

S/N 00923

1209

GXR-82

STEREO CARTRIDGE RECORDER

OPERATOR'S MANUAL

THIS MANUAL IS ALSO APPLICABLE TO MODEL GXR-82D
STEREO CARTRIDGE DECK.

CEE, CSA, UL and LA 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, 50Hz
CSA Models: 120V, 60Hz
UL, LA Models: 120V, 60Hz

WARNING:

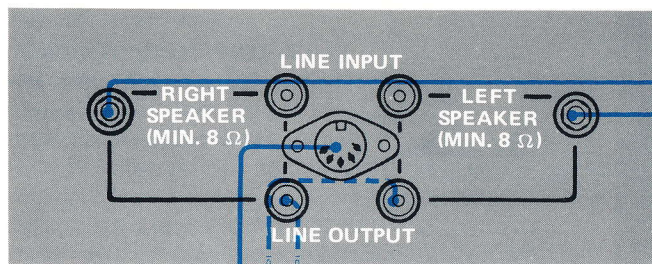
To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

AKAI®

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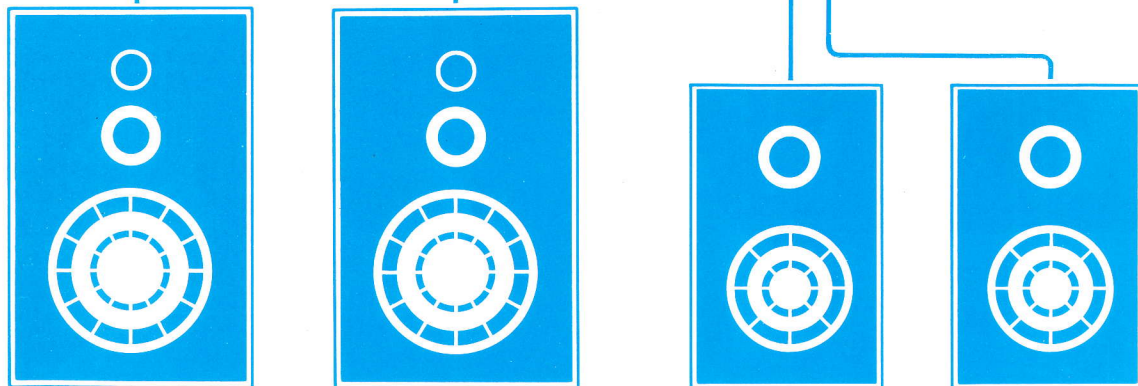
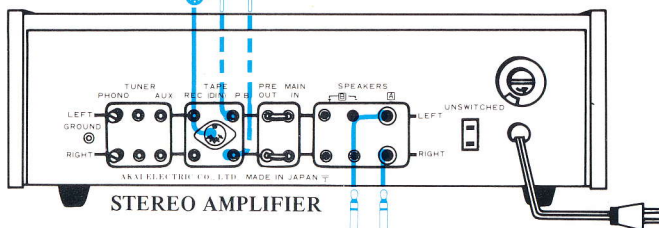
CONNECTIONS

FOR PLAYBACK



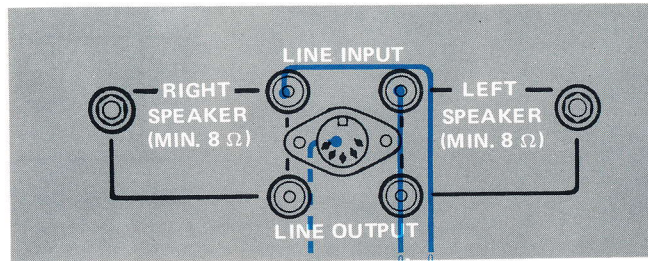
Make this connection when a more powerful output is desired. Use RCA/RCA connection cord.

The Din Jack can be used instead of the Line Jacks. This enables recording or playback with a single Din/Din connection cord.



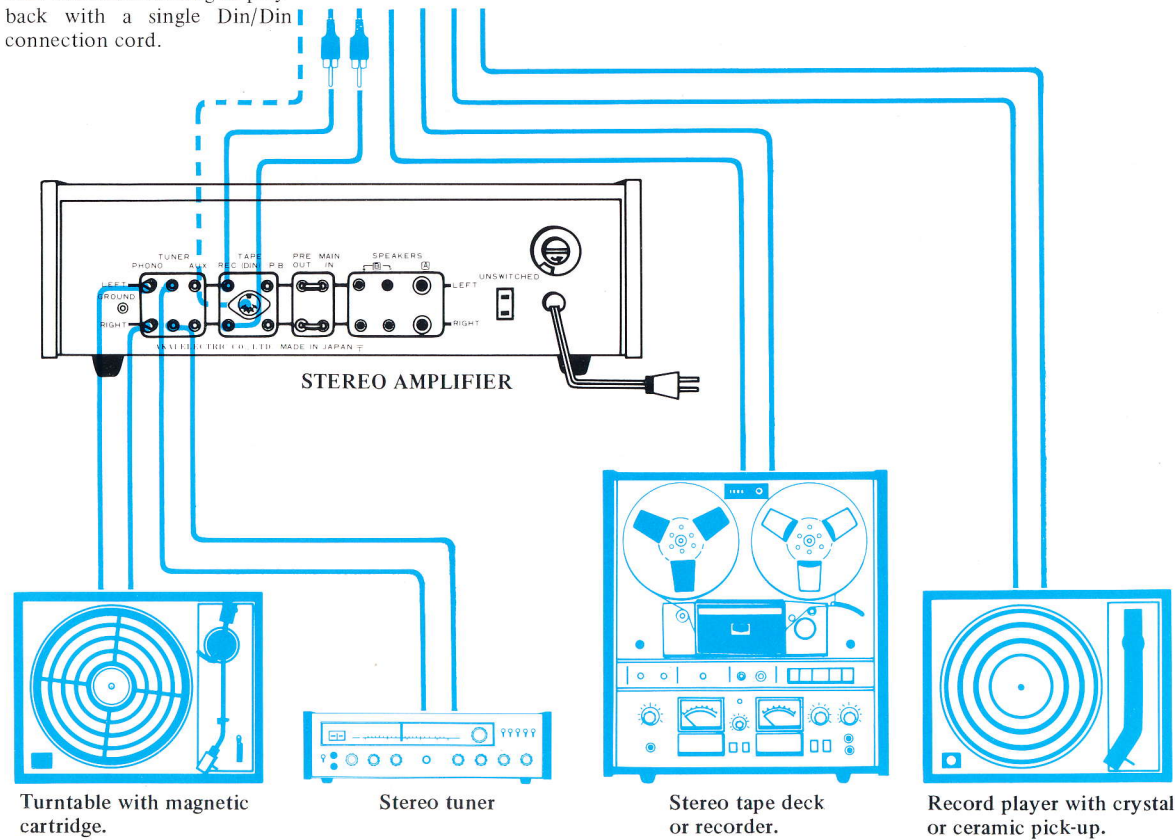
Model GXR-82 only

FOR RECORDING



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.

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



TECHNICAL DATA

Track System	8-track 2-channel stereo system
Tape Speed	3-3/4 ips ($\pm 1.5\%$)
Wow & Flutter	Less than 0.25% RMS at 3-3/4 ips
Equalization	Correct equalization for playback of tapes recorded to the NAB curve.
Frequency Response	40 Hz to 17,000 Hz (± 3 dB) at 3-3/4 ips
Output Power	16 W total Music Power (8 W/8 W) at 8 Ω (GXR-82 only)
Signal-To-Noise Ratio	Better than 47 dB
Erase Ratio	Better than 65 dB
Cross-Talk	Better than 45 dB (stereo)
Heads	(2): Recording/playback GX head, Erase head
Motor	(1): 2-speed 2/8-pole induction motor
Fast Forward & Rewind Time	Within 230 secs. using a 300 ft. tape
Recording Capacity	One hour stereo recording using a 300 ft. cartridge tape
Output Jacks	Line(2): 1.23 V (zero VU)/100 Ω (Required load impedance: more than 20 k Ω) Phone(1): 30 mV/8 Ω Speaker(2): 8 W/ 8 Ω each (GXR-82 only)
Input Jacks	Microphone(2): 0.5 mV/4.7 k Ω Line(2): 50 mV/500 k Ω
Din Jack	0.5 V/5 mV
Power Requirements	100 V to 240 V A.C., 50/60 Hz
Dimensions	346(W) x 135(H) x 266(D)mm (13.6 x 5.3 x 10.5")
Weight	8.6 kg (18.9 lbs) (GXR-82) 8.0 kg (17.6 lbs) (GXR-82D)

* For improvement purposes, specifications and design are subject to change without notice.

STANDARD ACCESSORIES

GXR-82D	
Connection Cord	1
Spare Fuses	1 set
Operator's Manual	1
GXR-82	
Spare Fuses	1 set
Operator's Manual	1

* Spare fuses not included with CEE, CSA, and UL Standard models.



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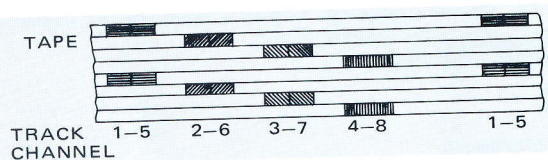


Printed in Japan

GLASS & X'TAL GX HEAD

This model employs Akai's GX recording and playback head for better signal-to-noise ratio, extended high range frequency and a more dynamic range. These features are contributable to the characteristics of Akai's amazing focused-field recording system. The core of the GX Head consists of a single crystallized element which is mounted and set in glass of the same hardness characteristics. The gem "single crystal" has no composite particles to eventually separate and cause head gap damage as the tape passes the head surface, thus enabling Akai engineers to focus the magnetic field into a sharp oblong radius. This focused field system eliminates undue equalization, minimizes high frequency loss and achieves a wider dynamic range. And GX performance is not just temporary. It's fully maintained for lasting new machine performance.

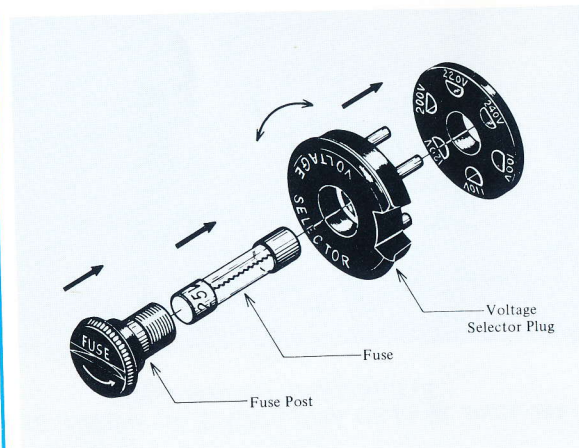
8-TRACK CARTRIDGE STEREO SYSTEM



This model employs an 8-track 2-channel cartridge stereo system. The tape has a total of 8-tracks, two of which are used at a time for stereo performance. When the first channel terminates, the second channel is automatically set to position for continued operation. Thus, a 300 ft. cartridge tape accommodates one hour of continuous performance. Desired channel or program can be easily selected by manually operating the Program Selector Button.

VOLTAGE & CYCLE CONVERSION

(CEE, CSA, UL and LA models not equipped with voltage and cycle conversion apparatus.)

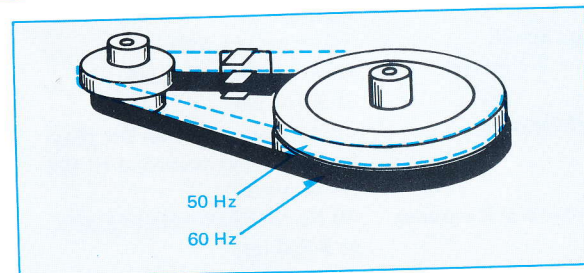


VOLTAGE

Your machine is equipped with a universal voltage selector offering six selections of voltage from 100 V to 240 V AC for use anywhere in the world. Voltage is preset at the factory according to destination. Please confirm setting prior to operation and if readjustment is necessary, proceed 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 is shown through the plug cut-out.
3. Change fuse to correspond with voltage and tighten the Fuse Post. Refer to fuse tag instructions for proper fuse depending upon standard area 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 Cycle Conversion Switch Lever and Drive Belt are not properly positioned.

Unscrew the 3 top panel holding screws and remove top panel. Then loosen 50/60 Hz Switch Lever holding screw, set Switch Lever to 50 or 60 Hz position, and tighten holding screw.

After setting Cycle Switch Lever, position drive belt to run on corresponding pulley. For 50 Hz operation, position belt in upper bracket and to run on upper part of pulleys. For 60 Hz operation, position belt in lower bracket and to run on lower part of pulleys.

PROGRAM SELECTION

Your unit is equipped with a convenient Program Indicator which enables confirmation of the program in use. When a program terminates, the next program is automatically positioned for continuous operation. To manually select programs, depress the Program Selector Button.

PLAYBACK

Connect speakers to the Speaker Jacks as shown in CONNECTIONS FOR PLAYBACK.

- A. Connect power cord and depress Power Switch.
- B. Insert cartridge into slot provided with groove facing downward.
- C. Depress Play Button.
- D. Adjust Volume Controls.
- E. Adjust Tone Controls.

* The Program Indicator Lamps will show which track is being played. For changing program, operate the Program Selector Button.

* At the end of each program, subsequent programs are automatically positioned for playback.

Note: If a more powerful output is desired, connect a stereo power amplifier to the output jacks and a pair of speakers to the amplifier as shown in CONNECTIONS FOR PLAYBACK.

AUTOMATIC STOP & CONTINUOUS PLAYBACK

This model is equipped with an Automatic Stop/Continuous Play Switch. When this switch is at Auto Stop position, at the end of channel 4, the tape will return to channel 1 position and stop automatically. At this time, both channel 4 and channel 1 Indicator Lamps will be lit. To continue operation, depress the Stop Button and again depress Play Button. When uninterrupted continuous playback is desired, set this Switch to CONT'S PLAY Position. The tape will be played over and over until the unit is turned off.

Note: When the machine is set to recording or F.Fwd mode, the tape will return to channel 1 position and automatic stop will be effected regardless of position of Automatic Stop/Continuous Play Switch.

FAST FORWARD

Advances tape at fast speed for quick tune selection.

Note: * Fast forward will not function while machine is set to Pause mode.

* To set cartridge tape to beginning of Program 1, set to 4 ch position with Program Selector and fast forward tape.

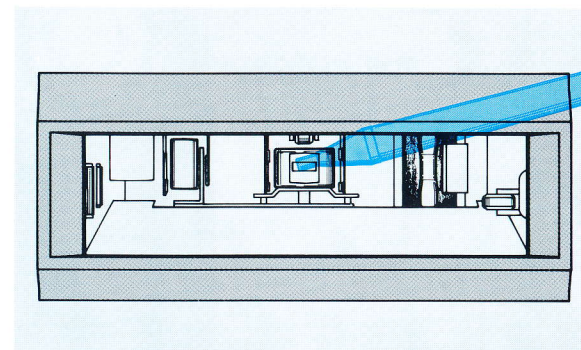
RECORDING

Connect desired program source to the appropriate input of the GXR-82(D) as shown in CONNECTIONS FOR RECORDING.

- A. Connect power cord and depress Power Switch.
- B. Depress Pause Button.
- C. Insert cartridge into slot provided with groove facing downward.
- D. Simultaneously depress Rec and Play Buttons. Recording Indicator Lamp will light to indicate recording mode.
- E. Adjust recording level with Volume Controls while observing VU Meters. Normal recording should not exceed "0" VU on either meter.
- F. Release Pause Button to begin recording.

* When using new blank cartridge tape, the Program Selector should be set to Program 1 before initiating recording operation. When the tape comes to the end, the next channel is automatically positioned for recording. Recording time for each channel is 15 minutes with a 300 ft. cartridge tape. Upon completion of recording on Program 4, the tape will return to Program 1 position and stop automatically.

HEAD CLEANING



While the GX Head does not normally need cleaning, if old tapes are used, periodical head cleaning is recommended. Use Akai's Head Cleaning Pen or a long cotton swab stick dipped in Akai Head Cleaning fluid (from Head Cleaning Kit HC-500) or alcohol.

Caution: Do not use chlorothane or other such chemicals, as the rubber parts will deteriorate.

PLAYBACK WITH MODEL GXR-82D

Connect and external amplifier to the Line Outputs and connect two speakers to the amplifier as shown in CONNECTIONS FOR PLAYBACK.

- A. Connect power cord and depress Power Switch.
- B. Insert cartridge into slot provided with groove facing downward.
- C. Depress Play Button.
- D. Adjust Volume Controls and adjust external amplifier controls.

NOTE: FOR RECORDING WITH MODEL GXR-82D, FOLLOW GXR-82 RECORDING PROCEDURE.

CONTROLS

OPERATING PRECAUTIONS

- * Heads should always be clean and free of dust.
- * For optimum recording performance, it is important to use only new and first quality magnetic tapes.
- * Machine should always be set to proper area voltage and cycles.
- * When using microphones, in order to avoid picking up outside disturbances or hum, place microphone as close to the sound source as possible.
- * When loading cartridge tape, make sure that the cartridge is properly set.

The following conditions do not mean mechanical failure of your unit. If any of these conditions should be exhibited, please check for the trouble as indicated.

- A. Loss of sensitivity and tone quality
- * Dirty erase head. . . . Clean the heads.
 - * A.C. power voltage lower than the voltage to which your unit is adjusted Check and re-adjust if necessary.
- B. Will not play or record
- * Machine set to Pause Mode.
 - * Faulty plug connection . . . Check the various connections.
 - * Switch or control at incorrect operating position.
 - * Cartridge inserted up-side-down.
- C. Will not fast forward
- * Machine set to Pause mode.
- D. Distorted sound and reduced sound level
- * Disconnect the power supply cord and check the wiring of both speakers. Shorted wiring should of course be corrected.

Should any mechanical problem develop, please take your machine to your nearest authorized Akai Service Agent or inquire at the service department of Akai Company, Tokyo, Japan.



RECORD BUTTON

To effect recording mode, depress this button and the Play Button simultaneously.

HEADPHONE JACK

For monitoring or private listening.

PROGRAM INDICATOR LAMPS

Indicates channel being used.

PROGRAM SELECTOR

For manual Selection of desired channel.

CARTRIDGE RECEPTACLE

PAUSE BUTTON & INDICATOR

Depress to momentarily stop tape travel during recording or playback. Pause Indicator Lamp lights when Button is depressed.

Caution: F.FWD will not function during Pause mode.

VOLTAGE SELECTOR & FUSE POST

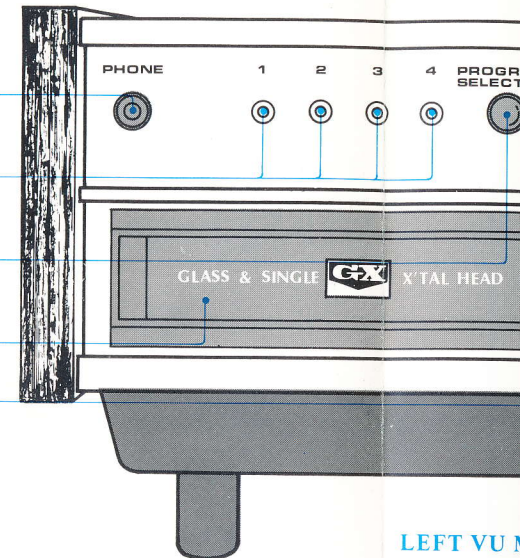
(CEE, CSA, UL and LA models not equipped with this facility.)

Universal Voltage Selector offers six selections of voltage from 100 to 240 V AC. When changing voltage it is also necessary to change the fuse accordingly. Refer to Voltage & Cycle Conversion procedure.

DIN JACK

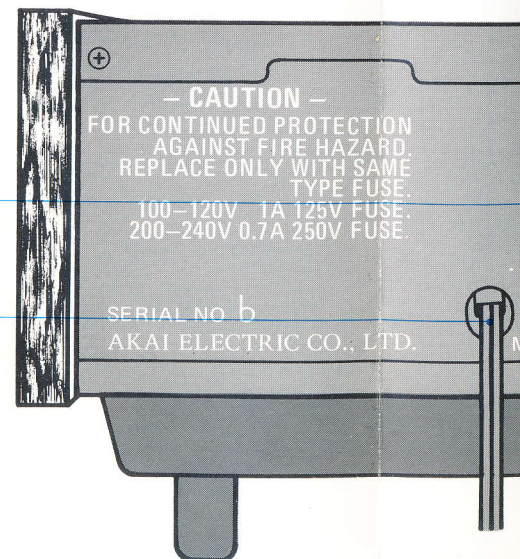
Enables connection with an external amplifier by use of a single Din Cord.

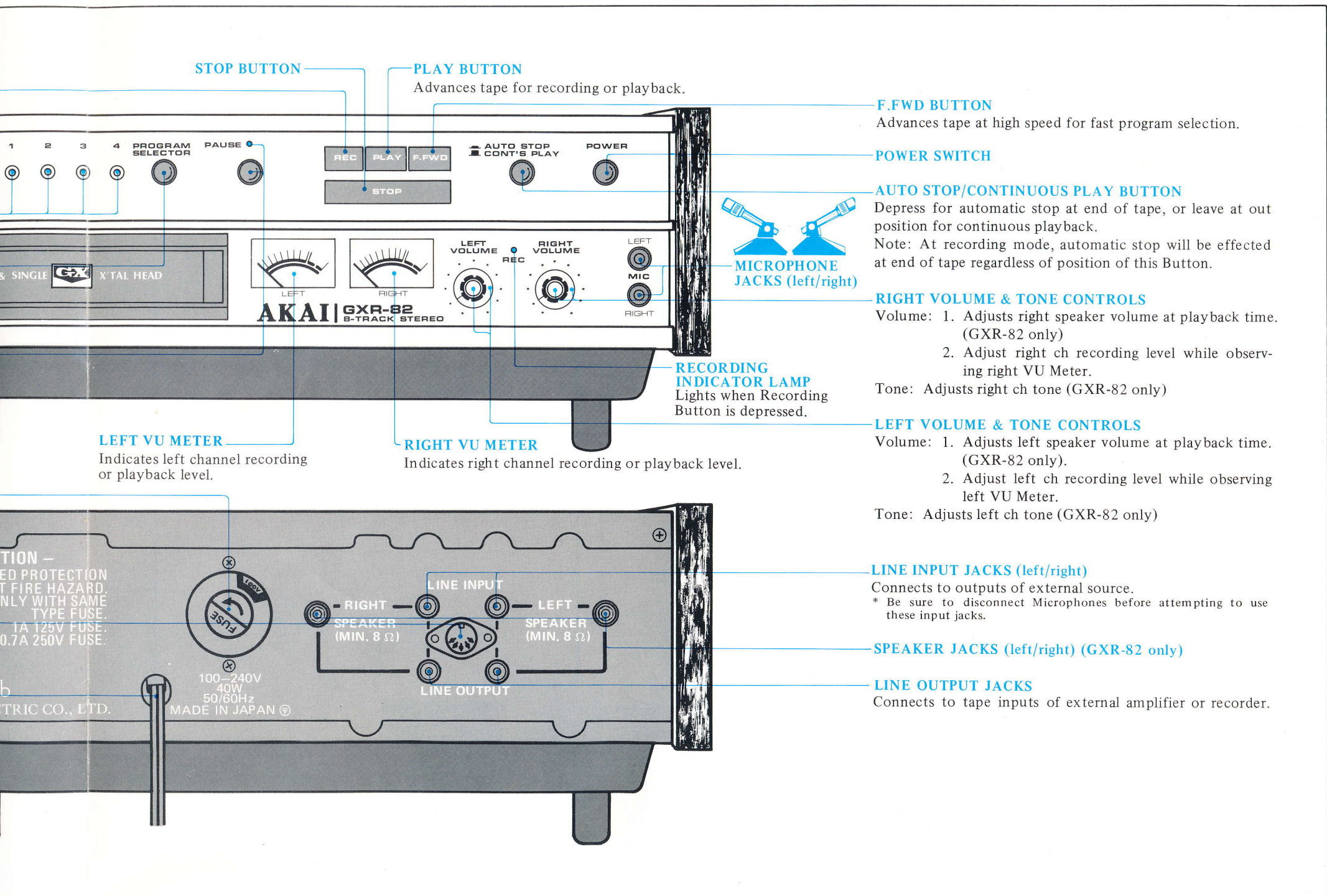
AC CORD



LEFT VU METER

Indicates level of recording or playback.





STOP BUTTON

PLAY BUTTON

Advances tape for recording or playback.

F.FWD BUTTON

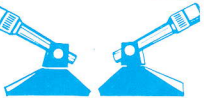
Advances tape at high speed for fast program selection.

POWER SWITCH

AUTO STOP/CONTINUOUS PLAY BUTTON

Depress for automatic stop at end of tape, or leave at out position for continuous playback.

Note: At recording mode, automatic stop will be effected at end of tape regardless of position of this Button.



MICROPHONE JACKS (left/right)

RIGHT VOLUME & TONE CONTROLS

Volume: 1. Adjusts right speaker volume at playback time. (GXR-82 only)

2. Adjust right ch recording level while observing right VU Meter.

Tone: Adjusts right ch tone (GXR-82 only)

RECORDING INDICATOR LAMP
Lights when Recording Button is depressed.

LEFT VOLUME & TONE CONTROLS

Volume: 1. Adjusts left speaker volume at playback time. (GXR-82 only).

2. Adjust left ch recording level while observing left VU Meter.

Tone: Adjusts left ch tone (GXR-82 only)

LEFT VU METER

Indicates left channel recording or playback level.

RIGHT VU METER

Indicates right channel recording or playback level.

LINE INPUT JACKS (left/right)

Connects to outputs of external source.

* Be sure to disconnect Microphones before attempting to use these input jacks.

SPEAKER JACKS (left/right) (GXR-82 only)

LINE OUTPUT JACKS

Connects to tape inputs of external amplifier or recorder.

