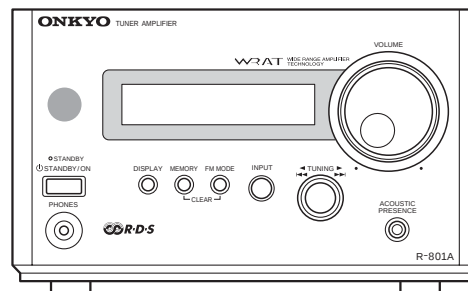


ONKYO® SERVICE MANUAL

FM STEREO/AM TUNER AMPLIFIER MODEL R-801A



European models front panel shown.

MPP	230-240V AC, 50Hz
MDT	120V AC, 50/60Hz
MGT,MGR	220-230V,50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

SPECIFICATIONS

Amplifier Section

Power output

17 watts per channel, min RMS, at 4 ohms, both channels driven 1 kHz, with no more than 0.8% THD
 13 watt per channel, min RMS, at 8 ohms, both channels driven 1 kHz, with no more than 0.8% THD
 2 X 17 watts at 4 ohms, 1 kHz, DIN
 2 X 15 watts at 6 ohms, 1 kHz, DIN
 2 X 13 watts at 8 ohms, 1 kHz, DIN
 2 X 24 watts at 4 ohms, 1 kHz, EIAJ

Dynamic power output

2 X 21 watts at 4 ohms
 2 X 14 watts at 8 ohms

Total harmonic distortion

0.8% at rated power

IM distortion

0.8% at rated power

Damping factor

20 at 8 ohms

Input Sensitivity and Impedance

TAPE, MD, CD/DVD, CDR/PC:
 150 mV, 50 kohms

Frequency and response

10 to 100 kHz ± 3 dB

Tone control

ACOUSTIC PRESENCE 1
 +4.5 dB at 41 Hz
 ACOUSTIC PRESENCE 2
 +5.5 dB at 82 Hz
 ACOUSTIC PRESENCE 3
 +6 dB at 41 Hz, + 6 dB at 82 Hz
 ACOUSTIC PRESENCE 4
 +6 dB at 41 Hz, + 6 dB at 82 Hz,
 +5 dB at 10 Hz

Signal to noise ratio

TAPE: 100 dB (IHF-A)

Muting

– 50 dB

Tuner Section

Tuning range

FM: 87.9 to 107.9 MHz (200 kHz steps)
 (U.S. & Canadian models)
 87.5 to 108.00 MHz (50 kHz steps)
 (Other area models)
 AM: 530 to 1710 kHz (10 kHz steps)
 (U.S. & Canadian models)
 522 to 1611 kHz (9 kHz steps)
 (Other area models)

Usable sensitivity

FM: Mono 11.2 dBf,
 1.0 μ V (75 ohms IHF)
 0.9 μ V (75 ohms DIN)
 Stereo 17.2 dBf,
 2.0 μ V (75 ohms IHF)
 23.0 μ V (75 ohms DIN)

AM: 30 μ V

50 dB Quieting sensitivity

FM: Mono 17.2 dBf, 2.0 μ V (75 ohms)
 Stereo 37.2 dBf, 20.0 μ V (75 ohms)

Capture ratio

FM: 2.0 dB

Image rejection ratio

FM: 40 dB (U.S. & Canadian models)
 85 dB (Other area models)
 AM: 40 dB

IF rejection ratio

FM: 90 dB
 AM: 40 dB

Signal to noise ratio

FM: Mono 73 dB, IHF
 Stereo 67 dB, IHF
 AM: 40 dB

Selectivity

FM: 50 dB DIN
 (± 300 kHz at 40 kHz Devi.)

AM Suppression Ratio

50 dB

Harmonic distortion

FM: Mono 0.2%
 Stereo 0.3%
 AM: 0.7 %

Frequency response

FM: 30 to 15,000 Hz (± 1.5 dB)

Stereo separation

FM: 45 dB at 1,000 Hz
 30 dB at 100 to 10,000 Hz

Stereo threshold

FM: 17.2 dBf, 2.0 μ V (75 ohms)

General

Clock precision

monthly error: ± 30 seconds
 (at 25 degrees Celsius)

Power supply

AC 120 V, 60 Hz
 AC 230-240 V, 50 Hz
 AC 220-230 V, 50 Hz/60 Hz

Power consumption

44 W

Dimensions (W X H X D)

155 X 94 X 285 mm
 6-1/8" X 3-1/16" X 11-1/4"

Weight

2.9 kg, 6.4 lbs

Specifications and external appearance are subject to change without notice as a result of product improvement.

SERVICE PROCEDURES

1. Replacing the fuses



This symbol located near the fuses 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 fusibles de meme type. Ce dernier est la qu le present symbol est appse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252082 or	0.315A-EAWK,Fuse <PP,GT,GR>
	252232 or	315MA-SE-TL250V,Fuse
	252266	315MA-SE-TL350V,Fuse
	252156 or	1A-UL/T-237,Fuse<DT>
	252250	1A-T/UL-ST2,Fuse
	Note: <PP>: 230-240V model only	
	<DT>: 220V model only	
	<GT>: 120V model only	
	<GR>: 220-230V model only	

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. Press and hold down the MEMORY button, then press the DISPLAY button.
2. Press the STANDBY/ON button.

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 setting.

3. Safety-check out

(120V model only)

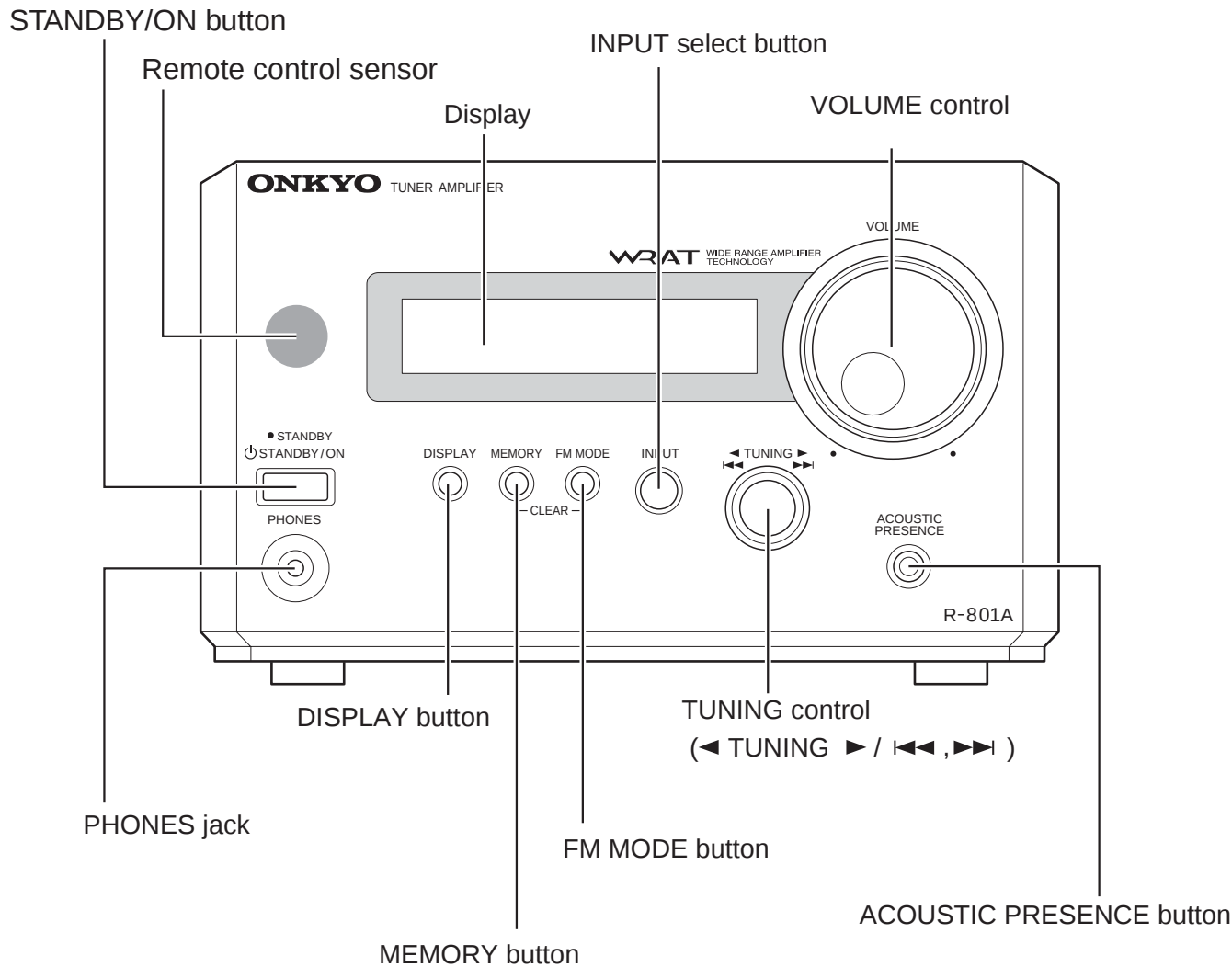
After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and screw on the back panel. Specifications: 3.3Mohm+/-10% at 500V.

4. Memory Preservation

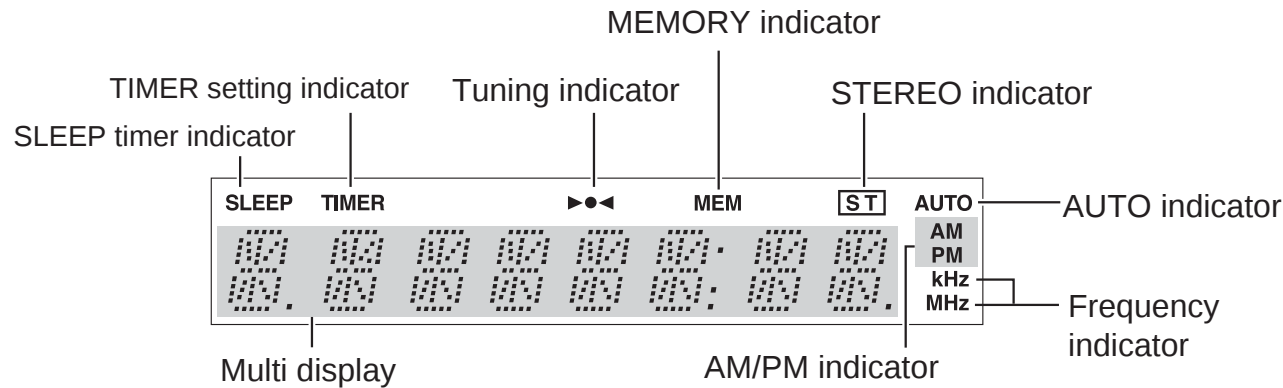
This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.

The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

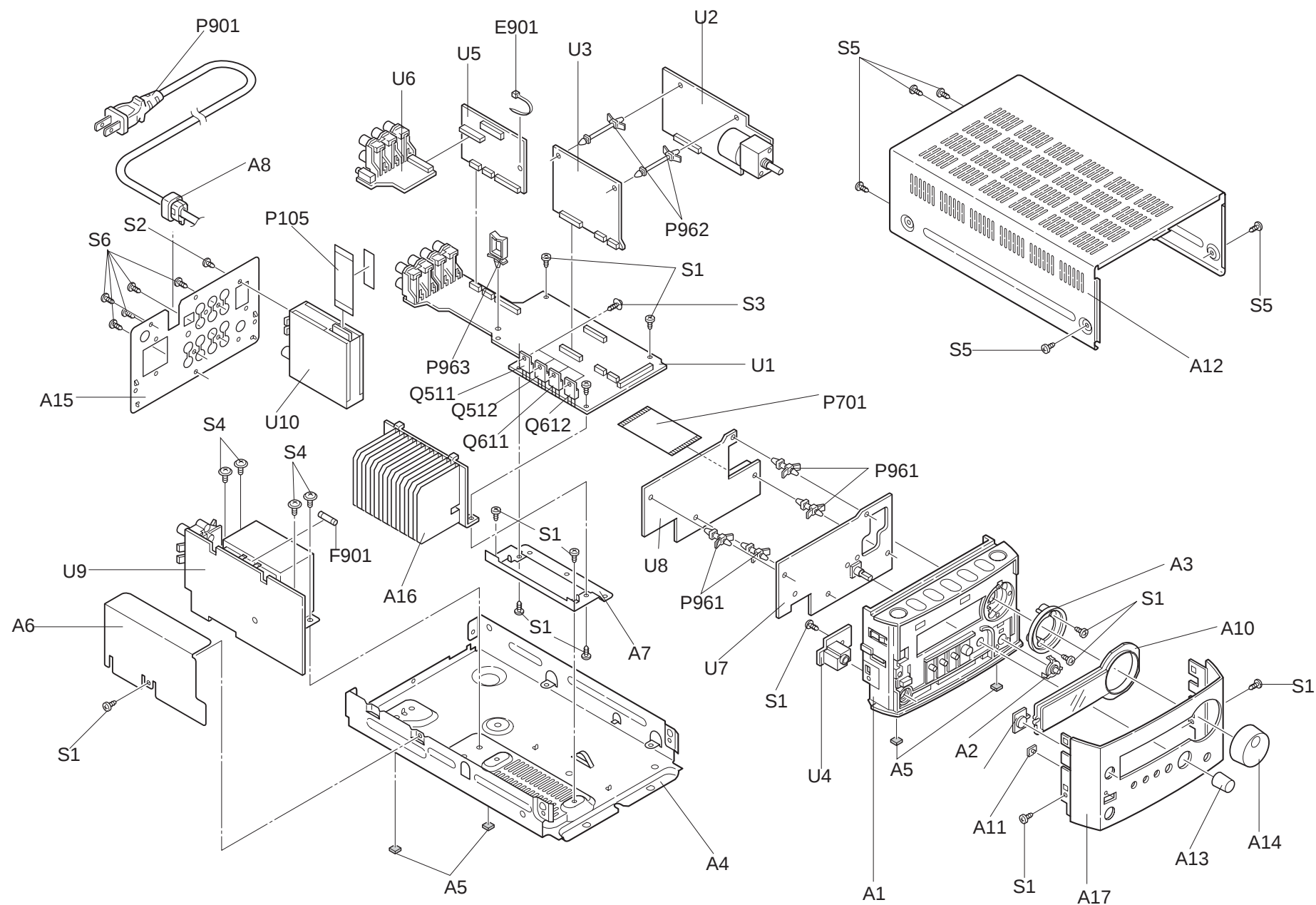
PANEL VIEW FRONT PANEL



Display section



EXPLODED VIEW



PARTS LIST

EXPLODED VIEW SECTION

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A1	27111247	Front bracket	U1	1A916536-1B	NAAF-7336-1B,Main PC board <PP>
A2	28325974A	Acoustic presence ass'y,Knob		1A916536-1C	NAAF-7336-1C,Main PC board <DT>
A3	27268056	Volume,Guide		1A916536-1D	NAAF-7336-1D,Main PC board <GR>
A4	27100410	Chassis		1A916536-1E	NAAF-7336-1E,Main PC board <GT>
A5	28141489	Cushion	U2	1A916537-1B	NAAF-7337-1B,Acoustic PC board <PP>
A6	28175276	Insulation plate		1A916537-1C	NAAF-7337-1C,Acoustic PC board <DT>
A7	27130872	HT,Bracket		1A916537-1D	NAAF-7337-1D,Acoustic PC board <GR>
A8	27300750	▲ #2271,Bushing		1A916537-1E	NAAF-7337-1E,Acoustic PC board <GT>
A10	28191953	Clear plate <PP>	U3	1A916538-1B	NAAF-7338-1B,Driver PC board <PP>
	28191940	Clear plate <DT,GR,GT>		1A916538-1C	NAAF-7338-1C,Driver PC board <DT>
A11	28198938	Facet		1A916538-1D	NAAF-7338-1D,Driver PC board <GR>
A12	28184824	Cover		1A916538-1E	NAAF-7338-1E,Driver PC board <GT>
A13	28325962	Tuner,Knob	U4	1A916539-1B	NAETC-7339-1B,Headphone PC board <PP>
A14	28325963	Volume ass'y,Knob		1A916539-1C	NAETC-7339-1C,Headphone PC board <DT>
A15	27122905	Rear panel		1A916539-1D	NAETC-7339-1D,Headphone PC board <GR>
A16	27160478	RAD-147,Heat sink		1A916539-1E	NAETC-7339-1E,Headphone PC board <GT>
A17	27212348	Front panel <PP>	U5	1A916540-1B	NAETC-7340-1B,Connection PC board <PP>
	27212347	Front panel <DT,GR,GT>		1A916540-1C	NAETC-7340-1C,Connection PC board <DT>
F901	252082 or	▲ 0.315A-SE-EAWK,Fuse <PP,GR,GT>		1A916540-1D	NAETC-7340-1D,Connection PC board <GR>
	252232 or	▲ 315MA-SE-TL250V,Fuse <PP,GR,GT>		1A916540-1E	NAETC-7340-1E,Connection PC board <GT>
	252266	▲ 315MA-SE-TL250V,Fuse <PP,GR,GT>	U6	1A916541-1B	NAETC-7341-1B,Input/Output PC board <PP>
	252156 or	▲ 1A-UL/T-237,Fuse <DT>		1A916541-1C	NAETC-7341-1C,Input/Output PC board <DT>
	252250	▲ 1A-T/U/L-ST2,Fuse <DT>		1A916541-1D	NAETC-7341-1D,Input/Output PC board <GR>
P901	253332HIT or	▲ AS-UC-2,Power supply cord <DT>		1A916541-1E	NAETC-7341-1E,Input/Output PC board <GT>
	253333VOL	▲ AS-UC-2,Power supply cord <DT>	U7	1A916542-1B	NADIS-7342-1B,Display PC board <PP>
	253335HIT or	▲ AS-CEE,Power supply cord <PP,GT>		1A916542-1C	NADIS-7342-1C,Display PC board <DT>
	253336VOL	▲ AS-CEE,Power supply cord <PP,GT>		1A916542-1D	NADIS-7342-1D,Display PC board <GR>
	253337HIT or	▲ AS-CCEE,Power supply cord <GR>		1A916542-1E	NADIS-7342-1E,Display PC board <GT>
	253338VOL	▲ AS-CCEE,Power supply cord <GR>	U8	1A916543-1B	NADG-7343-1B,Microprocessor PC board <PP>
Q511,Q611	2203595 or	● KTC2026-GR,Transistor		1A916543-1C	NADG-7343-1C,Microprocessor PC board <DT>
	2203383 or	● 2SC3851-O,Transistor		1A916543-1D	NADG-7343-1D,Microprocessor PC board <GR>
	2203384 or	● 2SC3851-Y,Transistor		1A916543-1E	NADG-7343-1E,Microprocessor PC board <GT>
	2203385 or	● 2SC3851-G,Transistor	U9	1A916544-1B	NAPS-7344-1B,Power supply PC board <PP>
	2203594	● KTC2026-Y,Transistor		1A916544-1C	NAPS-7344-1C,Power supply PC board <DT>
Q512,Q612	2203615 or	● KTA1046-GR,Transistor		1A916544-1D	NAPS-7344-1D,Power supply PC board <GR>
	2203393 or	● 2SA1488-O,Transistor		1A916544-1E	NAPS-7344-1E,Power supply PC board <GT>
	2203394 or	● 2SA1488-Y,Transistor	U10	240135 or	TFCE1E512A
	2203395 or	● 2SA1488-G,Transistor		240139A	ENG07501QR
	2203614	● KTA1046-Y,Transistor			
S1	838130088	3TTB+8B,Self tapping screw			
S2	838430068	3TTB+6B(BC),Self tapping screw			
S3	801433	3SMS8W.SW+14B(BC),Self tapping screw			
S4	830440069	4TTC+6C(BC),Self tapping screw			
S5	838930088	3TTB+8B(UN),Self tapping screw			
T901	2301558	▲ NPT-1427P,Power transformer <PP>			
	2301557	▲ NPT-1427D,Power transformer <DT>			
	2301559	▲ NPT-1427G,Power transformer <GR,GT>			
E901	260208	BINDER(CLAMPER)UL			
P105	2047150512	NCFC7-150512,FFC			
P701	2047270512	NCFC7-270512,FFC			
P961	27190011	KGLS-6S,Holder			
P962	27190470	HOLDER KGLS-18S,Holder			

CAUTION:

Replacement for transistor of mark●, if necessary must be made from the same beta group (hFE) as the original type.

Note
<PP>.....European model only
<DT>.....120V model only
<GT,GR>...220-230V model only
THE COMPONENTS IDENTIFIED BY MARK▲ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

SCHEMATIC DIAGRAM 3

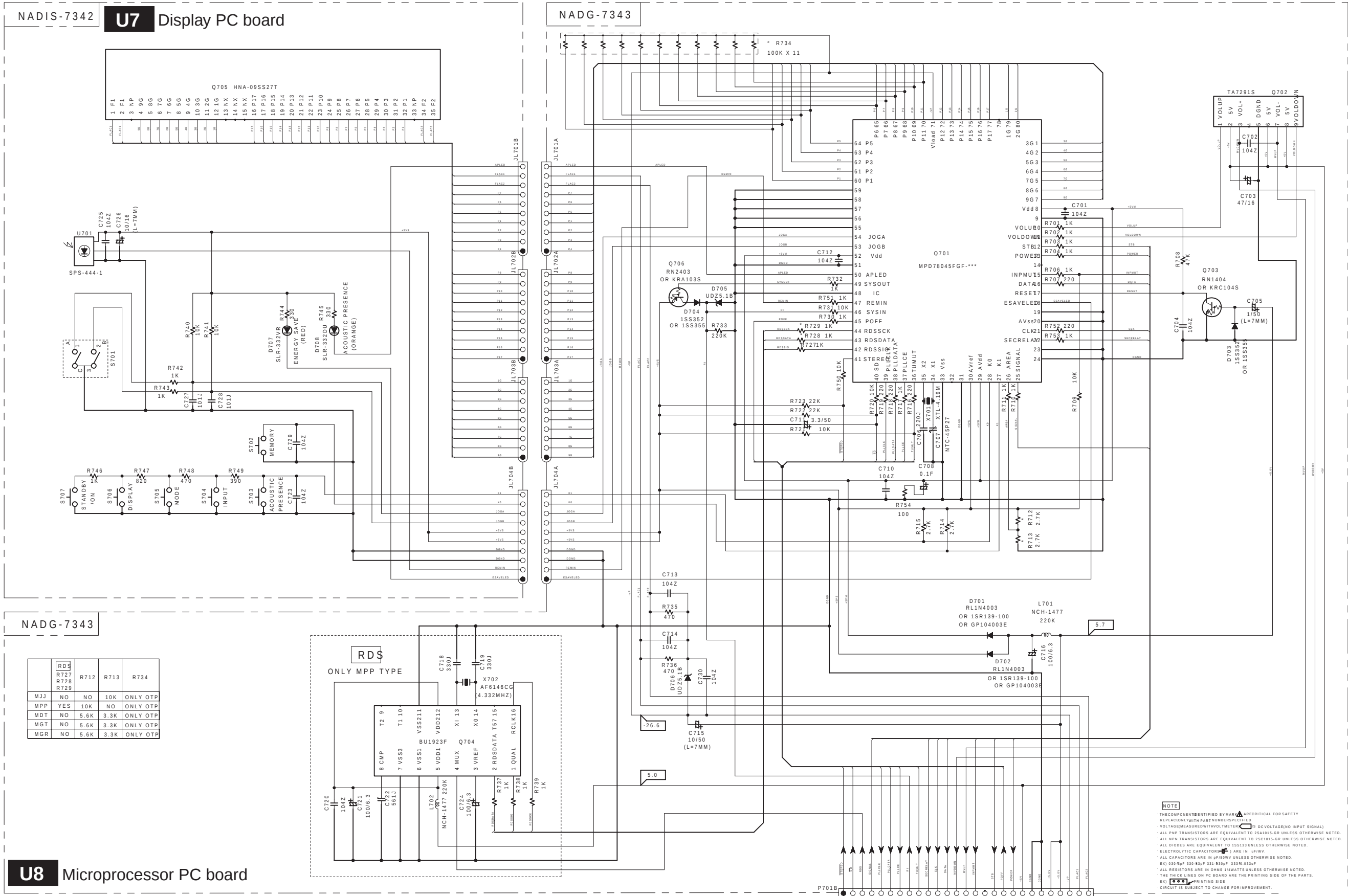
1

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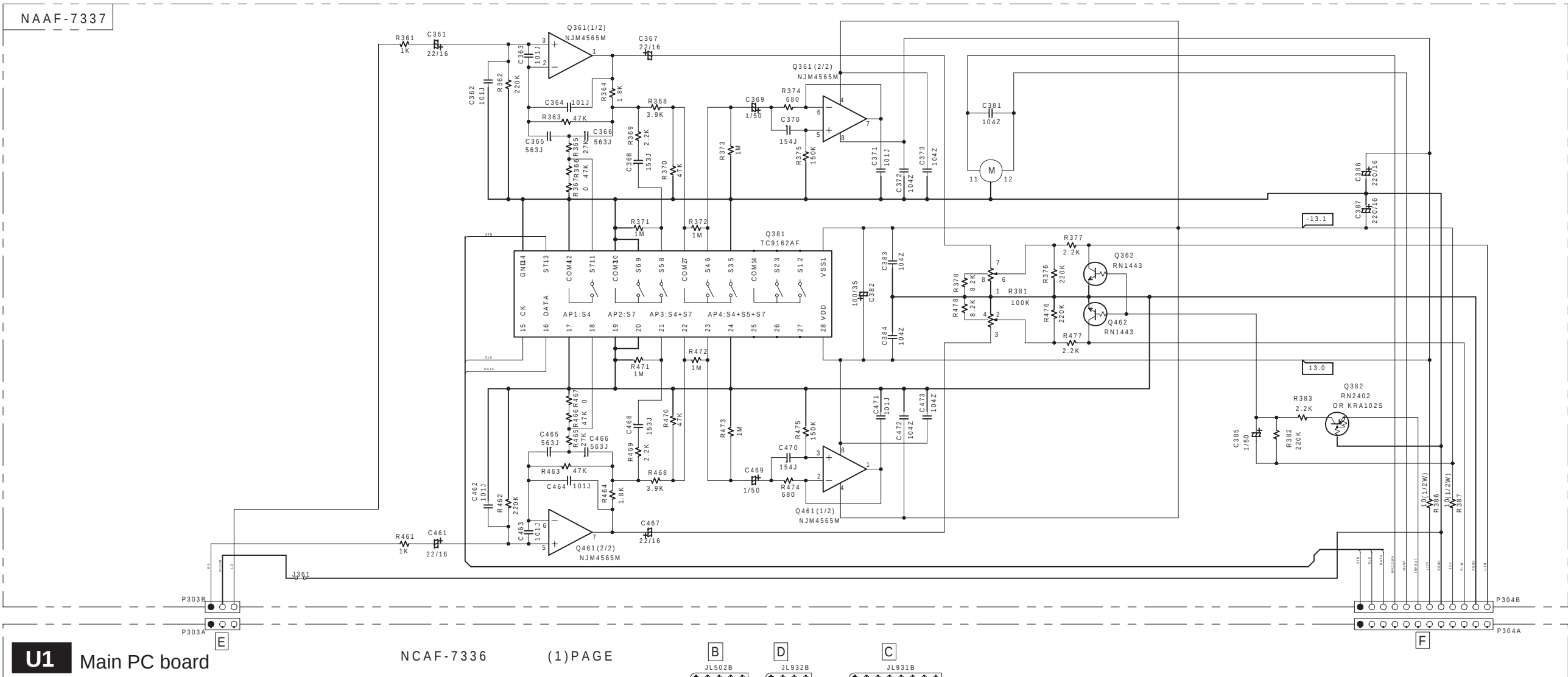
5



SCHEMATIC DIAGRAM 2

U2 Acoustic PC board

NAAF-7337



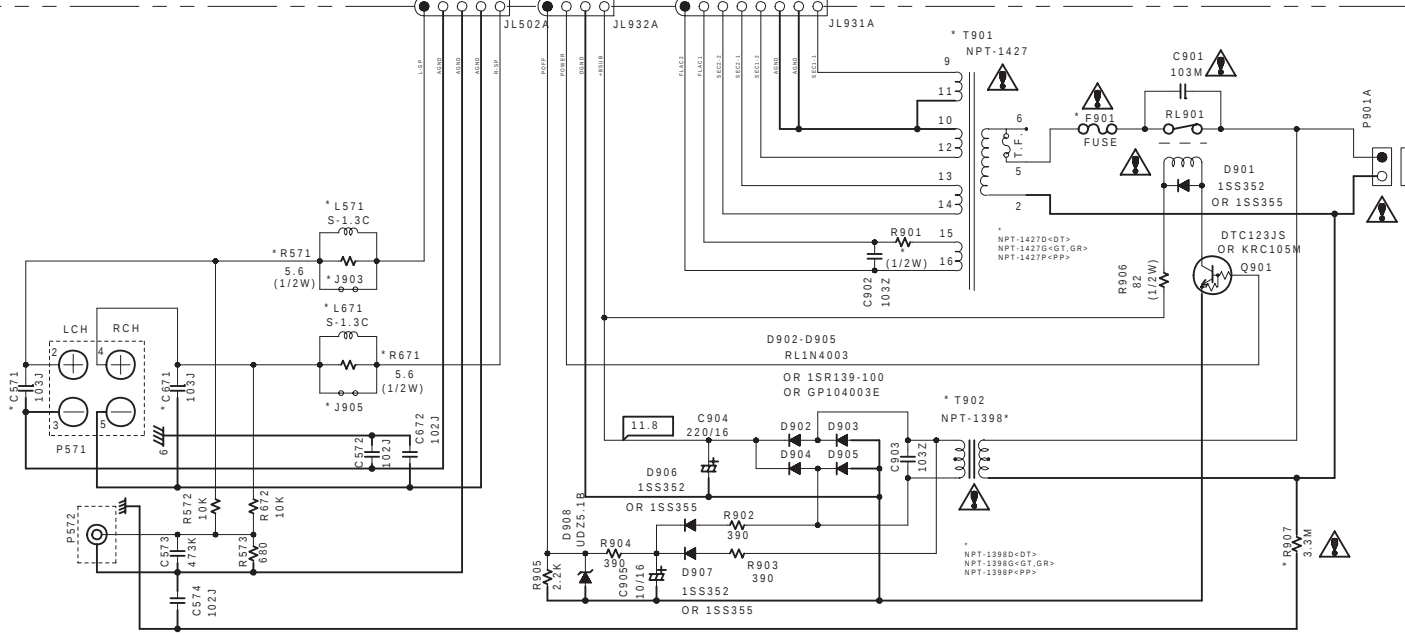
U1 Main PC board

NCAF-7336

(1)PAGE

NAPS-7344

	C571, C671, L571, L671, R571, R671	J903, J905	F901	T901	T902	R907	R901
MJJ	NO	YES	1.25A/125V	NPT-1427J	NPT-1398J	NO	5.6
MPP	YES	NO	T315mAL250V	NPT-1427P	NPT-1398P	NO	10
MDT	YES	NO	1A/125V	NPT-1427D	NPT-1398D	YES	5.6
MG	YES	NO	T315mAL250V	NPT-1427G	NPT-1398G	NO	5.6
MGR	YES	NO	T315mAL250V	NPT-1427G	NPT-1398G	NO	5.6



U9 Power supply circuit PC board

NOTE

- THE COMPONENTS IDENTIFIED BY MARKING ARE CRITICAL FOR SAFETY. REPLACEMENT PARTS MUST BE IDENTICAL TO THE ORIGINAL PARTS.
- VOLTAGE MEASURED WITH VOLT METER IS DC VOLTAGE (NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS ARE IN μ F/VV.
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
- EX) 030-8pF 330-83pF 331-830pF 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SCHEMATIC DIAGRAM 1

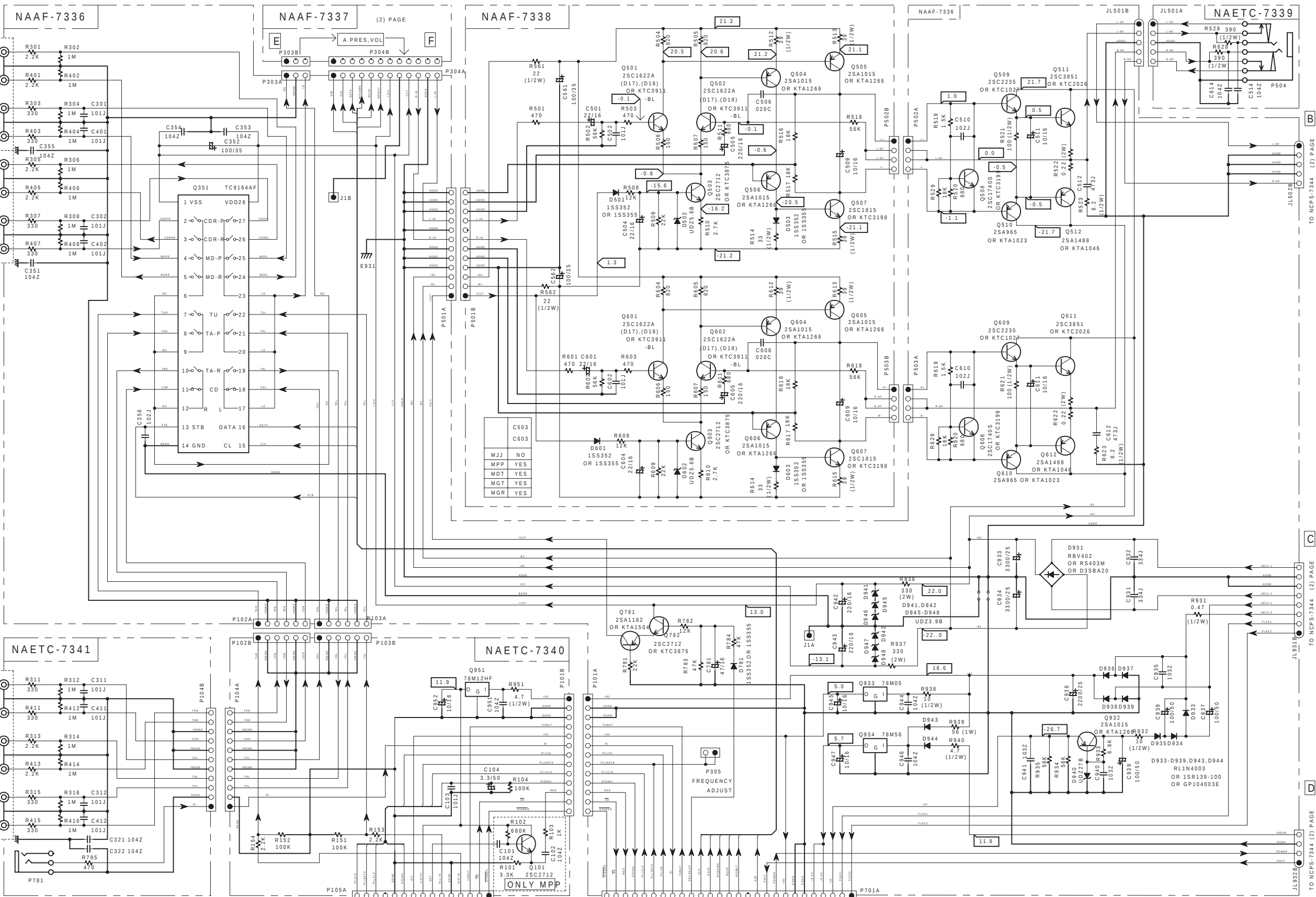
U2 Acoustic PC board

U3 Driver PC board

U4 Headphone PC board

U1

Main PC board



NOTE

1. THE COMPONENT IDENTIFIED BY MARK IS CRITICAL FOR SAFETY REPLACEMENT WITH PART NUMBER SPECIFIED.

2. VOLTAGE MEASURED WITH METER IS DC VOLTAGE (INPUT SIGNAL).

3. ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.

4. ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.

5. ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.

6. ELECTROLYTIC CAPACITORS ARE IN μ F/VOL.

7. ALL CAPACITORS ARE IN pF/VOL UNLESS OTHERWISE NOTED.

8. EX) 500pF 330k 30V 101-300pF 330M 0330V

9. ALL RESISTORS ARE IN OHMS (UNLESS OTHERWISE NOTED).

10. ALL RESISTORS ARE IN OHMS (UNLESS OTHERWISE NOTED).

11. THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.

12. EX) PRINTING SIDE.

13. CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

U6 Input/Output PC board

U5 Connection PC board

G

TO TUNER PACK

A

TO NCDG-7343

(3) PAGE

RIGHT

P101A

P101B

P101C

P101D

P101E

P101F

P101G

P101H

P101I

P101J

P101K

P101L

P101M

P101N

P101O

P101P

P101Q

P101R

P101S

P101T

P101U

P101V

P101W

P101X

P101Y

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P101U

P101V

P101W

P101X

P101Y

P101Z

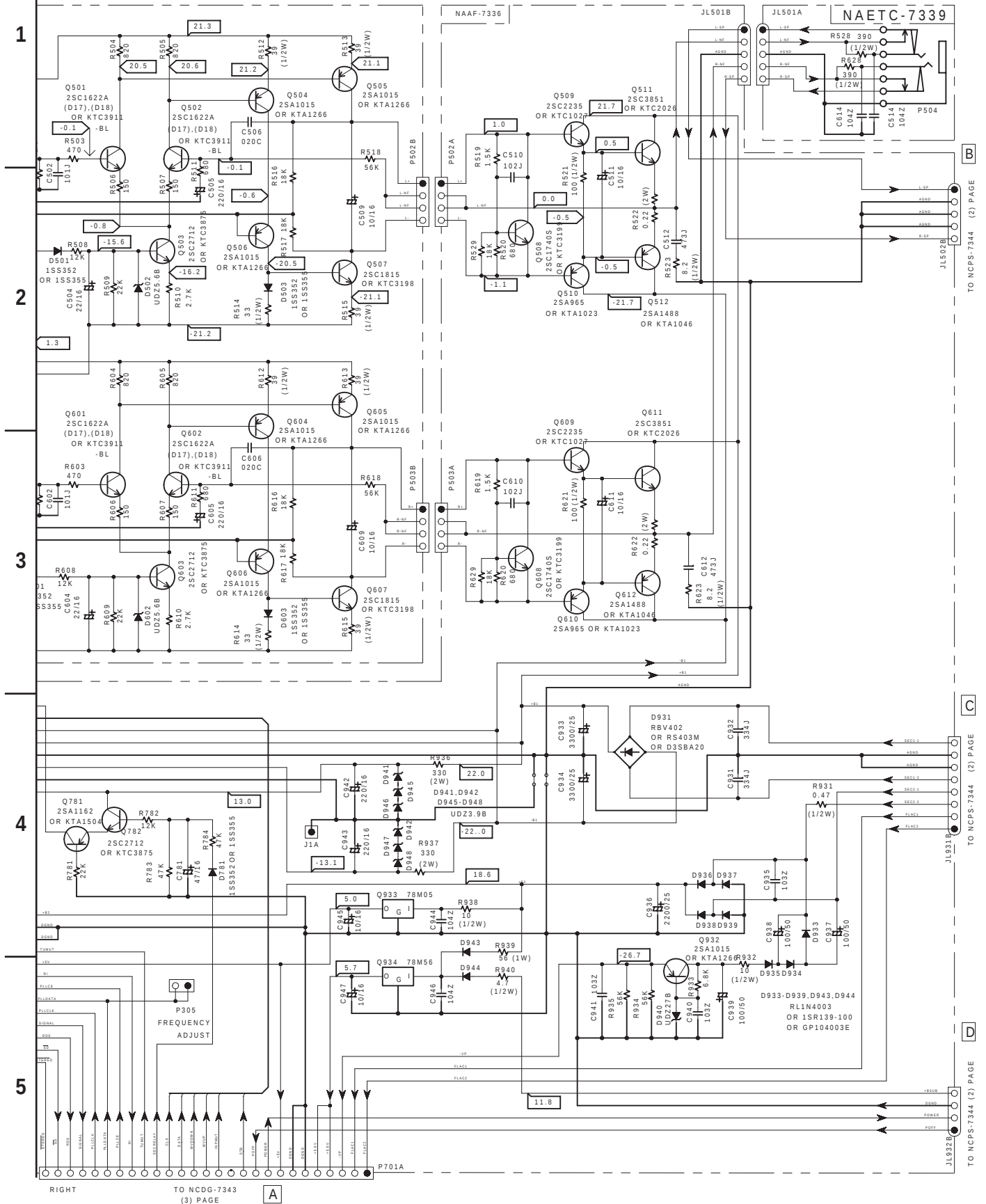
P101A

SCHEMATIC DIAGRAM 1-2

U3 Driver PC board

U1 Main PC board

U4 Headphone PC board



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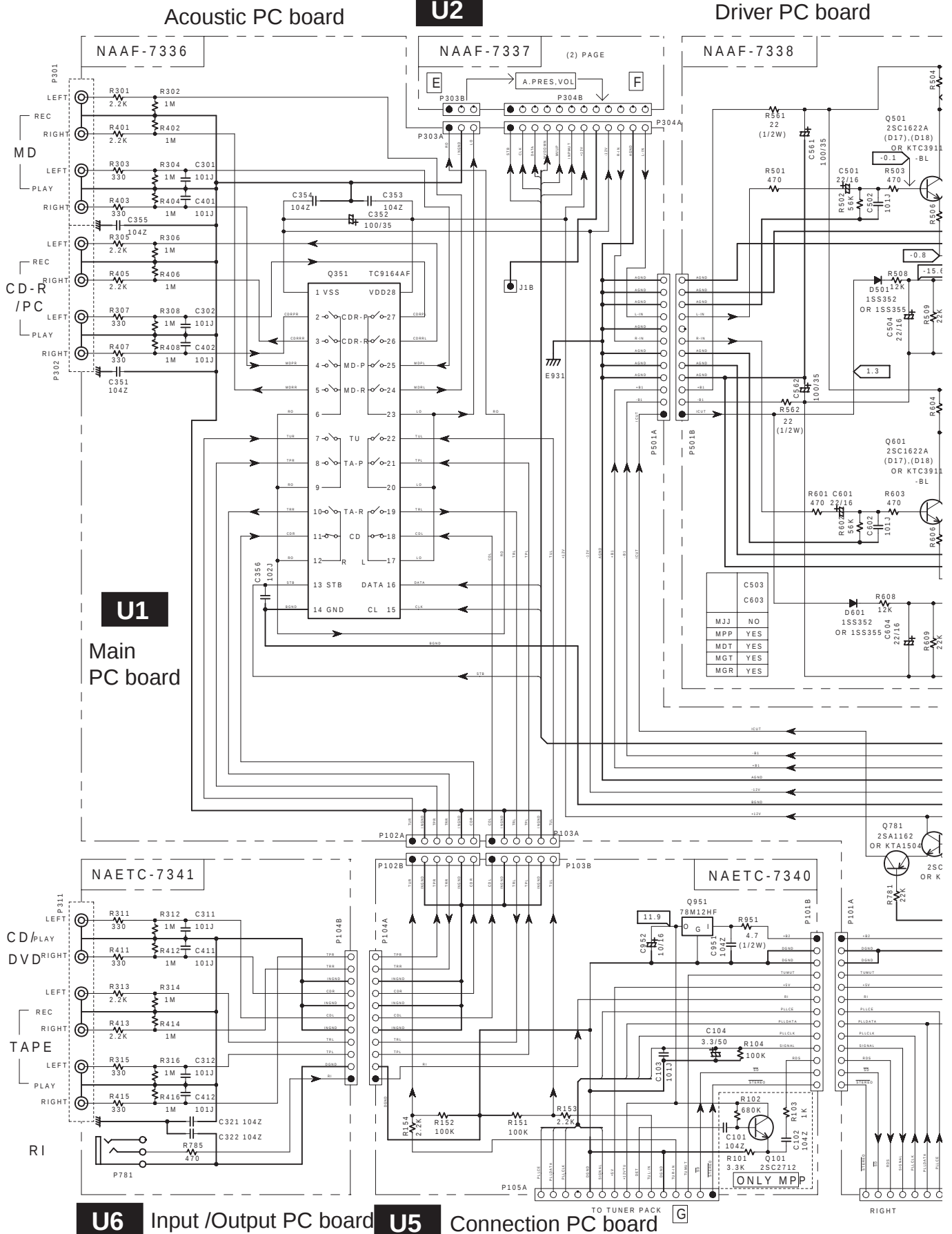
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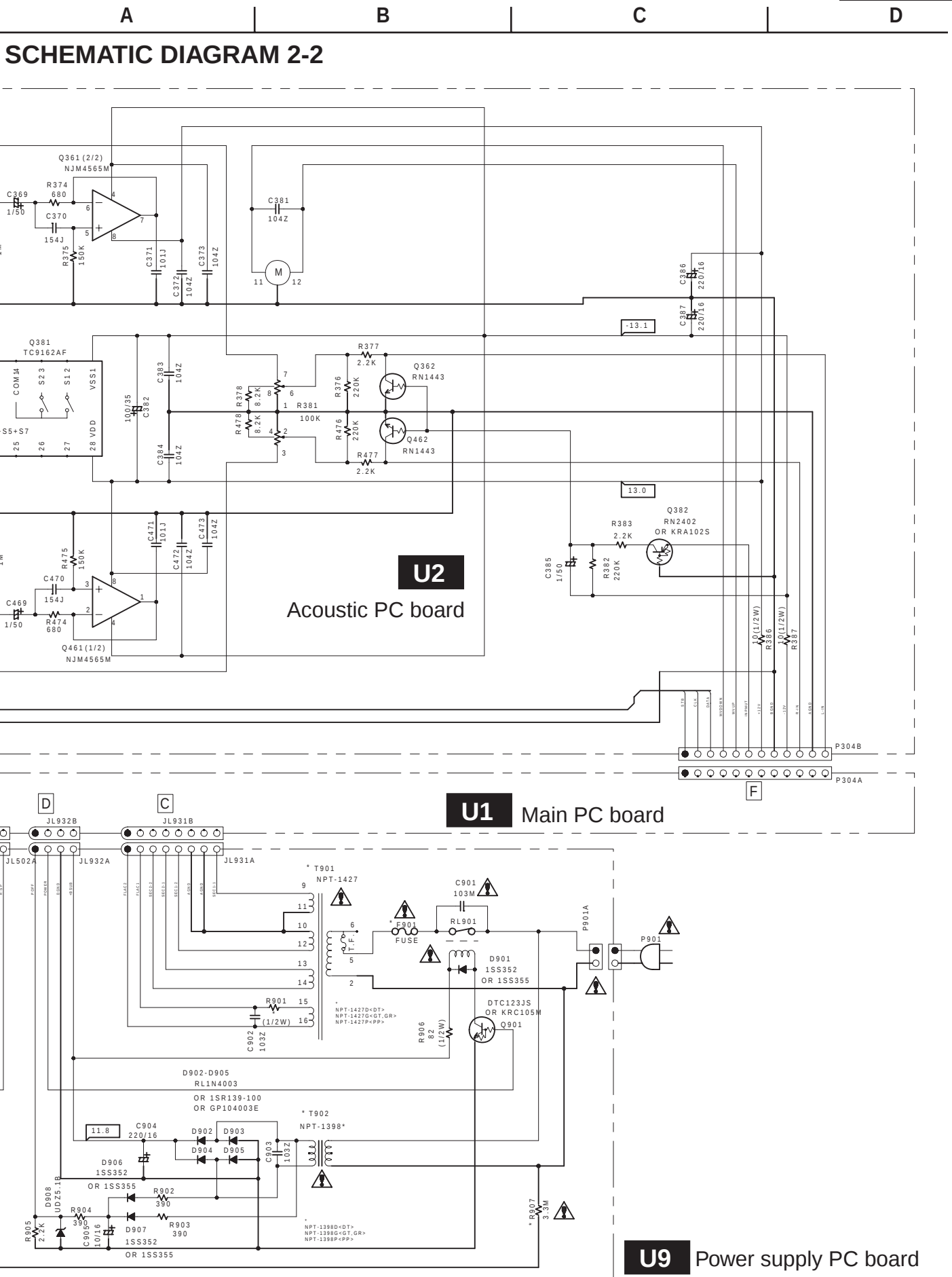
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SHEMATIC DIAGRAM 1-1

U3

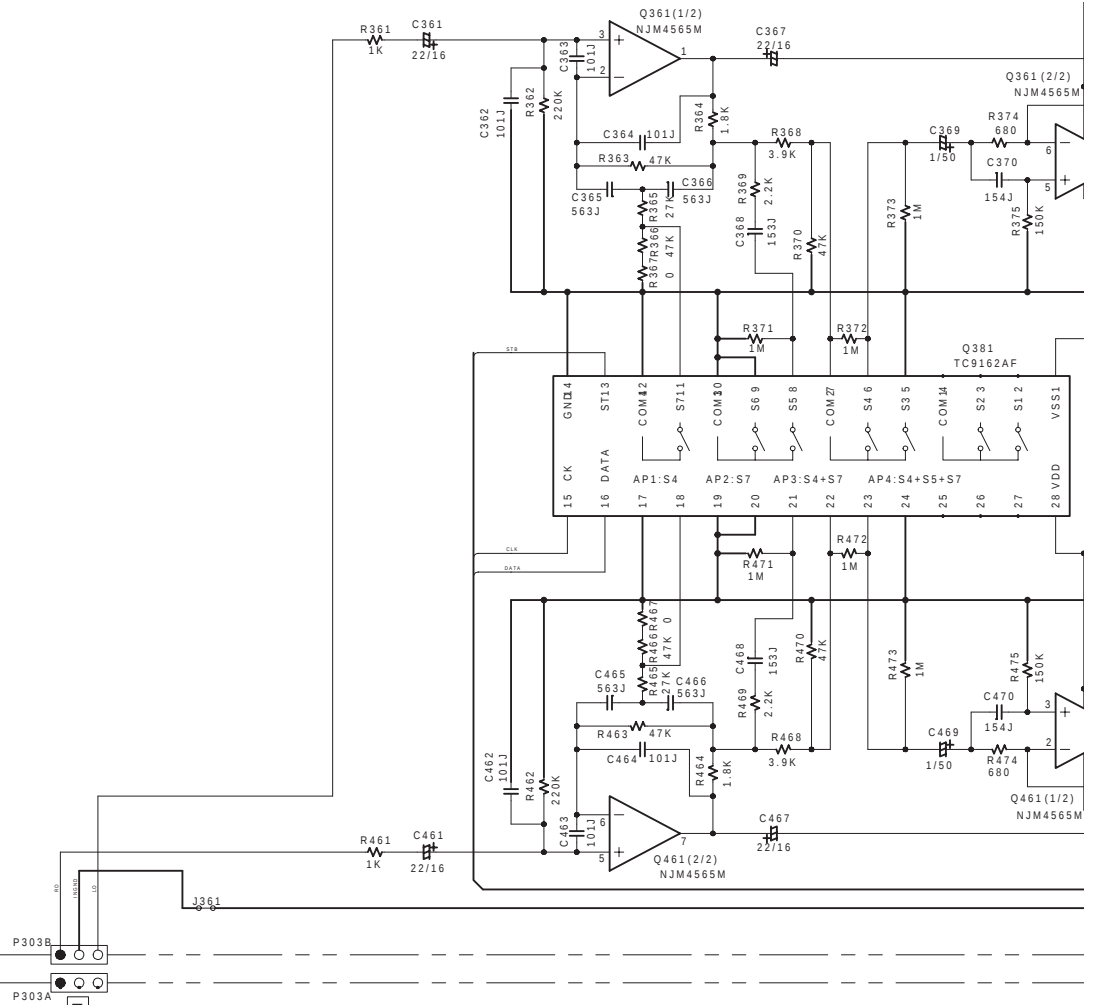




SCHEMATIC DIAGRAM 2-1

U2 Acoustic PC board

NAAF-7337



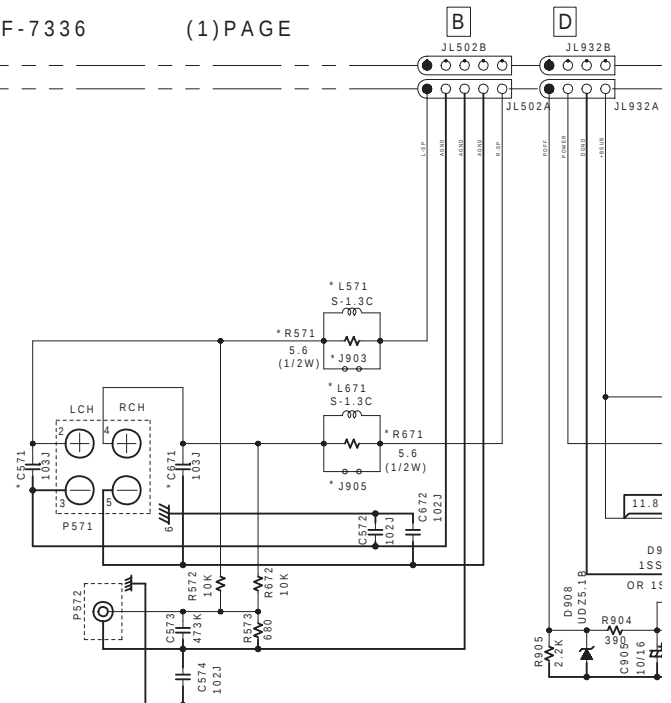
U1 Main PC board

NCAF-7336

(1) PAGE

NAPS-7344

C571,C671 L571,L671 R571,R671		J903 J905	F901	T901	T902	R907	R90
MJJ	NO	YES	1.25A/125V	NPT-1427J	NPT-1398J	NO	5.6
MPP	YES	NO	T315mAL250V	NPT-1427P	NPT-1398P	NO	10
MDT	YES	NO	1A/125V	NPT-1427D	NPT-1398D	YES	5.6
MGt	YES	NO	T315mAL250V	NPT-1427G	NPT-1398G	NO	5.6
MGR	YES	NO	T315mAL250V	NPT-1427G	NPT-1398G	NO	5.6



U8

Microprocessor PC board

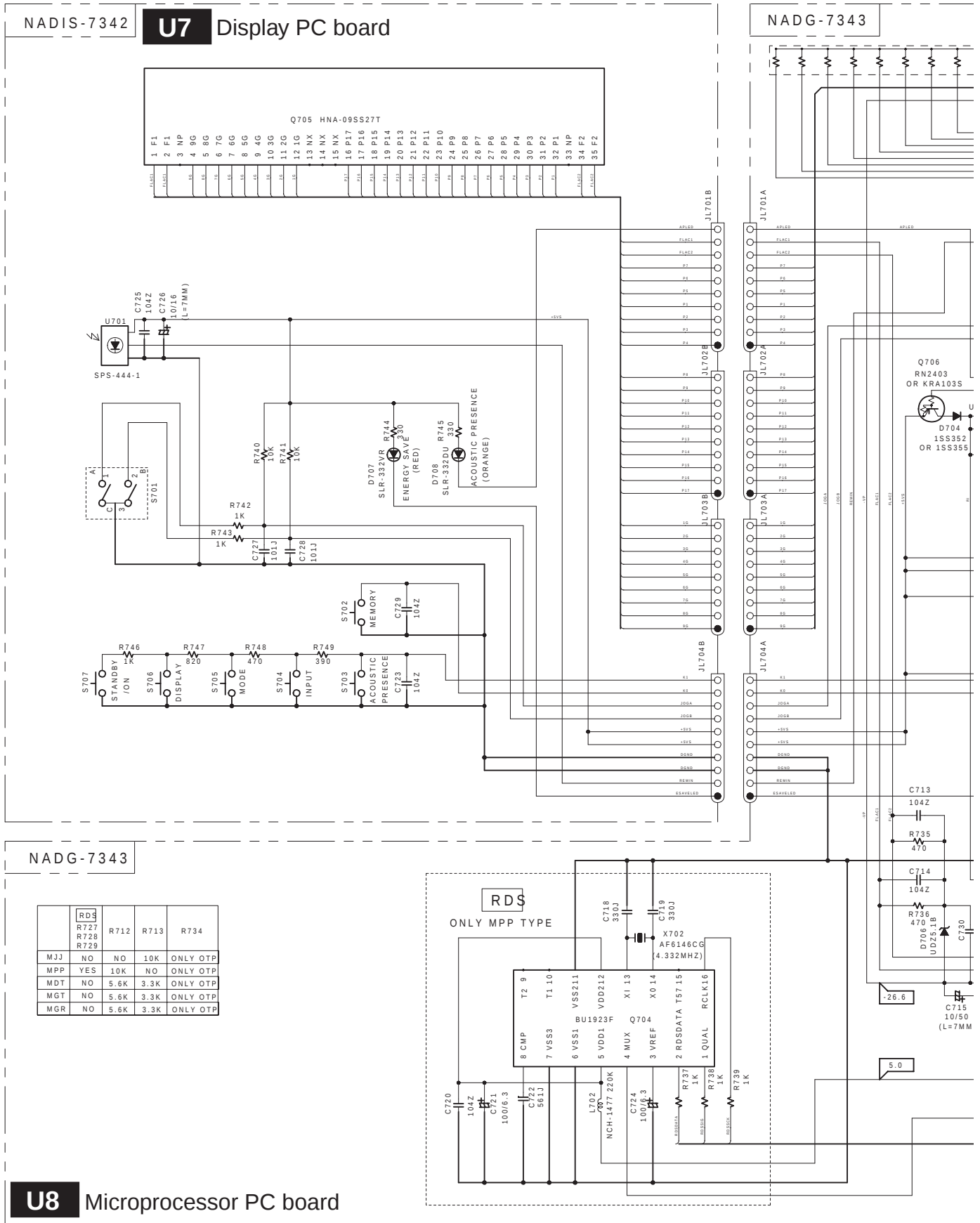


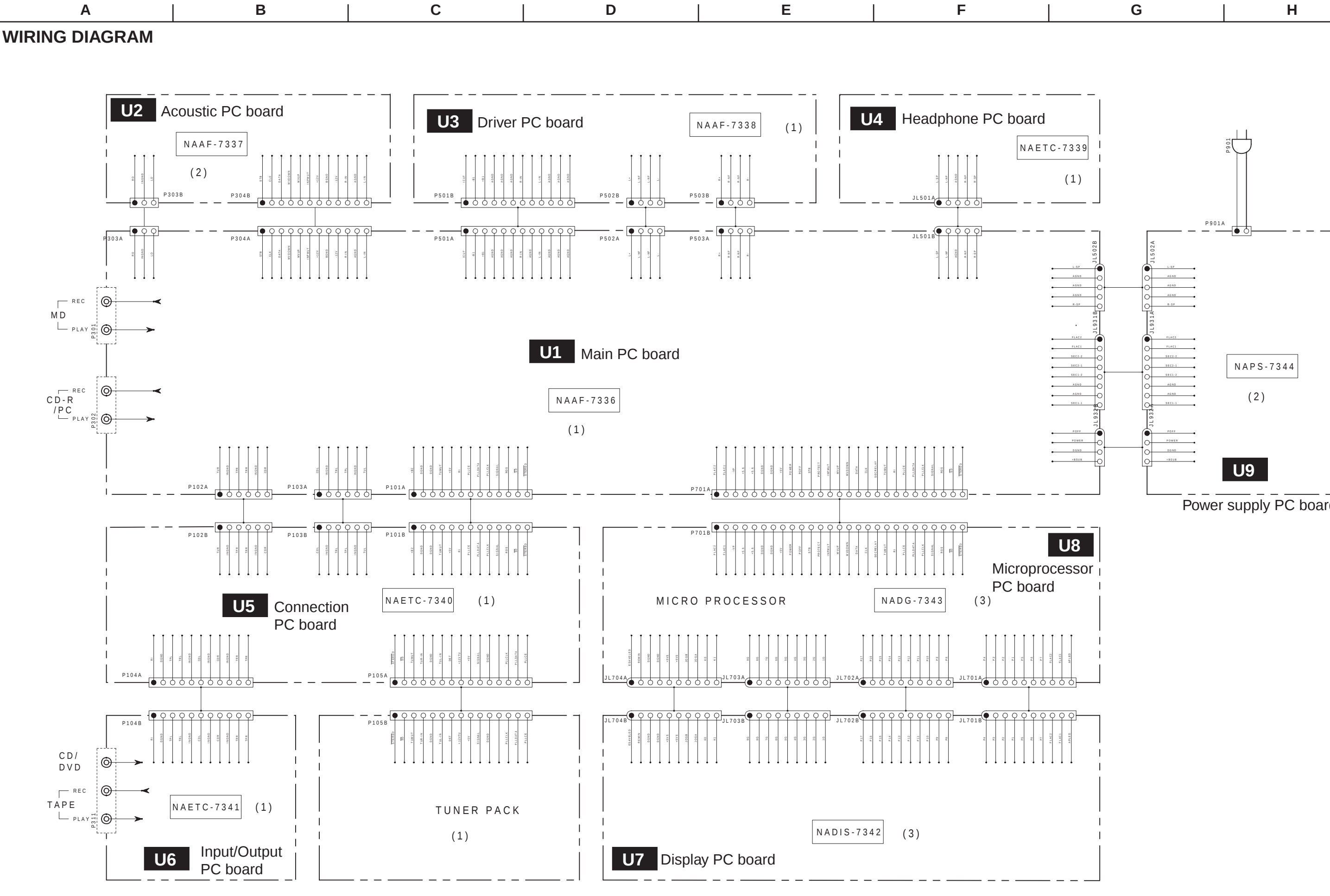
SCHEMATIC DIAGRAM 3-1

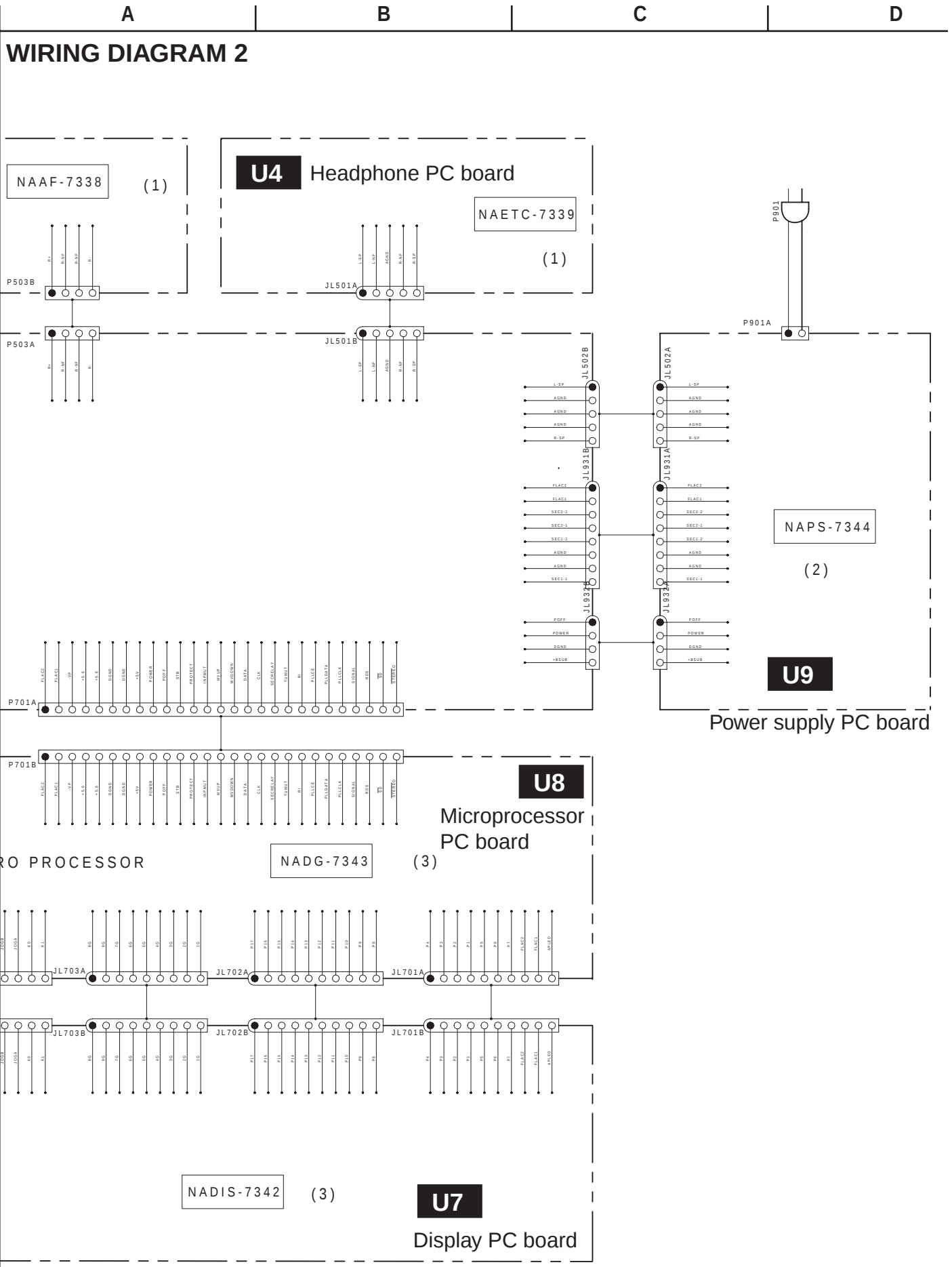
NADIS-7342

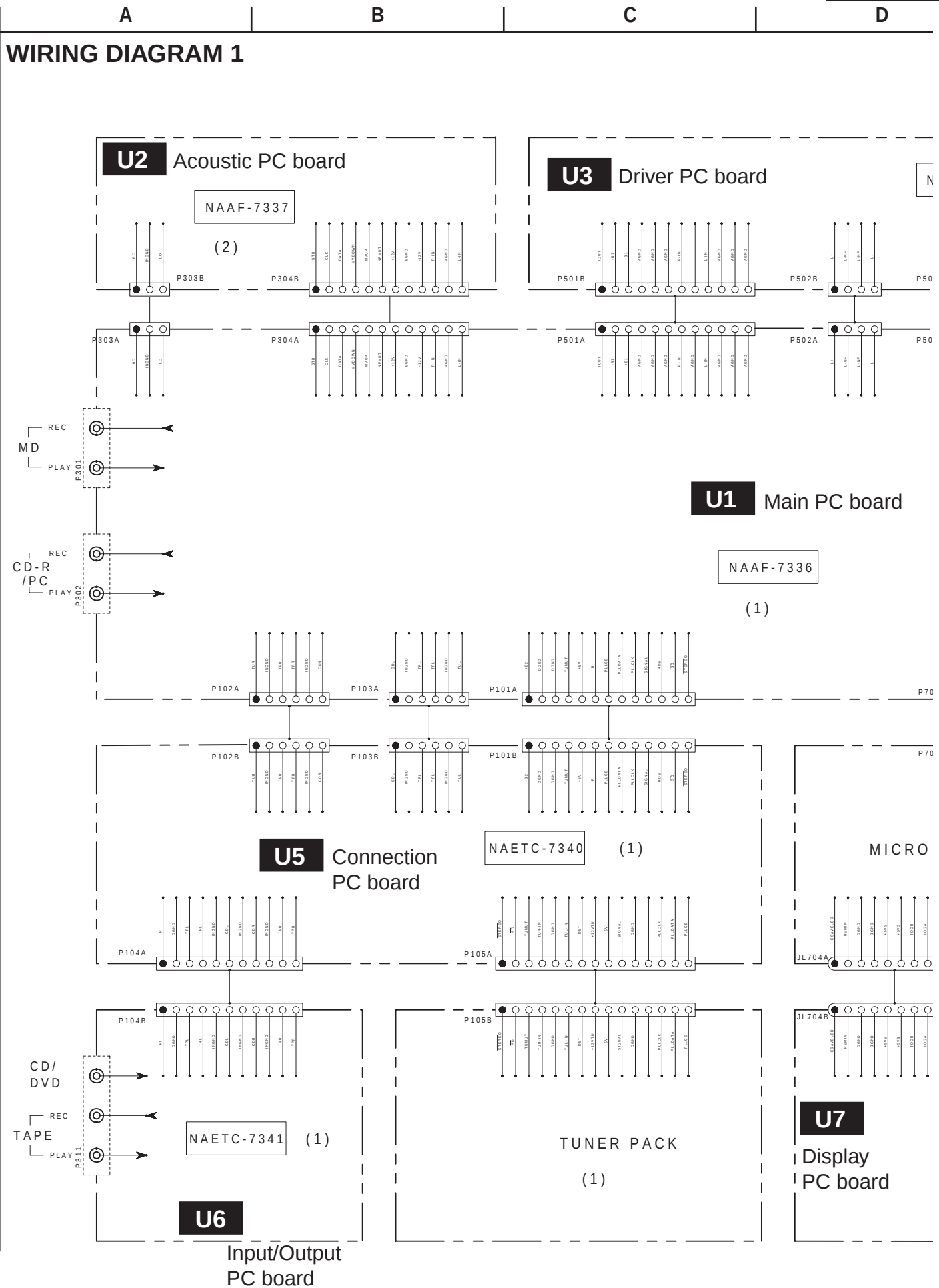
U7 Display PC board

NADG-7343









Soldering side

PRINTED CIRCUIT BOARD FROM SOLDERING SIDE 1-1

U1 Main PC board
NAAF-7336

Soldering side

Component side

1

1

1

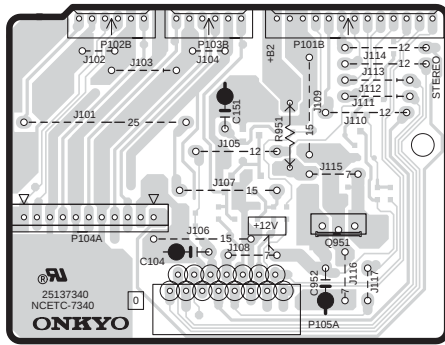
1

1

D

PRINTED CIRCUIT BOARD FROM SOLDERING SIDE 2-1

5

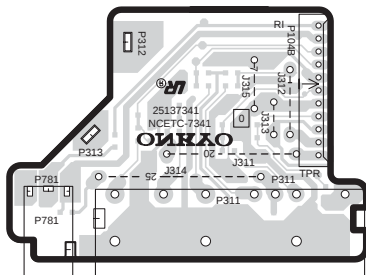
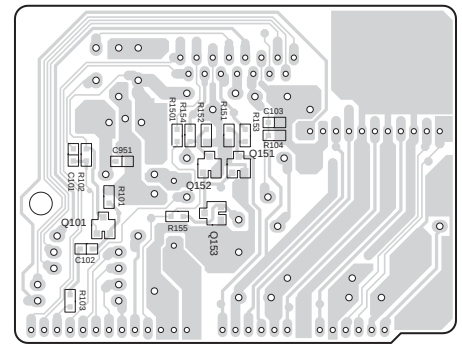


U5

Connection PC board
NAETC-7340

Component
side

Soldering
side

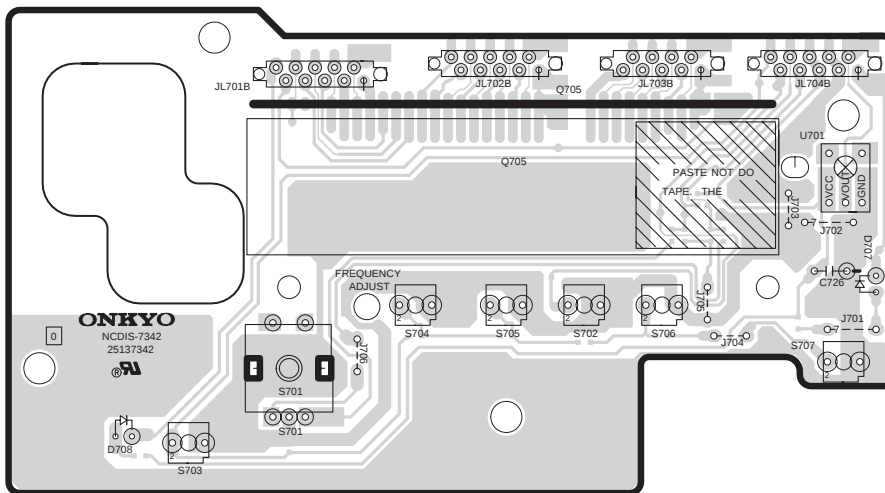
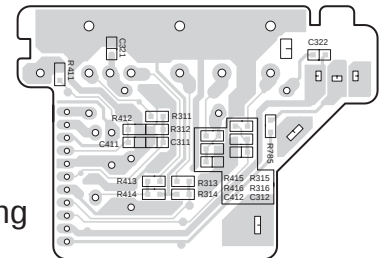


U6

Input/Output
PC board
NAETC-7341

Component
side

Soldering
side

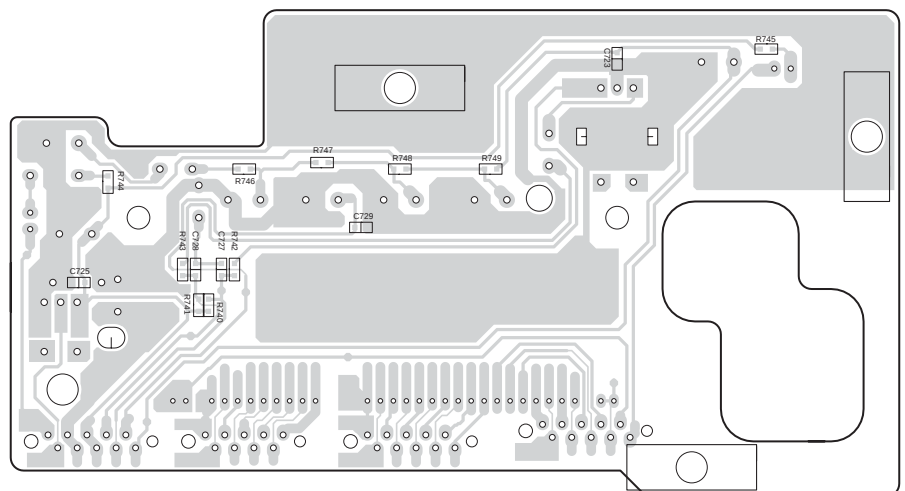


U7

Display PC board
NADIS-7342

Component
side

Soldering
side



PARTS LIST

CIRCUIT SECTION 1

U1	Main PC board(NAAF-7336-1B/1C/1D/1E)		U1	Main PC board(NAAF-7336-1B/1C/1D/1E)	
REF. NO.	PART NO	DESCRIPTION	REF. NO.	PART NO	DESCRIPTION
	ICs			Capacitors	
Q351	22241221R2	TC9164AF	C352,C937	354761019	100uF,35V,Elect.
Q933	222780055JRC or	78M05(NJM78M05FA)	C511,C611	354741009	10uF,16V,Elect.
	222780055MIT or	78M05L(M5F78M05L)	C781	354744709	47uF,16V,Elect.
	222780055NEC	78M05HF(MPC78M05HF)	C938,C939	354781019	100uF,50V,Elect.
Q934	222780565JRC	78M56(NJM78M56FA)	C942,C943	354742219	200uF,16V,Elect.
	Transistors		C945,C947	354741009	10uF,16V,Elect.
Q508,Q608	2215864 or	KTC3199-GR	C933,C934	393353327	3300uF,25V,Elect.
	2212115 or	2SC2458-GR	C936	393352227	3300uF,25V,Elect.
	2213284 or	2SC1740S-R	C512,C612	374724734	ECQ-V50V-473J,Plastic film
	2213285	2SC1740S-S	C931,C932	374723344	ECQ-V50V-334J,Plastic film
Q509,Q609	2216563 or	KTC1027-O	C512,C612	374724734	ECQ-V50V-473J,Plastic film
	2211654 or	2SC2235-Y	C931,C932	374723344	ECQ-V50V-334J,Plastic film
	2216564	KTC1027-Y		Resistors	
	2216573 or	KTA1023-O	R521,R621	443521014	100ohm +/-5%,1/2W,Metal oxide
Q510,Q610	2211644 or	2SA965-Y	R932,R938	442521004	10ohm +/-5%,1/2W,Metal oxide
	2216574	KTA1023-Y	R936,R937	442723314	330ohm +/-5%,2W,Metal oxide
	2216185R2 or	KTA1504-GR	R939	442625604	56ohm +/-5%,1W,Metal oxide
Q781	2214374R2	2SA1162-Y	R522,R622	4500027	0.22ohm +/-5%,2W,Metal plate
Q782	2216175R2 or	KTC3875-GR	R523,R623	453530824	8.2ohm +/-5%,1/2W,Metal
	2213143R2 or	2SC2712-O	R931	453534794	0.47ohm +/-5%,1/2W,Metal
	2213144R2 or	2SC2712-Y	R940	452530474	4.7ohm +/-5%,1/2W,Metal
	2213145R2 or	2SC2712-GR	R522,R622	4800071	RSS2WK-0.22,Cement resistor
	2216173R2 or	KTC3875-O		Plugs	
	2216174R2	KTC3875-Y	P101A	25055709	NPLG-13P665
Q932	2215975 or	KTA1266-GR	P102A,P103A	25055702	NPLG-6P658
	2211455	2SA1015-GR	P304A,P501A	25055708	NPLG-12P664
			P305	25055038	NPLG-2P29
	Diodes		P502A,P503A	25055804	NPLG-4P760
D931	22380271 or	D3SBA20		Sockets	
	22380022 or	RBV402	JL501B,JL502B	25050269	NSCT-5P97
	22380285	RS403M	JL931B	25050272	NSCT-8P100
D933-D939	22380260 or	RL1N4003	JL932B	25050268	NSCT-4P96
	22380032 or	1SR139-100	P701A	25052223	NSCT-27P2120
	22380035	GP104003E	P303A	2009990697UL	NSAS-6P0972
D934,D944	22380032	1SR139-100		Jacks	
D943,D944	22380260 or	RL1N4003	P301,P302	25045575 or	NPJ-4PDRW389
	22380035	GP104003E		25045303	NPJ-4PDBL162
D781	223234R2 or	1SS352,Chip		Retainer	
	223269R2	1SS355,Chip	E931	27141059	Retainer
D940	224492700R2 or	UDZ27B,Zener			
	224552700R2	UDZS27B,Zener			
D941,D942	224490390R2 or	UDZ3.9B,Zener			
	224550390R2 or	UDZS3.9B,Zener			
D945-D948	224490390R2 or	UDZ3.9B,Zener			
	224550390R2	UDZS3.9B,Zener			

Note
<PP>.....European model only
<DT>.....120V model only
<GT,GR>...220-230V model only
THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PARTS LIST

CIRCUIT SECTION 2

Note <PP>.....European model only <DT>.....120V model only <GT,GR>...220-230V model only
--

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PARTS LIST CIRCUIT SECTION 3

U5 Connection PC board(NAETC-7340-1B/1C/1D/1E)			U8 Microprocessor PC board(NADG-7343-1B/1C/1D/1E)		
REF. NO.	PART NO	DESCRIPTION	REF. NO.	PART NO	DESCRIPTION
ICs			ICs		
Q951	222780125JRC or	NJM78M12FA	Q701	22241712R3	MPD78045FGF-133-3B9
	222780125MIT or	M5F78M12L	Q702	22240239	TA7291S
	222780125NEC	MPC78M12HF	Q704	22241297R2	BU1923F<PP>
Transistors			Transistors		
Q101	2216175R2 or	KTC3875-GR<PP>	Q703	2216210R2 or	KRC104S
	2213143R2 or	2SC2712-O<PP>		2214490R2	RN1404
	2213144R2 or	2SC2712-Y<PP>	Q706	2216230R2 or	KRA103S
	2213145R2 or	2SC2712-GR<PP>		2214540R2	RN2403
	2216173R2 or	KTC3875-O<PP>	Diodes		
	2216174R2	KTC3875-Y<PP>	D701,D702	22380260 or	RL1N4003
Capacitors				22380032 or	1SR139-100
C952	354741009	10uF,16V,Elect.		22380035	GP104003E
C104	354780339	3.3uF,50V,Elect.	D703,D704	223234R2 or	1SS352,Chip
Resistor				223269R2	1SS355,Chip
R951	452530474	4.7ohm +/-5%,1/2W,Metal oxide	D705,D706	224490510R2 or	UDZ5.1B,Zener
Plug				224550510R2	UDZ5.1B,Zener
P104A	25055707	NPLG-11P663	Oscillators		
Sockets			X701	3010261	HC-49/U03 4.19M10P
P102B,P103B	25051231	NSCT-6P1021	X702	3010203	AF6146CG<PP>
P101B	25051238	NSCT-13P1028	Coils		
P105A	25052248	NSCT-15P2145	L701	231237K220R2	NCH-1477
			L702	231237K220R2	NCH-1477<PP>
			Capacitors		
			C708	3000120	FMC0H104Z,EDL
			C703	353744709	47uF,16V,Elect.
			C705	353780109	1uF,50V,Elect.
			C711	354780339	3.3uF,50V,Elect.
			C715	353781009	10uF,50V,Elect.
			C716	354721019	100uF,6.3V,Elect.
			C721,C724	354721019	100uF,6.3V,Elect.<PP>
			C722	374725614	ECQ-B50V-561J<PP>
			C707	3060031	NTC-45P27
			Socket		
			P701B	25052223	NSCT-27P2120
			Wire holders		
			JL701A,JL702A	25051094	NSCT-10P881
			JL703A	25051093	NSCT-9P880
			JL704A	25051094	NSCT-10P881

U6 Input/Output PC board(NAETC-7341-1B/1C/1D/1E)		
REF. NO.	PART NO	DESCRIPTION
Jacks		
P311	25045571 or	NPJ-6PDRW386
	25045300	NPJ-6PDBL159
P781	25045504	NPJ-1PDBL319
Socket		
P104B	25051236	NSCT-11P1026

U7 Display PC board(NADIS-7342-1B/1C/1D/1E)		
REF. NO.	PART NO	DESCRIPTION
FL. Tube		
Q705	212223	HNA-09SS27T
LES		
D707	225338	SLR-332VR
D708	225340	SLR-332DU
Remote sensors		
U701	241335 or	SPS-444-1
	241341	SPS-444-1-E1
Capacitor		
C726	353741009	10uF,16V,Elect.
Push switch		
S702-S707	25035699	NPS-111-S662
Rotary Encoder		
S701	25065622	EC11101200
Wire holder		
JL703B	25051093	NSCT-9P880
JL701B,JL702B	25051094	NSCT-10P881

Note
<PP>.....European model only
<DT>.....120V model only
<GT,GR>...220-230V model only
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PARTS LIST

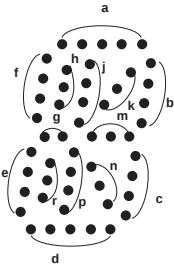
CIRCUIT PARTS 4

U9	Power supply PC board(NAPS-7344-1B/1C/1D/1E)	
REF. NO.	PART NO	DESCRIPTION
	Transistors	
Q901	2215830 or	KRC105M
	2213640	DTC123JS
	Diodes	
D902-D905	22380260 or	RL1N4003
	22380032 or	1SR139-100
	22380035	GP104003E
D901,D906	223234R2 or	1SS352,Chip
	223269R2	1SS355,Chip
D907	223234R2 or	1SS352,Chip
	223269R2	1SS355,Chip
D908	224490510R2 or	UDZ5.1B,Zener
	224550510R2	UDZS5.1B,Zener
	Coils	
L571,L671	231176S	S-1.3C
	Capacitors	
C904	354742219	220uF,16V,Elect.
C905	354741009	10uF,16V,Elect.
C901	3500196	RE275V-103M,Plastic film
C571,C671	374721034	ECQ-B50V-103J,Plastic
C573	374724734	ECQ-V50V-473J,Plastic
	Resistors	
R901	443521004	82ohm +/-5%,1/2W,Metal oxide<PP>
R906	443528204	10ohm +/-5%,1/2W,Metal oxide
R571,R671	453530564	5.6ohm +/-5%,1/2W,Metal
R901	453530564	5.6ohm +/-5%,1/2W,Metal<DT,GR,GT>
R907	431533355	⚠ RC1/2GFKUL-3.3M,Solid<DT>
	Transformer	
T902	2301464	⚠ NPT-1398D<DT>
	2301465	⚠ NPT-1398G<GR,GT>
	2301539	⚠ NPT-1398P<PP>
	Relays	
RL901	25065603 or	⚠ NRL-1P5A-DC9-152
	25065601	⚠ NRL-1P5A-DC9-150
	Terminal	
P571	25060286	NTM-4PDML217
	Jack	
P572	25045567	NPJ-1PDBL382
	Plug	
P901A	25055676	NPLG-2P632
	Fuse holders	
F901A,F901B	25052133	⚠ NSCT-1P2031
	Wire holders	
JL502A	25051109	NSCT-5P896
JL931A	25051112	NSCT-8P899
JL932A	25051108	NSCT-4P895
	Labels	
F901C	29363040	T315mAL250V<PP>
	29363040	T315mAL250V<GR>
	29363040	T315mAL250V<GT>
	29360667	LABEL(F)<DT>

Note
<PP>.....European model only
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FL.TUBE

SLEEP	TIMER	RDS	▶◄◄	▶◄◄◄RDM/	MEM	RPT	ST	AUTO
00.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00	AM PM kHz MHz
9G	8G	7G	6G	5G	4G	3G	2G	1G



	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	a	a	a	a	-
P2	i	i	i	i	i	i	i	i	-
P3	h	h	h	h	h	h	h	h	-
P4	k	k	k	k	k	k	k	k	-
P5	b	b	b	b	b	b	b	b	-
P6	f	f	f	f	f	f	f	f	-
P7	g	g	g	g	g	g	g	g	-
P8	m	m	m	m	m	m	m	m	PM
P9	c	c	c	c	c	c	c	c	AM
P10	e	e	e	e	e	e	e	e	-
P11	n	n	n	n	n	n	n	n	-
P12	r	r	r	r	r	r	r	r	MHz
P13	p	p	p	p	p	p	p	p	kHz
P14	d	d	d	d	d	d	d	d	-
P15	SLEEP	TIMER	RDS	▶	RDM	MEM	RPT	ST	AUTO
P16	Dp	-	-	◄◄	▶◄◄	Dp	-	Dp	-
P17	-	-	-	-	-	col	-	-	-

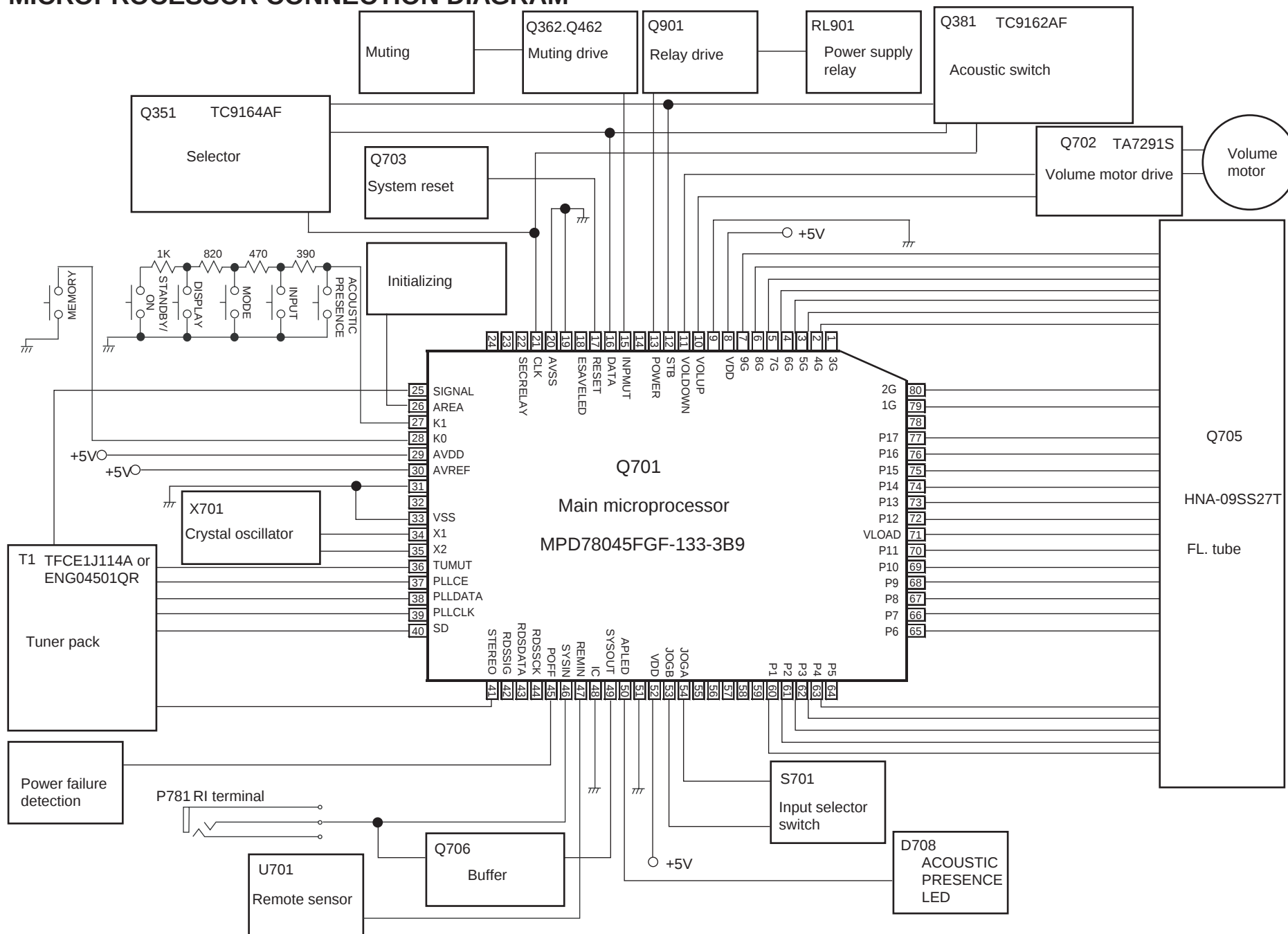
MICROPROCESSOR CONNECTION DIAGRAM

1

2

3

4



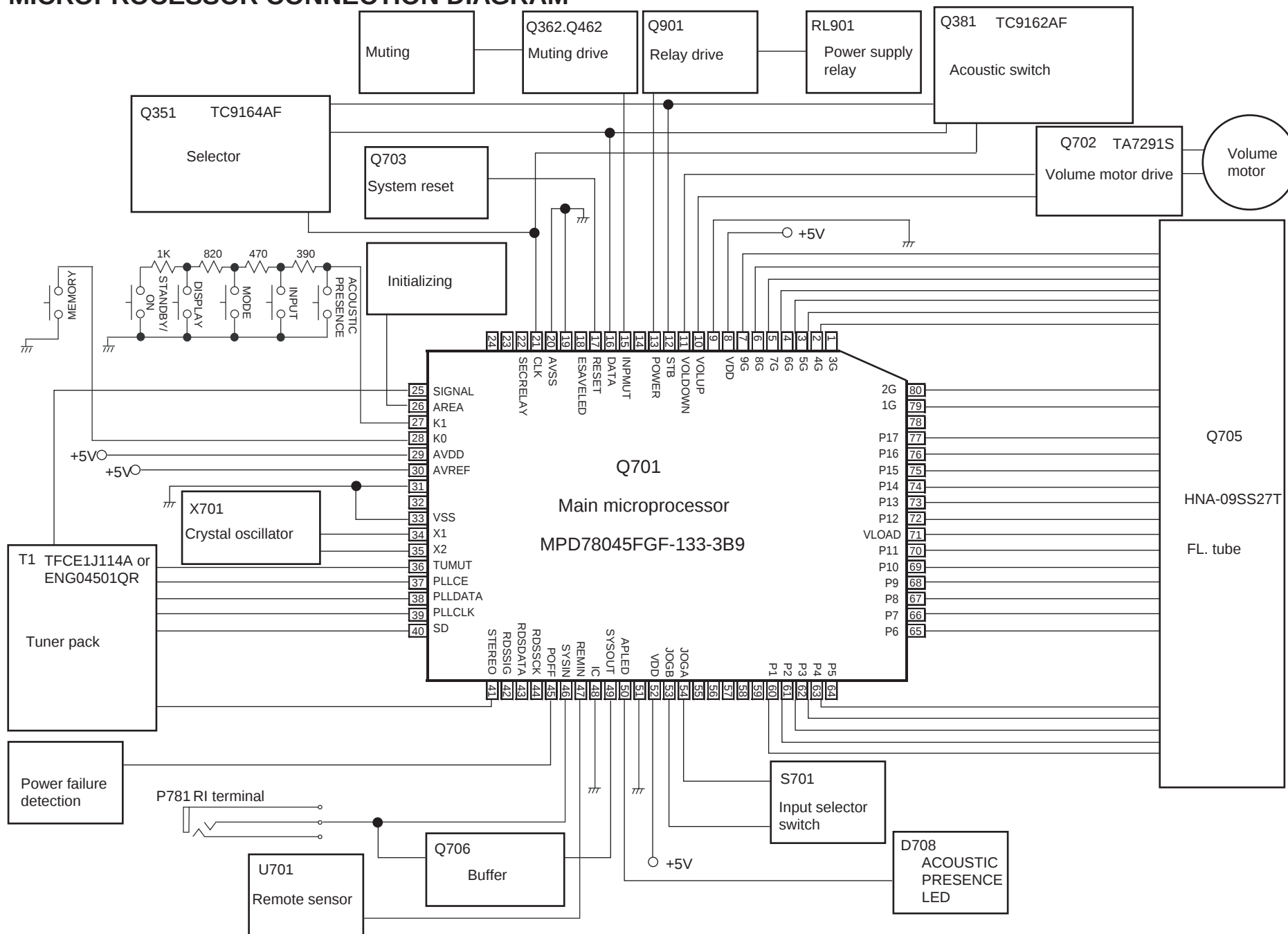
MICROPROCESSOR CONNECTION DIAGRAM

1

2

3

4



ADJUSTMENT PROCEDURES

Adjustment of clock frequency

1. Connect the frequency counter between the terminal P305 and Chassis.
2. Press and hold down the MEMORY button, then press the DISPLAY button.(All segments on FL tube light on)
3. Adjust the trimmer capacitor C707 so that the reading of frequency counter becomes 524.288 kHz.

Destination check

Press and hold down "MEMORY"key at standby,then press "INPUT"key .

Destination	Indication
MJJ	JJ
MPP	PP
MDT,MGT,MGR	DT,GT
NO GOOD	AREA NG

Version indication of microprocessor

Press and hold down "ACOUSTIC PRESENCE"key at standby,then press "INPUT"key.

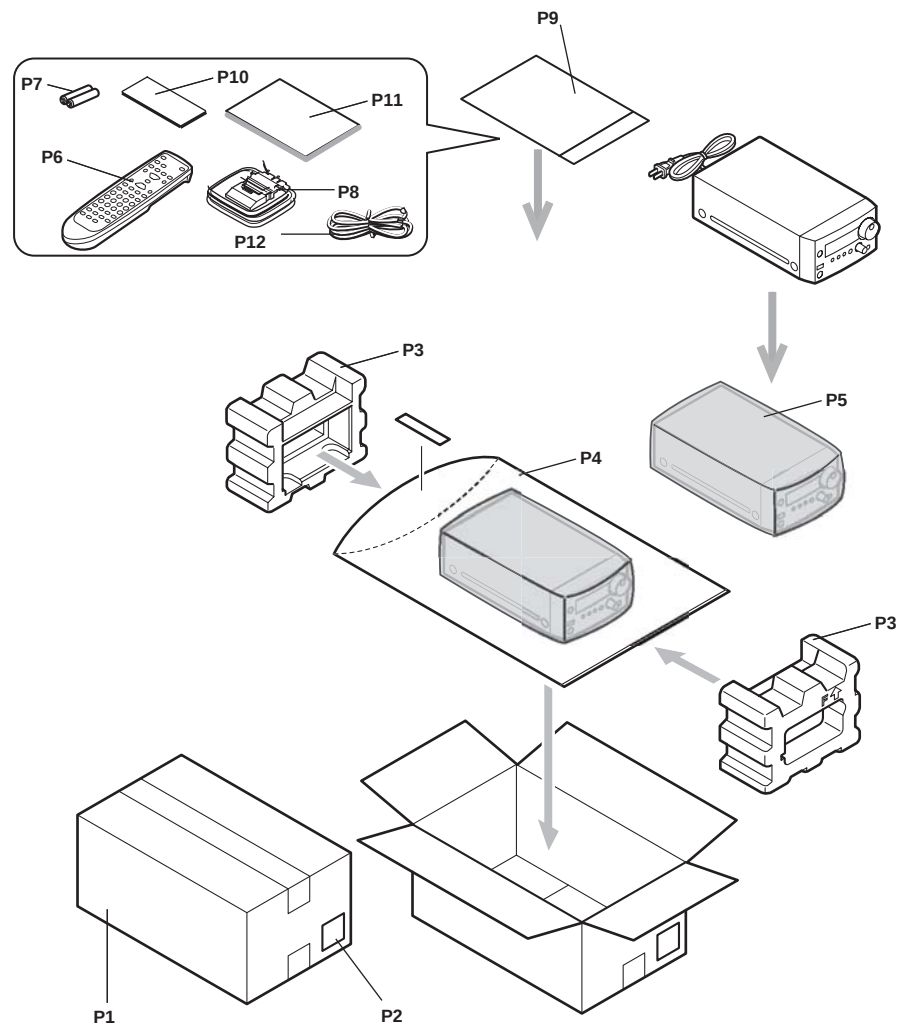
Initialize

- 1.Press and hold down "MEMORY"key at standby,then press "DISPLAY"key.
(The all segments on the FL. tube light on)
- 2.Press "STANDBY/ON"key.

Shipping position

Turn the volume to a minimam position.

PACKING VIEW



PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
P1	29053813	Carton <PP>
	29053812	Carton <DT,GT>
	29053814A	Carton <GR>
P2	29362962A	EAN Label
P3	29092008	Pad ass'y
P4	29100123C	430x550,Polybag
P5	29095906	Sheet
P6	24140466A	RC-466S,Remote controller
P7	3010154	UM-3,Battery
P8	232140	NMA-3057,AM 100p antenna
P9	29100097-1A	350x250,Polybag
P11	29343214A	Instruction manual,E
	29343215A	Instruction manual,U3GDSW<PP>
	29343216A	Instruction manual,U3FSI<PP>
	29343218A	Instruction manual,CT<DT,GR,GT>
	29343233A	Instruction manual,CS<GR>
P12	292115	FM Antenna ass'y
P13	25065462	YAE21-0237,FM antenna adapter

ONKYO CORPORATION

Sales & Product Planning Div. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN
Tel: 072-831-8111 Fax: 072-833-5222

ONKYO EUROPE ELECTRONICS GmbH

Industriestrasse 20, 82110 Germering, GERMANY
Tel: 089-849-320 Fax: 089-849-3265 E-mail: info@onkyo.de

ONKYO CHINA LIMITED

Units 2102-2107, Metroplaza Tower I, 223 Hing Fong Road, Kwai Chung,
N.T., HONG KONG Tel: 852-2429-3118 Fax: 852-2428-9039