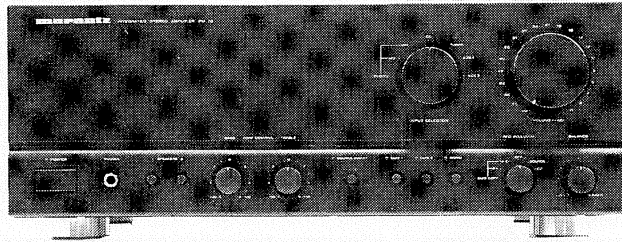


# Service Manual

**74 PM72/00B/01B/02B  
/01G/02G**

**Integrated stereo amplifier**



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**marantz®**

**model PM-72**

4822 725 50954

First issue: 1991

MZ 3005

## 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 telex. In both cases, 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 telex must be signed otherwise such part order will be considered as null and void.

### PARTS ORDERING

Parts may be ordered at the following addresses:

#### AUSTRIA

HORNYPHON  
Vertriebsgesellschaft GmbH  
Wienerbergstrasse 1  
A 1101 Wien  
Austria  
Telex: 132.332

#### BELGIUM

SVD DIVISION MARANTZ  
Industrialaan 1  
1720 Groot-Bijgaarden  
Belgium  
Telex: 24466

#### CHILE

MARANTZ  
DIVISION OF PHILIPS S.A.  
AV. Santa Maria, 0760  
Casilla 2687  
Santiago  
Telex: 240.239

#### DENMARK

MARANTZ  
DIVISION OF PHILIPS  
SERVICE A/S  
Prags Boulevard 80  
Postbox 1919  
DK-2300 København S  
Denmark  
Telex: 31201

#### FINLAND

MARANTZ  
DIVISION OF OY PHILIPS Ab  
Kaivokatu 8  
00100 Helsinki  
Finland  
Telex: 124811

#### FRANCE

MARANTZ FRANCE  
4 Rue Bernard Palissy  
92600 Asnières  
France  
Telex: 611651

#### GERMANY

MARANTZ GERMANY GmbH  
Alexanderstrasse 1  
2000 Hamburg  
Germany

#### THE NETHERLANDS

Elpro Marantz  
Wint Hontlaan 28  
3526 KV Utrecht  
The Netherlands  
Telex: 4748

#### NORWAY

MARANTZ  
DIVISION OF PHILIPS A/S  
Sandstuveien 40  
0680 Oslo 6  
Norway  
Telex: 72640

#### GREAT BRITAIN

MARANTZ AUDIO U.K. Ltd  
Unit 15/16  
Saxon Way Industrial Estate  
Moor Lane  
Harmondsworth UB7 0LW  
Great Britain  
Telex: 935196

#### GREECE

SHERTON ELECTRONICS S.A.  
P.O.Box 21025  
Hippocrates Street 188  
Athens 11471  
Greece  
Telex: 216.795

#### JAPAN

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

#### KUWAIT

AL ALAMIAH ELECTRONICS  
Ussama Building  
Fahd al Saleem Street  
P.O.Box 23781  
Safat-Kuwait  
Telex: 22694

#### ITALY

MARANTZ ITALIANA S.P.A.  
Via Chiese, 74  
20126 Milano  
Italy

#### SAUDI ARABIA

AL ALAMIAH ELECTRONICS  
P.O.Box 5954  
University Street  
Riyadh 11432  
Saudi Arabia  
Telex: 401530

#### SOUTH AFRICA

MARANTZ  
DIVISION OF PHILIPS S.A.  
Main Road Martindale  
P.O. Box. 58088  
Newville 21114  
South Africa

#### SPAIN

PHONO S.A.  
Ignacio Iglesias 10  
Badalona (Barcelona)  
Spain  
Telex: 59355

#### SWEDEN

MARANTZ  
DIVISION OF PHILIPS  
Försäljning AB  
Tegeluddsvägen 1  
S-115 84 Stockholm  
Sweden  
Telex: 14060

#### SWITZERLAND

MARANTZ  
Technischer Service  
Duenstrasse 3  
3186 Düringen  
Switzerland

#### TURKEY

DOGRUOL Ltd.  
I.M.C.  
6 Blok N°6310  
Unkapani  
Istanbul  
Turkey  
Telex: 22085

#### MALTA

CACHIA & GALEA  
Republic Street, 68D  
Valetta  
Telex: 1682

#### PORTUGAL

MARANTZ  
Divisao philips S.A. service  
Outurela-carnaxide  
2795 LinDA-A-VELHA  
Telex: 43906

### MARANTZ INTERNATIONAL

Vestdijk 9  
5600 MD Eindhoven  
The Netherlands  
Phone: +31/40.758290  
Telefax: +31/40.75.82.99  
Telex: 35000 PHTC NL routing IND NLMTFAT

All of the above locations are fully equipped to take care of your total service needs. 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 abovementioned address.

## TECHNICAL SPECIFICATIONS (DIN)

### Power Amplifier Section

IHF Dynamic Power		
2 ohms	:	250W
4 ohms	:	170W
8 ohms	:	120W
Power Output Per Channel		
DIN 4 ohms 1 kHz 1% THD	:	170W
RMS 4 ohms 1 kHz 0.06% THD	:	150W
DIN 8 ohms 1 kHz 1% THD	:	110W
RMS 8 ohms 1 kHz 0.03% THD	:	100W
FTC 4 ohms 20–20 kHz 0.06% THD	:	95W
FTC 8 ohms 20–20 kHz 0.03% THD	:	70W
Total Harmonic Distortion at 8 ohms	:	0.008%
I.M. Distortion at 8 ohms	:	0.008%
Damping Factor	:	150
Slew Rate	:	70 V/ $\mu$ s

### Phono Amplifier Section

MM Cartridge Input		
Frequency Difference	:	$\pm 0.5$ dB
Signal to Noise Ratio (A weighted)	:	86 dB
Input Sensitivity	:	2.5 mV
Input Impedance	:	47k Ohms
MC Cartridge Input		
Input Sensitivity	:	0.25 mV
Input Impedance	:	100 Ohms

### High Level Section

Frequency Response	:	10–70 kHz
Signal to Noise Ratio (A weighted)	:	86 dB
Input Sensitivity	:	150 mV
Input Impedance	:	33k Ohms
Tape Output Level [Phono (MM) 5 mV 1 kHz Input]	:	300 mV
Tape Output Impedance (Phono)	:	220 Ohms (02B/02G – 440 Ohms)
Tone Control Action 100 Hz	:	$\pm 6$ dB
10 kHz	:	$\pm 6$ dB
Channel Separation (CD Input at 1 kHz)	:	75 dB
(CD Input at 10 kHz)	:	65 dB

### General

Power Requirements		
2 Voltage version	:	02B/02G – 230V 00B – 230V/240V
4 Voltage version	:	01B/01G – 110V–240V

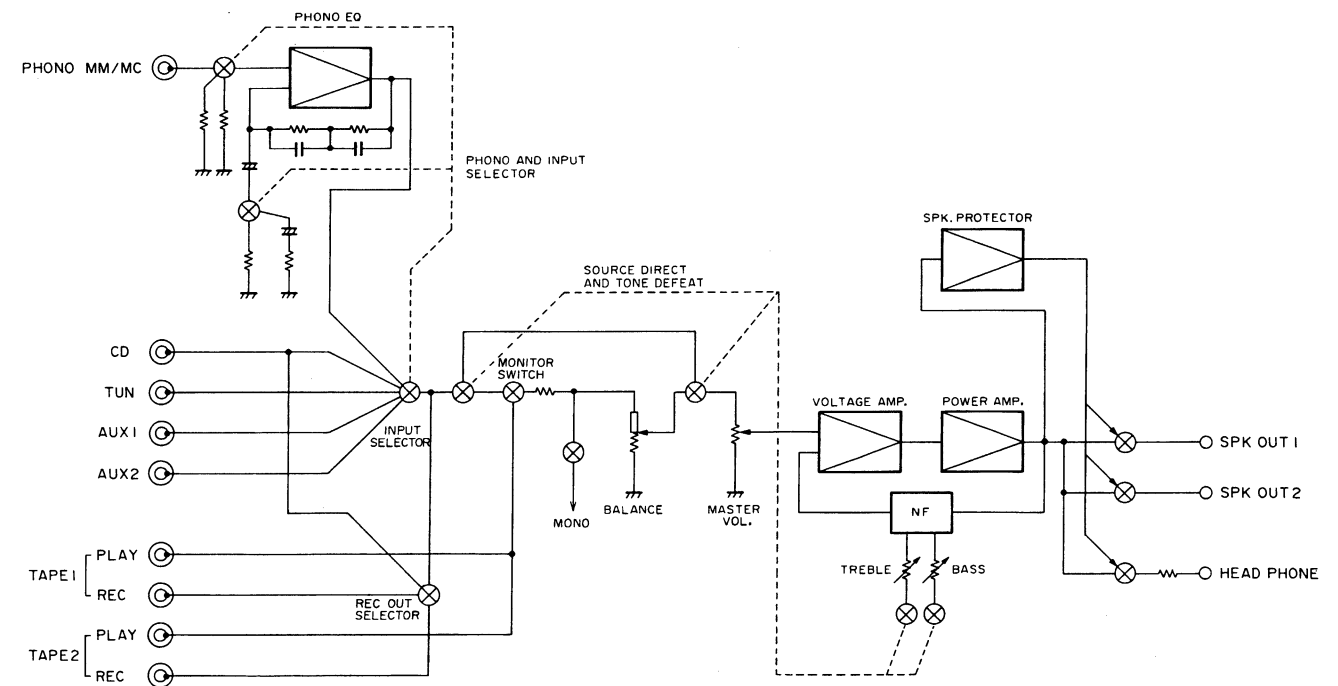
Power Consumption (Rated Power)		
AB Class Moode	:	390W

Dimensions		
Panel Width	:	420 mm
Panel Height	:	132 mm
Depth	:	334 mm

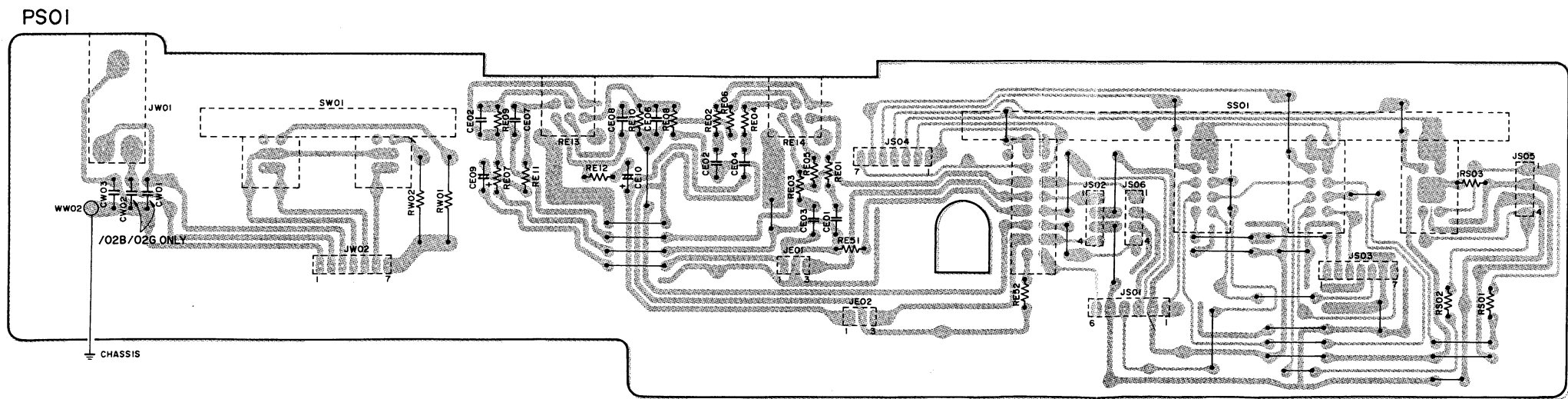
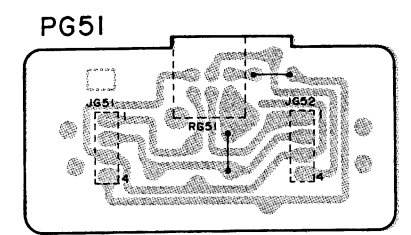
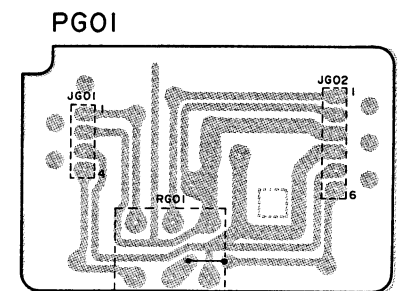
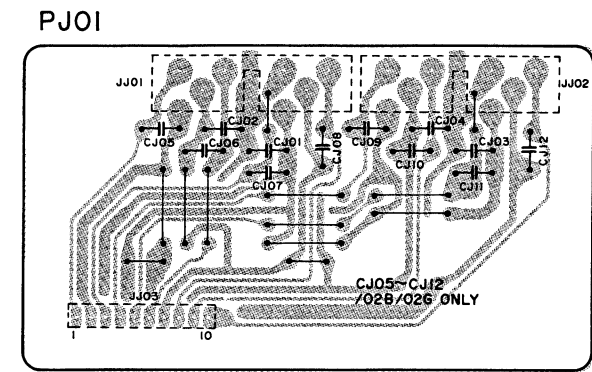
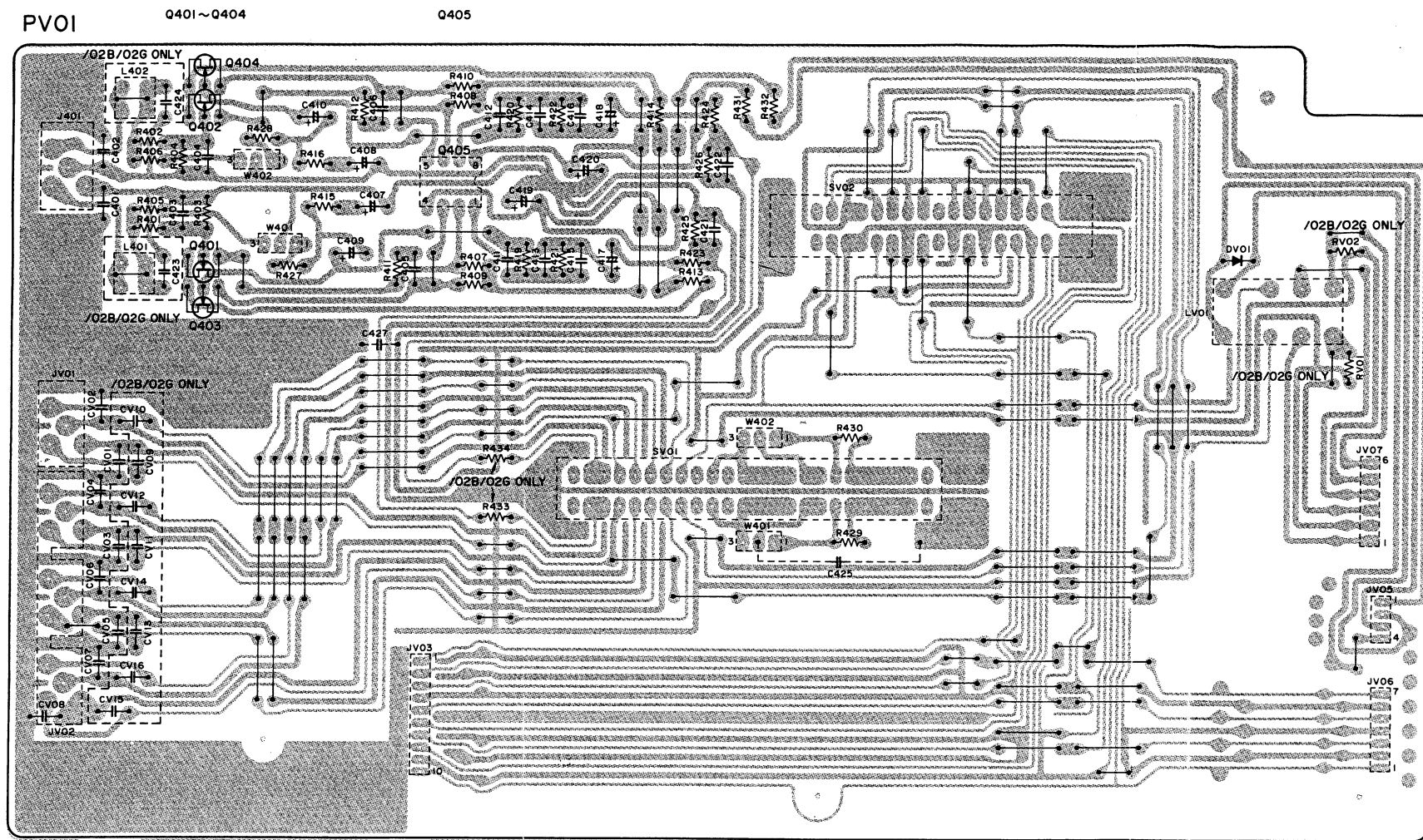
Weight		
Unit alone	:	10 kg

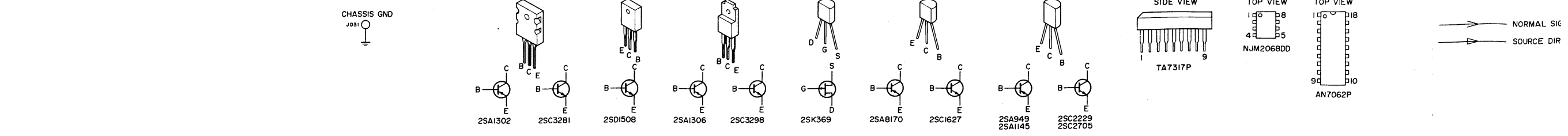
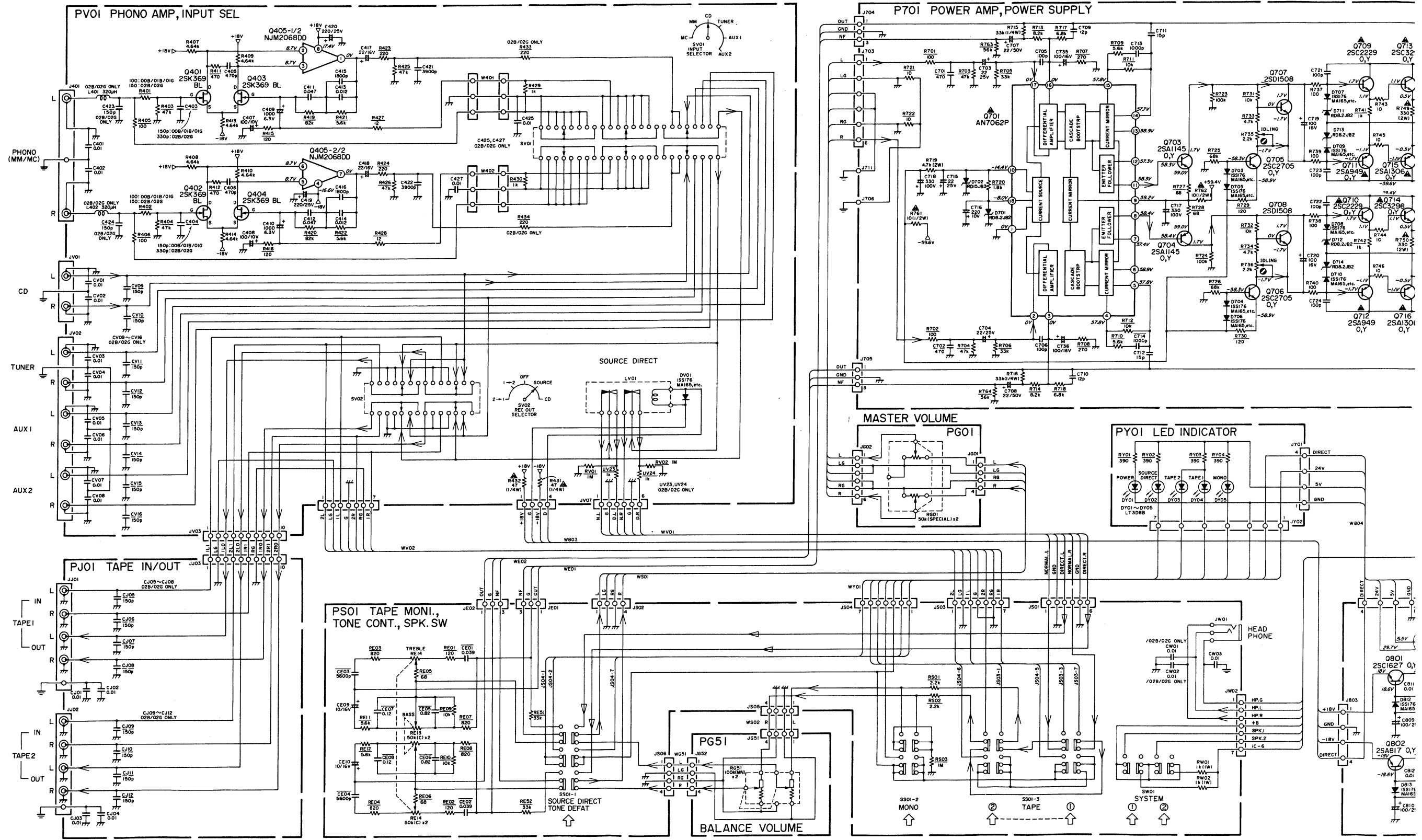
Specifications and appearance are subject to change for modification without notice.

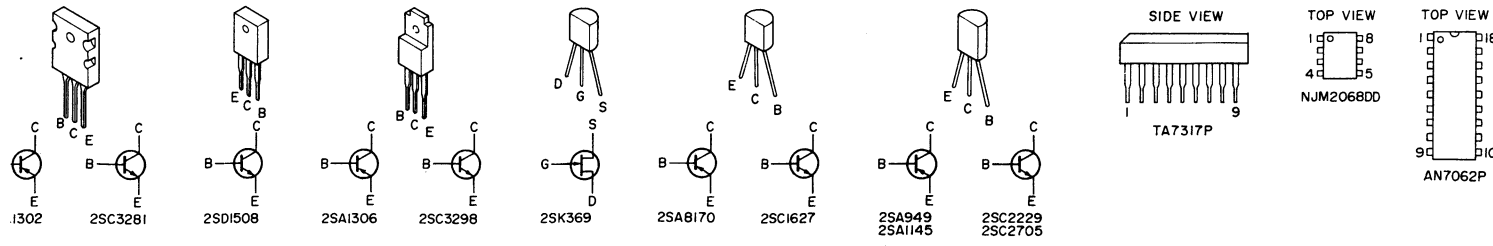
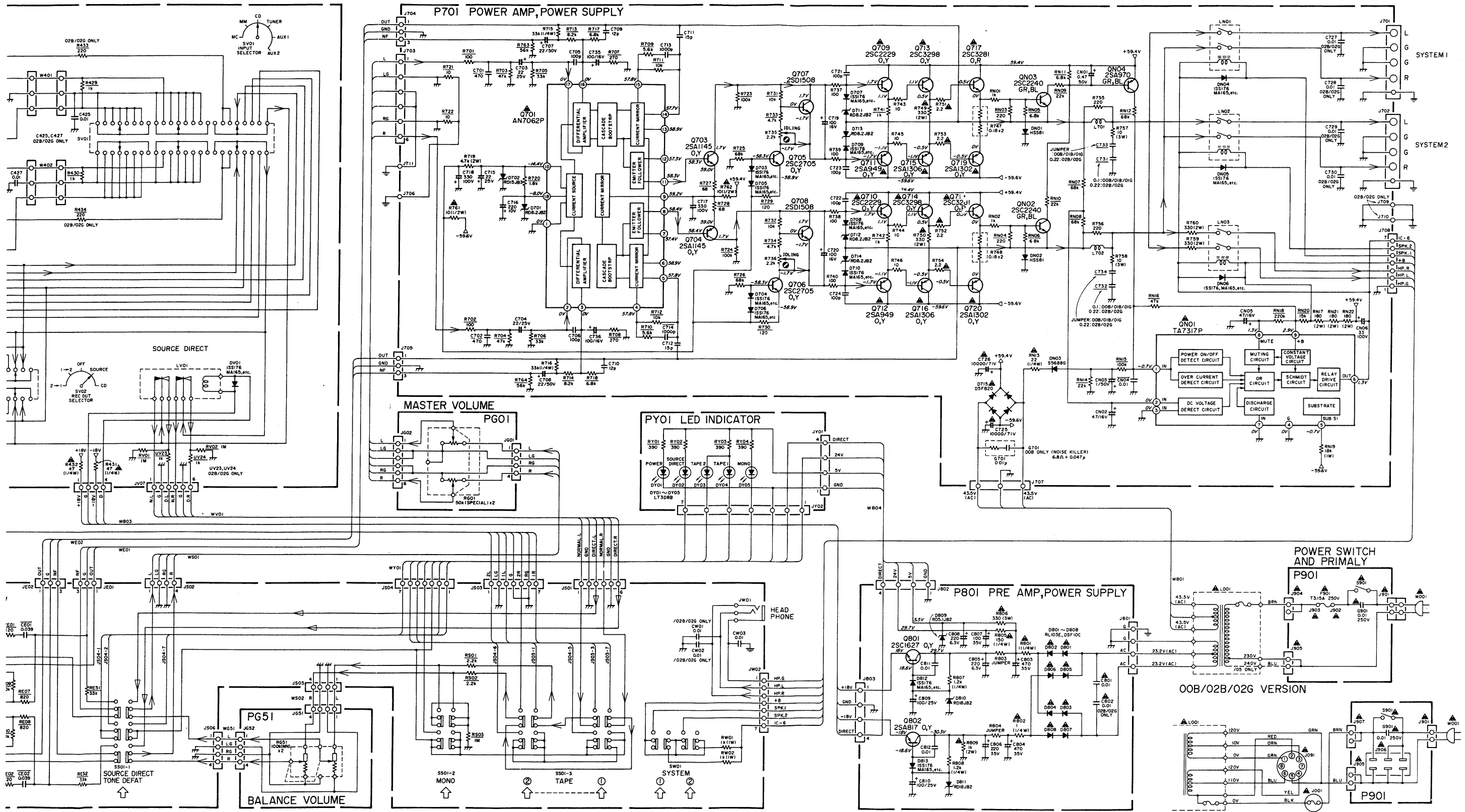
## 1. BLOCK DIAGRAM



2. SCHEMATIC DIAGRAM AND PARTS LOCATIONS (Pattern side)



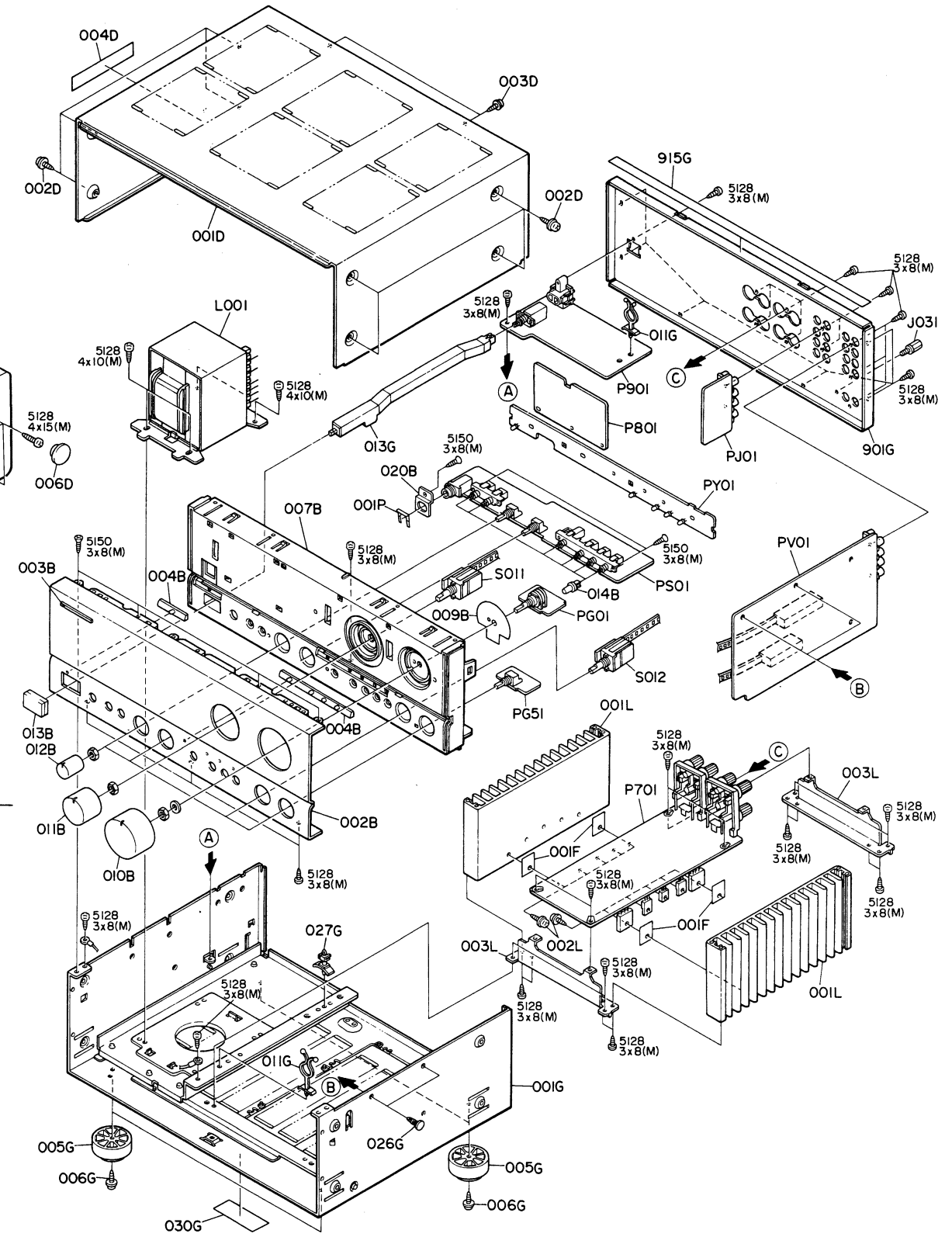
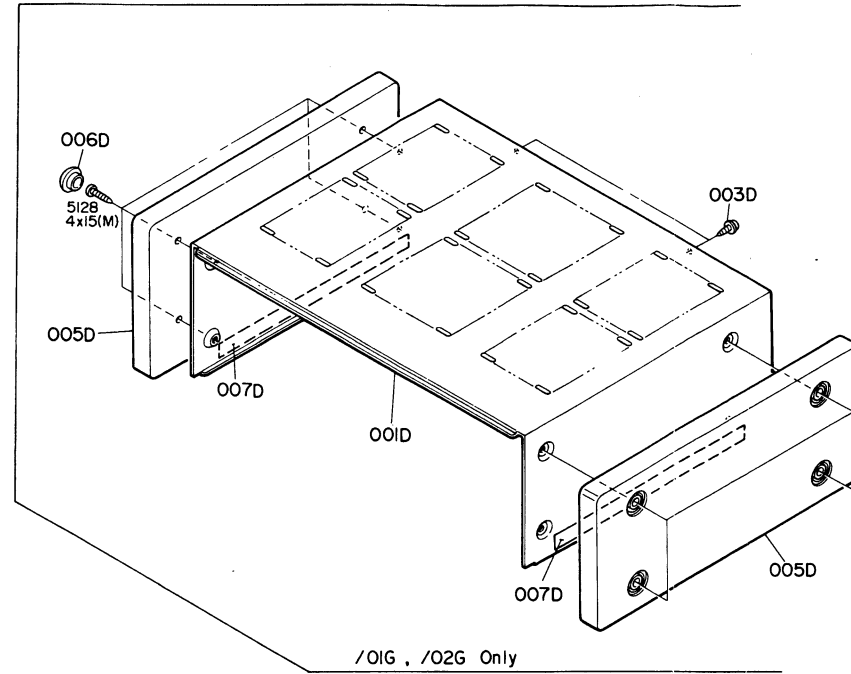
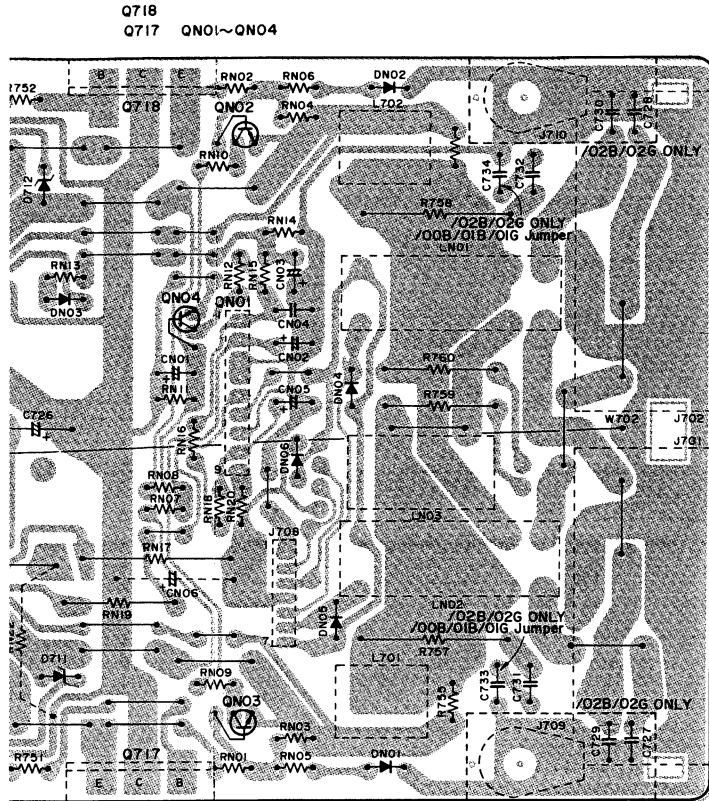




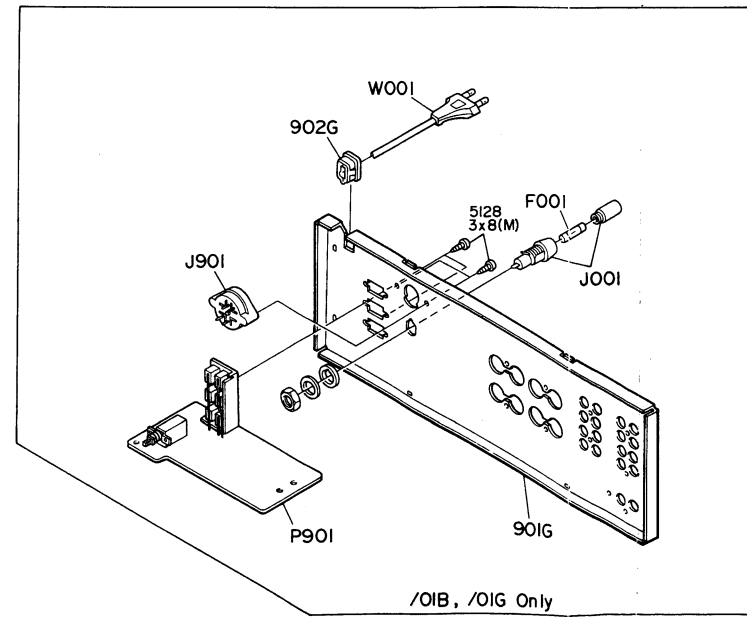
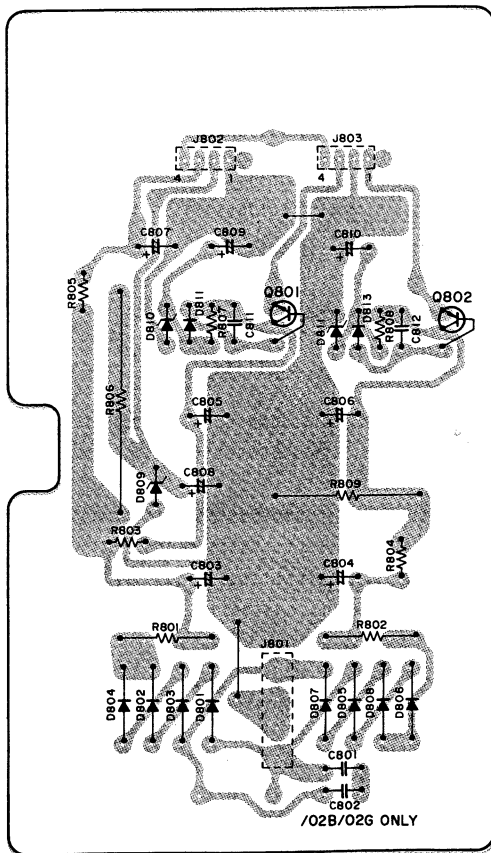
NORMAL SIGNAL LINE  
 SOURCE DIRECT SIGNAL LINE



### 3. EXPLODED VIEW AND PARTS LIST



P801 Q801 Q802





REF. DESIG.	PART NO.	DESCRIPTION
002B	4822 426 51515	Front Panel /00B/01B/02B
	4822 426 51518	Front Panel /01G/02G
003B	4822 454 11825	Badge /00B/01B/02B
	4822 459 10855	Badge /01G/02G
004B	4822 381 11286	Lens
007B	4822 464 90712	Front Chassis /00B/01B/02B
	4822 464 90713	Front Chassis /01G/02G
010B	4822 413 41679	Knob, Volume /00B/01B/02B
	4822 413 41683	Knob, Volume /01G/02G
011B	4822 413 41681	Knob, Selector /00B/01B/02B
	4822 413 41684	Knob, Selector /01G/02G
012B	4822 413 41678	Knob, Tone Control /00B/01B/02B
	4822 413 41682	Knob, Tone Control /01G/02G
013B	4822 410 60194	Button, Power /00B/01B/02B
	4822 410 60358	Button, Power /01G/02G
014B	4822 410 60343	Button, Speaker /00B/01B/02B
	4822 410 60334	Button, Speaker /01G/02G
020B	4822 530 80511	Retainer, Headphone
002D	4822 501 11008	B.T. Screw (W/W) B4 x 8 /00B/01B/02B
003D	4822 502 12511	B.T. Screw (W/W) B3 x 8
005D	4822 426 30148	Side Panel /01G/02G
006D	4822 444 60607	Cap. Side Panel /01G/02G
001F	4822 466 92249	Insulator, DENKA SHEET
005G	4822 462 41383	Leg
006G	4822 501 11008	B.T. Screw (W/W) B4 x 8
013G	4822 404 60705	Link, Power Switch
902G	4822 532 60948	Bushing, AC Cord /01B
001P	4822 401 11351	Clamper
▲ F001	4822 070 33152	Fuse, 3.15A 250V /01B/01G
▲ F002	4822 253 30243	Fuse, 6.3A 250V /01B/01G
▲ J001	4822 256 30233	Jack, Fuse Holder /01B/01G
J031	4822 290 40297	Terminal, GND
▲ J091	4822 272 10227	Voltage Selector /01B/01G
▲ J092	4822 265 10092	Jack, AC Adapter /01B/01G
▲ L001	4822 146 21651	Power Transformer /01B/01G
	4822 146 21649	Power Transformer /02B/02G
	4822 146 21648	Power Transformer /00B
S011	4822 273 10236	Rotary Switch, Input
S012	4822 273 10233	Rotary Switch, Output
001T	4822 736 21248	User Manual

#### 4. IDLING CURRENT ADJUSTMENT

- (1) Under the power OFF, turn the master volume control fully clockwise to min, and set the balance control and tone controls to center. Set trimmer resistors R735 (left channel) and R736 (right channel) in PC board (P701) to center.
- (2) Connect a digital voltmeter ranged direct current to test pins J713 (-) and J715 (+) (left channel), J714 (-) and J716 (+) (right channel) in PC board (P701).
- (3) Adjust idling current after setting as above. Turn the power ON, adjust trimmer resistors R735 (left channel) and R736 (right channel) in PC board (P701) while observing the digital voltmeter reading as follows. The initial setting is 16 mV (44.4 mA) for both channels.

#### NOTE

If turn the power ON after cool down condition, the normal unit idling current turns values that 12.5 mV about 30 seconds later, 14.5 mV about 1 minute later and 16 mV about 3 minutes later. This shows idling current is in stabilized condition.



Therefore, to adjust idling current 30 seconds through 1 minute later after the power ON, adjust to 13.5 – 14 mV. One minute through 2 minutes later, adjust to 15.5mV. Two minutes through 3 minutes later, adjust to 16 mV. Three minutes later, adjust to 16 mV (initial condition).

- (4) To adjust idling current after heat running, aging or serving, leave the unit under no input signal, no load condition and the power ON for 10 minutes. Then adjust to 16 mV (initial condition).

Please refer to the table below.

Elapsed time after power ON	Idling current setting value
30 sec. – 1 min.	13.5mV
1 min. – 2 min.	15.5mV
2 min. – 3 min.	16 mV
More than 3 min.	16 mV

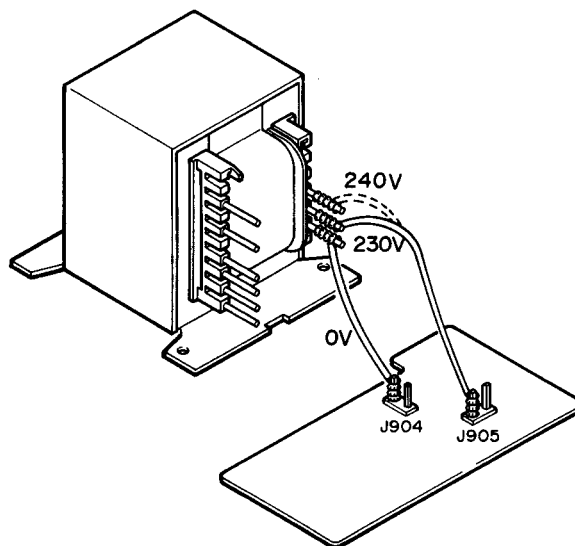
#### Note on Safety:

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 hazared.

#### 5. CHANGING OPERATION VOLTAGE TO 240V

The transformer of the PM-72/00B Version has two kind of taps, 230V or 240V. The operating voltage is factory set to 230V. The operating voltage can be changed to 240V by changing the wiring to the transformer.

In that case, be sure to put the label signs 240V on the voltage indication part of the rear panel.



## 6. TEST EQUIPMENT REQUIRED FOR SERVICING

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
ACVTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DCVTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer	Adjust level of primary power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

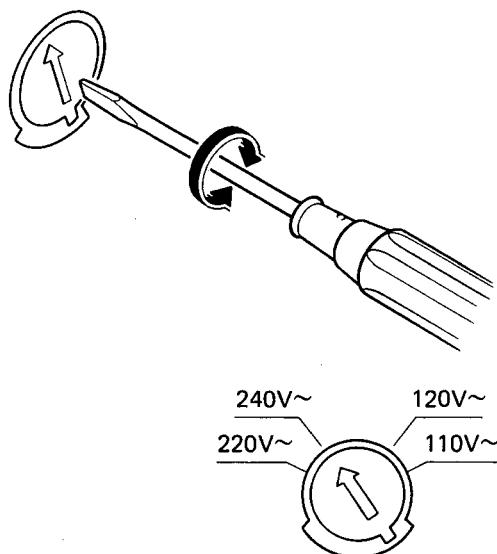
## 7. VOLTAGE CONVERSION

### ● EUROPEAN MODEL ONLY

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

### VOLTAGE SELECTOR

**CAUTION**  
DISCONNECT POWER SUPPLY CORD FROM AC  
OUTLET BEFORE CONVERTING VOLTAGE.





REF. DESIG.	PART NO.	DESCRIPTION		
C409	4822 124 22694	Elect	1000 $\mu$ F	6.3V
C410	4822 124 22694	Elect	1000 $\mu$ F	6.3V
C411	4822 121 42764	Film	0.047 $\mu$ F $\pm$ 5%	
C412	4822 121 42764	Film	0.047 $\mu$ F $\pm$ 5%	
C413	4822 121 42755	Film	0.012 $\mu$ F $\pm$ 5%	
C414	4822 121 42755	Film	0.012 $\mu$ F $\pm$ 5%	
C415	4822 121 42758	Film	1800pF $\pm$ 5%	
C416	4822 121 42758	Film	1800pF $\pm$ 5%	
C417	4822 124 90358	Elect	22 $\mu$ F	16V
C418	4822 124 90358	Elect	22 $\mu$ F	16V
C419	4822 124 90365	Elect	220 $\mu$ F	25V
C420	4822 124 90365	Elect	220 $\mu$ F	25V
C421	4822 121 42763	Film	3900pF $\pm$ 5%	
C422	4822 121 42763	Film	3900pF $\pm$ 5%	
C425	4822 122 32486	Ceramic	0.01 $\mu$ F +80% -20%	
C427	4822 122 32486	Ceramic	0.01 $\mu$ F +80% -20%	
<b>PV01-RESISTORS</b>				
R407 ?	4822 116 53691	4.64K $\Omega$	$\pm$ 1%	1/6W
R410				
R413	4822 116 53691	4.64K $\Omega$	$\pm$ 1%	1/6W
R414	4822 116 53691	4.64K $\Omega$	$\pm$ 1%	1/6W
▲ R431	4822 111 90731	47 $\Omega$	$\pm$ 2%	¼W, Fuse
▲ R432	4822 111 90731	47 $\Omega$	$\pm$ 2%	¼W, Fuse
<b>PV01-SEMICONDUCTORS</b>				
DV01	4822 130 33305	Diode	MA165, etc.	
Q401 ?	4822 130 42839	F.E.T.	2SK369(BL)	
Q404				
Q405	4822 209 73064	IC	NJM2068DD	
<b>PV01-MISCELLANEOUS</b>				
J401	4822 266 30282	Terminal, 2P; RCA		
JV01	4822 266 30282	Terminal, 2P; RCA		
JV02	4822 266 30285	Terminal, 6P; RCA		
LV01	4822 280 20464	Relay		
L401	4822 156 11019	Choke Coil	320 $\mu$ H /02B/02G	
L402	4822 156 11019	Choke Coil	320 $\mu$ H /02B/02G	
SV01	4822 277 21352	Slide Switch, Input		
SV02	4822 277 20832	Slide Switch, Rec Out		
<b>PY01-LED INDICATOR CIRCUIT BOARD</b>				
DY01 ? DY05	4822 130 80326	L.E.D.	LT3D8B	
<b>P701-POWER AMP/POWER SUPPLY CIRCUIT BOARD</b>				
<b>P701-CAPACITORS</b>				
C701	4822 121 41518	Film	470pF $\pm$ 5% /00B/01B/01G	
C702	4822 121 41518	Film	470pF $\pm$ 5% /00B/01B/01G	
C703	4822 124 90361	Elect	22 $\mu$ F	25V
C704	4822 124 90361	Elect	22 $\mu$ F	25V
C705	4822 126 10364	Ceramic	100pF	$\pm$ 10%
C706	4822 126 10364	Ceramic	100pF	$\pm$ 10%
C707	4822 124 90362	Elect	22 $\mu$ F	50V
C708	4822 124 90362	Elect	22 $\mu$ F	50V
C709	4822 126 11552	Ceramic	12pF	$\pm$ 5%
C710	4822 126 11552	Ceramic	12pF	$\pm$ 5%

REF. DESIG.	PART NO.	DESCRIPTION		
C711	4822 126 10512	Ceramic	15pF	$\pm$ 5%
C712	4822 126 10512	Ceramic	15pF	$\pm$ 5%
C715	4822 124 90361	Elect	22 $\mu$ F	25V
C716	4822 124 90363	Elect	220 $\mu$ F	10V
C717	4822 124 22724	Elect	330 $\mu$ F	100V
C718	4822 124 22724	Elect	330 $\mu$ F	100V
C719	4822 124 90354	Elect	100 $\mu$ F	16V
C720	4822 124 90354	Elect	100 $\mu$ F	16V
C721				
?	4822 121 51036	Film	100pF	$\pm$ 5%
C724				
▲ C725	4822 124 23927	Elect	10000 $\mu$ F	71V
▲ C726	4822 124 23927	Elect	10000 $\mu$ F	71V
C727				
?	4822 122 32486	Ceramic	0.01 $\mu$ F	+80% -20%
C730		/02B/02G		
C735	4822 124 90354	Elect	100 $\mu$ F	16V
C736	4822 124 90354	Elect	100 $\mu$ F	16V
CN01	4822 124 22273	Elect	0.47 $\mu$ F	50V
CN02	4822 124 41539	Elect	47 $\mu$ F	16V
CN03	4822 124 41543	Elect	1 $\mu$ F	50V
CN05	4822 124 41539	Elect	47 $\mu$ F	16V
CN06	4822 124 23994	Elect	33 $\mu$ F	100V
G701	4822 122 30043	Ceramic	0.01 $\mu$ F	+80% -20%
		/01B/02B/01G/02G		
	4822 126 11235	Composit	0.047 $\mu$ F/6.8 $\Omega$ /00B	
<b>P701-RESISTORS</b>				
R715	4822 050 23303	33K $\Omega$	$\pm$ 5%	¼W
R716	4822 050 23303	33K $\Omega$	$\pm$ 5%	¼W
R719	4822 116 60437	4.7K $\Omega$	$\pm$ 5%	2W
R735	4822 100 20681	2.2K $\Omega$ , Trimming		
R736	4822 100 20681	2.2K $\Omega$ , Trimming		
R737				
?	4822 111 91285	100 $\Omega$	$\pm$ 5%	1/6W
R740				
R743				
?	4822 111 91291	10 $\Omega$	$\pm$ 5%	1/6W
R746				
R747	4822 111 91002	0.18 $\Omega$ x2, Composit		
R748	4822 111 91002	0.18 $\Omega$ x2, Composit		
▲ R749	4822 116 60494	330 $\Omega$	$\pm$ 5%	2W, Metal
▲ R750	4822 116 60494	330 $\Omega$	$\pm$ 5%	2W, Metal
▲ R751				
?	4822 050 22208	2.2 $\Omega$	$\pm$ 5%	¼W
▲ R754				
R755	4822 050 22201	220 $\Omega$	$\pm$ 5%	¼W
R756	4822 050 22201	220 $\Omega$	$\pm$ 5%	¼W
R757	4822 116 83353	10 $\Omega$	$\pm$ 5%	3W, Metal
R758	4822 116 83353	10 $\Omega$	$\pm$ 5%	3W, Metal
R759	4822 116 60494	330 $\Omega$	$\pm$ 5%	2W, Metal
R760	4822 116 60494	330 $\Omega$	$\pm$ 5%	2W, Metal
▲ R761	4822 116 60313	10 $\Omega$	$\pm$ 5%	¼W, Fuse
▲ R762	4822 116 60313	10 $\Omega$	$\pm$ 5%	¼W, Fuse
RN01	4822 111 91257	1K $\Omega$	$\pm$ 5%	1/6W
RN02	4822 111 91257	1K $\Omega$	$\pm$ 5%	1/6W
▲ RN13	4822 113 90119	22 $\Omega$	$\pm$ 2%	¼W, Fuse
RN17	4822 116 60447	180 $\Omega$	$\pm$ 5%	2W
RN19	4822 116 60344	18K $\Omega$	$\pm$ 5%	1W
RN21	4822 116 60447	180 $\Omega$	$\pm$ 5%	2W
RN22	4822 116 60447	180 $\Omega$	$\pm$ 5%	2W

REF. DESIG.	PART NO.	DESCRIPTION
<b>P701-SEMICONDUCTORS</b>		
D701	4822 130 80273	Zener RD8.2JB2/MTZJ8.2C
D702	4822 130 80322	Zener RD15JB3/MTZJ16A
D703	4822 130 33305	Diode MA165, etc.
D710		
D711		
D714		
▲ D715		
DN01	4822 130 80837	Diode HSS81
DN02	4822 130 80837	Diode HSS81
DN03	4822 130 80839	Diode S5688G
DN04	4822 130 33305	Diode MA165, etc.
DN05	4822 130 33305	Diode MA165, etc.
DN06	4822 130 33305	Diode MA165, etc.
▲ Q701	4822 209 83732	IC AN7062P
Q703	4822 130 42999	Transistor 2SA1145(O, Y)
Q704	4822 130 42999	Transistor 2SA1145(O, Y)
Q705	4822 130 43283	Transistor 2SC2705(O, Y)
Q706	4822 130 43283	Transistor 2SC2705(O, Y)
Q707	4822 130 60526	Transistor 2SD1508
Q708	4822 130 60526	Transistor 2SD1508
▲ Q709	4822 130 43225	Transistor 2SC2229(O, Y)
▲ Q710	4822 130 43225	Transistor 2SC2229(O, Y)
▲ Q711	4822 130 42941	Transistor 2SA949(O, Y)
▲ Q712	4822 130 42941	Transistor 2SA949(O, Y)
▲ Q713	4822 130 60525	Transistor 2SC3298(O, Y)
▲ Q714	4822 130 60525	Transistor 2SC3298(O, Y)
▲ Q715	4822 130 60524	Transistor 2SA1306(O, Y)
▲ Q716	4822 130 60524	Transistor 2SA1306(O, Y)
▲ Q717	4822 130 61747	Transistor 2SC3281(O, R)
▲ Q718	4822 130 61747	Transistor 2SC3281(O, R)
▲ Q719	4822 130 42123	Transistor 2SA1302(O, R)
▲ Q720	4822 130 42123	Transistor 2SA1302(O, R)
▲ QN01	4822 209 83312	IC TA7317P
QN02	4822 130 43233	Transistor 2SC2240(GR, BL)
QN03	4822 130 43233	Transistor 2SC2240(GR, BL)
QN04	4822 130 42951	Transistor 2SA970(GR, BL)
<b>P701-MISCELLANEOUS</b>		
J701	4822 290 60837	Terminal, Speaker /00B/01B/01G
	4822 290 60841	Terminal, Speaker /02B/02G
J702	4822 290 60836	Terminal, Speaker /00B/01B/01G
	4822 290 60839	Terminal, Speaker /02B/02G
L701	4822 157 63085	Air Coil
L702	4822 157 63085	Air Coil
LN01	4822 280 70354	Relay
LN02	4822 280 70354	Relay
LN03	4822 280 20196	Relay
<b>P801-PRE AMP/POWER SUPPLY CIRCUIT BOARD</b>		
<b>P801-CAPACITORS</b>		
▲ C801	4822 122 32486	Ceramic 0.01μF +80% -20%
▲ C802	4822 122 32486	Ceramic 0.01μF +80% -20% /02B/02G
C803	4822 124 41541	Elect 470μF 35V
C804	4822 124 41541	Elect 470μF 35V
C805	4822 124 41538	Elect 220μF 35V
C806	4822 124 41538	Elect 220μF 35V
C807	4822 124 41536	Elect 100μF 35V
C808	4822 124 41537	Elect 220μF 6.3V
C809	4822 124 41535	Elect 100μF 25V

REF. DESIG.	PART NO.	DESCRIPTION
C810	4822 124 41535	Elect 100μF 25V
C811	4822 122 32486	Ceramic 0.01μF +80% -20%
C812	4822 122 32486	Ceramic 0.01μF +80% -20%
<b>P801-RESISTORS</b>		
▲ R801	4822 050 21008	1Ω ±5% ¼W
▲ R802	4822 050 21008	1Ω ±5% ¼W
▲ R805	4822 116 82051	150Ω ±2% ¼W
▲ R806	4822 116 60491	330Ω ±5% 3W
R807	4822 111 91423	1.2KΩ ±5% ¼W
R808	4822 111 91423	1.2KΩ ±5% ¼W
▲ R809	4822 116 60332	1KΩ ±5% 2W
<b>P801-SEMICONDUCTORS</b>		
▲ D801	4822 130 32508	Diode RL103E/DSF10C
▲ D802	4822 130 32508	Diode RL103E/DSF10C /02B/02G
▲ D803	4822 130 32508	Diode RL103E/DSF10C
▲ D804	4822 130 32508	Diode RL103E/DSF10C /02B/02G
▲ D805	4822 130 32508	Diode RL103E/DSF10C
▲ D806	4822 130 32508	Diode RL103E/DSF10C /02B/02G
▲ D807	4822 130 32508	Diode RL103E/DSF10C
▲ D808	4822 130 32508	Diode RL103E/DSF10C /02B/02G
D809	4822 130 80317	Zener RD5.1JB2/MTZJ5.1B
D810	4822 130 80838	Zener RD18JB2/MTZJ18C
D811	4822 130 80838	Zener RD18JB2/MTZJ18C
D812	4822 130 33305	Diode MA165, etc.
D813	4822 130 33305	Diode MA165, etc.
Q801	4822 130 60696	Transistor 2SC1627(O, Y)
Q802	4822 130 60693	Transistor 2SA817(O, Y)
<b>P901-POWER SWITCH/PRIMALY CIRCUIT BOARD</b>		
▲ F901	4822 070 33152	Fuse 3.15A 250V /00B/02B/02G
▲ G901	4822 121 43732	Film Cap. 0.01μF ±20%
▲ J901	4822 267 31416	Jack, AC Inlet /00B/02B/02G
▲ J906	4822 267 31417	Jack, AC Outlet /01B/01G
▲ S901	4822 276 12924	Push Switch, Power

**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.