

Service Manual

75AV1030 /1B /2B
75AV1040 /1A /2A

AV Surround processor



TABLE OF CONTENTS

SECTION	PAGE
1. TECHNICAL SPECIFICATIONS	1
2. BLOCK DIAGRAM	2
3. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern side)	4
4. IDLING CURRENT ADJUSTMENT	24
5. EXPLODED VIEW AND PARTS LIST	25
6. ELECTRICAL PARTS LIST	27

marantz®

model AV1030 / AV1040

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 at our National Marantz Subsidiary or Agent.

MARANTZ EUROPE B.V.
P.O. Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands
Phone : +31-40-732241
Fax : +31-40-735578

ORDERING PARTS

Parts can be ordered either by mail or by telex. 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 the part is required
5. Way of shipment
6. Signature: any order form or telex must be signed, otherwise such part order will be considered as null and void.

ADDRESSES

AUSTRALIA
MARANTZ AUSTRALIA
Figtree Drive
Australia Centre
Homebush, NSW 2140
AUSTRALIA

FINLAND
MARANTZ
Kuortanegatan 1
00520
Helsingfors 52
Finland

ITALY
MARANTZ ITALIANA SPA
Piazza IV Novembre 3
20124 Milano
Italy

NORWAY
MARANTZ
Postboks 7034
Assiden
3007 Drammen
Norway

SPAIN
MARANTZ SPAIN
Martinez Villergas 2
Apartado 2065
Madrid 28027
Spain

AUSTRIA
MARANTZ
Hietzinger Kai 137a
1130 Wien
Austria

FRANCE
MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnières
France

JAPAN
MARANTZ JAPAN INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

PORTUGAL
COREL
Av. da Liberdade
211-2 Esq.
1200 Lisboa
Portugal

SWEDEN
MARANTZ
Box 1324
17125 Solna
Sweden

BELGIUM
MARANTZ EUROPE B.V.
Div. Benelux
P.O.Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands

GERMANY
MARANTZ GERMANY GmbH
Kleine Heide 12
Postfach 4802
Halle-Westfalen
Germany

KUWAIT
AL ALAMIAH ELECTRONICS
P.O.Box 8196
Salmiah
22052 Kuwait

SAUDI ARABIA
AL ALAMIAH ELECTRONICS
P.O.Box 5954
University Street
Riyadh 11432
Saudi Arabia

SWITZERLAND
MARANTZ SWITZERLAND
Postfach
8010 Zürich-Müllingen
Switzerland

CHILE
MARANTZ DIVISION OF
PHILIPS S.A.
Av. Santa Maria 0760
Casilla 2687
Santiago
Chile

GREAT BRITAIN
MARANTZ HIFI UK Ltd.
Kingsbridge House
Padbury Oaks
575-583 Bath Road
Longford Middlesex UB7 0EH,
U.K.

NETHERLANDS
MARANTZ EUROPE B.V.
Div. Benelux
P.O.Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands

SOUTH AFRICA
MARANTZ S.A.
10 Bond Street
Randburg 2194
P.O. Box 7703
Johannesburg 2000
South Africa

TRADING
MARANTZ TRADING
P.O.Box 20008
Building SFF 2
5600 JB Eindhoven
The Netherlands

DENMARK
MARANTZ
Horsvinget 5
2630 Tastrup
Denmark

GREECE
ADAMCO ELECTR. SA
P.O.Box 21025
Hippocratus Str. 188
Athens 11471
Greece

All of the above locations are fully equipped to take care of your total service needs or can advise you. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.

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

1. TECHNICAL SPECIFICATIONS

AMPLIFIER SECTION			
Power output	DIN 8Ω	50 W	
	RMS 8Ω	45 W	
IHF Dynamic power	8Ω	64 W	
	4Ω	85 W	
	2Ω	92 W	
T.H.D. at 8Ω rated RMS output		0.05%	
Damping factor		100	
Input sensitivity : LD/TV/VCR1/VCR2/AUDIO IN		220 mV/40 kΩ	
S/N (IFH-A) : LD/TV/VCR1/VCR2/AUDIO IN		80 dB	

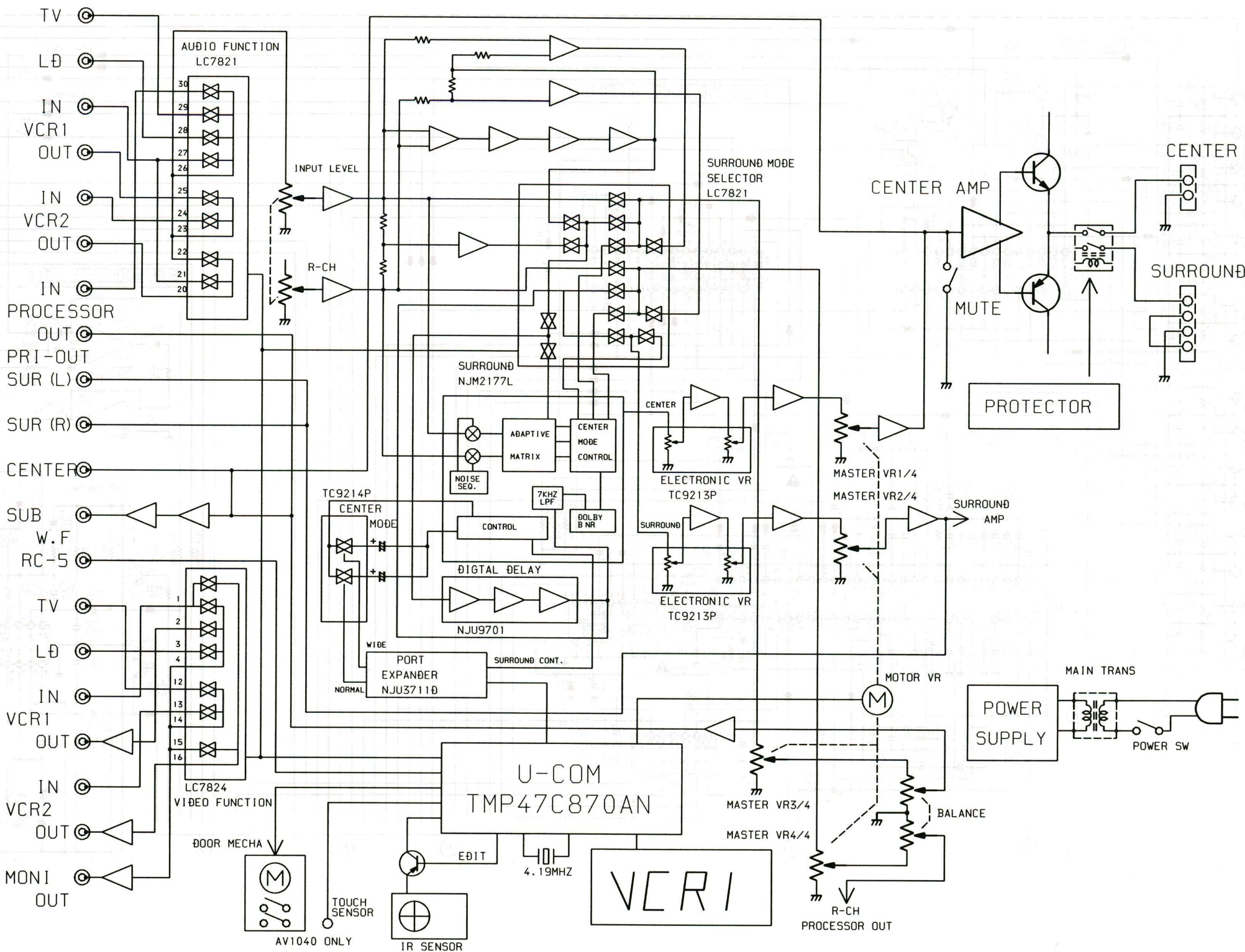
VIDEO SECTION			
Input/Output Level and Impedance		1 Vp-p/75Ω	
Power Requirements			
/2A/2B version		230 V AC, 50/60 Hz	
/1A/1B version		115/230 V AC, 50/60 Hz	

Dimensions			
Width		422 mm	
Height		76 mm	
Depth		334 mm	
Weight		5.9 kg (AV1030)	
		6.0 kg (AV1040)	

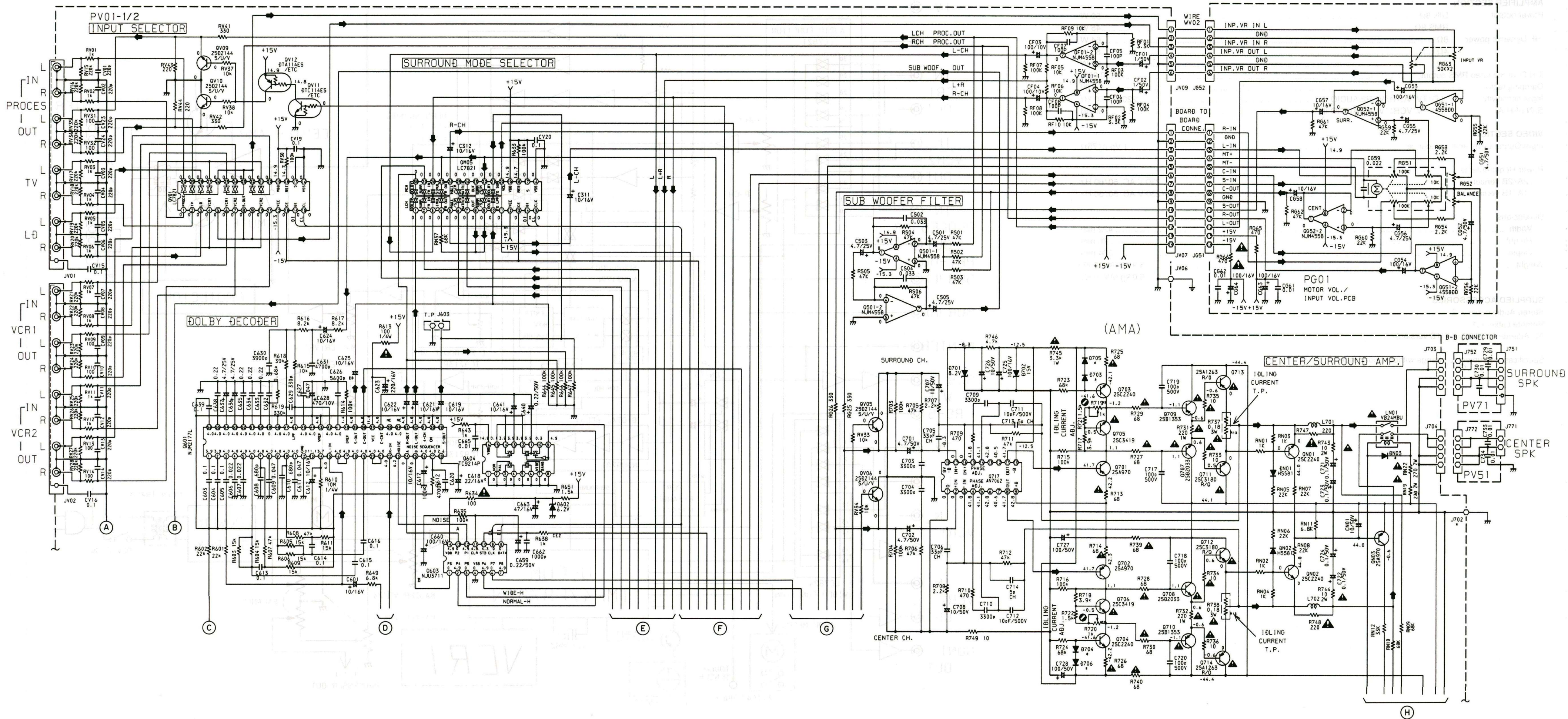
SUPPLIED ACCESSORIES
Stereo Audio cable × 2
Remote cable × 1
AC Adaptor × 1 (only 1A/1B version)

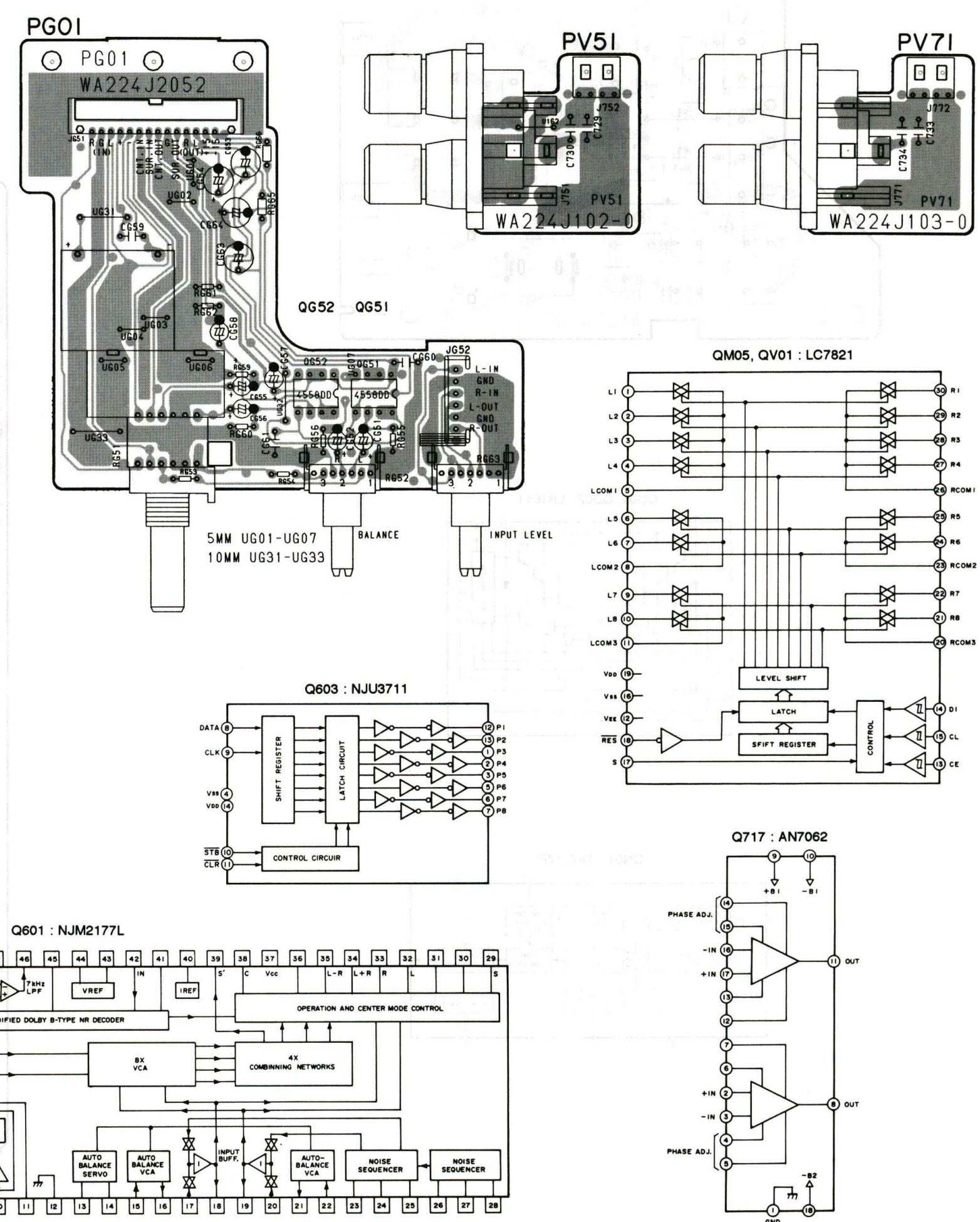
Specifications subject to change without prior notice.

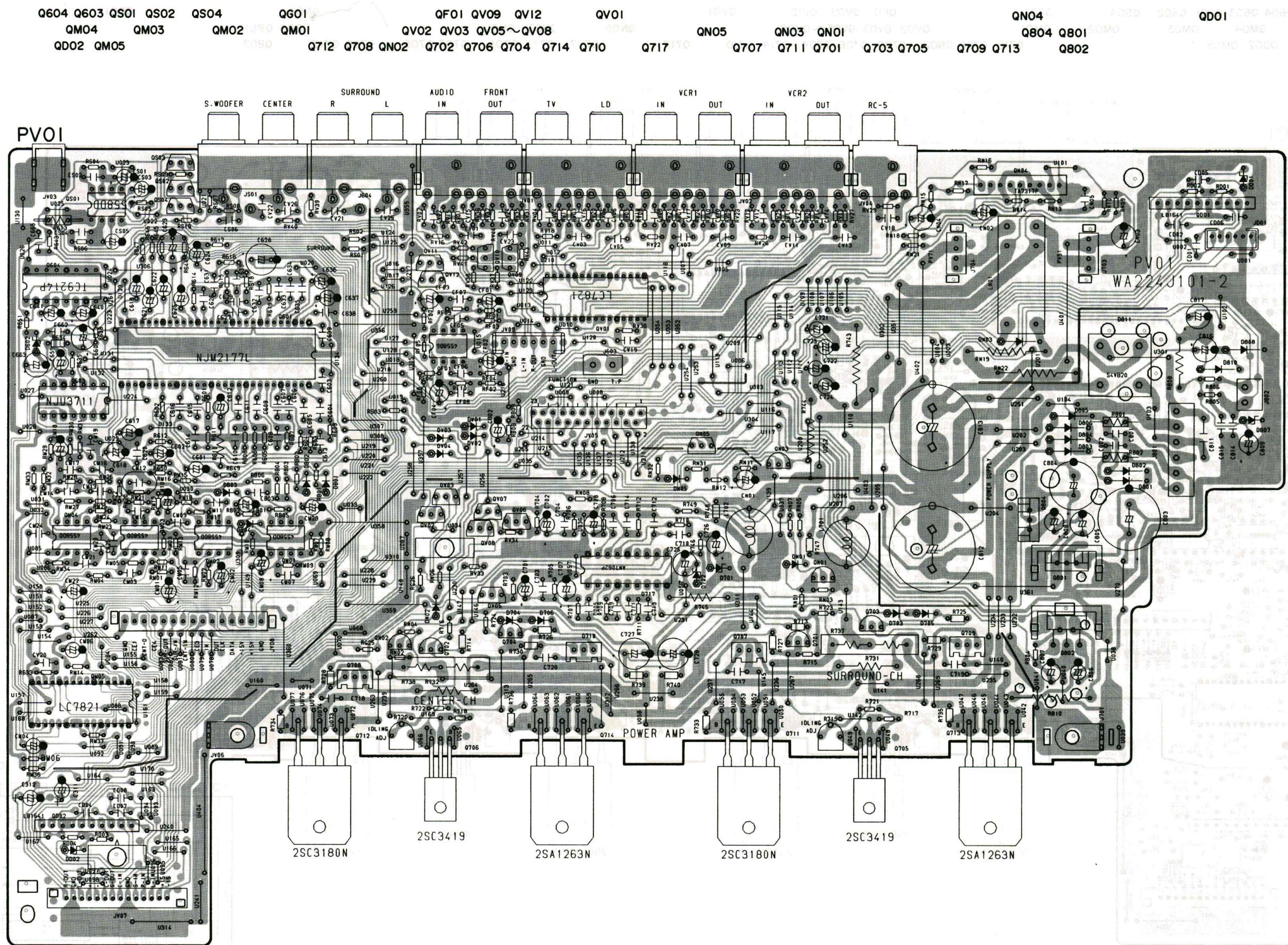
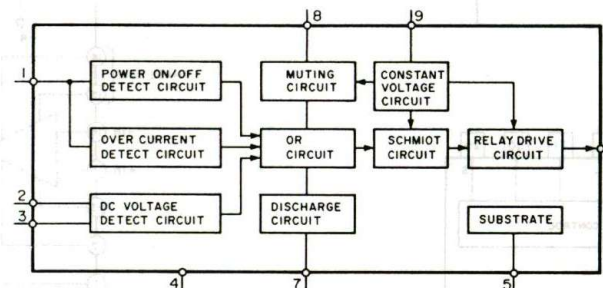
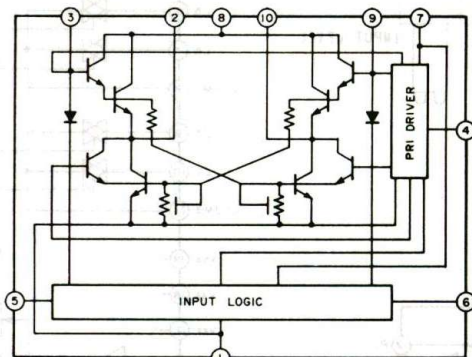
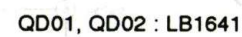
2. BLOCK DIAGRAM

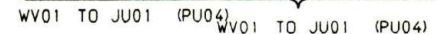


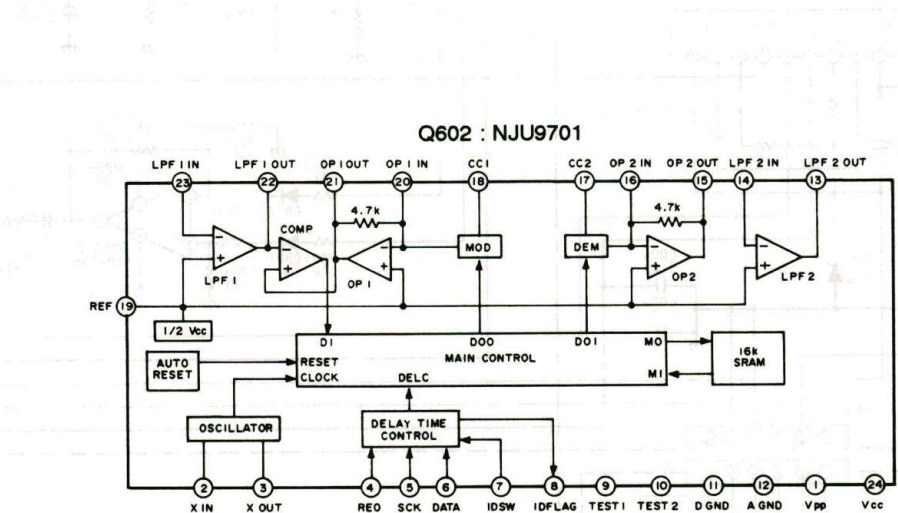
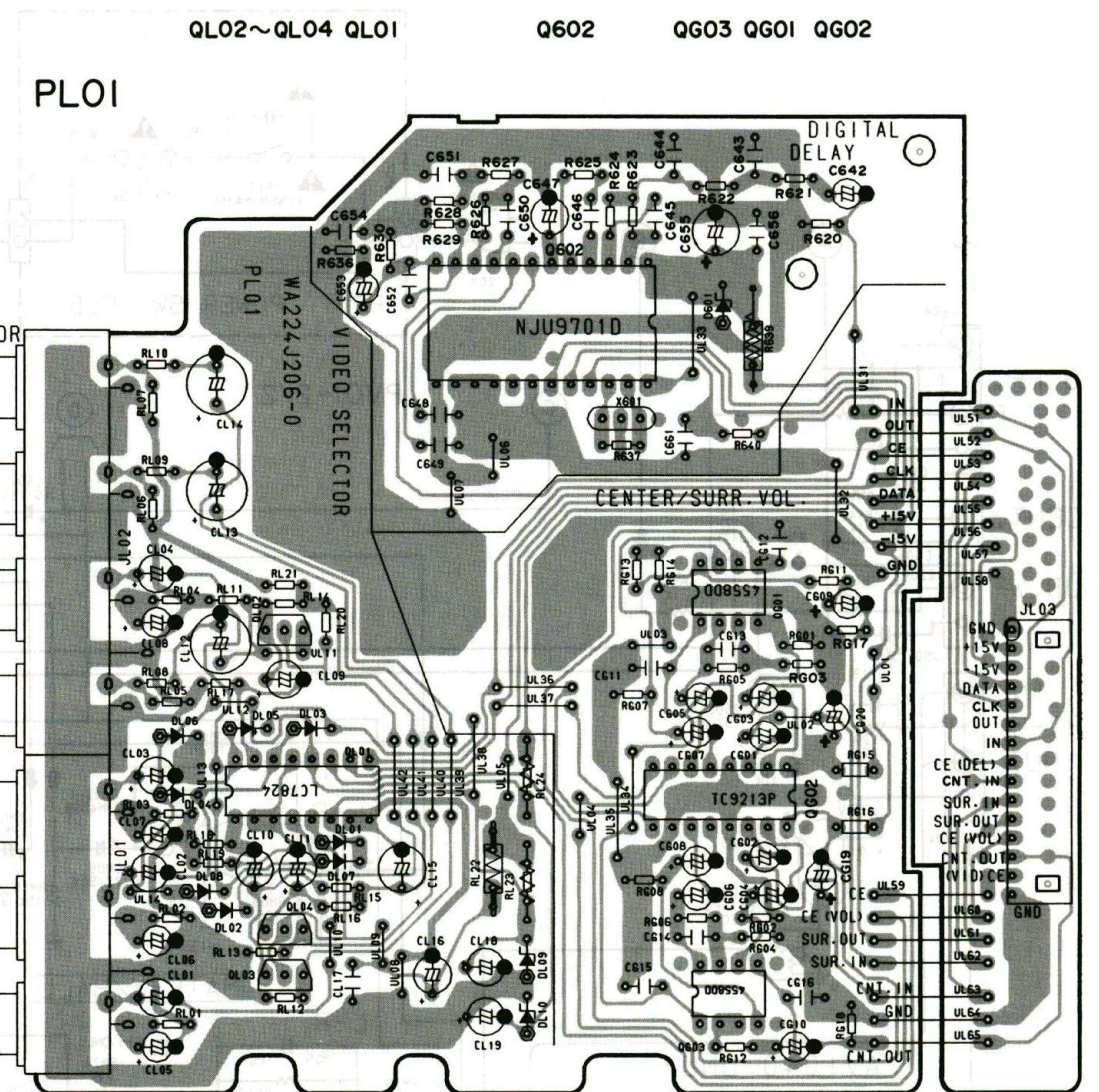
3. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern side)



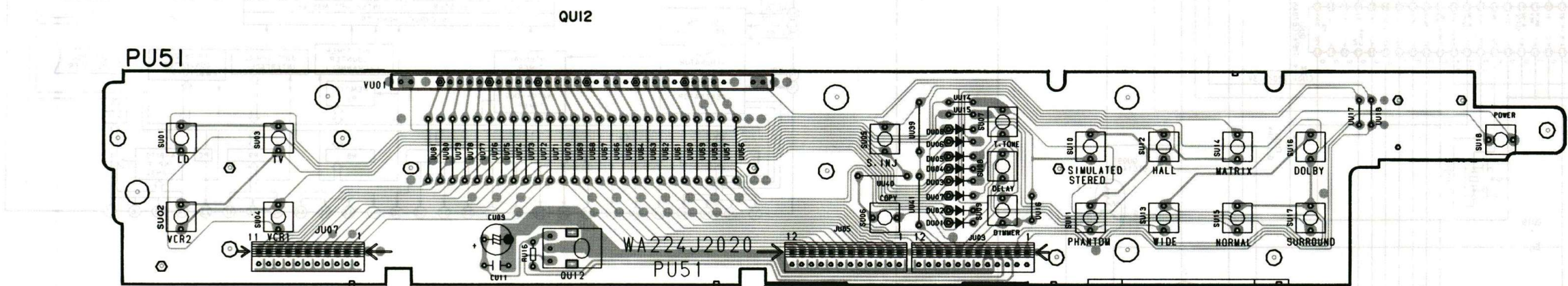
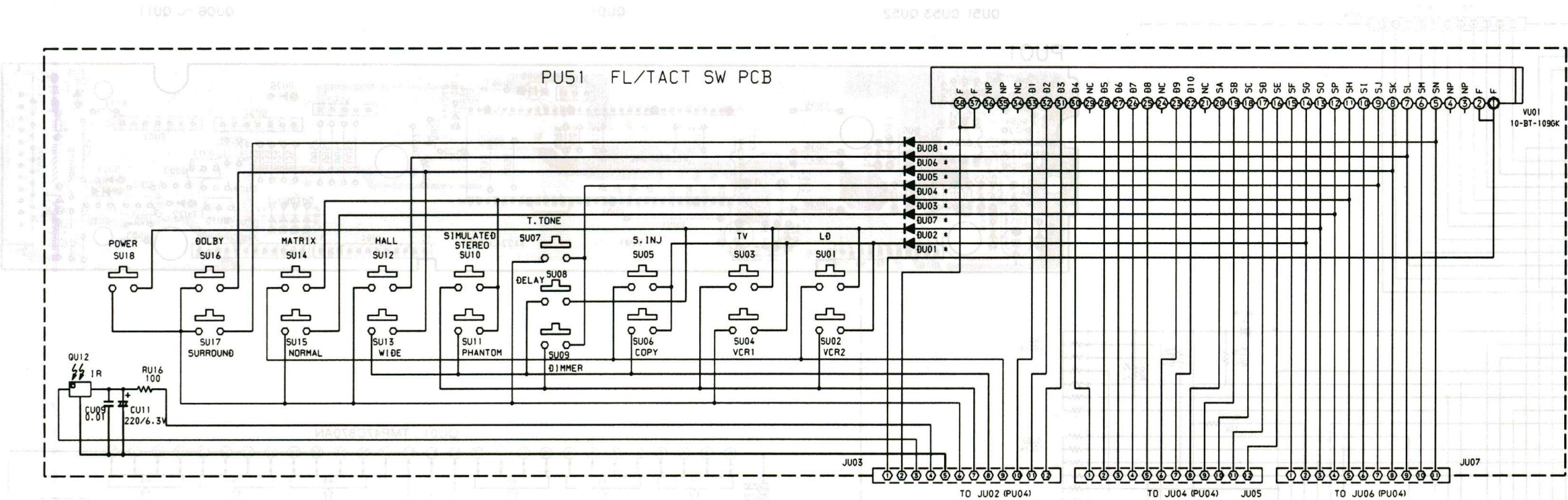












4. IDLING CURRENT ADJUSTMENT

- Before switching the power ON, set the Master Volume control to the minimum position and the Balance and Tone controls to the center positions. Then, rotate the semi-fixed resistors R719 (Surround) and R720 (Center) on the PC board PV04 center positions.
- Connect a digital voltmeter, set for the DC voltage input to the pertinent test points (the marked ones of R737-R738) on the PC board PV04.
- After the completion of the above setup. Switch the power ON and adjust the semi-fixed resistors R719 (Surround) and R720 (Center) on the PC board PV04 according to the reading of the digital voltmeter. The setting values are 7 mV (19.4 mA) of the both channels.

Note:
When you proceed to this adjustment after having serviced the unit, operate the unit with a non-signal condition for about 15 minutes after turning its power ON, then adjust to 7 mV. If you should proceed to the adjustment in less than 15 minutes after turning the power ON, refer to the following table for the value to be adjusted.

Power ON	
30 sec. ~ 1 min.	4.0 mV
1 min. ~ 2 min.	5.0 mV
2 min. ~ 3 min.	6.0 mV
More than 10 min.	7.0 mV

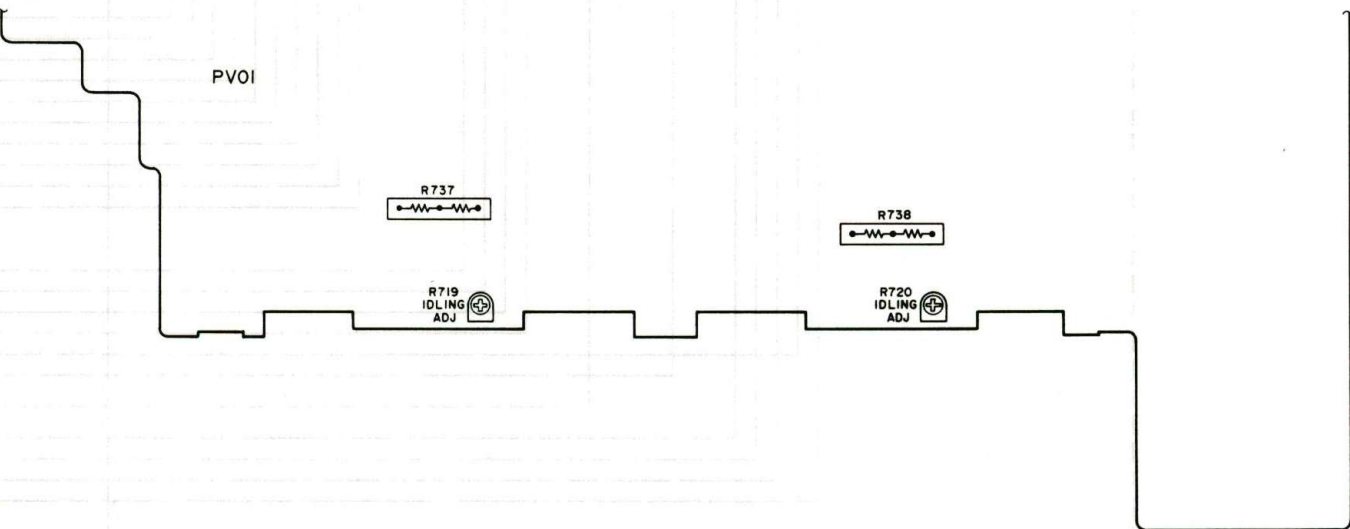
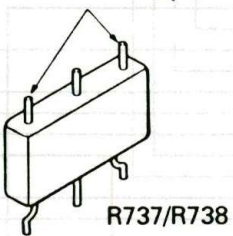
アイドリング電流の調整

- 電源を投入しない状態で、マスターボリュームを最小の位置にします。
- 電流調整用半固定抵抗 R719 (Surround)、R720 (Center) を中央の位置にします。
- セメント抵抗 R737 (Surround)、R738 (Center) の両端のピンに、デジタル電圧計を接続します。

* 電源を投入しアイドリング電流を、下表に従って R719、R720 を調整します。

参考
アイドリング電流調整済みのセットを、冷えた状態から電源投入すると、30 秒後に約 3.5mV、1 分後に約 4.5mV に達する。10 分後には平衡状態となり、7mV で安定します。従って、電源投入後、30 秒後～ 1 分以内に調整作業を行なう場合は「4mV」に調整します。同様に 1 分後～ 2 分以内の場合は「5mV」に、2 分後～ 3 分以内の場合は「6mV」に調整します。5 分後以降は、設定値である「7mV」に調整します。尚、ヒートラン、エージング後あるいは修理後に調整を行なう場合は、10 分間無信号、無負荷、電源投入状態で放置し、その後設定値である「7mV」に調整します。

Measurement point



[VERS. : VERSION. U : U.S.A. F : Japan, K : Far East, /XX : Europe]

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)	POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
			PG01-MOTOR VR / BALANCE CIRCUIT BOARD		CL16		4822 124 41539	ELECT 47μF 16V	OA47601620
					CL18		4822 124 41539	ELECT 47μF 16V	OA47601620
					CL19		4822 124 41539	ELECT 47μF 16V	OA47601620
			PG01-CAPACITORS		C642		4822 124 21894	ELECT 10μF 16V	EJ10601610
CG51		4822 124 23057	ELECT 4.7μF 50V	EJ47505010	C647		4822 124 41539	ELECT 47μF 16V	OA47601620
CG52		4822 124 23057	ELECT 4.7μF 50V	EJ47505010	C653		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
CG53		4822 124 23052	ELECT 100μF 16V	EJ10701610	C655		4822 124 80087	ELECT 220μF 6.3V	EJ22700610
CG54		4822 124 23052	ELECT 100μF 16V	EJ10701610	C656		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CG55		4822 124 21899	ELECT 4.7μF 25V	EJ47502510				PL01-CAPACITORS (COMMON)	
CG56		4822 124 21899	ELECT 4.7μF 25V	EJ47502510				HIGH DIELECTRIC CONSTANT CERAMIC CAPACITOR, ±10% 50V :	
CG57		4822 124 21894	ELECT 10μF 16V	EJ10601610				CG13, CG14, CL17, C645, C652, C661	
CG58		4822 124 21894	ELECT 10μF 16V	EJ10601610					
CG59		4822 122 30103	CER. 0.022μF +80% -20% 50V	DK18223310					
CG60		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310					
CG61		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310					
CG63		4822 124 23052	ELECT 100μF 16V	EJ10701610					
CG64		4822 124 23052	ELECT 100μF 16V	EJ10701610					
			PG01-RESISTORS						
RG51		4822 101 30865	100K Ω (B) x 4 VAR.	RY01040310					
RG52		4822 101 30863	100K Ω (MN) VAR.	RM01041580					
RG63		4822 101 30864	50K Ω (B) VAR.	RM05032070					
▲RG65		4822 052 10471	470 Ω ±5% 1/6W	GG05471160					
▲RG66		4822 052 10471	470 Ω ±5% 1/6W	GG05471160					
			PG01-RESISTORS (COMMON)						
			CARBON FILM FIXED RESISTOR, ±5% 1/6W :						
			RG53~RG56, RG59~RG62						
			PG01-SEMICONDUCTORS						
QG51		4822 209 83631	IC NJM4558D-D	HC10008090					
QG52		4822 209 83631	IC NJM4558D-D	HC10008090					
			PL01-VIDEO SELECTOR CIRCUIT BOARD						
			PL01-CAPACITORS						
CG01		4822 124 23053	ELECT 1μF 50V	EJ10505010					
CG04									
CG05		4822 124 21899	ELECT 4.7μF 25V	EJ47502510					
CG10									
CG12		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310					
CG13		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310					
CG19		4822 124 21894	ELECT 10μF 16V	EJ10601610					
CG20		4822 124 21894	ELECT 10μF 16V	EJ10601610					
CL01		4822 124 90353	ELECT 100μF 10V	OA10701020					
CL04									
CL05		4822 124 21894	ELECT 10μF 16V	EJ10601610					
CL08									
CL09		4822 124 90353	ELECT 100μF 10V	OA10701020					
CL11									
CL15		4822 124 23052	ELECT 100μF 16V	EJ10701610					

28

[VERS. : VERSION. U : U.S.A. F : Japan, K : Far East, /XX : Europe]

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)	POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
JL01		4822 265 30627	PL01-MISCELLANEOUS	YT02030060	DU09			PU01-SEMICONDUCTORS	
JL02		4822 266 30303	TERMINAL, 3P RCA	YT02040710	DU12		4822 130 33305	DIODE 1SS176, etc.	HD20002000
X601		4822 242 81525	CER. RESONATOR 2.0MHz	FQ02004030	DU17				
			PP01-POWER SW		DU19		4822 130 33305	DIODE 1SS176, etc.	HD20002000
			CIRCUIT BOARD		DU22		4822 130 33305	DIODE 1SS176, etc.	HD20002000
▲GP01		4822 122 33276	CER. CAP. 0.01μF ±20%	DK17103840	DU23		4822 130 33305	DIODE 1SS176, etc.	HD20002000
▲F001	/01/02	4822 070 31252	FUSE 1.25A 250V		DU24		4822 130 33305	DIODE 1SS176, etc.	HD20002000
	U		FUSE 2.5A 125V (AV1040)	FS10250360	DU26		4822 130 33305	DIODE 1SS176, etc.	HD20002000
	K		FUSE 1.25A 250V (AV1040)	FS10125850	DU51				
	F		FUSE 2.5A 125V (AV1040)	FS10250350	DU57		4822 130 33305	DIODE 1SS176, etc. (AV1040)	HD20002000
▲F002	/01	4822 070 31252	FUSE 1.25A 250V		QU01		4822 209 33822	μ-PRO. TMP47C870AN	HU224JT000
	K		FUSE 1.25A 250V (AV1040)	FS10125850	QU06		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
▲SP01		4822 276 12924	PUSH SW, POWER	SP01011540	QU07		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
▲SP02	/01	4822 277 21763	SLIDE SW, VOL. SEL.		QU08		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
	K		SLIDE SW, VOL. SEL. (AV1040)	SS02021240	QU09		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
			PU01-μ-COM		QU10		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
			CIRCUIT BOARD		QU11		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
			PU01-CAPACITORS		QU51		4822 209 63468	IC NJM082D (AV1040)	HC10066090
CU01		4822 124 80087	ELECT 220μF 6.3V	EJ22700610	QU52		4822 130 42715	TRS. 2SA608SP (AV1040)	HT10001000
CU02		4822 124 23295	BIG ELECT 0.022F	EX22300510	QU53		4822 130 60588	TRS. DIG. DTC114ES/UN4211 (AV1040)	BA20001000
CU03		4822 126 10935	ELECT 100μF 6.3V	EJ10700610					
CU04		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310	XU01		4822 242 72194	PU01-MISCELLANEOUS	
CU08		4822 124 41604	ELECT 0.1μF 50V	EJ10405010				CER. RESONATOR 4.19MHz	FQ04194020
CU51		4822 124 23056	ELECT 47μF 16V (AV1040)	EJ47601610				PU51-FL TACT SW	
CU53		4822 124 21899	ELECT 4.7μF 25V (AV1040)	EJ47502510				CIRCUIT BOARD	
			PU01-CAPACITORS		CU09		4822 124 80087	PU51-CAPACITORS	
			(COMMON)		CU11		4822 122 30043	ELECT 220μF 6.3V	EJ22700610
			HIGH DIELECTRIC CONSTANT					CER. 0.01μF +80% -20% 50V	DK18103310
			CERAMIC CAPACITOR,					PU51-RESISTORS	
			±10% 50V :					(COMMON)	
			[CU52 (AV1040)]					CARBON FILM FIXED	
			PU01-RESISTORS					RESISTOR, ±5% 1/6W :	
			(COMMON)					RU16	
			CARBON FILM FIXED					PU51-SEMICONDUCTORS	
			RESISTOR, ±5% 1/6W :		DU01				
			RU01~RU03, RU07~RU11,		DU08		4822 130 33305	DIODE 1SS176, etc.	HD20002000
			RU13, [RU51~RU57, RU60,						
			RU61 (AV1040)]		QU12		4822 130 83519	PHOTO UNIT RPM-670CBR	HW10001210
								PU51-MISCELLANEOUS	
					SU01				
					SU18		4822 276 20508	PUSH SW, TACT	SP01011280
					VU01		4822 130 91278	DISPLAY UNIT, FIP7JM9	HQ31012060

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
PV01-MAIN FUNCTION CIRCUIT BOARD				
PV01-CAPACITORS				
CB01		4822 124 21894	ELECT 10μF 16V	EJ10601610
CB02		4822 124 23053	ELECT 1μF 50V	EJ10505010
CD01		4822 122 30043	CER. 0.01μF +80% -20% 50V (AV1040)	DK18103310
CD02		4822 122 30043	CER. 0.01μF +80% -20% 50V (AV1040)	DK18103310
CD04		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CD05		4822 122 30043	CER. 0.01μF +80% -20% 50V (AV1040)	DK18103310
CD06		4822 122 30043	CER. 0.01μF +80% -20% 50V (AV1040)	DK18103310
CD07		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CD08		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CF01		4822 124 23053	ELECT 1μF 50V	EJ10505010
CF02		4822 124 23053	ELECT 1μF 50V	EJ10505010
CF03		4822 124 90353	ELECT 100μF 10V	OA10701020
CF04		4822 124 90353	ELECT 100μF 10V	OA10701020
CM01		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM02		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM04		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM06		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM08		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
CM10		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM15	/02	4822 122 31205	CER. 47pF ±5% 50V	
CM18		4822 124 23053	ELECT 1μF 50V	EJ10505010
CM22		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
CM24		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CM25		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
CM28		4822 124 23053	ELECT 1μF 50V	EJ10505010
CN01		4822 124 22571	ELECT 10μF 50V	OA10605020
CN02		4822 124 40786	ELECT 2.2μF 50V	EJ22505010
CN03		4822 124 23056	ELECT 47μF 16V	EJ47601610
CN04		4822 124 23056	ELECT 47μF 16V	EJ47601610
CN05		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CS01		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
CS03		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
CS05		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
CV15		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CV17		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CV20		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
CV22		4822 122 40617	CER. 0.1μF +80% -20% 50V	DD38104010
C311		4822 124 21894	ELECT 10μF 16V	EJ10601610
C312		4822 124 21894	ELECT 10μF 16V	EJ10601610
C601		4822 124 21894	ELECT 10μF 16V	EJ10601610
C602		4822 124 21894	ELECT 10μF 16V	EJ10601610
C612		4822 124 21894	ELECT 10μF 16V	EJ10601610
C617		4822 124 21894	ELECT 10μF 16V	EJ10601610
C618		4822 124 23055	ELECT 22μF 16V	EJ22601610
C619		4822 124 21894	ELECT 10μF 16V	EJ10601610
C621		4822 124 21894	ELECT 10μF 16V	EJ10601610
C622		4822 124 21894	ELECT 10μF 16V	EJ10601610
C623		4822 124 90364	ELECT 220μF 16V	OA22701620
C624		4822 124 21894	ELECT 10μF 16V	EJ10601610

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
C625		4822 124 21894	ELECT 10μF 16V	EJ10601610
C636		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
C637		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
C640		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
C641		4822 124 21894	ELECT 10μF 16V	EJ10601610
C659		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
C660		4822 124 90354	ELECT 100μF 16V	OA10701620
C663		4822 124 23056	ELECT 47μF 16V	EJ47601610
C665		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C701		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
C702		4822 124 21899	ELECT 4.7μF 25V	EJ47502510
C705		5322 122 32072	CER. 33pF ±5% 50V	DD15330300
C706		5322 122 32072	CER. 33pF ±5% 50V	DD15330300
C707		4822 124 22571	ELECT 10μF 50V	OA10605020
C708		4822 124 22571	ELECT 10μF 50V	OA10605020
C711		4822 126 10797	CER. 10pF ±0.5% 500V	DD11100560
C712		4822 126 10797	CER. 10pF ±0.5% 500V	DD11100560
C713		4822 122 40103	CER. 5pF ±0.25% 50V	DD10050300
C714		4822 122 40103	CER. 5pF ±0.25% 50V	DD10050300
C717		5322 122 32265	CER. 100pF ±5% 500V	DD15101560
C720				
C721				
C724		4822 124 21895	ELECT 0.22μF 50V	EJ22405010
C725		4822 124 90354	ELECT 100μF 16V	OA10701620
C726		4822 124 22571	ELECT 10μF 50V	OA10605020
C801		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C802		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C805		4822 124 23052	ELECT 100μF 16V	EJ10701610
C806		4822 124 23057	ELECT 4.7μF 50V	EJ47505010
C807		4822 124 22571	ELECT 10μF 50V	OA10605020
C808		4822 124 22571	ELECT 10μF 50V	OA10605020
C809		4822 124 22571	ELECT 10μF 50V	OA10605020
▲C811		4822 126 12453	CER. 0.01μF +80% -20% 500V	DK18103560
▲C812		4822 126 12866	ELECT 4700μF 50V	EB47805040
▲C813		4822 126 12866	ELECT 4700μF 50V	EB47805040
C814		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C815		4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C816		4822 124 80665	ELECT 10μF 50V	EJ10605010
PV01-CAPACITOR (COMMON)				
HIGH DIELECTRIC CONSTANT CERAMIC CAPACITOR, ±10% 50V :				
CB03, CF05~CF08, CM03, CM05, CM07, CM09, CM11, CM20, (CM21 [/02]), CS06, CV01~CV14, (CV23~CV24 [/02]), C608, C610, C629, C662, C703, C704, C709, C710				
ELECTROLYTIC CAPACITOR, ±20% :				
C628, C727, C728, C803, C804, C817				
C***				

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
C***				
PLASTIC FILM CAPACITOR, ±5% 50V :				
CM12~CM14, CM16, CM17, CM19, CS02, CS04, C603~C607, C609, C611, C613~C616, C620, C626, C627, C630~C635, C638, C639				
PV01-RESISTORS				
▲RN19		4822 053 11271	270 Ω ±5% 2W	GA05271020
▲RN22		4822 053 11271	270 Ω ±5% 2W	GA05271020
R610		4822 111 30999	10M Ω ±5% 1/4W	GD05106140
▲R613		4822 115 90167	100 Ω ±2% 1/4W, FUSE	NF02101140
▲R634		4822 052 10101	100 Ω ±5% 1/6W	GG05101160
▲R713		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R714		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
R719		4822 100 11386	1K Ω TRIM.	RA01020780
R720		4822 100 11386	1K Ω TRIM.	RA01020780
▲R725				
?		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R730				
▲R731		4822 053 10221	220 Ω ±5% 1W	GA05221010
▲R732		4822 053 10221	220 Ω ±5% 1W	GA05221010
▲R733				
?		4822 052 10109	10 Ω ±5% 1/6W	GG05100160
▲R736				
▲R737		4822 116 82049	0.18 Ωx 2 3W	BZ10182010
▲R738		4822 116 82049	0.18 Ωx 2 3W	BZ10182010
▲R739		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R740		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R743		4822 053 11109	10 Ω ±5% 2W	GA05100020
▲R744		4822 053 11109	10 Ω ±5% 2W	GA05100020
▲R745		4822 053 10332	3.3K Ω ±5% 1W	GA05332010
▲R747		4822 052 10221	220 Ω ±5% 1/6W	GG05221160
▲R748		4822 052 10221	220 Ω ±5% 1/6W	GG05221160
▲R801		4822 117 10158	1 Ω ±5% 1/4W	GG05010140
▲R802		4822 117 10158	1 Ω ±5% 1/4W	GG05010140
▲R808		4822 117 10002	2.2K Ω ±5% 1/2W	GG05222120
▲R810		4822 053 11688	6.8 Ω ±5% 2W	GA05068020
PV01-RESISTORS (COMMON)				
CARBON FILM FIXED RESISTOR, ±5% 1/6W :				
RB01~RB09, [RD01, RD02 (AV1040)], RD03, RD04, RF01~RF10, RG25, RG26, RM01~RM34, RM36, RM37, RN01~RN18, RN21, RN31, RN32, RS01~RS10, RV01~RV44, R601~R609, R611, R612, R614~R619, R633, R635, R638, R643~R647, R649~R651, R703~R712, R715~R718, R721~R724, R746, R749, R804~R806				
R***				

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
PV01-SEMICONDUCTORS				
DB01				
?		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DB04				
DD01		4822 130 82609	ZENER MTZJ2.0B (AV1040)	HD30201000
DD02		4822 130 33759	ZENER 4.7V	HD30471000
DN01		4822 130 80837	DIODE HSS81	HD20027010
DN02		4822 130 80837	DIODE HSS81	HD20027010
DN03		4822 130 32508	DIODE RL103E/DSF10C	HD20003000
DN05		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DV01				
?		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DV04				
D602		4822 130 83142	ZENER 6.2V	HD30621000
D701		4822 130 80273	ZENER 8.2V	HD30821000
D702		4822 130 80322	ZENER 15V	HD31501000
D703				
?		4822 130 33305	DIODE 1SS176, etc.	HD20002000
D706				
▲D801				
?		4822 130 32508	DIODE RL103E/DSF10C	HD20003000
▲D806				
D807		4822 130 80838	ZENER 18V	HD31801000
▲D808		4822 130 32508	DIODE RL103E/DSF10C	HD20003000
▲D810		4822 130 32508	DIODE RL103E/DSF10C	HD20003000
▲D811		4822 130 31007	DIODE S4VB20	HE20015290
QD01		4822 209 30193	IC LB1641 (AV1040)	HC10279030
QD02		4822 209 30193	IC LB1641	HC10279030
QF01		4822 209 83631	IC NJM4558D-D	HC10008090
QM01				
?		4822 209 83631	IC NJM4558D-D	HC10008090
QM04				
QM05		4822 209 72748	IC LC7821	HC10228030
QN01		4822 130 43233	TRS. 2SC2240	HT322402A0
QN02		4822 130 43233	TRS. 2SC2240	HT322402A0
QN03		4822 130 42951	TRS. 2SA970	HT109702A0
QN04		4822 209 83312	IC TA7317P	HC10042050
QN05		4822 209 60588	TRS. DIG. DTC114ES/UN4211	BA20001000
QS01		4822 209 83631	IC NJM4558D-D	HC10008090
QS02		4822 130 61892	TRS. 2SD2144S (U, V)	HT421442A0
QS03		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
QS04		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
QV01		4822 209 72748	IC LC7821	HC10228030
QV02		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA2000

[VERS. : VERSION. U : U.S.A. F : Japan, K : Far East, /XX : Europe]

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
QV07		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
QV08		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
QV09		4822 130 61892	TRS. 2SD2144S (U, V)	HT421442A0
QV10		4822 130 61892	TRS. 2SD2144S (U, V)	HT421442A0
QV11		4822 130 42594	TRS. DIG. DTC144ES/UN4213	BA20002000
QV12		4822 130 42682	TRS. DIG. DTA144ES/UN4113	BA10002000
Q601		4822 209 32693	IC NJM2177L	HC10126090
Q603		4822 209 32695	IC NJU3711D	HC10128090
Q604		4822 209 73275	IC TC9214P	HC10209050
Q701		4822 130 42951	TRS. 2SA970 (GR, BL)	HT109702A0
Q702		4822 130 42951	TRS. 2SA970 (GR, BL)	HT109702A0
Q703		4822 130 43233	TRS. 2SC2240	HT322402A0
Q704		4822 130 43233	TRS. 2SC2240	HT322402A0
▲ Q705		4822 130 60117	TRS. 2SC3419 (Y)	HT334191Y0
▲ Q706		4822 130 60117	TRS. 2SC3419 (Y)	HT334191Y0
▲ Q707		4822 130 62335	TRS. 2SD2033 (E)	HT420331E0
▲ Q708		4822 130 62335	TRS. 2SD2033 (E)	HT420331E0
▲ Q709		4822 130 62334	TRS. 2SD1353 (E)	HT213531E0
▲ Q710		4822 130 62334	TRS. 2SD1353 (E)	HT213531E0
▲ Q711		4822 130 60697	TRS. 2SC3180N	HT331802A0
▲ Q712		4822 130 60697	TRS. 2SC3180N	HT331802A0
▲ Q713		4822 130 60694	TRS. 2SA1263N	HT112632A0
▲ Q714		4822 130 60694	TRS. 2SA1263N	HT112632A0
Q717		4822 209 83732	IC AN7062	HC10066020
▲ Q801		4822 209 33819	IC μPC24M15HF	HC3651506F
▲ Q802		4822 209 32514	IC L78MR06	HC10263030
▲ Q804		4822 209 31864	IC NJM7915FA	HC3991509F
PV01-MISCELLANEOUS				
JS01		4822 290 81688	TERMINAL, 2P RCA	YT02021260
JV01		4822 267 31451	TERMINAL, 8P RCA	YT02080110
JV02		4822 267 31451	TERMINAL, 8P RCA	YT02080110
JV04		4822 267 41009	TERMINAL, 2P RCA	YT02020890
J604		4822 290 81687	TERMINAL, 2P RCA	YT02021040
LN01		4822 280 70354	RELAY, VB24MBU	LY20240310
PV51-SPK TERMINAL SURROUND CIRCUIT BOARD				
PV51-CAPACITORS				
C729	/02	4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C730	/02	4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
PV51-MISCELLANEOUS				
J751		4822 290 81646	TERMINAL, 4P SPK	YT01040640

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,F)
PV71-SPK TERMINAL CENTER CIRCUIT BOARD				
PV71-CAPACITORS				
C733	/02	4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
C734	/02	4822 122 30043	CER. 0.01μF +80% -20% 50V	DK18103310
J771		4822 290 81686	TERMINAL, 2P SPK	YT01020230

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