer does not show the "0" dB on the meter scale, fine-tune the Level Calibration Controls (R+L) again.
  8. Now the adjustment is completed. Switch off the Test Tone and depress the Stop Button. Rewind the tape back to the start point of calibration, and erase the test tone recorded for the calibration procedures.

#### Auto-Rewind/Play Functions

The auto-rewind function automatically puts the tape transport mechanism into the "rewind" mode when the tape is played back to the end of tape (or "0000" indication of the counter, or the stored number of the counter when the Counter Memory Execution is activated), and brings it back to the "start" position (or "0000" indication of the counter, or the stored number of the counter when the Counter Memory Execution is activated).

While, the auto-play function puts the tape transport mechanism first into the "stop" mode when the tape is rewound to the "start" position (or "0000" indication of the counter, or the stored number of the counter when the Counter Memory Execution is activated), and then automatically into the "playback" mode.

#### How to repeat playback between desired 2 points.

- 1) While listening to the playback sound, at the point from where you want to start playback, press the Counter Clear Button to put the counter at the "0000" position.
- 2) At the point where you want to stop playback (to start rewinding), press the Counter Memory Write Button

to store in memory the corresponding number of the counter.

- 3) Then depress the Execution Button to put the counter memory into the auto function operation mode. (At the same time the indicator lights up.)
  - 4) Push the Auto Play and Rewind Buttons to issue an order to repeat.
  - 5) Turn on the REW Button to rewind the tape. Rewinding stops at the "0000" position of the counter and playback begins automatically. Playback ends at the stored number of the counter, and the deck is put into the rewind mode. In this way, the tape portion between the "0000" position of the counter and the stored position by the counter memory can be repeatedly played back.
- A) To change the passage to be repeated in playback, follow the steps 1 and 2.  
 B) If the Counter Clear Button and the Memory Call Button are depressed the counter memory is erased. In this case, you have to store in memory the counter number afresh.  
 C) In case you want to know the number of the counter memory, it is displayed in the counter while the Memory Call Button is kept depressed.

POSITION	CASSETTE MODEL	
normal	LUXMAN	XM-I XN-I
	TDK	AD ED OD
	MAXELL	UD UL XL-I
	SCOTCH	CX XS-I
	SONY	HF AHF BHF CHF
	DENON	DX1 DX3 DX4
	FUJI	DR ER FR-I
	BASF	PRO I LH-X
CrO <sub>2</sub>	LUXMAN	XM-II XN-II
	TDK	SA SA-X
	MAXELL	XL II XL II-S
	SCOTCH	XS-II
	SONY	JHF UCX-S
	FUJI	FR II
	BASF	PRO II
	DENON	DX 7, DX 8
metal	LUXMAN	XM-IV XN-IV
	SONY	METALLIC
	SCOTCH	METAFINE
	TDK	MA MA-R
	MAXELL	MX New MX
	FUJI	FR-METAL
	BASF	PRO IV
	DENON	DXM

**Head Cleaning**

Residue built up from the constant contact of tape to capstan and head is unavoidable. The tape heads and capstan should be cleaned about once a month or after every 50 hours of operation. If a loss of brilliance in high frequency response is noticed, the tape heads probably require cleaning.

A cotton swab moistened with head-cleaning fluids should be inserted into the cassette slot, and rubbed across the surface of the heads and capstan. Care should be taken not to scratch the head surface. As an alternative, a special head-cleaning cassette is available at most dealers.

**Demagnetization**

If lack of high frequency remains even after cleaning the heads, the heads may require degaussing. Though with LUX's cassette decks degaussing is less frequently needed than most other decks, it is recommended to demagnetize heads and capstan once every 50 hours' use. Demagnetizer is available in the marketplace. Select a good one and perform degaussing carefully.

**Stereo-Aufnahme**

1. Eine Kassette einlegen.
2. Mit dem Eingangswahlschalter des Verstärkers die gewünschte Programmquelle wählen. Den Tape-Monitorschalter auf MONITOR (Hinterbandkontrolle) schalten.
3. Drücken Sie zunächst die "Pause"-Taste und gleichzeitig die "Aufnahme"-Taste. Das Kassettendeck befindet sich jetzt in der Aufnahmeposition und die Aufnahme-Anzeige leuchtet auf. Drehen Sie jetzt den Aufnahmepegelsteller im Uhrzeigersinn, beginnen die Anzeiger des Pegel-Meters sich zu bewegen. Wählen Sie den Aufnahmepegel so hoch wie möglich, ohne dabei die 3 dB-Marke zu überschreiten.
4. Durch Drücken der Wiedergabe-Taste beginnt der Aufnahmevergang.
5. Ist die Aufnahme beendet, die STOP-Taste drücken. Für kurze Unterbrechungen der Aufnahme die PAUSE-Taste benutzen. Unerwünschte Programmteile können mit der Stummaufnahmeposition ausgeblendet werden. In dieser Stellung wird kein Signal auf das Band aufgesprochen.

**"Auto Space"-Funktion**

Diese Einrichtung dient der Erhöhung des Bedienungskomforts und produziert automatisch eine 3-Sekunden-Pause z.B. zwischen zwei Musiktiteln:

1. Drücken Sie zunächst die Pause-Taste am Ende des gerade aufgenommenen Titels.
2. Betätigen Sie anschließend die "Rec Mute"-Taste. Das Band läuft jetzt für drei Sekunden ohne, daß ein Signal aufgesprochen wird. Das Kassettendeck geht anschließend automatisch wieder in die Aufnahme-Pause-Funktion.
3. Betätigen Sie die "Play"-Taste, um die Aufnahme fortzusetzen.

**Einstellen des Aufnahmepegels**

Die Einstellung des Pegeleinstellers paßt die Signalstärke des Erfordernissen des Magnetbandes an. Ist der Signalpegel zu niedrig, wird die Aufnahme farblos, während ein zu hoher Aufnahmepegel Verzerrungen verursacht. Nur die sorgfältige Aussteuerung einer Aufnahme sichert max. Dynamik und geringste Verzerrungen.

Das Einstellen des optimalen Aufnahmepegels geschieht durch Beobachtung des Pegel-Meters, wenn sich das Deck in der Aufnahmeposition befindet (s. auch unter "Stereo-Aufnahme"). Achten Sie darauf, daß der höchste auftretende

Pegel die 3 dB-Marke nicht überschreitet. Schallplatten, Rundfunksendungen und kommerziell bespielte Bänder zählen zu den Programmquellen, deren Dynamik bei der Produktion durch Begrenzerschaltungen reduziert wird. Zufriedenstellende Aufnahmen sind deshalb nur möglich, wenn Sie die oben beschriebene Grundeinstellung beachten.

**Beziehungen zwischen Bandsorten-Wahlschalter und Kassettenband**

Bei Aufnahme und Wiedergabe ist der Bandsorten-Wahlschalter entsprechend der benutzten Bandsorte einzustellen.

**Direkter Wechsel von Wiedergabe in den Aufnahmevergang**

Die Logikschaltung dieses Decks erlaubt das direkte Um-schalten von Wiedergabe in den Aufnahmevergang ohne über die Stop-Funktion gehen zu müssen. Voraussetzung ist jedoch daß die Schutzlaschen der eingelegten Kassette vorher nicht entfernt worden sind.

Sie brauchen lediglich die Wiedergabe-Taste und gleichzeitig die Aufnahme-Taste zu betätigen und der Aufnahmevergang beginnt.

**Fernbedienung**

Mit der als Zubehör lieferbaren Fernbedienung steuern Sie alle Lauffunktionen des Kassettendecks bequem von Ihrem Sessel aus. Schließen Sie die Fernbedienung auf der Rückseite des Kassettendecks an die Buchse "Remote Control" an.

**Einleitung des Computer-unterstützten automatischen Einmeßvorganges (Computer Tuning System) (K-05)**

1. Schalten Sie das Gerät mit Hilfe des Netzschalters ein.
2. Betätigen Sie die "Eject"-Taste, um das Kassettenfach zu öffnen und legen Sie eine Kassette so ein, daß die Seite auf der Sie aufzeichnen wollen, nach vorn zeigt. Überprüfen Sie gleichzeitig, daß die Sicherungslaschen an der Rückseite der Kassette nicht herausgebrochen sind.
3. Stellen Sie den Bandsortenwahlschalter auf die dem verwendeten Band entsprechende Position. Stellen Sie anschließend den Timer-Schalter auf die "OFF"-Position und den Vormagnetisierungsfeineinsteller auf die mittlere Position.
4. Betätigen Sie dann die Taste "CTS Start". Gleichzeitig leuchten nacheinander die Anzeigelampen "Bias", "LEVEL" und "EQ" auf, um Ihnen damit zu bedeuten, daß der automatische Einmeßvorgang im Gang ist. Ist der CTS-Einmeßvorgang beendet, wird dieses durch Aufleuchten der "OK"-Lampe signalisiert. Das Kassettendeck



## SPECIFICATIONS

## TECHNISCHE DATEN

	K-05	K-04	Köpfe	K-05	K-04
Heads:	3	3		3	3
Record head	Sendust	Sendust		Sendust/Ferrit	Sendust/Ferrit
Playback head	Ferrite	Ferrite		<0,022%	<0,022%
Erase head	Double Gap Sendust	Double Gap Sendust			
Wow & Flutter: (WRMS)	0.022%	0.022%	Gleichlaufschwankungen: (WRMS)		
Signal-to-Noise Ratio: (CCIR weighted)			Geräuschspannungsabstand:		
Metal-Tape, without NR	60dB		Metal-Tape, ohne NR	60dB	
Metal-Tape, with Dolby-B-NR	67dB		mit Dolby-B-NR	67dB	
Metal-Tape, with Dolby-C-NR	73dB		mit Dolby-C-NR	73dB	
CrO <sub>2</sub> -Tape, without NR	58dB		CrO <sub>2</sub> , 2-Band: ohne NR	58dB	
CrO <sub>2</sub> -Tape, with Dolby-B-NR	66dB		mit Dolby-B-NR	66dB	
CrO <sub>2</sub> -Tape, with Dolby-C-NR	73dB		mit Dolby-C-NR	73dB	
Nor-Tape, without NR	56dB		LH-Band	ohne NR	56dB
Nor-Tape, with Dolby-B-NR	64dB		mit Dolby-B-NR	64dB	
Nor-Tape, with Dolby-C-NR	71dB		mit Dolby-C-NR	71dB	
Frequency Response:			Frequenzgang:		
Metal Tape:	15Hz~27,000Hz (20Hz~22,000Hz ± 1,5dB)	20Hz~23,000Hz (20Hz~21,000Hz ± 2dB)	Metal-Tape:	15Hz~27.000Hz (20Hz~22.000Hz ± 1,5dB)	20Hz~23.000Hz (20Hz~21.000Hz ± 2dB)
CrO <sub>2</sub> Tape:	15Hz~22,000Hz (20Hz~20,000Hz ± 1,5dB)	20Hz~21,000Hz (20Hz~20,000Hz ± 3dB)	CrO <sub>2</sub> -Band:	15Hz~22.000Hz (20Hz~20.000Hz ± 1,5dB)	20Hz~21.000Hz (20Hz~20.000Hz ± 3dB)
Normal Tape:	15Hz~22,000Hz (20Hz~20,000Hz ± 1,5dB)	20Hz~21,000Hz (20Hz~20,000Hz ± 3dB)	LH-Band:	15Hz~22.000Hz (20Hz~20.000Hz ± 1,5dB)	20Hz~21.000Hz (20Hz~20.000Hz ± 3dB)
Tape 3rd Harmonic Distortion: (Normal tape, 1 kHz, 0dB)	0.5%	0.5%	Die dritte Harmonische: (Normalband bei 1kHz und 0dB)	<0,5%	<0,5%
Input Sensitivity:	line in: 100mV	line in: 100mV	Eingänge: Line:	100mV	100mV
Output Level:	line out: 550mV headphone: 50mW (8 ohms load)	line out: 550 mV headphone: 50mW (8 ohms load)	Ausgänge: Line: Kopfhörer:	550mV 50mW/8 Ohm	550mV 50mW/8 Ohm
Power Consumption:	40W	30W	Abmessungen (B x T x H):	460 x 361 x 158 mm	460 x 361 x 158 mm
Dimensions:	460(W) x 361(D) x 158(H) mm (18.1" x 14.2" x 6.1")	460(W) x 361(D) x 158(H) mm (18.1" x 14.2" x 6.1")	Gewicht: Netto:	11,5 kgs	11,0 kgs
Weight:	Net: 11.5 kgs (25.3 lbs) Gross: 13.0 kgs (28.6 lbs)	Net: 11.0 kgs (24.2 lbs) Gross: 12.5 kgs (27.5 lbs)	Technische Daten und Design können ohne Vorankündigung vom Hersteller geändert werden.		

Specifications and appearance design subject to change without notice.

\* NOISE REDUCTION CIRCUIT MADE UNDER LICENCE FROM DOLBY LABORATORIES. THE WORD "DOLBY" AND THE DOUBLE-D SYMBOL ARE THE TRADE MARKS OF DOLBY LABORATORIES.

Technische Daten und Design können ohne Vorankündigung vom Hersteller geändert werden.

\* DOLBY NR ist das Warenzeichen der Dolby Laboratories, Inc.

## CARACTERISTIQUES TECHNIQUES

	K-05	K-04
Têtes:	3	3
Enregistrement	Sendust	Sendust
Lecture	Ferrite	Ferrite
Effacement	Double-trouée sendust/ Ferrite	Double-trouée sendust/ Ferrite
Pleurage et scintillement: (WRMS)	0,022%	0,022%
Rapport signal/bruit		
fer pur	sans NR avec Dolby-B-NR avec Dolby-C-NR	60dB 67dB 73dB
CrO <sub>2</sub>	sans NR avec Dolby-B-NR avec Dolby-C-NR	58dB 66dB 73dB
normale	sans NR avec Dolby-B-NR avec Dolby-C-NR	56dB 64dB 71dB
Réponse en fréquence:		
bande au fer pur:	15 à 27.000Hz (20 à 22.000Hz ± 1,5dB)	20 à 23.000Hz (20 à 21.000Hz ± 2dB)
bande CrO <sub>2</sub> :	15 à 22.000Hz (20 à 20.000Hz ± 1,5dB)	20 à 21.000Hz (20 à 20.000Hz ± 3dB)
bande normale:	15 à 22.000Hz (20 à 20.000Hz ± 1,5dB)	20 à 21.000Hz (20 à 20.000Hz ± 3dB)
Distorsion 3 ème:		
(bande normale, 1 kHz, 0dB)	0,5%	0,5%
Sensibilité/impédance d'entrée:		
Entrée ligne:	100 mV/40k ohms	100 mV/40k ohms
Niveau/impédance de sortie:	550 mV/500 ohms	550 mV/500 ohms
Sortie casque:	50 mV/(8 ohms)	50 mV/(8 ohms)
Dimensions:	460(L) x 361(P) x 158(H) mm	460(L) x 361(P) x 158(H) mm
Poids:	Net 11,5 kgs	11,0 kgs

Caractéristiques pourront subir des modifications sans avis.

\* Dolby-NR est la marque déposée de Dolby Laboratories, Inc.



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