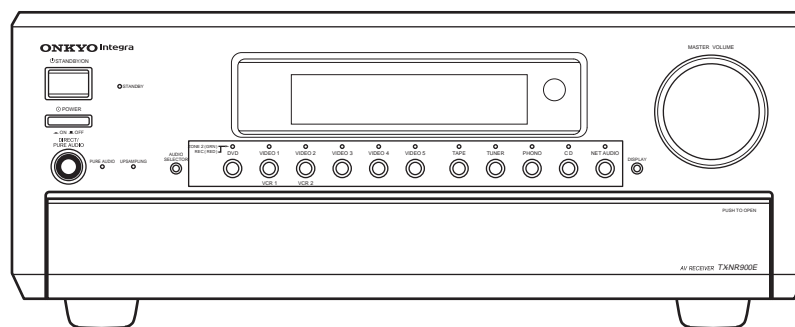


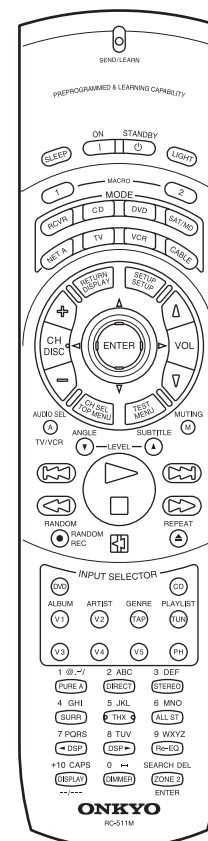
ONKYO SERVICE MANUAL

AV RECEIVER MODEL TX-NR900/E



Black, Silver and Golden models

BUDD,BUDC	120V AC, 60Hz
BUPP,BUPA,SUPP,GUPA	230~240V AC, 50Hz
BUWT,GUWT,GUWR	120/220~230V AC, 50/60Hz
GUGT	220V AC, 50Hz



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle 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

Continuous average power output (FTC)

All channels: **110 W per channel min. RMS at 8 Ω , 2 channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.**
145 W min. RMS at 6 Ω , 2 channels driven from 1 kHz with no more than 0.1% total harmonic distortion.

Continuous power output (DIN) 150 W at 6 Ω

Maximum power output (EIAJ) 180 W at 6 Ω

Dynamic power output (stereo) 2 \times 280 W at 3 Ω

2 \times 220 W at 4 Ω

2 \times 140 W at 8 Ω

Total Harmonic Distortion: 0.08% at rated power

0.08% at 1 W output

IM Distortion: 0.08% at rated power

0.08% at 1 W output

Damping factor: 60 at 8 Ω

Input sensitivity and impedance

PHONO: 2.5 mV, 50 k Ω

LINE (CD, TAPE, DVD,

VIDEO 1-5): 200 mV, 50 k Ω

MULTICHANNEL INPUT

(FRONT L/C/R, SURROUND

L/R, SURROUND BACK L/R): 200 mV, 50 k Ω

(SUBWOOFER): 36 mV, 50 k Ω

COAXIAL 1, 2, 3 (DIGITAL): 0.5 Vp-p, 75 Ω

DVD, VIDEO 1, 2, 3, 4, 5: 1 Vp-p, 75 Ω

1 Vp-p, 75 Ω (Y)

0.28 Vp-p, 75 Ω (C)

COMPONENT VIDEO 1, 2: 1 Vp-p, 75 Ω (Y)

0.7 Vp-p, 75 Ω (Pb, Pr)

Output level and impedance

Rec out (TAPE, VIDEO 1, 2):

200 mV, 470 Ω

Pre out: 1 V, 470 Ω

ZONE 2 OUT: 100 mV, 470 Ω

VIDEO (VIDEO 1, 2, MONITOR

OUT, ZONE 2 OUT): 1 Vp-p, 75 Ω

S-VIDEO (VIDEO 1, 2,

MONITOR OUT):

1 Vp-p, 75 Ω (Y)

0.28 p-p, 75 Ω (C)

COMPONENT VIDEO OUT: 1 Vp-p, 75 Ω (Y)

0.7 Vp-p, 75 Ω (Pb, Pr)

Phono overload: 120 mV RMS at 1 kHz, 0.5% T.H.D.

Frequency response: 10 Hz to 100 kHz : +1/-3 dB

(CD in Direct mode)

RIAA deviation: 20 Hz to 20 kHz : \pm 0.8 dB

Tone Control

Bass: \pm 10 dB at 50 Hz

Treble: \pm 10 dB at 20,000 Hz

Signal-to-noise ratio (direct)

Phono: 80 dB (IHF A, 5 mV input)

CD/Tape: 110 dB (IHF A, 0.5 V input)

TUNER SECTION

FM

Tuning range

USA & Canadian models: 87.50-108.00 MHz (100-kHz steps)

Other models: 87.50-108.00 MHz (50-kHz steps)

Usable sensitivity

Mono: 11.2 dBf, 1.0 μ V (75 Ω IHF)

0.9 μ V (75 Ω DIN)

Stereo: 17.2 dBf, 2.0 μ V (75 Ω IHF)

23 μ V (75 Ω DIN)

50 dB quieting sensitivity

Mono: 17.2 dBf, 2.0 μ V (75 Ω)

Stereo: 37.2 dBf, 20 μ V (75 Ω)

Capture ratio: 2.0 dB

Image rejection ratio: 85 dB

IF rejection ratio: 90 dB

Signal-to-noise ratio

Mono: 76 dB

Stereo: 70 dB

Alternate channel attenuation: 55 dB

Selectivity: 50 dB (DIN)

AM suppression ratio: 50 dB

Total harmonic distortion

Mono: 0.2%

Stereo: 0.3%

Frequency response: 30 Hz-15 kHz, \pm 1.0 dB

Stereo separation: 45 dB at 1 kHz

30 dB at 100 Hz - 10 kHz

AM

Tuning range

USA & Canadian models: 530 to 1,710kHz (10kHz steps)

Other than world wide models: 522 to 1,611 kHz (9-kHz steps)

Worldwide models: 522 to 1,611 kHz (9-kHz steps) or

530 to 1,710 kHz (10-kHz steps)

Usable sensitivity: 30 μ V

Image rejection ratio: 40 dB

IF rejection ratio: 40 dB

Signal-to-noise ratio: 40 dB

Total harmonic distortion: 0.7%

GENERAL

Power supply

USA & Canadian models: AC 120 V, 60 Hz

European & Australian models: AC 230 -240 V, 50 Hz

Some Asian models: AC 220-230 V, 50/60 Hz

Worldwide models: AC 220-230 and 120 V switchable,

50/60 Hz

Power consumption

USA & Canadian models: 8.4 A

Other models: 670 W

Dimensions (W \times H \times D): 435 \times 175 \times 459 mm

17-1/8" \times 6-7/8" \times 18-1/16"

Weight


USA & Canadian models: 17.5 kg (38.6 lbs)


Other models: 18.2 kg (40.1 lbs)

Specifications and features are subject to change without notice.

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
F6901,F6902	252100	10A-EAK, Fuse <O>
	252196	12A-UL/T-314, Fuse <D>
F901	252196	12A-UL/T-314, Fuse <D/T/R>
F902	252078,	5A-SE-EAK,
	252244 or	5A-SE-TL250V or
	252278	5A-SE-TL250V, Fuse <O>
F903	252075,	2.5A-SE-EAK,
	252241 or	2.5A-SE-TL250V or
	252275	2.5A-SE-TL250V, Fuse <O>
F9501,F9502	252160 or	2.5A-UL/T-237 or
	252254	2.5A-T/UL-ST2, Fuse <D>
	252075,	2.5A-SE-EAK,
	252241 or	2.5A-SE-TL250V or
	252275	2.5A-SE-TL250V, Fuse <O>

Note:
 <D>: 120V model only
 <O>: Except 120V model
 <T>: Worldwide model only
 <R>: Chinese 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 the STANDBY ON button to turn on the unit.
- 2.Press and hold down the VIDEO 1 button, then press the STANDBY/ON 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 setting.
- 4.Unplug the power supply cord.

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 screw on the back panel. Specifications: 3.3Mohm+/-10% at 500V.

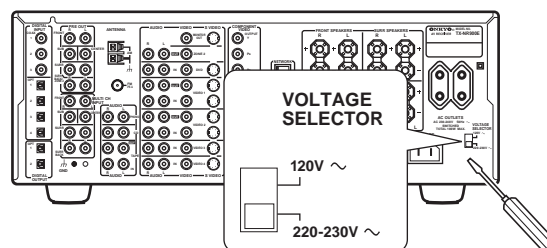
4. Memory Preservation

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.

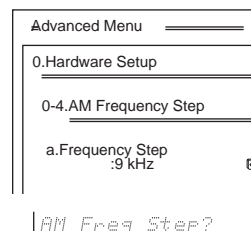
5. Setting the voltage selector (Worldwide models only)

Worldwide models are equipped with a voltage selector so that you can set your TX-NR900 to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit. Determine the proper voltage for your area: 220-230 V or 120 V. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch and slide the switch all the way to the top (120 V) or bottom (220-230 V), whichever is appropriate.



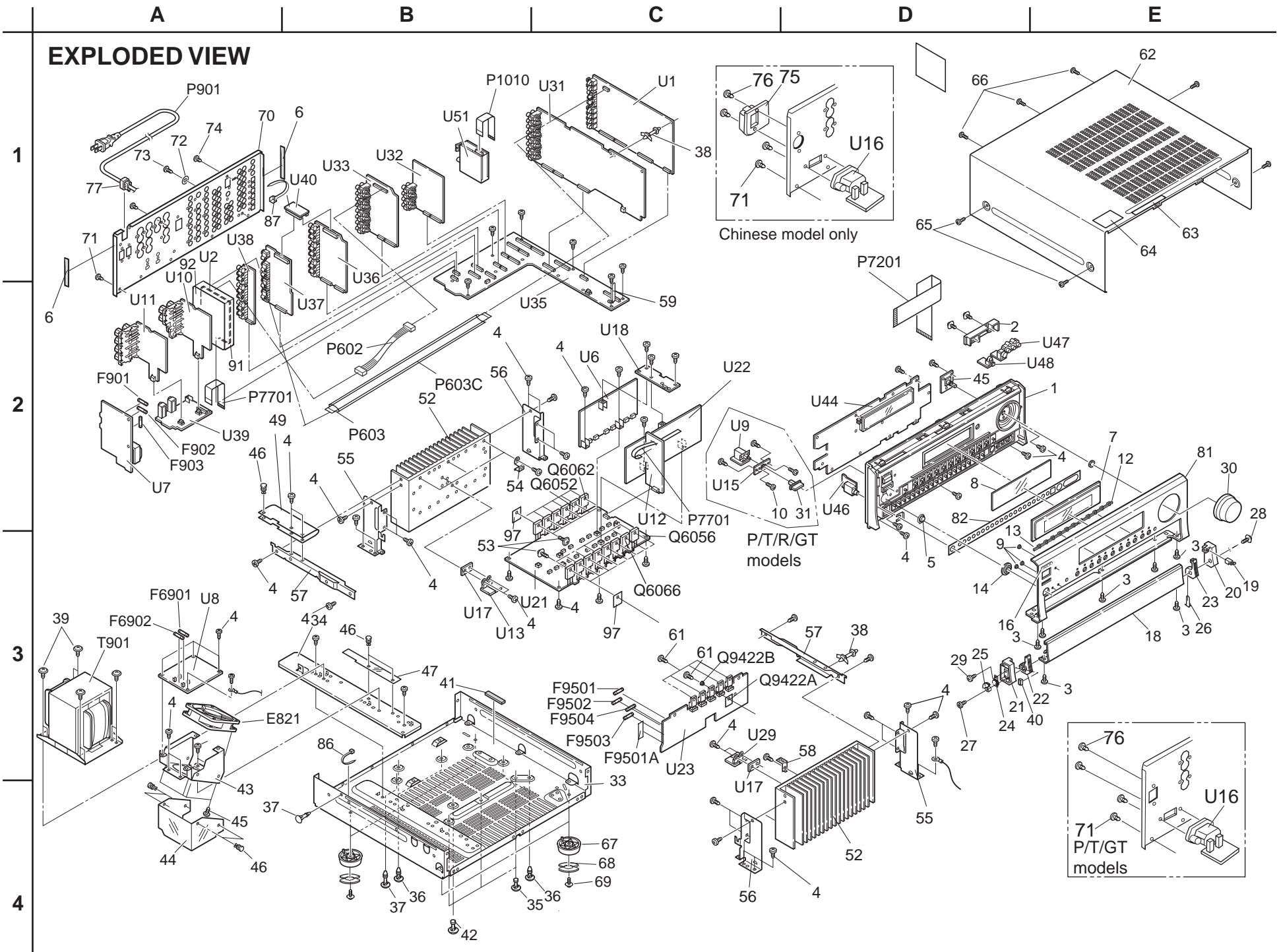
6. AM Frequency Step Sub-menu (Worldwide model only)

This sub-menu only appears on the worldwide model. The setting in this sub-menu determines the increment amount or decrement amount when adjusting the AM tuner frequency. The initial setting is 9 kHz, and this needs only to be changed if you are using the TX-NR900 in a 10-kHz region.



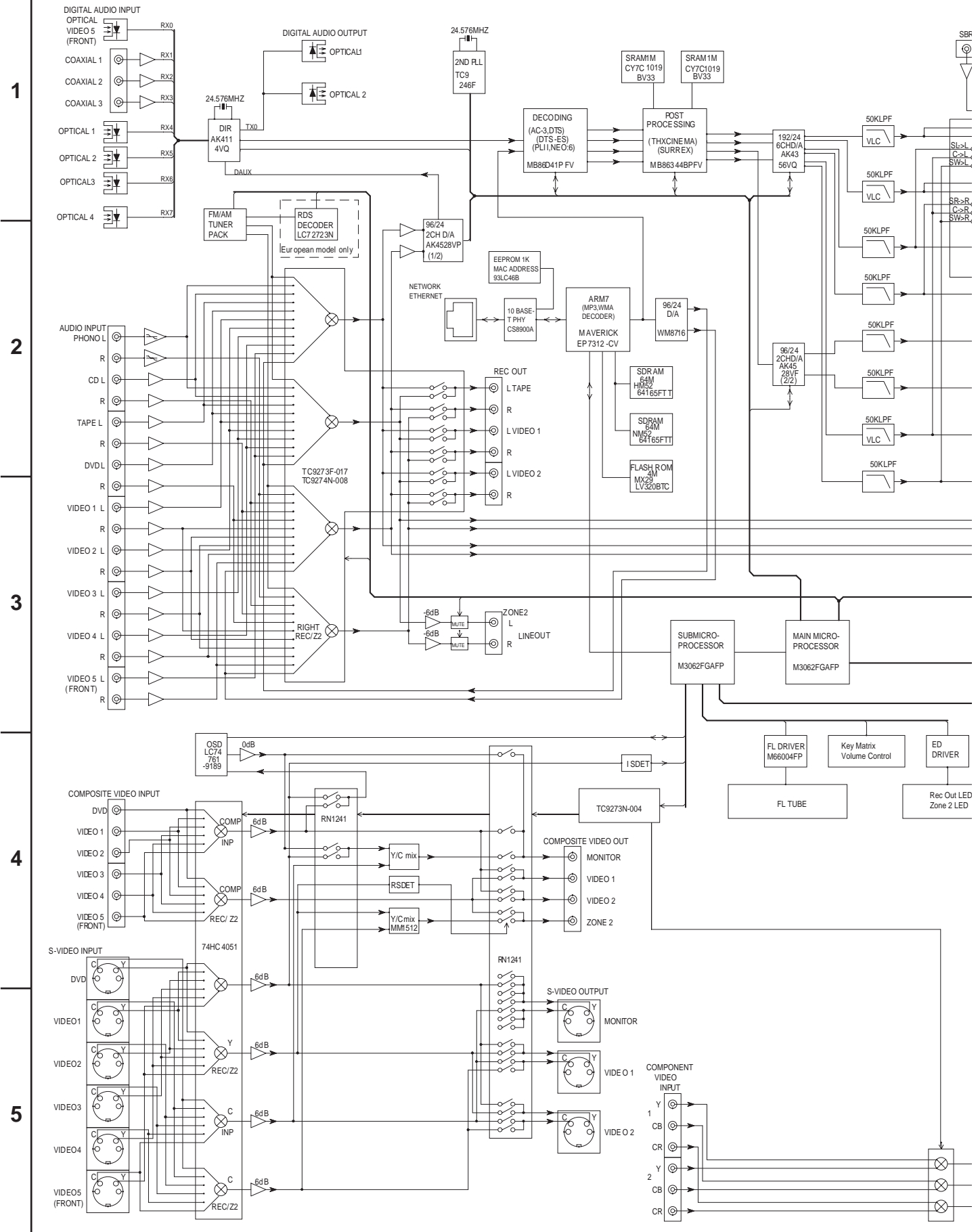
7. To confirm the version of microprocessor

- 1.Press the STANDBY ON button to turn on the unit.
- 2.Press and hold down the DISPLAY button after more than 15 sec., then press the STANDBY/ON button.
- 3.After the versions of main, sub and net microprocessors are displayed on FL tube, the unit returns to the original position.



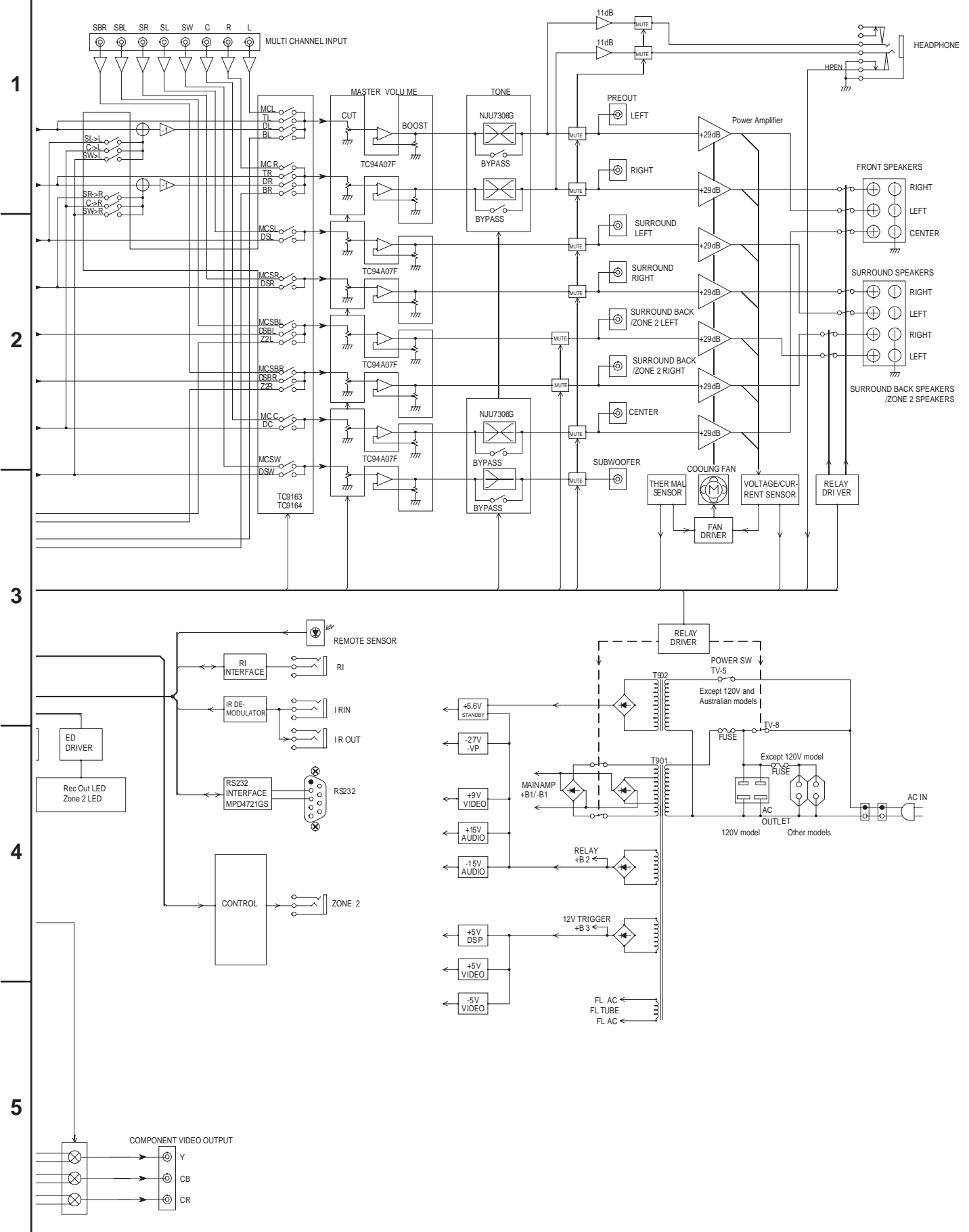
A **B** **C** **D**

BLOCK DIAGRAM



A **B** **C** **D**

BLOCK DIAGRAM



1

2

3

4

5

HEADPHONE

FRONT SPEAKERS

SURROUND SPEAKERS

SURROUND BACK SPEAKERS /ZONE 2 SPEAKERS

RELAY DRIVER

POWER SW

OUTLET

AC IN

MULTI CHANNEL INPUT

MASTER VOLUME

BOOST

TONE

PREOUT

Power Amplifier

RIGHT

LEFT

CENTER

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

LEFT

RIGHT

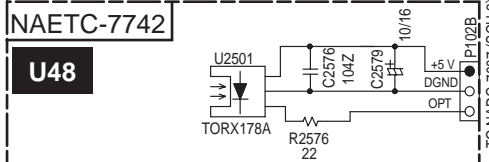
LEFT

RIGHT

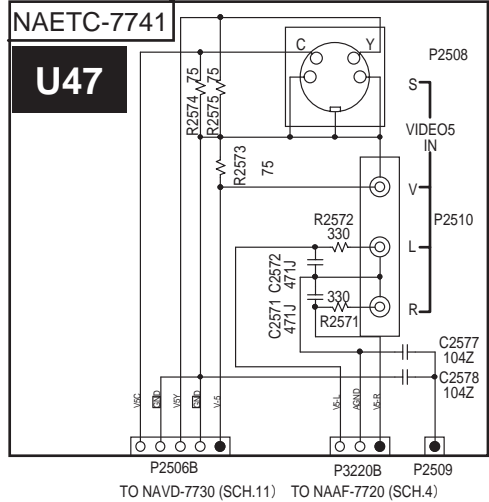
LEFT

A B C D
SCHEMATIC DIAGRAM 1-1 Sub-microprocessor and display sections

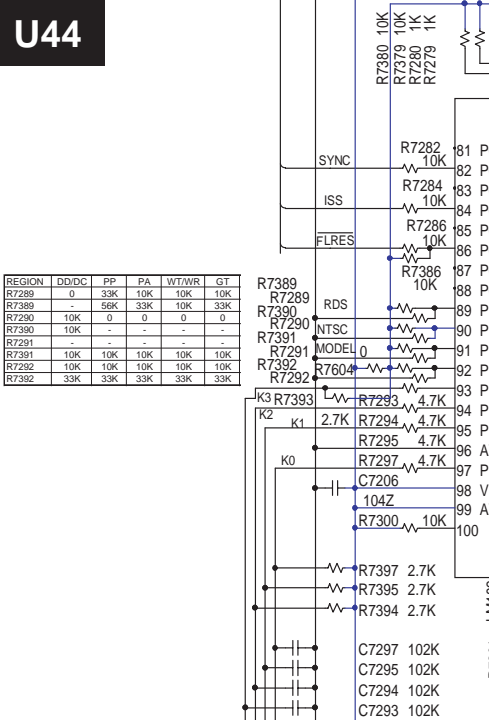
1



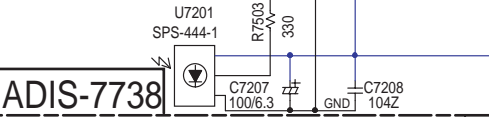
2



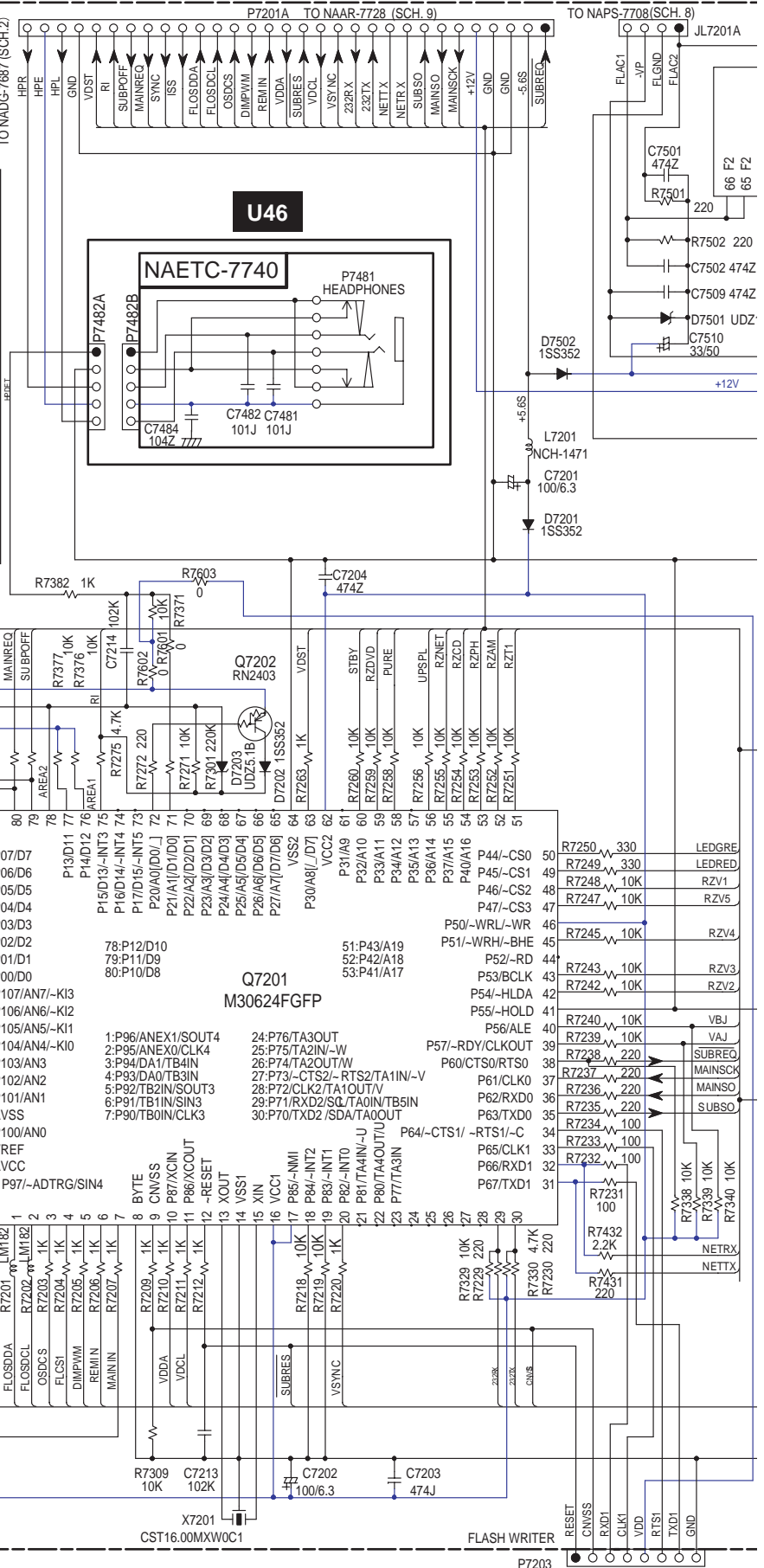
3



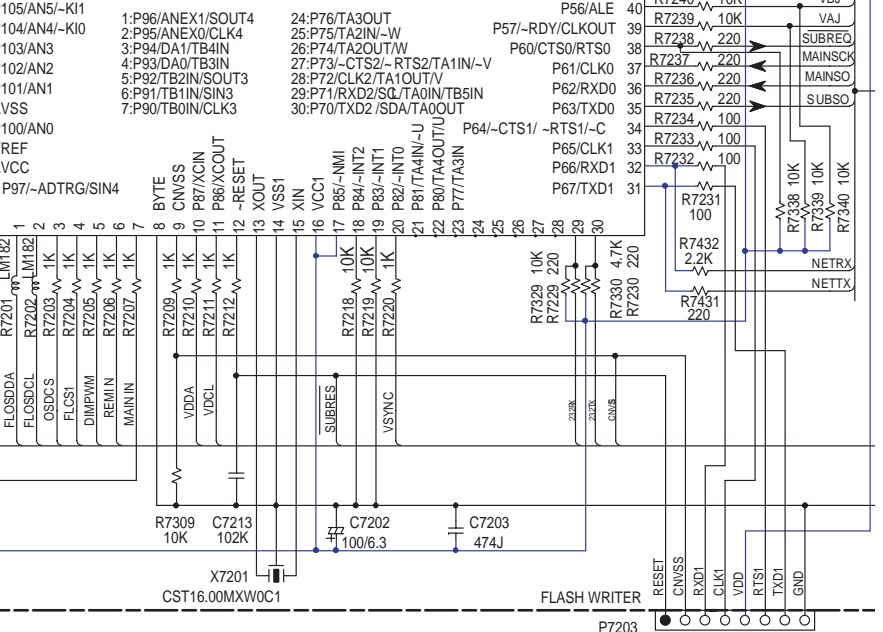
4



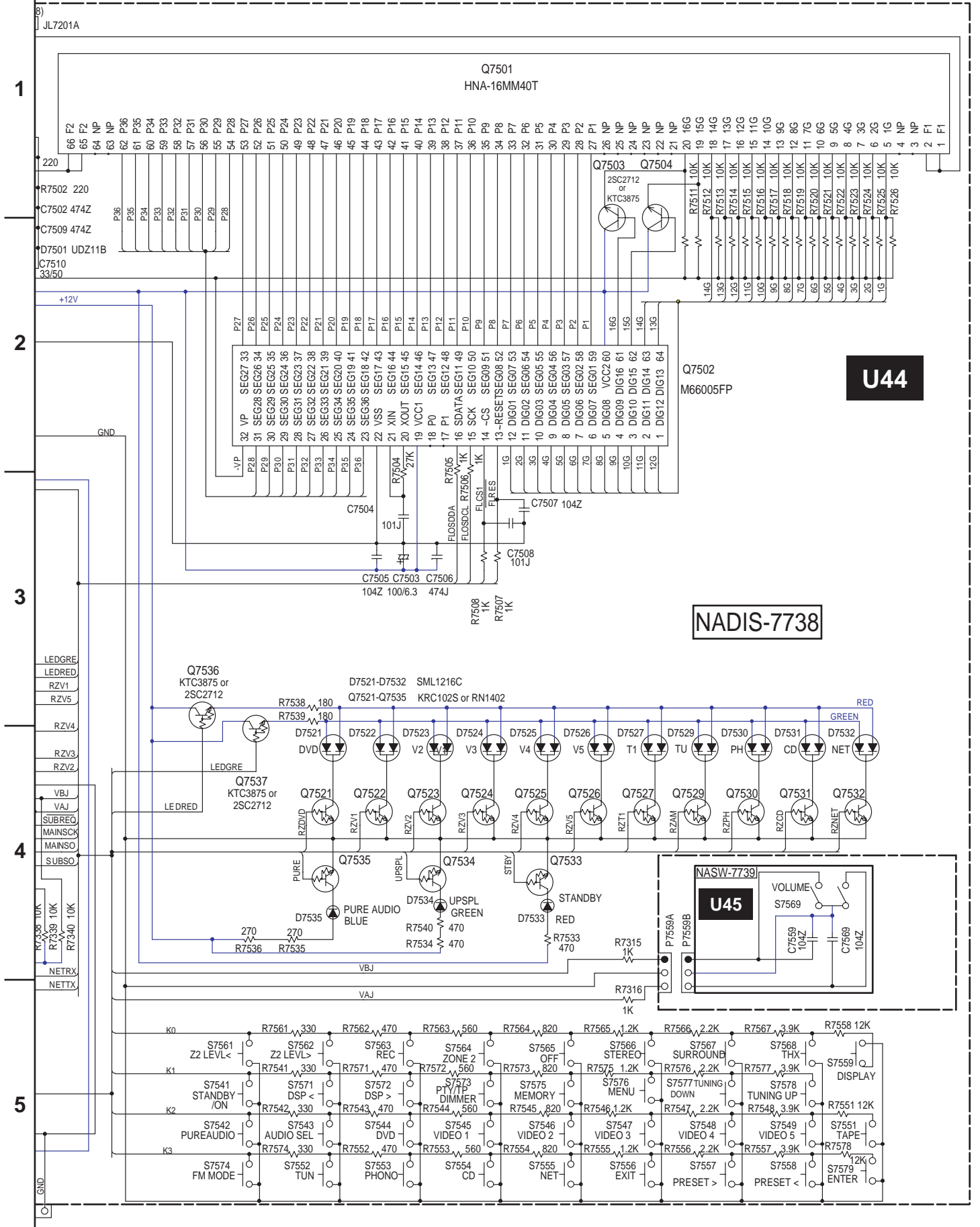
5



REGION	DD/C	PP	PA	WT/WR	GT
R7289	0	33K	10K	10K	10K
R7289	-	59K	33K	10K	33K
R7290	10K	0	0	0	0
R7390	10K	-	-	-	-
R7291	-	-	-	-	-
R7291	10K	10K	10K	10K	10K
R7292	10K	10K	10K	10K	10K
R7292	33K	33K	33K	33K	33K



SCHEMATIC DIAGRAM 1-2 Sub-microprocessor and display sections



A B C D
SCHEMATIC DIAGRAM 2-1 DSP and Main Microprocessor Section

1

2

3

4

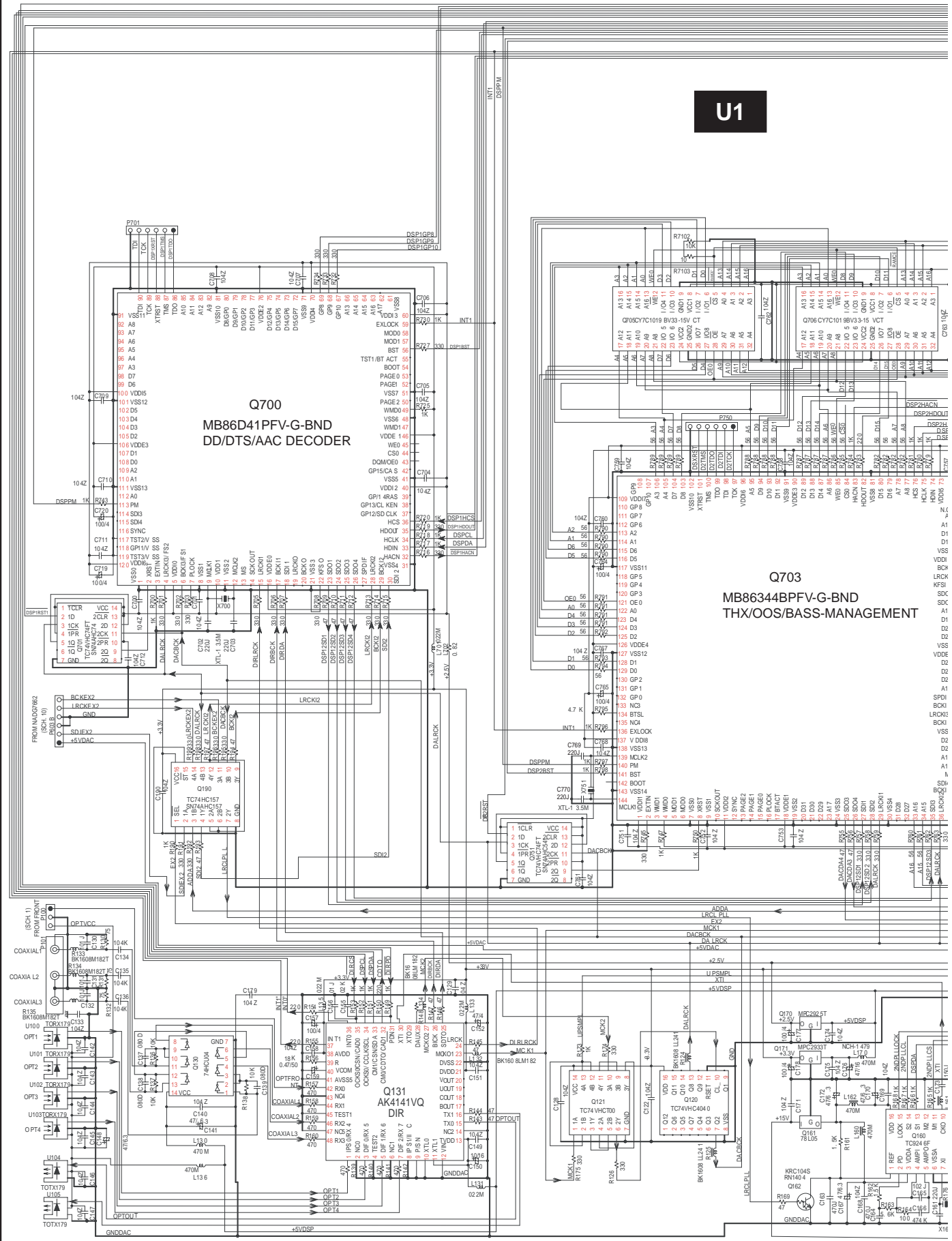
5

U1

Q700
MB86D41PFV-G-BND
DD/DTS/AAC DECODER

Q703
MB86344BPFV-G-BND
THX/OOS/BASS-MANAGEMENT

Q131
AK411VQ
DIR



A

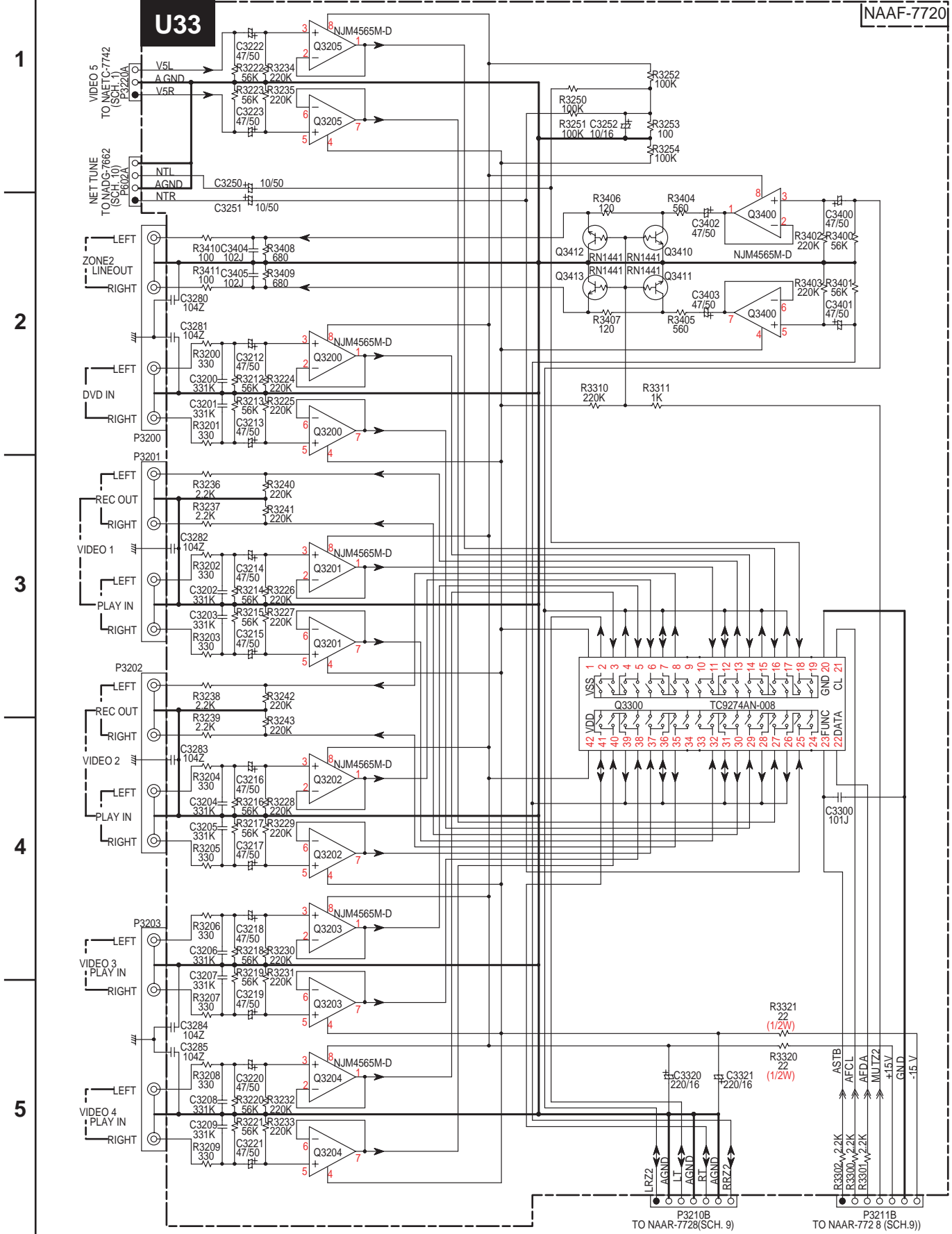
B

C

D

SCHEMATIC DIAGRAM 3-1

Audio Input/Output



A

B

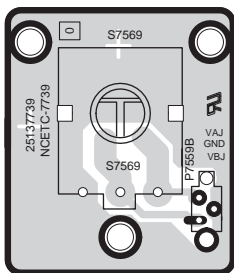
C

D

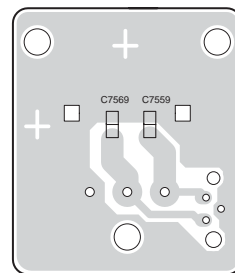
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1

1

U45



COMPONENT SIDE

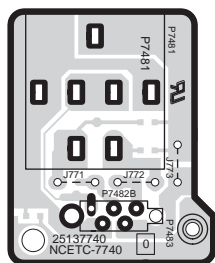


SOLDERING SIDE

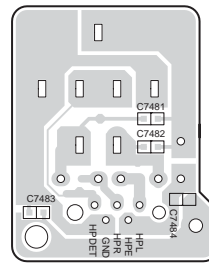
VOLUME PC BOARD(NAETC-7739)

2

U46



COMPONENT SIDE

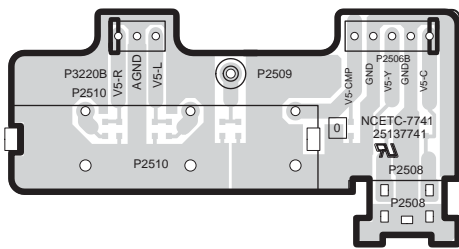


SOLDERING SIDE

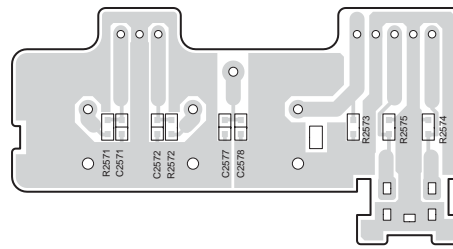
HEADPHONE TERMINAL PC BOARD(NAETC-7740)

3

U47



COMPONENT SIDE

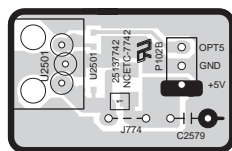


SOLDERING SIDE

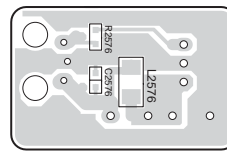
FRONT VIDEO PC BOARD(NAETC-7741)

4

U48



COMPONENT SIDE

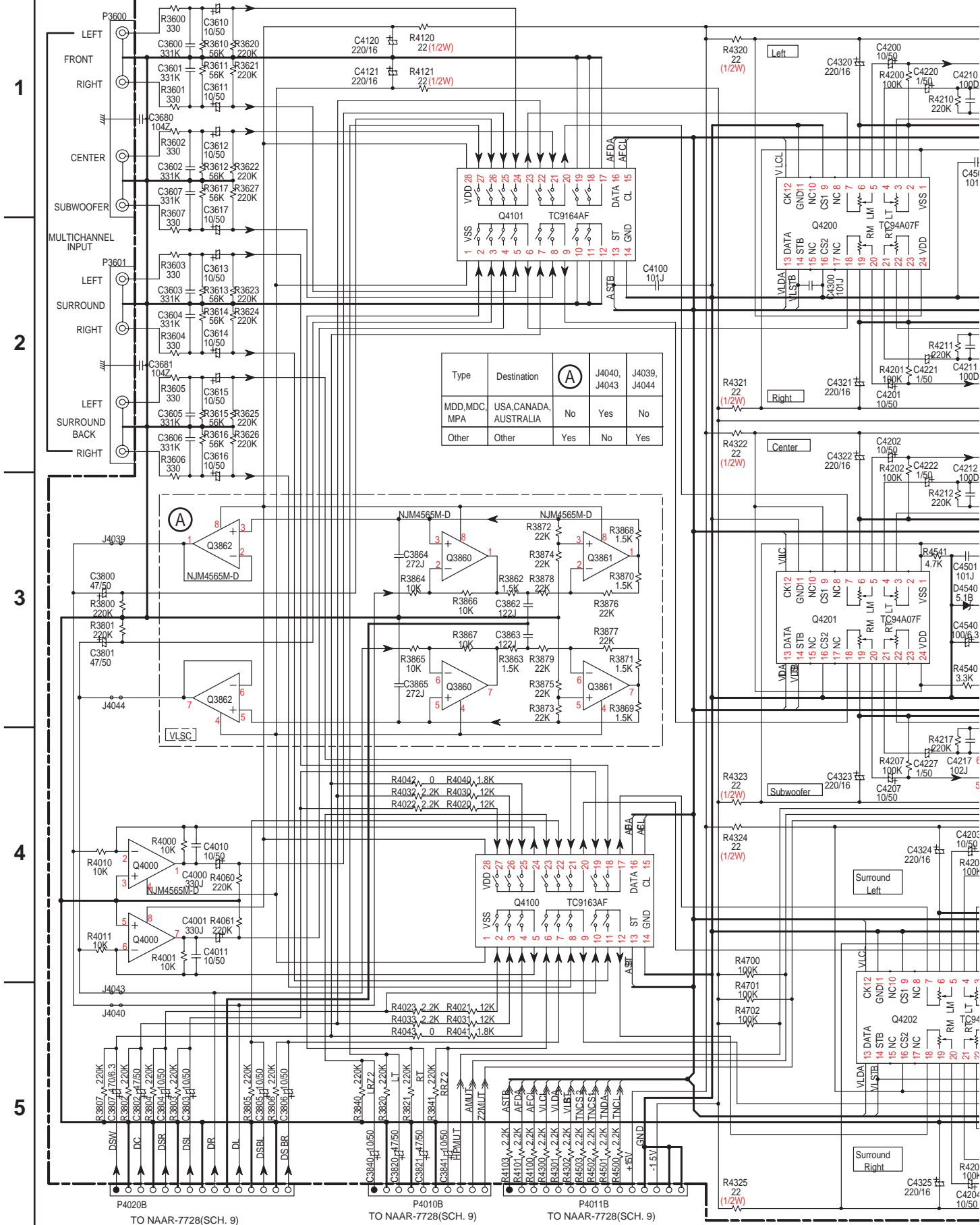


SOLDERING SIDE

FRONT OPTICAL INPUT PC BOARD(NAETC-7742)

5

A B C D
SCHEMATIC DIAGRAM 4-1 Pre-amplifier section

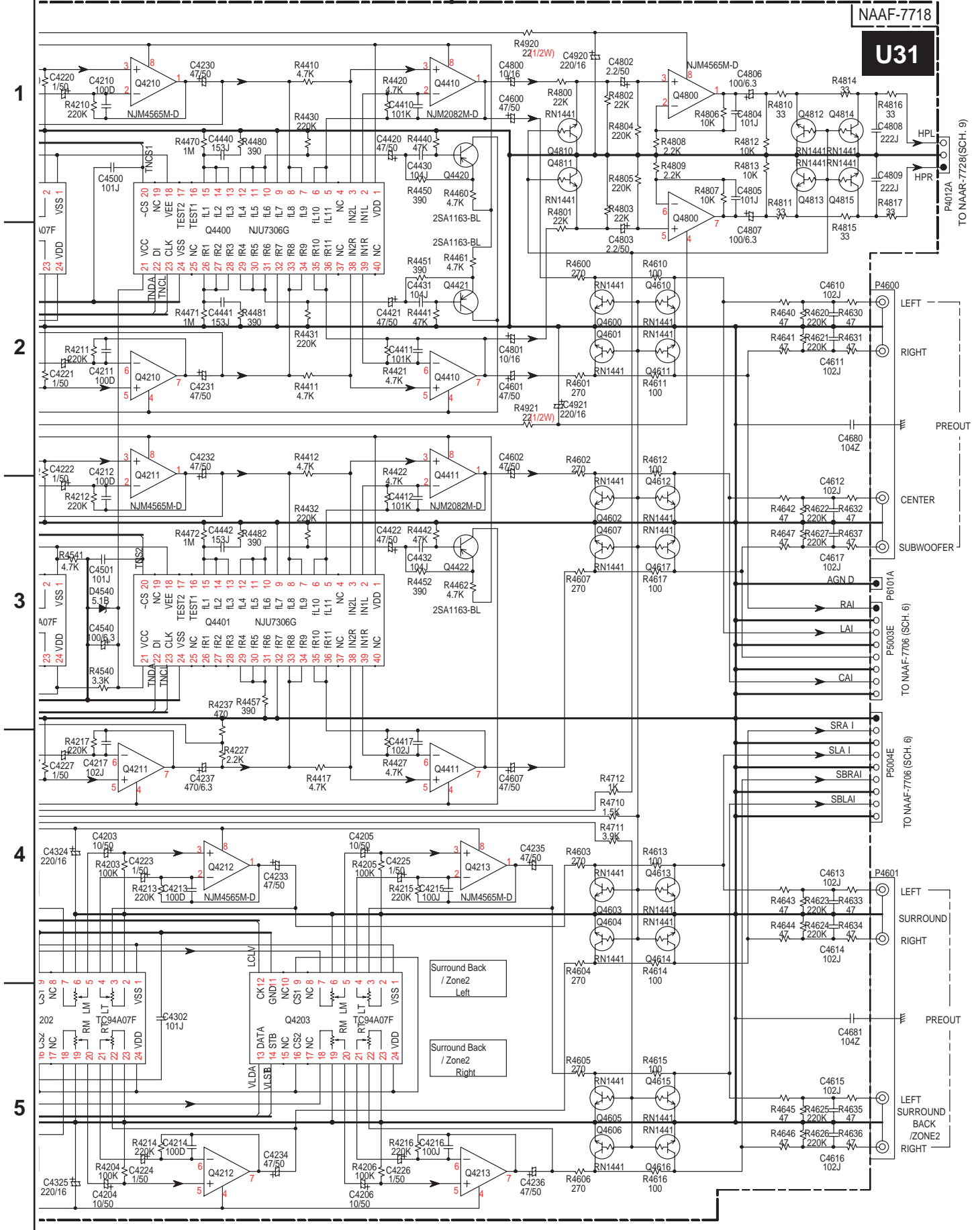


TO NAAR-7728(SCH. 9)

TO NAAR-7728(SCH. 9)

TO NAAR-7728(SCH. 9)

SCHEMATIC DIAGRAM 4-2 Pre-amplifier section

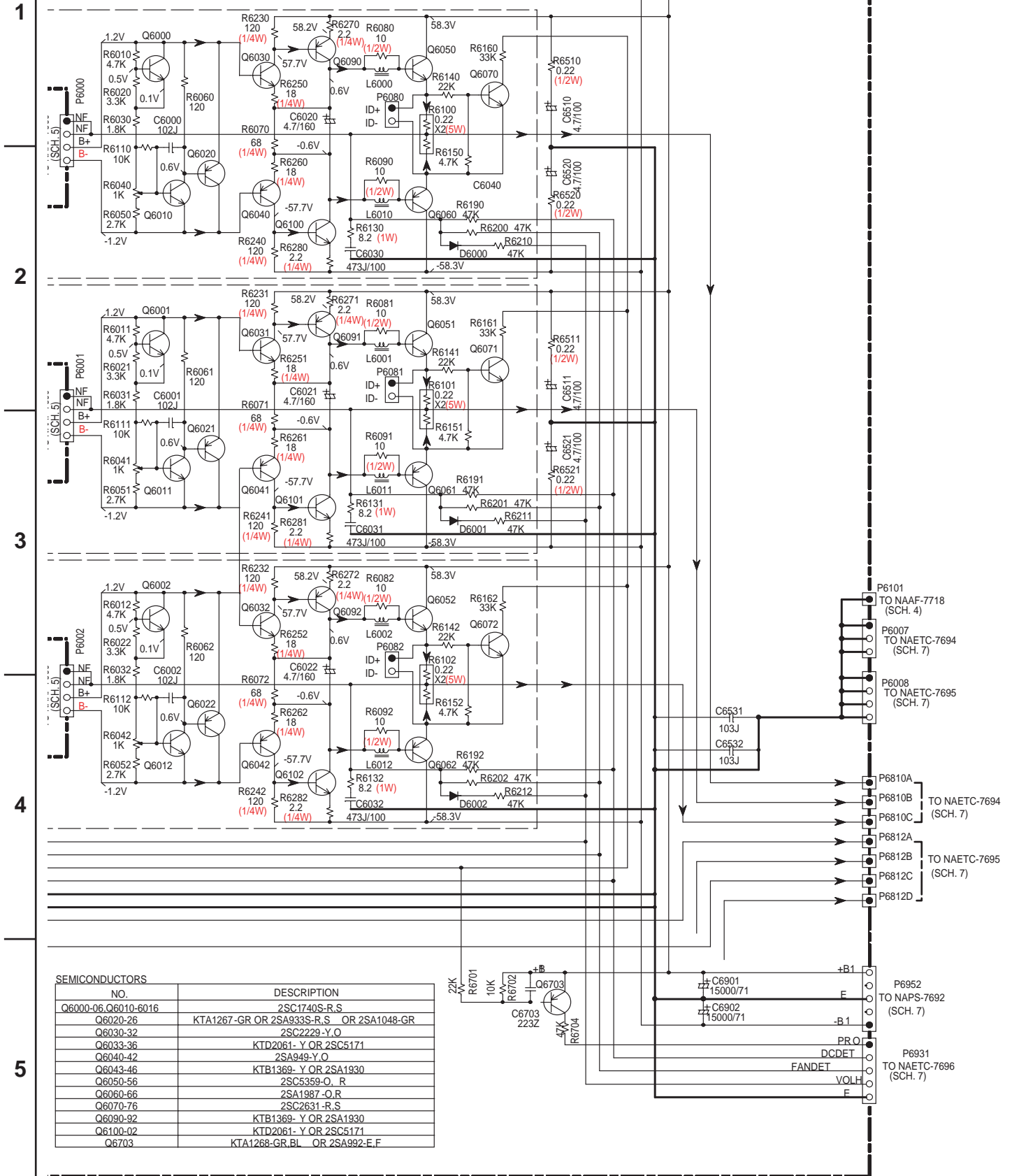


SCHEMATIC DIAGRAM 6-2

Power amplifier Section

NAAF-7706

U21



SEMICONDUCTORS	
NO.	DESCRIPTION
Q6000-06, Q6010-6016	2SC1740S-R,S
Q6020-26	KTA1267-GR OR 2SA933S-R,S OR 2SA1048-GR
Q6030-32	2SC2229-Y,O
Q6033-36	KTD2061-Y OR 2SC5171
Q6040-42	2SA949-Y,O
Q6043-46	KTB1369-Y OR 2SA1930
Q6050-56	2SC5359-O,R
Q6060-66	2SA1987-O,R
Q6070-76	2SC2631-R,S
Q6090-92	KTB1369-Y OR 2SA1930
Q6100-02	KTD2061-Y OR 2SC5171
Q6703	KTA1268-GR,BL OR 2SA992-E,F

A

B

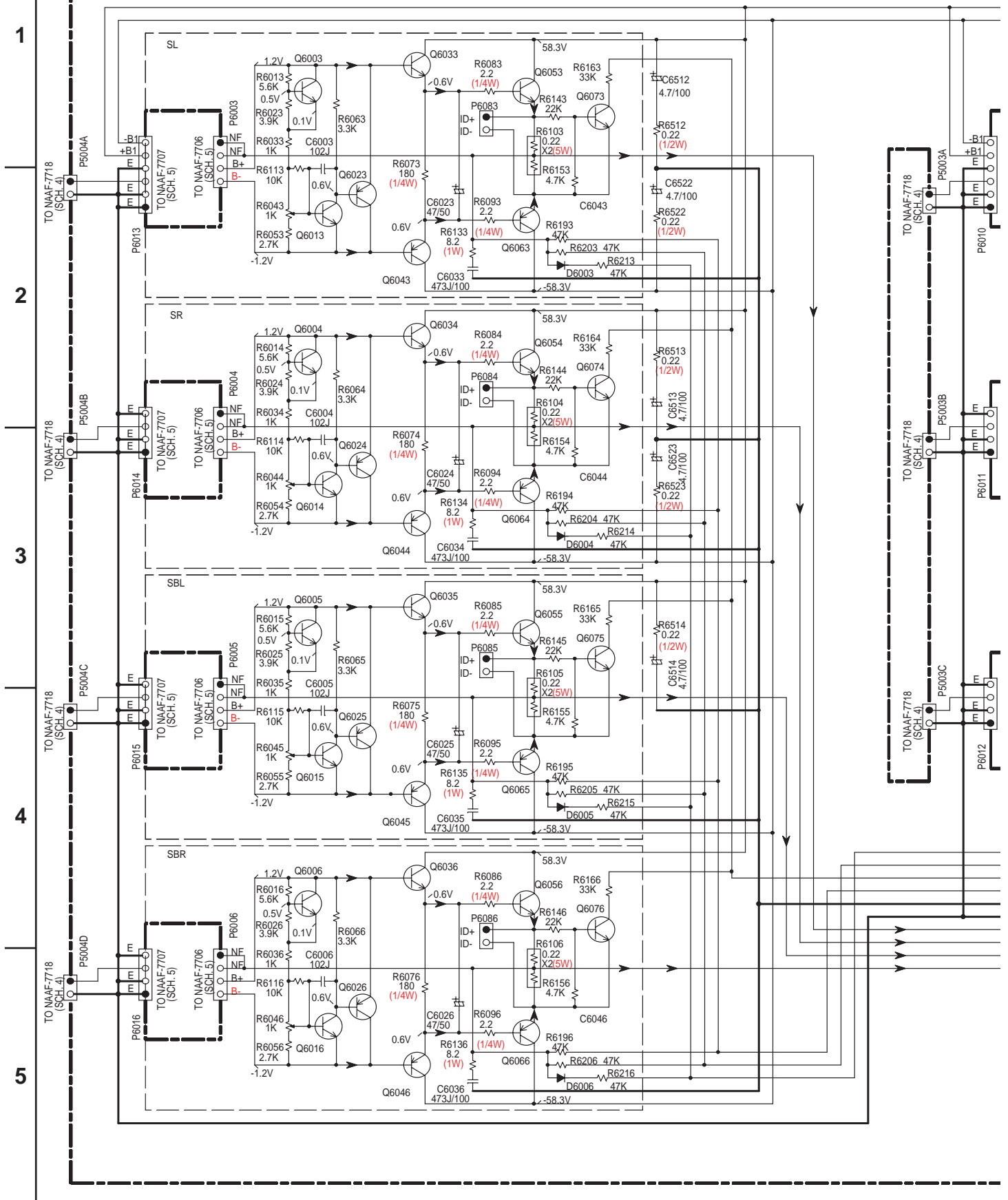
C

D

SCHEMATIC DIAGRAM 6-1

Power amplifier Section

NAAF-7706



A

B

C

D

SCHEMATIC DIAGRAM 5-2

Driver Circuit Section

NAAF-7707

U33

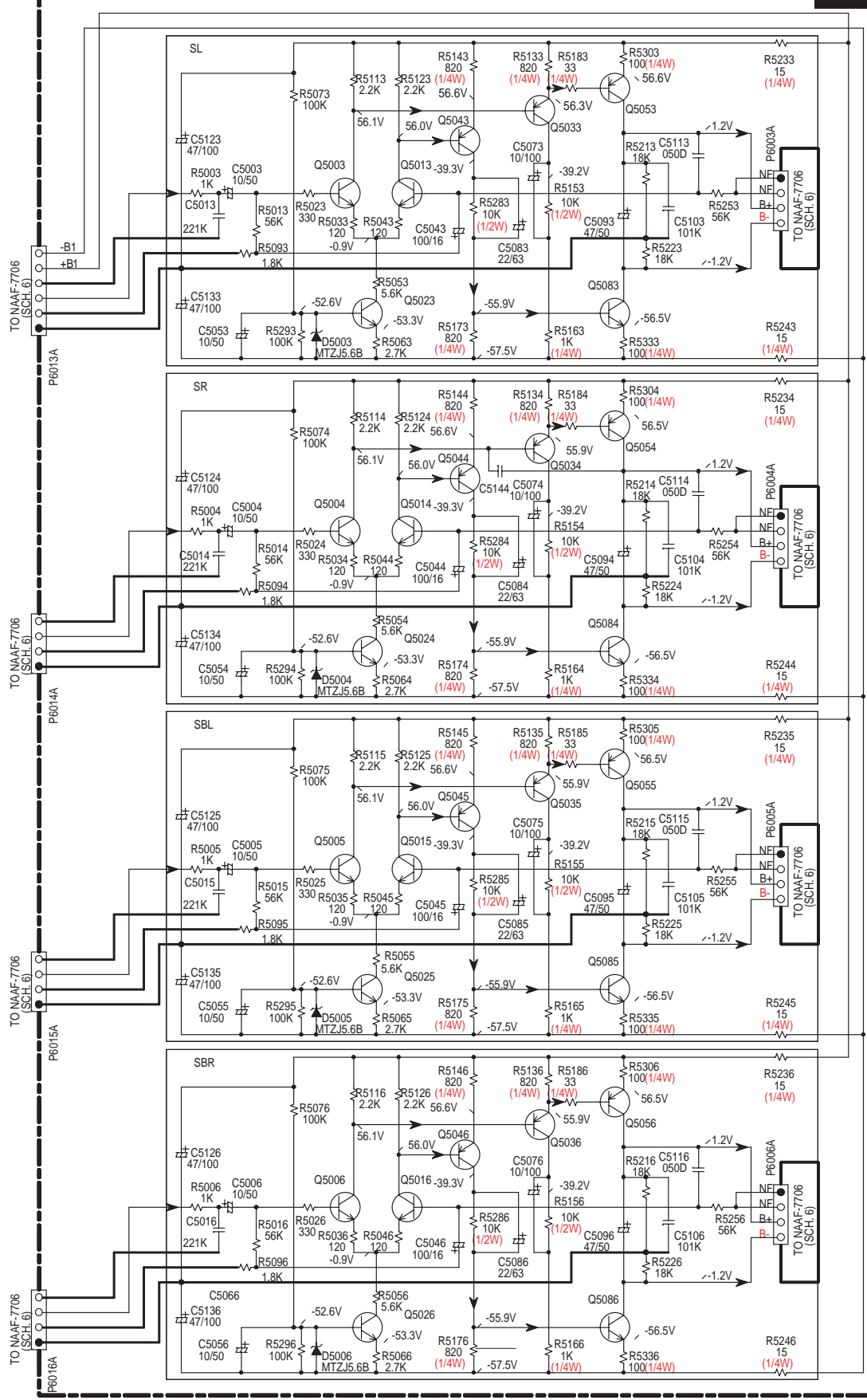
1

2

3

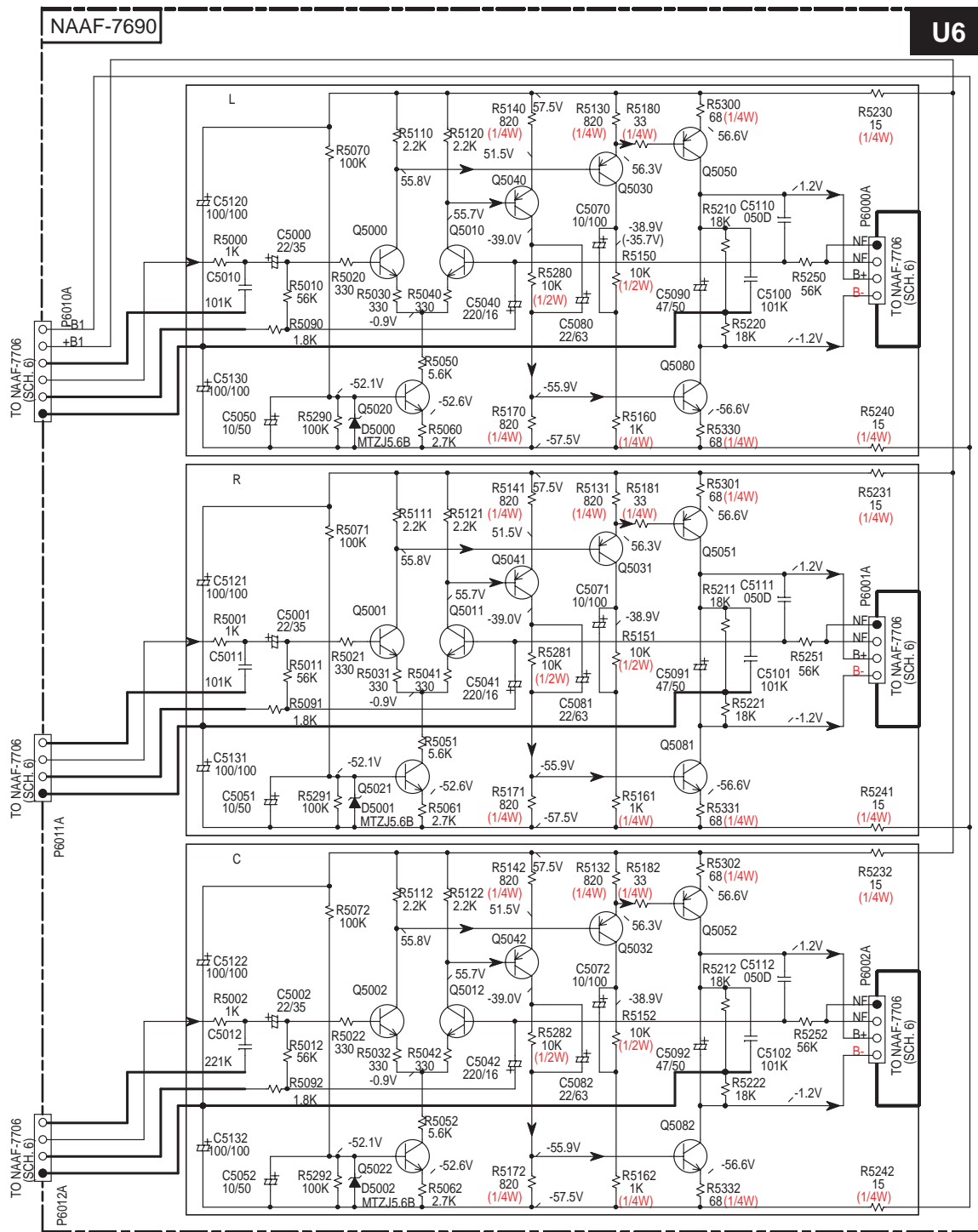
4

5



SCHEMATIC DIAGRAM 5-1

Driver Circuit Section



SEMICONDUCTORS

NO	
Q5000-06, Q5010-16	KTC3200-BL, 2SC1775A-E, F OR 2SC1845-E
Q5020-26	KTC3200-BL, 2SC1775A-E, F OR 2SC1845-E
Q5030-36, Q5040-46	KTA1024-Y, O OR 2SA949-Y, O
Q5050-52	2SA1360-Y, O
Q5053-56, Q5073-76	KTA1024-Y, O OR 2SA949-Y, O
Q5060-62	2SC3423-Y, O
Q5063-66, Q5080-83	KTC3206-Y, O OR 2SC2229-Y, O

NOTE

THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ON LY WITH PART NUMBER SPECIFIED.

VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE (NO INPUT SIGNAL). ELECTROLYTIC CAPACITORS (---) ARE IN μF /VV.

ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.

EX) 030-3pF 330-33pF 331-330pF 333pF-0.033uF

ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED. THE THICK LINE ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.

EX) --- PRINTING SIDE

CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

1

2

3

4

5

SCHEMATIC DIAGRAM 5-1
Driver Circuit Section

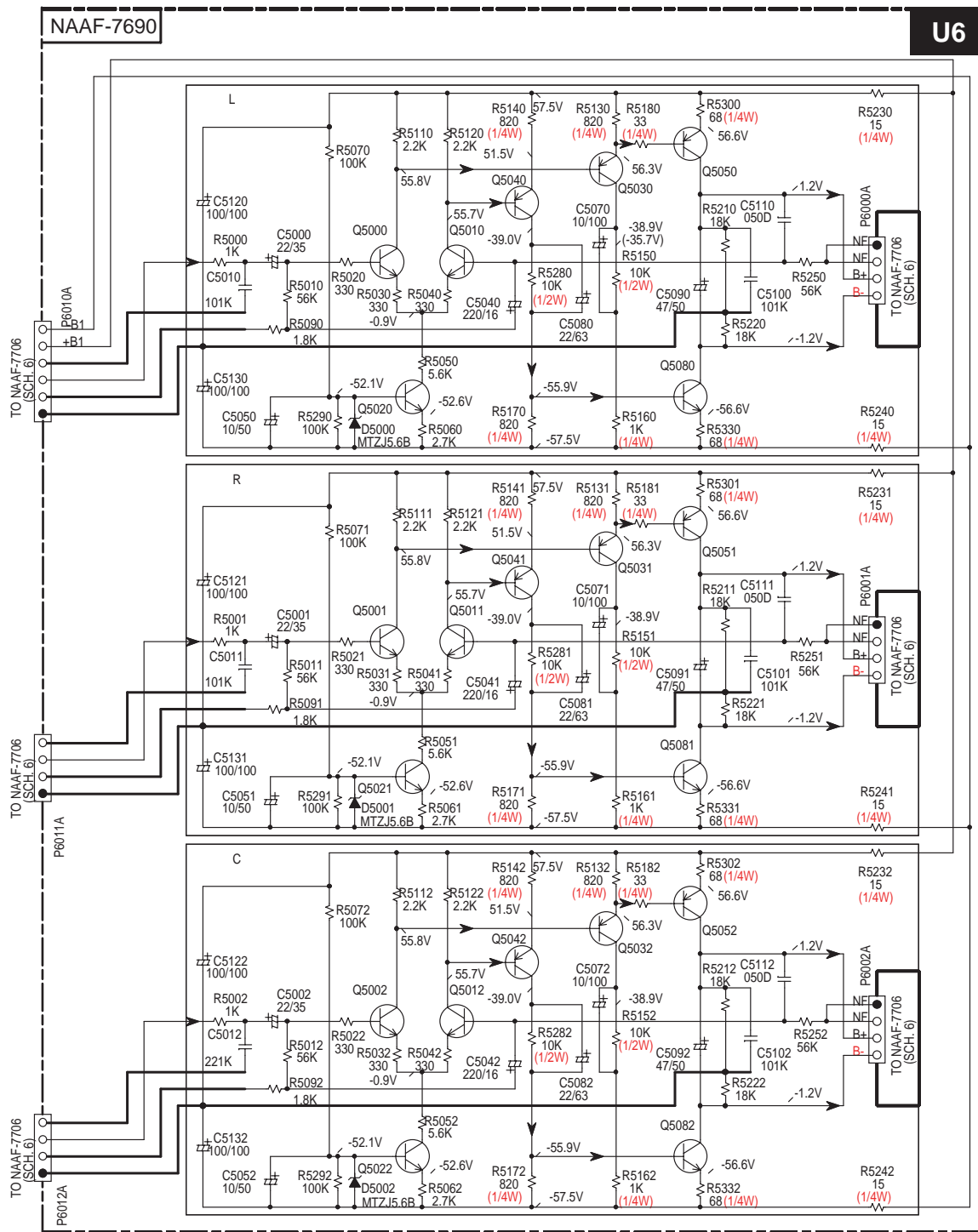
1

2

3

4

5



SEMICONDUCTORS

NO	
Q5000-06, Q5010-16	KTC3200-BL, 2SC1775A-E, F OR 2SC1845-E
Q5020-26	KTC3200-BL, 2SC1775A-E, F OR 2SC1845-E
Q5030-36, Q5040-46	KTA1024-Y, O OR 2SA949-Y, O
Q5050-52	2SA1360-Y, O
Q5053-56, Q5073-76	KTA1024-Y, O OR 2SA949-Y, O
Q5060-62	2SC3423-Y, O
Q5063-66, Q5080-83	KTC3206-Y, O OR 2SC2229-Y, O

NOTE

THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ON LY WITH PART NUMBER SPECIFIED.
 VOLTAGE (MEASURED WITH VOLTMETER) \square IS DC VOLTAGE (NO INPUT SIGNAL).
 ELECTROLYTIC CAPACITORS (---) ARE IN $\mu\text{F}/\text{V}$.
 ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
 EX) 030-3pF 330-33pF 331-330pF 333pF-0.033uF
 ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
 THE THICK LINE ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
 EX) \square PRINTING SIDE
 CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

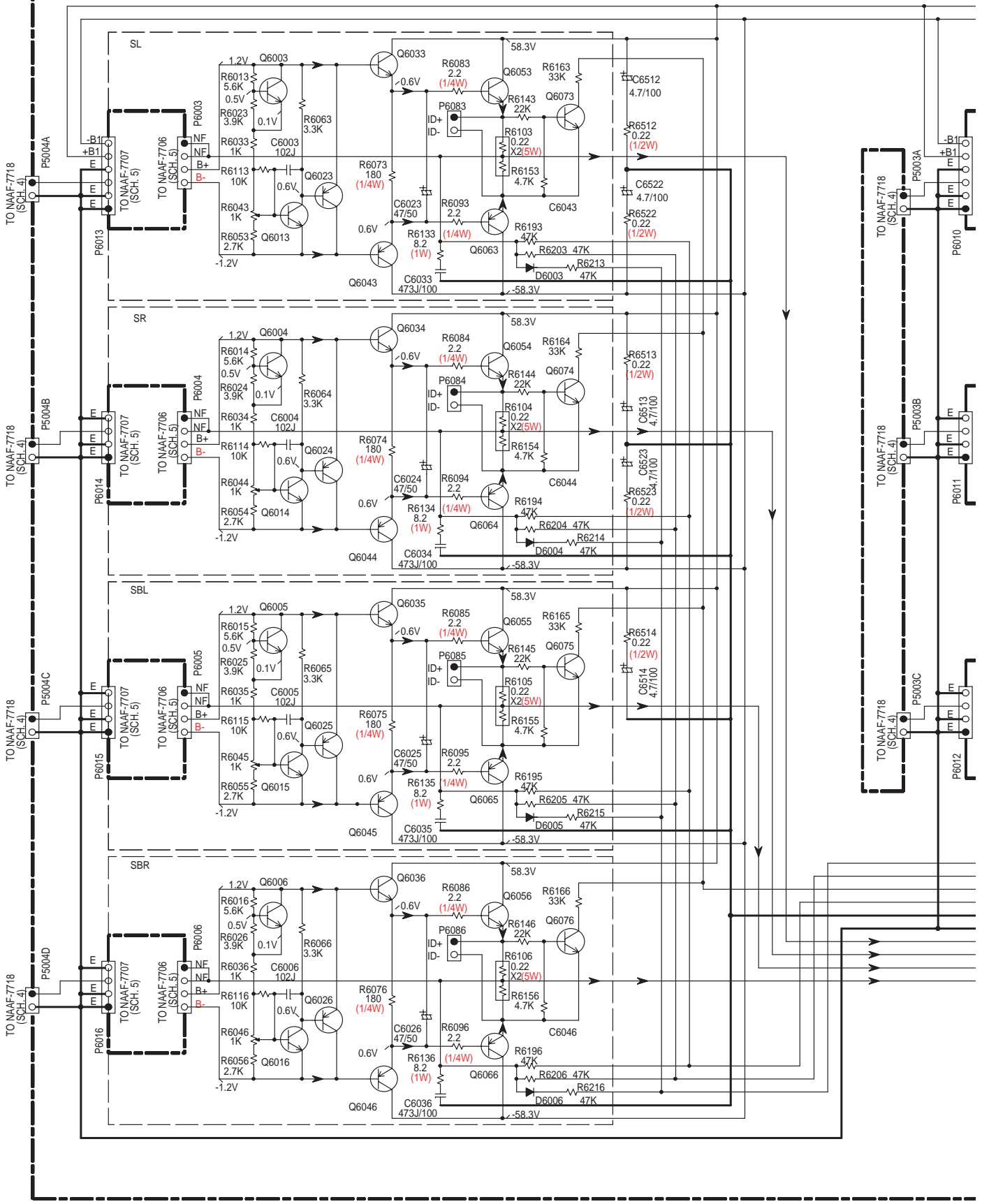
A B C D

SCHEMATIC DIAGRAM 6-1

Power amplifier Section

NAAF-7706

1
2
3
4
5



A

B

C

D

SCHEMATIC DIAGRAM 5-2
Driver Circuit Section

NAAF-7707

U33

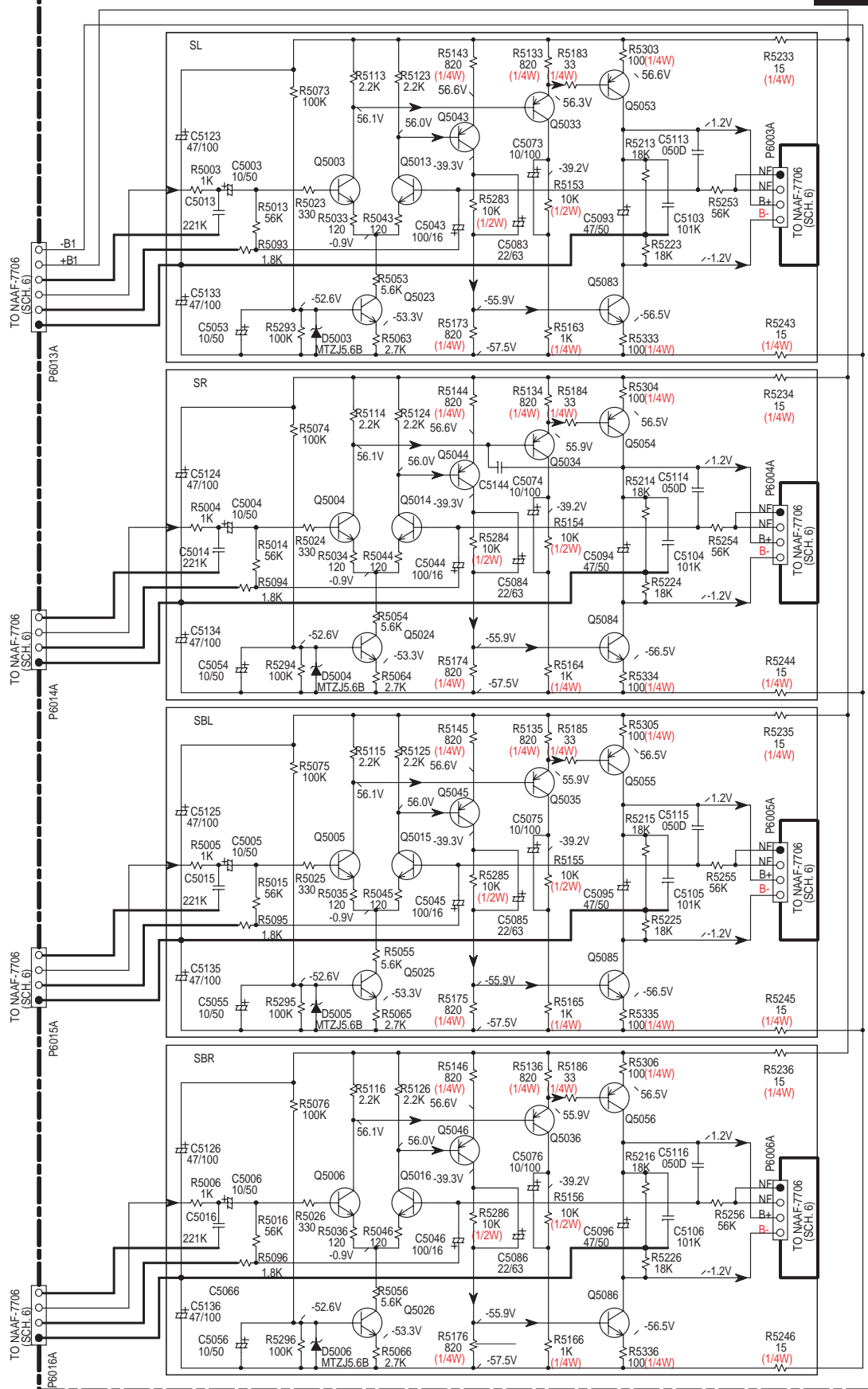
1

2

3

4

5

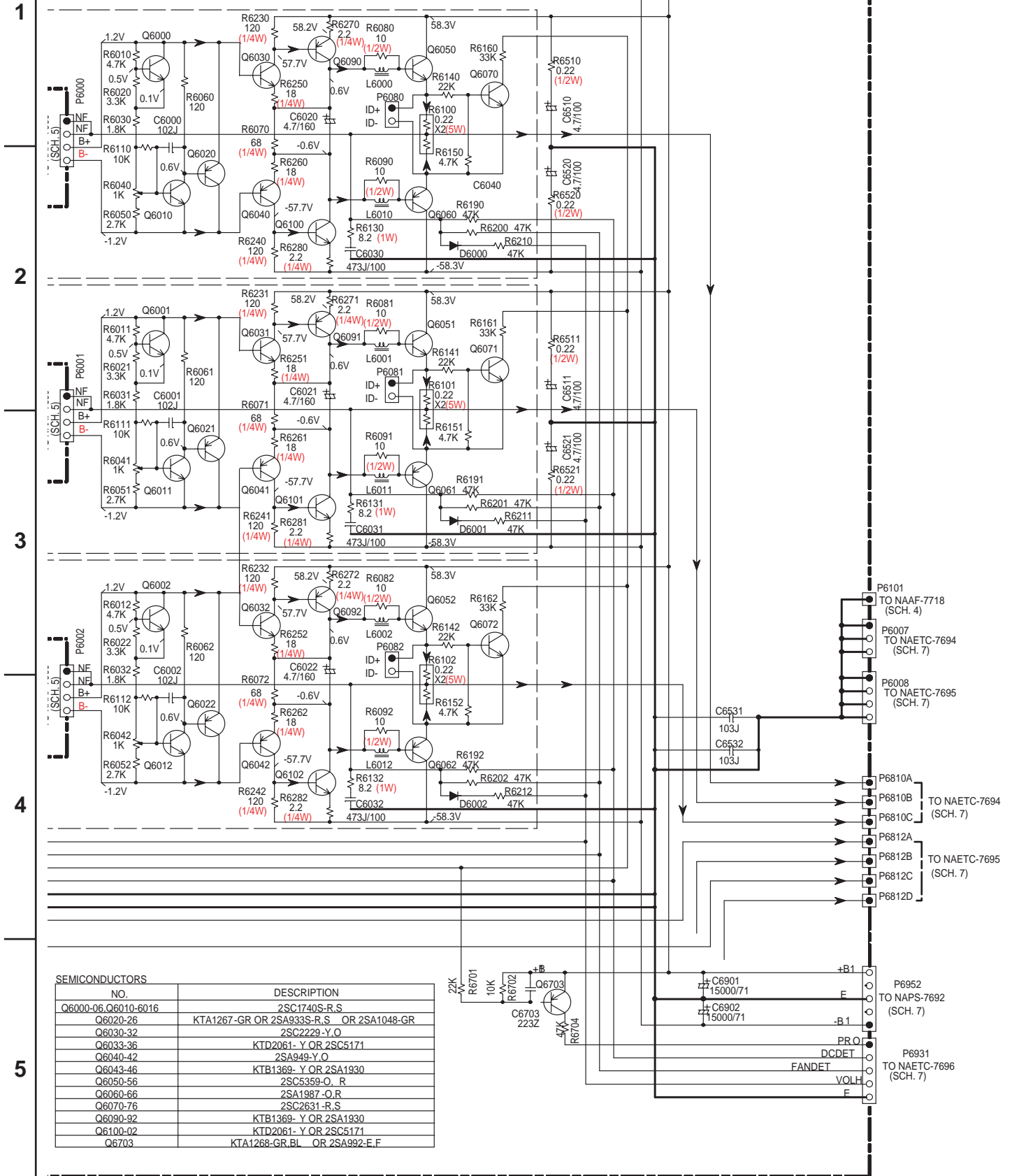


SCHEMATIC DIAGRAM 6-2

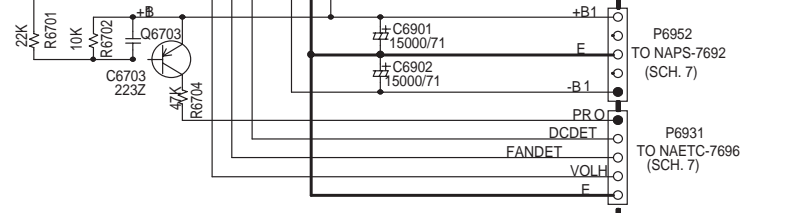
Power amplifier Section

NAAF-7706

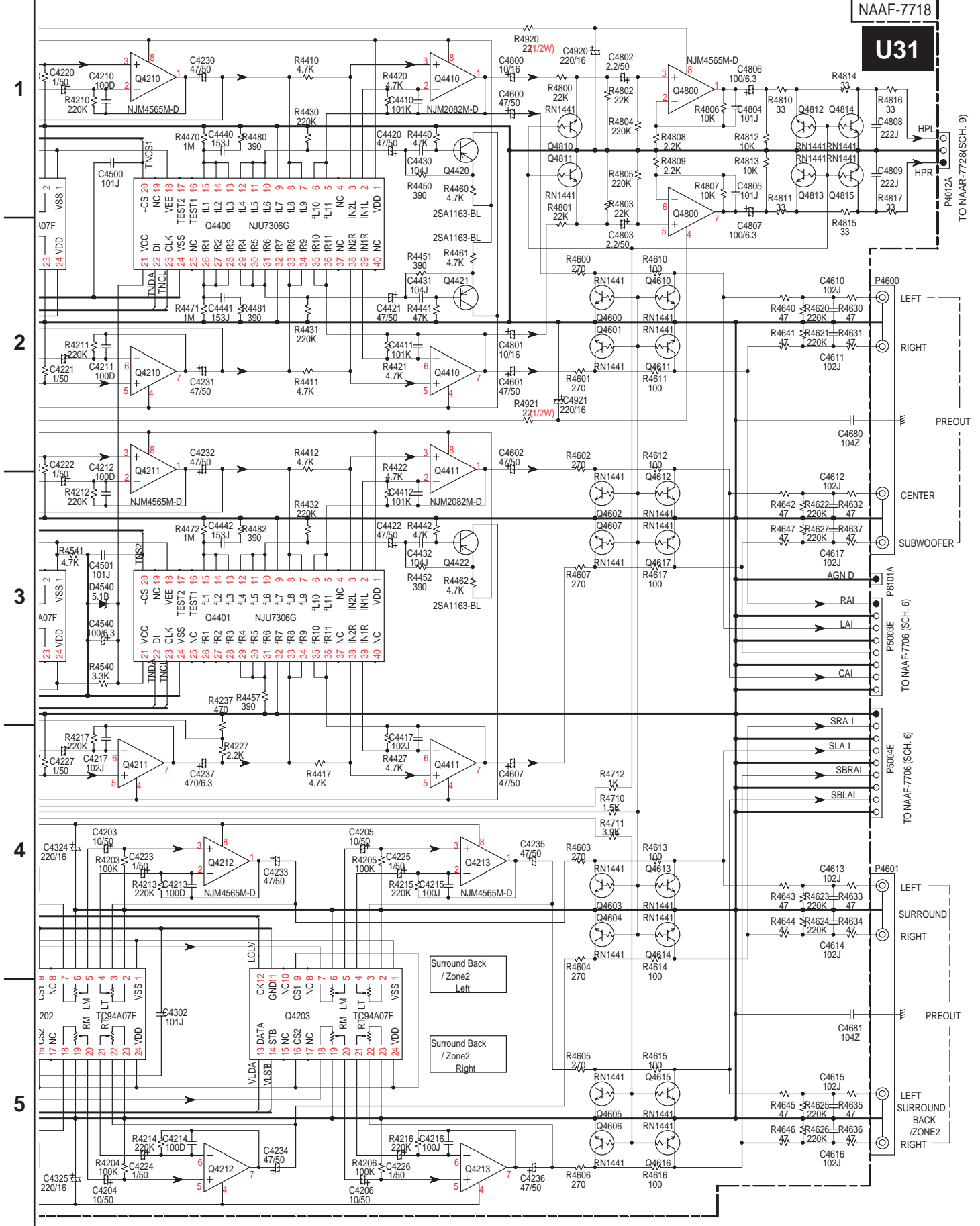
U21



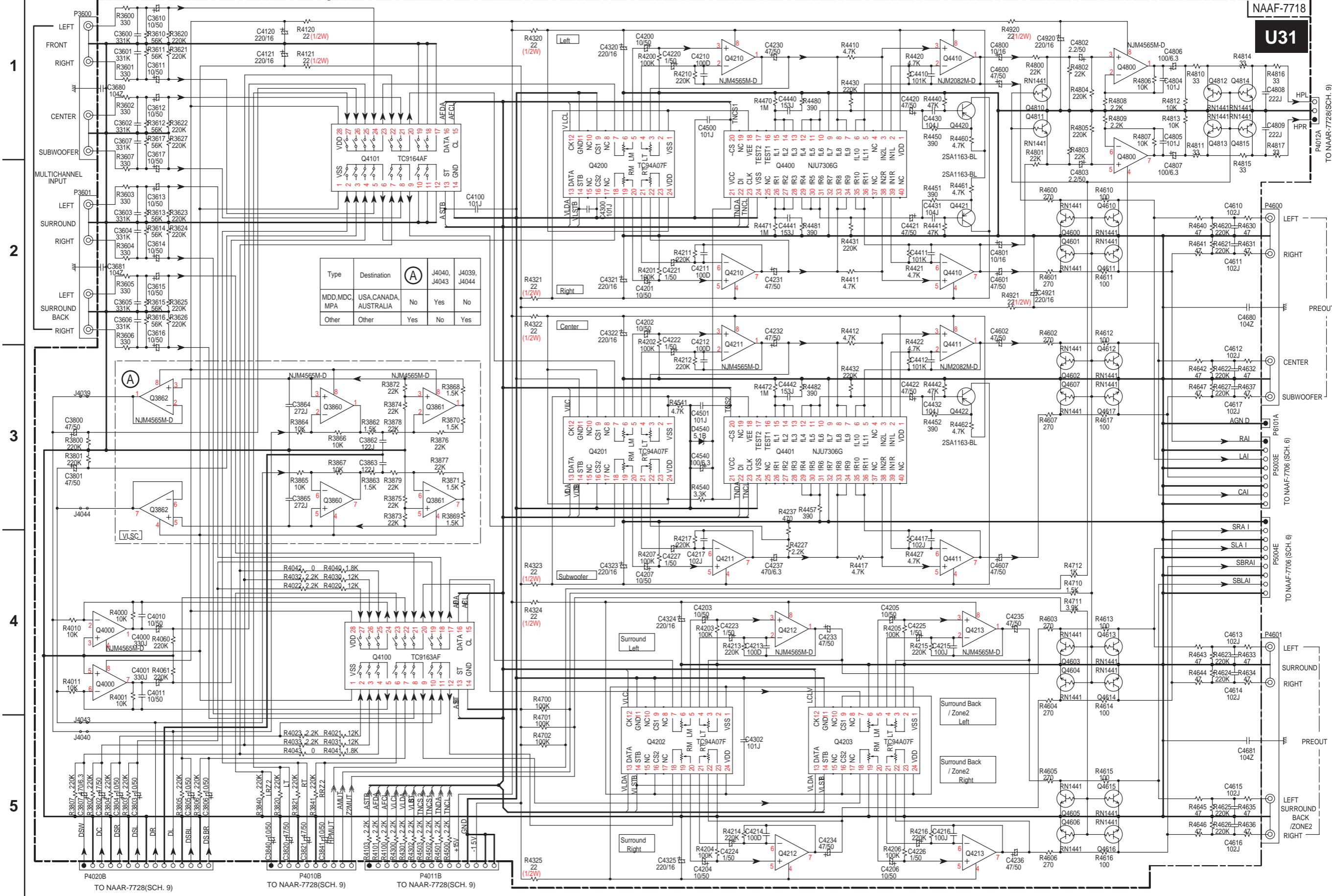
SEMICONDUCTORS	
NO.	DESCRIPTION
Q6000-06, Q6010-6016	2SC1740S-R,S
Q6020-26	KTA1267-GR OR 2SA933S-R,S OR 2SA1048-GR
Q6030-32	2SC2229-Y,O
Q6033-36	KTD2061-Y OR 2SC5171
Q6040-42	2SA949-Y,O
Q6043-46	KTB1369-Y OR 2SA1930
Q6050-56	2SC5359-O,R
Q6060-66	2SA1987-O,R
Q6070-76	2SC2631-R,S
Q6090-92	KTB1369-Y OR 2SA1930
Q6100-02	KTD2061-Y OR 2SC5171
Q6703	KTA1268-GR,BL OR 2SA992-E,F



SCHEMATIC DIAGRAM 4-2 Pre-amplifier section



SCHEMATIC DIAGRAM 4-1 Pre-amplifier section



NAAF-7718

U31

TO NAAF-7728(SCH. 9)

PREOUT

AGN D

RAI LAI CAI

SRA I SLA I SBRAI SBLAI

P4601 LEFT SURROUND RIGHT

PREOUT

LEFT SURROUND BACK /ZONE2 RIGHT

TO NAAF-7706 (SCH. 6)

TO NAAF-7706 (SCH. 6)

TO NAAF-7728(SCH. 9)

TO NAAF-7728(SCH. 9)

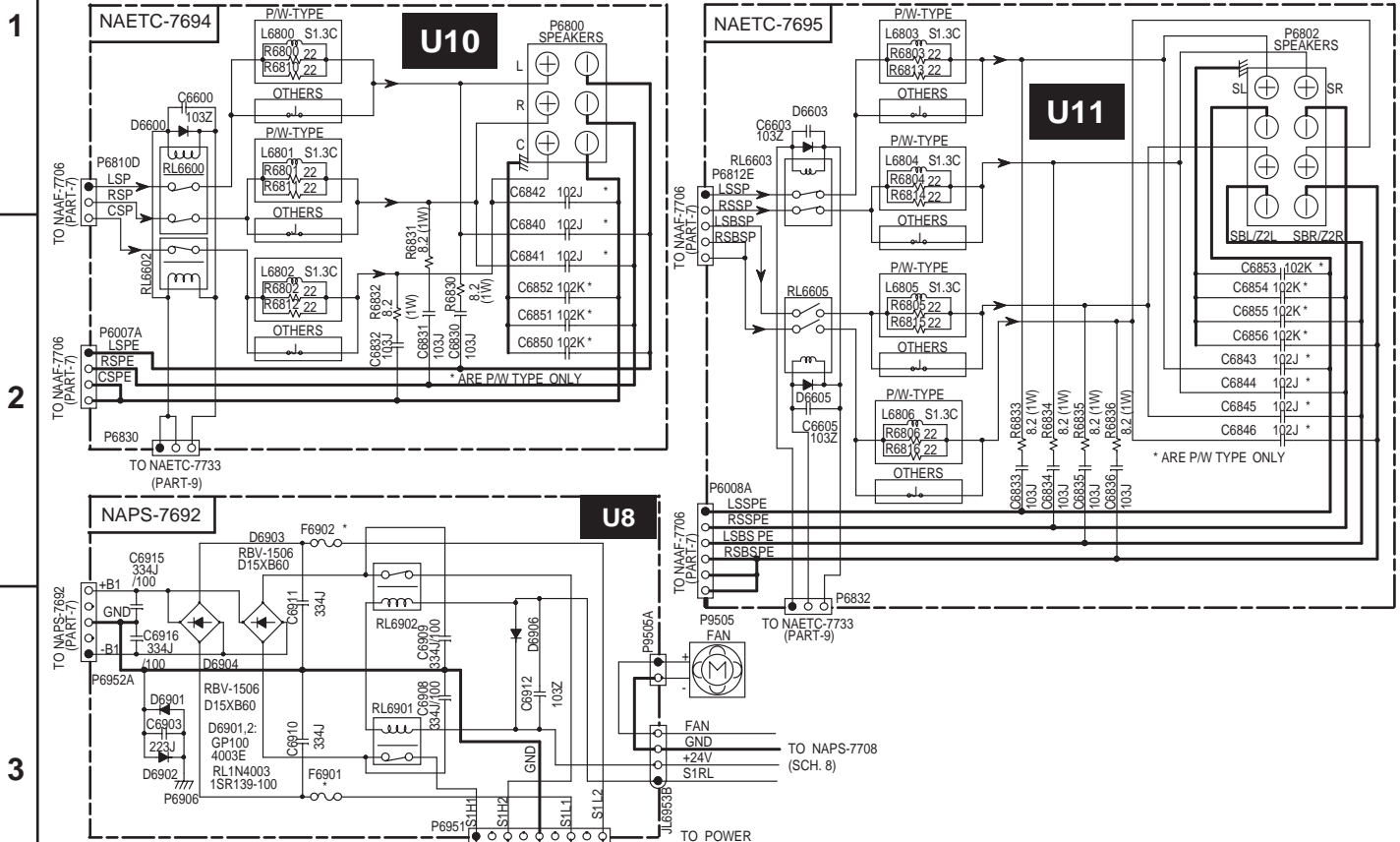
TO NAAF-7728(SCH. 9)

TO NAAF-7728(SCH. 9)

TO NAAF-7706 (SCH. 6)

TO NAAF-7706 (SCH. 6)

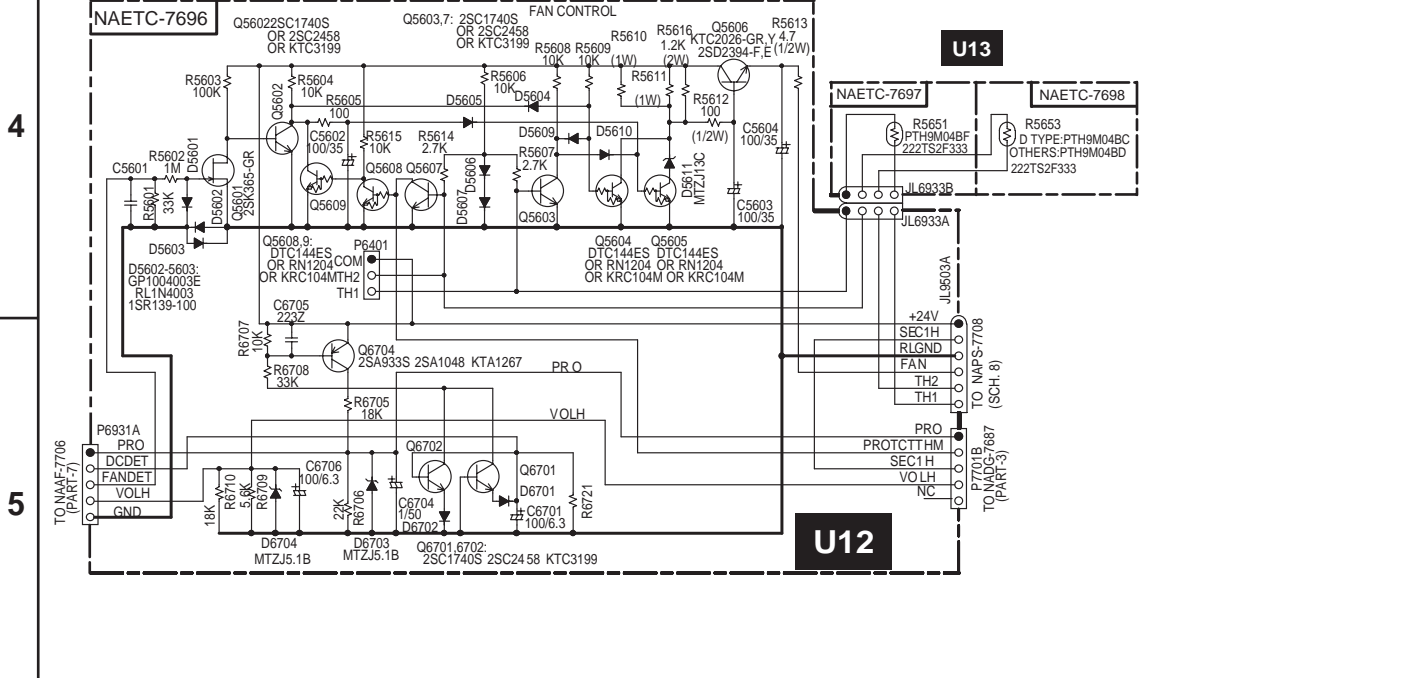
A B C D
SCHEMATIC DIAGRAM 7 Speaker terminal and fan drive sections



FAN CONTROL

SIGNAL	TEMP	Q5601	Q5602	Q5603	Q5604	Q5605	Q5607	Q5608	Q5609	Q5606	FAN
NO	LOW	ON	OFF	OFF	ON	ON	OFF	ON	OFF	0V	OFF
YES	LOW	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	12V	LOW
NO	MID	ON	OFF	ON	OFF	ON	OFF	ON	OFF	12V	LOW
YES	MID	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	22V	HI
NO	HIGH	ON	OFF	ON	OFF	OFF	ON	OFF	ON	22V	HI
YES	HIGH	OFF	ON	ON	OFF	OFF	ON	OFF	ON	22V	HI

TYPE	F6901_2
D	12V 250V
P	T10AL250V
G	T10AL250V
W	T10AL250V



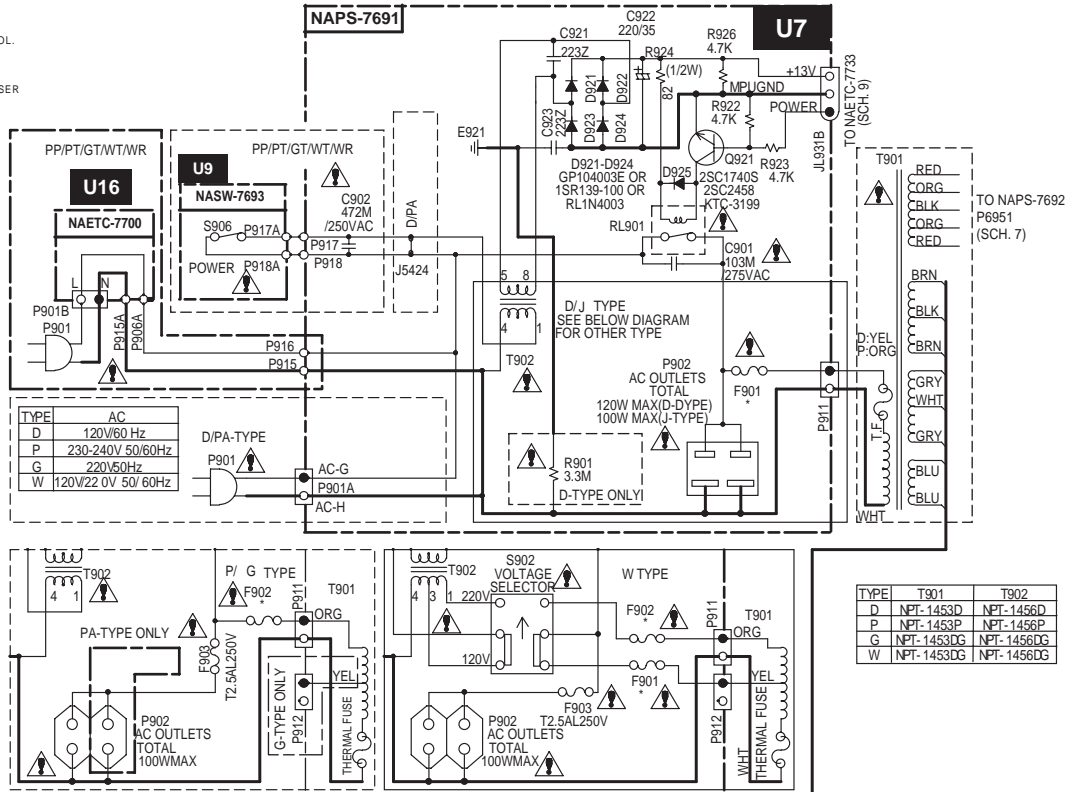
SCHEMATIC DIAGRAM 8 Power Supply Section

THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD. REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MAKING ADJACENT TO THE SYMBOL.

1 CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT. E POUR UNE PROTECTION PERMANENTE. N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST INDIQUE LA OU LE PRESENT SYMBOL EST APPOSE.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

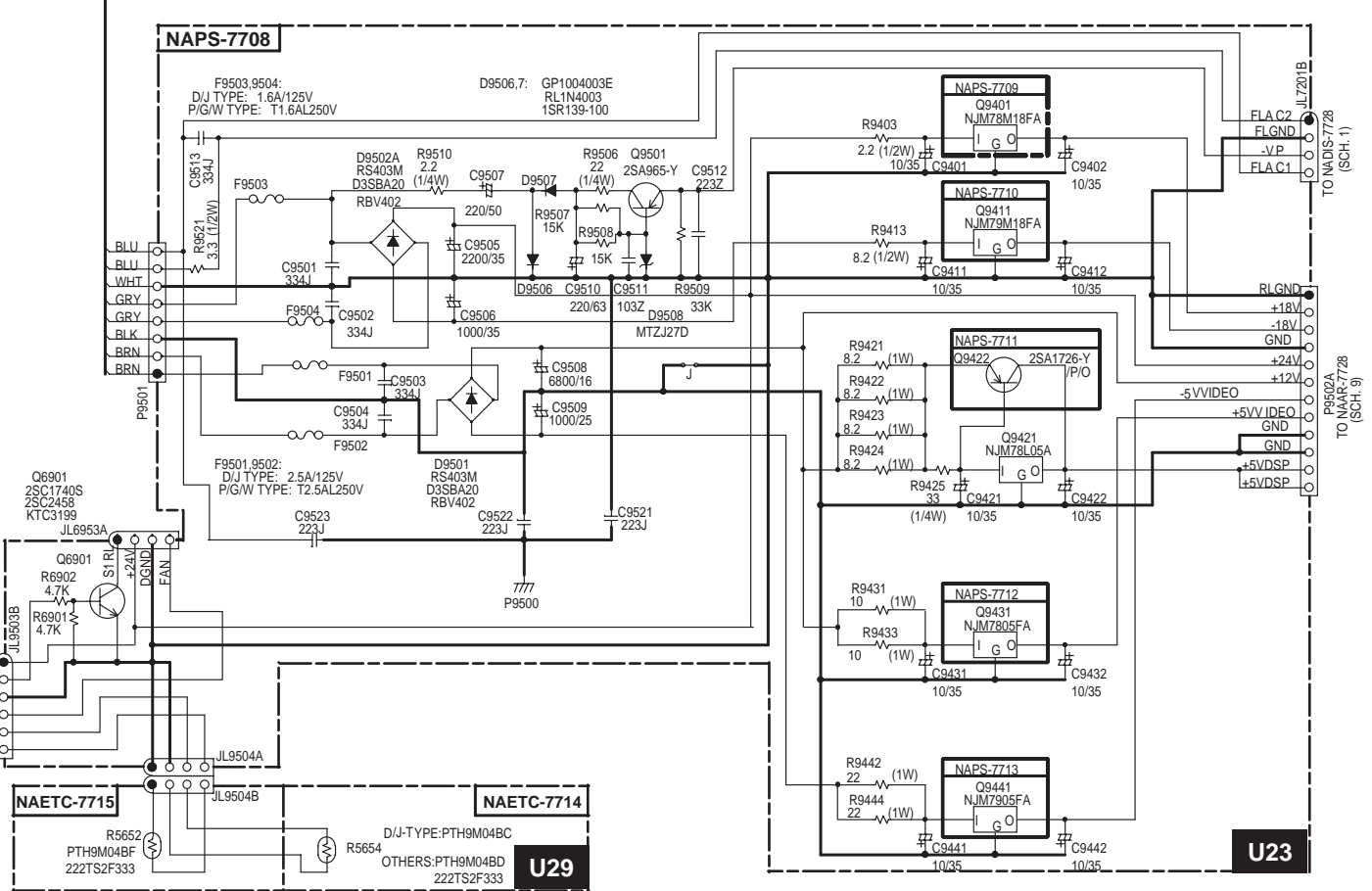


2

3

4

5



U23

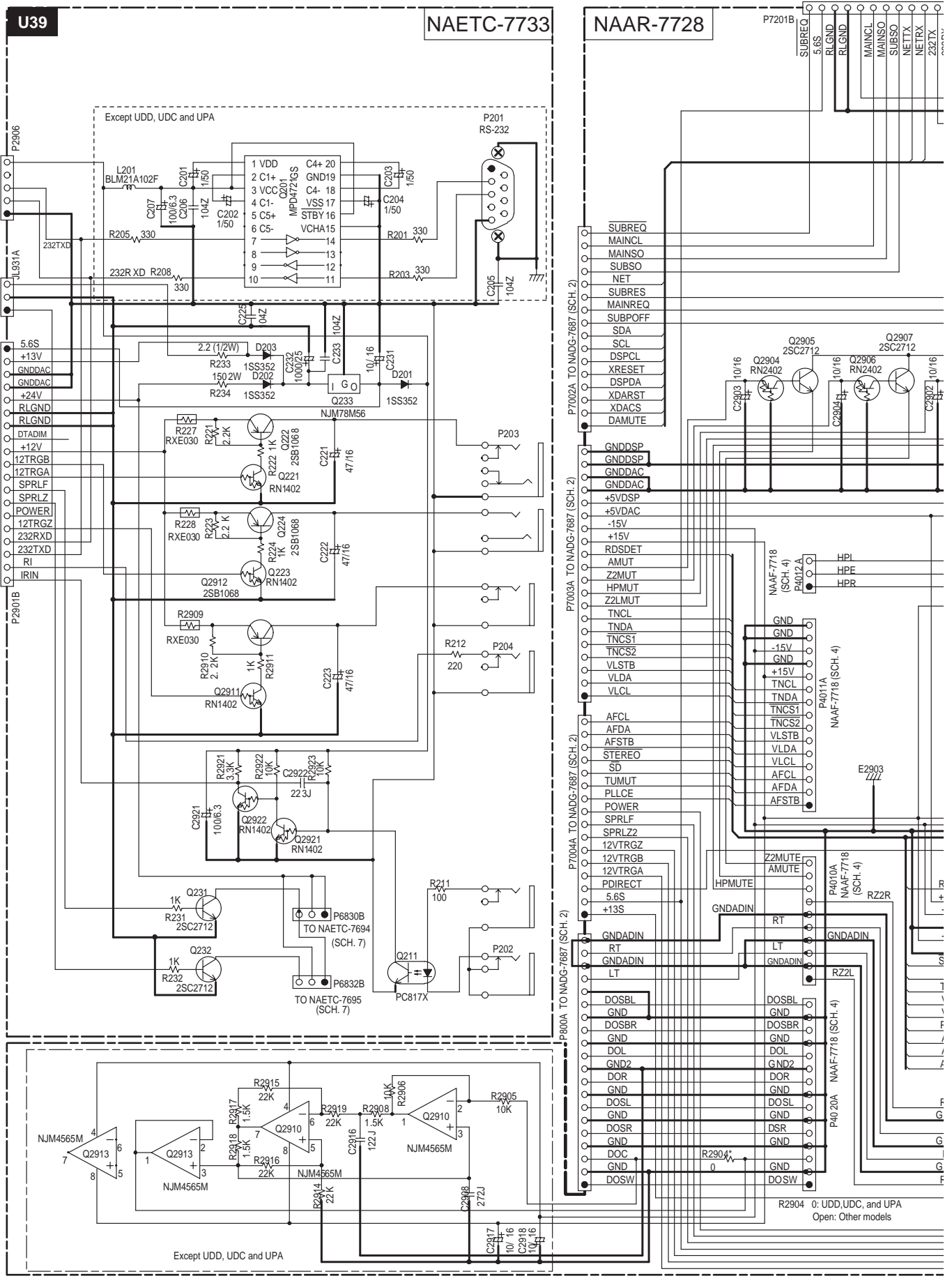
SCHEMATIC DIAGRAM 9-1 Mother Board Section

U39

NAETC-7733

NAAR-7728

1
2
3
4
5



R2904 0: UDD,UDC, and UPA
Open: Other models

SCHEMATIC DIAGRAM 9-2 Mother Board Section

NADIS-7738(SCH.1) NAPS-7708 (SCH. 8)

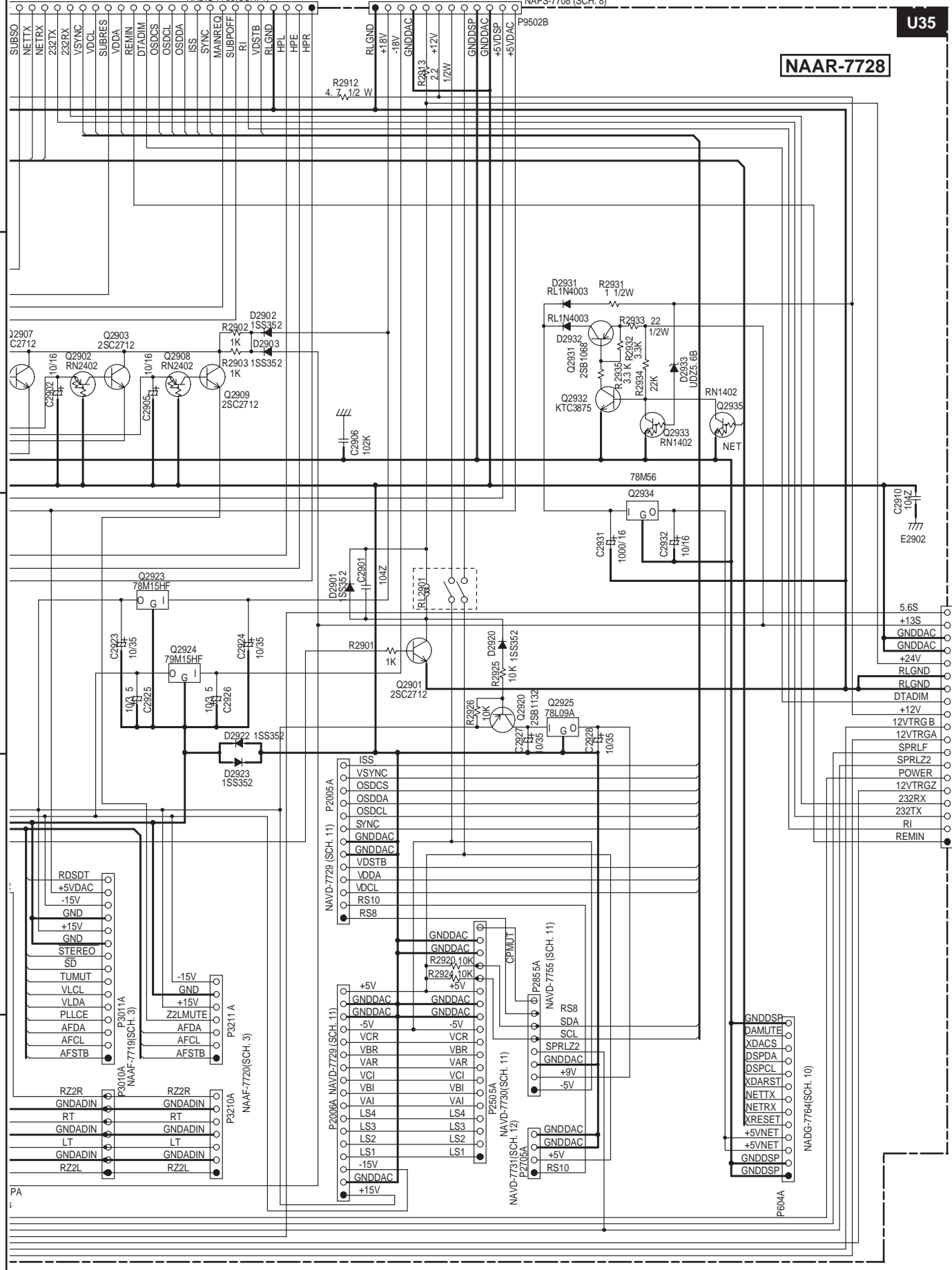
1

2

3

4

5



A B C D
SCHEMATIC DIAGRAM 10-1 Net-tune circuit section

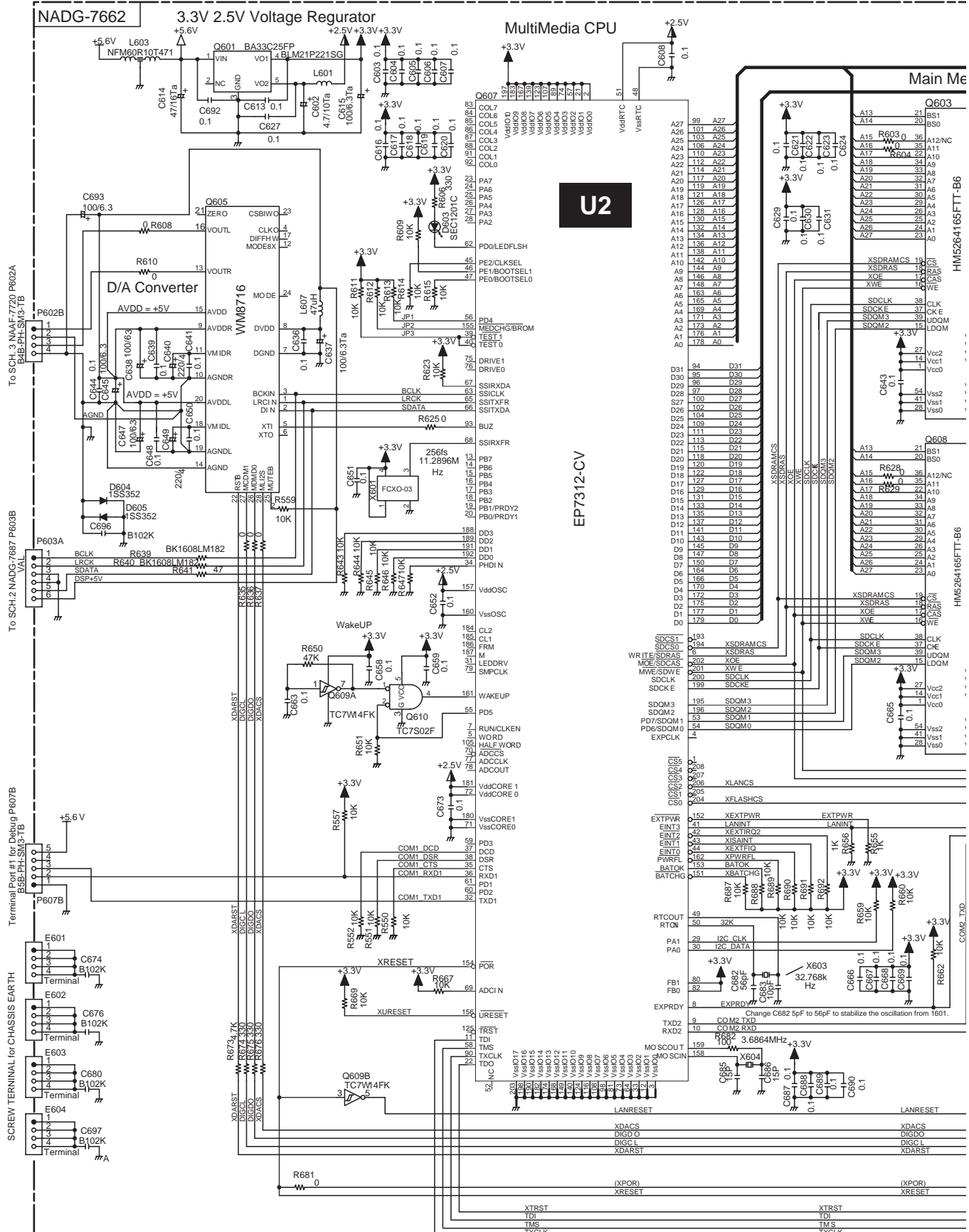
1

2

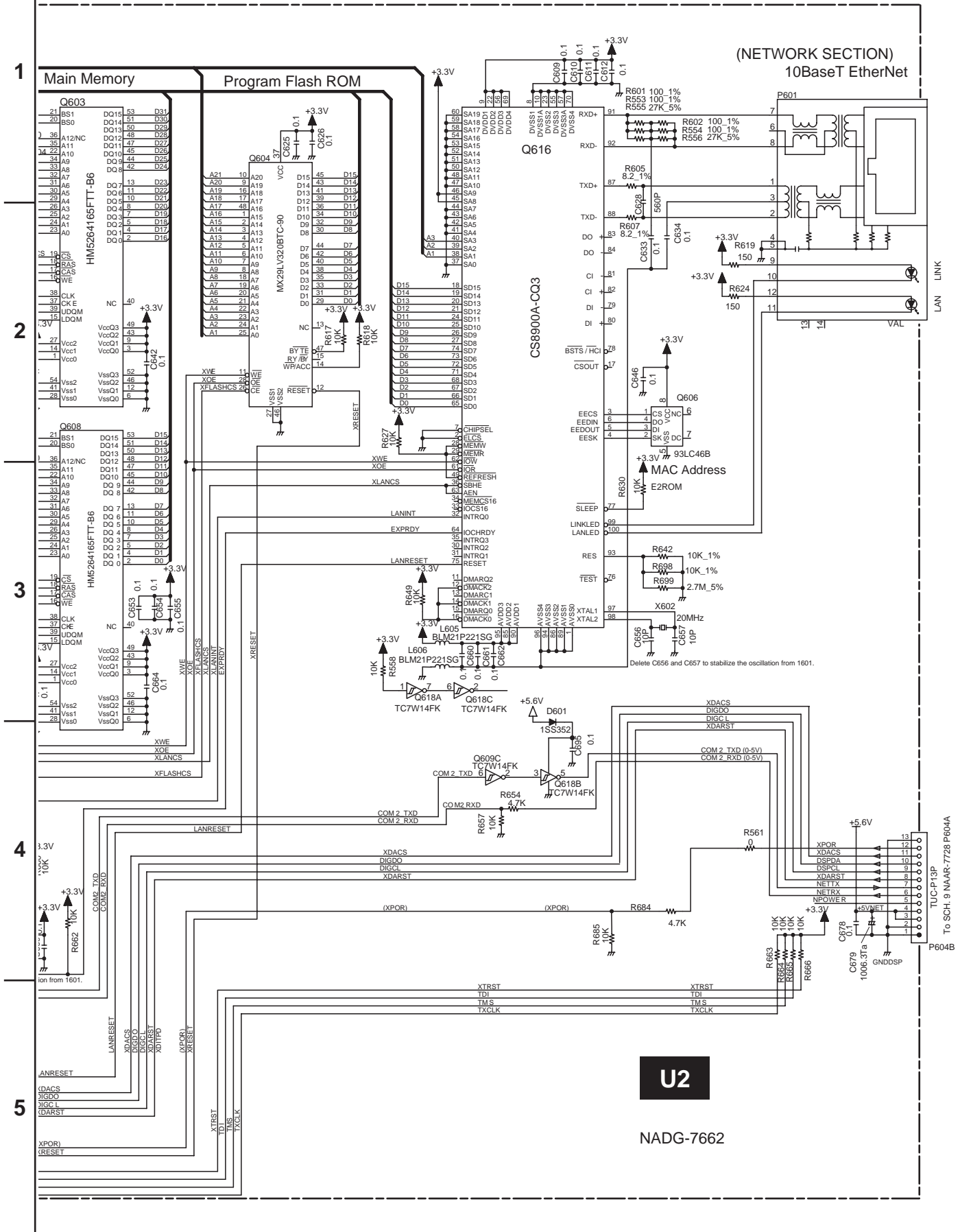
3

4

5

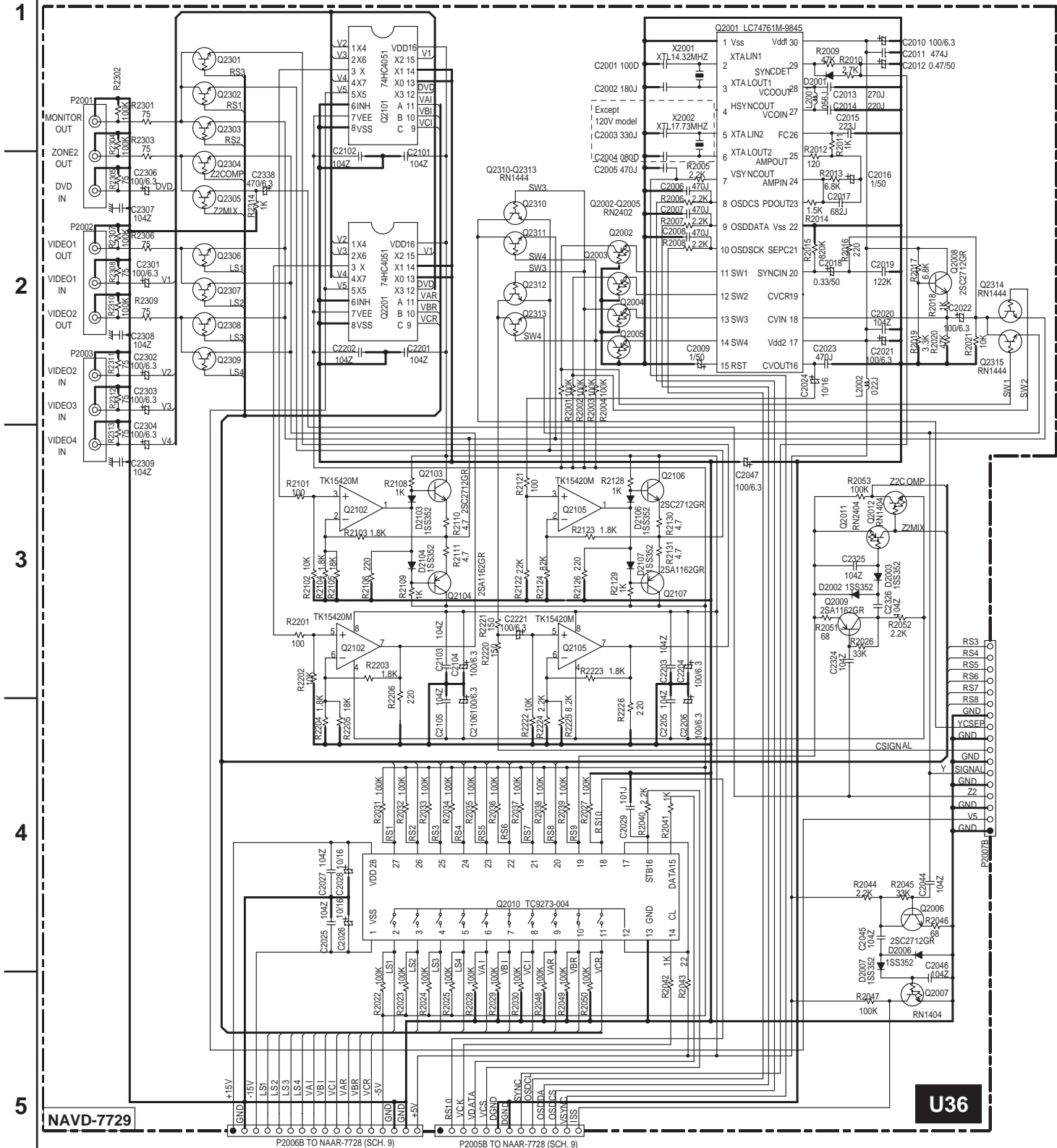


SCHEMATIC DIAGRAM 10-2 Net-tune circuit section



A B C D

SCHEMATIC DIAGRAM 11-1 Video Section



U36

NAVD-7729

P2006B TO NAAR-7728 (SCH. 9) P2005B TO NAAR-7728 (SCH. 9)

A B C D

SCHEMATIC DIAGRAM 11-2 Video Section

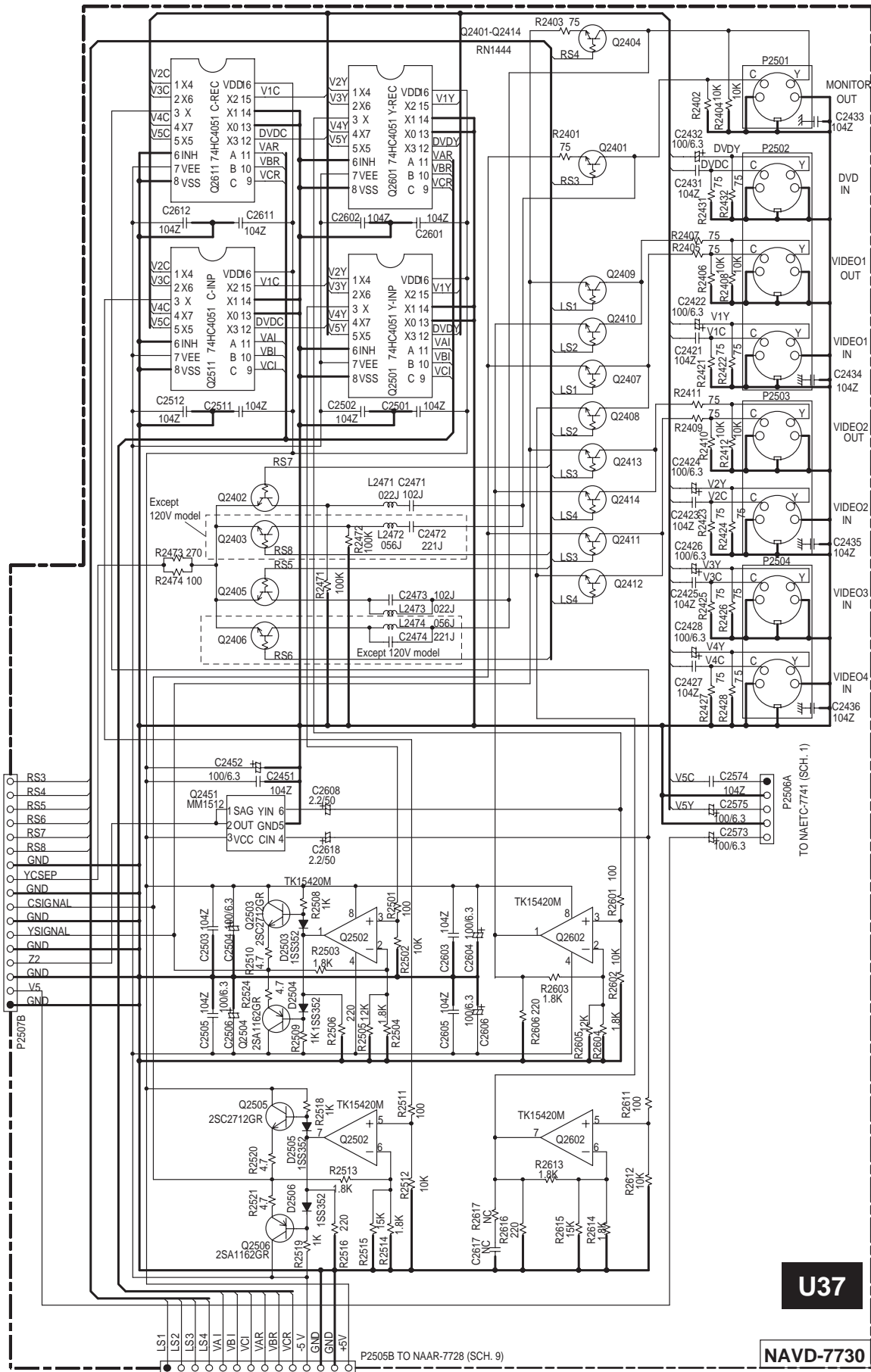
1

2

3

4

5



U37

NAVD-7730

A

B

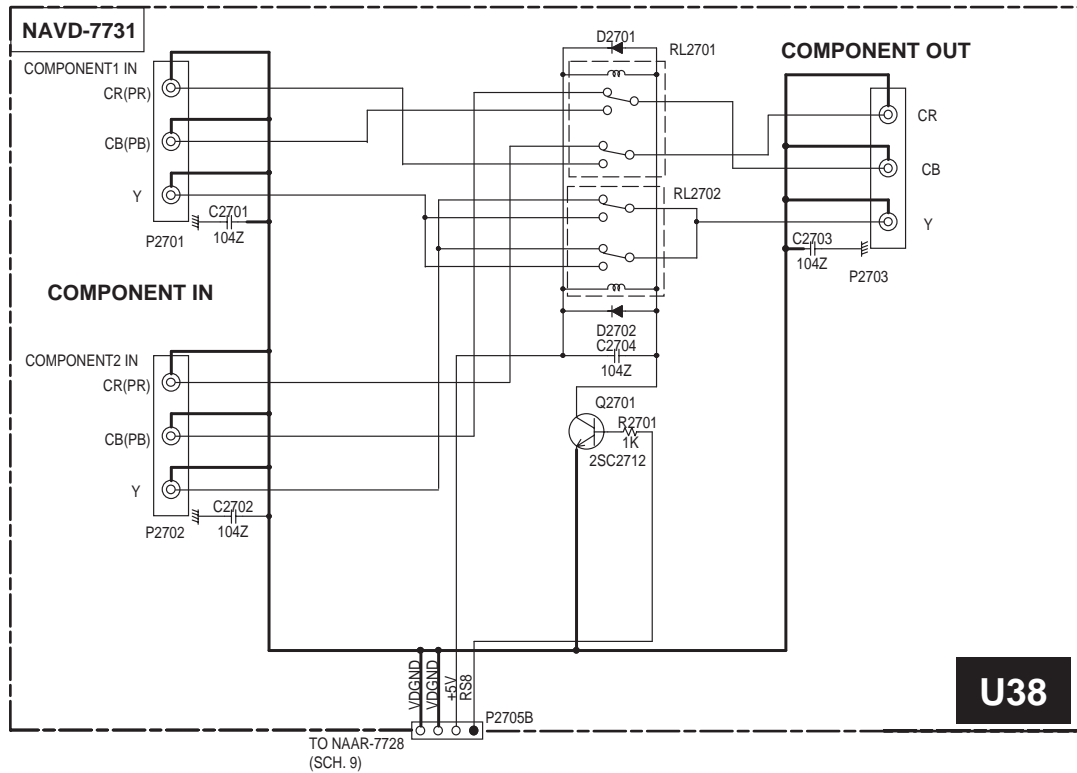
C

D

SCHEMATIC DIAGRAM 12

Component video section

1

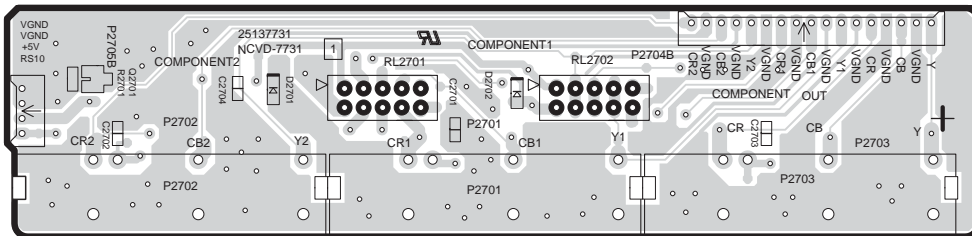


2

3

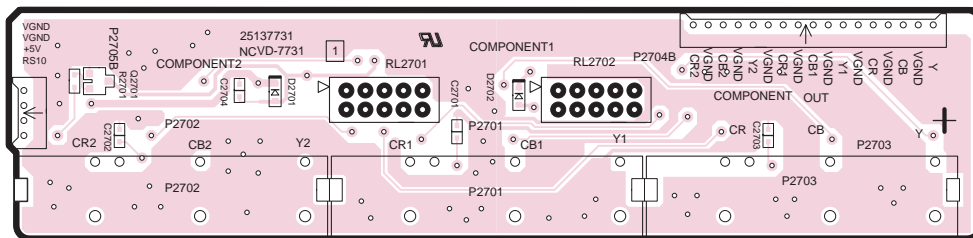
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 12

U38



4

COMPONENT PARTS SIDE



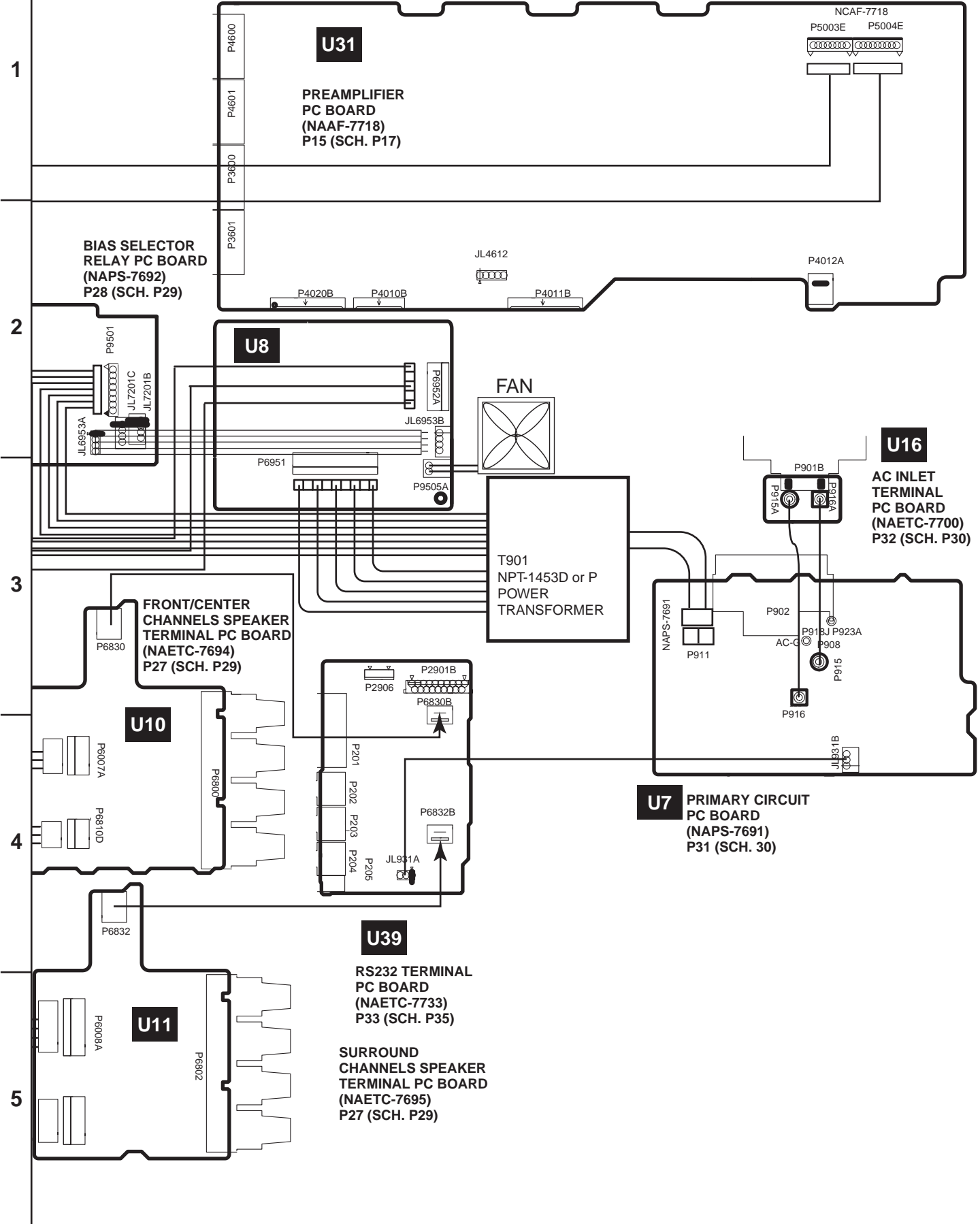
5

CHIP PARTS SIDE

COMPONENT VIDEO PC BOARD(NAVD-7731)

A B C D

WIRING VIEW 2-2



A

B

C

D

WIRING VIEW 2-1

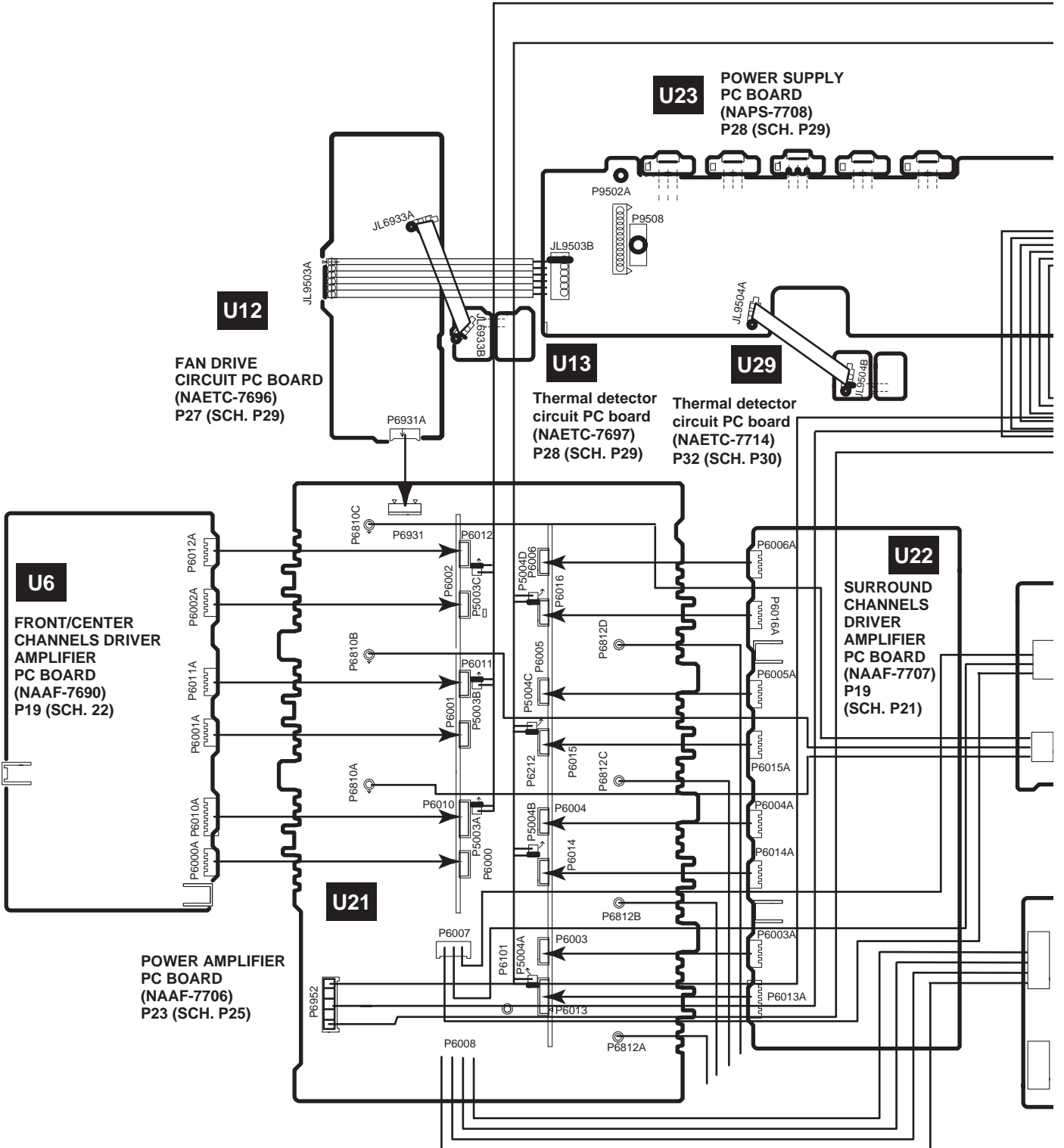
1

2

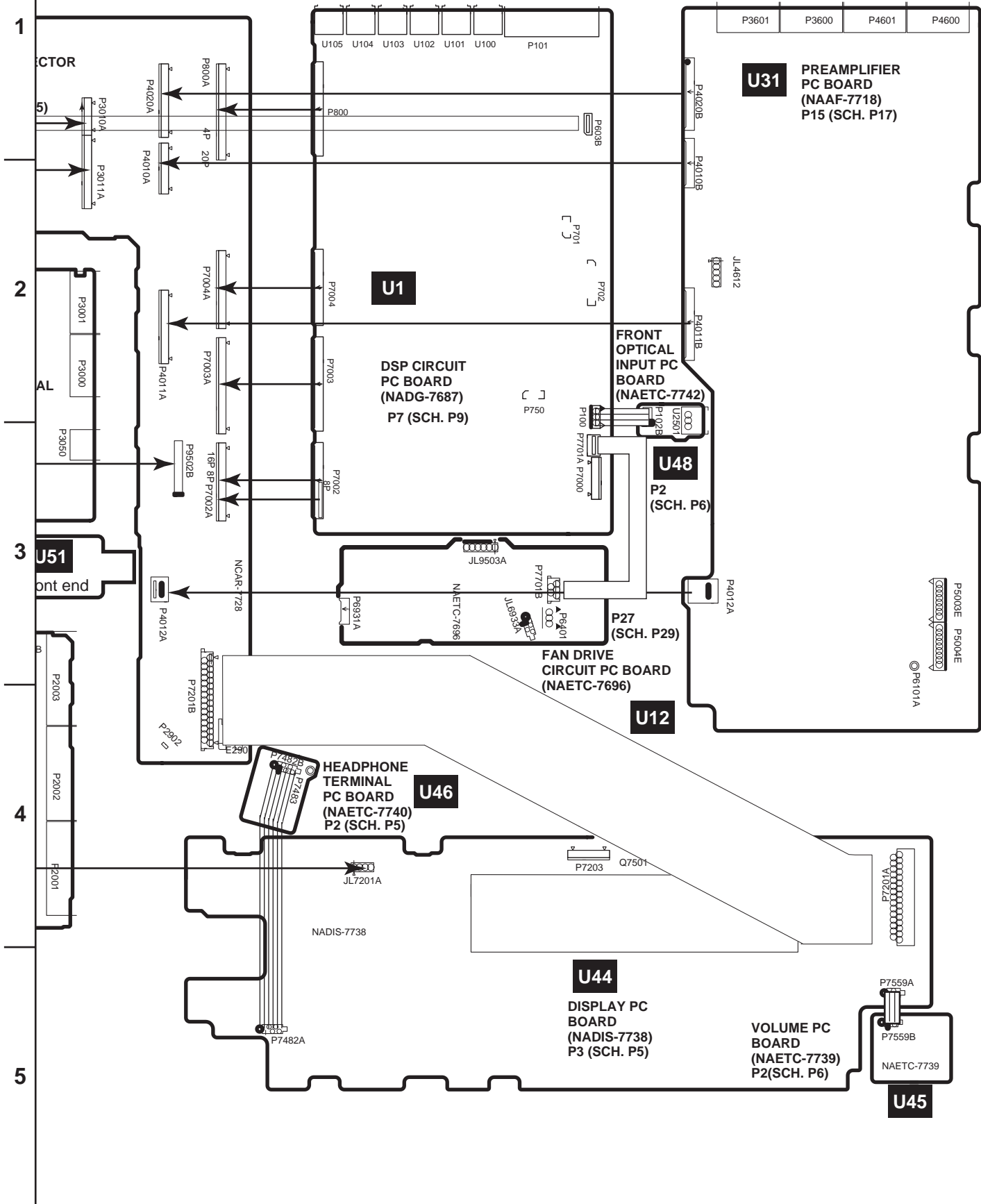
3

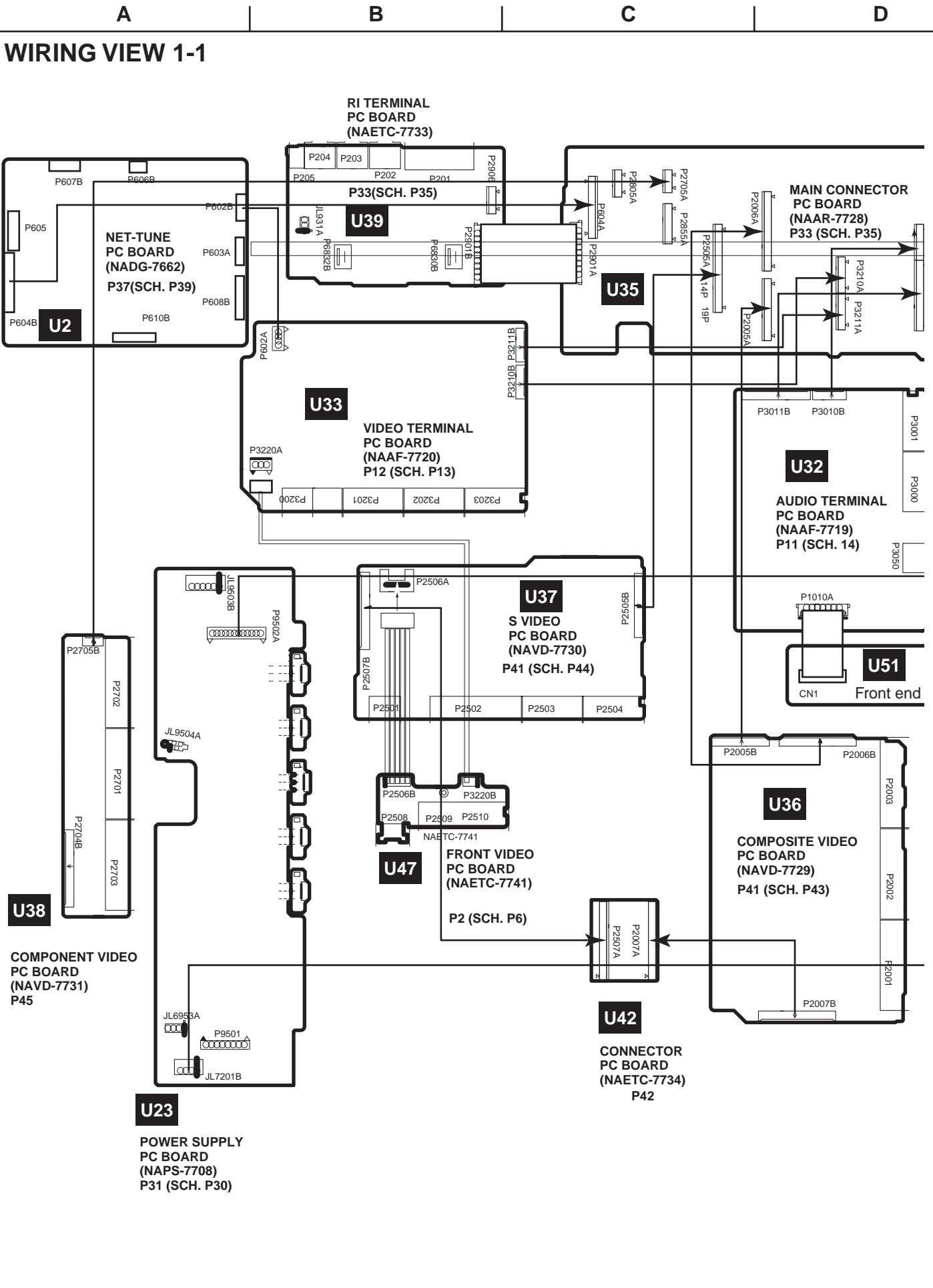
4

5



WIRING VIEW 1-2





A

B

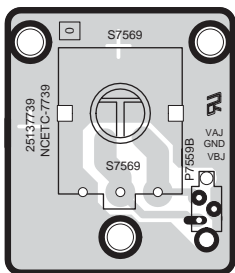
C

D

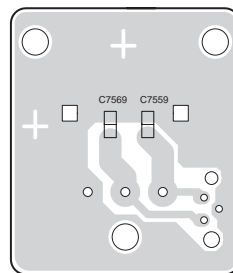
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1

1

U45



COMPONENT SIDE

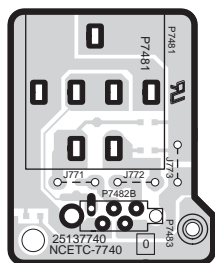


SOLDERING SIDE

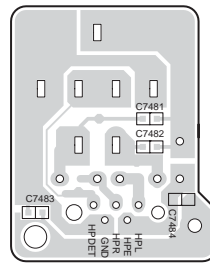
VOLUME PC BOARD(NAETC-7739)

2

U46



COMPONENT SIDE

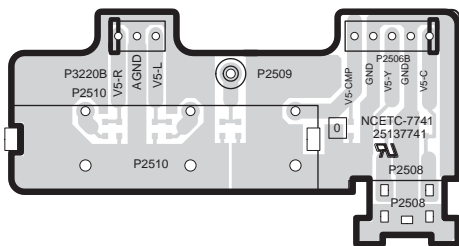


SOLDERING SIDE

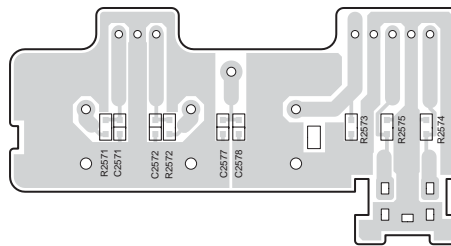
HEADPHONE TERMINAL PC BOARD(NAETC-7740)

3

U47



COMPONENT SIDE

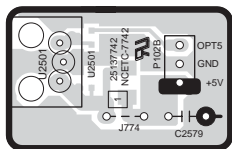


SOLDERING SIDE

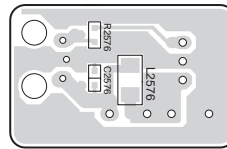
FRONT VIDEO PC BOARD(NAETC-7741)

4

U48



COMPONENT SIDE



SOLDERING SIDE

FRONT OPTICAL INPUT PC BOARD(NAETC-7742)

5

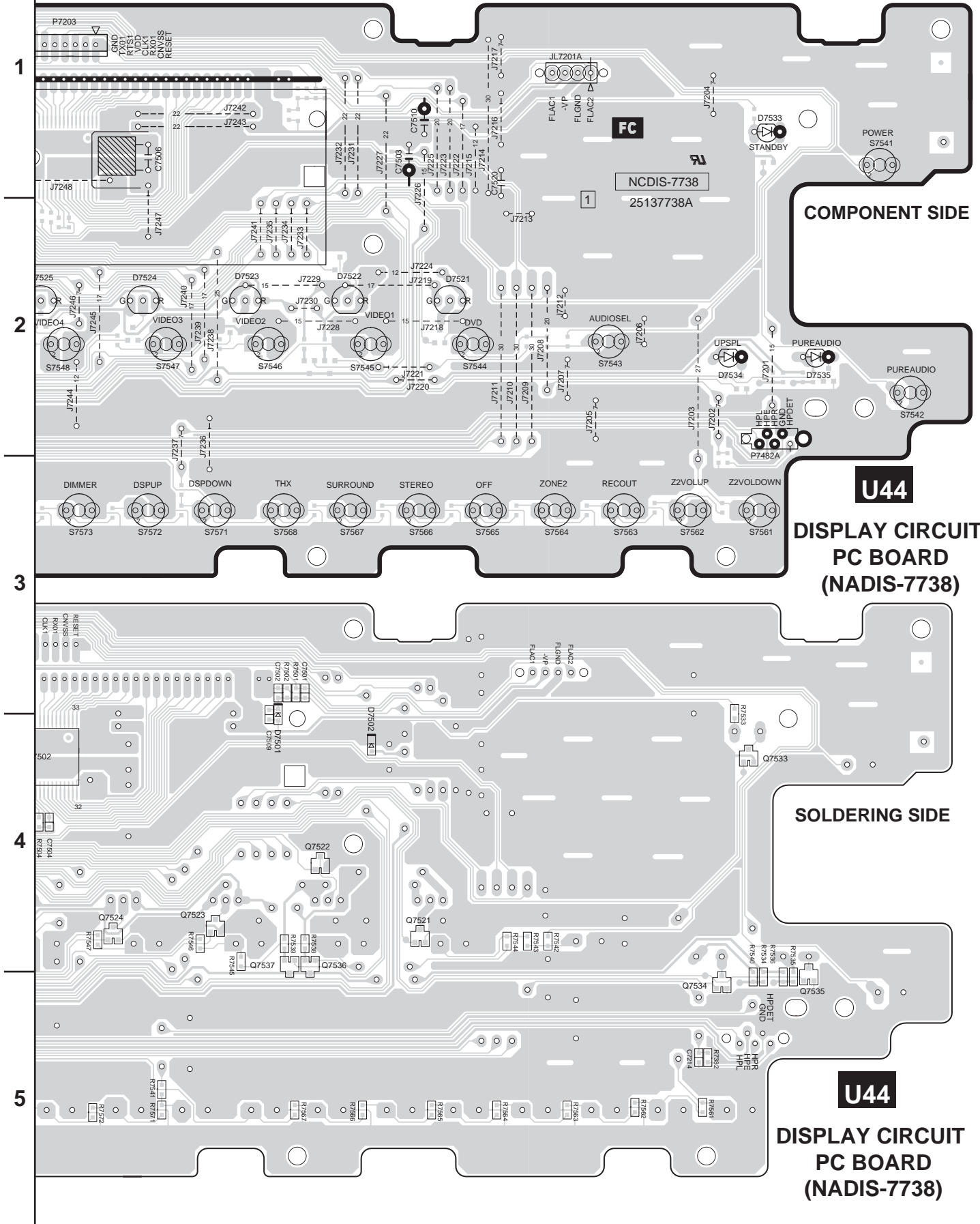
A

B

C

D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-2



COMPNENT SIDE

U44
DISPLAY CIRCUIT
PC BOARD
(NADIS-7738)

SOLDERING SIDE

U44
DISPLAY CIRCUIT
PC BOARD
(NADIS-7738)

A

B

C

D

PRINTED CIRCUIT BOARD VIEW 3-3

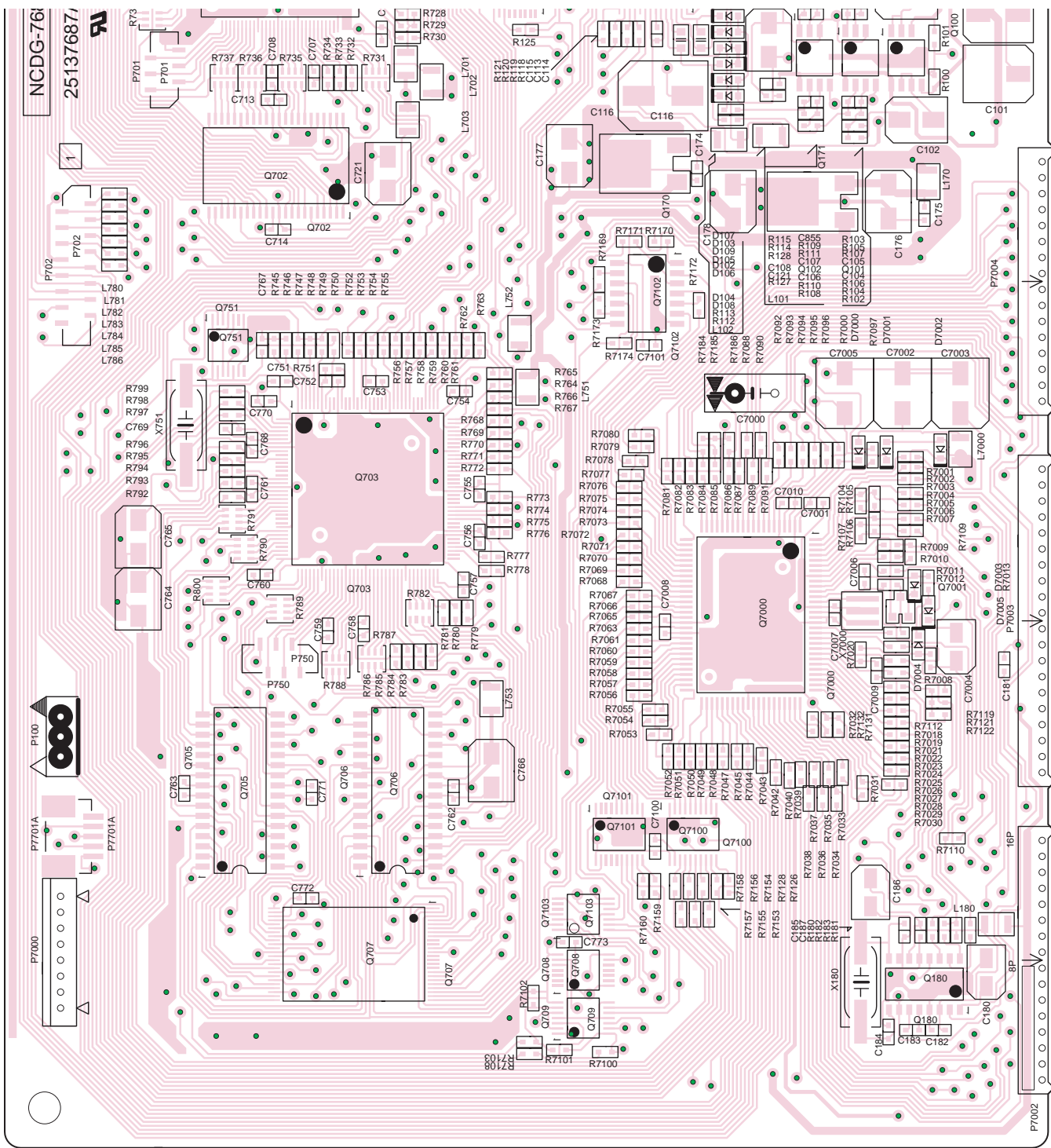
1

2

3

4

5



U1
DSP CIRCUIT
PC BOARD
(NADG-7687)
CHIP PARTS
SIDE

A

B

C

D

PRINTED CIRCUIT BOARD VIEW 3-2

U1

**DSP CIRCUIT
PC BOARD
(NADG-7687)
CHIP PARTS
SIDE**

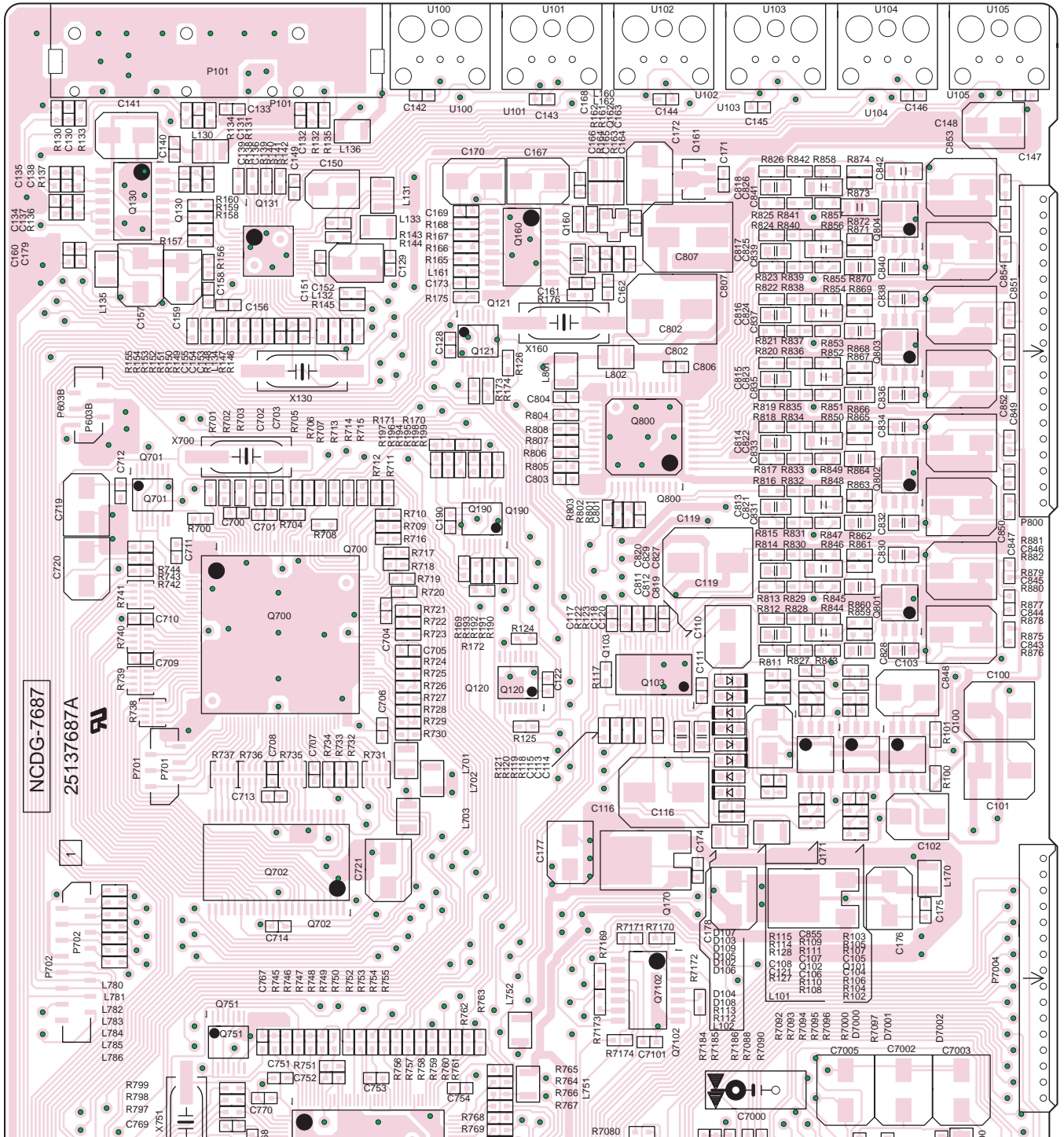
1

2

3

4

5



NCDG-7687
25137687A

A

B

C

D

PRINTED CIRCUIT BOARD VIEW 3-1

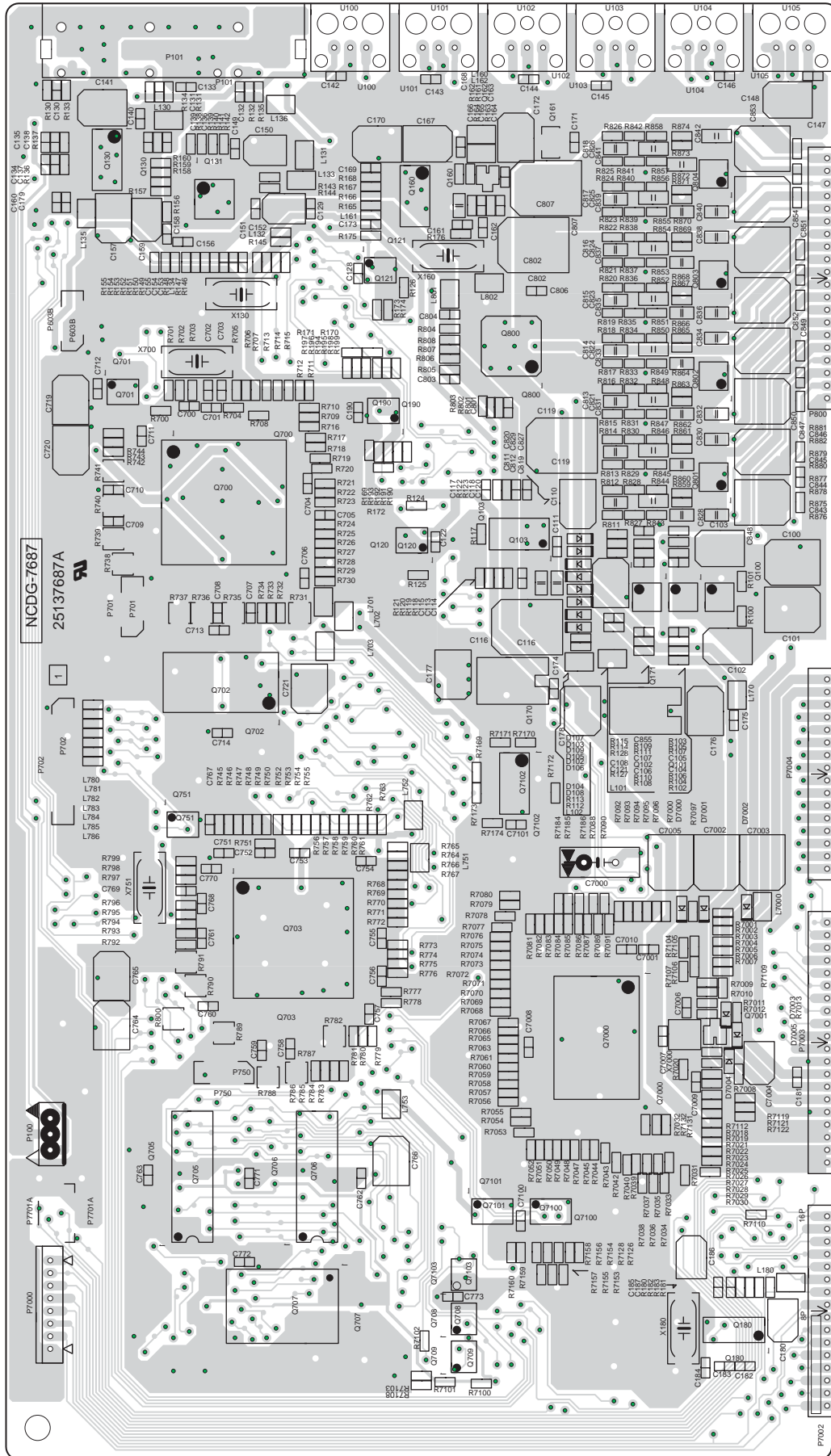
1

2

3

4

5



U1

DSP CIRCUIT
PC BOARD
(NADG-7687)
COMPONENT PARTS
SIDE

A

B

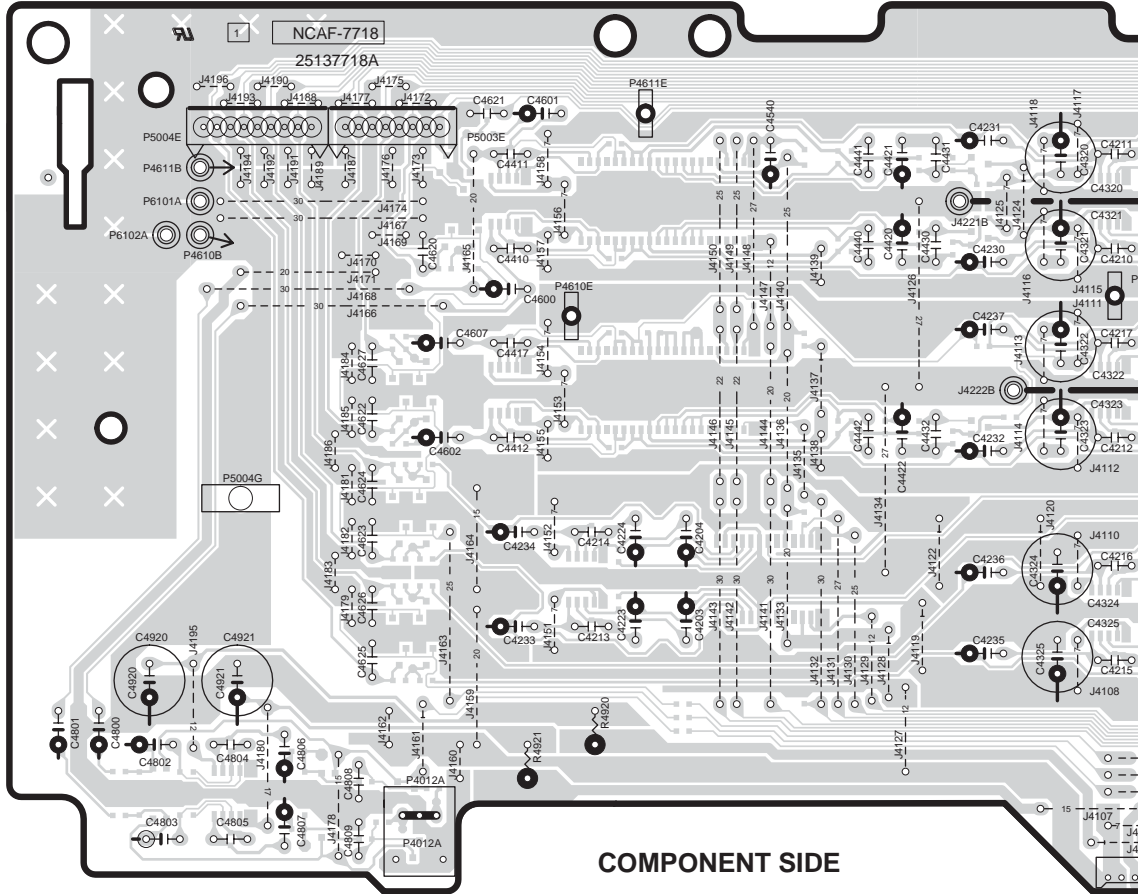
C

D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 5-1

U31

1 PREAMPLIFIER
PC BOARD
(NAAF-7718)



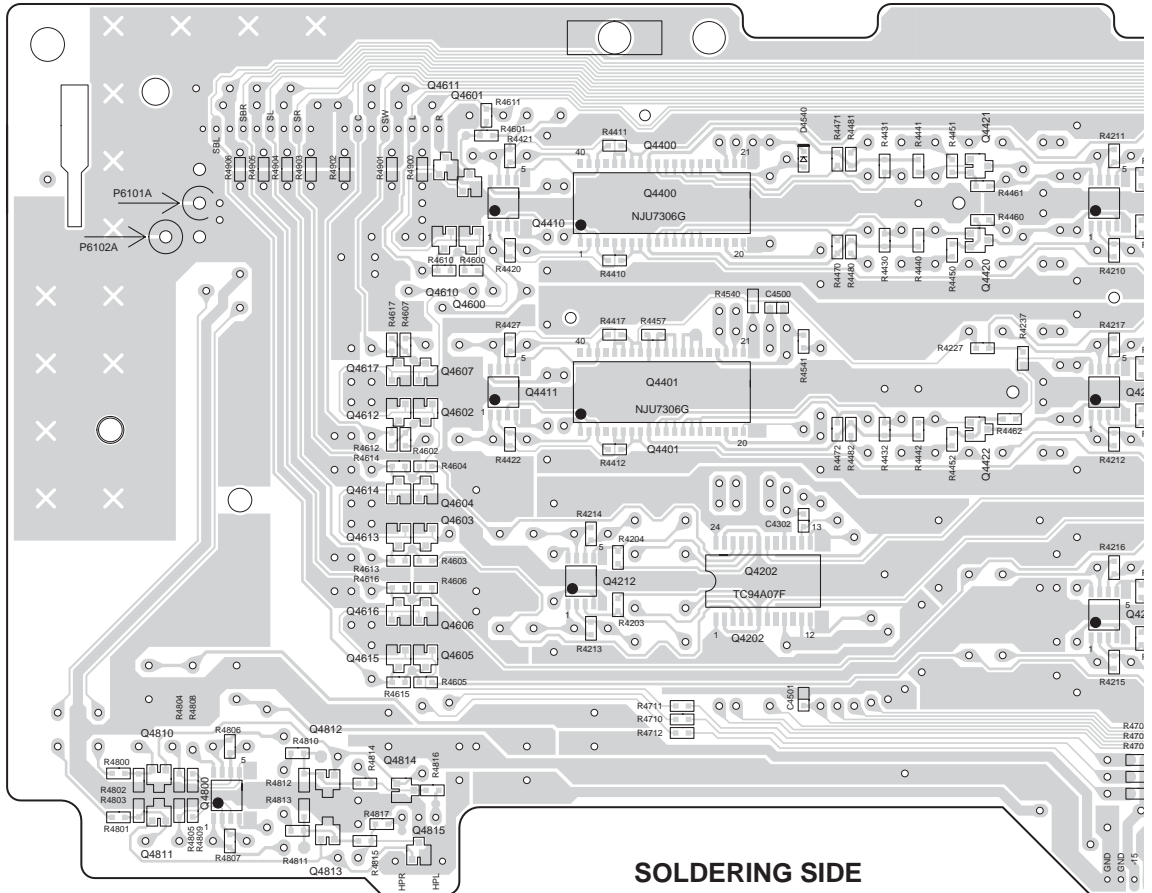
1

2

3

4

5



○ GND
○ 0V
○ 0.5

A

B

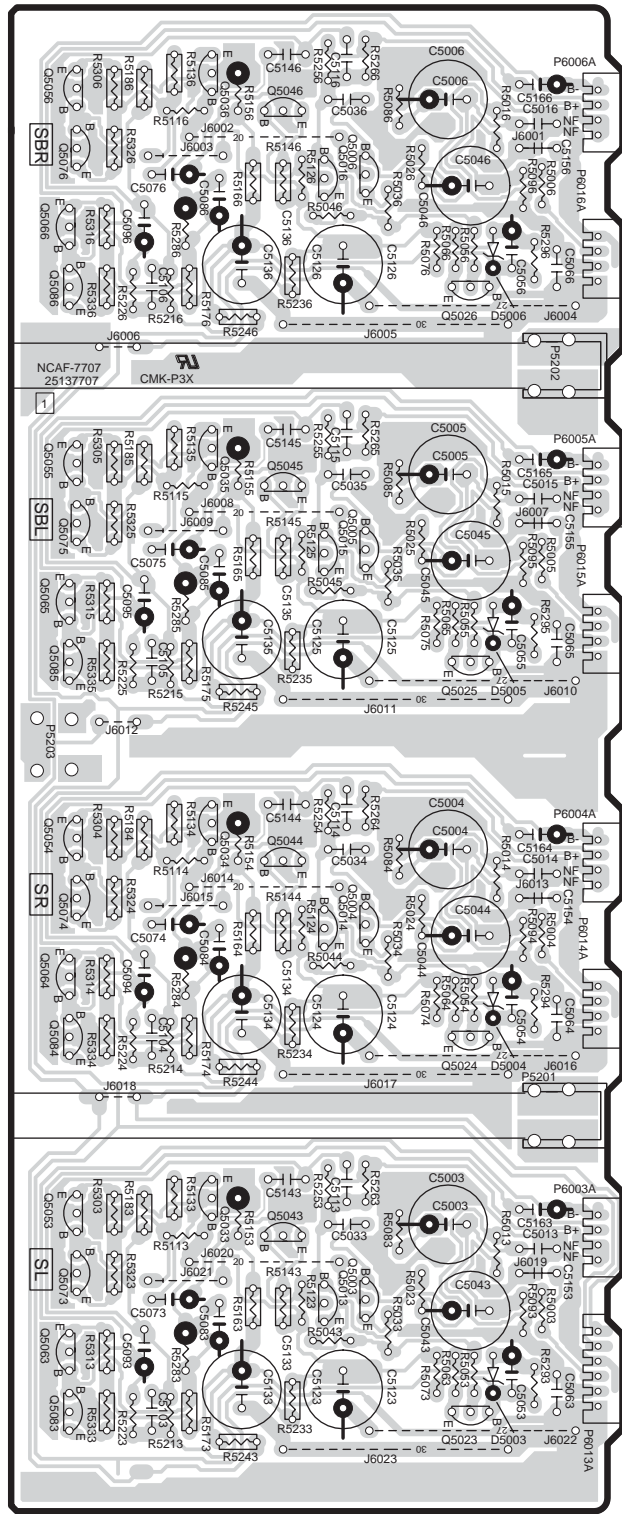
C

D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 6-1

U22

1
2
3
4
5



SURROUND CHANNEL DRIVER AMPLIFIER PC BOARD(NAAF-7707)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 7-1

U21

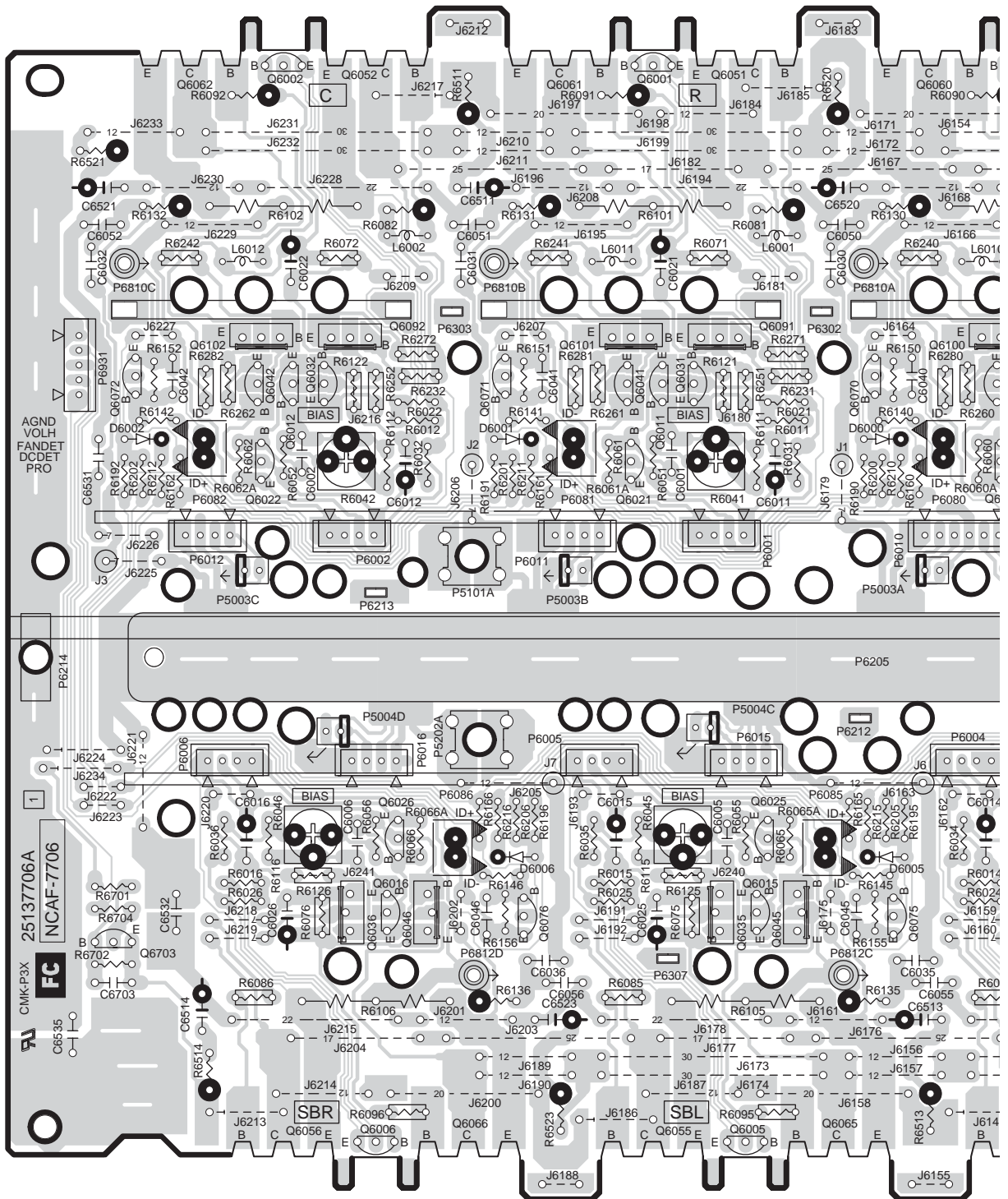
1

2

3

4

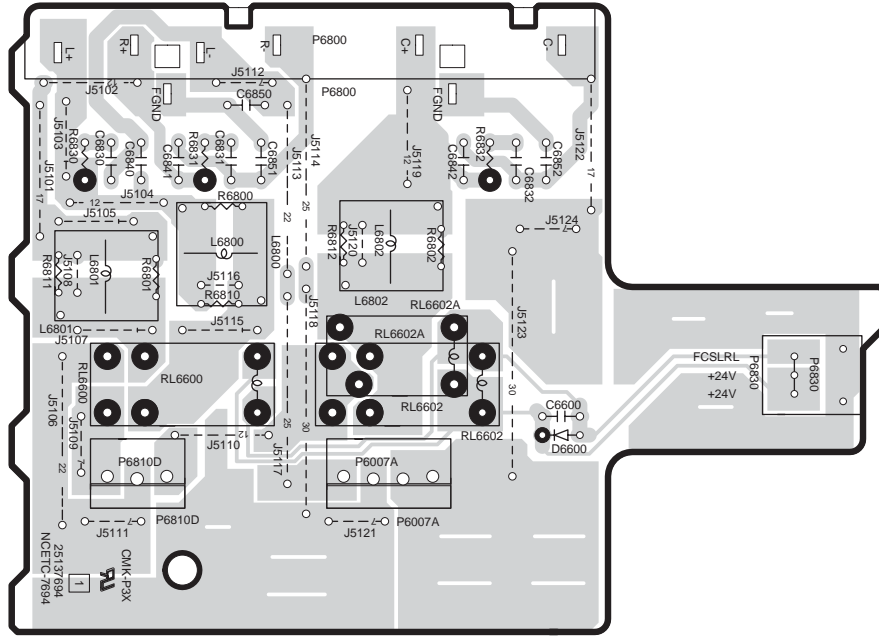
5



POWER AMPLIFIER PC BOARD(NAAF-7706)

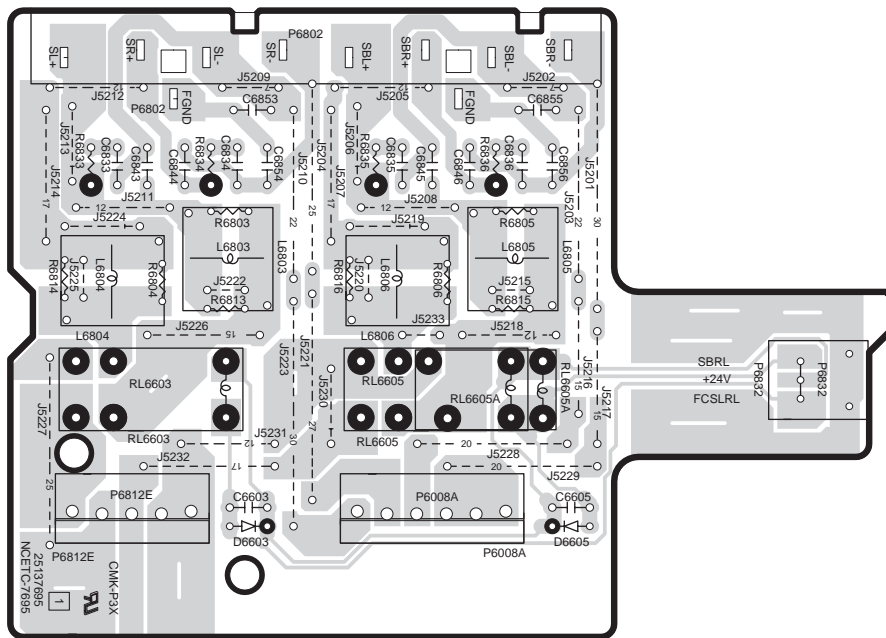
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 8-1

U10



**FRONT/CENTER CHANNELS SPEAKER
TERMINAL PC BOARD(NAETC-7694)**

U11



**SURROUND CHANNELS SPEAKER
TERMINAL PC BOARD(NAETC-7695)**

A

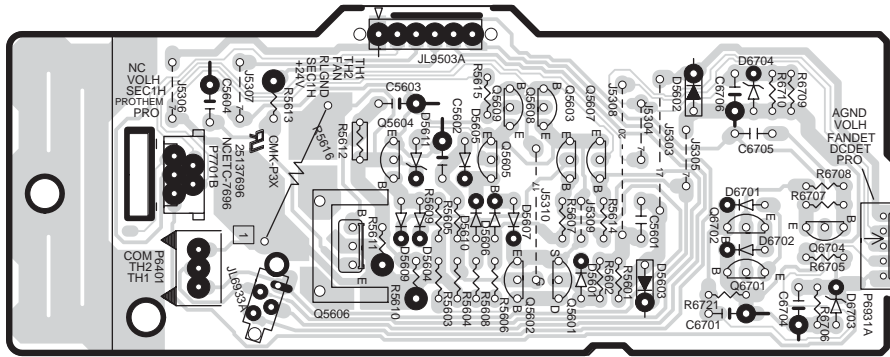
B

C

D

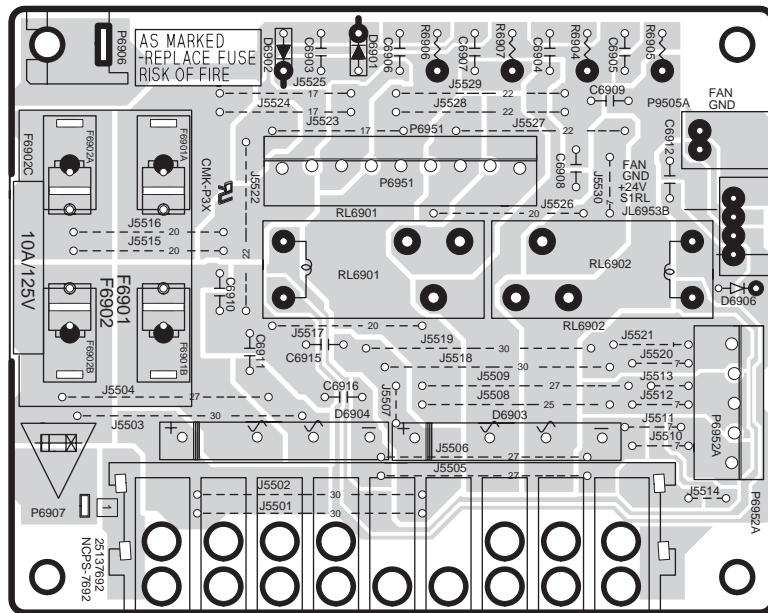
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 8-2

U12



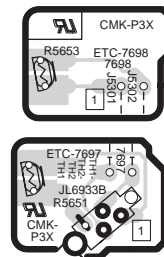
FAN DRIVE CIRCUIT PC BOARD(NAETC-7696)

U8



BIAS SELECTOR RELAY PC BOARD(NAPS-7692)

U13



THERMAL DETECTOR PC BOARD(NAETC-7697)

1

2

3

4

5

A

B

C

D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 9-1

U23

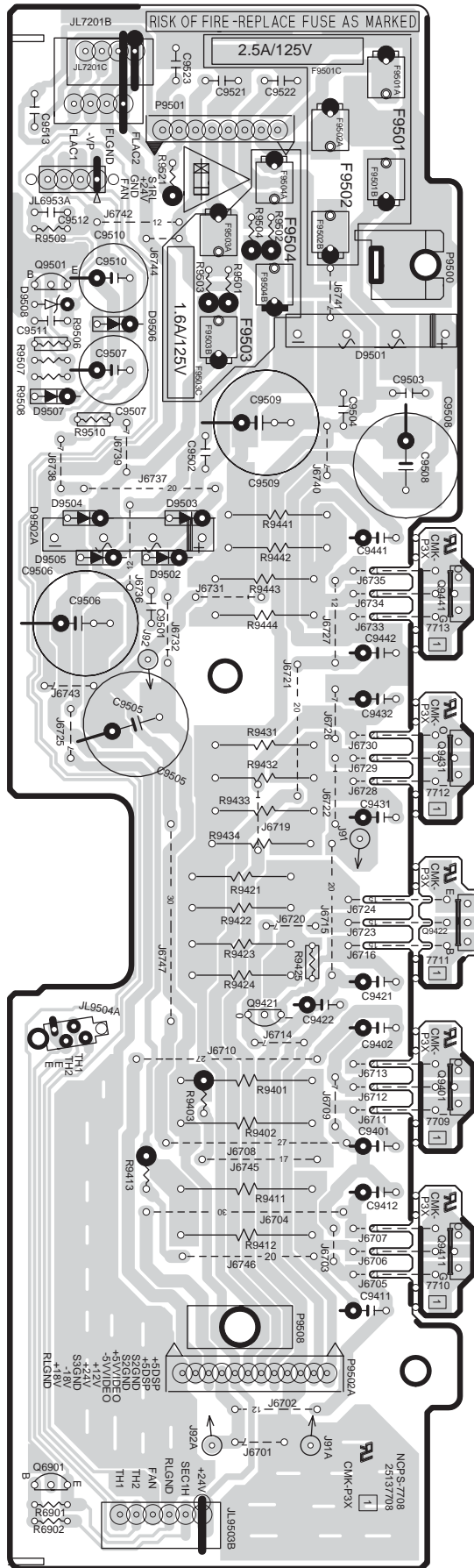
1

2

3

4

5



POWER SUPPLY PC BOARD(NAPS-7708)

A

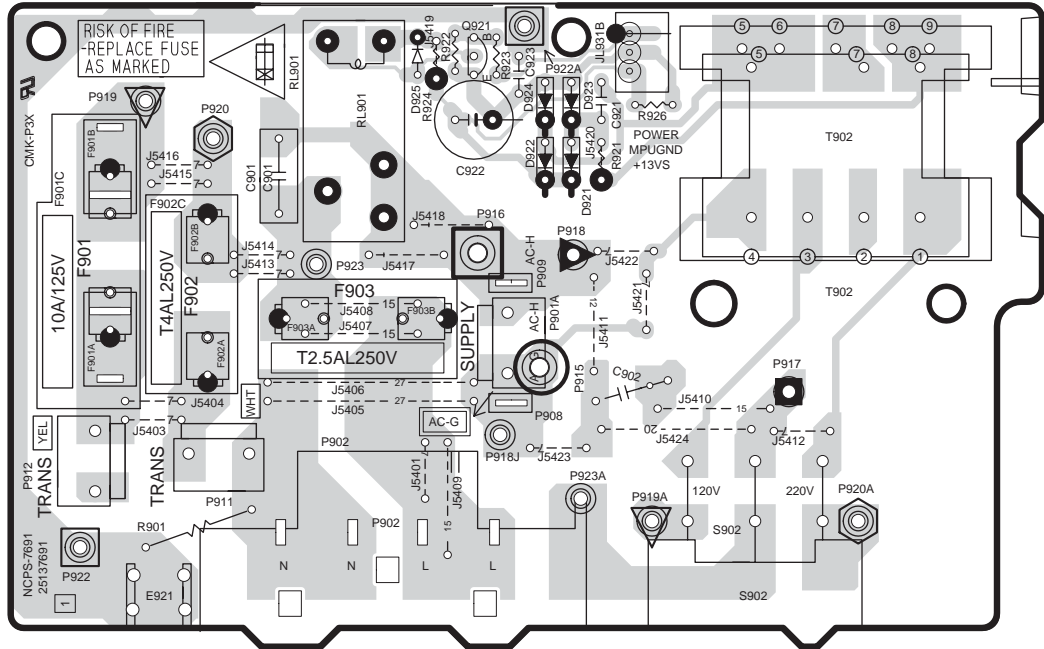
B

C

D

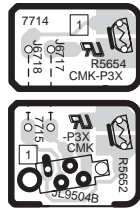
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 9-2

U7



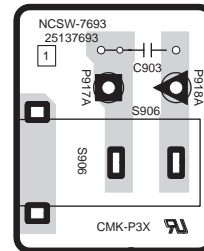
PRIMARY CIRCUIT PC BOARD(NAPS-7691)

U29



THERMAL DETECTOR PC BOARD(NAETC-7714)

U9



POWER SWITCH PC BOARD(NASW-7693)
Except 120V and Australian models

1

2

3

4

5

A B C D
PRINTED CIRCUIT BOARD VIEW 10-4

1

2

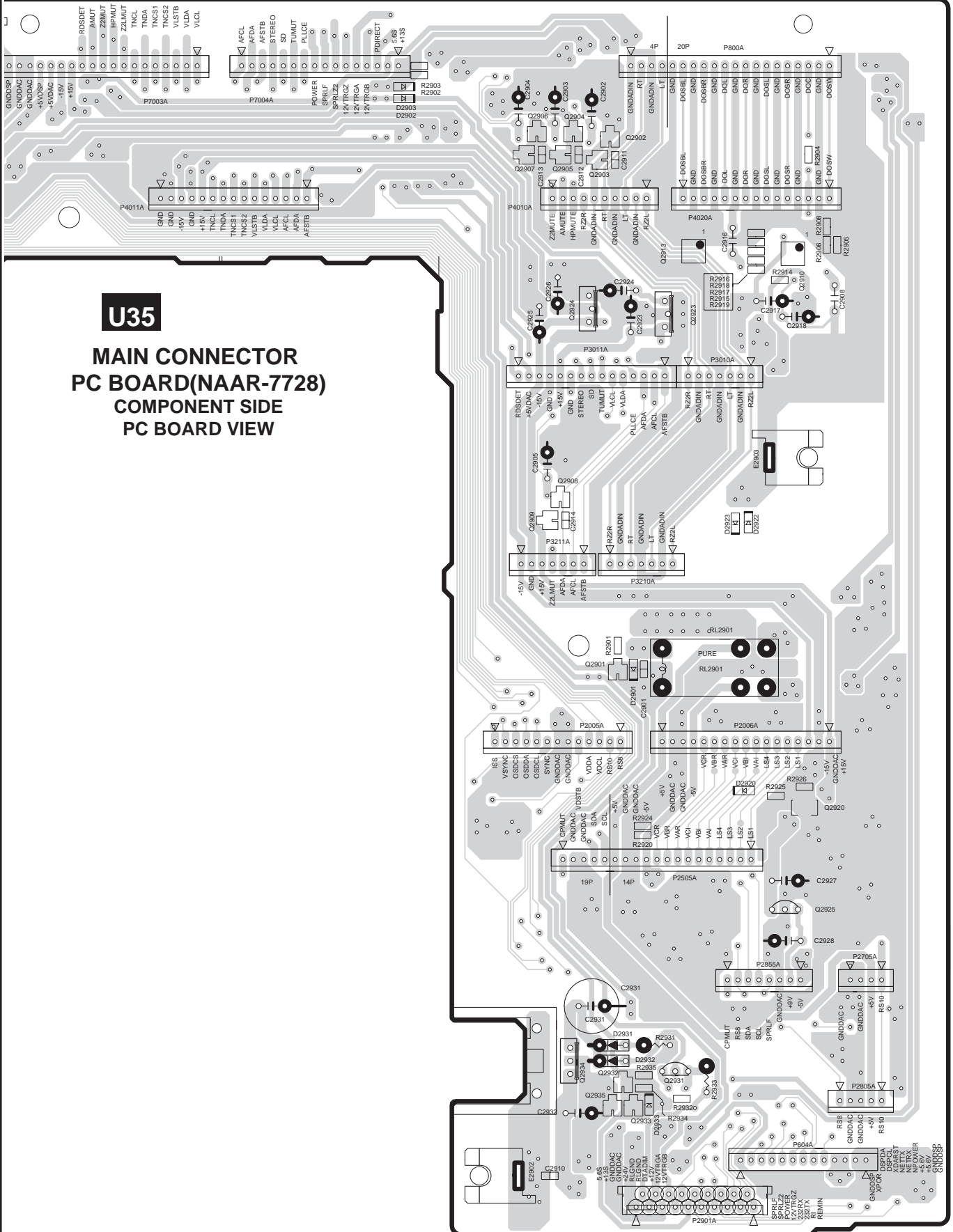
3

4

5

U35

**MAIN CONNECTOR
PC BOARD(NAAR-7728)
COMPONENT SIDE
PC BOARD VIEW**



A

B

C

D

PRINTED CIRCUIT BOARD VIEW 10-3

1

2

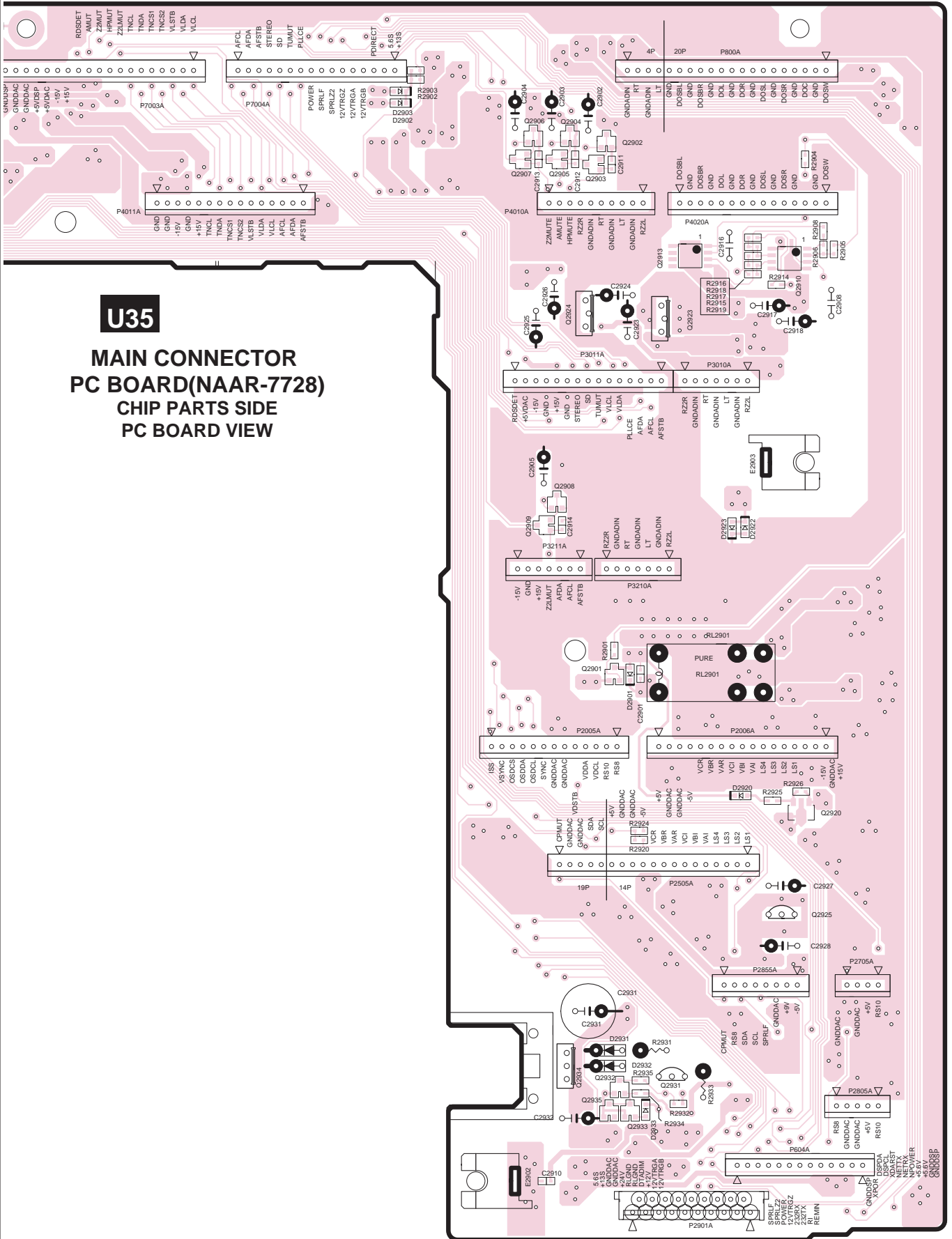
3

4

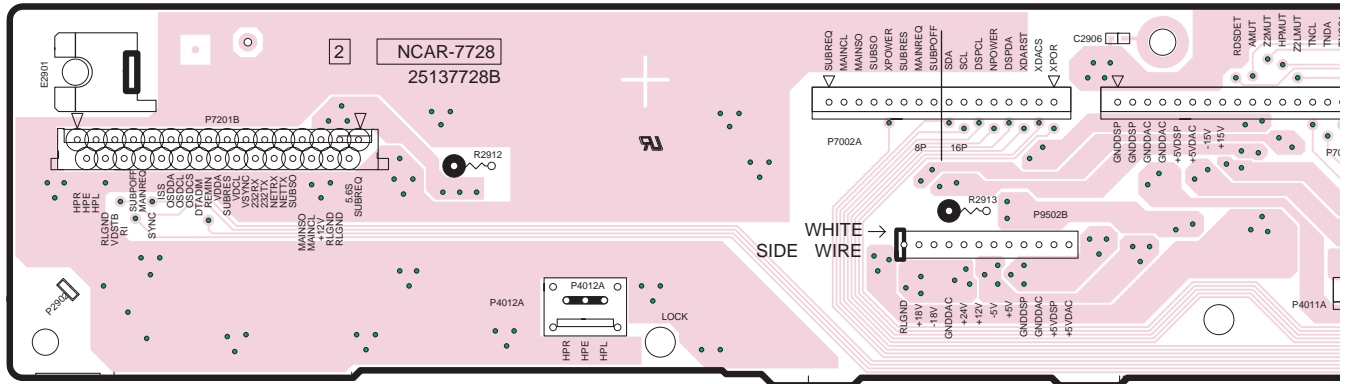
5

U35

MAIN CONNECTOR
PC BOARD(NAAR-7728)
CHIP PARTS SIDE
PC BOARD VIEW

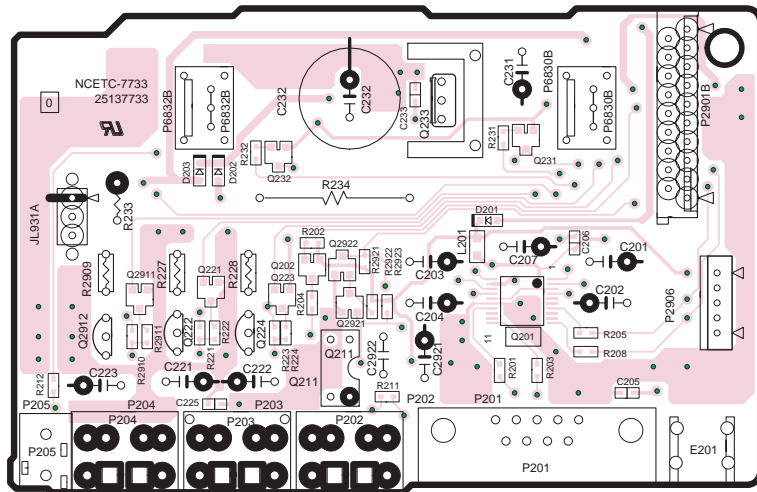


A B C D
PRINTED CIRCUIT BOARD VIEW 10-2



U35

**MAIN CONNECTOR
 PC BOARD(NAAR-7728)
 CHIP PARTS SIDE
 PC BOARD VIEW**

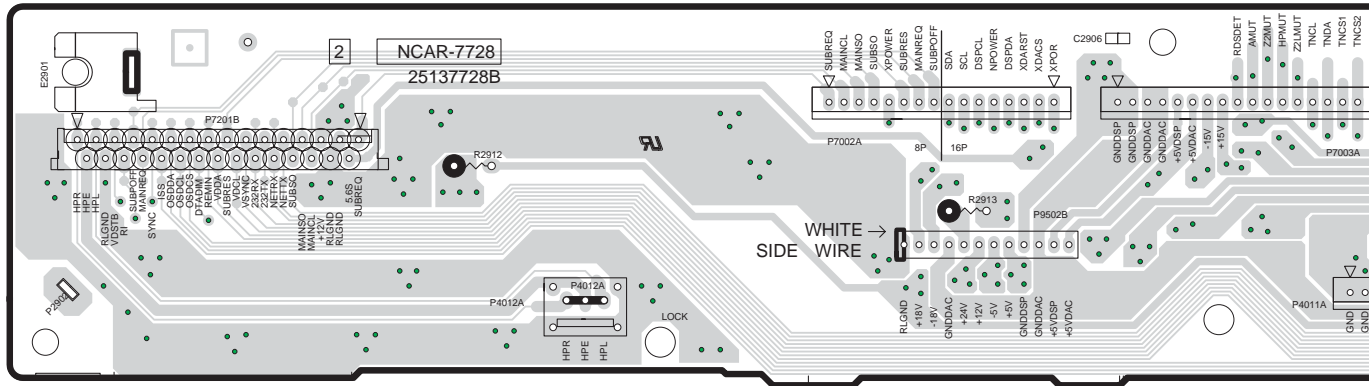


U39 **RS232 TERMINAL PC BOARD(NAETC-7733)**

A B C D

PRINTED CIRCUIT BOARD VIEW 10-1

1

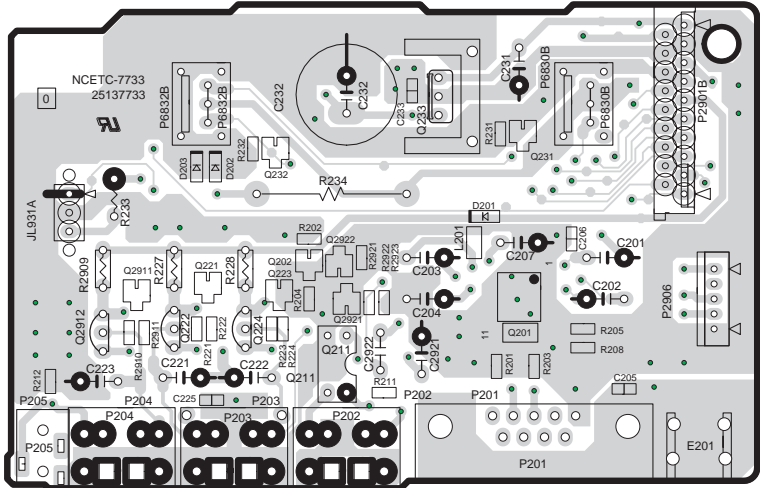


2

U35

**MAIN CONNECTOR
PC BOARD(NAAR-7728)
COMPONENT PARTS SIDE
PC BOARD VIEW**

3



4

U39

RS232 TERMINAL PC BOARD(NAETC-7733)

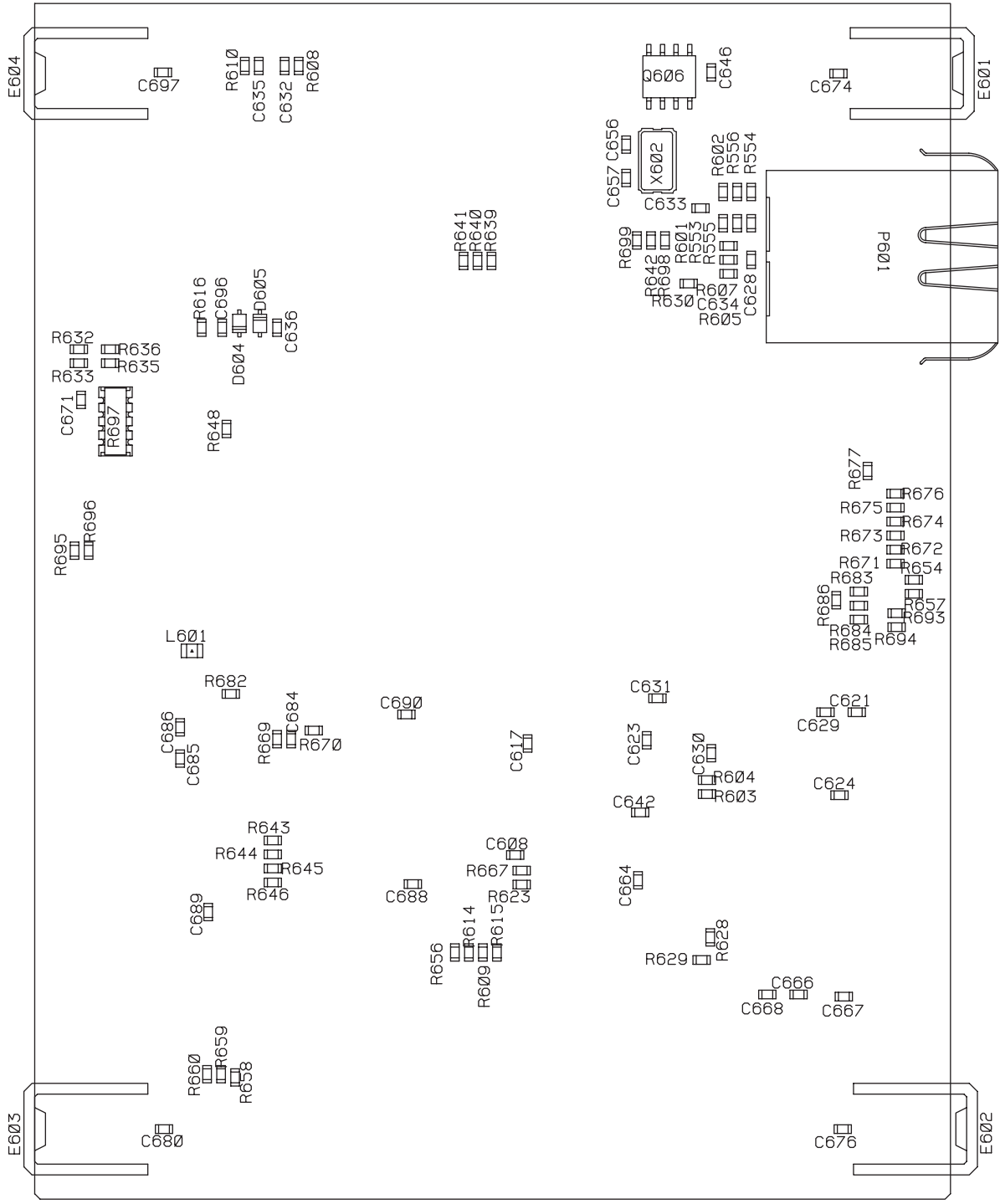
5

A B C D

PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE 11-2

U2

1
2
3
4
5



Soldering side

NET-TUNE CIRCUIT PC BOARD(NADG-7662)

A

B

C

D

PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE 11-1

U2

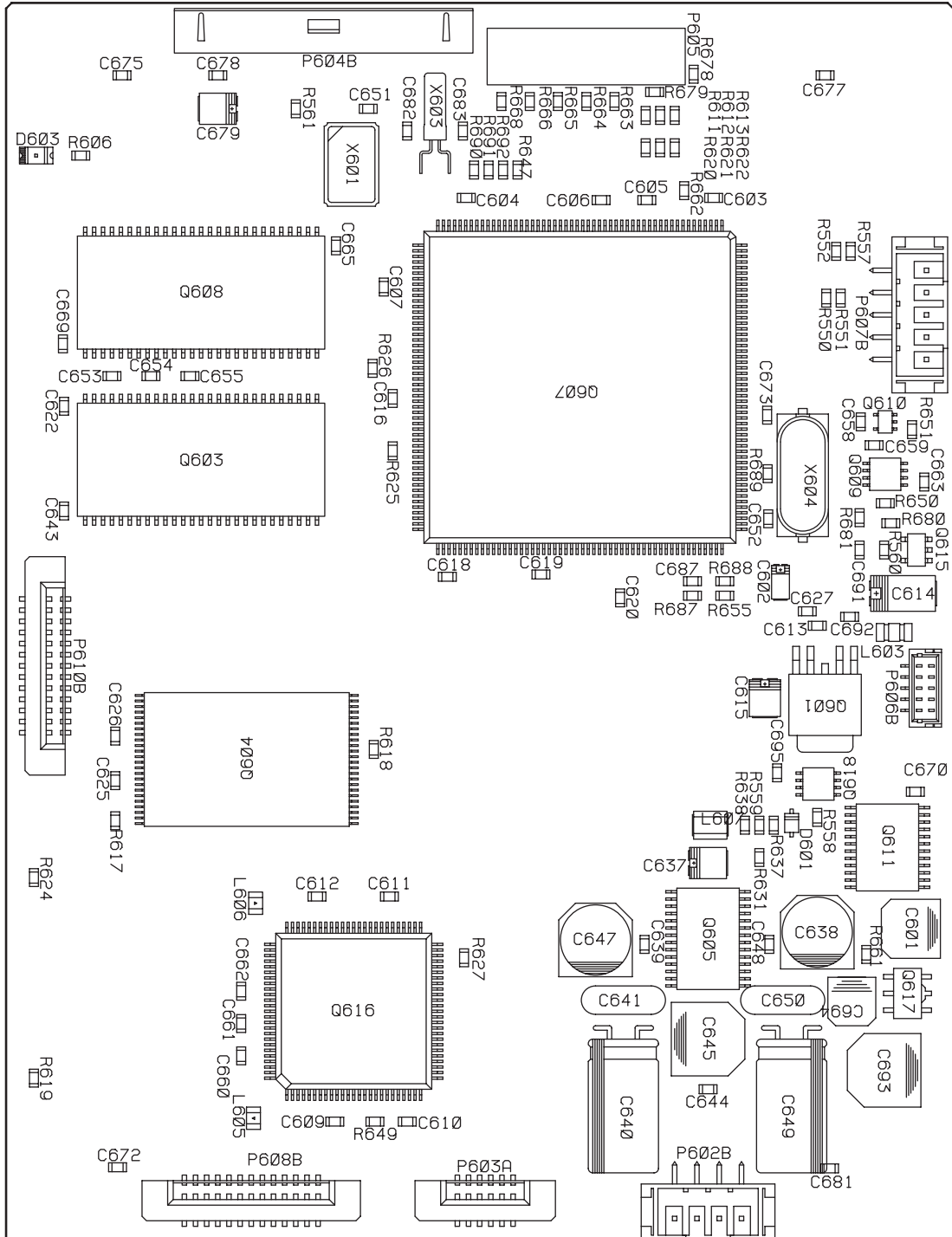
1

2

3

4

5



Component side
NET-TUNE CIRCUIT PC BOARD(NADG-7662)

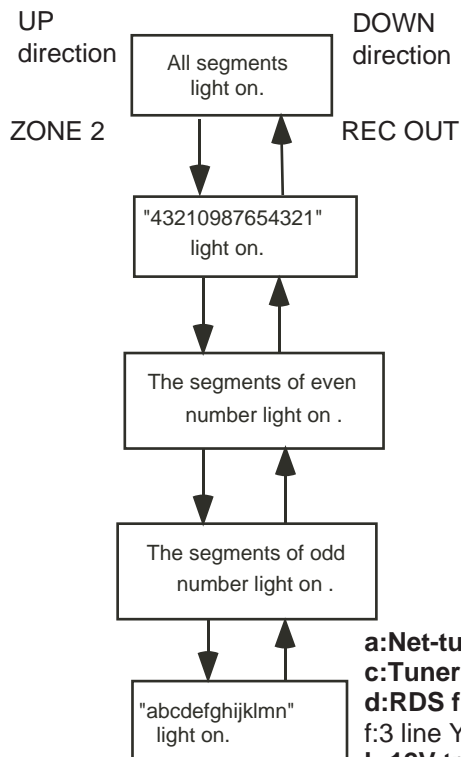
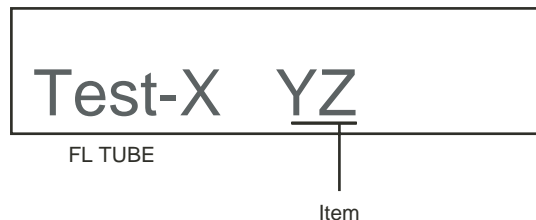
ADJUSTMENT AND CONFIRMATION PROCEDURES 3

Test Mode

1. Turn POWER button on.
2. Press and hold down CD button, then press DISPLAY and STANDBY/ON buttons.
3. After "TEST " on the FL tube is displayed, press CD button to set the unit to the test mode of FL tube.

Note: VIDEO 1:TEST-1 VIDEO 2:TEST-2
VIDEO 3:TEST-3 VIDEO 4:TEST-4

Test mode of FL tube
ZONE 2....UP
REC OUT.....DOWN



Confirmation of voltage sensor

1. Set the unit to TEST-3-4.
2. Apply the signal 1kHz, -15dBV to the MULTI-CH input. Confirm that the FM STEREO is displayed. Confirm the all channels except SUBWOFFER.
3. When connect the resistor 1.2 kohm/1 W between the terminals COM and TH2 of P6401, confirm that "THX" light on.
Note: No input signal.
4. When change set the unit to "TEST-3-05, confirm that the speaker relays of RL6901 and RL6902 turn off.
Note: No input signal.

a:Net-tune function "N":avaiable b:Optical input 4 "4":avaiable
c:Tuner aria "U":USA and Canad "E":Europe "W":Worldiwde " _ ":Japan
d:RDS function "R":avaiable e:Video format "P":PAL/NTSC auto "N":NTSC
f:3 line Y/C separation function "3":avaiable g:Video converer function: "C":avaiable
h:12V trigger function "A":A/B/Zone2 "Z":Zone 2 only

UDD/UDC N4U_N_Z_L ___ i:Dimmer interlock function
UWT/UWR N4W_P_Z_L ___ "D":avaiable j:Zone 2 Lineout function "L":avaiable
UPA/UGT N4E_P_Z_L ___ k:AAC function "A":avaiable
UPP N4ERP_Z_L ___ l:Dolby headphone function "H":avaiable m: THX Ultra2:"U":avaiable n:No use
Note: All functions " _ ": No avaiable AAC: Japanese model only

Press POWER button to finish the test mode of FL tube.

ADJUSTMENT AND CONFIRMATION PROCEDURES 2

3. Confirmation of Current detection circuit

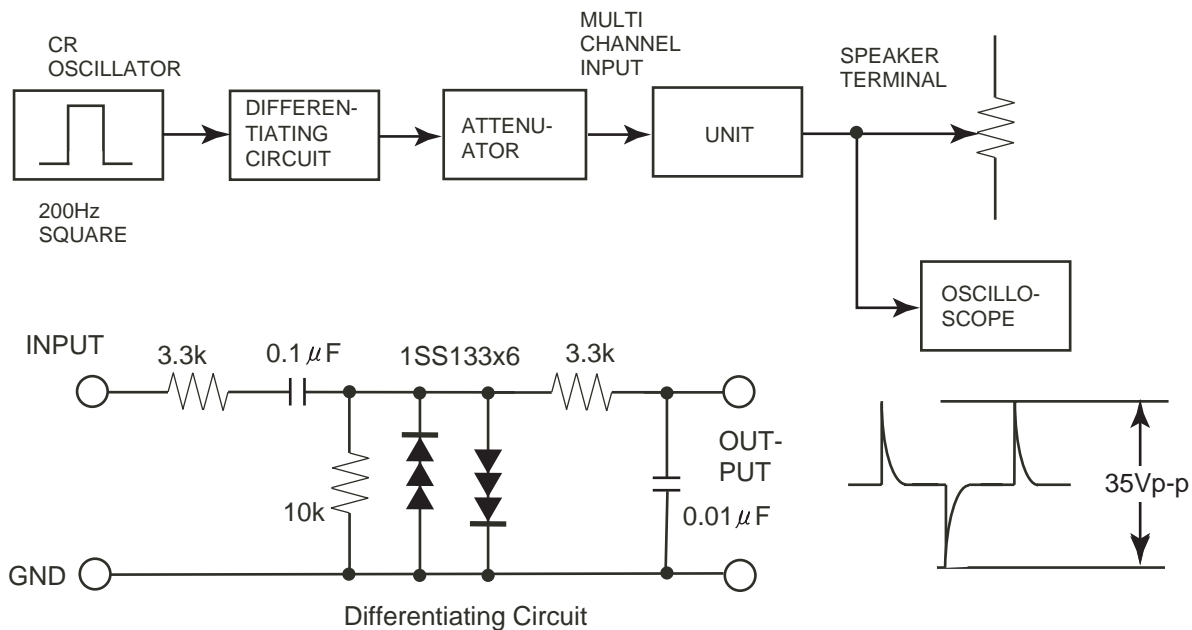
Set the unit to "TEST-1-00".

Connect the differentiating circuit and apply the 200Hz square signal to MULTI CHANNEL INPUT terminal of each channel.

Adjust the attenuator or Volume so that the output level becomes 35V p-p.

Confirm that the speaker relay does not turn OFF when a 3.0 ohm load is connected.

Confirm that the speaker relay turns OFF when a 1.5 ohm load is connected.



4. Confirmation of fan

Set the unit to "TEST-1-00".

Apply the 1kHz -30dBV signal to the left channel of MULTI-CH terminal with no load.

Confirm that the fan rotates slow speed after few seconds.

Confirm the operation above at all channels.

Connect the 1.2 kohm/1W resistor between terminals COM and TH-1 of P6401 with no input signal.

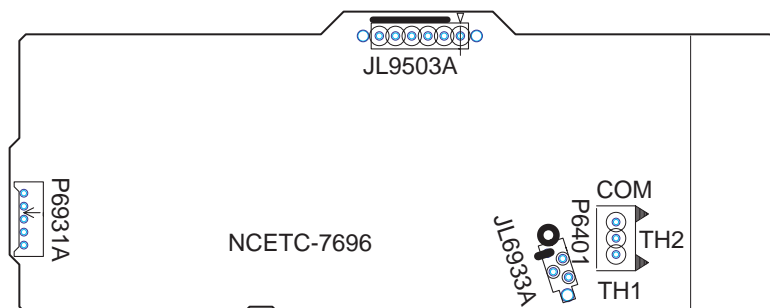
Confirm that the fan rotates slow speed after few seconds.

Next apply the 1kHz -30dBV signal to the left channel of MULTI-CH terminal with no load.

Confirm that the fan rotates high speed after few seconds.

Connect the 1.2 kohm/1W resistors between terminals COM-TH-1 and COM-TH-2 of P6401 respectively with no input signal.

Confirm that the fan rotates high speed after few seconds.



ADJUSTMENT AND CONFIRMATION PROCEDURES 1

Idling current adjustment

Before Idling current adjustment, turn the trimming resistors R6040 to R6046 to counter-clockwise.

Connect the DC voltmeter at the sockets P6080 to P6086.

After turn POWER to ON, adjust the trimming resistors R6040, R6041 and R6042 so that the reading of voltmeter becomes 11 mV. (Front and center channels)

Adjust the trimming resistors R6043, R6044, R6045 and R6046 so that the reading of voltmeter becomes 4.5 mV. (Surround and surround back channels)

After adjustment, attach the top cover.

Confirm the voltage of points above after about five minutes.

Front and center channels

When less than 16.5 mV, readjust the resistors above so that the voltage becomes 16.5 mV.

When 16.5 mV to 18.5 mV, you are not necessary to adjust.

When more than 18.5 mV, readjust the resistors above so that the voltage becomes 18.5 mV.

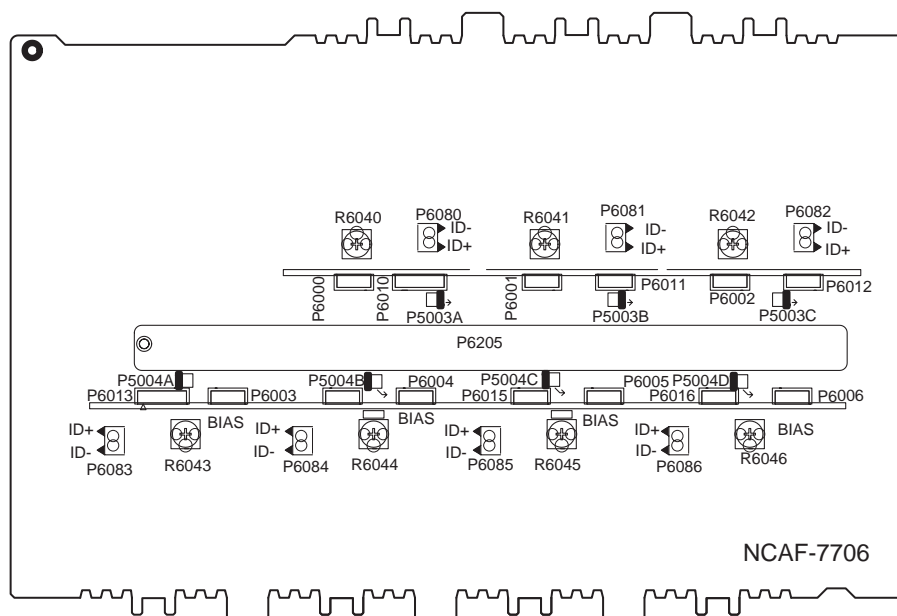
Surround and surround back channels

When less than 6.0 mV, readjust the resistors above so that the voltage becomes 6.0 mV.

When 6.0 mV to 8.0 mV, you are not necessary to adjust.

When more than 8.0 mV, readjust the resistors above so that the voltage becomes 8.0 mV.

Note: No load and No signal



Confirmation of protection circuit

1. Confirmation of operation of speaker relay

Confirm that the speaker relays turn ON approximate. 5 seconds after the power switch is turned ON.

Confirm that the speaker relays turn OFF immediately after the power switch is turned OFF.

2. Confirmation of DC detection circuit

Press and hold down CD button, then press STANDBY/ON and DISPLAY buttons to set the unit to "Test-1" mode.

After "Test-1" on the FL tube light on, press VIDEO 1 button to set the unit to "Test-1-00".

Apply DC 1.5 to 3.5V to the MULTI-CH INPUT terminal with no load.

Confirm that the speaker relay turns OFF.

Apply DC -1.5 to -3.5 V to the MULTI-CH INPUT terminal with no load.

Confirm that the speaker relay turns OFF.

Caution: Don't apply DC voltage more than 1 sec..

REF. NO.	PART NO.	DESCRIPTION
1	27111236B	Front bracket
	27111237B	Front bracket <S>
	27111238B	Front bracket <G>
2	27191153B	Holder. Jack
3	838430088	3TTB+8B(BC),Self-tapping screw
4	838130088	3TTB+8B,Self-tapping screw
5	28325948	Knob, pure
	28325949	Knob, pure <S/G>
6	28141447	Cushion
7	28191936	Clear plate
8	28133385	Back plate
	28133386	Back plate <S/G>
9	28198905	Facet
10	82143010	3P+10FN(BC),Pan head screw
12	28198933	Facet 5
13	28198936	Facet 6
14	27268050	Guide, pure
	27268051	Guide, pure <S>
	27268052	Guide, pure <G>
16	28135244	Badge
	28135245	Badge <S/G>
18	28148522	Door <D/A>
	28148523	Door <S>
	28148524	Door <G> <T/R/GT>
	28148527	Door <P>
	28148528	Door <T>
	28148529	Door <G> <A>
19	27230047	Push latch
20	27191175	Holder R
	27191176	Holder R <S/G>
21	27191173	Holder L
	27191174	Holder L <S/G>
22	28180156	Hinge L
	28180157	Hinge L <S/G>
23	28180158	Hinge R
	28180159	Hinge R <S/G>
24	27301947	Damper
25	27301946	Gear
26	27141828	Retainer B
27	831430088	3TTW+8B(BC),Self-tapping screw
28	801433	3SMS8W.SW+14B(BC),Special screw
29	838120088	2TTB+8B,Self-tapping screw
30	28325898	Knob, volume
	28325899	Knob, volume <S>
	28325900	Knob, volume <G>
31	28325497A	Knob, power
	28325499A	Knob, power <G>
	28325547A	Knob, power <S>
33	27100408-1A	Chassis
34	27130870A	Bracket, power transformer
35	27190965	Holder

36	27190693A	KGLS-6RF,Holder
37	27190266	KGLS-12RF,Holder
38	27190164	KGLS-14S,Holder
39	830440089	4TTC+8C(BC),Self-tapping screw
40	28141511	t1.0*5*5,Cushion
41	28141484	Cushion
42	27191112	KGPS-6RF,Holder
43	27141797	Retainer, fan
44	27150470	Shield plate, fan
45	838450108	5TTB+10B(BC),Self-tapping screw
46	880016	P3035B,Plastic rivet
47	27150471	Shield plate, amplifier
49	27150474	Shield plate, wire
52	27160489A	Heat sink
53	801606	3SMH10W.SW+15B(CU),Special screw
54	27141681	Retainer, PC board
55	27141798	Retainer, heat sink R
56	27141799	Retainer, heat sink L
57	27130869	Bracket, heatsink
58	27130745	Bracket
59	27255004	CS-1U,Clip
61	838430107	3TTB+10S(BC),Self-tapping screw
62	28184817-1	Top cover
	28184818-1	Top cover <S>
	28184819-1	Top cover <G>
63	29363226	Label, display
64	29362772	Label, cover
65	838240089	4TTB+8C(NI),Self-tapping screw <G/S>
	838440089	4TTB+8C(BC),Self-tapping screw
66	838430088	3TTB+8B(BC),Self-tapping screw
	838930088	3TTB+8B(UN),Self-tapping screw <G/S>
67	27175319B	Leg
68	28141494	Cushion
69	831430088	3TTW+8B(BC),Self-tapping screw
70	27123027-1	Rear panel <D>
	27123028-1	Rear panel <P>
	27123029-1	Rear panel <T>
	27123030-1	Rear panel <A>
	27123031-1	Rear panel <R>
	27123032-1	Rear panel <GT>
71	838430088	3TTB+8B(BC),Self-tapping screw
72	87643010	W3*10F(BC),Flat washer
73	838930088	3TTB+8B(UN),Self-tapping screw
74	838430068	3TTB+6B(BC),Self-tapping screw
75	27191130	! Holder, outlet <R>
76	838440089	4TTB+8C(BC),Self-tapping screw
77	27300750	! Bushing. Cord <D/A>
81	27212439	Front panel <D/A>
	27212441	Front panel <S>
	27212442	Front panel <G> <T/R/GT>
	27212451	Front panel <P/T>
	27212456	Front panel <G> <A>

82	27262680	Plate, door <D/A/T>
	27262681	Plate, door <S>
	27262682	Plate, door <G>
	27262684	Plate, door <P>
83	27190470	KGLS-18S, Holder
86	260208	Binder S
87	260258	Binder L
91	27225149	Shield case
92	27150485	Shield plate
97	223025	! AC262,Isolated sheet
E821	24502310	D09T-24PG10(EX),Fan
F6901,F6902	252100	! 10A-EAK,Fuse <O>
	252196	! 12A-UL/T-314,Fuse <D>
F901	252196	! 12A-UL/T-314,Fuse <D/T/R>
F902	252078,	! 5A-SE-EAK,
	252244 or	! 5A-SE-TL250V or
	252278	! 5A-SE-TL250V,Fuse <O>
F903	252075,	! 2.5A-SE-EAK,
	252241 or	! 2.5A-SE-TL250V or
	252275	! 2.5A-SE-TL250V,Fuse <O>
F9501,F9502	252075,	! 2.5A-SE-EAK,
	252160 or	! 2.5A-UL/T-237 or
	252241 or	! 2.5A-SE-TL250V or
	252254	! 2.5A-T/UL-ST2, Fuse <D>
	252275	! 2.5A-SE-TL250V,Fuse <O>
F9501A	29363313	! T2.5AL1.6AL250V,Fuse label <O>
F9503,F9504	252073,	! 1.6A-SE-EAK,
	252158 or	! 1.6A-UL/T-237 or
	252239 or	! 1.6A-SE-TL250V or
	252252	! 1.6A-T/UL-ST2,Fuse <D>
	252273	! 1.6A-SE-TL250V,Fuse <O>
P1010	2047151012	NCFC7-151012,Flexible cable
P2901	2047191012	NCFC7-191012,Flexible cable
P6009	27141825	Retiner BUS
P602	2009990753UL	NSAS-8P1059,Socket
P603	204406027	NCFC4-062512,Flexible cable
P603C	79012	Tube
P6205	27141826	Retiner BUS
P7201	2047312512	NCFC7-312512,Flexible cable
P7701	2047051012	NCFC7-051012,Flexible cable
P901	253347VOL	! AS-UC-2,Power supply cord <D>
P901	253307VOL or	! AS-SAA or
	253197HIT	! AS-SAA,Power supply cord <A>
Q6050~Q6056	2203083 or	* 2SC5359-O or
Q6050~Q6056	2203082	* 2SC5359-R, Transistor
Q6060~Q6066	2203073 or	* 2SA1987-O or
Q6060~Q6066	2203072	* 2SA1987-R,Transistor
Q9422A	223026	! ISO SHEET,Isolated sheet
Q9422B	223032	! TO-66(1),Isolated washer
T901	2301649	! NPT-1453D,Power transformer <D>
T901	2301650	! NPT-1453P,Power transformer <P/A>
T901	2301651	! NPT-1453DG,Power transformer <T//R/GT>

U1	1A956587-1A	NADG-7687-1A,DSP circuit PC board ass'y <D/A>
	1A956587-1B	NADG-7687-1B,DSP circuit PC board ass'y <P>
	1A956587-1C	NADG-7687-1C,DSP circuit PC board ass'y <T/R/GT>
U2	1A956562-2	NADG-7662-2,Nettune PC board ass'y
U6	1A956590-1A	NAAF-7690-1A,F/C ch. driver circuit PC board ass'y <D>
	1A956590-1B	NAAF-7690-1B,F/C ch. driver circuit PC board ass'y <P>
	1A956590-1C	NAAF-7690-1C,F/C ch. driver circuit PC board ass'y <T>
	1A956590-1D	NAAF-7690-1D,F/C ch. driver circuit PC board ass'y <A>
	1A956590-1E	NAAF-7690-1E,F/C ch. driver circuit PC board ass'y <R>
	1A956590-1F	NAAF-7690-1F,F/C ch. driver circuit PC board ass'y <GT>
U7	1A956591-1A	NAPS-7691-1A,Primary cirucit PC board ass'y <D>
	1A956591-1B	NAPS-7691-1B,Primary cirucit PC board ass'y <P>
	1A956591-1C	NAPS-7691-1C,Primary cirucit PC board ass'y <T>
	1A956591-1D	NAPS-7691-1D,Primary cirucit PC board ass'y <A>
	1A956591-1E	NAPS-7691-1E,Primary cirucit PC board ass'y <R>
	1A956591-1F	NAPS-7691-1F,Primary cirucit PC board ass'y <GT>
U8	1A956592-1A	NAPS-7692-1A,Bias selector relay PC board ass'y <D>
	1A956592-1B	NAPS-7692-1B,Bias selector relay PC board ass'y <P>
	1A956592-1C	NAPS-7692-1C,Bias selector relay PC board ass'y <T>
	1A956592-1D	NAPS-7692-1D,Bias selector relay PC board ass'y <A>
	1A956592-1E	NAPS-7692-1E,Bias selector relay PC board ass'y <R>
	1A956592-1F	NAPS-7692-1F,Bias selector relay PC board ass'y <GT>
U9	1A956593-1B	NASW-7693-1B,Power switch PC board ass'y <P>
	1A956593-1C	NASW-7693-1C,Power switch PC board ass'y <T>
	1A956593-1E	NASW-7693-1E,Power switch PC board ass'y <R>
	1A956593-1F	NASW-7693-1F,Power switch PC board ass'y <GT>
U10	1A956594-1A	NAETC-7694-1A,F/C ch. speaker terminal PC board ass'y <D>
	1A956594-1B	NAETC-7694-1B,F/C ch. speaker terminal PC board ass'y <P>
	1A956594-1C	NAETC-7694-1C,F/C ch. speaker terminal PC board ass'y <T>
	1A956594-1D	NAETC-7694-1D,F/C ch. speaker terminal PC board ass'y <A>
	1A956594-1E	NAETC-7694-1E,F/C ch. speaker terminal PC board ass'y <R>
	1A956594-1F	NAETC-7694-1F,F/C ch. speaker terminal PC board ass'y <GT>
U11	1A956595-1A	NAETC-7695-1A,Surround ch. speaker terminal PC board ass'y <D>
	1A956595-1B	NAETC-7695-1B,Surround ch. speaker terminal PC board ass'y <P>
	1A956595-1C	NAETC-7695-1C,Surround ch. speaker terminal PC board ass'y <T>
	1A956595-1D	NAETC-7695-1D,Surround ch. speaker terminal PC board ass'y <A>
	1A956595-1E	NAETC-7695-1E,Surround ch. speaker terminal PC board ass'y <R>
	1A956595-1F	NAETC-7695-1F,Surround ch. speaker terminal PC board ass'y <GT>
U12	1A956596-1A	NAETC-7696-1A,Fan drive circuit PC board ass'y <D>
	1A956596-1B	NAETC-7696-1B,Fan drive circuit PC board ass'y <P>
	1A956596-1C	NAETC-7696-1C,Fan drive circuit PC board ass'y <T>
	1A956596-1D	NAETC-7696-1D,Fan drive circuit PC board ass'y <A>
	1A956596-1E	NAETC-7696-1E,Fan drive circuit PC board ass'y <R>
	1A956596-1F	NAETC-7696-1F,Fan drive circuit PC board ass'y <GT>
U13	1A956597-1A	NAETC-7697-1A,Thermal detector PC board ass'y <D>
	1A956597-1B	NAETC-7697-1B,Thermal detector PC board ass'y <P>
	1A956597-1C	NAETC-7697-1C,Thermal detector PC board ass'y <T>
	1A956597-1D	NAETC-7697-1D,Thermal detector PC board ass'y <A>
	1A956597-1E	NAETC-7697-1E,Thermal detector PC board ass'y <R>
	1A956597-1F	NAETC-7697-1F,Thermal detector PC board ass'y <GT>
U15	1A956599-1B	NAETC-7699-1B,PC board for holder <P>
	1A956599-1C	NAETC-7699-1C,PC board for holder <T>

	1A956599-1D	NAETC-7699-1D,PC board for holder <A>
	1A956599-1E	NAETC-7699-1E,PC board for holder <R>
	1A956599-1F	NAETC-7699-1F,PC board for holder <GT>
U16	1A956500-1B	NAETC-7700-1B,AC inlet PC board ass'y <P>
	1A956500-1C	NAETC-7700-1C,AC inlet PC board ass'y <T>
	1A956500-1E	NAETC-7700-1E,AC inlet PC board ass'y <R>
	1A956500-1F	NAETC-7700-1F,AC inlet PC board ass'y <GT>
U17	1A956501-1A	NAETC-7701-1A,PC board for holder <D>
	1A956501-1B	NAETC-7701-1B,PC board for holder <P>
	1A956501-1C	NAETC-7701-1C,PC board for holder <T>
	1A956501-1D	NAETC-7701-1D,PC board for holder <A>
	1A956501-1E	NAETC-7701-1E,PC board for holder <R>
	1A956501-1F	NAETC-7701-1F,PC board for holder <GT>
U18	1A956502-1A	NAETC-7702-1A,PC board for holder <D>
	1A956502-1B	NAETC-7702-1B,PC board for holder <P>
	1A956502-1C	NAETC-7702-1C,PC board for holder <T>
	1A956502-1D	NAETC-7702-1D,PC board for holder <A>
	1A956502-1E	NAETC-7702-1E,PC board for holder <R>
	1A956502-1F	NAETC-7702-1F,PC board for holder <GT>
U21	1A956506-1A	NAAF-7706-1A,Power amplifier PC board ass'y <D>
	1A956506-1B	NAAF-7706-1B,Power amplifier PC board ass'y <O>
U22	1A956507-1A	NAAF-7707-1A,Surround ch. driver amplifier PC board ass'y <D>
	1A956507-1B	NAAF-7707-1B,Surround ch. driver amplifier PC board ass'y <O>
U23	1A956508-1A	NAPS-7708-1A,Power supply PC board ass'y <D>
	1A956508-1B	NAPS-7708-1B,Power supply PC board ass'y <O>
U29	1A956514-1A	NAETC-7714-1A,Thermal detector PC board ass'y <D>
	1A956514-1B	NAETC-7714-1B,Thermal detector PC board ass'y <O>
U31	1A956518-1A	NAAF-7718-1A,Pre. Amplifier PC board ass'y <D/A>
	1A956518-1B	NAAF-7718-1B,Pre. Amplifier PC board ass'y <P>
	1A956518-1C	NAAF-7718-1C,Pre. Amplifier PC board ass'y <T/R/GT>
U32	1A956519-1A	NAAF-7719-1A,Audio terminal PC board ass'y <D/A>
	1A956519-1B	NAAF-7719-1B,Audio terminal PC board ass'y <P>
	1A956519-1C	NAAF-7719-1C,Audio terminal PC board ass'y <T/R/GT>
U33	1A956520-1A	NAAF-7720-1A,Video input terminal PC board ass'y <D/A>
	1A956520-1B	NAAF-7720-1B,Video input terminal PC board ass'y <P>
	1A956520-1C	NAAF-7720-1C,Video input terminal PC board ass'y <T/R/WT>
U35	1A956528-1A	NAAR-7728-1A,Main connector PC board ass'y <D>
	1A956528-1B	NAAR-7728-1B,Main connector PC board ass'y <P/T/R/GT>
	1A956528-1C	NAAR-7728-1C,Main connector PC board ass'y <A>
U36	1A956529-1A	NAVD-7729-1A,Composite video terminal PC board ass'y <D>
	1A956529-1B	NAVD-7729-1B,Composite video terminal PC board ass'y <P/T/R/GT>
	1A956529-1C	NAVD-7729-1C,Composite video terminal PC board ass'y <A>
U37	1A956530-1A	NAVD-7730-1A,S video terminal PC board ass'y <D>
	1A956530-1B	NAVD-7730-1B,S video terminal PC board ass'y <P/T/R/GT>
	1A956530-1C	NAVD-7730-1C,S video terminal PC board ass'y <A>
U38	1A956531-1A	NAVD-7731-1A,Component video terminal PC board ass'y <D>
	1A956531-1B	NAVD-7731-1B,Component video terminal PC board ass'y
	1A956531-1C	NAVD-7731-1C,Component video terminal PC board ass'y <A>
U39	1A956533-1A	NAETC-7733-1A,RS232 terminal PC board ass'y <D>
	1A956533-1B	NAETC-7733-1B,RS232 terminal PC board ass'y <P/T/R/GT>
	1A956533-1C	NAETC-7733-1C,RS232 terminal PC board ass'y <A>
U40	1A956534-1A	NAETC-7734-1A,Connector PC board ass'y <D>

	1A956534-1B	NAETC-7734-1B,Connector PC board ass'y <P/T/R/GT>
	1A956534-1C	NAETC-7734-1C,Connector PC board ass'y <A>
U44	1A956538-1A	NADIS-7738-1A,Display circuit PC board ass'y <D>
	1A956538-1B	NADIS-7738-1B,Display circuit PC board ass'y <P>
	1A956538-1C	NADIS-7738-1C,Display circuit PC board ass'y <A/GT>
	1A956538-1D	NADIS-7738-1D,Display circuit PC board ass'y <T/R>
U45	1A956539-1A	NAETC-7739-1A,Volume PC board ass'y <D>
	1A956539-1B	NAETC-7739-1B,Volume PC board ass'y <P>
	1A956539-1C	NAETC-7739-1C,Volume PC board ass'y <A/GT>
	1A956539-1D	NAETC-7739-1D,Volume PC board ass'y <T/R>
U46	1A956540-1A	NAETC-7740-1A,Headphone terminal PC board ass'y <D>
	1A956540-1B	NAETC-7740-1B,Headphone terminal PC board ass'y <P>
	1A956540-1C	NAETC-7740-1C,Headphone terminal PC board ass'y <A/GT>
	1A956540-1D	NAETC-7740-1D,Headphone terminal PC board ass'y <T/R>
U47	1A956541-1A	NAETC-7741,Front video terminal PC board ass'y <D>
	1A956541-1B	NAETC-7741,Front video terminal PC board ass'y <P>
	1A956541-1C	NAETC-7741,Front video terminal PC board ass'y <A/GT>
	1A956541-1D	NAETC-7741,Front video terminal PC board ass'y <T/R>
U48	1A956542-1A	NAETC-7742-1A,Front opto. Input terminal PC board ass'y <D>
	1A956542-1B	NAETC-7742-1B,Front opto. Input terminal PC board ass'y <P>
	1A956542-1C	NAETC-7742-1C,Front opto. Input terminal PC board ass'y <A/GT>
	1A956542-1D	NAETC-7742-1D,Front opto. Input terminal PC board ass'y <T/R>
U51	240138A or	ENG06501QR or
	240134A	TFCE1U114B, Tuner pack <D>
	240139A or	ENG07501QR or
	240135	TFCE1E512A, Tuner pack <O>

PRINTED CIRCUIT BOARD-PARTS LIST 1

DSP circuit PC board (NADG-7687-1A/1B/1C)			CIRCUIT NO.	PART NO.	DESCRIPTION
CIRCUIT NO.	PART NO.	DESCRIPTION		Coils	
Q100-Q102	22241448R2	NJM4580M-D	L801,L802	231237M022R2 or	NCH-1471 or
Q103	22241522R2	AK4528VF	R124,R125	233533M022R2	NCH-1587-022M
Q120,Q121	22274040ER2TO	TC74VHC4040FT	R133-R135	230959R1	BK1608LL241-T
Q121	22274000GR2TO	TC74VHCT00AFT		230958R1	BK1608LM182-T
Q130	222740046R2	74HCU04F		Capacitors	
Q131	22241633R3	AK4114VQ	C100-C103	356744709R2	47uF,16V, Elect., chip
Q160	22240928R2	TC9246F	C108,C110	356724709R2	47uF,6.3V, Elect., chip
Q161	222780053R2JR	NJM78L05UA	C113,C114	373021524R2	1500pF+/-5%,50V,Plastic
Q170	22278028DR2JR	NJM2391DL1-285	C116,C119	356723319R2	330uF,6.3V, Elect., chip
Q171	22278033DR2NE or	MPC2933T or	C141,C148	356724709R2	47uF,6.3V, Elect., chip
Q171 or	22278033DR2JR	NJM2391DL1-33	C150	356741009R2	10uF,16V, Elect., chip
Q180	22241845R2	LC72723M <P>	C152	356724709R2	47uF,6.3V, Elect., chip
Q190	22274157ER2TO or	TC74VHC157FT or	C157	3567A1019R2	100uF,4V, Elect., chip
	22274157IR2TI	SN74AHC157PWR	C159	356784799R2	0.47uF,50V, Elect., chip
Q700	22241846R3	MB86D41PFV	C167,C170	356724709R2	47uF,6.3V, Elect., chip
Q7000	22241512	M30624FGAFP	C172	356724709R2	47uF,6.3V, Elect., chip
Q701	22274074ER2TO or	TC74VHC74FT or	C176	356744709R2	47uF,16V, Elect., chip
	22274074IR2TI	SN74AHC74PWR	C177,C178	3567A1019R2	100uF,4V, Elect., chip
Q703	22241847R3	MB86344BPFV	C180,C186	356741009R2	10uF,16V, Elect., chip <P>
Q705,Q706	22241612R2 or	CY7C1019BV33-15VCT or	C7000	3000078 or	DX-5R5L104 or
	22241487R2	CY7C1019CV33-15VCT		3000121	SCDA5R5104V, Super
Q7100,Q7101	22274541ER2TO or	TC74VHC541FT or	C7002,C7003	356721019R2	100uF,6.3V, Elect., chip
	22274541IR2TI	SN74AHC541PWR	C7004	356780109R2	1uF,50V, Elect., chip
Q7102	222740077R2TO	TC74HCT7007AF	C7005	356721019R2	100uF,6.3V, Elect., chip
Q751	22274074ER2TO or	TC74VHC74FT or	C719,C720	3567A1019R2	100uF,4V, Elect., chip
	22274074IR2TI	SN74AHC74PWR	C764-C766	3567A1019R2	100uF,4V, Elect., chip
Q800	22241521R3	AK4356VQ	C802,C807	356723319R2	330uF,6.3V, Elect., chip
Q801-Q804	22241449R2,	NJM5532M-D,	C819,C820	373024724R2	4700pF+/-5%,50V,Plastic
	22241409R2 or	BA15532F or	C821,C822	373024724R2	4700pF+/-5%,50V,Plastic <D/A>
	22241472R2	NJM2114M-D	C823,C824	373024724R2	4700pF+/-5%,50V,Plastic
	Transistors		C825	373024724R2	4700pF+/-5%,50V,Plastic <D/A>
Q162,Q7001	2214490R2 or	RN1404 or	C826	373043334R2	0.033uF+/-5%,16V,Plastic
	2216210R2	KRC104S	C827-C830	373026814R2	680pF+/-5%,50V,Plastic
	Photo couplers		C831-C834	373026814R2	680pF+/-5%,50V,Plastic <D/A>
U100-U103	24120101	TORX179L	C831-C834	373023314R2	330pF+/-5%,50V,Plastic <P/T/R/GT>
U104,U105	24120102	TOTX179L	C835-C838	373026814R2	680pF+/-5%,50V,Plastic
	Diodes		C839,C840	373026814R2	680pF+/-5%,50V,Plastic <D/A>
D102-D109	223234R2 or	1SS352 or	C839,C840	373023314R2	330pF+/-5%,50V,Plastic <P/T/R/GT>
D7000-D7004	223269R2	1SS355	C841,C842	373041534R2	0.015uF+/-5%,16V,Plastic <D/A>
D7005	224660624R2,	HZU6.2B,	C847,C848	356744709R2	47uF,16V, Elect., chip
	224490620R2or	UDZ6.2B or	C849,C850	356741019R2	100uF,16V, Elect., chip
	224550620R2	UDZS6.2B	C851-C854	356744709R2	47uF,16V, Elect., chip
	Oscillators		R782	43474056004R1	RM0KJ560X04,Array
X160	3010331R2	HC-49/U03C24.576MHz,Crystal	R787-R791	43474056004R1	RM0KJ560X04,Array
X180	3010332R2	HC-49/U03C4.332MHz,Crystal <P>		Terminal	
X700,X751	3010368R2	XTL-13.5M,Crystal	P101	25045666	NPJ-3PDO465 <D/A>
X7000	3010329R2	CSTCV16.00MXJ0C,Ceramic		25045624	NPJ-3PDO431 <P/T/R/GT>
	Coils			Sockets	
L101,L102	231237M022R2 or	NCH-1471 or	P603B	25052572R2	NSCT-6P2469
L131,L133	233533M022R2	NCH-1587-022M	P7002,P7004	25051527	NSCT-16P1314
L130,L136	231237K470R2 or	NCH-1479 or	P7003,P800	25051241	NSCT-20P1031
L160,L162	233533K470R2	NCH-1587-470K	P7701A	25052277R2	NSCT-5P2174
L132,L134	230958R1	BK1608LM182-T		Plugs	
L135,L701	231237M022R2 or	NCH-1471 or	P100	25055133	NPLG-3P117
L751	233533M022R2	NCH-1587-022M	P7000	25056056	NPLG-8P1006
L161	230958R1	BK1608LM182-T		Cushion	
L170,L753	231237K470R2 or	NCH-1479 or	Q800A	28141445	(DAC)
	233533K470R2	NCH-1587-470K			
L180	231237K220R2 or	NCH-1477 or			
	233533K220R2	NCH-1587-220K <P>			
L7000	231237K220R2 or	NCH-1477 or			
	233533K220R2	NCH-1587-220K			

Note: <D>: 120V model only <GT>: 220-230 V model only
 <P>: European model only <A>: Australian model only
 <T>: Worldwide model only <R>: Chinese model only
 <O>: Except 120V model

PRINTED CIRCUIT BOARD-PARTS LIST 2

Note: <D>: 120V model only <GT>: 220-230 V model only
<P>: European model only <A>: Australian model only
<T>: Worldwide model only <R>: Chinese model only
<O>: Except 120V model

F/C ch. driver circuit PC board (NAAF-7690-1A/1B/1C/1D/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Transistors		
Q5000~Q5002	2215896,	* KTC3200-BL,
Q5010~Q5012	2210755,	* 2SC1775A-E,
	2210756 or	* 2SC1775A-F or
	2211733	* 2SC1845-E
Q5020~Q5022	2215896,	KTC3200-BL,
	2210755,	2SC1775A-E,
	2210756 or	2SC1775A-F or
	2211733	2SC1845-E
Q5030~Q5032	2215844,	KTA1024-Y,
Q5040~Q5042	2211353,	2SA949-O,
	2211354 or	2SA949-Y or
	2215843	KTA1024-O
Q5050~Q5052	2202094 or	2SA1360-Y
	2202093	2SA1360-O
Q5080~Q5082	2202104 or	2SC3423-Y or
	2202103	2SC3423-O
Diodes		
D5000~D5002	224470562	MTZJ5.6B
Capacitors		
C5000~C5002	393362207	22uF,35V, Elect.
C5010,C5011	374721015	100pF+/-10%,50V,Plastic
C5012	374722215	220pF+/-10%,50V,Plastic
C5040~C5042	393342217	220uF,16V, Elect.
C5050~C5052	394681007	10uF,50V, Elect.
C5070~C5072	394691007	10uF,100V, Elect.
C5080~C5082	394672207	22uF,63V, Elect.
C5090~C5092	394684707	47uF,50V, Elect.
C5100~C5102	374721015	100pF+/-10%,50V,Plastic
C5120~C5122	394691017S	100uF,100V, Elect.
C5130~C5132	394691017S	100uF,100V, Elect.
Resistors		
R5130~R5132	415478214	820ohm+/-5%,1/4W,NF carbon
R5140~R5142	415478214	820ohm+/-5%,1/4W,NF carbon
R5150~R5152	443521034	10kohm+/-5%, 1/2W, Metal oxide
R5160~R5162	415471024	1kohm+/-5%,1/4W,NF carbon
R5170~R5172	415478214	820ohm+/-5%,1/4W,NF carbon
R5180~R5182	415473304	33ohm+/-5%,1/4W,NF carbon
R5230~R5232	415471504	15ohm+/-5%,1/4W,NF carbon
R5240~R5242	415471504	15ohm+/-5%,1/4W,NF carbon
R5280~R5282	443521034	10kohm+/-5%, 1/2W, Metal oxide
R5300~R5302	415476804	68ohm+/-5%,1/4W,NF carbon
R5330~R5332	415476804	68ohm+/-5%,1/4W,NF carbon
Terminals		
P5100,P5101	25060302	NTM-1P233(M1969)
P6907	260224	CP-1S,Clip
Sockets		
P6000A~P6002A	25052287	NSCT-4P2184
P6010A	25052289	NSCT-6P2186
P6011A,P6012A	25052287	NSCT-4P2184
Plug		
P6401	25055042	NPLG-3P32
Radiators		
Q5050A~Q5052A	27160517	RAD-177
Screws		
Q5050B~Q5052E	838430107	3TTB+10S(BC),Self-tapping
Q5080B~Q5082E	838430107	3TTB+10S(BC),Self-tapping

Primary circuit PC board (NAPS-7691-1A/1B/1C/1D/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Transistor		
Q921	2215864,	KTC3199-GR,
	2212115,	2SC2458-GR,
	2213284 or	2SC1740S-R or
	2213285	2SC1740S-S
Diodes		
D921~D924	22380260,	RL1N4003,
	22380032 or	1SR139-100 or
	22380035	GP104003E
D925	223163,	1SS133,
	223205 or	1SS270A or
	223222	WG713A
Power transformer		
T902	2301661	△ NPT-1456D <D>
T902	2301662	△ NPT-1456P <P/A>
T902	2301663	△ NPT-1456DG <T/R/GT>
Capacitors		
C901	3500196S	△ RE275V-103M,IS
C902	3300030	△ DE1307E472M-KH <O>
C922	394662217	220uF,35V, Elect.
Resistors		
R901	4000206S or	△ RD1/2SPH-3.3M or
R901 or	431533355	△ RC1/2GFKUL-3.3M <D>
R924	443528204	82ohm+/-5%, 1/2W, Metal oxide
Relay		
RL901	25065584 or	△ NRL-1P10A-DC12-140 or
	25065516	△ NRL-1P10A-DC12-097
Switch		
S902	25065437	△ NSS-22157P <T/R>
Fuses		
F901	252196	△ 12A-UL/T-314, Fuse <D/T/R>
F902	252078,	△ 5A-SE-EAK,
	252244 or	△ 5A-SE-TL250V or
	252278	△ 5A-SE-TL250V, Fuse <O>
F903	252075,	△ 2.5A-SE-EAK,
	252241 or	△ 2.5A-SE-TL250V or
	252275	△ 2.5A-SE-TL250V, Fuse <O>
Fuse holders		
F901A,F901B	250113	△ SN5051 <D/T/R>
F902A,F902B	25052133	△ NSCT-1P2031 <O>
F903A,F903B	25052133	△ NSCT-1P2031 <O>
AC outlet		
P902	25051126	△ NSCT-4P913 <D>
P902	25051125	△ NSCT-4P912 <P/T/GT>
P902	25052115	△ NSCT-2P2013 <A>
P902	25052664	△ NSCT-2P2560 <R>
Socket		
JL931B	25050267	NSCT-3P95
Plugs		
P901A	25055675 or	△ NPLG-2P631 or
P901A or	25056028	△ NPLG-2P0978 <D/A>
P911	25055675 or	NPLG-2P631 or
P911 or	25056028	NPLG-2P0978
P912	25055675 or	NPLG-2P631 or
P912 or	25056028	NPLG-2P0978 <T/R/GT>
Fuse labels		
F901C	29362325	12A/250V <D/T/R>
F902C	29361938	T5AL250V <O>







CAUTION: Replacement for transistor of mark *, if necessary must be made from the same beta group (Hfe) as the original type.

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


PRINTED CIRCUIT BOARD-PARTS LIST 3

Note: <D>: 120V model only <GT>: 220-230 V model only
 <P>: European model only <A>: Australian model only
 <T>: Worldwide model only <R>: Chinese model only
 <O>: Except 120V model

Bias selector relay PC board (NAPS-7692-1A/1B/1C/1D/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Diodes		
D6901,D6902	22380260, 22380032 or 22380035	RL1N4003, 1SR139-100 or GP104003E
D6903,D6904	22380309 or 22380044	D15XB60 or RBV-1506
D6906	223163, 223205 or 223222	1SS133, 1SS270A or WG713A
Capacitors		
C6903	374722234	0.022uF+/-5%,50V,Plastic
C6908,C6909	374733344	0.33uF+/-5%,100V,Plastic
C6910,C6911	374723344	0.33uF+/-5%,50V,Plastic
C6915,C6916	374733344	0.33uF+/-5%,100V,Plastic
Relays		
RL6901,RL6902	25065584 or	NRL-1P10A-DC12-140 or
RL6901,RL6902	25065516	NRL-1P10A-DC12-097
Fuses		
F6901,F6902	252100	 10A-EAK, Fuse <O>
F6901,F6902	252196	 12A-UL/T-314, Fuse <D>
Fuse holders		
F6901A,F6901B	250113	 SN5051 <D>
F6901A,F6901B	25052133	 NSCT-1P2031 <O>
F6902A,F6902B	250113	 SN5051 <D>
F6902A,F6902B	25052133	 NSCT-1P2031 <O>
Socket		
JL6953B	25050268	NSCT-4P96
Plugs		
P6951	25055172	NPLG-9P156
P6952A	25055168	NPLG-5P152
P9505A	25055600	NPLG-2P568
Fuse label		
F6902C	29362325	12A/250V <D>
F6902C	29362801	T10AL250V <O>
Radiator		
D6903A	27160499	RAD-164
Screws		
D6903B,D6904B	82143010	3P+10FN(BC), Pan head
Washers		
D6903C,D6904C	871430	SW-3(BC), Spring
Tape		
D6903D	29110083	Cloth

Power switch PC board (NASW-7693-1B/1C/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Switch		
S906	25035636	 NPS-111-L590P

F/C ch. speaker terminal PC board (NAETC-7694-1A/1B/1C/1D/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Diodes		
D6600	223163, 223205 or 223222	1SS133, 1SS270A or WG713A
Coils		
L6800~L6802	231176S	S-1.3C <O>
Capacitors		
C6830~C6832	374731034	0.01uF+/-5%,100V,Plastic
C6840~C6842	374731024	1000pF+/-5%,100V,Plastic <O>
Resistors		
R6830~R6832	453630824	8.2ohm+/-5%, 1W, Metal


CIRCUIT NO.	PART NO.	DESCRIPTION
Relays		
RL6600,RL6602	25065563, 25065517 or 25065586	NRL-2P5A-DC24-129, NRL-2P5A-DC24-098 or NRL-2P5A-DC24-142
Terminal		
P6800	25060337	NTM-6PDMN268 <D>
P6800	25060338	NTM-6PDMN269 <O>
Plugs		
P6007A	25055167	NPLG-4P151
P6810D	25055166	NPLG-3P150
P6830	25055734	NPLG-3P690

Surround ch. speaker terminal PC board (NAETC-7695-1A/1B/1C/1D/1E/1F)

CIRCUIT NO.	PART NO.	DESCRIPTION
Diodes		
D6603,D6605	223163, 223205 or 223222	1SS133, 1SS270A or WG713A
Coils		
L6803~L6806	231176S	S-1.3C <O>
Capacitors		
C6833~C6836	374731034	0.01uF+/-5%,100V,Plastic
C6843~C6846	374731024	1000pF+/-5%,100V,Plastic <O>
Resistors		
R6833~R6836	453630824	8.2ohm+/-5%, 1W, Metal
Relays		
RL6603,RL6605	25065563, 25065517 or 25065586	NRL-2P5A-DC24-129, NRL-2P5A-DC24-098 or NRL-2P5A-DC24-142
Terminal		
P6802	25060339	NTM-8PDMN270 <D>
P6802	25060340	NTM-8PDMN271 <O>
Plugs		
P6008A	25055169	NPLG-6P153
P6812E	25055168	NPLG-5P152
P6832	25055734	NPLG-3P690


Fan driver circuit PC board (NAETC-7696-1A/1B/1C/1D/1E/1F)


CIRCUIT NO.	PART NO.	DESCRIPTION
Transistors		
Q5601	2212445	2SK365-GR
Q5602,Q5603	2215864,	KTC3199-GR,
Q5607,Q6701	2212115,	2SC2458-GR,
Q6702	2213284 or 2213285	2SC1740S-R or 2SC1740S-S
Q5604,Q5605	2215820,	KRC104M,
Q5608,Q5609	221282 or 2213560	DTC144ES or RN1204
Q5606	2203595, 2202705, 2202706 or 2203594	KTC2026-GR, 2SD2394-E, 2SD2394-F or KTC2026-Y
Q6704	2215995, 2212125, 2213354 or 2213355	KTA1267-GR, 2SA1048-GR, 2SA933S-R or 2SA933S-S
Diodes		
D5601	223163,	1SS133,
D5604~D5607	223205 or	1SS270A or
D5609,D5610	223222	WG713A
D5602,D5603	22380260, 22380032 or 22380035	RL1N4003, 1SR139-100 or GP104003E
D5611	224471303	MTZJ13C

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

PRINTED CIRCUIT BOARD-PARTS LIST 4

CAUTION: Replacement for transistor of mark *, if necessary must be made from the same beta group (Hfe) as the original type.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes			Transistors	
D6701,D6702	223163, 223205 or 223222	1SS133, 1SS270A or WG713A	Q6090-Q6092	2203424 or 2203000	KTB1369-Y or 2SA1930
D6703,D6704	224470512	MTZJ5.1B	Q6100-Q6102	2203434 or 2203010	KTD2061-Y or 2SC5171
	Capacitors		Q6703	2215885, 2211792, 2211793 or 2215886	KTA1268-GR, 2SA992-F, 2SA992-E or KTA1268-BL
C5602-C5604	394661017	100uF,35V, Elect.		Diodes	
C6701	394621017	100uF,6.3V, Elect.	D6000-D6006	223163, 223205 or 223222	1SS133, 1SS270A or WG713A
C6704	394680107	1uF,50V, Elect.		Cores	
C6706	394621017	100uF,6.3V, Elect.	L6000-L6002	5597-45502	
	Resistors		L6010-L6012	5597-45502	
R5612	415471014	100ohm+/-5%,1/4W,NF carbon		Capacitors	
R5613	453530474	4.7ohm+/-5%, 1/2W, Metal	C6000-C6006	374721024	1000pF+/-5%,50V,Plastic
R5616	441721224F	1.2kohm+/-5%, 2W, Metal oxide	C6020-C6022	394500477	4.7uF,160V, Elect.
	Sockets		C6023-C6026	394684707	47uF,50V, Elect.
P6931A	25051230	NSCT-5P1020	C6030-C6036	374734734	0.047uF+/-5%,100V,Plastic
P7701B	25052201, 25051271, 25051812 or 25052014	NSCT-5P2098, NSCT-5P1060, NSCT-5P1599 or NSCT-5P1801	C6510-C6514	394690477	4.7uF,100V, Elect.
JL6933A	25051088	NSCT-4P875	C6520-C6523	394690477	4.7uF,100V, Elect.
JL9503A	25051110	NSCT-6P897	C6531,C6532	374721034	0.01uF+/-5%,50V,Plastic
Thermal detector PC board (NAETC-7697-1A/1B/1C/1D/1E/1F)					
	Thermistors		C6901,C6902	3504373	15000uF,71V, Elect.
R5651	4000153	PTH9M04BF222TS2F333	C6901,C6902	3504374	15000uF,71V, Elect.
R5653	4000150	PTH9M04BC222TS2F333 <D>	C6901,C6902	3504373	15000uF,71V, Elect.
R5653	4000151	PTH9M04BD222TS2F333 <O>	C6901,C6902	3504374	15000uF,71V, Elect.
	Socket			Resistors	
JL6933B	25051088	NSCT-4P875	R6040-R6046	5210258	N06HR1KBC,Trimming
AC inlet PC board (NAETC-7700-1B/1C/1E/1F) (Except 120V and Australian models)					
	AC inlet		R6070-R6072	415476804	68ohm+/-5%,1/4W,NF carbon
P901B	25055960	 NPLG-2P913	R6073-R6076	415471814	180ohm+/-5%,1/4W,NF carbon
Power amplifier PC board (NAAF-7706-1A/1B)					
	Transistors		R6080-R6082	443521004	10ohm+/-5%, 1/2W, Metal oxide
Q6000-Q6006	2213284 or	2SC1740S-R or	R6083-R6086	415470224	2.2ohm+/-5%,1/4W,NF carbon
Q6010-Q6016	2213285	2SC1740S-S	R6090-R6092	443521004	10ohm+/-5%, 1/2W, Metal oxide
Q6020-Q6022	2215995, 2212125, 2213354 or 2213355	KTA1267-GR, 2SA1048-GR, 2SA933S-R or 2SA933S-S	R6093-R6096	415470224	2.2ohm+/-5%,1/4W,NF carbon
Q6023-Q6026	2211455 or 2211454	2SA1015-GR or 2SA1015-Y	R6100-R6106	4000201, 4000132 or 4500245	RF-5EGKR22, RGC55 0.22 or BPR55FK0.22,Metal plate
Q6030-Q6032	2211634 or 2211633	2SC2229-Y or 2SC2229-O	R6130-R6136	453630824	8.2ohm+/-5%, 1W, Metal
Q6033-Q6036	2203434 or 2203010	KTD2061-Y or 2SC5171	R6230-R6232	415471214	120ohm+/-5%,1/4W,NF carbon
Q6040-Q6042	2211354 or 2211353	2SA949-Y or 2SA949-O	R6240-R6242	415471214	120ohm+/-5%,1/4W,NF carbon
Q6043-Q6046	2203424 or 2203000	KTB1369-Y or 2SA1930	R6250-R6252	415471804	18ohm+/-5%,1/4W,NF carbon
Q6050-Q6056	2203083 or 2203082	* 2SC5359-O or * 2SC5359-R	R6260-R6262	415471804	18ohm+/-5%,1/4W,NF carbon
Q6060-Q6066	2203073 or 2203072	* 2SA1987-O or * 2SA1987-R	R6270-R6272	415470224	2.2ohm+/-5%,1/4W,NF carbon
Q6070-Q6076	2214984 or 2214985	2SC2631-R or 2SC2631-S	R6280-R6282	415470224	2.2ohm+/-5%,1/4W,NF carbon
			R6510-R6514	453532294	0.22ohm+/-5%, 1/2W, Metal
			R6520-R6523	453532294	0.22ohm+/-5%, 1/2W, Metal
				Terminals	
			P5100A,P5101A	25060301	NTM-1P232(M1700)
			P5201A,P5202A	25060301	NTM-1P232(M1700)
				Sockets	
			P5003	2009990666UL	NSAS-12P0929
			P5004	2009990745UL	NSAS-16P1040
			P6007	2009990759UL	NSAS-6P1070
			P6008	2009990760UL	NSAS-8P1071
			P6810	2009990668UL	NSAS-6P0931
			P6812	2009990669UL	NSAS-6P0932
			P6952	2009990671UL	NSAS-6P0934
				Plugs	
			P6000-P6006	25056009	NPLG-4P0959
			P6010,P6013	25056011	NPLG-6P0961
			P6011,P6012	25056009	NPLG-4P0959
			P6014-P6016	25056009	NPLG-4P0959

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

PRINTED CIRCUIT BOARD-PARTS LIST 5

Note: <D>: 120V model only
<P>: European model only
<T>: Worldwide model only
<O>: Except 120V model
<GT>: 220-230 V model only
<A>: Australian model only
<R>: Chinese model only

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
P6080~P6086	25055038	NPLG-2P29	P6003A~P6006A	25052287	NSCT-4P2184
P6931	25055701	NPLG-5P657	P6013A	25052289	NSCT-6P2186
P6201	27141850	BBL50	P6014A~P6016A	25052287	NSCT-4P2184
P6214	27190608-1	UA-0 V0	Power supply PC board (NAPS-7708-1A/1B)		
P6211~P6213	260226	CP-2S	CIRCUIT NO.	PART NO.	DESCRIPTION
P6216	260226	CP-2S		ICs	
P6301~P6303	260224	CP-1S	Q9401	222780185JRC	NJM78M18FA
P6305~P6307	260224	CP-1S	Q9411	222790185JRC	NJM79M18FA
Q6090A~Q6092A	27160486	RAD-155	Q9421	222780053JRC	NJM78L05A
Q6090B~Q6092E	838430107	3TTB+10S(BC),Self-tapping	Q9431	222780054JRC	NJM7805FA
Q6100B~Q6102E	838430107	3TTB+10S(BC),Self-tapping	Q9441	222790054JRC	NJM7905FA
Surround ch. driver circuit PC board (NAAF-7707-1A/1B)			Transistors		
CIRCUIT NO.	PART NO.	DESCRIPTION	Q6901	2215864,	KTC3199-GR,
	Transistors			2212115,	2SC2458-GR,
Q5003~Q5006	2215896,	* KTC3200-BL,		2213284 or	2SC1740S-R or
Q5013~Q5016	2210755,	* 2SC1775A-E,	Q9422	2213285	2SC1740S-S
	2210756 or	* 2SC1775A-F or		2202314 or	2SA1726-Y or
	2211733	* 2SC1845-E	Q9501	2202315	2SA1726-P
Q5023~Q5026	2215896,	KTC3200-BL,		2211644	2SA965-Y
	2210755,	2SC1775A-E,	Diodes		
	2210756 or	2SC1775A-F or	D9501,D9502A	22380285F,	RS403M,
	2211733	2SC1845-E		22380022F or	RBV402 or
Q5033~Q5036	2215844,	KTA1024-Y,	D9506,D9507	22380271F	D3SBA20
Q5043~Q5046	2211353,	2SA949-O,		22380260,	RL1N4003,
Q5053~Q5056	2211354 or	2SA949-Y or	D9508	22380032 or	1SR139-100 or
	2215843	KTA1024-O		22380035	GP104003E
Q5083~Q5086	2215854,	KTC3206-Y,		224472704	MTZJ27D
	2211633,	2SC2229-O,	Capacitors		
	2211634 or	2SC2229-Y or	C9401,C9402	394561007	10uF,35V, Elect.
	2215853	KTC3206-O	C9411,C9412	394561007	10uF,35V, Elect.
D5003~D5006	224470562	MTZJ5.6B	C9421,C9422	394561007	10uF,35V, Elect.
C5003~C5006	393381007	10uF,50V, Elect.	C9431,C9432	394561007	10uF,35V, Elect.
C5013~C5016	374722215	220pF+/-10%,50V,Plastic	C9441,C9442	394561007	10uF,35V, Elect.
C5043~C5046	393341017	100uF,16V, Elect.	C9501~C9504	374723344	0.33uF+/-5%,50V,Plastic
C5053~C5056	394681007	10uF,50V, Elect.	C9505	394662227	2200uF,35V, Elect.
C5073~C5076	394691007	10uF,100V, Elect.	C9506	394661027	1000uF,35V, Elect.
C5083~C5086	394672207	22uF,63V, Elect.	C9507	394682217	220uF,50V, Elect.
C5093~C5096	394684707	47uF,50V, Elect.	C9508	394646827	6800uF,16V, Elect.
C5103~C5106	374721015	100pF+/-10%,50V,Plastic	C9509	394651027	1000uF,25V, Elect.
C5123~C5126	394694707	47uF,100V, Elect.	C9510	394672217	220uF,63V, Elect.
C5133~C5136	394694707	47uF,100V, Elect.	C9513	374723344	0.33uF+/-5%,50V,Plastic
R5133~R5136	415478214	820ohm+/-5%,1/4W,NF carbon	C9521~C9523	374722234	0.022uF+/-5%,50V,Plastic
R5143~R5146	415478214	820ohm+/-5%,1/4W,NF carbon	Resistors		
R5153~R5156	443521034	10kohm+/-5%, 1/2W, Metal oxide	R9403	453530224	2.2ohm+/-5%, 1/2W, Metal
R5163~R5166	415471024	1kohm+/-5%,1/4W,NF carbon	R9413	453530824	8.2ohm+/-5%, 1/2W, Metal
R5173~R5176	415478214	820ohm+/-5%,1/4W,NF carbon	R9421~R9425	441620824	8.2ohm+/-5%, 1W, Metal oxide
R5183~R5186	415473304	33ohm+/-5%,1/4W,NF carbon	R9431,R9433	441621004	10ohm+/-5%, 1W, Metal oxide
R5233~R5236	415471504	15ohm+/-5%,1/4W,NF carbon	R9442,R9444	441622204	22ohm+/-5%, 1W, Metal oxide
R5243~R5246	415471504	15ohm+/-5%,1/4W,NF carbon	R9506	415472204	22ohm+/-5%,1/4W,NF carbon
R5283~R5286	443521034	10kohm+/-5%, 1/2W, Metal oxide	R9510	415470224	2.2ohm+/-5%,1/4W,NF carbon
R5303~R5306	415471014	100ohm+/-5%,1/4W,NF carbon	R9521	453530334	3.3ohm+/-5%, 1/2W, Metal
R5333~R5336	415471014	100ohm+/-5%,1/4W,NF carbon	Fuses		
P5201,P5202	25060302	NTM-1P233(M1969)	F9501,F9502	252160 or	△ 2.5A-UL/T-237 or
				252254	△ 2.5A-T/UL-ST2, Fuse <D>
				252075,	△ 2.5A-SE-EAK,
				252241 or	△ 2.5A-SE-TL250V or
				252275	△ 2.5A-SE-TL250V, Fuse <O>
			F9501A	29363313	△ T2.5AL1.6AL250V, Label, fuse <O>
			F9503,F9504	252252	△ 1.6A-T/UL-ST2, Fuse <D>
				252073,	△ 1.6A-SE-EAK,
				252239 or	△ 1.6A-SE-TL250V or
				252273	△ 1.6A-SE-TL250V, Fuse <O>

CAUTION: Replacement for transistor of mark *, if necessary must be made from the same beta group (Hfe) as the original type.

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

PRINTED CIRCUIT BOARD-PARTS LIST 6

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

CIRCUIT NO. PART NO. DESCRIPTION

Fuse holders

F9501A,F9501B	25052133	\triangle NSCT-1P2031
F9502A,F9502B	25052133	\triangle NSCT-1P2031
F9503A,F9503B	25052133	\triangle NSCT-1P2031
F9504A,F9504B	25052133	\triangle NSCT-1P2031

Fuse labels

F9501C	29361747	T2.5AL250V <O>
F9503C	29361769	T1.6AL250V <O>

Sockets

JL6953A	25051108	NSCT-4P895
JL7201B	25050281	NSCT-4P109
JL9503B	25050270	NSCT-6P98
JL9504A	25051088	NSCT-4P875

Plugs

P9501	25055138	NPLG-8P122
P9502A	25055156	NPLG-12P140

Thermal detector PC board (NAETC-7714-1A/1B)

CIRCUIT NO. PART NO. DESCRIPTION

Socket

JL9504B	25051088	NSCT-4P875
---------	----------	------------

Thermistors

R5652	4000153	PTH9M04BF222TS2F333
R5654	4000150	PTH9M04BC222TS2F333 <D>
R5654	4000151	PTH9M04BD222TS2F333 <O>

Pre. amplifier PC board (NAAF-7718-1A/1B/1C)

CIRCUIT NO. PART NO. DESCRIPTION

ICs

Q3860~Q3862	22241383R2 or	NJM4565M-D or
Q3860~Q3862	22240489R1NE	MPC4570G2-T1(MST) <P/T/R/GT>
Q4000,Q4800	22241383R2 or	NJM4565M-D or
Q4210~Q4213	22240489R1NE	MPC4570G2-T1(MST)
Q4100	22240943R2	TC9163AF
Q4101	22241221R2	TC9164AF
Q4200~Q4203	22241640R2	TC94A07F
Q4400,Q4401	22241451R9	NJU7306G
Q4410,Q4411	22241450R2 or	NJM2082M-D or
	22241567R2	NJM2082M

Transistors

Q4420~Q4422	2216756R2	2SA1163-BL
Q4600~Q4607	2215410R2	RN1441
Q4610~Q4617	2215410R2	RN1441
Q4810~Q4815	2215410R2	RN1441

Diode

D4540	224490510R2	UDZ5.1B
-------	-------------	---------

Capacitors

C3600~C3607	374723315	330pF+/-10%,50V,Plastic
C3610~C3617	393381007	10uF,50V, Elect.
C3800~C3802	393384707	47uF,50V, Elect.
C3803~C3806	393381007	10uF,50V, Elect.
C3807	354724719	470uF,6.3V, Elect.
C3820,C3821	393384707	47uF,50V, Elect.
C3840,C3841	393381007	10uF,50V, Elect.
C3862,C3863	374721224	1200pF+/-5%,50V,Plastic <P/T/R/GT>
C3864,C3865	374722724	2700pF+/-5%,50V,Plastic <P/T/R/GT>
C4010,C4011	393381007	10uF,50V, Elect.
C4120,C4121	354742219 or	220uF,16V, Elect. or
C4120,C4121	394642217	220uF,16V, Elect.
C4200~C4207	393381007	10uF,50V, Elect.
C4217	374721024	1000pF+/-5%,50V,Plastic
C4220~C4227	393380107	1uF,50V, Elect.
	393384707	47uF,50V, Elect.
C4320~C4325	354742219 or	220uF,16V, Elect. or
	394642217	220uF,16V, Elect.

CIRCUIT NO. PART NO. DESCRIPTION

Capacitors

C4410~C4412	374721015	100pF+/-10%,50V,Plastic
C4417	374721024	1000pF+/-5%,50V,Plastic
C4420~C4422	393384707	47uF,50V, Elect.
C4430~C4432	374721044	0.1uF+/-5%,50V,Plastic
C4440~C4442	374721534	0.015uF+/-5%,50V,Plastic
C4540	354721019 or	100uF,6.3V, Elect. or
	394621017	100uF,6.3V, Elect.
C4600~C4602	393384707	47uF,50V, Elect.
C4607	393384707	47uF,50V, Elect.
C4610~C4617	374721024	1000pF+/-5%,50V,Plastic
C4800,C4801	354741009	10uF,16V, Elect.
C4802,C4803	354780229	2.2uF,50V, Elect.
C4806,C4807	354721019	100uF,6.3V, Elect.
C4808,C4809	374722224	2200pF+/-5%,50V,Plastic
C4920,C4921	354742219 or	220uF,16V, Elect. or
	394642217	220uF,16V, Elect.

Resistors

R4120,R4121	443522204	22ohm+/-5%, 1/2W, Metal oxide
R4320~R4325	443522204	22ohm+/-5%, 1/2W, Metal oxide
R4920,R4921	443522204	22ohm+/-5%, 1/2W, Metal oxide

Terminals

P3600,P4600	25045707	NPJ-4PDGPRW502 <D/A>
	25045708	NPJ-4PDGPRW503 <P/T/R/GT>
P3601,P4601	25045709	NPJ-4PDELNT504 <D/A>
	25045710	NPJ-4PDELNT505 <P/T/R/GT>

Sockets

P4010B	25051235	NSCT-10P1025
P4011B,P4020B	25051240	NSCT-15P1030

Plugs

P4012A	25055734	NPLG-3P690
P5003E	25055152	NPLG-8P136
P5004E	25055153	NPLG-9P137

Bars

J4220~J4223	27141851	BBL60
-------------	----------	-------

Holders

P4610C~P4610E	27190540-1	Clamp
P5004G	27190608-1	Clamp

Audio terminal PC board (NAAF-7719-1A/1B/1C)

CIRCUIT NO. PART NO. DESCRIPTION

ICs

Q1001	222780125	78M12HF
Q3000,Q3020	22241383R2 or	NJM4565M-D or
Q3021	22240489R1NE	MPC4570G2-T1(MST)
Q3100	22241639R2	TC9273F-017

Transistor

Q1102	2216175R2 or	KTC3875-GR or
	2213145R2	2SC2712-GR

Capacitors

C1002,C1007	354741009 or	10uF,16V, Elect. or
	394641007	10uF,16V, Elect.
C1003,C1006	354780339 or	3.3uF,50V, Elect. or
	394680337	3.3uF,50V, Elect.
C3000,C3001	374722215	220pF+/-10%,50V,Plastic
C3002,C3003	393384707	47uF,50V, Elect.
C3004,C3005	374721524	1500pF+/-5%,50V,Plastic
C3006,C3007	354722219	220uF,6.3V, Elect.
C3008,C3009	374721234	0.012uF+/-5%,50V,Plastic
C3010,C3011	374723924	3900pF+/-5%,50V,Plastic
C3020~C3023	374723315	330pF+/-10%,50V,Plastic
C3026~C3029	393384707	47uF,50V, Elect.

Note: <D>: 120V model only <GT>: 220-230 V model only
<P>: European model only <A>: Australian model only
<T>: Worldwide model only <R>: Chinese model only
<O>: Except 120V model

PRINTED CIRCUIT BOARD-PARTS LIST 7

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors			Transistors	
C3120,C3121	354742219 or 394642217	220uF,16V, Elect. or 220uF,16V, Elect.	Q2909	2216175R2 or 2213145R2	KTC3875-GR or 2SC2712-GR
C3122,C3123	354744709 or 394644707	47uF,16V, Elect. or 47uF,16V, Elect.	Q2931	2212855 or 2212853	2SB1068-U or 2SB1068-K
	Resistors		Q2932	2216175R2 or 2213145R2	KTC3875-GR or 2SC2712-GR
R3120,R3121	443522204	22ohm+/-5%, 1/2W, Metal oxide	Q2933,Q2935	2216190R2 or 2214470R2	KRC102S or RN1402
	Terminals			Diodes	
P3000,P3001	25045575 or 25045303	NPJ-4PDRW389 or NPJ-4PDBL162 <D/A>	D2901-D2903	223234R2 or	1SS352 or
	25045582 or 25045491	NPJ-4PDRW393 or NPJ-4PDBL308 <P/T/R/GT>	D2922,D2923	223269R2	1SS355
	Sockets		D2931,D2932	22380260 or 22380035	RL1N4003 or GP104003E
P1010A	25052248, 25051859 or 25052061	NSCT-15P2145, NSCT-15P1646 or NSCT-15P1848	D2933	224490560R2	UDZ5.6B
P3010B	25051232	NSCT-7P1022		Capacitors	
P3011B	25051240	NSCT-15P1030	C2902-C2905	354741009	10uF,16V, Elect.
	Video terminal PC board (NAAF-7720-1A/1B/1C)		C2908	374722724	2700pF+/-5%,50V,Plastic <P/T/R/GT>
	CIRCUIT NO. PART NO. DESCRIPTION		C2916	374721224	1200pF+/-5%,50V,Plastic <P/T/R/GT>
	ICs		C2917,C2918	354741009	10uF,16V, Elect.<P/T/R/GT>
Q3200-Q3205	22241383R2 or	NJM4565M-D or	C2923-C2926	354761009	10uF,35V, Elect.
Q3400	22240489R1NE	MPC4570G2-T1(MST)	C2931	394641027	1000uF,16V, Elect.
Q3300	22240829	TC9274N-008	C2932	354741009	10uF,16V, Elect.
	Transistors			Resistors	
Q3410-Q3413	2215410R2	RN1441	R2912	453530474	4.7ohm+/-5%, 1/2W, Metal
	Capacitors		R2913	453530224	2.2ohm+/-5%, 1/2W, Metal
C3200-C3203	374723315	330pF+/-10%,50V,Plastic	R2931	453530104	1ohm+/-5%, 1/2W, Metal
C3205-C3209	374723315	330pF+/-10%,50V,Plastic	R2933	443522204	22ohm+/-5%, 1/2W, Metal oxide
C3212-C3223	393384707	47uF,50V, Elect.		Relay	
C3250,C3251	393381007	10uF,50V, Elect.	RL2901	25065563	NRL-2P5A-DC24-129
C3252	354741009 or	10uF,16V, Elect. or		Sockets	
C3252 or	394641007	10uF,16V, Elect.	P2901A	25051826	NSCT-19P1613
C3320,C3321	354742219 or	220uF,16V, Elect. or	P4012A	25051255	NSCT-3P1045
C3320,C3321	394642217	220uF,16V, Elect.	P7201B	25051838	NSCT-31P1625
C3400-C3403	393384707	47uF,50V, Elect.	P9502B	2009990748UL	NSAS-24P1045
C3404,C3405	374721024	1000pF+/-5%,50V,Plastic		Plugs	
	Resistors		P2005A	25055709	NPLG-13P665
R3320,R3321	443522204	22ohm+/-5%, 1/2W, Metal oxide	P2006A	25055806	NPLG-17P762
	Terminals		P2505A	25055710	NPLG-14P666
P3200-P3203	25045575 or 25045303	NPJ-4PDRW389 or NPJ-4PDBL162 <D/A>	P2705A	25055804	NPLG-4P760
	25045582 or 25045491	NPJ-4PDRW393 or NPJ-4PDBL308 <P/T/R/GT>	P3010A	25055703	NPLG-7P659
	Sockets		P3011A	25055711	NPLG-15P667
P3210B	25051232	NSCT-7P1022	P3210A,P3211A	25055703	NPLG-7P659
P3211B	25051232	NSCT-7P1022	P4010A	25055706	NPLG-10P662
	Plugs		P4011A,P4020A	25055711	NPLG-15P667
P3220A	25055133	NPLG-3P117	P604A	25055709	NPLG-13P665
P602A	25055148	NPLG-4P132	P7002A,P7004A	25055805	NPLG-16P761
	Main connector PC board (NAAR-7728-1A/1B/1C)		P7003A,P800A	25055712	NPLG-20P668
	CIRCUIT NO. PART NO. DESCRIPTION			Heat sink	
	ICs		Q2934A	27160472	RAD-141
Q2910,Q2913	22241383R2	NJM4565M-D <P/T/R/GT>		Screw	
Q2923	222780155JRC	NJM78M15FA	Q2934B	82143010	3P+10FN(BC), Pan head
Q2924	222790155JRC	NJM79M15FA		Clamp	
Q2934	222780565JRC	NJM78M56FA	P2902	260224	CP-1S
	Transistors			Note: <D>: 120V model only <GT>: 220-230 V model only	
Q2901,Q2903	2216175R2 or	KTC3875-GR or		<P>: European model only <A>: Australian model only	
Q2905,Q2907	2213145R2	2SC2712-GR		<T>: Worldwide model only <R>: Chinese model only	
Q2902,Q2904	2216220R2 or	KRA102S or		<O>: Except 120V model	
Q2906,Q2908	2214530R2	RN2402			

PRINTED CIRCUIT BOARD-PARTS LIST 8

Composite video PC board (NAVD-7729-1A/1B/1C)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q2001	22241848R2	LC74761M-9845
Q2010	22241619R2	TC9273F-004
Q2101,Q2201	222740515R2	74HC4051AF
Q2102,Q2105	22241443R2	TK15420M
Transistors		
Q2002~Q2005	2216220R2 or 2214530R2	KRA102S or RN2402
Q2006,Q2008	2216175R2 or	KTC3875-GR or
Q2103,Q2106	2213145R2	2SC2712-GR
Q2007,Q2012	2216210R2 or 2214490R2	KRC104S or RN1404
Q2009,Q2104	2216185R2 or	KTA1504-GR or
Q2107	2214375R2	2SA1162-GR
Q2011	2214550R2	RN2404
	2216175R2 or	KTC3875-GR or
Q2301~Q2315	2216031R2 or 2216032R2	RN1444-A or RN1444-B
Diodes		
D2001~D2003	223234R2 or	1SS352 or
D2006,D2007	223269R2	1SS355
D2103,D2104	223234R2 or	1SS352 or
D2106,D2107	223269R2	1SS355
Oscillators		
X2001	3010363	HC-49/U0314.318M
X2002	3010364	HC-49/U0317.734M <O>
Capacitors		
C2009	354780109	1uF,50V, Elect.
C2010	354721019	100uF,6.3V, Elect.
C2011	375524744	0.47uF+/-5%,50V,Plastic
C2012	354784799	0.47uF,50V, Elect.
C2015	374722234	0.022uF+/-5%,50V,Plastic
C2016	354780109	1uF,50V, Elect.
C2017	374726824	6800pF+/-5%,50V,Plastic
C2018	354783399	0.33uF,50V, Elect.
C2021,C2022	354721019	100uF,6.3V, Elect.
C2024,C2026	354741009	10uF,16V, Elect.
C2028	354741009	10uF,16V, Elect.
C2047	354721019	100uF,6.3V, Elect.
C2104,C2106	354721019	100uF,6.3V, Elect.
C2204,C2206	354721019	100uF,6.3V, Elect.
C2221	354721019	100uF,6.3V, Elect.
C2301~C2304	354721019	100uF,6.3V, Elect.
C2306	354721019	100uF,6.3V, Elect.
C2338	354724719	470uF,6.3V, Elect.
Terminals		
P2001~P2003	25045299	NPJ-3PDYE158 <D/A>
P2001~P2003	25045363	NPJ-3PDYE208 <P/T/R/GT>
Sockets		
P2005B	25051238	NSCT-13P1028
P2006B,P2007B	25051528	NSCT-17P1315

Note: <D>: 120V model only <GT>: 220-230 V model only
 <P>: European model only <A>: Australian model only
 <T>: Worldwide model only <R>: Chinese model only
 <O>: Except 120V model

S video PC board (NAVD-7730-1A/1B/1C)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q2451	22241849R2	MM1512
Q2501,Q2511	222740515R2	74HC4051AF
Q2502,Q2602	22241443R2	TK15420M
Q2601,Q2611	222740515R2	74HC4051AF
Transistors		
Q2401,Q2402	2216031R2 or	RN1444-A or
Q2407~Q2414	2216032R2	RN1444-B
Q2403,Q2406	2216031R2 or	RN1444-A or
Q2403,Q2406	2216032R2	RN1444-B <O>
Q2404,Q2405	2216031R2 or	RN1444-A or
	2216032R2	RN1444-B
Q2503,Q2505	2216175R2 or	KTC3875-GR or
	2213145R2	2SC2712-GR
Q2504,Q2506	2216185R2 or	KTA1504-GR or
	2214375R2	2SA1162-GR
Diodes		
D2503~D2506	223234R2 or	1SS352 or
	223269R2	1SS355
Coils		
L2001	231292J056R2	NCH-1572
L2002	231237K022R2 or	NCH-1471 or
L2002 or	233533K022R2	NCH-1587-022K
L2471,L2473	231237K022R2	NCH-1471
L2472,L2474	231292J056R2	NCH-1572 <O>
Capacitors		
C2422,C2424	354721019	100uF,6.3V, Elect.
C2426,C2428	354721019	100uF,6.3V, Elect.
C2432,C2452	354721019	100uF,6.3V, Elect.
C2504,C2506	354721019	100uF,6.3V, Elect.
C2573,C2575	354721019	100uF,6.3V, Elect.
C2604,C2606	354721019	100uF,6.3V, Elect.
C2608,C2618	354780229	2.2uF,50V, Elect.
Sockets		
P2501	25051750	NSCT-4P1537 <D/A>
P2501	25051955	NSCT-4P1742 <P/T/R/GT>
P2502	25051568	NSCT-12P1355 <D/A>
P2502	25051957	NSCT-12P1744 <P/T/R/GT>
P2503,P2504	25051748	NSCT-8P1535 <D/A>
	25051956	NSCT-8P1743 <P/T/R/GT>
P2505B	25051239	NSCT-14P1029
P2507B	25051528	NSCT-17P1315
Plug		
P2506A	25055236	NPLG-5P220
Component video PC board (NAVD-7731-1A/1B/1C)		
CIRCUIT NO.	PART NO.	DESCRIPTION
Transistor		
Q2701	2216175R2 or 2213145R2	KTC3875-GR or 2SC2712-GR
Diodes		
D2701,D2702	223234R2 or 223269R2	1SS352 or 1SS355
Relays		
RL2701,RL2702	25065610	NRL-2P1A-DC4.5-156
Terminals		
P2701~P2703	25045629	NPJ-3PDGLR436 <D/A>
P2701~P2703	25045607	NPJ-3PDGLR414 <P/T/R/GT>
Socket		
P2705B	25051526	NSCT-4P1313

PRINTED CIRCUIT BOARD-PARTS LIST 9

Note: <D>: 120V model only <GT>: 220-230 V model only
 <P>: European model only <A>: Australian model only
 <T>: Worldwide model only <R>: Chinese model only
 <O>: Except 120V model

RS232 terminal PC board (NAETC-7733-1A/1B/1C)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q201	22241537R2	MPD4721GS <P/T/R/GT>
Q233	222780565	78M56
	Transistors	
Q231	2213145R2 or	2SC2712-GR or
Q231 or	2216175R2	KTC3875-GR
Q232	2213145R2 or	2SC2712-GR or
Q232 or	2216175R2	KTC3875-GR
Q2911	2216190R2 or	KRC102S or
Q2921,Q2922	2214470R2	RN1402
Q2912	2212855 or	2SB1068-U or
Q2912 or	2212853	2SB1068-K
	Photo coupler	
Q211	24120080	PC817X
	Diodes	
D201~D203	223234R2 or	1SS352 or
	223269R2	1SS355
	Coil	
L201	230948R2	BLM21A102F <P/T/R/GT>
	Capacitors	
C201~C204	354780109	1uF,50V, Elect. <P/T/R/GT>
C207	354721019	100uF,6.3V, Elect. <P/T/R/GT>
C223	354744709	47uF,16V, Elect.
C231	354741009	10uF,16V, Elect.
C232	354751029S	1000uF,25V, Elect.
C2921	354721019	100uF,6.3V, Elect.
C2922	374722234	0.022uF+/-5%,50V,Plastic
	Resistors	
R234	441721514F	150ohm+/-5%, 2W, Metal oxide
R233	453532294	0.22ohm+/-5%, 1/2W, Metal
	Thermistor	
R2909	4000195	RXE030
	Terminals	
P202	25045647	HSJ1002-01-1020
P204	25045647	HSJ1002-01-1020
	Sockets	
JL931A	25051107	NSCT-3P894
P201	25052379	NSCT-9P2277
P201	25052379	NSCT-9P2277
P201	25052379	NSCT-9P2277
P2901B	25051826	NSCT-19P1613
P6830B,P6832B	25051255	NSCT-3P1045
	Plug	
P2906	25055701	NPLG-5P657
	Heat sink	
Q233A	27160145	RAD-51
	Screw	
Q233B	82143010	3P+10FN(BC),Pan head

Connector PC board (NAETC-7734-1A/1B/1C)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs	
P2007A,P2507A	25055806	NPLG-17P762

Display circuit PC board (NADIS-7738-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q7501	212234	HNA-16MM40T
	Remote sensor	
U7201	241335 or	SPS-444-1 or
	241341	SPS-444-1-E1

CIRCUIT NO.	PART NO.	DESCRIPTION
Q7201	22241512	M30624FGAFP
Q7502	22241680AR2	M66005-0001AFP
	Transistors	
Q7202	2216230R2 or	KRA103-S or
	2214540R2	RN2403
Q7503,Q7504	2216175R2 or	KTC3875-GR or
	2213145R2	2SC2712-GR
Q7521~Q7527	2216190R2 or	KRC102S or
Q7529~Q7535	2214470R2	RN1402
Q7536,Q7537	2216175R2 or	KTC3875-GR or
	2213145R2	2SC2712-GR
	Diodes	
D7201,D7202	223234R2 or	1SS352 or
D7502	223269R2	1SS355
D7203	224490510R2 or	UDZ5.1B or
	224550510R2	UDZS5.1B
D7501	224491100R2 or	UDZ11B or
	224551100R2	UDZS11B
D7521~D7527	225375	SML1216C
D7529~D7532	225375	SML1216C
D7533	225290	SEL4110R
D7534	225292D	SEL4310G-D
D7535	225374	SEL2E10C
	Oscillator	
X7201	3010322	CST16.00MXW0C1,Ceramic
	Coils	
L7201	231237M022R2 or	NCH-1471 or
	233533M022R2	NCH-1587-022M
R7201,R7202	230958R1	BK1608LM182-T
	Capacitors	
C7201,C7202	355721019	100uF,6.3V, Elect.
C7203,C7506	375524744	0.47uF+/-5%,50V,Plastic
C7207,C7503	355721019	100uF,6.3V, Elect.
C7510	355783309	33uF,50V, Elect.
	Switches	
S7541~S7549	25035699 or	NPS-111-S662 or
S7551~S7559	25035714	NPS-111-S677
S7561~S7568	25035699 or	NPS-111-S662 or
S7571~S7579	25035714	NPS-111-S677
	Sockets	
JL7201A	25051108	NSCT-4P895
P7201A	25051875	NSCT-31P1662
P7482A	25051089	NSCT-5P876
P7559A	25051087	NSCT-3P874
	Plugs	
P7203	25056056	NPLG-8P1006
	Holder	
Q7501A	27191074A	(FL)

Volume PC board (NAETC-7739-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Rotary encoder	
S7569	25065575	EC16B2425
	Socket	
P7559B	25051087	NSCT-3P874

Headphone terminal PC board (NAETC-7740-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Terminal	
P7481	25045467	YKB22-5153G
	Socket	
P7482B	25051089	NSCT-5P876

PRINTED CIRCUIT BOARD-PARTS LIST 10

Front video terminal PC board (NAETC-7741-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Terminal	
P2510	25045678	NPJ-3PDB475
	Sockets	
P2506B	2009990575UL	NSAS-10P0784
P2508	25051569	NSCT-4P1356
P3220B	2009990420	NSAS-6P0564



Front optical terminal PC board (NAETC-7742-1A/1B/1C/1D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Photo coupler	
U2501	24120101	TORX179L
	Capacitors	
C2579	354741009	10uF,16V, Elect.
	Socket	
P102B	2009990513UL	NSAS-6P0675

Net-tune circuit PC board (NAVD-7662-2)


CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q601	22241778R2	BA33C25FP, Regulator
Q603,Q608	22241861R3	HM5264165FTT-B6, Main memory
Q604	22241862R3	MX29LV320BTC-90, Flash ROM
Q605	22241821R2	WM8716EDS
Q606	22241872R2	93LC46BT/SN,MAC address
Q607	22241863R3	EP7312-CV, MM microprocessor
Q609,Q618	22241161R2	TC7W14FU
Q610	22241159R2	TC7S02FU
Q616	22241867R3	CS8900A-CQ3,Ethernet controller
	Diodes	
D601	223234R2 or	1SS352 or
D604,D605	223269R2	1SS355
D603	225385R2	SEC1201C
	Coils	
L601	230949R2	BLM21P221SG
L603	3030048R2	NFE31PT471F1E9
L605,L606	230949R2	BLM21P221SG
L607	231237K470R2	NCH-1479
R639,R640	230958R1	BK1608LM182-T
	Oscillators	
X601	3010374R2	DSO-751SV, Crystal
X602	3010371R2	DSX630G, Crystal
X603	3010372R2	SM-26F, Crystal
X604	3010373R2	SMD-49, Crystal
	Capacitors	
C602,C614	395530477R2	4.7uF,10V, Tantalum
C615,C637	395521017R2	100uF,6.3V, Tantalum
C638	356721019R2	100uF,6.3V, Elect., chip
C640	393322217	220uF,6.3V, Elect.
C641	374721044	0.1uF+/-5%,50V,Plastic
C645,C647	356721019R2	100uF,6.3V, Elect., chip
C649	393322217	220uF,6.3V, Elect.
C650	374721044	0.1uF+/-5%,50V,Plastic
C679	395521017R2	100uF,6.3V, Tantalum
C693	356721019R2	100uF,6.3V, Elect., chip
	Sockets	
P601	25052724	NSCT-8P2620,LAN
P603A	25052707R2	NSCT-6P2603
P604B	25051238	NSCT-13P1028
	Plugs	
P602B	25055964R2	NPLG-4P917
P607B	25055965R2	NPLG-5P918
	Cushion	
Q605A	28141445	(DAC)

PACKING VIEW-PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
101	29092063-1	Pad
102	29095906	Protection sheet
103	29100035-1	720*1020, Polybag
104	29110149	Tape, cellophane
105	29110148	PP tape
111	29053942-1	Carton box <D/A>
	29053944-1	Carton box <P>
	29053943	Carton box <T>
	29053946-1	Carton box <G> <T/R/GT>
	29053973-1	Carton box <G> <A>
	29053945-1	Carton box <S>
112	29363221-1	Label EAN <P>
	29363222-1	Label EAN <S> <P>
	29363223-1	Label EAN <A/T>
	29363224-1	Label EAN <G>
	29363225-1	Label UPC <D/C>
122	29100097-1A	350*250, Polybag <O>
123	29343409	Instruction manual E
124	29343410	Instruction manual FI <P/C>
	29343412	Instruction manual CT/CS <T/R/GT>
125	29343411	Instruction manual GDSW <P>
126	29343414	Instruction manual
128	29343454A	Instruction E, Net-tune
129	29343455A	Instruction U6, Net-tune <P/T/R/C/GT>
130	29355256	Instruction sheet, caution
131	29355424	Instruction sheet E, Net-tune DL <D/A>
	29355425	Instruction sheet U7, Net-tune DL <P/C>
	29355426	Instruction sheet U3, Net-tune DL <T/R/GT>
132	29355428	Instruction sheet E, Net-tune QS <D/A>
	29355429	Instruction sheet U7, Net-tune QS <P/C>
	29355430	Instruction sheet U3, Net-tune QS <T/R/GT>
135	29365090A	Warranty card <D>
136	29363059A	Label, speaker cable
141	292142	FM antenna <D>
	292115	FM antenna <O>
142	232140	NMA-3057, AM loop antenna
143	3010054	UM-3, Battery
144	25065462	YAE21-0237, Antenna adapter <A/T/R/GT>
145	25056005	CV-K-1, Conversion plug <T>
151	24140511	RC-511M, Remote controller
152	29363080	Label TWNEMC
P901	253298KAW	 AS-CEE-3, Power supply cord <P/T>
	253312VOL	 AS-CCEE, Power supply cord <R>

Note:

: Black model only
 <G>: Golden model only
 <S>: Silver model only
 <D>: U.S.A. model only
 <O>: Except 120V model
 <P>: European model only
 <C>: Canadian model only
 <T>: Worldwide model only
 <GT>: 220-230 V model only
 <A>: Australian model only
 <R>: Chinese model only

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

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 U.S.A. CORPORATION

18 Park Way, Upper Saddle River, N.J. 07458, U.S.A.
Tel: 201-785-2600 Fax: 201-785-2650 E-mail: onkyo@onkyousa.com

ONKYO EUROPE ELECTRONICS GmbH

Liegnitzerstrasse 6, 82194 Grobenzell, GERMANY
Tel: +49-8142-4401-0 Fax: +49-8142-4401-555 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