STEREO RADIO CASSETTE RECORDER
RADIO-MAGNÉTOPHONE À CASSETTE STÉRÉO
RADIO-MAGNETOFONO DE CINTA CASSETTE ESTEREOFONICO
立體聲收音・卡式錄音機
스테레오 라디오 카세트 녹음기

GF-700Z
GF-700ZR
GF-700ZD
GF-700Z(G)

OPERATION MANUAL
MODE D'EMPLOI
MANUAL DE MANEJO
使用説明書
사용 설명서

36W (PMPO) | Double Cassette | High-Speed Dubbing | GRAPHIC EQUALIZER

APLD Auto Program Locate Device | APPS Auto Program Pause Switch | Soft-Touch Soft-Touch Operation | METAL

SHARP

TABLE OF CONTENTS

INDICE

TABLE DES MATIERES

Note for Users in Australia:
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• FM/SW Telescopic Rod Aerial

• Graphic Equalizer Controls
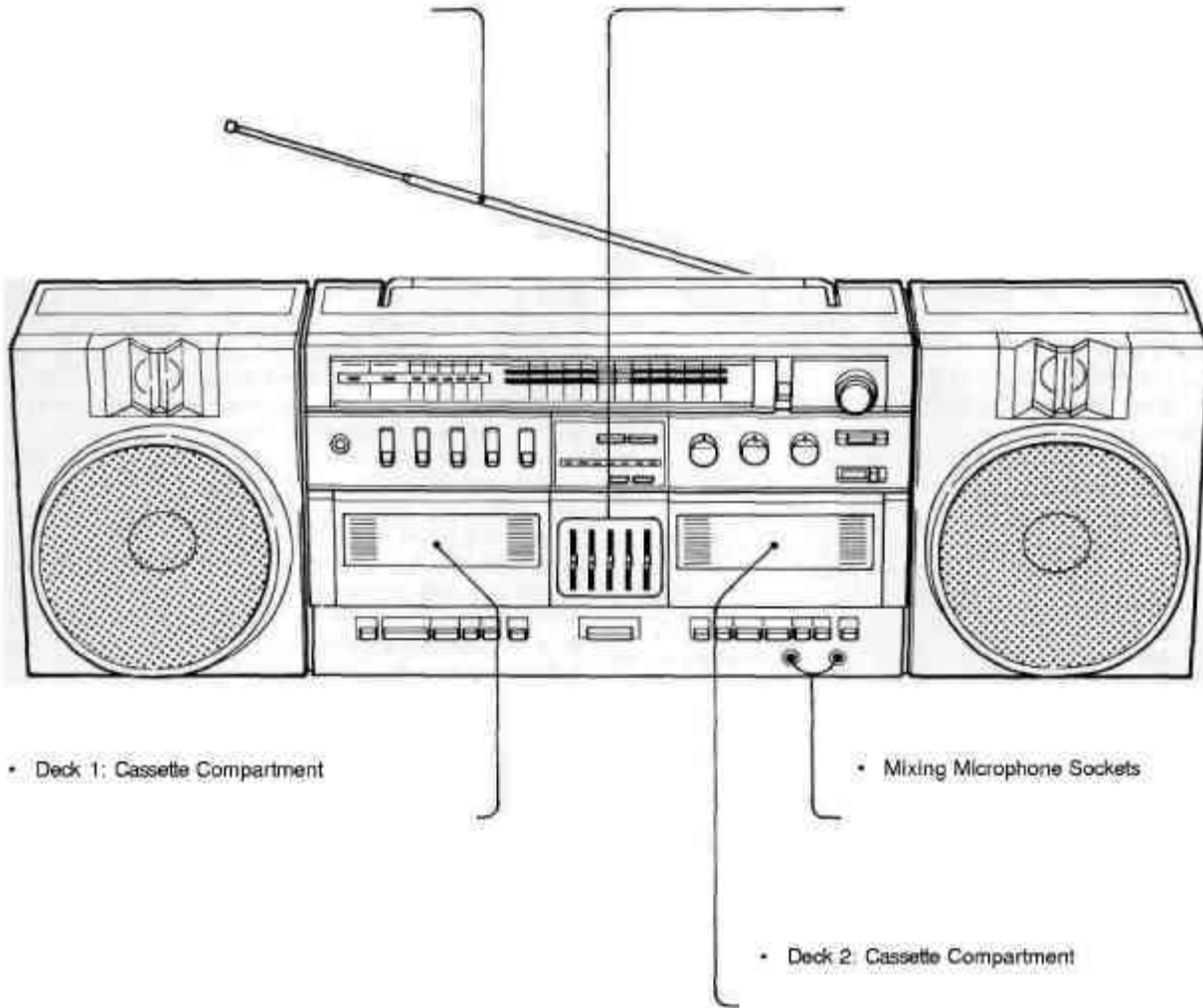
• Deck 1: Cassette Compartment

• Mixing Microphone Sockets

• Deck 2: Cassette Compartment

• Level Meter
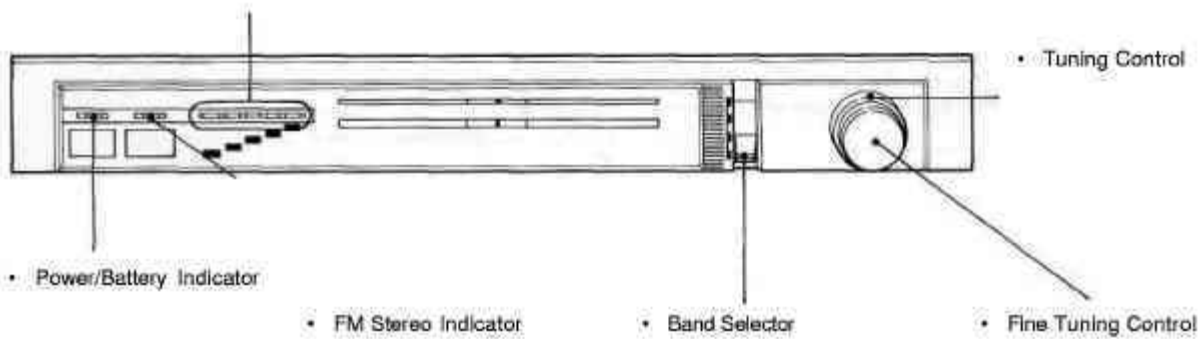
• Tuning Control

• Power/Battery Indicator

• FM Stereo Indicator

• Band Selector

• Fine Tuning Control

- Dubbing Speed/Microphone Switch

- Microphone Selector Switch

- FM Mode Switch

- Deck 2: Tape Selector Switch

- Headphones Socket

- Deck 1: Tape Selector Switch

- Function Switch

- Programme-Set Indicator

- APLD/APPS Set Button

- APPS End-Pause Indicator

- Deck 1: Fast Forward Button

- Deck 1: Pause Button

- Deck 2:

- Deck 1: Rewind Button

- Deck 1: Eject Button

- Deck 1: Play Button

- Deck 1: Stop Button

4

• Deck 2: Record Muting Button

• Dubbing Indicator

• Power Switch

• Tape Counter Reset Button

• Deck 2: Digital Tape Counter

• Volume Control

• Microphone Volume Control

• Balance Control

• APLD/APPS Clear Button

• Deck 2: Rewind Button

Play Button

• Deck 2: Stop Button

• Deck 2: Fast Forward Button

• Deck 2: Pause Button

• Dubbing Start Button

• Deck 2: Eject Button

• Deck 2: Record Button

• Line Output Sockets

• Input Switch

• Beat Cancel Switch

• Earth Terminal

• Speaker Release Knob

• Line/Phono Input Sockets

• External Speaker Socket

• Speaker Lead Holder

• Battery Compartment

For AC voltage level selection, refer to page 7, AC SUPPLY VOLTAGE SELECTOR.

• External DC Power Supply Socket

• AC Power Supply Socket

P R E C A U T I O N S

- Do not expose the unit to temperatures higher than 60°C (140°F). This includes leaving the unit inside closed vehicles, placing it in direct sunlight or in the vicinity of heaters, etc.

- Do not expose the unit to rain or moisture, as this will result in damage to internal circuitry.
- Do not locate or store the unit for extended periods in places with high humidity or high concentrations of dust.

- Do not apply petroleum, any organic solvents, or insecticides to the cabinet surface, as this may result in cracking or other surface damage.
- Do not apply oil to any part of the unit.

- Be sure to hold the AC supply plug — NOT THE LEAD — when removing this plug from the AC outlet. Removing the plug by pulling the lead may result in damaged or broken connections.

- Remove the AC supply lead before servicing or cleaning heads, rollers, etc. Do not remove the unit's cover, as this may result in electric shock. Refer all servicing and repairs to your local SHARP dealer.

P O W E R   S O U R C E

1   AC SUPPLY VOLTAGE SELECTOR

Be sure to check the voltage setting of the voltage selector before connecting AC supply lead plug to the AC outlet. If necessary, adjust the setting as follows:

1. Loosen the securing screw of the supply voltage selector.
2. Slide the panel right or left, until the correct voltage reading is seen on either side.
3. Secure the screw.
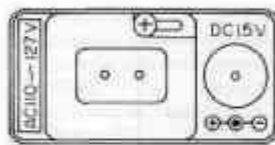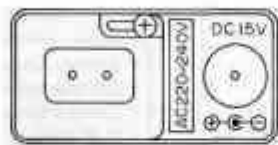
AC 110~127V   AC 220 ~ 240V

- Do not use this unit with AC mains voltages other than those specified, as this may result in damage, fire, etc. SHARP may NOT be held responsible for damage resulting from use of this unit with unspecified voltages.

2   OPERATION FROM AC POWER SUPPLY

Connect the AC supply lead to the unit's AC power supply socket. Next, connect the AC supply lead plug to the AC outlet. Supply is either 110V ~ 127V or 220V ~240V.

- Inserting the AC supply lead into the unit automatically disconnects the batteries. As a result, the AC supply lead must be removed from the unit in order to operate the unit on battery power.
- An AC power supply should be used whenever possible in order to conserve battery power.
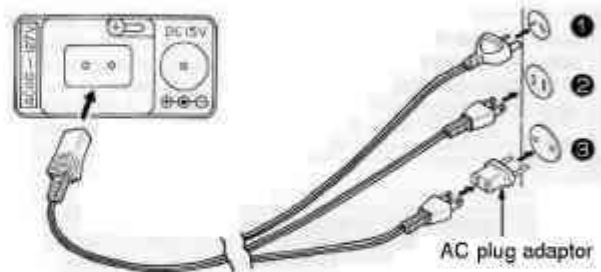
AC plug adaptor

AC PLUG ADAPTOR
The AC plug adaptor can be used when, due to the difference in shapes between the AC wall outlet and the AC supply plug, a direct connection is impossible (See figure 3 at above). The AC plug adaptor is not included in areas where the AC wall outlet and AC supply plug can be directly connected (See figures 1 and 2).

Note for users in Australia:
An AC plug adaptor is not included in units which are supplied with an AC cord fitted with the Australian Standard plug.

Disconnect the AC supply lead plug from the AC outlet when the unit is not in use for extended periods.

3 OPERATION FROM DC POWER SUPPLY: BATTERIES

• Disconnect the AC supply lead and car battery adaptor from the unit.
• Set the POWER switch to the OFF position.

• BATTERY INSTALLATION

1. Please lay the unit face down on a soft cloth so as not to damage the unit.
2. Remove the battery compartment cover.
3. Load ten new batteries (1.5V cell x 10) - UM/SUM-1, R 20, HP-2 or D type — into the compartment.

• Battery polarity and location are shown inside the compartment.

• BATTERY LEVEL CHECK

The POWER/BATTERY indicator shows whether or not the DC power supply is adequate for unit operation.

1. Turn the VOLUME control to the MIN position.
2. Depress the PLAY • button of either Deck 1 or Deck 2.
3. Battery level is adequate if the POWER/BATTERY indicator illuminates. It is inadequate if this indicator is either dim or does not illuminate. In this case new batteries should be installed.

▲ Load these batteries last by pushing them toward the (—) terminal.

4. Replace the battery compartment cover. The unit ready for internal battery power supply operation.
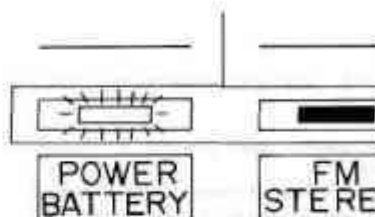
NOTES:

• Remove the batteries when they become weak or when the unit is not in use for extended periods. This will prevent damage to the unit from battery leakage at such times.
• Be sure to keep battery contact parts clean. Dust accumulations between batteries and battery terminals may result in imperfect contacts, and may even prevent the unit from operating.

• When batteries are weakened, recording sometimes becomes impossible, even though radio broadcasts may be audibly received. Batteries should be replaced at once.

4 OPERATION FROM DC POWER SUPPLY: CAR BATTERY

DC 12V (cigarette lighter socket)

AD-118N
Car battery adaptor
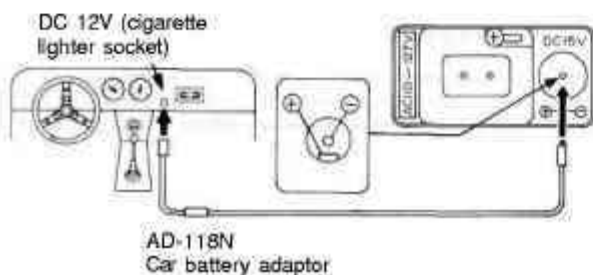
This unit can be operated in cars with a DC 12V battery and a negative ground. For this purpose, use only SHARP AD-118N car battery adaptor (optional accessory).

Attach the car battery adaptor as shown at left.

• Use of external DC power source will automatically disconnect the internal batteries.

SPEAKER BOX

• HOW TO MOUNT SPEAKER BOXES

Insert the four fittings on the speaker box into the holes on the unit as shown on the diagram, and push down the box to let it lock automatically.
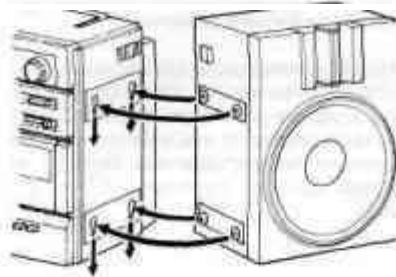
• HOW TO DISMOUNT SPEAKER BOXES

To unlock the speaker, slide the speaker release knob on the back of the speaker box in the direction as shown, and then lift the box slightly to remove it from the main unit while holding the speaker release knob.
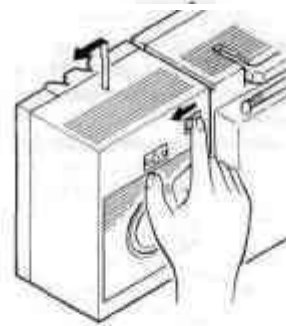
• HOW TO TAKE OUT AND STORE THE SPEAKER LEAD-

To Take Out:

1. Unwind the speaker lead so that it reaches the external speaker socket.
2. After threading the lead neatly through the groove for the speaker lead, connect the plug to the external speaker socket.
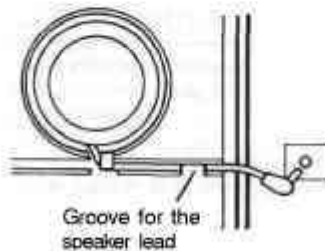
To Store:

Disconnect the plug from the external speaker socket, and wind the lead on the speaker lead holder.

When storing the speaker lead, wind it tightly on the holder. If wound loosely, the lead may not be stored completely on the holder.

Groove for the speaker lead

• How to use speakers separated from the unit

• After extending the desired length of the speaker lead, connect the plug to the external speaker socket.
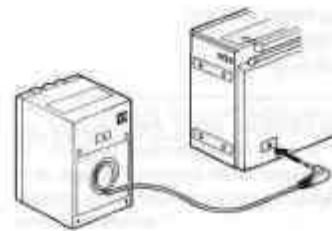
• CORRELATION BETWEEN SPEAKERS AND UNIT

• The speakers'maximum input power is 10W. If you intend to use this speaker system with an amplifier which is not part of this system, do not connect the speakers to an amplifier with a maximum output power of more than 10W, as this may cause damage to the speaker.

• If you wish to connect any of the speakers currently being sold on the market to this unit, please select speakers with at least 3.2 ohms impedance. Connecting speakers with less than 3.2 ohms impedance to the unit may damage the electric circuitry in the amplifier section of the unit.

9

HOW TO ADJUST SOUND

• VOLUME, BALANCE AND MIC VOLUME CONTROLS
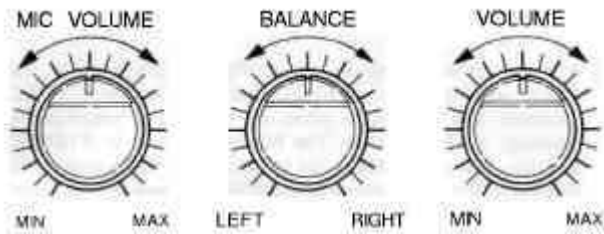
VOLUME CONTROL:
Turn the VOLUME control to adjust sound to the desired level. Turning the VOLUME control to the right increases the volume.

BUILT-IN LOUDNESS CIRCUIT:
When listening to the radio or a tape at low volume settings, the built-in loudness circuit is activated to compensate for bass and treble deficiencies.

BALANCE CONTROL:
Controls the balance of right and left speaker volume.

MIC VOLUME CONTROL:
Turn the MIC VOLUME control to adjust the microphone level. Turn the MIC VOLUME control to the right to increase the microphone level.

• GRAPHIC EQUALIZER CONTROLS
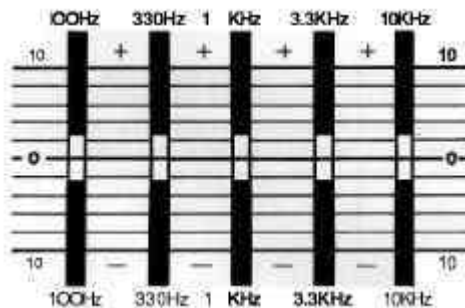
Graphic equalizer is a device by which you can change tone quality of a sound by compensating its frequency characteristic. This tape recorder is equipped with five controls to cover five different frequency ranges: 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, and 10 kHz. By controlling the levels of each range, sounds in any frequency characteristics desired may be reproduced by this tape recorder.

• Slide a control knob of a specific range upward (toward + 10 position) to emphasize the sounds in that particular range.
• Slide a control knob of a specific range downward (toward — 10 position) to diminish the sounds in that particular range.
• By setting all GRAPHIC EQUALIZER controls to the centre position (0), the frequency responses will become flat.

100 Hz
This is the sound range that will bring out the fascinating bass sounds of such instruments as bass guitars or drums. Slide the control knob upward and a more composed and massive sound quality will be obtained. If the reproduced sounds are opaque or cloudy in the lower frequencies, slide the knob downward and more clear-cut sounds will be obtained.

330 Hz
This is the range that covers human voices and basic sounds of music. Slide the knob upward and human voices will be emphasized with a more punch put into.

1 kHz
This range affects the middle register which is higher than the 330 Hz range. By sliding the knob upward, sounds from a piano or brass instruments, or high human voices will be emphasized with full life.

3.3 kHz |
Sound in this range are stimulative to human ears. Slide the knob upward and sounds from string instruments will be reproduced to give a brilliant and spirited feeling. When the reproduced sounds are too poignant to your ears, slide the knob downward so that milder and mellower sounds will be reproduced.

10 kHz
The clear sonance of the upper register of cymbals and triangles is emphasized by sliding this knob upward. Slide the knob downward to reduce tape hiss noises.

RADIO OPERATION
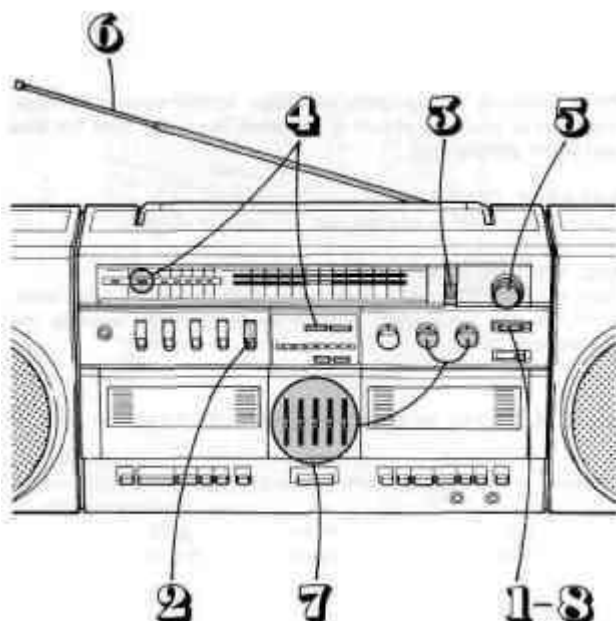
1. Set the POWER switch to the ON position. The POWER/BATTERY indicator will illuminate.

2. Slide the FUNCTION switch to the RADIO position.

3. Slide the BAND selector to the FM, AM, SWI or SW2 position.

4. With the BAND selector in the FM position, set the FM MODE selector to the STEREO position. The FM STEREO indicator will illuminate when an FM stereo broadcast is received. Even with the FM MODE selector in STEREO position, mono broadcasts can be received if the broadcasting station is not transmitting a stereo programme at that time. If stereo reception is unsatisfactory, set the FM MODE selector to the MONO position.

5. Rotate the TUNING control in the appropriate direction until the desired broadcast is received. FINE TUNING control functions only for SW1 and SW2 bands.

6. Adjust the aerial appropriately to obtain best reception on the band selected. (See below for more detailed instructions on adjusting the aerial).

7. Adjust volume and sound quality (refer to instructions on page 10).

8. Set the POWER switch to the OFF position to terminate radio operation and extinguish the POWER/BATTERY indicator.

For receiving FM broadcasts	For receiving AM broadcasts	For receiving SW1 or SW2 broadcasts
Raise and extend the telescopic rod aerial. Adjust the position and length of the aerial until FM broadcast reception signal is at peak strength.	Rotate or locate the unit to receive peak signal strength of the AM broadcast.	Raise and extend the telescopic rod aerial vertically to its full length.

CASSETTE RECORDER OPERATION

1 CASSETTES

• CASSETTE TAPE SELECTION

The quality and condition of the cassette tapes used will have a direct effect on the performance of this unit.

Low quality tapes tend to break and stretch, and a broken tape can easily become entangled in the drive mechanism, causing major damage. Stretched tapes will run at uneven speeds and will distort anything recorded on them.

• Use only well-known brands of tape.

• Use of C-120 (120 minutes) cassettes is not recommended. The extreme thinness of this tape may result in breakage or other problems.

• Check to ensure there are no loose layers of tape visible through the cassette centre window. Tighten these loose layers with a pencil or ball-point pen before inserting the cassette into the unit.
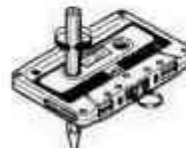
• PROTECTION AGAINST CASSETTE TAPE ERASURE

All cassette tapes are provided with tabs which, when in place, allow tape erasure to be performed. If these tabs are removed, the tape cannot be erased (The REC • button of Deck 2 cannot be depressed.) To protect the A (or "1") side of cassette tape, break off the A side tab with a screwdriver. Follow the same procedure for B (or "2") side.

The tape can be re-recorded or erased by covering the tab holes with plastic tape.

Cassette tape with side "A" uppermost.

Screwdriver

Side "A" protection tab

Side "B" protection tab

• NOTES FOR STORING CASSETTE TAPES

1. Do not locate cassettes near objects with a strong magnetic field, such as radios, TV sets or loudspeakers. Magnetic fields may reduce the tape sensitivity or even erase the recording.
2. Do not store cassettes for extended periods in hot, moist or dusty location.

• LOADING AND UNLOADING THE CASSETTE TAPES

• Stop the tape before opening the cassette compartment.

The unit's tape recorder is equipped with two decks. Deck 1 may be used for playback with APLD/APPS operation (not for recording). Deck 2 may be used for normal playback and recording purposes.

LOADING

1. Depress the EJECT ▲ button of Deck 1 or Deck 2, respectively.
2. Load the cassette tape into the compartment so that the title of the tape track to be used is facing outwards.
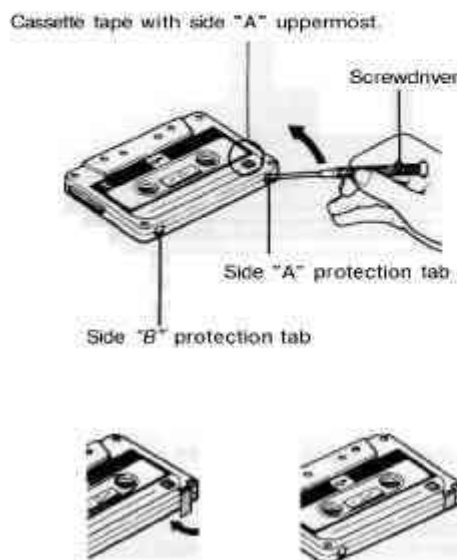3. Close the compartment lid.

Full reel
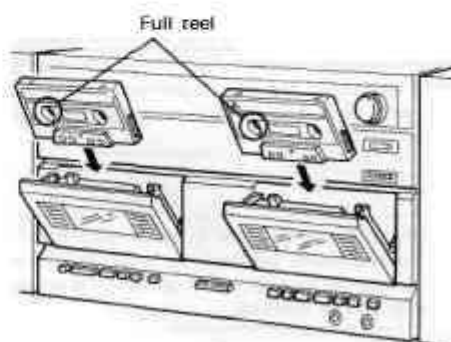
UNLOADING

Depress the EJECT ▲ button and remove the tape.

2 TAPE SELECTOR SWITCHES

The unit is furnished with independent TAPE SELECTOR switches for Deck 1 and Deck 2, respectively.

According to the deck to be used, the designated switch should be set to the proper position before beginning playback or recording, in order to match the bias and equalization circuits with the cassette tape being used.

• Refer to the following chart, and set the switch to the appropriate settings.

Type of tape	Deck 1: Tape Selector	Deck 2: Tape Selector Playback	Recording
Normal (low noise) tape	NORMAL	NORMAL	NORMAL
Chrome tape	METAL/CrO2	CrO2	CrO2
Ferri-Chrome tape	METAL/CrO2	CrO2	NORMAL
Metal tape	METAL/CrO2	METAL	METAL

3 FAST FORWARD/REWIND

· Depress the STOP · button if the recorder is in a mode other than neutral.

· For fast forward winding or rewinding of short sections of the tape, the cue or review function may be used, respectively. Refer to instructions "CUE AND REVIEW (SKIPPING)" on page 14.

Fast Forward
Depress the F FWD ·· button of Deck 1 or Deck 2 for fast forward winding of the tape.
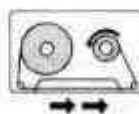
Rewind
Depress the REW ◄◄ button of Deck 1 or Deck 2 to rewind the tape.
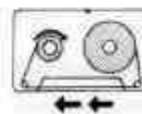
4   PLAYBACK

· With this unit it is possible to perform either individual playback with Deck 1 or Deck 2, or simultaneous playback with Decks 1 and 2.

When playing a tape with Deck 1, set the DUBBING SPEED switch to the NORMAL position. At HIGH SPEED position, the equalizer circuit for high speed operation is activated and the high range will be lowered.

· Since treble is emphasized on tapes recorded with the Dolby NR system, for playback of such tapes with this unit, lowering treble slightly with the GRAPHIC EQUALIZER controls makes for easier listening.

1 Set the POWER switch to the ON position.

2 Slide the FUNCTION switch to the TAPE position.

3 Load a pre-recorded cassette into the cassette compartment (refer to instructions on page 12).

4 Set the TAPE SELECTOR switches to the proper position (refer to instructions on page 12).

5 INDIVIDUAL PLAYBACK
Depress the PLAY · button of Deck 1 or Deck 2 to begin playback.

SIMULTANEOUS PLAYBACK
Depress the PLAY · buttons of Deck 1 and Deck 2 simultaneously.
The stereo audio reproduction from the cassette tapes on Deck 1 and Deck 2 will be heard mixed respectively from the speaker's output — right channel and left channel.

6 Adjust volume and sound quality (refer to instructions on page 10).

7 Depress the PAUSE II button to discontinue playback temporarily. The tape will stop at the point where this button is depressed. The playback will be resumed from this point when the PAUSE II button is depressed a second time.

8 To listen to the reverse side of the tape, unload the cassette, reverse it and reload it in the cassette compartment.

After use, depress the STOP · button to return the unit to the neutral mode, and set the POWER switch to the OFF position.
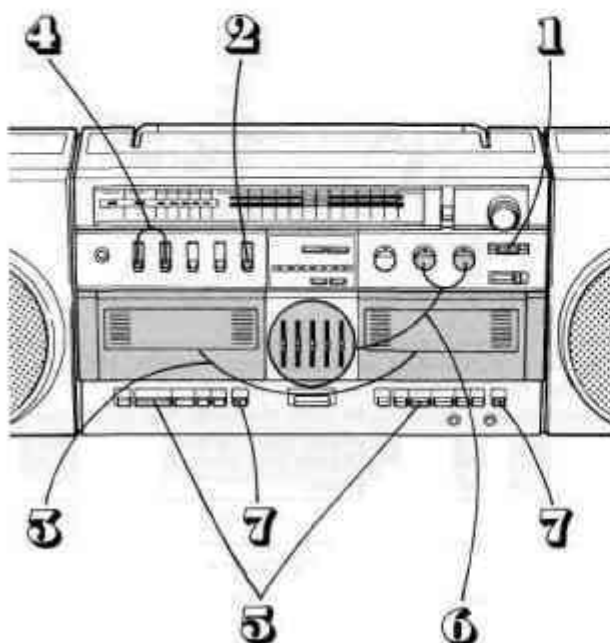
• CUE AND REVIEW (SKIPPING)

CUE

During playback on Deck 2, depress the F FWD •• button for fast forward winding of short sections of the tape.
Fast forward will continue as long as the button is depressed, and playback will resume from the point at which this button is released.
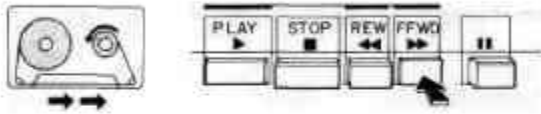
REVIEW

During playback on Deck 2, depress the REW ◄◄ button to rewind short sections of the tape.
Rewind will continue as long as this button is depressed, and playback will resume from the point at which this button is released.

• FULL AUTO STOP SYSTEM

When the end of the tape is reached while the unit is operating in the recording, playback, fast forward, rewind or APLD mode, the full auto stop system is activated and automatically puts the unit into the neutral (stop) mode.

The automatic stop mechanism may not operate when the unit is using a DC power supply (batteries) and the battery level is inadequate.

• HOW TO STOP TAPE

To stop the tape when the unit is in the recording, playback, fast forward, rewind or APLD mode, depress the STOP • button.

• MODE SELECTION

Before changing from one mode to another while the unit is operating in the recording, playback, fast forward or rewind mode, be sure to first depress the STOP • button. For APLD operation, however, it is not needed to depress the STOP • button in advance: to start it, depress the F FWD ►► or REW ◄◄ button when the PLAY • button is being depressed.

• NOTE FOR SOFT-TOUCH MECHANISM

When the batteries are too weak, the unit will not function by depressing the PLAY • button or REC • button and it is then not possible to return the PLAY • button or REC • button completely by depressing the STOP • button.
In that case, change the batteries or use an AC supply lead without opening the cassette compartment.

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5   APLD (Auto Program Locate Device)/APPS (Auto Program Pause System)

INTRODUCTION

SHARP has solved one of the main drawbacks of cassette play in comparison with record play:
That of finding the beginning or end of a selection.
To eliminate the need for trial, error and delay, APLD/APPS was developed to automatically scan a tape for the blank space between recordings, and to either start playback from the beginning of the recording following this space, or stop temporarily at the end of the selection in playing back. APLD/APPS is available only on Deck 1.

Forward APLD

Performs fast forward winding to programmed spaces, and starts playback from the beginning of the selections following these spaces.
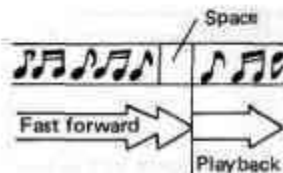
Reverse APLD

Rewinds to programmed spaces, and starts playback from the beginning of selections following these spaces.
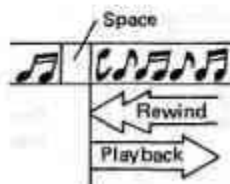
APPS

Performs playback to programmed spaces, and automatically stops the tape when the end of the selections before these spaces is reached.
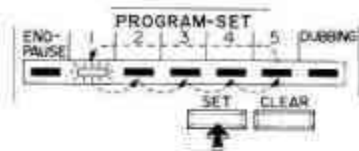
PROGRAM-SET

• Depressing the APLD/APPS SET button once will cause the APLD/APPS PROGRAM-SET indicator to advance from " 1 " by one, as far as "5", at which point the indicator will return to " 1 ". The progression is as follows: "1 → 2 → 3 → 4 → 5 → 1 → 2

• When depressing the APLD/APPS CLEAR button, the APLD/APPS PROGRAM-SET indicator will be turned off.

• The APLD/APPS can only accommodate numbers up to 5. To locate selections separated by more than 5 spaces, have the APLD/APPS locate the fifth space, then reactivate for the additional number of spaces necessary to reach the desired selection.

• You can change the APLD numbers while APLD is functioning.

1 Count the number of blank spaces (musical gaps) on the tape between the current tape position and the desired selection.

2 Enter that number into memory by depressing the APLD/APPS SET button the same number of times. The corresponding APLD/APPS PROGRAM-SET indicator will illuminate. The APLD/APPS PROGRAM-SET indicator shows the number of programmes the APLD/APPS will skip.
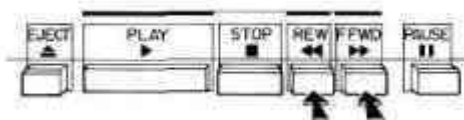
• It is necessary to enter the APLD number only when wishing to skip more than one space on the tape. It is not necessary to use the APLD to repeat the current selection or skip ahead to the next selection.

• When depressing the PAUSE II button or STOP • button after setting the APLD/APPS music numbers, the numbers will decrease by one number. In case only one music number is set, the END-PAUSE indicator will illuminate. While the END-PAUSE indicator is illuminated, Deck 1 and Deck 2 do not function, therefore, release the END-PAUSE function by depressing the APLD/APPS CLEAR button.

3 Depress the F FWD • • button or REW ◄◄ button.

4 When Deck 1 reaches the desired space between selections, it will automatically release the F FWD • • button or REW ◄◄ button and start playback of the desired selection.

APLD Pause Control:
If it is desired to stop the tape at the beginning of the selection, depress PAUSE II button prior to performing the above operations.

EXAMPLE To skip three selections in the forward direction and start playback automatically from the beginning of the fourth selection:

The APLD/APPS PROGRAM-SET indicator " 1 " extinguishes.

Deck 1 returns to playback mode.

Depress the APLD/APPS SET button three times, causing the APLD/APPS PROGRAM-SET Indicator " 3 " to illuminate. Next, depress the F FWD • • **button.**
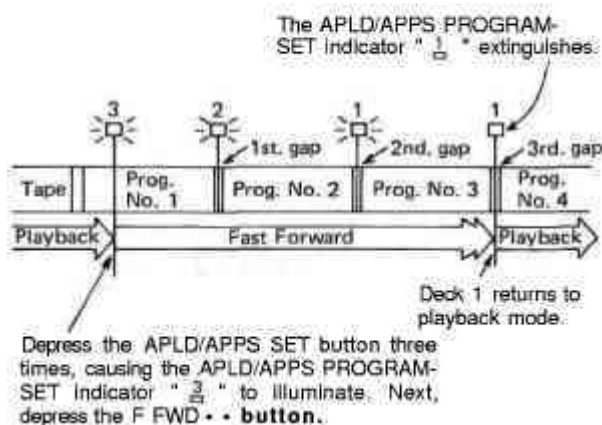
EXAMPLE To skip three selections in the reverse direction and start playback from the beginning of the third selection:

The APLD/APPS PROGRAM-SET indicator " 1 " extinguishes.

Deck 1 returns to playback mode.

Depress the APLD/APPS SET button three times, causing the APLD/APPS PROGRAM-SET Indicator " 3 " to illuminate. Then depress the REW ◄◄ button.
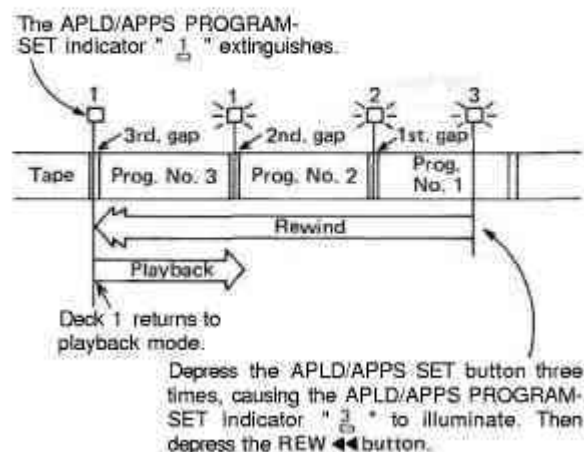
•APPS OPERATION

At times of simultaneous playback, or dubbing from Deck 1 to Deck 2, activating the APPS function will stop tape motion on both decks.
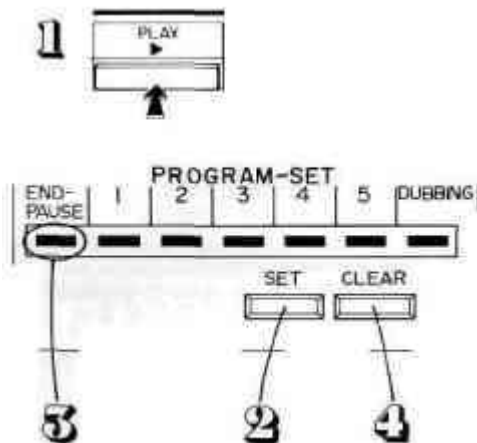
1 Depress the PLAY • button of Deck 1 to start playback.

2 Count the number of selections to be played back, and enter that number into memory by depressing the APLD/APPS SET button the same number of times. The corresponding APLD/APPS PROGRAM-SET indicator will illuminate.

As spaces are passed during playback, the indicator will show the number of selections remaining to be played.
• You can change the APPS numbers while APPS is functioning.

3 When the end of the last selection is reached, the tape will stop automatically, and the END-PAUSE indicator will illuminate. At this time, the PLAY • button will not disengage.

• When the music is gradually faded out, the APPS may be activated before the end of the music.

4 Depress the APLD/APPS CLEAR button to disengage the APPS function, and resume playback from that point.

CAUTION:
Do not allow the APPS function to remain engaged for extended periods as it may damage the tape or pinch roller. When playback shall not be continued, be sure to depress the STOP • button to stop the playback function, and also depress the APLD/APPS CLEAR button.

• NOTES ON APLD/APPS OPERATION

1. The APLD/APPS may not function perfectly at all times with tape containing the following characteristics:
   a. The recorded signal on the tape is of an intermittent nature (speech, music with silent passages etc.).
   b. The recorded signal on the tape contains soft classical music, solo performance, modern jazz, etc.
   c. The recorded signal on the tape is of low strength.
   d. The recorded programme items are separated by less than a three second gap (during which there occurs no signal).
   e. The recorded programme items are separated by gaps which are not free of noise or stray signals.
2. If the APLD/APPS function is activated near the end of a selection, one programme may be skipped. Check by watching the APLD/APPS PROGRAM-SET indicator as it is displayed.
3. Avoid locating the unit in the vicinity of powerful magnetic fields, such as those generated by TV sets, dynamos or other electrical appliances.
4. When the APLD is functioning (searching for a programme item in either forward or reverse), the speakers may emit a slight high-pitched sound. This is not due to any malfunction of the unit, and does not present need for alarm.

•APLD/APPS SPACING

In order for the APLD/APPS to operate correctly, there must be a space of at least 4-second duration between each item on the tape. In order to edit space (non-signal space) on tapes, follow the instructions below.

1. Press the REC MUTE button (for about 5 seconds) during recording at a point suitable for selection editing.

• Since the REC MUTE button cannot be locked into place, it is necessary to keep this button pressed for the entire duration of editing time.

2. After sufficient editing time has elapsed, depress the PAUSE II button of Deck 2 before releasing the REC MUTE button.
3. Release the REC MUTE button. The space is now edited onto the cassette tape recording.
4. Depress the PAUSE II button a second time to release it and begin recording of the next selection.

5. Perform steps 1 — 4 to edit spaces between selections so that the tape may be used for future APLD/APPS operation.

- Since recording is possible only with Deck 2, the following instructions are relevant to that deck alone.
- When recording important selections, be sure to make a preliminary test to ensure that the desired material is being properly recorded.

(Rear Panel)
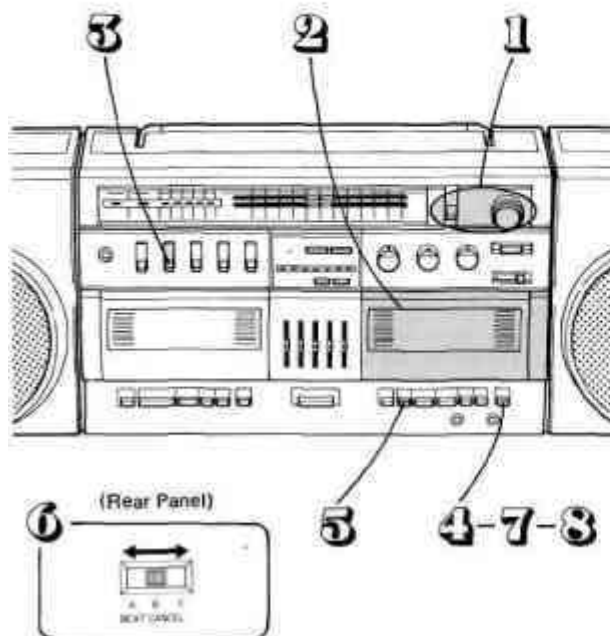
1 Tune to the desired station (refer to instructions on page 11).

2 Load a cassette into the Deck 2 cassette compartment (refer to instructions on page 12). Make sure that the protection tabs are intact (refer to page 12).

3 Set the TAPE SELECTOR switch of Deck 2 to proper position. Refer to the chart on page 12 to determine the proper (tape) setting.

4 Depress the PAUSE II button.

5 Depress the REC • button. This will also engage the PLAY • button.

6 When AM, SWi or SW2 radio reception is hampered by interference, slide the BEAT CANCEL switch on the back of the unit to one of the positions A, B, or C, by which the interference will be reduced most.

7 Depress the PAUSE II button a second time to release it and begin recording.

8 Depress the PAUSE II button to temporarily discontinue recording. The tape will stop at this point. To resume recording from the same point, release the PAUSE II button by depressing it a second time.

- The VOLUME and GRAPHIC EQUALIZER controls may be adjusted with no effect on the recording level input signal.

All buttons will be released automatically when the end of tape is reached. However, radio reception will continue uninterrupted. If it is desired to turn off the radio at this time, set the POWER switch to the OFF position.

• DIGITAL TAPE COUNTER
Press the button at the side of the counter to reset to "000". The counter will advance while recording or playback is in progress. These readings provide a useful reference during recording and playback.
The tape counter functions only with Deck 2.

• ALC (Automatic Record Level Control) CIRCUIT
The ALC circuit automatically controls the level of input signal strength used for recording.

• ERASING RECORDED TAPES
Previously recorded material will be erased automatically whenever new material is re-recorded onto the tape. If it is desired to erase a previously recorded tape without recording over it, follow the instructions below.

- Before starting erasure, check to ensure that Deck 1 is in the neutral mode.

1. Load the tape to be erased into the cassette compartment.
2. Slide the FUNCTION switch to the TAPE position.
3. Slide the DUBBING SPEED/MIC switch to the NORMAL/OFF position.

4. Depress the REC • button. This will automatically engage the PLAY • button and begin erasing the tape.
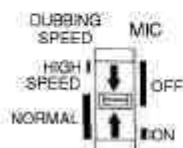
For erasure of shorter tape segments, use the REC MUTE button during recording.

7 DUBBING FROM DECK 1 TO DECK 2

- The unit's dual deck system permits dubbing operations without the use of another tape deck. Dubbing is performed from Deck 1 onto Deck 2.
- Normal-speed dubbing as well as high-speed dubbing may be performed with this unit.

- Do not connect any microphones to the MIXING MIC sockets during dubbing.
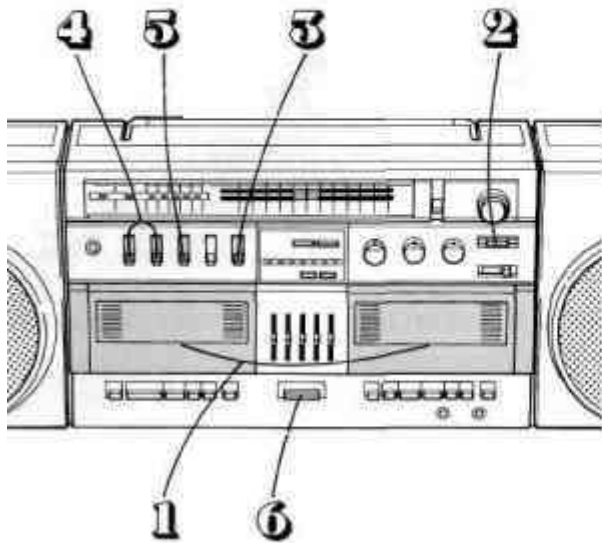- Do not change the setting of the DUBBING SPEED switch during dubbing.

1 Load a pre-recorded cassette tape into the cassette compartment of Deck 1, and a cassette tape suitable for recording into the cassette compartment of Deck 2.

2 Set the POWER switch to the ON position.

3 Slide the FUNCTION switch to the TAPE position.

4 Slide the TAPE SELECTOR switches of Deck 1 and Deck 2 to their respective proper positions (refer to chart on page 12).

5 Slide the DUBBING SPEED/MIC switch to either the NORMAL/OFF or HIGH SPEED/OFF position.
The NORMAL/OFF position permits dubbing to be performed at normal speed.
The HIGH SPEED/OFF position permits dubbing at twice normal speed.

6 Depress the DUBBING START button. The PLAY · button of Deck 1 and REC · button, PLAY · button of Deck 2 are automatically depressed.

• APLD/APPS DUBBING

Dubbing may also be performed in cases where it is desired to dub only certain selected material. In such cases the beginnings of the desired selections may be easily found by using the FORWARD APLD, REVERSE APLD or APPS functions.
Perform APLD/APPS dubbing according to the following instructions.
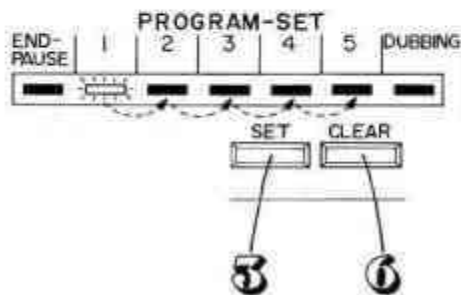
1 Perform steps 1 ~5 of DUBBING FROM DECK 1 TO DECK 2 to prepare the unit for dubbing.

2 Locate the beginning of desired selection by using the APLD (refer to page 15).

3 Set the desired number of selections to be dubbed with the APLD/APPS SET button (refer to instructions on page 16).

4 Depress the DUBBING START button.
- Upon conclusion of dubbing of the preset selections, the END-PAUSE indicator illuminates, and the tapes on Deck 1 and Deck 2 will simultaneously stop.

5 Depress the STOP · buttons on both decks.

6 Depress the APLD/APPS CLEAR button.

7 To perform dubbing of subsequent selections, repeat steps 1~6.

NOTES ON USING MICROPHONES

- Avoid feedback by separating external microphones from speakers or by reducing volume.

- Stereo microphones should have an impedance of 400 ohms to 3 kohms and be equipped with a plug 6.3mm in diameter.

1 RECORDING FROM AN EXTERNAL MICROPHONE

- Check to ensure that Deck 1 is in the stop mode.
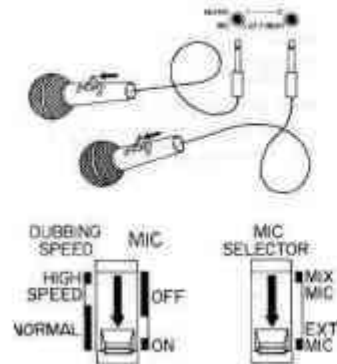
1 Connect two microphone plugs to the MIXING MIC right-hand socket (RIGHT) and the MIXING MIC left-hand socket (LEFT).
   Note: In the event that a microphone is connected only to the right or left socket, sound from the microphone will issue from that channel alone.

2 Slide the DUBBING SPEED/MIC switch to the NORMAL/ON position.

3 Slide the MIC SELECTOR switch to the EXT MIC position.

4 Perform steps 2 to 5, and step 7 of "RECORDING FROM THE BUILT-IN RADIO" on page 17.

2 MIXED PLAYBACK AND RECORDING

The unit can mix the output of a microphone with the playback (Deck 1 or Deck 2), the built-in radio, or other external audio equipment connected to the LINE IN/PHONO sockets.

- When mixing, microphone sound is monaural.

A. MIXED PLAYBACK WITH DECK 1

1 Set the POWER switch to the ON position.

2 Slide the FUNCTION switch to the TAPE position.

3 Slide the DUBBING SPEED/MIC switch to the NORMAL/ON position.

4 Slide the MIC SELECTOR switch to the MIX MIC position.

5 Connect the external microphone to either MIXING MIC socket (1 or 2).

   Note:
   In cases where it is desired to perform mixing with two microphones, connect microphone plugs to sockets 1 and 2, respectively.

6 Perform playback operations for Deck 1 (refer to instructions for "PLAYBACK" on page 13).

7 To adjust microphone volume, turn the MIC VOLUME control to a suitable level while speaking into the microphone.

TO RECORD

8 Perform recording operations with Deck 2 (refer to instructions for "RECORDING FROM THE BUILT-IN RADIO" on page 17).
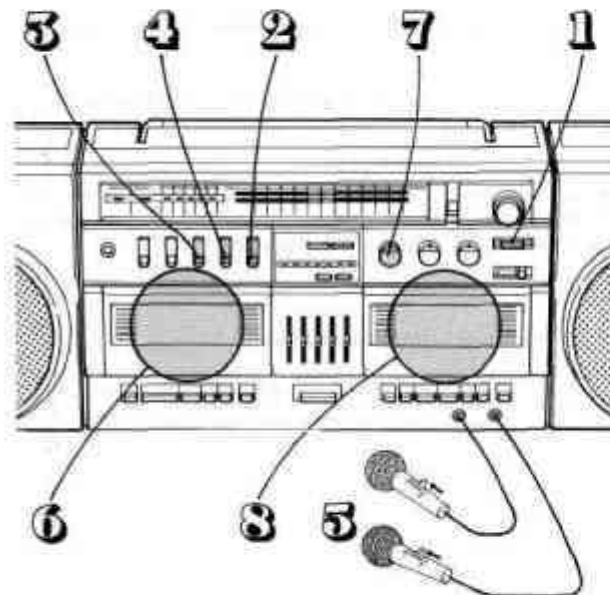
CAUTION:
When performing operations other than mixing, set the MIC VOLUME control to the MIN position.

By activating the APPS operation, it is possible to stop the tape automatically at the end of a specified selection (refer to instructions for APPS OPERATION on page 16).

B. MIXED PLAYBACK WITH THE BUILT-IN RADIO OR OTHER AUDIO EQUIPMENT CONNECTED TO LINE IN/PHONO SOCKETS.

1. Set the POWER switch to the ON position.

2. For mixing with the built-in radio, slide the FUNCTION switch to the RADIO position. For mixing with other audio equipment, slide this switch to the LINE IN/PHONO position.

3. Perform steps 3 — 5 on page 19.

4. Tune in the desired radio broadcast (refer to page 11) or activate the external audio equipment.

5. To adjust microphone volume, turn the MIC VOLUME control to a suitable level while speaking into the microphone.

TO RECORD

6. Perform recording operations with Deck 2 (refer to instructions for "RECORDING FROM THE BUILT-IN RADIO" on page 17).

3 MULTI-RECORDINGS

Multi-recording is a method for superimposing voice and other sounds onto the original sound track by means of repeated mixing and dubbing.

1. Load recorded tape into Deck 1 and unrecorded tape into Deck 2.

2. Begin dubbing from Deck 1 onto Deck 2.
   (Refer to the instructions "DUBBING FROM DECK 1 TO DECK 2" on page 18.)
   While dubbing is in progress, other sounds or selections may be recorded using a mixing microphone.
   (Refer to the instructions "MIXED PLAYBACK AND RECORDING" on page 19.)

3. Load the mixed recording tape from Deck 2 into Deck 1, and a blank tape into Deck 2.

4. Multi-recording may be performed by repeating steps 2 and 3, above.

USE WITH EXTERNAL UNITS
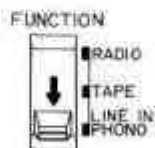
1 CONNECTING AN EXTERNAL RECORD PLAYER

Since this unit contains an internal phono equalizing circuit, it can be used only with record players using magnetic cartridges which produce quality sound signals. Players with ceramic or crystal cartridges are not suitable for use with this unit.

• Since feedback (howling) may result if the unit and record player are placed in close proximity, they should be separated when in use to prevent such an occurrence.

1. Connect the output leads of the magnetic cartridge record player (optional extra) to the LINE IN/PHONO sockets of the unit. If the record player is equipped with an earth lead (or terminal), connect it to the GND (PHONO) terminal of the unit.

Earth lead
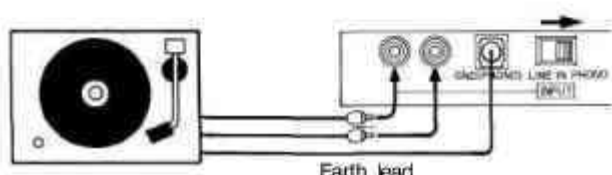
2. Slide the INPUT switch on the back panel to the PHONO position.
3. Set the POWER switch to the ON position.
4. Slide the FUNCTION switch to the LINE IN/PHONO position.



FUNCTION
RADIO
TAPE
LINE IN
PHONO

5. Set the record player in play mode.
6. Adjust the unit's controls (refer to instructions on page 10).
7. To record from discs, follow the instructions in "RECORDING FROM THE BUILT-IN RADIO" on page 17.

2 CONNECTING AN EXTERNAL AMPLIFIER

Use a standard lead fitted with RCA type pin plugs to connect the unit to the amplifier. This type of lead permits recording and play via external equipment.

• AUDIO REPRODUCTION THROUGH AN AMPLIFIER
1. Turn off both the unit and the amplifier.
2. Connect the amplifier input sockets (TAPE PB, TAPE IN, etc.) to the LINE OUT sockets (right and left channels) of the unit (with leads having plugs suitable for fitting into each set of sockets).
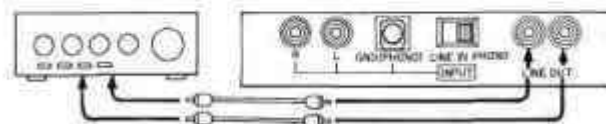
3. Prepare the unit for radio operation (refer to page 11) or tape playback (refer to page 13).
4. Adjust the audio controls of the amplifier to suitable levels.

• RECORDING FROM AN AMPLIFIER
1. Turn off both the unit and the amplifier.
2. Connect the amplifier output sockets (TAPE REC, TAPE OUT, etc.) to the LINE IN/PHONO sockets (right and left channels) of the unit (with leads that have plugs suitable for fitting into each set of sockets).
3. Slide the INPUT switch on the back panel to the LINE IN position.

4. Set the POWER switch to the ON position.
5. Slide the FUNCTION switch to the LINE IN/PHONO position.
6. Turn on the power switch of the amplifier.
7. Begin recording (refer the instructions for "RECORDING FROM THE BUILT-IN RADIO" on page 17).

3 CONNECTING A TIMER UNIT

Any commercially available timer with an "automatic on" system enables the unit to begin recording, playback or radio operation automatically at any predetermined point in time.
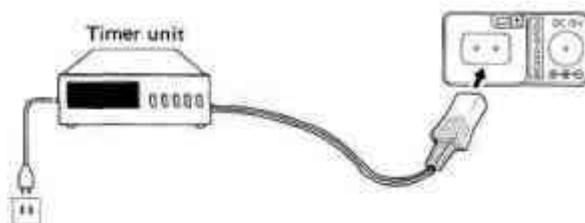
1. Connect the AC supply lead of the unit to the "automatic on" outlet of the timer.
2. Connect the AC supply lead of the timer to an AC wall outlet.

• AUTOMATIC PLAYBACK START
1. Perform steps 1—6 for tape playback (refer to page 13).
2. Depress the STOP • button.
3. Adjust the timer to the desired time for playback to begin.
4. Depress the PLAY • button of Deck 1 and/or Deck 2.
5. When the pre-set time arrives, power will be supplied to the unit and playback will begin.

• AUTOMATIC RADIO START
1. Tune the radio to the desired station (refer to instructions on page 11).
2. Adjust the timer to the desired time for radio listening.
3. When the pre-set time arrives, the built-in radio will be turned on.

• AUTOMATIC RECORDING START
1. Tune the radio to the desired station (refer to instructions on page 11).
2. Load a tape into the cassette compartment of Deck 2. Check to ensure the erasure protection tabs are intact.
3. Set the TAPE SELECTOR switch of Deck 2 to the proper position.
4. Set the VOLUME control at the MIN position.
5. Adjust the timer to the desired time for recording to begin.
6. Depress the REC • button of Deck 2. This also engages the PLAY ▶button.
7. When the pre-set time arrives, power will be supplied to the unit, and recording will begin.

• All buttons will be released automatically when the end of tape is reached. However, radio reception will continue uninterrupted.

NOTE
Some timers may operate in a manner different from the above descriptions. Carefully read the instruction manual before using the timer.

4 HEADPHONES

Connect the headphones plug to the PHONES socket on the front panel of the unit. Speaker output will be automatically disconnected. The volume level can be adjusted with the VOLUME control. Recommended SHARP stereo headphones: HP-30, HP-40, HP-200, HP-300 or HP-400H.
Headphones with 8 ohms ~ 32 ohms impedance are also suitable for use.
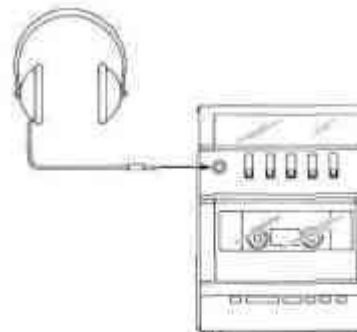
5 CONNECTING EXTERNAL SPEAKERS

Use external speaker leads with 3.5mm diameter plugs (speakers, leads, and plugs not supplied). Speakers require 3.2 ohms to 8 ohms impedance. Fit the speaker leads to speaker system so that phasing (polarity) of speakers is equal. For this it may be necessary to consult your SHARP service engineer. After disconnecting plugs of the units speaker, connect the external speaker plugs to the appropriate speaker sockets.
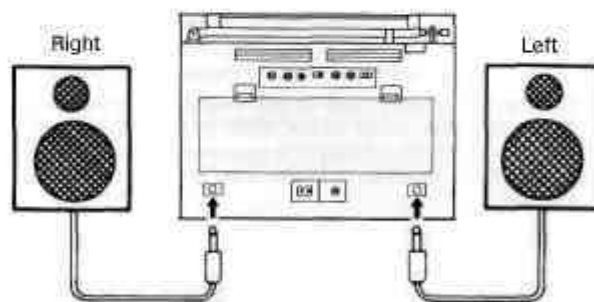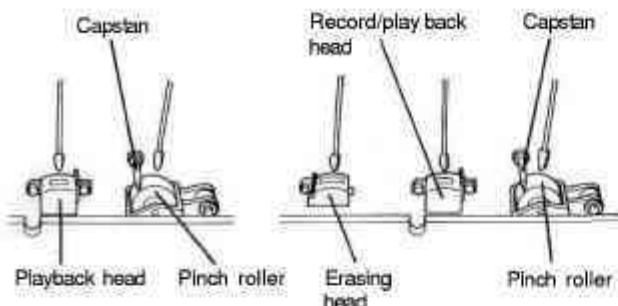
MAINTENANCE

• CLEANING THE TAPE HEADS

Clean the heads frequently to remove dust and tape residue. Dirt on the heads will impair the sound quality of both recording and playback.

There are two methods for head cleaning:

A. The simpler method is to use a head cleaning cassette, available at most audio stores. Follow the instructions supplied with the cleaning cassette.

B. The heads can be also cleaned manually:
   1. Depress the EJECT ▲ button of Deck 1 and Deck 2 in order to open the cassette compartment. Remove the cassette tape in the compartment.
   2. Depress the PLAY ▸ button of Deck 1 and Deck 2.
   3. Wipe the heads with a soft lint-free cloth or cotton swab that has been partially soaked in alcohol (methylated spirit), until the heads are free of all dirt and residue deposits.

Capstan — Record/play back head — Capstan

Playback head — Pinch roller — Erasing head — Pinch roller

• CLEANING MECHANICAL PARTS

Dust or magnetized particles attached to the capstan or pinch roller are the direct cause of uneven tape speed during recording and playback. This is the cause of "wow" and "flutter", namely tape speed variations below and above normal speed, respectively. The capstan or pinch roller should therefore be thoroughly cleaned with a soft lint-free cloth or cotton swab partially soaked in alcohol (methylated spirit).

• CLEANING THE CABINET

Use only a damp cloth for cleaning the cabinet.

SPECIFICATIONS

Power source:	AC 110V ~ 127V and 220V ~ 240V, 50/60HZ
	DC 15V (UM/SUM-1, R 20, HP-2 or D type x 10, or external 15V DC)
Output power:	PMPO;36W (18W + 18W) (AC operation)
	MPO; 30W (15W + 15W) (AC operation)
	RMS; 15W (7.5W + 7.5W) (DC operation, 10% distortion)
Semiconductors:	16 ICs
	25 transistors
	37 diodes
	14 LEDs
Dimensions: Width;	730mm (28-11/16")
Height;	225mm (8-13/16")
Depth;	160mm (6-5/16")
Weight:	7.7 kg (17 lbs.) without batteries

TAPE RECORDER

Tape:	Compact cassette tape
Frequency response:	30Hz — 14,000Hz (normal tape)
	30Hz - 16,000Hz (CrO2 tape)
	30Hz - 17,000Hz (metal tape)
Signal/noise ratio:	55 dB (Deck 1, playback)
	50 dB (Deck 2, recording)
Wow and flutter:	0.06% (WRMS)
Input impedance:	Mixing/external mic; 600 ohms
	Line in/phono; 20 kohms/50 kohms
Loaded impedance:	
Headphones;	8 ohms — 32 ohms
External speakers;	3.2 ohms — 8 ohms
Line out;	50 kohms

RADIO

Frequency range:	AM; 526.5 kHz - 1606.5 kHz
	SW1; 2.3 MHz - 7.3 MHz
	SW2; 7.3 MHz - 22 MHz
	FM; 87.6 MHz - 108 MHz

SPEAKER

Speakers:	16cm (6-1/2") woofer x 2
	Horn type tweeter x 2
Impedance;	3.2 ohms
Input;	10W (maximum)
	18W(peak)

The manufacturer reserves the right to vary specifications, design, or use alternative materials as may be deemed necessary or desirable at any time, any such change or variations being of a kind as not to reduce the quality, performance or appearance.

مسجل راديو كاسيت ستيريو

GF-700Z
GF-700ZR
GF-700ZD
GF-700Z(G)

دليل التشغيل

36W (PMPO) **Double Cassette** **High-Speed Dubbing** **GRAPHIC EQUALIZER**

APLD Auto Program Locate Device **APPS** Auto Program Pause System **Soft-Touch** Soft-Touch Operation **METAL**

SHARP
مؤسسة شارب