

STEREO AMPLIFIER AVX-20

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

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AVX-20

■ TO SERVICE PERSONNEL

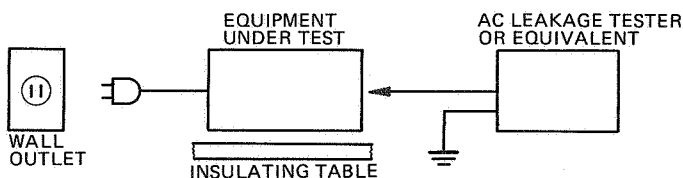
1. Critical Components Information.

Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.

2. Leakage Current Measurement (For 120V Model Only).

When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.

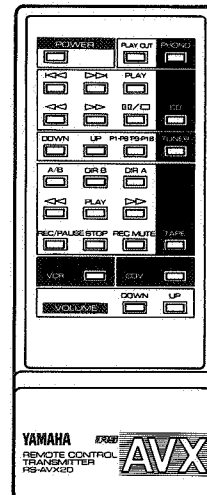
- Meter impedance should be equivalent to 1500 ohm shunted by $0.15 \mu F$.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



• POLARIZATION (C Model only)

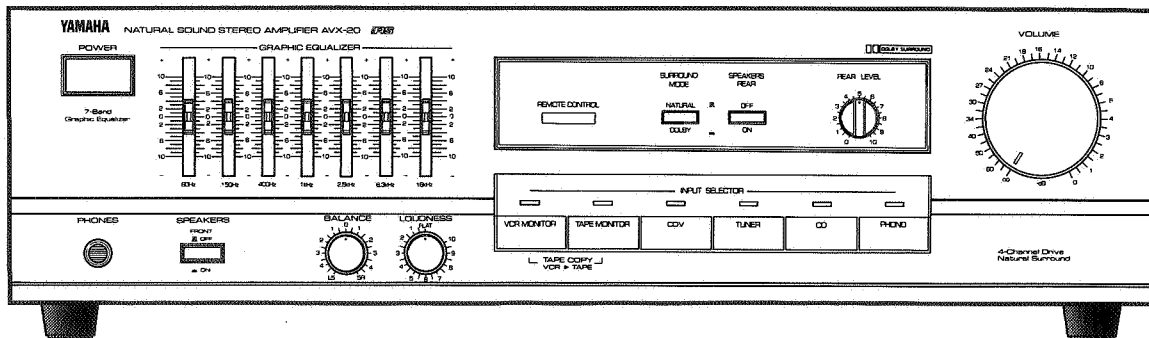
This amplifier product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature.

● RS-AVX20

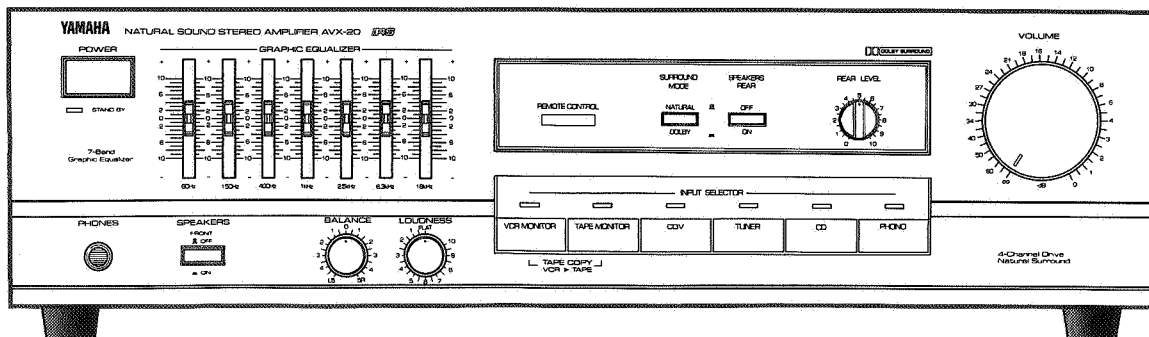


■ FRONT PANELS

● Canadian, Australian and General Model

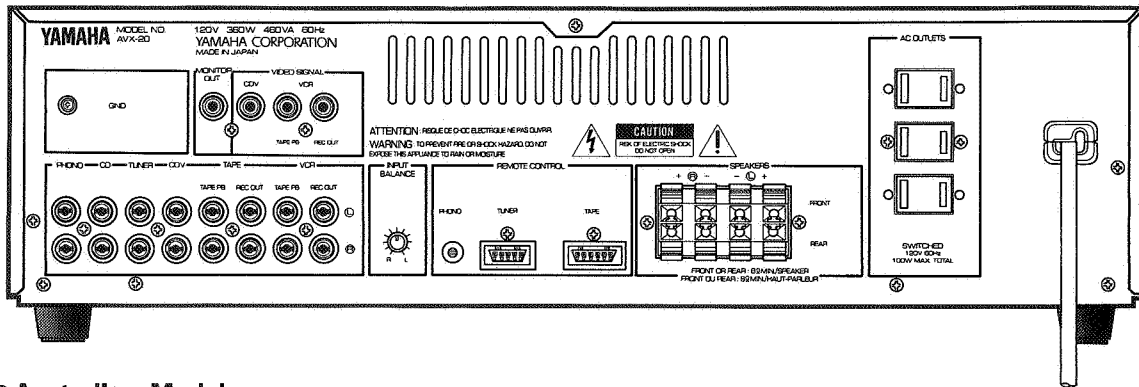


● European Model

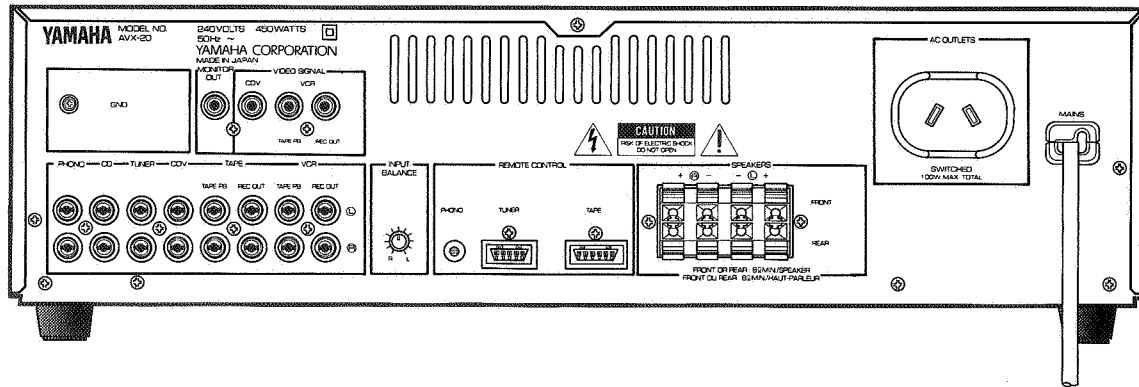


REAR PANELS

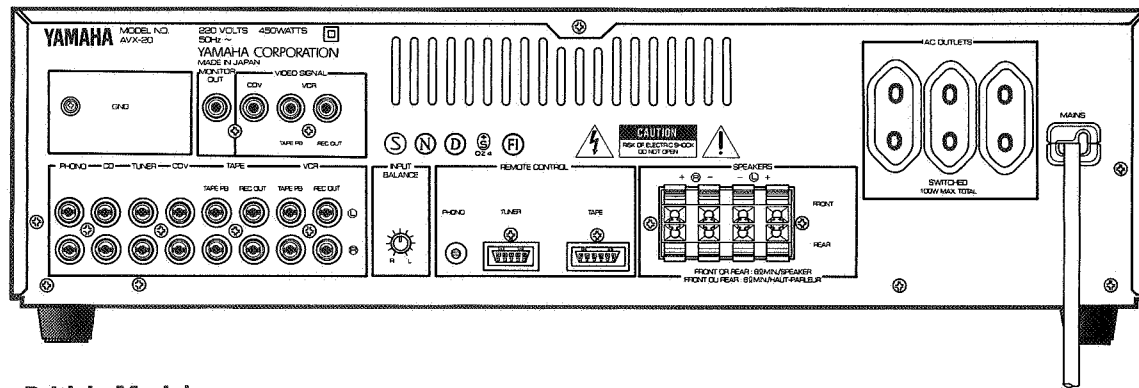
Canadian Model



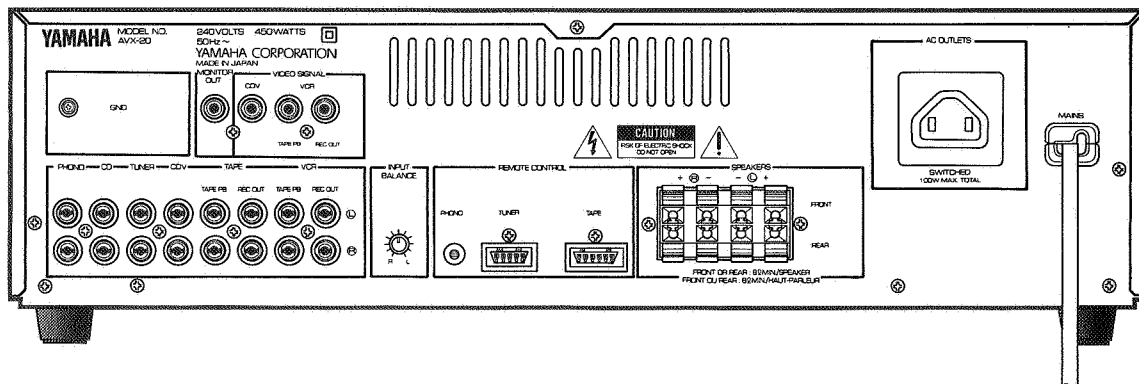
Australian Model



North European Model

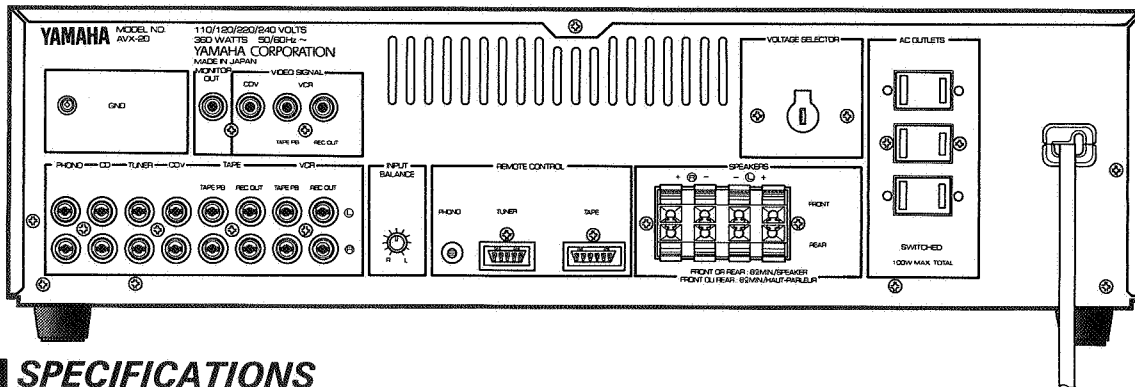


British Model



AVX-20

● General Model



SPECIFICATIONS

AUDIO SECTION

Minimum RMS Output Power Per Channel

20Hz ~ 20kHz, 0.05% THD, 8Ω	100W [for R, C, A, B] 80W [for H]
1kHz, 0.1% THD, 8Ω	115W [for R, C, A, B]
Rear 1kHz, 0.9% THD, 8Ω (Natural Surround)	15W

Dynamic Power Per Channel

8Ω	145W [for R, C] 120W [for A, B, H]
6Ω	180W [for R, C] 150W [for A, B, H]
4Ω	240W [for R, C] 190W [for A, B, H]

DIN Standard Output Power Per Channel

1kHz, 1% THD, 4Ω	115W [for H]
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Dynamic Headroom

8Ω	1.6dB
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IEC Power

1kHz, 0.01% THD, 8Ω	85W [for H]
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Power Band Width

0.1% THD, 50W, 8Ω	10Hz ~ 60kHz
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Damping Factor

1kHz, 8Ω	50
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Input Sensitivity/Impedance

PHONO MM	2.5mV/47kΩ
Picture	1Vp-p/75Ω
CD etc.	150mV/47kΩ [for R, C]

Input Sensitivity (New IHF)

PHONO MM	0.25mV [for R, C]
CD etc.	15mV [for R, C]

Maximum-Input Signal

1kHz, 0.02% THD PHONO MM	80mV
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Output Level/Impedance

Rec Out	150mV/470Ω
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Headphone Jack Rated Output/Impedance

0.05% THD, RL = 8Ω	0.81V/270Ω [for R, C, A, B] 0.73V/270Ω [for H]
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Frequency Response

20Hz ~ 20kHz, CD/etc	±0.5dB
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RIAA Equalization Deviation

PHONO MM	±0.5dB
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Total Harmonic Distortion (20Hz ~ 20kHz)

PHONO MM to Rec Out 3V	0.009%
CD/etc to Sp Out 50W/8Ω	0.02%

Signal to Noise Ratio (IHF-A-Network)

PHONO MM (5mV Input Shorted)	79dB
CD/etc (Shorted)	100dB

Signal to Noise Ratio (New IHF)

PHONO MM	75dB
CD/etc	80dB

Input Equivalent Noise

	125dBV [for A, B, H]
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Residual Noise (IHF-A-Network)

	250μV [for R, C]
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Channel Separation (Vol. -30dB)

Phono MC/MM input shorted	
1kHz/10kHz	70dB/60dB

CD etc. input 5.1kΩ	
terminated 1kHz/10kHz	70dB/60dB

Graphic Equalizer

Boost/Cut	60Hz	±12dB
	150Hz	±12dB
	400Hz	±12dB
	1kHz	±12dB
	2.5kHz	±12dB
	6.3kHz	±12dB
	16kHz	±12dB

Continuous Loudness Control

	-20dB (1kHz)
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Gain tracking error (0 ~ -60dB)

	2dB
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GENERAL

Power Supply

Canadian Models	AC120V 60Hz
Australian & British Models	AC240V 50Hz
European Models	AC220V 50Hz
Others Models	AC110/120/220/240V 50/60Hz

Power Consumption

	360W [for R, C]
	450W [for A, H, B]

AC Outlet

Switched x 3	100W max. [for R, C, H]
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Switched x 1	100W max. [for A, B]
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Dimensions (W x H x D)

	435 x 122.5 x 300.5mm (17-1/8" x 4-13/16" x 11-53/64")
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Weight

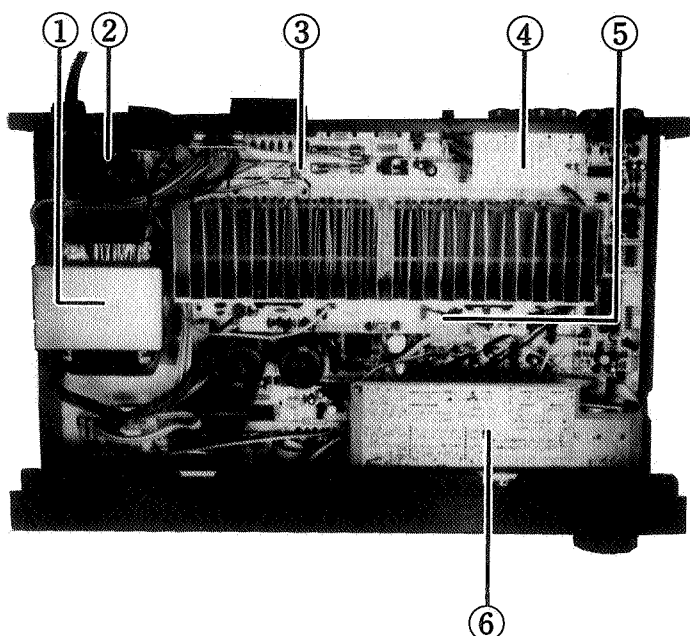
	7.5kg (16 lbs. 9 oz.)
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CD/etc.: CD/VIDEO/TUNER/AUX/TAPE/VCR

(C)	Canadian Model
(A)	Australian Model
(H)	North European Model
(B)	British Model
(R)	General Model

Specifications subject to change without notice.

INTERNAL VIEW



- ① POWER TRANSFORMER
C model : XD619A00
R model : XD620010
A, B model : XD621A00
H model : XD622A00
- ② SUB CIRCUIT BOARD (3)
- ③ MAIN CIRCUIT BOARD (1)
- ④ MAIN CIRCUIT BOARD (3)
- ⑤ SURROUND CIRCUIT BOARD (2)
- ⑥ SURROUND CIRCUIT BOARD (1)

DISASSEMBLY PROCEDURES

1. Removal of Top Cover

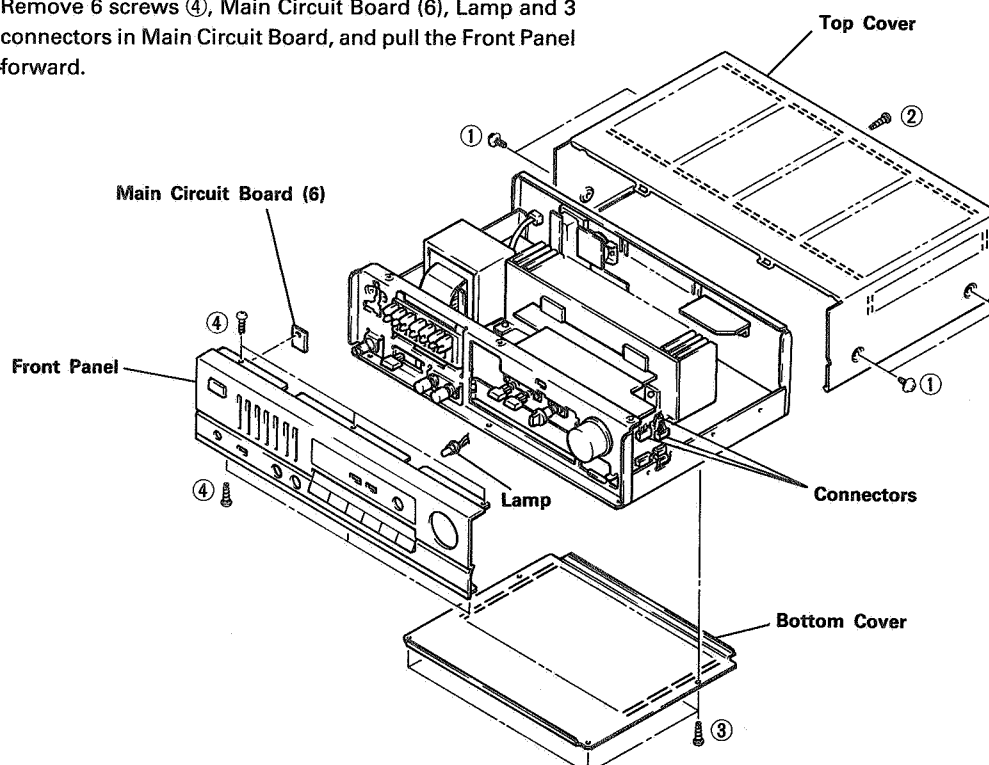
Remove 4 screws ① and 1 screw ② in Fig. 1, and slide the Top Cover back.

2. Removal of Bottom Cover

Remove 4 screws ③ in Fig. 1.

3. Removal of Front Panel

Remove 6 screws ④, Main Circuit Board (6), Lamp and 3 connectors in Main Circuit Board, and pull the Front Panel forward.



■ ADJUSTMENT

1. IDLING CURRENT ADJUSTMENT

When replacing the power and drive transistors, adjust idling current. Turn ON the power in the no signal state and wait for two minutes before the adjustment.

Adjust VR103 (Lch) and VR104 (Rch) so that the voltage across the terminal of R253, R254 comes from 4.0mV to 6.0mV DC.

	Test Points	Adjustment points	Rating
Lch	Across the terminals of R253	VR103	4.0mV ~ 6.0mV DC
Rch	Across the terminals of R254	VR104	4.0mV ~ 6.0mV DC

2. DOLBY SURROUND DISTORTION ADJUSTMENT

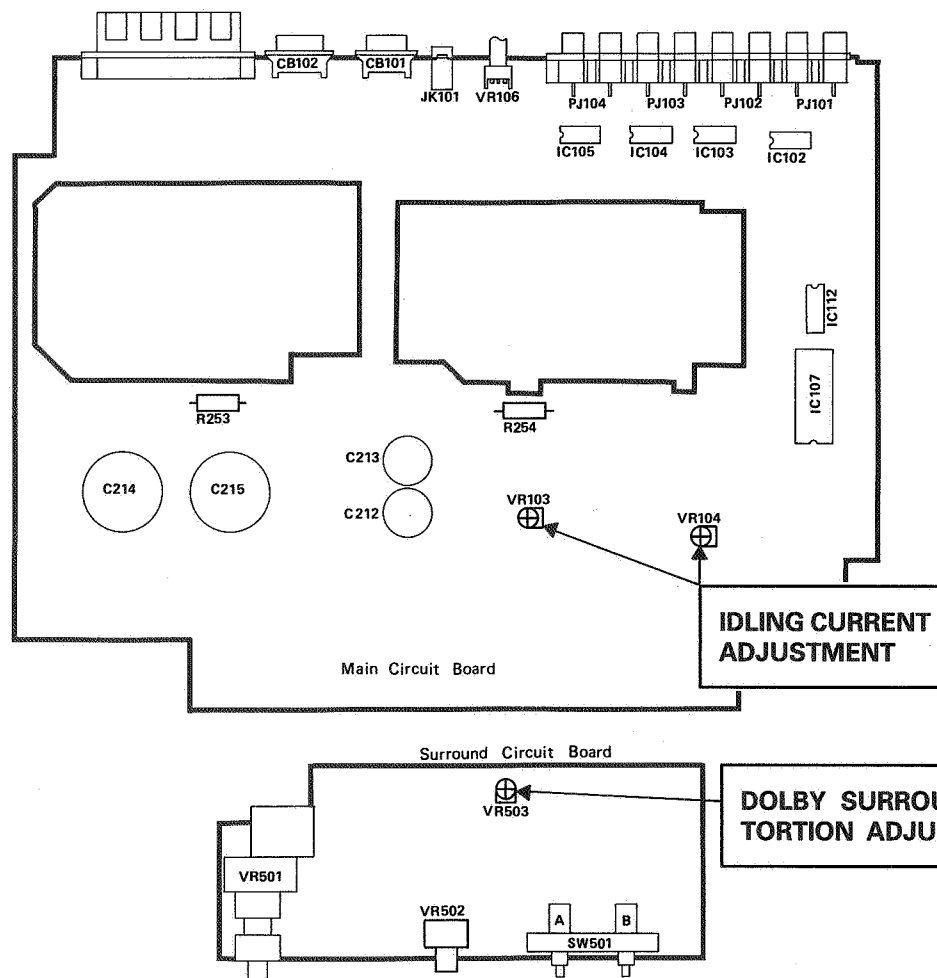
When replacing the power and drive transistors, adjust dolby surround distortion.

Turn ON the power in the no signal state and wait for two minutes before the adjustment.

Set the Rear level VR so that the output voltage at either channel of 1kHz, 150mV. (Main VR: Maximum) Then adjust VR503 to make the distortion minimum.

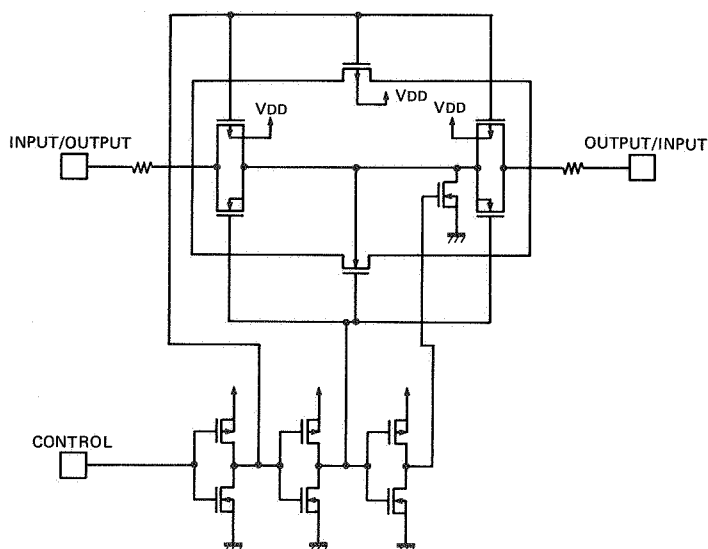
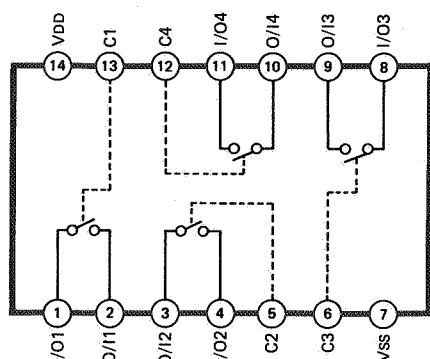
Input	Adjustment point	Test Point	Rating
Input : 1kHz 150mV/Either channel	VR503	Rear Speaker Terminal	Minimum

● TEST POINTS

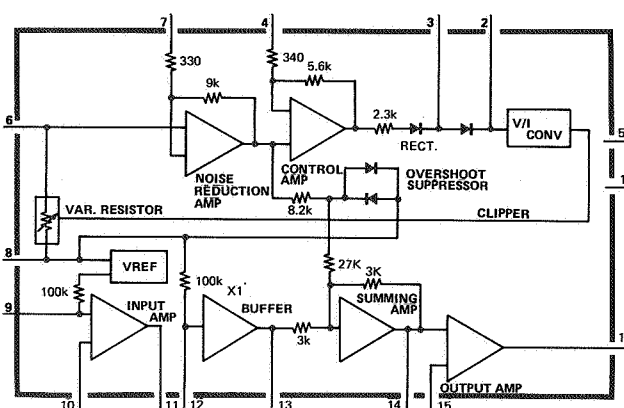
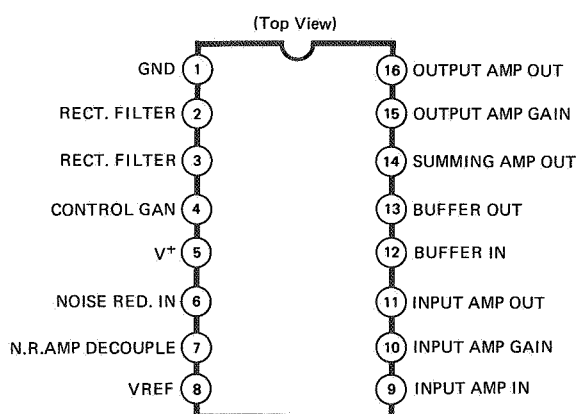


IC BLOCK/CIRCUIT DATA

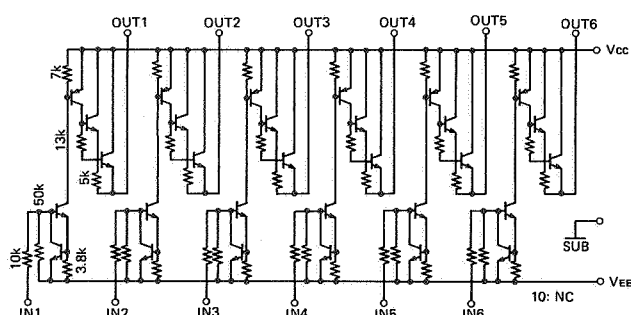
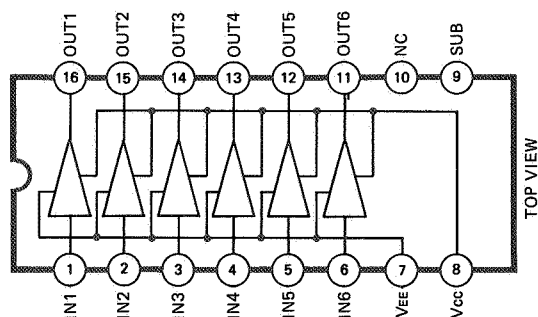
● IC102 ~ 106 : BU4066B, LC4066B, M4066PB, MN4066B (QUADRUPLE BILATERAL SWITCH)



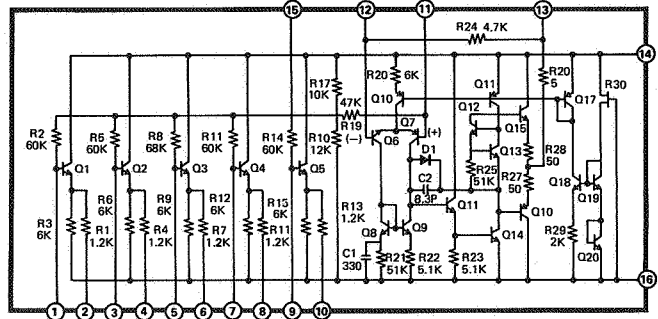
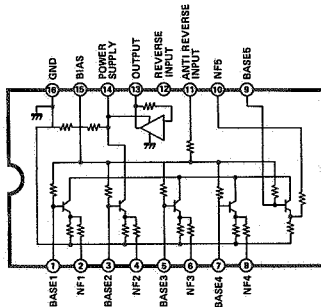
● IC505 : LA2730 (DOLBY IC)



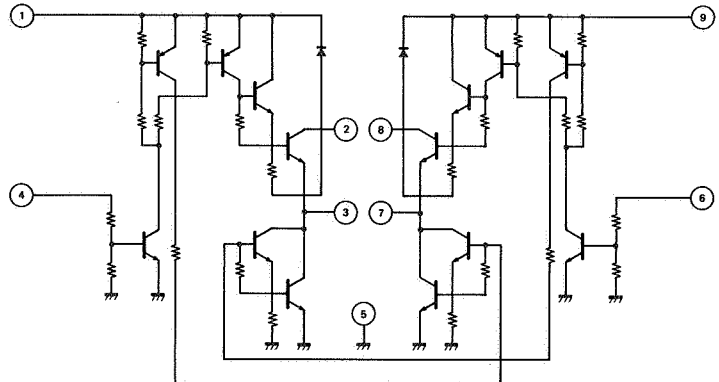
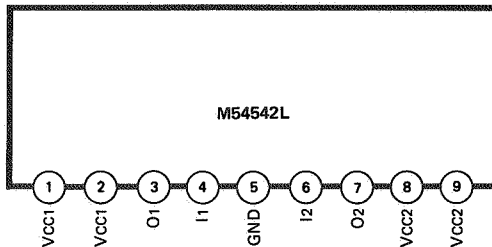
● IC112 : LB1294 (6 CIRCUIT DRIVER ARRAY)



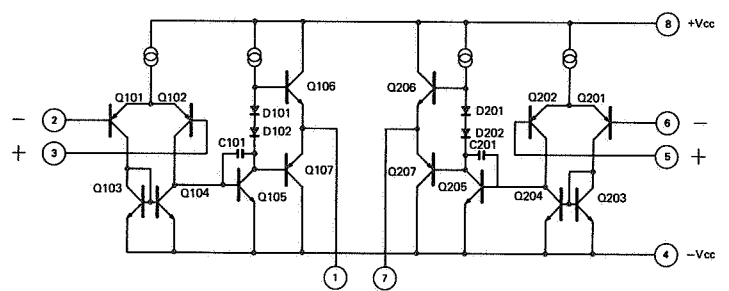
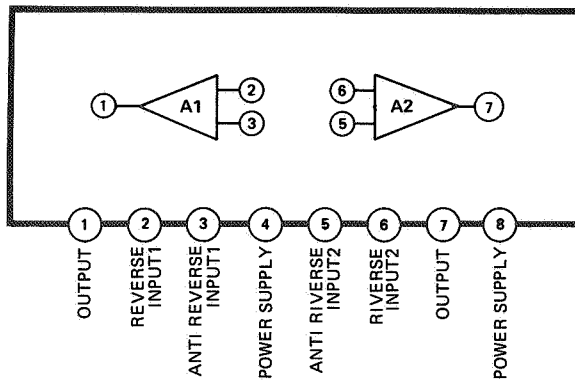
● IC109, IC110 : M5226P (5 ELEMENT GRAPHIC EQUALIZER AMP. 1ch)



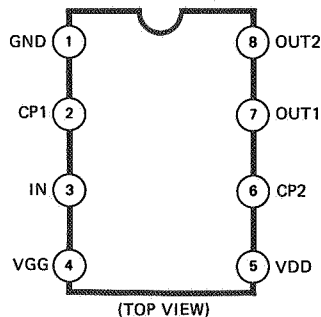
● IC108 : M54542 (REVERSE SMALL MOTOR DRIVER IC)



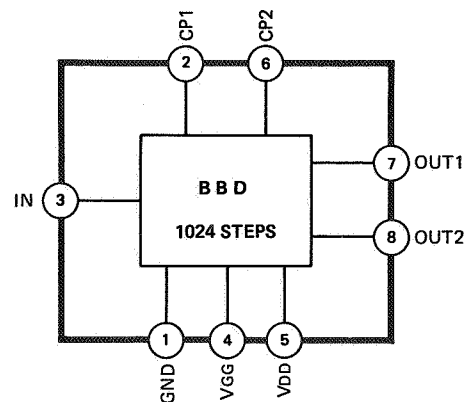
● IC101, 111 : M5218LV (DUAL LOW NOISE OPERATION AMP.)



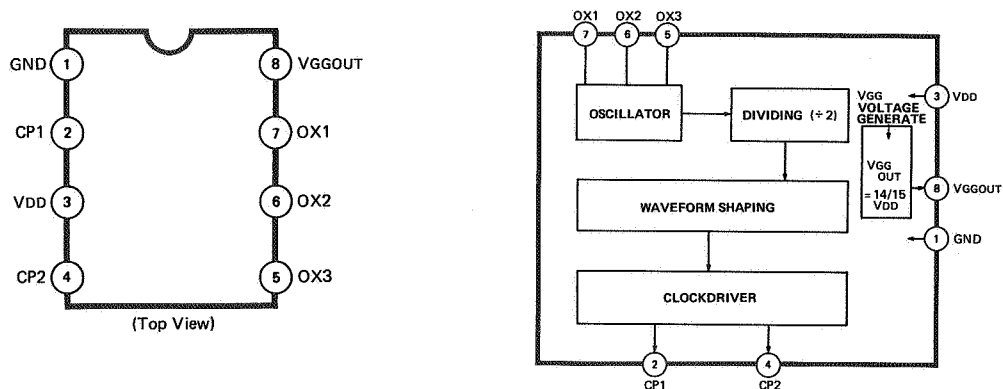
● IC504 : MN3007Y (AUDIO SIGNAL DELAY ELEMENT)



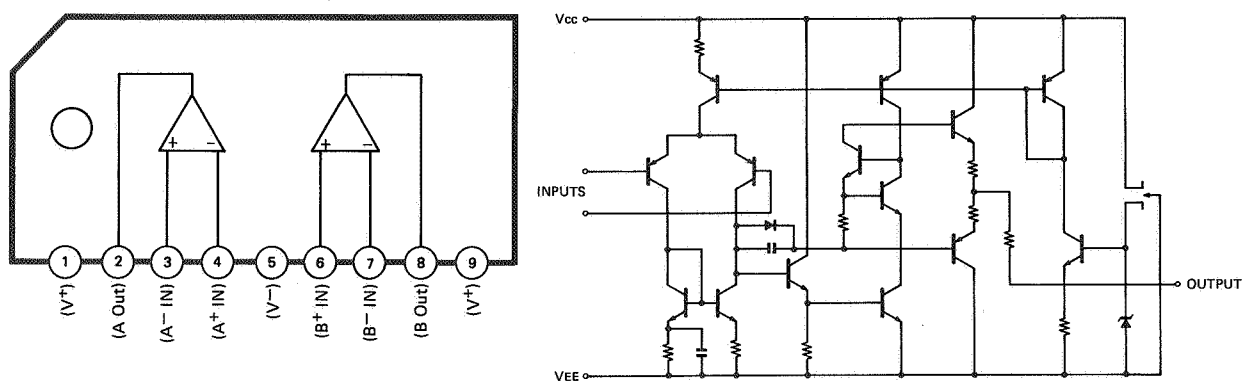
(TOP VIEW)



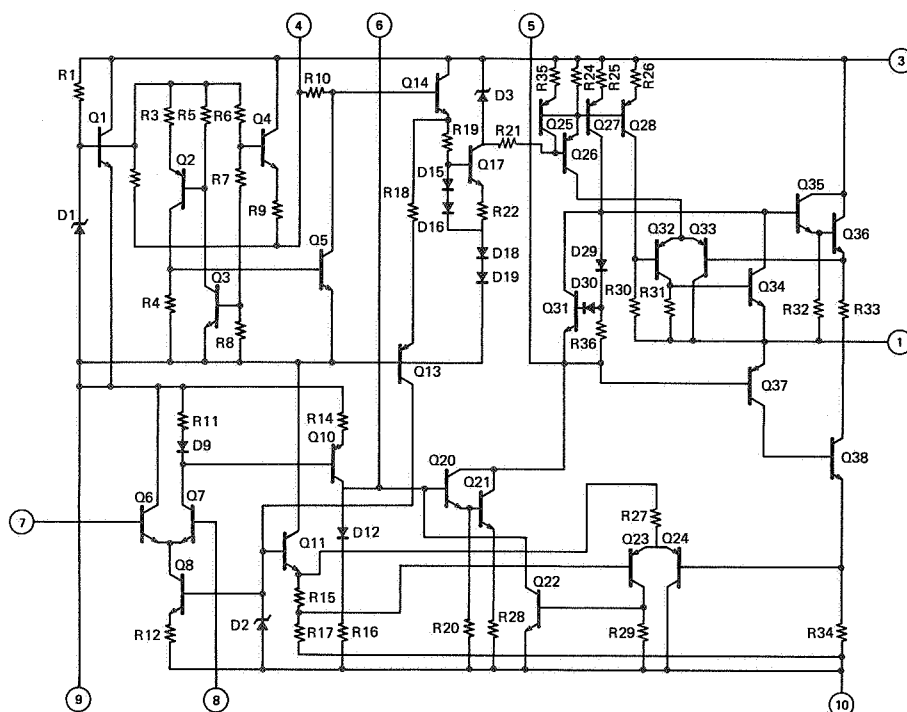
● IC503 : MN3101 (DELAY TIME CONTROLLER)



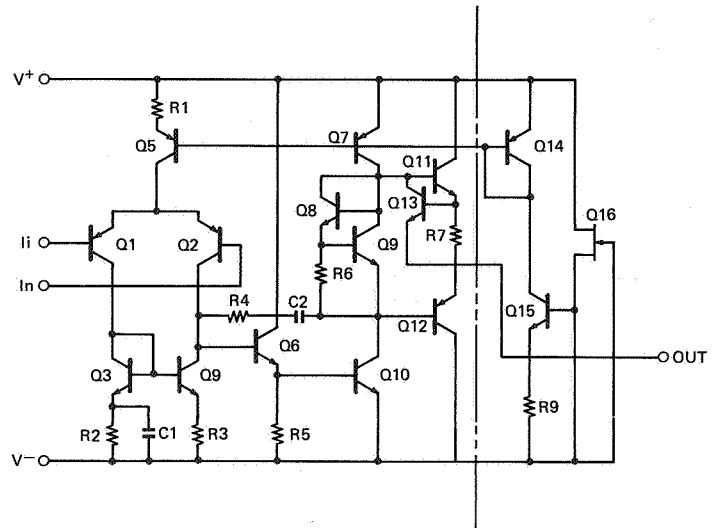
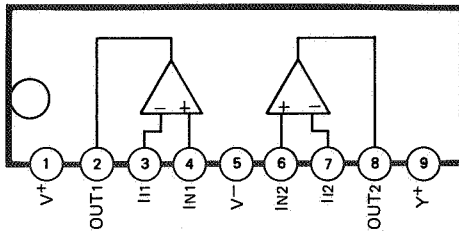
● IC502, 508 : NJM45585 (DUAL OPE-AMP.)



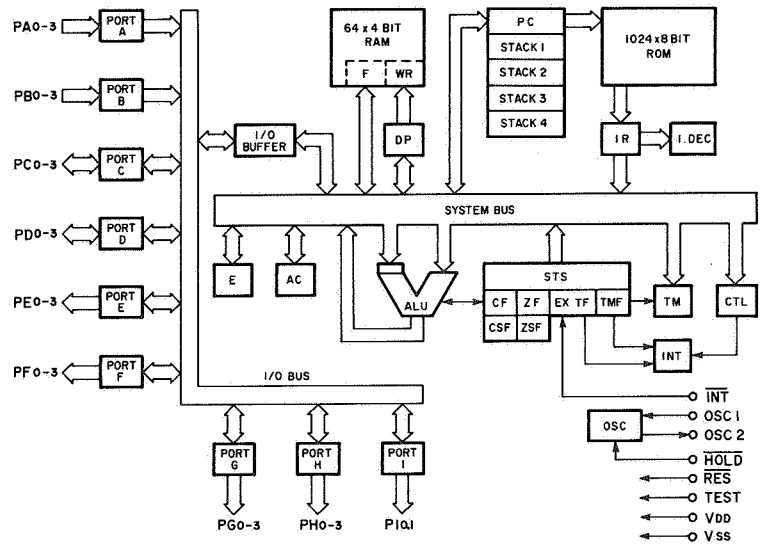
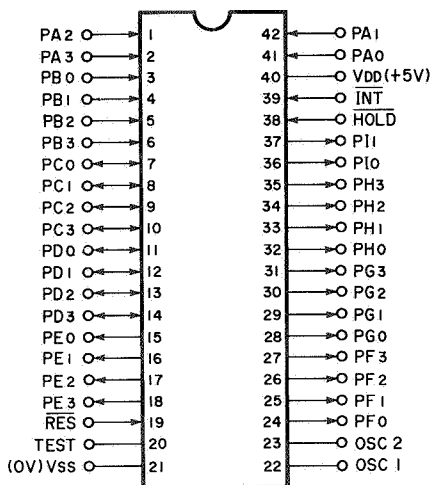
● IC506, 507 : μ PC1188H



●IC501 : μ PC4570HA (DUAL OPE AMP.)



●IC107 : LC6505C—3525 (4 BIT μ -COM)

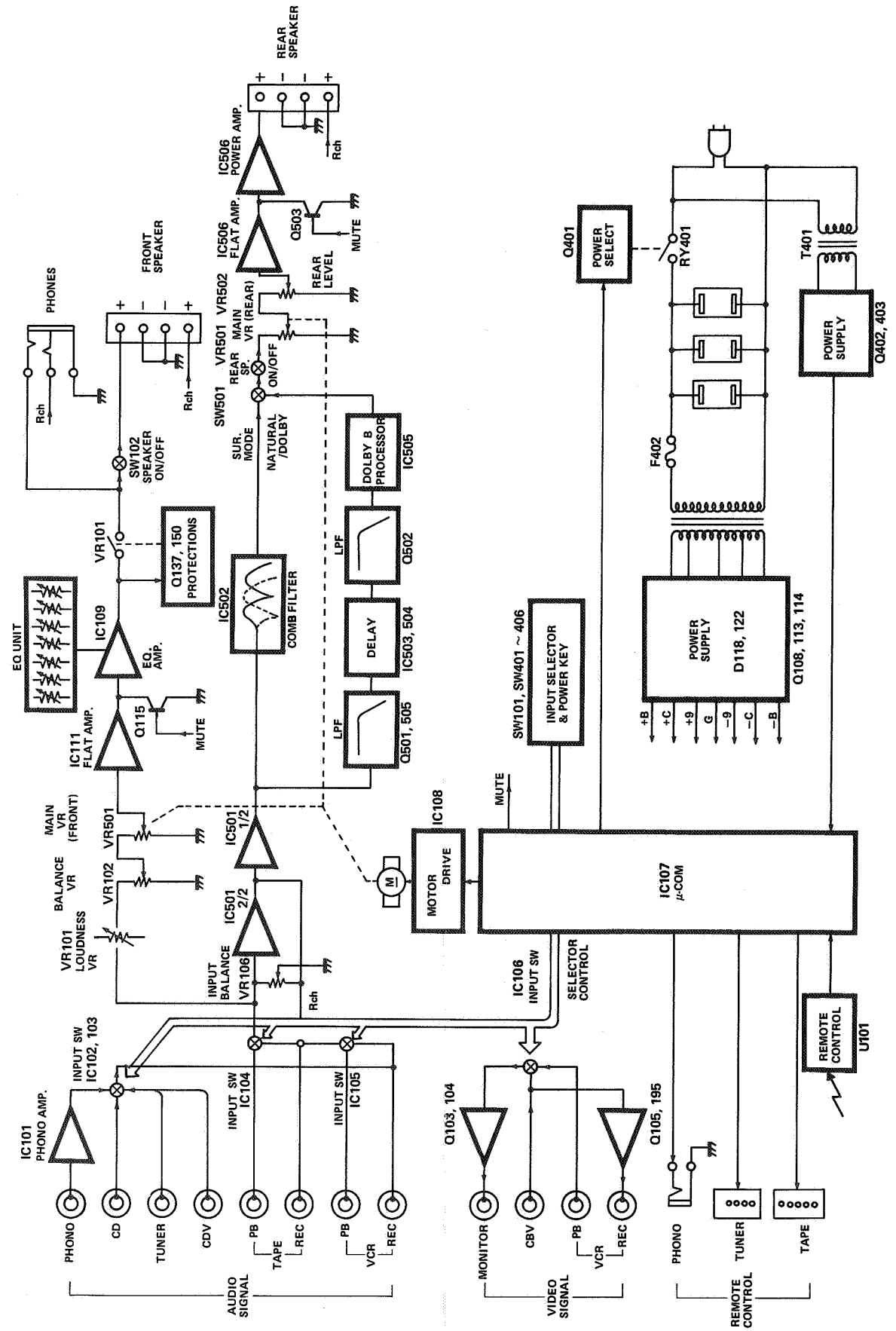


■ μ -COM DATA

●IC107 : LC6505C-3525

NO.	NAME	I/O	FUNCTION
1	PA2	I	N.C. (L level connect)
2	PA3	I	H Level (TAPE MONITOR)
3	PB0	I	Key input (Key on : H)
4	PB1	I	
5	PB2	I	
6	PB3	I	
7	PC0	I/O	Key scan signal (Active H)
8	PC1	I/O	
9	PC2	I/O	
10	PC3	I/O	PHONO PLAY/CUT control signal
11	PD0	I/O	N.C.
12	PD1	I/O	CD control signal
13	PD2	I/O	
14	PD3	I/O	
15	PE0	O	Deck control signal
16	PE1	O	
17	PE2	O	
18	PE3	O	
19	RES	I	Reset input
20	TEST	—	LSI Test Terminal (GND)
21	Vss	—	GND
22	OSC1	I	Microcomputer clock circuit 400kHz
23	OSC2	O	
24	PF0	O	PHONO
25	PF1	O	CD
26	PF2	O	TUNER
27	PF3	O	VDP
28	PG0	O	TAPE (MONITOR)
29	PG1	O	VCR (MONITOR)
30	PG2	O	(TAPE 2 (MONITOR)) ... N.C.
31	PG3	O	POWER control signal (ON : H)
32	PH0	O	Control signal
33	PH1	O	
34	PH2	O	Tuner control signal
35	PH3	O	
36	PI0	O	AMUTE Audio Muting control signal (Active L)
37	PI1	O	Mute Muting control signal (Active L)
38	HOLD	I	Microcomputer backup cotrol (Backup : L, Play : H)
39	INT	I	+5V
40	Vdd	—	+5V
41	PA0	I	Remotecontrol data input
42	PA1	I	POWER ON/OFF backup (H : backup, L : Ever ON)

■ BLOCK DIAGRAM



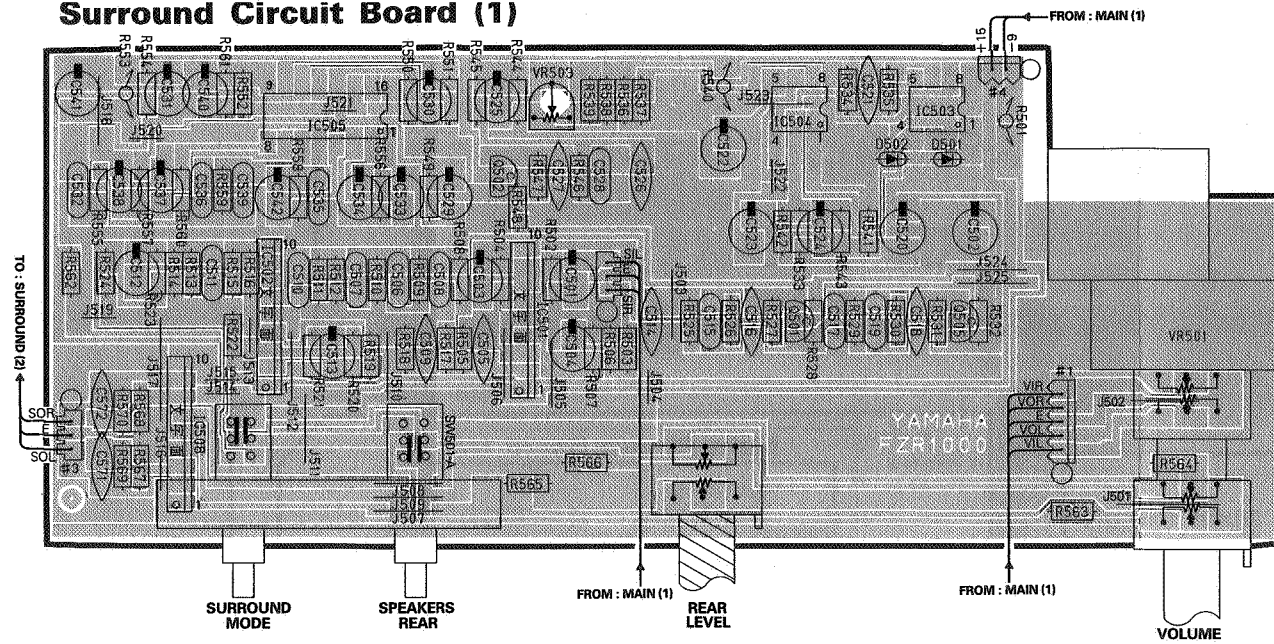
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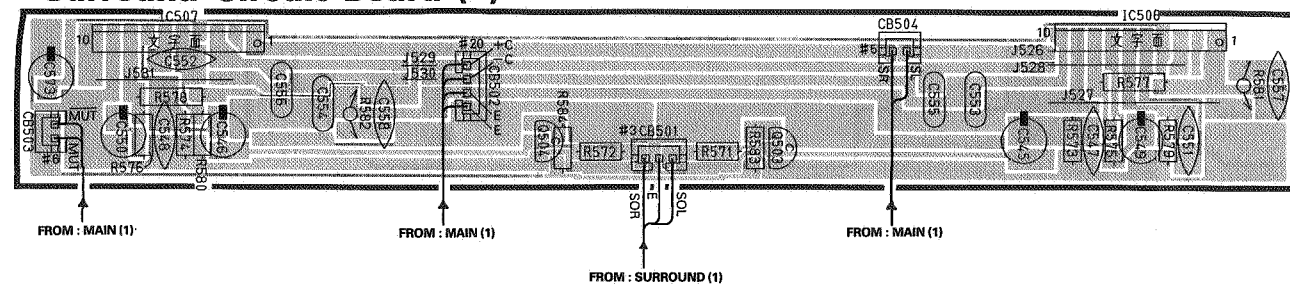
AVX-20

■ **PRINTED CIRCUIT BOARD (Pattern Side)**
Surround Circuit Board (1)

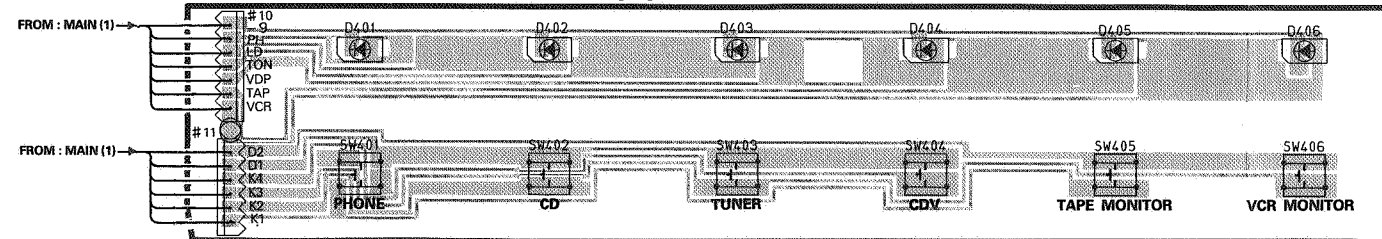
※ 文字面 : Component Side



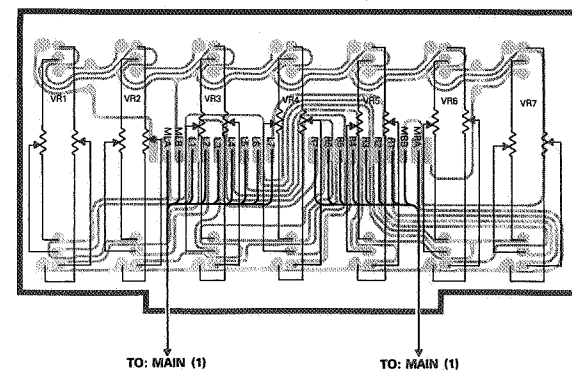
Surround Circuit Board (2)



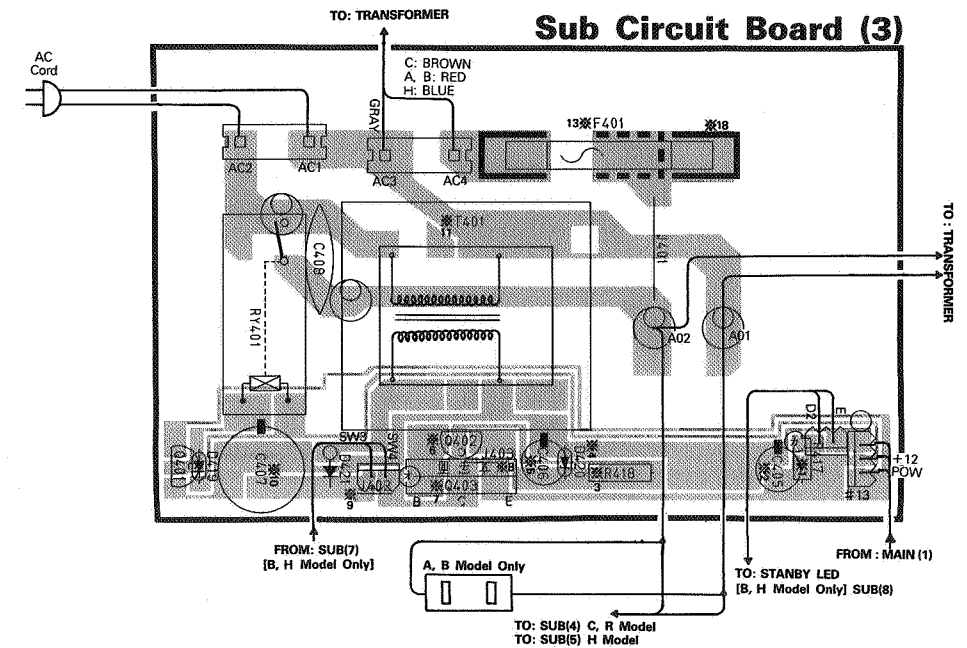
Surround Circuit Board (3)



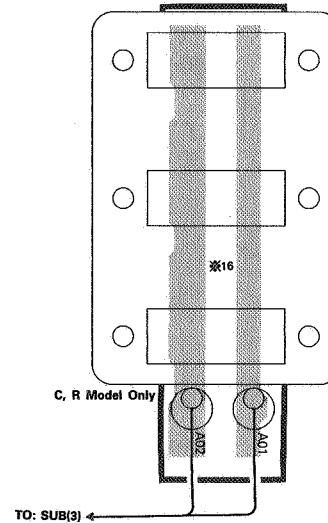
**EQ. UNIT
 (SLIDE POTENTIOMETER BLOCK)**



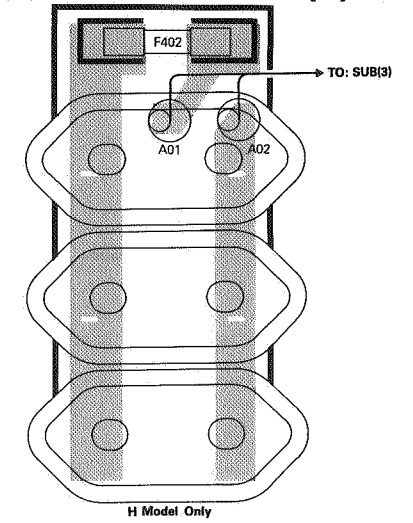
#	C	R	A	B	H
1	R417	OPEN	→	1.2K	→
2	C405	OPEN	10/16	OPEN	→
3	R418	OPEN	8.2K	OPEN	→
4	D420	OPEN	MTZ12C	OPEN	→
5	C406	OPEN	47/16	OPEN	→
6	Q402	OPEN	○	OPEN	→
7	Q403	OPEN	○	OPEN	→
8	J403	○	×	○	→
9	J402	○	→	×	→
10	C407	470/25	470/63	470/25	→
11	T401	XC083	XC082	XC084	→
12	C408	F151410	→	→	F150410
13	F401	7A 125V	T7A 250V	T3.15A 250V	T2.5A 250V
16	⑤	○	→	×	→
17	⑥	×	→	→	○
18	⑦	×	○	×	→
19	F402	×	→	→	T2.5A 250V
20	⑧	×	→	→	○
21	SW407	×	→	→	KAB0332
22	C410	OPEN	→	0.01	→
23	D422	OPEN	→	SLR-34URC3F	→



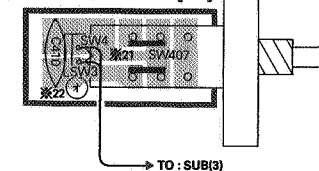
Sub Circuit Board (4)



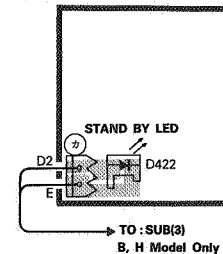
Sub Circuit Board (5)



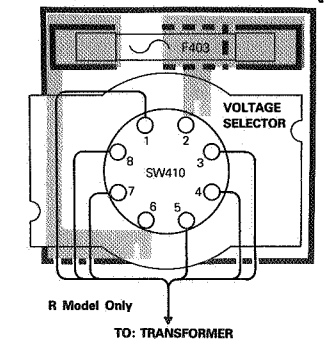
Sub Circuit Board (7)



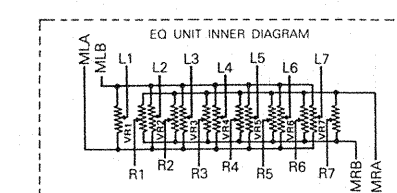
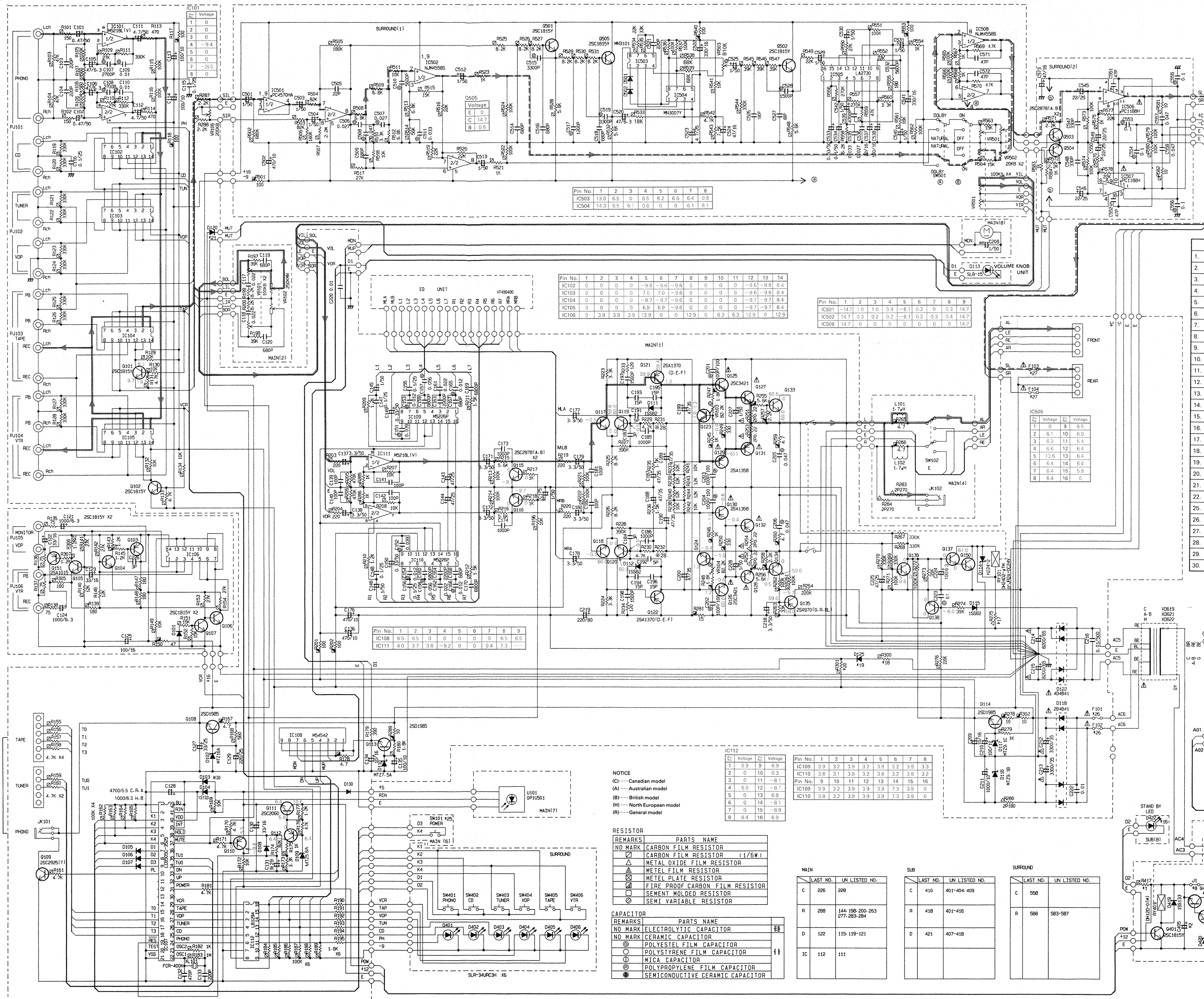
Sub Circuit Board (8)



Sub Circuit Board (9)



SCHEMATIC DIAGRAM



IC	2SC1815Y	2SC2240 (GR. BL)	1SS133	LC4066B	OP. PD4066B	OP. M4066B
IC						

Pin No.	1	2	3	4	5	6	7	8
IC502	12.0	6.5	0	6.5	6.2	6.5	6.4	0.8
IC504	14.3	6.5	6.1	0.8	0	6.1	6.1	

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
IC102	0	0	0	0	-9.6	-9.6	-9.6	0	0	0	0	-9.6	-9.6	8.4
IC103	0	0	0	0	7.0	7.0	-9.6	0	0	0	0	-9.6	-9.6	8.4
IC104	0	0	0	0	-9.7	-9.7	-9.6	0	0	0	0	-9.7	-9.7	8.4
IC105	0	0	0	0	6.8	6.8	-9.6	0	0	0	0	-9.7	-9.7	8.4
IC106	0	3.9	3.9	3.9	12.9	0	0	12.9	0	6.3	6.3	12.9	0	12.9

Pin No.	1	2	3	4	5	6	7	8	9
IC501	14.7	1.0	1.0	0.9	-8.1	0.3	0	0.3	14.7
IC502	14.7	0.3	0.2	0.2	-8.1	0.3	0.3	0.4	14.7
IC508	14.7	0	0	0	0	0	0	0	14.7

IC	1	2	3	4	5	6	7	8	9	10	11	12	13	14
IC505	1	0	9	6.5										
	2	6.1	10	6.0										
	3	6.3	11	5.4										
	4	6.6	12	6.4										
	5	13.6	13	6.4										
	6	6.4	14	6.4										
	7	6.4	15	5.9										
	8	6.4	16	0										

	C	R	A	B	H
1. R417	OPEN	→	→	1.2K	→
2. C405	OPEN	10/16	OPEN	→	→
3. R418	OPEN	8.2K	OPEN	→	→
4. D420	OPEN	MTZ12C	OPEN	→	→
5. C406	OPEN	47/16	OPEN	→	→
6. Q402	OPEN	2SC2240	OPEN	→	→
7. Q403	OPEN	2SD1485	OPEN	→	→
8. J1	SHORT	OPEN	SHORT	→	→
9. J2	SHORT	→	SHORT	OPEN	→
10. C407	470/25	470/63	470/25	→	→
11. T401	XC083	XC082	XC084	→	→
12. F402	OPEN	→	→	T2.5A 250V	→
13. F401	7A125V	T7A250V	T3.15A 250V	→	T2.5A 250V
14. SW407	OPEN	→	→	KA80332	→
15. C410	OPEN	→	→	0.01	→
16. D422	OPEN	→	→	SLR-34URC3F	→
17. R275	2P1.5K	→	→	→	2P1.2K
18. R300	OPEN	→	→	27K	27K
19. D125	OPEN	→	→	1SS133	1SS133
20. R301	OPEN	→	→	100K	100K
21. D120	SHORT	→	→	1SS133	1SS133
22. C128	1000/6.3	→	→	4.7mF/5.5	→
25. SW101	C405/93H	→	→	OPEN	→
26. F101, 102	3A250V	T3.0A250V	T3.15A250V	→	→
27. F103, 104	2.5A250V	T2.5A250V	T2.5A250V	→	→
28. R231, 232	27K	→	→	→	22K
29. C131	10/16	→	→	0.47/50	→
30. D103	1SS133	→	→	OPEN	→

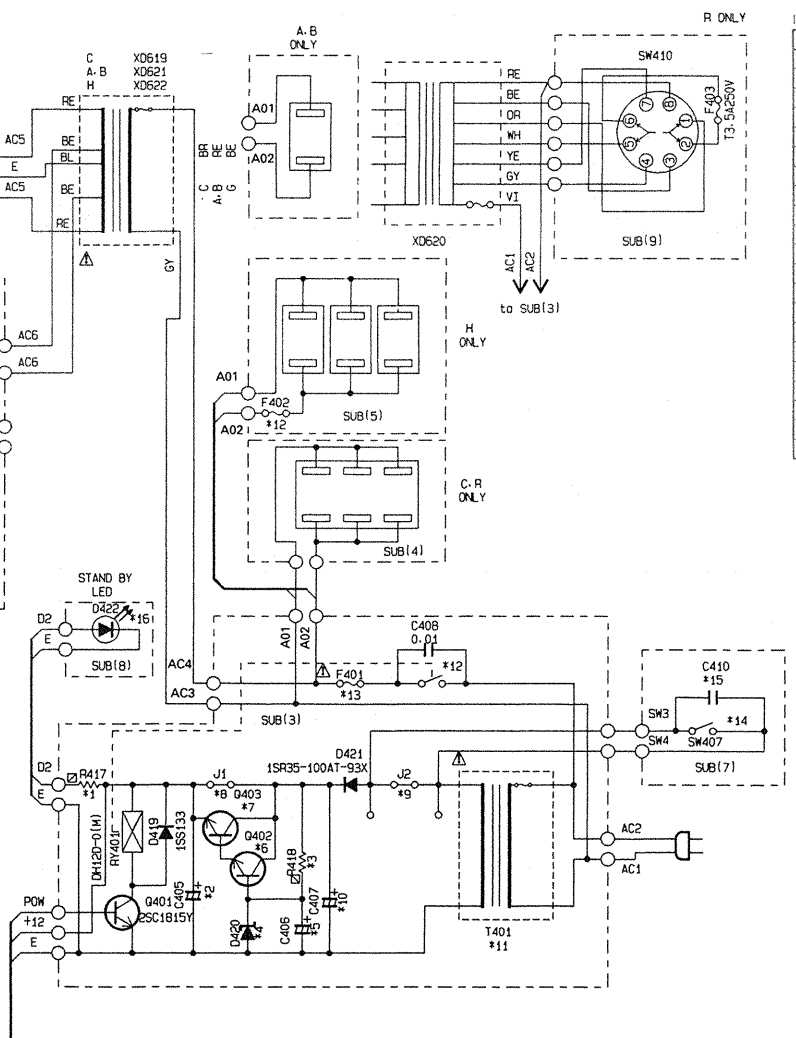
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
IC107	1	0	22	2.0																	
	2	5.6	23	2.6																	
	3	-1.5	24	0																	
	4	-1.5	25	0																	
	5	-1.5	26	5.0																	
	6	-1.5	27	0																	
	7	1.2	28	0																	
	8	1.0	29	5.0																	
	9	2.9	30	0																	
	10	0	31	4.9																	
	11	0	32	0																	
	12	0	33	0																	
	13	0	34	0																	
	14	0	35	0																	
	15	0	36	0																	
	16	0	37	5.2																	
	17	0	38	4.9																	
	18	0	39	5.4																	
	19	4.9	40	5.1																	
	20	41	5.4																		
	21	0	42	5.4																	

NOTICE
 (C) Canadian model
 (A) Australian model
 (B) British model
 (R) North European model
 (G) General model

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR
△	CARBON FILM RESISTOR (1/6W)
▲	METAL OXIDE FILM RESISTOR
△	METAL FILM RESISTOR
▲	METAL PLATE RESISTOR
△	FIRE PROOF CARBON FILM RESISTOR
△	SEMENT MOLDED RESISTOR
△	SEMI VARIABLE RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
○	MICA CAPACITOR
○	POLYPROPYLENE FILM CAPACITOR
○	SEMICONDUCTIVE CERAMIC CAPACITOR

	LAST NO.	UN LISTED NO.
C	226	228
R	288	144-198-200-263 277-283-294
D	122	115-119-121
IC	112	111



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

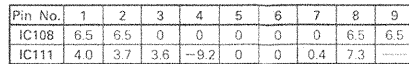
2SA970 2SA1015Y 2SA1370D, E, F 2SC1815Y 2SC2240 2SC2878A, B 2SC2925T	2SA1358	2SC2060	2SC3421	2SD1485	2SD1985	1SS82 1SS133 MTZ24-2 MTZ25.6A MTZ27.5A MTZ29.1B MTZ29.1C	MTZ16A MTZ12C 1SR35-100AT-93X	2B4B41	4D4B41	LA2730 M5226P	LB1924	LC4066B	BU4066B M4066BP MN4066B μPD4066B	M54542	M5218LV	MN3007Y MN3101	NJM4558S μPC4570HA	μPC1188H	LC6505L-3525
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* All voltages are measured with a 10MΩ/DC electric volt meter.
 * Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 * Schematic diagram is subject to change without notice.

The previous page is reprinted in exploded form over the following 4 pages

TOP	1 OF 4	2 OF 4
BOTTOM	3 OF 4	4 OF 4

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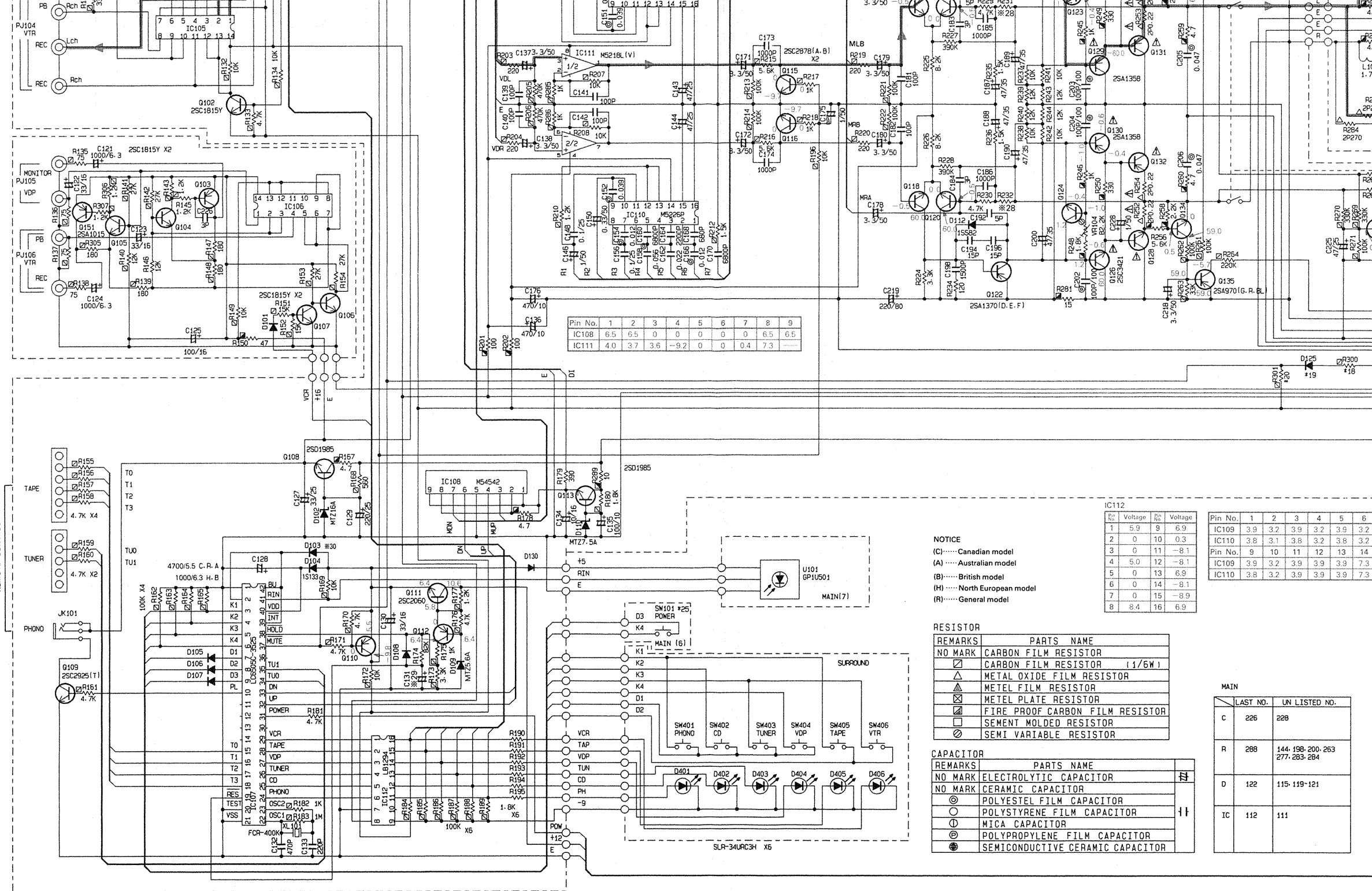
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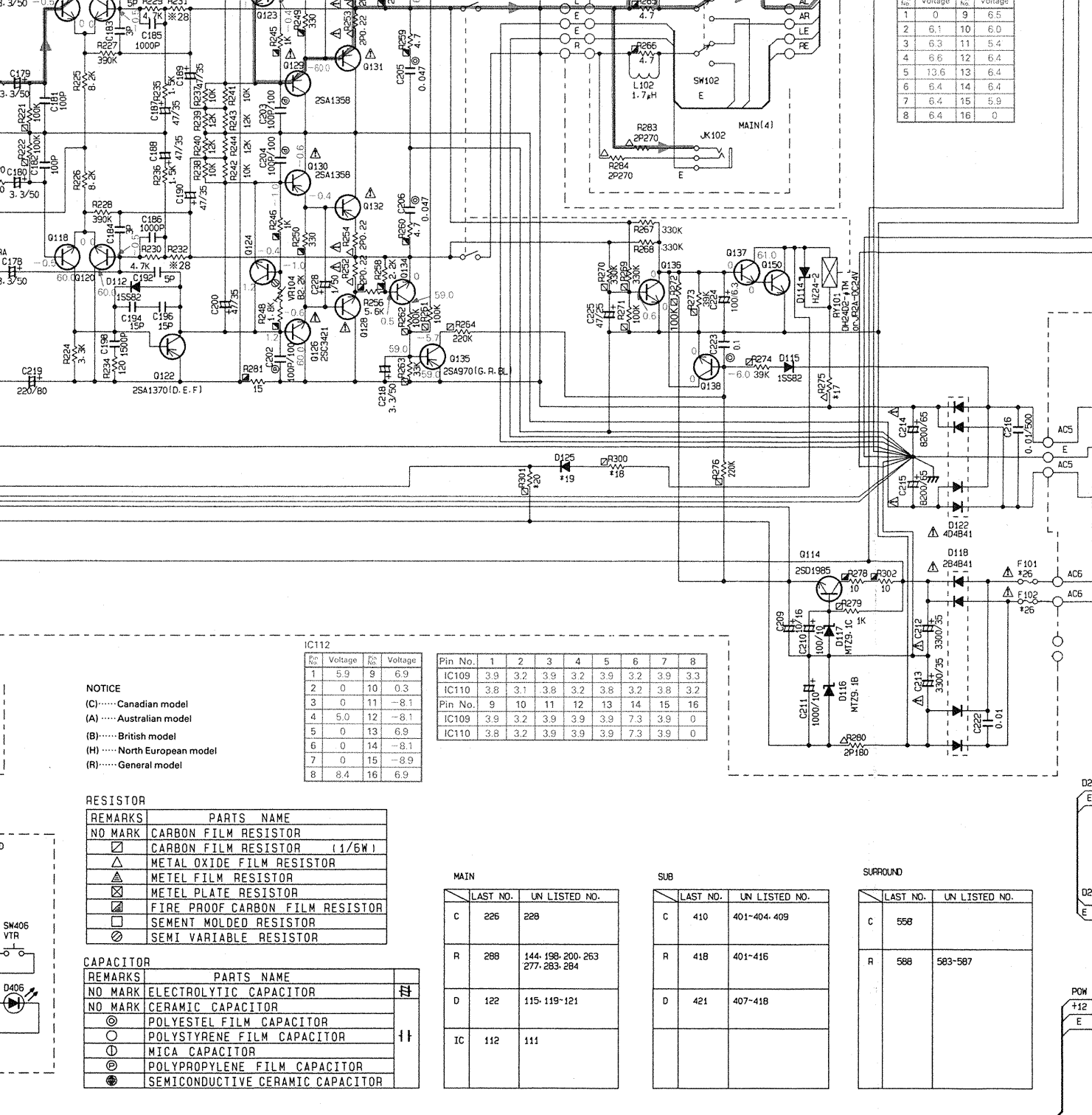
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10



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

2SA970 2SA1015Y 2SA1370D, E, F 2SC1815Y 2SC2240 2SC2878A, B 2SC2925T	2SA1358	2SC2060	2SC3421	2SD1485	2SD1985	1SS82 1SS133 HZ24-2 MTZ5.6A MTZ7.5A MTZ9.1B MTZ9.1C	MTZ16A MTZ12C 1SR35-100AT-93X	2B4B41	4D4B41	LA2730 M5226P	LB1924	LC40



Pin No.	Voltage	Pin No.	Voltage
1	0	9	6.5
2	6.1	10	6.0
3	6.3	11	5.4
4	6.6	12	6.4
5	13.6	13	6.4
6	6.4	14	6.4
7	6.4	15	5.9
8	6.4	16	0

16. D422	OPEN	→	→	SLR-34URC3F	→
17. R275	2P1.5K	→	→	→	2P1.2K
18. R300	OPEN	→	→	27K	27K
19. D125	OPEN	→	→	1SS133	1SS133
20. R301	OPEN	→	→	100K	100K
21. D120	SHORT	→	→	1SS133	1SS133
22. C128	1000/6.3	→	→	4.7mF/5.5	→
25. SW101	KA9063B or VE32730	→	→	OPEN	→
26. F101, 102	3A250V	T3.0A250V	T3.15A250V	→	→
27. F103, 104	2.5A250V	T2.5A250V	T2.5A250V	→	→
28. R231, 232	27K	→	→	→	22K
29. C131	10/16	→	→	0.47/50	→
30. D103	1SS133	→	→	OPEN	→

Pin No.	Voltage	Pin No.	Voltage
1	0	22	2.0
2	5.6	23	2.6
3	-1.5	24	0
4	-1.5	25	0
5	-1.5	26	5.0
6	-1.5	27	0
7	1.2	28	0
8	1.0	29	5.0
9	2.9	30	0
10	0	31	4.9
11	0	32	0
12	0	33	0
13	0	34	0
14	0	35	0
15	0	36	0
16	0	37	5.2
17	0	38	4.9
18	0	39	5.4
19	4.9	40	5.1
20	0	41	5.4
21	0	42	5.4

NOTICE
 (C).....Canadian model
 (A).....Australian model
 (B).....British model
 (H).....North European model
 (R).....General model

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR
□	CARBON FILM RESISTOR (1/6W)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
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⊞	FIRE PROOF CARBON FILM RESISTOR
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⊞	SEMI VARIABLE RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
⊖	MICA CAPACITOR
⊖	POLYPROPYLENE FILM CAPACITOR
⊖	SEMICONDUCTIVE CERAMIC CAPACITOR

Pin No.	1	2	3	4	5	6	7	8
IC109	3.9	3.2	3.9	3.2	3.9	3.2	3.9	3.3
IC110	3.8	3.1	3.8	3.2	3.8	3.2	3.8	3.2
IC111	9	10	11	12	13	14	15	16
IC109	3.9	3.2	3.9	3.9	3.9	7.3	3.9	0
IC110	3.8	3.2	3.9	3.9	3.9	7.3	3.9	0

MAIN	LAST NO.	UN LISTED NO.
C	226	228
R	288	144-198-200-263 277-283-284
D	122	115-119-121
IC	112	111

SUB	LAST NO.	UN LISTED NO.
C	410	401-404-409
R	418	401-416
D	421	407-418

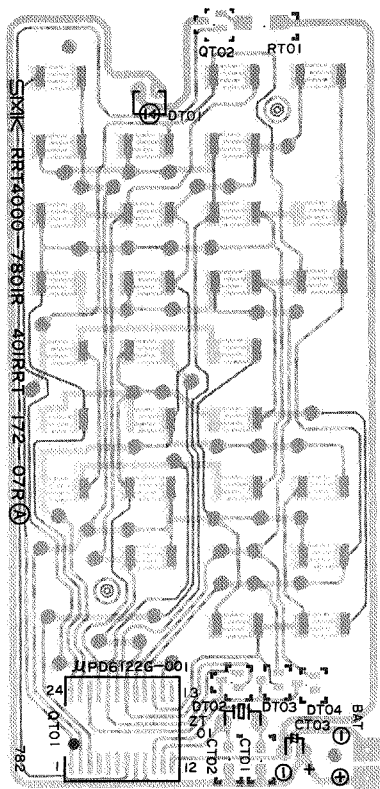
SURROUND	LAST NO.	UN LISTED NO.
C	558	
R	588	583-587

* All voltages are measured with a 10MΩ/DC electric volt meter.
 * Components having special characteristics are marked ▲ and must be replaced with parts having specifications equal to those originally installed.
 * Schematic diagram is subject to change without notice.

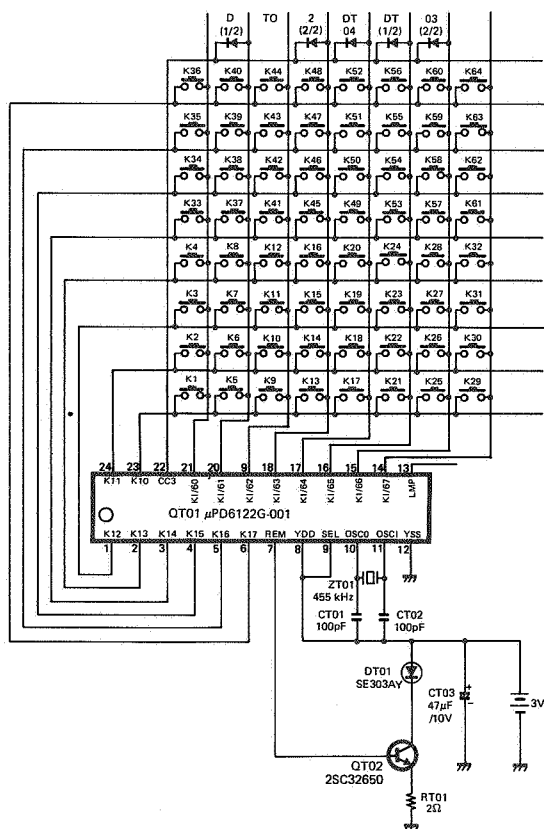
mode	2B4B41	4D4B41	LA2730 M5226P	LB1924	LC4066B	BU4066B M4066BP MN4066B μPD4066B	M54542	M5218LV	MN3007Y MN3101	NJM4558S μPC4570HA	μPC1188H	LC6505L-3525

RS-AVX20 REMOTE CONTROL TRANSMITTER

PRINTED CIRCUIT BOARD (Pattern Side)



SCHEMATIC DIAGRAM



KEY FUNCTION

KEY No.	FUNCTION	CORD	KEY No.	FUNCTION	CORD
K1	TAPE PLAY	00	K33	TAPE DIR B	40
K2	TAPE <<	01	K34		41
K3	TAPE >>	02	K35		42
K4	TAPE STOP	03	K36		43
K5	TAPE REC/MUTE	04	K37		44
K6	TAPE REC/MUTE	05	K38		45
K7	TAPE A/B	06	K39		46
K8	TAPE DIR A	07	K40		47
K9	CD PLAY	08	K41		48
K10	CD III/□	09	K42		49
K11	CD >>	0A	K43		4A
K12	CD <<	0B	K44		4B
K13	CD >>	0C	K45		4C
K14	CD <<	0D	K46		4D
K15	PLAY/CUT	0E	K47		4E
K16	VCR	0F	K48		4F
K17	TUNER UP	10	K49		50
K18	TUNER DOWN	11	K50		51
K19	TUNER P1-P8/P9-P16	12	K51		52
K20		13	K52		53
K21	PHONO	14	K53		54
K22	CD	15	K54		55
K23	TUNER	16	K55		56
K24	CDV	17	K56		57
K25	TAPE	18	K57		58
K26		19	K58		59
K27	VOLUME UP	1A	K59		5A
K28	VOLUME DOWN	1B	K60		5B
K29		1C	K61		5C
K30		1D	K62		5D
K31		1E	K63		5E
K32	POWER	1F	K64		5F

■ WARNING

PARTS LIST

■ ELECTRICAL PARTS

Components having special characteristics are marked $\triangle$ and must be replaced with parts having specifications equal to those originally installed.

• Carbon resistors 1/4 W are not included in the ELECTRICAL PARTS list. For the parts No. of the carbon resistor, refer to P. 29.

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
※	NA 09 63 60	Main Circuit Board	メ イ ン シ ー ト			C	
※	NA 09 92 90	〃	〃			R	
※	NA 09 93 00	〃	〃			A	
※	NA 09 93 10	〃	〃			B	
※	NA 09 93 20	〃	〃			H	
	FG 20 03 00	Ceramic Cap. 3pF 50V	セ ラ コ ン	C183, 184, 226			
	FG 21 11 50	〃 15pF 50V	〃	C193 ~ 196			
	FG 21 05 00	〃 5pF 50V	〃	C191, 192			
	FG 21 21 00	〃 100pF 50V	〃	C139 ~ 142, 181, 182			
	FG 21 22 20	〃 220pF 50V	〃	C103, 104, 133			
	FG 21 24 70	〃 470pF 50V	〃	C132			
	FG 21 26 80	〃 680pF 50V	〃	C119, 120, 167, 168			
	FG 21 31 00	〃 1000pF 50V	〃	C173, 174, 185, 186			
	FG 21 31 50	〃 1500pF 50V	〃	C197, 198			
	FG 41 32 20	〃 2200pF 50V	〃	C163, 164			
	FG 24 36 80	〃 6800pF 50V	〃	C159, 160, 169, 170			
	FG 24 41 00	〃 0.01 μ F 50V	〃	C220, 222			
	FG 24 42 20	〃 0.022 μ F 50V	〃	C117, 118, 161, 162			
	FZ 00 41 30	Semiconductive Ceramic Cap. 0.1 μ F 25V	半 導 体 セ ラ コ ン	C115, 116, 147, 148, 155, 156			
	FA 15 32 70	Mylar Cap. 2700pF 50V	マ イ ラ ー コ ン	C107, 108			
	FA 15 41 00	〃 0.01 μ F 50V	〃	C109, 110			
	FA 15 41 20	〃 0.012 μ F 50V	〃	C153, 154, 165, 166			
	FA 15 43 90	〃 0.039 μ F 50V	〃	C151, 152			
	FA 15 44 70	〃 0.047 μ F 50V	〃	C205, 206			
	FA 15 45 60	〃 0.056 μ F 50V	〃	C157, 158			
	FA 15 51 00	〃 0.1 μ F 50V	〃	C223			
	Ui 91 74 70	Electrolytic Cap. 47 μ F 6.3V	ケ ミ コ ン	C105, 106			
	UJ 11 81 00	〃 100 μ F 6.3V	〃	C224			
	UJ 12 81 00	〃 100 μ F 10V	〃	C113, 114 135, 210			
	UJ 13 71 00	〃 470 μ F 10V	〃	C136, 176			
	Ui 33 71 00	〃 10 μ F 16V	〃	C134, 209			
	UJ 13 73 30	〃 33 μ F 16V	〃	C122, 123, 130			
	UJ 13 81 00	〃 100 μ F 16V	〃	C125			
	UJ 14 73 30	〃 33 μ F 25V	〃	C127			
	FZ 00 70 90	〃 47 μ F 25V	〃	C143, 144, 225			
	FZ 00 64 70	〃 220 μ F 25V	〃	C129			
※	VE 01 92 00	〃 47 μ F 35V	〃	C187 ~ 190, 199, 200			
	Ui 36 53 30	〃 0.33 μ F 50V	〃	C149, 150			
	Ui 36 54 70	〃 0.47 μ F 50V	〃	C101, 102			
	Ui 36 31 00	〃 1 μ F 50V	〃	C145, 146, 227, 228			
	UJ 46 63 30	〃 3.3 μ F 50V	〃	C137, 138, 171, 172, 177 ~ 180, 218			
	UJ 16 64 70	〃 4.7 μ F 50V	〃	C111, 112			
	Ui 91 91 00	〃 1000 μ F 6.3V	〃	C121, 124			
	Ui 91 91 00	〃 1000 μ F 6.3V	〃	C128		C, R, A	
	VB 17 01 00	〃 4700 μ F 5.5V	〃	〃		B, H	
	UM 09 93 30	〃 3300 μ F 35V	〃	C212, 213			
	FM 11 61 00	〃 1 μ F 50V	BP ケ ミ コ ン	C175, 208			
	UJ 12 91 00	〃 1000 μ F 10V	ケ ミ コ ン	C211			
	FZ 00 72 00	〃 220 μ F 80V	オ ー デ ィ オ ケ ミ コ ン	C219			
	VE 33 98 00	〃 8200 μ F 65V	ブ ロ ッ ク ケ ミ コ ン	C214, 215			
	Ui 33 71 00	〃 10 μ F 16V	ケ ミ コ ン	C131		C, R, A	
	Ui 36 54 70	〃 0.47 μ F 50V	〃	〃		B, H	

※New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
FH	23 41 00	Ceramic Cap.	0.01 μ F 500V	セラコン	C216		
UT	45 21 00	Polypropylene Film Cap.	100pF 100V	ポリプロコン	C201 ~ 204		
HJ	35 83 90	Carbon Resistor	390k Ω 1/4W	カーボン抵抗	R227, 228		
HL	32 22 20	Metal Oxide Film Resistor	0.22 Ω 2W	酸化金抵抗	R251 ~ 254		
HL	32 51 80	"	180 Ω 2W	"	R280		
HL	32 52 70	"	270 Ω 2W	"	R283, 284		
HL	32 61 20	"	1.2K Ω 2W	"	R275	H	
HL	32 61 50	"	1.5K Ω 2W	"	"	C, R, A, B	
HV	45 34 70	Flame Proof Carbon Resistor	4.7 Ω 1/4W	不燃化カーボン抵抗	R167, 178, 259, 260, 265, 266		
HV	45 41 00	"	10 Ω 1/4W	"	R278, 289, 302		
HV	45 41 50	"	15 Ω 1/4W	"	R281		
HV	45 44 70	"	47 Ω 1/4W	"	R150		
HV	45 51 00	"	100 Ω 1/4W	"	R117, 118, 201, 202		
HV	45 53 30	"	330 Ω 1/4W	"	R249, 250		
HV	45 61 00	"	1K Ω 1/4W	"	R245, 246		
HV	45 61 80	"	1.8K Ω 1/4W	"	R247, 248		
HV	45 62 20	"	2.2K Ω 1/4W	"	R257, 258		
HV	45 65 60	"	5.6K Ω 1/4W	"	R255, 256		
VB	86 12 00	Pre-Set Potentiometer	B2.2K Ω	半固定抵抗器	VR103, 104	Inter-changeable	
VB	86 29 00	"	B2.2K Ω	"	"		
VE	29 93 00	Potentiometer	250K Ω MN	可変抵抗器	VR102		
VE	29 94 00	"	100K Ω B x 2	"	VR101		
VE	29 91 00	"	200K Ω B	"	VR106		
iA	09 70 00	Transistor	2SA970 (GR, BL)	トランジスター	Q135		
iA	10 15 21	"	2SA1015 (Y)	"	Q103, 110, 112, 151		
iC	18 15 20	"	2SC1815 (Y)	"	Q101, 102, 104 ~ 107		
iC	22 40 00	"	2SC2240 (GR, BL)	"	Q117 ~ 120, 123, 124, 133, 134, 136 ~ 138, 150		
iC	28 78 20	"	2SC2878 (A, B)	"	Q115, 116		
iC	20 60 00	"	2SC2060	"	Q111		
VA	85 47 00	"	2SA1370 (D, E, F)	"	Q121, 122		
VE	91 96 00	"	2SC2925T	"	Q109		
VE	02 92 00	"	2SD1985	"	Q108, 113, 114		
iF	00 55 60	Diode	1SS82	ダイオード	D111, 112, 115		
iF	00 34 50	"	1SS133	"	D120, 125	B, H	
iF	00 34 50	"	1SS133	"	D101, 104 ~ 108, 130		
iF	00 34 50	"	1SS133	"	D103	C, R, A	
iH	00 11 60	Diode Bridge	4D4B41	ダイオードブリッジ	D122		
iH	00 09 90	"	2B4B41	"	D118		
iF	01 07 10	Zener Diode	MTZ5.6A	ツェナーダイオード	D109		
iF	01 07 90	"	MTZ7.5A	"	D110		
iF	01 08 70	"	MTZ9.1C	"	D117		
iF	00 89 30	"	MTZ16A	"	D102		
iF	01 08 60	"	MTZ9.1B	"	D116		
iF	00 19 40	"	HZ24-2	"	D114		
iG	05 49 00	IC	M54542	I C	IC108		
iG	05 82 10	"	M5218LV	"	IC101, 111		

※New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
	IG 15 14 00	IC	M5226P	I C	IC109, 110		
	IG 08 92 00	〃	LC4066B	〃	IC102 ~ 106		
	IG 06 16 00	〃	μPD4066BC	〃	〃		
	IG 11 05 00	〃	M4066BP	〃	〃		
	XD 08 40 01	〃	MN4066B	〃	〃		
	XD 14 80 01	〃	BU4066B	〃	〃		
	XA 54 90 01	〃	LB1294	〃	IC112		
	XD 62 70 01	〃	LC6505C-3525	〃	IC107		
	IX 60 35 80	Transistor	2SA1358	ト ラ ン ジ ス タ ー	Q129, 130		
	IX 60 35 90	〃	2SC3421	〃	Q125, 126		
	KA 90 63 80	Switch	5MEVQ-QRB-04M	ライトタッチスイッチ	SW101		
	VE 32 73 00	Tact Switch	KHH-MA901	タ ク ト ス イ ッ チ	〃		
※	VF 39 98 00	Push Switch	2-2	プ ッ シ ュ ス イ ッ チ	SW102		
	GD 90 04 70	Output coil	1.7 μH	ア ウ ト プ ッ ト コ イ ル	L101, 102		
	GG 00 07 00	Ceramic Resonator	FCR-400K	セ ラ ミ ッ ク 振 動 子	XL101		
	KC 00 19 40	Relay	DH24D2-OTM	リ レ ー	RY101		
	KC 00 20 00	〃	JR2a-DC24V	〃	〃		
	VD 85 31 00	Remote Control Receiver Unit	GP1U501	リモコン受光ユニット	U101		
	VC 36 44 00	Pin Jack	2P	ピ ン ジャ ッ ク	PJ105, 106		
	LB 40 10 30	〃	4P	〃	PJ102 ~ 104		
	LB 40 10 50	〃	4P	〃	PJ101		
	LB 30 17 60	Jack, Head Phone		ヘ ッ ド ホ ン ジャ ッ ク	JK102		
	LB 10 07 30	Mini Jack		ミ ニ ジャ ッ ク	JK101		
	LB 50 07 10	ST Connector Socket	5P	ST コ ネ ク タ ー ソ ケ ッ ト	CB101		
	LB 60 83 90	〃	6P	〃	CB102		
	KB 00 03 60	Fuse	T3.0A 250V	ヒ ュ ー ズ	F101, 102	R	
	KB 00 07 60	〃	T3.15A 250V	〃	〃	A, B, H	
	KB 00 26 50	〃	3A 250V	〃	〃	C	
	VF 21 63 00	〃	2.5A 250V	〃	F103, 104	C	
	KB 00 04 20	〃	T2.5A 250V	〃	〃	R	
	KB 00 06 90	〃	T2.5A 250V	〃	〃	A, B, H	
	LA 00 20 00	Lapping Terminal	P=7.5 2P i-Type	ラ ッ ピ ン グ 端 子 板			
	LA 00 21 20	〃	P=5 2P i-Type	〃			
	VB 84 59 00	Speaker Terminal	8P	ス ピ ー カ ー 端 子			
	VA 82 15 00	Radiator		ラ ジ エ タ ー			
	LB 20 18 80	Holder Pin		ホ ル ダ ー ピ ン			
	BB 06 95 10	Ground Metal		ラ ン ド 金 具			
	BA 08 40 00	Heat Sink		放 熱 器			
※	VF 45 32 00	Radiator/D		ラ ジ エ タ ー		H	
	Ei 33 00 86	Bind Tapping Screw	3 x 8 FCM3-B ℓ	バ イ ン ド タ ッ ピ ン グ ネ ジ	PACK		
	EZ 00 13 50	Cup Screw	3 x 14 FCM3-B ℓ	カ ッ プ ス ク リ ュ ー (Bタイ)		C	

※New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
	NA 09 63 70	Sub Circuit Board	サ ブ シ ー ト		AV-33	C	
	NA 09 63 80	〃	〃		〃	R	
	NA 09 63 90	〃	〃		〃	A	
	NA 09 64 00	〃	〃		〃	B	
	NA 09 64 10	〃	〃		〃	H	
	Fi 51 41 00	Ceramic Cap.	0.01 μ F	セ ラ コ ン C408			
	Fi 55 41 00	〃	0.01 μ F 50V	〃 C410		B, H	
	Ui 33 71 00	Electrolytic Cap.	10 μ F 16V	ケ ミ コ ン C405		R	
	Ui 33 74 70	〃	47 μ F 16V	〃 C406		R	
	UJ 14 84 70	〃	470 μ F 25V	〃 C407		C, R, A, B	
	UW 67 84 70	〃	470 μ F 63V	〃		R	
	iF 00 34 50	Diode	1SS133	ダ イ オ ー ド D419			
	iH 00 14 30	〃	1SR35-100AT-93X	〃 D421			
	iF 00 88 70	Zener Diode	MTZ12C	ツェナーダイオード D420		R	
	VD 95 26 00	LED	SLR-34URC3F	L E D D422		B, H	
	iC 18 15 20	Transistor	2SC1815 (Y)	ト ラ ン ジ ス タ ー Q401			
	iC 22 40 00	〃	2SC2240 (GR, BL)	〃 Q402		R	
	VB 22 27 00	〃	2SD1485	〃 Q403		R	
	KA 80 33 20	Push Switch	2-2NS	プ ッ シ ュ ス イ ッ チ SW407		B, H	
	VE 56 89 00	Relay	DH12D1-O(M)	リ レ ー RY401			
	KB 00 07 60	Fuse	T3.15A 250V	ヒ ュ ー ズ F401		A, B	
	KB 00 13 00	〃	T7A 250V	〃		R	
	KB 00 15 20	〃	7A 125V	〃		C	
	KB 00 06 90	〃	T2.5A 250V	〃 F401, 402		H	
	XC 08 20 01	Power Transformer		電 源 ト ラ ン ス T401		R	
	XC 08 30 01	〃		〃		C	
	XC 08 40 01	〃		〃		A, B, H	
	LB 20 18 80	Holder Pin	PC-FHI	ヒューズホルダーピン			
	LA 00 21 40	Lapping Terminal	2P, P=10, i-Type	ラ ッ ピ ン グ 端 子			
	LA 00 38 70	〃	2P, P=10, WTM-Type	〃			
	LB 60 81 70	AC Outlet		AC アウトレット		C, R	
	CB 64 46 70	Cover, capacitor		コンデンサーカバー		H	
	NA 09 64 20	Surround Circuit Board	サラウンドシート		AV-33		
	FG 21 12 20	Ceramic Cap.	22pF 50V	セ ラ コ ン C505			
	FG 21 14 70	〃	47pF 50V	〃 C551, 552, 571, 572			
	FG 21 16 80	〃	68pF 50V	〃 C527			
	FG 21 22 20	〃	220pF 50V	〃 C521			
	FG 21 23 30	〃	330pF 50V	〃 C547, 548			
	FG 21 21 80	〃	180pF 50V	〃 C526			
	FG 21 26 80	〃	680pF 50V	〃 C509, 514, 516, 518			
	FG 24 44 70	〃	0.047 μ F 50V	〃 C557, 558			
	FA 15 31 20	Mylar Cap.	1200pF 50V	マ イ ラ ー コ ン C517			

※New Parts (新規部品)

Ref. No.	Part No.				Description			部 品 名	Remarks	Common Model	Markets	ランク
	FA	15	31	60	Mylar Cap.	1600pF	50V	マ イ ラ ー コ ン	C528			
	FA	15	33	30	◇	3300pF	50V	◇	C515, 519			
	FA	15	34	70	◇	4700pF	50V	◇	C539			
	FA	15	35	60	◇	5600pF	50V	◇	C510, 532			
	FA	15	42	70	◇	0.027 μ F	50V	◇	C506, 507, 536			
	FA	15	43	30	◇	0.033 μ F	50V	◇	C511, 535			
	FA	15	44	70	◇	0.047 μ F	50V	◇	C508			
	FA	15	51	00	◇	0.1 μ F	50V	◇	C553 ~ 556			
	Ui	91	74	70	Electrolytic Cap.	47 μ F	6.3V	ケ ミ コ ン	C520			
	UJ	12	84	70	◇	470 μ F	10V	◇	C502			
	Ui	83	72	20	◇	22 μ F	16V	◇	C537			
	Ui	93	74	70	◇	47 μ F	16V	◇	C524, 573			
	Ui	93	81	00	◇	100 μ F	16V	◇	C538			
	Ui	93	83	30	◇	330 μ F	16V	◇	C522, 541			
	Ui	24	64	70	◇	4.7 μ F	25V	◇	C523			
	UJ	14	72	20	◇	22 μ F	25V	◇	C545, 546, 549, 550			
	Ui	36	51	00	◇	0.1 μ F	50V	◇	C534			
	Ui	36	53	30	◇	0.33 μ F	50V	◇	C533			
	Ui	36	61	00	◇	1 μ F	50V	◇	C501, 503, 504, 512, 513, 525, 529, 530, 531, 540, 542			
	HV	45	41	00	Flame Proof Carbon Resistor	10 Ω	1/4W	不 燃 化 カ ー ボ ン	R581, 582			
	HV	45	51	00	◇	100 Ω	1/4W	◇	R501, 540, 553			
	VB	86	15	00	Pre-Set Potentiometer	B10k Ω		半 固 定 抵 抗	VR503			
	VF	39	99	00	Push Switch	2-2NS		プ ッ シ ュ ス イ ッ チ	SW501			
	VE	29	92	00	Potentiometer	20kB x 2		可 変 抵 抗	VR502			
	VE	29	96	00	Potentiometer with Motor	100kY x 4		モ ー タ ー 付 可 変 抵 抗	VR501			
	iC	18	15	20	Transistor	2SC1815 (Y)		ト ラ ン ジ ス タ ー	Q501, 502, 505			
	iX	60	42	00	◇	2SC2878 (A, B)		◇	Q503, 504			
	iF	00	34	50	Diode	1SS133		ダ イ オ ー ド	D501, 502			
	iF	00	87	30	LED	RED SLR-34URC3H3		L E D	D401 ~ 406			
	iG	03	75	00	IC	MN3101		I C	IC503			
	XC	10	30	01	◇	MN3007Y		◇	IC504			
	XD	38	60	01	◇	LA2730		◇	IC505			
	iG	07	68	00	◇	NJM4558S		◇	IC502, 508			
	XB	24	70	01	◇	μ PC4570HA		◇	IC501			
	iG	10	27	00	◇	μ PC1188H		◇	IC506, 507			
	VD	00	45	00	Base Pin	2P i-Type		PH ベ ー ス ピ ン	CB503, 504			
	VD	00	46	00	◇	3P i-Type		◇	CB501			
	VD	00	47	00	◇	4P i-Type		◇	CB502			
	KA	90	63	80	Switch	5M, EVQ-QRB-04M		ラ イ ト タ ッ チ ス イ ッ チ	SW401 ~ 406	Inter-changeable		
	VE	32	73	00	Tact Switch	KHH-MA901		タ ク ト ス イ ッ チ	◇			

※New Parts (新規部品)

EXPLODED VIEW



AVX-20

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets	ランク
※ 1	VF 49 71 00	Panel Unit	パ ネ ル ユ ニ ッ ト			C, R, A	
※	VF 49 72 00	◇	◇			B, H	
2	VE 29 83 00	Knob Unit	VR ツ マ ミ ユ ニ ッ ト				
2-1	VD 27 06 00	LED	RED SLB-15 L E D	D113			
2-2	VB 66 92 00	Plastic Rivet	プ ラ ス チ ャ ッ ク リ ベ ッ ト				
※ 3	NA 09 92 80	Main Circuit Board	メ イ ン シ ー ト			C	
※	NA 09 92 90	◇	◇			R	
※	NA 09 93 00	◇	◇			A	
※	NA 09 93 10	◇	◇			B	
※	NA 09 93 20	◇	◇			H	
4	AA 62 87 90	Support TR	サ ポ ー ト TR				
5	VF 29 86 00	Shield Plate	シ ー ル ド プ レ ー ト				
6	EX 60 00 90	Cup Screw	3 x 8 FCM3B ℓ カ ッ プ ス ク リ ュ ー (B タ イ ト)				
7	IX 61 10 20	Transistor	2SB1347 (P, S, Q) ト ラ ン ジ ス タ ー	Q131, 132		C, R, A, B	
◇	IX 61 10 30	◇	2SD2029 (P, S, Q)	Q127, 128		◇	
◇	IX 61 10 40	◇	2SB1362 (P, S, Q)	Q131, 132		H	
◇	IX 61 10 50	◇	2SD2053 (P, S, Q)	Q127, 128		◇	
8	VB 43 50 00	Sheet	19 x 24 放 熱 シ ー ト			B	
◇	VC 39 72 00	◇	22 x 29 デ リ カ シ ー ト ジ ャ ン ボ			C, R, A, B	
9	IL 00 05 00	Insulation Base	AC243 マ イ カ ベ ー ス				
10	VE 24 65 00	Heat Sink	ラ ジ エ タ ー				
11	EZ 00 13 50	Cup Screw	3 x 14 FCM3-B ℓ カ ッ プ ス ク リ ュ ー (B タ イ ト)				
12	NA 09 63 70	Sub Circuit Board	サ ブ シ ー ト			C	
◇	NA 09 63 80	◇	◇			R	
◇	NA 09 63 90	◇	◇			A	
◇	NA 09 64 00	◇	◇			B	
◇	NA 09 64 10	◇	◇			H	
13	NA 09 64 20	Surround Circuit Board	サ ラ ウ ン ド シ ー ト				
14	XD 61 80 01	Power Transformer	電 源 ト ラ ン ス			R	
◇	XD 61 90 01	◇	◇			C	
◇	XD 62 10 01	◇	◇			A, B	
◇	XD 62 20 01	◇	◇			H	
15	VA 93 29 00	Voltage Selector	ESE-37226 電 圧 切 換 器			R	
16	KB 00 03 70	Fuse	T3.5A 250V ヒ ュ ー ズ			◇	
17	VD 77 82 00	Cord Stopper	コ ー ド ス ト ッ パ ー			C	
◇	VD 37 59 00	◇	222Y2271-10	◇		R, A, B, H	
18	MG 00 22 20	Power Cord	10A 125V 電 源 コ ー ド			C	
◇	MG 00 16 30	◇	6A 250V	◇		R	
◇	MG 00 23 10	◇	7.5A 250V	◇		A	
◇	MG 00 23 30	◇	300/300V	◇		B	
◇	MG 00 23 20	◇	2.5A 250V	◇		H	
19	VC 62 61 00	AC Outlet	2P AC ア ウ ト レ ッ ト			A	
◇	VC 62 68 00	◇	2P	◇		H	
◇	VC 62 70 00	◇	2P	◇		B	
20	VF 49 94 00	Slide Potentiometer Block	250KBΩ x 2 ス ラ イ ド VR ブ ロ ッ ク				
20-1	CX 60 35 80	Knob	ノ ブ				
20-2	CX 60 39 20	Marker	マ ー カ ー				
21	VE 24 67 00	Top Cover	ト ッ プ カ バ ー				
22	VE 24 68 00	Sub Chassis	サ ブ シ ャ シ ー				

※New Parts (新規部品)

Ref. No.	Part No.				Description	部 品 名	Remarks	Common Model	Markets	ランク
25	AA	62	88	20	Bottom Cover	ボトムカバー				
※ 26	VF	49	84	00	Rear Panel	リヤパネル			R	
※	◇	VF	49	83	00	◇			C	
※	◇	VF	49	86	00	◇			B	
※	◇	VF	49	85	00	◇			A	
※	◇	VF	49	87	00	◇			H	
27	CB	63	42	30	Push Button	プッシュボタン				
28	CB	62	08	40	Switch Knob	スイッチツマミ				
29	CB	62	60	40	Knob (B)	ツマミ (B)	BALANCE			
30	VE	37	37	00	Knob L	ノブ L	LOUDNESS			
31	CB	66	08	10	Button	ボタン	POWER		B, H	
32	CB	61	03	90	Leg	レッグ				
33	VB	66	92	00	Plastic Rivet	プラスチックリベット				
34	CB	65	34	00	Cushion	クッション				
35	VF	20	15	00	Damper	ダンパー			R, A, B, H	
36	AA	62	73	10	GND Terminal	STG3 x 13 GND ターミナル				
37	EW	40	36	50	Sems Washer	φ10-φ3.6t=0.8 FNM 3-3g 鉄セムス座金				
38	ED	33	00	66	Binding Head Screw	M3 x 6 FCM3B ℓ バインド小ネジ	PACK			
39	EZ	00	13	20	Cup Screw	4 x 8 FCM3B ℓ カップスクリュー(タイト)				
40	EK	03	00	60	BW Head Tapping Screw	3 x 8 φ10ZMC2-Y BW タッピングネジ				
41	Ei	33	00	86	Binding Head Tapping Screw	3 x 8 FCM3B ℓ バインドヘッド B タイトネジ	PACK			
42	EZ	00	04	60	Bind Head Bonding Screw	3 x 8 FCM3B ℓ ボンディング B タイトネジ				
43	EX	60	08	50	Cup Screw	4 x 10 FCM3B ℓ カップスクリュー(タイト)				
44	CB	06	92	50	Binding Tie	BK-1 インシュロックタイ				
※ 45	VE	42	74	00	Remote Control Transmitter	RS-AVX20 リモートコントロール トランスミッター				
※ 45-1	CX	60	35	50	Case Ass'y	ケース Ass'y				
45-2	CX	60	30	80	Lid	電池蓋				
					Accessories	付 属 品				
※	VE	42	74	00	Remote Control Transmitter	RS-AVX20 リモートコントロール トランスミッター				
					Battery	AA (R06) 電池				

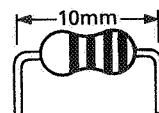
※New Parts (新規部品)

Part List for Carbon Resistor

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0Ω	HJ35 3100	※	12KΩ	HJ35 7120	HF85 7120
1.8Ω	HJ35 3180	※	15Ω	HJ35 7150	HF85 7150
2.2Ω	HJ35 3220	HF85 3220	18Ω	HJ35 7180	HF85 7180
3.3Ω	HJ35 3330	HF85 3330	22Ω	HJ35 7220	HF85 7220
4.7Ω	HJ35 3470	HF85 3470	27Ω	HJ35 7270	HF85 7270
5.6Ω	HJ35 3560	HF85 3560	33Ω	HJ35 7330	HF85 7330
10Ω	HJ35 4100	HF85 4100	39Ω	HJ35 7390	HF85 7390
15Ω	HJ35 4150	HF85 4150	47Ω	HJ35 7470	HF85 7470
22Ω	HJ35 4220	HF85 4220	56Ω	HJ35 7560	HF85 7560
27Ω	HJ35 4270	HF85 4270	68Ω	HJ35 7680	HF85 7680
33Ω	HJ35 4330	HF85 4330	82Ω	HJ35 7820	HF85 7820
39Ω	HJ35 4390	HF85 4390	91Ω	HJ35 7910	HF85 7910
47Ω	HJ35 4470	HF85 4470	100Ω	HJ35 8100	HF85 8100
56Ω	HJ35 4560	HF85 4560	120Ω	HJ35 8120	HF85 8120
68Ω	HJ35 4680	HF85 4680	150Ω	HJ35 8150	HF85 8150
82Ω	HJ35 4820	HF85 4820	180Ω	HJ35 8180	HF85 8180
100Ω	HJ35 5100	HF85 5100	220Ω	HJ35 8220	HF85 8220
110Ω	HJ35 5110	HF85 5100	270Ω	HJ35 8270	HF85 8270
120Ω	HJ35 5120	HF85 5120	330Ω	HJ35 8330	HF85 8330
150Ω	HJ35 5150	HF85 5150	390Ω	HJ35 8390	HF85 8390
160Ω	HJ35 5160	※	470Ω	HJ35 8470	HF85 8470
180Ω	HJ35 5180	HF85 5180	560Ω	HJ35 8560	HF85 8560
220Ω	HJ35 5220	HF85 5220	680Ω	HJ35 8680	HF85 8680
270Ω	HJ35 5270	HF85 5270	820Ω	HJ35 8820	HF85 8820
330Ω	HJ35 5330	HF85 5330	1.0MΩ	HJ35 9100	HF85 9100
390Ω	HJ35 5390	HF85 5390	1.2Ω	HJ35 9120	※
470Ω	HJ35 5470	HF85 5470	1.5Ω	HJ35 9150	HF85 9150
510Ω	※	HF85 5510	1.8Ω	HJ35 9180	HF85 9180
560Ω	HJ35 5560	HF85 5560	2.2Ω	HJ35 9220	HF85 9220
680Ω	HJ35 5680	HF85 5680	3.3Ω	HJ35 9330	HF85 9330
820Ω	HJ35 5820	HF85 5820	3.9Ω	HJ35 9390	※
910Ω	HJ35 5910	HF85 5910	4.7Ω	HJ35 9470	※
1.0KΩ	HJ35 6100	HF85 6100			
1.2Ω	HJ35 6120	HF85 6120			
1.5Ω	HJ35 6150	HF85 6150			
1.8Ω	HJ35 6180	HF85 6180			
2.0Ω	HJ35 6200	HF85 6200			
2.2Ω	HJ35 6220	HF85 6220			
2.4Ω	HJ35 6240	HF85 6240			
2.7Ω	HJ35 6270	HF85 6270			
3.0Ω	HJ35 6300	HF85 6300			
3.3Ω	HJ35 6330	HF85 6330			
3.6Ω	HJ35 6360	HF85 6360			
3.9Ω	HJ35 6390	HF85 6390			
4.7Ω	HJ35 6470	HF85 6470			
5.1Ω	HJ35 6510	HF85 6510			
5.6Ω	HJ35 6560	HF85 6560			
6.8Ω	HJ35 6680	HF85 6680			
8.2Ω	HJ35 6820	HF85 6820			
9.1Ω	HJ35 6910	HF85 6910			
10Ω	HJ35 7100	HF85 7100			

1/4W Type

HJ35 ○○○○



1/6W Type

HF85 ○○○○

