

DOUBLE CASSETTE STEREO TAPE RECORDER  
STEREO-DOPPEL-CASSETTENREKORDER  
MAGNETOPHONE A DOUBLE CASSETTE STEREO  
DUBBLA KASSETTBANDSPELARE  
REGISTRATORE STEREO A DOPPIA CASSETTA

OPERATION MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
BRUKSANVISNING  
MANUALE DI ISTRUZIONI

**GF-525H**

*The  
Searcher*



**APLD**  
Auto Program Locate Device

**SHARP**

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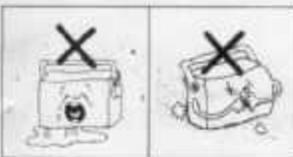
## CAUTIONS



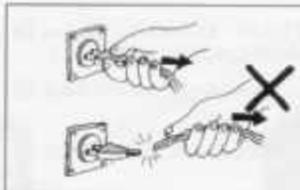
1. Do not expose the unit to heat, 60°C (140°F), or above. For example do not place the unit near heaters, radiators, in direct sunlight, or even leave inside a motor vehicle on a sunny day - temperature can reach 80°C (176°F), or above. Heat will damage the cabinet. Also avoid leaving the unit in extremely cold places, 5°C (41°F), or below.



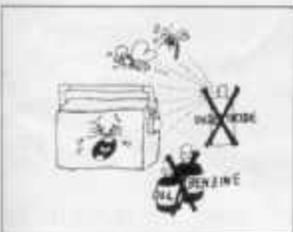
5. Do not oil any part of the unit.



2. Do not expose the unit to moisture - rain, vapour etc. - because the circuitry may be damaged.
3. Do not store the unit or Cassette Tapes in humid or dusty environments for any length of time.



6. Do not hold leads of plugs - AC supply plug and jack - when disconnecting. This will break the connections. Hold the plug body when disconnecting from the outlet.



4. Do not apply any organic solvents - petroleum, benzene, thinners, etc., or even insecticides - to the surfaces of the unit. Such materials can cause cracking or deterioration of the cabinet surface.

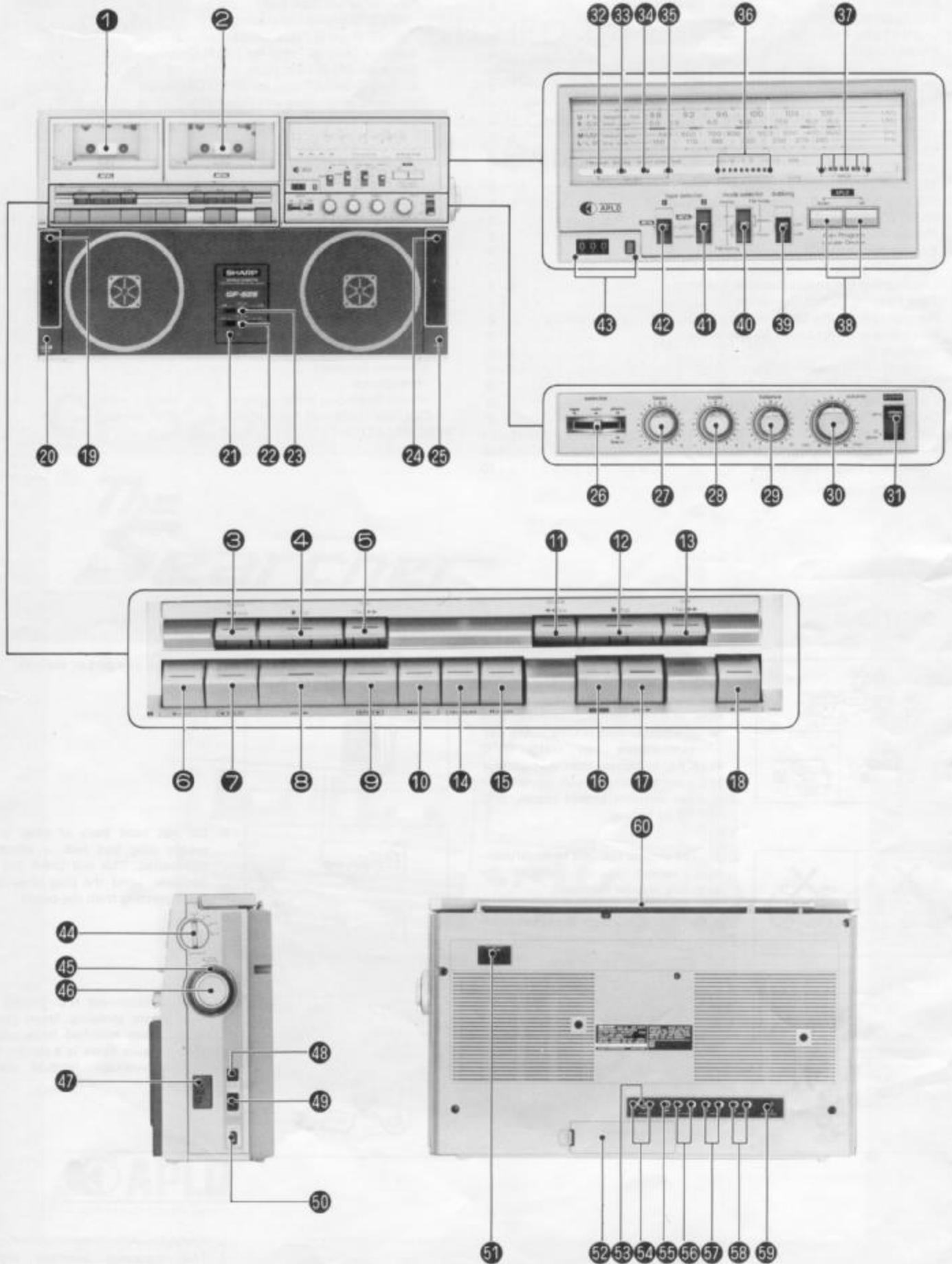


7. Always disconnect A C Supply lead Plug before servicing. Never remove cover unless qualified to repair this unit, because there is a danger from the high-voltage residual electric charge.

This apparatus complies with requirements of EEC directive 76/889/EEC.

# DIAGRAM AND EXPLANATION OF CONTROLS

## DIAGRAM



## EXPLANATION OF CONTROLS

- 1 DECK 1: CASSETTE COMPARTMENT
- 2 DECK 2: CASSETTE COMPARTMENT
- 3 DECK 1: REWIND/REVIEW SKIP REWIND KEY (◀◀ REW/REVIEW)
- 4 DECK 1: STOP KEY (■ STOP)
- 5 DECK 1: FAST FORWARD WIND/CUE (SKIP FORWARD) KEY (F.FWD▶▶/CUE)
- 6 DECK 1: CASSETTE EJECTION KEY (EJECT)
- 7 DECK 1: APLD REVERSE (REWIND) KEY (◀APLD)
- 8 DECK 1: PLAYBACK KEY (PLAY)
- 9 DECK 1: APLD FORWARD KEY (APLD▶)
- 10 DECK 1: PAUSE KEY (PAUSE)
- 11 DECK 2: REWIND/REVIEW (SKIP REWIND) KEY (◀◀REW/REVIEW)
- 12 DECK 2: STOP KEY (STOP)
- 13 DECK 2: FAST FORWARD WIND/CUE (SKIP FORWARD) KEY (F.FWD▶▶/CUE)
- 14 DECK 2 RECORDING MUTE SWITCH KEY (REC MUTE)
- 15 DECK 2: PAUSE KEY (PAUSE)
- 16 DECK 2: RECORD KEY (RECORD)
- 17 DECK 2: PLAYBACK KEY (PLAY)
- 18 DECK 2: EJECTION KEY (EJECT)
- 19 BUILT-IN MICROPHONE FOR LEFT CHANNEL RECORDING
- 20 DECK 1: MONITORING SOCKET (TAPE 1 MONITOR)
- 21 MIXING MICROPHONE SOCKET (MIC)
- 22 MICROPHONE VOLUME CONTROL (MIC VOLUME)
- 23 TAPE FADING CONTROL (TAPE FADER)
- 24 BUILT-IN MICROPHONE FOR RIGHT CHANNEL RECORDING
- 25 HEADPHONES SOCKET (PHONES)
- 26 FUNCTION SELECTOR SWITCH (SELECTOR)
- 27 BASS TONE CONTROL (BASS)
- 28 TREBLE TONE CONTROL (TREBLE)
- 29 CHANNEL BALANCE CONTROL (BALANCE)
- 30 OUTPUT VOLUME CONTROL (VOLUME)
- 31 POWER SWITCH (POWER)
- 32 FM STEREO BROADCAST INDICATOR (FM STEREO)
- 33 DUBBING INDICATOR (DUBBING)
- 34 RECORDING INDICATOR (RECORD)
- 35 POWER INDICATOR (POWER/BATT)
- 36 LEVEL/TUNING INDICATOR (LEVEL/TUNING)
- 37 and 38 APLD INPUT BUTTONS AND INDICATORS (APLD: 1-5)
- 39 DUBBING SWITCH (DUBBING)
- 40 FM MODE/MIXING/FM MUTING SWITCH (MODE SELECTOR)
- 41 DECK 2: TAPE SELECTOR SWITCH (TAPE SELECTOR 2)
- 42 DECK 1: TAPE SELECTOR SWITCH (TAPE SELECTOR 1)
- 43 DECK 2: TAPE COUNTER AND COUNTER RESET BUTTON
- 44 WAVE BAND SELECTOR SWITCH (BAND SELECTOR)
- 45 TURNING CONTROL (TUNING)
- 46 FINE TUNING CONTROL (FINE TUNING)
- 47 EXTERNAL SPEAKER SOCKETS (EXT SP.)
- 48 15 VOLT DC TERMINAL (DC 15V)
- 49 AC SUPPLY INPUT TERMINAL (AC INPUT)
- 50 MAINS SUPPLY VOLTAGE SELECTOR (VOLTAGE)
- 51 FM AERIAL TERMINALS (FM EXT. ANT)
- 52 BATTERY COMPARTMENT
- 53 and 54 REMOTE START/STOP CONTROL SOCKET (REM) AND EXTERNAL MICROPHONE SOCKET (EXT MIC)
- 55 EARTHING TERMINAL (GND)
- 56 RECORD PLAYER INPUT SOCKETS (PHONO)
- 57 LINE INPUT SOCKETS (LINE IN)
- 58 LINE OUTPUT SOCKETS (LINE OUT)
- 59 BEAT INTERFERENCE CANCELLING SWITCH (BEAT CANCEL)
- 60 TELESCOPIC AERIAL

## PREPARATION FOR USE

### 1 POWER SUPPLY

The GF-525H Unit will operate on an AC mains supply of 110 Volts, 220 Volts, or 240 Volts of 50Hz or 60Hz. For portable use it will operate on its internal batteries, or from an external 15-Volts DC supply (with an adaptor).

### 2 AC SUPPLY OPERATION



#### AC Supply Voltage Adjustment

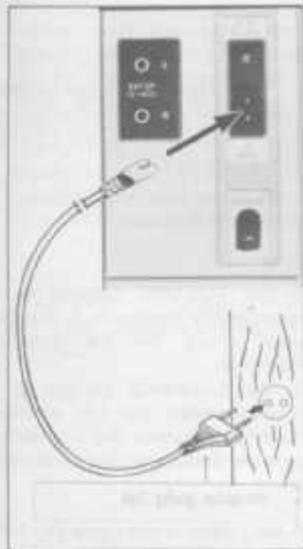
The Voltage Selector setting should be checked to see that it conforms to the local AC supply voltage. This must be done before plugging in to the AC supply. Adjustment is made by turning the adjusting screw in either direction with a screwdriver until reading of Selector matches the local AC supply voltage.

#### Connection to AC Supply

1. Fit the AC supply lead connector to the AC INPUT terminal point on the unit.
2. Connect the AC supply plug (the other end connector of the lead) to the AC supply (110, 220 or 240V).

#### Notes:

- 1) Connection of AC INPUT Terminal with connector cuts out internal batteries, (if fitted).
- 2) Disconnect AC INPUT Terminal Connector in order to operate Unit with its internal batteries, (if fitted).
- 3) Operate the Unit with the AC supply in order to conserve battery power, or when batteries are not fitted.
- 4) Disconnect AC supply plug from AC supply outlet when the unit is not being used for long periods.



### 3 INTERNAL BATTERY OPERATION

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

1. Disconnect the AC Supply Lead Connector from AC INPUT Terminal of the Unit.
2. Remove Battery Compartment Cover.



3. Fit ten batteries into the Battery Compartment. Use the UM/SUM-1; R-20; HP-2; or D type batteries.



4. Replace Battery Compartment Cover. Unit is ready for internal battery power supply operation.



#### Notes:

- 1) Be careful to fit all batteries in series.
- 2) Be careful when fitting batteries to ensure that all battery terminals, and the Unit's battery terminal contacts are perfectly clean. Dust between contacting terminals will cause malfunction of operation.
- 3) Remove the batteries from the Unit when the Unit is not intended for use over long periods. Also remove batteries when batteries power is weak. Leaking electrolyte from batteries will cause serious damage to the Unit.

### 4 INTERNAL BATTERY CONDITION CHECK

The battery check serves as an indication of the effective battery life. Batteries should be replaced according to the POWER/BATT Indicator display.

1. Disconnect the AC INPUT Terminal Connector.
2. Disconnect the connector from the DC 15V Terminal.
3. Turn the VOLUME Control to the "0" position.
4. Slide the SELECTOR Switch to the TAPE position.
5. Depress the PLAY Key of either Deck 1 or of Deck 2.



6. Replace batteries if POWER/BATT indicator grows dim, flickers or becomes dark.
7. Do not attempt to replace batteries as long as the POWER/BATT indicator stays lit.



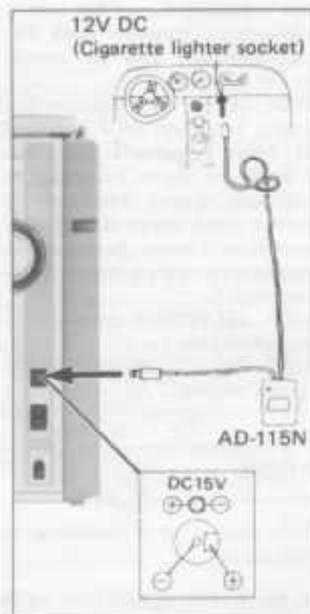
### 5 EXTERNAL DC POWER SUPPLY OPERATION

The Unit can be operated on an external 15 Volt, DC supply. With the use of the Adaptor AD-115N (not supplied) it is possible to use a 12 Volt vehicle battery.

1. Fit the Adaptor (AD-115N) connector into the DC 15V Terminal point on the Unit.
2. Fit the other end of the Adaptor (with plug fitted) into the vehicle's 12 Volt, DC, cigarette lighter socket on the dash board.

#### Note:

Connection of Adaptor to the DC 15V Terminal point will cut out the internal batteries.



## 1 FM (FREQUENCY MODULATION) RECEPTION



- Slide the POWER Switch to the ON position: POWER/BATT Indicator illuminates.

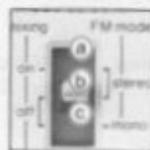


- Slide the SELECTOR Switch to the RADIO position.



- Increase the VOLUME Control to 2 or 3 position of the scale.

- Turn the BAND SELECTOR to the FM position.



- Slide the MODE SELECTOR to the appropriate position:
  - FM MUTING ON/STEREO: When receiving powerful FM Stereo broadcast.
  - FM MUTING OFF/STEREO: When receiving weak FM Stereo broadcast.
  - FM MUTING OFF/MONO: When receiving weak Stereo or Mono FM broadcast – reproduction will be mono.

### Notes:

- MODE SELECTOR position (a) or (b) permits reception of FM stereo or mono broadcasts. Selection of stereo or mono broadcast is automatic (stereo broadcast is received when stereo broadcast is transmitted; mono broadcast is received when mono broadcast is transmitted.)
- MODE SELECTOR position (a) muting will eliminate inter-station noise occurring during the tuning of broadcast. However weak FM broadcasts will also be muted and not heard.
- MODE SELECTOR position (b) permits reception of FM stereo and mono broadcasts. Selection of stereo or mono broadcast is automatic; (stereo broadcast is received when stereo broadcast is transmitted; mono broadcast is received when mono broadcast is transmitted).
- MODE SELECTOR position (b) cuts out muting.
- MODE SELECTOR position (c) cuts out muting.



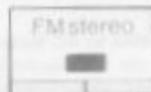
- Raise and extend the telescopic aerial



- Rotate TUNING Control (outer control) in order to tune in the broadcast: Continue tuning in the broadcast until maximum number of indicators illuminate on the LEVEL/TUNING indicator.



- FM STEREO Indicator illuminates if stereo broadcast is received.



- Adjust the telescopic aerial lengths and axis, until maximum number of indicators illuminate on the LEVEL/TUNING indicator.



- Turn the VOLUME Control to a position which results in a suitable acoustic effect for the listening environment.

- Turn the BALANCE Control to a position between the left channel (L) and right channel (R) in order to balance the audible output of the left and right channel speakers.



- Turn the TREBLE and BASS Controls in order to adjust the treble and bass content of the audio reproduction. Turn the TREBLE and BASS Controls towards the plus signs (+) in order to boost treble and bass content; toward the centre in order to flatten treble and bass content; and towards the minus signs (-) in order to cut the treble and bass contents.



- Slide the POWER Switch to the SLEEP position in order to turn off the radio: POWER/BATT Indicator will extinguish.

### Caution:

With the POWER Switch in the SLEEP position the AC power supply to the Unit is not turned off. Disconnect the AC supply plug from the AC supply in order to cut off AC power to the Unit.

## 2 SW (SHORT WAVE) RECEPTION

- Perform steps 1 to 4 mentioned for FM Reception.



- Turn the BAND SELECTOR to the K-SW position.
- Raise and extend the telescopic aerial to a vertical position.



- Rotate the TUNING Control (outer control) in order to tune in the broadcast. Continue tuning in the broadcast until the maximum number of LEDs illuminate on the LEVEL/TUNING indicator. For further tuning rotate the FINE TUNING Control (inner control) until the maximum number of LEDs illuminate on the LEVEL/TUNING indicator.

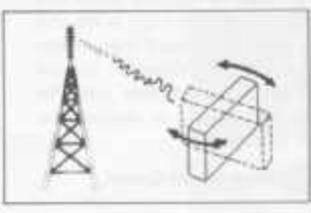


- Perform steps 6, 7 and 13 mentioned for FM Reception.

**3 MW (MEDIUM WAVE) AND LW (LONG WAVE) RECEPTION**



1. Perform steps 1 to 4 mentioned for FM Reception on page 5.
2. Turn the BAND SELECTOR to the MW or the LW position.
3. Perform steps 7 and 10 to 13 of FM Reception mentioned on page 5.



4. Rotate the Unit around the vertical axis in order to orientate the internal directional aerial for peak gain.

**CASSETTE TAPE RECORDER OPERATION**

**1 NOTES ON CASSETTE TAPES AND DECKS**

1. Use well-known brands of Cassette Tapes.
2. Avoid use of C-120 type Cassette Tapes.
3. When quality of recording is below standard the cause may be a deposit of oxide and other tape materials on the magnetic Heads. This will happen more frequently with the use of low quality Cassette Tapes. Cleaning of Heads is performed with a Cleaning Cassette (not supplied). Use the Cleaning Cassette according to manufacturer's instructions and avoid prolonged use – longer than required to clean the Heads – because this will cause unnecessary wear of Heads. The reduction in the quality of recording is not, therefore, due to any fault of the Unit.
4. Heads can also be cleaned manually by wiping the Heads with cotton wadding on a stick which has been moistened with methylated spirits. Wipe the Heads until the deposit is removed.



**Caution:**

- 1) Do not attempt to clean the Heads with any hard instrument. Scraping the Heads with a hard instrument will cause serious damage.
- 2) Do not use any organic solvents for cleaning the Heads – benzine, thinners, etc.

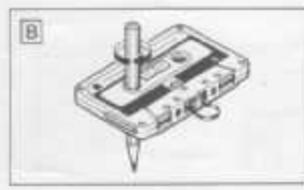
**2 MECHANISM FAULT**

- a. Tape jamming causing irregular play-back speed.
- b. Tape tangling around the Capstan Roller.



The above difficulties can be avoided if the following precautions are taken.

1. Inspect the Cassette for loosely wound tape spools. The spools can be viewed through the window in the centre of the cassette; refer to figure A.



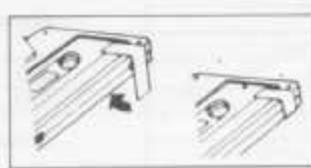
Loosely wound spools can be tightened by winding the spool with a pencil or similar object inserted into the spool spindle hole; refer to figure B.

2. If the cassette appears to be very stiff and winds slowly the cause may be due to folds or overlapping windings on the spool. The difficulty can be resolved by fast forward winding of the Cassette followed by rewinding.

**3 ERASURE PROTECTION**



In order to protect recorded tapes from accidental erasure the erasure tabs fitted to the edge of the Cassette – should be removed (with a minus screwdriver). (Illustration shows that the side "A" is facing upwards.) Cassette Tapes treated in this manner cannot be erased and when in the Cassette Compartment of Deck 2 it will not be possible to depress the RECORD Key. Erasure protection of side A (or 1) of the Cassette requires the removal of tab A (or 1); and side B (2) the removal of tab B (or 2).



The Cassette Tapes treated in this manner can be used for recording if the open tab holes are covered with a strong plastic tape.

**4 CASSETTE STORING**

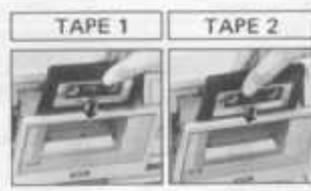


1. Do not store or place the Cassette in strong magnetic fields such as those radiating from TV sets, loud-speakers, etc. Exposure to magnetic radiation will reduce the recording sensitivity or even erase the recording.
2. Do not store the Cassette in hot, moist, or dusty environments.

**5 LOADING AND UNLOADING CASSETTE TAPES**



1. Depress the EJECT Key in order to open the Cassette Compartment – of Deck 1 or Deck 2.



2. Place a Cassette into the Compartment with the side to be recorded or played, A or B (1 or 2) side, facing outward. Also place the Cassette in the Compartment with the strip of exposed tape facing downward.



3. Before commencing recording or play check that tape is wound onto the left hand spool. If the tape is wound onto the right hand spool then either reverse the side of Cassette in the Compartment, turn A side over to B side, or vice versa; or rewind the tape, refer to page 12.



4. Close the Compartment Cover.



5. Depress the EJECT Key in order to open the Cassette Compartment Cover when unloading the Cassette. Remove the Cassette by hand.



- Notes:**
- Deck 1 will play Cassette Tapes with the APLD operation. Deck 1 cannot be used for recording.
  - Deck 2 will play and record Cassette Tapes.
  - Cassette Tapes loaded for recording must be placed into Deck 2.
  - Do not attempt to operate the lever (shown at the left) while the Deck 1 or 2 Compartment is open. If the lever is pushed while either Compartment is open then do not attempt to close the Compartment because damage will be caused. Depress the EJECT Key in order to return the lever to its original position.
  - Do not depress the PLAY Key while the Cassette Compartment is open because this will cause damage.

## 6 TAPE SELECTOR SWITCH OPERATION



1. Slide the TAPE SELECTOR [1] Switch to the NORMAL or to the CrO<sub>2</sub>/METAL position in order to match the circuit with the Cassette Tape being used on Deck 1 (for playing).

2. Do the same for TAPE SELECTOR [2] Switch. The TAPE SELECTOR [2] Switch is effective during playing and recording of Cassette Tape.

3. The Unit has been adjusted to match the following Cassette Tapes.

Normal	..... SHARP C-60SD/C-90SD
	MAXELL UD C-60/C-90
CrO <sub>2</sub>	..... MAXELL UDXLII C-60/C-90
Metal	..... SHARP C-60MX
	TDK MAC C-46/C-60

4. Other manufacturer's Cassette Tapes are suitable for the Unit if the TAPE SELECTOR switches [1] and [2] are operated so as to match the Unit's circuits with the type of tape used. Refer to the table for correct matching.

BRAND	TYPE OF TAPE	Position of the [1] switch		Position of the [2] switch	
		Playback	Recording	Recording	Playback
SHARP	C-46S/C-60S/C-90S	normal	normal	normal	normal
	C-46SD/C-60SD/C-90SD				
	C-60CR/C-90CR				
	C-60MX				
MAXELL	LN C-60/C-90	normal	normal	normal	normal
	UD C-60/C-90				
	UD-XL I C-60/C-90				
	UD-XL II C-60/C-90				
TDK	METAL C-46/C-60	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	metal	CrO <sub>2</sub>
	D-C-60/C-90	CrO <sub>2</sub> /metal	metal	metal	metal
	AD-C-60/C-90	normal	normal	normal	normal
	SA-C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	CrO <sub>2</sub>	CrO <sub>2</sub>
	MA-R C-46/C-60	CrO <sub>2</sub> /metal	metal	metal	CrO <sub>2</sub>
SONY	MA-C-46/C-60	CrO <sub>2</sub> /metal	metal	metal	CrO <sub>2</sub>
	LN X-60/90	normal	normal	normal	normal
	HFX-60/90				
	SHF-60/90				
	FE-CR-60/90				
EHF-60/90					
FUJI FILM	FL C-60/C-90	normal	normal	normal	normal
	FX-I C-60/C-90				
	FX-II C-60/C-90				
	METAL C-46/C-60				
SCOTCH	MASTER I C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	metal	CrO <sub>2</sub>
	MASTER II C-60/C-90	CrO <sub>2</sub> /metal	normal	normal	normal
	MASTER III C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	CrO <sub>2</sub>	CrO <sub>2</sub>
	METAFINE C-46/C-90	CrO <sub>2</sub> /metal	metal	metal	metal
MEMOREX	MRX <sub>2</sub> OXIDE C-60/C-90	normal	normal	normal	normal
	HIGH BIAS C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	CrO <sub>2</sub>	CrO <sub>2</sub>
AMPEX	GRAND MASTER I C-60/C-90	normal	normal	normal	normal
	GRAND MASTER II C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	CrO <sub>2</sub>	CrO <sub>2</sub>
BASF	PROFESSIONAL-I C-60/C-90	normal	normal	normal	normal
	PROFESSIONAL-II C-60/C-90	CrO <sub>2</sub> /metal	CrO <sub>2</sub>	CrO <sub>2</sub>	CrO <sub>2</sub>
	PROFESSIONAL-III C-60/C-90	CrO <sub>2</sub> /metal	normal	normal	CrO <sub>2</sub>

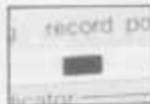
## 7 RECORDING FROM THE UNIT'S RADIO

### Note:

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to relevant law in your country.

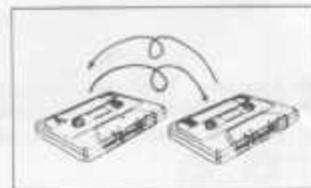
Recording is possible only on Deck 2. Therefore the following instructions are relevant to Deck 2.

1. Prepare the Unit for radio reception. Refer to appropriate section of Radio Operation, pages 5 and 6.
2. Load a Cassette Tape into the Cassette Compartment of Deck 2. Refer to the instruction on pages 6 and 7.
3. Slide TAPE SELECTOR [2] Switch to the NORMAL, CrO<sub>2</sub> or METAL position as mentioned in section on page 7.
4. Depress the PAUSE Key of Deck 2. Normally Cassette Tapes are provided with leader tapes on both ends. Therefore with a completely wound tape the recording should be started not immediately but allowing the lead to pass through the Deck for about 5 seconds. After making a 5 seconds programme gap on the tape then start recording.
5. Depress the RECORD Key of Deck 2. The PLAY Key will engage automatically.



### Notes:

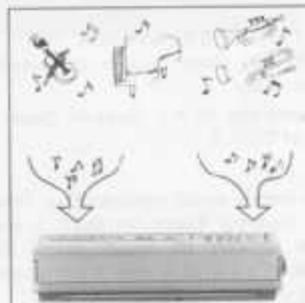
- 1) The RECORD Key cannot be depressed if the Cassette has been protected against erasure. Refer to instructions on page 6.
- 2) The RECORD Key cannot be depressed if the Cassette Compartment is not loaded with a Cassette.
- 3) The RECORD Key cannot be depressed if the PLAY Key has already been engaged. In this case do not attempt to depress the RECORD Key with force.



6. Slide BEAT CANCEL Switch to "A" position or to "B" position in order to cancel the maximum amount of beat interference when tuned to AM broadcasts.
7. Depress the PAUSE Key in order to release it at moment recording is to start.
8. Adjustment of the VOLUME, BASS and TREBLE Controls will not alter the recording level. Refer to page 5.
9. Depress the PAUSE Key in order to interrupt the recording on Deck 2. Tape motion will stop when the PAUSE Key engaged and resume from the point of stopping when PAUSE Key is released, (depressed for the second time.)
10. Slide the POWER Switch to the OFF/SLEEP position in order to turn off the radio. Recording process will continue until Cassette Tape has reached its end and Deck 2 automatically stops.
11. Depress the STOP Key in order to stop the recording process – at the end of recording.
12. Recording process will continue until Cassette Tape has reached its end and the Deck 2 automatically stops. All Keys are automatic.
13. Recording (or playback) can be continued on the reverse side of the Cassette Tape. Perform steps 5, 2 and 4 in sequence for Unloading and Loading of Cassette Tape mentioned on pages 6 and 7 and also steps 4, 5 and 8 for Recording from Unit's Radio mentioned.

## 8 RECORDING WITH THE UNIT'S MICROPHONES

1. Disconnect the jacks from EXT MIC Sockets, (if connected).
2. Slide the POWER Switch to the ON position.
3. Slide the DUBBING Switch to the OFF position, (if not already in that position.)
4. Slide the SELECTOR Switch to the TAPE position.



5. Perform steps 2 to 5 and step 8 of Recording from the Unit's Radio.
6. For optimal sound reproduction, position that it faces, and place the unit as close as possible to the sound source.

### Note:

Monitoring of recording with headphones or with the Unit's speakers is not possible.

## 9 PLAYBACK

The Unit can playback Cassette Tapes in a variety of combinations using Deck 1 and Deck 2.

- 1) Individual Playback.  
Playback from Deck 1 or playback from Deck 2.
- 2) Simultaneous Playback.  
Deck 1 and Deck 2 playback together. Playback of Deck 1 and playback of Deck 2 are mixed in the speaker output. Or Deck 1 playback can be monitored with Headphones and Deck 2 playback can be heard with the unit's speakers or Headphones.
- 3) Sequential Playback.  
Playback from Deck 1 is followed in sequence by playback from Deck 2. Or playback from Deck 2 is followed in sequence by playback from Deck 1.

### INDIVIDUAL PLAYBACK

1. Perform steps of Cassette Tape Loading and Unloading mentioned on pages 6 and 7 in order to load Cassette Tapes into Deck 1 or Deck 2.
2. Slide the TAPE SELECTOR [1] Switch to the proper position.  
(Refer to Tape Selector Switch Operation on page 7).



3. Slide the POWER Switch to the ON position.



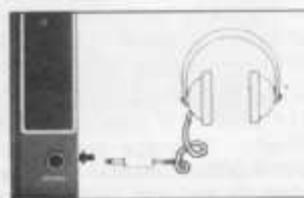
4. Slide the SELECTOR Switch to the TAPE position.



5. Slide the TAPE FADER control to the central position between TAPE 1 and TAPE 2.



6. Depress Deck 1 or Deck 2 PLAY Key. Deck 1 or Deck 2 will commence playback of Cassette Tape.



7. Turn VOLUME, BASS and TREBLE Controls respectively, in order to adjust the audio reproduction suitable for the acoustic environment. Refer to page 5.

8. Fit the stereo headphones jack into the PHONES Socket, if required. Refer to Headphones, page 15.



9. Depress the PAUSE Key in order to interrupt the playback of Deck 1 or Deck 2. Tape motion will stop when the PAUSE Key is engaged and resume from the point of stopping when PAUSE Key is released, (depressed for the second time).



10. Depress the STOP Key in order to stop Deck 1 or Deck 2.



11. Deck 1 or Deck 2 will automatically stop and the PLAY Key will disengage when the Cassette Tape reaches the end.



12. Both sides of the Cassette Tape can be played on Deck 1 or on Deck 2. When the Cassette Tape reaches the end, the reverse side of the Cassette Tape is ready for playback.



#### SIMULTANEOUS PLAYBACK

Deck 1 and Deck 2 can be played simultaneously.



1. Depress the PLAY Keys of Deck 1 and of Deck 2.



2. The stereo audio reproduction from the Cassette Tapes on Deck 1 and Deck 2 will be heard from the speakers output — left channel and right channel.



3. Fit the stereo headphones jack into the TAPE 1 MONITOR Socket in order to hear the stereo audio reproduction from Deck 1. Deck 2 stereo audio reproduction will be heard from the speakers output or headphones through PHONES socket.



4. Slide the TAPE FADER control to adjust volume balance between Deck 1 and Deck 2.

#### SEQUENTIAL PLAYBACK

Sequential playback from Deck 1 to Deck 2 or from Deck 2 to Deck 1 is possible.

1. Load two Cassette Tapes into Deck 1 and also into Deck 2 Cassette Compartment. Refer to instructions for Loading and Unloading Cassette Tapes mentioned on pages 6 and 7.

2. Slide the TAPE SELECTOR Switch 1 or 2 to the proper position. Refer to reference chart and instructions on page 7.

3. Arrange Cassette Tapes in Deck 1 and Deck 2 for the desired starting point. The APLD Fast Forward, or Rewind operation will be useful for this. Refer to the APLD Operation instructions mentioned on pages 10 and 11.

4. Perform the steps 3, 4 and 5 of Individual Playback.



5. Depress the PAUSE Key of the Deck which is to be played finally.



6. Depress the PLAY Key of the Deck which is to be played finally.



7. Depress the PLAY Key of the Deck which is to be played first. Playback on the Deck to be played first will start.



8. The PAUSE Key of the Deck which is to be played finally will release automatically when the Cassette Tape played first has ended. Playback of the Cassette Tape to be played finally will begin.

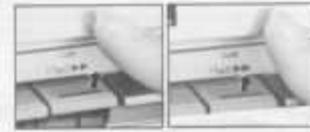
#### 10 SKIPPING, (CUEING OR REVIEWING)



1. Depress the PLAY key of Deck 1 and/or Deck 2.



2. Depress the CUE/F.FWD key of Deck 1 and/or Deck 2 in order to wind the Cassette Tape forward rapidly. The CUE/F.FWD key does not lock in position and the Cassette Tape will wind forward as long as the Key is held in the depressed position. When the CUE/F.FWD key is released the Cassette Tape of Deck 1 and/or Deck 2 will resume playback.



3. Depress the REVIEW/REW Key of Deck 1 and/or Deck 2 in order to rewind the Cassette Tape rapidly. The REVIEW/REW Key does not lock in position and the Cassette Tape will rewind as long as the key is held in the depressed position. When the REVIEW/REW Key is released the Cassette Tape of Deck 1 and/or Deck 2 will resume playback.



The APLD provides a positive means for finding separated programme items recorded on a Cassette Tape. The programme items — songs, movements of a symphony, etc. — can be played at the push of a key in any combination of forward or reverse sequence. This arrangement eliminates the trial and error method of finding programme items on a Tape which considered to be a disadvantage of the Tape Recorder in comparison with the Record Player.

Deck 1 of the GF-525H Unit is provided with the APLD which scans the forward or reverse motion of the Cassette Tape and detects the separation of programme items (gaps) on the recorded tape. At such gaps the Deck automatically commences play.

**Forward APLD**

operation — to find the start of a piece of music or other programme item whilst winding forward.  
After programming steps mentioned below please follow the operation instructions regarding FORWARD APLD OPERATION as described below.

**Reverse (Rewind)**

APLD operation — to find the start of a piece of music or other programme item whilst rewinding.  
After programming steps mentioned below please follow the operation instructions regarding FORWARD APLD OPERATION as described below.

**PROGRAMMING THE APLD COUNTER**

The APLD can be programmed in order to play a section of items on the Cassette Tape that are more than two programme items apart — in either the forward or reverse direction. Up to 5 Programme items can be selected in one operation; more items can be selected by a second programming operation after the first 5 have been played. It is not necessary to programme the APLD for consecutive items or to skip to the next item to the one being played.

**Skipping (forward or reverse)**

1. Perform steps 1 to 6 for Individual Playback on Deck 1. Refer to pages 10.
2. Depress the APLD ► Key in order to skip forward to the next item; or depress the ◄ APLD Key in order to skip in reverse to the next item.

**Selecting Programme Item**

1. Perform steps 1 to 6 for Individual Playback on Deck 1. Refer to pages 8 and 9.
2. Count the number of gaps from the present position of Cassette Tape to the beginning of the selected item.
3. Push the APLD Input Button (UP or DOWN) that corresponds to the number of gaps counted in step 2: The APLD indicator will illuminate. The number of lit LED for APLD indicator shows the number of programmes that APLD is going to skip. As you keep pushing the UP button, the number of programmes that APLD skips increases, while the number of programmes decreases as you keep pushing the DOWN button.



**Cancelling Selected Programme Item**

1. Perform all steps for Selecting Programme Item.
2. Depress the STOP Key of Deck 1.
3. Wait for several seconds.
4. Depress PLAY Key, CUE/F.FWD ►► Key or REVIEW/◄◄ REW Key of Deck 1 in order to commence next operation.

**Note:**

If step 4 is performed without wait-int several seconds, the selected programme item may not be cancelled.

**FORWARD APLD OPERATION**

1. Perform all steps for Selecting Programme Items.
2. Depress the APLD ► Key in order to wind the Cassette Tape forward rapidly.
3. Tape will rapidly wind forward while the APLD sensor searches for the selected programme item.
4. At the selected programme item, the APLD ► Key automatically releases and playback of the cassette tape automatically starts.

**REVERSE APLD OPERATION**

1. Perform all steps for Selecting Programme Items.
2. Depress the ◄ APLD Key in order to rewind the Cassette Tape rapidly.
3. Tape will rapidly wind backward while the APLD sensor searches for the selected programme item.
4. At the selected programme item, the ◄ APLD key automatically releases and playback of the cassette tape automatically starts.

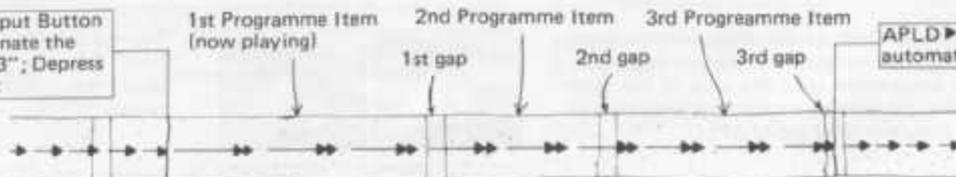
**Notes:**

- 1) As the Cassette Tape reverses the APLD indicators (1 - 5) illuminate corresponding to the number of items remaining.
- 2) Refer to page 11 if any difficulties are encountered in the operation of the APLD.

**EXAMPLE**

A. Skipping the next two programme items in sequence in order to begin playback at the third item ahead of the present position.

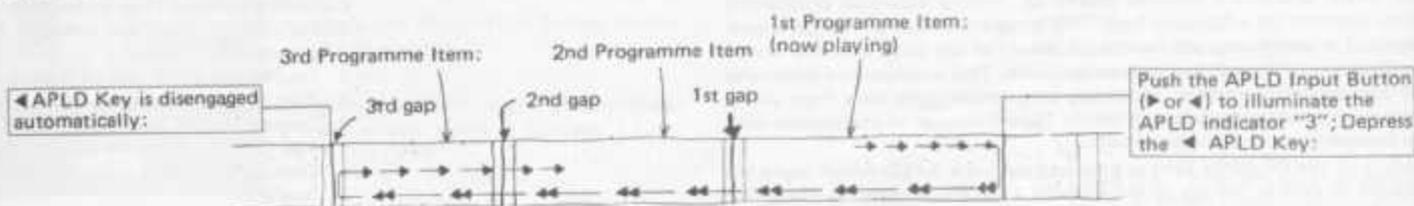
Push the APLD Input Button (► or ◄) to illuminate the APLD indicator "3"; Depress the APLD ► Key:



APLD ► Key disengages automatically:

## EXAMPLE

B. Skipping the previous two programme items in sequence in order to begin playback at the second item behind the present position.



## APLD Forward Pause Control

1. Depress the PAUSE Key of Deck 1.



2. Perform all steps for Selecting Programme Item and also Forward APLD operation, mentioned on page 10.

3. The Cassette Tape motion will stop at the beginning of the selected programme item.

4. Depress the PAUSE Key again (to release) in order to start the playback of the selected programme item.



## APLD Reverse Pause Control

1. Depress the PAUSE Key of Deck 1.



2. Perform all steps for Selecting Programme Item and also for Reverse APLD Operation, mentioned on page 10.

3. The Cassette Tape motion will stop at the beginning of the selected programme item.

4. Depress the PAUSE Key again (to release) in order to start the playback of the selected programme item.



## SUITABLE CASSETTE TAPES FOR APLD OPERATION

The APLD may not operate successfully with Cassette Tapes that have any of the following types of recording.

1. Cassette Tapes with intermittent recording – conversation, lectures, etc.
2. Cassette Tapes with recordings of soft classical music, solo performances, modern jazz, etc.
3. Cassette Tapes with low signal strength recording – below – 15VU over the entire recording.
4. Cassette Tapes with recorded programme items separated by less than a three second gap.
5. Cassette Tapes with recordings containing high level noise occurring between the programme items.

All these types of Cassette Tape recordings are not suited to APLD operation and may cause the APLD to start play at a point in mid programme item, or to skip over programme items selected, or both.

## NOTES ON APLD OPERATION

1. Avoid operation of the APLD when the play is close to the end of a programme item. This may cause a skipping of the item selected and playing of the following item.
2. Avoid placing the Unit near sources of powerful magnetic radiation – TV sets, generators, electrical appliances during operation. Exposure to magnetic radiation will disturb the functioning of the APLD circuits.
3. Do not depress the APLD ▶ Key or the ◀ APLD Key during the recording of Cassette Tapes on Deck 2.
4. Any sound emitted from the speakers during APLD operation (searching for a programme item) does not indicate a fault in the Unit.

## EDITING CASSETTE TAPE FOR APLD OPERATION

The majority of commercially available prerecorded Cassette Tapes are produced with separated programme items of sufficient duration for use with the APLD on Deck 1. When recording Cassette Tapes on Deck 2 it will be necessary to separate the programme items during recording, or to edit gaps into continuously recorded Cassette Tapes.



1. Depress the REC MUTE Key of Deck 2 (for about 5 seconds) during the process of recording at a point suitable for ending a programme item.



2. After about 5 seconds, depress the PAUSE Key of Deck 2 while keeping the REC MUTE Key depressed.



3. Release the REC MUTE Key. The gap is then edited onto the Cassette Tape recording.



4. Depress the PAUSE Key again (to disengage) at a suitable point for starting the recording of the next programme item.

5. Perform the steps 1 to 4 throughout the recording in order to edit the recording with gaps that will produce a recorded Cassette Tape suitable for APLD Deck 1 played.

## 12

## FAST FORWARD WINDING AND REWINDING

This is a method of searching for a position on the tape without using APLD. However, this key is mainly used to wind the tape to its end, or to advance the tape to a desired programme with the help of the tape counter (See page 13), for advancing the tape to an approximate position before researching for the cue of a programme by use of APLD.



## FAST FORWARD WINDING

1. Depress the STOP Key of Deck 1 and/or Deck 2.

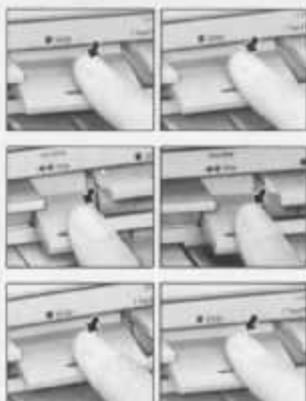


2. Depress the CUE/F.FWD ▶▶ Key of Deck 1 and/or Deck 2 in order to wind the Cassette Tape forward rapidly.



3. Depress the STOP Key of Deck 1 and/or Deck 2 again in order to stop the winding of the Cassette Tape on Deck 1 and/or Deck 2.

**REWINDING**



1. Depress the STOP Key of Deck 1 and/or Deck 2.
2. Depress the REVIEW/◀◀REW Key of Deck 1 and/or Deck 2 in order to rewind the Cassette Tape of Deck 1 and/or Deck 2 rapidly.
3. Depress the STOP Key of Deck 1 and/or Deck 2 in order to stop the rewinding of the Cassette Tape on Deck 1 and/or Deck 2.

**Notes:**

- 1) Deck 1 and/or Deck 2 will stop automatically and all Keys disengage when the Cassette Tape of Deck 1 and/or Deck 2 is completely wound or rewound.
- 2) The automatic stopping and disengaging of Keys may not operate after the Cassette Tape of Deck 1 and/or Deck 2 is completely wound or rewound when operating the unit on its internal battery power supply. This will be due to weak or exhausted batteries.
- 3) Depress the STOP Key of Deck 1 and/or Deck 2 before depressing the PLAY Key of Deck 1 and/or Deck 2 in order to return Deck 1 or Deck 2 from fast forward winding or rewinding to playback.
- 4) Depress the STOP Key of Deck 1 and/or Deck 2 before depressing the CUE/F.FWD ▶▶ Key or the REVIEW/◀◀REW Key of Deck 1 and/or Deck 2 in order to reverse the winding operation from fast forward winding to rewinding, or from rewinding to fast forward winding.

**13 DUBBING (DUPLICATING)**

The Dual Deck System of the GF-525H permits dubbing operations without the need of another Tape Recorder. However dubbing can also be carried out with the use of an additional Tape Recorder if required — open reel or cartridge type recorder for example. Refer to page 14. Dubbing takes place from Deck 1 onto Deck 2.

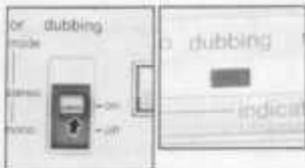
**Note: (dubbing preparations)**

1. Disconnect Headphones jack from the TAPE 1 MONITOR Socket.
2. Disconnect Microphone jacks from the EXT MIC left channel (L) and right channel (R) Sockets.
3. Slide the MODE SELECTOR Switch to the MIXING OFF position, (if it is not in the position).



**Dubbing Procedure**

1. Load a pre-recorded Cassette Tape into the Cassette Compartment of Deck 1. Perform steps of Loading and Unloading Cassette Tapes mentioned on pages 6 and 7.
2. Operate the APLD in order to prepare the Cassette Tape for the dubbing of selected programme item. Perform all the steps for Selecting Programme Item and Forward APLD Operation or Reverse APLD Operation, mentioned on page 10.
3. Load Cassette Tape suitable for recording into the Cassette Compartment of Deck 2. Perform all steps for Loading and Unloading Cassette Tapes mentioned on pages 6 and 7.
4. Rewind the Cassette Tape to the start, or fast forward wind the Cassette Tape to the point at which dubbing is to start. Perform all steps for Fast Forward Winding or Rewinding.
5. Slide the TAPE SELECTOR Switch of Deck 1 and Deck 2 to the proper positions. Refer to instructions and chart on page 7.
6. Slide the SELECTOR switch to the TAPE position.
7. Slide the DUBBING Switch to the ON position in order to cut out the Unit's microphones. The Dubbing Indicator illuminates.



8. Depress the PAUSE Key of Deck 2.
9. Depress the RECORD Key of Deck 2. (The PLAY Key will also engage.)
10. Depress the PLAY Key of Deck 1, (if not already depressed.); or PAUSE Key, (if APLD Programme Item Selection and Pause Control procedures have been followed.) Deck 1 starts playback of selected programme item required for dubbing.
11. Depress the PLAY Key of Deck 1 and also the PAUSE Key of Deck 2 together (to release).
12. Turn the VOLUME, BALANCE, BASS, and TREBLE Controls in order to adjust reproduced audio characteristics. Refer to steps 10, 11, and 12 of FM Reception of page 5. Adjustment of these controls will not affect the recording level, in cases where sound reproduction is unnecessary, set the VOLUME control to the "0" position.
13. Depress the STOP Key of Deck 1 and Deck 2 in order to stop the dubbing.
14. The Cassette Tapes in Deck 1 and Deck 2 will stop after reaching the ends; Deck 1 and Deck 2 will automatically disengage all Keys.

**14 MULTI-RECORDING**

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. Dubbing from Deck 1 to Deck 2. Record with another sound using Mixing Microphone (refer to page 15).
3. Load the Tape of Deck 2 into Deck 1 and load Unrecorded Tape into Deck 2.
4. Repeat the same procedure with above (2).
5. By repeating above procedures of (2) and (3), multi-recording is possible.

## 15 ERASURE OF RECORDED TAPES

Recorded Cassette Tapes are erased during the new recording process. It is also possible to erase Cassette Tapes without recording.

1. Slide the **SELECTOR** Switch to **TAPE** position.
2. Slide the **DUBBING** Switch to **ON** position.
3. Slide the **MODE SELECTOR** Switch to **MIXING OFF** position.



4. Depress the **RECORD** Key of Deck 2.

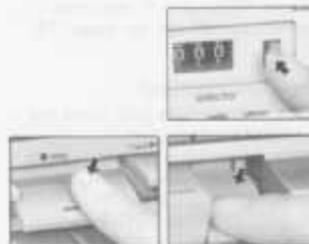
5. The Cassette Tape in Deck 2 will stop after reaching the end of the tape. All **DECK 2** Keys will automatically disengage.

### REC MUTE SWITCH

For short periods of tape erasure it is possible to use the **REC MUTE** Switch. Depress the **REC MUTE** Switch during the recording process.

## 16 TAPE COUNTER (for Deck 2)

By pressing the reset button, the tape counter is set to "000" (at the start of Cassette Tape), and the integer displayed at the beginning of each recorded item can be noted. This provides a convenient reference. In order to locate the position of any item record on the tape use the noted tape counter integer that precedes each item.



1. Rewind the tape to the beginning.
2. Then set the tape counter to read "000" and start fast forward winding until the integer of the counter advances to the noted number.
3. In order to stop the tape when the noted integer is reached, depress the **STOP** key.
4. You are now ready to play the item by depressing the **PLAY** Key of the Deck 2.

## 17 SLEEP SYSTEM

This unit is equipped with a system that automatically shuts off all radio and audio circuits the moment the end of tape is reached. This function operates on fast forward, rewinding, playing or recording.

### Sleeping While Listening to or Recording from Radio

1. Perform steps of Recording from the Unit's Radio mentioned on page 8. Or, perform steps of Individual Playback mentioned on pages 8 and 9.
2. Slide the **POWER** Switch to **⏻** / **SLEEP** position.
3. The running time of the tape will depend on the type of Cassette Tape. For example C-60 tape plays for half an hour before turning off the Unit.

Tape used	Timer Period
C-46	approx. 23 mins.
C-60	approx. 30 mins.
C-90	approx. 45 mins.

If shorter period time is required, advance the tape to an estimated position on tape and then proceed with this operation, the timer period can be made shorter. In cases of sequential playback, the total length of tape playback may be calculated by adding the playing times of the tapes inserted in Decks 1 and 2.

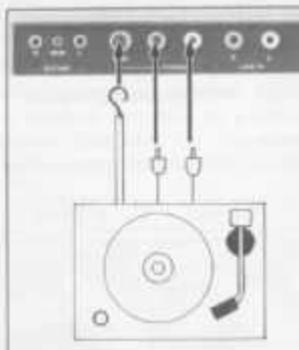
## EXTERNAL UNITS

### 1 RECORD PLAYER AUDIO REPRODUCTION

The GF-525H Unit can be connected to the output of a stereo magnetic cartridge pick-up used on a Record Player because the Unit is provided with an equalizing circuit for this purpose. Ceramic and Crystal cartridges are not suited to the circuits of the Unit.



1. Slide the **POWER** Switch to the **⏻** / **SLEEP** Position.



2. Fit the output lead jacks from the stereo magnetic cartridge of the Record Player to the left channel (L) and right channel (R) of the Unit.
3. Fix the earth wire of the Record Player (if provided) to **GND** Terminal of the Unit.



4. Slide the **POWER** Switch to the **ON** position.

5. Slide the **SELECTOR** Switch to the **PHONO/LINE IN** position.

6. Slide the **MODE SELECTOR** Switch to the **MIXING OFF** position, (if not already in that position.)



7. Prepare the Record Player for playing a stereo record.

8. Turn the **VOLUME**, **BALANCE**, **BASS**, and **TREBLE** Controls to appropriate positions for suitable audio characteristics. Perform the steps 10, 11, and 12 of **FM Reception** mentioned on page 5.

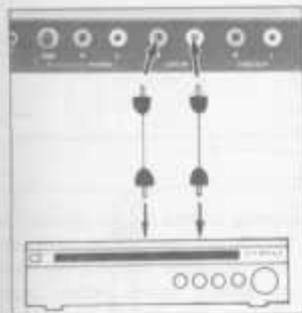
## 2 RECORDING FROM A RECORD PLAYER

1. Perform steps 1 to 6 of Record Player Audio Reproduction mentioned on page 13.
2. Perform steps 2 to 5 and 8 of Recording from Unit's Radio, mentioned on page 8.

## 3 RECORDING FROM AN AMPLIFIER

### Note:

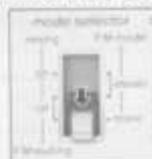
If the Record Player is connected to the PHONO Sockets of the GF-525H Unit the player should be set in the stop mode otherwise the sound from the Amplifier will mix with the sound from the Record Player.



1. Turn off both GF-525H Unit and the Amplifier.
2. Amplifier output sockets, (REC OUT, TAPE OUT, etc.) should be connected to the LINE IN right channel (R) and left channel (L) Sockets of the GF-525H Unit (with leads that have plugs suitable for fitting into each set of sockets.) Even if the input terminals, (TAPE PLAYBACK or TAPE INPUT etc.) are connected or are already connected to the LINE OUT Sockets of the GF-525H Unit recording can be affected.

## 4 CONNECTION TO AN EXTERNAL RECORDER

It is possible to perform dubbing operations using an external Tape Recorder. If the Tape to be dubbed is a cassette type then follow procedures mentioned on page 12. The following procedure is for the open reel type or other recording equipment.

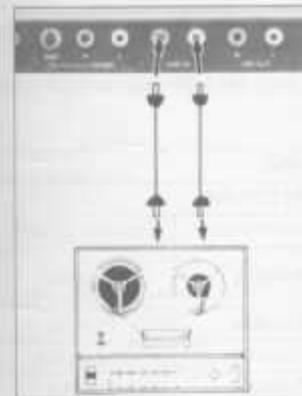


### Note:

Slide the MODE SELECTOR Switch to the MIXING OFF position.

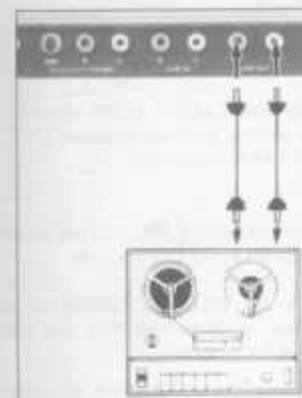
### DUBBING FROM AN EXTERNAL RECORDER

1. Connect the external Tape Recorder to the LINE IN Sockets of the GF-525H Unit.
2. Load the recorded source tape onto the external Recorder.
3. Load the Cassette Compartment of Deck 2 on the GF-525H Unit with a suitable Cassette Tape on Deck 2 to a point for starting the dubbing recording.
4. Prepare Deck 2 of the GF-525H Unit for recording, refer to page 8 and also prepare the External Recorder for playing of recorded tape.



### DUBBING ONTO AN EXTERNAL RECORDER

1. Connect the External Tape Recorder to the LINE OUT Sockets of the GF-525H Unit with RCA type leads.
2. Load a Cassette Tape into the Cassette Compartment of either Deck 1 or Deck 2 of the GF-525H Unit. Find the position on the Cassette Tape from where the dubbing should start.
3. Prepare the External Tape Recorder for recording.
4. Prepare Deck 1 or Deck 2 for playback. Refer to pages 8 and 9.



## 3. Record output of the Record Player.

3. Turn on the POWER Switches of both Units.
4. Slide the SELECTOR Switch to the PHONO/LINE IN Position.
5. Slide the MODE SELECTOR Switch to the MIXING OFF position.
6. Start the recording process. Refer to steps 2 to 5 and 8 or Recording from the Unit's Radio on page 8.
7. Turn the VOLUME, BALANCE, BASS, and TREBLE Controls in order to adjust the audio characteristics suited to the acoustic environment. Refer to steps 11, 12, and 13 of FM Reception mentioned on page 5.



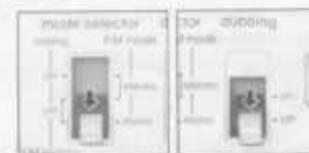
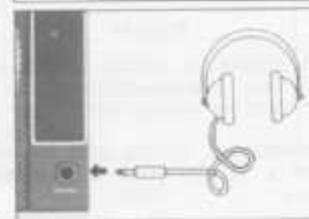
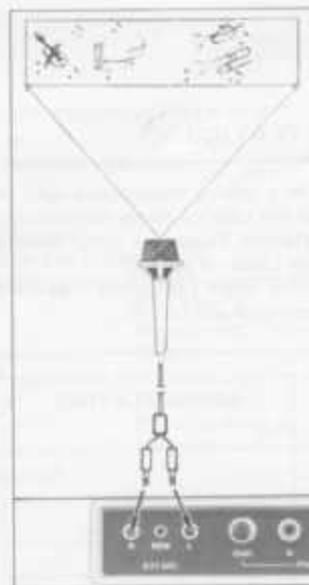
## 5 RECORDING FROM EXTERNAL MICROPHONES

### Note:

Check whether Deck 1 is in the stop mode.

1. Stereo Recording
  - a) Prepare two microphones, (400 ohm to 3k ohm impedance each, with 3.5mm dia. plugs), or use SHARP's stereo microphone MC-57CL/MC-55CL.
  - b) Plug the microphone jacks into the EXT MIC R and L sockets. If microphone is fitted with a remote stop/start switch, the plug is inserted into the REM control socket between the microphone sockets.
  - c) Arrange the microphone as shown in the illustration.
2. Mono Recording
 

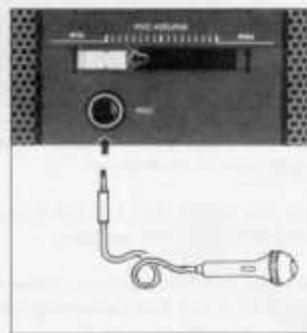
The signal is recorded on either the left or right channel tape track. Plug the mono microphone jack into EXT MIC left or right socket on the rear panel.
3. Use stereo headphones in order to monitor the recording. Monitoring is also possible with the built-in speakers, but this may result in feedback whistle (howling); therefore the use of headphones is advisable. Connect headphones to the PHONES socket on the front panel. The monitoring level can be adjusted by using the VOLUME control, without affecting the recording.
4. Slide MODE SELECTOR to MIXING OFF position.
5. Slide the DUBBING switch to OFF position.
6. Slide the SELECTOR Switch to the TAPE position.
7. Make the recording by referring steps 2 to 8 or the explanation for Recording from the Unit's Radio on page 8.



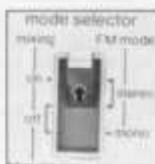
## 6 MICROPHONE AMPLIFICATION

The Unit will amplify the input from an external microphone, (which is useful for public address activities.)

The microphone (not supplied) should be fitted with a 6.3mm diameter jack.



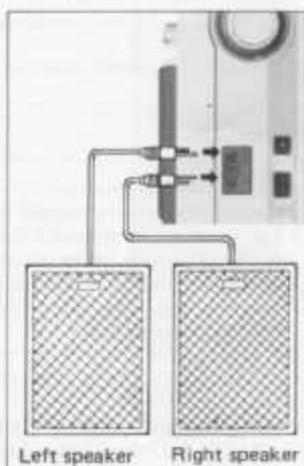
1. Connect the microphone jack to the MIX MIC Socket.
2. Slide the MIC VOLUME Control to the MIN position.



3. Slide the MODE SELECTOR Switch to the MIXING ON position.

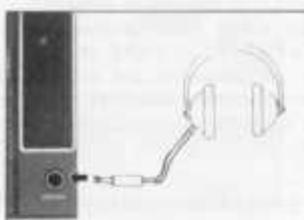
4. Adjust the VOLUME, BALANCE, BASS, and TREBLE Controls, as mentioned for FM Reception on page 5.

## 7 EXTERNAL SPEAKERS



The GF-525H Unit can power external speakers. The external speakers require at 4 to 8ohm impedance and the external speakers leads must be fitted with a 3.5mm connector. Also the connections made in the connector must phase the speakers correctly, (seek advice from the SHARP dealer on this point.) When the external speakers are connected to the Unit the internal speakers are cut out.

## 8 HEADPHONES



For listening to the Radio in environments which are not suited to speaker sound reproduction (excessively noisy place or places where other people prefer silence) the use of stereo headphones is recommended.

Fit stereo headphones jack into the PHONES Socket (on the front panel of the Unit) if headphones listening is desirable.

The speakers output will be cut off when headphones jack is connected. SHARP Stereo Headphones (not supplied) are recommended: Models HP-30 HP-40; HP-200; HP-300; or HP-400H

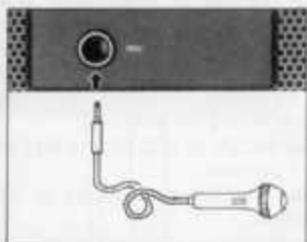
## 9 MIXED RECORDING AND PLAYING

The GF-525H Unit can mix the output of a mixing microphone with the playback (Deck 1 or Deck 2), input from the Unit's internal microphones, the Unit's radio, a Tape Recorder, a Record Player, or other external audio equipment which is connected to the LINE IN Socket.

1. Follow the instruction provided in the chart for mixed playing or mixed recording with the mixing microphone and source.

\* Possible: (with connection of extra tape recorder to the LINE OUT sockets.)

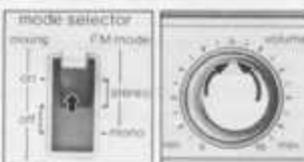
SOURCE UNIT FOR MIXING	MIXED PLAYING	MIXED RECORDING			
		FUNCTION	MONITORING		
			Unit's Speaker	Headphones	External Speaker
Built-in Deck 1	Possible	Possible	Possible	Possible	Possible
Built-in Deck 2			Possible	Possible	Possible
Unit's Radio			Possible	Possible	Possible
Unit's Microphones	Impossible	Possible	Impossible	Impossible	Impossible
External Record Player	Possible		Possible	Possible	
External Audio Systems Connected to the LINE IN Sockets	Possible		Possible	Possible	
External Microphones	Impossible	Impossible	Possible	Possible	



2. Connect the mixing microphone, (with a 6.3mm jack) to the MIC Socket. The reproduced mixed audio output is monophonic. The Mixing Microphone requires 400 ohm to 3K ohm impedance.



4. Slide the TAPE FADER control to the central position between TAPE 1 and TAPE 2 positions.

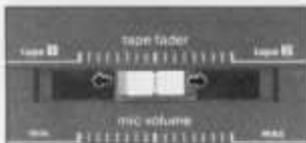


3. Adjust the MIC VOLUME Control to the central position between the MIN and MAX positions.

5. Slide the MODE SELECTOR Switch to the MIXING ON position.

6. Turn the VOLUME Control to the central position between the MIN and MAX positions.

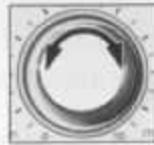
7. Follow steps for Playback, on pages 7 and 9, or Recording, page 8.



8. In cases where mixed playing of Tapes 1 and 2 is desired, volume balance for both tapes may be adjusted by means of the TAPE FADER Control.



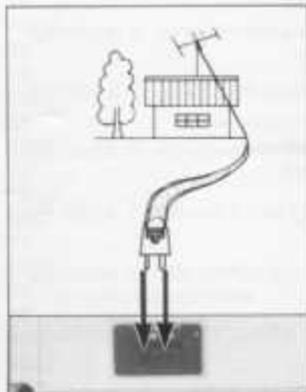
9. Volume balance for mixing microphone and source (radio broadcast, record reproduction or sound from other external Units) may be adjusted with the MIC VOLUME control.



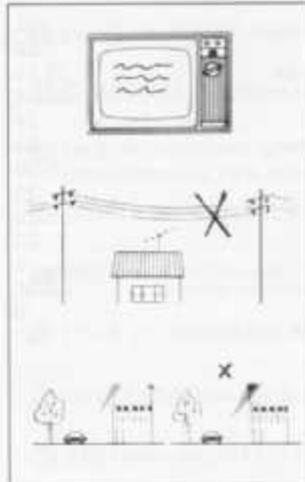
10. Adjust the volume level with the VOLUME Control.

11. Also mixing of sound of Deck 1 with the mixing microphone is possible while dubbing from Deck 1 to Deck 2. Refer to the instruction of Multi-Recording on page 12.

## 10 OUTDOOR (EXTERNAL) FM AERIAL



The FM radio reception gain can be improved with the use of an outdoor (external) aerial. If reception with the telescopic aerial is unsatisfactory then connect the outdoor aerial to the FM EXT ANT Terminals (on the rear of the Unit). Weak reception may be due to the geographical position of the receiver relative to the particular broadcast transmitter.



### Notes:

- 1) Do not use an outdoor TV aerial instead of an outdoor FM aerial; the TV aerial will cause local TV reception interference.
- 2) Do not set up the outdoor aerial near to power cables or any other power circuitry.
- 3) Place the outdoor aerial as far away as conveniently possible from roads and railways.

## SPECIFICATIONS

### GENERAL

Power source:	AC 110/220/240V, 50/60Hz DC 15V (UM/SUM-1, R-20, HP-2, or "D" battery x 10, or external DC supply)
Speakers:	16cm (6-1/2") x 2 Horn type x 2
Output power (DIN 45 324):	MPO 14W (7W + 7W, AC Supply operation) RMS 12W (6W + 6W, DC Supply operation)
Semiconductors:	10-IC's (Integrated circuits) 48-Transistors 1-SCR 47-Diodes 14-LED's
Dimensions:	Width; 530mm (20-7/8") Depth; 154mm (6-1/16") Height; 320mm (12-5/8")
Weight (without batteries):	9.0kg (19.8 lbs)

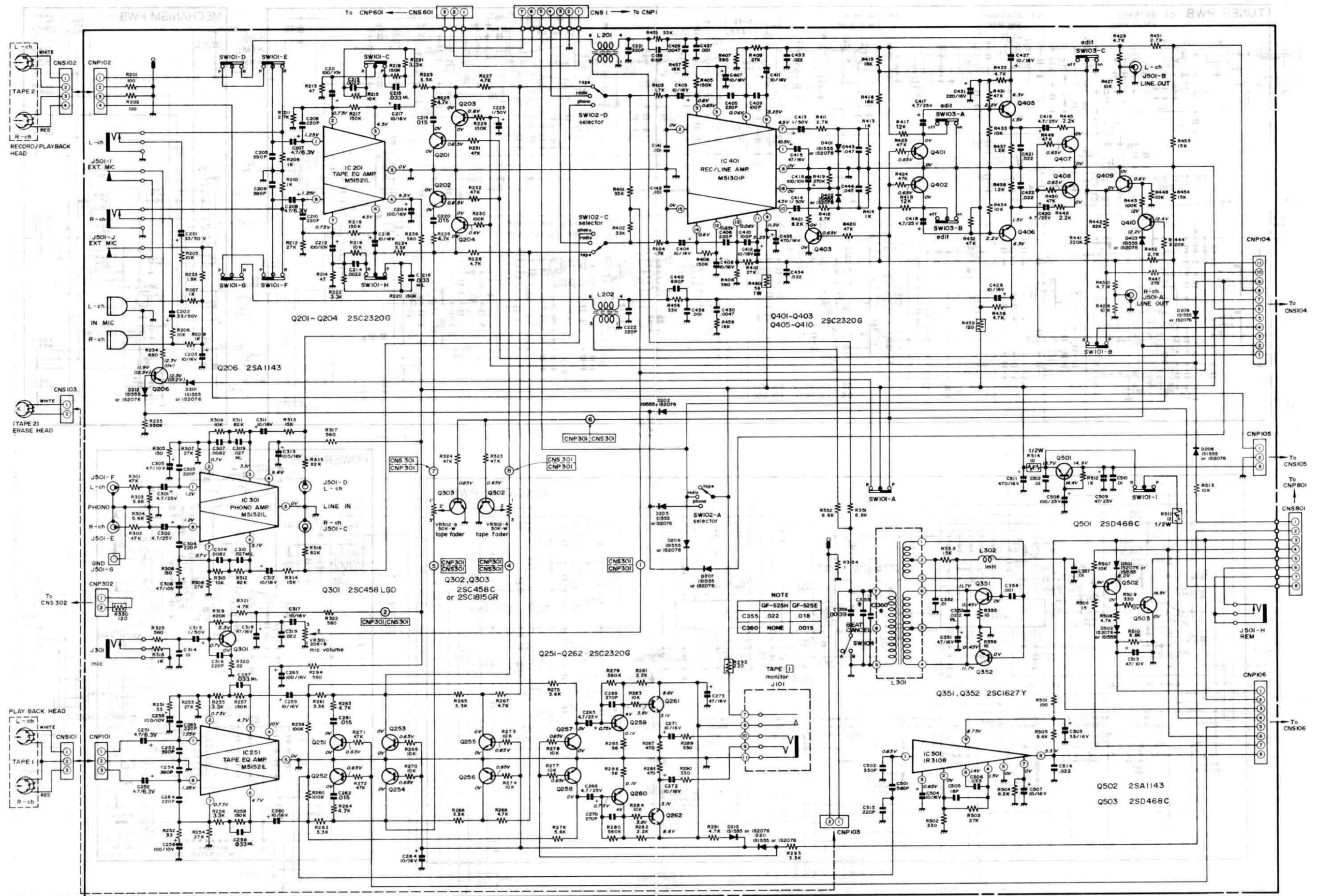
### TAPE RECORDER/PLAYER

Tape:	Philips-type compact cassette tape
Frequency response:	30Hz to 17000Hz (Metal tape) 30Hz to 15000Hz (CrO <sub>2</sub> tape) 30Hz to 14000Hz (normal tape)
S/N ratio:	50dB
Wow and flutter:	0.17% (DIN 45511)
Input sensitivity and input impedance:	
Ext. Mic;	600 ohms
Mixing mic;	600 ohms
Line in;	0.1V/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:	LW: 150kHz to 285kHz MW: 520kHz to 1620kHz SW: 5.95MHz to 18MHz FM: 87.6MHz to 108MHz
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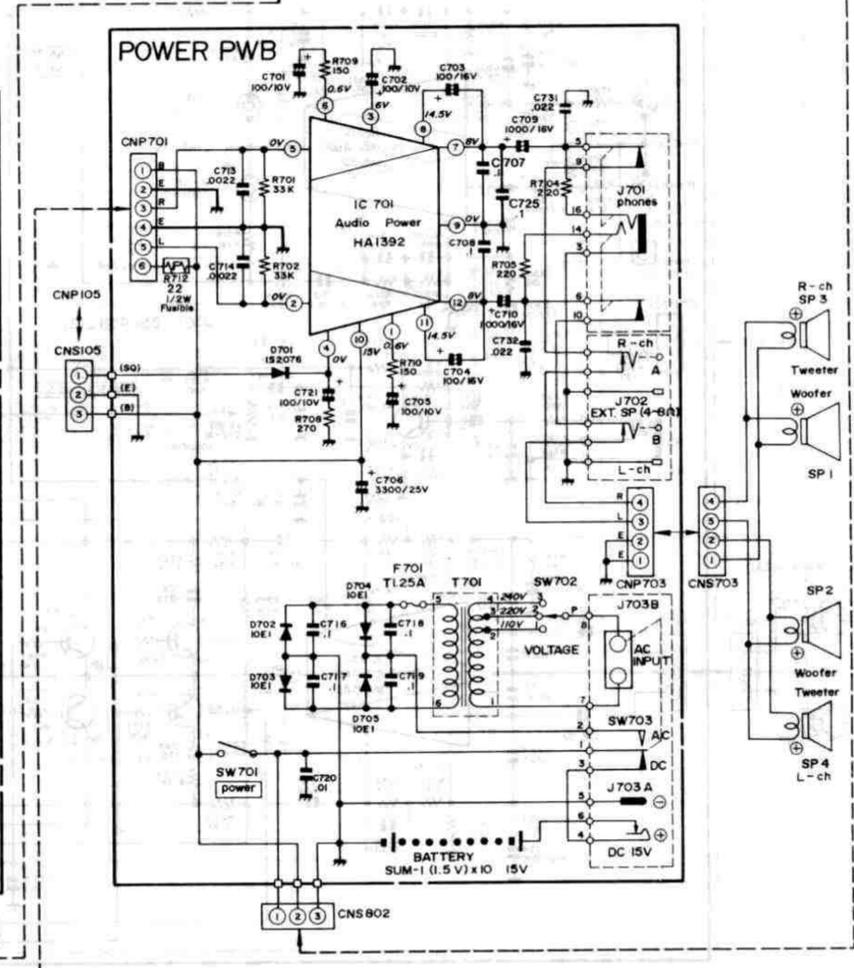
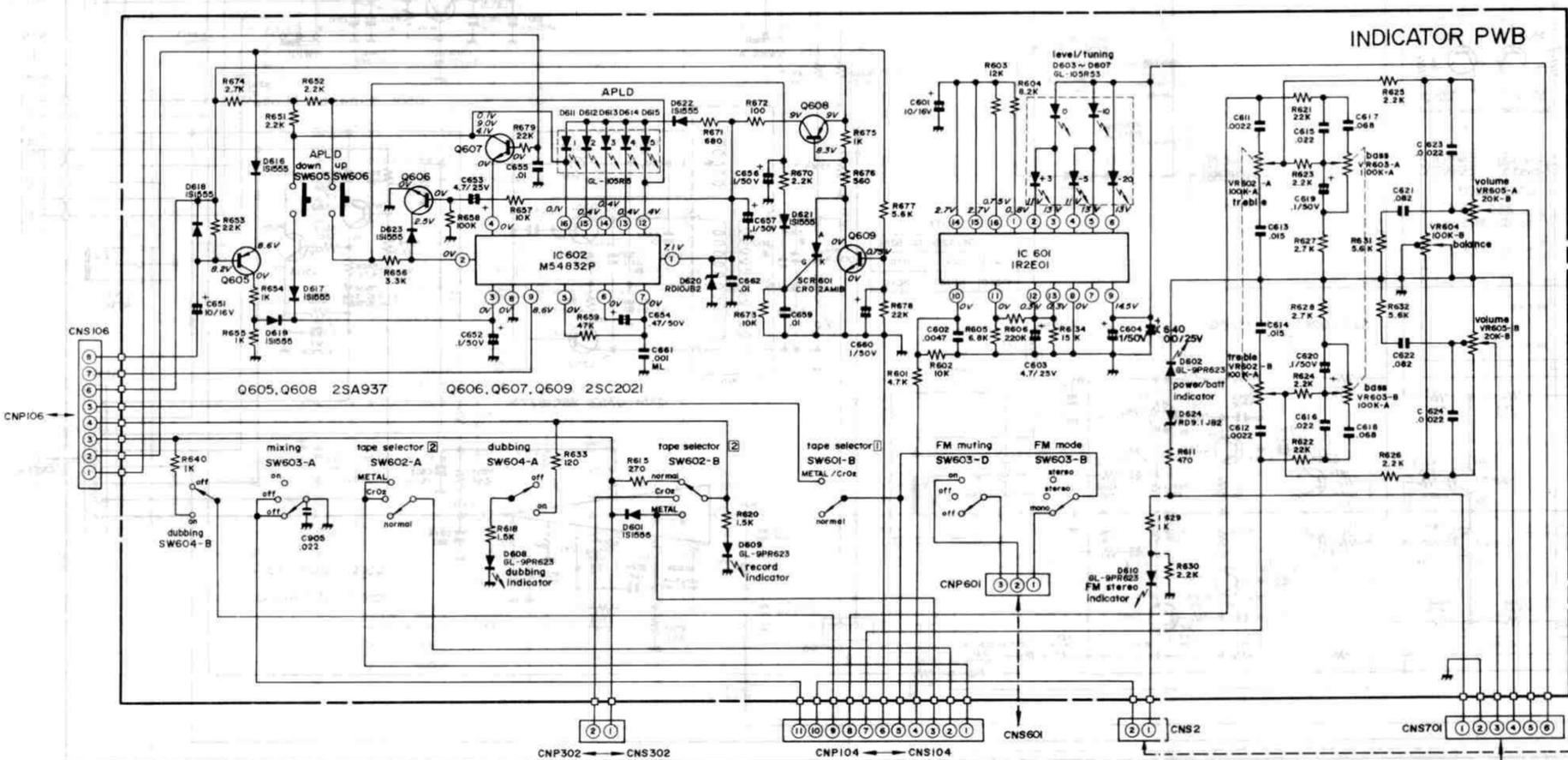
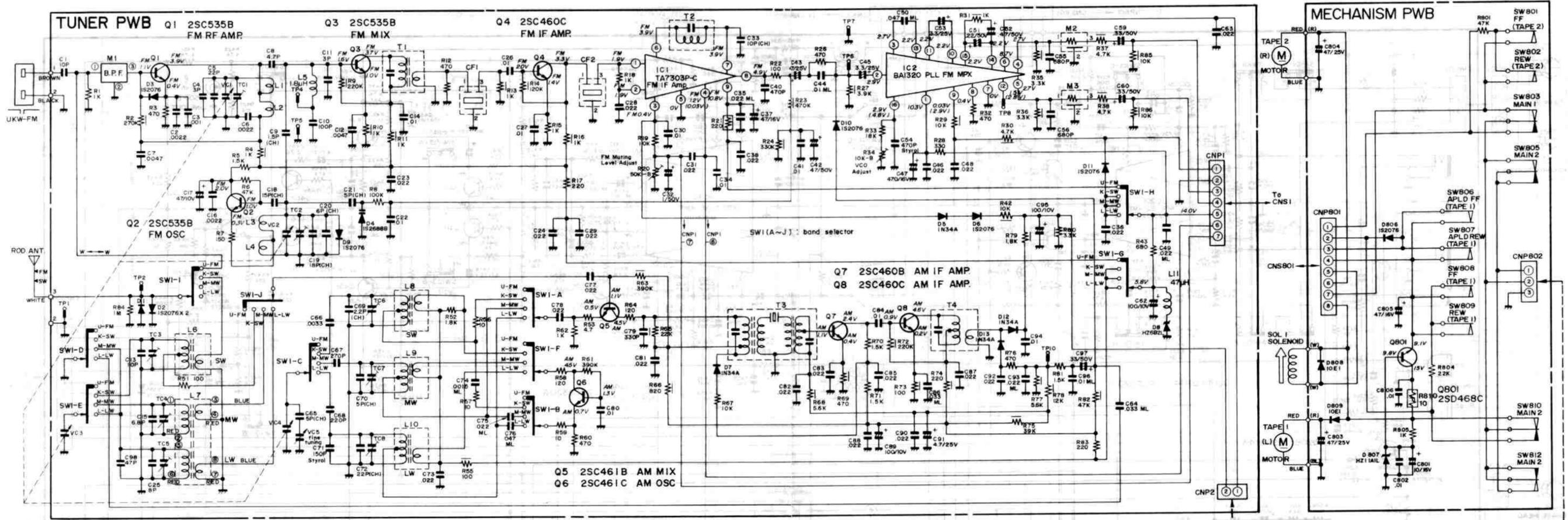
SHARP CORPORATION reserves the right to change the specifications, materials of production, and the design of the Unit. However any such alternations will not impair the quality of construction and grade of performance of the Unit.



NOTE

GF-525H	GF-525E
C355	022 018
C360	NONE 0015

Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.



REVIEW NACHPRÜFUNG *REVUE* REVISION REVISIONE  
 CUE SUCHBETRIEB *SONDAGE* SONDERING SONDAGGIO  
 STOP STOPP *ARRET*  
 REW (REWIND) RÜCKSPULUNG *RETOUR* ÄTERSPOLNING RIAVVOLGIMENTO  
 F FWD (FAST FORWARD) SCHNELLVORLAUF *AVANCE RAPIDE* SNABBFRAMSPOLNING AVANZAMENTO RAPIDO

TAPE 1 TONBAND 1 *MAGNET. 1* BAND 1 REGISTRATORE 1  
 TAPE 2 TONBAND 2 *MAGNET. 2* BAND 2 REGISTRATORE 2  
 METAL METALL *METAL* METALL AL METALLO

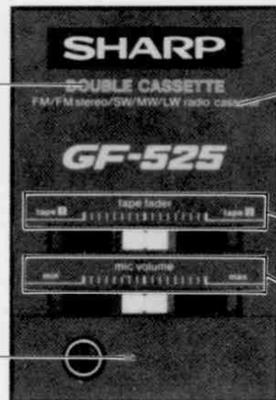
METAL METALL *METAL* METALL AL METALLO



TAPE 1 TONBAND 1 *MAGNET. 1* BAND 1 REGISTRATORE 1  
 EJECT AUSWURF *EJECTION* UTKAST ESPULSIONE  
 APLD (AUTO PROGRAM LOCATE DEVICE) APLD (AUTOMATISCHE PROGRAMM-SUCHEINRICHTUNG) *APLD (DISPOSITIF DE LOCALISATION AUTOMATIQUE DE PROGRAMME)*  
 PLAY WIEDERGABE *LECTURE* AVSPELNING ASCOLTO  
 APLD (AUTOMATISK PROGRAM-LOKALISERARE) APLD (DISPOSITIVO DI LOCALIZZAZIONE AUTOMATICA DEL PROGRAMMA)

REC MUTE AUFNAHMETONDÄMPFUNG *ASSOURDISSEMENT DE L'ENREGISTREMENT* LJUDDÄMPNING SORDINA DI REGISTRAZIONE  
 PAUSE PAUSE *PAUSE* PAUSA  
 RECORD AUFNAHME *ENREGISTREMENT* INSPELNING REGISTRAZIONE  
 PLAY WIEDERGABE *LECTURE* AVSPELNING ASCOLTO  
 EJECT AUSWURF *EJECTION* UTKAST ESPULSIONE  
 TAPE 2 TONBAND 2 *MAGNET. 2* BAND 2 REGISTRATORE 2

DOUBLE CASSETTE DOPPELCASSETTE *CASSETTE DOUBLE* DUBBELKASSETT DOPPIA CASSETTA

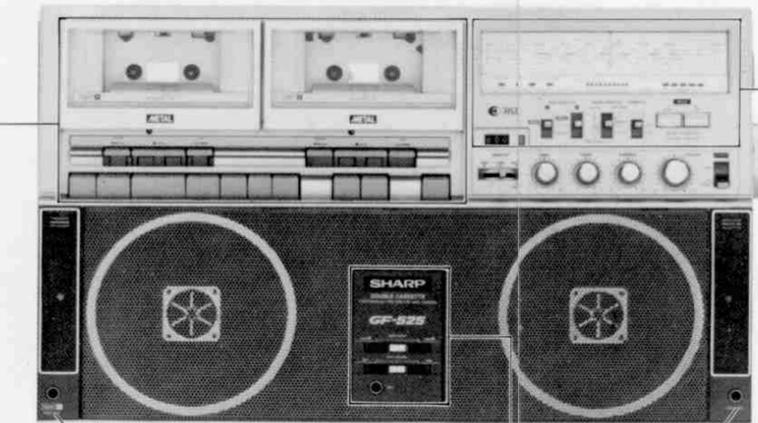


MIC MIKROFON *MICROPHONE* MIKROFON MICROFONO

TAPE 1 TONBAND 1 *MAGNET. 1* BAND 1 REGISTRATORE 1  
 TAPE FADER ÜBERBLEND *ATTENUATEUR* BANDFÄDNING DISSOLVENZA NASTRO  
 TAPE 2 TONBAND 2 *MAGNET. 2* BAND 2 REGISTRATORE 2

MIN. MIC VOLUME MIKROFONLAUTSTÄRKE *VOLUME DU MICROPHONE* MIKROFONVOLYM VOLUME DEL MICROFONO  
 MAX. MAX. MAX. MAX.

FM/FM STEREO/SW/MW/LW RADIO CASSETTE  
 UKW/UKW-STEREO/KW/MW/LW RADIO-CASSETTE  
*RADIO-CASSETTE FM/FM STEREO/OC/PO/GO*  
 UKV/UKV-STEREO/KV/MV/LV KASSETTRADIO  
 RADIO REGISTRATORE A CASSETTE FM/FM STEREO/SW/MW/LW



TAPE 1 MONITOR TONBAND 1 MONITOR *CONTROLE AUDITIF DU MAGNET. 1* BAND 1 MONITOR MONITOR NASTRO 1

PHONES KOPFHÖRER *CASQUE* HÖRTELEFON CUFFIE

FM STEREO UKW-STEREO *FM STEREO* FM (UKV)-STEREO FM STEREO  
 DUBBING ÜBERSPIELEN *COPIE DE BANDE* ÖVERSPELNING DUPLICAZIONE  
 RECORD AUFNAHME *ENREGISTREMENT* INSPELNING REGISTRAZIONE  
 POWER/BATT STROM/BATTERIE *ALIMENTATION/PILE* STRÖM/BATTERI ALIMENTAZIONE/BATTERIE

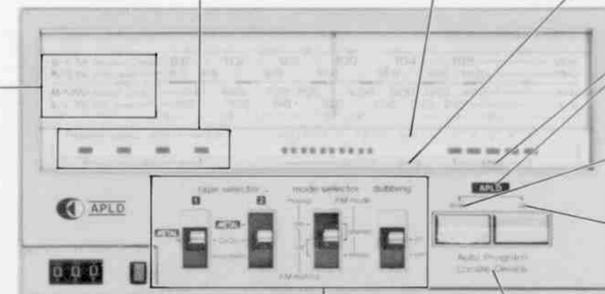
INDICATOR ANZEIGE *TEMOIN* INDIKATOR INDICATORE

LEVEL PEGEL *NIVEAU* NIVÅ LIVELLO  
 TUNING ABSTIMMUNG *ACCORD* AVSTÄMNING SINTONIA

APLD APLD *APLD* APLD APLD

DOWN NACHGESTELLT *DESCENDANT* BAKÅT ABBASSATO

UP VORGESTELLT *ASCENDANT* FRAMÅT AVANZATO



CHANNEL KANAL *KANAL* KANAL CANALE  
 U-FM UKW *FM* FM (UKV) FM  
 FREQUENCY MOD. FREQUENZMODULATION *MODULATION DE FREQUENCE* FREKVENSMODULERING MODULAZIONE DI FREQUENZA  
 K-SW KW *OC* SW  
 SHORT WAVE KURZWELLE *ONDES COURTES* KORTVÄG ONDE CORTE

METER METER *METRE* METER METRO  
 M-MW MW *PO* MV MW  
 MEDIUM WAVE MITTELWELLE *PETITES ONDES* MELLANVÄG ONDE MEDIE

L-LW LW *GO* LV LW  
 LONG WAVE LANGWELLE *GRANDES ONDES* LÄNGVÄG ONDE LUNGHE

TAPE SELECTOR TONBANDWAHLSCHALTER *SELECTEUR DE BANDE* BANDTYPVÄLJARE SELETTORE DI NASTRO  
 MODE SELECTOR BETRIEBSARTENWÄHLER *SELECTEUR DE MODE* FUNKTIONSVÄLJARE SELETTORE DI FUNZIONE  
 DUBBING ÜBERSPIELEN *COPIE DE BANDE* ÖVERSPELNING DUPLICAZIONE

METAL METALL *METAL* METALL AL METALLO  
 METAL METALL *METAL* METALL AL METALLO  
 METAL METALL *METAL* METALL AL METALLO  
 MIXING MISCHUNG *MIXAGE* MIXNING MIXING  
 FM MODE UKW-BETRIEBSART *MODE FM* FM (UKV) MODUS MODO FM  
 ON EIN *EN CIRCUIT* STEREO EIN *EN CIRCUIT*  
 OFF AUS *COUPE CIRCUIT* STEREO AUS *COUPE CIRCUIT*  
 NORMAL NORMAL *NORMAL* NORMAL NORMALE  
 STEREO STEREO  
 MONO MONO  
 OFF OFF  
 MONO MONO  
 OFF OFF

FM MUTING UKW-STUMMABSTIMMUNG *REGLAGE SILENCIEUX FM* FM (UKV) BRUSSPÄRR SORDINA FM

**SHARP** MODEL NO. GF-525H  
STEREO RADIO-TAPE RECORDER  
110/220/240V ~ 50/60Hz 40W  
15V (UM/SUM-1) x 10  
FREQUENCY RANGE  
FM 87.6 ~ 108 MHz SW 5.95 ~ 18 MHz  
MW 520 ~ 1620 kHz LW 150 ~ 285 kHz

SERIAL NO.  
SHARP CORPORATION

**SHARP** MODELE No GF-525H  
MAGNETOPHONE A CASSETTES-RADIO  
STEREO  
110/220/240V ~ 50/60Hz 40W  
15V (UM/SUM-1) x 10  
GAMME DE FREQUENCES  
FM 87.6 ~ 108 MHz OC 5.95 ~ 18 MHz  
PO 520 ~ 1620 kHz GO 150 ~ 285 kHz

No DE SERIE  
SHARP CORPORATION

**SHARP** MODELLO No GF-525H  
RADIO REGISTRATORE A CASSETTA  
STEREO  
110/220/240V ~ 50/60Hz 40W  
15V (UM/SUM-1) x 10  
GAMMA DI FREQUENZA  
FM 87.6 ~ 108 MHz SW 5.95 ~ 18 MHz  
MW 510 ~ 1620 kHz LW 150 ~ 285 kHz

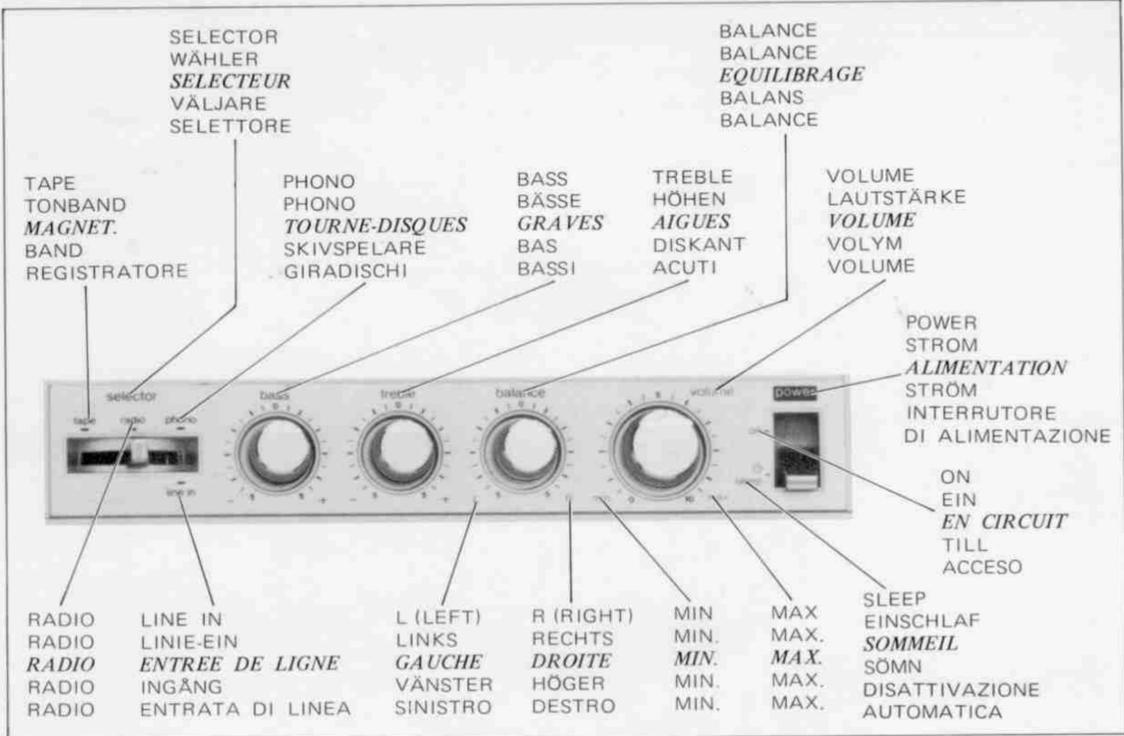
N. DI SERIE  
SHARP CORPORATION

**SHARP** MODELL NR. GF-525H  
STEREO-RADIO-CASSETTENREKORDER  
110/220/240V ~ 50/60Hz 40W  
15V (UM/SUM-1) x 10  
FREQUENZBEREICH  
UKW 87,6 ~ 108 MHz KW 5,95 ~ 18 MHz  
MW 520 ~ 1620 kHz LW 150 ~ 285 kHz

SERIENNUMMER  
SHARP CORPORATION

**SHARP** MODELL NR. GF-525H  
STEREO-KASSETTRADIO  
110/220/240V ~ 50/60Hz 40W  
15V (UM/SUM-1) x 10  
FREKVENSOMRÅDE  
UKV 87,6 ~ 108 MHz KV 5,95 ~ 18 MHz  
MV 520 ~ 1620 kHz LV 150 ~ 285 kHz

SERIENNUMMER  
SHARP CORPORATION



**WARNING:** WHEN THIS UNIT IS NOT IN USE, ALSO BEFORE ATTEMPTING ANY INTERNAL EXAMINATION, PULL THE MAINS PLUG OUT OF THE WALL SOCKET.

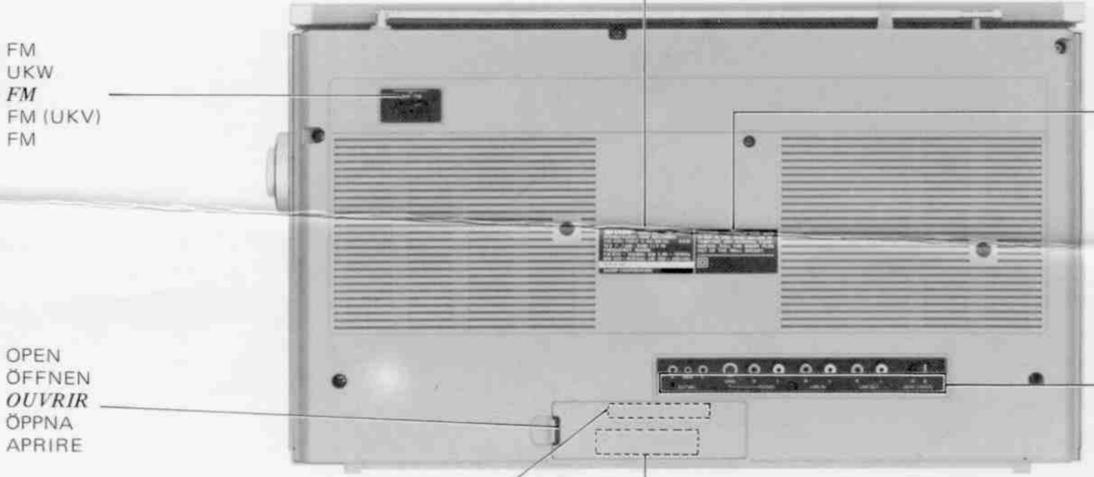
**WARNING:** ZIEHEN SIE IMMER BITTE DAS NETZKABEL AUS DER STECKDOSE, WENN DAS GERÄT NICHT IN BETRIEB IST ODER WENN SIE ES ÖFFNEN WOLLEN.

**ATTENTION:** LORSQUE CET APPAREIL N'EST PAS UTILISE, AUSSI AVANT TOUTE INSPECTION DE SON MECANISME INTERNE, DEBRANCHEZ LE CORDON D'ALIMENTATION DE LA PRISE DE COURANT MURALE.

**VARNING:** TAR UR NÄTANSLUTNINGSPROPPEN UR VÄGGUTTAGET, NÄR DENNA APPARAT INTE SKALL ANVÄNDAS ELLER DU VILL ÖPPNA DEN.

**ATTENZIONE:** QUANDO L'UNITÀ NON È IN USO E PRIMA DI OGNI ISPEZIONE INTERNA, DISINSERIRE LA SPINA PRINCIPALE DALLA PRESA DI RETE.

U-FM	K-SW	M-MW	L-LW
UKW	KW	MW	LW
FM	OC	PO	GO
FM (UKV)	KV	MV	LV
FM	SW	MW	LW



DC15V, (UM/SUM-1 OR D-CELL) x 10  
15V GLEICHSTROM, (UM/SUM-1 ODER D-ZELLE) x 10  
C.C.15V, (PILES UM/SUM-1 OU D) x 10  
LIKSTRÖM 15V, (UM/SUM-1 ELLER D-CELL) x 10  
DC15V (BATTERIE UM/SUM-1 O D) x 10

**BOTTOM BODEN BAS BOTTEN FONDO TOP OBERE SEITE HAUT TOPP PARTE SUPERIORE**

MAKE SURE POLARITY, OR THE TAPE RECORDER MAY RESULT IN TROUBLE.  
ACHTEN SIE AUF DIE RICHTIGE POLARITÄT, WEIL SONST DIESES TONBANDGERÄT EINE STÖRUNG ZUR FOLGE HABEN KANN.  
VEILLER A LA POLARITE, SINON LE MAGNETOPHONE RISQUERAIT DE S'ENDOMMAGER.  
SE TILL ATT POLARITETEN ÄR RÄTT, EFTERSOM BANDSPELAREN KAN SKADAS.  
ASSICURARSI DELLA POLALITÀ, O IL REGISTRATORE POTREBBE VENIRE DANNEGGIATO.



L (LEFT) LINKS GAUCHE VÄNSTER SINISTRO

EXT SP (4 ~ 8 Ω) AUSSENLAUTSPRECHER (4 ~ 8 OHM) HAUT-PARLEUR EXTERIEUR (4 ~ 8 OHMS) YTTRE HÖGTALARE (4 ~ 8 OHM) ALTOPARLANTE ESTERNO (4 ~ 8 OHMS)

R (RIGHT) RECHTS DROITE HÖGER DESTRO

R (RIGHT) RECHTS DROITE HÖGER DESTRO	REM (REMOTE) FERNBEDIENUNG TELECOMMANDE FJÄRRKONTROLL TELECOMANDO	L (LEFT) LINKS GAUCHE VÄNSTER SINISTRO	GND ERDE TERRE JORDNING TERRA	R (RIGHT) RECHTS DROITE HÖGER DESTRO	L (LEFT) LINKS GAUCHE VÄNSTER SINISTRO	R (RIGHT) RECHTS DROITE HÖGER DESTRO	L (LEFT) LINKS GAUCHE VÄNSTER SINISTRO	R (RIGHT) RECHTS DROITE HÖGER DESTRO	L (LEFT) LINKS GAUCHE VÄNSTER SINISTRO	EXT MIC AUSSENMIKROFON MICROPHONE EXTERIEUR YTTRE MIKROFON MICROFONO ESTERNO	PHONO PHONO TOURNE-DISQUES GRAMMOFON GIRADISCHI	LINE IN LINIE-EIN ENTREE DE LIGNE INGÅNG ENTRATA DI LINEA	LINE OUT LINIE-AUS SORTIE DE LIGNE UTGÅNG USCITA DI LINEA	BEAT CANCEL BEHEBEN DER SCHWEBUNG SUPPRESSION DE BATTEMENT STÖRNINGSFILTER CANCELLAZIONE DI BATTITO
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