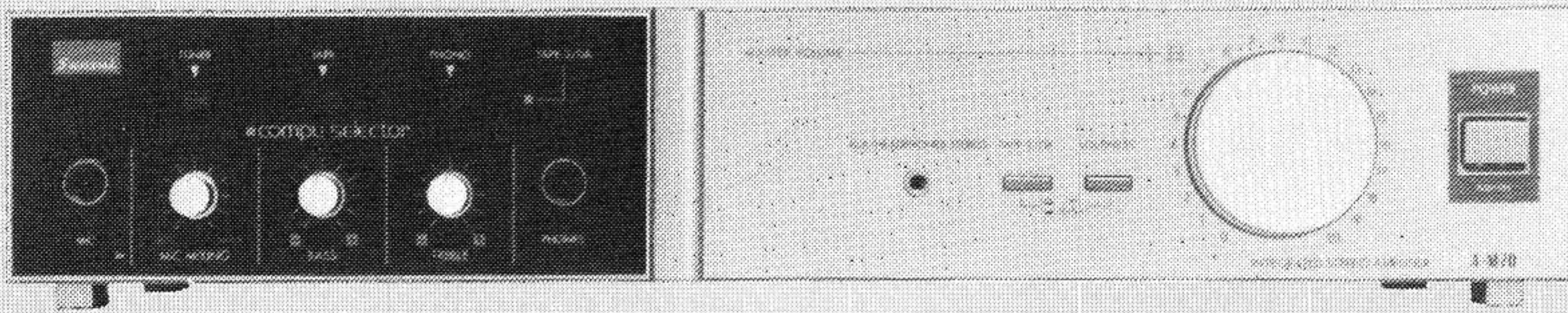


# SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

## SANSUI A-M70

(Silver & Black Model)



### NOTE

A-M70 is additional model which external appearances are different from those of A-M77.

This manual contains **OTHER PARTS LIST**, **PACKING LIST** and **ACCESSORY LIST** in which changed parts are printed with bold-face.

For other parts list, refer to A-M77 service manual previously issued.

### •SPECIFICATIONS

#### Power output

Min. RMS, both channels driven, from 40 to 20,000 Hz with no more than 0.5% total harmonic distortion.

25 watts per channel into 8 ohms.

**Load impedance**..... 8 ohms

#### Total harmonic distortion

..... less than 0.5% at or below  
rated min. RMS power output

#### Frequency response (at 1 watt)

..... 10 to 50,000 Hz/  
+0.5 dB, -2 dB

#### RIAA curve deviation (PHONO, 30 Hz to 20 kHz)

..... +0.5 dB, -0.5 dB

#### Input sensitivity and impedance

(1 kHz, for rated power output)

PHONO..... 2.5 mV/47 kilohms

(Max. input capability: 130 mV at 1 kHz, less than  
0.5% total harmonic distortion)

TUNER, TAPE-1 PLAY

..... 150 mV/47 kilohms

MIC..... 0.5 mV/10 kilohms

#### Output level (1 kHz)

TAPE REC..... 130 mV into 47 kilohms

#### Signal to noise ratio (short-circuit, A-network)

PHONO..... 72 dB

TUNER, TAPE-1 PLAY

..... 90 dB

#### Power requirements

Power voltage..... 120/220/240 V (50/60 Hz)

For U.S.A. & Canada

..... 120 V (60 Hz).

Power consumption.... 105 watts 120 VA Rated

150 watts Maximum

**Dimensions**..... 345 mm (13-5/8") W

66 mm (2-5/8") H

235 mm (8-11/16") D

**Weight**..... 3.3 kg (7.3 lbs.) net

3.8 kg (8.4 lbs.) packed

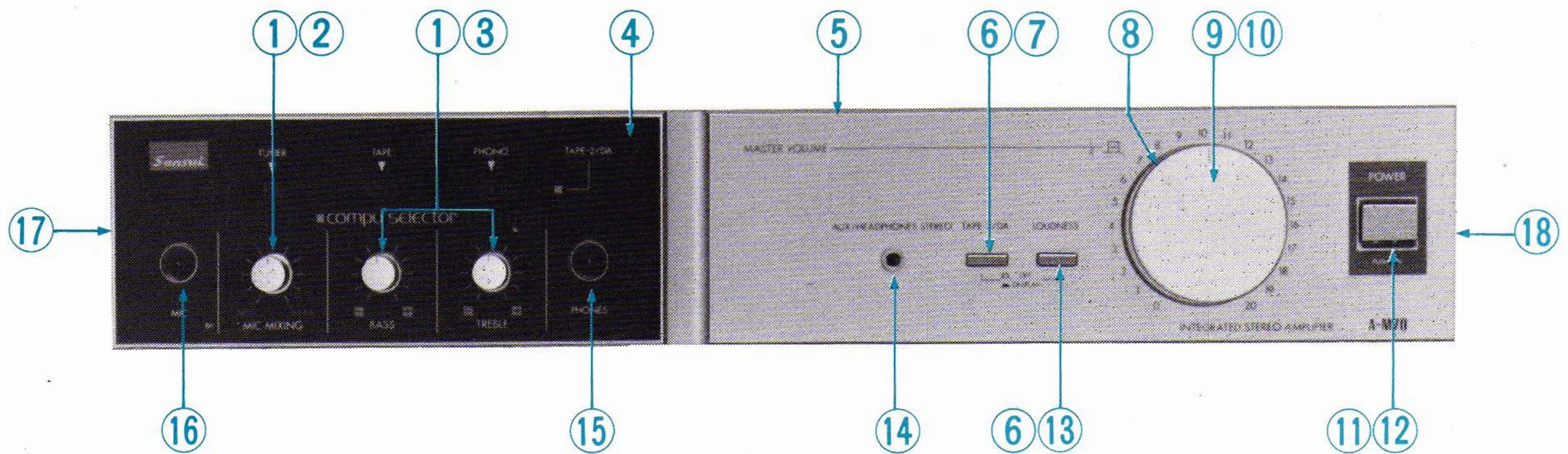
\* Design and specifications subject to change without notice for improvements.

**Sansui**

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# 1. OTHER PARTS

•Front View



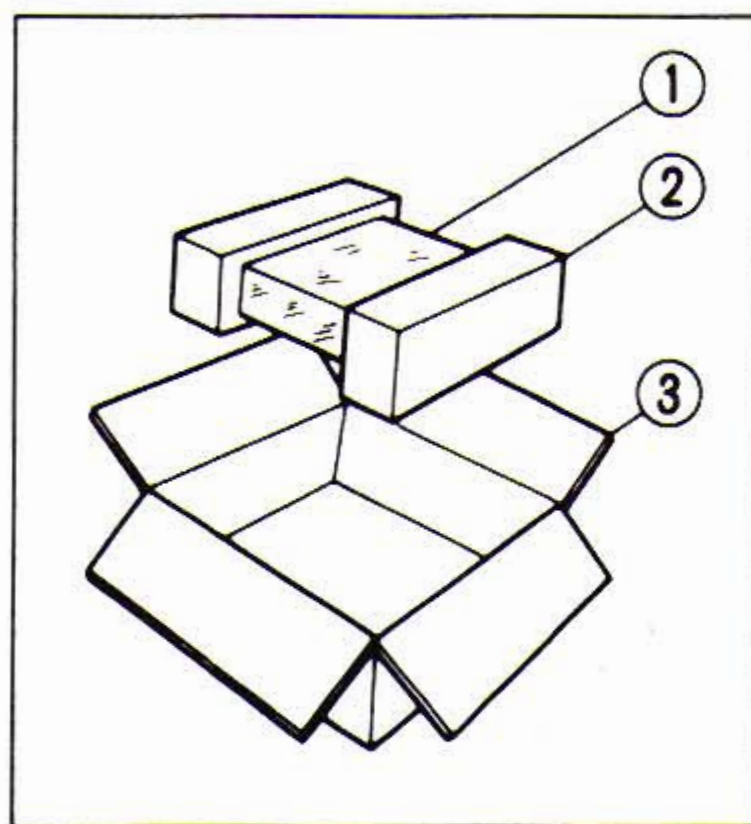
## Parts List

Parts No.	Stock No.	Description
1	07779920	Knob, MIC, BASS, TREBLE
2	46556100	20kΩ 15A V.R. MIC MIXING
3	46556000	50kΩ(C) V.R. BASS TREBLE
4	47458000	Front Panel Ass'y (Silver Model)
	47559100	Front Panel Ass'y (Black Model)
5	47172400	Metal Bonnet (Silver Model)
	47558500	Metal Bonnet (Black Model)
6	47212810	Push Knob, TAPE-2/DA, LOUDNESS (Silver Model)
	47547100	Push Knob, TAPE-2/DA, LOUDNESS (Black Model)
7	46556300	Push SW., TAPE-2/DA
8	47460100	Knob (R), MASTER VOLUME (Silver Model)
	47557400	Knob (R), MASTER VOLUME (Black Model)

Parts No.	Stock No.	Description
9	47460000	Knob (L), MASTER VOLUME (Silver Model)
	47557300	Knob (L), MASTER VOLUME (Black Model)
10	46555900	150kΩ 3BM × 2 V.R. MASTER VOLUME
11	47460200	Push Knob, POWER
12	46364300	Push SW., POWER
13	46556400	Push SW., LOUDNESS
14	46271000	Mini Jack, AUX/HEAD PHONES
15	46549400	Jack, PHONES
16	46549300	Jack, MIC
17	47160000	Side Panel (L) < Silver Model >
	47560000	Side Panel (L) < Black Model >
18	47159900	Side Panel (R) < Silver Model >
	47560100	Side Panel (R) < Black Model >

## 2. PACKING LIST

Parts No.	Stock No.	Description
1	07805200	Vinyl Cover
2	47159800	Styrofoam Packing
3	47592800	Carton Case (Silver Model)
	47558300	Carton Case (Black Model)



## 3. ACCESSORY LIST

Stock No.	Description
46952500	Operating Instruction
46957700	Connection Diagram



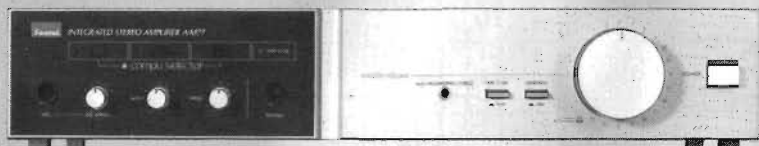
SANSUI ELECTRIC CO., LTD.:  
 SANSUI ELECTRONICS CORPORATION:  
 SANSUI ELECTRONICS (U.K.) LTD.:  
 SANSUI ELECTRONICS G.M.B.H.:

14-1, Izumi 2-chome, Suginami-ku, Tokyo 168 Japan  
 PHONE: (03) 324-8891/TELEX: 232-2076 (International Division)  
 1250 Valley Brook Ave. Lyndhurst, N.J. 07071 U.S.A.  
 17150 South Margay Ave. Carson, California 90746 U.S.A.  
 3036 Koapaka Street. Honolulu, Hawaii 96819 U.S.A.  
 Unit 10A, Lyon Industrial Estate, Rockware Avenue, Geenford, Middx UB6, OAA, England  
 Pau Ehrich Strasse 8, 6074 Rödermark 2, West Germany

# SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

## SANSUI A-M77



### CAUTION

1. Use only replacement parts recommended by the manufacturer.
2. Measure insulation resistance before returning the appliance to the customer to prevent electrical shock.

### •SPECIFICATIONS

#### Power output

Min. RMS, both channels driven, from 40 to 20,000 Hz with no more than 0.5% total harmonic distortion.

25 watts per channel into 8 ohms.

**Load impedance**..... 8 ohms

#### Total harmonic distortion

..... less than 0.5% at or below rated min. RMS power output

#### Frequency response (at 1 watt)

..... 10 to 50,000 Hz/+0.5 dB, -2 dB

#### RIAA curve deviation (PHONO, 30 Hz to 20 kHz)

..... +0.5 dB, -0.5 dB

#### Input sensitivity and impedance

(1 kHz, for rated power output)

PHONO..... 2.5 mV/47 kilohms

(Max. input capability: 130 mV at 1 kHz, less than 0.1% total harmonic distortion)

TUNER, TAPE-1 PLAY

..... 150 mV/47 kilohms

MIC..... 0.5 mV/10 kilohms

#### Output level (1 kHz)

TAPE REC..... 130 mV into 47 kilohms

#### Signal to noise ratio (short-circuit, A-network)

PHONO..... 72 dB

TUNER, TAPE-1 PLAY

..... 90 dB

#### Power requirements

Power voltage..... 120/220/240V (50/60 Hz)  
For U.S.A. & Canada

..... 120V (60 Hz)

Power consumption.... 105 watts 120 VA Rated

150 watts Maximum

**Dimensions**..... 345 mm (13-5/8") W

66 mm (2-5/8") H

235 mm (8-11/16") D

**Weight**..... 3.3 kg (7.3 lbs.) net

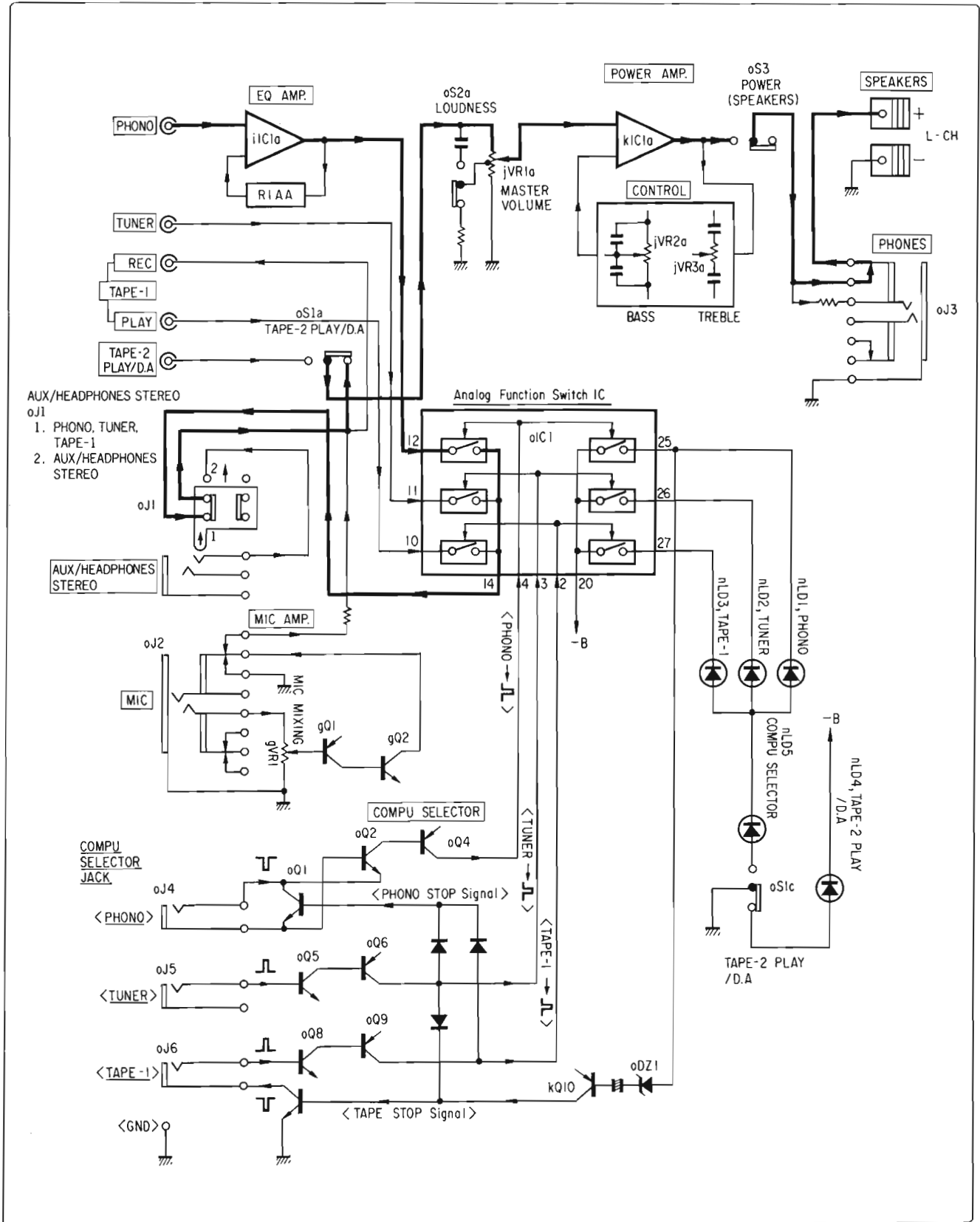
3.8 kg (8.4 lbs.) packed

\* Design and specifications subject to change without notice for improvements.

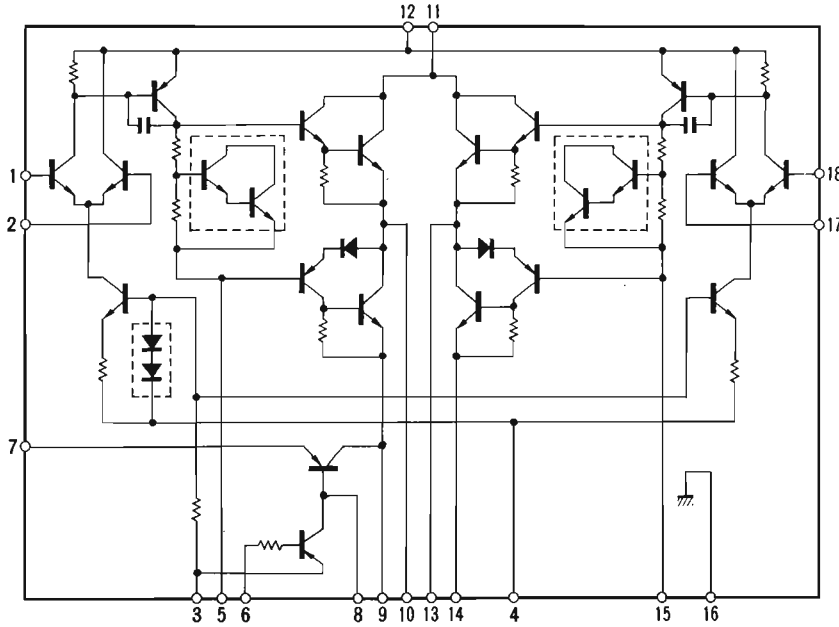
*Sansui*

SANSUI ELECTRIC CO., LTD.

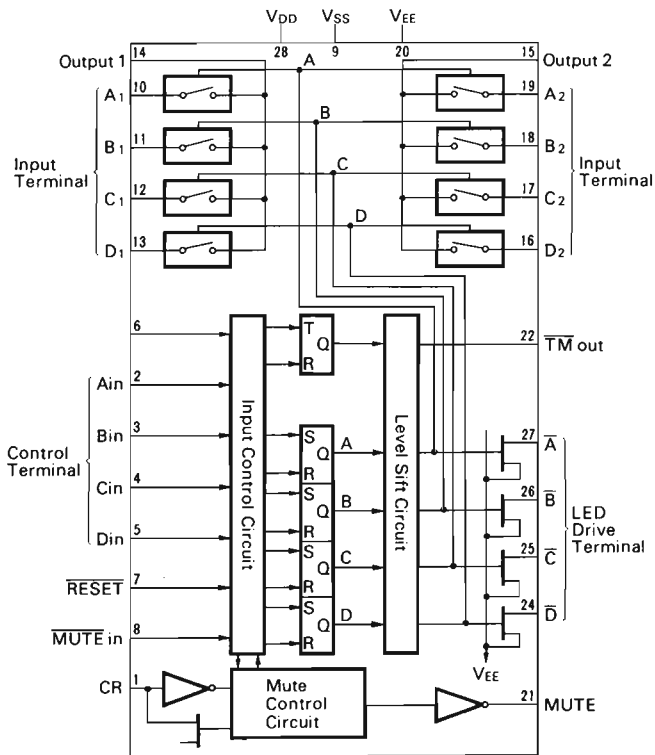
# 1. BLOCK DIAGRAM



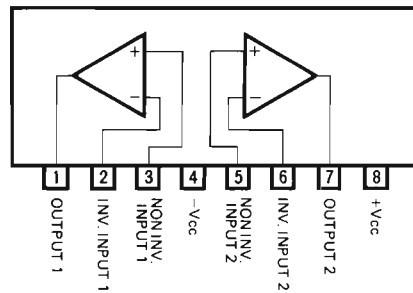
•STK4141II (Power Amp. IC)



•LC7815H (Analog Function Switch IC)



•M5218L (Audio Pre Amp. IC)



\*Output Table of LC7815H

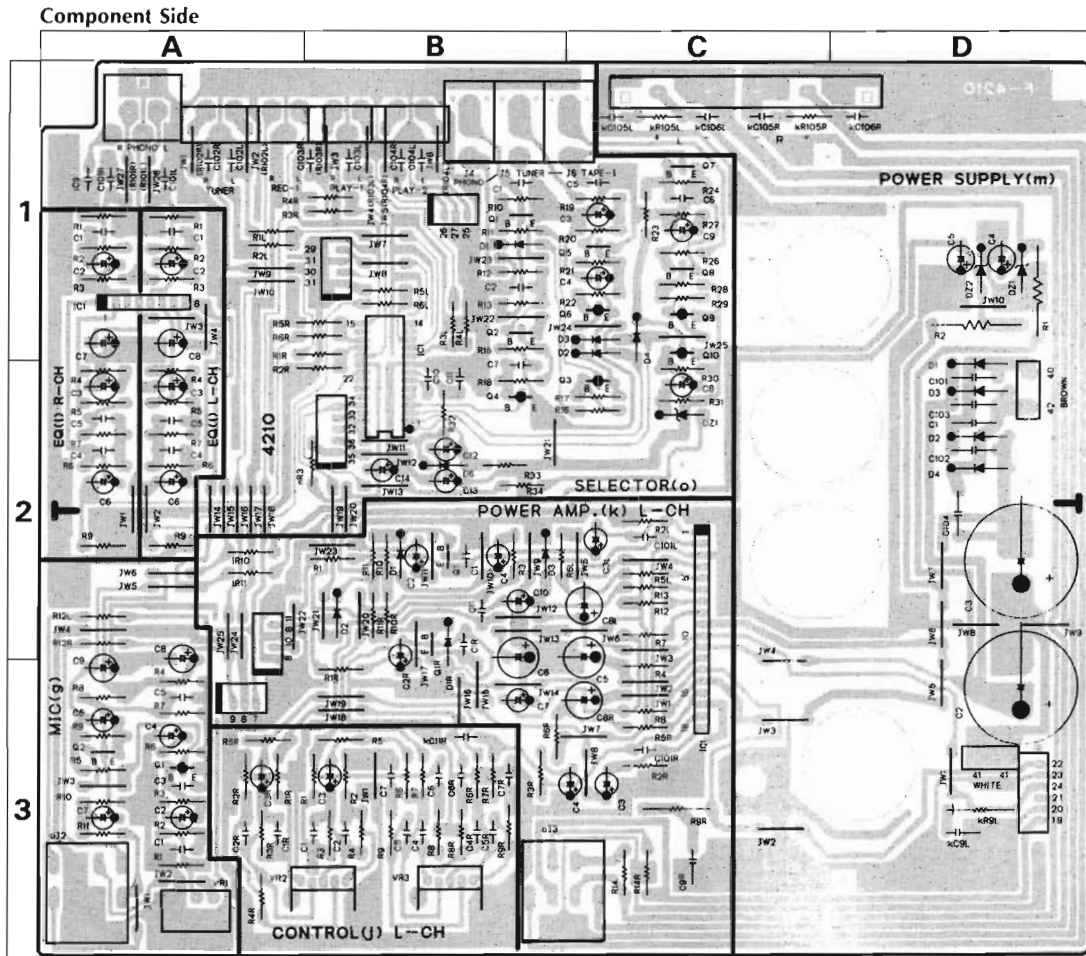
Condition of control input terminals Port (Pin No.)				Connected input terminal to output 1 and 2 terminals		Connected terminal to LED
Ain (2)	Bin (3)	Cin (4)	Din (5)	PORT (Pin No.)	PORT (Pin No.)	PORT (Pin No.)
H	×	×	×	A <sub>1</sub> (10)	A <sub>2</sub> (19)	A(27)
L	H	×	×	B <sub>1</sub> (11)	B <sub>2</sub> (18)	B(26)
L	L	H	×	C <sub>1</sub> (12)	C <sub>2</sub> (17)	C(25)
L	L	L	H	D <sub>1</sub> (13)	D <sub>2</sub> (16)	D(24)

H : H level    L : L level    × : Don't care

## 2. PARTS LOCATION & PARTS LIST

•Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.

### 2-1. F-4210 EQ. Amp., Power Amp. & COMPU Selector Circuit Board (Stock No. 00737001)



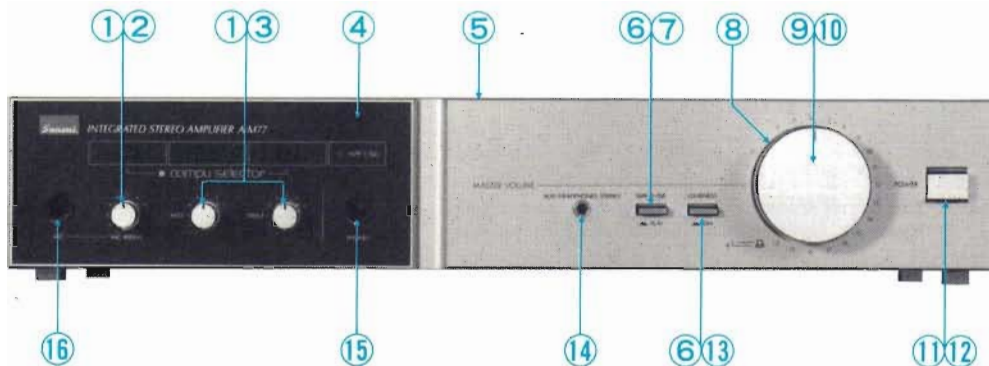
#### Parts List

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
•Transistor			mD1	03117700	10E-2	oO5	46367301	2SC2458
gQ1	03010901	2SA992	mD2	03117700	10E-2	or 46367101	2SC2603	
gQ2	07225401	2SC2320	mD3	03117700	10E-2	oO6	46367201	2SA1048
			mD4	03117700	10E-2	or 46367001	2SA1115	
gVR1	46556100	20kΩ V.R., MIC MIXING	•Zener Diode			or 46392001	2SA1175	
•IC			mDZ1	46113800	05Z12	oO7	46367301	2SC2458
iIC1	46078900	M5218L	mDZ2	46113800	05Z12	or 46367101	2SC2603	
jC2	46561700	0.22μF 50V E.BL.	mC1	08680400	10000pF 500V C.C.	or 46391901	2SC2785	
jVR2	46556000	50kΩ(C) × 2 V.R., BASS	mC2	46190500	3300μF 45V E.C.	oO8	46367301	2SC2458
jVR3	46556000	50kΩ(C) × 2 V.R., TREBLE	mC3	46190500	3300μF 45V E.C.	or 46367101	2SC2603	
•Transistor			mC101	08680400	10000pF 500V C.C.	or 46391901	2SC2785	
kQ1	46367301	2SC2458	mC102	08680400	10000pF 500V C.C.	oO9	46367201	2SA1048
or 46367101	2SC2603		mC103	08680400	10000pF 500V C.C.	or 46367001	2SA1115	
or 46391901	2SC2785		mC104	08680400	10000pV 500V C.C.	or 46392001	2SA1175	
•IC			•Transistor			•IC		
kIC1	46563100	STK4141-2	oO1	46367301	2SC2458	oiC1	46394800	LC7815H
•Diode			or 46367101	2SC2603		•Diode		
kD1	03117600	1S2473T	or 46391901	2SC2785		oD2	03117600	1S2473
or 46086000	1S1588		oO2	46367301	2SC2458	or 46086000	1S1588	
kD2	03117600	1S2473	or 46367101	2SC2603		oD3	03117600	1S2473
or 46086000	1S1588		or 46391901	2SC2785		or 46086000	1S1588	
kD3	03117600	1S2473	oO4	46367201	2SA1048	oD4	03117600	1S2473
or 46086000	1S1588		or 46367001	2SA1115		or 46086000	1S1588	
or 46086000	1S1588		or 46392001	2SA1175		oD6	03117600	1S2473
						or 46086000	1S1588	

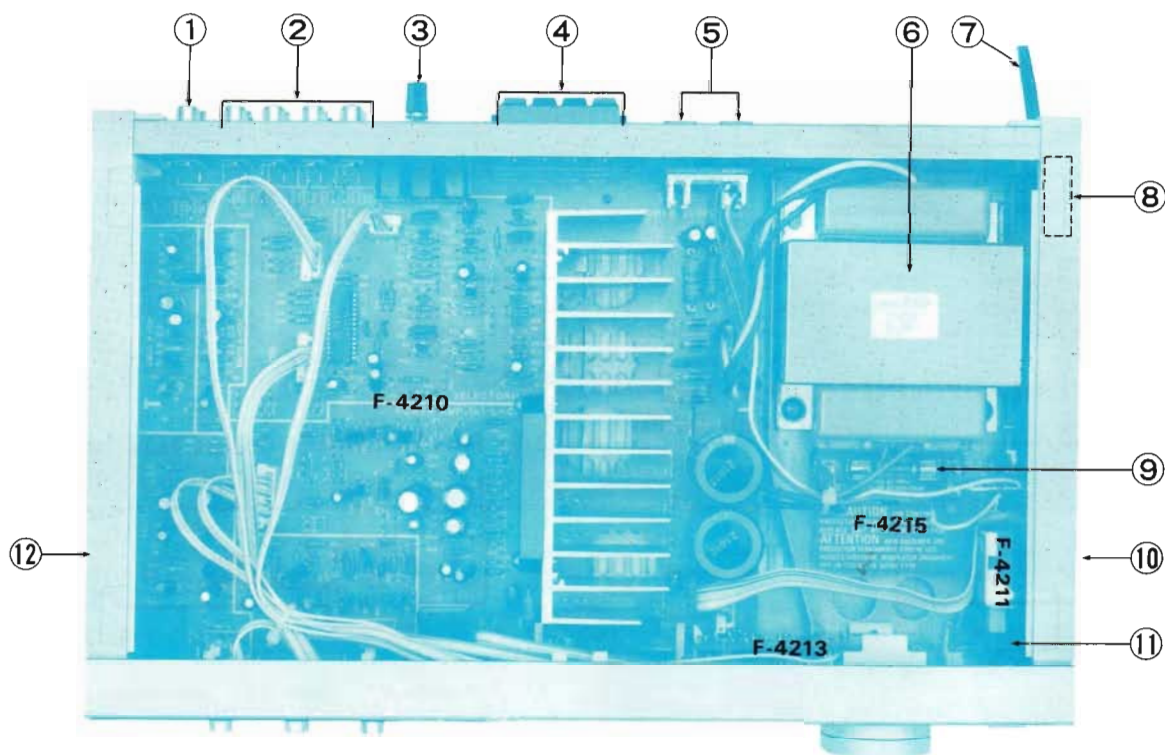


### 3. OTHER PARTS

#### 3-1. Front View



#### 3-2. Top View



#### Parts List < Front View >

Parts No.	Stock No.	Description
1	07779910	Knob, MIC, BASS, TREBLE
2	46556100	20kΩ(A) V.R., MIC MIXING
3	46556000	50kΩ(C) × 2 V.R., BASS, TREBLE
4	47172200	Front panel Ass'y
5	47172400	Bonnet
6	47212800	Push Knob, TAPE-2/DA, LOUDNESS
7	46556300	Push SW., TAPE-2/DA
8	47157500	Knob(R), MASTER VOLUME
9	47157400	Knob(L), MASTER VOLUME
10	46555900	150kΩ(B) V.R., MASTER VOLUME
11	47157800	Push Knob, POWER
12	46364300	Push SW., POWER
13	46556400	Push SW., LOUDNESS
14	46271000	Mini Jack, AUX/HEAD PHONES
15	46549400	Jack, PHONES
16	46549300	Jack, MIC

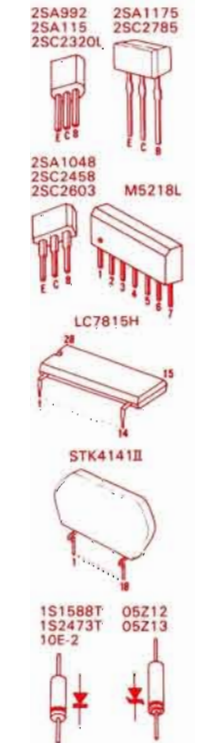
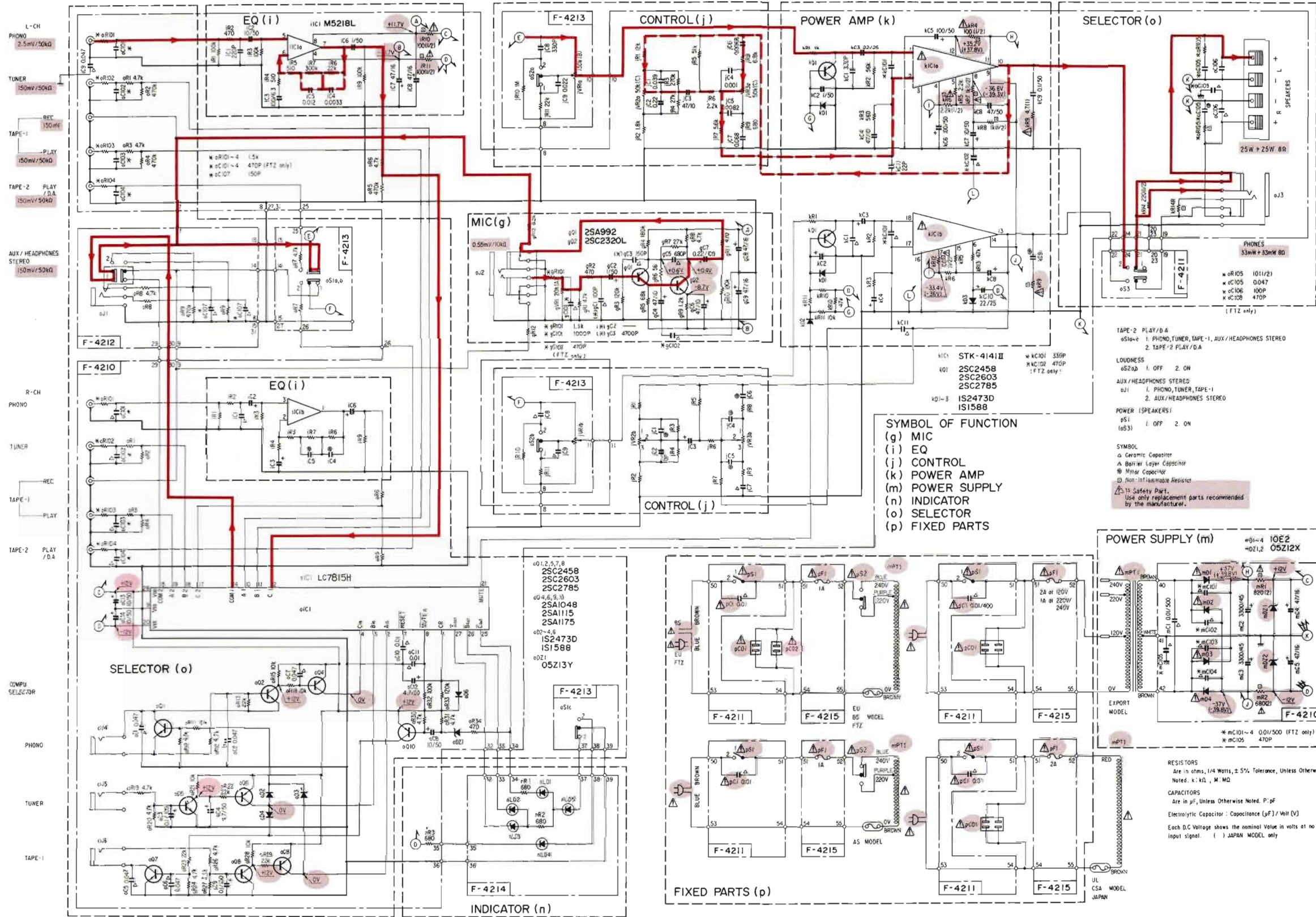
#### Parts List < Top View >

Parts No.	Stock No.	Description
1	46438100	2P Input Terminal Board, PHONO
2	46363800	4P Input/Output Terminal Board, TUNER, TAPE-1, TAPE-2
3	22301510	Ground Terminal
4	46549200	4P Output Terminal Board, SPEAKERS
5	46365000	AC OUTLETS
6	15012501	Power Transformer
7	38005700	Power Supply Cord
8	47157300	Cord Cover
9	07188600	Fuse 2A 250V(120V)
	or 07188400	Fuse 1.0A 250V(220V/240V)
10	47159900	Side Panel(Right)
11	47157100	Joint Shaft
12	47160000	Side Panel(Left)



# 4. SCHEMATIC DIAGRAM

\*Design and specifications subject to change without notice for improvement.  
 \*La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.  
 \*Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



**SYMBOL OF FUNCTION**  
 (g) MIC  
 (i) EQ  
 (j) CONTROL  
 (k) POWER AMP  
 (m) POWER SUPPLY  
 (n) INDICATOR  
 (o) SELECTOR  
 (p) FIXED PARTS

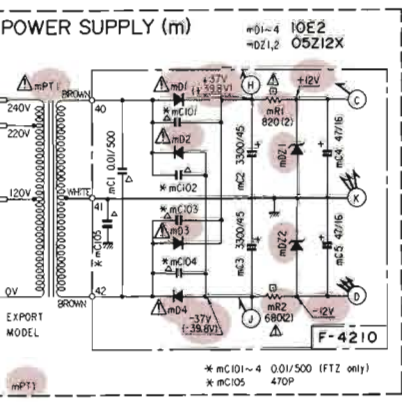
**TAPE-2 PLAY/D.A**  
 1. PHONO, TUNER, TAPE-1, AUX/HEADPHONES STEREO  
 2. TAPE-2 PLAY/D.A

**LOUDNESS**  
 1. OFF 2. ON

**AUX/HEADPHONES STEREO**  
 1. PHONO, TUNER, TAPE-1  
 2. AUX/HEADPHONES STEREO

**POWER (SPEAKERS)**  
 1. OFF 2. ON

**SYMBOL**  
 △ Ceramic Capacitor  
 ▲ Barrier Layer Capacitor  
 ⊕ Mylar Capacitor  
 ⊖ Non-Flammable Resistor  
 ⚠ Safety Part. Use only replacement parts recommended by the manufacturer.



**RESISTORS**  
 Are in ohms, 1/4 Watts, ±5% Tolerance, Unless Otherwise Noted. k: kΩ, M: MΩ

**CAPACITORS**  
 Are in pF, Unless Otherwise Noted. P: pF  
 Electrolytic Capacitor: Capacitance (μF) / Volt (V)

Each D.C. Voltage shows the nominal value in volts at no input signal. ( ) JAPAN MODEL ONLY

— Signal Line  
 - - - N.F.B. Line

1

2

3

4

5

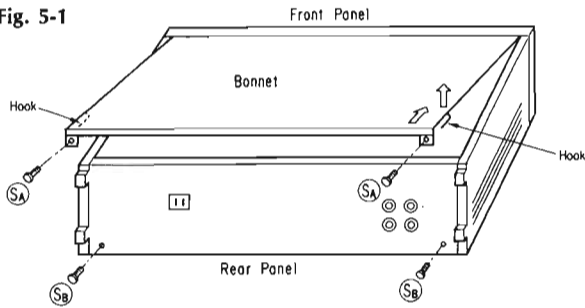
6

## 5. MAIN PARTS REPLACEMENT

### A. Bonnet (See Fig. 5-1)

- 1). Remove two screws (S<sub>A</sub>).
- 2). Push the rear side of the bonnet to remove the hooks and then remove bonnet.

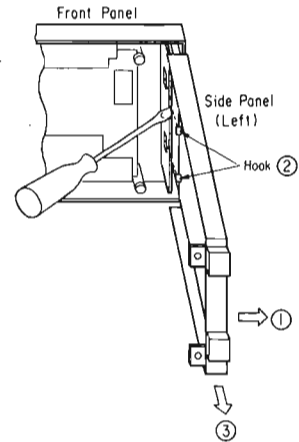
Fig. 5-1



### B. Side Panel L(R) (See Fig. 5-1 & 5-2)

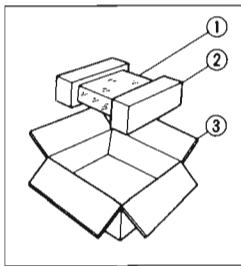
- 1). Remove the bonnet and two screws (S<sub>B</sub>).
- 2). Shift the position of the side panel L(R) 1.5 cm in the arrow direction.
- 3). Remove the hooks (2) of the side panel from front panel and then pull it to the arrow direction (3) to remove the side panel L(R) (Fig. 5-2 (3)).

Fig. 5-2



## 6. PACKING LIST

Parts No.	Stock No.	Description
1	07805200	Vinyl Cover
2	47159800	Styrofoam Packing
3	47158000	Carton Case



## 7. ACCESSORY LIST

Stock No.	Description
46556600	Operating Instruction

The Sansui logo is written in a stylized, italicized serif font. The letters are white and set against a solid black rectangular background.

SANSUI ELECTRIC CO., LTD.:

SANSUI ELECTRONICS CORPORATION:

SANSUI ELECTRONICS (U.K.) LTD.:

SANSUI ELECTRONICS G.M.B.H.:

14-1, Izumi 2-chome, Suginami-ku, Tokyo 168 Japan  
PHONE: (03) 324-8891/TELEX: 232-2076 (International Division)  
1250 Valley Brook Ave. Lyndhurst, N.J. 07071 U.S.A.  
333 West Alondra Blvd. Gardena, California 90247 U.S.A.  
3036 Koapaka St. Honolulu, Hawaii 96819 U.S.A.  
Unit 10A, Lyon Industrial Estate, Rockware Avenue, Greenford, Middx UB6, OAA, England  
Paul Ehrlich Strasse 8, 6074 Rödermark 2, West Germany