

GXC-75D

STEREO CASSETTE DECK

OPERATOR'S MANUAL



CEE, CSA and UL standard models are not equipped with a Voltage Selector or Cycle Change Apparatus. Therefore, voltage and cycle conversion is not necessary. If your machine corresponds to any of these standards, please disregard all references to voltage and cycle adjustment throughout this manual.

CEE Models: 220V, 50 Hz.

CSA Models: 120V, 60 Hz.

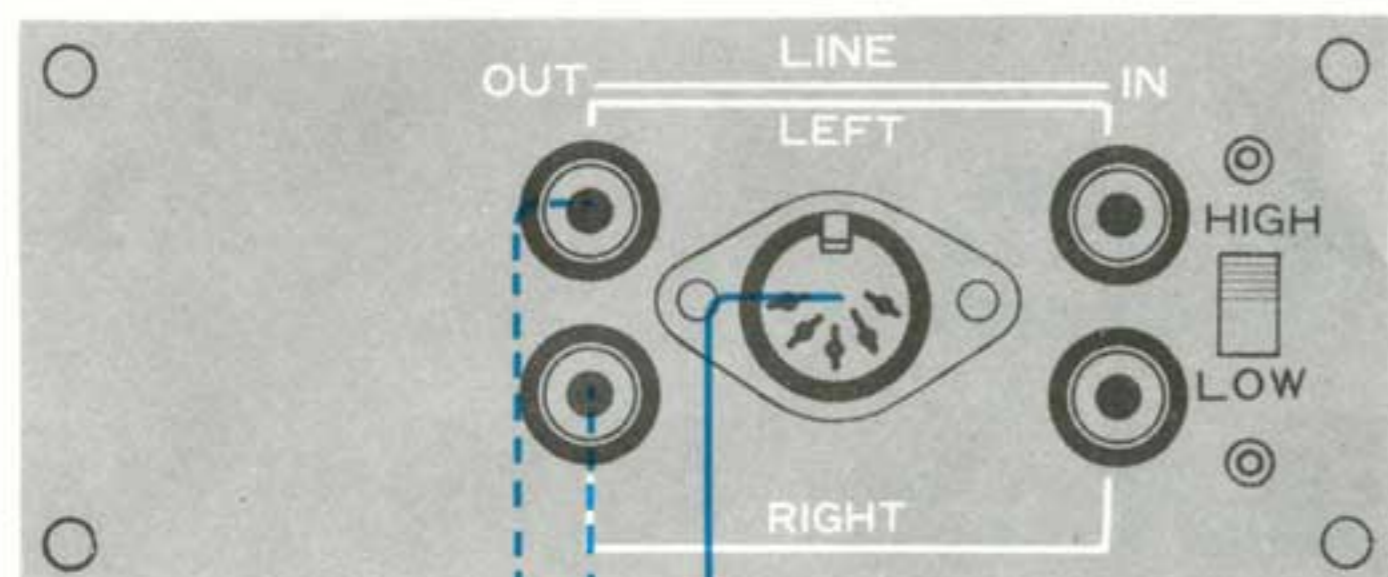
UL Models: 120V, 60 Hz.

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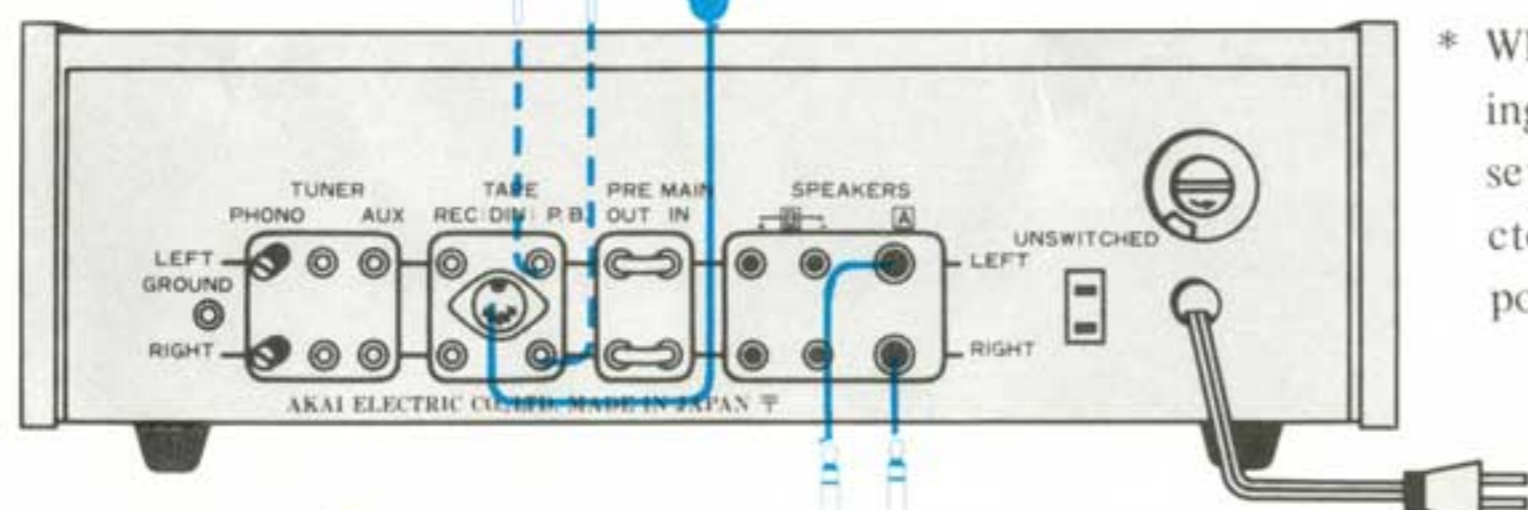
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CONNECTIONS

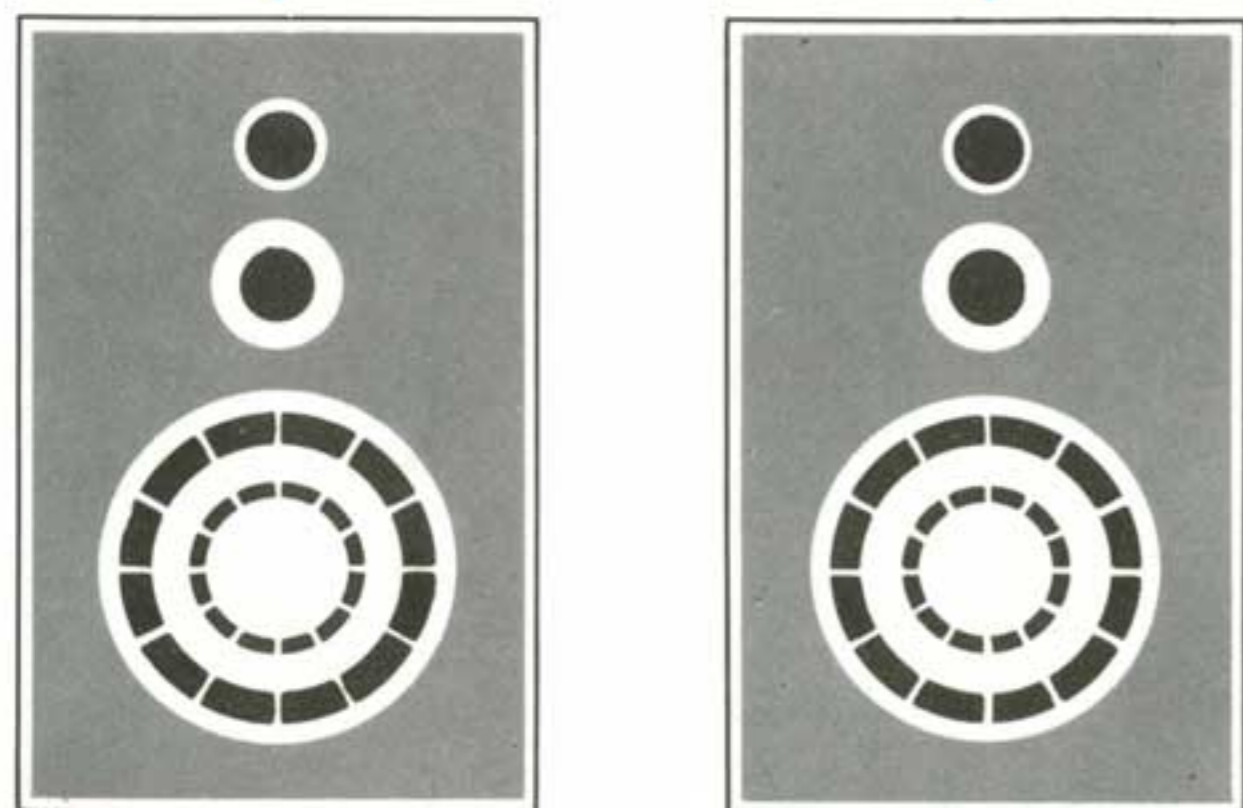
FOR PLAYBACK



The Din Jack can be used instead of the Line Jacks. This enables recording or playback with a single Din/Din connection cord. Set Din Jack HIGH/LOW input switch to correspond with the output of your amplifier.



* When employing Din Jack, set Input Selector to MIC position.



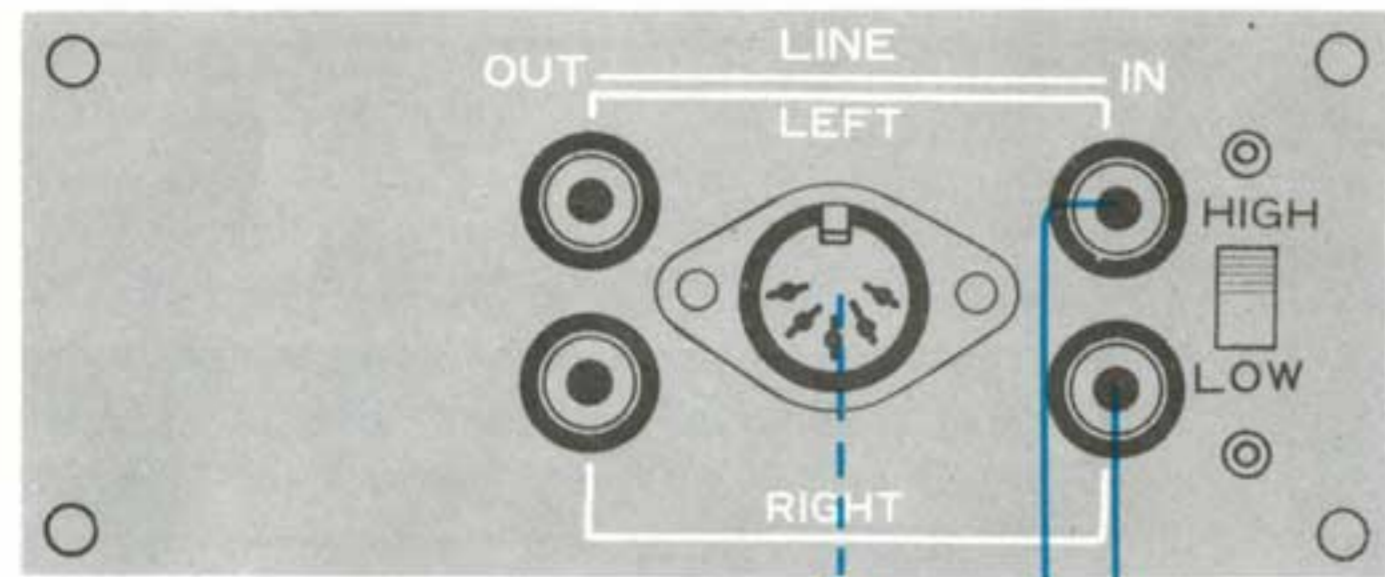
PLAYBACK

Connect an external amplifier/speaker system to the line output jacks as shown in CONNECTIONS FOR PLAYBACK.

- A. Connect power cord and turn on Power Switch.
- B. Depress Eject Button and load a pre-recorded tape.
- C. Depress forward or reverse direction Manual Reverse Button for forward or reverse playback mode.
- D. Depress Play Key to begin playback.
- E. Adjust Volume Controls and external amplifier controls.
- F. Depress Stop Key to stop tape travel.

* Because this model employs an automatic and manual reversing system, it is not necessary to invert cassette for playback of Side B. (Refer to Reverse Selector under CONTROLS).

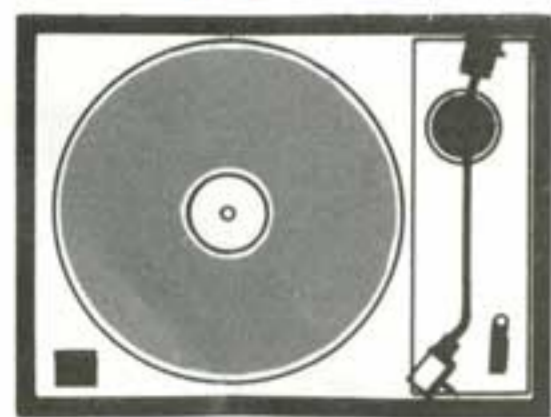
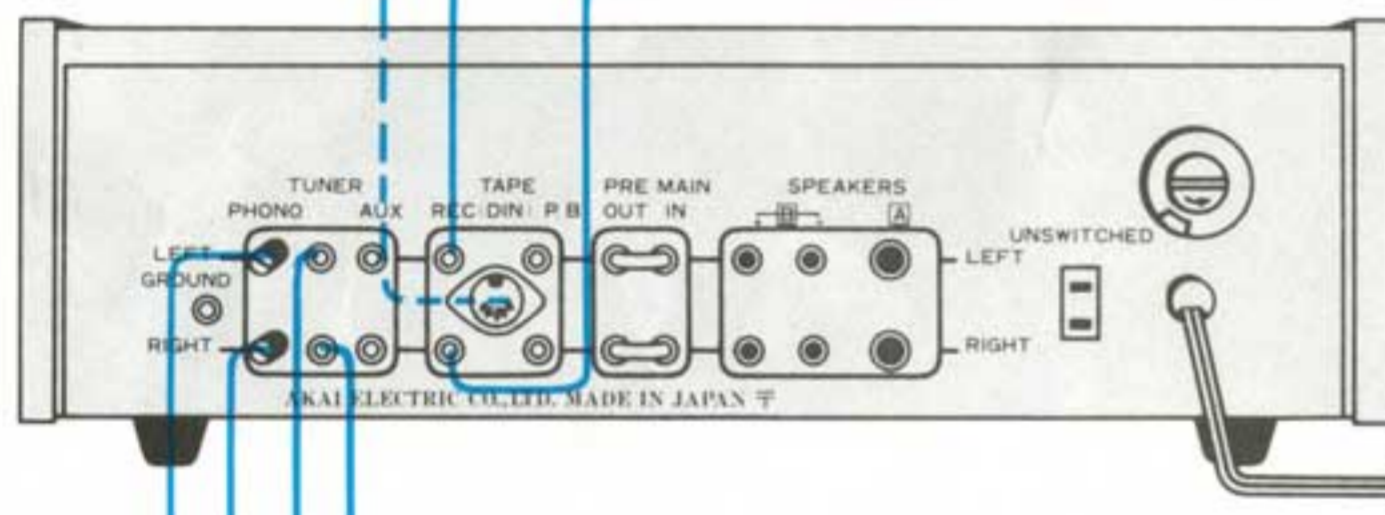
FOR RECORDING



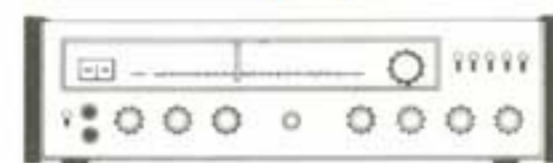
* When employing Din Jack, set Input Selector to MIC position.

The Din Jack can be used instead of the Line Jacks for connection. This enables recording or playback with a single Din/Din connection cord. Set Din Jack HIGH/LOW input switch to correspond with the output of your amplifier.

Connect one of the desired sources with an RCA/RCA connection cord.



Turntable with magnetic cartridge.



Stereo tuner



Stereo tape deck or recorder.



Record player with crystal or ceramic pick-up.

RECORDING

Connect desired program source to appropriate inputs as shown in CONNECTIONS FOR RECORDING.

- A. Connect power cord and turn on Power Switch.
- B. Depress Eject Button and load a tape.
- C. Set front panel Input Selector to MIC or LINE according to input connections.
- D. Set Index Counter to "000".
- E. Depress forward or reverse direction Manual Reverse Button for forward or reverse recording mode.
- F. Depress Pause Button and then depress Recording and Play Keys simultaneously.
- G. Adjust and balance recording input level with Recording Level Controls while observing VU Meters (normal recording level should not exceed "0" VU).
- H. When an optimum recording level has been determined, release Pause Button to begin recording.

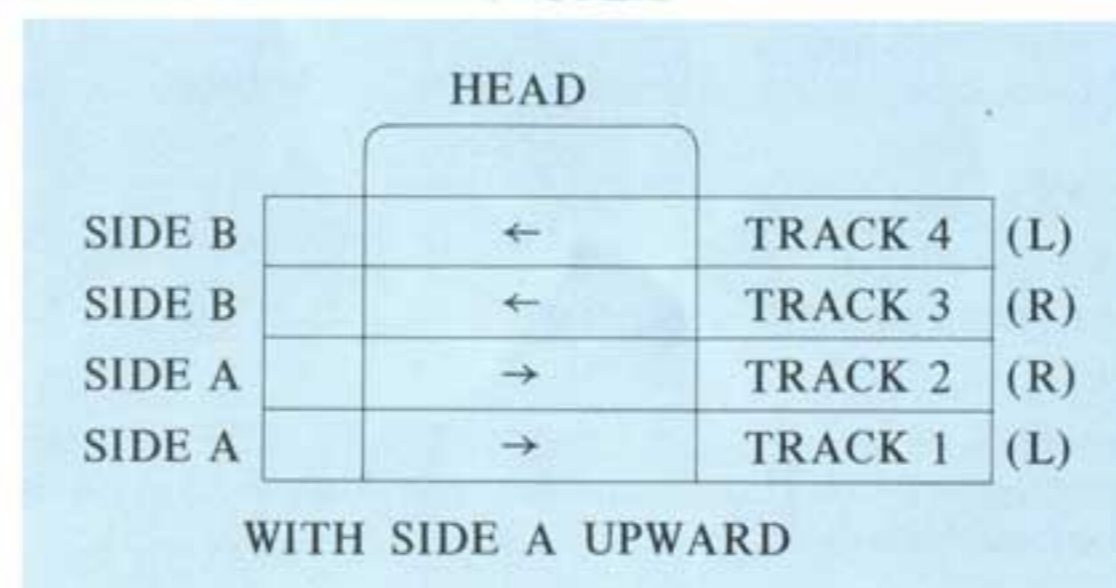
I. Depress Stop Key to stop tape travel.

* Because this model employs an automatic and manual reversing system, it is not necessary to invert cassette for recording on Side B. (Refer to Reverse Selector under CONTROLS).

OPERATING PRECAUTIONS AND NOTES

- * Operate this model in a level horizontal position only.
- * Your machine is delivered with a loading slot guard for protection of the heads during transportation. Remove guard and depress Eject Button before attempting to load a tape.
- * Avoid setting your machine on a vacuum tube amplifier, etc. which generates heat or operating the unit in extremely hot or cold places. Also avoid blocking the ventilators.
- * If your machine will not record or playback, check input and output plug connections, and the position of the Pause Button, etc.
- * Heads should be kept clean and demagnetized at all times.
- * This machine is designed for utilization of low noise tape as standard. The use of ordinary tape will result in inferior performance.
- * Before using a cassette tape, check to confirm whether or not tape slack exists. As tape slack causes the tape to twist or tangle around the pinch wheel and capstan, take up slack if necessary.
- * As the base of C-120 tapes are thin and easily damaged, they are not recommended for use with this machine.
- * Recording cannot be made on the leader tape. Therefore, when using a new cassette tape, be sure to forward the tape slightly so that the leader tape is not in the head path.
- * Tapes which have been stored in a hot, moist place for a period of time or cassette tapes with bent cases should not be used. Such tapes may curl or have greasy places on the tape, altering tape speed and preventing proper performance. Always store tapes in a cool, dry place.
- * Do not touch the tape with your fingers as high frequency signals cannot be recorded in places which are not clean on the tape.
- * Cassette tapes are equipped with a break-out tab each for A and B side. When these tabs have been removed to protect an important recording, no further recording can be made on the tape unless the cavities are plugged or covered with a piece of tape.

CASSETTE TRACK SYSTEM



This model employs a 4-track stereo recording/playback system. The first recording (playback) takes place on tracks 1 and 2, and the second on tracks 3 and 4. Recording and playback time depends upon the length of the cassette tape (C-30, 30 minutes; C-60, 60 minutes, etc.)

Monaural and stereo recorded cassettes can be played back on either stereo or monaural cassette recorders without any loss in quality. Because the total track width of the left and right channels is equal to that of the monaural track, when a stereo cassette is played on a monaural recorder, the playback head will scan both left and right channels together. This results in automatic mixing of left and right channels from the stereo tape for monaural reproduction.

- * The GXC-75D employs an automatic and manual reversing system so that it is not necessary to invert cassettes for recording or playback of side B. (Refer to Reverse Selector under CONTROLS).

TAPE ERASING

Any signals previously recorded on the tape will be automatically erased as a new recording takes place. For erasing only, no plugs should be connected to the input jacks and Recording Level Controls should be kept at minimum. For quick and complete erasure, a bulk tape eraser is recommended.

CASSETTE TAPE LOADING



Depress Eject Button and load a cassette tape with the tape facing the heads. Close cassette lid by gently pressing downward on the lower right hand corner. Pressure of the lid will set cassette. To remove cassette, depress the Eject Button.

- * The Eject Button will not operate while the Play Key is depressed. If tape ejection is desired during recording or playback mode, first depress Stop Key and then depress Eject Button.

LUBRICATION

Although the motor of this model is sufficiently oiled for prolonged use, for maximum service and optimum performance, please take your machine to your local authorized AKAI agent for occasional lubrication.

CONTROLS

INDEX COUNTER AND RESET BUTTON

Tape indexing is made easy with this 3 digit Index Counter. Provides an easy reference for quickly locating positions on the tape. To reset, depress Reset Button.

O.L.S (over-level suppressor) SWITCH

Set this switch to ON position to prevent over-level recording and cut distortion when recording at a high volume level. Especially effective when recording from microphones at close range.

TAPE DIRECTION, PAUSE, RECORDING, O.L.S, DOLBY NR, AND CHROME TAPE INDICATOR LAMPS

These color indicator lamps light according to position of respective control switches.

TAPE VIEW WINDOW

CASSETTE RECEPTACLE LID

Opens when Eject Button is depressed.

PAUSE BUTTON

Depress to momentarily suspend tape travel during recording or playback. Convenient for editing tape. Simply depress Pause Button when a certain portion of the program is not desired. Depress again to release.

EJECT BUTTON

Depress to eject cassette. This button must be depressed before attempting to load a tape.
* The Eject Button does not function while the Play Key is depressed.

MANUAL REVERSE BUTTONS

Set to forward or reverse direction prior to recording or playback.
* During playback, manual reverse in either direction can be effected by operating these buttons.
* These buttons will not function during recording mode.

RECORDING KEY

While holding this key at depressed position, depress Play Key to effect recording mode.

REWIND KEY

Rewinds tape at high speed.

STOP KEY

Depress to stop tape travel.

PLAY KEY

Advances tape for playback or recording mode.

FAST FORWARD KEY

Advances tape at high speed.

DOLBY NR SWITCH

Setting the Dolby Noise Reduction Switch to ON position activates the Dolby circuit to expand low level signals before they are recorded and lowers them by precisely the same amount during playback, thus reducing the extraneous and super-imposed noise, resulting in the reduction of tape hiss to a completely inaudible level.

* When using a tape recorded with the Dolby process, it is imperative that this switch be set to ON position during playback also.
* "Dolby" and the Double D symbol are trade marks of Dolby Laboratories, Inc. (Under license from Dolby Laboratories, Inc.)

VU METERS

Indicates recording and playback levels. Normal recording should not exceed "0" VU.

MEMORY WIND BUTTON

Set Index Counter to "000" and depress Memory Wind Button for automatic stop from Fast Forward or Rewind at any place on the tape.

RECORDING LEVEL CONTROLS

Controls microphone and line input level. Set front panel Input Selector to MIC or LINE position according to connections and adjust these controls while observing the VU Meters.

VOLUME CONTROLS

Adjusts output volume during playback.

HEADPHONE JACK

Accommodates stereo headphones of 8Ω impedance for monitoring or private headphone listening.

MICROPHONE JACKS

POWER SWITCH

INPUT SELECTOR

Set to MIC or LINE according to input connections.
* When employing Din Jack, set to MIC position.

TAPE SELECTOR SWITCH

Set to CHROME when using chromium dioxide tape and to LOW NOISE when using low noise tape.
* Low noise tape is standard for this machine. The use of ordinary tape will result in inferior recordings.
* The use of chromium dioxide tape will improve frequency response.

REVERSE SELECTOR

NON (one-way recording or playback) Depress forward or reverse direction Manual Reverse Button and set recorder to recording or playback mode. Automatic Stop will be effected at the end of one-way operation.

SINGLE (one cycle forward and reverse recording or playback) Set machine to forward recording or playback mode. Automatic Stop will be effected at the end of reverse recording or playback.

* If Side B break-out tabs have been removed, recording cannot take place and automatic stop will be effected at the end of Side A.

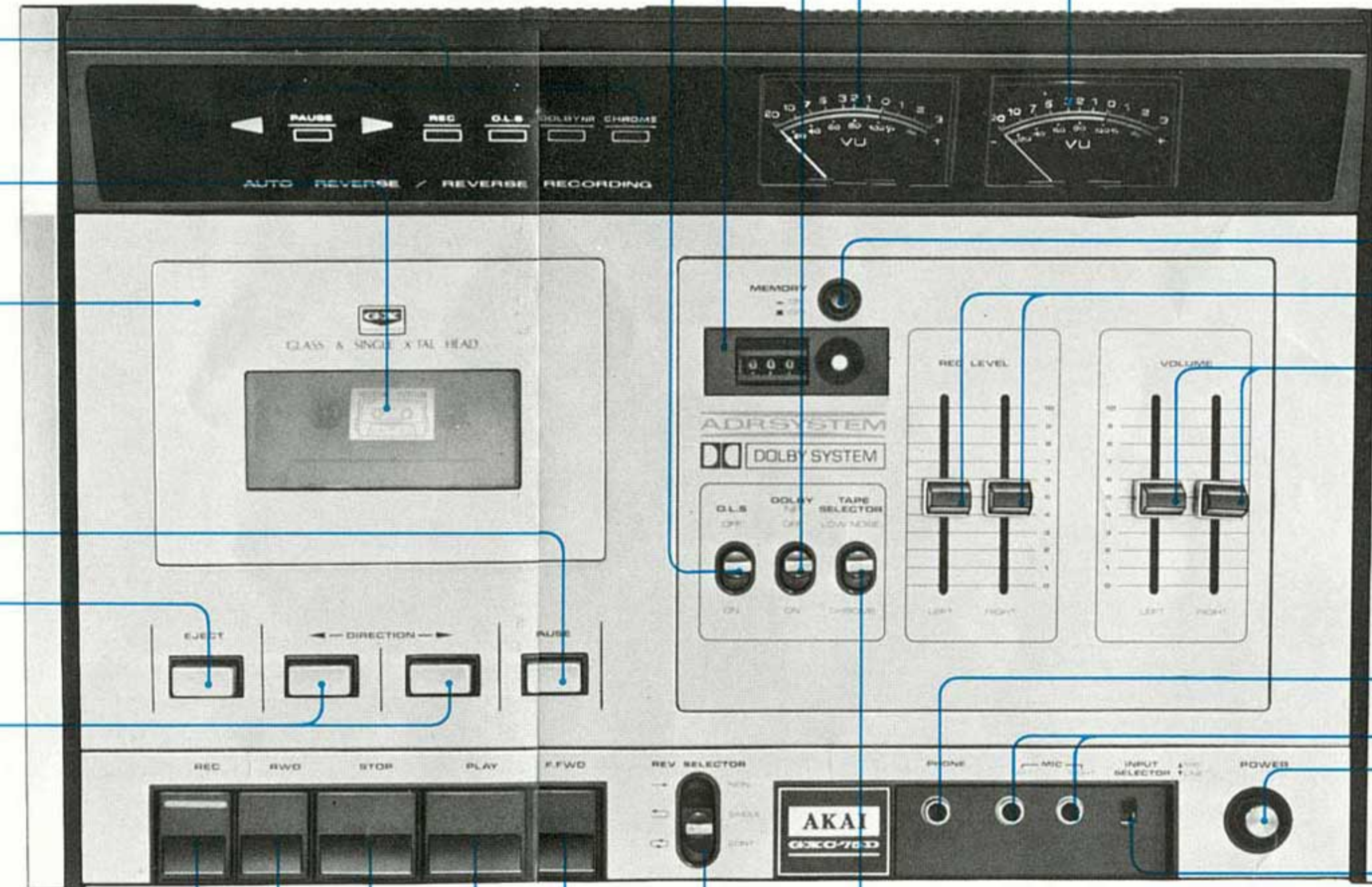
* If recording or playback is begun at reverse mode, automatic stop will be effected at the end of reverse operation. For this reason, the machine should be set to forward mode first.

CONT (continuous playback) Set machine to forward or reverse playback mode. Playback will continue in both directions until the Stop Key is depressed.

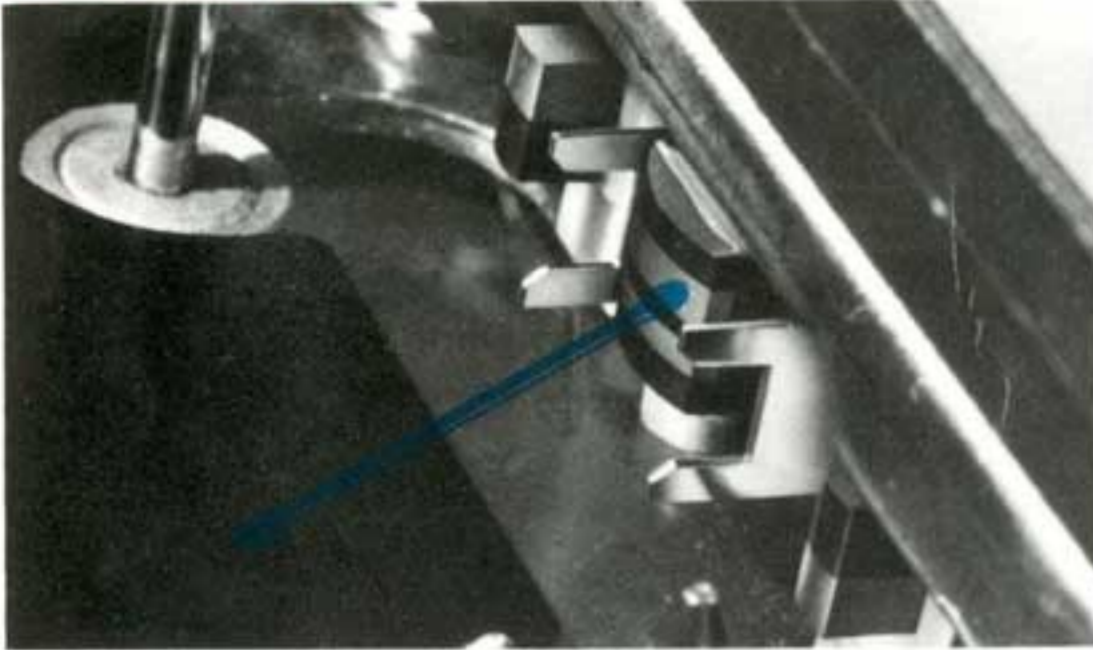
* Should the machine be set to recording mode and the Reverse Selector is at CONT position, it will automatically return to SINGLE position so that automatic stop will be effected at the end of reverse recording mode and the tape will not be erased and re-recorded.

* DIRECT FUNCTION CHANGE CONTROL SYSTEM

This model employs direct function change control for speedy mode selection. The necessity of depressing the Stop Key prior to changing modes is eliminated.



HEAD CLEANING



It is important for all heads and the head block to be kept clean at all times as dust adhering to these parts deteriorate sound quality.

This model is equipped with a GX (glass & single crystal) recording/playback head and, while GX Head cleaning is not normally necessary, if old tape or splicing tape is used, GX Head cleaning is also recommended.

- (1) Turn off Power Switch.
- (2) Remove cassette from receptacle and depress cassette holder plate to flat horizontal position.
- (3) With machine at stop mode, clean recording/playback and both erase heads with a cotton swab stick soaked in Akai cleaning fluid (from Akai Head Cleaning Kit HC-500). Also clean pinch wheel and capstan and other parts over which the tape travels.

* If Akai cleaning fluid is not available, use alcohol. Do not use chemicals such as chloro-thane, etc. as the rubber parts will deteriorate.

* Heads are most accessible when facing the rear panel of the recorder.

HEAD DEMAGNETIZING

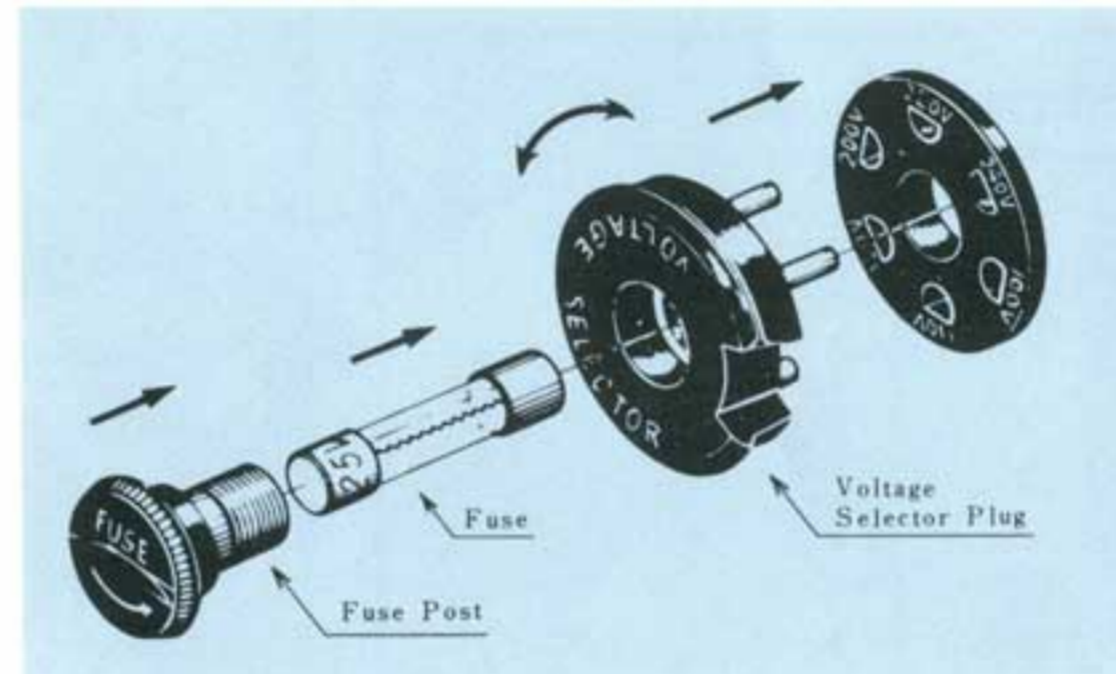
Normally, the steel pole pieces which form part of the recording/playback head as well as parts over which the tape travels become slightly magnetized and as a result, the tape is partially erased at high frequencies. Therefore, head demagnetizing is recommended periodically.

- (1) Turn off Power Switch.

- (2) Remove cassette from receptacle and depress holder plate to flat horizontal position.
- (3) With machine at stop mode, demagnetize heads and other parts which the tape contacts with a bulk Head Demagnetizer by bringing the prongs of the demagnetizer close to the heads and making small circular motions over the entire head block area.

* Do not bring the demagnetizer close to the VU Meters.

VOLTAGE & CYCLE CONVERSION



Voltage

Your machine is equipped with a universal voltage selector offering six selections of voltage from 100V to 240V A.C. Voltage is preset at the factory according to destination. However, the operator is requested to reconfirm setting and, if necessary, re-adjust as follows:

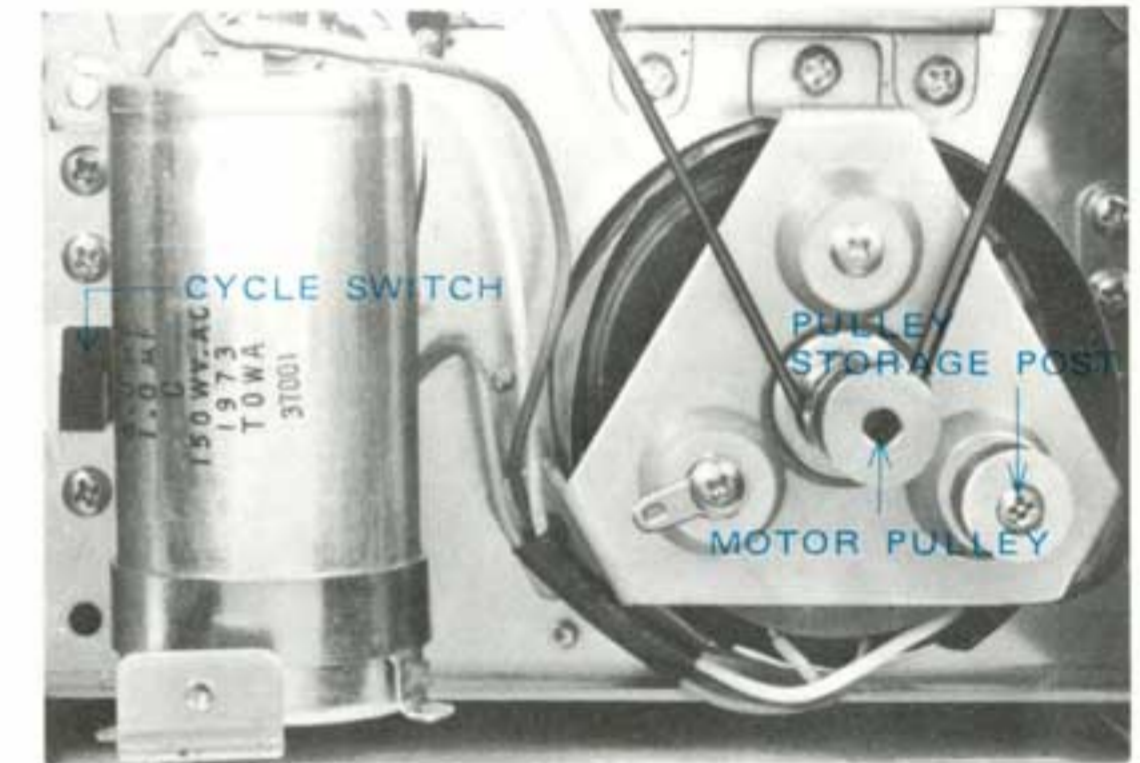
- (1) **Disconnect power cord** and remove the Fuse Post by screwing in direction of arrow.
- (2) Remove the Voltage Selector Plug and reinsert so that proper area voltage shows through the plug cut-out.
- (3) Change fuse to correspond with voltage and tighten fuse post. (Refer to standard accessory spare fuse tag instructions for proper fuse voltage).

* To maintain optimum performance and prolong the life of your machine, it is important that the line voltage be held within a 10% deviation of standard area voltage.

Cycles

Correct tape speed cannot be obtained if the correct motor pulley is not used and the Cycle Change Switch is not properly positioned. If cycle change is necessary, **disconnect power cord** and proceed as follows:

- (1) Remove bottom panel and set Cycle Change Switch to 50 Hz or 60 Hz position according to power source.



- (2) Loosen motor pulley holding screws with standard accessory hexagonal driver and replace pulley. For 60 Hz operation, use the thin pulley, and for 50 Hz operation, use the stout pulley.
- (3) Tighten motor pulley holding screws and properly position drive belt.
 - * As the drive belt is likely to slide off of the flywheels and idler during cycle change, re-check and properly position for smooth belt travel.
- (4) Store pulley not in use on pulley storage post.

TECHNICAL DATA

Track System	4 track 2 channel stereo system
Tape Speed	1-7/8 ips.
Wow & Flutter	0.1% WRMS
Equalization	Correct equalization for playback of tapes recorded to NAB curve.
Frequency Response	30Hz to 16,000Hz \pm 3dB using chromium dioxide tape (CrO ₂) 30Hz to 14,000Hz \pm 3dB using low noise tape
Distortion	Less than 1.0% (1,000Hz "0" VU)
Signal to Noise Ratio	Better than 50dB, (with Dolby Process: 58dB)
Erase Ratio	Better than 70dB
Bias Frequency	61 kHz
Heads	(3): One GX recording/playback head. Two erase heads
Motors	(1): Hysteresis synchronous outer-rotor motor
Fast Forward & Rewind Time	90 sec. using a C-60 Cassette Tape

Output Jacks	Line (2) : 0.775V ("0" VU). Required load impedance : more than 20k Ω Phone (1) : 30mV/8 Ω
Input Jack	Microphone (2) : 0.5mV/4.7k Ω Line (2) : 60mV/200k Ω
Din Jack	0.4V/90mV(high)/5mV(low)
Semi-Conductors	Transistors : 41 Diodes : 44
Power Requirements	100V to 240V A.C., 50/60Hz
Power Consumption	25W
Dimensions	460(W) x 146(H) x 302(D)mm (18.1 x 5.8 x 11.9")
Weight	8.0kg (17.6 lbs)

STANDARD ACCESSORIES

Connection Cord	1
Spare Fuses	1 set
Hexagonal Driver	1
Operator's Manual	1

TROUBLE SHOOTING CHART

The conditions listed below do not indicate mechanical failure of your unit. If your machine exhibits any of these conditions check for trouble as indicated.

SYMPTOM	TROUBLE	REMEDY
Recording Key will not function.	* Cassette is not loaded. * Cassette break-out tabs are removed.	* Plug or cover cavities.
Tape will not run.	* Power is not being supplied. * Tape slack.	* Check power cord and Power Switch. * Take up slack as mentioned in OPERATING PRECAUTIONS AND NOTES.
Noisy sound.	* Heads are magnetized. * Heads are dirty. * Connections are incorrect. * Tape Selector Switch is set incorrectly.	* Demagnetize heads following head demagnetizing instructions. * Clean the heads following head cleaning instructions. * Set to CHROME position when using chromium dioxide tape, and to LOW NOISE position when using low noise tape.
Previous recording will not erase.	* Erase heads are dirty.	* Clean heads following head cleaning instructions.
Distorted sound.	* Recording level is too high.	* Normal recording level is "0" VU.
Playback cannot be effected.	* Connections are incorrect. * Controls are not properly adjusted or positioned.	* Check external amplifier controls.
Recording will not take place.	* Dirty recording head. * Connections are incorrect. * Front panel input selector at wrong position. * Controls are not properly positioned or adjusted.	* Clean head following head cleaning instructions. * Check external source controls. * Set to MIC or LINE according to connections.

Should there be a problem with your machine, write down the model and serial numbers and all pertinent data regarding warranty coverage as well as a clear description of the existing trouble and contact your nearest authorized Akai Service Station or the Service Department of Akai Company, Tokyo, Japan.



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AKAI ELECTRIC CO., LTD.
AKAI TRADING CO., LTD.

12-14, 2-chome, Higashi-Kojiya,
Ohta-ku, Tokyo, Japan

AKAI AMERICA LTD.

2139 E. Del Amo Blvd., Compton, Calif., 90220, U.S.A.
TELEPHONE:(213) 537-3880
TELEX: 67-7494

STANDARD REFERENCE AND RECOMMENDED TAPES LIST
LISTE DES BANDES STANDARD ET RECOMMANDEES
LISTE FÜR REFERENZ- UND EMPFOHLENE BANDSORTEN

Tape Selector Position Position du Sélecteur de Bande Stellung des Bandwahlschalters	Reference Tape Bande Etalon Referenzband	Recommended Tapes Bande Recommandée Empfohlene Bänder
LN (Low Noise) Position Position LN (à faible bruit) LN LOW-NOISE-Stellung	FUJI FL C-60	AGFA GEVAERT Super SFD C-60, C-90 BASF LH C-60, C-90 LHS C-60, C-90 FUJI FL C-60, C-90 MAXELL LN C-60, C-90 UD C-60, C-90 SCOTCH LH C-60, C-90 LD C-60, C-90 TDK D C-60, C-90 SD C-60, C-90 ED C-60, C-90
CrO ₂ (CHROME) Position Position CrO ₂ (CHROME) CrO ₂ Chrom-Stellung	BASF Chromdioxide C-60	BASF Chromdioxide SA C-60, C-90 TDK C-60, C-90
FeCr Position Position FeCr FeCr Stellung	SONY Duad C-60	BASF Ferrochrom Duad C-60, C-90 SONY C-60, C-90



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