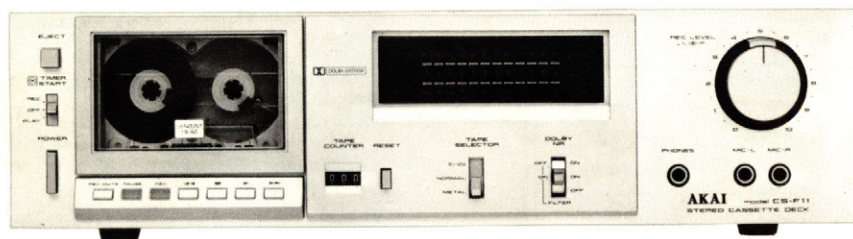


# CS-F11

## STEREO CASSETTE DECK

- Notes:**
- \* Cassette tape in photograph not included in standard accessories.
  - \* This manual is applicable to both silver and black panel models.
- Remarques:**
- \* La bande de cassette sur la photo n'est pas comprise dans les accessoires standards.
  - \* Ce manuel s'applique aussi aux modèles avec panneaux argent et noir.
- Opmerkingen:**
- \* De in de foto's afgebeelde cassettes behoren niet tot het standaardtoebehooren.
  - \* Deze gebruiksaanwijzing is van toepassing op modellen met zilver en zwart paneel.
- Anmärkningar:**
- \* Kassettbanden i bilderna hör inte till standard tillbehören.
  - \* Bruksanvisningen gäller för både modellen med silverpanel och modellen med mattsvart panel.
- Anmerkungen:**
- \* Die Cassette im Bild gehört nicht zum Standardzubehör.
  - \* Diese Betriebsanleitung gilt auch für die Ausführung mattsilber und mattschwarz.
- Notas:**
- \* La cinta casete mostrada en la fotografía no está incluida como accesorio estándar.
  - \* Este manual cubre ambos modelos, el de panel plateado y el de panel negro.



### WARNING

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

**Operator's Manual**  
**Manuel de l'utilisateur**  
**Gebruiksaanwijzing**  
**Bruksanvisning**  
**Bedienungsanleitung**  
**Manual del usuario**

# AKAI

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AKAI TRADING CO., LTD./AKAI AMERICA LTD.



## WARNING

### Voltage Selection

Power requirements for electrical equipment differ from area to area.

Please ensure that your machine meets the power requirements in your area.

If in doubt, consult a qualified electrician.

120V, 60 Hz for USA and Canada

220V, 50 Hz for Europe except UK

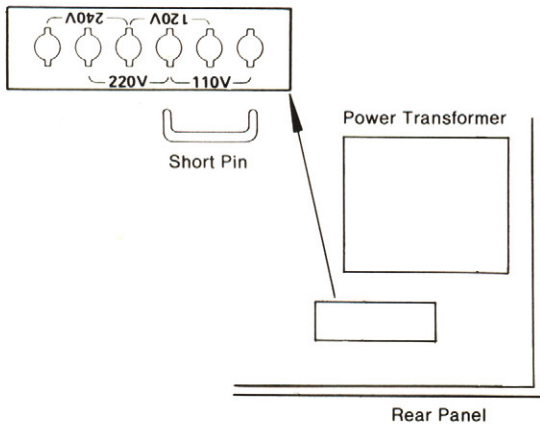
240V, 50 Hz for UK and Australia

110V/120V/220V/240V, 50/60 Hz internally switchable for other countries.

### DO NOT ATTEMPT THIS CONVERSION YOURSELF.

Voltage conversion (Models for Canada, USA, Europe, UK and Australia are not equipped with this facility). Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V or 240V as required. If your machine's voltage can be converted, refer the following voltage conversion to a qualified Service Repair Shop or professional service personnel.

1. Disconnect power cord.
2. Loosen holding screws of the top panel and the two top screws of the rear panel and remove top panel.
3. Remove short pin plug from present holes and replace in correct holes. Follow the markings explicitly.



### FOR CUSTOMERS IN THE UK IMPORTANT FOR YOUR SAFETY

The flex supplied with your machine will have either two wires or three as shown in the illustrations.

#### THREE CORE FLEX

##### WARNING

#### THIS APPARATUS MUST BE EARTHED IMPORTANT

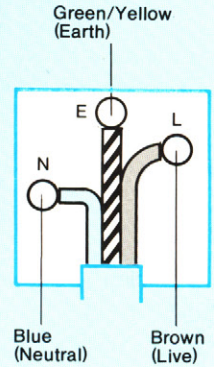
The wires in this mains lead are coloured in accordance with the following code: Green-and-yellow: Earth  
Blue: Neutral,  
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  $\perp$  or coloured green or coloured green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.



#### TWO CORE FLEX IMPORTANT

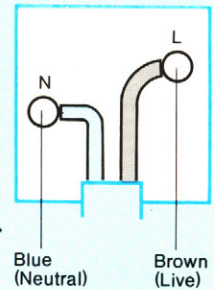
The wires in this mains lead are coloured in accordance with the following code: Blue: Neutral,  
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

\* Do not connect any wire to the larger pin marked E or  $\perp$  when wiring a plug. Ensure that all terminals are securely tightened and that no loose strands of wire exist.



### FOR CUSTOMERS IN AUSTRALIA

If your machine comes with a three core power cord, FOR YOUR SAFETY.

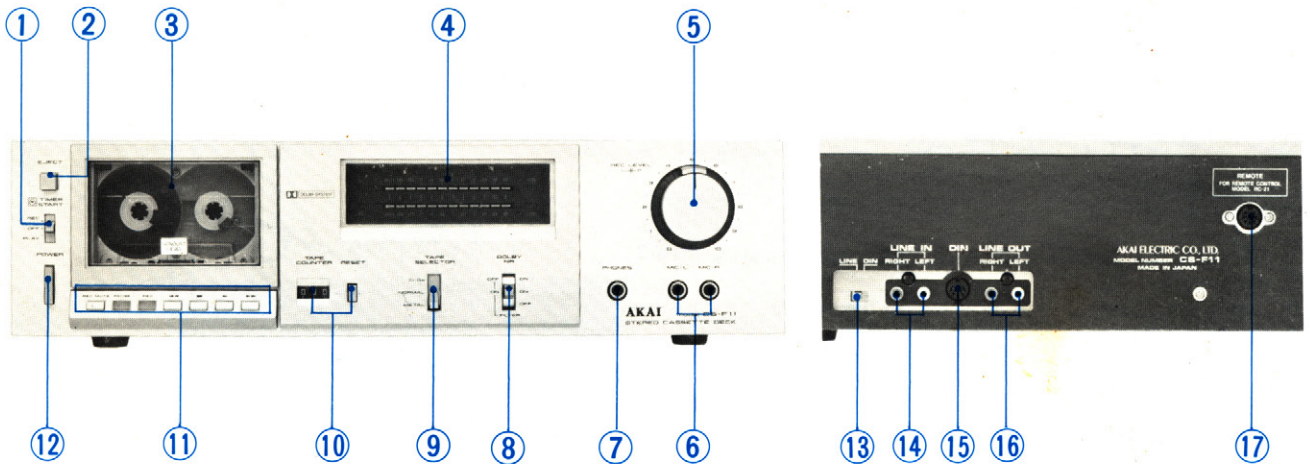
1. Insert this plug only into an effectively earthed three-pin plug socket outlet.
2. If any doubt exists regarding the earthing, consult a qualified electrician.
3. Extension cords, if used, must be three core correctly wired.
6. If water is spilled on this equipment, disconnect and call your dealer.
7. Make sure the equipment is well ventilated and away from direct sunlight.
8. Keep away from heat (stoves, etc.) to avoid damage to the external surface and internal circuits.
9. Avoid spray-type insecticides which will damage the equipment and may ignite suddenly.
10. To avoid damaging the finish never use alcohol, paint thinner or others similar chemicals.
11. Always place the equipment on a flat and solid surface.
12. Please read this manual in its entirety and keep it handy for further reference.

## PRECAUTIONS

1. Use only household AC power sources. Never use DC power sources.
2. Touching the plug with wet hands risks dangerous electric shocks. Always pull out by the plug and never the cord.
3. Make sure the power consumption to each audio component does not exceed wattage specified. Only connect other audio components.
4. Only let a qualified professional repair or reassemble the equipment. An unauthorized person may touch the internal parts and receive a serious electric shock.
5. Never allow a child to put anything, especially metal into this equipment. A serious shock or malfunction may occur.



# CONTROLS



## 1. TIMER START Switch

REC: Set to this position for absentee recording with a timer.

OFF: Set to this position at all other times when the Timer Start operation is not to be engaged.

PLAY: Set to this position for timed playback with a timer.

## 2. EJECT Button

## 3. Cassette Receptacle

## 4. LED Bar Meters

Show the VU reading for both recording and playback for both channels.

## 5. LEFT → RIGHT RECORDING LEVEL Controls

The outer ring controls the right channel recording input level and the inner knob controls the left channel recording input level. The controls are coaxial therefore they may be adjusted independently or together.

- Coaxial controls and enumerated positions facilitate easy fade-in (gradual increase in volume at the beginning of a musical selection) and fade-out (gradual decrease in volume at the end) recording operations.

## 6. Microphone Jacks (MIC-L: left, MIC-R: right)

Connect one microphone to the left jack for monophonic recording.

- Some models have MONO MIC jack. Connect to this jack for monophonic recording.

## 7. Headphone Jack (PHONES)

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

## 8. DOLBY NR and FILTER Switch

DOLBY NR ON, FILTER OFF

Use for recording and playback with Dolby NR.

DOLBY NR ON, FILTER ON

Use for recording with Dolby NR from FM stereo broadcasts.

DOLBY NR OFF

Use for recording and playback without Dolby NR.

## 9. TAPE SELECTOR

Set to position corresponding to the tape for the correct equalization and bias adjustment.

NORMAL — Normal tapes (Low noise and low noise high output tapes)

CrO<sub>2</sub> — Chrome oxide tapes

METAL — Metal tapes

## 10. TAPE COUNTER and RESET Button

## 11. Operating Buttons

- For stable Timer Start operation, the Operating buttons will not be activated for approx. 5 seconds after the POWER switch has been turned on.

## 12. POWER Switch

## 13. LINE/DIN Selector (Some models do not have this facility.)

LINE: Set to this position for input from LINE IN jacks.

DIN: Set to this position for input from DIN jack.

## 14. LINE IN Jacks (right and left)

## 15. DIN Jack (Some models do not have this facility.)

Can be used instead of the LINE IN and OUT jacks for connection with an external amplifier through a DIN connection cord.

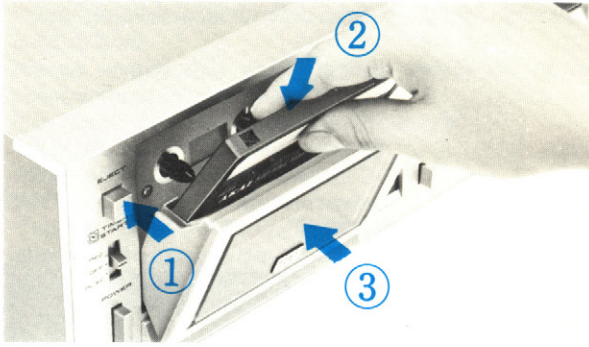
## 16. LINE OUT Jacks (right and left)

## 17. REMOTE CONTROL Jack

Connect the optional Remote Control Unit RC-21 for remote control operation.

- Use only an AKAI recommended connecting cord.

## CASSETTE TAPE



1. Depress the EJECT button to open the cassette receptacle.
2. Insert the cassette with tape facing the heads.
3. Close the lid.

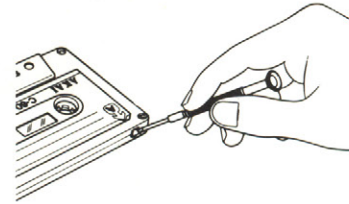
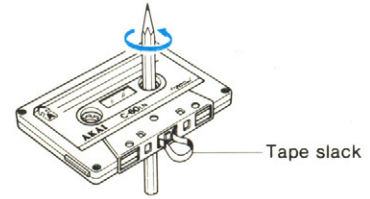
## STANDARD REFERENCE AND RECOMMENDED TAPES

Tape Selector Position	Recommended Tapes	
Normal position	AKAI FUJI MAXELL SCOTCH  TDK	LN FL, FX-I LN, UD*, XL-I Dynarange Master-I D, AD, OD
CrO <sub>2</sub> (CHROME) Position	TDK MAXELL SCOTCH FUJI	SA* XL-II Master-II FX-II
Metal Position	AKAI SCOTCH TDK FUJI	MT, MX Metafine MA*, MA-R METAL

When playing back FeCr tapes, set to CrO<sub>2</sub> position or Metal position.

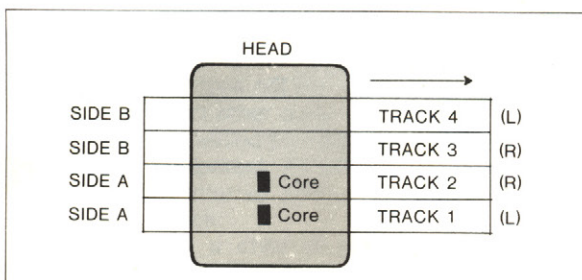
\* C-60 tapes with this mark are the standard reference tapes.

## CASSETTE TAPE CARE



- \* Heads should be kept clean and demagnetized at all times.
- \* Before using a cassette tape, confirm whether tape slack exists. As tape slack causes the tape to twist or tangle around the pinch wheel and capstan, take up slack if necessary.
- \* 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 tape with bent cases should not be used. Such tapes may curl or have greasy places 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.
- \* When using a tape recorded with the Dolby process, it is necessary to set the Dolby NR switch at playback time also. Keep the Dolby NR Switch at OFF position at all times except during recording or playback with Dolby NR.
- \* Cassette tapes are equipped with a break-out tab for both A and B sides. 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



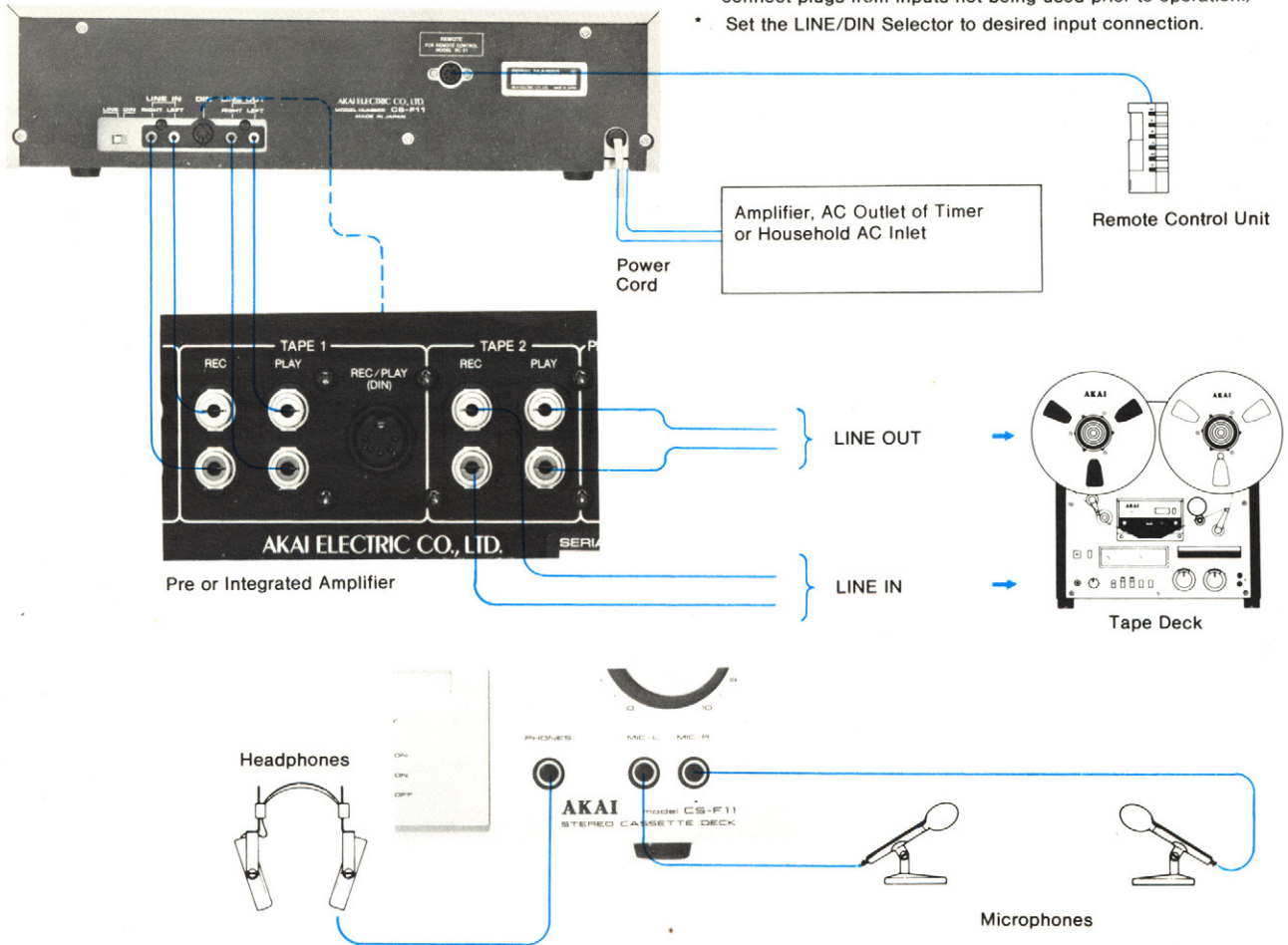
This model employs a 4-track recording/playback system. The first half of the stereophonic recording or playback takes place on tracks 1 and 2. The second half takes place on tracks 3 and 4 after the cassette has been inverted. Recording and playback depends upon the length of the tape (C-30, 30 minutes; C-60, 60 minutes, etc.). Monaural and stereo recorded tapes 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, 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.



# CONNECTIONS

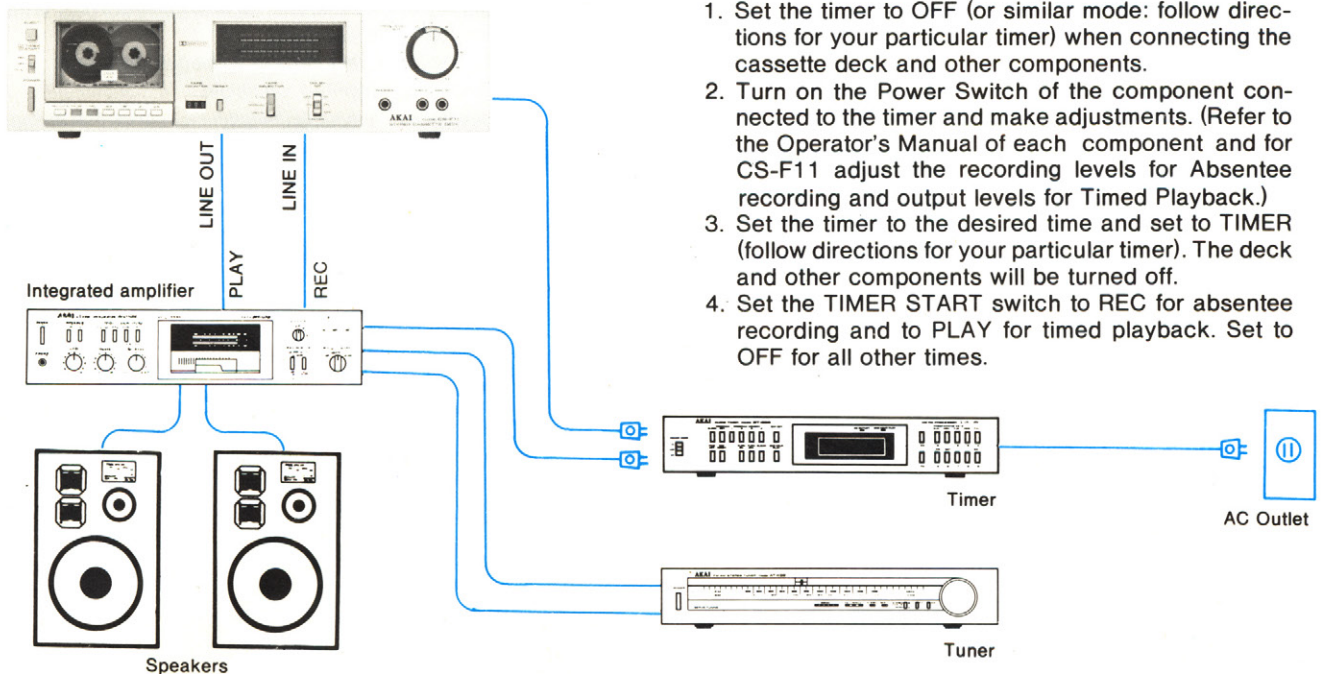
## For Recording and Playback

- Set all the components' power switches to off before connecting.
- When microphones are connected, DIN and LINE inputs are cut. Does not apply to some models.
- To avoid cross-talk, do not operate the machine with input sources connected to both the LINE and DIN input jacks. (Disconnect plugs from inputs not being used prior to operation.)
- Set the LINE/DIN Selector to desired input connection.



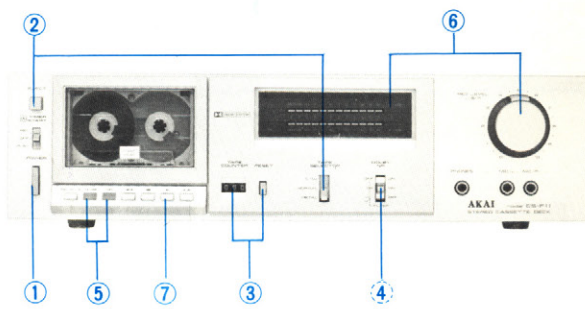
## For Absentee Recording and Timed Playback

1. Set the timer to OFF (or similar mode: follow directions for your particular timer) when connecting the cassette deck and other components.
2. Turn on the Power Switch of the component connected to the timer and make adjustments. (Refer to the Operator's Manual of each component and for CS-F11 adjust the recording levels for Absentee recording and output levels for Timed Playback.)
3. Set the timer to the desired time and set to TIMER (follow directions for your particular timer). The deck and other components will be turned off.
4. Set the TIMER START switch to REC for absentee recording and to PLAY for timed playback. Set to OFF for all other times.



# OPERATIONS

## RECORDING

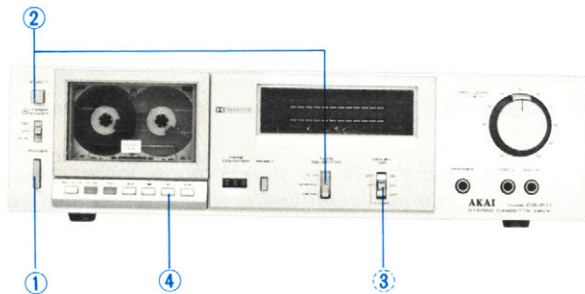


Connect the desired program source to the appropriate inputs as shown in CONNECTIONS FOR RECORDING AND PLAYBACK.

1. Connect the power cord and turn on the POWER switch.
2. Depress the EJECT button and load a tape (new tape gives best results) and set the TAPE SELECTOR to match the tape being used.

3. Depress the RESET button to reset the TAPE COUNTER to "000" for easy tape indexing.
  4. Set the DOLBY NR and FILTER switch if recording with Dolby NR is desired.
  5. Depress the PAUSE and Recording (REC) buttons simultaneously.
  6. Observe the LED Bar Meters and adjust so that the VU levels read up to, but not exceed 0 dB.
  7. When the optimum recording levels have been determined, depress the Play (▶) button to begin recording.
- \* When the REC MUTE button is held depressed during recording, the recording amp circuit will be brought into a NO-SIGNAL mode. No recording will be made on the tape during this period. Convenient for excluding commercials when recording broadcasts and sound of the needle dropping onto the record.
  - \* To momentarily suspend tape travel, depress the PAUSE button. The PAUSE button does not function during Fast Forward or Rewind.
  - \* To stop tape travel during performance, depress the Stop (■) button.
  - \* Automatic Stop will be effected at the end of the tape.

## PLAYBACK

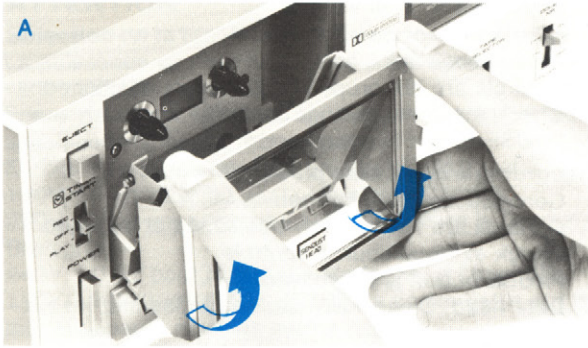


Make the necessary connections for playback as shown in CONNECTIONS FOR RECORDING AND PLAYBACK.

1. Connect the power cord and turn on the POWER switch.
  2. Depress the EJECT button and load a pre-recorded tape and set the TAPE SELECTOR to match the tape being used.
  3. Set the DOLBY NR and FILTER switch to DOLBY NR ON, FILTER OFF if the tape was recorded with the Dolby NR processor.
  4. Depress the play (▶) button to begin playback.
  5. Adjust external amplifier controls.
- \* To advance the tape quickly depress the Fast Forward (▶▶) button.
  - \* To rewind the tape, depress the Rewind (◀◀) button.
  - \* Automatic Stop will be effected at the end of the tape.
  - \* To stop tape travel during performance, depress the Stop (■) button.
  - \* To momentarily suspend tape travel depress the PAUSE button. The PAUSE button does not function during Fast Forward or Rewind.



# MAINTENANCE

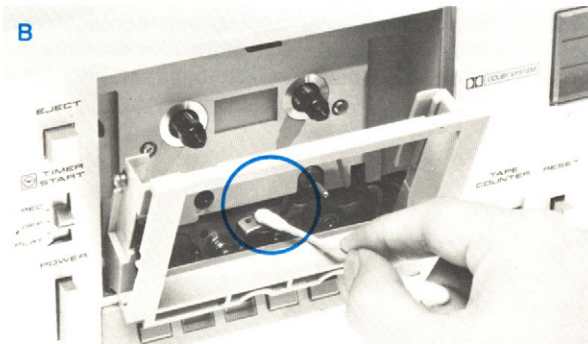


Turn off the POWER switch.

## 1. REMOVING THE RECEPTACLE LID

Depress the EJECT button and remove the cassette tape from the receptacle. The receptacle lid can be removed by pulling both lower ends of the lid toward you. Refer to Figure A.

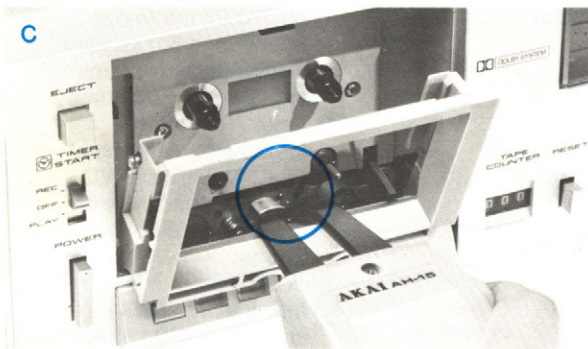
- Be sure to use both hands.



## 2. HEAD CLEANING

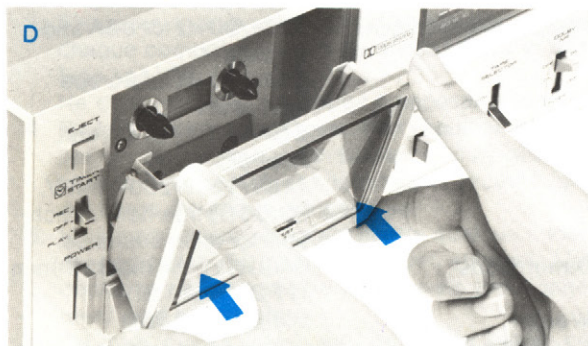
With cassette holder at ejected position, clean the heads with a cotton swab stick which has been dipped in Akai Cleaning Fluid (Akai Cleaning Kit HC-550P). Also clean the pinch wheel, capstan, and other parts over which the tape travels. Refer to Figure B.

- If Akai Cleaning Fluid is not available, use alcohol. Do not use other chemical cleaners as the rubber parts will deteriorate.



## 3. HEAD DEMAGNETIZING

The steel pole pieces which form part of the recording and playback heads become slightly magnetized after several recording and playback hours and as a result, the tape is partially erased at high frequencies. Therefore, head demagnetizing is recommended periodically. Refer to Figure C.



## 4. REPLACING THE RECEPTACLE LID

To replace lid onto holder, hook the upper part of the lid and fit the lower part of the lid onto holder. Refer to Figure D.

- Do not insert cassette tape with receptacle lid off.
- The receptacle lid is properly attached when it is even with the front panel.

## TROUBLE SHOOTING

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.

### Recording 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. Check power cord and Power Switch.
- \* Tape slack. Take up slack as mentioned in "Cassette Tape Care."

### Noisy Sound

- \* Connections are incorrect.
- \* Wrong TAPE SELECTOR position. Position according to the kind of tape being used.
- \* Heads are dirty. Clean following head cleaning instructions.
- \* Heads are magnetized. Demagnetize following head demagnetizing instructions.

### Previous recording will not erase

- \* Erase head dirty. Clean following head cleaning instructions.

### Distorted sound

- \* Recording level is too high.

### Playback cannot be effected

- \* Connections are incorrect.
- \* Controls are not properly adjusted or positioned. Check external amplifier controls.
- \* PAUSE button is depressed.

### Recording will not take place

- \* Connections are incorrect.
- \* Controls are not properly positioned or adjusted. Check external source controls.
- \* PAUSE button is depressed.
- \* Dirty head. Clean following head cleaning instructions.

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.

## TECHNICAL DATA

Track System	4 Track 2 Channel Stereo System
Tape	Philips Type Cassette
Tape Speed	4.76 cm/s $\pm 1.0\%$ (1-7/8 ips. $\pm 1.0\%$ )
Heads	Erase head $\times 1$ Sendust head for recording/ playback $\times 1$
Motors	Electronically speed controlled D.C. motor for capstan drive $\times 1$ D.C. motor for reel drive $\times 1$
Wow & Flutter	Less than 0.04% WRMS, 0.11% (DIN 45 500)
Tape Winding Time	80 sec. using a C-60 cassette tape
Frequency Response	Normal: 30 to 16,000 Hz $\pm 3$ dB (-20 VU) CrO <sub>2</sub> : 30 to 16,500 Hz $\pm 3$ dB (-20 VU) 30 to 8,500 Hz $\pm 3$ dB (0 VU) Metal: 30 to 18,000 Hz $\pm 3$ dB (-20 VU) 30 to 12,500 Hz $\pm 3$ dB (0 VU)
Signal to Noise Ratio	Normal: Better than 58 dB CrO <sub>2</sub> : Better than 60 dB Metal: Better than 60 dB (measured via tape with peak recording level) Dolby NR switch ON: Improves up to 10 dB above 5 kHz

Harmonic Distortion	Normal: Less than 0.8% CrO <sub>2</sub> : Less than 0.7% Metal: Less than 0.7%
Input	MIC: 0.25 mV (input impedance 5.0 kohms) Required microphone impedance: 600 ohms Line: 70 mV (input impedance 47 kohms)
Output	Line: 410 mV at 0 VU Required load impedance: more than 20 kohms Phone: 50 mV/8 ohms at 0 VU
DIN	Input: 2 mV (input impedance 10 kohms) Output: 410 mV Required load impedance: more than 20 kohms
Power Requirements	120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/120V/220V/240V, 50/60 Hz internally switchable for other countries.
Dimensions	440(W)x118(H)x285(D)mm (17.3x4.6x11.2")
Weight	6.8 kg (15.0 lbs)
	* For improvement purpose, specifications and design are subject to change without notice. * "Dolby" and the Double D system are trademarks of Dolby Laboratories. (Manufactured under license from Dolby Laboratories).

## STANDARD ACCESSORIES

Connection Cords	1 set
Operator's Manual	1





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