

Service Manual

74 SC80/02B/02G

Stereo Control Amplifier

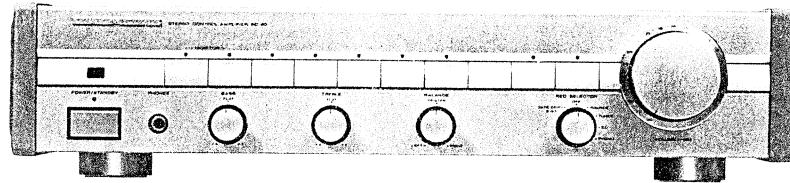


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marantz®

model SC-80

First issue: 1990

4822 725 50922

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 OLW
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
Oturela-carnaxide
2795 LinDA-A-VELHA
Telex: 43906

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)

Frequency Response

PHONO (20 Hz–20 kHz)	±0.2 dB
High Level (20 Hz–20 kHz)	±0.2 dB

THD

1V output (20 Hz–20 kHz)	0.015%
--------------------------------	--------

S/N Ratio (ref. 0.5V output A-weighted)

PHONO (MC) (500 μ V input)	75 dB
PHONO (MM) (5 mV input)	90 dB
High Level (0.5 V input)	95 dB

S/N Ratio Vol. max. (ref. 1V output A-weighted)

PHONO (MC) (0.22 mV input)	69 dB
PHONO (MM) (2.5 mV input)	88 dB
High Level (150 mV input)	115 dB

Input Sensitivity/Impedance

PHONO (MC Low)	0.22 mV/130 ohms
PHONO (MC High)	0.17 mV/1k ohms
PHONO (MM)	2.5 mV/47k ohms
High Level	150 mV/20k ohms

Phono Overload (1% THD, 1 kHz)

MC Low	12 mV
MM	160 mV

Output Level (ref./ max)

Muting Attenuation

Power Consumption

Dimensions

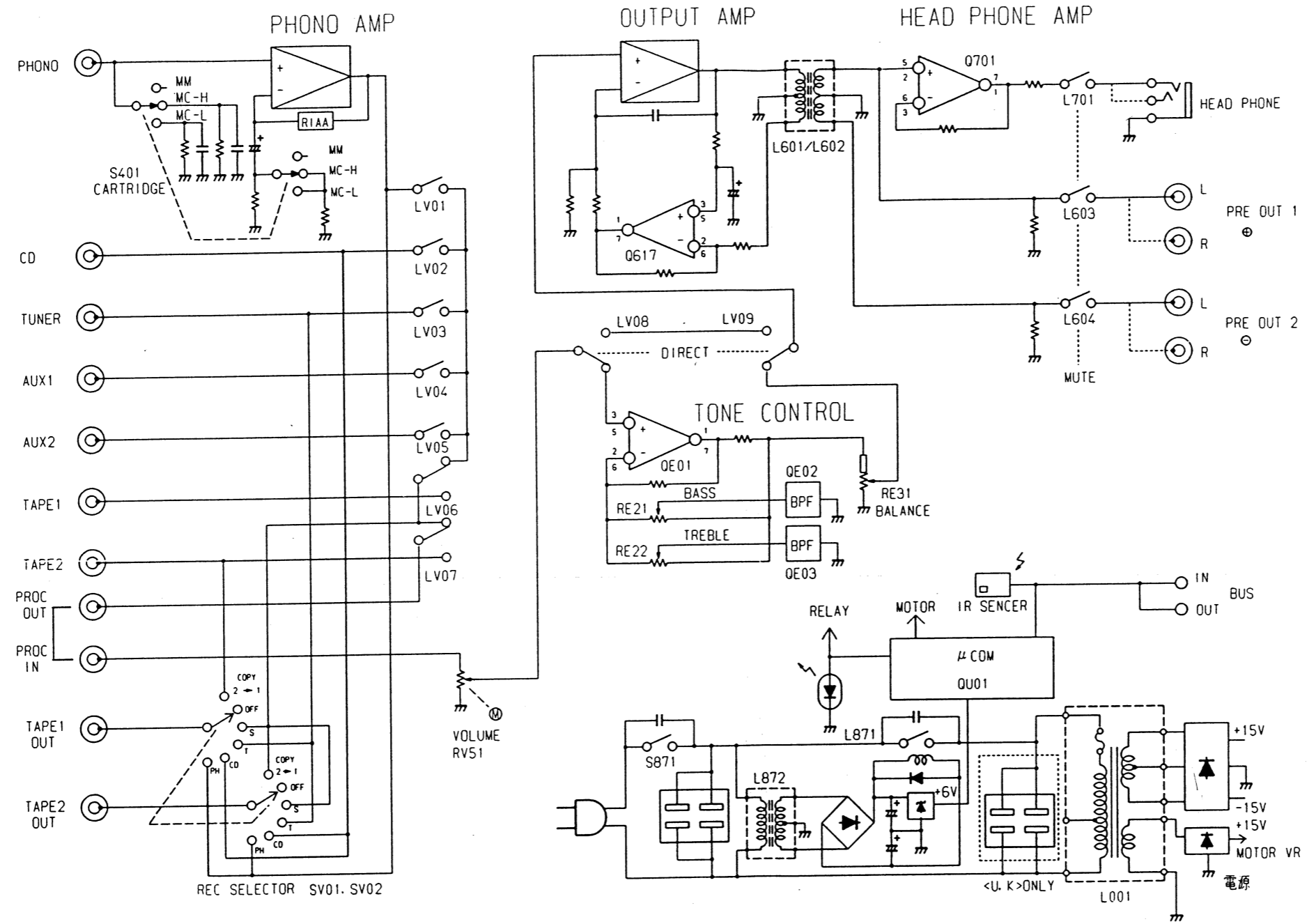
Panel Width	420 mm
Panel Height	86 mm
Depth	334 mm

Weight

Unit alone	5.6 kg
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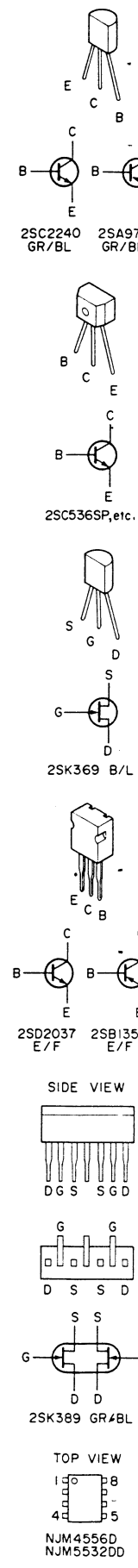
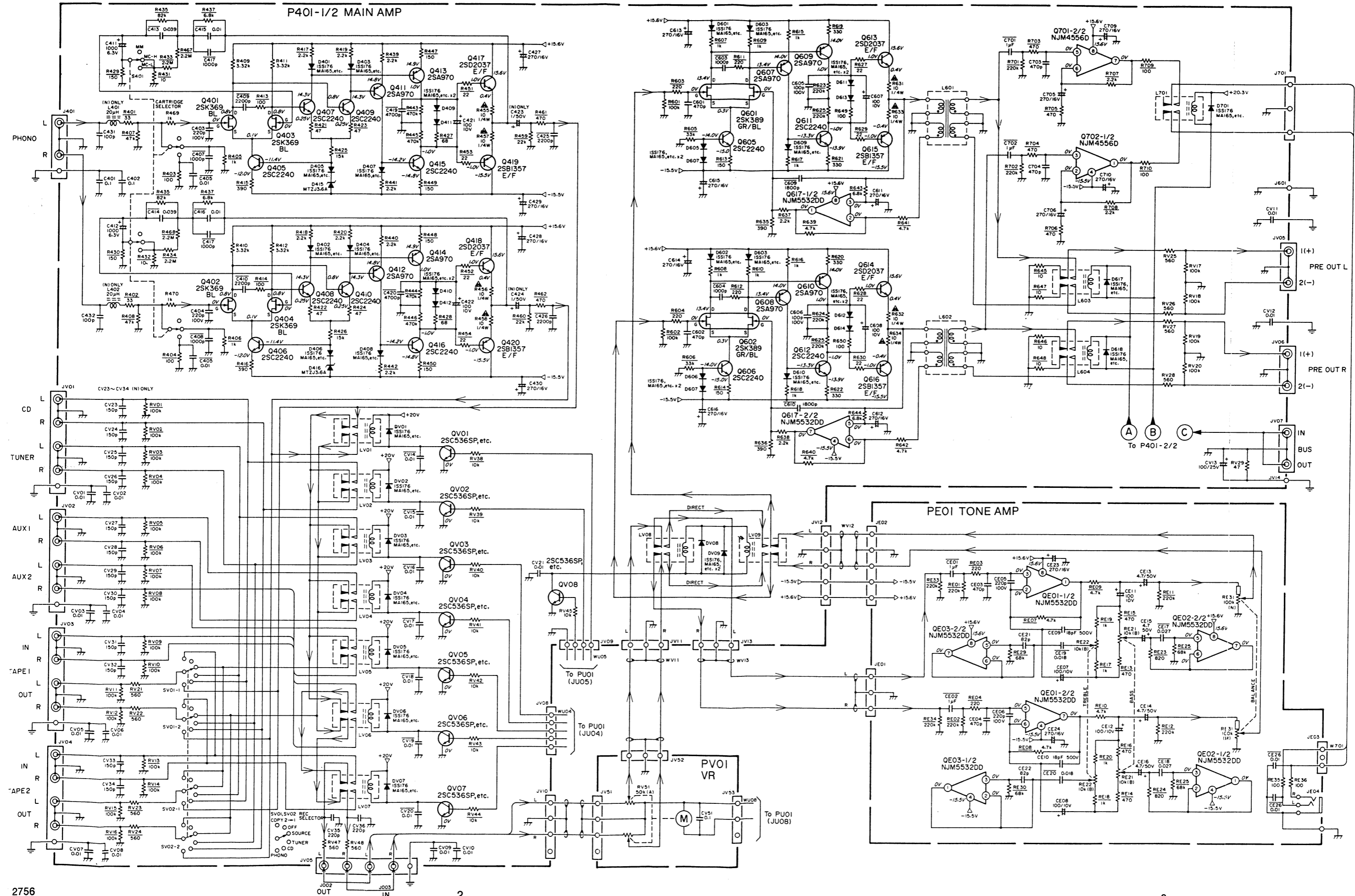
Specifications subject to change without prior notice.

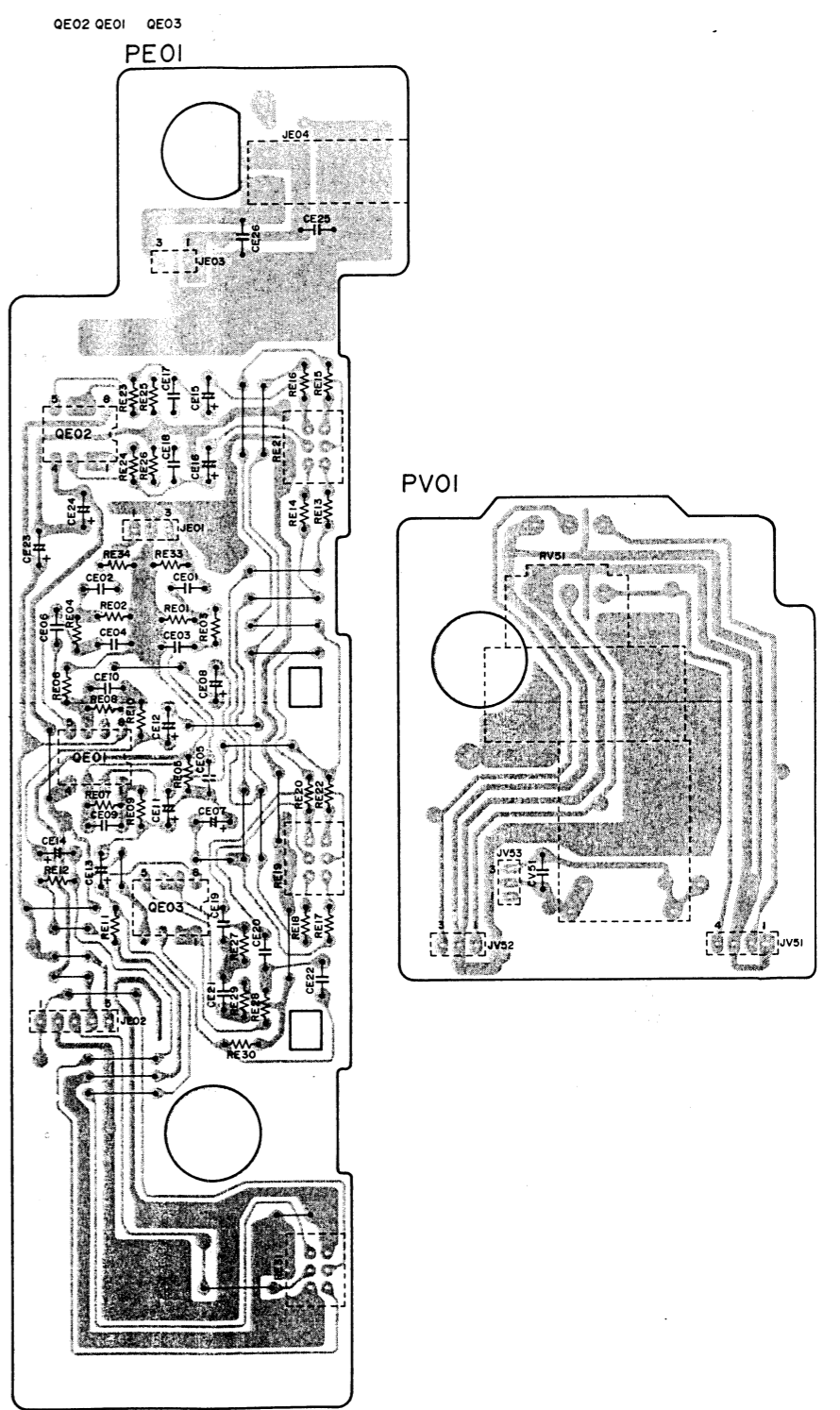
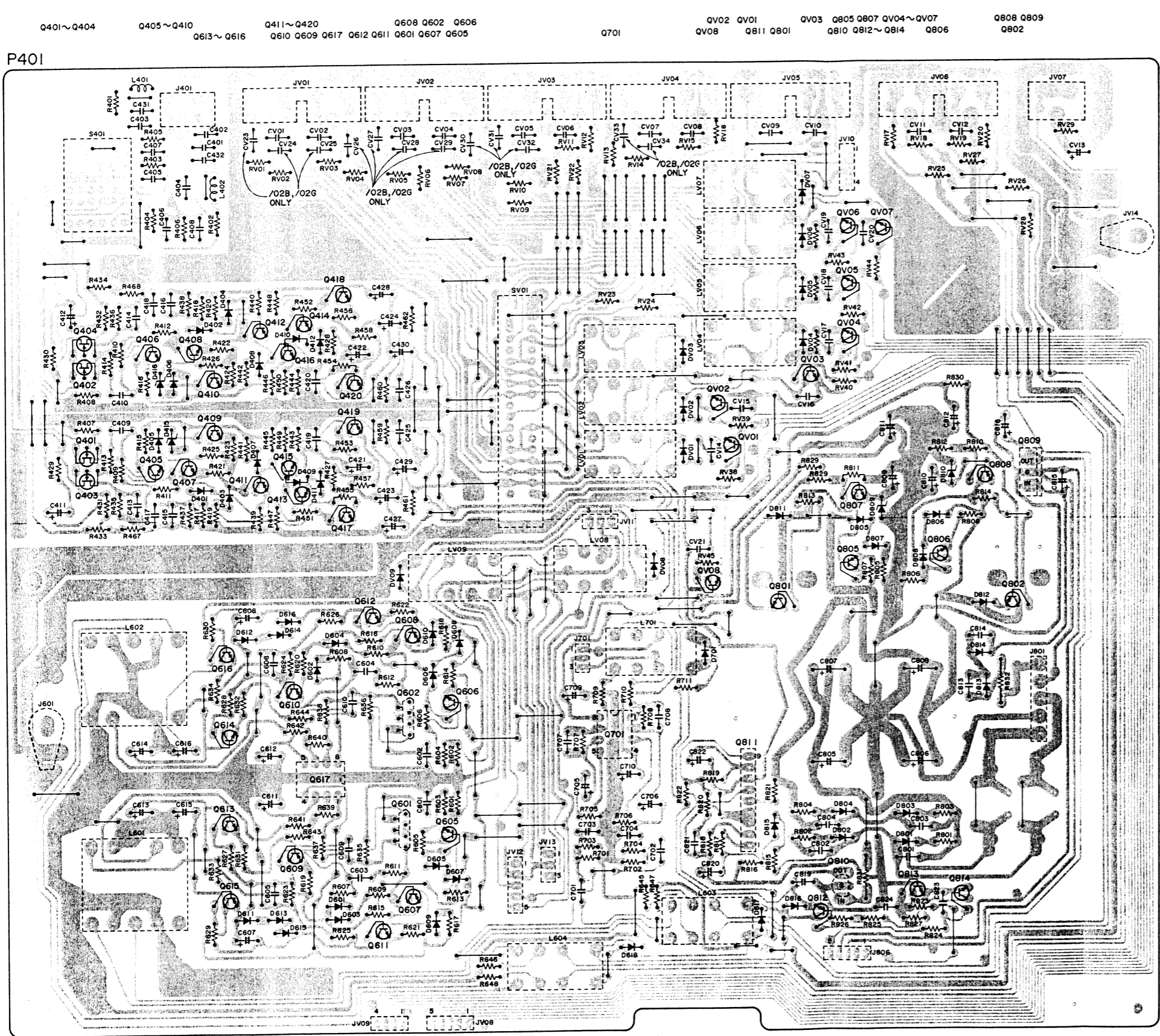
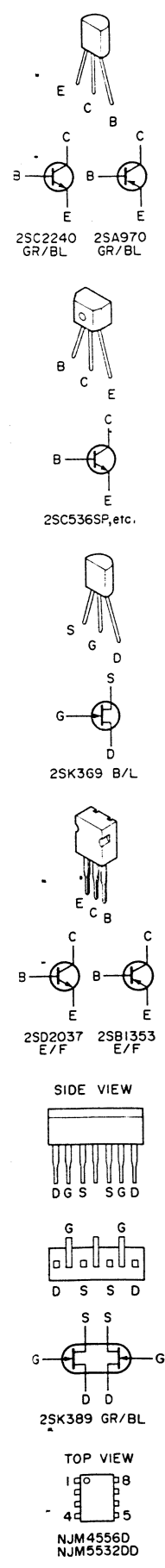
1. BLOCK DIAGRAM

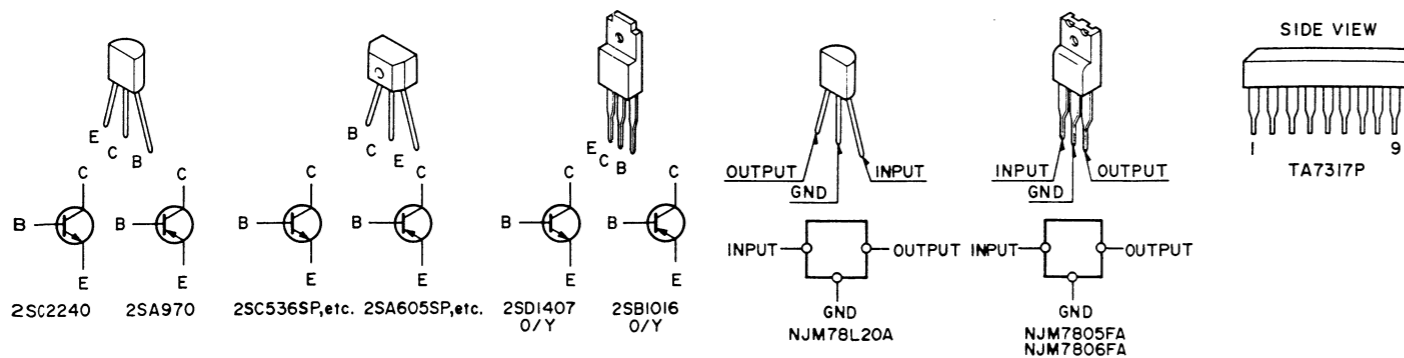
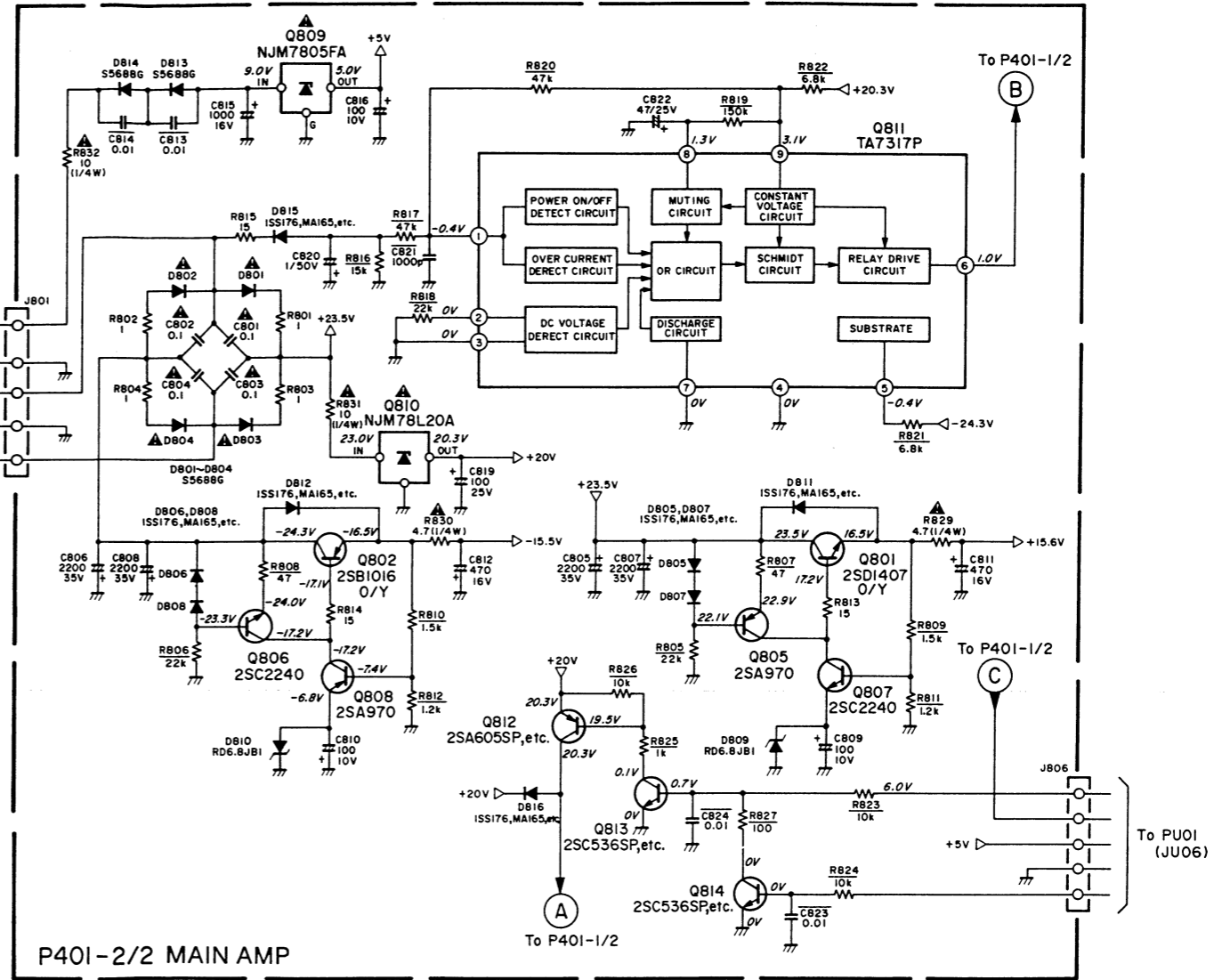
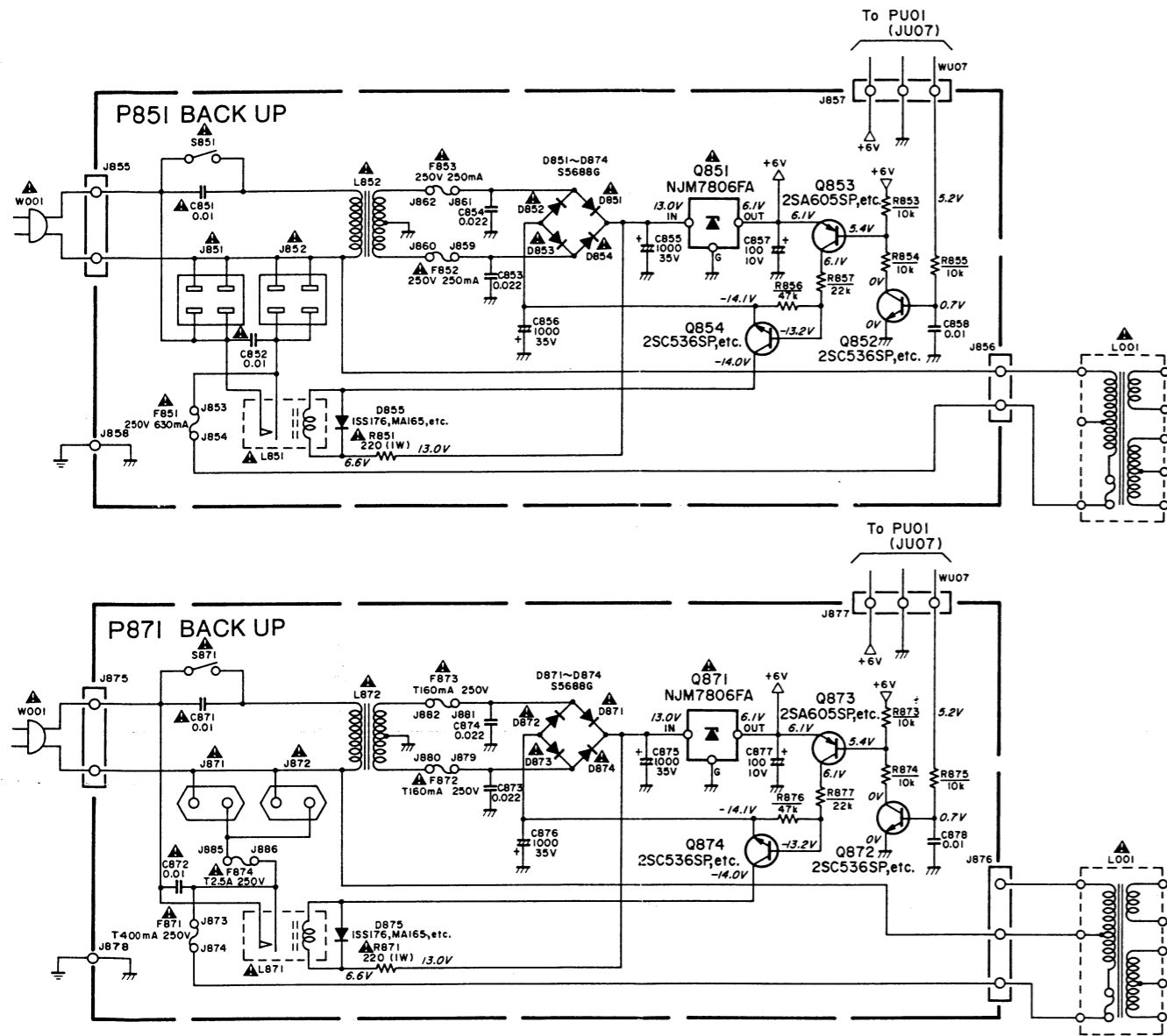


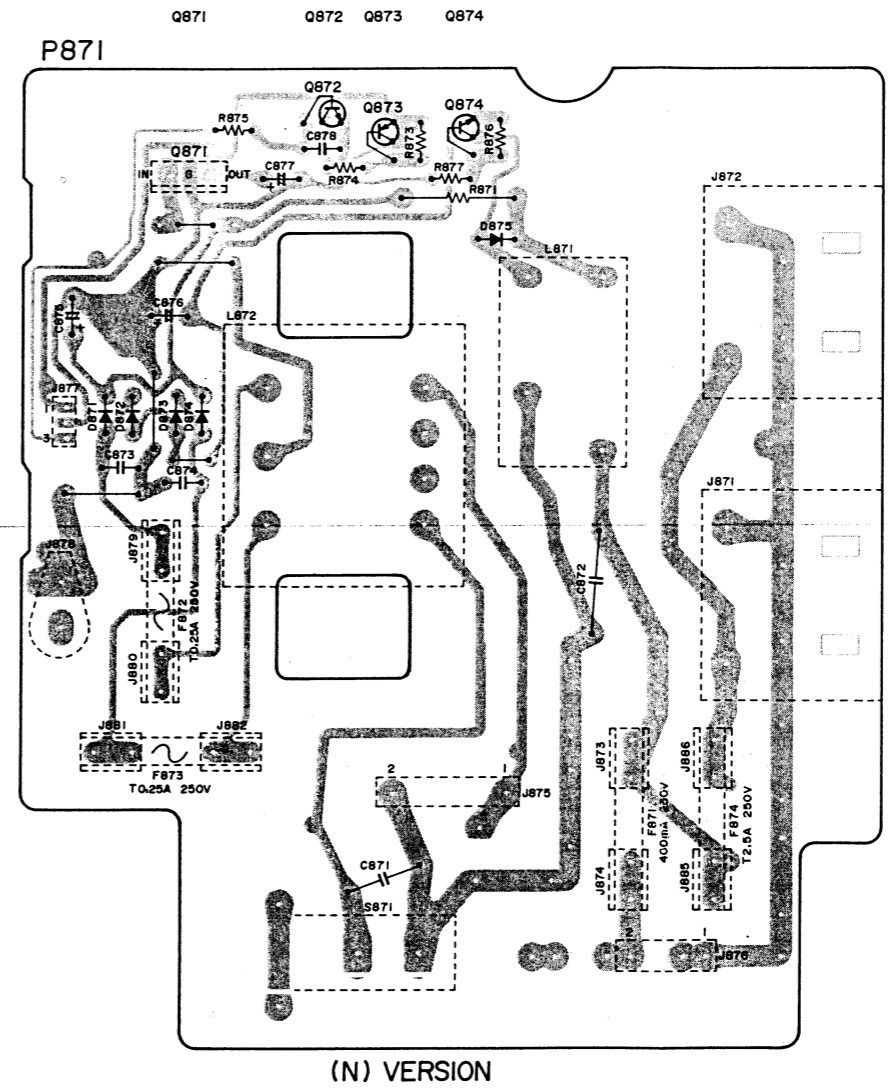
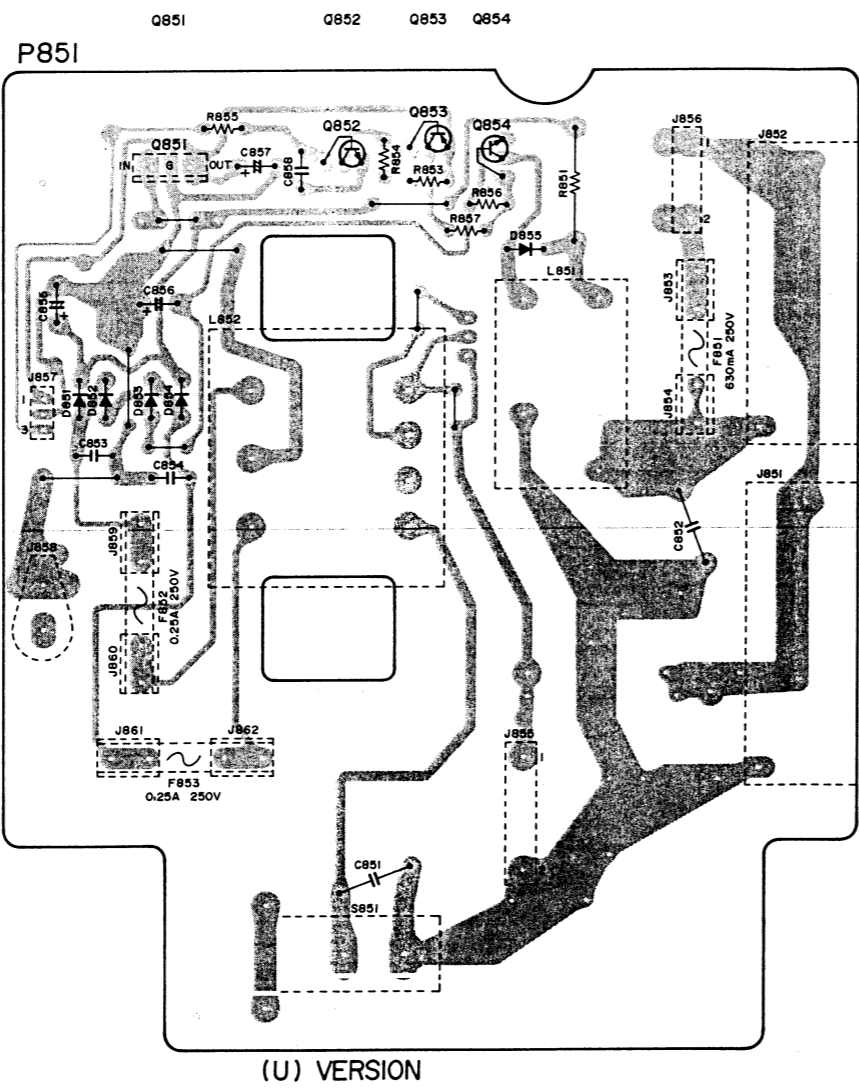
2. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern Side)

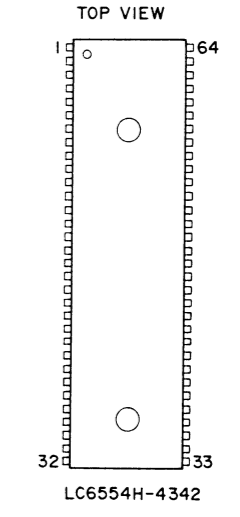
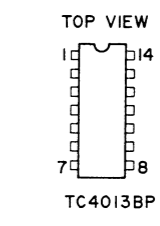
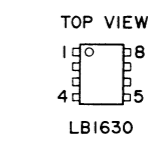
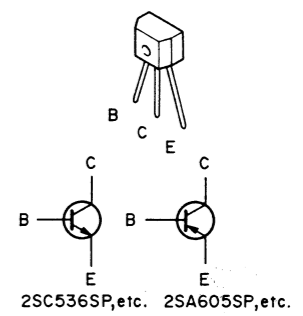
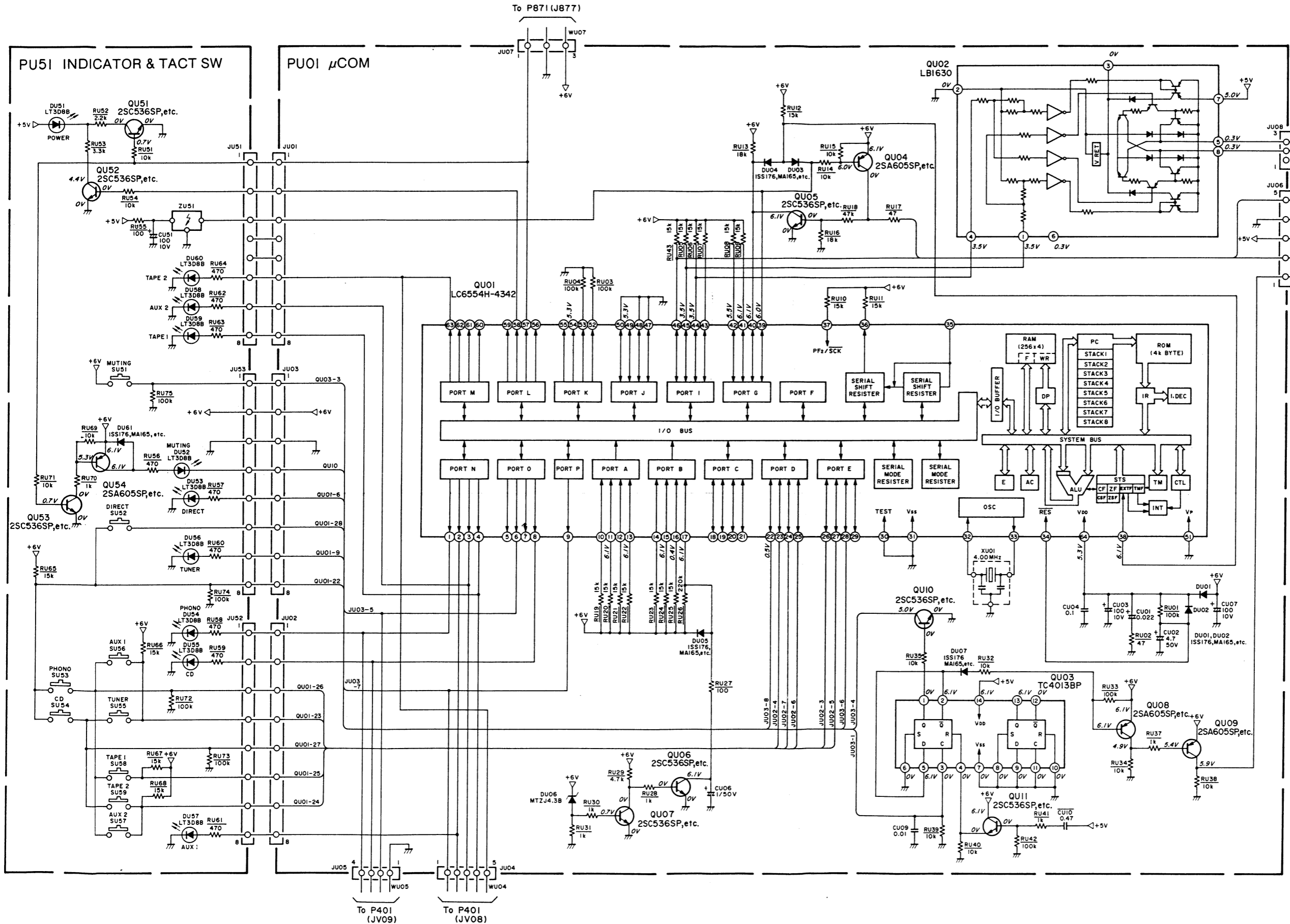
P401-1/2 MAIN AMP





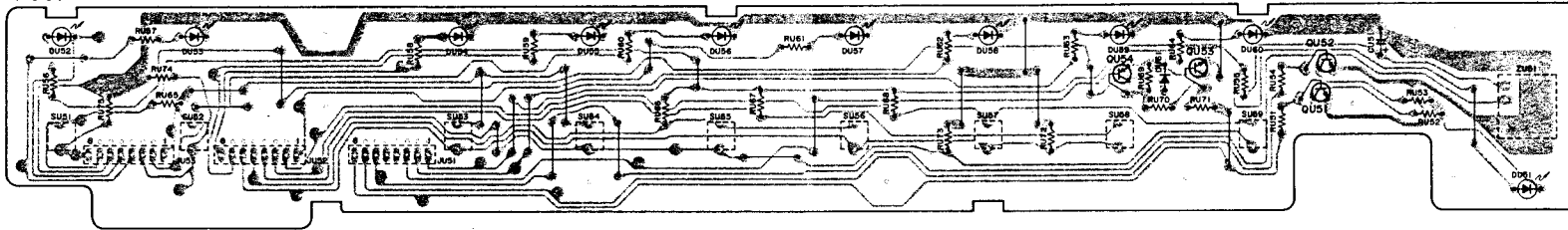






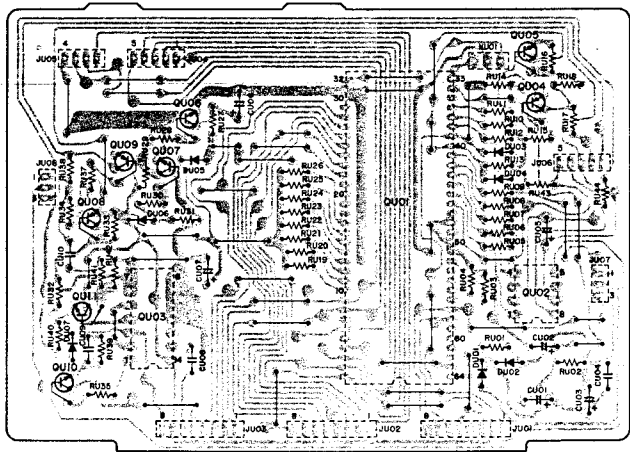
PU51

QU54 QU53 QU51 QU52

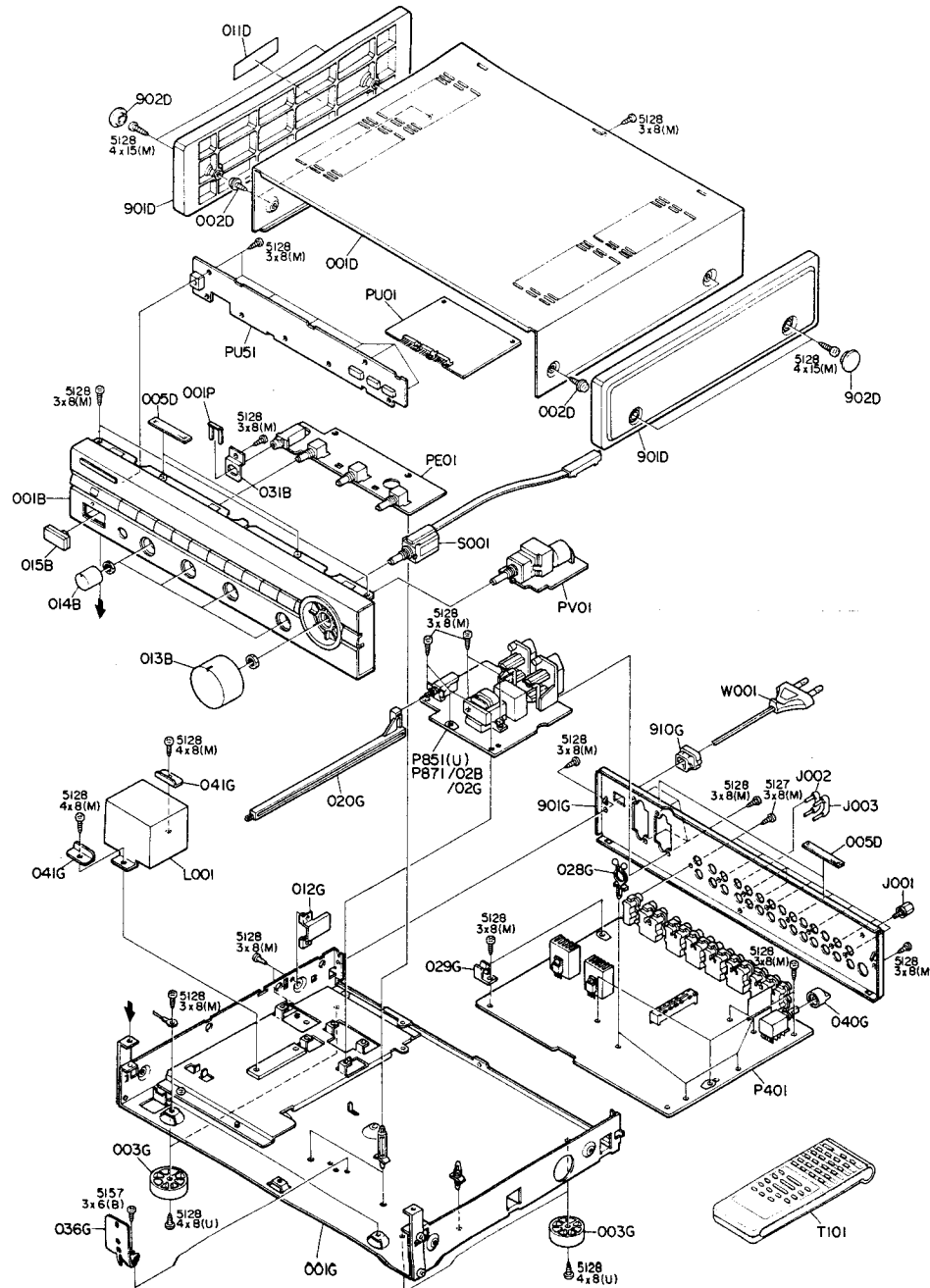


QU08 QU09 QU07 QU06
QU10 QU11 QU03 QU01 QU05 QU04
QU02

PU01



3. EXPLODED VIEW AND PARTS LIST



REF. DESIG.	PART NO.	DESCRIPTION
001B	4822 447 50128 4822 447 50133 4822 447 50134	Front Panel Assembly (BLK) /02B Front Panel Assembly (GLD) /02G Front Panel Assembly (BLK) [U]
013B	4822 413 41542 4822 413 41544	Knob, Volume (GLD) /02G Knob, Volume (BLK) [U] , /02B
014B	4822 411 10051	Knob, Tone (GLD) /02G
015B	4822 413 31551 4822 410 60194 4822 410 60358	Knob, Tone (BLK) [U] , /02B Button, Power (BLK) [U] , /02B Button, Power (GLD) /02G
002D	4822 501 11008	B.T. Screw (W/W) B4 x 8 [U] , /02B
901D		Side Panel (GLD) /02G
902D	4822 444 60607	Cap, Side (GLD) /02G
003G	4822 462 41402 4822 462 41477	Leg, Silver [U] Leg, Gold /02B/02G
020G	4822 402 50237	Link, Power, Switch
040G	4822 413 31647	Knob, Cartridge Selector
910G	4822 532 60948	Bushing, AC Cord
J002	4822 264 10111	Shote Plug
J003	4822 264 10111	Shote Plug
▲ L001	4822 146 21584 4822 146 21587	Power Transformer /02B/02G Power Transformer [U]
S001	4822 273 10218	Rotary Switch, Band Selector
T101	4822 218 10376 4822 218 10377	Unit K, Remocon /02B/02G Unit K, Remocon [U]
001T	4822 736 20992 4822 736 20995	User Manual /02B/92G User Manual [U]

4. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

- R*****: (1) GD05---140, Carbon film fixed resistor, $\pm 5\%$, 1/4W
R***: (2) GD05---160, Carbon film fixed resistor, $\pm 5\%$, 1/6W
 ① — Resistance value

Examples

① Resistance value

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

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

C***: CERAMIC CAP

- (1) DD1---370, Ceramic condenser
 Disc type
 Temp. coeff. P350 ~ N1000, 50V
 ① ②

Capacity value
 Tolerance

Examples

- ① Tolerance (Capacity deviation)
- | |
|----------------------------|
| $\pm 0.25\mu\text{F}$...0 |
| $\pm 0.5\mu\text{F}$...1 |
| $\pm 5\%$...5 |

* Tolerance of COMMON PARTS handled here are as follows:

- | | |
|--------------|-----------------------|
| 0.5pF ~ 5pF | $\pm 0.25\mu\text{F}$ |
| 6pF ~ 10pF | $\pm 0.5\mu\text{F}$ |
| 12pF ~ 560pF | $\pm 5\%$ |

- ② 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.

- (1) DX16---300, High dielectric constant ceramic condenser
 Disc type
 Temp. chara. 2B4, 50V
 ①

Capacity value

Example

- ② Capacity value
- | | | |
|-------------|--------------|---------------|
| 100pF...101 | 1000pF...102 | 10000pF...103 |
| 470pF...471 | 2200pF...222 | |

C***: ELECTROLYTIC CAP. (E), FILM CAP. (F)

- (1) EA---10, Electrolytic condenser
 One-way lead type, Tolerance $\pm 20\%$
 ① ②

Dielectric strength
 Capacity value

Examples

- ① 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 ...108 |
| | | 2200 μF ...228 |

- ② Working voltage
- | | |
|------------|-----------|
| 6.3V...006 | 25V...025 |
| 10V...010 | 35V...035 |
| 16V...016 | 50V...050 |

- (2) DF15---350, Plastic film condenser
 One-way type, Mylar $\pm 5\%$, 50V
 ①

Capacity value

Examples

- ② Capacity value
- | | |
|-------------------------------------|---------------------------|
| 0.001 μF (1000pF) ...102 | 0.1 μF ...104 |
| 0.0018 μF ...182 | 0.56 μF ...564 |
| 0.01 μF ...103 | 1 μF ...105 |
| 0.015 μF ...153 | |

REF. DESIG.	PART NO.	DESCRIPTION
		PE01-TONE AMP CIRCUIT BOARD
		PE01-CAPACITORS
CE03	4822 121 42327	Film 470pF $\pm 5\%$
CE04	4822 121 42327	Film 470pF $\pm 5\%$
CE05	4822 121 42344	Film 220pF $\pm 5\%$
CE06	4822 121 42344	Film 220pF $\pm 5\%$
CE07	4822 124 23516	Elect 100 μF 10V
CE08	4822 124 23516	Elect 100 μF 10V
CE09	4822 121 43811	Mica 18pF $\pm 5\%$
CE10	4822 121 43811	Mica 18pF $\pm 5\%$
CE11	4822 124 23516	Elect 100 μF 10V
CE12	4822 124 23516	Elect 100 μF 10V
CE13		
CE16	4822 124 23521	Elect 4.7 μF 35V
CE21		Ceramic 82pF $\pm 5\%$
CE22		Ceramic 82pF $\pm 5\%$
CE23	4822 124 23519	Elect 270 μF 16V
CE24	4822 124 23519	Elect 270 μF 16V
		PE01-RESISTORS
RE21	4822 101 30735	10K Ω (B)x2, Variable
RE22	4822 101 30735	10K Ω (B)x2, Variable
RE31	4822 100 30138	100K Ω (MN)x2, Variable
		PE01-SEMICONDUCTORS
QE01	4822 209 63174	IC NJM5532DD
QE02	4822 209 83631	IC NJM4558DD
QE03	4822 209 83631	IC NJM4558DD
		PE01-MISCELLANEOUS
JE04	4822 267 31274	Jack, Phones
		PU01-μ COM CIRCUIT BOARD
		PU01-CAPACITORS
CU01	4822 124 23295	Big Elect 0.022 μF 5V
CU02	4822 124 22274	Elect 4.7 μF 50V
CU03	4822 124 90353	Elect 100 μF 10V
CU04	4822 122 40617	Ceramic 0.1 μF +80% -20%
CU05	4822 124 90353	Elect 100 μF 10V
CU06	4822 124 41543	Elect 1 μF 50V
CU07	4822 124 90353	Elect 100 μF 10V
CU08	4822 122 32486	Ceramic 0.01 μF +80% -20%
CU09	4822 122 32486	Ceramic 0.01 μF +80% -20%
		PU01-SEMICONDUCTORS
DU01		
DU05	4822 130 33305	Diode 1SS176, etc.
DU06	4822 130 31554	Zener MTZJ4.3B
DU07	4822 130 33305	Diode 1SS176, etc.
QU01	4822 209 62424	Microprocessor LC6554H-4342
QU02	4822 209 73287	IC LB1630
QU03	4822 209 80618	IC TC4013BP
QU04	4822 130 42715	Transistor 2SA608SP, etc.
QU05	4822 130 42298	Transistor 2SC536SP, etc.
QU06	4822 130 42298	Transistor 2SC536SP, etc.
QU07	4822 130 42298	Transistor 2SC536SP, etc.
QU08	4822 130 42715	Transistor 2SA608SP, etc.
QU09	4822 130 42715	Transistor 2SA608SP, etc.
QU10	4822 130 42298	Transistor 2SC536SP, etc.
QU11	4822 130 42298	Transistor 2SC536SP, etc.
		PU01-MISCELLANEOUS
XU01	4822 242 72223	Ceramic Vibrator 4.00MHz

REF. DESIG.	PART NO.	DESCRIPTION
PU51-INDICATOR & TACT SW CIRCUIT BOARD		
CU51	4822 124 90353	Elect Cap. 100μF 10V
DU51 DU60 DU61	4822 130 80326	L.E.D. LT3D8B
QU51 QU52 QU53 QU54	4822 130 42298	Transistor 2SC536SP, etc.
SU51 SU59	4822 276 12455	Push Switch Tact
ZU51		Photo Unit, IR Sensor
PV01-VR CIRCUIT BOARD		
CV51	4822 122 40617	Ceramic Cap. 0.1μF +80% -20%
RV51	4822 101 30736	Variable Resistor 50KΩ(A), Motor
P401-MAIN AMP CIRCUIT BOARD		
P401-CAPACITORS		
CV01 CV12 CV13 CV23 CV34	4822 122 32486	Ceramic 0.01μF +80% -20%
	4822 124 41535	Elect 100μF 25V
	4822 122 31626	Ceramic 100pF ±5% /02B/02G
C401 C402 C403 C404 C411 C412 C421 C422 C423	4822 122 40617	Ceramic 0.1μF +80% -20%
	4822 122 40617	Ceramic 0.1μF +80% -20%
	4822 121 42344	Film 220pF ±5%
	4822 121 42344	Film 220pF ±5%
	4822 124 23517	Elect 1000μF 6.3V
	4822 124 23517	Elect 1000μF 6.3V
	4822 124 23516	Elect 100μF 10V
	4822 124 23516	Elect 100μF 10V
	4822 124 41543	Elect 1μF 50V /02B/02G
	4822 124 23521	Elect 4.7μF 35V [U]
C424	4822 124 41543	Elect 1μF 50V /02B/02G
	4822 124 23521	Elect 4.7μF 35V [U]
C427 C430 C431 C432	4822 124 23519	Elect 270μF 16V
	5322 122 31626	Ceramic 100pF ±5% /02B/02G
	5322 122 31626	Ceramic 100pF ±5% /02B/02G
C601 C602 C605 C606 C607 C608 C611 C616	4822 121 42327	Film 470pF ±5%
	4822 121 42327	Film 470pF ±5%
	4822 121 42712	Film 100pF ±5%
	4822 121 42712	Film 100pF ±5%
	4822 124 23516	Elect 100μF 10V
	4822 124 23516	Elect 100μF 10V
	4822 124 23519	Elect 270μF 16V

REF. DESIG.	PART NO.	DESCRIPTION
C703 C704 C705 C706 C707 C708 C709 C710	4822 121 42327	Film 470pF ±5%
	4822 121 42327	Film 470pF ±5%
	4822 124 23519	Elect 270μF 16V
	4822 124 23519	Elect 270μF 16V
	4822 124 23519	Elect 270μF 16V
	4822 124 23519	Elect 270μF 16V
	4822 124 23519	Elect 270μF 16V
	4822 121 23519	Elect 270μF 16V
▲C801 C804 C805 C808 C809 C810 C811 C812	4822 122 40617	Ceramic 0.1μF +80% -20%
	4822 124 23518	Elect 2200μF 35V
	4822 124 23516	Elect 100μF 10V
	4822 124 23516	Elect 100μF 10V
	4822 124 23522	Elect 470μF 16V
	4822 124 23522	Elect 470μF 16V
C815 C816 C819 C820 C822	4822 124 22722	Elect 1000μF 16V
	4822 124 23516	Elect 100μF 10V
	4822 124 41535	Elect 100μF 25V
	4822 124 41543	Elect 1μF 50V
	4822 124 22698	Elect 4.7μF 25V
P401-RESISTORS		
R409 R412 ▲R455 R458		3.32KΩ ±10% 1/6W
		15Ω ±5% 1/6W
▲R631 ▲R634		15Ω ±5% 1/6W
R801 R804 R813 R814 R815		1Ω ±5% 1/6W
		15Ω ±5% 1/6W
		15Ω ±5% 1/6W
		15Ω ±5% 1/6W
▲R829 ▲R830 ▲R831 ▲R832	4822 111 90967	4.7Ω ±5% 1/4W, Fuse
	4822 111 90967	4.7Ω ±5% 1/4W, Fuse
	4822 115 90166	10Ω ±2% 1/4W, Fuse
	4822 115 90166	10Ω ±2% 1/4W, Fuse
P401-SEMICONDUCTORS		
DV01 DV09	4822 130 33305	Diode 1SS176, etc.
D401 D414 D601 D618 D701	4822 130 33305	Diode 1SS176, etc.
	4822 130 33305	Diode 1SS176, etc.
	4822 130 33305	Diode 1SS176, etc.
▲D801 D805 D808 D809 D810 D811 D812	4822 130 80839	Diode S5688G
	4822 130 33305	Diode 1SS176, etc.
	4822 130 82363	Zener RD6.8JB1
	4822 130 82363	Zener RD6.8JB1
	4822 130 33305	Diode 1SS176, etc.
	4822 130 33305	Diode 1SS176, etc.

REF. DESIG.	PART NO.	DESCRIPTION
D813 D814 D815 D816	4822 130 80839	Diode S5688G
	4822 130 80839	Diode S5688G
	4822 130 33305	Diode 1SS176, etc.
	4822 130 33305	Diode 1SS176, etc.
QV01 QV08	4822 130 42298	Transistor 2SC536SP, etc.
Q401 Q404 Q405 Q410 Q411 Q414 Q415	4822 130 42839	F.E.T. 2SK3698L
	4822 130 43233	Transistor 2SC2240(GR, BL)
Q416 Q417 Q418 Q419 Q420	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 61179	Transistor 2SD2037(E, F)
	4822 130 61179	Transistor 2SD2037(E, F)
	4822 130 61176	Transistor 2SB1357(E, F)
	4822 130 61176	Transistor 2SB1357(E, F)
Q601 Q602 Q605 Q606 Q607 Q608 Q609 Q610 Q611 Q612	4822 130 42843	F.E.T. 2SK389(GR, BL)
	4822 130 42843	F.E.T. 2SK389(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
Q613 Q614 Q615 Q616 Q617	4822 130 61179	Transistor 2SD2037(E, F)
	4822 130 61179	Transistor 2SD2037(E, F)
	4822 130 61176	Transistor 2SB1357(E, F)
	4822 130 61176	Transistor 2SB1357(E, F)
		IC NUM5532DD
Q701	4822 209 83654	IC NJM4565D
Q801 Q802 Q805 Q806 Q807 Q808 ▲Q809 ▲Q810 Q811 Q812 Q813 Q814	4822 130 43311	Transistor 2SC3298(O, Y)
	4822 130 43023	Transistor 2SA1306(O, Y)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 43233	Transistor 2SC2240(GR, BL)
	4822 130 42951	Transistor 2SA970(GR, BL)
	4822 209 71903	IC NJM7805FA
	4822 209 63339	IC NJM78L20A
	4822 209 83312	IC TA7317P
	4822 130 42715	Transistor 2SA608SP, etc.
	4822 130 42298	Transistor 2SC536SP, etc.
	4822 130 42298	Transistor 2SC536SP, etc.
P401-MISCELLANEOUS		
JV01 JV06 JV07	4822 265 30587	Terminal, 4P RCA Pin
	4822 266 30274	Terminal, 2P RCA Pin
J401	4822 266 30282	Terminal, 2P RCA Pin
LV01 LV09	4822 280 20464	Relay

REF. DESIG.	PART NO.	DESCRIPTION
L401 L402 L601 L602 L603 L604 L701	4822 158 60606	Choke Coil, 20μH /02B/02G
	4822 158 60606	Choke Coil, 20μH /02B/02G
	4822 140 10411	Output Transformer
	4822 140 10411	Output Transformer
	4822 280 20464	Relay
	4822 280 20464	Relay
	4822 280 20464	Relay
SV01 S401	4822 277 21116	Slide Switch Rotary Switch, MM/MC
P851-BACKUP CIRCUIT BOARD [U]		
P851-CAPACITORS		
▲C851 ▲C852 C853 C854 C855 C856 C857 C858	4822 121 43732	Ceramic 0.01μF +80% -20%
	4822 122 40491	Film 0.01μF ±20%
	4822 122 40491	Ceramic 0.022μF +80% -20%
	4822 122 40491	Ceramic 0.022μF +80% -20%
	4822 124 90356	Elect 1000μF 35V
	4822 124 90356	Elect 1000μF 35V
	4822 124 90353	Elect 100μF 10V
	4822 122 32486	Ceramic 0.01μF +80% -20%
P851-RESISTOR		
▲R851	4822 116 60246	220Ω ±5% 1W
P851-SEMICONDUCTORS		
▲D851 ▲D854 ▲D855	4822 130 80839	Diode S5688G
	4822 130 33305	Diode 1SS176, etc.
▲Q851 Q852 Q853 Q854	4822 209 61533	IC NJM7806FA
	4822 130 42298	Transistor 2SC536SP, etc.
	4822 130 42715	Transistor 2SA608SP, etc.
	4822 130 42298	Transistor 2SC536SP, etc.
P851-MISCELLANEOUS		
▲F851 ▲F852 ▲F853	4822 253 30355	Fuse 630mA 250V
	4822 253 30355	Fuse 0.25A 250V
	4822 253 30355	Fuse 0.25A 250V
▲J851 ▲J852		Jack, AC Outlet Jack, AC Outlet
▲L851 ▲L852 ▲S851	4822 146 21577	Relay Power Transformer
	4822 276 12925	Push Switch
P871-BACKUP CIRCUIT BOARD /02B/02G		
P871-CAPACITORS		
▲C871 ▲C872 C873 C874 C875 C876 C877 C878	4822 121 43732	Ceramic 0.01μF +80% -20%
	4822 122 40491	Film 0.01μF ±20%
	4822 122 40491	Ceramic 0.022μF +80% -20%
	4822 124 90356	Ceramic 0.022μF +80% -20%
	4822 124 90356	Elect 1000μF 35V
	4822 124 90356	Elect 1000μF 35V
	4822 124 90353	Elect 100μF 10V
	4822 122 32486	Ceramic 0.01μF +80% -20%
▲R871	4822 116 60246	P871-RESISTOR 220Ω ±5% 1W

REF. DESIG.	PART NO.	DESCRIPTION
P871-SEMICONDUCTORS		
▲ D871 /	4822 130 80839	Diode S5688G
▲ D874	4822 130 33305	Diode 1SS176, etc.
▲ Q871	4822 209 61533	IC NJM7806FA
Q872	4822 130 42298	Transistor 2SC536SP, etc.
Q873	4822 130 42715	Transistor 2SA608SP, etc.
Q874	4822 130 42298	Transistor 2SC536SP, etc.
P871-MISCELLANEOUS		
▲ F871		Fuse 400mA 250V
▲ F872	4822 253 30209	Fuse T250mA 250V
▲ F873	4822 253 30209	Fuse T250mA 250V
▲ F874	4822 253 40166	Fuse T2.5A 250V
▲ J871	4822 267 31194	Jack, AC Outlet
▲ J872	4822 267 31194	Jack, AC Outlet
▲ L871	4822 280 20459	Relay
▲ L872	4822 146 21569	Power Transformer
▲ S871	4822 276 12925	Push Switch

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.