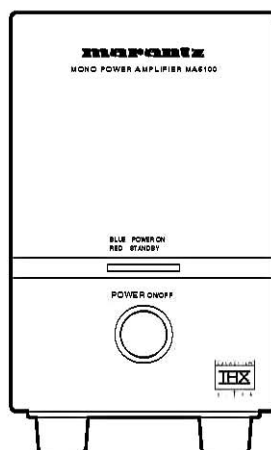


Service Manual

MA6100 /N1G, /U1G /N1B, /U1B Mono Power Amplifier



MA6100

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Please use this service manual with referring to the user guide (D.F.U.) without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

marantz®

MA6100

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

EUROPE / TRADING

MARANTZ EUROPE B.V.
P.O.BOX 80002, BUILDING SFF2
5600 JB EINDHOVEN
THE NETHERLANDS
PHONE : +31 - 40 - 2732241
FAX : +31 - 40 - 2735578

BRAZIL

PHILIP DA AMAZONIA IND. ELET. ITDA
CENTRO DE INFORMACOES AO
CEP 04698-970
SAO PAULO, SP, BRAZIL
PHONE : 0800 - 123123(Discagem Direta Gratuita)
FAX : +55 11 534. 8988

PROFESSIONAL AMERICAS

SUPERSCOPE TECHNOLOGIES, INC.
MARANTZ PROFESSIONAL PRODUCTS
2640 WHITE OAK CIRCLE, SUITE A
AURORA, ILLINOIS 60504 USA
PHONE : 630 - 820 - 4800
FAX : 630 - 820 - 8103

PROFESSIONAL AUSTRALIA

TECHNICAL AUDIO GROUP PTY, LTD
558 DARLING STREET,
BALMAIN, NSW 2041,
AUSTRALIA
PHONE : 61 - 2 - 9810 - 5300
FAX : 61 - 2 - 9810 - 5355

CANADA

LENBROOK INDUSTRIES LIMITED
633 GRANITE COURT,
PICKERING, ONTARIO L1W 3K1
CANADA
PHONE : 905 - 831 - 6333
FAX : 905 - 831 - 6936

AUSTRALIA

JAMO AUSTRALIA PTY LTD
1 EXPO COURT, P.O. BOX 350
MT. WAVERLEY VIC 3149
AUSTRALIA
PHONE : +61 - 3 - 9543 - 1522
FAX : +61 - 3 - 9543 - 3677

THAILAND

MRZ STANDARD CO.,LTD
746 - 754 MAHACHAI ROAD.,
WANGBURAPAPIROM, PHRANAKORN,
BANGKOK, 10200 THAILAND
PHONE : +66 - 2 - 222 9181
FAX : +66 - 2 - 224 6795

SINGAPORE

WO KEE HONG (S) PTE LTD
WO KEE HONG CENTRE
NO.23, LORONG 8, TOA PAYOH
SINGAPORE 319257
PHONE : +65 2544555
FAX : +65 2502213

NEW ZEALAND

WILDASH AUDIO SYSTEMS NZ
14 MALVERN ROAD MT ALBERT
AUCKLAND NEW ZEALAND
PHONE : +64 - 9 - 8451958
FAX : +64 - 9 - 8463554

TAIWAN

PAI- YUING CO., LTD.
6 TH FL NO. 148 SUNG KIANG ROAD,
TAIPEI, 10429, TAIWAN R.O.C.
PHONE : +886 - 2 - 25221304
FAX : +886 - 2 - 25630415

MALAYSIA

WO KEE HONG ELECTRONICS SDN. BHD.
SUITE 8.1, LEVEL 8, MENARA GENESIS,
NO.33, JALAN SULTAN ISMAIL,
50250 KUALA LUMPUR, MALAYSIA
PHONE : +60 3 - 2457677
FAX : +60 3 - 2458180

JAPAN *Technical*

MARANTZ JAPAN, INC.
35- 1, 7- CHOME, SAGAMIONO
SAGAMIHARA - SHI, KANAGAWA
JAPAN 228-8505
PHONE : +81 42 748 1013
FAX : +81 42 741 9190

日本 マラantz 株式会社

本 社 〒228-8505
神奈川県相模原市相模大野7-35-1
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 :

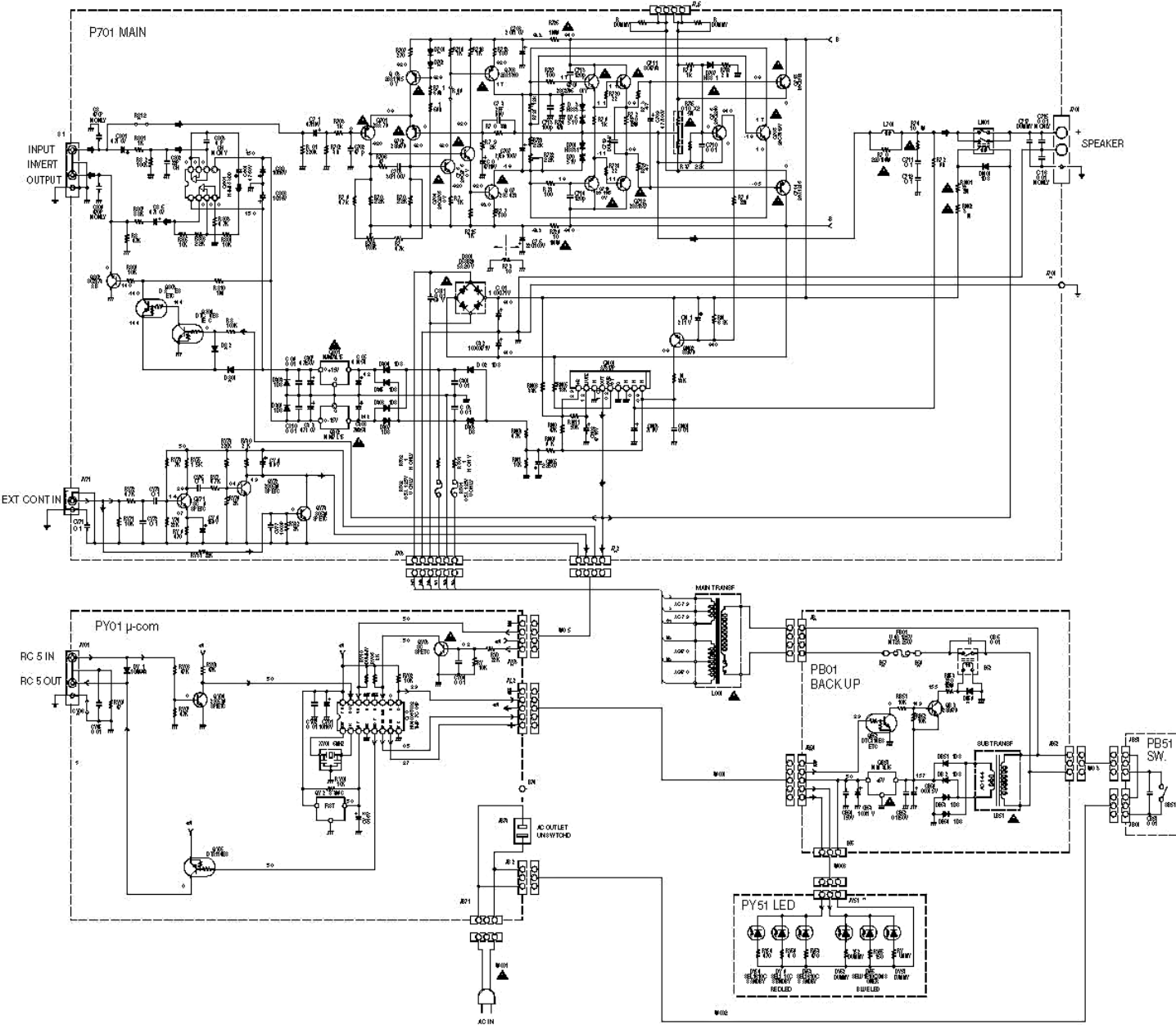
CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

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.

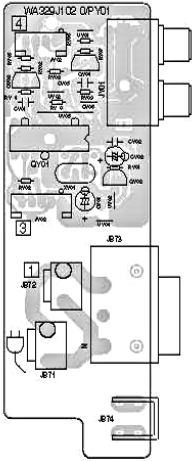
Ref. UL Standard No. 1492.

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

5. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern Side)



PY01
QY03 QY04
QY01 QY02



P701

Q802 Q803

Q701 Q702

Q801

Q802

Q714

Q705 Q707

Q704 Q704

Q703 Q715

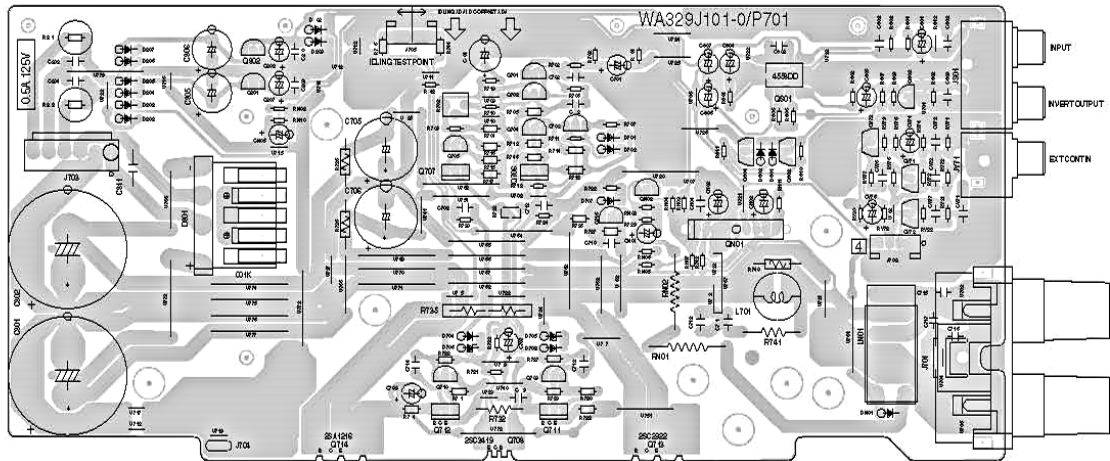
Q708 Q709

Q711 Q713

Q712 Q712

Q710 Q712

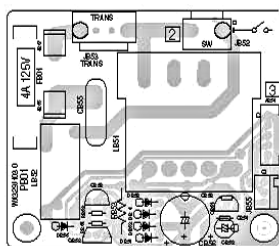
Q711 Q711



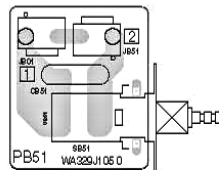
PB01

Q853
Q852

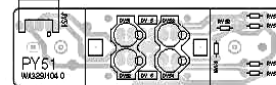
Q851







PB51

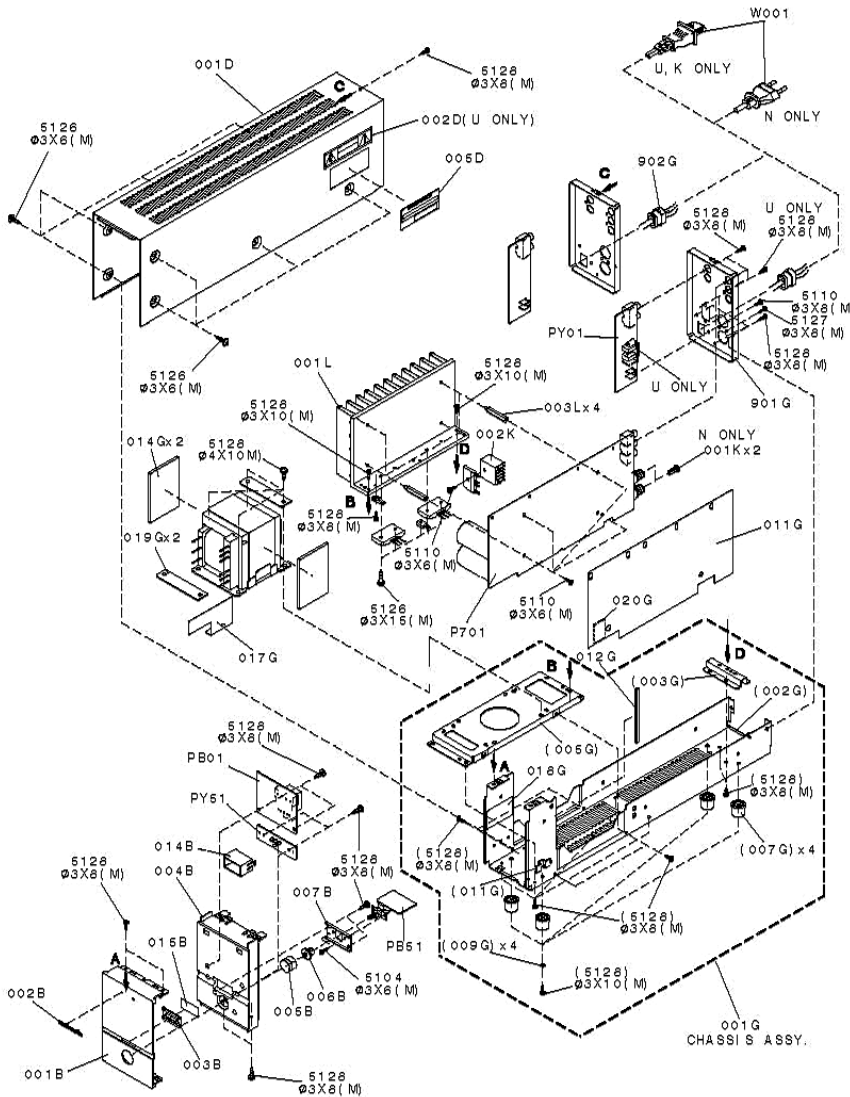
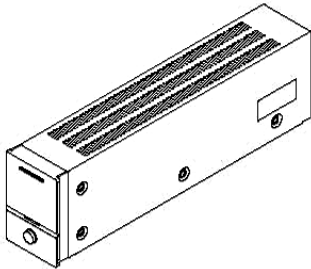


PY51



6. EXPLODED VIEW AND PARTS LIST

SYMBOL	STYLE	PARTS NAME	MARK	MATERIAL/ FINISH
5104		F H M SCREW	(M)	IRON/ COPPER
5110		B H M SCREW		
5126		B H TAP TITE SCREW W/WASHER		
5128		B H TAP TITE SCREW(B TYPE)		



POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJ)
001B	BLACK GOLD	9965 000 05897	FRONT AL PANEL BLACK	329J248010
001B		9965 000 05902	FRONT AL PANEL GOLD	329J248110
002B		9965 000 05898	BADGE MARANTZ	354H251240
003B		9965 000 05899	LENS FOR POWER ON/STANDBY	329J355010
004B	BLACK	9965 000 05900	CHASSIS FRONT MOLD BL	329J105010
004B		9965 000 05903	CHASSIS FRONT MOLD GL	329J105110
005B	BLACK	9965 000 01975	BUTTON POWER BL	255W270010
005B	GOLD	9965 000 01395	BUTTON POWER GL	255W270110
006B		9965 000 01394	JOINT FOR POWER BUTTON	312J125010
014B			REFLECTOR FOR P.ON/STAN.	329J274010
007G		4822 462 42026	LEG	176J057010
902G		4822 532 60948	BUSHING MAINS CORD	450H259010
▲ L001	/N	9965 000 05887	MAINS TRANSF. 230V 50Hz	TS18631020
▲ L001	/U		MAINS TRANSF. 120V 60Hz	TS18631010
▲ W001	/N	4822 321 11343	MAINS CORD N MAYOR / JB71	YC01800790
▲ W001	/U		MAINS CORD UL/CSA	YC02000880
PACKING				
001T	/N	9965 000 05901	USER GUIDE	329J851310
001T	/U		USER GUIDE	329J851250
Z001		4822 321 62012	RCA PIN CORD ORANGE	ZD00900100
NOT STANDARD SPARE PARTS				
001S			PACKING CASE	329J801010
002S			CUSHION FRONT	329J809010
003S			CUSHION REAR	329J809020

8. 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

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

±0.25pF 0
±0.5pF 1
±5% 5

* Tolerance of COMMON PARTS handled here are as follows :

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

③ Capacity value

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

100pF ... 101	1000pF ... 102	10000pF ... 103
470pF ... 471	2200pF ... 222	

C*** : 5) ELECTROLYTIC 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

0.1μF ... 104	4.7μF ... 475	100μF ... 107
0.33μF ... 334	10μF ... 106	330μF ... 337
1μF ... 105	22μF ... 226	1100μF ... 118
		2200μF ... 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
 DF16××× 310 — One-way type, Mylar ±10% 50V
 ⑦ — Capacity value

Examples ;

⑦ Capacity value

0.001μF (1000pF) 102	0.1μF 104
0.0018μF 182	0.56μF 564
0.01μF 103	1μF 105
0.015μF 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 * Resistance value
 (0.1 – 10kΩ)

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 * Resistance value

Examples ;

* Resistance value

0.1Ω 001	10Ω ... 100	1kΩ 102	100kΩ 104
0.5Ω 005	18Ω ... 180	2.7kΩ 272	680kΩ 684
1Ω 010	100Ω ... 101	10kΩ 103	1MΩ 105
6.8Ω 068	390Ω ... 391	22kΩ 223	4.7MΩ 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	X'TAL : 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 :

⚡ が付いている部品は、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)
			P701-MAIN/POWER SUPPLY CIRCUIT BOARD	
			P701-CAPACITORS	
CN01		4822 124 90358	ELECT. 22 μ F M 16V RA-2	OA22601620
CN02		4822 124 41539	ELECT. 47 μ F M 16V RA-2	OA47601620
CN03		4822 124 41539	ELECT. 47 μ F M 16V RA-2	OA47601620
CN04		4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
CN05		4822 124 90357	ELECT. 2.2 μ F M 50V RA-2	OA22505020
CN06	/N	4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
CS01		4822 124 22274	ELECT. 4.7 μ F M 50V RA-2	OA47505020
CS02		5322 122 32143	CER. 22pF J CH 50V BLK	DD15220300
CS03	/N	4822 122 31205	CER. 47pF J CH 50V BLK	DD15470300
CS04		4822 124 22274	ELECT. 4.7 μ F M 50V RA-2	OA47505020
CS05		4822 124 22274	ELECT. 4.7 μ F M 50V RA-2	OA47505020
CS06		4822 124 90352	ELECT. 10 μ F M 16V RA-2	OA10601620
CS07		4822 124 90352	ELECT. 10 μ F M 16V RA-2	OA10601620
CY71		4822 122 40617	CER. 0.1 μ F +80 -20% 50V DC	DD38104010
CY74		4822 124 41543	ELECT. 1 μ F M 50V RA-2	OA10505020
CY76		4822 124 41543	ELECT. 1 μ F M 50V RA-2	OA10505020
C701		4822 124 22275	ELECT. 47 μ F M 10V RA-2	OA47601020
C702			FILM 470pF TP 100V	OF15471540
C703		4822 121 42341	FILM 680pF 100V ECQ-P	DF15681550
C704		4822 124 22275	ELECT. 47 μ F M 10V RA-2	OA47601020
C705		9965 000 02644	ELECT. 220 μ F M 100V RA-2	OA22710020
C706		9965 000 02644	ELECT. 220 μ F M 100V RA-2	OA22710020
C707		4822 124 11533	ELECT. 1 μ F 100V RA-2	OA10510020
C708		9965 000 01586	MICA 22pF J 500V FE	DF35220520
C709		9965 000 05892	ELECT. 4.7 μ F 100V	EA47510010
C713		9965 000 00438	FILM 120pF J 100V APSV	OF15121540
C714		9965 000 00438	FILM 120pF J 100V APSV	OF15121540
C715	/N	4822 122 40306	CER. 0.047 μ F Z 50V	DK18473310
C716	/N	4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
C718		9965 000 01344	FILM 100pF J 100V APSV	OF15101540
▲ C801			ELECT. 10000 μ F M 71V	EB10907170
▲ C802			ELECT. 10000 μ F M 71V	EB10907170
C803		4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
C804		4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
C805		4822 124 41541	ELECT. 470 μ F M 35V RA-2	OA47703520
C806		4822 124 41541	ELECT. 470 μ F M 35V RA-2	OA47703520
C807		4822 124 22274	ELECT. 4.7 μ F M 50V RA-2	OA47505020
C808		4822 124 22274	ELECT. 4.7 μ F M 50V RA-2	OA47505020
C809		4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
C810		4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
C811		4822 126 12453	CER. 0.01 μ F Z E 500V	DK18103560
C812	/N	4822 122 30043	CER. 0.01 μ F Z 50V	DK18103310
			P701-CAPACITORS (COMMON)	
			HIGH DIELECTRIC CONSTANT CER. CAPACITOR $\pm 10\%$ 50V : CS08 CS09 CY77	
			P701-CAPACITORS (COMMON)	
			PLASTIC FILM CAPACITOR $\pm 5\%$ 50V : C710-C713 CY72-CY75	
			P701-RESISTORS	
▲ RN01		4822 053 11821	820 Ω $\pm 5\%$ 2W	GA05821020
▲ RN02		4822 053 11821	820 Ω $\pm 5\%$ 2W	GA05821020
RS12			JUMPER	75060501P0
▲ R704		4822 050 22202	2.2k Ω $\pm 5\%$ 1/6W	GG05222160
▲ R705		4822 050 22202	2.2k Ω $\pm 5\%$ 1/6W	GG05222160
R708		9965 000 01766	TRIM. 100k Ω	RA01040760
▲ R713		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R714		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R715		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R716		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R717			180 Ω $\pm 5\%$ 1/6W	GG05181160
▲ R718			180 Ω $\pm 5\%$ 1/6W	GG05181160
R722		9965 000 01566	TRIM. 2.2k Ω	RA02220760
▲ R725		4822 052 10109	10 Ω $\pm 5\%$ 1/4W	GG05100140

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
▲ R726		4822 052 10109	10 Ω $\pm 5\%$ 1/4W	GG05100140
▲ R727		4822 052 10101	100 Ω $\pm 5\%$ 1/6W	GG05101160
▲ R728		4822 052 10101	100 Ω $\pm 5\%$ 1/6W	GG05101160
▲ R729		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R730		4822 052 10229	22 Ω $\pm 5\%$ 1/6W	GG05220160
▲ R731		4822 052 10229	22 Ω $\pm 5\%$ 1/6W	GG05220160
▲ R732		4822 116 60319	FUSIBLE 220 Ω J 1/2W	NH05221120
▲ R733		4822 052 10478	4.7 Ω $\pm 5\%$ 1/6W	GG05047160
▲ R734		4822 052 10478	4.7 Ω $\pm 5\%$ 1/6W	GG05047160
▲ R735		4822 111 91422	COMPO. 0.1 Ω K 5W X 2	BW10000050
▲ R736		4822 052 10102	1k Ω $\pm 5\%$ 1/6W	GG05102160
▲ R737		4822 050 22202	2.2k Ω $\pm 5\%$ 1/6W	GG05222160
▲ R740		4822 116 83929	220 Ω $\pm 5\%$ 1/4W	GG05221140
▲ R741		4822 053 10109	10 Ω $\pm 5\%$ 1W	GA05100010
R746			JUMPER	75060501P0
▲ R801	/N	4822 116 82805	1 Ω $\pm 5\%$ 1/6W	GG05010160
▲ R801	/U		FUSE 0.5A 125V UL/CSA	FS20050220
▲ R802	/N	4822 116 82805	1 Ω $\pm 5\%$ 1/6W	GG05010160
▲ R802	/U		FUSE 0.5A 125V UL/CSA	FS20050220
			P701-RESISTORS (COMMON)	
			CARBON FILM FIXED RES. $\pm 5\%$ 1/6W : R701-R703 R706 R707 R709-R712 R719-R724 R738 R739 R742 R743 RN03-RN1 RS01-RS11 RY71-RY82	
			P701-SEMICONDUCTORS	
DN01		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
DS01		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
DS02		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
D701		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
D702		4822 130 32362	DIODE 1SS176 MA165 1SS254 30V 0.1A	HD20002000
D703		4822 130 80837	DIODE HSS81TD 150V 150mA	HD20027010
D704		4822 130 80837	DIODE HSS81TD 150V 150mA	HD20027010
D705		4822 130 80317	ZENER DIODE 5.1V	HD30511000
D706		4822 130 80317	ZENER DIODE 5.1V	HD30511000
D707		4822 130 80837	DIODE HSS81TD 150V 150mA	HD20027010
▲ D801		4822 130 83438	DIODE D5SB-20 200V	HE20016290
D802				
S				
D809		4822 130 82421	DIODE 1D3 1A 200V	HD20002710
▲ K701			TRS. KIT 2SA1360 2SC3423 PAIR O OR Y	HK136019C0
▲ K702			TRS. KIT 2SA1837 2SC4793 HFE MJI RANK	HK183719C0
▲ K703		4822 130 11394	TRS. KIT 2SA1216 2SC2922 PAIR O OR Y	HK121619F0
QN01		4822 209 83312	IC TA7317P	HC10042050
QN02		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
QS01		4822 209 83631	IC NJM4558D-D	HC10008090
QS02		4822 130 43818	TRS. 2SC2878 A OR BRANK	HT328782A0
QS03		4822 130 61227	DIG.TRS.	BA10001000
			DTA114ES UN4111 10K 10K	
QS04		4822 130 60588	DIG.TRS.	BA20001000
			DTC114ES UN4211 10K 10K	
QY71				
S		4822 130 41947	TRS. 2SC2458 2SC1740S 2SC3199 ETC.	HT30001000
QY73				
Q701		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
Q702		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0
Q703		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0
Q704		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)	POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
Q705		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0	CY05		4822 122 30043	CER. 0.01μF Z 50V	DK18103310
▲ Q706		5322 130 61728	TRS. 2SA1360 O OR Y	HT113602A0	CY06			JUMPER	75060501P0
▲ Q707		5322 130 61737	TRS. 2SC3423 O OR Y	HT334232A0					
Q708		4822 130 60117	TRS. 2SC3419 Y	HT334191Y0					
			40V 0.8A PC=1.2W 5W						
Q709		4822 130 43283	TRS. 2SC2705 O OR Y	HT327052A0					
Q710		4822 130 42999	TRS. 2SA1145 O OR Y	HT111452A0					
▲ Q711		4822 130 63635	TRS. 2SC4793 O Y	HT347932A0					
▲ Q712		4822 130 63634	TRS. 2SA1837 O Y	HT118372A0	DY01		4822 130 81247	DIODE 1GWJ43	HD20031050
▲ Q713		9965 000 01762	TRS. 2SC2922 O Y	HT329222A0					
▲ Q714		9965 000 01763	TRS. 2SA1216 O Y	HT112162A0	QY01		4822 209 15768	MICROPROCESSOR	HU400ST000
Q715		4822 130 43233	TRS. 2SC2240 GR OR BL	HT322402A0					
▲ Q801		4822 209 71038	IC NJM78L15A +15V 0.1A	HC38115090	QY02		4822 209 14883	IC V-SENSOR IC S-806C 4.55V	HC10075530
▲ Q802		4822 209 71039	IC NJM79L15A -15V 500MW	HC39115090	QY03		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
								2SC3199 ETC.	
JS01		9965 000 01315	P701-MISCELLANEOUS		QY04		4822 130 41947	TRS. 2SC2458 2SC1740S	HT30001000
			TERMINAL 2P RCA JACK	YT02021550				2SC3199 ETC.	
JY71		9965 000 05815	BLK/BLK GOLD 1L2		QY05		4822 130 42682	DIG.TRS.	BA10002000
			TERMINAL 1P RCA PIN JACK	YT02010580				DTA144ES UN4113 47K 47K	
J701		4822 290 81596	YELLOW						
LN01		9965 000 05895	TERMINAL SPK. BROWN/RED	YT01020190					
L701		4822 157 70022	RELAY G5PA-28 5A 250VAC	LY20240490	▲ JB73	/U	4822 267 31686	JACK AC OUTLET 1P	YJ04001780
			SPK CHOCK COIL VERTICAL	ML08010030	JY01		9965 000 03413	TERMINAL 14X14 RA 1L2P	YT02021640
								ORG NI F-GROUND	
			PB01-SUB TRANSF.						
			CIRCUIT BOARD						
			PB01-CAPACITORS						
CB52		4822 126 11558	CER. 0.01μF Z 50V	DA17104110					
CB53		4822 124 90353	ELECT. 100μF M 10V RA-2	OA10701020					
CB54		4822 126 11558	CER. 0.01μF Z 50V	DA17104110					
CB55			CER. 0.01μF 250V	DK17103860					
CB56		4822 124 90356	ELECT. 1000μF M 35V RA-2	OA10803520					
			PB01-RESISTORS						
RB51			10kΩ ±5% 1/6W	GD05103160					
RB52			10kΩ ±5% 1/6W	GD05103160					
▲ RB53		4822 050 22201	220Ω ±5% 1/2W	GG05221120					
			PB01-SEMICONDUCTORS						
DB51									
DB54		4822 130 82421	DIODE 1D3 1A 200V	HD20002710					
DB56		4822 130 32362	DIODE 1SS176 MA165 1SS254	HD20002000					
			30V 0.1A						
▲ QB51		4822 209 71373	IC NJM78L05A	HC38105090					
QB52		4822 130 60588	DIG.TRS. DTC114ES UN4211	BA20001000					
			10K 10K						
QB53		4822 130 42949	TRS. 2SA970 GR OR BL	HT109702A0					
			PB01-MISCELLANEOUS						
▲ FB01	/N	4822 070 32001	FUSE 2 A 250V BS LISTED	FS10200850					
▲ FB01	/U		FUSE 4A 125V	FS10400350					
			UL CSA MITI TYPE FBT						
▲ LB51	/N	9965 000 05888	BACK UP 230V 50Hz	TS12812020					
▲ LB51	/U		BACK UP 120V 60Hz	TS12812010					
▲ LB52		9965 000 00681	RELAY POWER G5PA-1 5A	LY10120400					
			PB51-SWITCH						
			CIRCUIT BOARD						
CB51			CER. 0.01μF 250V	DK17103860					
▲ SB51		9965 000 01777	PUSH SWITCH	SP01012460					
			SDDL B1-B1-D2 TV-5						
			PY01-μ-COM CIRCUIT BOARD						
			PY01-CAPACITORS						
CY01		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620					
CY02		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					
CY03		4822 124 90352	ELECT. 10μF M 16V RA-2	OA10601620					
CY04		4822 122 30043	CER. 0.01μF Z 50V	DK18103310					