

DOUBLE CASSETTE STEREO TAPE RECORDER
MAGNETOPHONE A DOUBLE CASSETTE STEREO
MAGNETOFONO A CASSETTES ESTEREOFONICO DOBLE

雙卡式磁帶立體聲錄音機

트윈 카세트 스테레오 녹음기

مسجل كاسيت ستيريو مزدوج

GF-555X

OPERATION MANUAL

MODE D'EMPLOI

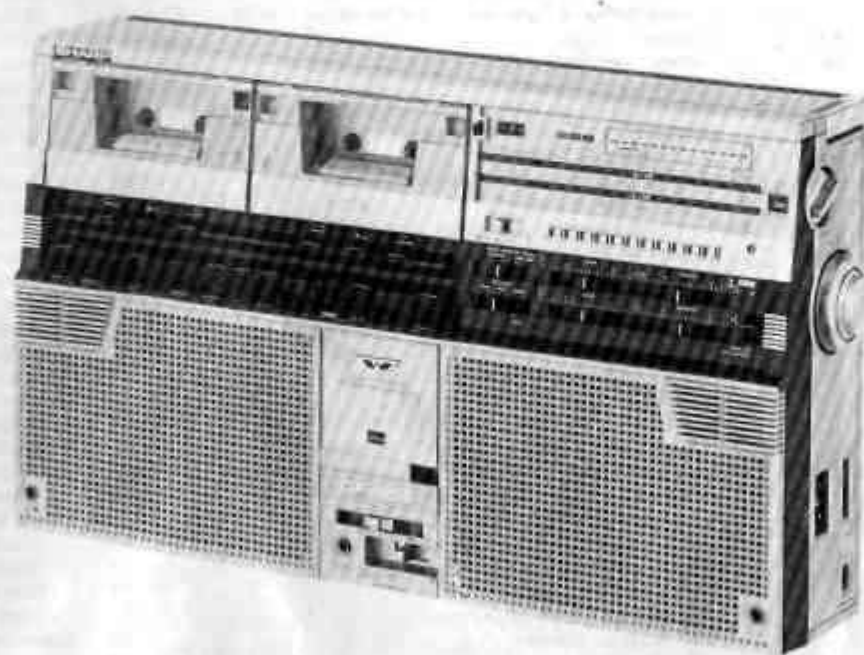
MANUAL DE MANEJO

使用説明書

사용설명서

دليل التشغيل

*The
Searcher*



APLD
Auto Program Locate Device

SHARP

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OUTSTANDING FEATURES

TWIN MECHANISM (Deck 1 and Deck 2)

Due to the unique twin mechanism the following functions are available.

1. Sequential playing of Deck 1 and Deck 2. page 49
As soon as playing of Deck 1 ended, playing of Deck 2 starts automatically and vice versa.
2. Simultaneous playing of Deck 1 and Deck 2. page 52
3. Dubbing from Deck 1 to Deck 2. page 66 to 68
4. Mixed recording on Deck 2. page 78 - 79
It is possible to produce mixed recording on Deck 2 using a microphone and the playback of Deck 1.

APLD (Auto Program Locate Device)

This system scans the tape at high speed in either the rewind or the fast forward mode. When it detects the desired non-signal segment between recorded musical items the tape automatically stops and begins playback from that point.

22,000mW POWERFUL OUTPUT

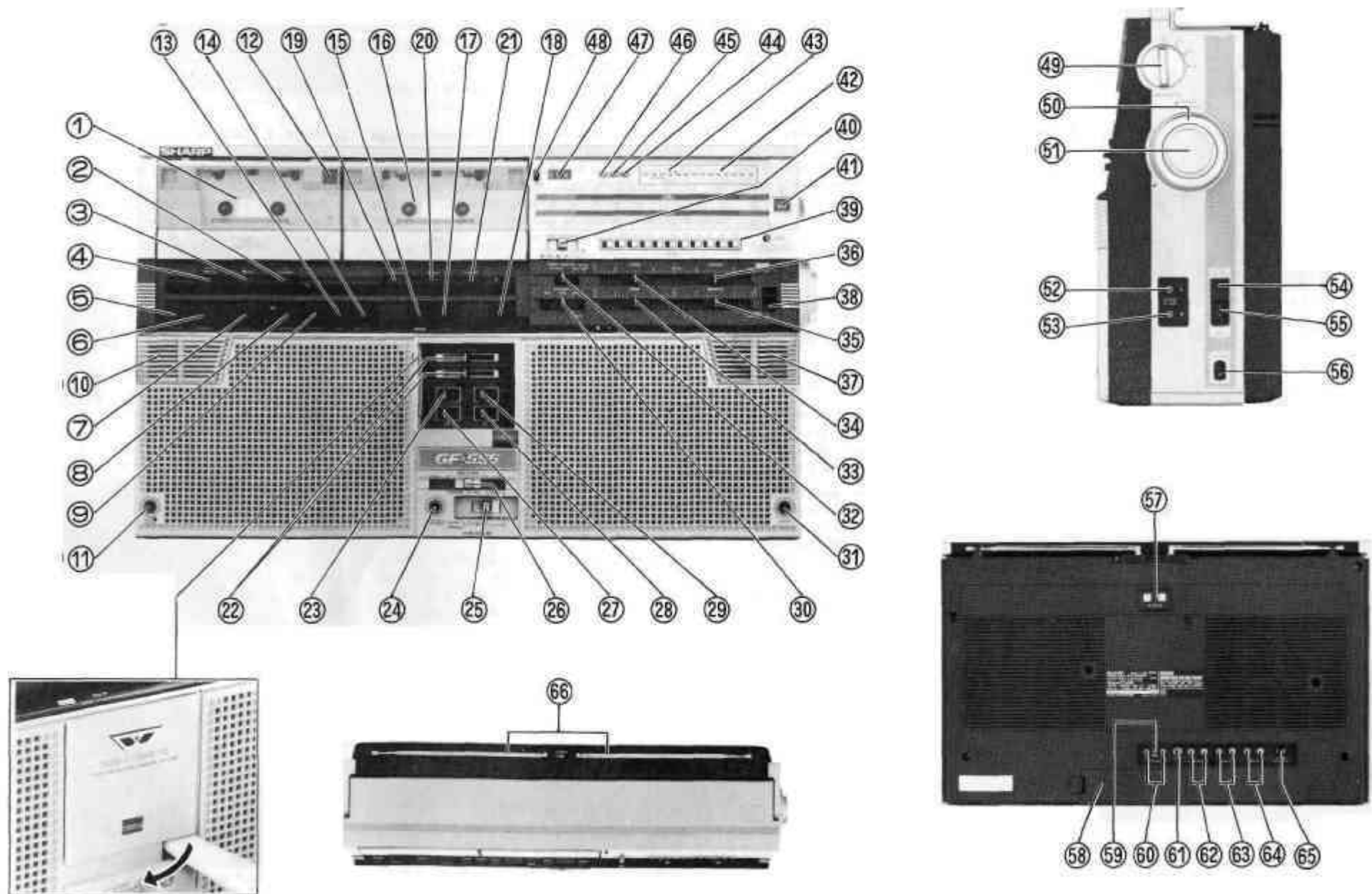
22,000mW (11,000mW + 11,000mW) powerful output is obtained by dynamic power.

PHONO INPUT SOCKETS

The record player which has a magnetic type cartridge can be connected with this unit because this unit has an equalization circuit for this type of cartridge.

DIAGRAM AND EXPLANATION OF PARTS

DIAGRAM



EXPLANATION OF CONTROLS



Deck 1, cassette compartment

Use Deck 1 if you wish to search for a desired programme item using the AP.L.D.
Deck 1 is for playback only, and cannot be used for recording.



2. Deck 1, fast forward wind/skip (cue) key

Depress this key to wind the Deck 1 at high speed. This key is useful for advancing the tape and skipping of program items on Deck 1 being listened to during playback.



3. Deck 1, stop key

Depress this key to stop Deck 1 at any point. When the Deck 1 cassette is wound to the end while in playback, fast forward or rewind modes, the Deck 1 will stop and return to the neutral mode automatically.



Deck 1, rewind/review key

To rewind Deck 1, Cassette at high speed to the beginning, depress this key.
This key is useful to skip backwards over the programme items of Deck 1 being listened to during playback.



- 5. Deck 1, cassette ejection key**
 This key is used to open the Deck 1 cassette compartment lid in order to load or unload the cassette.
 If the Deck 1 is in any mode other than the neutral mode, the Deck 1 cassette compartment lid will not open even if this key is depressed.



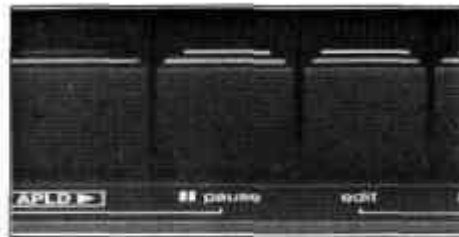
- 6. Deck 1 reverse-APLD key**
 This key is used for searching for the head of a desired programme item (selection of music), while rewinding the tape.
 APLD is possible only on Deck 1.



- 7. Deck 1 playback key**
 To start playing of Deck 1 depress this key only.
 Deck 1 recording is not possible.



- 8. Deck 1 APLD forward key**
 This key is used for searching for the head of desired programme item (selection of music), while winding the tape forward.

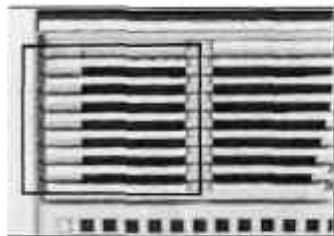


9. Deck 1 pause key

This key is provided to stop Deck 1 momentarily during playback and then resume at the exact point where it was halted.

A depression of this key engages the pause function and further depression of this key releases it and playback resumes.

Even if this pause key is depressed during the sequential playback from Deck 2 to Deck 1, it will release as soon as the Deck 2 playback ends.

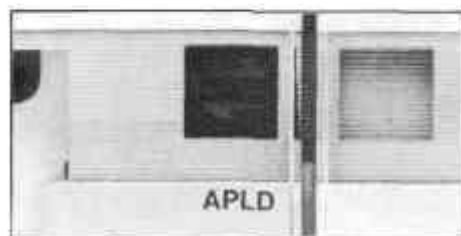


10. Left channel built-in microphone.





11. Deck 1 monitor output socket

If wishing to listen the audio sound of Deck 1 with stereo headphones, connect the headphone to this socket.



12. Indicator of APLD direction

With the forward APLD operation,  indicator lights up.

With the reverse (rewind) APLD operation,  indicator lights up.



13. Deck 2 edit key

In order to make a non-signal segment on the Deck 2 cassette tape during recording mode, depress this key; then input is cut-off. This edit key is useful for editing the tape for APLD.



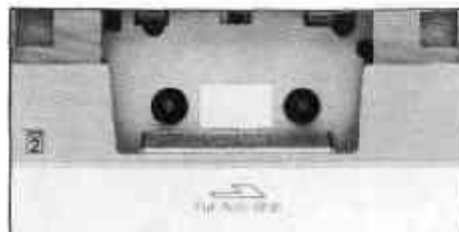
14. Deck 2 pause key

Its use is similar to Deck 1 pause key during playback or recording. In the case of continuous playback from Deck 1 to Deck 2, this pause key releases as soon as Deck 1 playback ends.



15. Deck 2 record key

To put the Deck 2 recorder in the recording mode, depress this key. With the depression of this key, the play key will be engaged automatically. Record key cannot be depressed when the play key is in the depressed position.



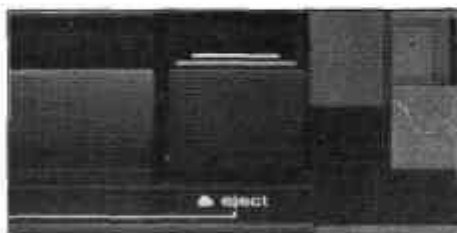
16. Deck 2 cassette compartment

The tape which is to be recorded is loaded in this cassette compartment.



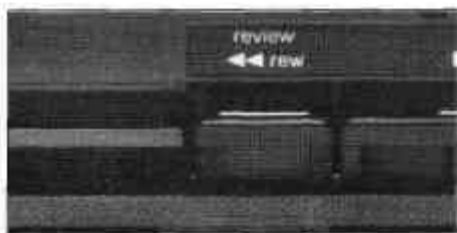
17. Deck 2 playback key

When wishing to listen to Deck 2, depress this key and put Deck 2 into the playback mode.



18. Deck 2 eject key

To eject cassette from the Deck 2 cassette compartment, depress this key. Eject key cannot be depressed when the play key is in the depressed position.



19. Deck 2 rewind/review key

Its use is similar to Deck 1 rewind/review key.



20. Deck 2 stop key

Its use is similar to Deck 1 stop key.



Deck 2 fast forward wind/skip (cue) key

Its use is similar to Deck 1 fast forward wind/skip (cue) key.



22. Recording level controls (left and right channels)



23. Dubbing switch
For dubbing from Deck 1 to Deck 2, put this switch to the ON position.
This switch prevents any recording through the built-in microphone after Deck 1 has automatically stopped.



24. Mixing microphone socket
When microphone (of low impedance) is connected to this socket, the sound entering this microphone are amplified and played through speakers or recorded and mixed with the signal from one of the following units, such as the built-in radio, record player, or other audio unit connected to line input sockets.



25. FM mode selection/mixing on-off/FM muting on-off

This switch switches the following 3 functions,

1. FM mode stereo-mono
2. Mixed recording/reproducing on-off
3. FM muting on-off



26. Fading control

This is for use during mixed recording or mixed playback with a mixing microphone and one of the units mentioned below;

Built-in radio, record-player or other audio unit which are connected to line input socket.

Fade-in and/or fade-out is possible by using this control.

The mixing volume (level) of both source units can be adjusted with this fading control.



27. Deck 1 tape selector (normal ↔ CrO2)

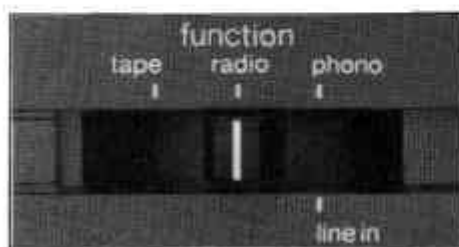
Set this selector according to the type of tape which is loaded into Deck 1 cassette compartment.



28. **Deck 2 tape selector (normal ↔ CrO2)**
Set this selector according to the type of tape which is loaded into Deck 2 cassette compartment.



29. **Recording mode selector (auto ↔ manual)**
This is for the selector of the recording mode, if automatic adjustment of recording is desired then this selector should be set to the AUTO position.
And if a particular adjustment is desired then this selector should be set to the MANUAL position and then adjust the record level control.



30. **Function selector**
This selector is for the switching of tape, radio, line-input or phono input.



31. **Headphones socket**
This socket is for 8 to 25 ohms impedance headphones. When headphone jack is inserted, built-in speaker will cut out.



32. Meter indication selector

When this selector is set to the BATT/LIGHT position, the left channel VU indicator will show the battery voltage; and the right channel VU indicator will show the signal strength of either FM, SW2, SW1, or AM(MW) broadcast and the dial light will light up. When this selector is set to VU level position, the indicators show the level programme source being recorded or listened to.



33. Bass tone control

The strength of bass tone can be adjusted with this control.



34. Treble tone control

The strength of treble tone can be adjusted with this control.



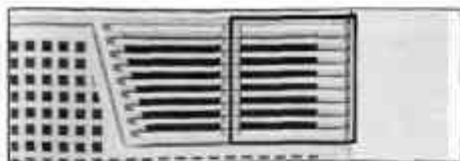
35. Channel balance control

This control is to be used to adjust the relative volume level of the left and right channels.

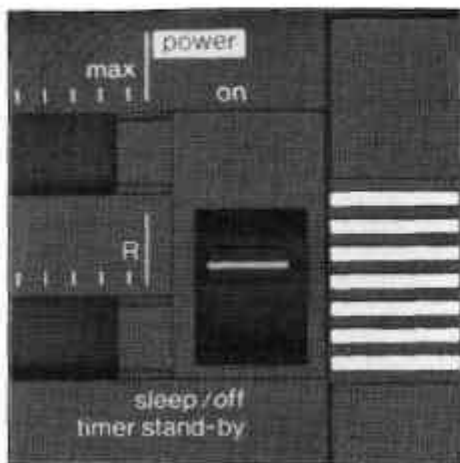


36. Volume control

This control is for raising or lowering the volume of left and right channels together.

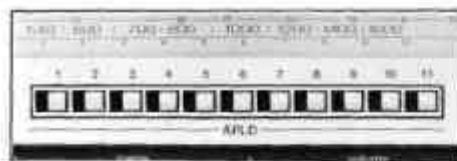


37. Right channel built-in microphone



38. Power switch

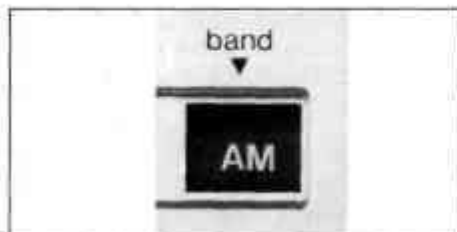
When setting the power switch to the ON position all the built-in circuits will be turned on. When setting the power switch to the SLEEP/OFF, TIMER STAND-BY position, all circuits will be turned off. But if any of the keys for recording or playing on Deck 1 or Deck 2 are engaged, all circuits will not be turned off until after the engaged key(s) is (are) released by the automatic stopping action. Even after all circuits are turned off in the SLEEP/OFF, TIMER STAND-BY position, the electric power is not cut off. When this unit is not used for a long period, the AC mains supply lead should be disconnected. If wishing to start recording or playback of tape automatically at a desired time, (using the timer unit,) set the switch to the SLEEP/OFF, TIMER STAND-BY position.



- 39. APLD number input buttons and indicators**
 These buttons are used for number inputs to the APLD microprocessor:



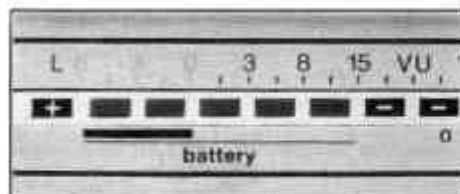
- 40. Tape operation mode selector**
 When the selector is set to the 1 → 2 position, sequential playback from the end of Deck 1 cassette tape to the head of Deck 2 cassette tape or vice-versa will occur.
 If wishing playback of Deck 1 or Deck 2, or playback both at the same time, set the selector to the 1 and/or 2 position.
 If wishing to start Deck 2 automatically in order to record or playback at a desired time, set the selector to the TIMER STAND-BY position.



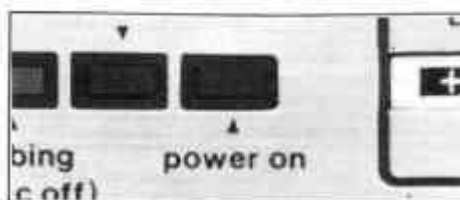
- 41. Wave-band indication window**
 This window indicates the position of wave-band selector. Picture shows the AM setting.



- 42. Right channel VU indicator/Tuning indicator**
 When meter selector is set to the VU LEVEL position, this indicator indicates radio audio output level, Deck 2 recording level, and input signal level (right channel) from the LINE IN sockets or PHONO sockets.
 When this selector is set to the TUNING/BATT/LIGHT position, while in the radio receiving mode, this indicator shows the signal strength of broadcast.



- 43. Left channel VU indicator/battery condition indicator**
 When meter selector is set to VU LEVEL position, this indicator indicates radio output level, Deck 2 recording level and input signal level (left channel) from LINE IN sockets or PHONO sockets.
 When meter selector is set to TUNING/BATT/LIGHT position, this indicator indicates voltage of batteries.

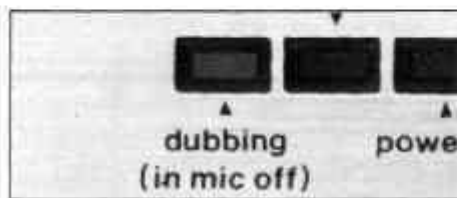


- 44. Power ON indicator**
 When power switch of this unit is set to the ON position, this indicator will light up and show that all circuits are turned on.



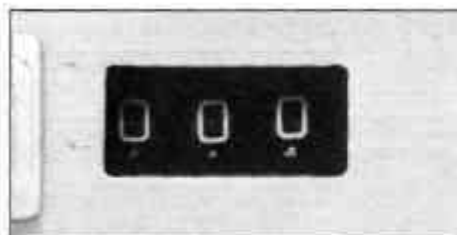
45. FM stereo indicator

This indicator lights up during the receiving of an FM stereo broadcast.



46. Dubbing indicator

When the dubbing switch of this unit is set to the ON position, this indicator will light up and show that the built-in microphone is turned off.



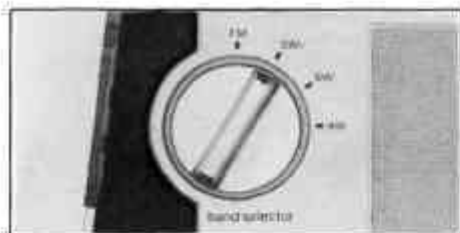
47. Digital tape counter

The number of this counter will increase or decrease according to the running direction of the tape in the Deck 2. However, the number of the counter does not correspond to the revolutions of cassette reel; in other words the number 1 on the counter does not indicate one revolution of cassette reel. In order to set this counter 000 reading, push the reset button at the starting point; the reading can be used as an index of recording on the tape.



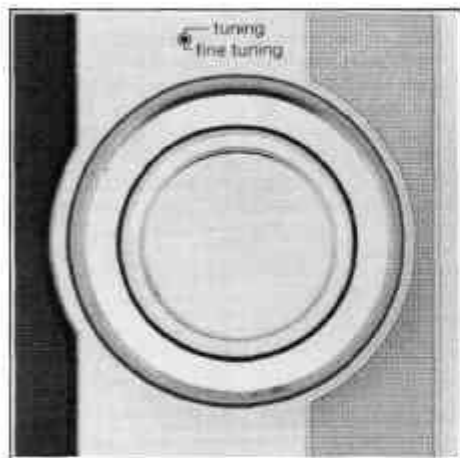
48. Tape counter reset button

By pushing this button, the counter will indicate 000.



49. Wave-band selector

Switch this selector to the position for the wave-band which is desired.
MW broadcast is shown as AM.



50. Tuning control

Tune the desired station with this control.

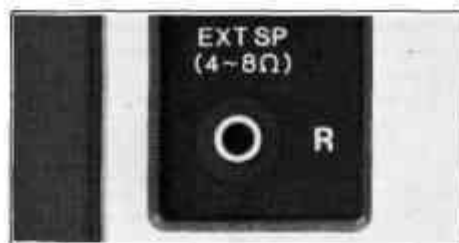
51. Fine tuning control

For pin-point tuning for SW1 or SW2 use this control after adjusting the tuning control.



52. External speaker socket (left channel)

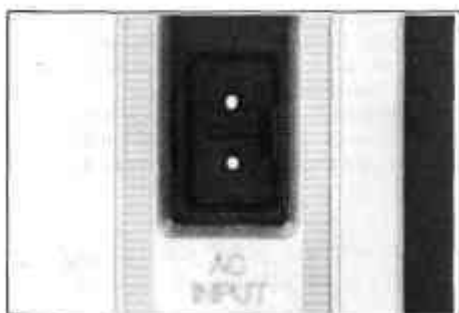
Connect a 4 to 8 ohms impedance speaker unit. This socket is for output of left channel. When jack is connected to this socket, the built-in speaker will be disconnected and sound will come only from the external speaker.



- 53. External speaker socket (right channel)**
 This socket is for output of right channel.
 How to use is similar with item 52.



- 54. DC 15V input**
 This is a terminal for connecting the external power source of DC 15V. Make sure of the correct polarity.
 If wishing to operate this unit with a car battery, use motorcar battery adaptor AD-115N, (optional accessory).
 As soon as the jack of adaptor is inserted, built-in battery will be automatically disconnected.



- 55. AC input**
 This terminal is for the AC mains power supply, either 110V, 220V, or 240V. Switch the voltage selector to the correct position to correspond.
 As soon as the plug of AC supply cord is inserted in to this terminal, the built-in battery will be disconnected.



56. Mains supply voltage selector

The GF-555X can be set to operate at 110V, 220V or 240V, AC current. Before plugging the Unit into the AC outlet, this selector should be set to the voltage indication corresponding to the power supply in your area.



57. External FM aerial terminals

This is the FM aerial terminal to connect the flat cable of 300 ohms impedance. If telescopic aerial is not sufficient for FM signal input, connect an external aerial.



58. Battery compartment

This is a compartment for 10 batteries. Insert 10 batteries of 1.5V (UM/SUM-1, R-20, HP-2, D etc).



59, 60. External microphone input and remote control sockets

These are sockets to be connected with the microphone unit which has a low impedance. In the case of a microphone which has a remote start/stop control switch, connect the plug jack for the remote control to the REM socket.



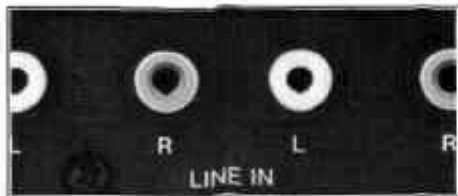
61. Earthing terminal

If the record player which is connected to the PHONO socket has an earthing lead or earthing terminal, it must be connected this GND terminal in order to avoid a humming noise.



Phono input sockets

The record player which is provided with a magnetic type 3 to 4mV output cartridge is to be connected to this socket.



63. Line input sockets

To record from external equipment such as an amplifier, tape deck etc. connect output of external equipment to this socket.

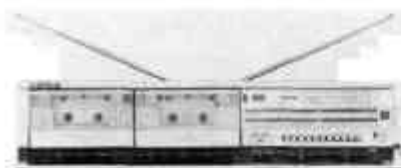


64. Line output sockets

Input of external equipment such as an amplifier or tape deck is to be connected to this socket.

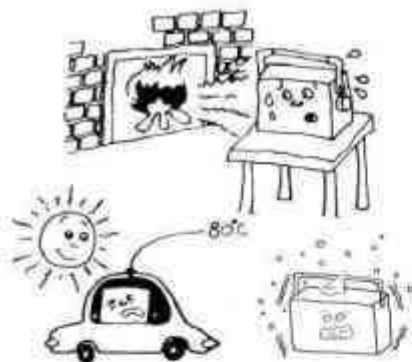


- 65. Beat interference canceller switch**
 During the recording of an MW broadcast, if a beat interference is caused then slide this switch and set it to the position A or B to achieve the least beat interference.



- 66. FM/SW2/SW1 telescopic aerial**
 Use this aerial for receiving FM, SW2 or SW1 broadcast station with a strong signal.
 Use an external aerial for receiving FM broadcast station with a weak signal.

WARNINGS AND CAUTIONS



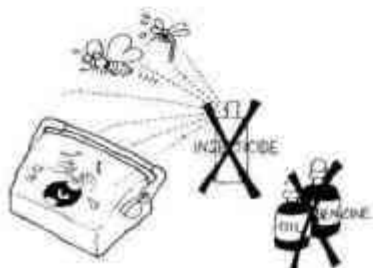
1. The cabinet of this unit may be damaged if subjected to heat of 60°C/140°F or greater. Please note that temperature in automobiles can reach 80°C/176°F or more. Do not situate this unit in areas exposed to direct sunlight or near heating equipment such as stoves, radiators, etc. Extreme cold, (below 5°C/41°F) is also undesirable.



2. This unit should be protected from rain and moisture which may damage internal circuitry.



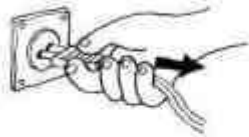
3. Avoid storing either this unit or cassette tapes in moist or dusty places for long periods of time.



4. Petroleum or benzol type organic solvents or oils can corrode or crack the cabinet and control panel of this unit. Also caution must be taken when handling insecticides, benzene, paint thinner, petrol or similar substances near the unit.



5. Do not apply oil to this unit.



6. Be sure to grasp the plug firmly when disconnecting mains power supply, or other plugs. Holding the lead only can result in damaged or broken connections.

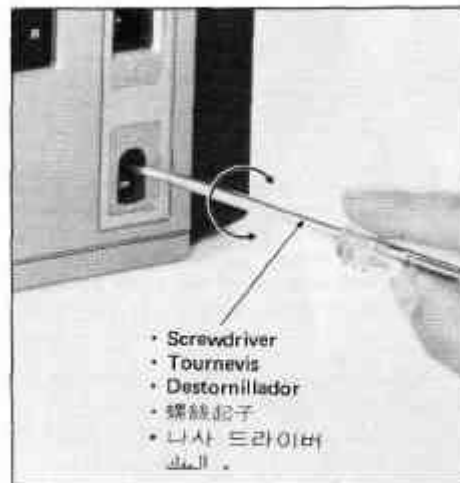


7. Always disconnect the mains power lead before servicing. Never remove cover unless qualified to repair this unit, because there is a danger from the high-voltage residual electric charge.

SUPPLY VOLTAGE

The unit is designed to operate on a 110V, 220V or 240V, 50/60Hz mains or on internal batteries, (10 x UM/SUM-1 or equivalents).
It is also possible to operate the unit from an external 15 Volt D.C. supply.

MAINS SUPPLY VOLTAGE SELECTION



Be sure to check the preset voltage before connecting this unit to a mains outlet. If the setting differs from your local power supply, the Voltage selector must be reset in the following manner. Rotate the Voltage selector with a screwdriver until the correct setting of the local electrical supply can be seen.

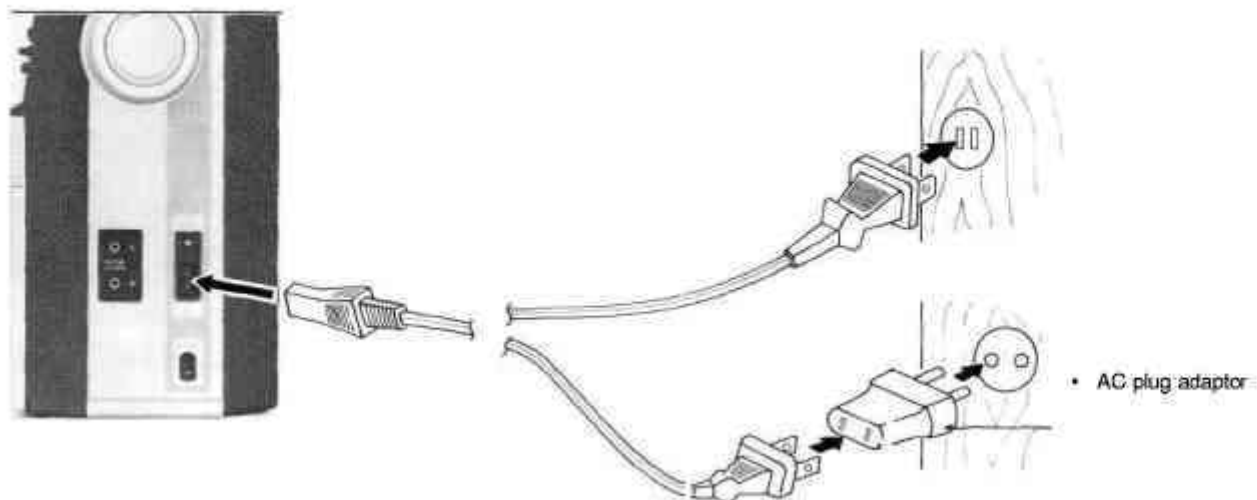
Caution:

Use this unit only on the specified voltages, otherwise damage, fire, or accidents may be caused. SHARP cannot accept responsibility for any damage resulting from the use of this unit on unspecified voltages.

MAINS OPERATION

In order to conserve batteries, remember to use mains power whenever possible.

1. Insert the mains lead plug into the AC INPUT socket of the unit, and connect to a mains socket, (110V, 220V, or 240V).
The power source is automatically switched from the batteries to the mains supply.
2. When the unit is not operated for long periods, disconnect the mains plug from its socket.
3. The AC plug adaptor (accessory) may be used in countries where the AC mains voltage is 220V or 240V and the mains socket is as shown below.



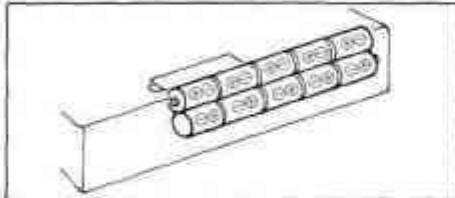
BATTERY INSTALLATION

It is advisable to use AC power for long periods of recording.

1. Remove the mains lead from the mains input socket.



2. Remove the battery compartment cover.



3. Install ten batteries into the compartment as shown. The following types of battery are suitable for this unit:

• UM/SUM-1 • R-20 • HP-2 • "D"



4. Replace the battery compartment cover. The unit is now ready for operation.

Note:

1. Battery leakage can cause considerable damage to both electronic and mechanical parts of this unit. You are strongly advised to remove the exhausted batteries as soon as possible, and to take the extra precautions of removing the batteries if the unit is not going to be used for a lengthy period.
2. Dust between battery contacts and battery compartment terminals can cause malfunctioning of the unit. Be sure to keep all contacts clean.

BATTERY CONDITION CHECK

The battery condition meter (BATTERY) indicates battery voltage. To check battery voltage, follow these steps.

The voltage level shown on the LED indicator differs according to the operation mode of this unit, and battery voltage may decrease after long periods of operation.

This check serves as an estimate of the time remaining before the renewing of batteries is required. It is necessary to exchange the batteries at an earlier stage.

1. Remove the AC supply lead from AC input socket. Also remove the jack plug from the external DC input.



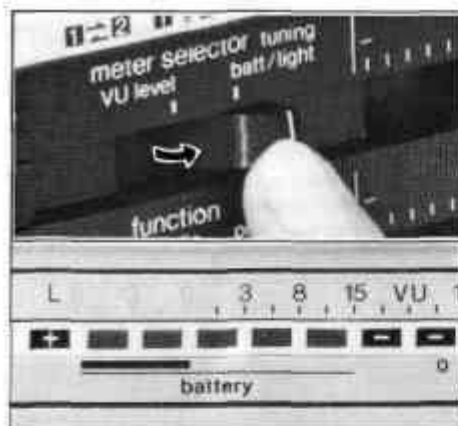
2. Adjust the volume control to the 0 position.



3. Slide the function selector to the TAPE position.



4. Depress the play key of either Deck 1 or Deck 2.

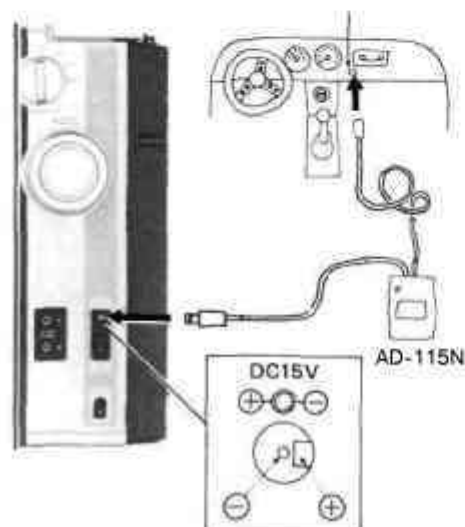


5. Slide and hold the meter selector to the BATT/LIGHT position and check the battery condition indicator. The battery is still effective if one or two red coloured LEDs are lighting up. Namely, if the fourth indicator counted from right lights up, then the batteries are still effective. If none of red coloured LEDs light up and only the green coloured LEDs light up, then batteries are to be considered weak and should be renewed.

OPERATION WITH A MOTORCAR BATTERY

- 12V DC (Cigarette lighter socket)

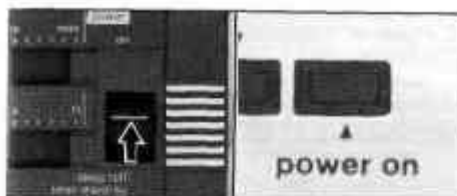
This unit may be operated with a 12V motorcar battery by the use of a motorcar battery- adaptor, (optional extra AD-115N). Insert the adaptor plug into the DC15V socket, and the connecting plug into the cigarette lighter socket of your motorcar. Supply power will automatically switch from the internal batteries to the motorcar battery.



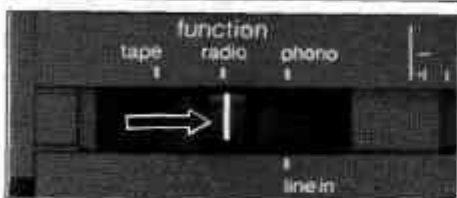
FM RECEPTION

Note:

Adjust the fading control (FADER) to the SOURCE position (Slide fully to the left).



1. Set the power switch (POWER) to the ON position, and then the POWER ON indicator will light up.



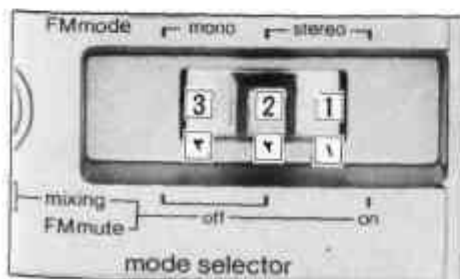
2. Slide the function selector (FUNCTION) to the RADIO position.



3. Increase the volume control slightly from its 0 position.



4. Turn the band selector (Band Selector) to the FM position. Selected position is shown in the wave-band indication window.



5. Slide the mode selector (Mode) to the corresponding position referring to the following instructions.

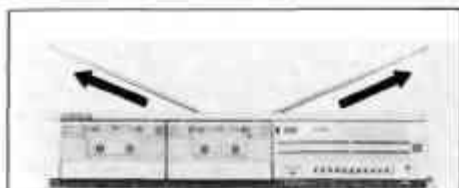
Position 1 ... Set the selector to this position, if it is desired to listen to a strong signal strength FM Stereo broadcast.

Either FM stereo or FM mono broadcasts can be received with this position setting. They are switched automatically in each case. In this position, FM muting will be on and therefore inter-station noise will be eliminated during tuning. However weak signal strength FM stations will be muted and therefore cannot be received.

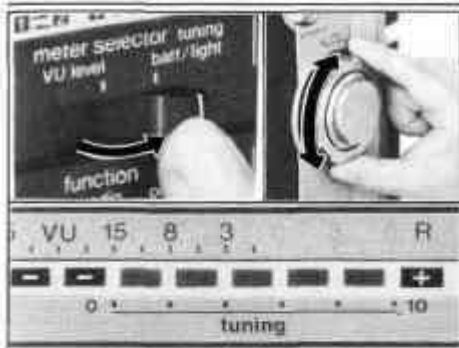
Position 2 ... Set the selector to this position, if it is desired to listen to a weak signal strength FM stereo broadcast.

In this position, FM muting will be off. Either FM stereo or FM mono broadcasts can be received with this position setting. They are switched automatically in each case.

Position 3The sound reproduction will be monophonic even if receiving a FM stereo broadcast. In this position FM muting will be off. Set the selector to this position, if it is desired to listen to a weak signal strength FM broadcast.



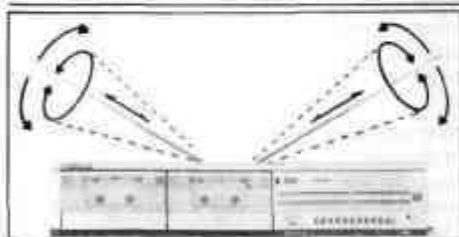
6. Raise and extend the telescopic aerial.



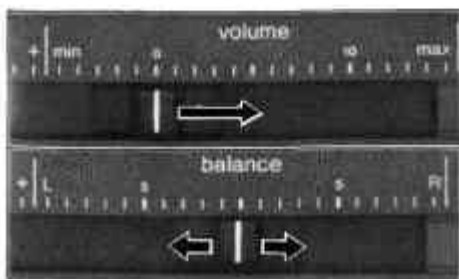
7. Use the tuning control to tune in the desired station, whilst moving the meter selector to the TUNING/BATT/LIGHT POSITION. For the best reception, adjust the tuning control so that all, or as many as possible, of the LED indicators of the tuning meter light up. The dial light will illuminate the tuning scale for visual tuning when it is dark.



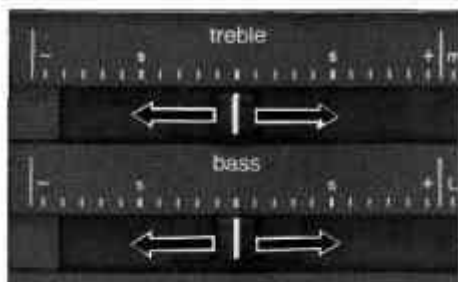
8. Illumination of the FM stereo indicator shows that an FM stereo broadcast is being received.



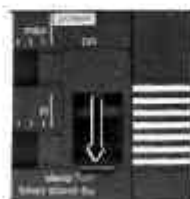
9. After moving the meter selector to the TUNING/BATT/LIGHT position, check the tuning meter while adjusting the aerial's length and angle in order to improve the reception.



10. Adjust the volume control to a comfortable level.



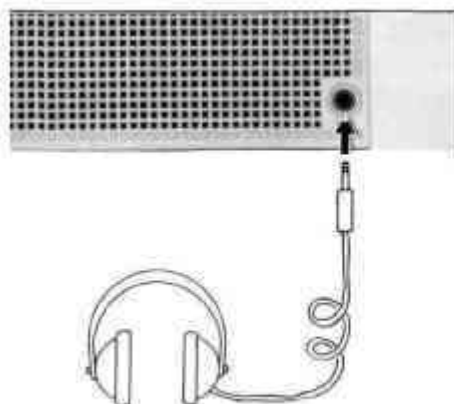
12. Adjust tone quality with the bass and treble controls. Treble and bass boost is flattened in the centre position; emphasized in the + 5 position; and de-emphasized in the -5 position.



13. To turn off the radio, set the power switch to the SLEEP/OFF, TIMER STAND-BY position, and the power indicator light will go out.

Caution:

The mains power supply to the unit will not be cut off even when the power switch is set to the SLEEP/OFF, TIMER STAND-BY position. In order to completely shut off the power, be sure to disconnect the mains power plug from the mains socket.



HEADPHONES

For private listening, connect the stereo headphones set (optional extra, 8 to 25 ohms) to the PHONES socket of the unit.

Sound will be heard with the headphones only. SHARP stereo headphones set, HP-30, HP-200 or HP-300 or HP-400H are recommended for use with this unit.

CONNECTION OF EXTERNAL FM AERIAL

Weak signals from very distant FM broadcasting stations can be boosted with the use of an external FM aerial connected to the FM Ext Ant terminals of the unit.

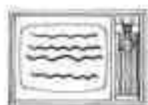
Due to the nature of FM transmission, and the geographic conditions in the region between the receiver and the transmitter, a noticeable improvement of FM reception will occur with the use of an external aerial.



CAUTIONS AND NOTES ON INSTALLATION OF EXTERNAL AERIALS

1. Do not use a TV aerial instead of the external FM aerial, because it causes TV reception interference.
2. The external aerial should not be located in the vicinity of overhead power cables or other electric power circuits.
3. In order to avoid mixing of unwanted electrostatic noise with received signal, the external aerial should be located away from roads, with heavy traffic, and railways.

1



2



3

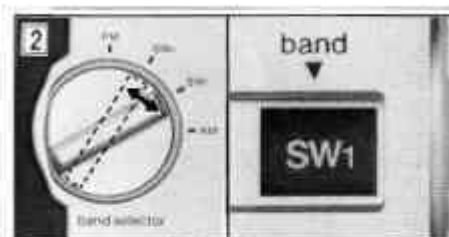
• Good



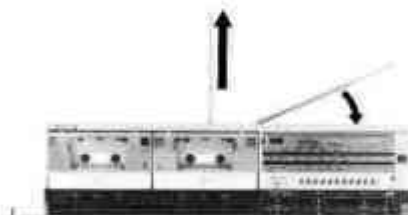
• Bad



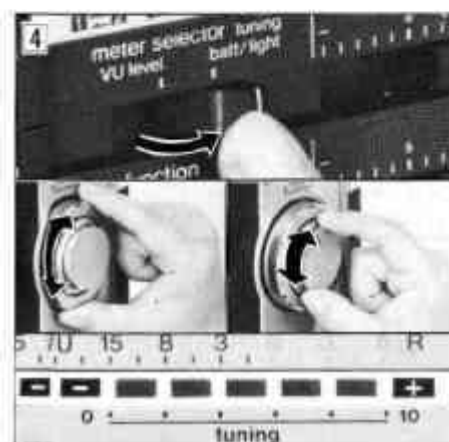
**RECEIVING SW1
OR SW2
BROADCASTS**



2. Turn the band selector (BAND SELECTOR) to the SW2 or the SW1 position.
 SW2 7.3 MHz - 22 MHz
 SW1 2.3 MHz - 7.3 MHz
 Selected position is shown in the wave-band indication window.



3. Raise and extend the left-hand telescopic rod aerial vertically. The right-hand aerial should not be extended, if it is already extended it should be retracted and fitted into the aerial lock on the panel of the unit.

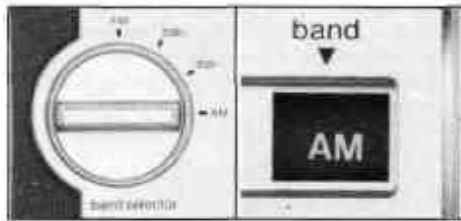


4. Use the tuning control to tune in the desired station; look at the dial and move the meter selector to the TUNING/BATT/LIGHT position. For best reception, adjust the tuning and fine tuning controls so that all, or as many as possible, of the LED indicators of the tuning meter light up.

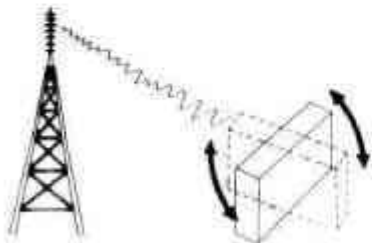
5. Further operations are same as step 10 to 13 of page 32 and 33.

RECEIVING MW BROADCAST

1. Prepare to receive MW broadcast with the same operations of step 1 to 3 on page 30 in "FM Reception".



2. Turn the band selector (Band Selector) to AM position. (MW is shown as AM). Selected position is shown in the wave-band indication window.



3. The built-in MW aerial is directional and improved reception can be achieved by rotating the GF-555X unit as shown in the illustration.

4. Further operations are same as step 7 and 10 to 13 of page 32 and 33.

CASSETTE TAPE

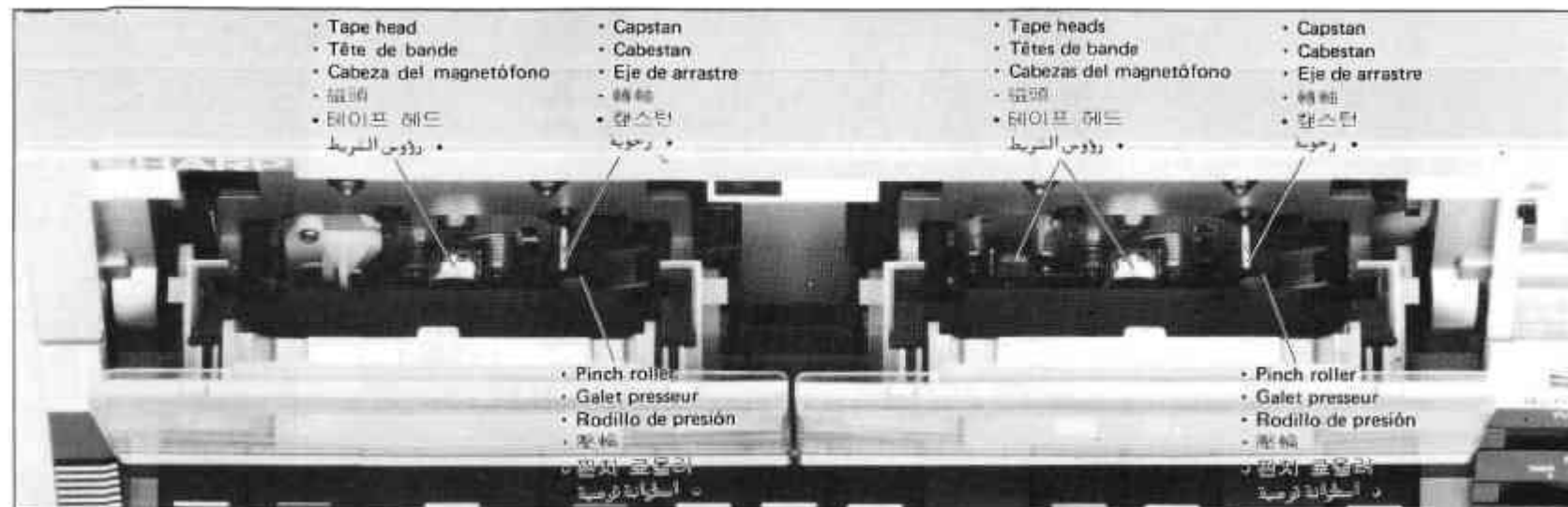
IMPORTANT NOTES ON CASSETTE TAPES

1. Use only well known brands of tape cassettes.
2. Use of C-120 cassettes is not recommended.
3. Tape head
 - A. After a time, some tapes, especially the less expensive brands, may sound muffled, in extreme cases almost inaudible, during playback.
This is not the fault of the machine. The trouble is caused by a deposit of oxide and other contaminants on the heads.
An easy way to overcome the problem is to use a proprietary brand head cleaning cassette. Follow the provided instructions carefully and do not over use the head cleaning cassette as this may cause excessive wear on the heads.

- B. If you cannot obtain a head cleaning cassette, clean the head in the following manner: wipe the head with a cotton tipped stick soaked in methylated spirits until all the deposit is removed.

Caution:

- Never use any other solvent than alcohol e.g. do not use benzine or paint thinners.
- The head is a delicate precision component and you will cause serious damage if you try to scrape contaminants away with a sharp implement.



Other common causes of trouble during playback

- a) Tape jamming — leading to uneven playback speed.
- b) Tape tangling — the tape wraps itself around the capstan roller.

A



B



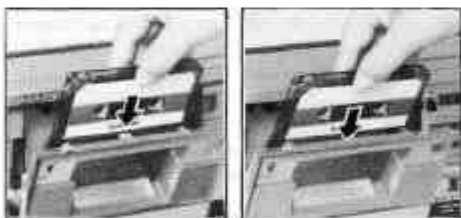
To reduce these problems take the following precautions:

1. Check that there are no loose layers of tape visible through the centre window of the cassette, (see Fig. A).
If there are, wind the loosely layered spool with a pencil or ballpoint pen before inserting the cassette into the machine, (see Fig. B).
2. If the cassette spool is excessively difficult to wind, it may be jamming because of "ridges" in the spool winding, (visible through the centre window). In most cases the ridges can be eliminated by fast-winding the cassette from one tape end to the other and then back again.

LOADING AND UNLOADING CASSETTE TAPES



1. Open the cassette compartment by depressing the eject (▲) key of Deck 1 or Deck 2.

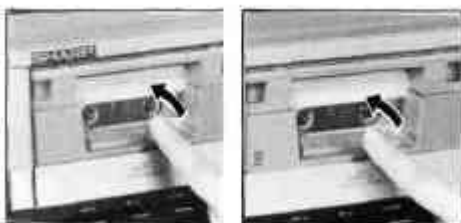


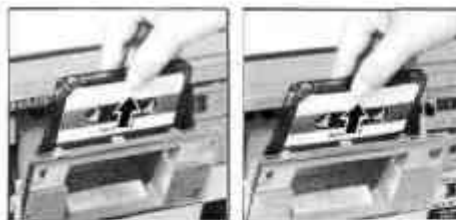
2. Load cassette into the cassette compartment with the side you wish to record "A" or "B" ("1" or "2") facing to the front and the exposed tape lowermost. The tape travels in the direction of the arrow shown on the cassette compartment lids of Deck 1 and Deck 2, so if the tape is completely wound onto the right-hand spool it is necessary to either use the other side of the cassette or to rewind the tape, (see page 54).

Deck 1 is for playback only and not for recording, but APLD operation is possible.

Deck 2 is for playback and recording.

Load the cassette in to the cassette compartments with consideration for the above functions.





4. To unload cassette tapes, open the cassette compartment by depressing the eject (▲) keys for Deck 1 and Deck 2, and remove the cassettes by hand.



CAUTIONS FOR STORING CASSETTE TAPES

1. Do not put the cassette near a magnetic field, such as a radio, TV, or loudspeaker. Magnetic fields may reduce the tape sensitivity or even erase the recording.
2. Do not store the cassette for any length of time in a hot, moist or dusty place.

TAPE SELECTOR SWITCH



Tape selector 1 functions only in playback mode, 2 is for playback and recording modes. This unit which has been factory adjusted is matched with SHARP cassette tape characteristics. When using commercially available cassette tapes, set the tape selector switch according to the table on the following page.

• Brand	• Type of tape	• Position of the tape selector switch 1	• Position of the tape selector switch 2	
		• Playback	• Recording	• Playback
SHARP	C-46S/C-60S/C-90S	normal	normal	normal
	C-46SD/C-60SD/C-90SD			
	C-60CR/C-90CR	CrO2	CrO2	CrO2
MAXELL	LN C-60/C-90	normal	normal	normal
	UD C-60/C-90			
	UDXL C-60/C-90			
	CR C-60/C-90	CrO2	CrO2	CrO2
TDK	SD C-60/C-90	normal	normal	normal
	SA C-60/C-90	CrO2	CrO2	CrO2
SONY	C-60/C-90	normal	normal	normal
	C-60HF/C-90HF			
	C60 DUAD/C-90DUAD	CrO2	normal	CrO2
	C-60CR/C-90CR	CrO2	CrO2	CrO2
FUJI FILM	FL C-60/C-90	normal	normal	normal
	FMC-60/C-90			
	FX C-60/C-90			
	FCC-60/C-90	CrO2	CrO2	CrO2
SCOTCH	C-60LH/C-90LH	normal	normal	normal
	C-60HD			
	C-60LN			
	MASTER C-60			
	CLASSIC C-60/C-90	CrO2	normal	CrO2
BASF	C-60LH/C-90LH	normal	normal	normal
	C-60LH SUPER			
	C-90LH SUPER			
	C-60CR/C-90CR	CrO2	CrO2	CrO2
	FERROCHROM C-60/C-90	CrO2	normal	CrO2
AGFA	STD C-60/C-90	normal	normal	normal
	C-60CR/C-90CR	CrO2	CrO2	CrO2
	CRAFT C-60/C-90	CrO2	normal	CrO2
MEMOREX	STD C-60/C-90	normal	normal	normal
	CR C-60/C-90	CrO2	CrO2	CrO2

RECORDING FROM BUILT-IN RADIO

Recording is available only on Deck 2, therefore the following explanation is applicable to the Deck 2 recorder/player.

1. Tune in the desired broadcasting station. (See instructions on pages 30 to 36).
2. Load a cassette into Deck 2 according to the instructions on page 40.
3. Set the tape selector switch according to the instructions and table on pages 41 and 42.



4. Adjust the fading control (FADER) to the SOURCE position (Slide fully to the left).



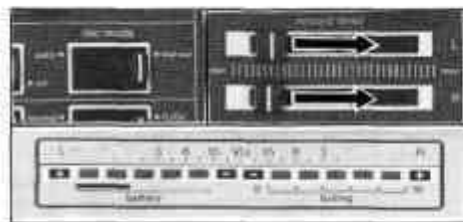
5. Depress the pause (||) key.



6. Depress the record key of Deck 2. The play (▶) key will automatically engage.

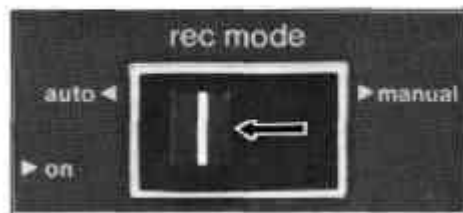
Note:

The record key cannot be depressed when the compartment is loaded with an erase-proof cassette tape. Refer to the instructions on page 87. The record key cannot be depressed when the cassette is not loaded, or when play key has already been depressed. In the such cases never depress the record key by force.



7. Adjusting the recording level

- A. When recording music, set the REC MODE switch to the MANUAL position, then adjust the record level controls so that three green indicators light up and one red indicator blinks.



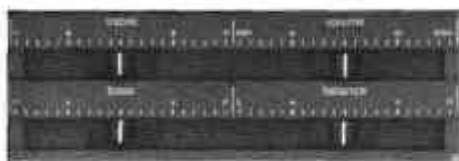
- B. When recording conversation, etc., set the REC MODE switch to the AUTO position and the ALC (Automatic Record Level Control) circuit will automatically adjust recording levels to the proper strength.



8. Whistling noises may be heard during MW broadcast recording. In this case, set the Beat Cancel switch to the position which produces the least noise.



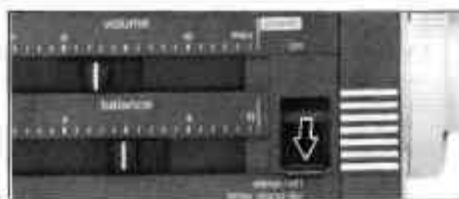
9. Depress the pause (||) key to disengage the function and the unit will begin recording.



10. The volume, bass, and treble controls can be adjusted without affecting the recording level. (See page 32 and 33).



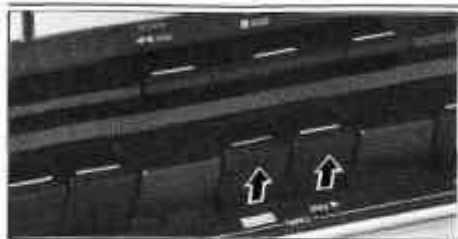
11. The tape advance can be stopped at any time by depressing pause (||) key and without disengaging the record function during recording, or the playback function during playback. The tape advance can be re-started by depressing the pause (||) key once again.



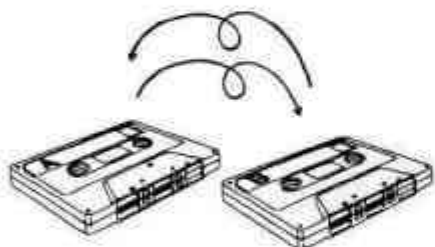
12. If wishing to turn off the built-in radio after the tape has reached an end and the Deck is automatically stopped with the automatic stop mechanism, set the power switch to the SLEEP/OFF, TIMER STAND-BY position. The recording will be continued.



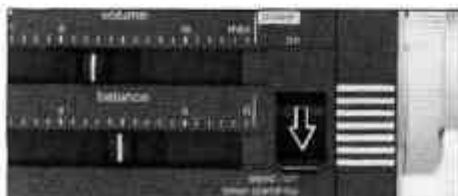
13. When the recording is finished, stop the tape advance by depressing the stop key.



14. The unit will automatically return to the neutral operating mode when the tape reaches one end.



15. The reverse side of cassette can be played. Repeat steps 2 and 4, (Loading of cassette tapes), of page 40; and steps 5, 6 and 9 etc. of page 43 to 45, (To begin recording).



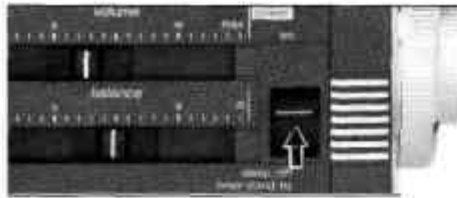
16. To turn off the radio, slide the power switch to the SLEEP/OFF, TIMER STAND-BY position. (If not already switched to that position.)

17. Disconnect AC. Supply Lead Plug from the AC. Input when play has ended and unit is not intended to be used in the near future.

RECORDING FROM BUILT-IN MICROPHONES

Preparation

1. When recording with the built-in microphones, nothing should be connected to the EXT MIC socket.
2. Deck 1 should be checked for the stop mode setting.
3. Check that the dubbing switch is in the OFF position.
4. Set the mode selector to the OFF position.

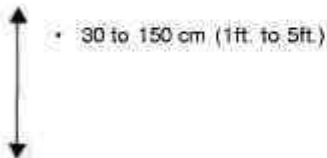


Operation

1. Set the power switch to the ON position.



2. Face the front panel of GF-555X unit to the source of sound which is to be recorded. For the best recording, the sound sources should be 30 to 150cm (1 to 5 feet) from the unit; however, satisfactory results can be obtained with even greater distances.



Note:

When the tape which was recorded through the built-in microphones of the GF-555X is played back the sounds channels heard are reversed. (For instance, the relative left and right position of musical instruments recorded will be heard through the right and left channel speakers respectively.)



3. Slide the function selector to the TAPE position.

4. Start the recording after referring to the instructions of steps 2 to 7 and step 9, (page 43—45,) of "Recording from built-in radio".

Note:

In the case of recording with built-in microphones monitoring is not possible either with speakers or headphones.

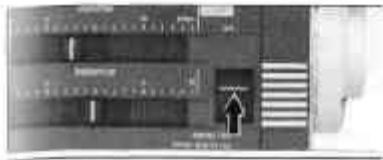
PLAYBACK

This machine can playback in many ways as mentioned below.

1. Playback with Deck 1 only or with Deck 2 only
 Individual Playback
2. Deck 2 can start playback automatically as soon as the playback of Deck 1 has ended, or vice-versa, from Deck 2 to Deck 1.
 Sequential playback
3. Both Deck 1 and Deck 2 can playback at the same time, mixing both sounds.
 Simultaneous playback
 The sound of Deck 1 can be listened to with Headphones via Deck 1 monitor socket and the sound of Deck 2 with the built-in speakers.

INDIVIDUAL PLAYBACK

1. Load a cassette tape into Deck 1 or Deck 2 cassette compartment, as desired, according to the instructions on page 40.
2. Set the tape selector switch to the appropriate 1 or 2 position for the tape being used. (Refer to the instructions and table on pages 41 and 42).



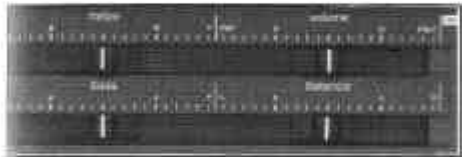
3. Set the power switch to the ON position.



4. Slide the function selector to the TAPE position.



5. Depress the play (▶) key.
The unit will start playing the tape.



6. Adjust the volume, bass and treble controls to a comfortable level.



7. To temporarily interrupt tape playback, depress the pause (||) key.
Depress and release the pause (||) key once more to resume playback.



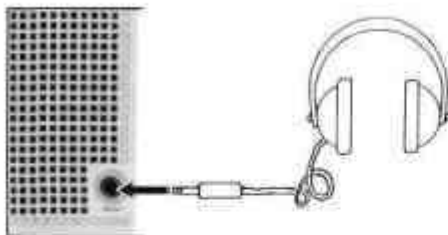
8. Press the stop (■) key to stop the tape.



9. The unit will automatically return to the neutral operating mode after the end of tape has been reached.



10. The full length of both sides of any cassette tape may be played. After one side of the tape is finished, the other side is ready for playback.



Headphones

In order to listen in privacy you may use a pair of stereo headphones.

SEQUENTIAL PLAYBACK

Sequential playback in any direction, either Deck 1 or Deck 2, is possible.

1. Load the cassette tapes into Deck 1 and Deck 2 cassette compartments and adjust the tape selectors according to the instructions on pages 37-42.
2. Search for the starting position on each cassette tape, (which is desired for playback). Searching is according to the APLD or Rewind, fast forward wind operation explanations which will follow later on.
3. Follow the steps 3 and 4 on page 50.



4. Slide the tape operation mode selector to **1** \rightarrow **2** position.



5. Depress the pause (||) key of Deck 1 or Deck 2 — whichever is to be played back finally. And then depress the play (▶) key.



6. Depress the play (▶) key of Deck 1 or Deck 2 — whichever is to be started first, and then playback will start.



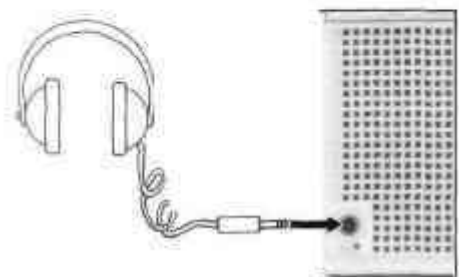
7. When the first tape has ended its playback, the pause (||) key of Deck 1 or Deck 2 — whichever is to be played back finally, will be released automatically and the playback of Deck will start.

SIMULTANEOUS PLAYBACK

This unit can be playback Deck 1 and Deck 2 at the same time.

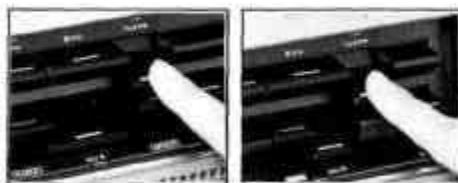


1. Depress both play (▶) keys.
The mixed sound of both Decks can be heard with the built-in speakers.



2. When the headphones are connected to the TAPE 1 MONITOR socket, the sound from Deck 1 can be heard with the headphones and the sound from Deck 2 can be heard with the built-in speakers.

SKIPPING (CUE OR REVIEW)



1. In order to advance short sections of the tape at high speed, whilst leaving the unit in playback mode, Depress the fast forward CUE/ F FWD (▶▶) key.

The tape will continue to advance as long as the fast-forward (▶▶) key is depressed, and will return to the playback mode when the key is released.



2. To rewind the tape at high speed for short segments, depress the rewind REVIEW/REW (◀◀) key whilst leaving the unit in playback mode. The tape will continue to rewind as long as the key is depressed, and will return to the playback mode when the key is released.

FAST FORWARD WINDING OR REWINDING

at high speed observe the following steps after
depressing the stop (●) key.
For short operations, refer to the SKIPPING (CUE
or REVIEW) instructions on page 53.



FAST FORWARD WINDING

1. To advance the tape at high speed, depress the
fast forward CUE/F FWD (●●) key.



2. To stop the advance before the end of the tape,
depress the stop (■) key.



3. The unit will automatically return to the
neutral operating mode after the end of the
tape is reached.



REWINDING

1. To rewind the tape at high speed, depress the
rewind (◀◀) key.



2. To stop rewind before the beginning of the tape, depress the stop (■) key.



3. The unit will automatically return to the neutral operating mode after the beginning of the tape is reached.

Note:

1. If battery voltage is low, the auto-stop circuit may not function after high-speed advance or rewind.
2. If you want to change the mode from fast-forward to playback, from rewind to playback, from to rewind to fast-forward, or from fast-forward to rewind, depress the stop key before depressing the other desired key.

APLD (Auto Program Locate Device)

INTRODUCTION

A drawback of most cassette systems when compared with records is that a trial and error forward and reverse winding is necessary in order to find the head of any item in the intermediate sections of the tape.

By using the APLD, the GF-555X scans the tape and automatically starts play wherever there is space between two recorded items. Only the Deck 1 is provided with the APLD.

USING THE APLD

APLD Forward— Finding the head of a piece of music or other programme item during forward winding — see pages 61—62.

APLD Reverse — Finding the head of a piece of music or other programme item during rewinding — see pages 63-64.

TAPES TO FIT APLD

APLD may not operate normally with cassettes recordings which have the following characteristics:

- a) Tapes on which the sound recording is intermittent (e.g. conversation, lectures, etc.)
- b) Tapes which contain very soft classical music, solo performances, modern jazz, etc.
- c) Tapes with a very low recording level (less than -15VU) throughout.
- d) Tapes with intervals of less than 3 seconds between recorded items.
- e) Tapes with excessive hum or noise in the intervals between recordings.

In these circumstances the APLD may either miss the required space or start playing in the middle of a recording.

NOTES ON APLD OPERATION

1. If the APLD is activated near the end of a programme item, the system may jump over the following item. Avoid this by watching the LED indicator.
2. The APLD has a highly sensitive circuit. It may not work properly if the unit is placed near powerful magnetic fields such as those created by TV sets or electrical appliances.
3. Do not depress the forward APLD (APLD •) key or the reverse APLD (^ APLD) key during a recording.
4. When the APLD is operating and the tape is running rapidly there may be some sound from the loud speakers. This does not indicate a malfunction.

PROGRAMMING THE APLD COUNTER

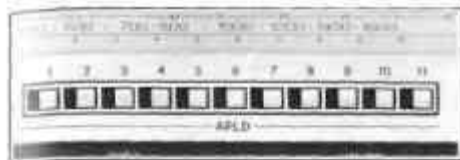
Programming is necessary when searching for an item that is separated by more than 2 items. Programming is not necessary if you want to skip over the item to which you are listening and move to an adjacent item; in this case depress the forward APLD (APLD •) or reverse APLD (◀ APLD) key without pressing an APLD number input button.

The APLD can be programmed to find 11 item selections in one operation. To locate a section that is more than 12 items away, first select 11 and after the tape has reached that position select the additional number of space necessary.



1. Depress the play (▶) key if it is not already

2. Count the number of blank intervals between the present position of the tape and the item you want to hear.



3. Press the corresponding number input button (1 — 11). The indicator LED next to the number pressed will light up.

CHANGING THE APLD NUMBER

In order to change the inputted number, push the button corresponding to the new input number.



CANCELLING THE APLD FUNCTION

1. In order to cancel an inputted number which has been programmed, depress the stop key once.
2. In order to begin playback, fast forward winding, or rewinding from this position, wait several seconds and then depress the play (▶), f. fwd (▶▶), or rew (◀◀) key.

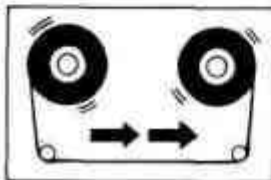
If the play (◀), f. fwd or rew key is depressed immediately after the stop (■) key, the number to be cancelled may be retained in the unit's memory.

FORWARD APLD OPERATION

In order to find the beginning of an item automatically during forward winding:



1. Depress the forward APLD (APLD ►) key.
The play (►) key is already depressed.



2. The tape will rapidly wind forward whilst the scanning system searches for the next space between items.
As the items advance, the APLD counts the spaces between programs and the LED indicator corresponding to the remaining number of items will light up.



3. When the appropriate space is reached, the unit will return automatically to the playback mode.
(The forward APLD (APLD ►) key is released.)



PAUSE CONTROL

If you want the Deck 1 to stop at the beginning of a selected item of music or other programme item, depress the pause (||) key of Deck 1 before initiating the above sequences of instructions.
Release the pause (||) key to restart after automatic stopping.

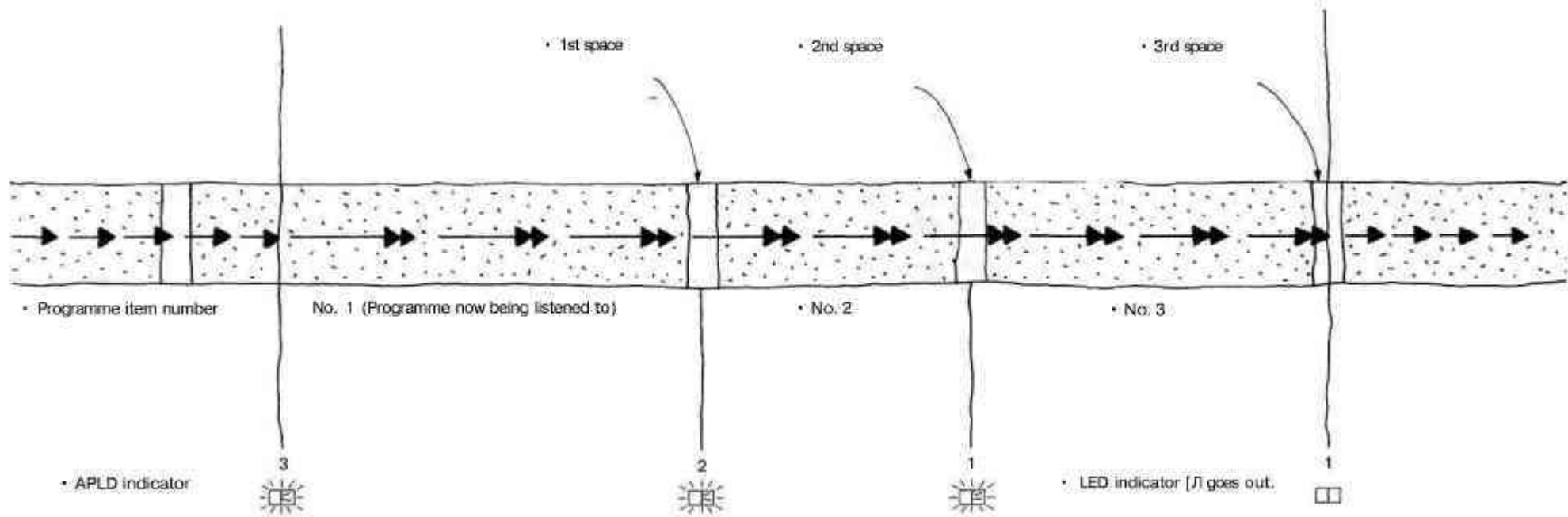
IF YOU HAVE ANY DIFFICULTY WITH
THE APLD OPERATION: Read pages 57
and 58.

EXAMPLE

- Skipping over the next three programme items in sequence and beginning playback automatically from the beginning of the fourth programme item.

- Press the number **3** input button, then depress Forward APLD (APLD ►) key.

- Forward APLD (APLD ►) key is disengaged automatically.

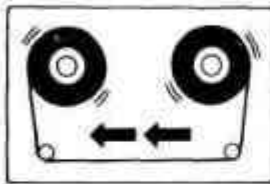


REVERSE APLD OPERATION

Finding the beginning of an item automatically during rewind.



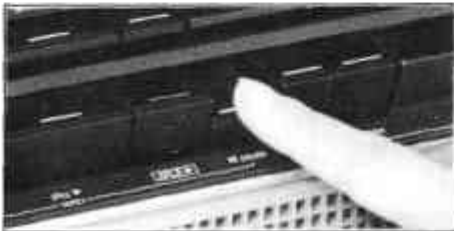
1. Depress the reverse APLD (◀ APLD) key. Play (▶) key is already depressed.



2. The tape will rapidly rewind and the scanning system searches for the space before the item. As the programme advances, the corresponding LED indicators will light up. Showing the number of remaining item gaps.



3. When the appropriate item space is reached, Deck 1 will return automatically to the playback mode, and the reverse APLD (◀ APLD) key is released.



PAUSE CONTROL

If you want the Deck 1 to stop at the beginning of a selected item of music or other programme item, depress the pause (||) key of Deck 1 before initiating the above sequence of instructions. Release the pause (||) key to restart after automatic stopping.

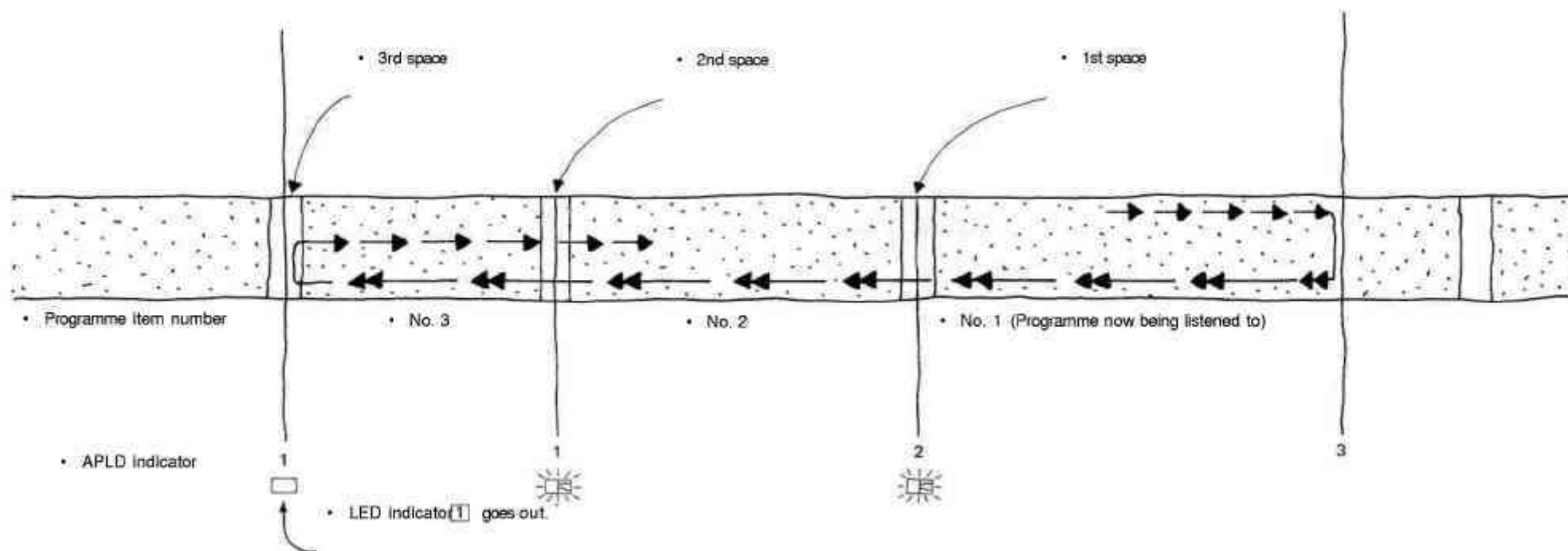
IF YOU HAVE ANY DIFFICULTY WITH
THE APLD OPERATION: Read Pages 57
and 58.

EXAMPLE

- Skipping over the previous three programme items and beginning playback automatically from the beginning of the third programme.

- APLD (◀ APLD) key is disengaged automatically.

- Press the number[3] button, then depress APLD (◀ APLD) key.



TAPE EDITING FOR APLD

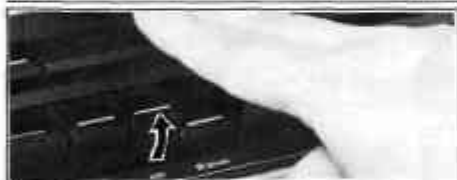
For the APLD to function, it is necessary to have a space of at least three seconds between each item of music or other programme item during recording. Most commercially pre-recorded cassettes are already edited. Also the space between items on a record is sufficient to activate the APLD function. In order to make your own space on the tape, refer to the following instructions.



1. When an item being recorded ends, depress the EDIT key for about 5 seconds in order to make an absolutely blank space on the tape.



2. Then, depress the pause (||) key while depressing the EDIT key.



3. Release the editing key. This will establish the correct blank space.



4. In order to begin a further recording, disengage the pause function by depressing the pause (||) key a second time.

5. Then repeat the same procedure throughout the entire cassette.

DUPLICATING (DUBBING)

This unit does not need any additional tape recorder for dubbing; by using both of Deck 1 and Deck 2 it can be done very easily.
Needless to say, the dubbing from or to an external deck is possible (See page 72 and 73).

DUBBING FROM DECK 1 TO DECK 2

Note:

1. Remove the headphones jack from Deck 1 monitor socket.
2. Remove the microphones jacks from external microphone sockets.
3. Set the mode selector to the OFF position.

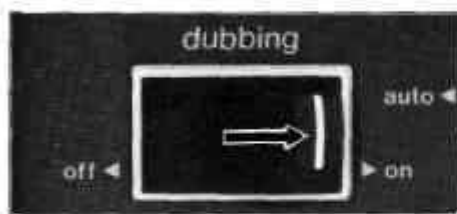
1. Load the cassette containing the programme source (recorded cassette) into the cassette compartment of Deck 1, and search the position of the tape from where it is wished to start the recording on Deck 2.

2. Load the cassette to be recorded into the cassette compartment of Deck 2, and search for either the head of the tape or the start position of the recording.

3. Set the tape selector 1 and 2 to the proper position according to the characteristics of tape to be used.



4. Slide the function selector to the TAPE position.



6. Depress the pause (||) key of Deck 2.



7. Depress the record key of Deck 2.
The play (▶) key is also depressed.



8. Depress the play (▶) key of Deck 1. Deck 1 starts to play.

9. Adjust recording levels — See page 44.



11. Depress the play (▶) key of Deck 1 and simultaneously release the pause (||) key of Deck 2. Tape dubbing begins.



12. The volume, balance, bass and treble controls can be adjusted without affecting the recording.



13. In order to stop the tape dubbing depress stop (■) keys of both Decks.



14. When either Deck 1 or Deck 2 has ended its tape, the unit will change to the neutral

USING EXTERNAL UNITS

PLAYING RECORDS

Note:

Set the mode selector to the OFF position. This unit can be connected to a record player with a magnetic cartridge which produces quality sound signals; the unit has a built-in phono equalising circuit.



1. Set the power switch to the SLEEP/OFF, TIMER STAND-BY position.



2. Connect the output leads of a magnetic cartridge record player (optional extra) to the PHONO sockets of the unit.
The PHONO sockets of this unit are designed exclusively for use with a magnetic cartridge. Connecting it to a record player with ceramic or crystal cartridge will result in excessive input signals and distortion in recorded sound.

3. If the record player is equipped with an earth lead (or terminal), connect it to the GND terminal of the unit.



4. Set the power switch to the ON position.



5. Slide the function selector to the **PHONO LINE IN** position.
6. Prepare the record/player to play a record.
7. Adjust the volume, balance, bass and treble controls as you like. (See pages 32 to 33).

RECORDING FROM RECORD PLAYER

1. Operate steps 1 to 6 according to the above explanation.
2. Operate steps 2 to 7, and 9 of pages 43 to 45, then record.

RECORDING FROM AN AMPLIFIER

Note:

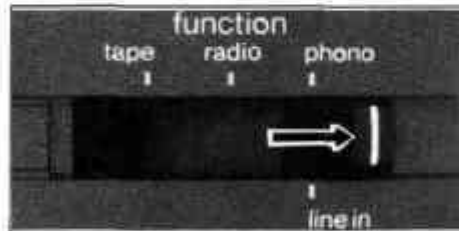
1. If the record player is connected to the phono sockets of this unit, the player should be set to the stop mode, otherwise the sound from the amplifier will mix with the sound of the record player.
2. Set the mode selector to the OFF position.

1. Turn off both units, (amplifier and GF-555X).



2. Output sockets (Rec Out, Tape Out etc.) of amplifier and LINE IN sockets of this unit should be connected by the leads which have the plugs to fit each socket.
Even if input terminals, (tape playback or tape input etc.) are connected or already in the connected situation, with the LINE OUT sockets of GF-555X, affect will not be given to the recording.

3. Turn on both units.



4. Slide the function selector to the PHONO/ LINE IN position.

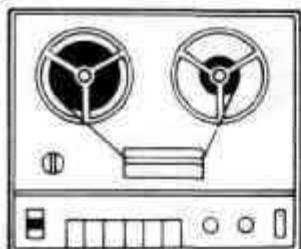
5. Operate the recording, referring to steps 2 to 7, and step 9 of the explanation on pages 43 to 45.

6. Volume, balance, bass, treble controls can be adjusted as desired without affecting the recording.

CONNECTING TO EXTERNAL RECORDER



• To LINE IN sockets



If wishing to dub by combining with an external recorder, (especially with the recorder which does not use cassette tape, but uses open reel tape), follow the following explanation. In the case of cassette to cassette dubbing, follow to the explanation of pages 66 to 68.

Note:

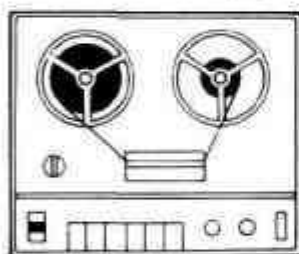
Set the mode selector to the OFF position.

Dubbing from an external recorder (or player) to GF-555X

1. Connect an external tape recorder, (or deck,) to the LINE IN sockets on the GF-555X rear panel.
2. Load the tape cassette (blank or pre-recorded) into Deck 2 of GF-555X and search for the starting position from where it is desired to start the recording.
3. Load a tape, which will be the programme source, on the external recorder or player.
4. Adjust Deck 2 of GF-555X to its recording mode, (see page 49), and the external recorder to its playing mode.



• To LINE OUT sockets



Dubbing from GF-555X to external recorder, (or deck).

1. Connect another tape recorder to the LINE OUT sockets on the GF-555X rear panel with RCA type leads.
2. Load tape cassette into either GF-555X Deck 1 or into Deck 2 and search for the programme which is desired, (for dubbing).
3. Set the external tape recorder to the recording mode.
4. Set the GF-555X to the playing mode, (see pages 49 to 51).

RECORDING FROM EXTERNAL MICROPHONES

Note:

1. Check whether Deck 1 is in the stop mode.
2. Set the mode selector to OFF position.



1. Recording in stereophonic

a) Prepare two microphones (400 ohm to 3k ohm impedance, having 3.5mm diameter plugs), or use SHARP'S stereo microphone MC-57CL/MC-55CL.

b) Plug the microphones into the R and L external microphones sockets.

If your microphone is fitted with a remote stop/start switch, the small plug is inserted into the REM control socket adjacent to the microphone sockets.

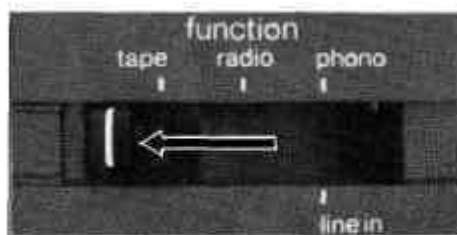
c) Place the microphones as shown in the illustration on the left.

2. Recording in monophonic

For monaural recording, whereby the signal is recorded on either the left or right channel track, plug a microphone into the front panel microphone jack (left or right).



3. In order to monitor a microphone recording, it is necessary to use stereo headphones. Monitoring is possible even feedback whistle (howling) the use of headphones is advisable. Connect them to the phones socket on the front panel. The volume level can be adjusted, using the volume control, without affecting the recording.

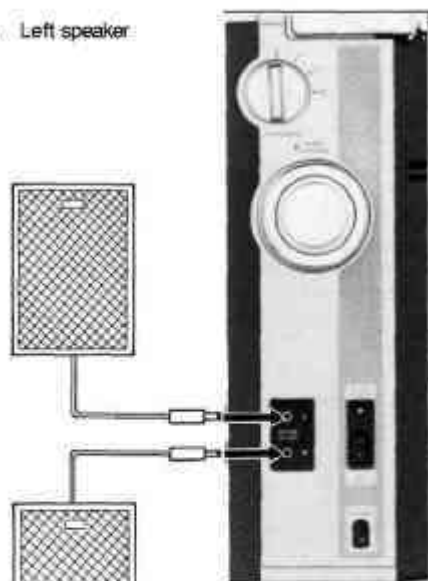


4. Slide the function selector to the TAPE position.

5. Make the recording by referring steps 2 to 7, (page 43 and 44), of the explanation for "Recording from built-in radio".

EXTERNAL SPEAKERS

- Left speaker

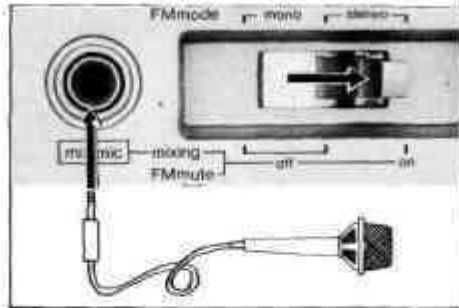


- Right speaker

If desiring to use the GF-555X with external speakers, the speaker leads must be terminated with 3.5mm plugs, and the speakers themselves should have a nominal impedance of 4 to 8 ohms. To ensure the speakers are correctly phased, (if the leads are not already fitted with the correct plugs), ask your local dealer to fit the proper plugs. The use of external speakers automatically disconnects the internal speakers.

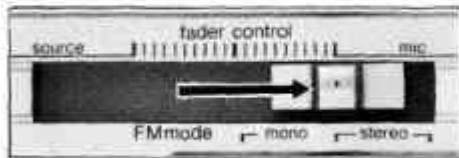
MICROPHONE AMPLIFIER

If using optional microphone, (provided with a 6.3mm dia. plug jack), this unit functions as an amplifier and public address will become possible.



1. Connect the microphone to the MIX MIC socket on the front panel.

2. Slide the mode selector to the ON position.



3. Slide the fading control to MIC position.



4. Adjust the volume, balance, bass, and treble controls as desired.

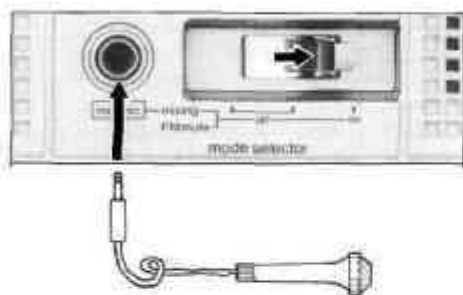
Use of a mixing microphone (impedance: 400 ohms—3K ohms) enables this unit to mix the recording or playback with the built-in microphone, built-in radio, the tape recorder itself, a record player, or other external audio system connected to the LINE IN socket.

Note:

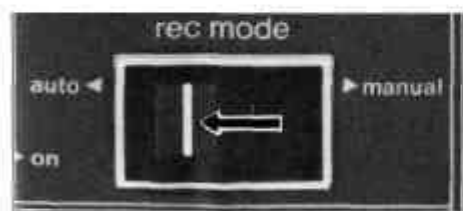
Recorded or reproduced sound after mixing is monophonic.



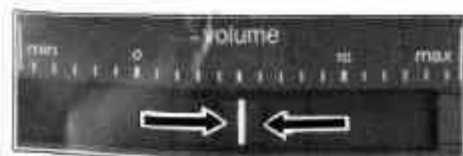
1. Adjust the fading control to the central position between SOURCE and MIC.



2. Connect the mixing microphone (provided with plug jack of 6.3mm dia.)
3. Slide the mode selector to the ON position.



4. Set the REC MODE switch to the AUTO position.



5. Adjust the volume control to the central position between 0 and 10.

6. For mixed playing or mixed recording with mixing microphone and source, follow the instructions in the chart below.

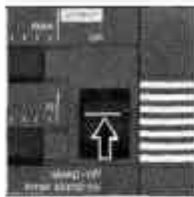


7. During dubbing from Deck 1 to Deck 2 with the dubbing switch in "ON" position, the mixing of Deck 1 sound with the sound of mixing microphone is possible.

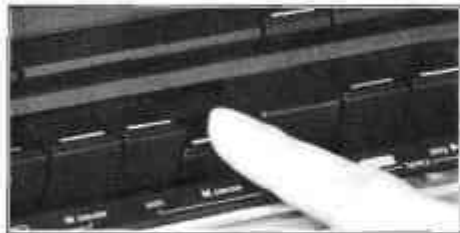
Source unit to be mixed with the mixing microphone.	Function		Operation				Monitoring
	Mixed playing	Mixed recording	Depress the play key (Deck 1 and/or Deck 2).	Depress the record key (possible only *with Deck 2).	Fader control		
					If it is set to the "source" position.	If it is set to the "mic" position.	
Built-in radio	Allowed	Allowed	No	Depress the key at the time of mixed recording.	Sound coming from the radio is increased.	Sound coming from the mixing microphone is increased.	Built-in speaker, headphones or external speaker
Built-in Deck 2 and/or Deck 1	Allowed	Mixed recording is possible by connecting an extra tape recorder to the LINE OUT sockets.	Yes	No	Sound coming from the built-in Deck 2 and/or Deck 1 is increased.		Built-in speaker, headphones or external speaker
Built-in microphone	Not allowed	Allowed	No	Yes	Sound coming from the built-in microphone is increased.		
Record player	Allowed	Allowed	No	Depress the key at the time of mixed recording.	Sound coming from the record player is increased.		Built-in speaker, headphones or external speaker
External audio system connected to the LINE IN socket.	Allowed	Allowed	No	Yes	Sound coming from external audio systems connected to the "LINE IN" socket is increased.		Headphones or external speaker
External microphones	Not allowed	Allowed	No	Yes	Sound coming from the external microphone is increased.		Headphones or external speaker

The timer unit is provided with an AUTOMATIC-ON system, (commercially available), which will enable the tape deck to automatically start recording or playback at predetermined times.

1. Plug the AC supply lead of this tape deck and the supply lead of the amplifier or receiver in use into the AUTOMATIC ON outlet of the timer, and adjust the timer unit to the EVER-ON mode.



2. Set the POWER switch to the ON position.



3. Depress the pause key of Deck 2.



4. Depress the record key and adjust the recording level for the recording and depress the play (▶) key for playing.

5. Adjust the timer unit to the desired starting time of the recording or playback, and set the timer unit to the AUTOMATIC-ON mode.



6. Slide the tape operation selector to [2] /TIMER STAND-BY position.



7. Slide the power switch to SLEEP/OFF, TIMER STAND-BY position. The GF-555X will now be turned off.



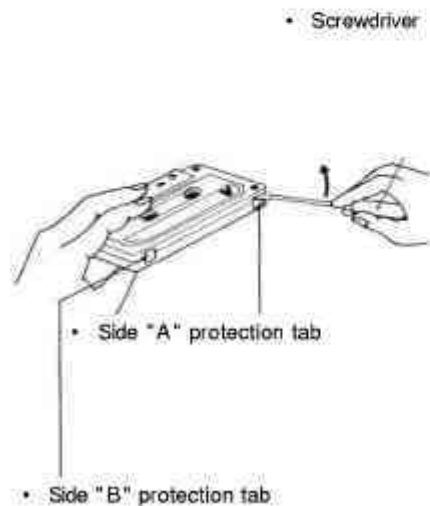
8. When the pre-set time arrives, this unit will be turned on, pause (II) key of Deck 2 is automatically released and recording or playback will begin.

Note:

Some timer units may operate in a manner different from the above description. Read the instruction manual carefully before use.

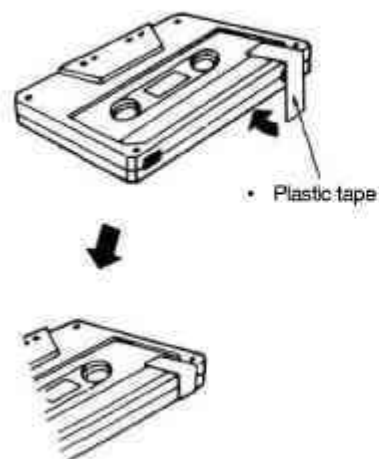
SUGGESTIONS

PROTECTING AGAINST ACCIDENTAL ERASURE, OF RECORDED TAPES



All tape cassettes are provided with tabs which can be removed in order to prevent accidental erasure of a recording which is to be kept permanently. To protect the "A" (or "1") side of the tape, break off the "A" side tab. Break off the "B" (or "2") side tab to protect side "B". The record key cannot be depressed when the unit is loaded with such an erase-proof cassette.

Illustration at left shows in the case side "A" is facing upwards.



If necessary, a tape can be re-recorded, even after the protection tabs have been removed, by covering the empty area with a strip of plastic tape.

**ERASURE OF
RECORDED TAPES**

Previous recordings are automatically erased when a new recording is made.
It is possible, however, to erase the tape without making further recording.



1. Set the REC MODE switch to the MANUAL position.



2. Set the record level controls to the MIN position.



3. Depress the record key.



4. The unit will automatically return to the neutral operating mode after the end of the tape is reached.



EDIT SWITCH

During recording, the EDIT key, if pushed, can cut out the input signal during the record mode. It is possible to use this EDIT key for a short period.

DIGITAL TAPE COUNTER

By setting the counter to "000" at the beginning of each cassette tape, (performed by pressing the reset button), the number on the counter will provide a convenient index number for each recording.

CLEANING THE CABINET

Use a damp cloth only for cleaning the cabinet.

GENERAL

Power source:	AC 110/220/240V, 50/60Hz DC 15V (Ten UM/SUM-1, R20, HP-2, "D" batteries or external DC supply)
Speakers:	16 cm (Woofer) x 2 5 cm (Tweeter) x 2
Output power:	Dynamic power 22,000mW (11,000mW. + 11,000mW.)
Semiconductors:	11-IC's (Integrated circuits) 32-Transistors 2-FET's 1-SCR 41-Diodes 26-LED's
Dimensions:	
Width;	530mm
Depth;	150mm
Height;	320mm
Weight	9 kg. (without batteries)

TAPE RECORDER/PLAYER

Tape:	Philips-type compact cassette tape
Frequency response:	40Hz to 15000Hz (CrO2 tape) 40Hz to 12000Hz (normal tape)
SN ratio:	50 dB
Vow and flutter:	0.07 %/VRMS
Input sensitivity and input impedance:	
Ext. Mic;	600 ohms
Mixing Mic;	600 ohms
Line in;	0.1 V/100k Ohms
Output level and loaded impedance:	
Headphones;	8 ohms to 25 ohms
External speaker;	4 ohms to 8 ohms
Line out;	0.7V/50k Ohms

RADIO

Frequency range:	AM; 525 kHz to 1605 kHz SW1; 2.3 MHz to 7.3 MHz SW2; 7.3 MHz to 22 MHz FM; 87.6 MHz to 108 MHz
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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.

SHARP

SHARP CORPORATION

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مؤسسة شارب
اوساكا - اليابان