

# SPECIFICATIONS

## AMPLIFIER SECTION

### Power Output

#### Stereo Mode

100 watts per channel, min. RMS into 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.

#### Surround Mode (MULTI-CH INPUT)

##### Front L/R and Center Channels

80 watts per channel, min. RMS into 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.

##### Rear Channels (Rear channel only driven)

20 watts per channel, min. RMS into 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.

Total Harmonic Distortion:	0.08% at rated power (Front)
IM Distortion:	0.08% at rated power (Front)
Damping Factor:	60 at 8 ohms (Front)
Input Sensitivity and Impedance	
Phono:	2.5 mV, 50 kohms
Line (CD, Tape, TV/AUX Video-1, 2):	200 mV, 50 kohms
Video (Video-1,2):	1 Vp-p, 75 ohms
Output Level and Impedance:	
Rec Out (Tape):	200 mV, 2.2 kohms
Out (Video-2):	200 mV, 2.2 kohms
Pre Out (Subwoofer):	1 V, 2.2 kohms
Video (Video-2, Monitor):	1 Vp-p, 75 ohms
Phono Overload:	120 mV RMS. at 1 kHz, 0.5% T.H.D.
Frequency Response:	20 Hz to 30 kHz, $\pm 1$ dB
RIAA Deviation:	20 Hz to 20 kHz, $\pm 0.8$ dB
Tone Control	
Bass:	$\pm 10$ dB at 100 Hz
Treble:	$\pm 10$ dB at 10 kHz
Signal-to-Noise Ratio	
Phono:	80 dB (IHF A, 5 mV input)
CD/Tape:	100 dB (IHF A)
Muting:	-50 dB (Front)

## GENERAL

Power Supply:	AC 120 V, 60 Hz
Power Consumption:	3.1 A (372 W)
Dimensions (W x H x D):	435 x 150 x 322 mm 17-1/8" x 5-7/8" x 12-11/16"
Weight:	9.5 kg, 20.9 lbs.


## REMOTE CONTROL RC-327S


Transmitter:	Infrared
Signal range:	Approx. 5 meters, 16 ft.
Power supply:	Two "AA" batteries (1.5 V x 2)

Specifications and features are subject to change without notice.

# SERVICE PROCEDURES

## 1. Replacing the fuses

 This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilise est a rapide. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce dernier est indique la qu le present symbol est appose.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252166Y	6.3 A-UL/T-237,Primary
F991,F992	252163Y	4A-UL/T-237,Secondary

## 2. To Initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.

To perform a result, please follow the procedure below.

1. Turn the power button "ON"
2. Press and hold down the Video 1 button, then press the SPEAKER A button.
3. After "clear" is displayed, the preset memory and each mode stored in the memory, such as surround, are initialized and will return to the factory settings.

## 3. Safety-check out

(Only U.S.A. model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and the screw on the back panel.

Specifications: 3.3 Mohm $\pm 10\%$  at 500V.

## 4. Memory preservation

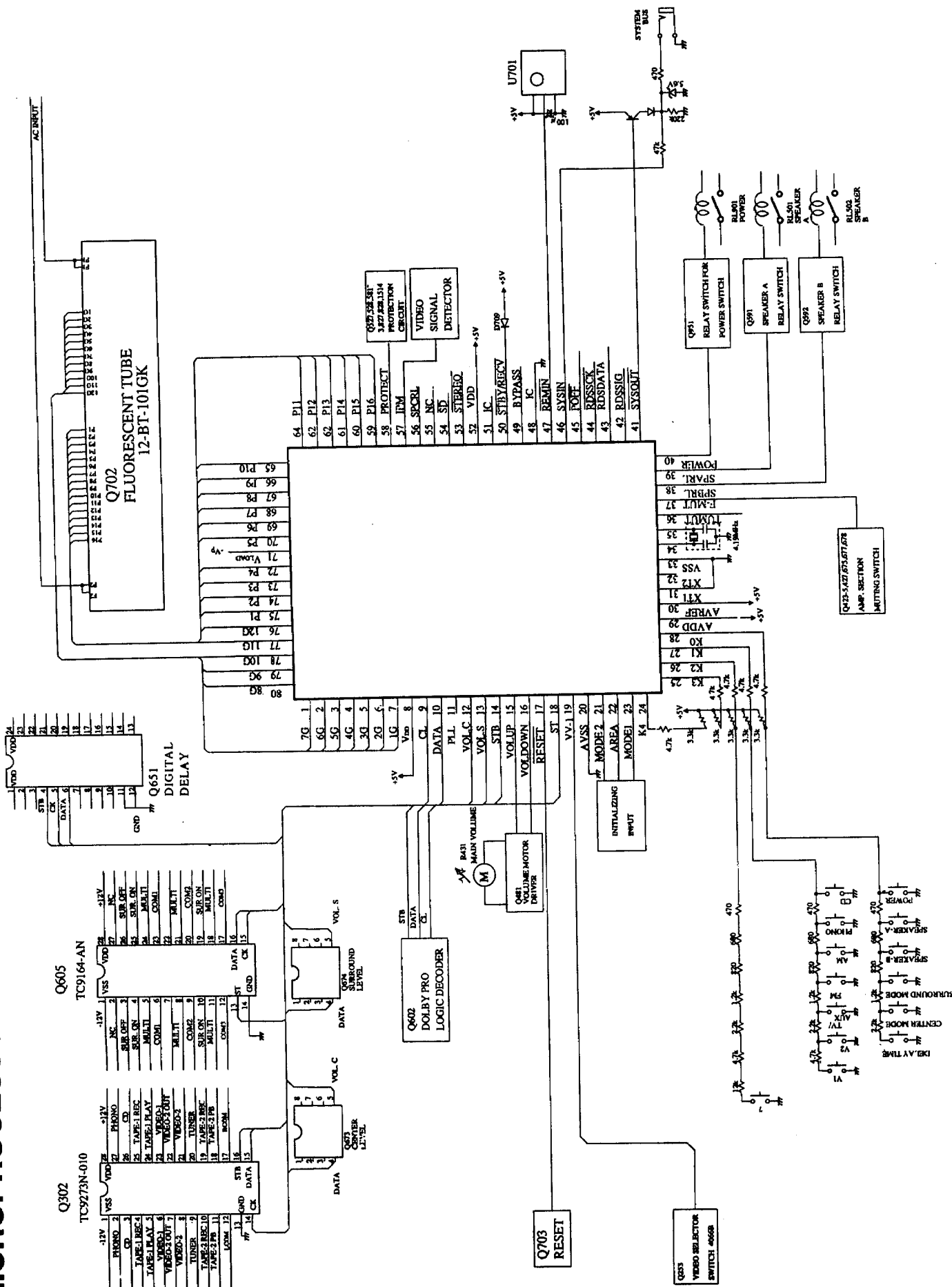
This unit does not require memory preservation batteries.

A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged.

The unit must be plugged in and the power switch turned on and off once in order to charge the back-up system. Note that since this is not a permanent memory, the power switch must be turned on and off a few times each month the keep the back-up system operative.

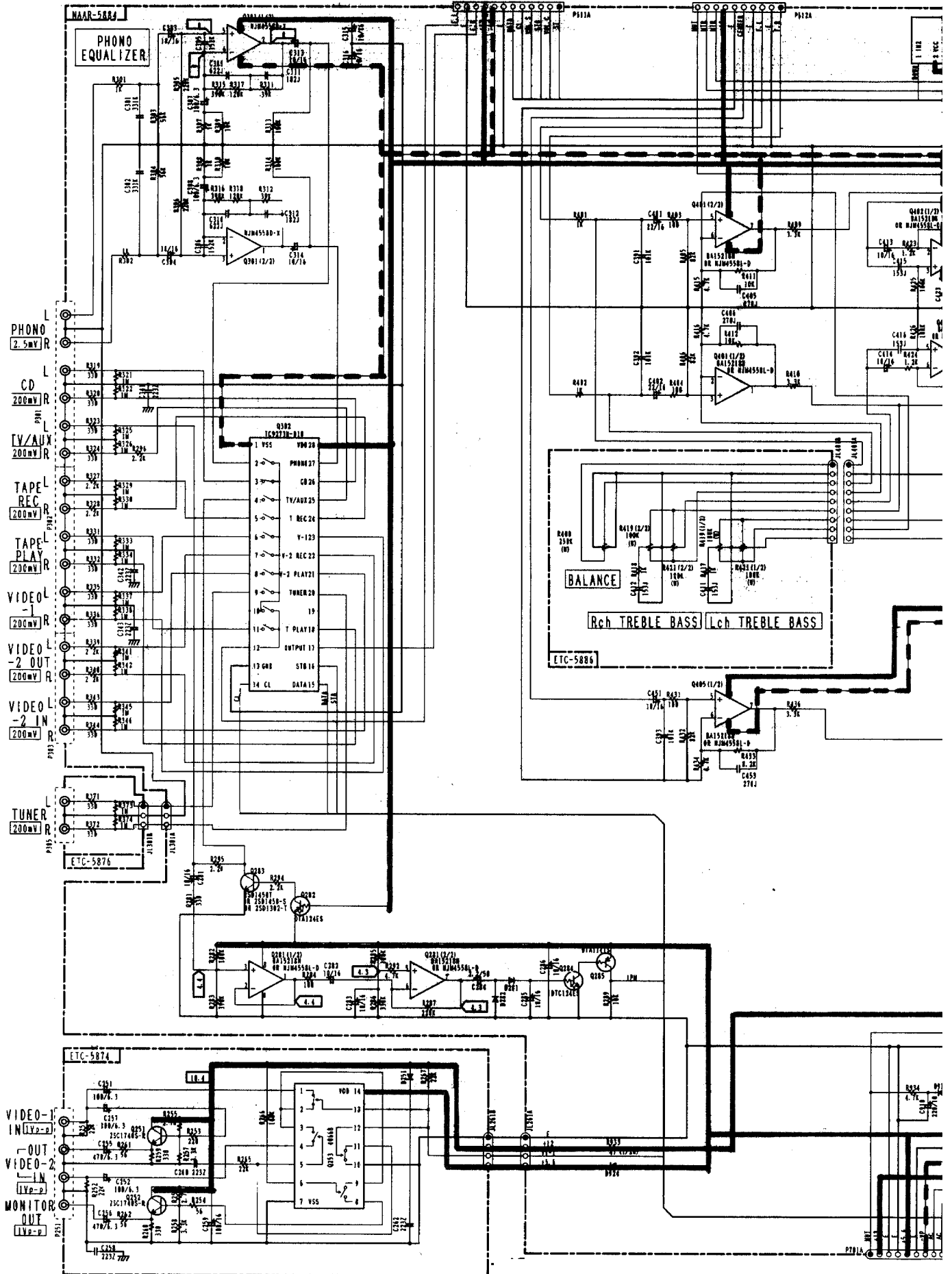
The period of the time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shorted when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

# MICROPROCESSOR CONNECTION DIAGRAM

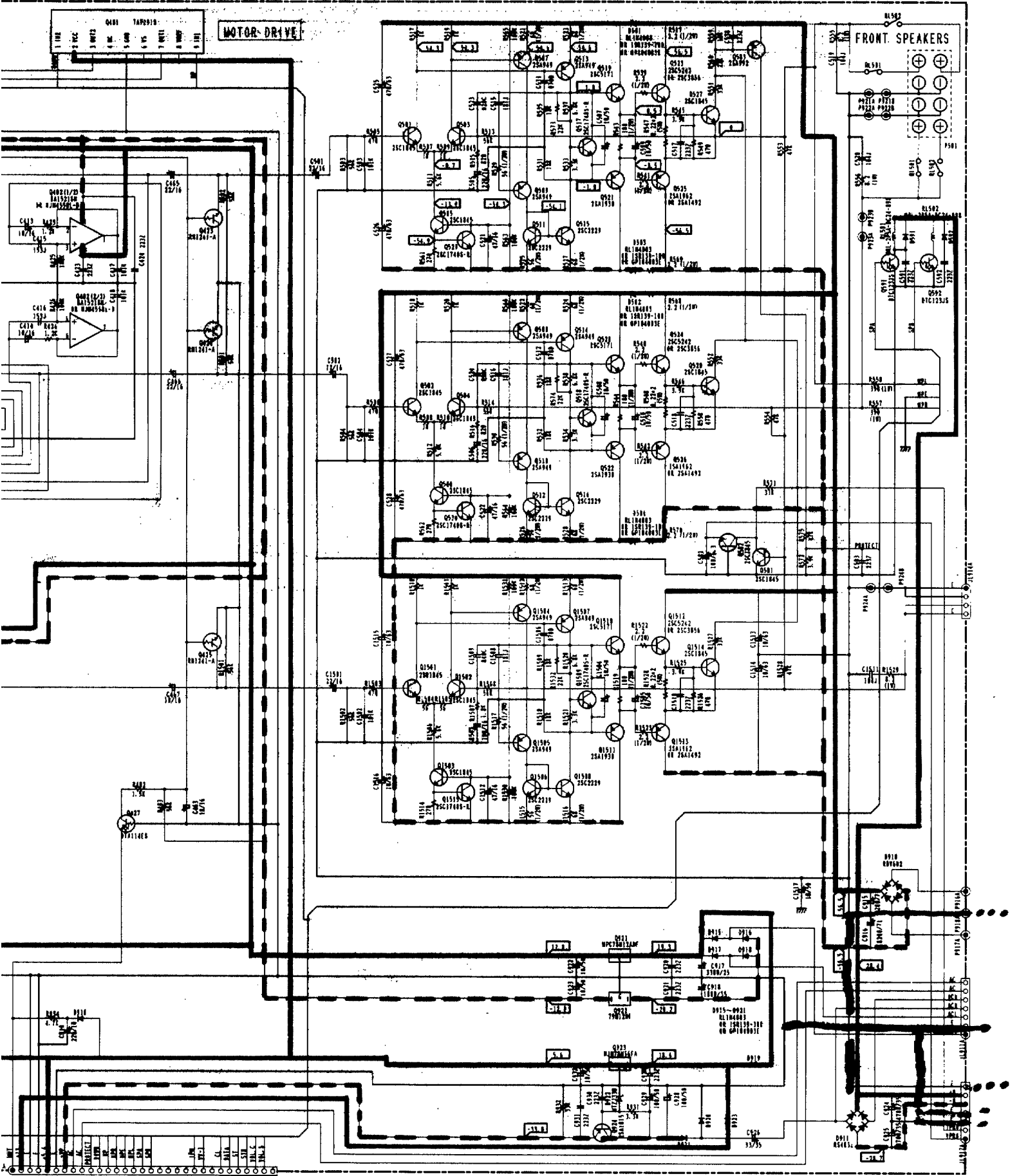


# SCHEMATIC DIAGRAM

1  
2  
3  
4  
5

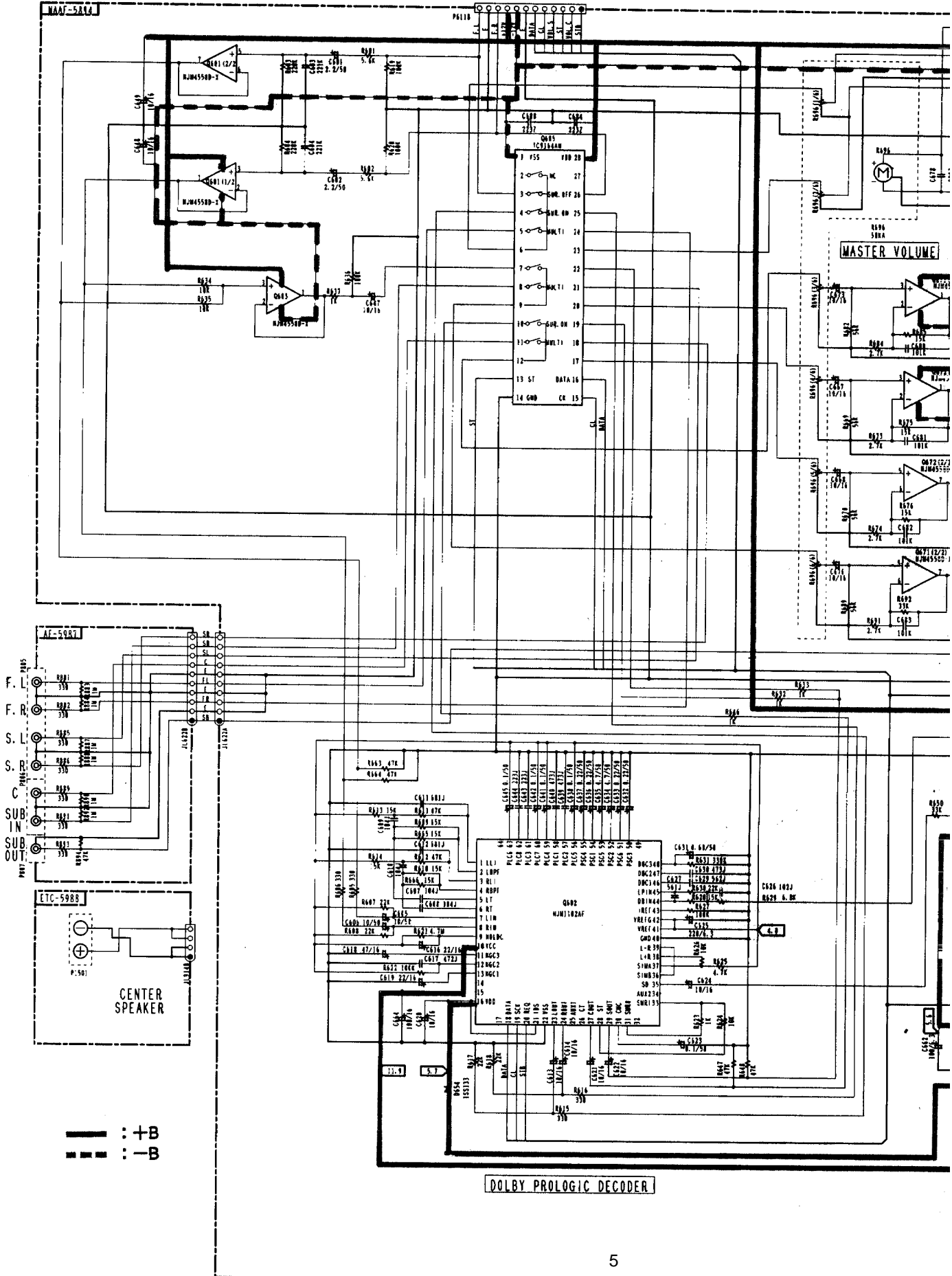


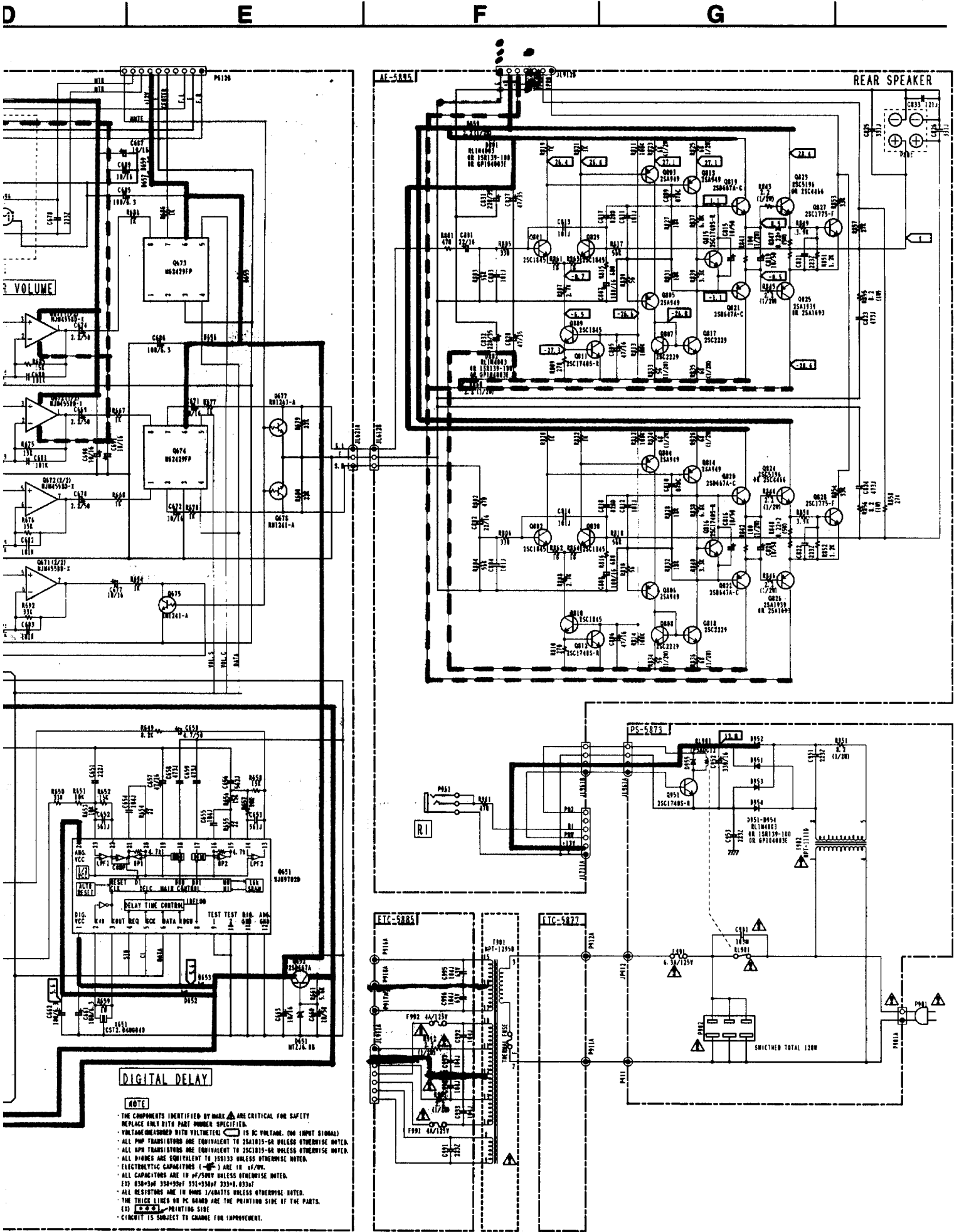
D E F G



# A B C D

## SCHEMATIC DIAGRAM



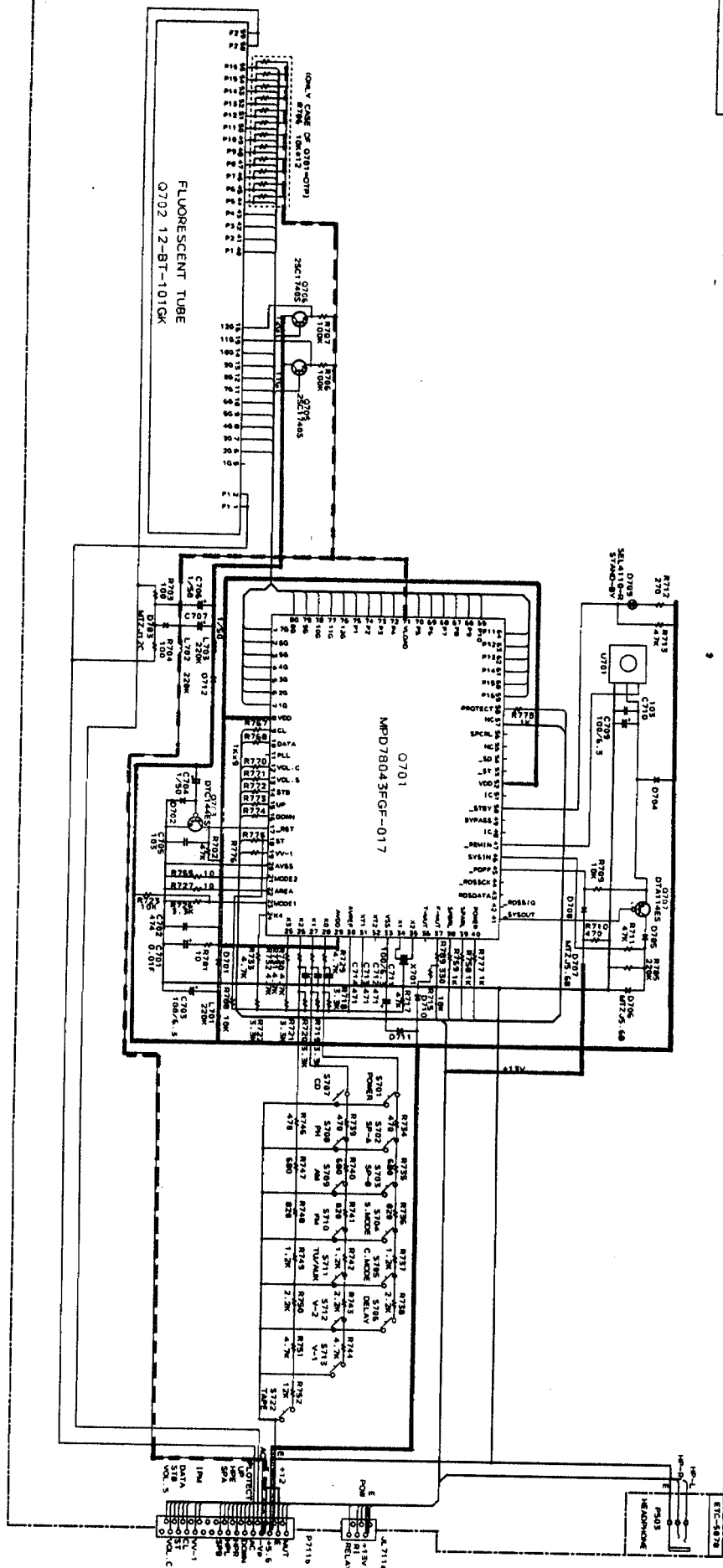


**DIGITAL DELAY**

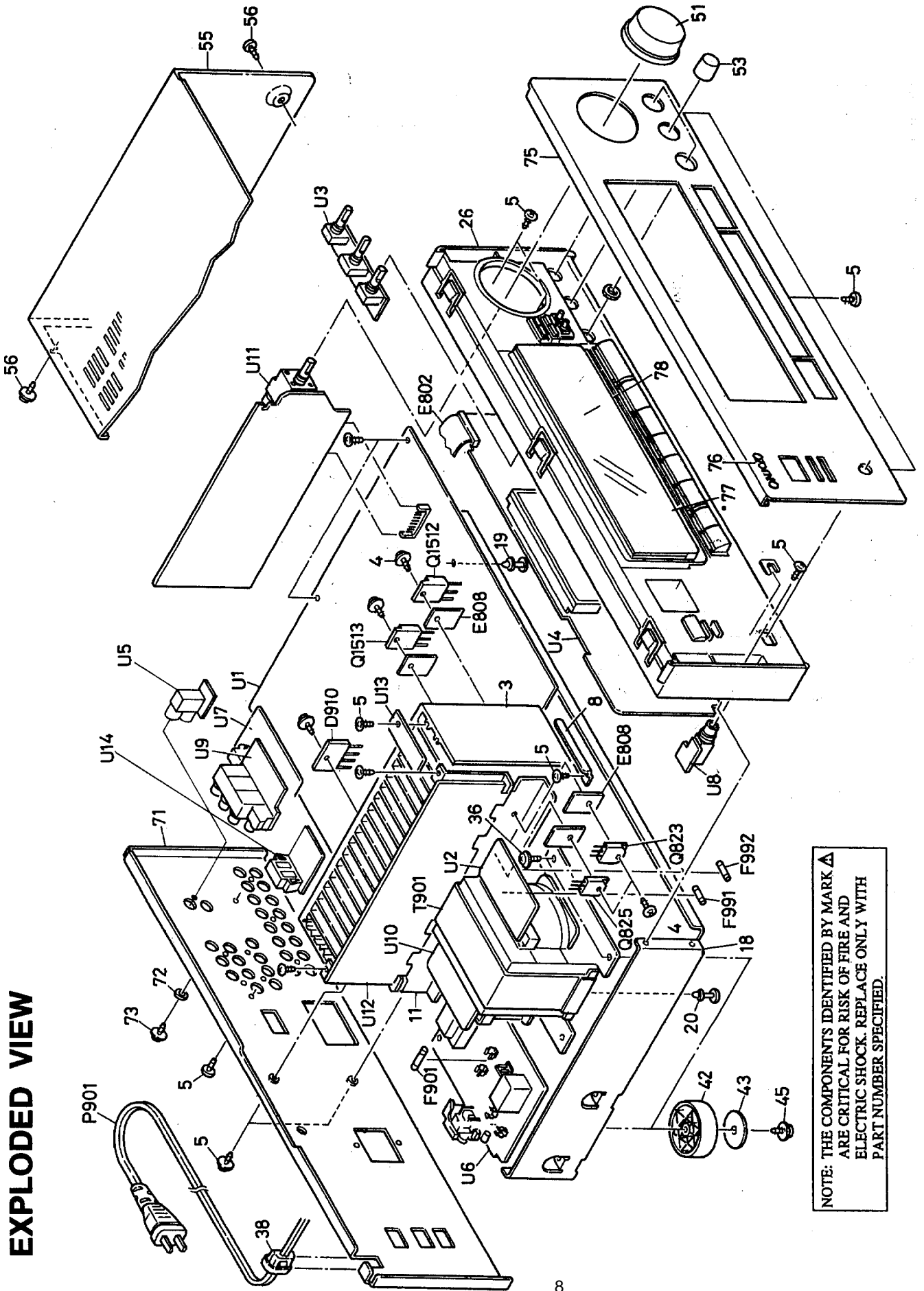
- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY
  - REPLACE ONLY WITH PART NUMBER & SPECIFICATION.
  - VOLTAGE MEASURED WITH VOLTMETER  $\square$  IS DC VOLTAGE, (OH INPUT SIGNAL)
  - ALL PNP TRANSISTORS ARE EQUIVALENT TO 25A1015-OR UNLESS OTHERWISE NOTED.
  - ALL NPN TRANSISTORS ARE EQUIVALENT TO 25C1015-OR UNLESS OTHERWISE NOTED.
  - ALL DIODES ARE EQUIVALENT TO 158133 UNLESS OTHERWISE NOTED.
  - ELECTROLYTIC CAPACITORS (  $\square$  ) ARE IN  $\mu$ F/WV.
  - ALL CAPACITORS ARE IN  $\mu$ F/50V UNLESS OTHERWISE NOTED.
  - EX: 0.01/50V IS 0.01 $\mu$ F/50V UNLESS OTHERWISE NOTED.
  - ALL RESISTORS ARE IN OHMS  $\frac{1}{4}$ W/5% UNLESS OTHERWISE NOTED.
  - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  - EX:  $\square$  PRINTING SIDE
  - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

# CHEMATIC DIAGRAM

NADIS-5871



**EXPLODED VIEW**



NOTE: THE COMPONENTS IDENTIFIED BY MARK **A** ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.



## PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	27160375Y	Heatsink	Q523, Q524	2202843,	* 2SC5242-O,
4	801433	3SMS8W.SW+14B(BC), Special screw	Q1512	2202842,	* 2SC5242-R,
5	838130088	3TTB+8B, Self-tapping screw		2201653,	* 2SC3856-O,
8	27141671	Retainer		2201654 or	* 2SC3856-Y or
11	27160376	Heatsink S		2201655	* 2SC3856-P
18	27100320AY	Chassis	Q525, Q526	2202833,	* 2SA1962-O,
19	27190503A	KGLS-8RF, Holder	Q1513	2202832,	* 2SA1962-R,
20	27190266	KGLS-12RF, Holder		2201663,	* 2SA1492-O,
24	28175225Y	Isolation plate		2201664 or	* 2SA1492-Y or
26	27110956AY	Front bracket		2201665	* 2SA1492-P
36	830440089	4TTC+8C(BC), Self-tapping screw	Q823, Q824	2202923,	* 2SC5196-O,
38	27300750	#2271, Bushing cord		2202922,	* 2SC5196-R,
42	27175319A	Leg		2202373,	* 2SC4466-O,
43	28141332Y	Cushion for leg		2202374 or	* 2SC4466-Y or
45	838130088	3TTB+8B, Self-tapping screw		2202375	* 2SC4466-P
51	28325456Y	Knob, Volume	Q825, Q826	2202913,	* 2SA1939-O,
53	28325454Y	Knob, Tone		2202912,	* 2SA1939-R,
55	28184663Y	Top cover		2202363,	* 2SA1693-O,
56	838430088	3TTB+8B(BC), Self-tapping screw		2202364 or	* 2SA1693-Y or
57	28141240	Cushion		2202365	* 2SA1693-P
71	27122325Y	Rear panel	T901	2301259Y	▲ NPT-1295D, Power transformer
72	87643010	W3x10F(BC), Washer	U1	1A737584-3AY	NAAR-5884-3A, Main circuit pc board ass'y
73	838230088	3TTB+8B(NI), Nickel screw	U2	1A737585-3AY	NAETC-5885-3A, Secondary circuit pc board ass'y
75	27211877Y	Front panel	U3	1A737586-3AY	NAETC-5886-3A, Tone control circuit pc board ass'y
76	28135244Y	Badge	U4	1A737571-3AY	NADIS-5871-3A, Display circuit pc board ass'y
78	28191759Y	Clear plate	U5	1A737576-3AY	NAETC-5876-3A, Tuner terminal pc board ass'y
D910	22380038	RBV602	U6	1A737573-3AY	NAPS-5873-3A, Power supply circuit pc board ass'y
E801	260208	Wire tie	U7	1A737574-3AY	NAETC-5874-3A, Video terminal pc board ass'y
E802	2047311512Y	NCFC7-311512, Flexible flat cable	U8	1A737578-3AY	NAETC-5878-3A, Headphone terminal pc board ass'y
E808	223024	▲ AC238, Isolation sheet	U9	1A737587-3AY	NAETC-5987-3A, Terminal pc board ass'y
F901	252166Y	▲ 6.3A-UL/T-237, Fuse	U10	1A737577-3AY	NAETC-5877-3A, Primary terminal pc board ass'y
F991, F992	252163Y	▲ 4A-UL/T-237, Fuse	U11	1A737594-3AY	NAAF-5894-3A, Volume circuit pc board ass'y
P901	253192HIT	▲ AS-UC-6#18, Power supply cord	U12	1A737595-3AY	NAAF-5895-3A, Rear amplifier pc board ass'y
			U13	25136061	NCEIC-6061, Holder for lead wire
			U14	1A737588-3AY	NAETC-5988-3A, Center speaker terminal pc board ass'y

NOTE: THE COMPONENTS IDENTIFIED BY MARK ▲  
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ELECTRIC SHOCK. REPLACE ONLY WITH  
PART NUMBER SPECIFIED.

# PRINTED CIRCUIT BOARD-PARTS LIST

## DISPLAY CIRCUIT PC BOARD (NADIS-5871-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q701	22241055	MPD78043FGF-017
	Transistors	
Q703	221282	DTC144ES
Q705,Q706	2213284	2SC1740S-R
Q707	2213510	DTA114ES
	FL Tube	
Q702	212156	12-BT-101GK
	Diodes	
D701,D702	223163 or	1SS133 or
D704,D705	223205	1SS270A
D703	224471503	MTZJ15C, Zener
D706,D707	224470562	MTZJ5.6B, Zener
D708	223163 or	1SS133 or
D710-D712	223205	1SS270A
D709	225290	SEL4110R, LED
	Coils	
L701-L703	233454K220	NCH-1452, 220K
	Oscillator	
X701	3010163	CST-4.19MGW, Ceramic
	Capacitors	
C701	3000076 or 3000078	0.01F,5.5V,Super
C702	375524744	0.47 $\mu$ F $\pm$ 5%, 50V, Plastic
C703	354721019	100 $\mu$ F,6.3V,Elect.
C704	353780109	1 $\mu$ F,50V,Elect.
C706,C707	353780109	1 $\mu$ F,50V,Elect.
C709,C711	354721019	100 $\mu$ F,6.3V,Elect.
	Switches	
S701-S713	25035652	NPS-111-S604
S722	25035652	NPS-111-S604
	Socket	
IL711a	25051090Y	NSCT-6P877
P711b	25051875	NSCT-31P1662
	Remote Sensor	
U701	24130011	PIC-12043TE2
	Holder	
Q702a	27190989	FL

## POWER SUPPLY CIRCUIT PC BOARD (NAPS-5873-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistor	
Q951	2213284	2SC1740S-R
	Diodes	
D951-D954	22380260,	$\Delta$ RL1N4003,
	22380032 or	$\Delta$ 1SR139-100 or
	22380035	$\Delta$ GP104003E
D955	223163 or	1SS133 or
	223205	1SS270A
	Power transformer	
T902	2300670A	$\Delta$ NPT-1111D
	Capacitors	
C901	3500191	$\Delta$ DE7150F103M, IS C
C952	354742219	220 $\mu$ F,16V,Elect.
	Resistor	
R951	453530824	8.2 ohm, $\pm$ 5%, 1/2W, Metal
	Plug	
P901a	25055675	NPLG-2P631
	Relay	
RL901	25065515 or	$\Delta$ NRL-1P5A-DC12-096 or
	25065526	$\Delta$ NRL-1P5A-DC12-102
	Fuse Holder	
F901a	25050065	YSH403T
	AC Outlet	
P902	25051124	NSCT-6P911
	Socket	
JL961a	25051088Y	NSCT-4P875

## VIDEO CIRCUIT PC BOARD (NAETC-5874-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q253	222840661	4066B
	Transistors	
Q251,Q252	2213284	2SC1740S-R
	Diode	
D251	223163 or 223205	1SS133 or 1SS270A
	Capacitors	
C251,C252	354721019	100 $\mu$ F,6.3V, Elect.
C255,C256	354724719	470 $\mu$ F,6.3V,Elect.
C257	354721019	100 $\mu$ F,6.3V,Elect.
C259	354741019	100 $\mu$ F,16V,Elect.
	Terminal	
P251	25045462 or 25045339	NPJ-4PDYE283 or NPJ-4PDYE190
	Plug	
JL261b	25055625	NPLG-4P587

## TUNER TERMINAL PC BOARD (NAETC-5876-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
P305	25045307	NPJ-2PDBL166
JL301b	25055624	NPLG-3P586

## HEADPHONE TERMINAL PC BOARD (NAETC-5878-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
P503	25045255	YKB21-5009

## TERMINAL PC BOARD (NAETC-5987-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
P805	25045460Y	NPJ-4PDBL281
P806	25045456Y	NPJ-2PDBL277
P807	25045459Y or 25045302Y	NPJ-1PDBL280 or NPJ-1PDBL161
JL622b	25055631Y	NPLG-10P593

## CENTER SPEAKER TERMINAL PC BOARD (NAETC-5988-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
P1501	25060114	NTM-2PDMNL048, Terminal
JL914b	25050281	NSCT-4P109, Socket

## MAIN CIRCUIT PC BOARD (NAAR-5884-3A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q281,Q401	22240293 or	NJM4558L-D or
Q402,Q405	22240247	BA15218N
Q301	222502	NJM4558D-X
Q302	22240881	TC9273N-010
Q481	22240239	TA7291S
Q921	222780125NEC	MPC78M12AHF
Q922	222790125	79M12HF
Q923	222780565JRC	NJM78M56FA
	Transistors	
Q282	2212600	DTA124ES
Q283	2213816,	2SD1450-T,
	2213815 or	2SD1450-S or
	2212356	2SD1302-T
Q284	2213160	DTC124ES
Q285	2215240	DTA114TS
Q423~Q425	2213631	RN1241-A
Q427	2213510	DTA114ES
Q501~Q506	2211733 or	* 2SC1845-E or
	2211732	* 2SC1845-F
Q507~Q510	2211353	2SA949-O
Q511,Q512	2211633	2SC2229-O
Q513,Q514	2211353	2SA949-O
Q515,Q516	2211633	2SC2229-O
Q517,Q518	2213284	2SC1740S-R

NOTE: <D>: Only 120V model  
 <P>: Only 230V/240V models  
 <W>: Only Worldwide model

CIRCUIT NO.	PART NO.	DESCRIPTION
	<b>Transistors</b>	
Q519,Q520	2203010	2SC5171
Q521,Q522	2203000	2SA1930
Q523,Q524	2202843,	* 2SC5242-O,
Q1512	2202842,	* 2SC5242-R,
	2201653,	* 2SC3856-O,
	2201654 or	* 2SC3856-Y or
	2201655	* 2SC3856-P
Q525,Q526	2202833 or	* 2SA1962-O,
Q1513	2202832	* 2SA1962-R,
	2201663,	* 2SA1492-O,
	2201664 or	* 2SA1492-Y or
	2201665	* 2SA1492-P
Q527,Q528	2211733 or	2SC1845-E or
	2211732	2SC1845-F
Q529,Q530	2213284	2SC1740S-R
Q581,Q582	2211733 or	2SC1845-E or
	2211732	2SC1845-F
Q583	2211792 or	2SA992-F or
	2211793	2SA992-E
Q591,Q592	2213640	DTC123JS
Q924	2211455	2SA1015-GR
Q1501*Q1503	2211733 or	* 2SC1845-E or
Q1514	2211732	* 2SC1845-F
Q1504,Q1505	2211353	2SA949-O
Q1506,Q1508	2211633	2SC2229-O
Q1507	2211353	2SA949-O
Q1509,Q1515	2213284	2SC1740S-R
Q1510	2203010	2SC5171
Q1511	2203000	2SA1930
	<b>Diodes</b>	
D281,D282	223163 or	1SS133 or
D401*D403	223205	1SS270A
D501*D504	22380260,	RL1N4003,
D915*D921	22380032 or	1SR139-100 or
	22380035	GP104003E
D591,D592	223163 or	1SS133 or
D910	223205	1SS270A
D911	22380021	△ RS403L
D922	224473304	MTZJ33D
D923,D924	223163 or	1SS133 or
	223205	1SS270A
	<b>Capacitors</b>	
C281*C283	354741009	10 μ F,16V, Elect.
C284	354780229	2.2 μ F,50V, Elect.
C285,C286	354741009	10 μ F,16V, Elect.
C303,C304	354741009	10 μ F,16V, Elect.
C307,C308	354721019	100 μ F,6.3V, Elect.
C309,C310	374726224	6200pF±5%, 50V, Plastic
C311,C312	374721824	1800pF±5%, 50V, Plastic
C313*C316	354741009	10 μ F,16V, Elect.
C391*C393	374721015	100pF±10%, 50V, Plastic
C401,C402	354742209	22 μ F,16V, Elect.
C413,C414	354741009	10 μ F,16V, Elect.
C415,C416	374721534	0.015 μ F±5%, 50V, Plastic
C417,C418	374721015	100pF±10%, 50V, Plastic
C451,C463	354741009	10 μ F,16V, Elect.
C465,C466	354742209	22 μ F,16V, Elect.
C501,C502	354742209	22 μ F,16V, Elect.
C503,C504	374721015	100pF±10%, 50V, Plastic
C505,C506	354742219	220 μ F,16V, Elect.
C507*C510	354781009	10 μ F,50V, Elect.
C519,C520	374721044	0.1 μ F±5%, 50V, Plastic
C521,C522	354744709	47 μ F,16V, Elect.
C525*C528	354774719	470 μ F,63V, Elect.
C581	354721019	100 μ F,6.3V, Elect.
C910	354742219	220 μ F,16V, Elect.
C915,C916	3504303	8200 μ F,71V

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 SHOCK. REPLACE ONLY WITH PART NUMBER  
 SPECIFIED.

CIRCUIT NO.	PART NO.	DESCRIPTION
	<b>Capacitors</b>	
C917	354753329	3300 μ F,25V, Elect.
C918	354761029	1000 μ F,35V, Elect.
C922,C923	354781009	10 μ F,50V, Elect.
C924,C925	3504213	4700 μ F,35V, Elect.
C926	354763309	33 μ F,35V, Elect.
C928,C929	354781019	100 μ F,50V, Elect.
C932	354741009	10 μ F,16V, Elect.
C1501	354742209	22 μ F,16V, Elect.
C1502	374721015	100pF±10%, 50V, Plastic
C1503	354741019	100 μ F,16V, Elect.
C1504,C1505	354781009	10 μ F,50V, Elect.
C1511	374721044	0.1 μ F±5%, 50V, Plastic
C1512	354744709	47 μ F,16V, Elect.
C1513*C1516	354771009	10 μ F,63V, Elect.
C1517	354781009	10 μ F,50V, Elect.
	<b>Resistors</b>	
R521*R524	443526804	68ohm±5%, 1/2W, Metal oxide
R525,R526	443525604	56ohm±5%, 1/2W, Metal oxide
R527,R528	443526804	△ 68ohm±5%, 1/2W, Metal oxide
R539*R542	453530224	2.2ohm±5%, 1/2W, Metal
R543,R544	443521014	100ohm±5%, 1/2W, Metal oxide
R547,R548	4000157	RGC55, 0.22 OHM X2, Metal plate
R555,R556	453630824	8.2ohm±5%, 1W, Metal
R557,R558	443623914	390ohm±5%, 1W, Metal oxide
R567*R570	453530224	2.2ohm±5%, 1/2W, Metal
R933	443524704	47ohm±5%, 1/2W, Metal oxide
R1512,R1513	443526804	68ohm±5%, 1/2W, Metal oxide
R1515	443525604	56ohm±5%, 1/2W, Metal oxide
R1516	443526804	△ 68ohm±5%, 1/2W, Metal oxide
R1519	443521014	100ohm±5%, 1/2W, Metal oxide
R1522,R1523	453530224	2.2ohm±5%, 1/2W, Metal
R1524	4000157	RGC55, 0.22 OHM X2, Metal plate
R1529	453630824	8.2ohm±5%, 1W, Metal
	<b>Relay</b>	
RL501,RL502	25065517	NRL-2P5A-DC24-098
	<b>Terminals</b>	
P301,P302	25045458 or	NPJ-6PDBL279 or
	25045300	NPJ-6PDBL159
P303	25045460Y or	NPJ-4PDBL280 or
	25045303Y	NPJ-4PDBL162
P501	25060224Y or	NTM-8PDML146 or
	25060158Y	NTM-8PDML084
	<b>Plugs</b>	
P612a	25055706Y	NPLG-10P662
	<b>Sockets</b>	
P611a	25051752Y	NSCT-12P1539
P701b	25051838Y	NSCT-31P1625,
JL261a	25051088	NSCT-4P875
JL301a	25051087	NSCT-3P874
JL401a	25051093	NSCT-9P880
JL911a,JL912a	25051111	NSCT-7P898
JL914a	25051108	NSCT-4P895
	<b>Radiators</b>	
Q921a	27160209	RAD-67
Q922a	27160227	RAD-076
	<b>Screws</b>	
Q921b,Q922b	838430107	3TTB+10S(BC), Self-tapping

**SECONDARY CIRCUIT PC BOARD (NAETC-5885-3A)**

CIRCUIT NO.	PART NO.	DESCRIPTION
F991a,F992a	25050065	△ YSH403T, Fuseholder
F991,F992	252163Y	△ 4A-UL/T-237, Fuse
JL911b	25051111	NSCT-7P898, Socket
C992,C993	374721044	0.1 μ F±5%, 50V, Plastic capacitor
C995,C996	374791044	0.1 μ F±5%, 63V, Plastic capacitor
C997,C998	374721044	0.1 μ F±5%, 50V, Plastic capacitor
R991,R992	453530224	2.2ohm±5%, 1/2W, Metal resistor

**TONE CONTROL CIRCUIT PC BOARD (NAETC-5886-3A)**

CIRCUIT NO.	PART NO.	DESCRIPTION
R400	5104288	N11RCL250KWT20Z, Variable resistor
R419,R421	5104356	N14RLC100KWT20Z, Variable resistor
JL401b	25051093	NSCT-9P880, Wire holder
C411,C412	374721534	0.015 $\mu$ F $\pm$ 5%, 50V, Plastic capacitor

**VOLUME CIRCUIT PC BOARD (NAAF-5894-3A)**

CIRCUIT NO.	PART NO.	DESCRIPTION
<b>ICs</b>		
Q601,Q603	222502	NJM4558D-X
Q602	22241053	NJW1102AF
Q605	22240800	TC9164AN
Q651	22240995 or 22240686	NJU9702D or M65830P
Q671,Q672	222502	NJM4558D-X
Q673,Q674	22241054	M62429FP
<b>Transistors</b>		
Q652	2215163	2SD667A-C
Q675	2213631	RN1241-A
Q677,Q678	2213631	RN1241-A
<b>Oscillator</b>		
X651	3010217	CST2.04MG040, Ceramic
<b>Diodes</b>		
D651	224470682	MTZJ6.8B, Zener
D652~D657	223163 or 223205	1SS133 or 1SS270A
<b>Capacitors</b>		
C601,C602	354780229	2.2 $\mu$ F, 50V, Elect.
C605,C606	354781009	10 $\mu$ F, 50V, Elect.
C607~C610	374721044	0.1 $\mu$ F $\pm$ 5%, 50V, Plastic
C611,C612	374726814	680pF $\pm$ 5%, 50V, Plastic
C613,C614	354741009	10 $\mu$ F, 16V, Elect.
C616	392842207	22 $\mu$ F, 16V, Elect. LL
C617	374724724	4700pF $\pm$ 5%, 50V, Plastic
C618,C657	354744709	47 $\mu$ F, 16V, Elect.
C619	354742209	22 $\mu$ F, 16V, Elect.
C620~C622	354741009	10 $\mu$ F, 16V, Elect.
C623,C638	354781099	0.1 $\mu$ F, 50V, Elect.
C624	354741009	10 $\mu$ F, 16V, Elect.
C625	354722219	220 $\mu$ F, 6.3V, Elect.
C627	374725614	560pF $\pm$ 5%, 50V, Plastic
C628	374721024	1000pF $\pm$ 5%, 50V, Plastic
C629,C656	374725624	5600pF $\pm$ 5%, 50V, Plastic
C630	374724734	0.047 $\mu$ F $\pm$ 5%, 50V, Plastic
C631	354786899	0.68 $\mu$ F, 50V, Elect.
C632,C633	354782299	0.22 $\mu$ F, 50V, Elect.
C634,C635,C650	354780479	4.7 $\mu$ F, 50V, Elect.
C636,C637	354782299	0.22 $\mu$ F, 50V, Elect.
C639,C640	374724734	0.047 $\mu$ F $\pm$ 5%, 50V, Plastic
C641,C642	354781099	0.1 $\mu$ F, 50V, Elect.
C643,C644	374722234	0.022 $\mu$ F $\pm$ 5%, 50V, Plastic
C645	354781099	0.1 $\mu$ F, 50V, Elect.
C647~C649	354741009	10 $\mu$ F, 16V, Elect.
C651	374722224	2200pF $\pm$ 5%, 50V, Plastic
C652,C653	374725614	560pF $\pm$ 5%, 50V, Plastic
C654,C655	374721044	0.1 $\mu$ F $\pm$ 5%, 50V, Plastic
C658,C659	374724734	0.047 $\mu$ F $\pm$ 5%, 50V, Plastic
C660	354781009	10 $\mu$ F, 50V, Elect.
C661,C662	354721019	100 $\mu$ F, 6.3V, Elect.
C663,C687	354741009	10 $\mu$ F, 16V, Elect.
C664	354741019	100 $\mu$ F, 16V, Elect.
C667,C668	354741009	10 $\mu$ F, 16V, Elect.
C669,C670	354780229	2.2 $\mu$ F, 50V, Elect.
C671~C673	354741009	10 $\mu$ F, 16V, Elect.
C674	354780229	2.2 $\mu$ F, 50V, Elect.
C676,C677	354741009	10 $\mu$ F, 16V, Elect.
C685,C686	354721019	100 $\mu$ F, 6.3V, Elect.
C689~C691	354741009	10 $\mu$ F, 16V, Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	<b>Resistor</b>	
R696	5104392A	N16RFL50KA25F, Variable
	<b>Sockets</b>	
JL621a	25051087	NSCT-3P874
JL622a	25051094	NSCT-10P881
P611b	25055885Y	NPLG-12P841
P612b	25051235Y	NSCT-10P1025

**REAR AMPLIFIER PC BOARD (NAAF-5895-3A)**

CIRCUIT NO.	PART NO.	DESCRIPTION
<b>Transistors</b>		
Q801,Q802	2211732 or 2215116	2SC1845-F or 2SC1775-F
Q803~Q806	2211353	2SA949-O
Q807,Q808	2211633	2SC2229-O
Q809,Q810	2211732 or 2215116	2SC1845-F or 2SC1775-F
Q811,Q812	2213284	2SC1740S-R
Q813,Q814	2211353	2SA949-O
Q815,Q816	2213284	2SC1740S-R
Q817,Q818	2211633	2SC2229-O
Q819,Q820	2215163	2SD667A-C
Q821,Q822	2215173	2SB647A-C
Q823,Q824	2202923, 2202922, 2202373, 2202374 or 2202375	* 2SC5196-O, * 2SC5196-R, * 2SC4466-O, * 2SC4466-Y or * 2SC4466-P
Q825,Q826	2202913, 2202912, 2202363, 2202364 or 2202365	* 2SA1939-O or * 2SA1939-R * 2SA1693-O, * 2SA1693-Y or * 2SA1693-P
Q827~Q830	2211732 or 2215116	2SC1845-F or 2SC1775-F
<b>Diode</b>		
D801,D802	22380260, 22380032 or 22380035	RL1N4003, 1SR139-100 or GP104003E
<b>Capacitors</b>		
C801,C802	354742209	22 $\mu$ F, 16V, Elect.
C805,C806	354744709	47 $\mu$ F, 16V, Elect.
C807,C808	354741019	100 $\mu$ F, 16V, Elect.
C815,C816	354781009	10 $\mu$ F, 50V, Elect.
C819,C820	354781009	10 $\mu$ F, 50V, Elect.
C823,C824	374724734	0.047 $\mu$ F $\pm$ 5%, 50V, Plastic
C827,C828	354764709	47 $\mu$ F, 35V, Elect.
C831,C832	354762219	220 $\mu$ F, 35V, Elect.
<b>Resistors</b>		
R823~R826	443526804	68ohm $\pm$ 5%, 1/2W, Metal oxide
R833,R834	443525604	56ohm $\pm$ 5%, 1/2W, Metal oxide
R835,R836	443526804	68ohm $\pm$ 5%, 1/2W, Metal oxide
R841,R842	443521014	100ohm $\pm$ 5%, 1/2W, Metal oxide
R843~R846	453530224	2.2ohm $\pm$ 5%, 1/2W, Metal
R847,R848	4000131	RGC22, 0.22 ohm $\times$ 2, Metal plate
R855,R856	453630824	8.2ohm $\pm$ 5%, 1W, Metal
R859,R860	453530224	2.2ohm $\pm$ 5%, 1/2W, Metal
<b>Wire traps</b>		
JL621b	25055624	NPLG-3P586
JL711b	25055627	NPLG-6P589
JL912b	25050271	NSCT-7P99
JL961b	25055625	NPLG-4P587
<b>Terminals</b>		
P961	25045439Y	NPJ-1PDBL263
P801	25060161Y	NTM-4PDMNL087