

Service Manual

SR14A /N1G, /S1G, /U1G, /U1B
SR18A /K1G, /S1G, /U1G, /U1B
SR17A /F1N
AV Surround Receiver

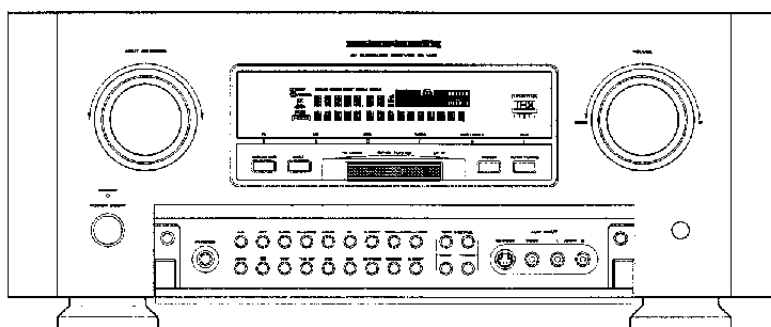


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Please use this service manual with referring to the user guide (D.F.U.) without fail.

marantz®

SR-14EX/SR-14mkII
SR-17EX/SR-18EX



MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC.
440 MEDINAH ROAD
ROSELLE, ILLINOIS 60172
USA
PHONE : 630 - 307 - 3100
FAX : 630 - 307 - 2687

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BRAZIL

PHILIPS DA AMAZONIA IND. ELET. ITDA
CENTRO DE INFORMACOES AO
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MARANTZ PROFESSIONAL PRODUCTS
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AURORA, ILLINOIS 60504 USA
PHONE : 630 - 820 - 4800
FAX : 630 - 820 - 8103

PROFESSIONAL AUSTRALIA

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558 DARLING STREET,
BALMAIN, NSW 2041,
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LENBROOK INDUSTRIES LIMITED
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MT. WAVERLEY VIC 3149
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THAILAND

MRZ STANDARD CO., LTD
746 - 754 MAHACHAI ROAD.,
WANGBURAPAPIROM, PHRANAKORN,
BANGKOK, 10200 THAILAND
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SINGAPORE

WO KEE HONG DISTRIBUTION PTE LTD
130 JOO SENG ROAD
#03-02 OLIVINE BUILDING
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PHONE : +65 858 5535 / +65 381 8621
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WILDASH AUDIO SYSTEMS NZ
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AUCKLAND NEW ZEALAND
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NO. 33, JALAN SULTAN ISMAIL,
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営業本部 〒150-0022
東京都渋谷区恵比寿南1-11-9

KOREA

MK ENTERPRISES LTD.
ROOM 604/605, ELECTRO-OFFICETEL, 16-58,
3GA, HANGANG-RO, YONGSAN-KU, SEOUL
KOREA
PHONE : +822 - 3232 - 155
FAX : +822 - 3232 - 154

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard No. 1492.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

FM TUNER SECTION

Frequency Range	87.5 – 108.0 MHz (K, N, S, U version) 76.0 – 90.0 MHz (F version)
Usable Sensitivity	IHF 1.8 μ V / 16.4 dB
Signal to Noise Ratio	Mono / Stereo 76 / 72 dB
Distortion	Mono / Stereo 0.2 / 0.3 %
Stereo Separation	1 kHz 45 dB
Alternate Channel Selectivity	\pm 400 kHz 60 dB (F, U version) \pm 300 kHz 60 dB (K, N, S version)
Image Rejection	98 MHz 70 dB
Tuner Output Level	1 kHz, 75 kHz Dev 800 mV (F, U version) 1 kHz, 40 kHz Dev 800 mV (K, N, S version)

AM/LW TUNER SECTION

Frequency Range	AM(MW) : 520 – 1710 kHz (U version) 531 – 1602 or 520 – 1710 kHz (K version) 531 – 1602 kHz (F, N, S version) LW : 152 – 282 kHz (N version)
Signal to Noise Ratio	50 dB
Usable Sensitivity	Loop 400 μ V
Distortion	400 Hz, 30 % Mod. 0.5 %
Selectivity	\pm 20 kHz 70 dB (U version) \pm 18 kHz 70 dB (K, N, S version)

AUDIO SECTION

Rated Power	
FRONT (20 Hz – 20 kHz)	8 ohms 140W / Ch
Center (20 Hz – 20 kHz)	8 ohms 140W / Ch
Surround (20 Hz – 20 kHz)	8 ohms 140W / Ch
THD Front (20 Hz – 20 kHz)	8 ohms 0.05%
Input Sensitivity / Impedance	
Linear	350 mV / 47 kohms
Signal to Noise Rate (IHF A)	
Linear	106 dB
Frequency Response	
(Analog Input / Source Direct)	8 Hz - 80 kHz (\pm 3 dB)
(Digital Input / 96 kHz PCM)	8 Hz - 45 kHz (\pm 3 dB)

VIDEO

Television Format	NTSC (F, U version) PAL/NTSC (K, N, S version)
Input Level / Impedance	1 Vp-p / 75 ohms
Output Level / Impedance	1 Vp-p / 75 ohms
Video Frequency Response	5 Hz to 8 MHz (- 1 dB)
S/N	60 dB

GENERAL

Power Requirement	AC 120V 60 Hz (U version) AC 220V 50 / 60 Hz (K version) AC 100V 50 / 60 Hz (F version) AC 230V 50 Hz (N, S version)
Power Consumption	530W
Dimension (MAX)	
Width	18 inches (458 mm)
Height	7- $\frac{1}{2}$ inches (190 mm)
Depth	19- $\frac{1}{2}$ inches (496 mm)
Weight (SR14A)	58.4 lds. (26.5 kg)
Weight (SR17A)	56.4 lds. (25.2 kg)
Weight (SR18A)	53.9 lds. (24.5 kg)

ACCESSORIES

Remote Control Unit	
RC5000i (SR14A)	1
RC-18SR (SR18A / SR17)	1

Dolby Digital(AC-3) SECTION

Output Level (Master Volume is set 0dB)	
Front L / R, CENTER, SURROUND L/R	
1 kHz, 20 dB FS INPUT	0.24V
SUBWOOFER	
40 Hz, 0 dB FS INPUT	7.5V

Frequency Response

Front L / R, CENTER, SURROUND L / R (LARGE)	
20 Hz – 20 kHz	-0.5 dB

Total Harmonic Distortion

Front L / R, CENTER, SURROUND L / R and	
SBL / SB (1 kHz)	0.01% or less
SUBWOOFER (40 Hz)	0.07% or less
Signal to Noise Ratio (IHF-A)	80 dB
Channel Separation (1 kHz)	95 dB

Specifications subject to change without prior notice.

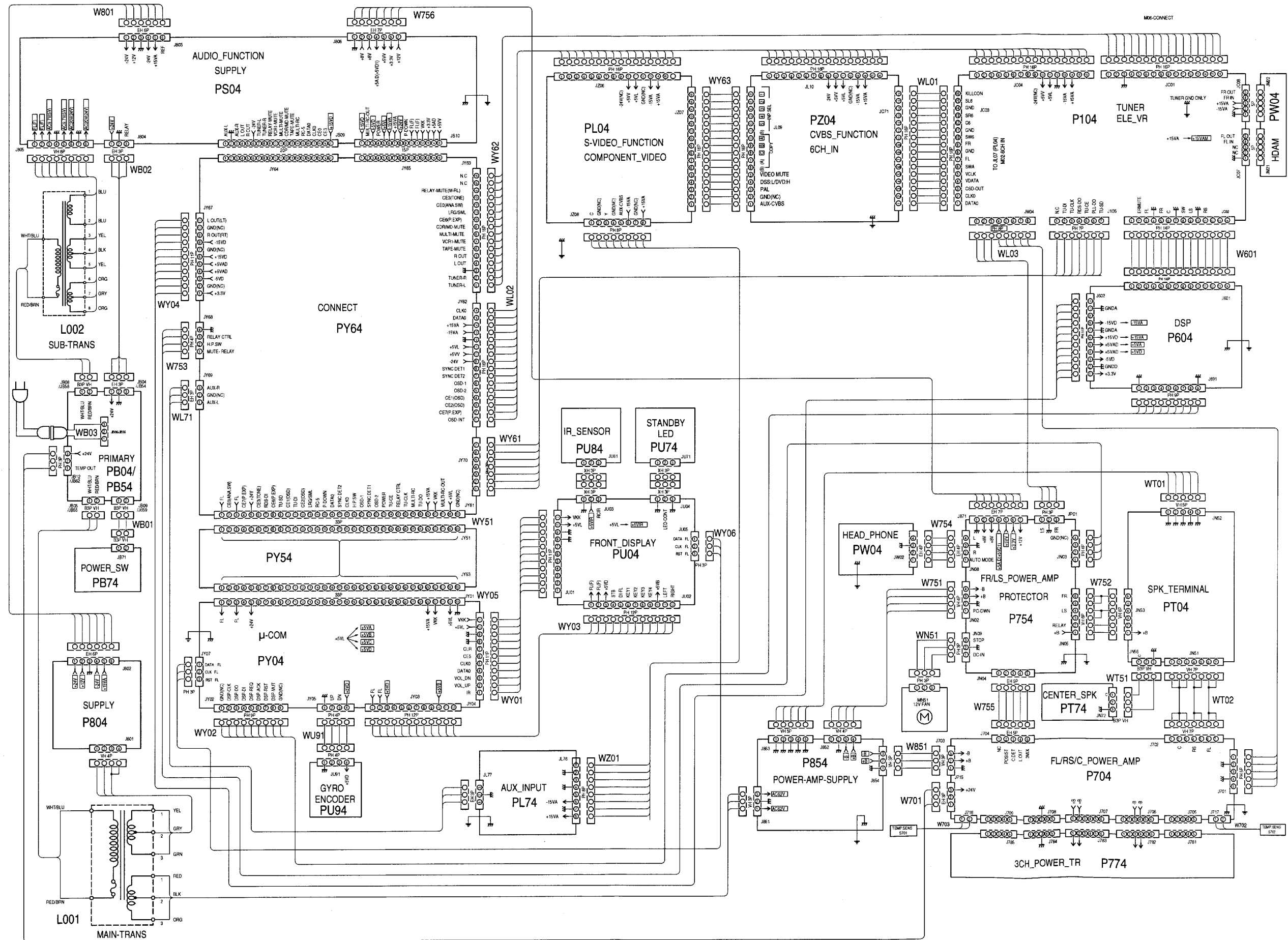
Remark : Bass signal output from Sub Woofer terminal for SR-14EX/SR-14mkII/SR-17EX/SR18-EX.

Sub woofer output is not active while all surround modes. Please refer to the following table.

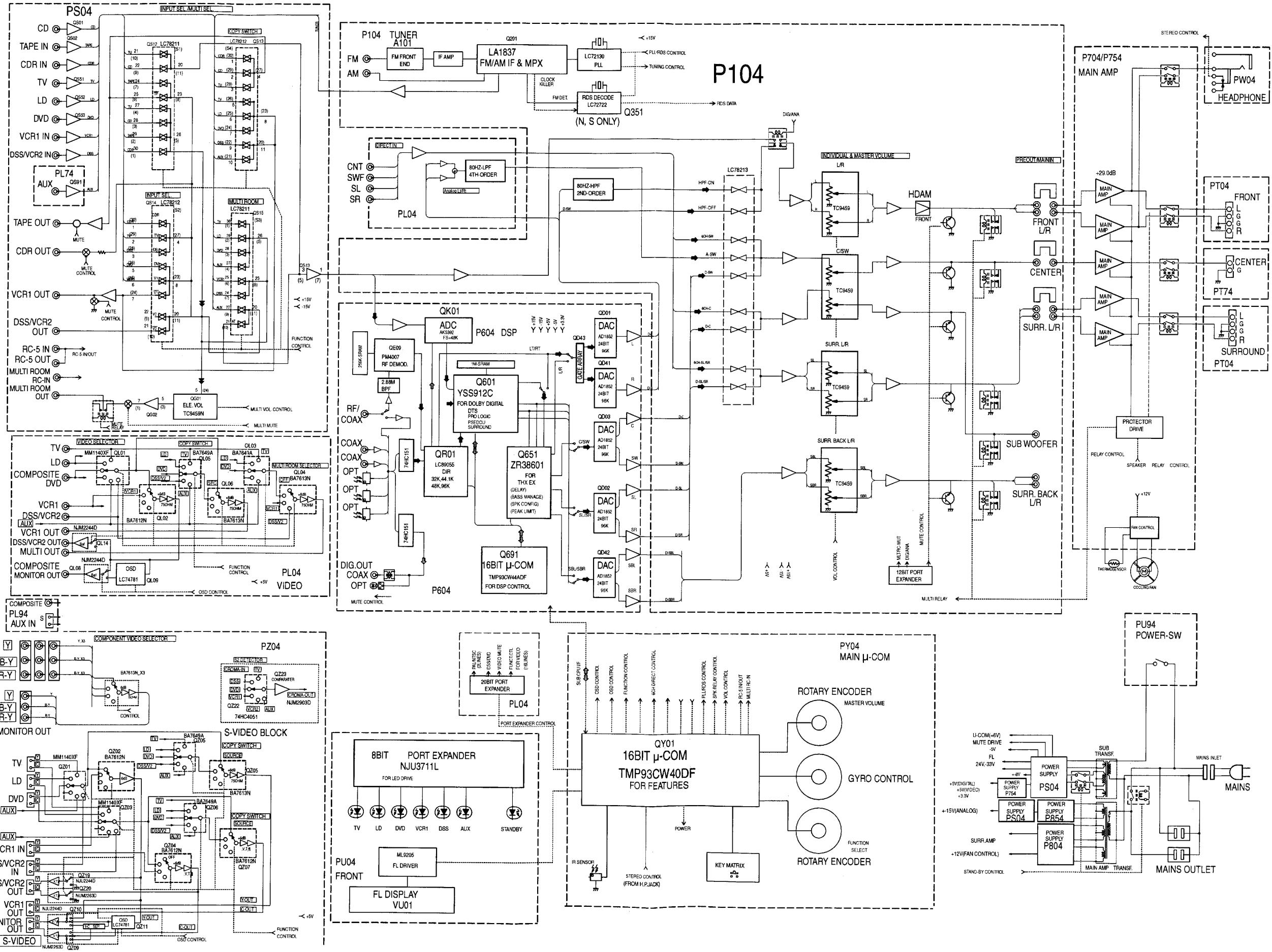
SPK SETUP for SR-14EX/SR-14mkII/SR-17EX/SR18-EX

Sub Woofer	SPK setup		ZP38601		SubWoofer Output by Surround mode							NOTES	No.				
	Front	Center	Surr. L/R	Surr. B (L/R)	Bass CFG #	THX Surr EX	THX5.1, Dolby-D, DTS	THX4.0, Logic	Pro	Stargo	AUTO (PCM, Ana)			AUTO (AC-3, DTS)	JAC-3.2ch, karaoke		
ON	Large	Large	Large	Large	1	LFE	LFE	none		L+R	LFE		L+R	1			
			Small	Small	14	LFE+Sb	LFE								2		
			Large	Small	3	LFE+SL+SR	LFE+SL+SR	none			L+R	LFE+SL+SR		L+R	3		
			Small	Large	16	LFE+SL+SR+Sb	LFE+SL+SR				L+R			L+R	4		
			None (prohibit)	None	1	LFE	LFE	none			L+R	LFE		L+R	5		
			Large	Large	5	LFE+C	LFE+C	C			L+R	LFE+C		L+R	6		
			Small	Small	18	LFE+C+Sb	LFE+C									7	
			Large	Large	6	LFE+C+SL+SR	LFE+C+SL+SR	C			L+R	LFE+C+SL+SR		L+R	8		
		Small	Small	21	LFE+C+SL+SR+Sb	LFE+C+SL+SR									9		
		None (prohibit)	None	5	LFE+C	LFE+C	C			L+R	LFE+C		L+R	10			
		None	Large	Large	1	LFE	LFE	none			L+R	LFE		L+R	11		
			Small	Small	14	LFE+Sb	LFE								12		
			Large	Small	3	LFE+SL+SR	LFE+SL+SR	none			L+R	LFE+SL+SR		L+R	13		
			Small	Large	16	LFE+SL+SR+Sb	LFE+SL+SR				L+R			L+R	14		
			None (prohibit)	None	1	LFE	LFE	none			L+R	LFE		L+R	15		
			Large	Large	12	LFE+L+R	LFE+L+R	L+R			L+R	LFE+L+R		L+R	16		
	Small		Small	25	LFE+L+R+Sb	LFE+L+R									17		
	Large		Large	11	LFE+L+R+SL+SR	LFE+L+R+SL+SR	L+R			L+R	LFE+L+R+SL+SR		L+R	18			
	Small	Large	Large	Large	Large	12	LFE+L+R+Sb	LFE+L+R	L+R		L+R	LFE+L+R		L+R	19		
				Small	Small	24	LFE+L+R+SL+SR+Sb	LFE+L+R+SL+SR							20		
			Large	Large	10	LFE+L+R+C	LFE+L+R+C	L+R+C			L+R	LFE+L+R+C		L+R	21		
			Small	Small	23	LFE+L+R+C+Sb	LFE+L+R+C								22		
		None	Large	Large	Large	Large	0	LFE+L+R+C+SL+SR	LFE+L+R+C+SL+SR	L+R+C		L+R	LFE+L+R+C+SL+SR		L+R	23	
					Small	Small	13	LFE+L+R+C+SL+SR+Sb	LFE+L+R+C+SL+SR							24	
			None (prohibit)	Large	Large	Large	Large	10	LFE+L+R+C	LFE+L+R+C	L+R+C		L+R	LFE+L+R+C		L+R	25
						Small	Small	12	LFE+L+R	LFE+L+R	L+R			L+R	LFE+L+R		L+R
	None	Large	Large	Large	Large	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R		L+R	27		
				Small	Small	25	LFE+L+R+Sb	LFE+L+R								28	
		None (prohibit)	Large	Large	Large	Large	11	LFE+SL+SR	LFE+SL+SR	L+R		L+R	LFE+SL+SR		L+R	29	
					Small	Small	24	LFE+SL+SR+Sb	LFE+SL+SR								30
	None (prohibit)	None	None	Large	Large	12	LFE+L+R	LFE+L+R	L+R		L+R	LFE+L+R		L+R	31		
				Small	Small	12	LFE+L+R	LFE+L+R	L+R			L+R	LFE+L+R		L+R	32	
OFF														18			

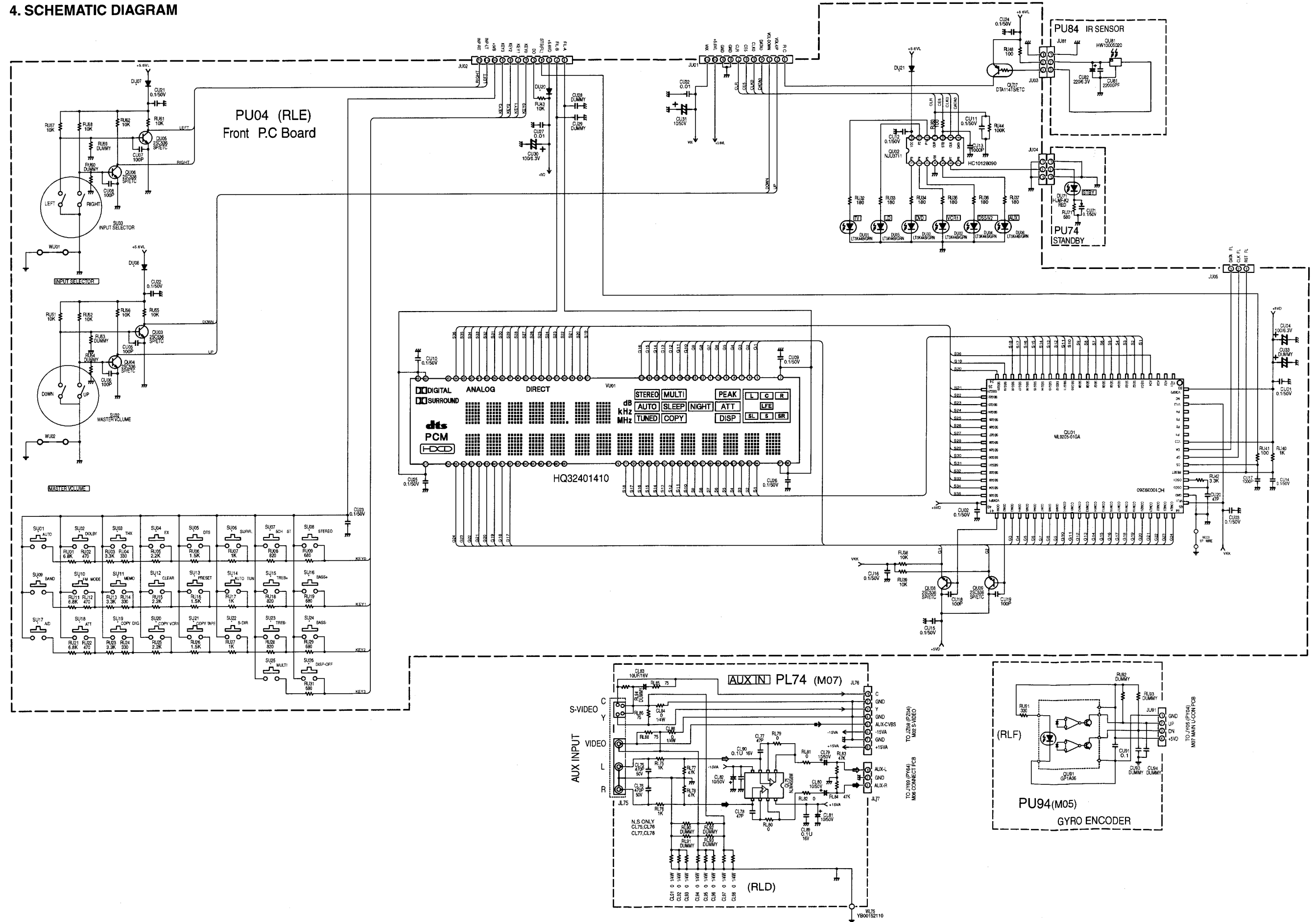
2. WIRING DIAGRAM

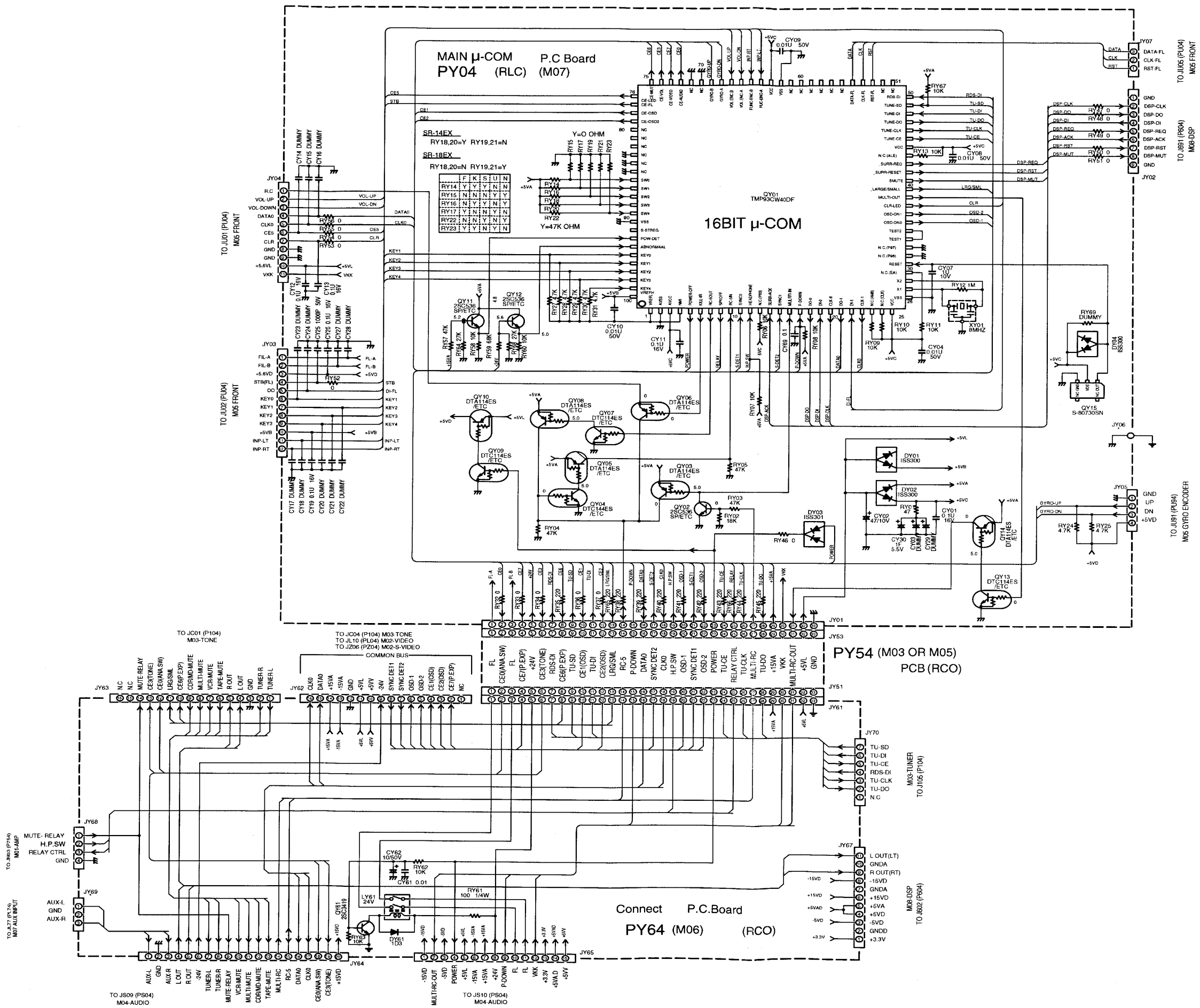


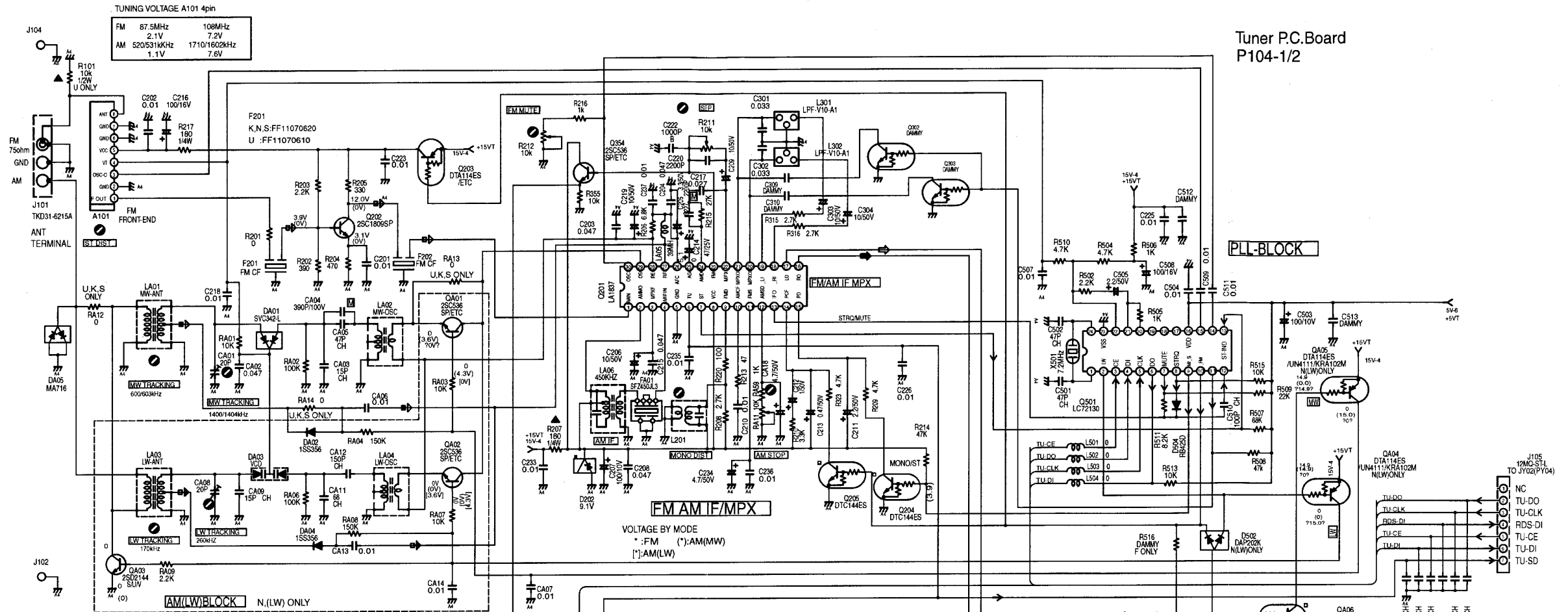
3. BLOCK DIAGRAM



4. SCHEMATIC DIAGRAM



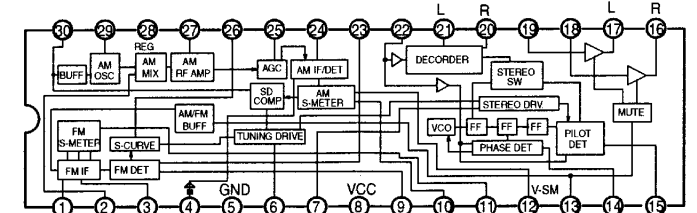




J102

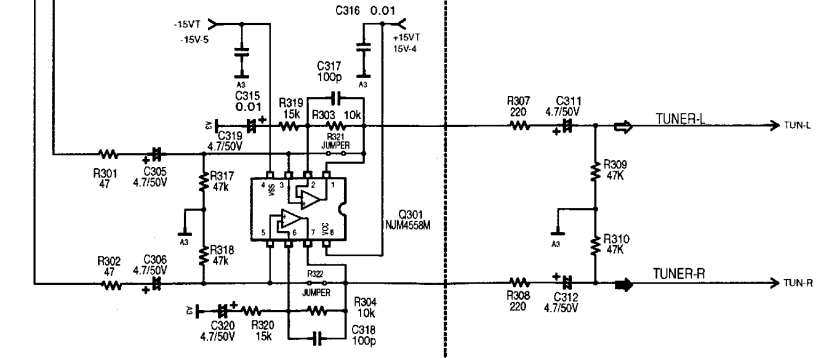
AM(LW)BLOCK N,(LW) ONLY

	C227	C217	R215	C301/302	R201	R211
U	2200P	0.027	27k	0.047	0	10k
K,S,N	0.015	68k	0.033	100	22k	



Q201 LA1837

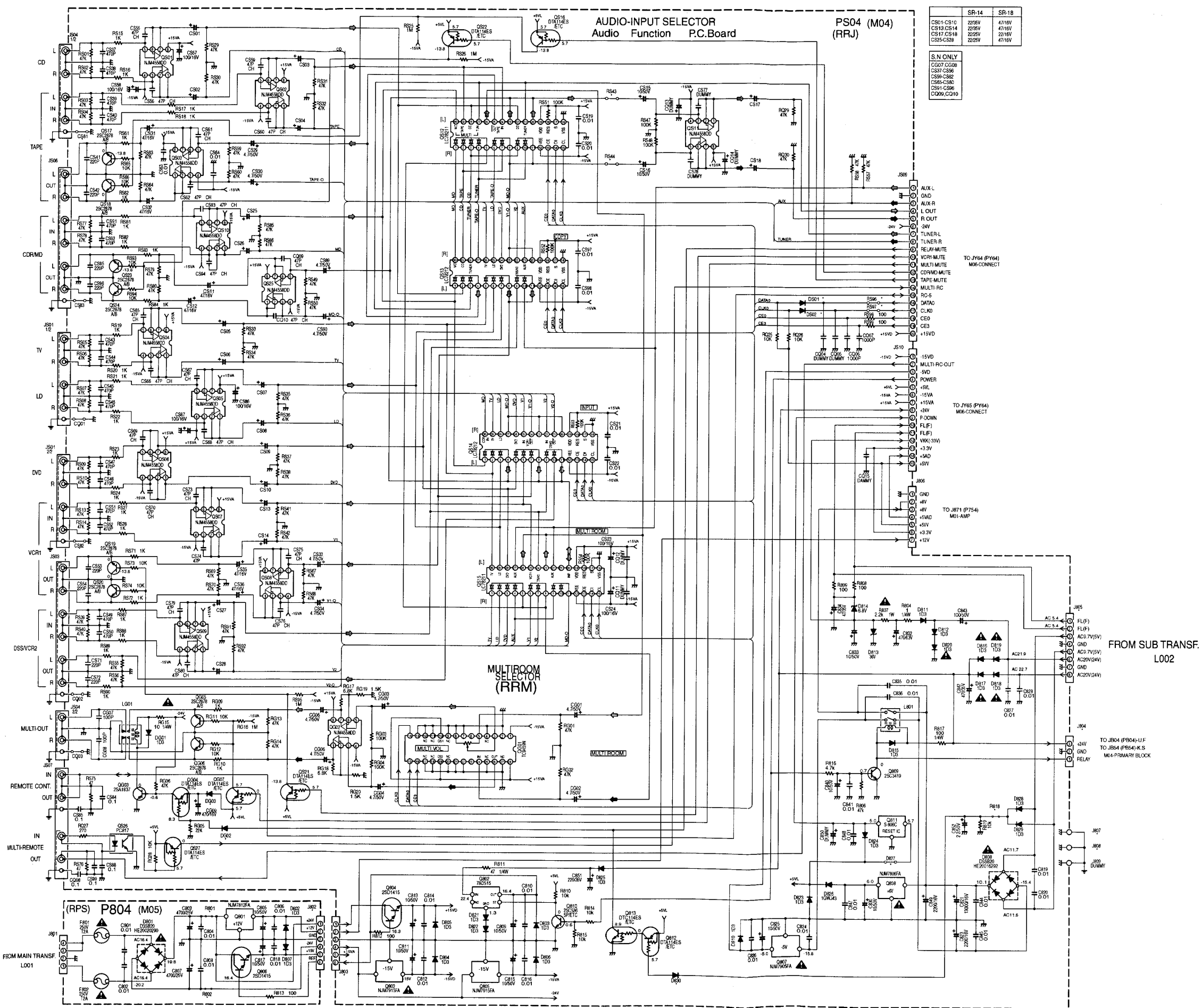
PRE AMP K.S.N ONLY



	R301	R321	C305
U	0	JUMPER	JUMPER
K,S,N	47	OPEN	4.7/50

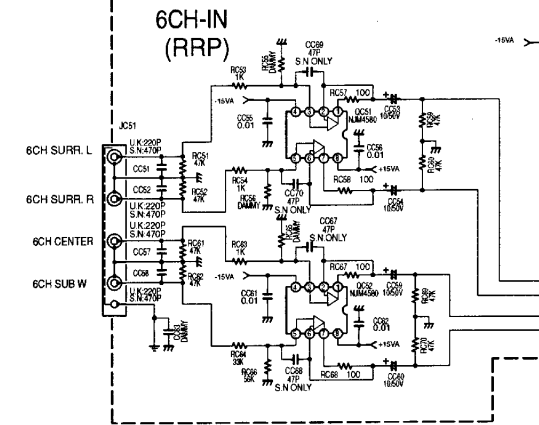
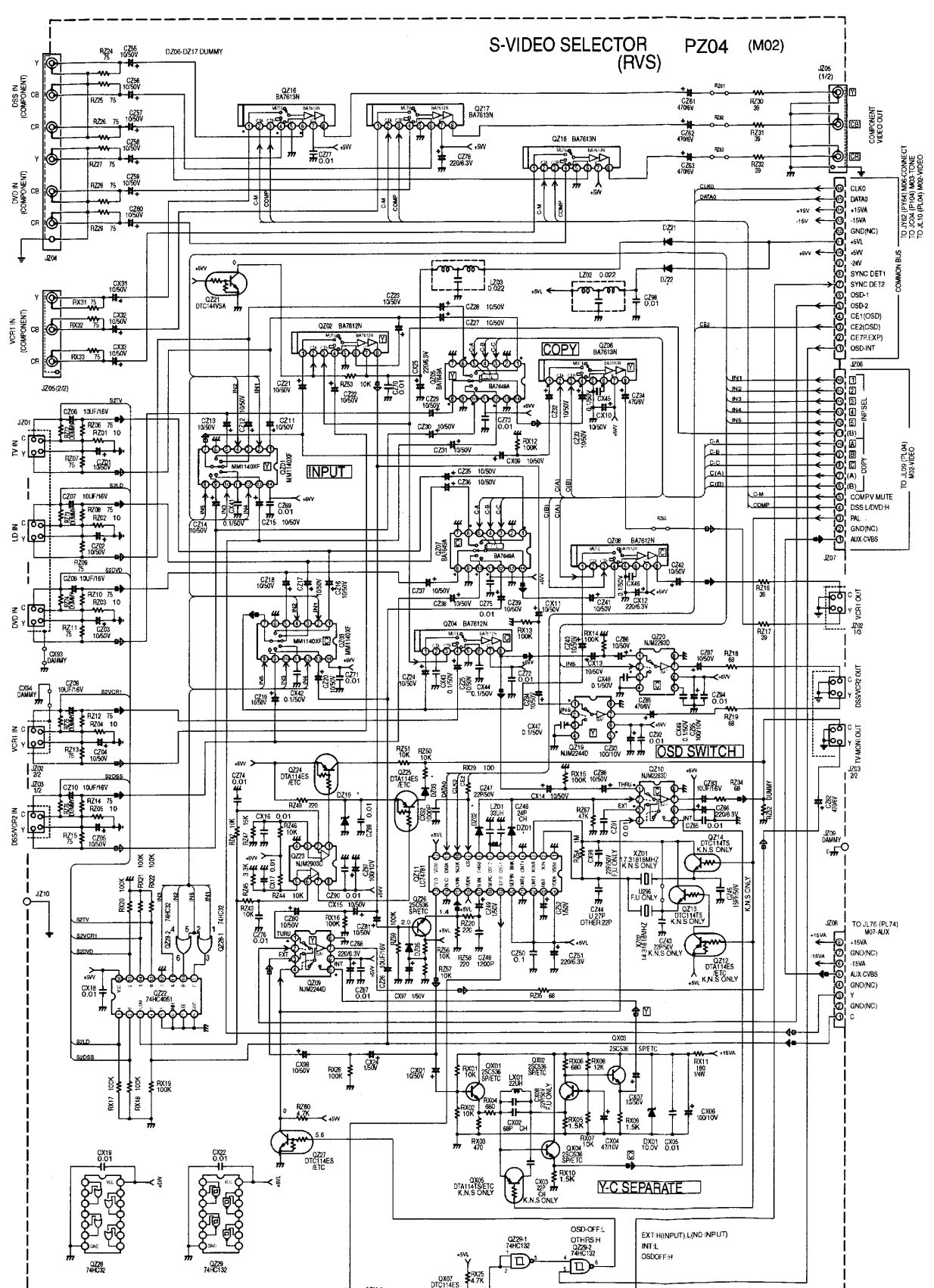
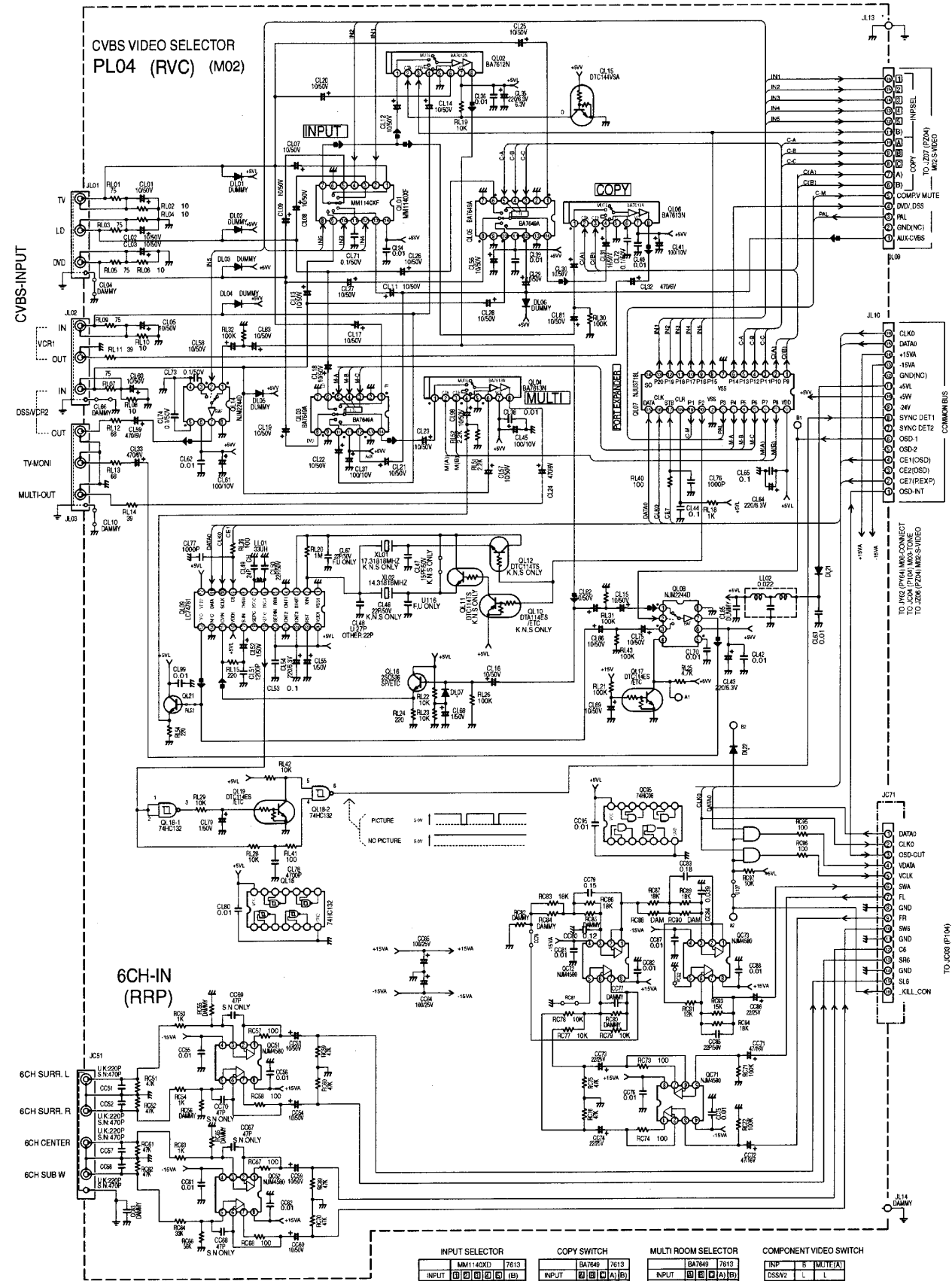
+15V ← -15V
 +15V ← -15V
 +15V ← -15V
 +15V ← -15V
 +15V ← -15V
 +15V ← -15V





	SP-14	SP-18
CS01-CS16	225V	4716V
CS13-CS14	225V	4716V
CS17-CS18	225V	2216V
CS25-CS28	225V	4716V

S.N ONLY	
C007-C008	
CS37-CS38	
CS39-CS40	
CS48-CS49	
CS51-CS56	
C009,C010	

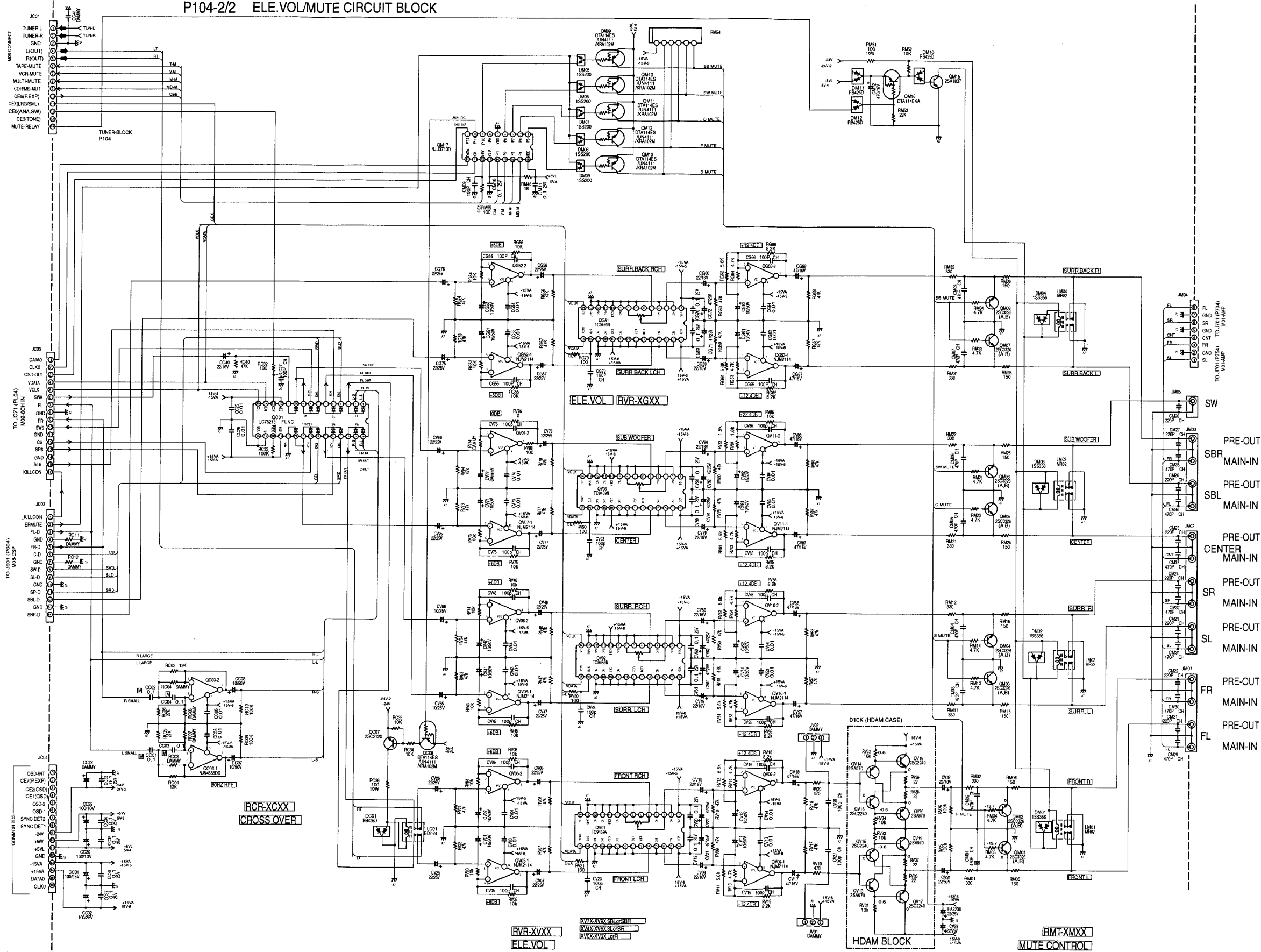


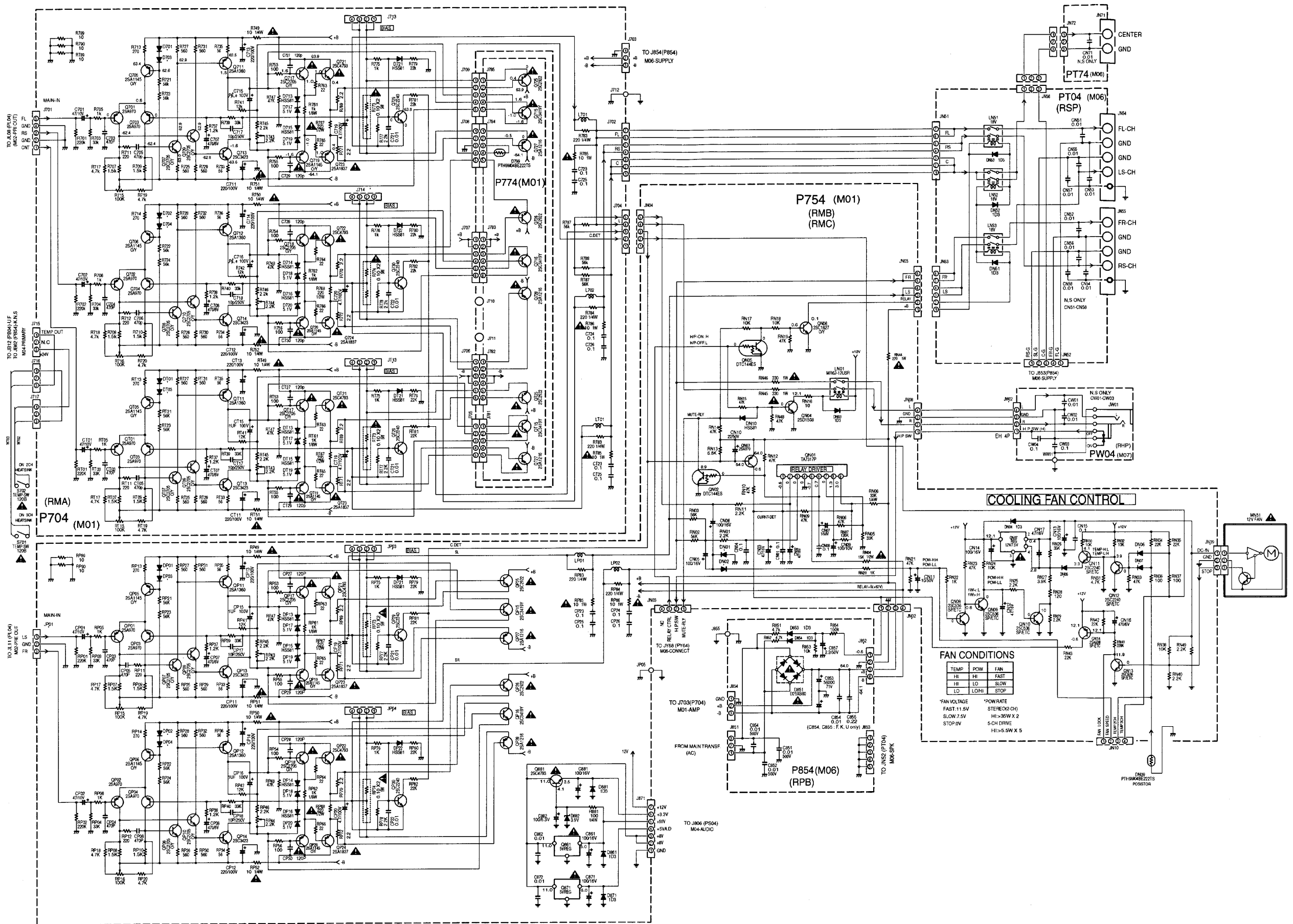
INPUT SELECTOR				COPY SWITCH				MULTI ROOM SELECTOR				COMPONENT VIDEO SWITCH			
INPUT	TV	LD	DND	TV	LD	DND	OTHERS	INPUT	TV	LD	DND	TV	LD	DND	OTHERS
MM14003	L	L	L	BA7613	L	L	L	BA7613	L	L	L	BA7613	L	L	L
7613	L	L	L	7613	L	L	L	7613	L	L	L	7613	L	L	L
(A)	L	L	L	(A)	L	L	L	(A)	L	L	L	(A)	L	L	L
(B)	L	L	L	(B)	L	L	L	(B)	L	L	L	(B)	L	L	L
(C)	L	L	L	(C)	L	L	L	(C)	L	L	L	(C)	L	L	L
(D)	L	L	L	(D)	L	L	L	(D)	L	L	L	(D)	L	L	L
(E)	L	L	L	(E)	L	L	L	(E)	L	L	L	(E)	L	L	L
(F)	L	L	L	(F)	L	L	L	(F)	L	L	L	(F)	L	L	L
(G)	L	L	L	(G)	L	L	L	(G)	L	L	L	(G)	L	L	L
(H)	L	L	L	(H)	L	L	L	(H)	L	L	L	(H)	L	L	L
(I)	L	L	L	(I)	L	L	L	(I)	L	L	L	(I)	L	L	L
(J)	L	L	L	(J)	L	L	L	(J)	L	L	L	(J)	L	L	L
(K)	L	L	L	(K)	L	L	L	(K)	L	L	L	(K)	L	L	L
(L)	L	L	L	(L)	L	L	L	(L)	L	L	L	(L)	L	L	L
(M)	L	L	L	(M)	L	L	L	(M)	L	L	L	(M)	L	L	L
(N)	L	L	L	(N)	L	L	L	(N)	L	L	L	(N)	L	L	L
(O)	L	L	L	(O)	L	L	L	(O)	L	L	L	(O)	L	L	L
(P)	L	L	L	(P)	L	L	L	(P)	L	L	L	(P)	L	L	L
(Q)	L	L	L	(Q)	L	L	L	(Q)	L	L	L	(Q)	L	L	L
(R)	L	L	L	(R)	L	L	L	(R)	L	L	L	(R)	L	L	L
(S)	L	L	L	(S)	L	L	L	(S)	L	L	L	(S)	L	L	L
(T)	L	L	L	(T)	L	L	L	(T)	L	L	L	(T)	L	L	L
(U)	L	L	L	(U)	L	L	L	(U)	L	L	L	(U)	L	L	L
(V)	L	L	L	(V)	L	L	L	(V)	L	L	L	(V)	L	L	L
(W)	L	L	L	(W)	L	L	L	(W)	L	L	L	(W)	L	L	L
(X)	L	L	L	(X)	L	L	L	(X)	L	L	L	(X)	L	L	L
(Y)	L	L	L	(Y)	L	L	L	(Y)	L	L	L	(Y)	L	L	L
(Z)	L	L	L	(Z)	L	L	L	(Z)	L	L	L	(Z)	L	L	L

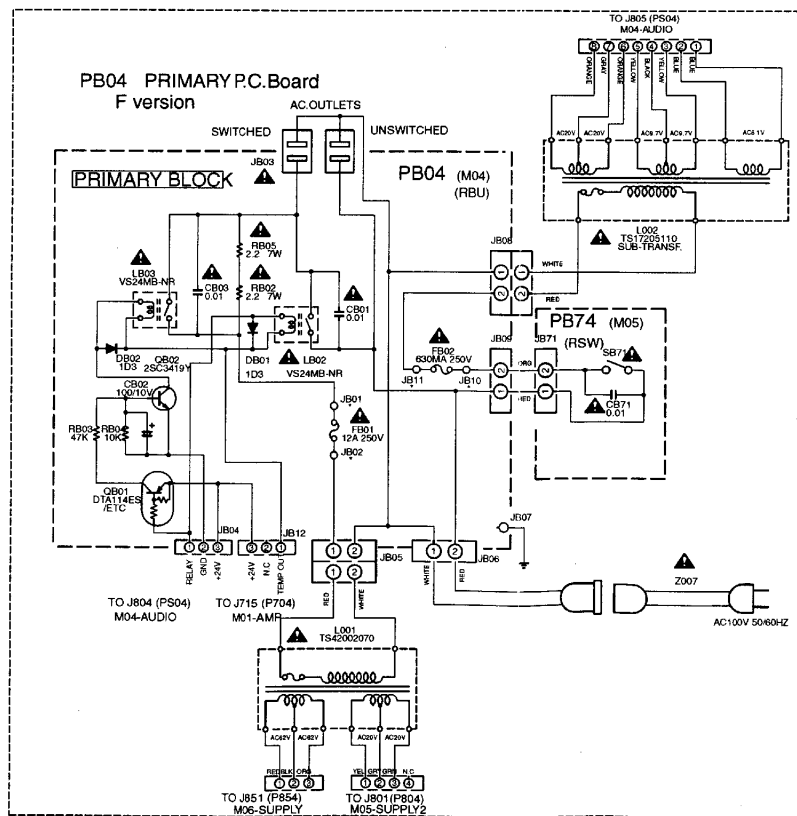
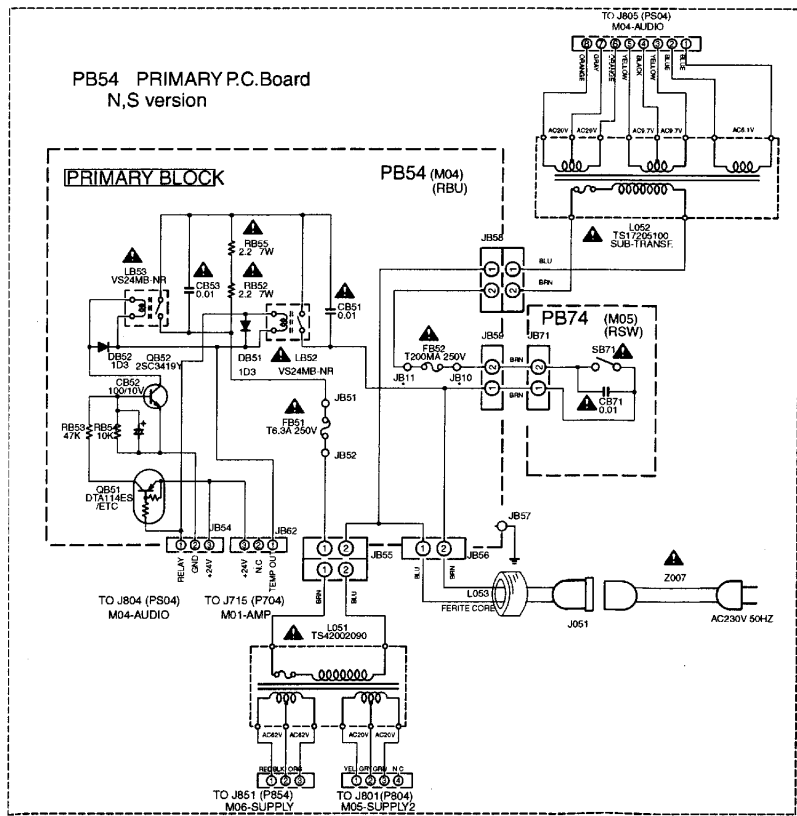
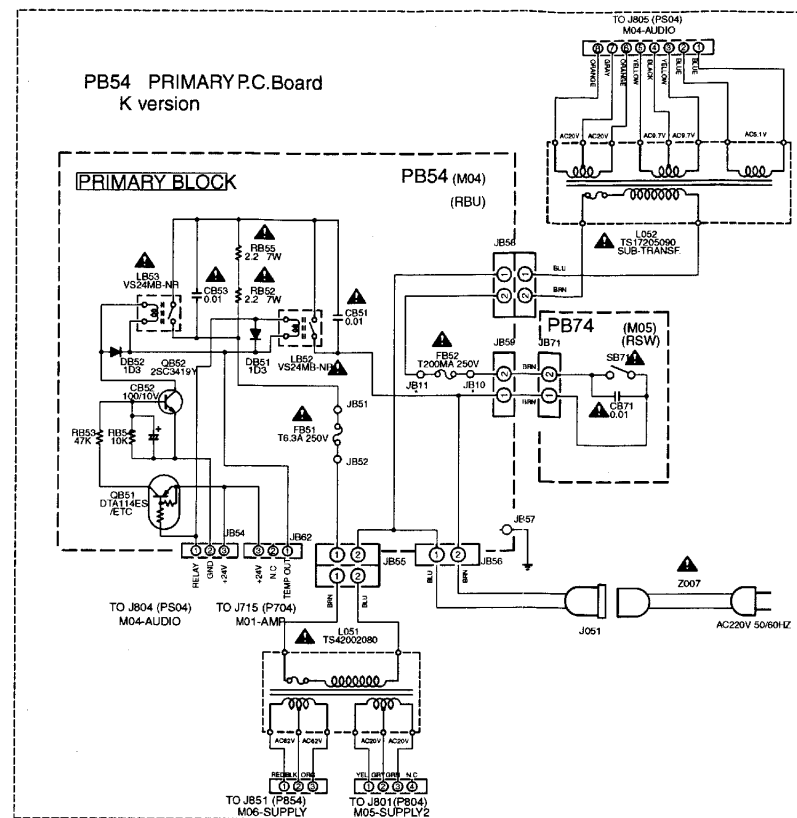
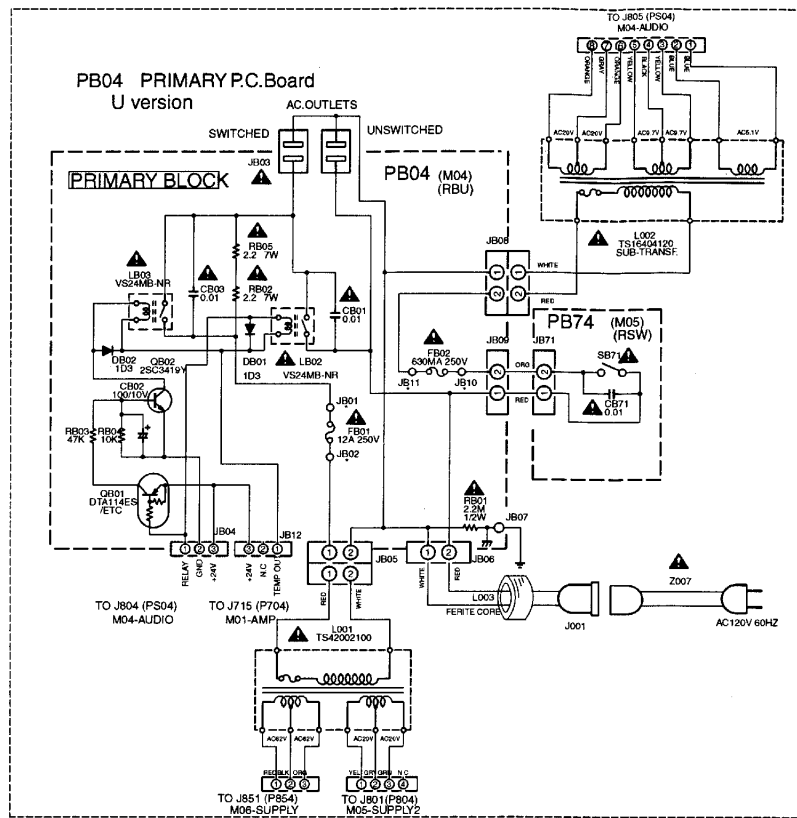
INPUT SELECTOR AND COPY SWITCH
:SAME DATA BETWEEN CVBS VIDEO AND S-VIDEO.
BA7612N/BA7613N
:SAME DATA BETWEEN BA7612N AND BA7613N

TO J162 (P164) M06 CONNECT TO J004 (P104) M05-TONE TO J10 (P104) M02 VIDEO TO J006 (P004) M02 S-VIDEO

P104-2/2 ELE.VOL/MUTE CIRCUIT BLOCK

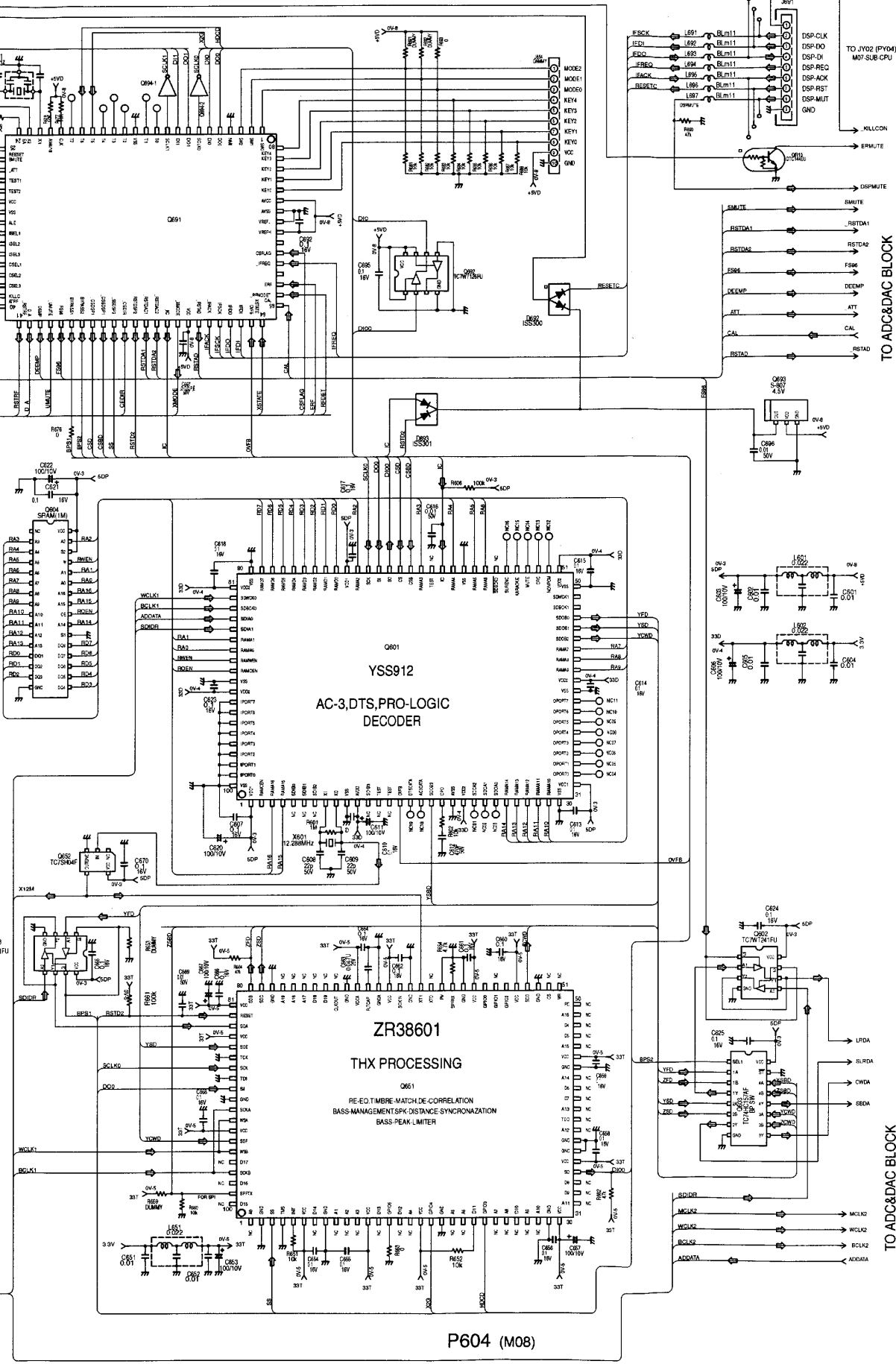
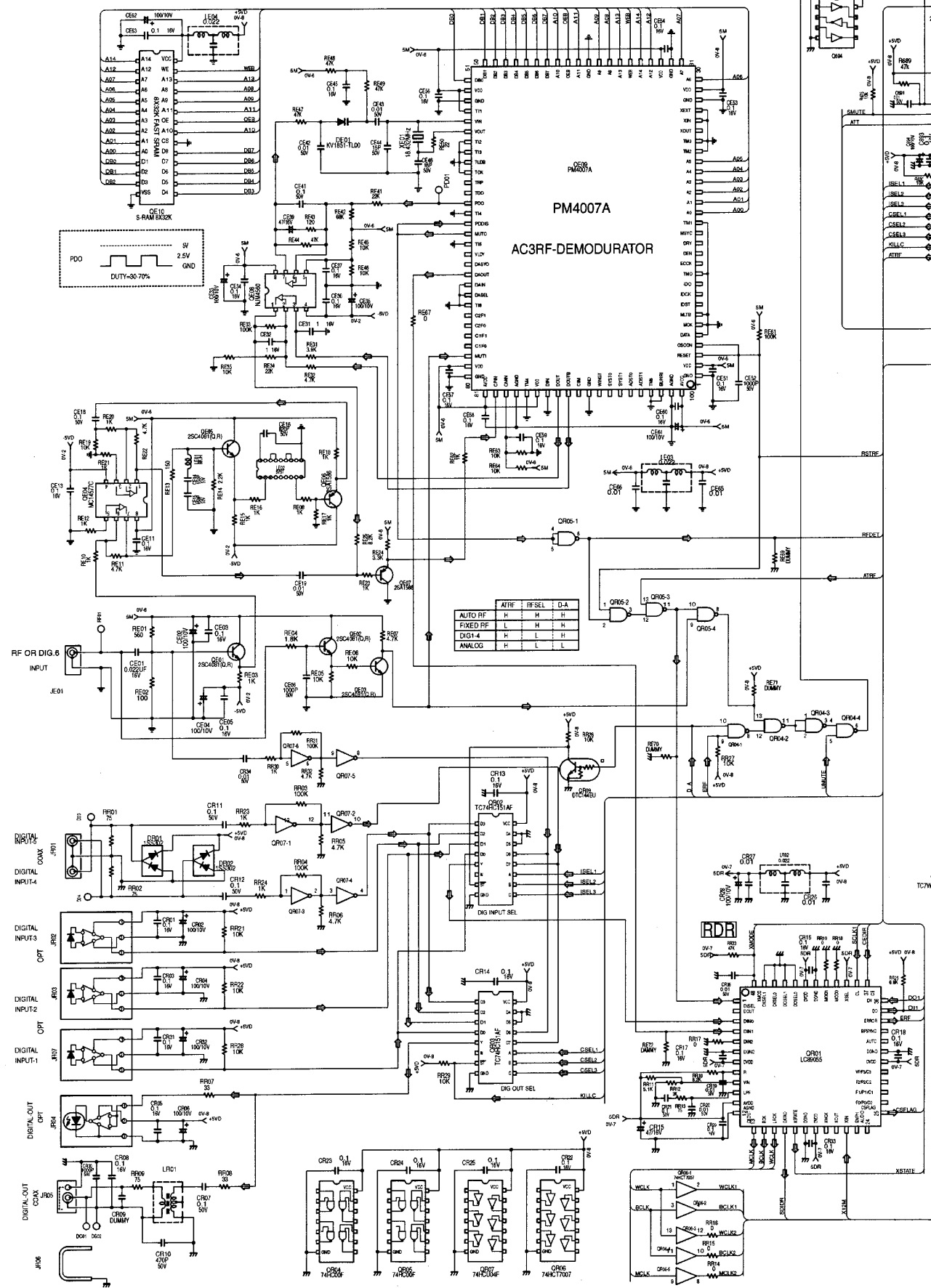


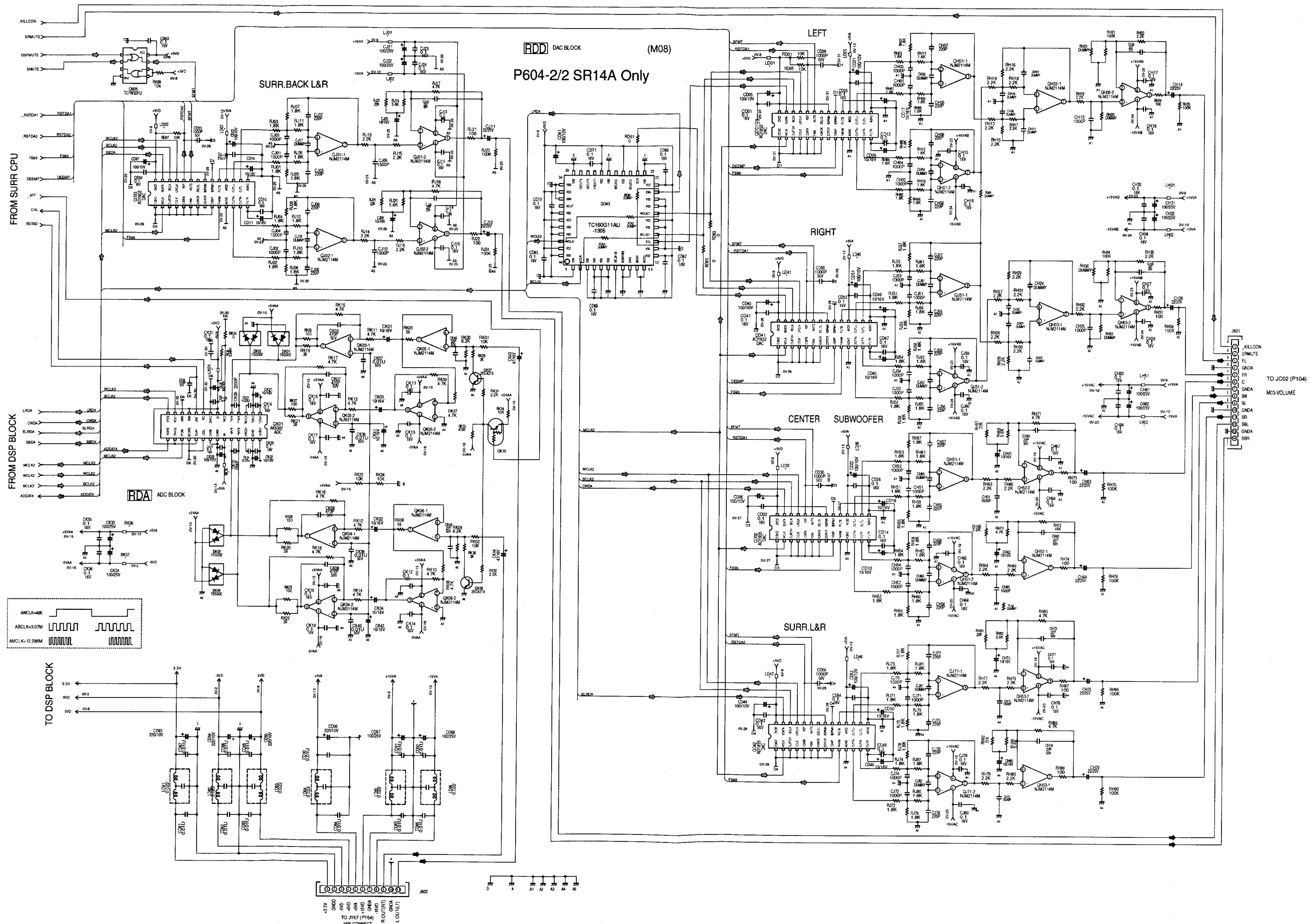




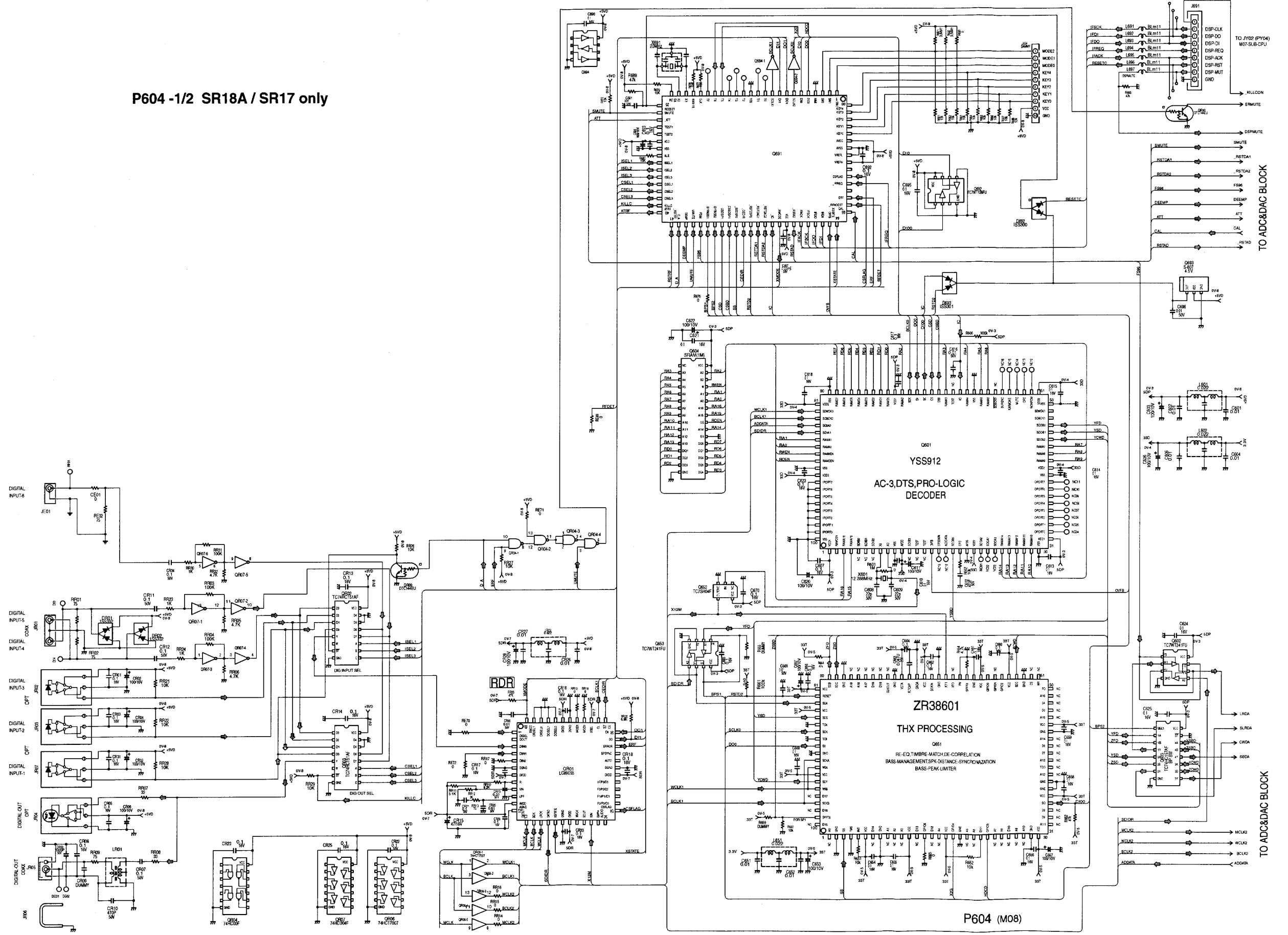
P604-1/2 SR14A Only

RDM DEMODURATOR BLOCK

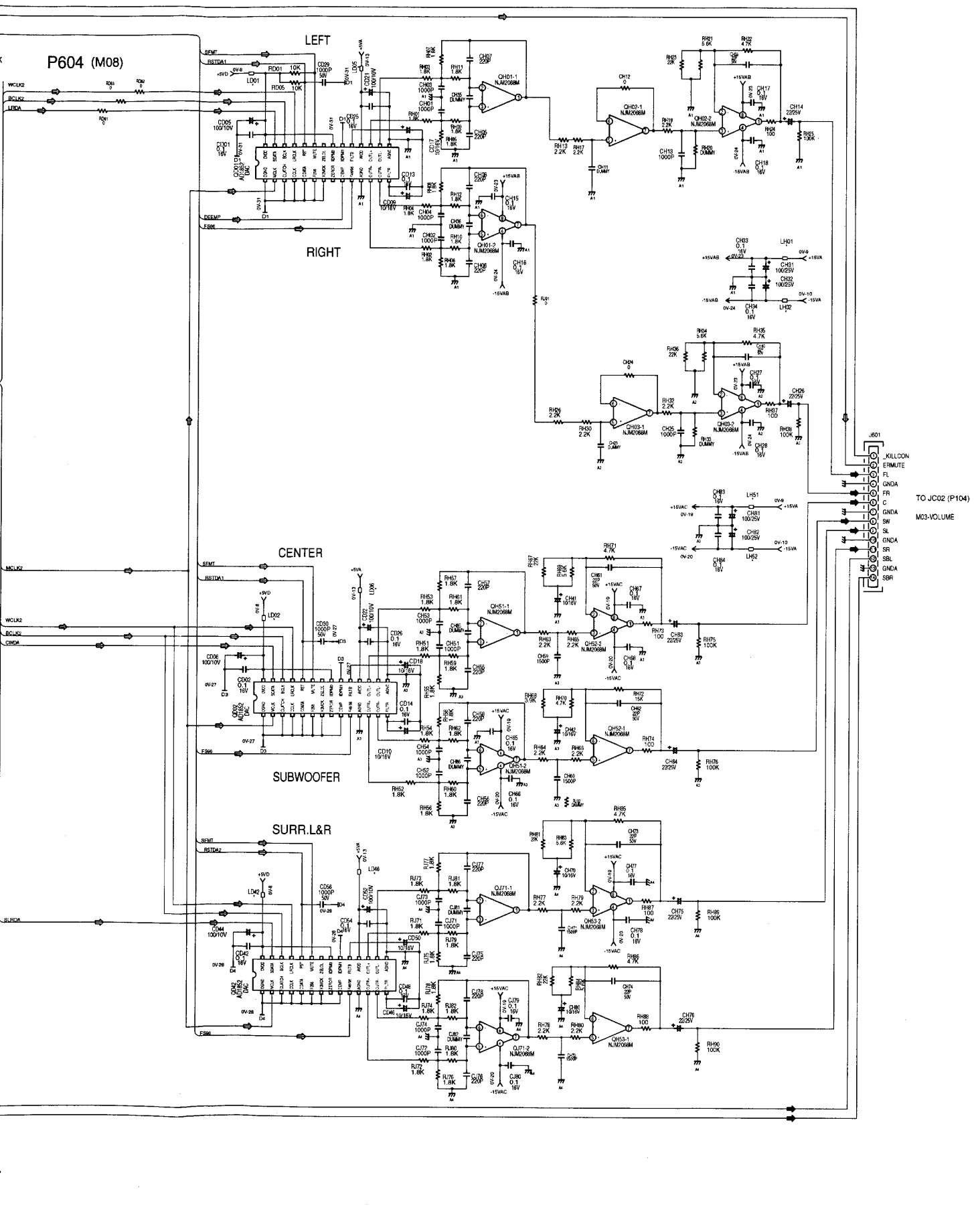
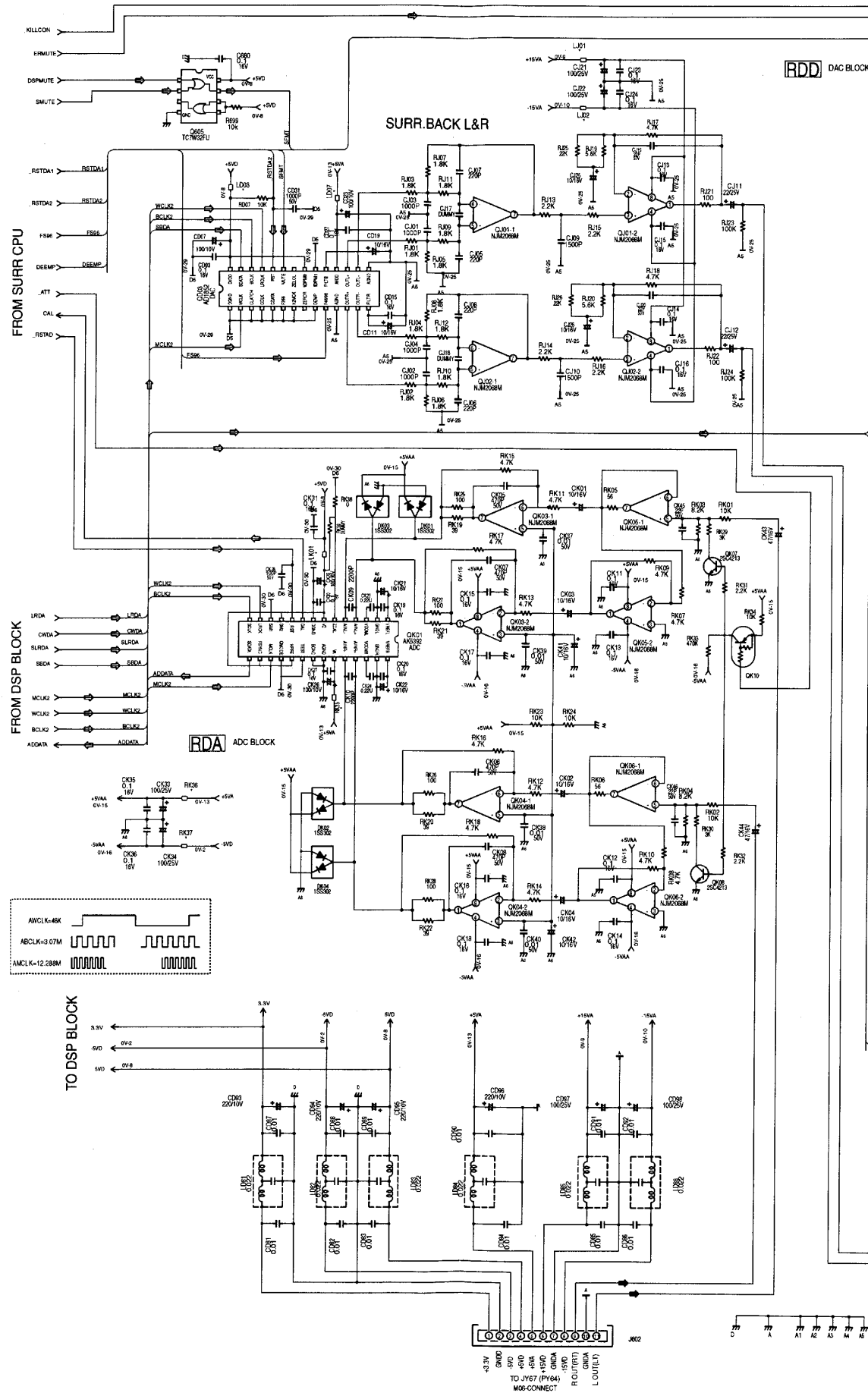




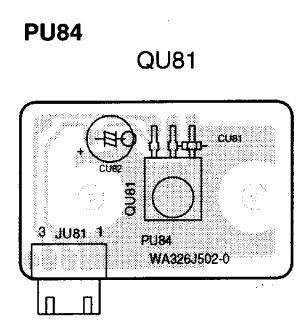
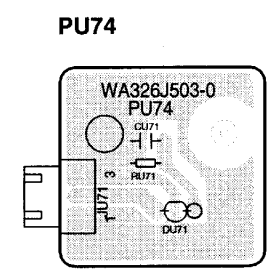
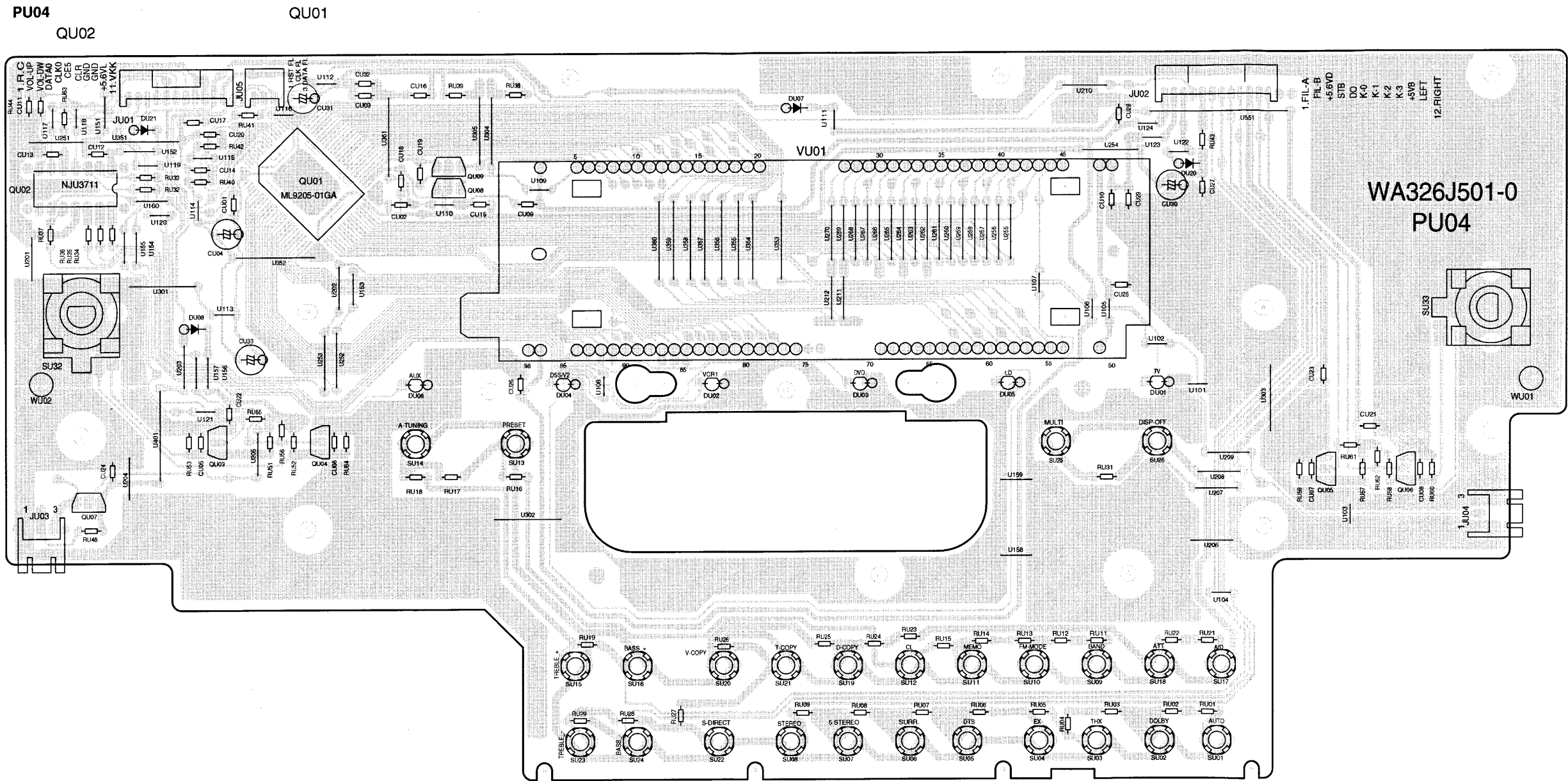
P604 -1/2 SR18A / SR17 only



P604 -2/2 SR18A / SR17 only

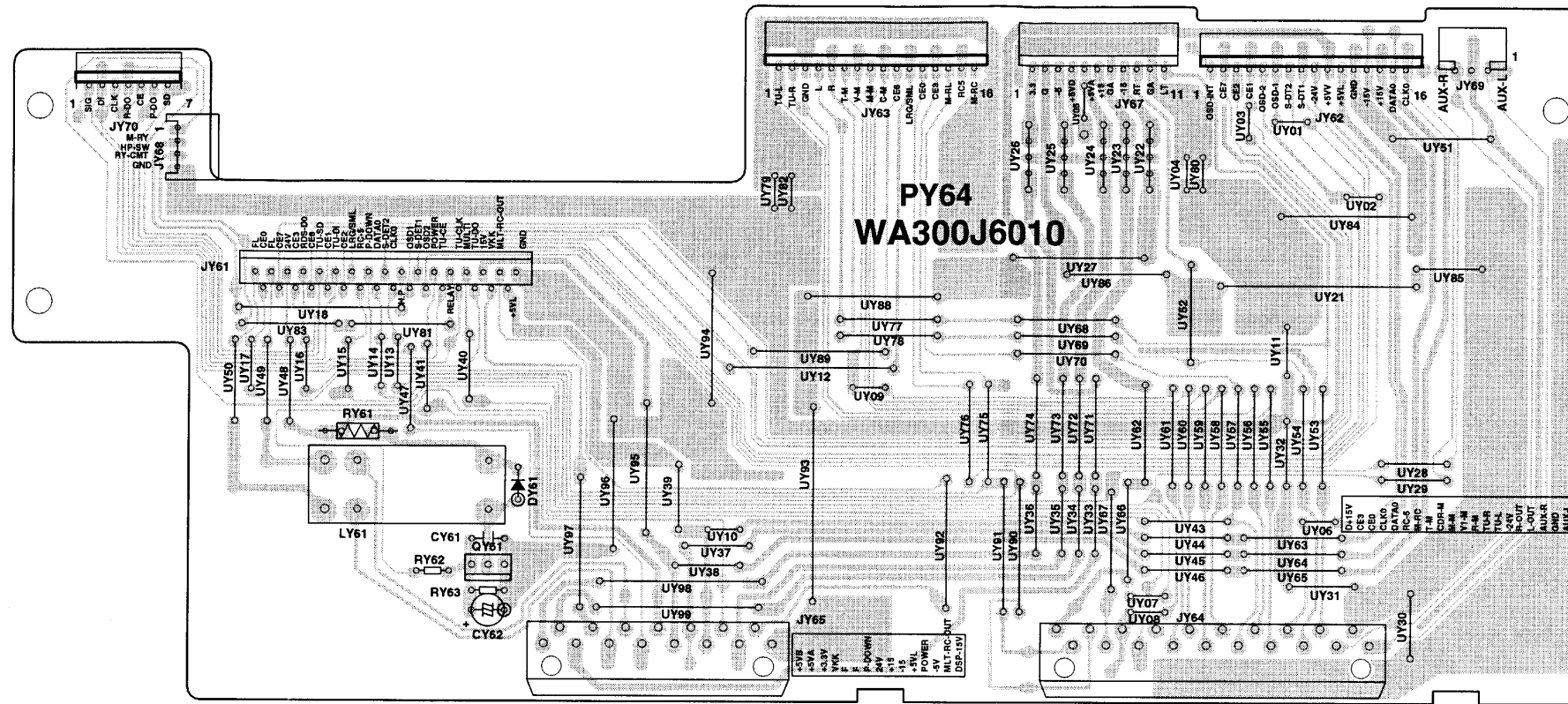


5. PARTS LOCATION (Pattern Side)



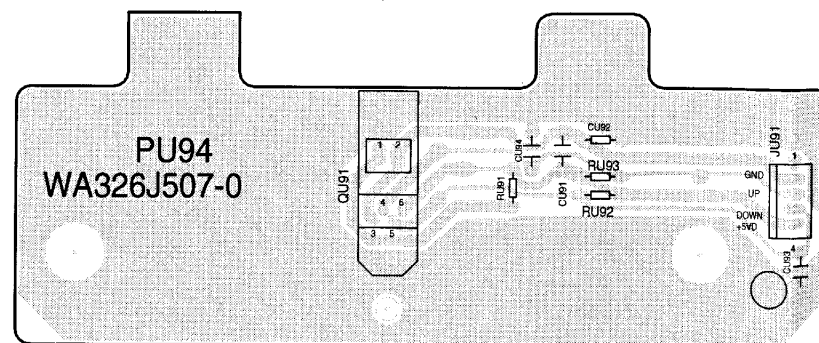
PY64

QY61



PU94

QU91



PS04
WA300J401-0

Q811

Q803

Q805

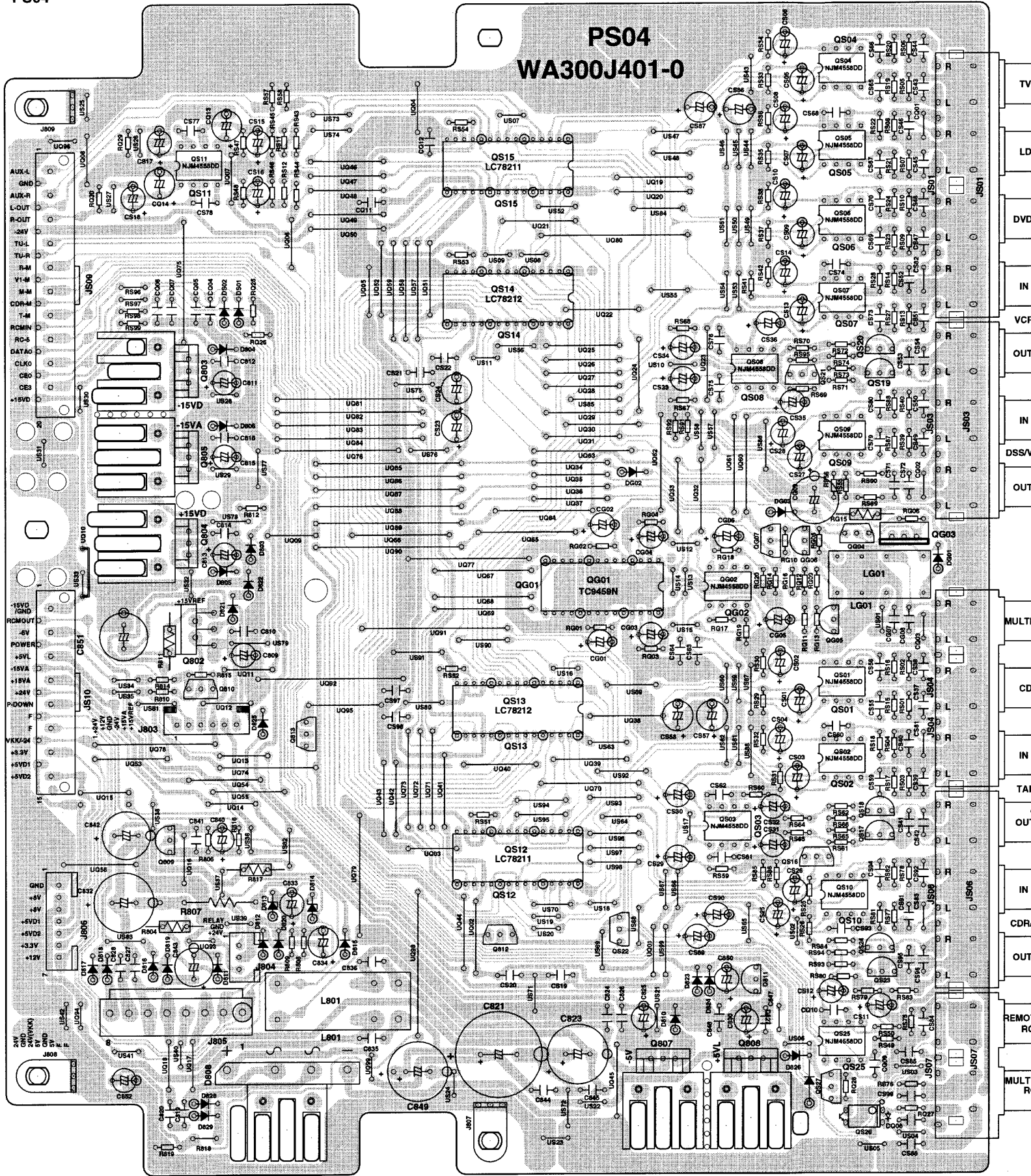
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Q802

Q810

Q813

Q809



QS04

QS05

QS06

QS07

QS20

QS08 QS21 QS19

QS09

QG04 QG03

QG07 QG06

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QS01

QS13

QS02

QS18

QS03 QS17

QS12 QS16

QS10

QS24

QS23

QS11

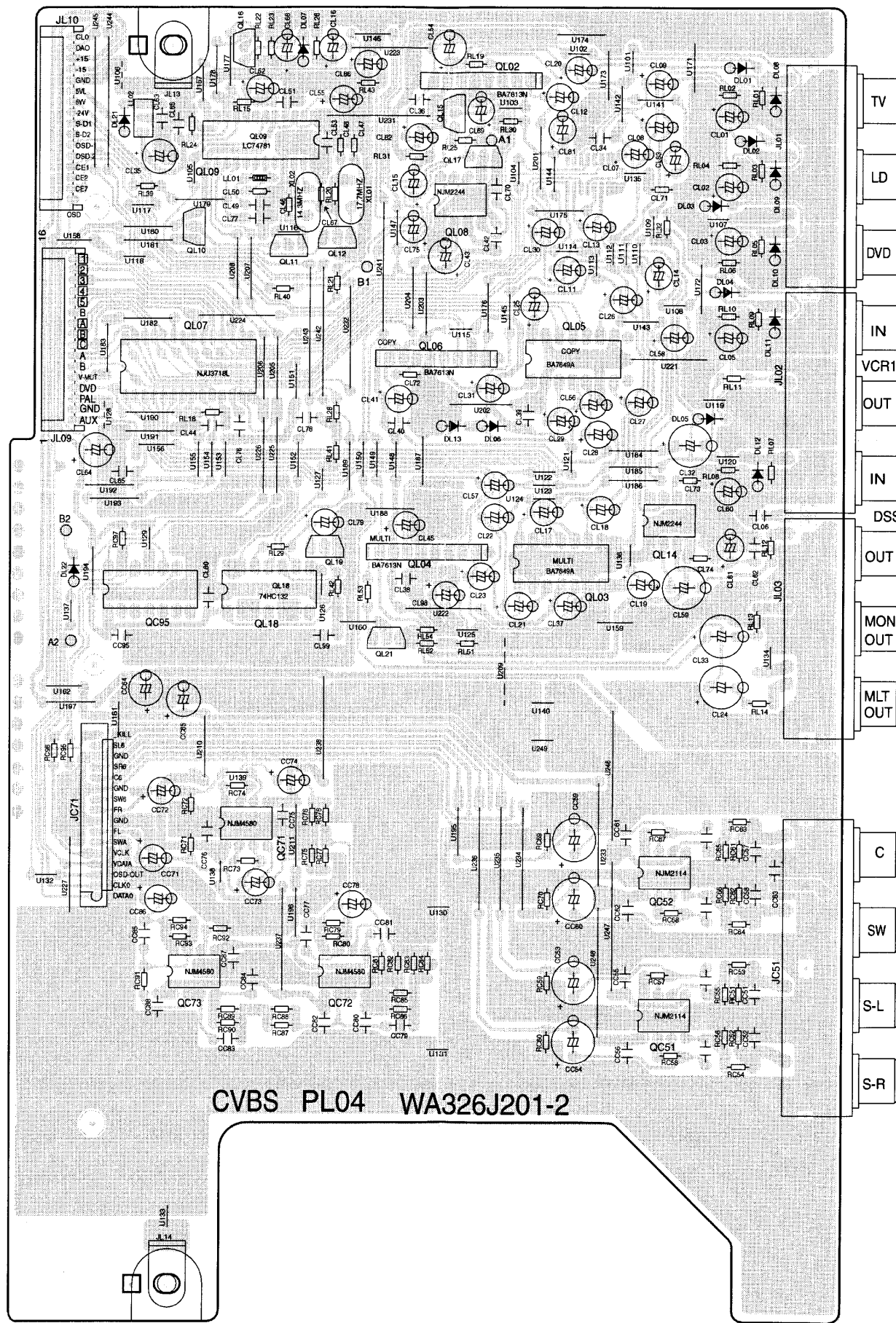
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Q807 Q808

QS27

QS26

PL04

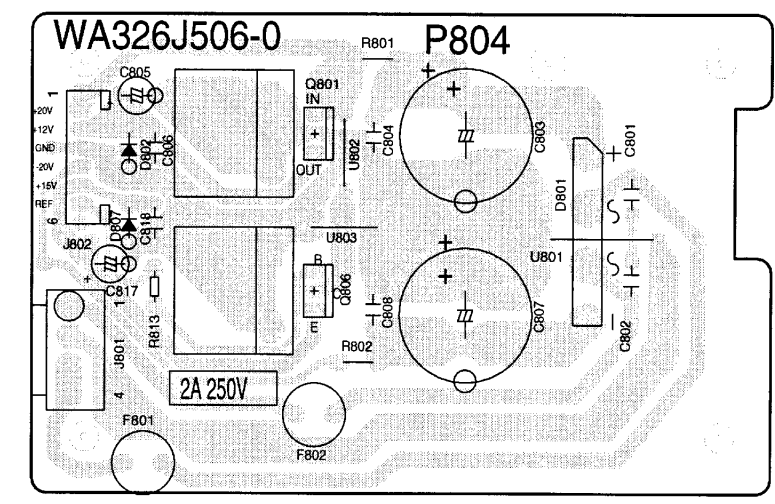


- QL16
- QL02
- QL09 QL15 QL17
- QL08
- QL10
- QL11 QL12
- QL07 QL06 QL05
- QL14
- QL19 QL04 QL03
- QC95 QL18
- QL21
- QC71
- QC73 QC72
- QC51
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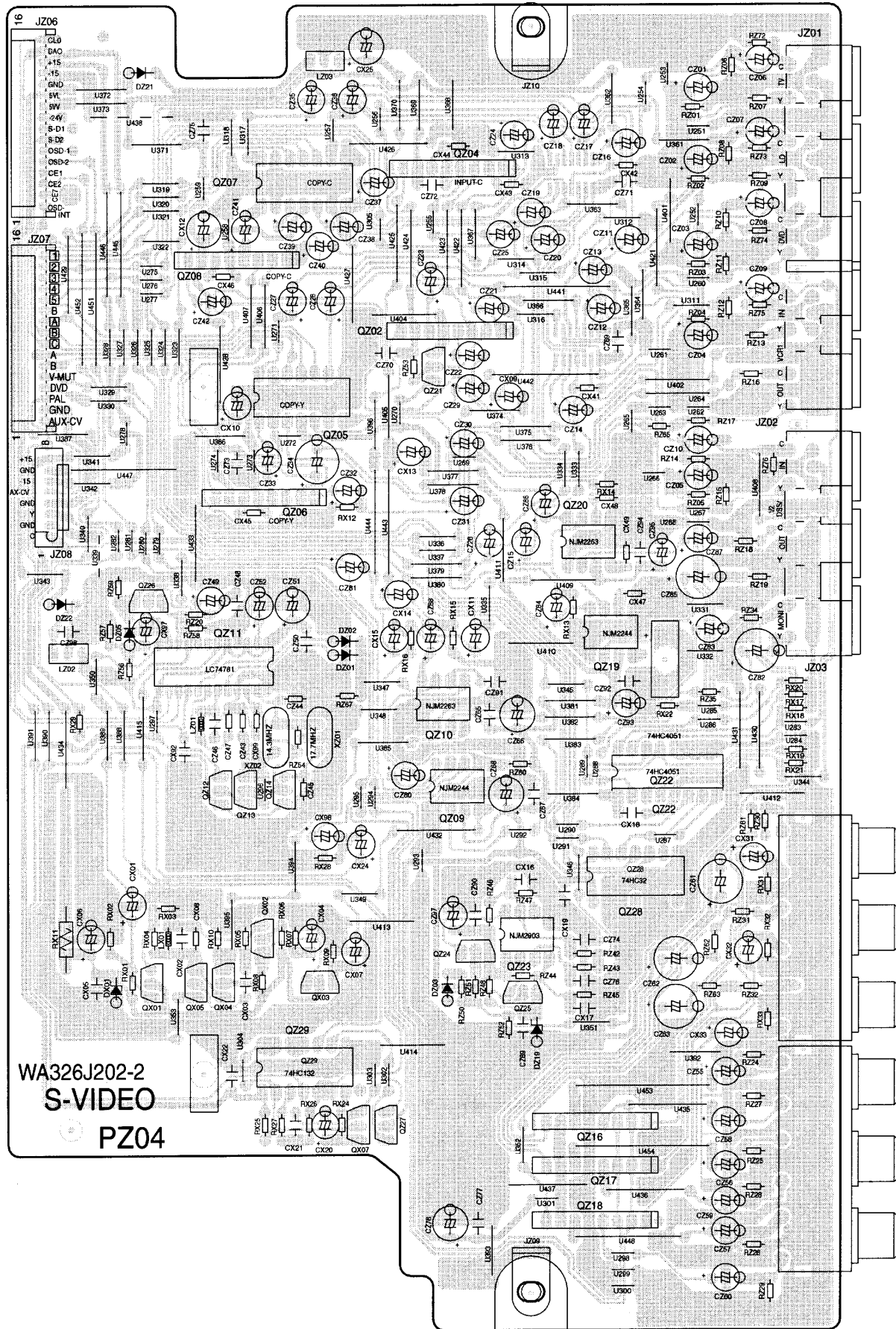
CVBS PL04 WA326J201-2

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- Q806



PZ04



QZ07 QZ04

QZ08

QZ02

QZ21

QZ05

QZ06

QZ20

QZ26

QZ19

QZ11

QZ10

QZ22

QZ12 QZ13 QZ14 QZ09

QZ28

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QZ29

QX07 QX27 QZ16

QZ17

QZ18

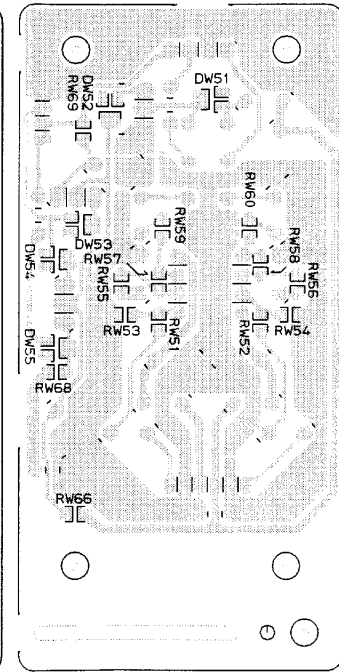
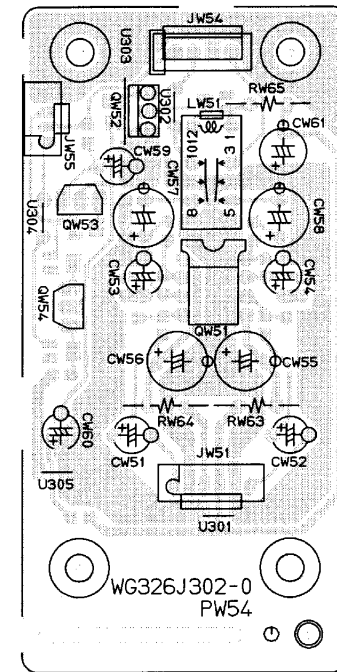
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QW52

QW53

QW54

QW51



P104

Q205 Q203

Q501

Q353 - Q351

QA03

Q202

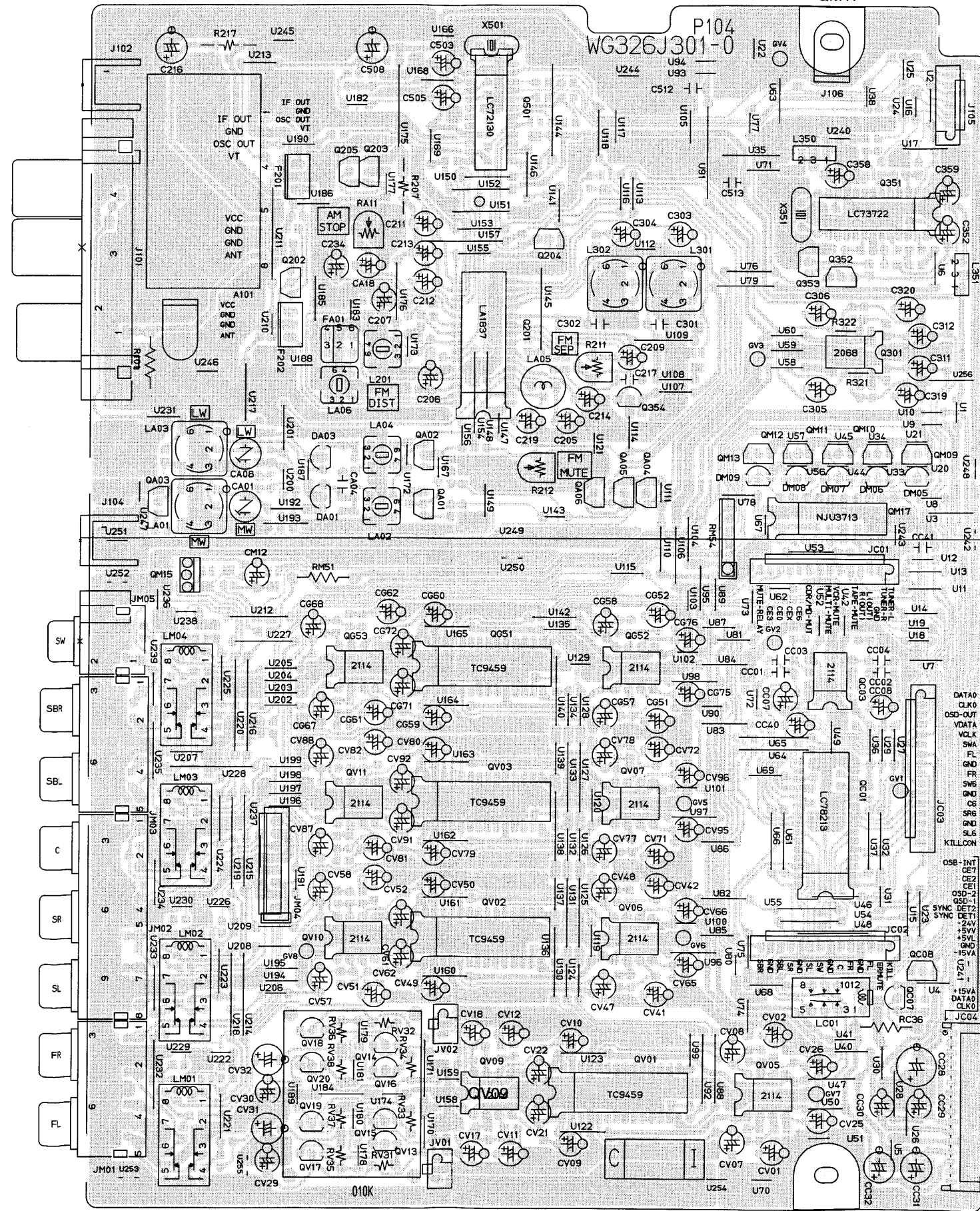
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Q204

Q354

QM13 - QM11 - QM09

QM17



QM15

QG53

QV11

QV07

QC03

QV10

QV02

QV06

QC01

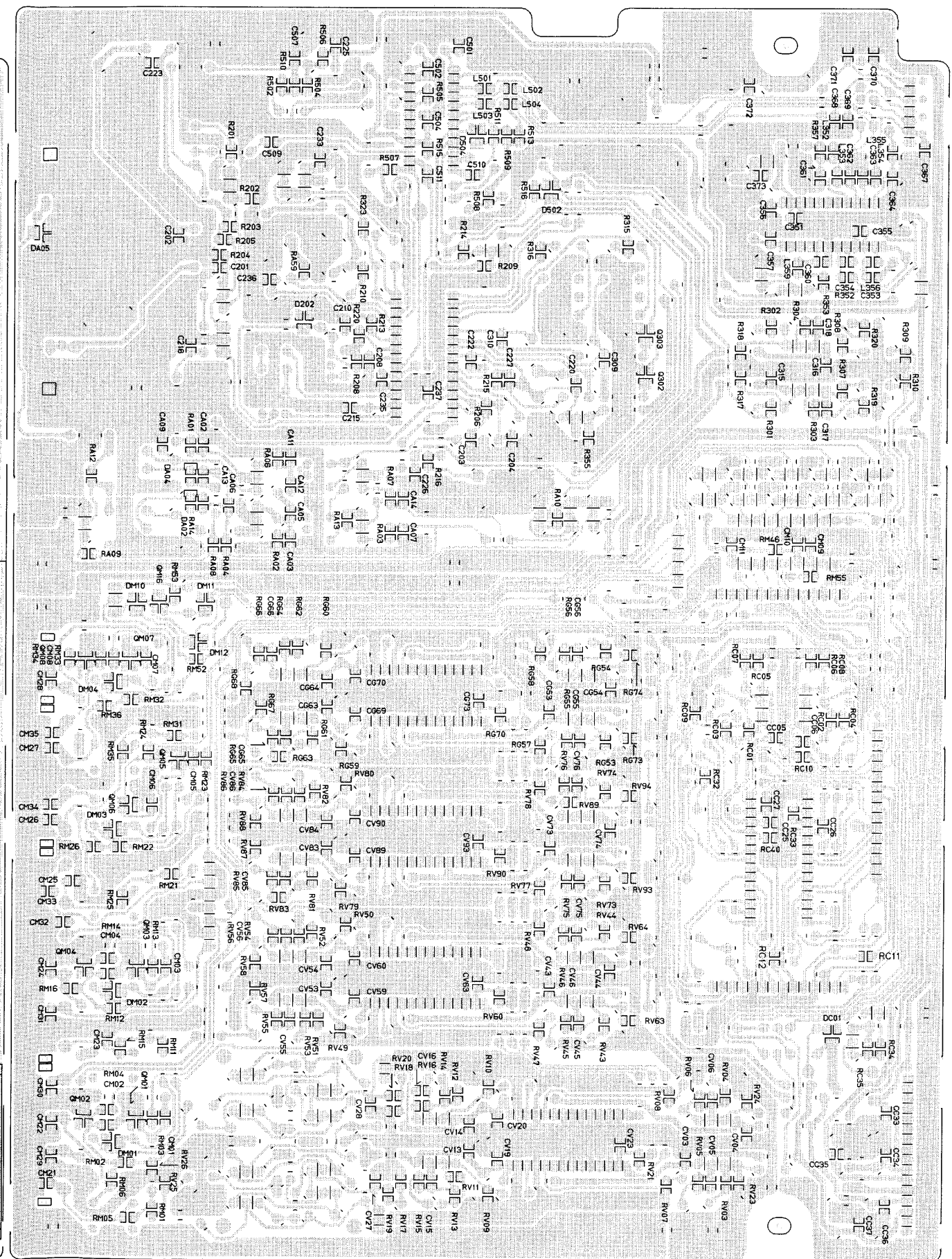
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QV01

QV05

QC07 QC08



P704

QT03 QT01
QT09 QT13
QT19 QT23

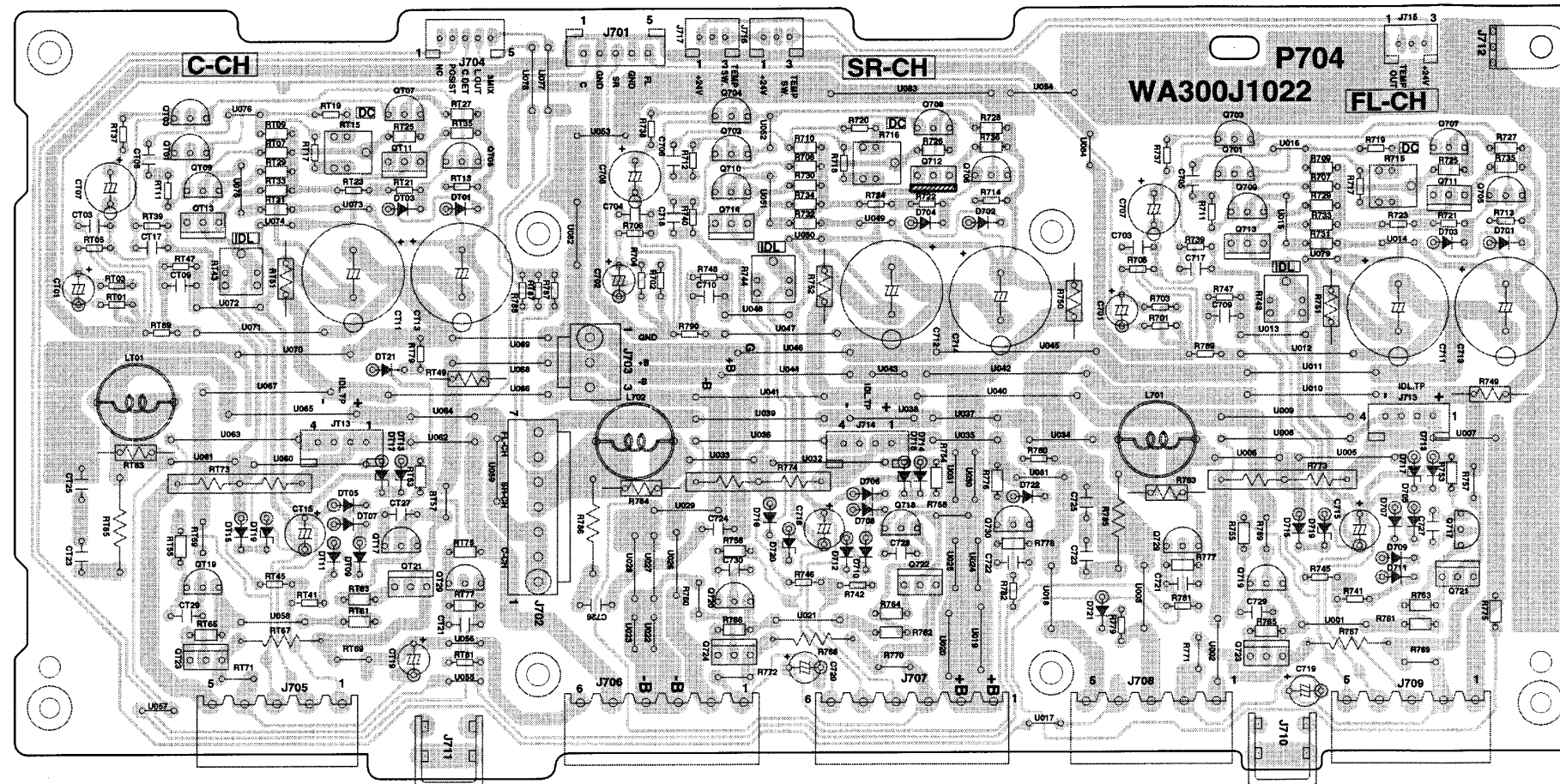
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QT11 QT05
QT17 QT21 QT29

Q704 Q702
Q710 Q714
Q720 Q724

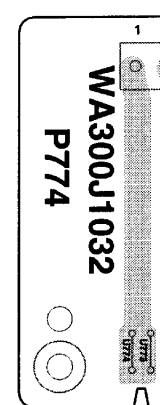
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Q712 Q706
Q718 Q722 Q730

Q703 Q701
Q709 Q713
Q728 Q719

Q707
Q711 Q705
Q717 Q721



P774



Q725

Q715

Q727

Q726

Q716

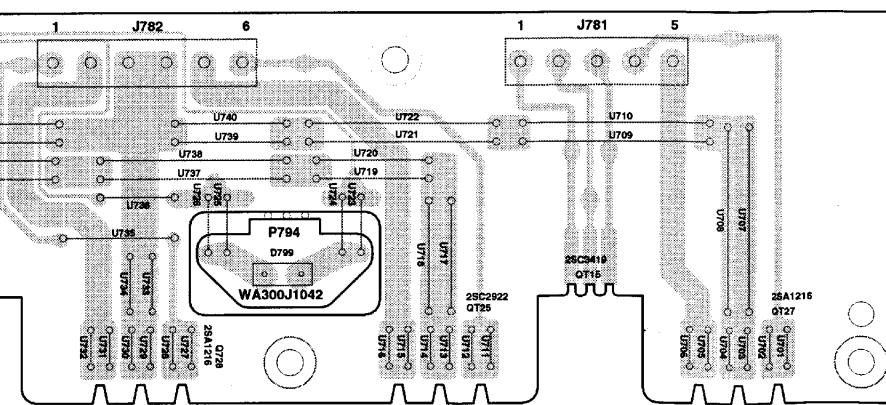
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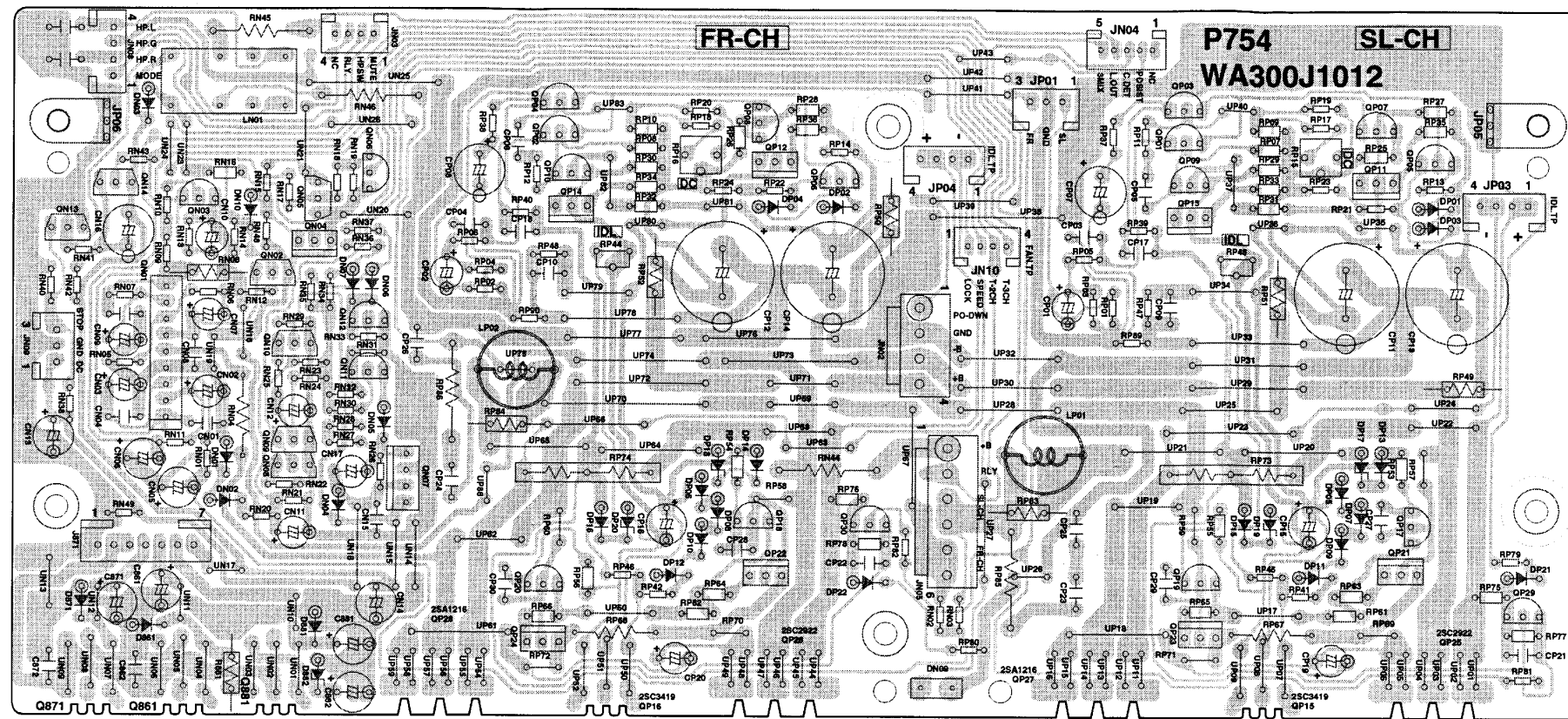
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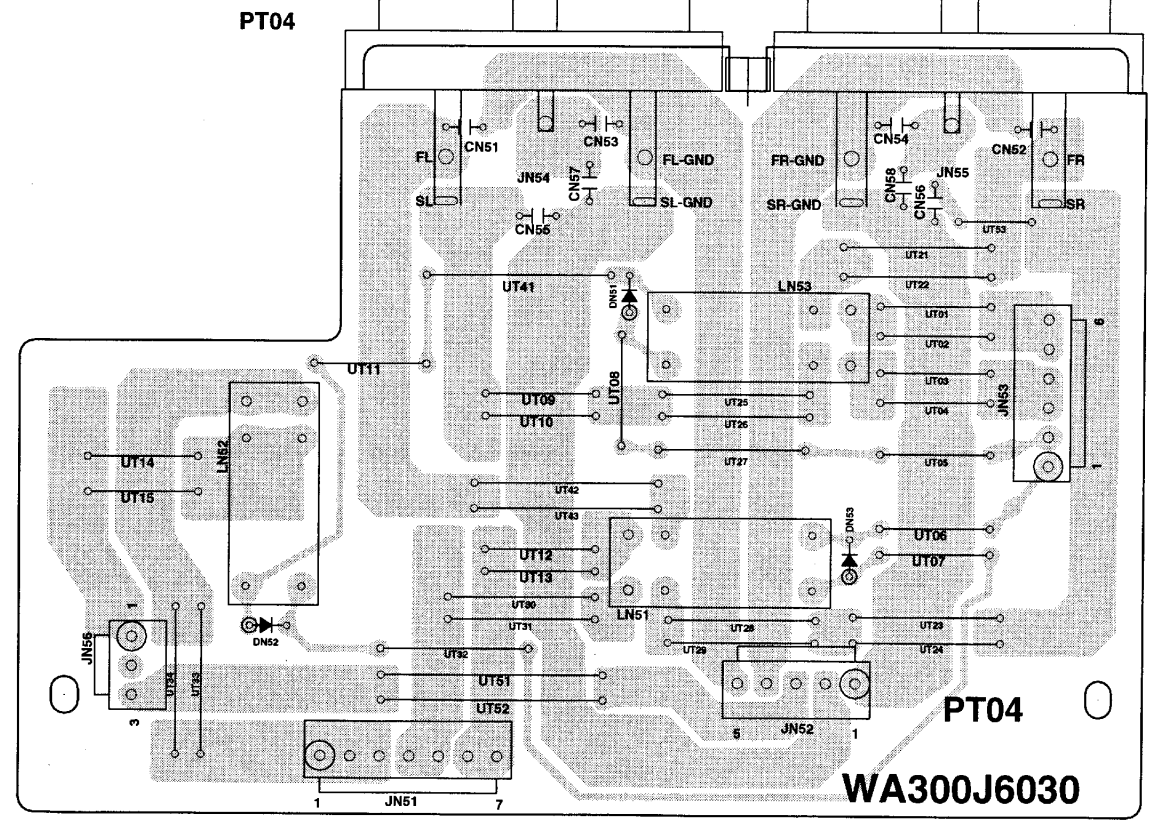
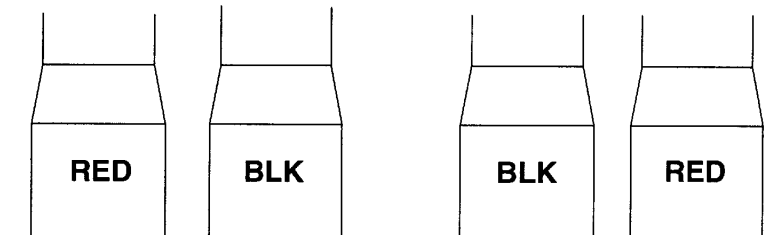
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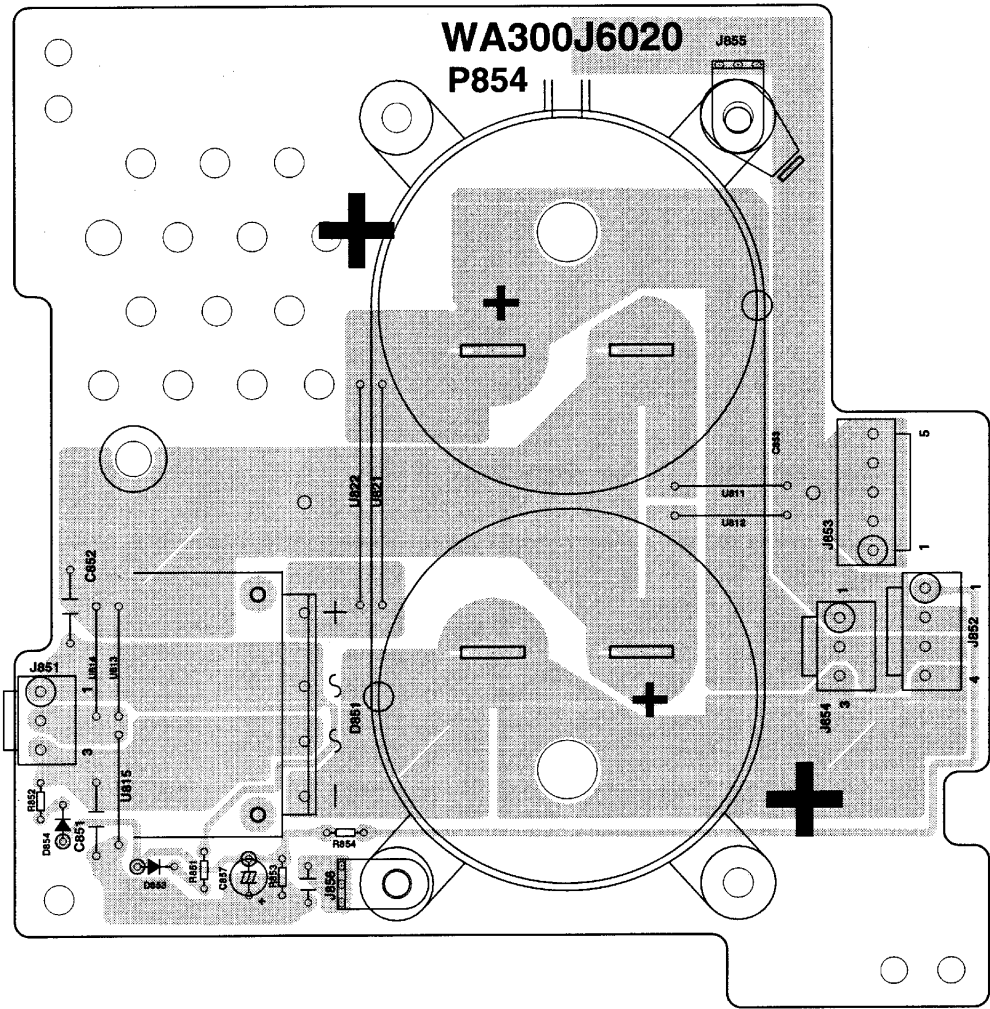
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 QN13 QN03 QN02 QN10 QN12 QN11 QP10 QP14 QP12 QP06 QP09 QP13 QP11 QP05



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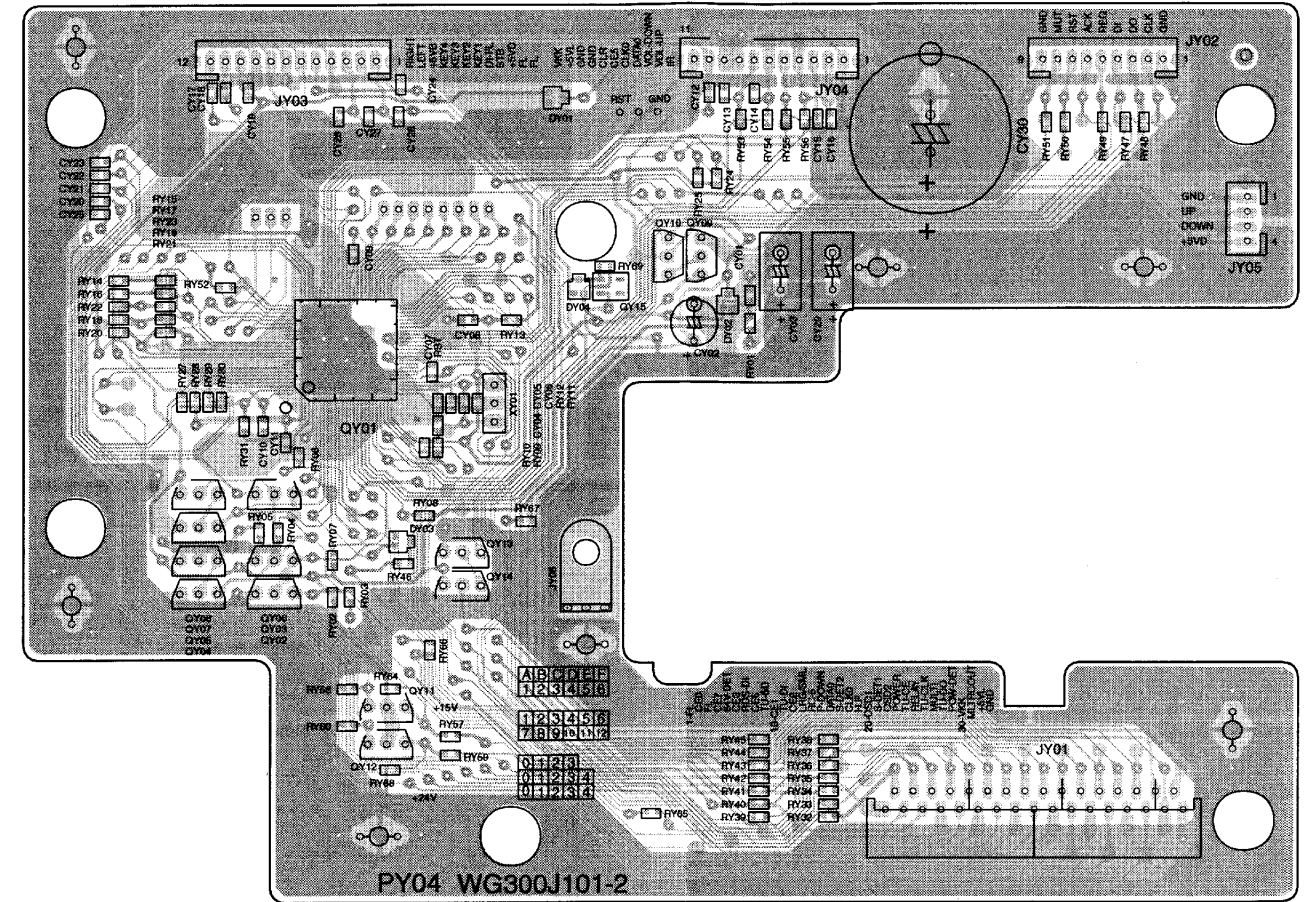


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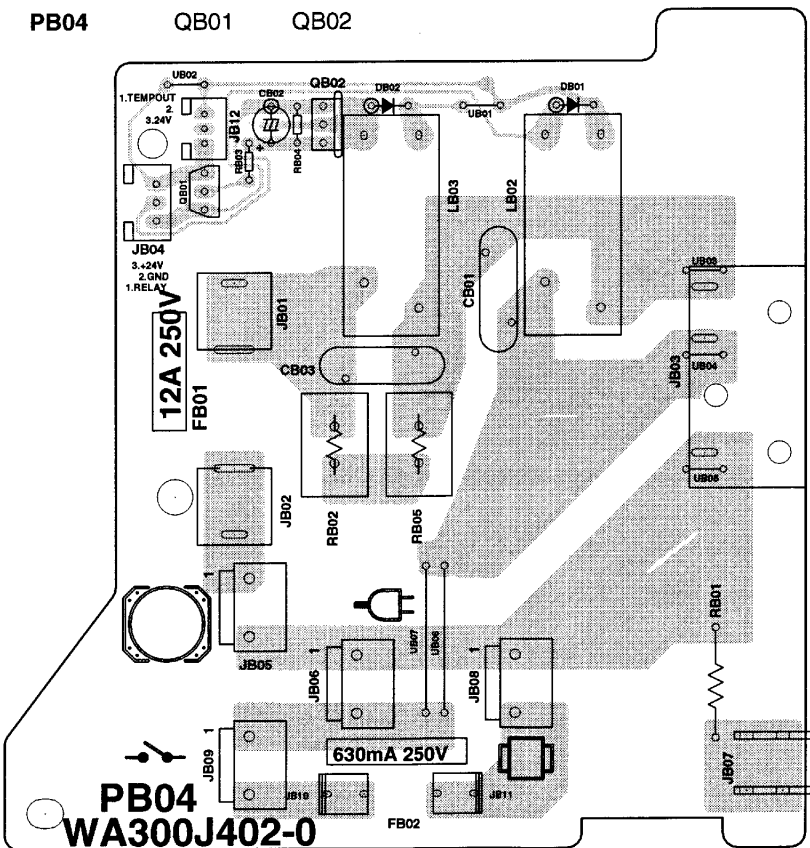
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QY02 - QY08 QY13 QY14
QY11 QY12



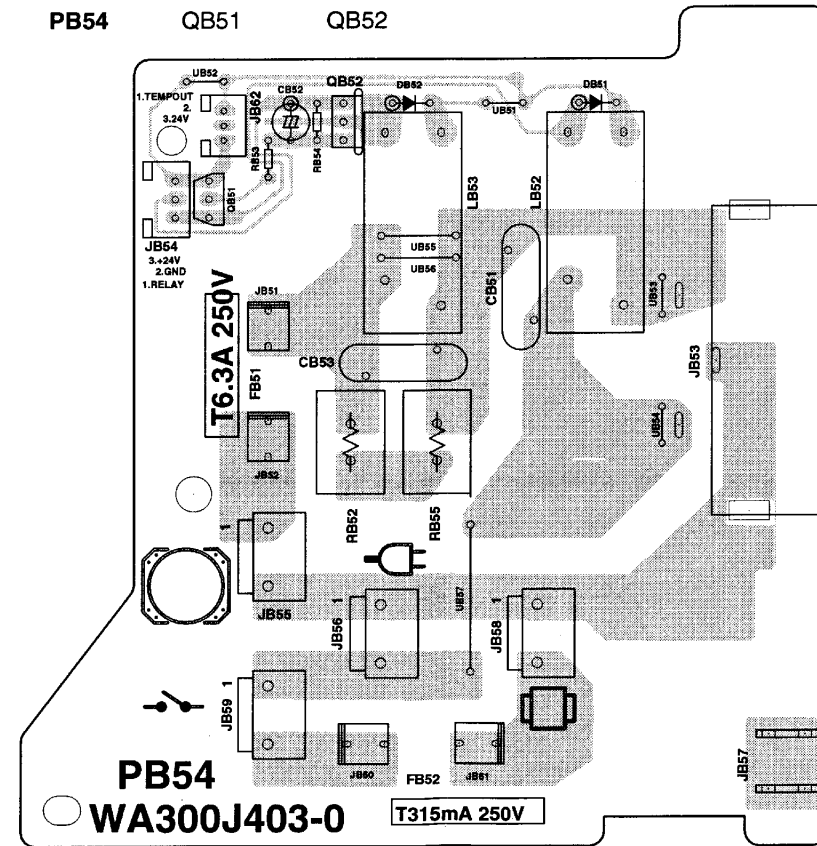
PB04

QB01 QB02

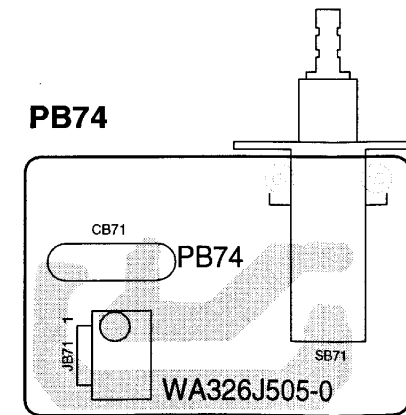


PB54

QB51 QB52

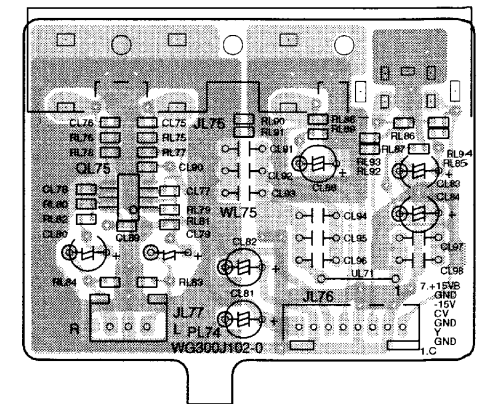


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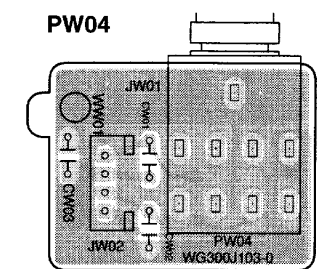


PL74

QL75



PW04



P604

QK05 QK06
QK03 QK04
QK01

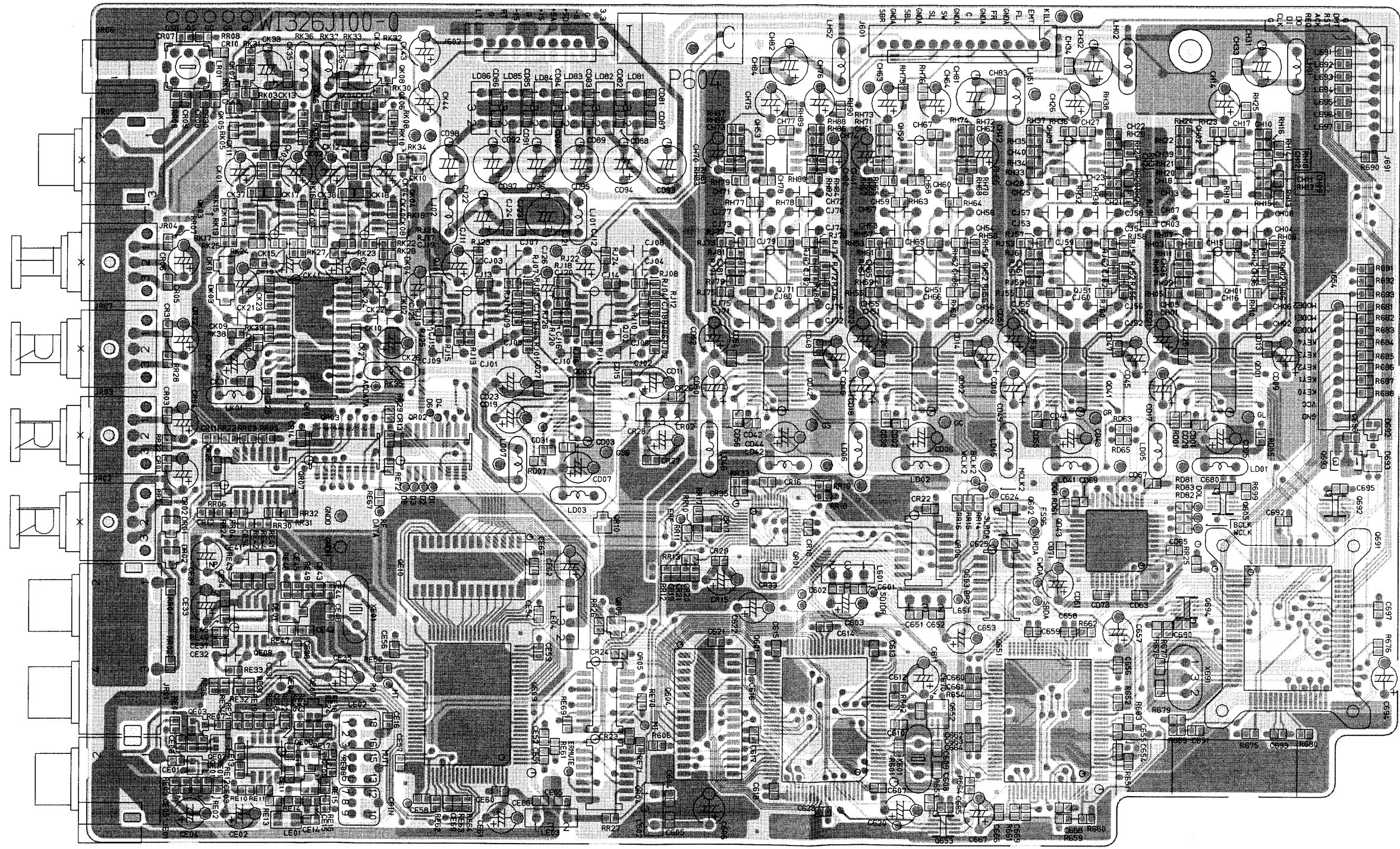
QJ01 QJ02
QD03

QH53 QJ71
QD42

QH52 QH51
QD02

QH03 QJ51
QD41

QH02 QH01
QD01



QR07 QR03
QE01 QE08 QE01
QE04 - QE07

QR02 QR10 QR09
QE10 QR05
QE09 QR04

Q604 QR01
Q601

QR06 Q603 Q602
Q652 Q653 Q651

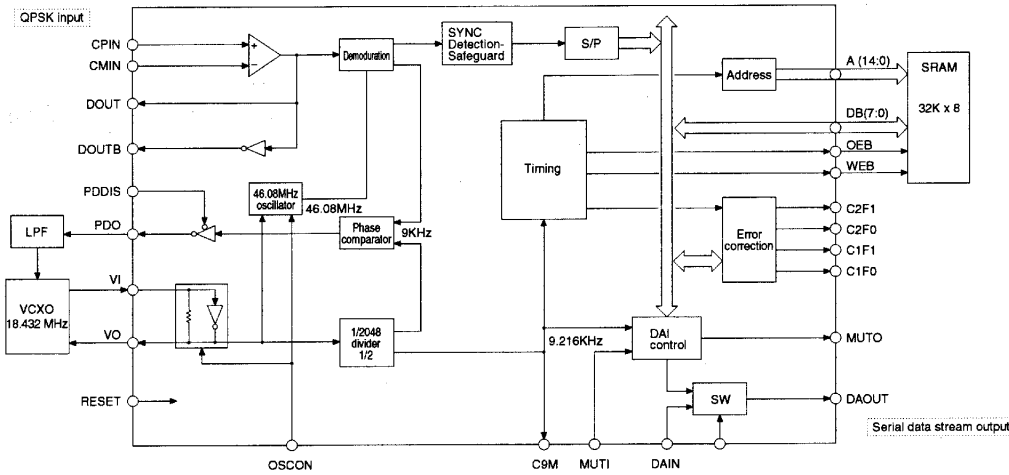
QD43

Q605 Q694

Q693 Q692
Q691

6. IC DATA

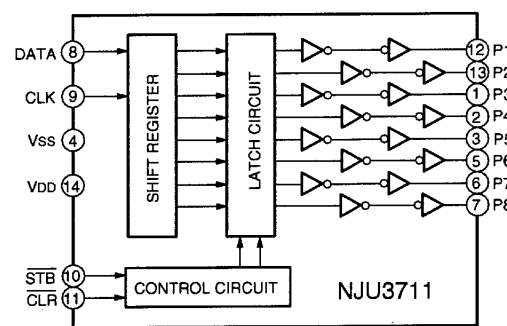
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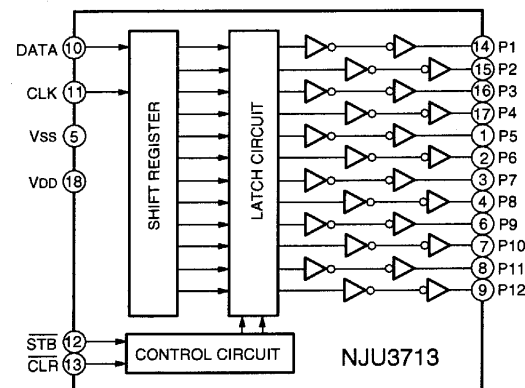
No.	Name	I/O	Function
1	GND	-	GND
2	VDD	-	+5V
3	RESET	I	System Reset At "L" reset
4	OSCON	I	Oscillator control At "H" during normal operation At "L" during standby
5	DATA	I	TEST
6	MCK	I	TEST
7	MLTB	I	TEST
8	IDST	I	TEST
9	IDCK	O	TEST
10	IDO	O	TEST
11	TM0	I	TEST
12	ECCK	O	TEST
13	DEN	O	TEST
14	DRY	O	TEST
15	MSYC	O	TEST
16	TM1	I	TEST
17	A0	O	RAM A0
18	A1	O	RAM A1
19	A2	O	RAM A2
20	A3	O	RAM A3
21	A4	O	RAM A4
22	A5	O	RAM A5
23	TM2	I	TEST
24	TM3	I	TEST
25	XOUT	O	TEST
26	XIN	I	TEST
27	XEXT	I	TEST
28	GND	-	GND
29	VDD	-	+5V
30	A6	O	RAM A6
31	A7	O	RAM A7
32	GND	-	GND
33	VDD	-	+5V
34	A12	O	RAM A12
35	A14	O	RAM A14
36	WEB	O	RAM WEB
37	A13	O	RAM A13
38	A8	O	RAM A8
39	A9	O	RAM A9
40	GND	-	GND
41	A11	O	RAM A11
42	OE	O	RAM OE
43	A10	O	RAM A10
44	DB7	B	RAM D7
45	DB6	B	RAM D6
46	DB5	B	RAM D5
47	DB4	B	RAM D4
48	DB3	B	RAM D3
49	DB2	B	RAM D2
50	DB1	B	RAM D1

No.	Name	I/O	Function
51	DB0	B	RAM D0
52	VDD	-	+5V
53	GND	-	GND
54	T1	I	TEST
55	VIN	I	VCXO input
56	VOUT	O	VCXO output
57	T2	I	TEST
58	T3	I	TEST
59	TLDB	I	TEST
60	TCK	I	TEST
61	TRP	O	TEST
62	TDO	O	TEST
63	PDO	O	Phase comparator output (3-state)
64	T4	I	TEST
65	PDDIS	I	Control input for PDO out At "L" Output ON
66	MUTO	O	Muting output. Mutes at "H". Sets to "H" when MUTI = H or the AC-3 period cannot be received.
67	T5	I	TEST
68	VLDY	O	TEST
69	DASYO	O	TEST
70	DAOUT	O	Digital OUT (serial data stream output)
71	DAIN	I	Digital external input : Sets to DAOOUT when DASEL is at "H"
72	DASEL	I	Selects digital OUT
73	T8	I	TEST
74	C2F1	O	N.C.
75	C2F0	O	N.C.
76	C1F1	O	N.C.
77	C1F0	O	Displays C1 correction error status. Outputs error count at C1.
78	MUTI	I	Muting input. Mutes at "H".
79	VDD	-	+5V
80	GND	-	GND
81	AVDD	I	+5V
82	CPIN	I	Analog converter inverted input
83	CMIN	I	Analog converter inverted input
84	AGND	-	GND
85	TM4	I	TEST
86	VDD	-	+5V
87	DIN	I	TEST
88	DOOUT	O	Analog converter inverted output
89	DOOUTB	O	Analog converter inverted reverse output
90	C9M	O	N.C.
91	GND	-	GND
92	WINGT	O	TEST
93	SYST0	O	TEST
94	SYST1	O	TEST
95	ADST0	O	TEST
96	ADST1	O	TEST
97	TM5	I	TEST
98	BUNRI	I	TEST
99	AGND	-	GND
100	AVDD	-	+5V

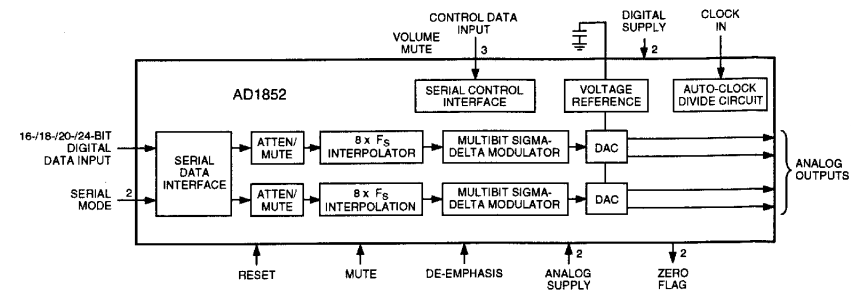
QU02:NJU3711



QM07:NJU3713D



QD01-QD03,QD41-QD43:AD1855

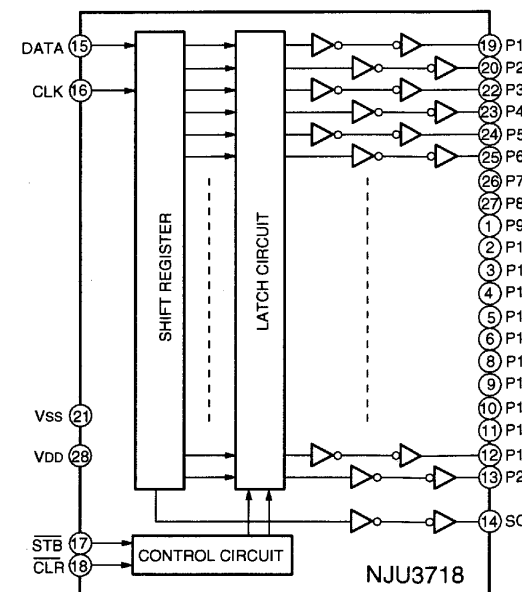


Pin	In/Out	Pin Name	Description
1	I	DGND	Digital Ground.
2	I	MCLK	Master Clock Input. Connect to an external clock source at either 256 F _s , 384 F _s , 512 F _s , 768 F _s , or 1024 F _s .
3	I	CLATCH	Latch Input for Control Data. This input is rising-edge sensitive.
4	I	CCLK	Control Clock Input for Control Data. Control input data must be valid on the rising edge of CCLK. CCLK may be continuous or gated.
5	I	CDATA	Serial Control Input. MSB first, containing 16 bits of unsigned data per channel. Used for specifying channel-specific attenuation and mute.
6	I	NC	No Connect.
7	I	192/48	Selects 48 kHz (LO) or 192 kHz Sample Frequency.
8	O	ZEROR	Right Channel Zero Flag Output. This pin goes HI when Right Channel has no signal input for more than 1024 LR Clock Cycles.
9	I	DEEMP	De-Emphasis. Digital de-emphasis is enabled when this input signal is HI. This is used to impose a 50µs/15µs response characteristic on the output audio spectrum at an assumed 44.1 kHz sample rate. Curves for 32 kHz and 48 kHz sample rates may be selected via SPI control register.
10	I	96/48	Selects 48 kHz (LO) or 96 kHz Sample Frequency.
11, 15	I	AGND	Analog Ground.
12	O	OUTR+	Right Channel Positive Line Level Analog Output.
13	O	OUTRB	Right Channel Negative Line Level Analog Output.
14	O	FILTR	Voltage Reference Filter Capacitor Connection. Bypass and decouple the voltage reference with parallel 10µF and 0.1µF capacitors to the AGND.
16	O	OUTLD	Left Channel Negative Line Level Analog Output.
17	O	OUTL+	Left Channel Positive Line Level Analog Output.
18	I	AVDD	Analog Power Supply. Connect to Analog 5 V Supply.
19	I	FILTB	Filter Capacitor Connection. Connect 10µF capacitor to AGND (Pin 15).
20	I	IDPM1	Input Serial Data Port Mode Control One. With IDPM0, defines 1 of 4 serial modes.
21	I	IDPM0	Input Serial Data Port Mode Control Zero. With IDPM1, defines 1 of 4 serial modes.
22	O	ZEROL	Left Channel Zero Flag Output. This pin goes HI when Left Channel has no signal input for more than 1024 LR Clock Cycles.
23	I	MUTE	Mute. Assert HI to mute both stereo analog outputs. Deassert LO for normal operation.
24	I	RESET	Reset. The AD1852 is reset on the rising edge of this signal. The serial control port registers are reset to the default values. Connect HI for normal operation.
25	I	LRCLK	Left/Right Clock Input for Input Data. Must run continuously.
26	I	BCLK	Bit Clock Input for Input Data. Need not run continuously, may be gated or used in a burst fashion.
27	I	SDATA	Serial Input. MSB first, containing two channels of 16, 18, 20, and 24 bits of two's complement data per channel.
28	I	DVDD	Digital Power Supply Connect to digital 5 V supply.

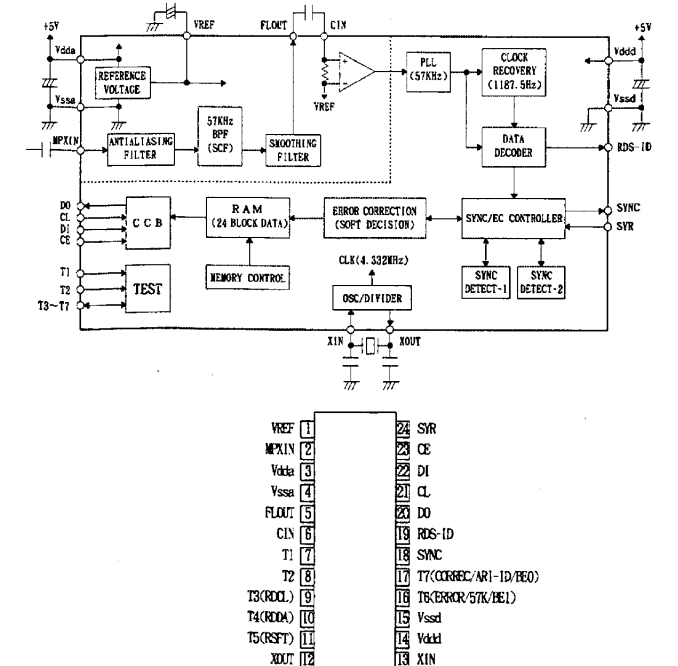
Table 1. Serial Data Input Mode

IDPM1 (Pin 20)	IDPM0 (Pin 21)	Serial Data Input Format
0	0	Right-Justified
0	1	I ² S-Compatible
1	0	Left-Justified
1	1	DSP

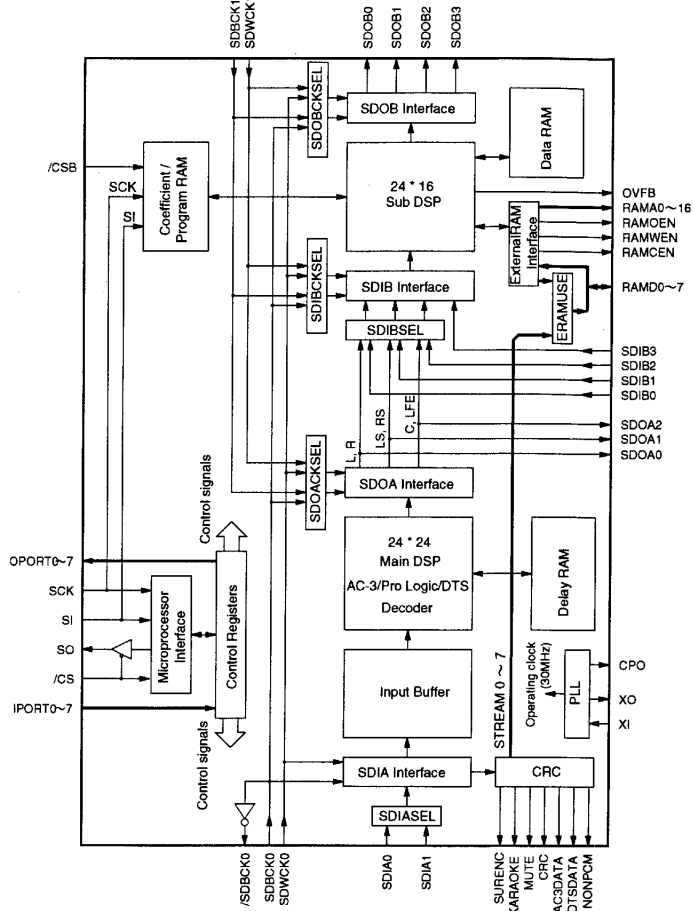
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Q351:LC72720

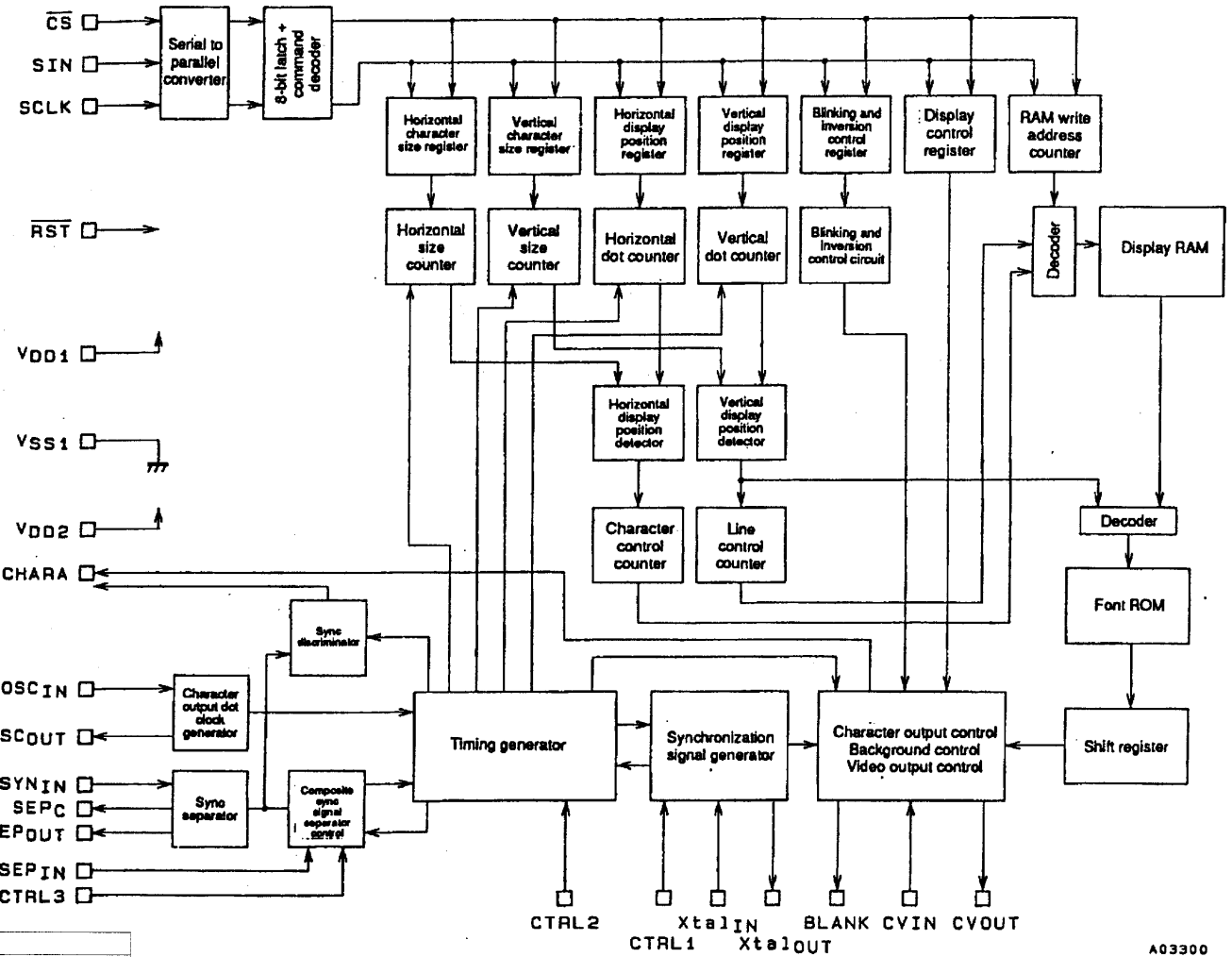


Q601:YSS912



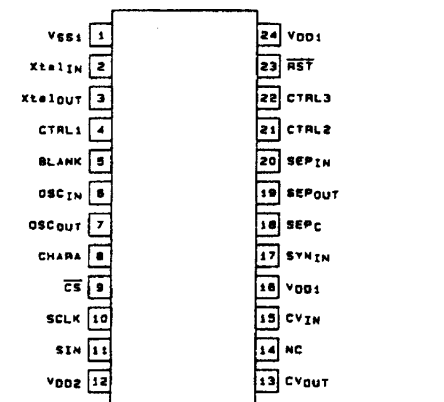
No.	NAME	I/O	FUNCTION
1	VDD1	-	+5V power supply (for I/Os)
2	RAMCEN	O	External SRAM Interface /CE
3	RAMA16	O	External SRAM Interface address 16
4	RAMA15	O	External SRAM Interface address 15
5	SDIB0	I+	PCM input 0 to Sub DSP
6	SDIB1	I+	PCM input 1 to Sub DSP
7	SDIB2	I+	PCM input 2 to Sub DSP
8	XI	I	Crystal oscillator connection or input external clock (12.288 MHz)
9	XO	O	Crystal oscillator connection
10	VSS	-	Ground
11	AVDD	-	+3.3V power supply (for PLL circuit)
12	SDIB3	I+	PCM input 3 to Sub DSP
13	TEST	O	Test terminal (to be open in normal use)
14	TEST	O	Test terminal (to be open in normal use)
15	OVFB	O	Detection of overflow at Sub DSP
16	DTSDATA	O	DTS data detection (Refer to "Status Register".)
17	AC3DATA	O	AC-3 data detection (Refer to "Status Register".)
18	SDOB3	O	PCM output from Sub DSP
19	CPO	A	Output terminal for PLL, to be connected to ground through the external analog filter circuit. (Refer to "External Circuit for PLL".)
20	AVSS	-	Ground (for PLL circuit)
21	VDD2	-	+3.3V power supply (for core logic)
22	SDOA2	O	PCM output from Main DSP (C, LFE)
23	SDOA1	O	PCM output from Main DSP (LS, RS)
24	SDOA0	O	PCM output from Main DSP (L, R)
25	RAMA14	O	External SRAM Interface address 14
26	RAMA13	O	External SRAM Interface address 13
27	RAMA12	O	External SRAM Interface address 12
28	RAMA11	O	External SRAM Interface address 11
29	RAMA10	O	External SRAM Interface address 10
30	VSS	-	Ground
31	VDD1	-	+5V power supply (for I/Os)
32	OPORT0	O	Output port for general purpose. (Refer to "OPORT Register")
33	OPORT1	O	Output port for general purpose. (Refer to "OPORT Register")
34	OPORT2	O	Output port for general purpose. (Refer to "OPORT Register")
35	OPORT3	O	Output port for general purpose. (Refer to "OPORT Register")
36	OPORT4	O	Output port for general purpose. (Refer to "OPORT Register")
37	OPORT5	O	Output port for general purpose. (Refer to "OPORT Register")
38	OPORT6	O	Output port for general purpose. (Refer to "OPORT Register")
39	OPORT7	O	Output port for general purpose. (Refer to "OPORT Register")
40	VSS	-	Ground
41	VDD2	-	+3.3V power supply (for core logic)
42	RAMA9	O	External SRAM interface address 9
43	RAMA8	O	External SRAM interface address 8
44	RAMA7	O	External SRAM interface address 7
45	SDOB2	O	PCM output from Sub DSP
46	SDOB1	O	PCM output from Sub DSP
47	SDOB0	O	PCM output from Sub DSP
48	SDBCK1	I+	Bit clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
49	SDWCK1	I+	Word clock input for SDOA, SDIB, SDOB. (Refer to "SDOA, SDIB, SDOB Register")
50	VSS	-	Ground

QL09,QZ11:LC74781



No.	NAME	I/O	FUNCTION
51	VDD2	-	+3.3V power supply (for core logic)
52	NONPCM	O	Detection of non PCM data. (Refer to "Status Register")
53	CRC	O	Detection of AC-3 CRC error. (Refer to "Status Register")
54	MUTE	O	Detection of auto-mute. (Refer to "Status Register")
55	KARAOKE	O	Detection of AC-3 karaoke data. (Refer to "Status Register")
56	SURENC	O	Detection of AC-3 2/0 mode Dolby surround encoded input (Refer to "Status Register")
57	/SDBCK0	O	Inverted SDBCK0 clock output (refer to "Block diagram")
58	RAMA6	O	External SRAM Interface address 6
59	RAMA5	O	External SRAM Interface address 5
60	VSS	-	Ground
61	RAMA4	O	External SRAM Interface address 4
62	/IC	Is	Initial clear
63	TEST	O	Test terminal (to be open in normal use)
64	RAMA3	O	External SRAM Interface address 3
65	/CSB	Is+	Sub DSP Chip select
66	/CS	Is	Microprocessor interface Chip select
67	SO	Ot	Microprocessor interface Serial data output
68	SI	Is	Microprocessor interface/Sub DSP Serial data input
69	SCK	Is	Microprocessor interface/Sub DSP clock input
70	RAMA2	O	External SRAM Interface address 2
71	VDD1	-	+5V power supply (for I/Os)
72	RAMD0	I+/O	External SRAM Interface data (STREAM 0 output when External SRAM is not in use)
73	RAMD1	I+/O	External SRAM Interface data (STREAM 1 output when External SRAM is not in use)
74	RAMD2	I+/O	External SRAM Interface data (STREAM 2 output when External SRAM is not in use)
75	RAMD3	I+/O	External SRAM Interface data (STREAM 3 output when External SRAM is not in use)
76	RAMD4	I+/O	External SRAM Interface data (STREAM 4 output when External SRAM is not in use)
77	RAMD5	I+/O	External SRAM Interface data (STREAM 5 output when External SRAM is not in use)
78	RAMD6	I+/O	External SRAM Interface data (STREAM 6 output when External SRAM is not in use)
79	RAMD7	I+/O	External SRAM Interface data (STREAM 7 output when External SRAM is not in use)
80	VSS	-	Ground
81	VDD2	-	+3.3V power supply (for core logic)
82	SDWCK0	I	Word clock input for SDIA, SDOA, SDIB, SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
83	SDBCK0	I	Bit clock input for SDIA SDOA SDIB SDOB (Refer to "SDIA, SDOA, SDIB, SDOB Register")
84	SDIA0	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
85	SDIA1	I	AC-3/DTS bitstream (or PCM) data input for Main DSP (Refer to "SDIA Register")
86	RAMA1	O	External SRAM Interface address 1
87	RAMA0	O	External SRAM Interface address 0
88	RAMWEN	O	External SRAM Interface /WE
89	RAMOEN	O	External SRAM Interface /OE
90	VSS	-	Ground
91	VDD2	-	+3.3V power supply (for core logic)
92	IPORT7	I+	Input port for general purpose (Refer to "IPORT Register")
93	IPORT6	I+	Input port for general purpose (Refer to "IPORT Register")
94	IPORT5	I+	Input port for general purpose (Refer to "IPORT Register")
95	IPORT4	I+	Input port for general purpose (Refer to "IPORT Register")
96	IPORT3	I+	Input port for general purpose (Refer to "IPORT Register")
97	IPORT2	I+	Input port for general purpose (Refer to "IPORT Register")
98	IPORT1	I+	Input port for general purpose (Refer to "IPORT Register")
99	IPORT0	I+	Input port for general purpose (Refer to "IPORT Register")
100	VSS	-	Ground

Note) Is: Schmidt trigger input terminal
 I+: Input terminal with a pull-up resistor
 O: Digital output terminal
 Ot: Tri-state digital output terminal
 A: Analog terminal



No.	Pin Name	I/O	Function
1	VREFL	O	Lch Reference Voltage Pin, 3.75V Normally connected to GNDL with a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor
2	GNDL	-	Lch Reference Ground Pin, 0V
3	VCOML	O	Lch Common Voltage Pin, 2.5V
4	AINL+	I	Lch Analog positive input Pin
5	AINL-	I	Lch Analog negative input Pin
6	ZCAL	I	Zero Calibration Control Pin This pin controls the calibration reference signal. "L":VCOML and VCOMR "H":Analog Input Pins(AINL±,AINR±)
7	VD	-	Digital Power Supply Pin, 3.3V
8	DGND	-	Digital Ground Pin, 0V
9	CAL	O	Calibration Active Signal Pin "H" means the offset calibration cycle is in progress. Offset calibration starts when RST goes "H". CAL goes "L" after 8704 LRCK cycles.
10	RST	I	Reset Pin When "L", Digital section is powered-down. Upon returning "H", an offset calibration cycle is started. An offset calibration cycle should always be initiated after power-up.
11	SMODE2	I	Serial Interface Mode Select Pin
12	SMODE1	I	MSB first, 2's complement. SMODE2 SMODE1 MODE LRCK L L Slave mode : MSB justified : H/L L H Master mode : Similar to I2S : H/L H L Slave mode : I2S : L/H H H Master mode : I2S : L/H
13	LRCK	I/O	Left/Right Channel Select Clock Pin LRCK goes "H" at SMODE2="L" and "L" at SMODE2="H" during reset when SMODE1 "H".

14	SCLK	I/O	Serial Data Clock Pin Data is clocked out on the falling edge of SCLK. Slave mode: SCLK requires more than 48fs clock. Master mode: SCLK outputs a 128fs clock. SCLK stays "L" during reset.
15	SDATA	O	Serial Data Output Pin MSB first, 2's complement. SDATA stays "L" during reset.
16	FSYNC	I/O	Frame Synchronization Signal Pin Slave mode: When "H", the data bits are clocked out on SDATA. Master mode: FSYNC outputs 2fs clock. FSYNC stays "L" during reset.
17	CLK	I	Master Clock Input Pin CMODE="H":384fs CMODE="L":256fs
18	CMODE	I	Master Clock Select Pin "L": CLK=256fs (12.288MHz @fs=48kHz) "H": CLK=384fs (18.432MHz @fs=48kHz)
19	HPFE	I	High Pass Filter Enable Pin "L": Disable "H": Enable
20	TEST	I	Test Pin Should be connected DGND.
21	BGND	-	Substrate Ground Pin, 0V
22	AGND	-	Analog Ground Pin, 0V
23	VA	-	Analog Supply Pin, 5V
24	AINR-	I	Rch Analog negative input Pin
25	AINR+	I	Rch Analog positive input Pin
26	VCOMR	O	Rch Common Voltage Pin, 2.5V
27	GNDR	-	Rch Reference Ground Pin, 0V
28	VREFR	O	Rch Reference Voltage Pin, 3.75V Normally connected to GNDR with a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor

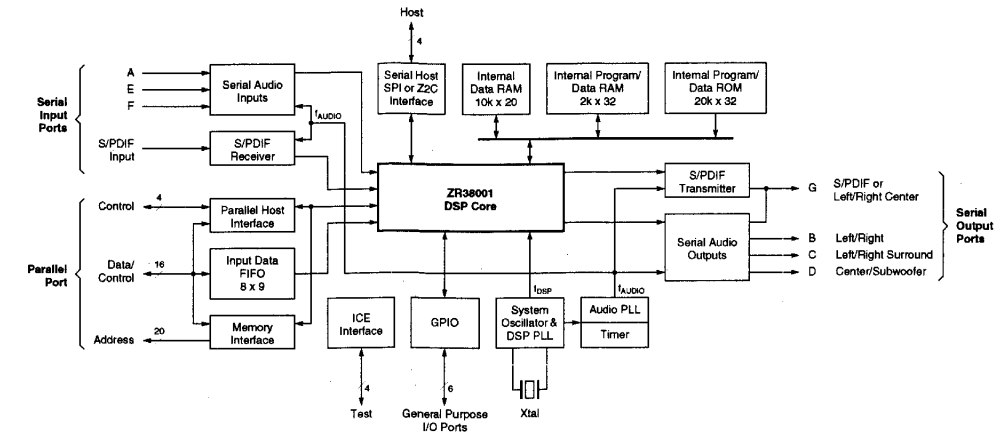
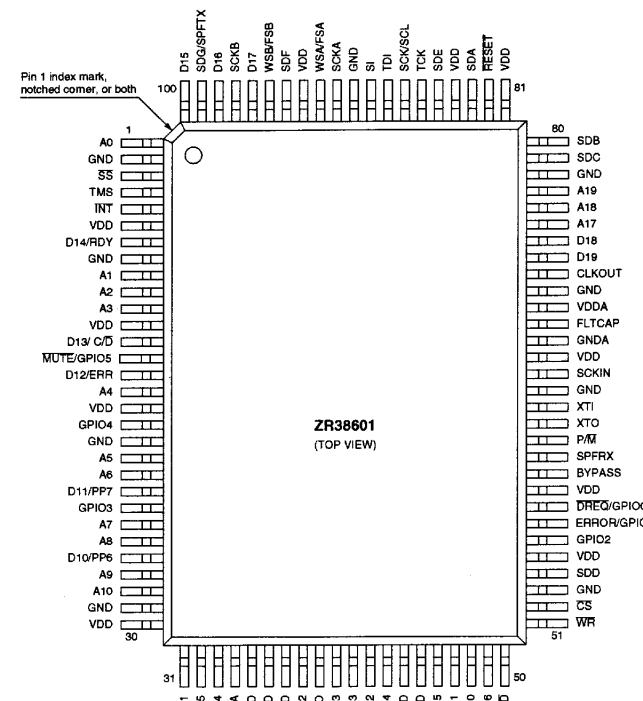
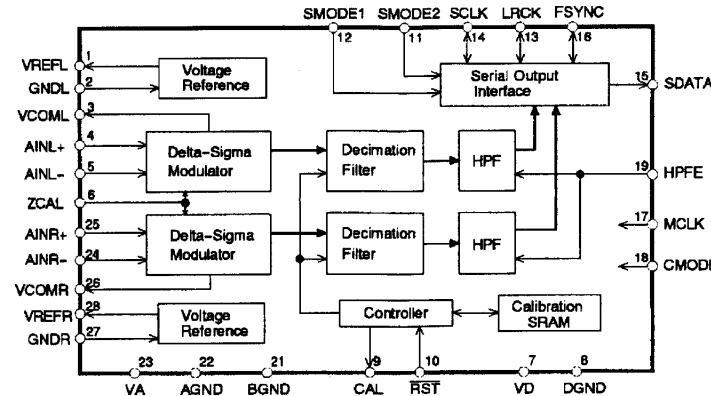


Figure 5. ZR38601 Simplified Block Diagram

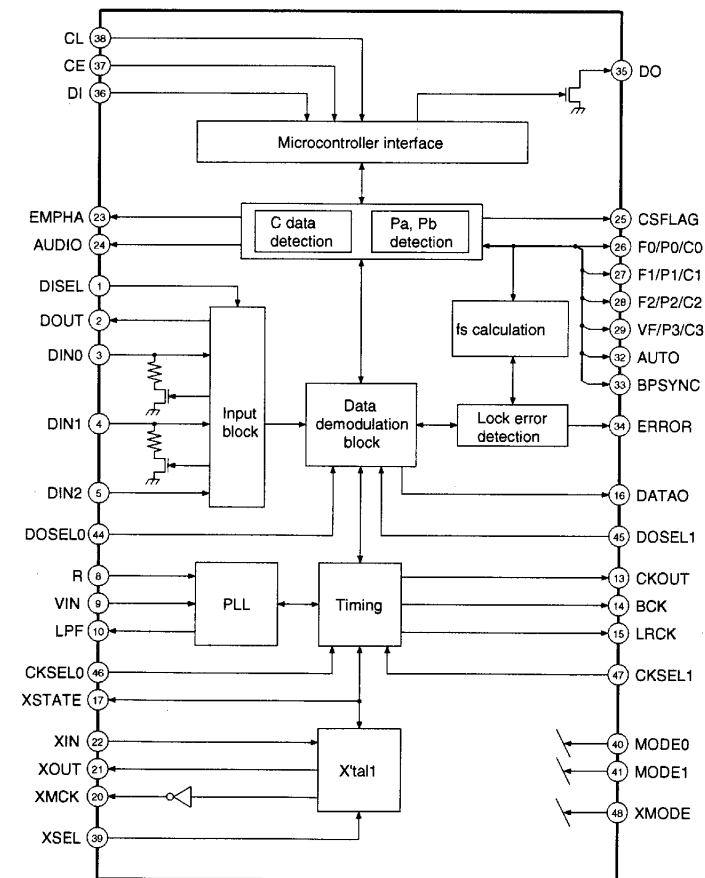
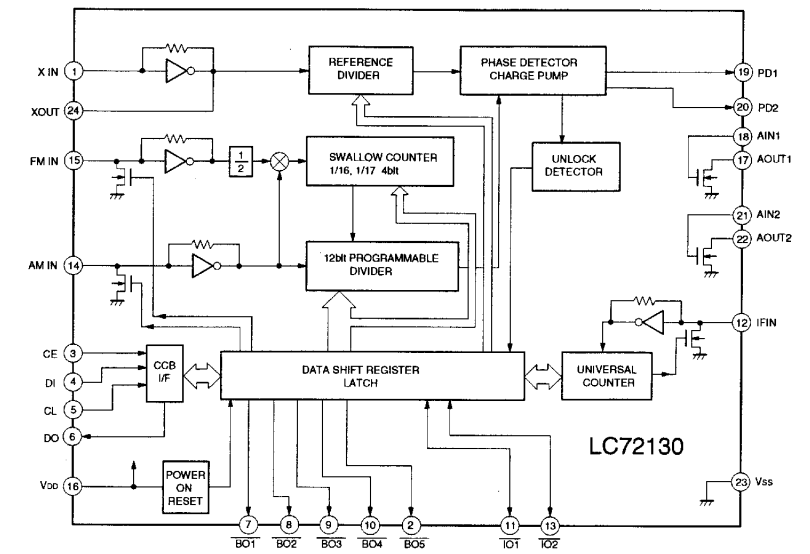
ZR38601 Signal Description Summary

Name	Number	Type ⁽¹⁾	Description
Parallel Port (40)			
A[19:0]	20	O	Address bus of parallel port
D[19:15]	5	I/O	Data bus of parallel port when selected for external memory (P/M = 0)
D14/RDY	1	I/O or O	Data bus (P/M = 0) or Ready output signal of parallel port when selected for parallel I/O (P/M = 1)
D13/C/D	1	I/O or I	Data bus (P/M = 0) or Command/Data select input of parallel port when selected for parallel I/O (P/M = 1)
D12/ERR	1	I/O or I	Data bus (P/M = 0) or Error input signal of parallel port when selected for parallel I/O (P/M = 1)
D[11:4]/PP[7:0]	8	I/O	Data bus of parallel port when selected for external memory (P/M = 0) or Parallel Port I/O (P/M = 1)
CS	1	I/O	Chip Select output for external memory or Chip Select input for parallel I/O
RD	1	I/O	Read enable output for external memory or Read enable input for parallel I/O
WR	1	I/O	Write enable output for external memory or Write enable input for parallel I/O
P/M	1	I	Parallel I/O or Memory select for parallel port. Determined at time of RESET.
Serial Ports (13)			
SPFRX	1	I	S/PDIF Receiver input port
SDA, SDE, SDF	3	I	Serial Data inputs. Ports A, E and F.
WSA/FSA	1	I/O	Word Select or Frame Synchronization for input ports. An output when a master, an input when a slave.
SCKA	1	I/O	Serial Clock for input ports. An output when a master, an input when a slave.
SDB	1	O	Serial left and right Data output. Port B. Also, at RESET defines SPI/Z2C for host serial interface.
SDC	1	O	Serial left and right surround Data output. Port C. Also, at RESET defines Z2CADR[0] of Z2C address.
SDD	1	O	Serial center and sub-woofer Data output. Port D. Also, at RESET defines Z2CADR[1] of Z2C address.
SDG/SPFTX	1	O	Serial Data output. Port G or S/PDIF Transmitter port. Also, at RESET defines the SCKP value.
WSB/FSB	1	I/O	Word Select or Frame Synchronization for output ports. An output when a master, an input when a slave.
SCKB	1	I/O	Serial Clock for output ports. An output when a master, an input when a slave.
SCKIN	1	I/O	Serial master Clock output or master clock input for output ports
General Purpose Ports (6)			
MUTE/GPIO5	1	I or I/O	Mute input signal or can be programmed as General Purpose Input/Output 5
GPIO[4:2]	3	I/O	Can be programmed as General Purpose Input/Output 4, 3 and 2
ERROR/GPIO1	1	O or I/O	Error output signal or can be programmed as General Purpose Input/Output 1
DREQ/GPIO0	1	O or I/O	Data Request output signal or can be programmed as General Purpose Input/Output 0
Serial Host Interface (4)			
SI	1	I	Host Serial interface data Input. Also, at RESET defines Z2CADR[5] of Z2C address.
SO/SDA	1	I/O/T	SPI host Serial interface data Output or Serial Data for Z2C
SCK/SCL	1	I	SPI host Serial interface Clock input or Slave Clock input for Z2C
SS	1	I	SPI host serial interface Slave Select input. Also, at RESET defines Z2CADR[4] of Z2C address.
ICE Interface (4)			
TDI	1	I	ICE Test interface Data Input
TDO	1	O/T	ICE Test interface Data Output
TCK	1	I	ICE Test interface Clock input
TMS	1	I	ICE Test interface Mode Select
System Interface (7)			
INT	1	I	External Interrupt request input
RESET	1	I	Reset input to start operation in known state
XTI	1	I	External system clock Input or connection to external crystal, at frequency f _{XTI}
XTO	1	O	Output connection to external crystal
CLKOUT	1	O	Clock Output from the ZR38601 at frequency f _{DSP/2}
BYPASS	1	I	Bypass internal DSP core PLL to use external system clock input on XTI
FLT CAP	1	I	External Filter Capacitor connection for PLL. A value of 47nF is recommended.
Power (26)			
VDD	12	Power	+3.3 volt power supply
VDDA	1	Power	+3.3 volt power supply, Analog for PLL
GND	12	Power	Power supply Ground
GNDA	1	Power	Power supply Ground, Analog for PLL
Total (100)			

1. O = Output, I = Input, T = Tri-state in normal use. May be different at Reset time as shown in Table 23 on page 42.

pin	port name	I/O	use	Name	Act.	Note
1	P55/AN5	I		MODE_SW0	-	Link Host or _Stand alone
2	P56/AN6	I		MODE_SW1	-	_HDCD available
3	P57/AN7	I		MODE_SW2	-	_RF available
4	NMI	I	-	-	-	to GND
5	P60/TXD0	I/O	O	DO0		Data out to DSP1&2
6	P61/RXD0	I/O	I	DI0		Data In from DSP1&2
7	P62/SCLK0	I/O	O	SCLK0		Clock Out to DSP1&2
8	P63/TXD1	I/O	O	DO1		Data out to DIR
9	P64/RXD1	I/O	I	DI1		Data In from DIR
10	P65/SCLK1	I/O	O	SCLK1		Clock Out to DIR
11	P70/WAIT	I/O	O	T0	L	to check LED
12	P71	I/O	O	T1	L	to check LED
13	Vss	I	Vss	GND	-	GND
14	P72	I/O	O	T2	L	to check LED
15	P73	I/O	O	T3	L	to check LED
16	P74	I/O	O	T4	L	to check LED
17	P75	I/O	O	X2GAIN	L	HDCD PE
18	P76	I/O	I	HDCD	H	detect HDCD
19	P77	I/O	O	K_TEST	L	to check LED
20	CLK	O	-	n.c.	-	pull μ P
21	AM8/16	I	-	n.c.	-	pull μ P
22	X1	I	X1	20MHz	-	

pin	port name	I/O	use	Name	Act.	Note
41	P10/AD8	I/O	O	_RSTRF	L	Reset RF demodulate
42	P11/AD9	I/O	O	D_A	-	Digital / Analog select
43	P12/AD10	I/O	O	DEMP	H	Emphasis to S-Direct
44	P13/AD11	I/O	O	_UMUTE	L	Hard Mute for Tr
45	P14/AD12	I/O	O	FS96	H	96kHz fs
46	P15/AD13	I/O	O	BYPASS 1	H	Bypass DSP1
47	P16/AD14	I/O	O	_BYPASS 2	L	Bypass DSP2
48	P17/AD15	I/O	O	_CS_DSP1	L	_CS_DSP1(main DSP)
49	P20/A0	I/O	O	_CSB_DSP1	L	_CS_DSP1(sub DSP)
50	P21/A1	I/O	O	_SS_DSP2	L	_SS_DSP2(Zoran)
51	P22/A2	I/O	O	_CE_DIR	L	_CE for DIR
52	P23/A3	I/O	O	_RSTDSP2	L	Reset DSP2
53	P24/A4	I/O	O	_RSTDA1	L	Reset DAC for L/R
54	P25/A5	I/O	O	_RSTDA2	L	Reset DAC except L/R
55	P26/A6	I/O	O	_IC	L	Reset DSP1
56	P27/A7	I/O	O	_XMODE	L	_Reset DIR
57	Vcc	I	Vcc	+5VD	-	Vcc
58	P30/RD	O	O	_RSTAD	L	Reset & Cal for ADC
59	P31/WR	O	O	_IFACK	L	Ack to main CPU
60	P32/SCK	I/O	I	IFSCK	-	Clock from main CPU
61	P33/SO	I/O	O	IFDO	-	Data to main CPU
62	P34/SI	I/O	I	IFDI	-	Data from main CPU
63	P35/INT0	I/O	INT	OVFB	H	Over Level (sub DSP)
64	P40/INT1	I/O	INT	XSTATE	H	MCLK status(L:/unstable)
65	P41/TO3	I/O	I	CAL	H	ADC Calibration
66	P42/INT4	I/O	INT	_RFNODET	L	_No RF signal
67	P43/INT5	I/O	INT	ERF	H	DIR Error
68	P44/TO4	I/O	O	-	-	-
69	P45/INT6	I/O	INT	_IFREQ	L	Request from main CPU
70	P46/INT7	I/O	I	CSFLAG	H	Ch. Status(fall edge DIR)
71	P47/TO6	I/O	O	-	-	-
72	VrefH	I	VrefH	+5VD	-	ref High voltage for int. AD
73	VrefL	I	VrefL	GND	-	ref Low voltage for int. AD
74	Avss	I	Avss	GND	-	GND for Int. AD
75	Avcc	I	Avcc	+5VD	-	Vcc for Int. AD
76	P50/AN0	I	AN	KEY_INPUT0	-	Optional 8 key input 0
77	P51/AN1	I	AN	KEY_INPUT1	-	Optional 8 key input 1
78	P52/AN2	I	AN	KEY_INPUT2	-	Optional 8 key input 2
79	P53/AN3	I	AN	KEY_INPUT3	-	Optional 8 key input 3
80	P54/AN4	I	AN	KEY_INPUT4	-	Optional 8 key input 4



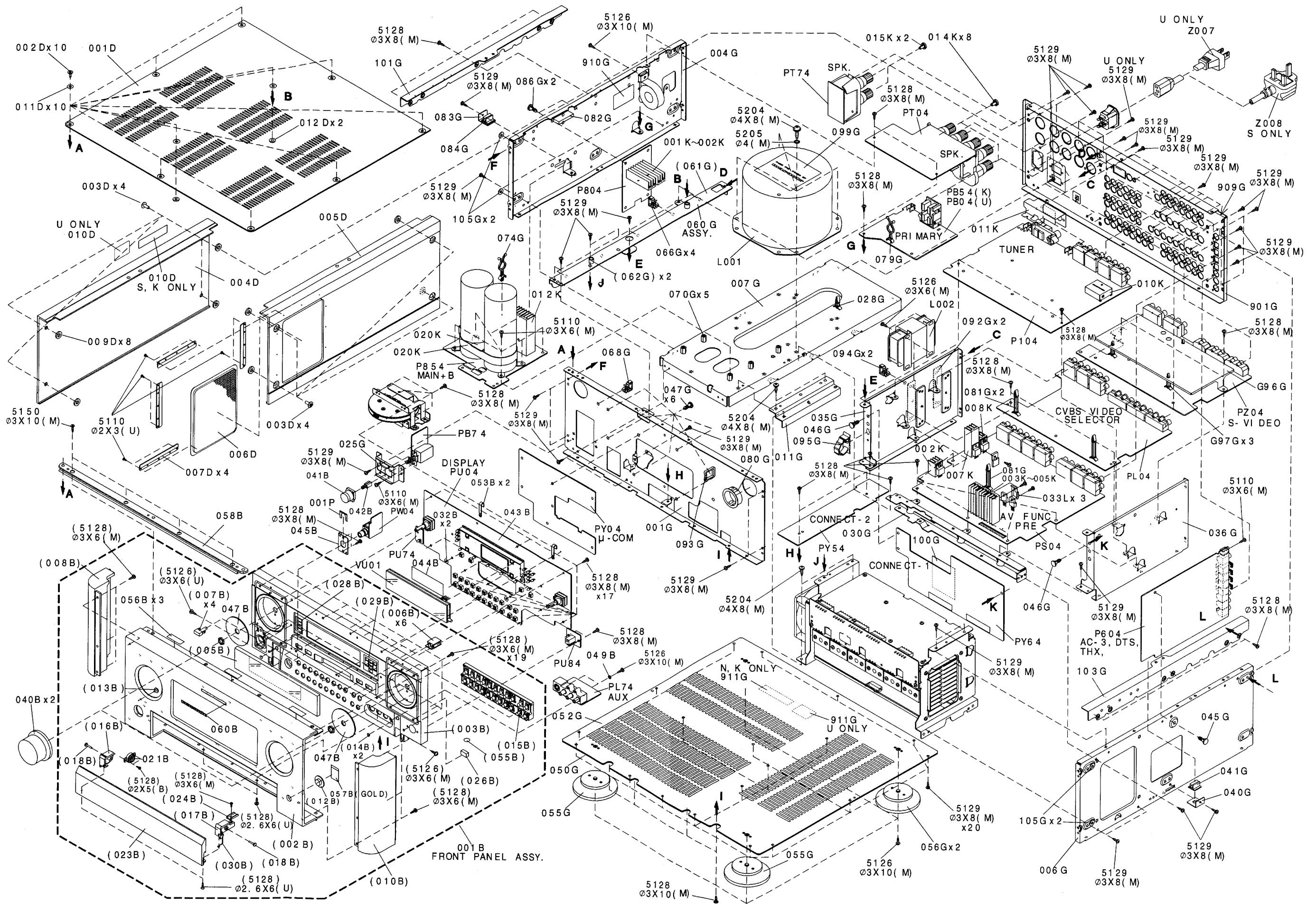
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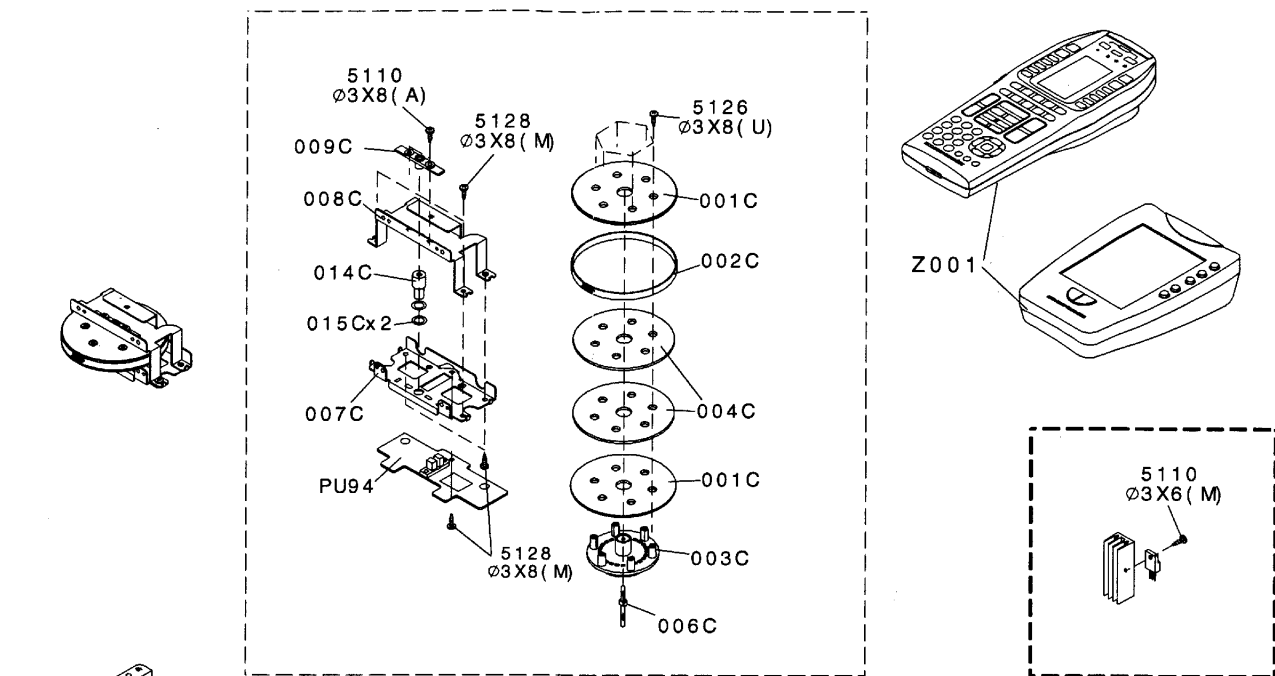
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1	VREFL	I	-	-	-	A/D VREFL.
2	AVSS	I	-	-	-	A/D VSS
3	AVCC	I	-	-	-	A/D VCC
4	NMI	I	NMI	-	-	Pull Up
5	P70/TI0	I/O	O	_POWER OFF	L	
6	P71/TO1	I/O	O	KILL IR	H	
7	P72/TO2	I/O	O	RC-5 OUT	H	
8	P73/TO3	I/O	O	SPEAKER OFF	H	SPK RELAY
9	P80/INT4	I/O	I	RC-5 IN	H	Both Edge
10	P81/INT5	I/O	I	SYNC0	H	Rising Edge
11	P82/TO4	I/O	I	_HEAD PHONE	L	
12	P83/TO5	I/O	I	-	-	Pull Up
13	P84/INT6	I/O	I	_SURR. ACK	L	Both Edge
14	P85/INT7	I/O	I	SYNC1	H	Rising Edge
15	P86/TO6	I/O	I	MULTI RC-5 IN	L	
16	P87/INT0	I/O	I	_POWER DOWN	L	
17	P90/TXD0	I/O	TXD	DO0	-	I/F to SURR. µP
18	P91/RXD0	I/O	RXD	DI0	-	I/F to SURR. µP
19	P92/SCLK0	I/O	CLK	CLK0	-	I/F to SURR. µP
20	P93/TXD1	I/O	O	DO1	-	I/F to ICs
21	P94/RXD1	I/O	O	-	-	
22	P95/SCLK1	I/O	O	CLK1	-	I/F to ICs
23	AM8/_16	I	-	-	-	Pull Up
24	CLK	O	-	-	-	Pull Up
25	VCC	I	-	-	-	Pull Up
26	VSS	I	-	-	-	to VSS
27	X1	I	-	-	-	20MHz
28	X2	O	-	-	-	20MHz
29	EA	I	-	-	-	Pull Up
30	RESET	I	-	-	-	
31	P96/XT1	I/O	I	-	-	to VSS
32	P97/XT2	I/O	I	-	-	to VSS
33	TEST1	I	-	-	-	to TEST2
34	TEST2	I	-	-	-	to TEST1
35	PA0	I/O	O	OSD ON0	H	
36	PA1	I/O	O	OSD ON1	H	
37	PA2	I/O	O	_CLR LED	L	NJU3718 CLR
38	PA3	I/O	O	MULTI RC-5 OUT	H	
39	PA4	I/O	O	_CE8 (Volume 8ch)	L	
40	PA5	I/O	O	SMUTE	H	

no	port name	I/O	USE	Sig. Name	act.	Description
41	PA6	I/O	O	_RST SURR	L	
42	PA7/SCOUT	I/O	O	_REQ SURR	L	I/F to SURR. µP
43	ALE	O	-	-	-	Pull Up
44	VCC	I	-	-	-	to VCC
45	P00	I/O	O	TU_CE(TUNER)	H	
46	P01	I/O	O	CLK(TUNER)	-	
47	P02	I/O	O	DO(TUNER)	-	
48	P03	I/O	I	DI(TUNER)	-	
49	P04	I/O	I	SD(TUNER)	L	
50	P05	I/O	I	DI(RDS)	-	
51	P06	I/O	O	_KILL CON	L	
52	P07	I/O	O	-	-	
53	P10	I/O	O	-CLKFL	-	
54	P11	I/O	O	-DATAFL	-	
55	P12	I/O	O	-	-	
56	P13	I/O	O	-	-	
57	P14	I/O	O	-	-	
58	P15	I/O	O	-	-	
59	P16	I/O	O	-	-	
60	P17	I/O	O	-	-	
61	WDTOUT	O	-	-	-	N.C
62	VSS	I	-	-	-	to VSS
63	VCC	I	-	-	-	to VCC
64	P20	I/O	I	FUNC. ENC. A	-	
65	P21	I/O	I	FUNC. ENC. B	-	
66	P22	I/O	I	VOL. ENC. A	-	
67	P23	I/O	I	VOL. ENC. B	-	
68	P24	I/O	I	GYRO A	-	
69	P25	I/O	I	GYRO B	-	
70	P26	I/O	I	-	-	to VSS
71	P27	I/O	I	-	-	to VSS
72	P30	I/O	O	CE0(AUDIO)	H	
73	P31	I/O	O	_CE7(VIDEO)	L	
74	P32	I/O	O	CE3(Multi Vol.)	H	
75	P33	I/O	O	_CE6(MUTE)	L	
76	P34	I/O	O	_CE5(LED)	L	
77	P35	I/O	O	_CE4(FL)	L	
78	P36	I/O	O	_CE1(OSD C)	L	
79	P37	I/O	O	_CE2(OSD S)	L	
80	P40	I/O	O	(RESERVED)	-	

no	port name	I/O	USE	Sig. Name	act.	Description
81	P41	I/O	O	(RESERVED)	-	
82	P42	I/O	O	(RESERVED)	-	
83	P60/	I/O	I	(RESERVED)	-	to VSS
84	P61/	I/O	I	(RESERVED)	-	to VSS
85	P62/	I/O	I	(RESERVED)	-	to VSS
86	P63/	I/O	I	SWITCH0	-	
87	P64/	I/O	I	SWITCH1	-	
88	P65/	I/O	I	SWITCH2	-	
89	P66/	I/O	I	SWITCH3	-	
90	P67/	I/O	I	SWITCH4	-	
91	VSS	I	-	-	-	to VSS
92	P50/AN0	I	AN	-	-	pull down
93	P51/AN1	I	AN	POWER DET.	-	see below
94	P52/AN2	I	AN	ABNORMAL	-	see below
95	P53/AN3	I	AN	KEY IN0	-	
96	P54/AN4	I	AN	KEY IN1	-	
97	P55/AN5	I	AN	KEY IN2	-	
98	P56/AN6	I	AN	KEY IN3	-	
99	P57/AN7	I	AN	KEY IN4	-	
100	VREFH	I	-	-	-	A/D VREFH

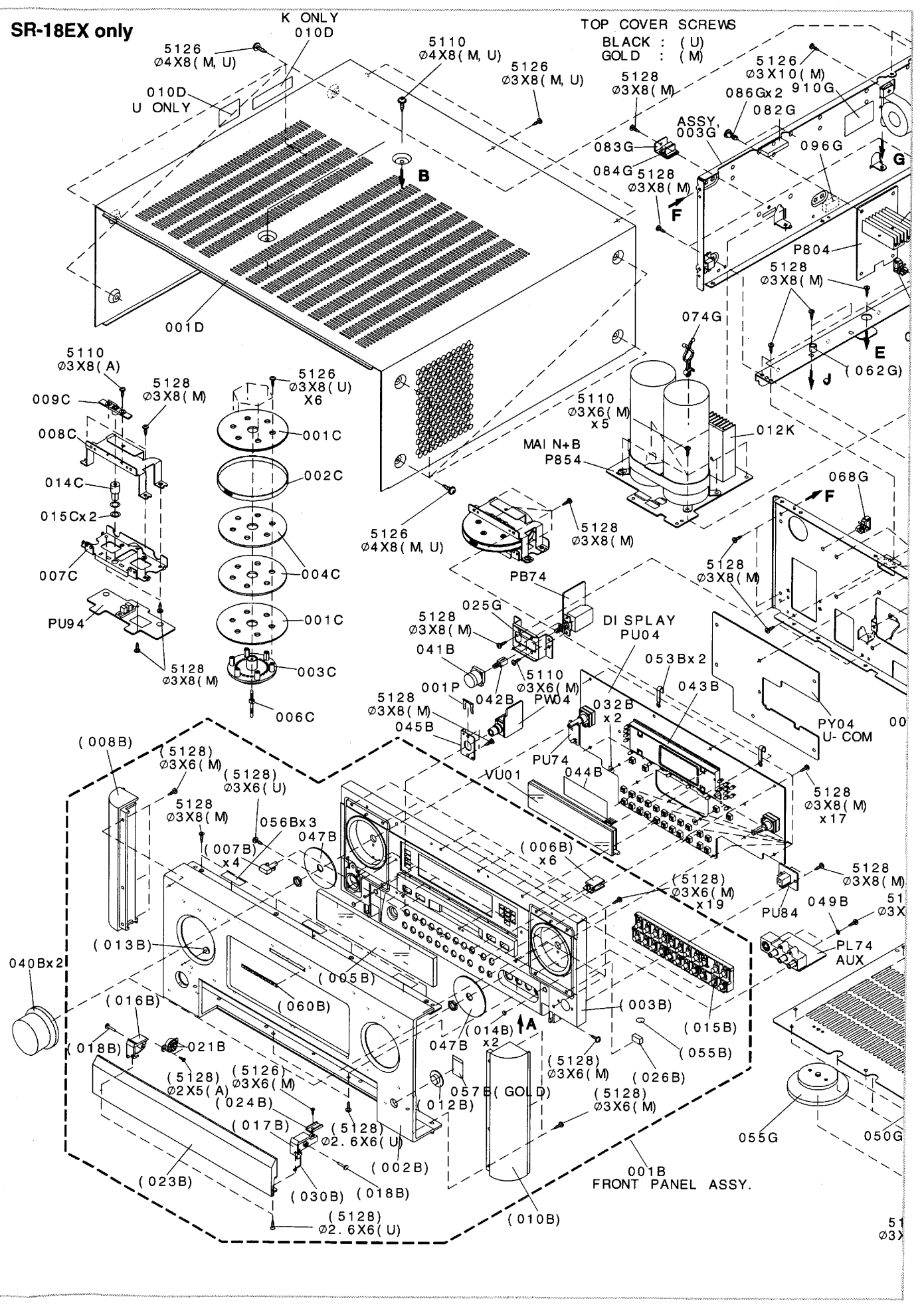
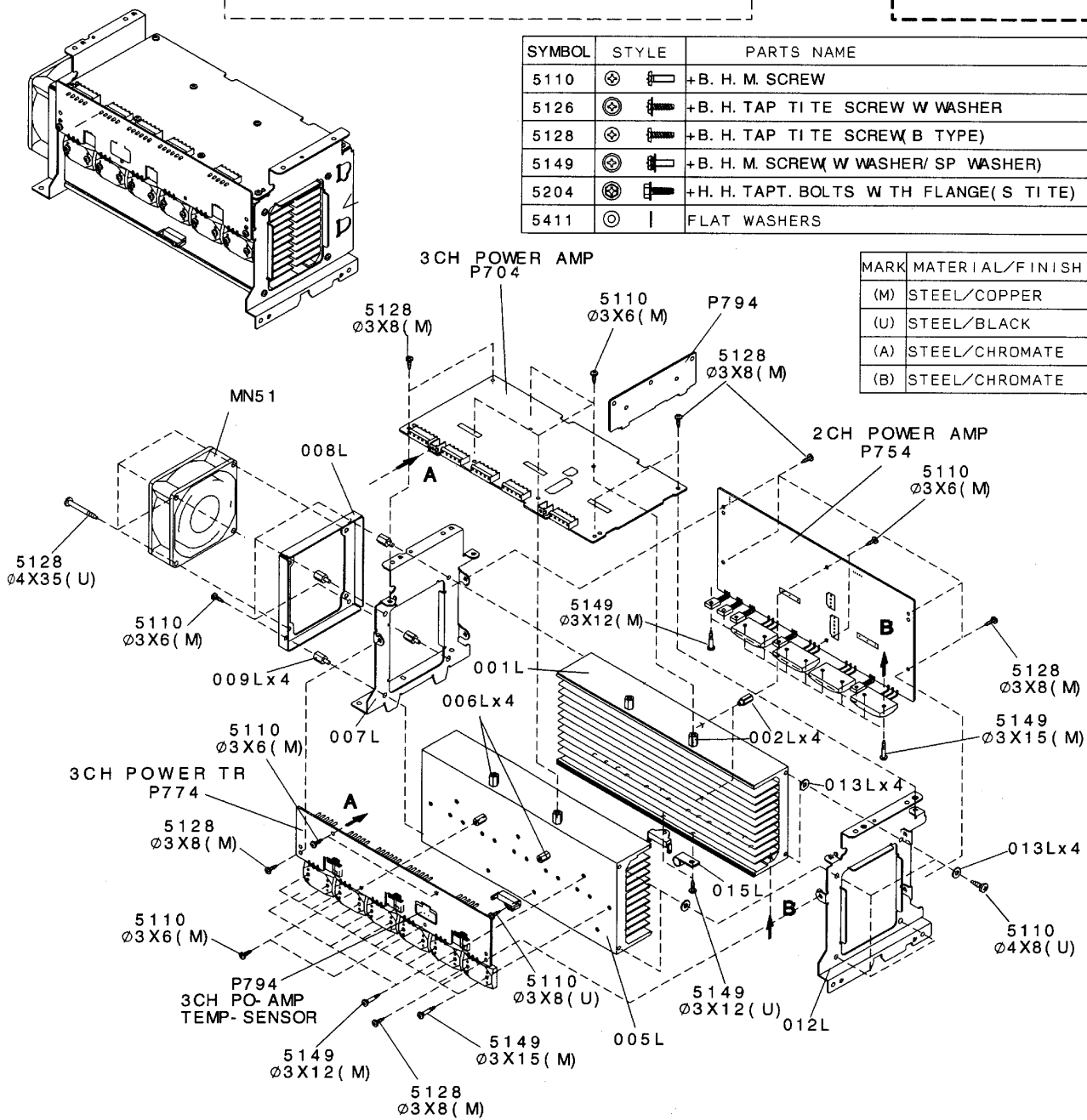
7. EXPLODED VIEW AND PARTS LIST





SYMBOL	STYLE	PARTS NAME
5110	⊗	+B. H. M. SCREW
5126	⊗	+B. H. TAP TITE SCREW W WASHER
5128	⊗	+B. H. TAP TITE SCREW (B TYPE)
5149	⊗	+B. H. M. SCREW (W WASHER/ SP WASHER)
5204	⊗	+H. H. TAPT. BOLTS W TH FLANGE (S TITE)
5411	⊙	FLAT WASHERS

MARK	MATERIAL/FINISH
(M)	STEEL/COPPER
(U)	STEEL/BLACK
(A)	STEEL/CHROMATE
(B)	STEEL/CHROMATE



8. SERVICE PROGRAM

REMARK

If these service programs are set, All user preset memories will be cleared.

1. FACTORY mode (Tracking point memory)

This **FACTORY mode** can be use for measurement of the tuner circuit.

When the product is POWER ON, press both [**MEMO**] and [**DISPLAY OFF**] buttons simultaneously over 3 seconds.

FLD shows "**FACTORY**" for 3 seconds. Press [**PRESET**] button, FLD shows "**PRESET SEL**".

The tuning frequencies are memorized as follows.

Band	VERSION	P1	P2	P3	P4
FM AUTO [MHz]	U, K, N, S	90.0	98.0	106.0	87.5
	F	78.0	83.0	88.0	76.0

Band	SCAN STEP	P5	P6	P7	P8	P9	P10	P11	P12
AM [kHz]	10 kHz(U)	600	1000	1400	520				
	9kHz(F, K, S)	603	999	1404	531				
	MW/LW(N)	603	999	1404	171	207	270	152	531

2. Version of microprocessor (CPU) and FLD segment check mode

This mode is available to confirm the version of each CPU and to check all luminous segments by the following steps.

1. When the product is FACTORY mode (Refer to the above mentioned "1. **FACTORY mode**"), press [**DISPLAY OFF**] button. FLD shows "**MARANTZ SR-14EX**".
2. Press [**DISPLAY OFF**] button. FLD shows the version of program code for QU01(main CPU).
3. Press [**DISPLAY OFF**] button. FLD shows the version of program code for Q961(SURROUND CPU).
4. Press [**DISPLAY OFF**] button. All segments turn off and LED's (TV, LD, DVD, VCR1, DSS/VCR2, AUX, STANDBY) light up.
5. Press [**DISPLAY OFF**] button. G1 and G2 segments light up step by step.
6. Press [**DISPLAY OFF**] button. Segments of checker pattern light up step by step.
7. Press [**DISPLAY OFF**] button. All segment of FLD and LED's turn off.
8. Press [**DISPLAY OFF**] button. It will return to 1. (FLD shows "**MARANTZ SR-14EX**".)

3. Input and output test mode

This mode is available for the functions as shown in Fig 1 by the following steps.

1. When the product is FACTORY mode (Refer to above mentioned "1. **FACTORY mode**"), press both [**MEMO**] and [**TREBLE▼**] buttons simultaneously.
2. FLD shows "**AUTO CD**". By pressing both [**MEMO**] and [**TREBLE ▼**] buttons simultaneously each time, the mode is changed in the following order.

Fig 1 Input and output test mode

ORDER	INDICATION for FLD	MODE FUNCTION
1	AUTO CD	Input selection mode (without using system setup menu)
2	ALL CH CD	5 or 6 channels output mode (This mode is available for 2 channels input)

3.1. Input selection mode (without setting to system setup menu)

This mode is available to select the input without setting to system setup menu by the following steps.

1. When FLD shows "AUTO CD"(Refer to "4. Input and output test mode"), the input can be shifted by pressing [**MODE**] button for the remote commander only each time as shown in Fig 2. ([**MODE**] button is in page4 of **AMP** function for RC-18SR*)

Fig 2. Input selection order by pressing [**MODE**] button each time

ORDER	INDICATION for FLD	INPUT STATUS
1	AUTO D1	DIG. 1 IN
2	AUTO D2	DIG. 2 IN
3	AUTO D3	DIG. 3 IN
4	AUTO D4	DIG. 4 IN
5	AUTO D5	DIG. 5 IN
6	AUTO D6	DIG. 6 IN
7	AUTO CD	CD IN (Analog)

Note: Surround mode is fixed "AUTO" mode automatically.

3.2. 5.1 channels output mode

This mode is available to output the same signal from 5 channels, even though 2 channels audio signal comes in.

As the result, all channels output can be confirmed by using analog stereo signal or PCM audio signal.

AC-3 or DTS source is not necessary to output from any channel in this mode.

1. When FLD shows "ALL CH CD" (Refer to "4. Input and output test mode"), the input can be shifted by pressing [**MODE**] button for the remote commander only each time as shown in Fig 3.
([**MODE**] button is in page4 of **AMP** function for RC-18SR*)
2. Supply to 2 channels PCM signal for digital input or 2 channels analog signal for analog input. But, Left channel and Right channel of input signal should be equal.
3. Then each output from the product is the same as the input signal. (Subwoofer channel is respond to lower than 80Hz signal)

Fig 3. Input selection order by pressing [**MODE**] button each time

ORDER	INDICATION for FLD	INPUT STATUS
1	ALL CH D1	DIG. 1 IN
2	ALL CH D2	DIG. 2 IN
3	ALL CH D3	DIG. 3 IN
4	ALL CH D4	DIG. 4 IN
5	ALL CH D5	DIG. 5 IN
6	ALL CH D6	DIG. 6 IN
7	ALL CH CD	CD IN (Analog)

4. Transistor MUTE mode

In mute situation on the product, output signal is muted by Volume control IC and muting transistor.

But, this mode is available to work the muting transistor only by the following steps.

1. When the product is FACTORY mode (Refer to "1. FACTORY mode"), press [**MUTE**] button for remote commander only.
2. FLD shows "TrMUTE ON", then muting transistor circuit is active only.

5. How to reset the product

When the product is POWER ON, press both [**CL**] and [**DISPLAY OFF**] buttons simultaneously.

FLD shows "DEFAULT" for 3 seconds, then all memories are cleared.

Note

* : The remote controller RC2000mkII is available instead of RC-18SR for [**MODE**] button.

9. ELECTRICAL ADJUSTMENTS

1. DC offset adjustment

Master Volume : Minimum, Speaker out : non Load

Step	Power	Channel	Adjustment Point	Test Point	Adjustment Vaule
1	on	Front L	R715	Speaker Output Terminal	± 20mV
		Center	RT15		
		Front R	RP16		
		Surr. L	RP15		
		Surr. R	R716		

Note : If the measured value is not exceed ±20mV, no need to adjust the DC offset.

2. Idling current adjustment

Master Volume : Minimum, Speaker out : non Load

Step	Power	Channel	Adjustment Point	Test Point	Adjustment Vaule
1	Power on	Front L	R743	J713 or R773	within 1 minute 0.4mV
		Center	RT43	JT13 or RT73	
		Front R	RP44	JP04 or RP74	
		Surr. L	RP43	JP03 or RP73	
2	after 4 minutes	Surr. R	R744	J714 or R774	see table for adjustment vaule
				J***:4P Connector [between 1p-4p] R***:Emitter Resister [0.1Ω x 2 (0.18Ω x 2)]	

Time since power on	Idling current adjust.	Time since power on	Idling current adjust.
4-4 minutes 30 seconds	5.6mV	11-12 minutes	8.0mV
4m30s-5 minutes	6.4mV	12-14 minutes	7.6mV
5-5 minutes 30 seconds	7.2mV	14-16 minutes	7.2mV
5m30s-6 minutes	7.7mV	16-18 minutes	6.5mV
6-7 minutes	8.2mV	18-22 minutes	5.6mV
7-8 minutes	8.6mV	22-26 minutes	4.9mV
8-9 minutes	8.8mV	26-30 minutes	4.4mV
9-10 minutes	8.6mV	more than 30 minutes	4.0mV
10-11 minutes	8.4mV		The target is 4.0mV

3. Thermostat circuit confirmation

- 1) When the product is POWER ON, remove the wire W701 from the connector J715 (P704).
- 2) FLD shows "ERROR PWR1".
- 3) Confirm the product is POWER OFF after 3 seconds.
- 4) Connect the wire W701 to the connector J715 (on P704).
- 5) Confirm the product is standby status.

4. Cooling fan confirmation

4.1 Fan failure sensor confirmation

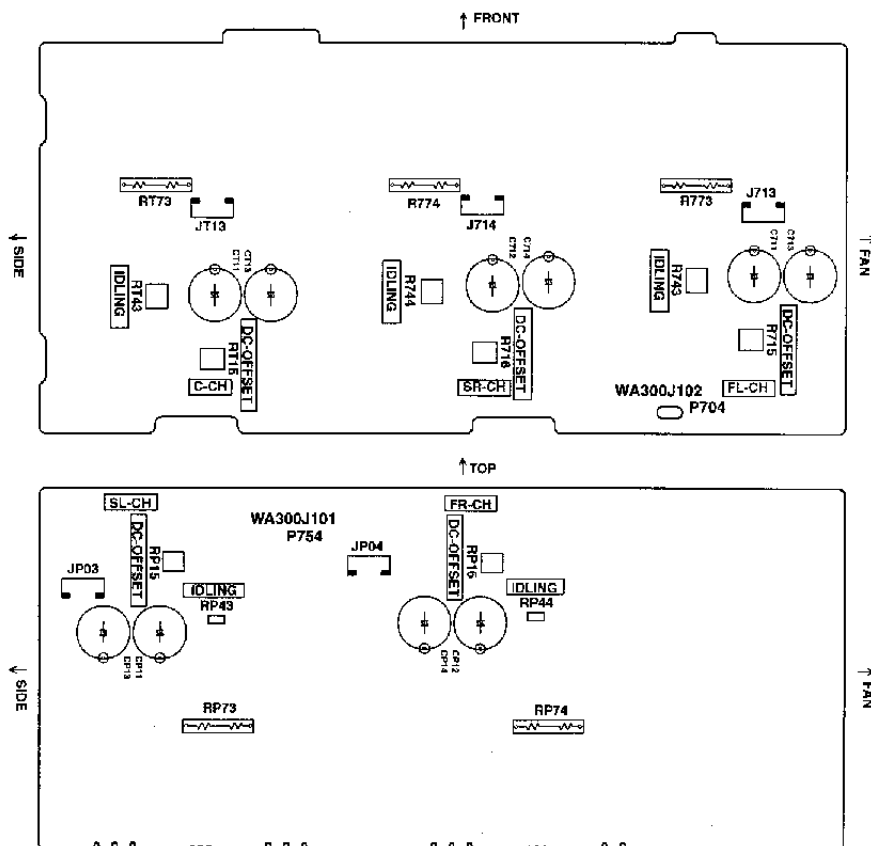
- 1) Set to be SPK output 1W from the front channel.
- 2) Connect the 1pin (LOCK) of the connector JN10 (on P754) to chassis (GND level) by a wire.
- 3) After 6 seconds the SPK relay works, and the SPK output isn't output.

4.2 Temperature sensor confirmation

- 1) Connect a resistor (470ohms 1W) between JN10 3pin (T-2CH) and DC +12Voltagess.
- 2) Confirm the cooling fan starts working. (Status : JN09 between 1pin and 2pin = **+7.5Voltage**, Fan speed = **Low**)
- 3) Remove the resistor.
- 4) Confirm the cooling fan stops.
- 5) Connect the resistor between JN10 4pin (T-3CH) and DC +12Voltage.
- 6) Confirm the cooling fan starts working again.
- 7) Remove the resistor.
- 8) Confirm the cooling fan stops.
- 9) Connect the resistor between JN10 3pin (T-2CH) and DC +12Voltage. And then connect another resistor between JN10 4pin (T-3CH) and DC +12Voltage.
- 10) Confirm the cooling fan starts working.
- 11) And then connect the resistor between JN10 2pin (SPEED) and DC +12Voltage.
- 12) Confirm the cooling fan changes to work with high speed. (Status : JN09 between 1pin and 2pin = **+11.5Voltage**, Fan speed = **High**)

4.3 Fan catching a foreign body sensor confirmation

- 1) Connect the resistor (470ohms 1W) between JN10 3pin (T-3CH) and DC +12Voltage.
- 2) Confirm the cooling fan starts working. (Status : JN09 between 1pin and 2pin=**+7.5Voltage**, Fan speed = **Low**)
- 3) Set to be SPK output 1W from the front channel.
- 4) Hold the cooling fan by hand and stop it.
Notes: Take care of wound in the hand!
- 5) After 6 seconds the SPK relay works and the SPK output isn't output.



10. ALIGNMENT PROCEDURES

1. AM IF Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	999 kHz (K, N, S, F) 1000 kHz (U)	Level 300 μ V/m (50dB/m) Mod. 400 Hz 30%	Tuning point	LA06	Output level (L or R) Maximum at TAPE-OUT

REMARK: For receiving antenna, the adapted one is available.

This adjustment is not necessary normally, because the coil LA06 is preset by the original supplier.

It is necessary when the incorrect usable sense and frequency response.

2. AM (MW) Tracking Adjustment

Step	**Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	603 kHz (K, N, S, F) 600 kHz (U)	Level 300 - 400 μ V/m Mod. 400 Hz 30%	603 kHz (K, N, S, F) 600 kHz (U)	LA01	Output level (L or R) Maximum at TAPE-OUT
2		1404 kHz (K, N, S, F) 1400 kHz (U)	Level 300 - 400 μ V/m Mod. 400 Hz 30%	1404 kHz (K, N, S, F) 1400 kHz (U)	CA01	Output level (L or R) Maximum at TAPE-OUT
3	Repeat step 1 and 2 until sensitivity be maximized.					

3. AM (LW) Tracking Adjustment [N version]

Step	**Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	171 kHz	Level 300 - 400 μ V/m Mod. 400 Hz 30%	171 kHz	LA03	Output level (L or R) Maximum at TAPE-OUT
2		270 kHz	Level 300 - 400 μ V/m Mod. 400 Hz 30%	270 kHz	CA08	Output level (L or R) Maximum at TAPE-OUT
3	Repeat step 1 and 2 until sensitivity be maximized.					

4. AM auto stop Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to transmission *loop antenna. (*:Standard required loop)	999 kHz (K, N, S, F) 1000 kHz (U)	500 μ V/m (54 dB/m)	999 kHz (K, N, S, F) 1000 kHz (U)	RA11	"TUNED" indicate on FLD
2			1000 μ V/m (60 dB/m)	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

5. FM MONO. Distortion Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (K, N, S, U) 83 MHz (F)	500 μ V (54 dB) MONO 1 kHz / Dev.40kHz 53.3% (K, N, S) MONO 1 kHz / Dev. 75 kHz 100% (U, F)	98 MHz (P2)	L201	Distortion level Minimum at TAPE-OUT

6. FM Muting Level Adjustment

Turn the variable resistor **R212** to no indication ("TUNED") point. And return that valuable resistor in opposite to the "TUNED" indicate point.

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (K, N, S, U) 83 MHz (F)	10 μV (20 dB) MONO 1 kHz / Dev. 40 kHz 53.3% (K, N, S) MONO 1 kHz / Dev. 75 kHz 100% (U, F)	98 MHz (K, N, S, U) 83 MHz (F)	R212	"TUNED" indicate on FLD
2			Over mentioned level +3 dB	AUTO SCAN	Only Confirm	"TUNED" indicate on FLD

7. FM STEREO Distortion Adjustment

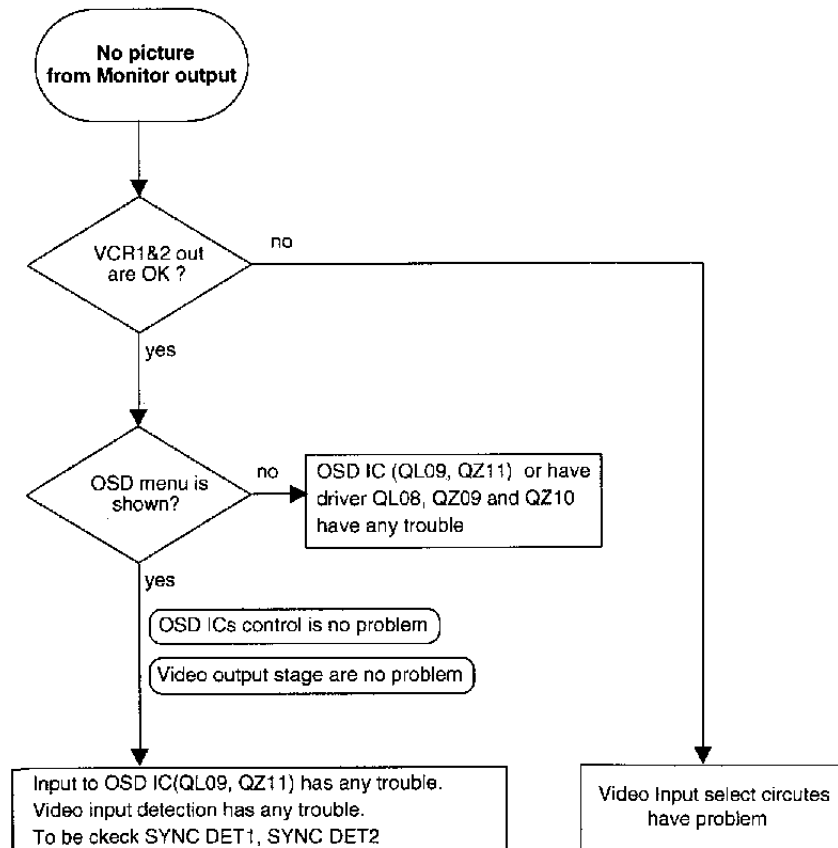
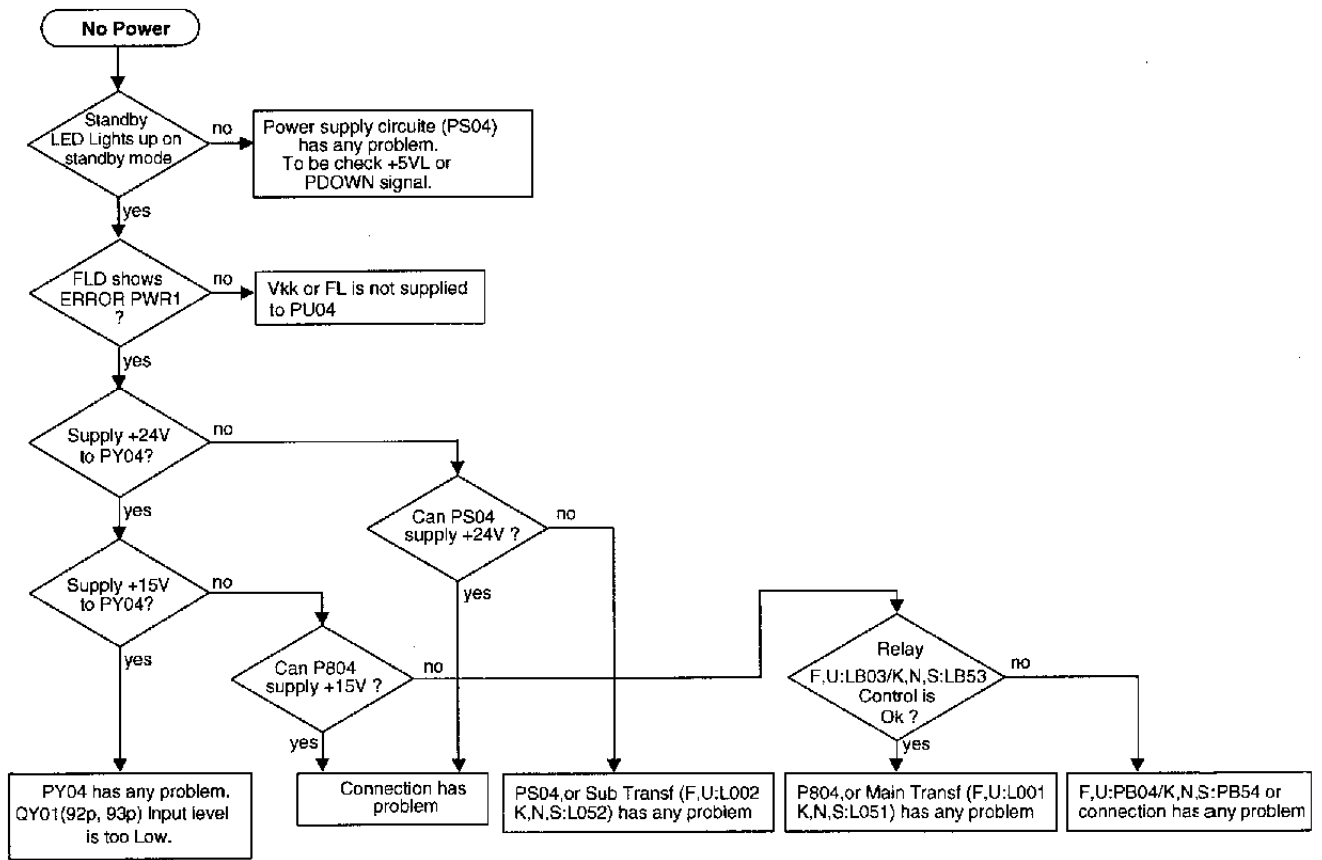
Adjust the **L channel** with the RF signal modulated only **L channel** first and confirm the **R channel** with the RF signal modulated only **R channel**.

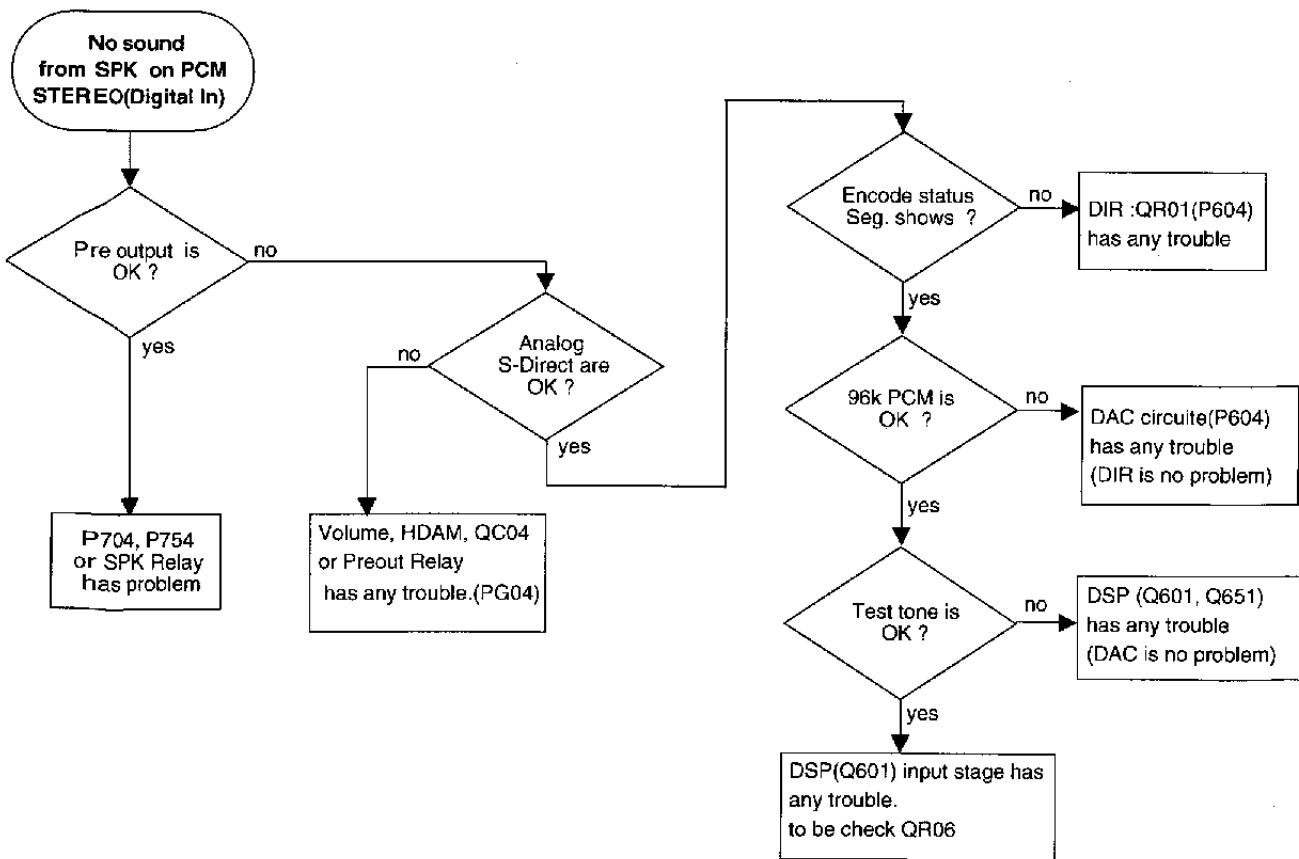
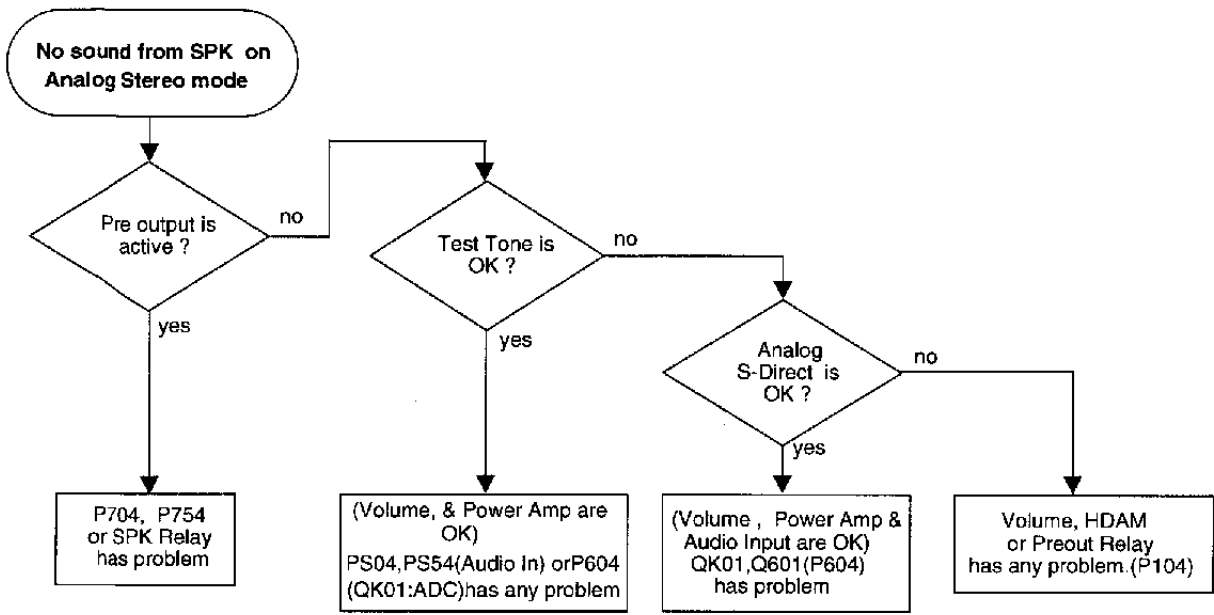
Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (K, N, S, U) 83 MHz (F)	500 μV (54 dB) L or R 1 kHz / Dev. 40 kHz 53.3% PILOT 19 kHz / Dev. 6 kHz 8% (K, N, S)	98 MHz (K, N, S, U) 83 MHz (F)	IF COIL in FRONT END	Distortion level Minimum at TAPE-OUT
2			L or R 1 kHz / Dev. 67.5 kHz 90% PILOT 19 kHz / Dev. 6.75 kHz 9% (U, F)		Only Confirm	Distortion level Simimilar as L ch. at TAPE-OUT R ch.

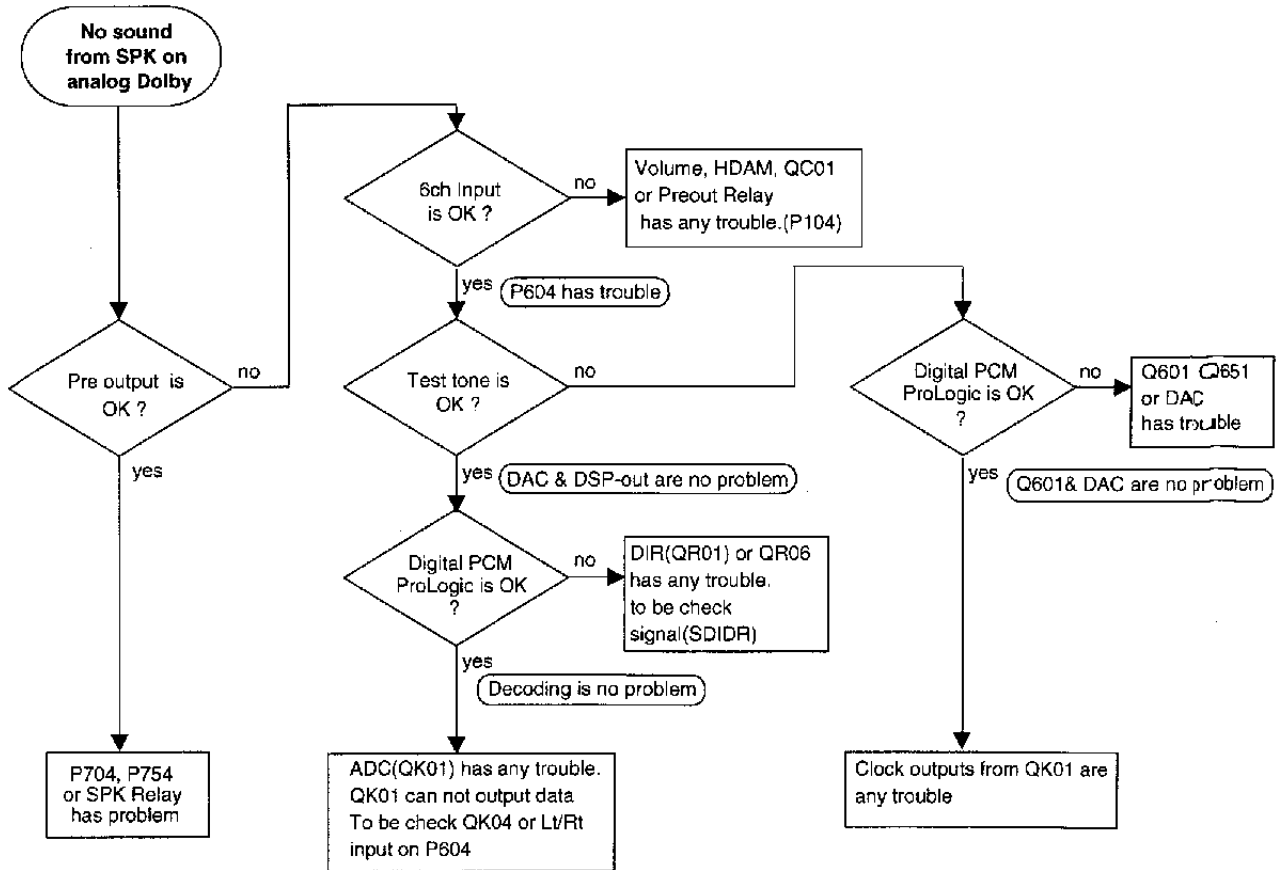
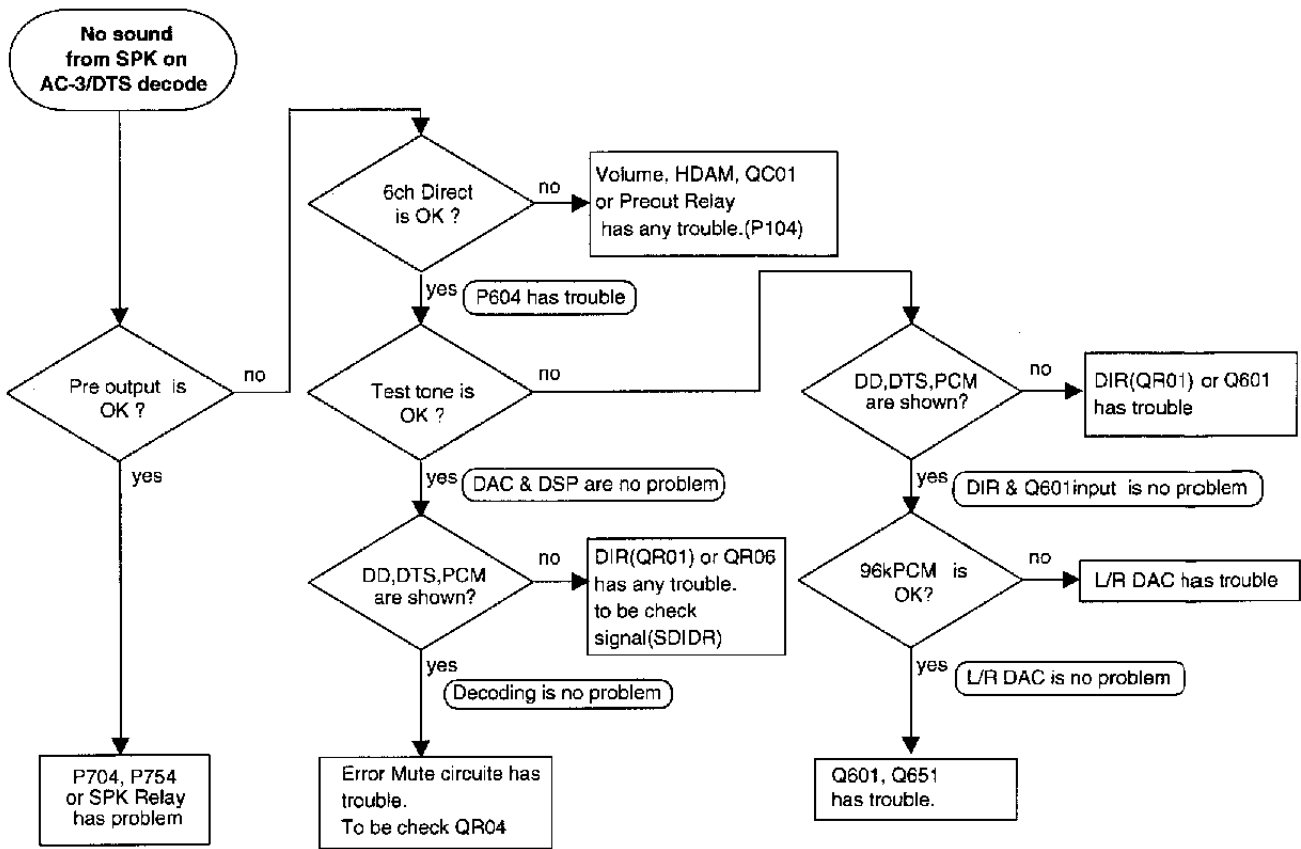
8. FM STEREO Separation Adjustment

Step	Input Signal Source Connection	Signal Frequency	Source Signal Output Level and Modulation	Reception Frequency	Adjustment Point	Adjustment Value
1	Signal generator output to FM antenna terminal. (75 Ω)	98 MHz (K, N, S, U) 83 MHz (F)	same specification as FM STEREO distortion adjustment. Input only L channel.	98 MHz (K, N, S, U) 83 MHz (F)	R211	Output level Minimum at TAPE-OUT channel R
2		98 MHz (K, N, S, U) 83 MHz (F)	same specification as FM STEREO distortion adjustment. Input only R channel.	98 MHz (K, N, S, U) 83 MHz (F)	R211	Output level Similar as Rch at TAPE-OUT channel L

11. TROUBLE SHOOTING







12. TECHNICAL DESCRIPTION

This product has two DSP ICs, one is for Dolby Digital (AC-3) decoding or DTS (Digital Theater System) decoding, another is for THX processing.

Multi channel sound is reproduced by connecting with DVD player or LD player.

Also Dolby Pro Logic decode is available to analog audio and PCM digital audio.

Additionally, 96kHz PCM stereo audio playback is possible.

Decoding circuit is consist of 13 ICs (DIR, two DSP, ADC, five DAC, AC-3 RF demodulator, two data separator and CPU).

DOLBY DIGITAL (AC-3)

Dolby Digital delivers six totally separate (discrete) channels of sound. Like Dolby Surround Pro Logic, it includes Left, Center and Right channels across the front of the room. Dolby Surround Pro Logic provides a single limited-bandwidth (100 Hz to 7,000 Hz) surround channel which is typically played back in the home through two channels of amplification and two speakers. In comparison, Dolby Digital provides separate (discrete) left surround and right surround channels, for more precise localization of sounds and a more convincing, realistic ambience. And, with Dolby Digital, all five main channels are full range (3 Hz to 20,000 Hz). A subwoofer could be added to each channel, if desired.

The sixth channel, the Low Frequency Effects Channel, will, at times, contain additional bass information to maximize the impact of scenes such as explosions, crashes, etc. Because this channel has only a limited frequency response (3 Hz to 120 Hz), it is sometimes referred to as the ".1" channel. When added to the 5 full range channels, the Dolby Digital system is sometimes referred to as having "5.1" channels.

DTS

An amazing new technology for surround-sound entertainment, DTS Digital Surround is an encode/decode system that delivers six channels (5.1) of master-quality, 20-bit audio. In the encoding process, the DTS algorithm encrypts six channels of 20-bit digital audio information in the space previously allotted for only two channels of 16-bit linear PCM. Then during playback, the DTS decoder reconstructs the original six channels of 20-bit digital audio. Each of these six channels is audibly superior to the 16-bit linear PCM audio found on conventional compact discs.

THX ULTRA

Home THX Controller Technologies : Dubbing stages (where soundtracks are created) and movie theatres do not change their acoustics, equipment, or system equalization when mixing or playing back 5.1 channel sound tracks. They merely divide the surround array of speakers into two symmetrical arrays (hence the term "split surround"). All of the remaining system equalization and setup remains the same. The Home THX Technologies of Re-Equalization, Timbre Matching, and Decorrelation, as well as the Home THX Crossover are still necessary for 5.1 channel formats. Because of the nature of the split surround soundtrack, Home THX Timbre Matching and Decorrelation technologies have been altered to provide correct surround sound balance and spaciousness. Here is a representation of how Home THX Controller Technologies work with the various surround sound formats.

THX SURROUND EX

THX Surround EX - Dolby Digital Surround EX is a joint development of Dolby Laboratories and the THX division of Lucasfilm Ltd.

In a movie theater, film soundtracks that have been encoded with Dolby Digital Surround EX technology are able to reproduce an extra channel which has been added during the mixing of the program.

This channel, called Surround Back, places sounds behind the listener in addition to the currently available front left, front center, front right, surround right, surround left and subwoofer channels.

This additional channel provides the opportunity for more detailed imaging behind the listener and brings more depth, spacious ambience and sound localization than ever before.

Movies that were created using the Dolby Digital Surround EX technology when released into the home consumer market may exhibit a Dolby Digital Surround EX logo on the packaging.

A list of movies created using this technology can be found on the Dolby web site at <http://www.dolby.com>.

"SURROUND EX™" is a trademark of Dolby Laboratories. Used under authorization.

THX SURROUND EX

DIR (Digital audio Interface Receiver : QR01 / LC89055)

This circuit extract synchronized clock signals and data from SPDIF signal input. QR01(LC89055) generates these signals, this chip supports 96kHz sample rate.

1st DSP (Digital Signal Processor for Dolby Digital, Pro Logic, DTS : Q601 / YSS912)

Q601(YSS912) decodes 6 channels audio from encoded data signal input. Some effects are processed in addition to multi channel decoding on HALL, MATRIX, and MOVIE mode.

2nd DSP (Digital Signal Processor for THX processing : Q651 / ZR38601)

Q651(ZR38601) has the THX 5.1 processing functions. These functions include **Re-equalization**, **Surround Timbre-Matching**, **Adaptive Decorrelation**, **Bass Management**, **Bass Peak Level Manager**, and **Loudspeaker Position Time Synchronization**.

Re-equalization takes the edginess or "brightness" out of your home cinema sound, compensating for the fact that sound mixed for theatres will sound too bright when played back through flat response speakers in your home.

Timbre Matching matches the tone of your front speakers to your surrounds to compensate for the fact that only two surround speakers are used in a typical Home Theatre system instead of a full array as in a movie theatre.

Adaptive Decorrelation gives a stereo "feel" when your surrounds are playing mono and automatically switches off when they are playing stereo.

Bass Management Electronic Crossover allows you to use more compact, easier-to-place speakers, while sending bass to a subwoofer system, improving frequency response, lowering distortion and increasing dynamic range.

Bass Peak Level Manager protects your subwoofer from overloading due to the great amount of bass a 5.1 soundtrack delivers.

Loudspeaker Position Time Synchronization lets you easily set up your system for an optimum listening position, which is difficult to achieve within the space constraints of most homes.

ADC (Analog to Digital Converter : QK01 / AK5392)

AK5392 is a complete analog-to-digital converter for stereo digital audio systems. it performs sampling, analog-to-digital conversion and anti-alias filtering, generating 24 bit values for both left and right inputs in serial form.

DAC (Digital to Analog Converter : QD01, QD02, QD03 : QD41, QD42 / AD1852)

The AD1852 is a high performance, single-chip stereo, audio DAC. There are five AD1852 chips on the board. Four chips are used for L, R, C, and Sub woofer channel individually. Another chip is used for Surround Left & Right.

CPU (Q691 / TMP93CW44ADF)

This chip controls some ICs in P604 and communicates with QU01. Connect to QU01 with serial interface lines.

13. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTORS

R***: 1) GD05 × × × 140, Carbon film fixed resistor, ±5% 1/4W
R***: 2) GD05 × × × 160, Carbon film fixed resistor, ±5% 1/6W

① — Resistance value

Examples;

- ① Resistance value
0.1 Ω ... 001 10 Ω ... 100 1 kΩ ... 102 100 kΩ ... 104
0.5 Ω ... 005 18 Ω ... 180 2.7 kΩ ... 272 680 kΩ ... 684
1 Ω ... 010 100 Ω ... 101 10 kΩ ... 103 1 MΩ ... 105
6.8 Ω ... 068 390 Ω ... 391 22 kΩ ... 223 4.7 MΩ ... 475

Note : Please distinguish 1/4W from 1/6W by the shape of parts used actually.

CAPACITORS

C***: CERAMIC CAP.

3) DD1 × × × × 370, Ceramic capacitor
Disc type
Temp.coeff.P350 ~ N1000, 50V
② — Capacity value
③ — Tolerance

Examples ;

- ② Tolerance (Capacity deviation)
±0.25 pF ... 0
±0.5 pF ... 1
±5% ... 5

* Tolerance of COMMON PARTS handled here are as follows :

- 0.5 pF ~ 5 pF ... ±0.25 pF
6 pF ~ 10 pF ... ±0.5 pF
12 pF ~ 560 pF ... ±5%

③ Capacity value

- 0.5 pF ... 005 3 pF ... 030 100 pF ... 101
1 pF ... 010 10 pF ... 100 220 pF ... 221
1.5 pF ... 015 47 pF ... 470 560 pF ... 561

C*** : CERAMIC CAP.

4) DK16 × × × 300, High dielectric constant ceramic capacitor
Disc type
Temp.chara. 2B4, 50V
④ — Capacity value

Examples ;

- ④ Capacity value
100 pF ... 101 1000 pF ... 102 10000 pF ... 103
470 pF ... 471 2200 pF ... 222

C*** : 5) ELECTROLY CAP. (, 6) FILM CAP. (

5) EA × × × × × 10, Electrolytic capacitor
One-way lead type, Tolerance ±20%
⑤ — Working voltage
⑥ — Capacity value

Examples ;

- ⑤ Capacity value
0.1 μF ... 104 4.7 μF ... 475 100 μF ... 107
0.33 μF ... 334 10 μF ... 106 330 μF ... 337
1 μF ... 105 22 μF ... 226 1100 μF ... 118
2200 μF ... 228

⑥ Working voltage

- 6.3V ... 006 25V ... 025
10V ... 010 35V ... 035
16V ... 016 50V ... 050

6) DF15 × × × 350 — Plastic film capacitor
DF15 × × × 310 — One-way type, Mylar ±5% 50V
DF16 × × × 310 — Plastic film capacitor
One-way type, Mylar ±10% 50V
⑦ — Capacity value

Examples ;

- ⑦ Capacity value
0.001 μF (1000 pF) ... 102 0.1 μF ... 104
0.0018 μF ... 182 0.56 μF ... 564
0.01 μF ... 103 1 μF ... 105
0.015 μF ... 153

NOTE : 1) The above CODES (R***, R***, C***, C*** and C***) are omitted on the schematic diagram in some case.

- 2) On the occasion, be confirmed the common parts on the parts list.
3) Refer to "Common Parts List" for the other common parts (RI05, DD4, DK4).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows;

1. KOA Corporation

Part No. (MJI)	→	Type No. (KOA)	Description
NH05 × × × 140	→	RF25S × × × × ΩJ	(±5% 1/4W)
NH05 × × × 120	→	RF50S × × × × ΩJ	(±5% 1/2W)
NH85 × × × 110	→	RF73B2A × × × × ΩJ	(±5% 1/10W)
NH95 × × × 140	→	RF73B2E × × × × ΩJ	(±5% 1/4W)

* Resistance value (0.1 Ω - 10 kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No. (MJI)	→	Type No. (MEC)	Description
NF05 × × × 140	→	ERD-2FCJ × × ×	(±5% 1/4W)
RF05 × × × 140	→		
NF02 × × × 140	→	ERD-2FCG × × ×	(±2% 1/4W)
RF02 × × × 140	→		

* Resistance value

Examples ;

- * Resistance value
0.1 Ω ... 001 10 Ω ... 100 1 kΩ ... 102 100 kΩ ... 104
0.5 Ω ... 005 18 Ω ... 180 2.7 kΩ ... 272 680 kΩ ... 684
1 Ω ... 010 100 Ω ... 101 10 kΩ ... 103 1 MΩ ... 105
6.8 Ω ... 068 390 Ω ... 391 22 kΩ ... 223 4.7 MΩ ... 475

ABBREVIATION AND MARKS

ANT. : ANTENNA	BATT. : BATTERY
CAP. : CAPACITOR	CER. : CERAMIC
CONN. : CONNECTING	DIG. : DIGITAL
HP. : HEADPHONE	MIC. : MICROPHONE
μ-PRO : MICROPROCESSOR	REC. : RECORDING
RES. : RESISTOR	SPK. : SPEAKER
SW. : SWITCH	TRANSF. : TRANSFORMER
TRIM. : TRIMMING	TRS. : TRANSISTOR
VAR. : VARIABLE	XTAL. : CRYSTAL

NOTE ON SAFETY :

Symbol Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
			P104-7CH ELE.VOL. TUNER CIRCUIT BOARD		CM12		4822 124 22277	ELECT. 470µF 16V M RA-2	OA47701620
			P104-CAPACITORS		CM21				
CA01		4822 125 50384	TRIM. 20pF VCT51E	CT12000200	CM28		4822 122 33575	CER.CHIP 220pF	DD55221300
CA02			CER.CHIP 0.047µF B 50V	DK56473300	CM29				
CA03		4822 122 33204	CER.CHIP 15pF	DD55150300					
CA04		4822 121 42466	FILM 390pF 100V ECQ-P	DF15391550	CM35				
CA05		5322 122 32452	CER.CHIP 47pF CH	DD55470300					
CA06		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV01		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CA07	/N	5322 122 34098	CER.CHIP 0.01µF Z 50V	DK56103300	CV02		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CA08	/N	4822 125 50384	TRIM. 20pF VCT51E	CT12000200	CV03		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CA09	/N	4822 122 33204	CER.CHIP 15pF J CH 50V BLK	DD55150300	CV04		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CA11	/N	4822 122 33514	CER.CHIP 68pF J CH 50V BLK	DD55680300	CV05		5322 122 32531	CER.CHIP 100pF	DD55101300
CA12	/N	5322 122 33538	CER.CHIP 150pF J CH 50V BLK	DD55151300	CV06		5322 122 32531	CER.CHIP 100pF	DD55101300
CA13	/N	5322 122 34098	CER.CHIP 0.01µF Z 50V	DK56103300	CV07		9965 000 06288	ELECT. 22µF 25V	EA22602520
CA14	/N	5322 122 34098	CER.CHIP 0.01µF Z 50V	DK56103300	CV08		9965 000 06288	ELECT. 22µF 25V	EA22602520
CA18		4822 124 80087	ELECT. 4.7µF M 50V RA-2	OA47505020	CV09		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620
					CV10		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620
CC05		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV11		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CC06		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV12		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CC07		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV13		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CC08		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV14		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CC25		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV15		5322 122 32531	CER.CHIP 100pF	DD55101300
CC26		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV16		5322 122 32531	CER.CHIP 100pF	DD55101300
CC27		5322 122 32531	CER.CHIP 100pF	DD55101300	CV17		9965 000 06289	ELECT. 47µl 16V	EA47601620
CC29		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CV17	/F		ELECT. 47µF M 25V ARS	OA47601640
CC30		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CV18		9965 000 06289	ELECT. 47µl 16V	EA47601620
CC31		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520	CV18	/F		ELECT. 47µF M 25V ARS	OA47601640
CC32		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520	CV19		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200
CC33					CV20		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200
		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200	CV21		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520
CC37					CV22		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520
CC40		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620	CV23		5322 122 32531	CER.CHIP 100pF	DD55101300
					CV25		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG51		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV26		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG52		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV27		5322 122 32531	CER.CHIP 100pF	DD55101300
CG53		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV28		5322 122 32531	CER.CHIP 100pF	DD55101300
CG54		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV29		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG55		5322 122 32531	CER.CHIP 100pF	DD55101300					
CG56		5322 122 32531	CER.CHIP 100pF	DD55101300	CV30		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG57		9965 000 06288	ELECT. 22µF 25V	EA22602520	CV31		4822 124 90362	ELECT. 22µF M 50V RA-2	OA22605020
CG58		9965 000 06288	ELECT. 22µF 25V	EA22602520	CV31	/F		ELECT. 22µF M 35V ARS	OA22603540
CG59		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620	CV32		4822 124 90362	ELECT. 22µF M 50V RA-2	OA22605020
CG59	/F		ELECT. 22µF M 25V ARS	OA22602540	CV32	/F		ELECT. 22µF M 35V ARS	OA22603540
CG60		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620	CV41		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CG60	/F		ELECT. 22µF M 25V ARS	OA22602540	CV42		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CG61		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV43		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CG62		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	CV44		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CG63		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV45		5322 122 32531	CER.CHIP 100pF	DD55101300
CG64		5322 122 34098	CER.CHIP 0.01µF	DK56103300	CV46		5322 122 32531	CER.CHIP 100pF	DD55101300
CG65		5322 122 32531	CER.CHIP 100pF	DD55101300	CV47		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG66		5322 122 32531	CER.CHIP 100pF	DD55101300	CV48		9965 000 06288	ELECT. 22µF 25V	EA22602520
CG67		9965 000 06289	ELECT. 47µl 16V	EA47601620	CV49		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620
CG67	/F		ELECT. 47µF M 16V ARS	OA47601640	CV49	/F		ELECT. 22µF M 25V ARS	OA22602540
CG68		9965 000 06289	ELECT. 47µl 16V	EA47601620	CV50		4822 124 41796	ELECT. 22µF M 16V RA-2	OA22601620
CG68	/F		ELECT. 47µF M 16V ARS	OA47601640	CV50	/F		ELECT. 22µF M 25V ARS	OA22602540
CG69		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200	CV51		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CG70		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200	CV52		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CG71		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520	CV53		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CG72		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520	CV54		5322 122 34098	CER.CHIP 0.01µF	DK56103300
CG73		5322 122 32531	CER.CHIP 100pF	DD55101300	CV55		5322 122 32531	CER.CHIP 100pF	DD55101300
CG75		9965 000 06288	ELECT. 22µF 25V	EA22602520	CV56		5322 122 32531	CER.CHIP 100pF	DD55101300
CG76		9965 000 06288	ELECT. 22µF 25V	EA22602520	CV57		9965 000 06289	ELECT. 47µl 16V	EA47601620
					CV57	/F		ELECT. 47µF M 16V ARS	OA47601640
CM01					CV58		9965 000 06289	ELECT. 47µl 16V	EA47601620
					CV58	/F		ELECT. 47µF M 16V ARS	OA47601640
CM08			CER.CHIP 470pF	DD55471300	CV59		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200
CM09		5322 122 32531	CER.CHIP 100pF	DD55101300	CV60		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200
CM10		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200	CV61		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520
CM11		4822 126 12061	CER.CHIP 0.1µF B 25V	DK56104200	CV62		4822 124 22698	ELECT. 47µF M 25V RA-2	OA47602520

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CV63		5322 122 32531	CER.CHIP 100pF	DD55101300
CV65		4822 124 41534	ELECT. 10μF M 25V RA-2	OA10602520
CV66		4822 124 41534	ELECT. 10μF M 25V RA-2	OA10602520
CV71		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
CV73		5322 122 34098	CER.CHIP 0.01μF	DK56103300
CV74		5322 122 34098	CER.CHIP 0.01μF	DK56103300
CV75		5322 122 32531	CER.CHIP 100pF	DD55101300
CV76		5322 122 32531	CER.CHIP 100pF	DD55101300
CV77		9965 000 06288	ELECT. 22μF 25V	EA22602520
CV78		9965 000 06288	ELECT. 22μF 25V	EA22602520
CV79		4822 124 41796	ELECT. 22μF M 16V RA-2	OA22601620
CV79	/F		ELECT. 22μF M 25V ARS	OA22602540
CV80		4822 124 41796	ELECT. 22μF M 16V RA-2	OA22601620
CV81		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
CV82		4822 124 22276	ELECT. 47μF M 50V RA-2	OA47605020
CV83		5322 122 34098	CER.CHIP 0.01μF	DK56103300
CV84		5322 122 34098	CER.CHIP 0.01μF	DK56103300
CV85		5322 122 32531	CER.CHIP 100pF	DD55101300
CV86		5322 122 32531	CER.CHIP 100pF	DD55101300
CV87		9965 000 06288	ELECT. 47μF 16V	EA47601620
CV87	/F		ELECT. 47μF M 16V ARS	OA47601640
CV88		9965 000 06288	ELECT. 47μF 16V	EA47601620
CV89		4822 126 12061	CER.CHIP 0.1μF B 25V	DK56104200
CV90		4822 126 12061	CER.CHIP 0.1μF B 25V	DK56104200
CV91		4822 124 22698	ELECT. 47μF M 25V RA-2	OA47602520
CV92		4822 124 22698	ELECT. 47μF M 25V RA-2	OA47602520
CV93		5322 122 32531	CER.CHIP 100pF	DD55101300
CV95		9965 000 06288	ELECT. 22μF 25V	EA22602520
CV96		9965 000 06288	ELECT. 22μF 25V	EA22602520
C201		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C202		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C203			CER.CHIP 0.047μF B 50V	DK56473300
C204			CER.CHIP 0.047μF B 50V	DK56473300
C205		4822 124 42182	ELECT. 3.3μF M 50V	OA33505020
C206		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C207		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
C208			CER.CHIP 0.047μF B 50V	DK56473300
C209		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C210		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C211		4822 124 40763	ELECT. 2.2μF M 50V RA-2	OA22505020
C212		4822 124 41543	ELECT. 1μF M 50V RA-2	OA10505020
C213		4822 124 22273	ELECT. 0.47μF M 50V RA-2	OA47405020
C214		4822 124 22698	ELECT. 47μF M 25V RA-2	OA47602520
C215			CER.CHIP 0.047μF B 50V	DK56473300
C216		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
C218		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C219		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C220		4822 122 33127	CER.CHIP 2200pF	DK56222300
C222		5322 126 10511	CER.CHIP 0.001μF	DK56102300
C223		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C225		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C226		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C227	/U	4822 122 33127	CER.CHIP 2200pF	DK56222300
C233		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C234		4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C235		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C236		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C237		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C303		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C304		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C305	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C305	/U	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C306	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C306	/U	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C309	18A /K, /S	482212233134	CER.CHIP 15000pF	DK56153300
C310	18A /K, /S	482212233134	CER.CHIP 15000pF	DK56153300

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C311	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C311	/U		JUMPER	75060501P0
C312	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C312	/U		JUMPER	75060501P0
C315	/K,N,S	5322 122 34098	CER.CHIP 0.01μF	DK56103300
C316	/K,N,S	5322 122 34098	CER.CHIP 0.01μF	DK56103300
C317	/K,N,S	5322 122 32531	CER.CHIP 100pF	DD55101300
C318	/K,N,S	5322 122 32531	CER.CHIP 100pF	DD55101300
C319	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C320	/K,N,S	4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
C351	/N, /S	5322 122 34098	CER.CHIP 10000pF	DK56103300
C352	/N, /S	5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C353	/N, /S	4822 122 33805	CER.CHIP 330pF	DK56331300
C354	/N, /S	4822 122 33137	CER.CHIP 560pF	DK56561300
C355	/N, /S	5322 122 34098	CER.CHIP 10000pF	DK56103300
C356	/N, /S	5322 122 32658	CER.CHIP 22pF	DD55220300
C357	/N, /S	5322 122 31946	CER.CHIP 27pF	DD55270300
C358	/N, /S	5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C359	/N, /S	5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C360	/N, /S	5322 126 10511	CER.CHIP 1000pF	DK56102300
C361	/N, /S			
C364				
C367				
C372		5322 122 32531	CER.CHIP 100pF	DD55101300
C501		5322 122 32452	CER.CHIP 47pF CH	DD55470300
C502		5322 122 32452	CER.CHIP 47pF CH	DD55470300
C503		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
C504		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C505		4822 124 40763	ELECT. 2.2μF 50V	OA22505020
C507		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C508		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
C509		5322 122 34098	CER.CHIP 0.01μF	DK56103300
C510		5322 122 32531	CER.CHIP 100pF	DD55101300
C511		5322 122 34098	CER.CHIP 0.01μF	DK56103300
P104-CAPACITORS (COMMON)				
PLASTIC FILM CAPACITOR				
±5% 50V : C217 C301C302				
CC01-CC04				
P104-RESISTORS				
RA01		4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RA02		4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI051041 10
RA03	/N	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RA04	/N	4822 051 20154	CHIP 150kΩ ±5% 1/10W	NI051511 10
RA06	/N	4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI051041 10
RA07	/N	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RA08	/N	4822 051 20154	CHIP 150kΩ ±5% 1/10W	NI051511 10
RA09	/N	4822 117 11449	CHIP 2.2kΩ ±5% 1/10W	NI052211 10
RA10	/N	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RA11		4822 100 11351	TRIM.RES. 10kΩ RH0638CJ4R	RA01001780
RA12	/N,S,U	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI050011 10
RA13	/N,S,U	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI050011 10
RA14	/N,S,U	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI050011 10
RA59		4822 051 20102	CHIP 1kΩ ±5% 1/10W	NI051011 10
RC01		4822 117 11383	CHIP 12kΩ ±5% 1/10W	NI051211 10
RC02		4822 117 11383	CHIP 12kΩ ±5% 1/10W	NI051211 10
RC05		4822 051 20273	CHIP 27kΩ ±5% 1/10W	NI052711 10
RC06		4822 051 20273	CHIP 27kΩ ±5% 1/10W	NI052711 10
RC09		4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI051041 10
RC10		4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI051041 10
RC32		4822 051 20101	CHIP 100kΩ ±5% 1/10W	NI051011 10
RC33		4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI051041 10
RC34		4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RC35		4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI051011 10
RC36		4822 050 21021	RES. 100Ω ±5% 1/2W	GG05101120
RC40		4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI054711 10

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R301	/U	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110
R302	/K,N,S	4822 051 20479	CHIP 47Ω ±5% 1/10W	NI05470110
R302	/U	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110
R303	/K,N,S	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
R304	/K,N,S	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
R307		4822 051 20153	CHIP 220Ω ±5% 1/10W	NI05221110
R308		4822 051 20153	CHIP 220Ω ±5% 1/10W	NI05221110
R309		4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R310		4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R315		9965 000 03405	CHIP 2.7kΩ ±5% 1/10W	NI05272110
R316		9965 000 03405	CHIP 2.7kΩ ±5% 1/10W	NI05272110
R317	/K,N,S	4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R318	/K,N,S	4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R319	/K,N,S	4822 116 83933	CHIP 15kΩ ±5% 1/10W	NI05153110
R320	/K,N,S	4822 116 83933	CHIP 15kΩ ±5% 1/10W	NI05153110
R321	/U		JUMPER	75060501P0
R322	/U		JUMPER	75060501P0
R323		4822 111 90918	CHIP 4.7kΩ ±5%	NI05472110
R352	/N, /S	4822 111 90896	CHIP 100kΩ ±5% 1/10W	NI05104110
R353	/N, /S	4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R355	/N, /S	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
R357	/N, /S	4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
R502		4822 117 11449	CHIP 2.2kΩ ±5% 1/10W	NI05222110
R504		4822 111 90918	CHIP 4.7kΩ ±5% 1/10W	NI05472110
R505		4822 051 20102	CHIP 1kΩ ±5% 1/10W	NI05102110
R506		4822 051 20102	CHIP 1kΩ ±5% 1/10W	NI05102110
R507		4822 111 90925	CHIP 68kΩ ±5% 1/10W	NI05683110
R508		4822 117 10834	CHIP 47kΩ ±5% 1/10W	NI05473110
R509		4822 051 20223	CHIP 22kΩ ±5% 1/10W	NI05223110
R510		4822 111 90918	CHIP 4.7kΩ ±5% 1/10W	NI05472110
R511		4822 051 20822	CHIP 8.2kΩ ±5% 1/10W	NI05822110
R513		4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
R515		4822 117 10833	CHIP 10kΩ ±5% 1/10W	NI05103110
P104-SEMICONDUCTORS				
DA01		4822 125 50416	VARICAP DIODE SVC342-L	HD40009030
DA02	/N	9965 000 03402	CHIP DIODE 1SS356	HZ21302210
DA03	/N	4822 125 50416	VARICAP DIODE SVC342-L	HD40009030
DA04	/N	9965 000 03402	CHIP DIODE 1SS356	HZ21302210
DA05		9965 000 03400	CHIP DIODE MA716	HZ20030020
DC01		9965 000 03401	CHIP DIODE RB425D	HZ20030210
DM01				
DM04		4822 130 33944	CHIP DIODE DAN202K	HZ20002210
DM05				
DM09		9965 000 06298	DIODE 1SS200	HE10202050
DM10		9965 000 03401	CHIP DIODE RB425D	HZ20030210
DM11		9965 000 03401	CHIP DIODE RB425D	HZ20030210
DM12		9965 000 03401	CHIP DIODE RB425D	HZ20030210
D202		9965 000 03403	CHIP ZENER DIODE 02CZ9.1-X	HZ30031050
D502	/N	4822 130 80522	CHIP DIODE DAP202K	HZ20001210
D504		9965 000 03401	CHIP DIODE RB425D	HZ20030210
QA01	/N	4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000
QA02	/N	4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000
QA03	/N	4822 130 61892	TRS. 2SD2144S U OR V	HT421442A0
QA04	/N	4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
QA05	/N	4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
QA06	/N	4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20001000
QC01		4822 209 32554	IC LC78213	HC10310030
QC03		4822 209 73953	IC NJM4580DD	HC10112090
QC07		4822 130 42292	TRS. 2SC2120 O	HT321201A0

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QC08		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
QG51		9965 000 01358	IC TC9459N ELE.VOLUME	HC10443050
QG52	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QG53	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QG52	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QG53	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QM01				
		4822 130 11511	CHIP TR. 2SC3326 A OR B	HX333262A0
QM08				
QM09				
		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
QM13				
QM15		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
QM16			DIG.TRS. RN2402 CHIP	BA1000605R
QM17		4822 209 90532	IC NJU3713D	HC10161090
QV01		9965 000 01358	IC TC9459N ELE.VOLUME	HC10443050
QV02		9965 000 01358	IC TC9459N ELE.VOLUME	HC10443050
QV03		9965 000 01358	IC TC9459N ELE.VOLUME	HC10443050
QV05		4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV06	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV07	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV09	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV10	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV11	14A	4822 209 31153	IC NJM2114D	HC10111090
			DUAL LOW NOISE OP-AMP	
QV06	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QV07	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QV09	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QV10	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QV11	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
QV13		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
QV14		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
QV15				
		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0
QV18				
QV19		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
QV20		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
Q201		9965 000 01369	IC LA1837 FM/AM IF MPX IC	HC10384030
Q202		4822 130 62294	TRS. 2SC1809S P 150MW 500MHz	HT318091P0
Q203				
		4822 130 42594	DIG.TRS.	BA20000000
Q205			DTC144ES UN4213 47K 47K	BA
Q301	/K	4822 209 73064	IC NJM-2068-DD	HC10053090
Q301	/N	4822 209 73064	IC NJM-2068-DD	HC10053090
Q301	/S	4822 209 73064	IC NJM-2068-DD	HC10053090
Q351	/N	9965 000 06298	IC LC72722 RDS DECODER	HC10404030
Q351	/S	9965 000 06298	IC LC72723 RDS DECODER	HC10404030
Q352	/N, /S	4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10000000
Q353	/N, /S	4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20000000
Q354	/N, /S	4822 130 41947	TRS. 2SC2458.2SC1740S. 2SC3199.ETC	HT30000000
Q501		9965 000 01370	IC LC72130	HC10390030
P104-MISCELLANEOUS				
A101		9965 000 01388	VHF TUNER TFFJ4E	AV00900010
FA01			CERAMIC FILTER SFZ450JL3 CERAFIL 451K	FF10040410

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F201	/K,N,S	4822 242 70665	CERAMIC FILTER SFE10.7MS3-A	FF11070620	CD41	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
F201	/J	4822 242 70911	CERAMIC FILTER SFF10.7MA8-A	FF11070610	CD42		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
F202		4822 242 70665	CERAMIC FILTER SFE10.7MS3-A	FF11070620	CD43	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
JM01		4822 265 10731	TERMINAL YKC21-3778	YT02041170	CD44		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
JM02		9965 000 06307	TERMINAL YKC21-3777	YT02060550	CD45	14A	4822 124 21894	ELECT. 10µl 16V	EJ10601610
JM03		4822 265 10731	TERMINAL YKC21-3778	YT02041170	CD46		4822 124 21894	ELECT. 10µl 16V	EJ10601610
JM05		4822 267 10603	TERMINAL YKC21-3707	YT02011030	CD47	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
J101		4822 290 81632	TERMINAL YKD31-0215A FM/AM ANT PAL	YT03030020	CD48		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
LA01		4822 157 63084	ANT COIL MW ANT 280µH	LA10295170	CD49	14A	4822 124 21894	ELECT. 10µl 16V	EJ10601610
LA02		4822 157 70779	OSC. COIL MW	LO70013010	CD50		4822 124 21894	ELECT. 100µF M 10V RA-2	OA10701020
LA03	/N	4822 157 52714	ANT COIL LW ANT	LA10295160	CD51	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
LA04	/N	4822 157 70781	OSC. COIL LW	LO70013020	CD52		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
LA05		4822 157 53589	CHOKO COIL TL-8 393J	LC23960710	CD53	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
LA06		4822 148 81095	I.F.T. COIL AM IFT K7-H5 FOR SFP450D	LI70033510	CD54		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
LC01		9965 000 01570	RELAY ED2-24	LY20240470	CD55	14A	5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300
LM01		9965 000 01576	RELAY MR82-24USR	LY20240480	CD56		5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300
LM04					CD61	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
L201		4822 157 63904	I.F.T. COIL FM DET M292BEAS-5969Z	LI70376010	CD63				
L301		4822 157 71731	M.P.X. COIL LPF-V10-A1 19/38kHz	LS10293020	CD69				
L302		4822 157 71731	M.P.X. COIL LPF-V10-A1 19/38kHz	LS10293020	CD71	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
L350	/N, /S	4822 242 73843	EMI FILTER DSS306-91-F-223	FM12223010	CD73	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
L351	/N, /S	4822 242 73843	EMI FILTER DSS306-91-F-233Z	FM12223010	CD81				
L352		4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110	CD92		4822 126 11703	CER.CHIP 0.01µF +80%-20%	DK98103300
L356		4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110	CD93		9965 000 01318	ELECT. 220µF M 10V RA-2	OA22701020
L359	/N, /S	4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110	CD94		9965 000 01318	ELECT. 220µF M 10V RA-2	OA22701020
L501		4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110	CD95		9965 000 01318	ELECT. 220µF M 10V RA-2	OA22701020
L504		4822 111 90892	CHIP 0Ω ±5% 1/10W	NI05000110	CD96		9965 000 01318	ELECT. 220µF M 10V RA-2	OA22701020
X351	/N, /S	4822 242 10857	CRYSTAL 4.332MHz AT-49	JX04003260	CD97		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520
X501		4822 242 72333	CRYSTAL AD0618CTB 7.2MHz	JX07001260	CD98		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520
CD01		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE01	14A	5322 122 32654	CER.CHIP 0.022µF ±10% XTR	DK96223200
CD02		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE01	18A	482211682487	CHIP RES. 0ohm ±5% 1/16W	NN05000610
CD03		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE02	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CD05		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE03	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD06		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE04	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CD07		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE05	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD09		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE06	14A	5322 126 11578	CER.CHIP 1000pF ±10% B 50V	DK96102300
CD10		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE11	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD11		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE13	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD13		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE14	14A	4822 122 33753	CER.CHIP 150pF ±5% CG 50V	DD95151300
CD14		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE15	14A	4822 122 33753	CER.CHIP 150pF ±5% CG 50V	DD95151300
CD15		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE16	14A	4822 126 12502	CER.CHIP 820pF ± 10%	DK96821300
CD17		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE18	14A	4822 126 13837	CER.CHIP 0.1µF ±10% B 10V	DK96104200
CD18		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE19	14A	4822 126 14417	CER.CHIP 0.01µF ±10% 50V	DK96103300
CD19		4822 124 21894	ELECT. 10µl 16V	EJ10601610	CE33	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CD21		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE34	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD22		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE35	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CD23		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	CE36	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD25		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE37	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
CD26		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE39	14A	4822 124 12389	ELECT. 47µl 16V BP	EQ47601630
CD27		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	CE42	14A	4822 126 14417	CER.CHIP 0.01µF ±10% 50V	DK96103300
CD29		5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300	CE43	14A	4822 126 14417	CER.CHIP 0.01µF ±10% 50V	DK96103300
CD30		5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300	CE44	14A	4822 122 33752	CER.CHIP 18pF 50V ±5%	DD95150300
CD31		5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300	CE45	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE46	14A	4822 126 13689	CER.CHIP 18pF	DD95180300
					CE51	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE52	14A	5322 126 11578	CER.CHIP 1000pF B 50V	DK96102300
					CE53	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE54	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE56				
					CE60	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE61	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
					CE62	14A	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
					CE63	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
					CE65	14A	4822 126 11703	CER.CHIP 0.01µF	DK98103300
					CE66	14A	4822 126 11703	CER.CHIP 0.01µF	DK98103300

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CH05				
}				
CH08		4822 121 10792	FILM 220pF 100V PP APSV	OF15221540
CH12	18A	482211682487	CHIP RES. 0Ω +- 5% 1/16W	NN05000610
CH14	14A	4822 124 81151	ELECT. 22μF M 25V ARA	OA22602550
CH14	/F		ELECT. 22μF M 25V ARS	OA22602540
CH14	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH15				
}		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH18				
CH24	18A	482211682487	CHIP RES. 0Ω +- 5% 1/16W	NN05000610
CH26	14A	4822 124 81151	ELECT. 22μF M 25V ARA	OA22602550
CH26	/F		ELECT. 22μF M 25V ARS	OA22602540
CH26	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH27		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH28		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH31		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CH32		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CH33		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH34		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH39		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH40		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH41		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CH42		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CH55				
}		4822 121 10792	FILM 220pF 100V PP APSV	OF15221540
CH58				
CH61		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH62		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH63	14A	4822 124 81151	ELECT. 22μF 25V ARA	OA22602550
CH63	/F		ELECT. 22μF M 25V ARS	OA22602540
CH63	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH64	14A	4822 124 81151	ELECT. 22μF M 25V ARA	OA22602550
CH64	17, 18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH65				
}		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH68				
CH70		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CH73		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH74		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CH75	14A	4822 124 81151	ELECT. 22μF 25V ARA	OA22602550
CH75	/F		ELECT. 22μF M 25V ARS	OA22602540
CH75	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH76	14A	4822 124 81151	ELECT. 22μF 25V ARA	OA22602550
CH76	/F		ELECT. 22μF M 25V ARS	OA22602540
CH76	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CH77		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH78		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH80		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CH81		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CH82		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CH83		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CH84		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ05				
}		4822 121 10792	FILM 220pF 100V PP APSV	OF15221540
CJ08				
CJ11	14A	4822 124 81151	ELECT. 22μF M 25V ARA	OA22602550
CJ11	/F		ELECT. 22μF M 25V ARS	OA22602540
CJ11	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CJ12	14A	4822 124 81151	ELECT. 22μF M 25V ARA	OA22602550
CJ12	/F		ELECT. 22μF M 25V ARS	OA22602540
CJ12	18A	996500001581	ELECT. 22μF M 25V RA-2	OA22602520
CJ13				
}		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ16				
CJ19		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CJ20		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CJ21		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CJ22		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520

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CJ23		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ24		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ25		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CJ26		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CJ55				
}	14A	4822 121 10792	FILM 220pF 100V PP APSV	OF15221540
CJ58				
CJ59	14A	4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ60	14A	4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ75				
}		4822 121 10792	FILM 220pF 100V PP APSV	OF15221540
CJ78				
CJ79		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CJ80		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK01				
}		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CK04				
CK05				
}		9965 000 06286	CER.CHIP 470pF ± 5% J SL	DD95471370
CK08				
CK11				
}		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK20				
CK21		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CK22		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620
CK23		9965 000 06287	CER.CHIP 0.22μF +80%-20%	DK98224200
CK24		9965 000 06287	CER.CHIP 0.22μF +80%-20%	DK98224200
CK25		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CK26		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CK27		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK28		4822 122 31765	CER.CHIP 100pF ±5% CG 50V	DD95101300
CK30		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK31		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK33		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CK34		4822 124 41535	ELECT. 100μF M 25V RA-2	OA10702520
CK35		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK36		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CK37				
}		5322 126 11583	CER.CHIP 0.01μF ±10% B 25V	DK96103200
CK40				
CK41		4822 124 21894	ELECT. 10μF 16V	EJ10601610
CK42		4822 124 21894	ELECT. 10μF 16V	EJ10601610
CK43		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CK44		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CK45		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CK46		4822 122 33761	CER.CHIP 22pF ±5% CG50V	DD95220300
CR01		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR02		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CR03		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR04		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CR05		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR06		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CR07		4822 126 13837	CER.CHIP 0.1μF ±10% B 10V	DK96104200
CR08		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR10		4822 126 11568	CER.CHIP 470pF	DK96471300
CR11		4822 126 13837	CER.CHIP 0.1μF ±10% B 10V	DK96104200
CR12		4822 126 13837	CER.CHIP 0.1μF ±10% B 10V	DK96104200
CR13		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR14		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR15		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CR16		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR17		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR18		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR19		5322 126 11583	CER.CHIP 0.01μF ±10% B 25V	DK96103200
CR20		5322 126 11583	CER.CHIP 0.01μF ±10% B 25V	DK96103200
CR21		4822 126 13837	CER.CHIP 0.1μF ±10% B 10V	DK96104200
CR22		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200
CR23		4822 126 11687	CER.CHIP 0.1μF +80%-20%	DK98104200

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	
CR24	14A	4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200				P604-CAPACITORS (COMMON) PLASTIC FILM CAPACITOR ±5% 50V : CE31 CE32 CE41 CH01-CH04 CH13 CH25 CH51 CH52-CH54 CH59 CH60 CH71 CH72 CJ02-CJ04 CJ09 CJ10 CJ51- CJ54 CJ71-CJ74 CK09 CK10		
CR25		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200						
CR26		4822 126 11703	CER.CHIP 0.01µF	DK98103300						
CR27		4822 126 11703	CER.CHIP 0.01µF	DK98103300						
CR28		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020						
CR29		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200						
CR30		5322 126 11578	CER.CHIP 1000pF ±10% B 50V	DK98102300						
CR31		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200						
CR32		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020						
CR33		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200						
CR34	14A	5322 126 11583	CER.CHIP 0.01µF ±10% B 25V	DK96103200	RD01	14A	4822 051 30103		CHIP 10kΩ ±5% 1/16W	NN05103610
CR34	18A	482212613837	CER.CHIP 0.1µF ±10% B 10V	DK96104200	RD05	14A	4822 051 30103		CHIP 10kΩ ±5% 1/16W	NN05103610
CR35		5322 126 11583	CER.CHIP 0.01µF ±10% B 25V	DK96103200	RD07	14A	4822 051 30103		CHIP 10kΩ ±5% 1/16W	NN05103610
C601		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RD81	18A	482211682487		CHIP 0Ω ±5% 1/16W	NN05000610
C602		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RD82	18A	482211682487		CHIP 0Ω ±5% 1/16W	NN05000610
C603		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RD83	18A	482211682487		CHIP 0Ω ±5% 1/16W	NN05000610
C604		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RD61	14A	4822 116 82487		CHIP 0Ω ±5% 1/16W	NN05000610
C605		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RD63	14A	4822 116 82487		CHIP 0Ω ±5% 1/16W	NN05000610
C606		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RD65	14A	4822 116 82487		CHIP 0Ω ±5% 1/16W	NN05000610
C607		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE01	14A	4822 051 30561		CHIP 560Ω ±5% 1/16W	NN05561610
C608		4822 122 33761	CER.CHIP 22pF ±5% CG 50V	DD95220300	RE02	14A	4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610	
C609		4822 122 33761	CER.CHIP 22pF ±5% CG 50V	DD95220300	RE03	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C610		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE04	14A	4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610	
C611		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE05	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C612		4822 126 11568	CER.CHIP 470pF	DK96471300	RE06	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C613		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE07	14A	4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	
C614		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE08	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C615		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE10	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C616		5322 126 11583	CER.CHIP 0.01µF ±10% B 25V	DK96103200	RE11	14A	4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	
C617		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE12	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C618		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE13	14A	4822 051 30151	CHIP 150Ω ±5% 1/16W	NN05151610	
C620		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE14	14A	4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610	
C621		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE15					
C622		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610		
C623		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE18					
C624		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE19	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C625		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE20	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C651		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RE21	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C652		4822 126 11703	CER.CHIP 0.01µF	DK98103300	RE22	14A	4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	
C653		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE23	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C654		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE24	14A	4822 051 30332	CHIP 3.3kΩ ±5% 1/16W	NN05332610	
C655		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE25	14A	4822 117 12902	CHIP 8.2kΩ ±5% 1/16W	NN05822610	
C656		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE31	14A	4822 051 30392	CHIP 3.9kΩ ±5% 1/16W	NN05392610	
C657		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE32	14A	4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	
C658		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE33	14A	4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610	
C662		4822 126 13396	CER.CHIP 0.047µF ±10% X7R	DK96473200	RE34	14A	4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610	
C664		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE35	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C665		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE41	14A	4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610	
C666		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE42	14A	4822 051 30683	CHIP 68kΩ ±5% 1/16W	NN05683610	
C667		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE43	14A	4822 051 30121	CHIP 120Ω ±5% 1/16W	NN05121610	
C668		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE44	14A	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	
C669		4822 126 14417	CER.CHIP 0.01µF B 50V	DK96103300	RE45	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C670		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE46	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C680		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE47	14A	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	
C690		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE48	14A	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	
C691		4822 126 14417	CER.CHIP 0.01µF B 50V	DK96103300	RE49	14A	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	
C692		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE50	14A	4822 117 12139	CHIP 22Ω ±5% 1/16W	NN05220610	
C693		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE61	14A	4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610	
C694		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020	RE62	14A	4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610	
C695		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200	RE63	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C696		5322 126 11583	CER.CHIP 0.01µF ±10% B 25V	DK96103200	RE64	14A	4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	
C697		5322 126 11583	CER.CHIP 0.01µF ±10% B 25V	DK96103200	RE67	14A	4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610	
					RE59					
					18A	482211682487	CHIP 0Ω ±5% 1/16W	NN05000610		
					RE72					
					RH01					
					RH12		4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610	

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RH13		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH14		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH15	14A	4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH16	14A	4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH17		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH18	14A	4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH19		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH21		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH22		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH24		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH21	18A	482211683215	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RH22	18A	482205130472	CHIP 4.7kΩ ±5% 1/16W	NN05222610
RH23	18A	482205130223	CHIP 22kΩ ±5% 1/16W	NN05101610
RH25		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH26		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH27				
	14A	4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH31				
RH32		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH34		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH35		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH34	18A	482211683215	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RH35	18A	482205130472	CHIP 4.7kΩ ±5% 1/16W	NN05222610
RH36	18A	482205130223	CHIP 22kΩ ±5% 1/16W	NN05101610
RH37		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH38		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH51				
		4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610
RH52				
RH63				
		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH66				
RH67		4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610
RH68		4822 051 30392	CHIP 3.9kΩ ±5% 1/16W	NN05392610
RH69		4822 051 30562	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RH70		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RH71		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RH72		4822 051 30153	CHIP 15kΩ ±5% 1/16W	NN05153610
RH73		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH74		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH75		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH76		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH77				
		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RH80				
RH81		4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610
RH82		4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610
RH83		4822 051 30562	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RH84		4822 051 30562	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RH85		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RH86		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RH87		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH88		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RH89		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RH90		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RJ01				
		4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610
RJ12				
RJ13				
		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RJ16				
RJ17		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RJ18		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RJ19		4822 051 30562	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RJ20		4822 051 30562	CHIP 5.6kΩ ±5% 1/16W	NN05562610
RJ21		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RJ22		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RJ23		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RJ24		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RJ25		4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610
RJ26		4822 051 30223	CHIP 22kΩ ±5% 1/16W	NN05223610
RJ51				
	14A	4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610
RJ62				
RJ71				
		4822 116 83211	CHIP 1.8kΩ ±5% 1/16W	NN05182610
RJ82				
RJ91	18A	4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610
RK01		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RK02		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RK03		4822 117 12902	CHIP 8.2kΩ ±5% 1/16W	NN05822610
RK04		4822 117 12902	CHIP 8.2kΩ ±5% 1/16W	NN05822610
RK05		9965 000 03187	CHIP 56Ω ±5% 1/16W	NN05560610
RK06		9965 000 03187	CHIP 56Ω ±5% 1/16W	NN05560610
RK07				
		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RK18				
RK19				
		9965 000 05009	CHIP 39Ω ±5% 1/16W	NN05390610
RK22				
RK23				
		4822 051 30101	CHIP 100Ω ±5% 1/16W	NN05101610
RK28				
RK29		4822 051 30302	CHIP 3kΩ ±5% 1/16W	NN05302610
RK30		4822 051 30302	CHIP 3kΩ ±5% 1/16W	NN05302610
RK31		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RK32		4822 051 30222	CHIP 2.2kΩ ±5% 1/16W	NN05222610
RK33		4822 051 30474	CHIP 470kΩ ±5% 1/16W	NN05474610
RK34		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RK35				
		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010
RK37				
RK38		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610
RR01		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RR02		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RR03		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RR04		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RR05		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RR06		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RR07		4822 051 30339	CHIP 33Ω ±5% 1/16W	NN05330610
RR08		4822 051 30339	CHIP 33Ω ±5% 1/16W	NN05330610
RR09		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RR10		4822 117 12902	CHIP 8.2kΩ ±5% 1/16W	NN05822610
RR11		9965 000 06300	CHIP 5.1kΩ ±5% 1/16W	NN05512610
RR12		4822 051 30302	CHIP 3kΩ ±5% 1/16W	NN05302610
RR13		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RR14				
		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610
RR19				
RR21		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RR22		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RR23		4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610
RR24		4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610
RR25		4822 051 30682	CHIP 6.8kΩ ±5% 1/16W	NN05582610
RR26				
		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
RR29				
RR30		4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610
RR31		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
RR32		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610
RR33		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610
R601		4822 051 30105	CHIP 1MΩ ±5% 1/16W	NN05105610
R602		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
R606		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610
R651		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610
R652		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MUJ)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MUJ)
R654		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	QK03				
R660		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	QK06	14A	4822 209 91175	IC NJM2114M OP AMP	HC10175090
R661		4822 117 13632	CHIP 100kΩ ±5% 1/16W	NN05104610	QK06				
R662		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	QK03				
R664		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	QK06	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090
R675		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	QK07		4822 130 63601	CHIP TR. 2SC4213	HX342132A0
R676		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610	QK08		4822 130 63601	CHIP TR. 2SC4213	HX342132A0
R677					QK10		4822 130 61903	DIG.TR.S. DTA114EU	BA10026210
R688		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	QR01		9965 000 06294	IC LC89055Q	HC10405030
R689		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610				SPDIF RECEIVER	
R690		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	QR02		9965 000 01342	IC TC74HC151AF	HC715100Z0
R693		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610	QR03		9965 000 01342	IC TC74HC151AF	HC715100Z0
R699		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	QR04		4822 209 30426	IC CMOS 74HC00	HC700000Z0
			P604-SEMICONDUCTORS		QR05		4822 209 30426	IC CMOS 74HC00	HC700000Z0
DE01	14A	4822 130 10683	CHIP DIODE KV1851-TL00	HZ40003420	QR06		4822 209 13267	IC TC74HC7007AF	HC800705Q00
DK01					QR07		4822 209 31568	IC 74HCU04 CMOS	HC700400Z0
DK04		4822 130 81324	CHIP DIODE 1SS302	HZ20018050	QR09		4822 130 60856	DIG.TR.S. DTC144EC	BA20021210
DR01		4822 130 81324	CHIP DIODE 1SS302	HZ20018050	QR10		4822 130 60856	DIG.TR.S. DTC144EC	BA20021210
DR02		4822 130 81324	CHIP DIODE 1SS302	HZ20018050	Q601		9965 000 01321	IC YSS912	HC10014640
D692		4822 130 80522	CHIP DIODE 1SS300 DAP202U	HZ21006000	Q602		9965 000 01322	DTS/AC-3 DECODER	HC007405K0
D693		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000	Q603		4822 209 15598	IC 74HCT157 PACK	HC715705Q0
QD01		9965 000 06290	IC AD1852 DAC 24BIT 96kHz	HC10014840	Q604		9965 000 01324	IC 1M SRAM 8X128K 15NS	HC10088000
QD02		9965 000 06290	IC AD1852 DAC 24BIT 96kHz	HC10014840	Q605		9965 000 01326	IC TCW32FU OR *2	HC10419050
QD03		9965 000 06290	IC AD1852 DAC 24BIT 96kHz	HC10014840	Q651		9965 000 06292	IC ZR38601	HC10102990
QD41	14A	9965 000 06290	IC AD1852 DAC 24BIT 96kHz	HC10014840	Q652		9965 000 01338	THX5.1 EX DECODE	HC007205K0
QD42		9965 000 06290	IC AD1852 DAC 24BIT 96kHz	HC10014840	Q653		9965 000 01322	IC TC7SET04F	HC007405K0
QD43	14A	4822 209 17526	IC TC160G11AU-1305	HC10438050	Q691		9965 000 06296	MICROPROCESSOR	HU326JT10F
QE01					Q692		9965 000 01323	TMP93CW44ADF SURR CPU	HC007305K0
QE03	14A	4822 130 60669	CHIP TR.	HX300012A0	Q693		4822 209 32921	IC TC7WT126FU	HC10048530
QE04	14A	4822 209 14876	2SC4081 Q R 2SC4116 Y GR	HC10065170	Q694		4822 209 33521	IC S-80745AN	HC10382050
QE05	14A	4822 130 60669	IC MC14577C SOP	HX300012A0				IC TC7W04FU	
QE06	14A	4822 130 10698	CHIP TR.	HX100012A0	JE01		4822 267 10603	P604-MISCELLANEOUS	YT02011030
QE07	14A	4822 130 10698	2SC4081 Q R 2SC4116 Y GR	HX100012A0	JR01		9965 000 01340	TERMINAL YKC21-3707	YT02021540
QE08	14A	4822 209 83357	SA1586 Y GR 2SA1576A Q R	HC10029090	JR02		4822 218 11487	TERMINAL RCA 2P AU BL	YJ15000150
QE09	14A	4822 209 17162	CHIP TR.	HC10016660	JR03		4822 218 11487	OPTICAL RECIVER GP1F32R	YJ15000150
QE10	14A	4822 209 14864	2SA1586 Y GR 2SA1576A Q R	HC10076000	JR04		4822 267 31369	OPTICAL RECIVER GP1F32R	YJ15000090
QH01	14A	4822 209 91175	IC NJM4560M	HC10029090	JR05		4822 290 81638	OPTICAL OUTPUT GP1F32T	YT02010790
QH02	14A	4822 209 91175	IC PM4007A	HC10016660	JR06			TERMINAL 14X14 RCA 1L1P	YL01010140
QH03	14A	4822 209 91175	AC-3 RF DEMODURATOR	HC10076000	JR07		4822 218 11487	TERMINAL GND TERMINAL M3	YJ15000150
QH01	18A	482220973064	IC 8X32K SRAM <35NS SOJ	HC10076000	LD01			OPTICAL RECIVER	
QH02	18A	482220973064			LD03		4822 526 10584	FERRITE	FC90090010
QH03	18A	482220973064			LD05			ZBF503D-00TA	
QH51	14A	4822 209 91175	IC NJM2114M OP AMP	HC10175090	LD07		4822 526 10584	FERRITE	FC90090010
QH52	14A	4822 209 91175	IC NJM-2068-DD OP AMP	HC10053090	LD41	14A	4822 526 10584	ZBF503D-00TA	FC90090010
QH53	14A	4822 209 91175	IC NJM-2068-DD OP AMP	HC10053090	LD42		4822 526 10584	FERRITE CORE	FC90090010
QH51	18A	482220973064	IC NJM2114M OP AMP	HC10175090	LD45	14A	4822 526 10584	ZBF503D-00TA	FC90090010
QH52	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090	LD46		4822 526 10584	FERRITE CORE	FC90090010
QH53	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090	LD81			ZBF503D-00TA	FC90090010
QJ01	14A	4822 209 91175	IC 8X32K SRAM <35NS SOJ	HC10076000	LD86		4822 242 73843	FERRITE CORE	FC90090010
QJ02	14A	4822 209 91175			LE01	14A	4822 157 70681	ZBF503D-00TA	FC90090010
QJ01	18A	482220973064			LE02	14A		EMI FILTER DSS306-91-F-2233	FM12223010
QJ02	18A	482220973064			LE03	14A		EMI FILTER DSS306-91-F-2233	FM12223010
QJ51		4822 209 91175	IC NJM2114M OP AMP	HC10175090	LE04	14A	4822 242 73843	EMI FILTER DSS306-91-F-2233	FM12223010
QJ71	14A	4822 209 91175	IC NJM2114M OP AMP	HC10175090	LH01		4822 526 10584	FERRITE CORE	FC90090010
QJ71	18A	482220973064	IC NJM-2068-DD OP AMP	HC10053090				ZBF503D-00TA	
QK01		9965 000 06291	IC AK5392 2CH.ADC 24BIT	HC10028480					

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LH02		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010				P704-RESISTORS	
LH51		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010	▲ R707		4822 050 21502	1.5kΩ ±5% 1/6W	GG05152160
LH52		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010	▲ R710				
LJ01		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010	R715		4822 100 12159	TRIM. 100kΩ RH0638CJ4R	RA01040780
LJ02		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010	R716		4822 100 12159	TRIM. 100kΩ RH0638CJ4R	RA01040780
LK01		4822 526 10584	FERRITE CORE ZBF503D-00TA	FC90090010	▲ R725				
LR01		4822 142 60422	PULSE TRANSF. TPS247MN-0386AN	TP41042030	▲ R736		4822 052 10569	56Ω 1/6W	GG05560160
LR02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ R743				
L601		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	R744		4822 100 20681	TRIM. 2.2kΩ RH0638CJ3R	RA02220780
L602		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ R749		4822 100 20681	TRIM. 2.2kΩ RH0638CJ3R	RA02220780
L651		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010	▲ R752				
L691					▲ R753		4822 052 10109	10Ω ±5% 1/4W	GG05100140
L697		4822 157 10884	EMI FILTER BLM11A221S	FN31000010	▲ R756				
XE01		9965 000 01320	CRYSTAL 18.432MHz AT-49	JX18001260	▲ R757		4822 052 10101	100Ω 1/6W	GG05101160
X601		4822 242 10651	CRYSTAL 12.288MHz AT-49	JX12013260	R758				
X691		9965 000 01346	SERAMIC VIB. CST20 00MXW	FQ02005030	▲ R760				
			P704-3CH POWER-AMP. CIRCUIT BOARD		▲ R761		4822 052 10102	1kΩ ±5% 1/6W	GG05102160
			P704-CAPACITORS		▲ R762		4822 052 10102	1kΩ ±5% 1/6W	GG05102160
CT01	14A	4822 124 90058	ELECT. 47μF M 25V ARA	OA47602550	▲ R763				
CT01	18A	482212422275	ELECT. 47μF M 10V RA-2	OA47601020	▲ R766		4822 052 10229	22Ω 1/6W	GG05220160
CT03		9965 000 05891	FILM 470pF J 100V APSV	OF15471540	▲ R767		4822 116 60319	FUSIBLE 220Ω ±5% 1/2W	NH05221120
CT05		9965 000 05891	FILM 470pF 100V PP APSV	OF15471540	▲ R768		4822 116 60319	FUSIBLE 220Ω ±5% 1/2W	NH05221120
CT07		9965 000 01040	ELECT. 470μF M 6.3V RA-2	OA47700620	R769				
CT11		9965 000 02644	ELECT. 220μF M 100V RA2	OA22710020	▲ R772		4822 052 10228	2.2kΩ ±5% 1/6W	GG05022160
CT13		9965 000 02644	ELECT. 220μF M 100V RA2	OA22710020	▲ R773		9965 000 01764	0.10Ω K 5W X2 RGC55 W/TP	BZ10102020
CT15		4822 124 11533	ELECT. 1μF M 100V RA2	OA10510020	▲ R774		9965 000 01764	0.10Ω K 5W X2 RGC55 W/TP	BZ10102020
CT17		9965 000 01561	MICA 10pF 250V FE	DF31100520	▲ R775		4822 052 10102	1kΩ 1/6W	GG05102160
CT19		9965 000 05892	ELECT. 4.7μF M 100V	EA47510010	▲ R776		4822 052 10102	1kΩ 1/6W	GG05102160
CT27		9965 000 00438	FILM 120pF J 100V APSV	OF15121540	▲ R777		4822 050 22202	2.2kΩ ±5% 1/6W	GG05222160
CT29		9965 000 00438	FILM 120pF J 100V APSV	OF15121540	▲ R778		4822 050 22202	2.2kΩ ±5% 1/6W	GG05222160
C701	14A	4822 124 90058	ELECT. 47μF M 25V ARA	OA47602550	▲ R783		4822 116 83929	220Ω ±5% 1/4W	GG05221140
C702	14A	4822 124 90058	ELECT. 47μF M 25V ARA	OA47602550	▲ R784		4822 116 83929	220Ω ±5% 1/4W	GG05221140
C701	18A	482212422275	ELECT. 47μF M 10V RA-2	OA47601020	▲ R785		4822 053 10109	10Ω 1W	GA05100010
C702	18A	482212422275	ELECT. 47μF M 10V RA-2	OA47601020	▲ R786		4822 053 10109	10Ω 1W	GA05100010
C703					▲ RT07		4822 050 21502	1.5kΩ ±5% 1/6W	GG05152160
C706		9965 000 05891	FILM 470pF 100V PP APSV	OF15471540	▲ RT09		4822 050 21502	1.5kΩ ±5% 1/6W	GG05152160
C707		9965 000 01040	ELECT. 470μF M 6.3V RA-2	OA47700620	RT15		4822 100 12159	TRIM. 100kΩ RH0638CJ4R	RA01040780
C708		9965 000 01040	ELECT. 470μF M 6.3V RA-2	OA47700620	▲ RT25		4822 052 10561	560Ω 1/6W	GG05561160
C711					▲ RT27		4822 052 10561	560Ω 1/6W	GG05561160
C714		9965 000 02644	ELECT. 220μF M 100V RA2	OA22710020	▲ RT29		4822 052 10561	560Ω 1/6W	GG05561160
C715		4822 124 11533	ELECT. 1μF M 100V RA2	OA10510020	▲ RT31		4822 052 10561	560Ω 1/6W	GG05561160
C716		4822 124 11533	ELECT. 1μF M 100V RA2	OA10510020	▲ RT33		4822 052 10569	56Ω 1/6W	GG05560160
C717		9965 000 01561	MICA 10pF 250V FE	DF31100520	▲ RT35		4822 052 10569	56Ω 1/6W	GG05560160
C718		9965 000 01561	MICA 10pF 250V FE	DF31100520	RT43		4822 100 20681	TRIM. 2.2kΩ RH0638CJ3R	RA02220780
C719		9965 000 05892	ELECT. 4.7μF M 100V RE3	EA47510010	▲ RT49		4822 052 10109	10Ω ±5% 1/4W	GG05100140
C720		9965 000 05892	ELECT. 4.7μF M 100V	EA47510010	▲ RT51		4822 052 10109	10Ω ±5% 1/4W	GG05100140
C727					▲ RT53		4822 052 10101	100Ω 1/6W	GG05101160
C730		9965 000 00438	FILM 120pF J 100V APSV	OF15121540	▲ RT55		4822 052 10101	100Ω 1/6W	GG05101160
			P704-CAPACITORS (COMMON)		RT57			JUMPER	75060501 P0
			PLASTIC FILM CAPACITOR ±5% 50V :		RT59			JUMPER	75060501 P0
			C721-C726 CT21 CT23 CT25		▲ RT61		4822 052 10102	1kΩ ±5% 1/6W	GG05102160
					▲ RT63		4822 052 10229	22Ω 1/6W	GG05220160
					▲ RT65		4822 052 10229	22Ω 1/6W	GG05220160
					▲ RT67		4822 116 60319	FUSIBLE 220Ω ±5% 1/2W	NH05221120
					RT69		4822 052 10228	2.2kΩ ±5% 1/6W	GG05022160
					RT71		4822 052 10228	2.2kΩ ±5% 1/6W	GG05022160
					▲ RT73		9965 000 01764	0.10Ω K 5W X2 RGC55 W/TP	BZ10102020
					▲ RT75		4822 052 10102	1kΩ 1/6W	GG05102160
					▲ RT77		4822 050 22202	2.2kΩ ±5% 1/6W	GG05222160
					▲ RT83		4822 116 83929	220Ω ±5% 1/4W	GG05221140
					▲ RT85		4822 053 10109	10Ω 1W	GA05100010

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
			P704-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : R701-R706 R711-R714 R717-R724 R737-R742 R745-R748 R779-R782 R787-R790 RT01 RT03 RT05 RT11 RT13 RT17 RT19 RT21 RT23 RT37 RT39 RT41 RT45 RT47 RT79 RT81 RT87 RT89		▲ Q723		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
					▲ Q724		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
					Q729		4822 130 43233	TRS. 2SC2240	HT322402A0
					Q730		4822 130 43233	TRS. 2SC2240	HT322402A0
					QT01		4822 130 42949	TRS. 2SA970	HT109702A0
					QT03		4822 130 42949	TRS. 2SA970	HT109702A0
					QT05		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
					QT07		4822 130 43283	TRS. 2SC2705 O OF Y	HT327052A0
					QT09		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0
					▲ QT11		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0
					▲ QT13		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0
					QT17		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0
					QT19		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
					▲ QT21		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0
					▲ QT23		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
					QT29		4822 130 43233	TRS. 2SC2240	HT322402A0
D701		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A JUMPER	HD20002000 75060501P0					
D704									
D712									
D713		4822 130 80837	DIODE HSS81	HD20027010					
D716									
D717									
D720		4822 130 80317	ZENER DIODE 5.1V RD5.1JB2 MTZJ5.1B	HD30511000	L701		4822 157 70022	AIR COIL SPK CHOCK COIL	ML08010030
D721		4822 130 80837	DIODE HSS81	HD20027010	L702		4822 157 70022	AIR COIL SPK CHOCK COIL	ML08010030
D722		4822 130 80837	DIODE HSS81	HD20027010	LT01		4822 157 70022	AIR COIL SPK CHOCK COIL	ML08010030
DT01		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	▲ S701		9965 000 01765	CIRCUIT BREAKER TEMP-SW 120DEG. OHD3-120B	FR31200020
DT03		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A JUMPER	HD20002000 75060501P0	▲ S702		9965 000 01765	CIRCUIT BREAKER TEMP-SW 120DEG. OHD3-120B	FR31200020
DT05			JUMPER	75060501P0					
DT07			JUMPER	75060501P0					
DT09			JUMPER	75060501P0					
DT11			JUMPER	75060501P0	C861		4822 124 90354	ELECT. 100µF 16V	OA10701620
DT13		4822 130 80837	DIODE HSS81	HD20027010	C862		4822 122 30043	CER. 0.01µF +80%-20% Z 50V	DK18103310
DT15		4822 130 80837	DIODE HSS81	HD20027010	C871		4822 124 90354	ELECT. 100µF 16V	OA10701620
DT17		4822 130 80317	ZENER DIODE 5.1V RD5.1JB2 MTZJ5.1B	HD30511000	C872		4822 122 30043	CER. 0.01µF +80%-20% Z 50V	DK18103310
DT19		4822 130 80317	ZENER DIODE 5.1V RD5.1JB2 MTZJ5.1B	HD30511000	C881		4822 124 90354	ELECT. 100µF 16V	OA10701620
DT21		4822 130 80837	DIODE HSS81	HD20027010	C882		4822 126 10935	ELECT. 100µF M 6.3V	EJ10700610
▲ K761			TRS. KIT 2SA1360 2SC3423 PAIR O OR Y	HK136019C0	CN01		4822 122 40617	CER. 0.1µF +80%-20% 50V DC	DD38104010
▲ K763					CN02		4822 124 41539	ELECT. 47µF M 16V RA-2	OA47601620
▲ K766					CN03		4822 124 41539	ELECT. 47µF M 16V RA-2	OA47601620
▲ K768			TRS. KIT 2SA1837 2SC4793 MJI RANK	HK183719C0	CN04		4822 122 40617	CER. 0.1µF +80%-20% 50V DC	DD38104010
▲ K771					CN05		4822 124 90354	ELECT. 100µF 16V	OA10701620
▲ K773		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O OR Y PAIR	HK121619F0	CN06		4822 124 90354	ELECT. 100µF 16V	OA10701620
Q701					CN07		4822 124 41543	ELECT. 1µF 50V	OA10505020
Q704		4822 130 42949	TRS. 2SA970	HT109702A0	CN08		4822 122 40617	CER. 0.1µF +80%-20% 50V DC	DD38104010
Q705		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CN09		4822 124 90353	ELECT. 100µF 10V	OA10701020
Q706		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CN10		4822 124 90362	ELECT. 22µF 50V	OA22605020
Q707					CN11		5322 124 21731	ELECT. 10µF 50V	OA10605020
Q710					CN12		4822 124 41539	ELECT. 47µF 16V	OA47601620
▲ Q711		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CN13		4822 124 90354	ELECT. 100µF 16V	OA10701620
▲ Q712		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CN14		4822 124 90354	ELECT. 100µF M 16V RA-2	OA10701620
▲ Q713		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0	CN15		4822 122 40617	CER. 0.1µF +80%-20% 50V DC	DD38104010
▲ Q714		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0	CN16		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
Q717		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CN17		4822 124 12389	ELECT. BP 47µF M 16V	EQ47601630
Q718		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CP01		4822 124 90058	ELECT. 47µF M 25V ARA	OA47602550
Q719		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CP02		4822 124 90058	ELECT. 47µF M 25V ARA	OA47602550
Q720		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0	CP03				
▲ Q721		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0			9965 000 05891	FILM CAP 470pF ±5% 100V	QF15471540
▲ Q722		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0	CP06				
					CP07		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
					CP08		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
					CP11				
							9965 000 02644	ELECT. 220µF M 100V RA-2	OA22710020
					CP14				
					CP15		4822 124 11533	ELECT. 1µF M 100V RA2	OA10510020
					CP16		4822 124 11533	ELECT. 1µF M 100V RA2	OA10510020
					CP17		4822 123 30088	MICA 10pF ±0.5pF 250V FE	DF31100520
					CP18		4822 123 30088	MICA 10pF ±0.5pF 250V FE	DF31100520

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	
CP19		9965 000 05892	ELECT. 4.7µF M 100V	EA47510010				P754-SEMICONDUCTORS		
CP20		9965 000 05892	ELECT. 4.7µF M 100V	EA47510010	D861		4822 130 82421		DIODE 1D3	HD20002710
CP27					D871		4822 130 82421		DIODE 1D3	HD20002710
}					D881		4822 130 82421		DIODE 1D3	HD20002710
CP30		9965 000 00438	FILM CAP 120pF ±5% 100V	OF15121540	D882		4822 130 80132		ZENER DIODE 3.9V RD3.9ESB1 MTZJ3.9A	HD30391000
			P754-CAPACITORS (COMMON) PLASTIC FILM CAPACITOR ±5% 50V : CP21-CP26		DN01		4822 130 32362		DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
			P754-RESISTORS		DN02		4822 130 32362		DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
▲ R881		4822 050 21021	100Ω ±5% 1/4W	GG05101140	DN03		4822 130 82421		DIODE 1D3	HD20002710
▲ RN04		4822 050 21503	15kΩ ±5% 1/2W	GG05153120	DN04		4822 130 82421		DIODE 1D3	HD20002710
▲ RN08		4822 050 23303	33kΩ ±5% 1/4W	GG05333140	DN05		4822 130 32362		DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
▲ RN16		4822 052 10109	10Ω ±5% 1/6W	GG05100160	DN07					
▲ RN44		4822 053 10221	220Ω ±5% 1W	GA05221010	DN09		4822 116 21235	VARIATOR PTH9M04BE222TS2F333	HF00004230	
▲ RN45		4822 053 10331	330Ω ±5% 1W	GA05331010	DN10		4822 130 80837	DIODE HSS81	HD20027010	
▲ RN46		4822 053 10331	330Ω ±5% 1W	GA05331010						
▲ RP07			1.5kΩ ±5% 1/6W	GG05152160	DP01					
▲ RP10					}		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	
RP15		9965 000 01766	TRIM. 100kΩ	RA01040760	DP04					
RP16		9965 000 01766	TRIM. 100kΩ	RA01040760	DP05					
▲ RP25					}			JUMPER	75060501P0	
}		4822 052 10581	560Ω 1/6W	GG05561160	DP12					
▲ RP32					DP13					
▲ RP33					}		4822 130 80837	DIODE HSS81	HD20027010	
}					DP16					
▲ RP36					DP17					
RP43		9965 000 01566	TRIM. 2.2kΩ	RA02220760	}		4822 130 80317	ZENER DIODE 5.1V RD5.1JB2 MTZJ5.1B	HD30511000	
RP44		9965 000 01566	TRIM. 2.2kΩ	RA02220760	DP20					
▲ RP49					DP21		4822 130 80837	DIODE HSS81	HD20027010	
}		4822 052 10109	10Ω ±5% 1/4W	GG05100140	DP22		4822 130 80837	DIODE HSS81	HD20027010	
▲ RP52										
▲ RP53					▲ K764			TRS. KIT 2SA1360 2SC3423 PAIR O OR Y	HK136019C0	
}		4822 052 10101	100Ω 1/6W	GG05101160	▲ K765			TRS. KIT 2SA1360 2SC3423 O OR Y	HK136019C0	
▲ RP56					▲ K769			TRS. KIT 2SA1837 2SC4793 MJI RANK	HK183719C0	
RP57										
}			JUMPER	75060501P0	▲ K770			TRS. KIT 2SA1837 2SC4793 MJI RANK	HK183719C0	
RP60					▲ K774		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O OR Y PAIR	HK121619F0	
▲ RP61		4822 052 10102	1kΩ ±5% 1/6W	GG05102160	▲ K775		4822 130 11394	TRS. KIT 2SA1216 2SC2922 O OR Y PAIR	HK121619F0	
▲ RP62		4822 052 10102	1kΩ ±5% 1/6W	GG05102160						
▲ RP63					▲ Q861		4822 209 83824	IC NJM7805FA +5V	HC38905090	
}		4822 052 10229	22Ω 1/6W	GG05220160	▲ Q871		4822 209 83824	IC NJM7805FA +5V	HC38905090	
▲ RP66					▲ Q881		4822 130 83635	TRS. 2SC4793 O OR Y	HT347932A0	
▲ RP67		4822 116 60319	FUSIBLE 220Ω ±5% 1/2W	NH05221120	QN01		4822 209 83312	IC TA7317P	HC10042050	
▲ RP68		4822 116 60319	FUSIBLE 220Ω ±5% 1/2W	NH05221120	QN02		4822 130 42594	DIG. TRS. DTC144ES	BA20002000	
RP69					QN03		4822 130 42949	TRS. 2SA970	HT109702A0	
}		4822 052 10228	2.2Ω ±5% 1/6W	GG05022160	QN04		4822 130 60526	TRS. 2SD1508 HFE>4000	HT415080A0	
RP72					QN05		4822 130 42594	DIG. TRS. DTC144ES	BA20002000	
▲ RP73		9965 000 01764	0.10Ω K 5W X2 RGC55 W/TP	BZ10102020	QN06		4822 130 60696	TRS. 2SC1627 O OR Y	HT316272B0	
▲ RP74		9965 000 01764	0.10Ω K 5W X2 RGC55 W/TP	BZ10102020	▲ QN07		9965 000 01771	IC PQ30RV11	HC36930320	
▲ RP75		4822 052 10102	1kΩ 1/6W	GG05102160	QN08		4822 130 41947	TRS. 2SC536SP 2SC2458 2SC3311 2SC1740S	HT30001000	
▲ RP76		4822 052 10102	1kΩ 1/6W	GG05102160	QN09		4822 130 41947	TRS. 2SC536SP 2SC2458 2SC3311 2SC1740S	HT30001000	
▲ RP77		4822 050 22202	2.2kΩ ±5% 1/6W	GG05222160	QN10		4822 130 41947	TRS. 2SC536SP 2SC2458 2SC3311 2SC1740S	HT30001000	
▲ RP78		4822 050 22202	2.2kΩ ±5% 1/6W	GG05222160	QN11		4822 130 43233	TRS. 2SC2240	HT322402A0	
▲ RP83		4822 116 83929	220Ω ±5% 1/4W	GG05221140	QN12		4822 130 43233	TRS. 2SC2240	HT322402A0	
▲ RP84		4822 116 83929	220Ω ±5% 1/4W	GG05221140	QN13		4822 130 41947	TRS. 2SC536SP 2SC2458 2SC3311 2SC1740S	HT30001000	
▲ RP85		4822 053 10109	10Ω ±5% 1W	GA05100010	QN14		4822 130 42715	TRS. 2SA608SP ETC	HT10001000	
▲ RP86		4822 053 10109	10Ω ±5% 1W	GA05100010						
			P754-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : RN01-RN03 RN05-RN07 RN09-RN15 RN17-RN43 RN48 RN49 RP01-RP06 RP11-RP14 RP17-RP24 RP37-RP42 RP45-RP48 RP79-RP82 RP89 RP90							

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJJ)
QP01		4822 130 42949	TRS. 2SA970	HT109702A0
QP04		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
QP05		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
QP06		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
QP07		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0
QP10		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0
▲ QP11		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0
▲ QP12		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0
▲ QP13		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0
▲ QP14		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0
QP15		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0
QP16		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0
QP17		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0
QP18		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
QP19		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
QP20		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0
▲ QP21		4822 130 63635	TRS. 2SC4793 O OR Y	HT347932A0
▲ QP22		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
▲ QP23		4822 130 63634	TRS. 2SA1837 O OR Y	HT118372A0
▲ QP24		9965 000 01762	TRS. 2SC2922 O OR Y	HT329222A0
▲ QP25		9965 000 01762	TRS. 2SC2922 O OR Y	HT329222A0
▲ QP26		9965 000 01763	TRS. 2SA1216 O OR Y	HT112162A0
▲ QP27		9965 000 01763	TRS. 2SA1216 O OR Y	HT112162A0
▲ QP28		4822 130 43233	TRS. 2SC2240	HT322402A0
QP29		4822 130 43233	TRS. 2SC2240	HT322402A0
QP30		4822 130 43233	TRS. 2SC2240	HT322402A0
LN01		9965 000 01343	RELAY RELAY MR62-12SR	LY20120510
LP01		4822 157 70022	AIR COIL SPK CHOCK COIL	ML08010030
LP02		4822 157 70022	AIR COIL SPK CHOCK COIL	ML08010030
▲ MN51		9965 000 01770	D.C MOTOR FBA08A12H0 DC FAN 12V	MM01200320
▲ ZN51		9965 000 01772	DC FAN MOTOR UNIT W 3P WIRE	ZK300J0020
D799		4822 116 21235	P774-PO-AMP.TR-BLOCK 3CH CIRCUIT BOARD P774-SEMICONDUCTORS VARISTOR PTH9M04BE222TS2F333	HP00004230
Q715		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0
Q716		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0
▲ Q725		9965 000 01762	TRS. 2SC2922 O OR Y	HT329222A0
▲ Q726		9965 000 01762	TRS. 2SC2922 O OR Y	HT329222A0
▲ Q727		9965 000 01763	TRS. 2SA1216 O OR Y	HT112162A0
▲ Q728		9965 000 01763	TRS. 2SA1216 O OR Y	HT112162A0
QT15		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0
▲ QT25		9965 000 01762	TRS. 2SC2922 O OR Y	HT329222A0
▲ QT27		9965 000 01763	TRS. 2SA1216 O OR Y	HT112162A0
C801		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310
C802		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310
C803		4822 124 81133	ELECT. 4700μF 25V	OA47802520
C804		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310
C805		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C806		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310
C807		4822 124 81133	ELECT. 4700μF 25V	OA47802520
C808		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310
C817		5322 124 21731	ELECT. 10μF M 50V	OA10605020
C818		4822 122 30043	CER. 0.01μF +80%-20% Z 50V	DK18103310

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJJ)
R801			P804-RESISTORS	75060501P0
R802			JUMPER	75060501P0
R813			JUMPER 100Ω ±5% 1/6W	GD05101160
▲ D801		4822 130 83067	P804-SEMICONDUCTORS DIODE D3SB 20 V=200V IO=3.0A	HE20020290
D802		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
D807		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
▲ Q801		4822 209 70084	IC NJM7812FA +12V 1A	HC38912090
▲ Q806		4822 130 11605	TRS. 2SD1415	HT41415100
▲ F801	/K,N,S	4822 117 10158	P804-MISCELLANEOUS 1Ω ±5% 1/4W	GG05010140
▲ F801	/F		FUSE T2A 125V UL CSA	FS20200220
▲ F801	/U		FUSE T2A 250V TR5 NO.19374	FS20200210
▲ F802	/K,N,S	4822 117 10158	1Ω ±5% 1/4W	GG05010140
▲ F802	/F		FUSE T2A 125V UL CSA	FS20200220
▲ F802	/U		FUSE T2A 250V TR5 NO 19374	FS20200210
C851		4822 122 30043	P854- MAIN+B CIRCUIT BOARD P854-CAPACITORS CER. 0.01μF +80%-20% E 500V	DK18103560
C852		4822 126 12453	CER. 0.01μF +80%-20% E 500V	DK18103560
▲ C853	/K,N, /S,/U	9965 000 01773	ELECT. 56000μF 71V x2	EI56907120
▲ C853	/F		ELECT. 56000μF 71V x2	OB56907120
▲ C854	/F,/K,/U	4822 126 12453	CER. 0.01μF +80%-20% E 500V	DK18103560
▲ C855	/F,/K,/U	4822 121 43363	FILM 0.22μF ±20% ECO-U 250V AC UL CSA VDE	DF17224800
C857		4822 124 40763	ELECT. 2.2μF M 50V RA-2	OA22505020
R***			P854-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : R851-R854	
▲ D851		9965 000 01578	P854-SEMICONDUCTORS DIODE D25XB60 BRIDGE	HE20029290
D853		4822 130 82421	DIODE 1D3	HD20002710
D854		4822 130 82421	DIODE 1D3	HD20002710
CB01	/F	4822 122 33276	P804-PRIMARY CIRCUIT BOARD [F, U] VERSION P804-CAPACITORS CER. 0.01μF ±20% DE1610 F SPARK KILLER	DK17103900
CB01	/U	4822 122 33276	CER. 0.01μF ±20% DE7150 F SPARK KILLER	DK17103840
CB02	/F	4822 122 33276	CER. 0.01μF ±20% DE1610 F SPARK KILLER	DK17103900
CB02	/U	4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
CB03	/U	4822 122 33276	CER. 0.01μF ±20% DE7150 F SPARK KILLER	DK17103840
RB01	/U		P804-RESISTORS 2.2MΩ ±10% 1/2W FOR UL	RC10225820
▲ RB02	/U	9965 000 01761	ROTOR 2.2Ω 7W W/TEMP.FUSE	NQ15022070
▲ RB05	/U	9965 000 01761	ROTOR 2.2Ω 7W W/TEMP.FUSE	NQ15022070
R***			P804-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : RB03 RB04	

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
DB01	/U	4822 130 82421	PB04-SEMICONDUCTORS DIODE 1D3 1A 200V	HD20002710
DB02	/U	4822 130 82421	DIODE 1D3 1A 200V	HD20002710
QB01	/U	4822 130 42682	DIG. TRS. DTA144ES UN4113 47k 47k	BA10002000
QB02	/U	4822 130 60117	TRS. 2SC3419 O OR Y 40V 0.8A PC=1.2W 5W	HT334192A0
▲ FB01	/F		PB04-MISCELLANEOUS FUSE 15A 250V UL CSA MITI	FS11500440
▲ FB01	/U		FUSE 12A 250V UL CSA MITI NO.314	FS11200440
▲ FB02	/F		FUSE 15A 250V UL CSA MITI	FS11500440
▲ FB02	/U		FUSE 630mA 250V UL CSA FBM	FS10063360
JB03	/U		JACK 2P AC OUTLET CCT1304-0212	YJ04002040
LB02	/U	4822 280 80773	RELAY VS24MB-NR TV-8 SEMKO LISTED	LY10240240
LB03	/U	4822 280 80773	RELAY VS24MB-NR TV-8 SEMKO LISTED	LY10240240
CB51	/K,/N,/S	4822 122 33276	PB54-PRIMARY CIRCUIT BOARD [K, /N, /S] VERSION PB54-CAPACITORS CER. 0.01µF ±20% DE7150 F SPARK KILLER	DK17103840
CB52	/K,/N,/S	4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CB53	/K,/N,/S	4822 122 33276	CER. 0.01µF ±20% DE7150 F SPARK KILLER	DK17103840
▲ RB52	/K,/N,/S	9965 000 01761	PB54-RESISTORS ROTOR 2.2Ω 7W W/TEMP FUSE	NQ15022070
▲ RB55	/K,/N,/S	9965 000 01761	ROTOR 2.2Ω 7W W/TEMP. FUSE	NQ15022070
R***			PB54-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : RB53 RB54	
DB51	/K,/N,/S	4822 130 82421	PB54-SEMICONDUCTORS DIODE 1D3 1A 200V	HD20002710
DB52	/K,/N,/S	4822 130 82421	DIODE 1D3 1A 200V	HD20002710
QB51	/K,/N,/S	4822 130 42682	DIG. TRS. DTA144ES UN4113 47k 47k	BA10002000
QB52	/K,/N,/S	4822 130 60117	TRS. 2SC3419 O OR Y 40V 0.8A PC=1.2W	HT334192A0
▲ FB51	/K,/N,/S	4822 070 36302	PB54-MISCELLANEOUS FUSE T6 3A 250V BS LISTED	FS10630850
▲ FB52	/K,/N,/S	4822 070 32001	FUSE T200mA 250V BS LISTED	FS10020850
LB52	/K,/N,/S	4822 280 80773	RELAY VS24MB-NR TV-8 SEMKO LISTED	LY10240240
LB53	/K,/N,/S	4822 280 80773	RELAY VS24MB-NR TV-8 SEMKO LISTED	LY10240240
CB71	/K,/N, /S,/U	4822 122 33276	PB74- POWER SW CIRCUIT BOARD CER. 0.01µF ±20% DE7150 F SPARK KILLER	DK17103840
CB71	/F	4822 122 33276	CER. 0.01µF ±20% DE7150 F SPARK KILLER	DK17103900
▲ SB71		9965 000 01777	PUSH SWITCH SDDL B1 POWER TV-5	SP01012460

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CC53		5322 124 21731	PL04-CVBS VIDEO SELECTOR CIRCUIT BOARD PL04-CAPACITORS ELECT. 10µF M 50V RA-2	OA10605020
CC54		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CC55		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC56		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC59		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CC60		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CC61		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC62		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC64		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520
CC65		4822 124 41535	ELECT. 100µF M 25V RA-2	OA10702520
CC67	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CC70				
CC73		9965 000 06288	ELECT. 22µF 25V	EA22602520
CC74		9965 000 06288	ELECT. 22µF 25V	EA22602520
CC75		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC76		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC78			JUMPER	75060501P0
CC81		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC82		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC85		4822 126 10362	CER. 22pF	DA15220110
CC86		9965 000 06288	ELECT. 22µF 25V	EA22602520
CC87		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC88		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CC95		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL01		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL02		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL03		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL05		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL07		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL08		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL09		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL11				
CL23		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL24		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CL25				
CL31		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CL32		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CL33		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CL34		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL35		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620
CL36		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL37		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CL38		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL39		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL40		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL41		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CL42		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CL43		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620
CL44		4822 122 40617	CER. 0.1µF 50V	DD38100010
CL45		4822 124 90353	ELECT. 100µF M 10V	OA10701020
CL46	/K, /N /S	4822 126 10362	CER. 22pF	DA15220110
CL47	/K, /N /S	4822 126 11553	CER. 15pF	DA15150120
CL48	/K, /N /S	4822 126 10362	CER. 22pF	DA15220110
CL48	/U	4822 122 33638	CER. 27pF	DA15270110
CL49		4822 126 11591	CER. 24pF J CH 50V BLK	DD15240300
CL50		4822 126 10362	CER. 22pF	DA15220110
CL52		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10500020
CL53		4822 122 40617	CER. 0.1µF 50V	DD38100010
CL54		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CL55		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10505020	QC52		4822 209 73953	IC NJM4580DD	HC10112090
CL56		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020				DUAL OP-ANP	
CL57		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QC71		4822 209 73953	IC NJM4580DD	HC10112090
CL58		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QC72		4822 209 73953	IC NJM4580DD	HC10112090
CL59		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620	QC73		4822 209 73953	IC NJM4580DD	HC10112090
CL60		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QC95		5322 209 11322	IC 74HC08 2-INPUT AND GATE	HC700800B0
CL61		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020					
CL62		4822 122 30043	CER. 0.01µF Z 50V	DK18103310	QL01		9965 000 01371	IC MM1140XF	HC10083550
CL63		4822 122 30043	CER. 0.01µF Z 50V	DK18103310	QL02		4822 209 32928	IC BA7612N	HC10201210
CL64		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620	QL03		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
CL65		4822 122 40617	CER. 0.1µF 50V	DD38104010	QL04		4822 209 31527	IC BA7613N	HC10202210
CL67	/U	4822 126 10362	CER. 22pF	DA15220110	QL05		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
CL68		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10505020	QL06		4822 209 31527	IC BA7613N	HC10202210
CL69		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QL07		4822 209 16846	IC NJU3718L	HC10171090
CL70		4822 122 30043	CER. 0.01µF Z 50V	DK18103310	QL08		4822 209 32246	IC NJM2244	HC10119090
CL71								3IN SW 75Ω DRIVER	
CL74		4822 126 11558	CER. 0.1µF 50V	DA17104110	QL09		4822 209 15524	IC LC74781 OSD IC	HC10377030
CL75					QL10	/K,/N,/S	4822 130 61227	DIG.TRS. DTA114ES ETC	BA10001000
CL79		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QL11	/K,/N,/S	4822 130 61189	DIG.TRS.	BA20004000
CL80		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10505020				DTC114TS UN4215 10K	
CL80		4822 122 30043	CER. 0.01µF Z 50V	DK18103310	QL12	/K,/N,/S	4822 130 61189	DIG.TRS.	BA20004000
CL81								DTC114TS UN4215 10K	
CL86		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QL14		4822 209 32246	IC NJM2244	HC10119090
CL87	/N	4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620	QL15		9965 000 06284	3IN SW 75Ω DRIVER	
CL98		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020	QL16		4822 130 41947	DIG.TRS. DTC144VSA 47K/10K	BA20068210
CL99		4822 122 30043	CER. 0.01µF Z 50V	DK18103310	QL17		4822 130 60588	TRS. 2SC2458 2SC1740S	HT30001000
		4822 122 30043	CER. 0.01µF Z 50V	DK18103310				2SC3199 ETC	
			PL04-CAPACITORS (COMMON)		QL18		5322 209 71773	DIG.TRS.	BA20001000
			HIGH DIELECTRIC CONSTANT		QL19		4822 130 60588	DIG.TRS.	BA20001000
			CER. CAPACITOR ±10% 50V :		QL21		4822 130 41947	DTC114ES UN4211 10k 10k	HT30001000
			CC51 CC52 CC57 CC58 CL51					TRS. 2SC2458 2SC1740S	
			CL76 CL77					2SC3199 ETC	
			ELECTROLYTIC CAPACITOR		JC51		9965 000 06306	TERMINAL YKC21-4170 1L4P	YT02041290
			±20% : CC71 CC72		JL01		4822 265 31299	TERMINAL 3P RCA YELLOW	YT02030340
			PLASTIC FILM CAPACITOR		JL02		4822 265 31299	TERMINAL 3P RCA YELLOW	YT02030340
			±5% 50V : CC79 CC80 CC73		JL03		9965 000 06305	TERMINAL 3P RCA YELLOW	YT02030620
			CC84 CL78		LL01		4822 157 62922	CHOKE COIL CHOKE 33UH J	LC13333800
			PL04-RESISTORS		LL02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010
			JUMPER	75060501P0	XL01	/K,/N,/S	4822 242 73903	CRYSTAL AT49 17.7MHZ	JX17001260
RC81			JUMPER	75060501P0	XL02		4822 242 80288	CRYSTAL AT49 14.31818MHZ	JX14001260
RC92			JUMPER	75060501P0					
RL01		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160				PL74-AUX INPUT	
RL03		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160				CIRCUIT BOARD	
RL05		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160				PL74-CAPACITORS	
RL07		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160	CL75	/N,/S	4822 126 11568	CER.CHIP 470pF	DK96471300
RL09		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160	CL76	/N,/S	4822 126 11568	CER.CHIP 470pF	DK96471300
RL53			JUMPER JUMPER WIRE	75060501P0	CL77	/N,/S	4822 122 33777	CER.CHIP 47pF	DD95470300
			PL04-RESISTORS (COMMON)		CL78	/N,/S	4822 122 33777	CER.CHIP 47pF	DD95470300
			CARBON FILM FIXED RES.		CL79				
			±5% 1/6W : RC51-RC54 RC57						
			RC58-RC64 RC66-RC79						
			RC83 RC86 RC87 RC89 RC91		CL82		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
			RC93-RC97 RL02 RL04 RL06		CL83		4822 124 11947	ELECT. 10µF 16V	EQ10601630
			RL08 RL10-RL15 RL18-RL26		CL84		4822 111 41305	RES. 0Ω	GD05000140
			RL28 RL32 RL39-RL43 RL51		CL88		4822 111 41305	RES. 0Ω	GD05000140
			RL52 RL54		CL89		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
			PL04-SEMICONDUCTORS		CL90		4822 126 11687	CER.CHIP 0.1µF +80%-20%	DK98104200
DL07		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000	CL91				
			30V 0.1A						
DL21		4822 130 32362	DIODE SUBSTITUTE	HD20002000					
DL22		4822 130 32362	DIODE SUBSTITUTE	HD20002000	CL98		4822 111 41305	RES. 0Ω	GD05000140
QC51		4822 209 73953	IC NJM4580DD	HC10112090				PL74-RESISTORS	
			DUAL OP-ANP		RL75		4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610
					RL76		4822 051 30102	CHIP 1kΩ ±5% 1/16W	NN05102610
					RL77		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610
					RL78		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RL79		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610
RL82				
RL83		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610
RL84		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610
RL85		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RL86		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
RL88		4822 051 30759	CHIP 75Ω ±5% 1/16W	NN05750610
QL75		4822 209 71451	PL74-SEMICONDUCTORS IC NJM4558M Y	HC10011090
JL75		9965 000 01347	PL74-MISCELLANEOUS TERMINAL RCA JACK 3P + S-TERMINAL AUX	BY04040030
CG01				
CG06				
CG09				
CQ01				
CQ02				
CQ03				
CQ08		4822 122 40617	CER. 0.1μF 50V	DD38104010
CQ09	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CQ10	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS01				
CS10	14A	9965 000 06301	ELECT. 22μF M 35V ARS	OA22603540
CS01				
CS10	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS11		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CS12		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CS13	14A	9965 000 06301	ELECT. 22μF M 35V ARS	OA22603540
CS14	14A	9965 000 06301	ELECT. 22μF M 35V ARS	OA22603540
CS13	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS14	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS15		5322 124 21731	ELECT. 10μF M 16V RA-2	OA10605020
CS16		5322 124 21731	ELECT. 10μF M 16V RA-2	OA10605020
CS17	14A	9965 000 06301	ELECT. 22μF M 35V ARS	OA22603540
CS18	14A	9965 000 06301	ELECT. 22μF M 35V ARS	OA22603540
CS17	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS18	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS19				
CS22		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CS23		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
CS24		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
CS25				
CS28	14A	9965 000 02015	ELECT. 22μF M 25V ARS	OA22602540
CS25				
CS28	18A	482212441539	ELECT. 47μF M 16V RA-2	OA47601620
CS29				
CS34		4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
CS35		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CS36		4822 124 41539	ELECT. 47μF M 16V RA-2	OA47601620
CS55	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS56	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS57		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
CS58		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CS59				
CS62	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS63		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CS64		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CS65				
CS70	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS73				
CS76	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS79	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS80	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS81			JUMPER	75060501P0
CS82			JUMPER	75060501P0
CS83			JUMPER	75060501P0
CS84		4822 122 40617	CER. 0.1μF +80%-20% 50V DC	DD38104010
CS85		4822 122 40617	CER. 0.1μF +80%-20% 50V DC	DD38104010
CS86		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
CS87		4822 124 90354	ELECT. 100μF M 16V RA-2	OA10701620
CS88		4822 122 40617	CER. 0.1μF +80%-20% 50V DC	DD38104010
CS89		4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
CS90		4822 124 80067	ELECT. 4.7μF M 50V RA-2	OA47505020
CS93	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS94	/N, /S	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS97		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CS98		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
CS99		4822 122 40617	CER. 0.1μF 50V	DD38104010
C809		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C810		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C811		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C812		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C813		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C814		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C815		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C816		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C819		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C820		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C821		9965 000 01351	ELECT. 13000μF M 16V RE3	EA13901670
C824		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C825		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C826		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C827		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C828		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C830		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C832		9965 000 01352	ELECT. 470μF 63V	EA47706310
C833		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C834		4822 124 80772	ELECT. 47μF M 35V RA-2	OA47603520
C835		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C836		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C840		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
C841		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C843		4822 124 90355	ELECT. 100μF M 50V RA-2	OA10703020
C844		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C845		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C847		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C848		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
C851		4822 124 41538	ELECT. 220μF 35V	OA22703520
C852		4822 124 40763	ELECT. 2.2μF 50V	OA22503020
C***			PS04-CAPACITORS (COMMON) HIGH DIELECTRIC CONSTANT CER. CAPACITOR ±10% 50V : CG07- CG08/N, /S CQ06 CQ07 CS37-CS54/N, /S CS71-CS72/N, /S CS91-CS92/N, /S CS95-CS96/N, /S	

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
C***			ELECTROLYTIC CAPACITOR ±20% : C823 C842 C849		QS14		4822 209 32553	IC LC78212	HC10309030
					QS15		4822 209 32552	IC LC78211	HC10308030
					QS16		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
▲ RG15		4822 115 90166	FUSE RES. 10Ω ±2% 1/4W	NF02100140	QS17				
RS43			JUMPER	75060501P0	}		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
RS44			JUMPER	75060501P0	QS20				
RS96			JUMPER	75060501P0	QS21		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
RS97			JUMPER	75060501P0					
▲ R804		4822 117 10158	RES. 1Ω ±5% 1/4W	GG05010140	QS22		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
R807		4822 053 10222	RES. 2.2kΩ ±5% 1W	GA05222010					
▲ R811		4822 111 90731	FUSE RES. 47Ω ±2% 1/4W	NF02470140	QS23		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
▲ R817		4822 115 90167	FUSE RES. 100Ω ±2% 1/4W	NF02101140	QS24		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
R818			JUMPER	75060501P0	QS25		4822 209 83631	IC NJM4558D-D	HC10008090
					QS26		4822 130 90347	PHOTO UNIT PC-817 PHOTO CUPLER 1PAIR	HW10006320
					QS27		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000
			PS04-RESISTORS (COMMON)		▲ Q802		9965 000 01354	IC L780S15 +15V 1A	HC38915030
			CARBON FILM FIXED RES. ±5% 1/6W : R806 R808 R810		▲ Q803		4822 209 61256	IC NJM7915FA -15V 1A	HC39915090
			R812 R814-R816 R819		▲ Q804		4822 130 11605	TRS. 2SD1415	HT141415100
			RG01-RG06 RG09-RG14		▲ Q805		4822 209 61256	IC NJM7915FA -15V 1A	HC39915090
			RG16-RG20 RQ25-RQ30		▲ Q807		4822 209 30258	IC NJM7905FA -5V 1A	HC39905090
			RS01-RS10 RS13-RS42		▲ Q808		4822 209 73674	IC NJM7806FA +6V	HC38906090
			RS47-RS99 RU01-RU09		Q809		4822 130 60117	TRS. 2S2SC3419 O OR Y 40V 0.8A PC=1.2W 5W	HT334192A0
			RU11-RU19 RU21-RU29		Q810		4822 130 41947	TRS. 2SC2458 2SC1704S 2SC3199 ETC.	HT30001000
			RU31-RU44 RY48 RU51 RU52		Q811		4822 209 14883	IC S-806C 4.55V V-SENSOR	HC10075530
			RU55-RU58 RU61-RU63		Q812		4822 130 61227	DIG.TRS. DTA114ES ETC	BA10001000
					Q813		4822 130 60588	DIG.TRS. DTC114ES ETC	BA20001000
			PS04-SEMICONDUCTORS					PS04-MISCELLANEOUS	
DG01		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	JS01		4822 265 10729	TERMINAL 8P RCA PIN JACK WHITE/RED AU	YT02080130
DG02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	JS03		4822 290 61244	TERMINAL 6P RCA PIN JACK WHITE/RED AU	YT02060490
DG03		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	JS04		4822 290 61244	TERMINAL 6P RCA PIN JACK WHITE/RED AU	YT02060490
DS01		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	JS06		4822 290 61244	TERMINAL 6P RCA PIN JACK WHITE/RED AU	YT02060490
DS02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000	JS07		9965 000 01355	TERMINAL 4P RCA RC- 51MULTI PC	YT02041260
D803					LG01		9965 000 01576	RELAY MR82-24USR	LY20240460
}					▲ L801		9965 000 01353	RELAY FTR-F1AA024T	LY20240460
D806								PT04-SPK. TERMINAL CIRCUIT BOARD PT04-CAPACITORS	
▲ D808		4822 130 83438	DIODE D5SB-20 5A 200V	HE20016290	CN51				
D810		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	}	/N, /S	4822 122 30043	CER. 0.01μF Z 50V	DK18103310
D811		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	CN58				
D812		4822 130 82421	DIODE 1D3 1A 200V	HD20002710				PT04-SEMICONDUCTORS	
D813		9965 000 06297	ZENER DIODE MTZJ36D	HD33601000	DN51		4822 130 82421	DIODE 1D3	HD20002710
D814		4822 130 80318	ZENER DIODE 6.8V	HD30681000	DN52		4822 130 82421	DIODE 1D3	HD20002710
D815					DN53		4822 130 82421	DIODE 1D3	HD20002710
}								PT04-MISCELLANEOUS	
D825		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	JN54	/K, /N, /S	9965 000 01774	TERMINAL SPK. 4P RR/BB IE	YT01040830
▲ D826		4822 130 81247	DIODE 1GWJ43	HD20031050	JN54	/U		TERMINAL SPK. 4P RR/BB	YT01040860
D827			JUMPER	75060501P0	JN55	/K, /N, /S	9965 000 01775	TERMINAL SPK. 4P BB/RR IE	YT01040840
D828		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	JN55	/U		TERMINAL SPK 4P BB/RR	YT01040850
D829		4822 130 82421	DIODE 1D3 1A 200V	HD20002710	LN51		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020
D830		4822 130 32362	DIODE 1S133	HD20002000	LN52		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020
					LN53		4822 280 10305	RELAY VB-18MBU-565-UL3	LY20180020
QG01		9965 000 01358	IC ELE.VOL.TC9459N	HC10449050					
QG02		4822 209 83631	IC NJM4558D-D	HC10008090					
QG03		4822 130 63634	TRS. 2SA1837 Q.Y	HT118372A0					
QG04		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000					
QG05		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0					
QG06		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0					
QG07		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000					
QS01									
}									
QS11		4822 209 83631	IC NJM4558D-D	HC10008090					
QS12		4822 209 32552	IC LC78211	HC10308030					
QS13		4822 209 32553	IC LC78212	HC10309030					

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
			PT74-CENTER SPEAKER TERMINAL CIRCUIT BOARD	
CN71	/N, /S	4822 122 30043	CER. 0.01 μ F 50V	DK18103310
JN71	/K, /N, /S	9965 000 01776	TERMINAL T6976 2P SPK. N B-R	YT01020390
JN71	/U		TERMINAL 2P SPK B/R	YT01020410
			PU04-FRONT/FL DISPLAY/SW. CIRCUIT BOARD	
			PU04-CAPACITORS	
CU01		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU02		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU03		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU04		4822 126 10935	ELECT. 100 μ F M 6.3V	EJ10700610
CU05				
CU08		4822 126 10364	CER. 100pF 50V	DA16101110
CU09				
CU12		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU13		4822 122 33639	CER. 1000pF 50V	DA16102110
CU14		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU15		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU16		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU17		4822 122 33639	CER. 1000pF 50V	DA16102110
CU18		4822 126 10364	CER. 100pF 50V	DA16101110
CU19		4822 126 10364	CER. 100pF 50V	DA16101110
CU20		4822 126 10513	CER. 47pF 50V	DA15470110
CU21				
CU26		4822 126 11558	CER. 0.1 μ F 50V	DA17104110
CU27		4822 122 40586	CER. 0.01 μ F	DA17103110
CU30		4822 126 10935	ELECT. 100 μ F M 6.3V	EJ10700610
CU31		4822 124 80685	ELECT. 100 μ F M 6.3V	EJ10605010
CU32		4822 122 40586	CER. 0.01 μ F	DA17103110
			PU04-SEMICONDUCTORS	
DU01		4822 130 11363	L.E.D. LT3K44B GREEN 30MA	HI10095320
DU06				
DU07		4822 130 32362	DIODE SUBSTITUTE	HD20002000
DU08		4822 130 32362	DIODE SUBSTITUTE	HD20002000
DU20		4822 130 32362	DIODE SUBSTITUTE	HD20002000
DU21		4822 130 32362	DIODE SUBSTITUTE	HD20002000
QU01		9965 000 03868	IC ML9205-01GA FL DRIVER	HC10039260
QU02		4822 209 32695	IC NJU3711D	HC10128090
QU03				
QU06		4822 130 41947	TRS. 2SC536SP ETC	HT30001000
QU07		4822 130 63211	DIG. TRS. DTA114TS UN415	BA10004000
QU08		4822 130 41947	TRS. 2SC536SP ETC	HT30001000
QU09		4822 130 41947	TRS. 2SC536SP ETC	HT30001000
			PU04-MISCELLANEOUS	
SU01		9965 000 00373	PUSH SW. EVQ11L05R	SP01013370
SU26			H/5MM 160GF	
SU32		9965 000 01348	ROTARY SW. ROTALY	SR02010070
			ENCODER 36PULSE EC16B	
SU33		9965 000 01349	ROTARY SW. ROT ENCOD	SR02010080
			EC16B 16PLS 16CLICK	
VU01		9965 000 08299	DISPLAY UNIT 24-BT-12GN FL	HQ32401410

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
			PU74-STANDBY LED CIRCUIT BOARD	
CU71		4822 122 40617	CER. 0.1 μ F 50V URAZUKE	DD38104010
CU81		4822 122 40588	CER. 0.022 μ F TP050F223Z	DA17223110
CU82		4822 124 80087	ELECT. 220 μ F 6.3V	EJ22700610
DU71		4822 130 11569	L.E.D. HLMF-K200 #2UL RED H=9 3MM	HI10005340
RU71			RES. 680 Ω \pm 5% 1/6W	GD05681160
			PU84-IR SENSOR CIRCUIT BOARD	
QU81		4822 209 16157	PHOTO UNIT PNA4655M00XB IR SENSOR	HW10005020
			PU94-GYRO ENCODER CIRCUIT BOARD	
CU91		4822 122 40617	CER. 0.1 μ F +80%-20% 50V DC	DD38104010
QU91		4822 130 11143	PHOTO UNIT GP1A06 2PHASE PHOTOINTERRUPTER	HW10033320
RU91			RES. 330 Ω \pm 5% 1/6W	GD05331160
			PW04-HEADPHONE CIRCUIT BOARD	
			PW04-CAPACITORS	
CW01		4822 122 40586	CER. 0.01 μ F	DA17103110
CW02		4822 122 40586	CER. 0.01 μ F	DA17103110
CW03		4822 122 40617	CER. 0.1 μ F 50V	DD38104010
CW04		4822 122 40617	CER. 0.1 μ F 50V	DD38104010
			PW04-MISCELLANEOUS	
JW01	GOLD	4822 265 11525	JACK HLJ2307-01-3163 H.P.	YJ01004330
JW01	BLACK	4822 265 10685	JACK HLJ2307-01-3160 H.P.	YJ01004240
			PY04-U-COM CIRCUIT BOARD	
			PY04-CAPACITORS	
CY01		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY02		4822 124 23056	ELECT. 47 μ i 10V	EJ47601010
CY04		5322 126 11583	CER.CHIP 0.01 μ F \pm 10% B 25V	DK96103200
CY07		4822 126 13303	CER.CHIP 1 μ F 10V F	DK98105200
CY08		5322 126 11583	CER.CHIP 0.01 μ F \pm 10% B 25V	DK96103200
CY09		5322 126 11583	CER.CHIP 0.01 μ F \pm 10% B 25V	DK96103200
CY10		5322 126 11583	CER.CHIP 0.01 μ F \pm 10% B 25V	DK96103200
CY11		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY12		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY13		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY19		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY25		5322 126 11578	CER.CHIP 1000pF \pm 10% B 50V	DK96102300
CY26		4822 126 11687	CER.CHIP 0.1 μ F +80%-20%	DK98104200
CY30		4822 124 11879	BIG ELECT. 1F 5.5V DB-5R5D105	EX10500530
			PY04-RESISTORS	
RY01		4822 051 30479	CHIP 47 Ω \pm 5% 1/16W	NN05470610
RY02		4822 116 83819	CHIP 18k Ω \pm 5% 1/16W	NN05183610
RY03		4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY04		4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY05		4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY06				
RY11		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610
RY12		4822 051 30105	CHIP 1M Ω \pm 5% 1/16W	NN05105610
RY13		4822 051 30103	CHIP 10k Ω \pm 5% 1/16W	NN05103610
RY14	/K, /F, /S	4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY15	/K, /U	4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
RY16	/K, /N, /S	4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY17	/U	4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
RY18	14A	4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY19	/F	4822 116 82487	CHIP 0 Ω \pm 5% 1/16W	NN05000610
RY19	18A	4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610
RY20	14A	4822 117 12925	CHIP 47k Ω \pm 5% 1/16W	NN05473610

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJ)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJ)
RY21	/F	4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610				PY04-MISCELLANEOUS JACK 33PIN ANGLE FFC33FE-ST-VK-N	
RY21	18A	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	JY01				YJ07020290
RY22	/N,/S	4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610					
RY23	/K,/U	4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610					
RY24		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	XY01		9965 000 01346	SERAMIC VIB. CST20.00MXW0H1 / 20MHz±C	FQ02005030
RY25		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610					
RY27								PY54-CONNECT CIRCUIT BOARD JACK 33FE-BT-VK-N 33PIN STRAIGHT	
RY31		4822 051 30472	CHIP 4.7kΩ ±5% 1/16W	NN05472610	JY51				YJ07020660
RY32		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610					
RY33		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610					
RY34		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610	JY53			JACK 33FE-BT-VK-N 33PIN STRAIGHT	YJ07020660
RY35		4822 051 30221	CHIP 220Ω ±5% 1/16W	NN05221610					
RY36		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610					
RY37		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610					
RY38								PY64-CONNECT-0 CIRCUIT BOARD CER. 0.01μF Z 50V	
RY45		4822 051 30221	CHIP 220Ω ±5% 1/16W	NN05221610	CY61		4822 122 30043		ELECT. 10μF M 50V
RY46					CY62		5322 124 21731		OA10605020
RY56									
RY57		4822 116 82487	CHIP 0Ω ±5% 1/16W	NN05000610	DY61		4822 130 82421	DIODE 1D3 1A 200V JACK 33PIN ANGLEB	HD20002710
RY58		4822 117 12925	CHIP 47kΩ ±5% 1/16W	NN05473610	JY61			FFC33FE-ST-VK-N	YJ07020290
RY59		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	▲ LY61		9965 000 01353	RELAY FTR-F1AA024T FOR FIL SW	LY20240460
RY60		4822 051 30683	CHIP 68kΩ ±5% 1/16W	NN05683610					
RY64		4822 051 30273	CHIP 27kΩ ±5% 1/16W	NN05273610	QY61		4822 130 60117	TRS. 2SC3419	HT334192A0
RY65		4822 051 30221	CHIP 220Ω ±5% 1/16W	NN05221610					
RY66		4822 051 30221	CHIP 220Ω ±5% 1/16W	NN05221610	▲ RY61		4822 115 90167	FUSE RES. 100Ω G 1/4W RES. 10kΩ ±5% 1/6W	NF02101140
RY67		4822 051 30103	CHIP 10kΩ ±5% 1/16W	NN05103610	RY62			RES. 10kΩ ±5% 1/6W	GD05103160
RY68		4822 051 30273	CHIP 27kΩ ±5% 1/16W	NN05273610	RY63				GD05103160
RY69		4822 122 40617	CER. 0.1μF 50V URAZUKE	DD38104010					
			PY04-SEMICONDUCTORS					PZ04-S-VIDEO SELECTOR CIRCUIT BOARD	
DY01		4822 130 80522	CHIP DIODE 1SS300 DAP202U	HZ21006000				PZ04-CAPACITORS	
DY02		4822 130 80522	CHIP DIODE 1SS300 DAP202U	HZ21006000	CX01		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
DY03		4822 130 83715	CHIP DIODE 1SS301 DAN202U	HZ21005000	CX02		4822 122 31349	CER. 68pF J 50V	DD15680300
DY04		4822 130 80522	CHIP DIODE 1SS300 DAP202U	HZ21006000	CX03	/K,/N,/S	5322 122 32143	CER. 22pF J 50V	DD15220300
QY01		9965 000 06295	MICROPROCESSOR 16BIT TMP93CW40DF MAIN CPU	HU326JT00F	CX04		4822 124 22275	ELECT. 47μF M 10V RA-2	OA47601020
QY02		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000	CX05		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
QY03		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	CX06		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020
QY04		4822 130 42594	DIG.TRS. DTC144ES UN4213 47K 47K	BA20002000	CX07		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY05		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	CX08	/U	4822 126 10362	CER. 22pF J 50V	DA15220110
QY06		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	CX09		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY07		4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20001000	CX10		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY08		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	CX11		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY09		4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20001000	CX12		4822 124 41537	ELECT. 220μF M 6.3V RA-2	OA22700620
QY10		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	CX13		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY11		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000	CX14		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY12		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000	CX15		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
QY13		4822 130 60588	DIG.TRS. DTC114ES UN4211/KRC102M	BA20001000	CX16				
QY14		4822 130 61227	DIG.TRS. DTA114ES UN4111 10k 10k	BA10001000	}		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
QY15		4822 209 12845	IC S-60730SN-DT-X RESET IC	HC10054530	CX19				
					CX20		4822 124 41543	ELECT. 1μF M 50V RA-2	OA10505020
					CX21			FILM 4700pF	DF15472350
					CX22		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
					CX24		4822 124 41543	ELECT. 1μF 50V RA-2	OA10505020
					CX25		4822 124 41537	ELECT. 220μF M 6.3V RA-2	OA22700620
					CX31		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
					CX32		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
					CX33		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
					CX41				
					}		4822 126 11558	CER. 0.1μF 50V	DA17104110
					CX49				
					CX92			CER. 1000pF K 50V	DK16102300
					CX97		4822 124 41543	ELECT. 1μF M 50V RA-2	OA10505020
					CX98		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
					CX99	/U	4822 126 10362	CER. 22pF	DA15220110
					CZ01				
					}		5322 124 21731	ELECT. 10μF M 50V RA-2	OA10605020
					CZ05				

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CZ06		4822 124 11947	ELECT. 10µF 16V	EQ10601630
CZ10				
CZ11		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ25		4822 124 11947	ELECT. 10µF 16V	EQ10601630
CZ26				
CZ27		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ33				
CZ34		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ35		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ42				
CZ43	/K,N,S	4822 126 10362	CER. 22pF	DA15220110
CZ44	/K,N,S	4822 126 10362	CER. 22pF	DA15220110
CZ44	/U	4822 122 33638	CER. 27pF	DA15270110
CZ45	/K,N,S	4822 126 11553	CER. 15pF	DA15150120
CZ46		4822 126 11591	CER. 24pF J CH 50V BLK	DD15240300
CZ47		4822 126 10362	CER. 22pF	DA15220110
CX98			CER. 1200pF K 50V	DK16122300
CZ49		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10505020
CZ50		4822 122 40617	CER. 0.1µF 50V	DD38104010
CZ51		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620
CZ52		4822 124 41543	ELECT. 1µF M 50V RA-2	OA10505020
CZ55				
CZ60		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ61		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ62		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ63		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ65		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CZ66		4822 124 41537	ELECT. 220µF M 6.3V	OA22700620
CZ67		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CZ68		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620
CZ69				
CZ77		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CZ78		4822 124 41537	ELECT. 220µF M 6.3V RA-2	OA22700620
CZ80		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ81		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ82		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ83		4822 124 11947	ELECT. 10µF 16V	EQ10601630
CZ84		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ85		9965 000 01040	ELECT. 470µF M 6.3V RA-2	OA47700620
CZ86		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ87		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ88		5322 124 21731	ELECT. 10µF M 50V RA-2	OA10605020
CZ89				
CZ92		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CZ93		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CZ94		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
CZ95		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CZ97		4822 124 90353	ELECT. 100µF M 10V RA-2	OA10701020
CZ98		4822 122 30043	CER. 0.01µF Z 50V	DK18103310
▲ RX11		4822 050 21801	RES. 180Ω ±5% 1/4W	GG05181140
RX31		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160
RX32		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160
RX33		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160
RZ06				
RZ11		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160
RZ12				
RZ15		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RZ24		4822 111 41355	RES. 75Ω ±5% 1/6W	GD05750160
RZ29				
RZ61			JUMPER	
RZ62			JUMPER	
RZ63			JUMPER	
RZ65			JUMPER	
***			PZ04-RESISTORS (COMMON) CARBON FILM FIXED RES. ±5% 1/6W : RX01-RX10 RX12-RX22 RX24-RX29 RZ01-RZ05 RZ16-RZ20 RZ30-RZ35 RZ42-RZ48 RZ50-RZ54 RZ56-RZ60 RZ67	
DX01		4822 130 80321	ZENER DIODE 10V	HD31001000
DZ01				
DZ03		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DZ05		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DZ19		9965 000 01374	ZENER DIODE MTZ 2.7B 2.7V	HD30271000
DZ21		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DZ22		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
QX01		4822 130 41947	TRS. 2SC536SP ETC	HT30001000
QX04				
QX05	/K,N,S	4822 130 63211	DIG.TRS. DTA114TS UN4115 10k	BA10004000
QX07		4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20001000
QZ01		9965 000 01371	IC MM1140XF	HC10083550
QZ03		4822 209 32928	IC BA7612N	HC10201210
QZ05		9965 000 01371	IC MM1140XF	HC10083550
QZ06		4822 209 32928	IC BA7612N	HC10201210
QZ07		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
QZ08		4822 209 31527	IC BA7613N	HC10202210
QZ09		9965 000 01372	IC BA7649A G-1 VIDEO SW	HC10179210
QZ10		4822 209 32246	IC NJM2244 3IN SW 75Ω DRIVER	HC10119090
QZ11		9965 000 01379	IC NJM2263D	HC10198090
QZ12	/K,N,S	4822 209 15524	IC LC74781 OSD	HC10377030
QZ13	/K,N,S	4822 130 61227	DIG.TRS. DTA114ES ETC	BA10001000
QZ14	/K,N,S	4822 130 61189	DIG.TRS. DTC114TS UN4215 10k	BA20004000
QZ16		4822 209 31527	DIG.TRS. DTC114TS UN4215 10k	BA20004000
QZ17		4822 209 31527	IC BA7613N	HC10202210
QZ18		4822 209 31527	IC BA7613N	HC10202210
QZ19		4822 209 31527	IC BA7613N	HC10202210
QZ20		4822 209 32246	IC NJM2244 3IN SW 75Ω DRIVER	HC10119090
QZ21		9965 000 01379	IC NJM2263D	HC10198090
QZ22		9965 000 06284	DIG.TRS. DTC144VSA 47k 10k	BA20062210
QZ23		9965 000 01380	IC 74HC4051 DIP	HC70510000
QZ24		4822 209 83088	IC NJM2903D DUAL COMPARATOR	HC10020090
QZ25		4822 130 61227	DIG.TRS. DTA114ES ETC	BA10001000
QZ26		4822 130 61227	DIG.TRS. DTA114ES ETC	BA10001000
QZ27		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC	HT30001000
QZ28				
QZ29		4822 130 60588	DIG.TRS. DTC114ES UN4211 10k 10k	BA20001000

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJ)
QZ28		9965 000 01381	IC 74HC32 DIP	HC703200B0
QZ29		5322 209 71773	IC TC74HC132AP	HC713205D0
			PZ04-MISCELLANEOUS	
JZ01		9965 000 01375	TERMINAL 3P S-TERM.GOLD	YT02030550
JZ02		9965 000 01376	TERMINAL 2P S-TERM.GOLD	YT02021520
JZ03		9965 000 01375	TERMINAL 3P S-TERM.GOLD	YT02030550
JZ04		9965 000 01377	TERMINAL 6P RCA	YT02060640
			COMP.VIDEO GOLD G/B/R	
JZ05		9965 000 01377	TERMINAL 6P RCA	YT02060640
			COMP.VIDEO GOLD G/B/R	
LX01		4822 157 62909	CHOKO COIL 22µH	LC12233800
LZ01		4822 157 62922	CHOKO COIL CHOKO 33µH J	LC13333800
LZ02		4822 242 73843	EMI FILTER DSS306-91-F-223Z	FM12223010
LZ03		4822 242 73843	EMI FILTER DSS306-91-F-233Z	FM12223010
XZ01	K. N /S	4822 242 73903	CRYSTAL AT49 17.7MHz	JX17001260
XZ02		4822 242 80288	CRYSTAL AT49 14.31818MHz	JX14001260