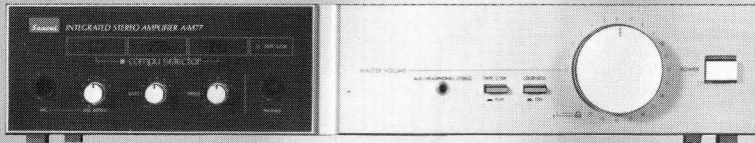


# SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

## SANSUI A-M77



### •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.

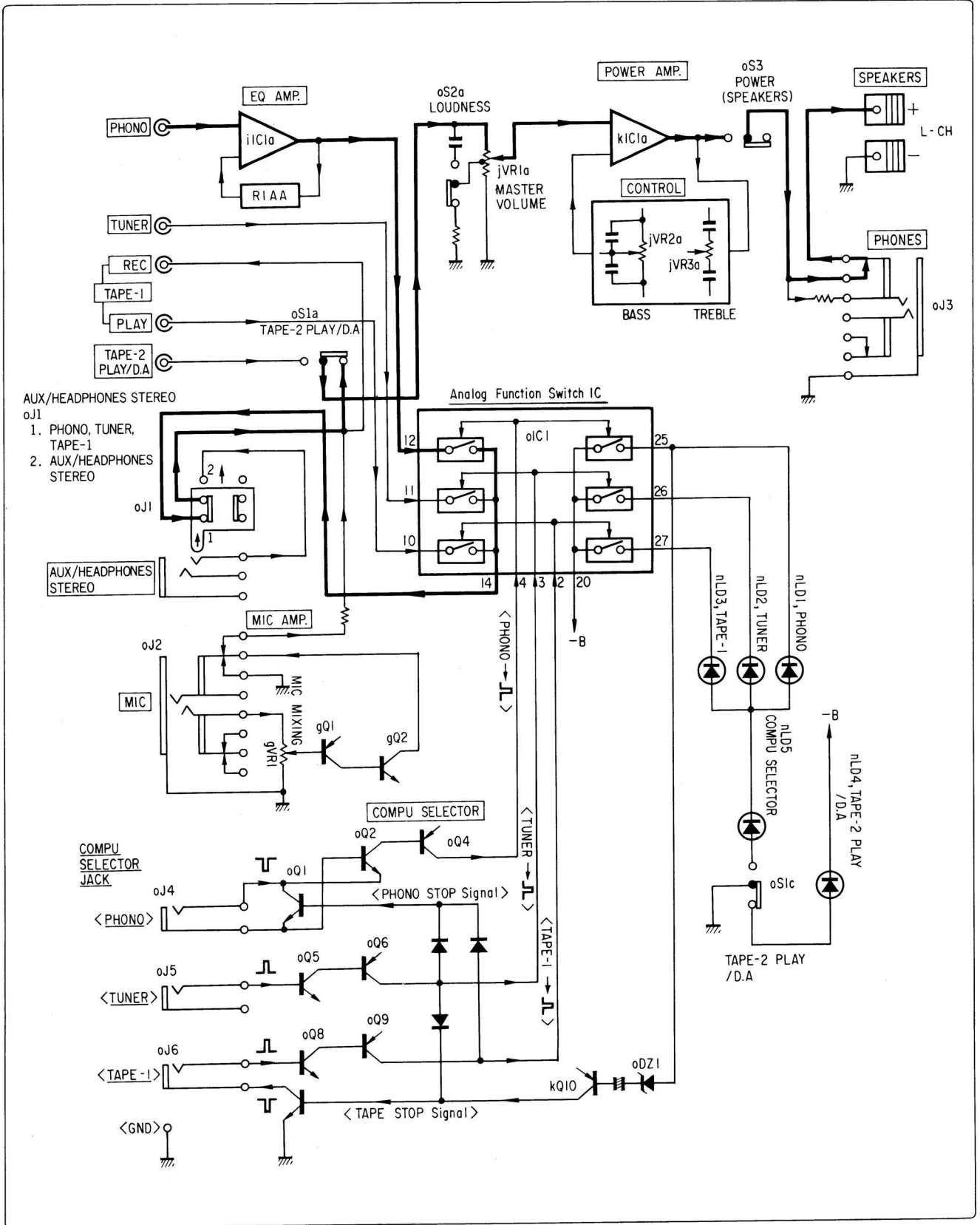
### CAUTION

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

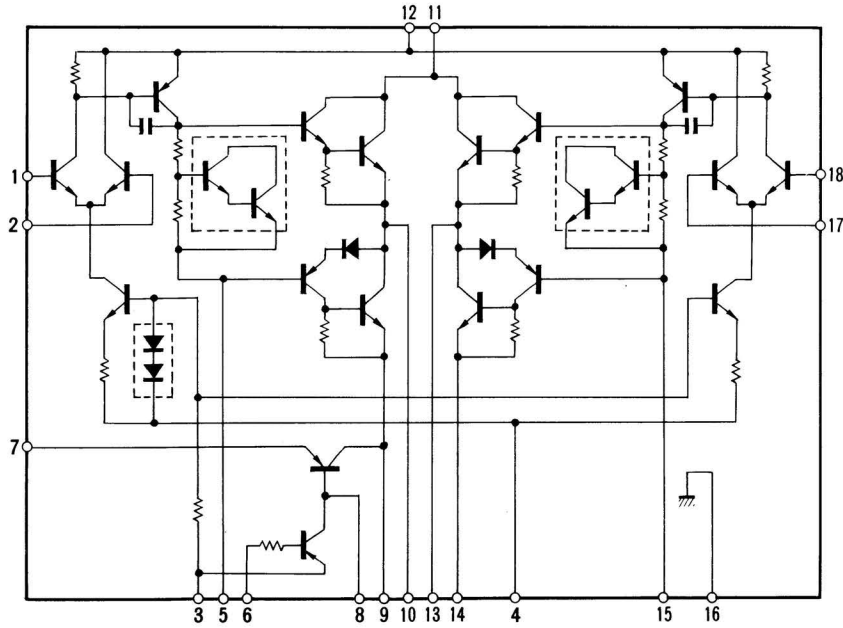
**Sansui**

SANSUI ELECTRIC CO., LTD.

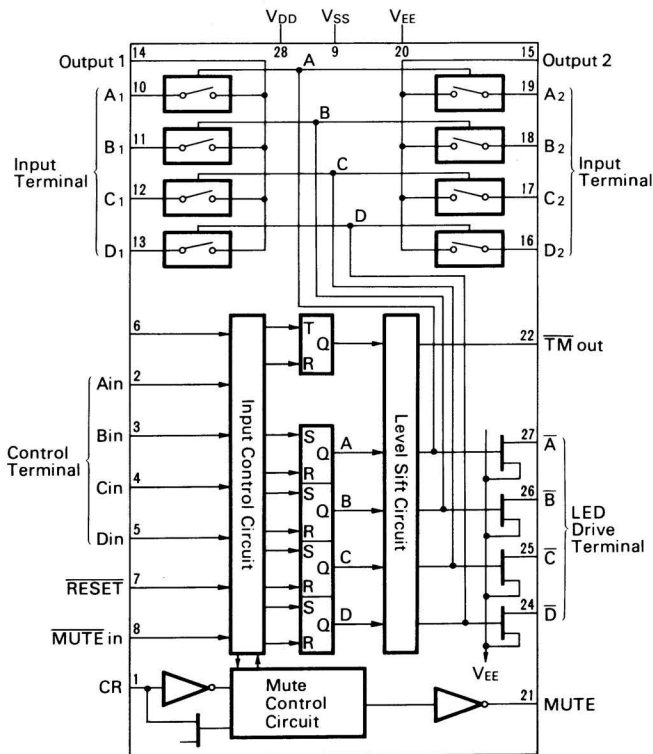
# 1. BLOCK DIAGRAM



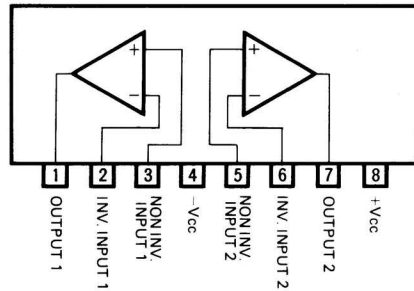
•STK4141III (Power Amp. IC)



•LC7815H (Analog Function Switch IC)



•M5218L (Audio Pre Amp. IC)



\*Output Table of LC7815H

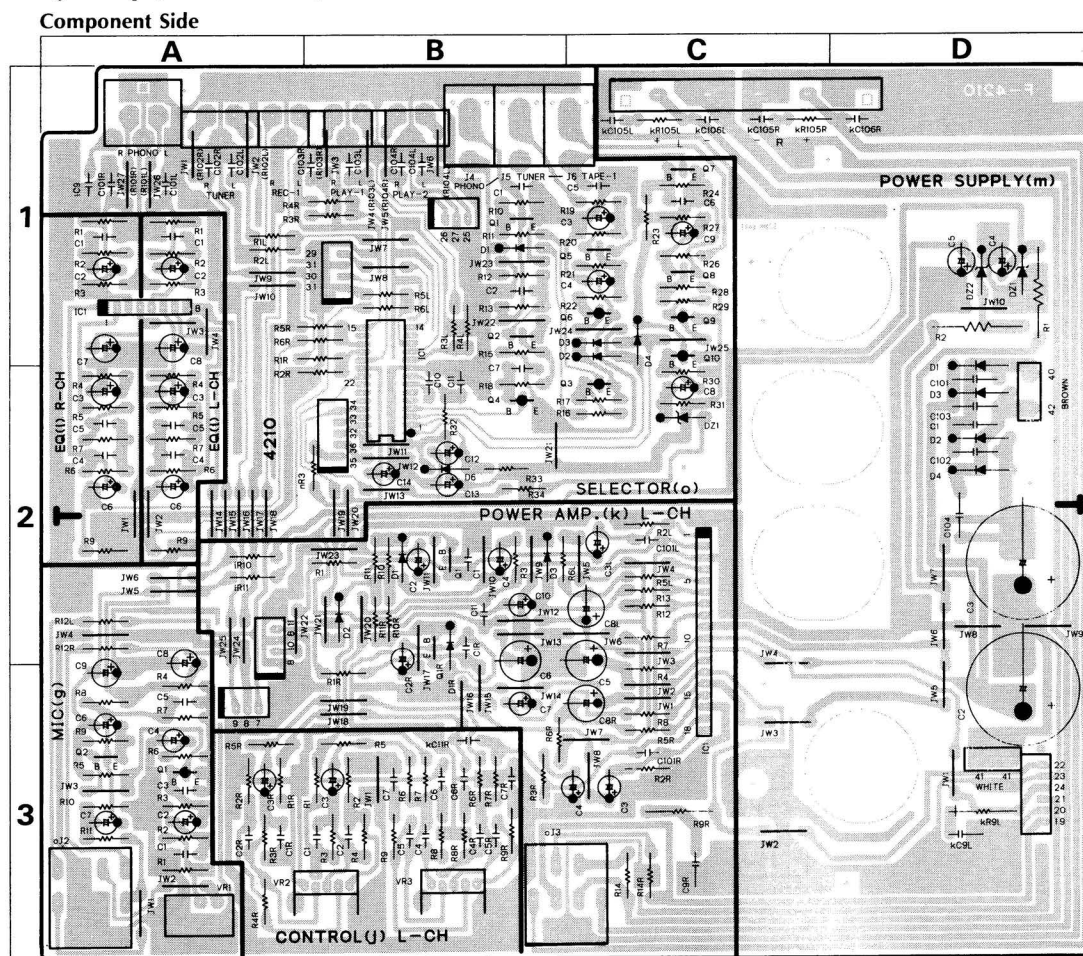
Condition of control input terminals Port (Pin No.)				Connected input terminal to output 1 and 2 terminals		Connected terminal to LED
Ain (2)	Bin (3)	Cin (4)	Din (5)	PORT (Pin No.)	PORT (Pin No.)	PORT (Pin No.)
H	×	×	×	A <sub>1</sub> (10)	A <sub>2</sub> (19)	A(27)
L	H	×	×	B <sub>1</sub> (11)	B <sub>2</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	oQ5	46367301	2SC2458
gQ1	03010901	2SA992	mD2	03117700	10E-2	or 46367101	2SC2603	
gQ2	07225401	2SC2320	mD3	03117700	10E-2	oQ6	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	oQ7	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.	oQ8	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.	oQ9	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			oQ10	46367201	2SA1048
kIC1	46563100	STK4141-2	oQ1	46367301	2SC2458	or 46367001	2SA1115	
•Diode			or 46367101	2SC2603		or 46392001	2SA1175	
kD1	03117600	1S2473T	or 46391901	2SC2785		•IC		
or 46086000	1S1588		oQ2	46367301	2SC2458	oIC1	46394800	LC7815H
kD2	03117600	1S2473	or 46367101	2SC2603		•Diode		
or 46086000	1S1588		or 46391901	2SC2785		oD2	03117600	1S2473
kD3	03117600	1S2473	oQ4	46367201	2SA1048	or 46086000	1S1588	
or 46086000	1S1588		or 46367001	2SA1115		or 03117600	1S2473	
or 46086000	1S1588		or 46392001	2SA1175		oD3	03117600	1S2473
						or 46086000	1S1588	
						oD4	03117600	1S2473
						or 46086000	1S1588	
						oD6	03117600	1S2473
						or 46086000	1S1588	



**Parts List <F-4210>**

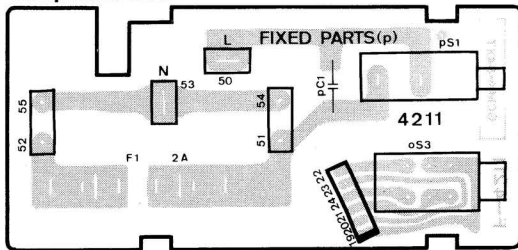
Parts No.	Stock No.	Description
•Zener Diode		
oDZ1	46114200	05Z13
oJ2	46549300	Jack, MIC
oJ3	46549400	Jack, PHONES
oJ4	46547200	Jack, COMPU SELECTOR PHONO
oJ5	46547200	Jack, COMPU SELECTOR TUNER

Parts No.	Stock No.	Description
oJ6	46547200	Jack, COMPU SELECTOR TAPE-1
	46438100	2P Input Terminal Board, PHONO
	46363800	4P Input/Output Terminal Board, TUNER, TAPE-1 REC
	46363800	4P Input Terminal Board, TAPE-1 PLAY, TAPE-2/DA PLAY
	46549200	SPEAKERS Terminal Board

•Note: The circuit board, F-4211, F-4212, F-4213, F-4214 & F-4215 are not supplied as the assembled. However, the individual parts on the circuit board are provided by orders.

**2-2. F-4211 POWER Switch Circuit Board**

Component Side

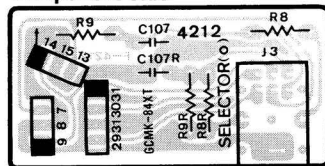


**Parts List**

Parts No.	Stock No.	Description
oS3	46414000	Push, SW., POWER (SPEAKERS)
pC1	46425800	10000pF 400V C.C.
pS1	46364300	Push SW., POWER

**2-3. F-4212 AUX/HEADPHONES STEREO Jack Circuit Board**

Component Side

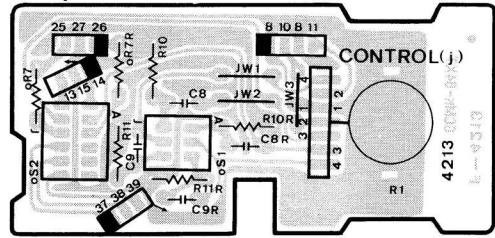


**Parts List**

Parts No.	Stock No.	Description
oJ1	46271000	Mini Jack, AUX/HEAD PHONES STEREO

**2-4. F-4213 MASTER VOLUME Circuit Board**

Component Side

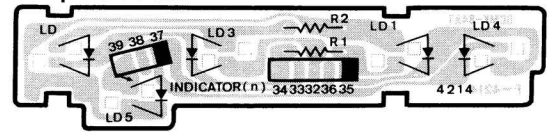


**Parts List**

Parts No.	Stock No.	Description
jC8	46139800	330pF 50V C.C.
jC9	46131400	2200pF 25V C.C.
jVR1	46555900	150kΩ x 2 V.R., MASTER VOLUME
oS1	46556300	Push SW., TAPE-2/DA
oS2	46556400	Push SW., LOUDNESS

**2-5. F-4214 COMPU SELECTOR Indicator Circuit Board**

Component Side



**Parts List**

Parts No.	Stock No.	Description
•LED		
nLD1	46176900	TLS-123
	or 46470200	SEL2210S
nLD2	46176900	TLS-123
	or 46470200	SEL2210S
nLD3	46176900	TLS-123
	or 46470200	SEL2210S
nLD4	46176900	TLS-123
	or 46470200	SEL2210S
nLD5	07250900	TLG123A
	or 46470300	SEL2410E

**2-6. F-4215 Fuse Circuit Board**

Component Side



**Parts List**

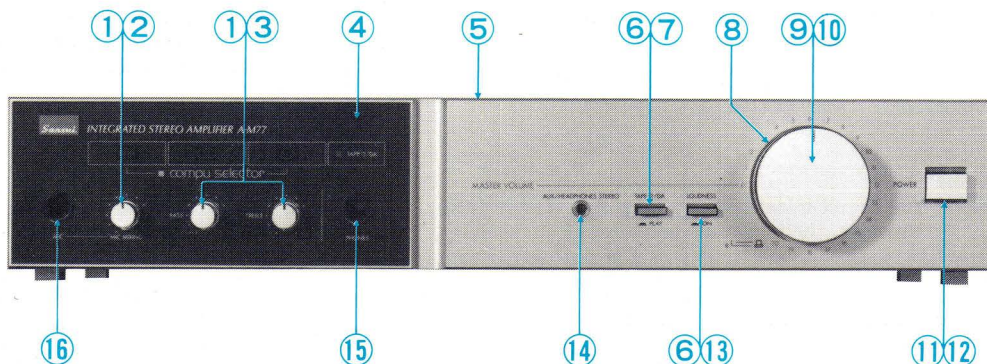
Parts No.	Stock No.	Description
pF1	07188600	Fuse 2.0A 250V (120V)
	or 07188400	Fuse 1.0A 250V (220V/240V)

•Abbreviations

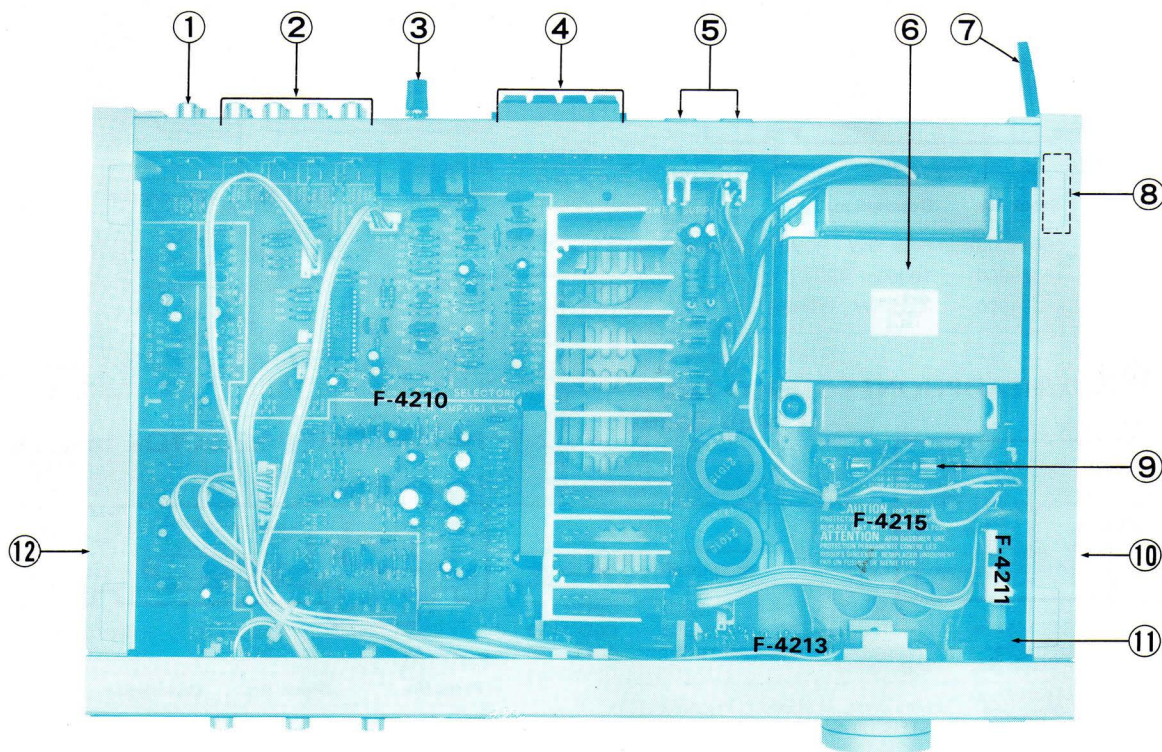
C.R. : Carbon Resistor	E.B. : Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	E.BL. : Low Leak Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	Ta.C. : Tantalum Capacitor
M.R. : Metal Film Resistor	F.C. : Film Capacitor
F.R. : Fusing Resistor	M.P. : Metalized Paper Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. : Polystyrene Capacitor
C.C. : Ceramic Capacitor	G.C. : Gimmic Capacitor
C.T. : Ceramic Capacitor, Temperature Compensation	V.R. : Variable Resistor
E.C. : Electrolytic Capacitor	S.V.R. : Semi Variable Resistor
E.L. : Low Leak Electrolytic Capacitor	SW. : Switch

### 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) x 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

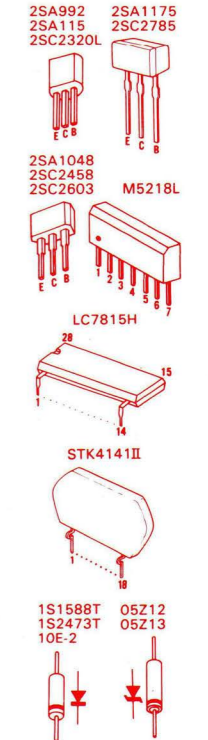
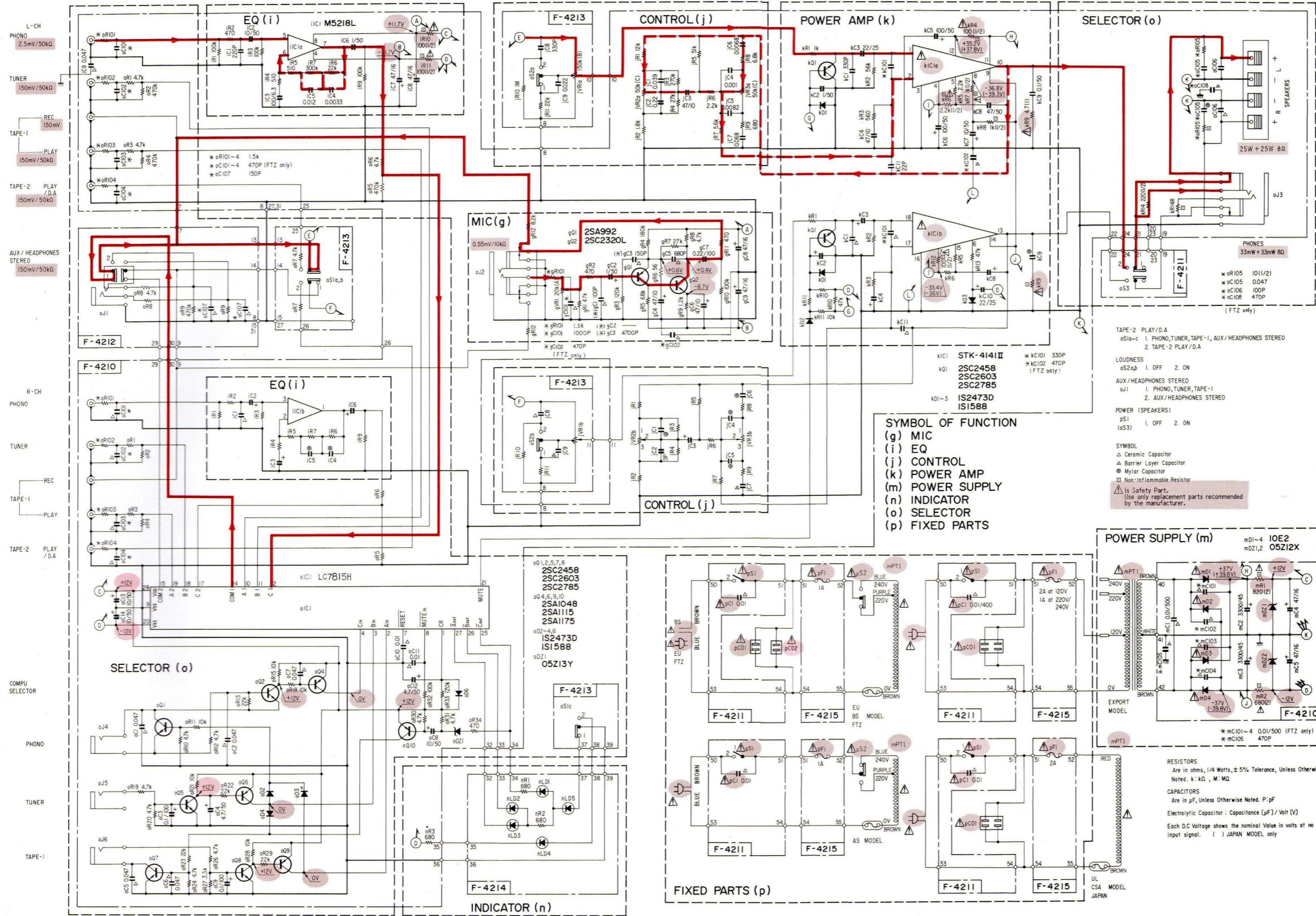
#### Parts List < Top View >

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**  
 o51a-c 1. PHONO, TUNER, TAPE-1, AUX/HEADPHONES STEREO  
 2. TAPE-2 PLAY/D.A

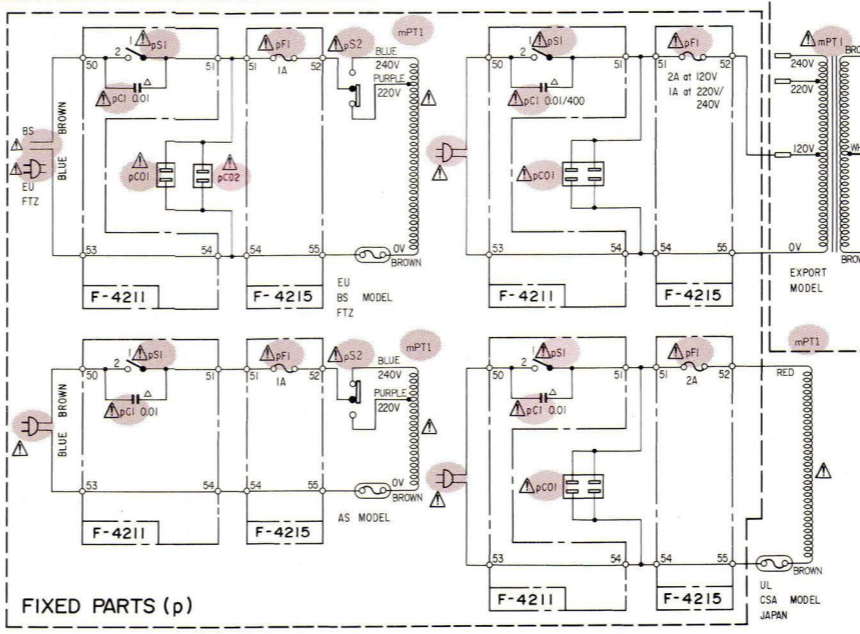
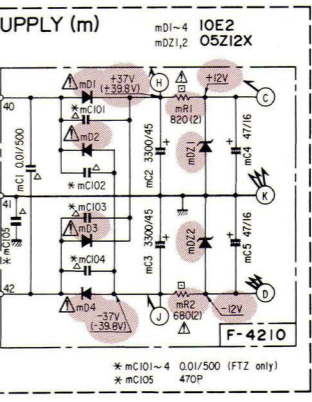
**LOUDNESS**  
 o52a,b 1. OFF 2. ON

**AUX/HEADPHONES STEREO**  
 o1 1. PHONO, TUNER, TAPE-1  
 2. AUX/HEADPHONES STEREO

**POWER (SPEAKERS)**  
 o53 1. OFF 2. ON

**SYMBOL**  
 Δ Ceramic Capacitor  
 ▽ Barrier Layer Capacitor  
 ⊙ Mylar Capacitor  
 □ Non-Flammable Resistor

⚠ is 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 μF, 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

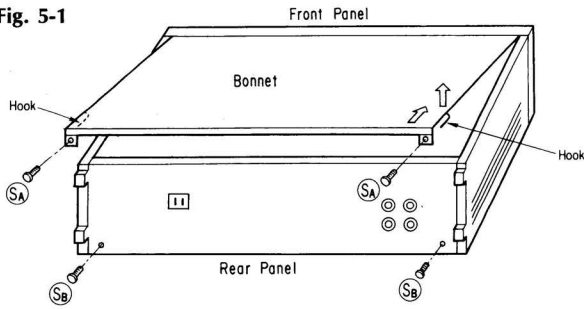
6

## 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.

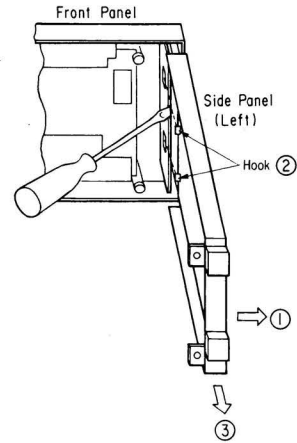
Fig. 5-1



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

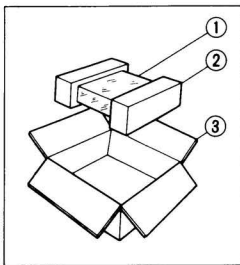
- 1). Remove the bonnet and two screws (S<sub>B</sub>).
- 2). Shift the position of the side panel L(R) 1.5 cm in the arrow direction.
- 3). Remove the hooks (2) of the side panel from front panel and then pull it to the arrow direction (3) to remove the side panel L(R) (Fig. 5-2 (3)).

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





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

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