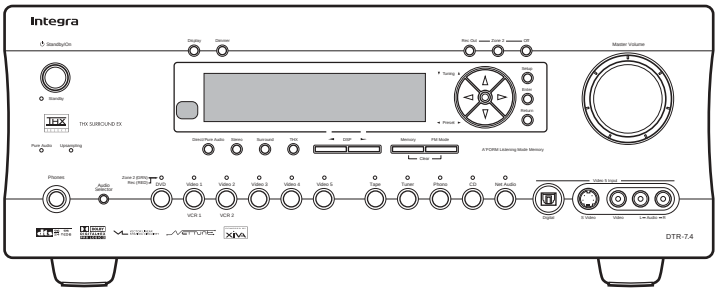
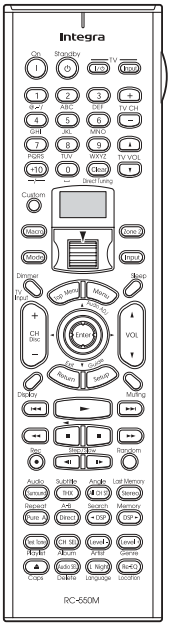
Ref. No. 3787
Nov., 2003

Integra SERVICE MANUAL

AV RECEIVER
MODEL DTR-7.4





Black model

BMDD	120V, AC 60Hz
BMPA	230~240V, AC 50Hz

SAFETY-RELATED COMPONENT WARNING!!

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

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

SPECIFICATIONS

AMPLIFIER SECTION

Power output (USA model) (FTC):

All channels:	**100 W per channel min. RMS into 8Ω, 2 channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.** **130 W min. RMS into 6Ω, 2 channels driven, 1 kHz with no more than 0.1% total harmonic distortion.**
Continuous power output (Australian model) (DIN):	135 W at 6Ω
Dynamic power output (stereo):	2×250 W at 3Ω 2×210 W at 4Ω 2×130 W at 8Ω
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 8Ω
Input sensitivity and impedance	
PHONO:	2.5 mV, 50 kΩ
LINE (CD, TAPE, DVD, VIDEO 1-5):	200 mV, 50 kΩ
MULTICHANNEL INPUT (FRONT L/C/R, SURROUND L/R, SURROUND BACK L/R):	200 mV, 50 kΩ
(SUBWOOFER):	36 mV, 50 kΩ
COAXIAL 1, 2, 3 (DIGITAL):	0.5 Vp-p, 75Ω
DVD, VIDEO 1, 2, 3, 4, 5:	1 Vp-p, 75 Ω (Composite Video) 1 Vp-p, 75Ω (S-Video, Y signal) 0.28 Vp-p, 75Ω (S-Video, C signal)
COMPONENT VIDEO 1, 2:	1 Vp-p, 75Ω (Y) 0.7 Vp-p, 75Ω (P_B/C_B, P_R/C_R)
Output level and impedance	
Rec out (TAPE, VIDEO 1,2):	200 mV, 470Ω
Pre out:	1 V, 470Ω
ZONE 2 OUT:	100 mV, 470Ω
VIDEO (VIDEO 1, 2, MONITOR OUT, ZONE 2 OUT):	1 Vp-p, 75Ω (Composite Video)
S-VIDEO (VIDEO 1, 2, MONITOR OUT):	1 Vp-p, 75Ω (S-Video, Y signal) 0.28 Vp-p, 75Ω (S-Video, C signal)
COMPONENT VIDEO OUT:	1 Vp-p, 75Ω (Y) 0.7 Vp-p, 75Ω (P_B/C_B, P_R/C_R)
Phono overload:	120 mV RMS at 1 kHz, 0.5% T.H.D.
Frequency response:	5 Hz to 100 kHz: +1~-3dB (CD in Direct mode)
RIAA deviation:	20 Hz to 20 kHz: ±0.8 dB
Tone Control	
Bass:	±10 dB at 50 Hz
Treble:	±10 dB at 20,000 Hz
Signal-to-noise ratio (direct)	
PHONO:	80 dB (IHF A, 5 mV input)
Line:	110 dB (IHF A, 0.5 V input)
Ethernet port:	10BASE-T
Supported audio file format:	MP3, WMA, WAV (non-compression, sampling rates of 32 kHz, 44.1 kHz, and 48 kHz supported)

TUNER SECTION

FM

Tuning range	
USA & Canadian models:	87.50~108.00 MHz (100 kHz steps)
Australian models:	87.50~108.00 MHz (50 kHz steps)
Usable sensitivity	
Mono:	11.2 dBf, 1.0 µV (75Ω, IHF) 0.9 µV (75Ω, DIN)
Stereo:	17.2 dBf, 2.0 µV (75Ω, IHF) 23 µV (75Ω DIN)
50 dB quieting sensitivity	
Mono:	17.2 dBf, 2.0 µV (75Ω)
Stereo:	37.2 dBf, 20.0 µV (75Ω)
Capture ratio:	2.0 dB
Image rejection ratio	
USA & Canadian models:	40 dB
Australian models:	85 dB
IF rejection ratio:	90 dB
Signal-to-noise ratio	
Mono:	76 dB
Stereo:	70 dB
Alternate channel attenuation:	Mono 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, ±1.0 dB
Stereo separation:	45 dB at 1 kHz 30 dB at 100 Hz~10 kHz

AM

Tuning range	
USA & Canadian models:	530~1,710 kHz (10 kHz steps)
Australian models:	522~1,611 kHz (9 kHz steps)
Usable sensitivity:	30 µV
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
Australian models:	AC 230-240 V, 50 Hz
Power consumption	
USA & Canadian models:	8.1 A
Australian models:	655 W
Dimensions (W×H×D):	435×175×460 mm 17-1/8"×6-7/8"×18-1/8"
Weight:	17.4 kg (38.4 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 utlise est a rapide. Pour une protection permanente, n'untiliser que fusibles de meme type. Ce darnier est la qu le present symbol est appse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252199	10A-UL,Fuse <D>
F902	252077,	4A-SE-EAK,
	252243 or	4A-SE-TL250V or
	252277	4A-SE-TL250V <A>
F903	252164 or	5A-UL/T-237 or
	252258	5A-T/UL-ST2,Fuse <D>
	252075,	2.5A-SE-EAK,
	252241 or	2.5A-SE-TL250V or
	252275	2.5A-SE-TL250V,Fuse <A>
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 <A>
F9503,F9504	252158 or	1.6A-UL/T-237 or
	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 <A>

Note: <D>: 120V model only
<A>: Australian 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

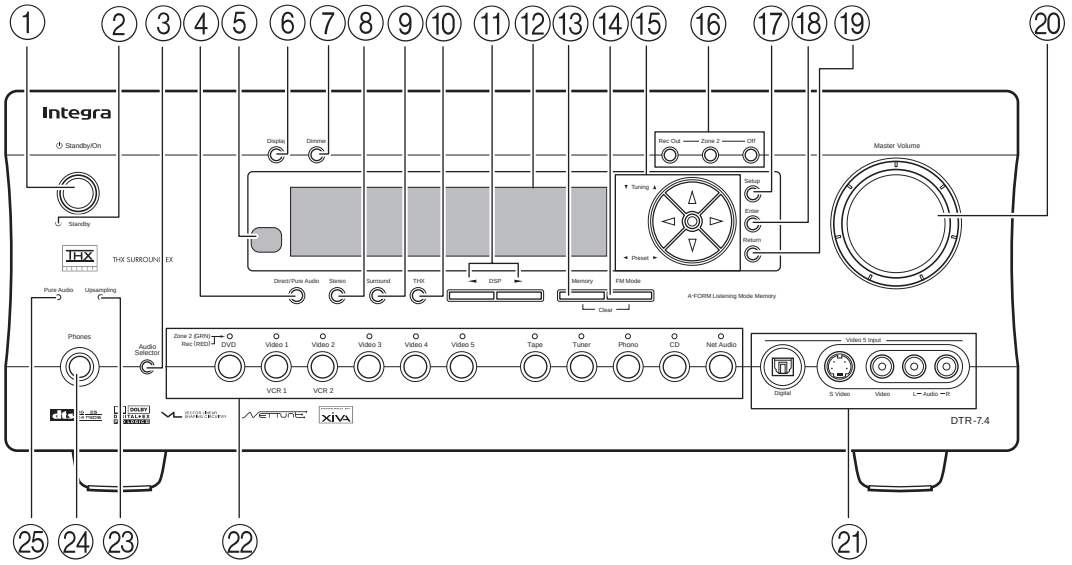
(U.S.A. model only)
After correcting the original service problem, perform the following safety check before releasing the set to the customer.
Leakage Current Check
Measure leakage current to a known earth ground(water pipe, conduit, etc.) by connecting a leakage current tester between the earth ground and exposed metal parts of the appliance (input/output terminals, screwheads,metal overlays, etc.).
Plug the power supply cord directly into a 120V AC 60 Hz outlet and turn Standby switch on. Any current meausred must not exceed 0.5mA.

4. Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged.The unit must be plugged in order to charge the back-up system.
The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged.This period is shorter when the unit is exposed to a highly humid climate.

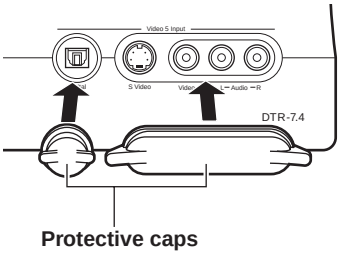
PANEL VIEWS

FRONT PANEL



Protective caps

Protective caps are provided for the Video 5 jacks. Be sure to always attach the protective caps when you are not connecting a device to the Video 5 jacks.



PANEL VIEWS

FRONT PANEL

① **Standby/On button**
This button is used to set the DTR-7.4 to On or Standby. In the standby state, the display is turned off and the DTR-7.4 cannot be operated.

② **Standby indicator**
Lights when the DTR-7.4 is in the standby state and when a signal is received from the remote controller.

③ **Audio Selector button**
Press to select the type of audio input signal.

④ **Direct/Pure Audio button**
Press to switch between the direct and pure audio listening modes.

⑤ **Remote control sensor**

⑥ **Display button**
Press to display information about the current input source signal. Each time you press the Display button, the screen changes to show you different-information concerning the input signal.

⑦ **Dimmer button**
Press to set the brightness of the front display. There are three settings available: normal, dark, and very dark. The brightness of the front display can also be changed using the remote controller.

⑧ **Stereo button**
Selects for the stereo listening mode.

⑨ **Surround button**
Selects for the Dolby Pro Logic II, DTS Neo:6, Dolby Digital, or DTS listening modes.

⑩ **THX button**
Selects for the THX listening mode.

⑪ **DSP ◄/► buttons**
Switches to the DSP (Digital Signal Processing) modes.

⑫ **Front display**

⑬ **Memory button**
Press to assign the radio station to which you are currently tuned to a preset channel or press to delete a previously preset station.

⑭ **FM Mode button**
Press to change the stereo mode from AUTO to MONO and vice versa. Each time this button is pressed, the AUTO indication turns on and off indicating the current mode. If you are listening to an FM radio station in stereo and the sound cuts out or there is a great deal of noise, switch from AUTO to MONO.

⑮ **Tuning ▼/▲ buttons**
These buttons used to tune into radio stations and to select items on the onscreen setup menus (OSD).

⑮ **Preset ◄/► buttons**
These buttons are used to select radio presets and to select items on the onscreen setup menus (OSD).

⑯ **Rec Out button**
This button is used to select the input source that you want to record via the REC OUTs (i.e., TAPE OUT, VIDEO 1 OUT, VIEDO 2 OUT).

Zone 2 button
This button is used to select the input source for Zone 2.

Off button
This button is used to turn off the REC OUTs (i.e., TAPE OUT, VIDEO 1 OUT, VIDEO 2 OUT) or Zone 2.

⑰ **Setup button**
Press to enter the Setup Menu. The OSD Menu will appear on the TV monitor as well as the front display on the DTR-7.4.

⑱ **Enter button**
Press to display the screen for the item that is selected in the Setup Menu.

⑲ **Return button**
In the Setup Menu, press to go back one level. If pressed while at the Main Menu, you will exit the Setup Menu.

⑳ **Master Volume dial**
Use to control the volume in the main zone. The volume for the remote zone (Zone 2) is independent.

㉑ **Video 5 Input terminals**
For connecting a video camera or game device.

㉒ **Input source buttons and indicators (DVD, Video 1~5, Tape, Tuner, Phono, CD, and Net Audio)**
Press these buttons to select the input source for the main zone.
To select the input source for the remote zone (Zone 2) or recording out (REC OUT), first press the Zone 2 or Rec Out button, and then press the desired input source button. The input channel with its indicator lit red is output to REC OUT and the one with its indicator lit green is output to ZONE 2.

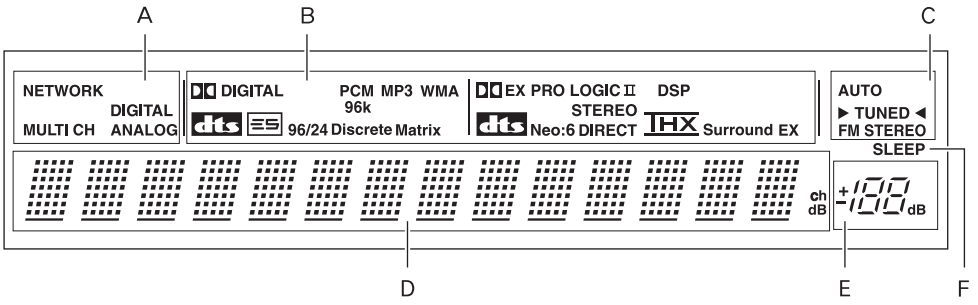
㉓ **Upsampling indicator**
Lights during upsampling. This function is available when the input source is Analog/PCM and the listening mode is set to the stereo or surround mode.

㉔ **Phones jack**
This is a standard stereo jack for connecting stereo headphones.

㉕ **Pure Audio indicator**
Lights during pure audio playback.

PANEL VIEWS

FRONT PANEL



A Input signal path indicators
Shows from which terminal the input signal is coming.

B Listening mode or digital input format indicators
One of these indicators lights to show the format of the current input source. In addition, one of the listening mode indicators lights to indicate the current listening mode.

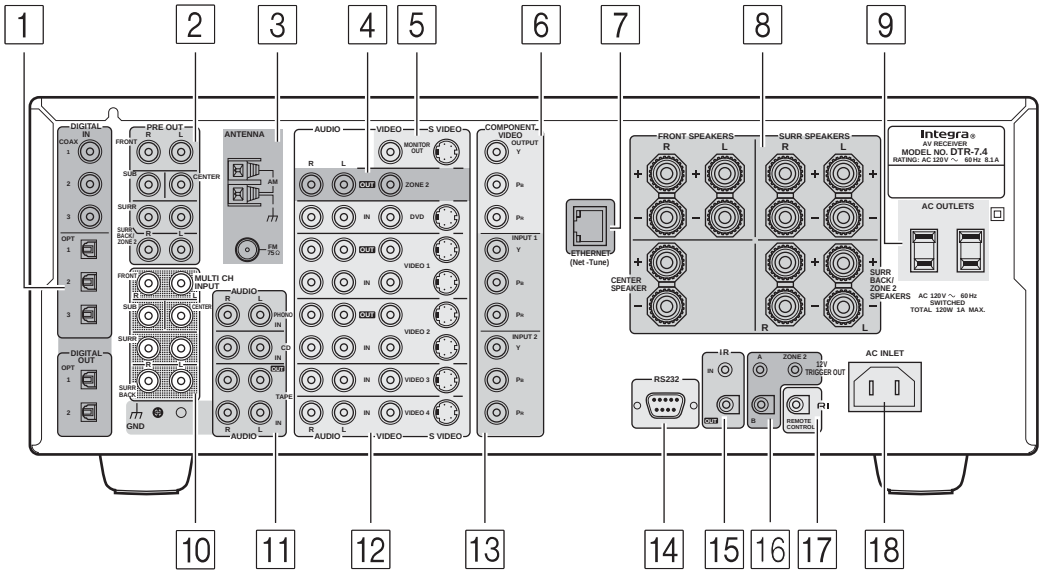
C Tuning indicators
AUTO indicator
Lights when receiving FM broadcasts in the stereo mode.Turns of when placed into the monaural mode.
TUNED indicator
Lights when a radio station is being received.
FM STEREO indicator
Lights when an FM broadcast station is being received in stereo. Turns off when placed into the monaural mode.

D Multi function display
During normal operation, shows the current input source and volume.When the FM or AM input is selected, shows the frequency and preset number. When the Display button is pressed, shows the listening mode and input source format. However, does not show the source format when the FM or AM source is selected.

E Volume display
Shows the volume level.

F SLEEP indicator
Lights when the sleep timer is turned on.

REAR PANEL



PANEL VIEWS

REAR PANEL

1 **DIGITAL IN/OUT**
These jacks are for connecting components with digital input and output capabilities.

2 **PRE OUT**
To use the DTR-7.4 as a preamplifier, connect a power amplifier to this jack.

3 **ANTENNA**
These jacks are for connecting the FM indoor antenna and the AM loop antenna that are supplied with the DTR-7.4.

4 **ZONE 2 OUT**
This jack is for connecting the component that will be used in the remote zone (Zone 2).

5 **MONITOR OUT VIDEO/S VIDEO**
These jacks are for connecting to the video input jacks on television monitors or projectors.

6 **COMPONENT VIDEO OUTPUT**
These jacks are for connecting to the component video input jacks on television monitors or projectors.

7 **ETHERNET (Net-Tune)**
This connector is for connecting to an Ethernet network.

8 **SPEAKERS**
These terminals are for connecting the speakers.

9 **AC OUTLETS**
This AC outlet is provided to plug in the power cord from another component. The shape and number of the AC outlet depend on the shipping destination.

10 **MULTI CH INPUT**
This connector is for connecting components with a multichannel output.

11 **PHONO/CD/TAPE AUDIO IN/OUT**
These connectors are for connecting to the audio input and output jacks on audio components.

12 **DVD/VIDEO1-4 IN/OUT**
These connectors are for connecting to the video input and output jacks on video components.

13 **COMPONENT VIDEO INPUT1/2**
These connectors are for connecting to the component video outputs of video components that have them.

14 **RS 232**
This port is for connecting the DTR-7.4 to home automation and external controllers.

15 **IR IN/OUT**
These connectors are for connecting the remote sensor of a multi-room kit (sold separately).

16 **12V TRIGGER OUT ZONE 2 A/B**
These connectors are used to connect to the 12V TRIGGER IN terminal of a component.

17 **RI**
This jack is for connecting other Integra/Onkyo components equipped with the same RI terminal. The audio connection cables must also be connected.

18 **AC INLET**
This connector is for connecting the supplied power cord.

PANEL VIEWS
REMOTE CONTROLLER

The DTR-7.4' s remote controller is a multipurpose device that can be used to control not just the DTR-7.4 but your other AV components as well. This section explains how its various operating modes can be used to control the DTR-7.4. When you use the Net-Tune mode, see Enjoy net audio for details. See Operating Onkyo Products for information on using the remote controller to control Onkyo components and TVs, VCRs, and AV components made by other manufacturers.

Amp Mode

Amp mode is used to control the DTR-7.4. To select Amp mode, press the scroll wheel. "AMP" appears on the display .

Note:
While neither the Input button nor Mode button is illuminated, rolling the scroll wheel changes the input source and remote controller mode simultaneously

① **On button**
This button is used to turn on the DTR-7.4.

② **Standby button**
This button is used to set the DTR-7.4 to Standby.

③ **Number/letter buttons**
These buttons are used to enter numbers and letters.

④ **Custom button**
This button is used to access various settings that you can use to customize the operation of the remote controller.

⑤ **Macro button**
This button is used with the Macro function.

⑥ **Mode button**
This button is used with the scroll wheel to select the remote controller modes.

⑦ **Dimmer button**
This button is used to adjust the display brightness.

⑧ **Up/Down/Left/Right ▲/▼/◄/► & Enter buttons**
These buttons are used to select items on the onscreen setup menus (OSD). The Enter button is also used to enter names and to confirm settings.

⑨ **CH/Disc +/ - button**
This button is used to select radio presets.

⑩ **Return/Exit button**
This button is used to return to the previously displayed onscreen setup menu (OSD).

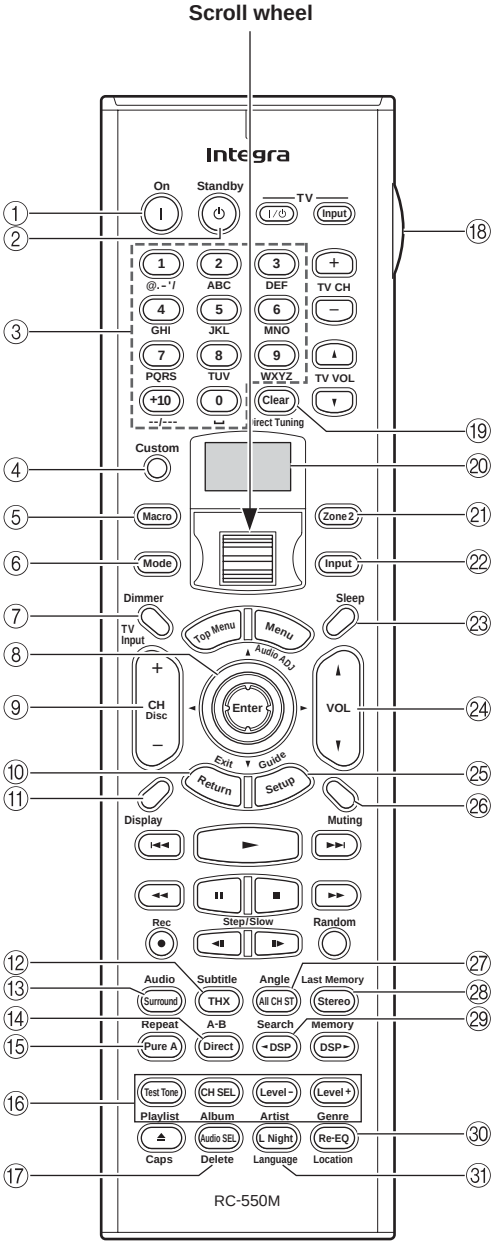
⑪ **Display button**
This button is used to display various information about the currently selected input source.

⑫ **THX button**
This button is used to select the THX listening modes.

⑬ **Surround button**
This button is used to select the Dolby and DTS listening modes.

⑭ **Direct button**
This button is used to select the Direct listening mode.

⑮ **Pure A button**
This button is used to select the Pure Audio listening mode.



PANEL VIEWS

REMOTE CONTROLLER

⑯ **Test Tone, CH SEL, Level - & Level+ buttons**

These buttons are used to adjust the level of each speaker individually. These functions can be set only with the remote controller. The Level- and Level+ buttons are also used to adjust the volume in Zone 2.

⑰ **Audio SEL button**
This button is used to select the audio input signal format: analog, digital, or multichannel.

⑱ **LIGHT button**
This button is used to turn on or off the remote controller's illuminated buttons.

⑲ **Direct Tuning button**
This button is used with the number buttons to select a radio station by entering its frequency. Press this button first, and then use the number buttons to enter the frequency.

⑳ **Display**
The top line of this LCD display shows the name of the currently selected input source. The bottom line shows the currently selected remote controller mode.

㉑ **Zone 2 button**
This button is used when you want to set the volume and input source for Zone 2.

㉒ **Input button**
This button is used to select the input source. Press this button first, and then roll the scroll wheel until the name of the input source appears on the display.

㉓ **Sleep button**
This button is used to set the Sleep function. This function can be set only with the remote controller.

㉔ **VOL ▲/▼ button**
This button is used to set the volume of the DTR-7.4.

㉕ **Setup/Guide button**
This button is used to access the onscreen setup menus (OSD) that appear on the TV.

㉖ **Muting button**
This button is used to mute the DTR-7.4. This function can be set only with the remote controller.

㉗ **All CH ST button**
This button is used to select the All Ch Stereo listening mode.

㉘ **Stereo button**
This button is used to select the Stereo listening mode.

㉙ **◄ DSP/DSP ► buttons**
These buttons are used to select the DSP (digital signal processor) listening modes.

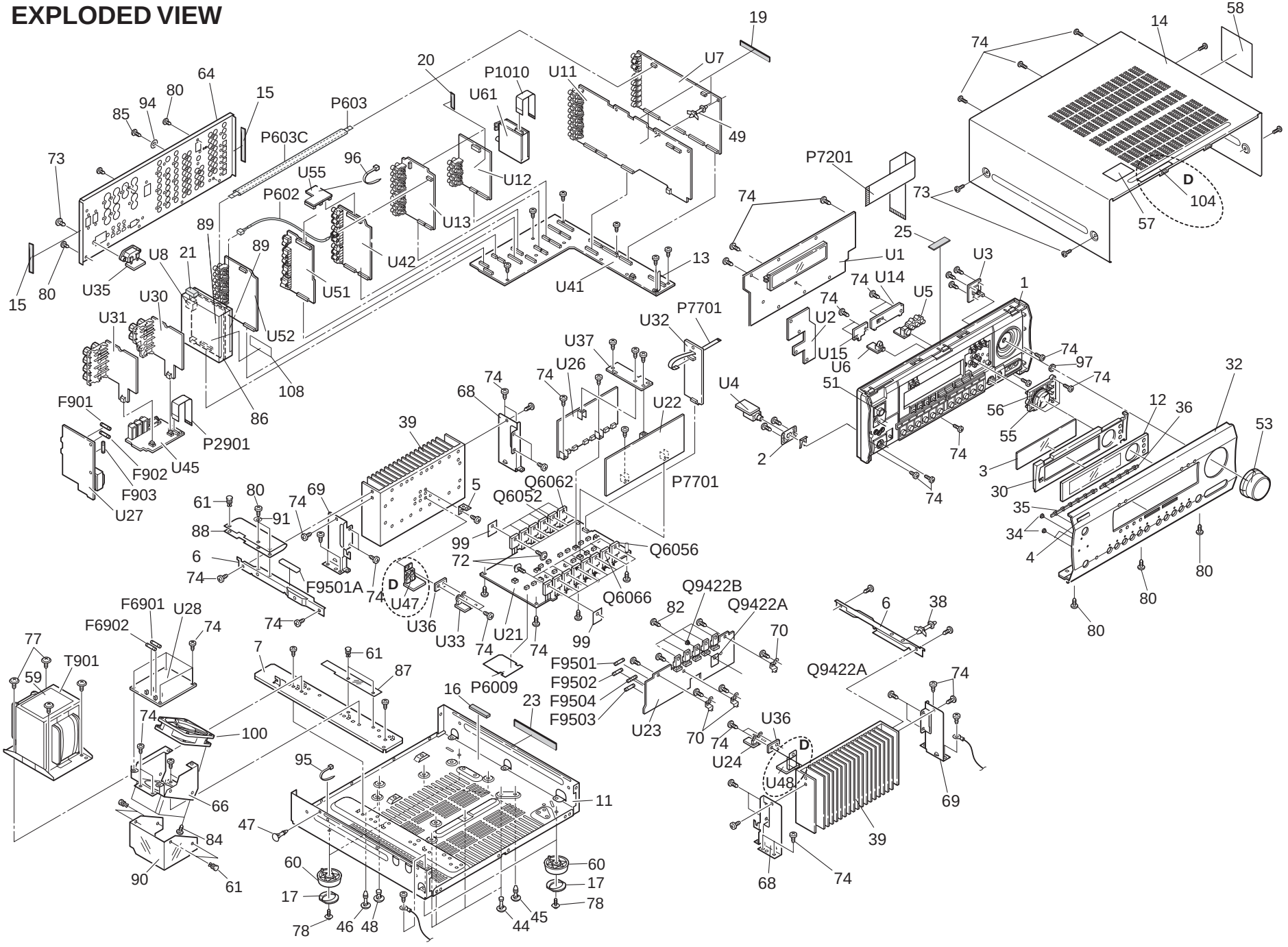
㉚ **Re-EQ button**
This button is used to turn on and off the Re-EQ function.

㉛ **L Night button**
This button is used to set the Late Night function.

A	B	C	D	E

1
2
3
4

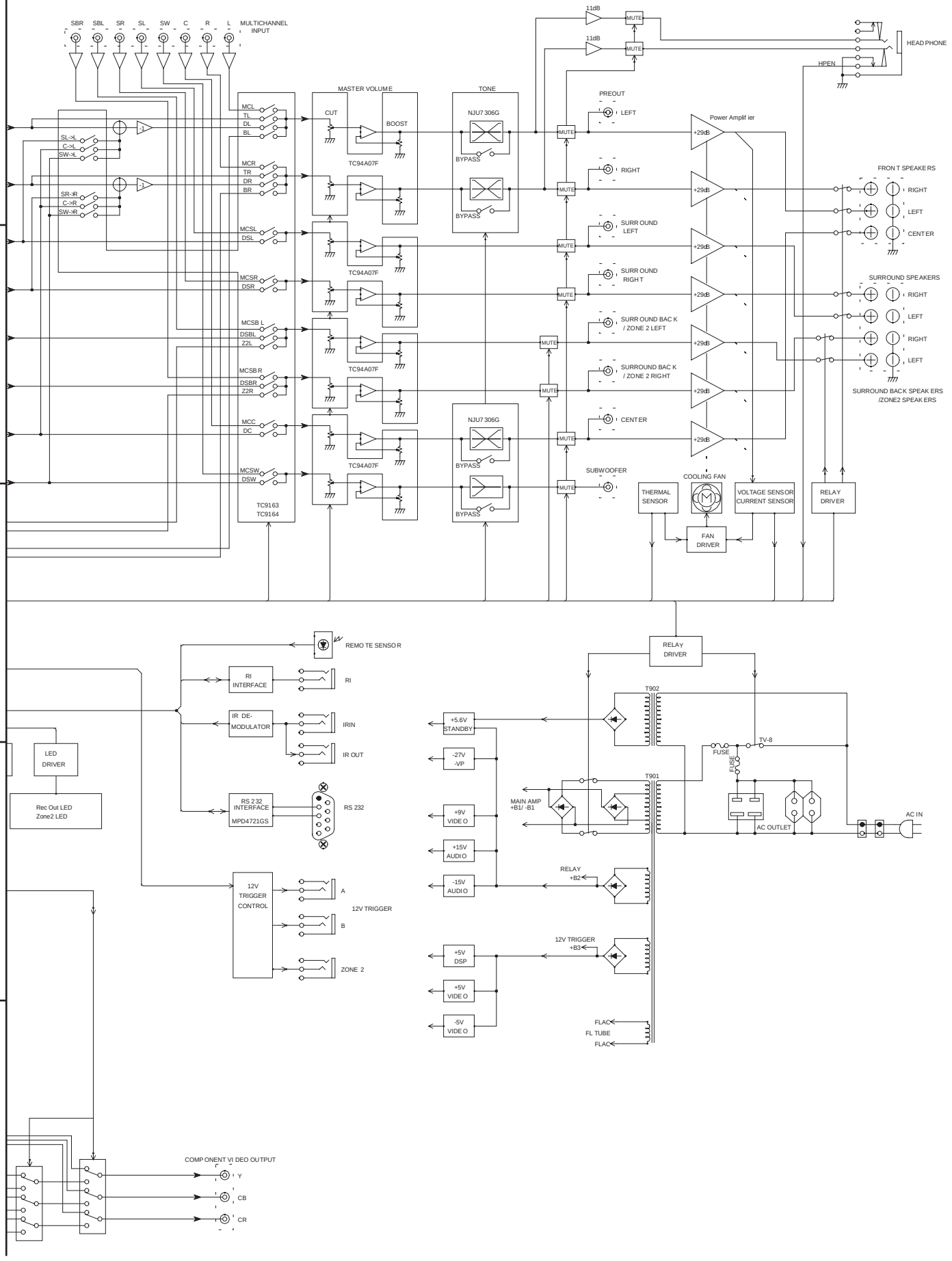
EXPLODED VIEW



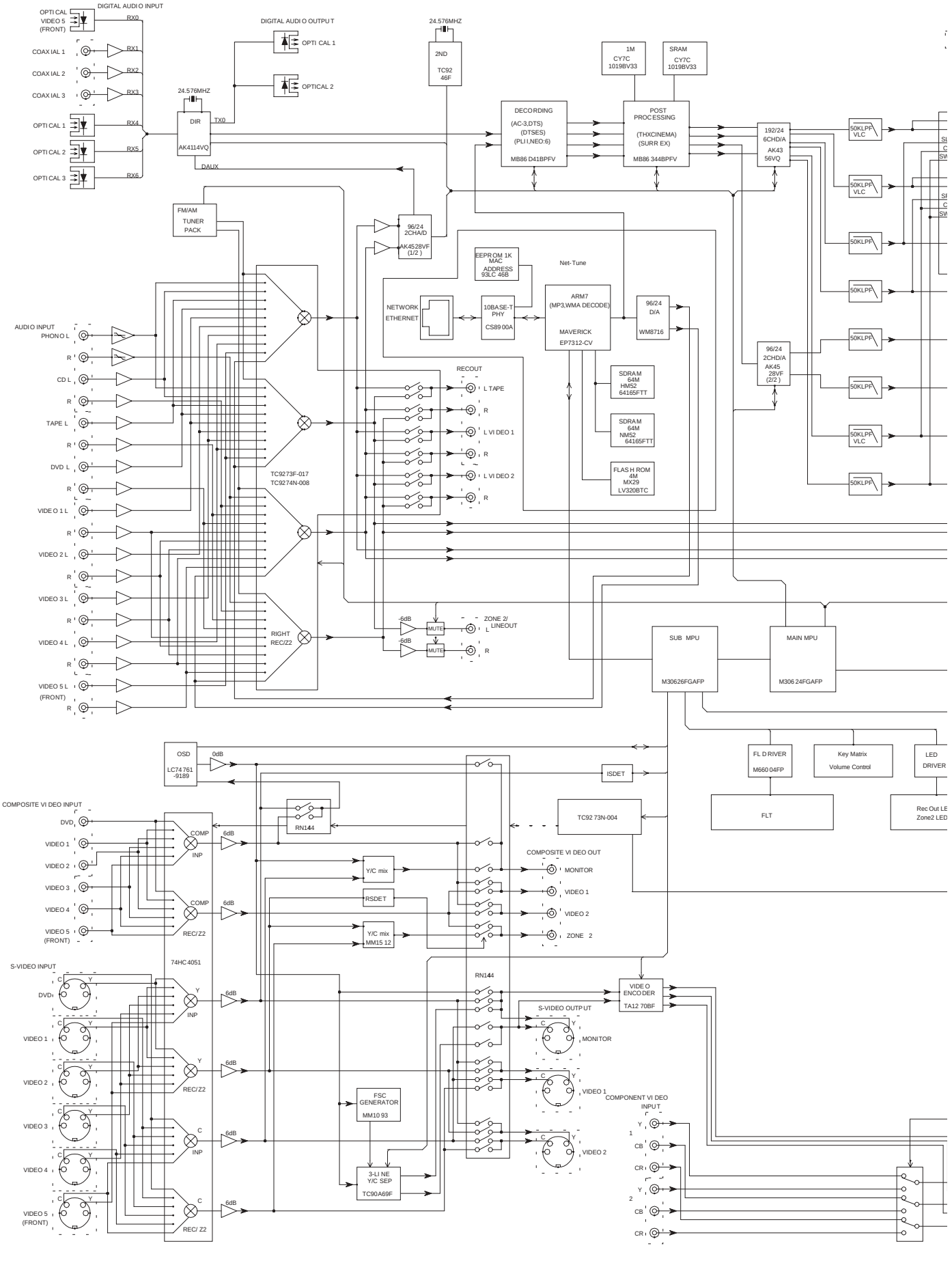
A B C D

1 2 3 4 5

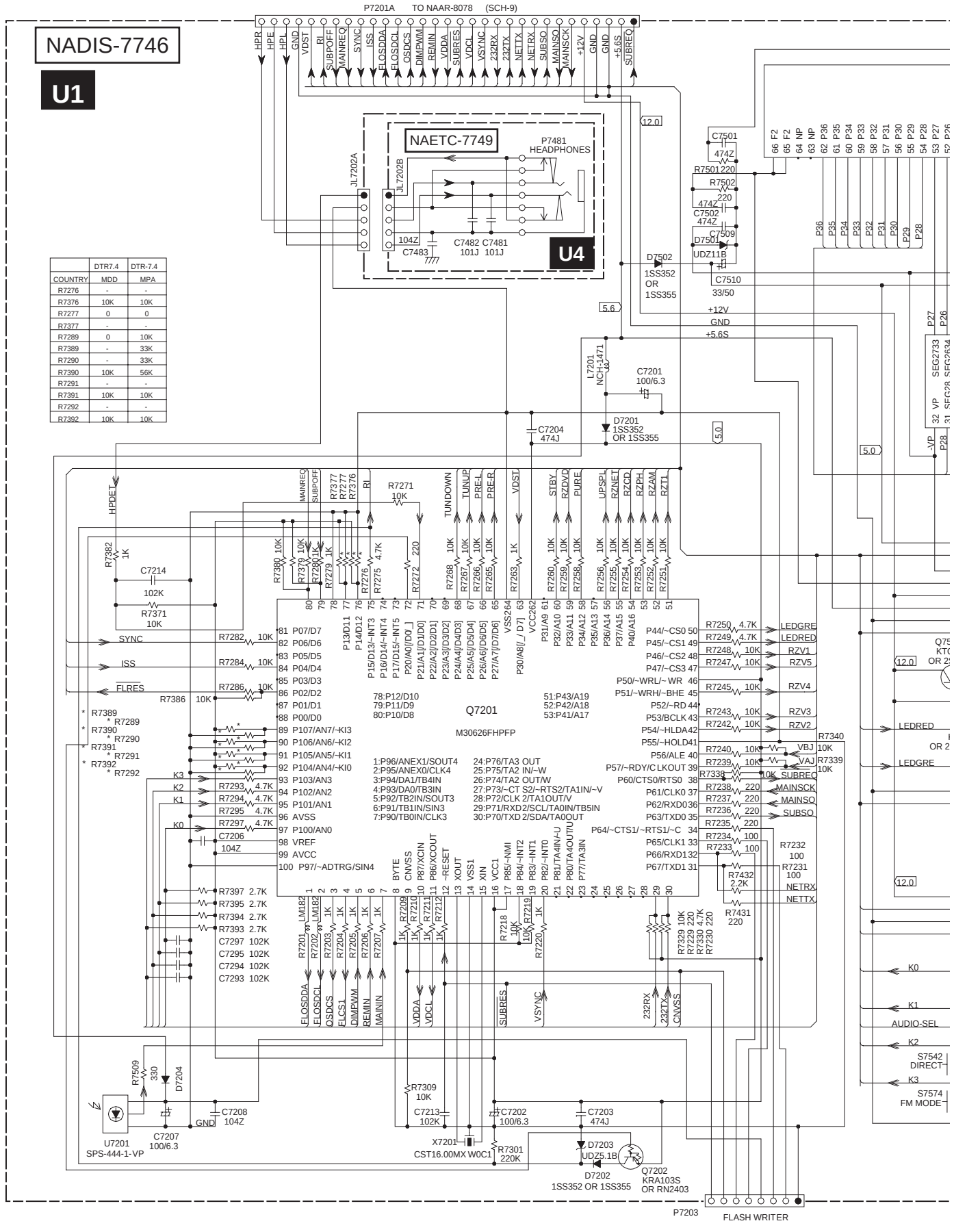
BLOCK DIAGRAM



BLOCK DIAGRAM

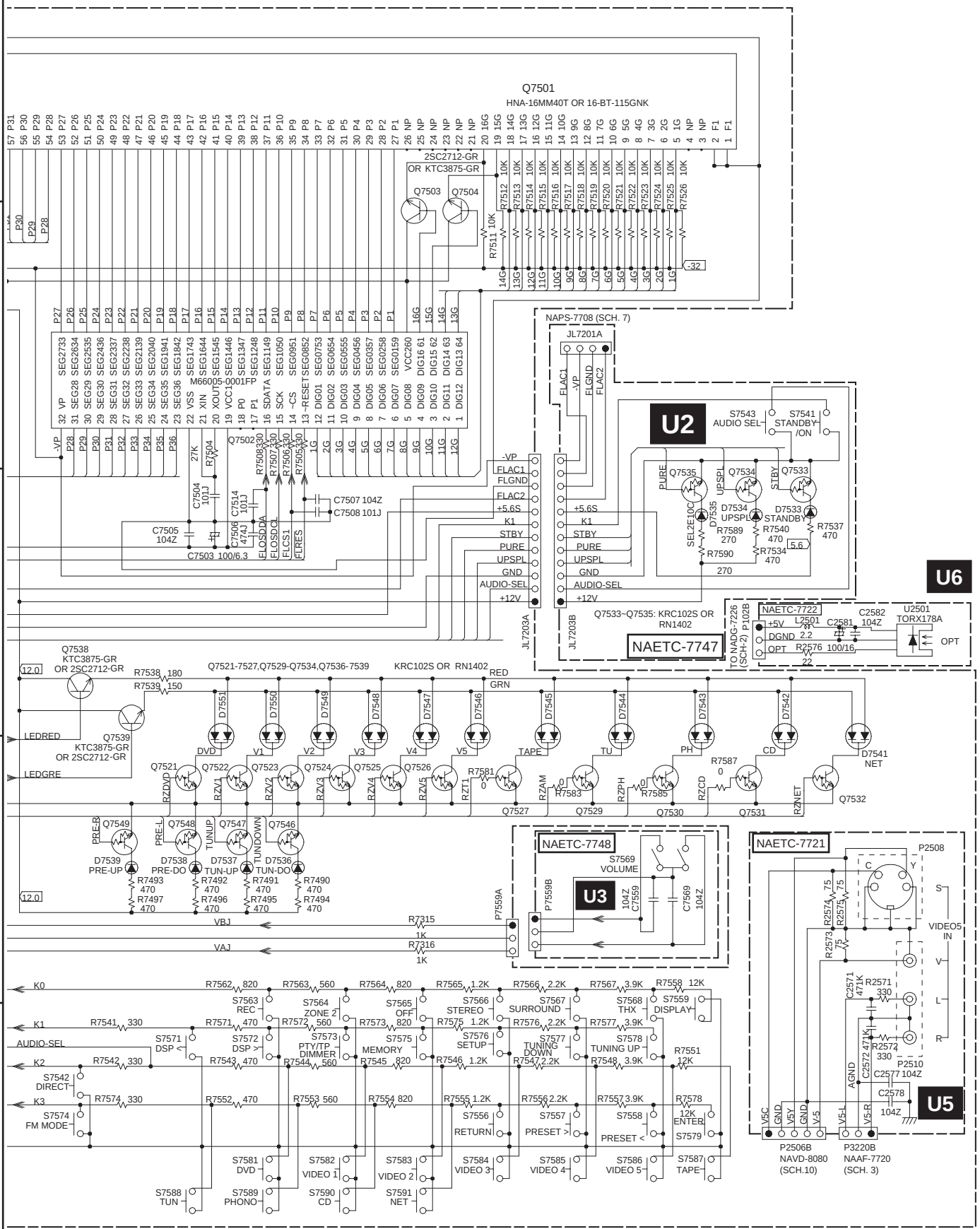


SCHEMATIC DIAGRAM 1 Display and submicroprocessor sections

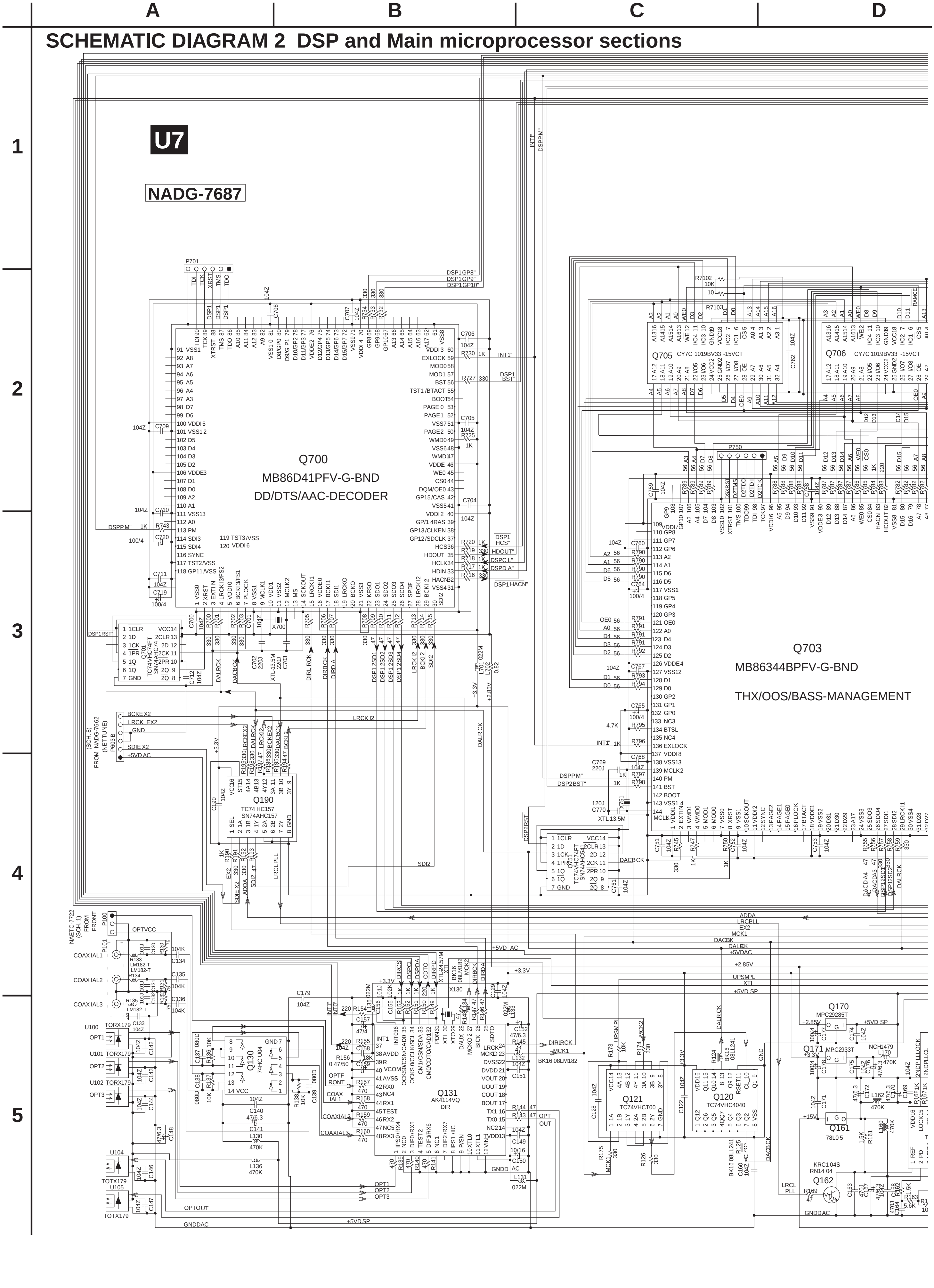


	DTR7.4	DTR-7.4
COUNTRY	MDD	MPA
R7276	-	-
R7376	10K	10K
R7277	0	0
R7377	-	-
R7289	0	10K
R7389	-	33K
R7290	-	33K
R7390	10K	56K
R7291	-	-
R7391	10K	10K
R7292	-	-
R7392	10K	10K

SCHEMATIC DIAGRAM 1 Display and submicroprocessor sections



SCHEMATIC DIAGRAM 2 DSP and Main microprocessor sections



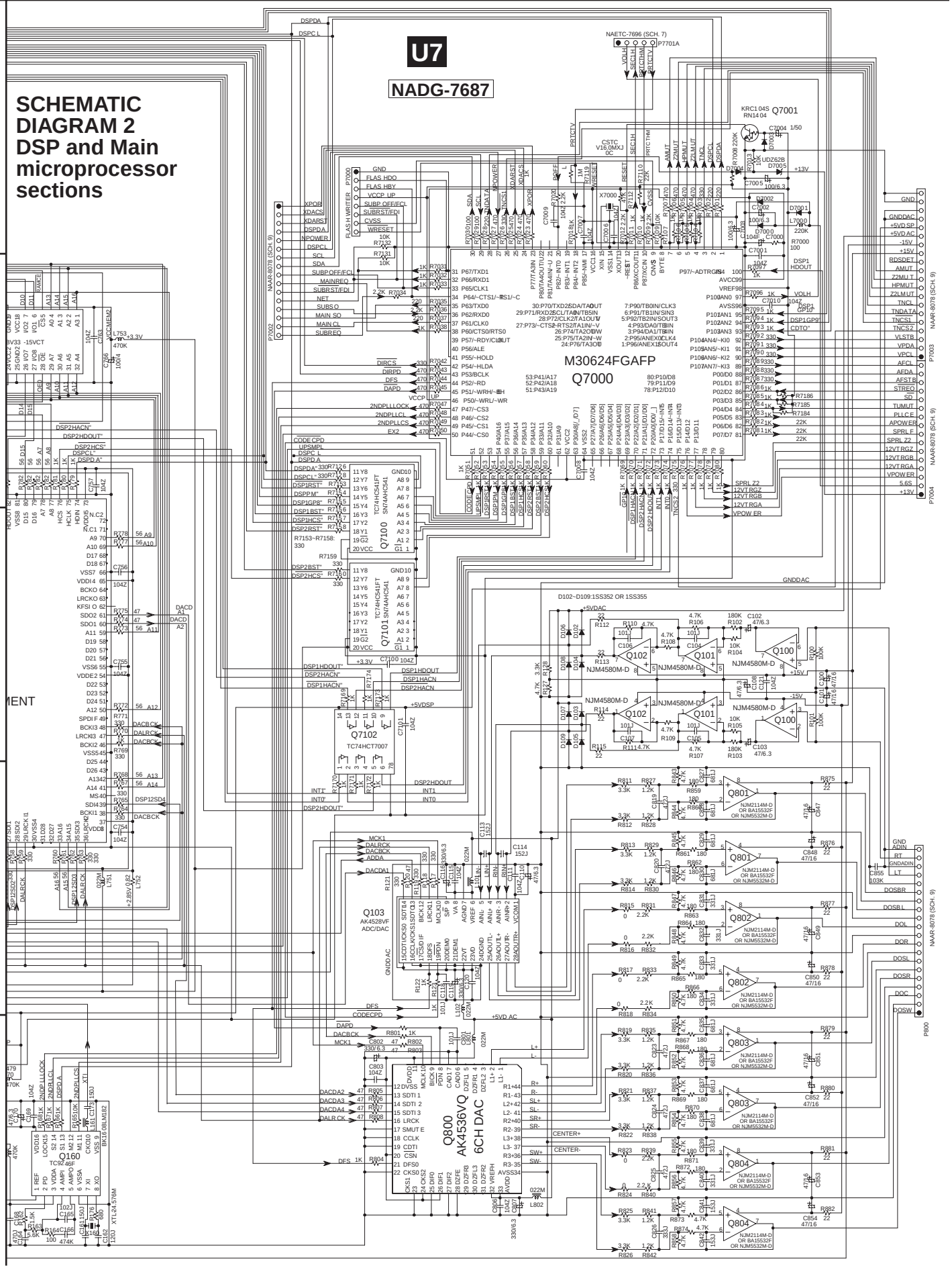
A B C D

1 2 3 4 5

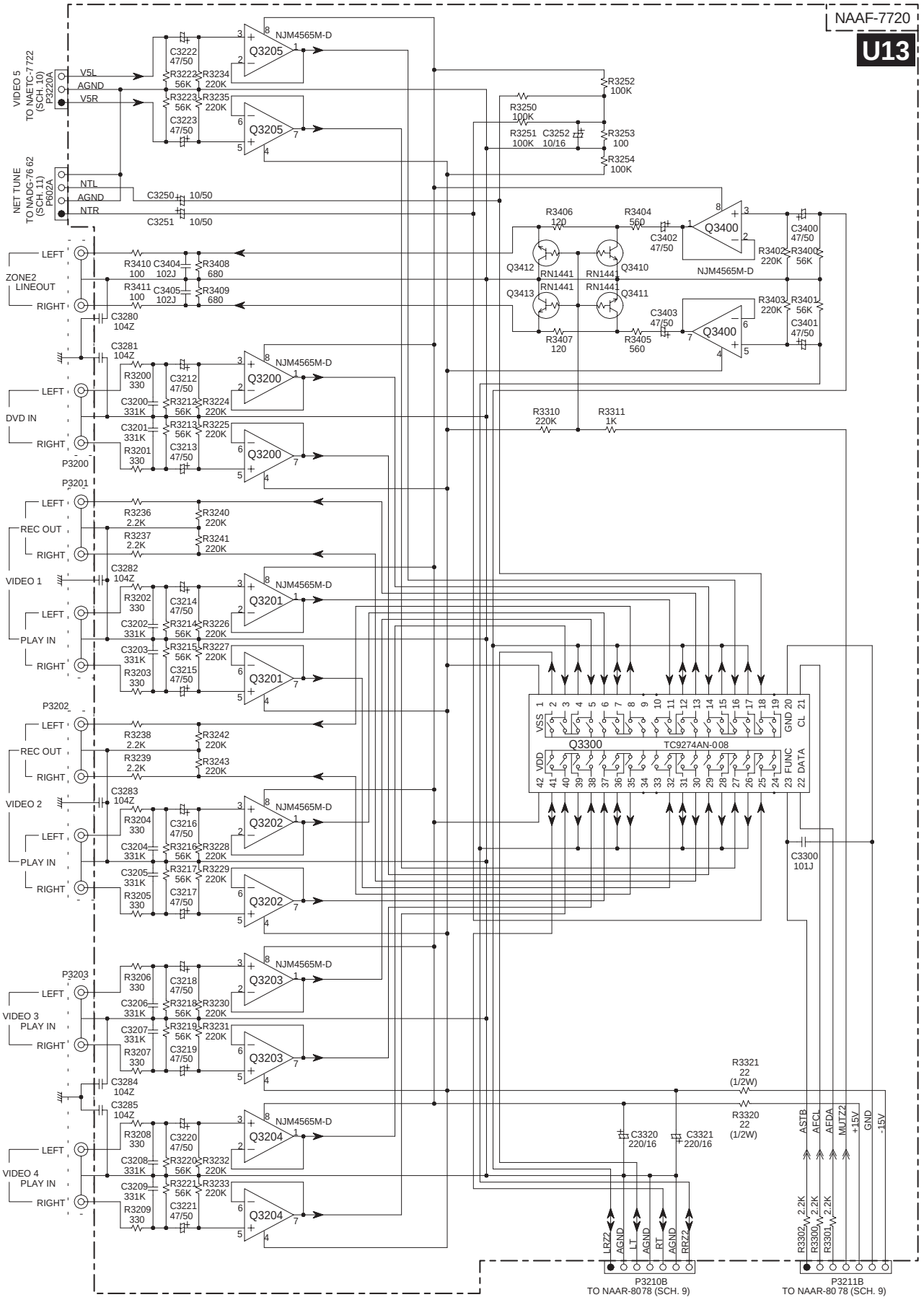
SCHEMATIC DIAGRAM 2
DSP and Main microprocessor sections

U7

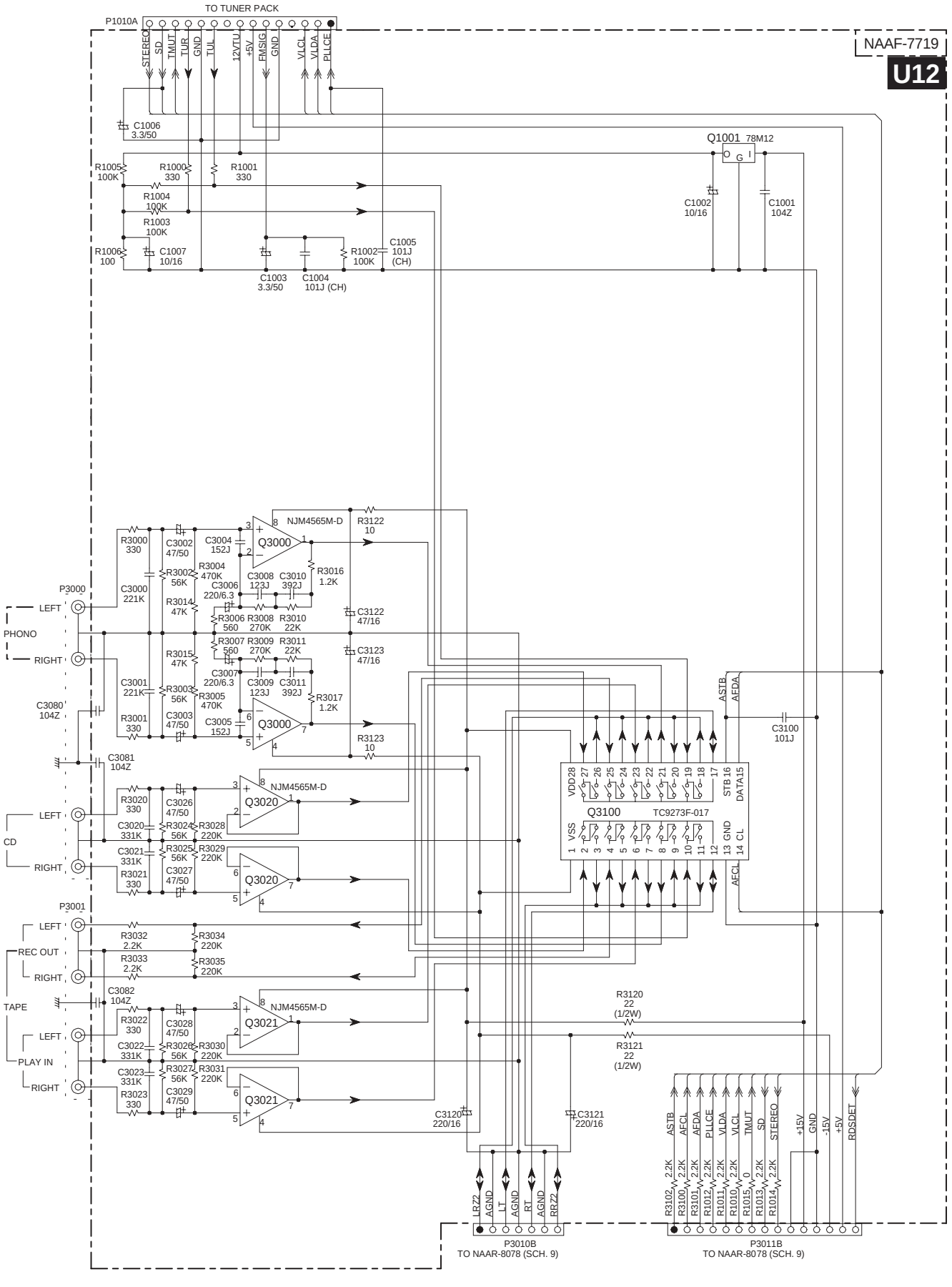
NADG-7687


M30624FGAFP
Q7000
TC74HC541FT
SN74AHC541
Q7100
Q7101
Q7102
TC74HCT7007
Q103
AK4528VF
ADC/DAC
Q800
AK4536VQ
6CH DAC
Q160
TC92A46F
NJM4580M-D
Q100
Q101
Q102
Q801
Q802
Q803
Q804
NJM2114M-D
OR BA15532F
OR NJM5532M-D
KRC104S Q7001
RN1404
NAETC-7696 (SCH. 7)
P7701A
FLASH WRITER P7000
NAAR-8078 (SCH. 9)
P7002
P7003
P7004
P900
DSP2HACN"
DSP2HDOUT"
DSP2HCS"
DSPCL"
DSPD A"
DSPDA"
DSPC L"
DSP1BST"
DSP1GPB"
DSPP.M"
DSP1HCS"
DSP2RST"
DSP2BST"
DSP2HCS"
DSP1HDOUT"
DSP1HACN"
DSP1HACN
DSP2HACN
DSP2HDOUT
INT1"
INT0"
INT1
INT0
DACD A1
DACD A2
DACBCK
DALRCK
DSP12SD4
DSP12SDO
DSP1SDO
DSP1BCK
DSP1LRCK
DSP1SDI
DSP2SDO
DSP2BCK
DSP2LRCK
DSP2SDI
MCK1
ADDA
DACDA1
DACDA2
DACDA3
DACDA4
DALR CK
DFS
CODECPD
DAPD
+5VDAC
+5VDSP
+5VD AC
+13V
+15V
-15V
+3.3V
+2.85V
GNDDAC
GNDD AC
CENTER+
CENTER-
SPRL Z2
12VT RGZ
12VT RGB
12VT RGA
VPOW ER
VOLH
DSP1 HDOUT
DSP1GP9"
CDTO"
DSP1GP10"
SCL
SDA
SUBP OFF/FCL
SUBRST/FDI
MAINREQ
NET
SUBS O
MAIN SO
MAIN CL
SUBREQ
WRESET
CVSS
NPOWER
XPOB
XDACS
XDARST
DSPDA
DSPCL
XTI
XTO
CSTC V16.0MXJ 0C
X7000
X7100
L753 470K
L754 470K
L755 470K
L756 470K
L757 470K
L758 470K
L759 470K
L760 470K
L761 470K
L762 470K
L763 470K
L764 100
L765 470K
L766 470K
L767 470K
L768 470K
L769 470K
L770 470K
L771 470K
L772 470K
L773 470K
L774 470K
L775 470K
L776 470K
L777 470K
L778 470K
L779 470K
L780 470K
L781 470K
L782 470K
L783 470K
L784 470K

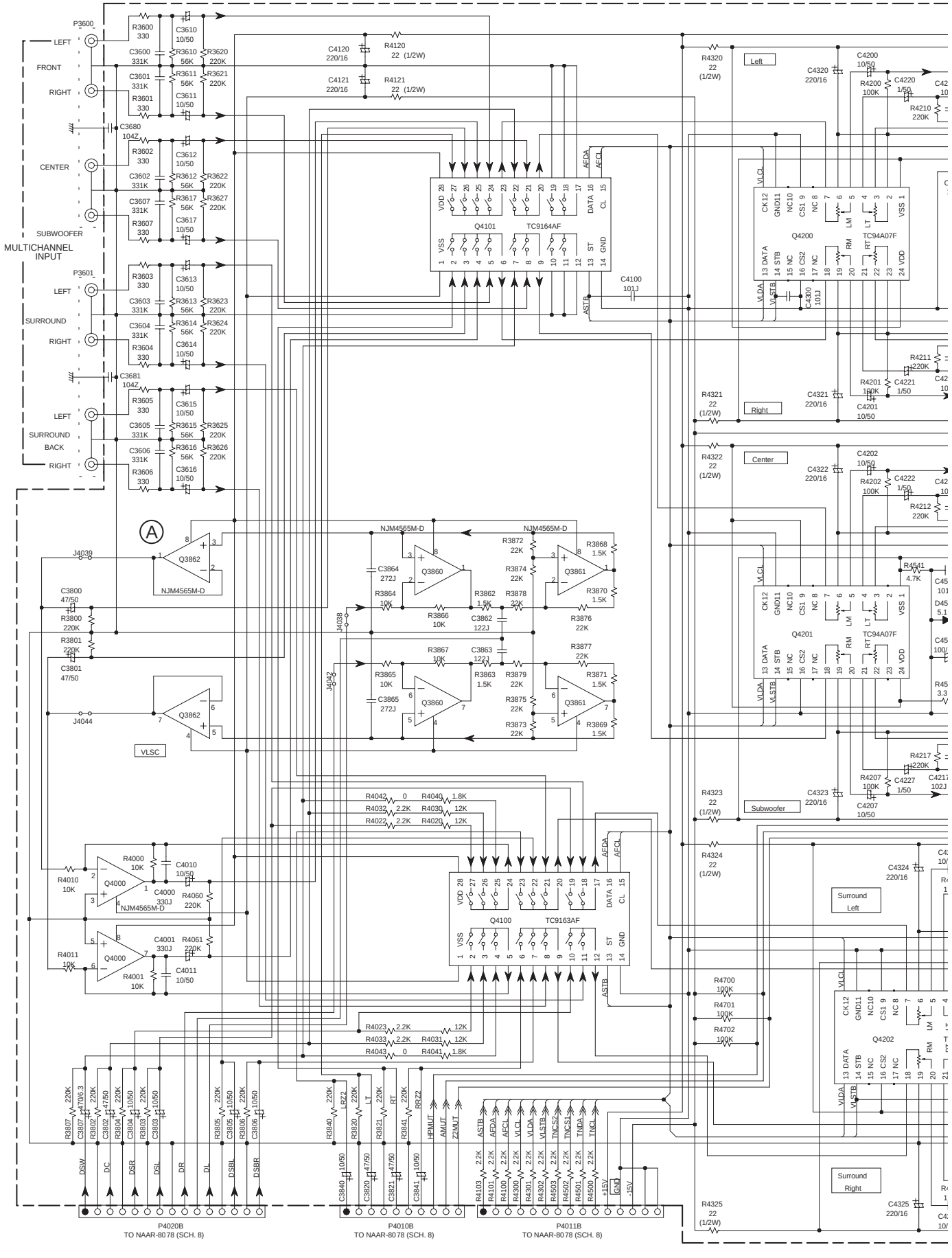
SCHEMATIC DIAGRAM 3 Audio I/O terminals



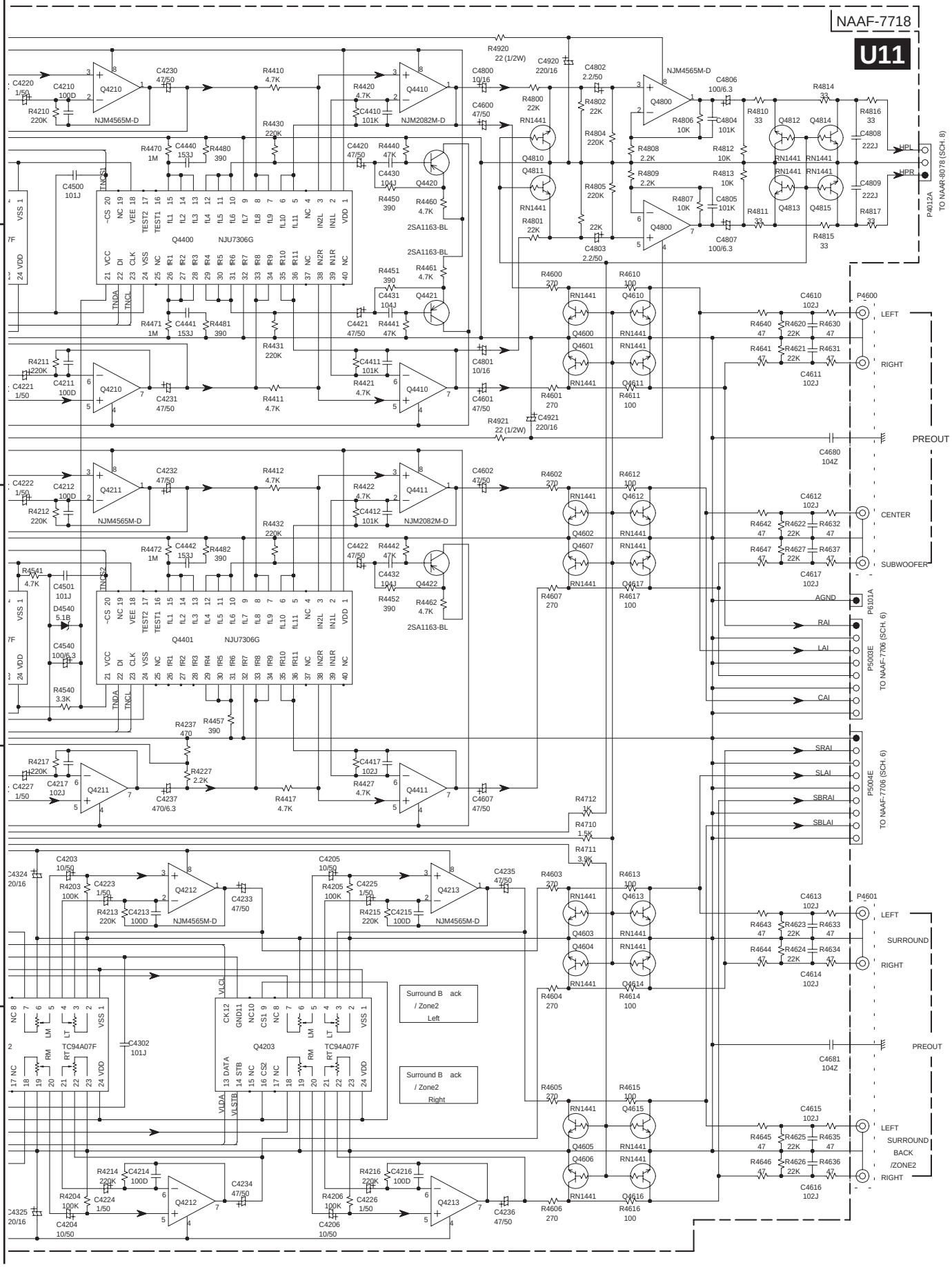
SCHEMATIC DIAGRAM 3 Audio I/O terminals



SCHEMATIC DIAGRAM 4 Preamplifier section



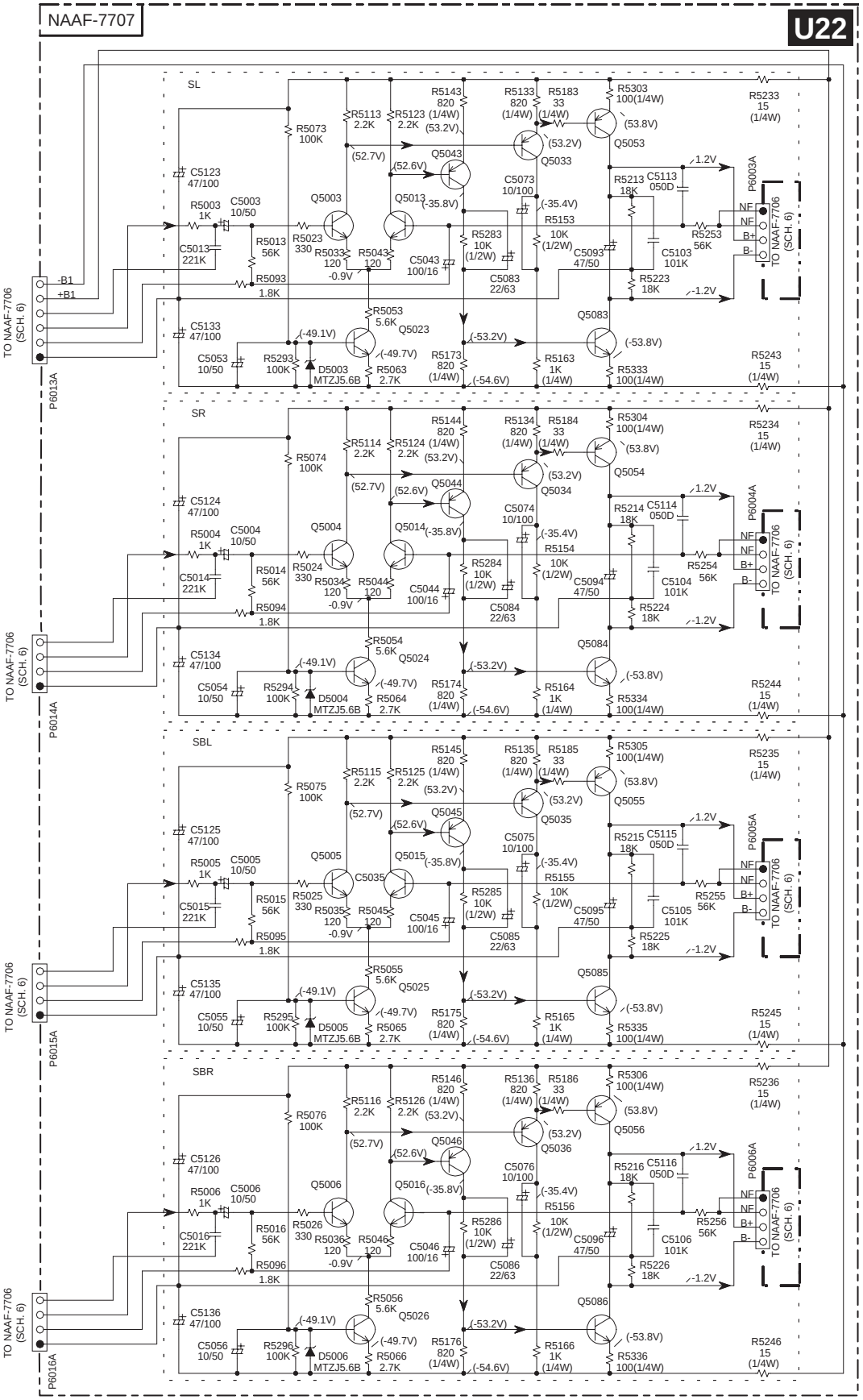
SCHEMATIC DIAGRAM 4 Preamplifier section



A B C D

1 2 3 4 5

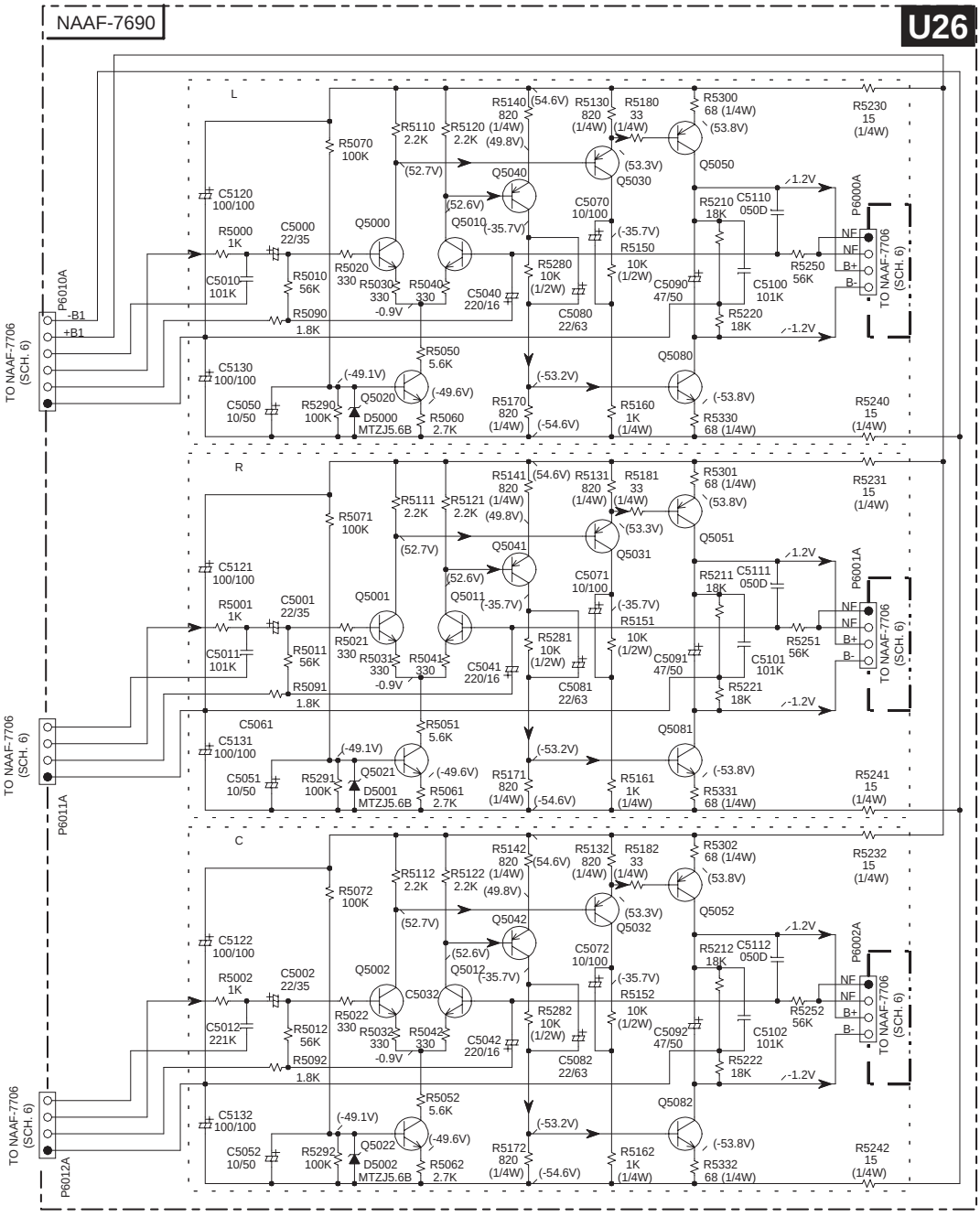
SCHEMATIC DIAGRAM 5 Driver section



A B C D

1 2 3 4 5

SCHEMATIC DIAGRAM 5 Driver section

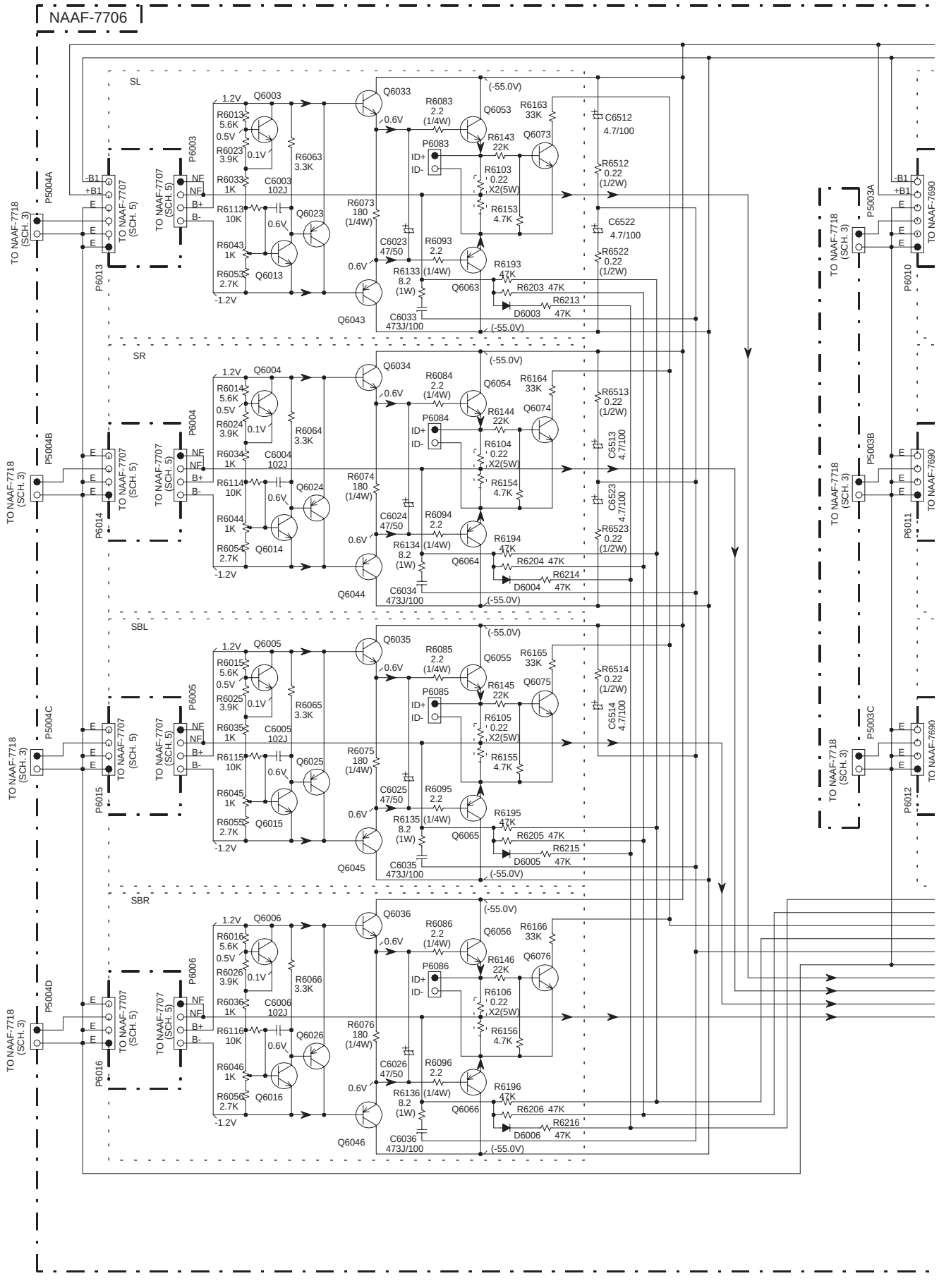


NOTE

- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY.
- REPLACE ON LY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS ( ) ARE IN uF/WV.
- 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.

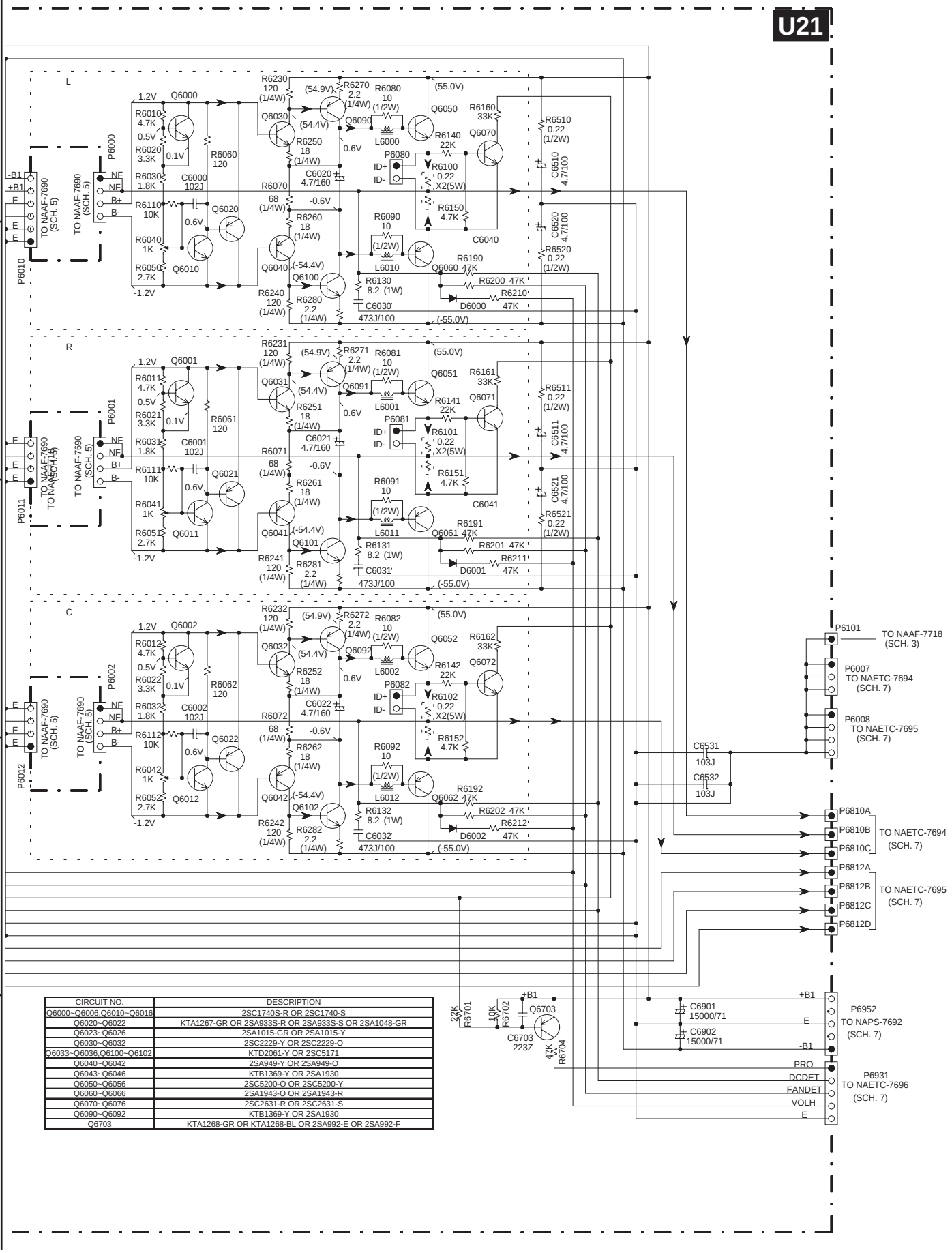
CIRCUIT NO.	DESCRIPTION
Q5000~Q5006,Q5010~Q5016	KTC3200-BL OR 2SC1775A-E OR 2SC1775A-F OR 2SC1845-E
Q5020~Q5026	KTC3200-BL OR 2SC1775A-E OR 2SC1775A-F OR 2SC1845-E
Q5030~Q5036,Q5040~Q5046	KTA1024-Y OR KTA1024-O OR 2SA949-Y OR 2SA949-O
Q5050~Q5052	2SA1360-Y OR 2SA1360-O
Q5053~Q5056	KTA1024-Y OR KTA1024-O OR 2SA949-Y OR 2SA949-O
Q5080~Q5082	2SC3423-Y OR 2SC3423-O
Q5083~Q5086	KTC3206-Y OR KTC3206-O OR 2SC2229-Y OR 2SC2229-O

SCHEMATIC DIAGRAM 6 Power amplifier section



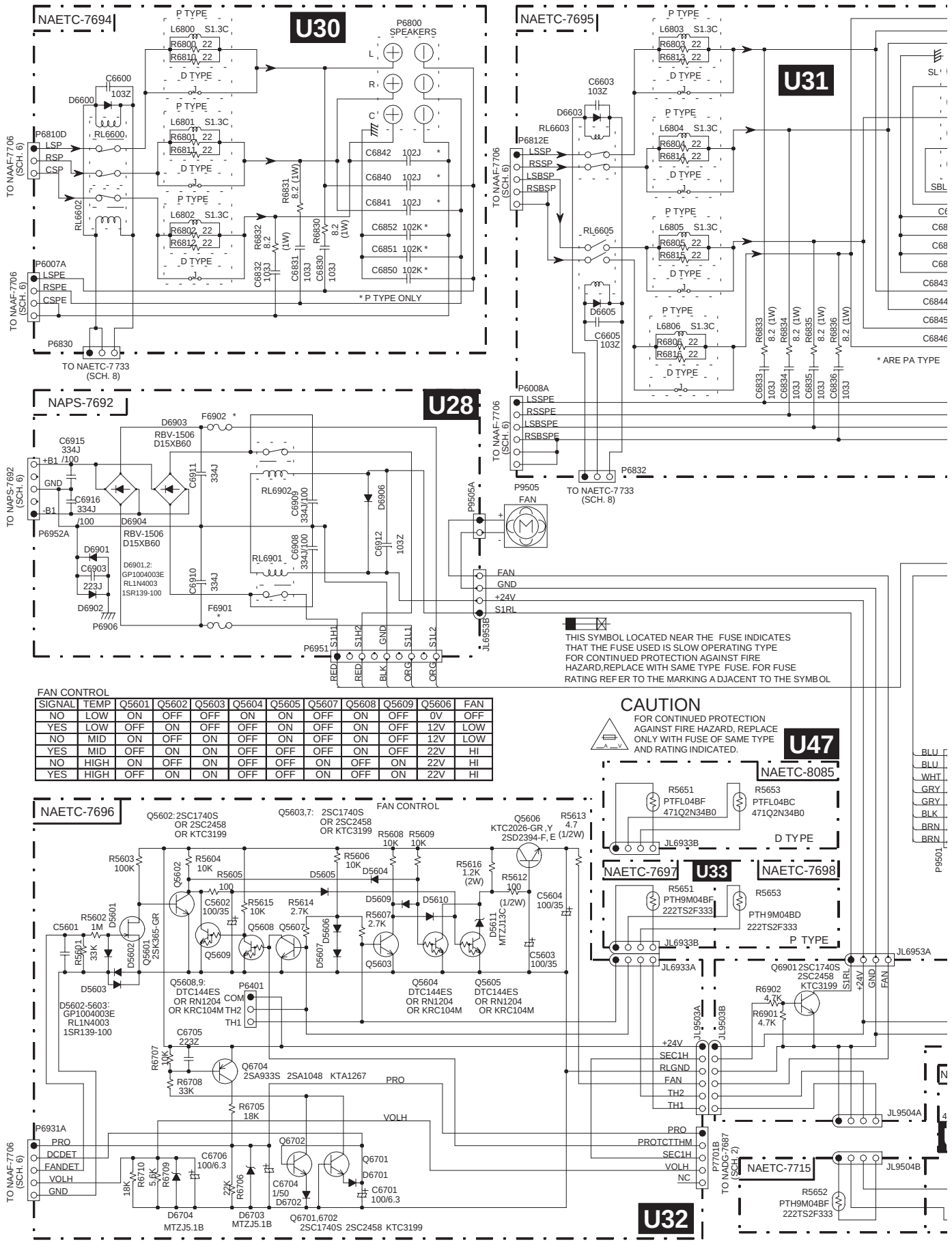
A B C D

SCHEMATIC DIAGRAM 6 Power amplifier section

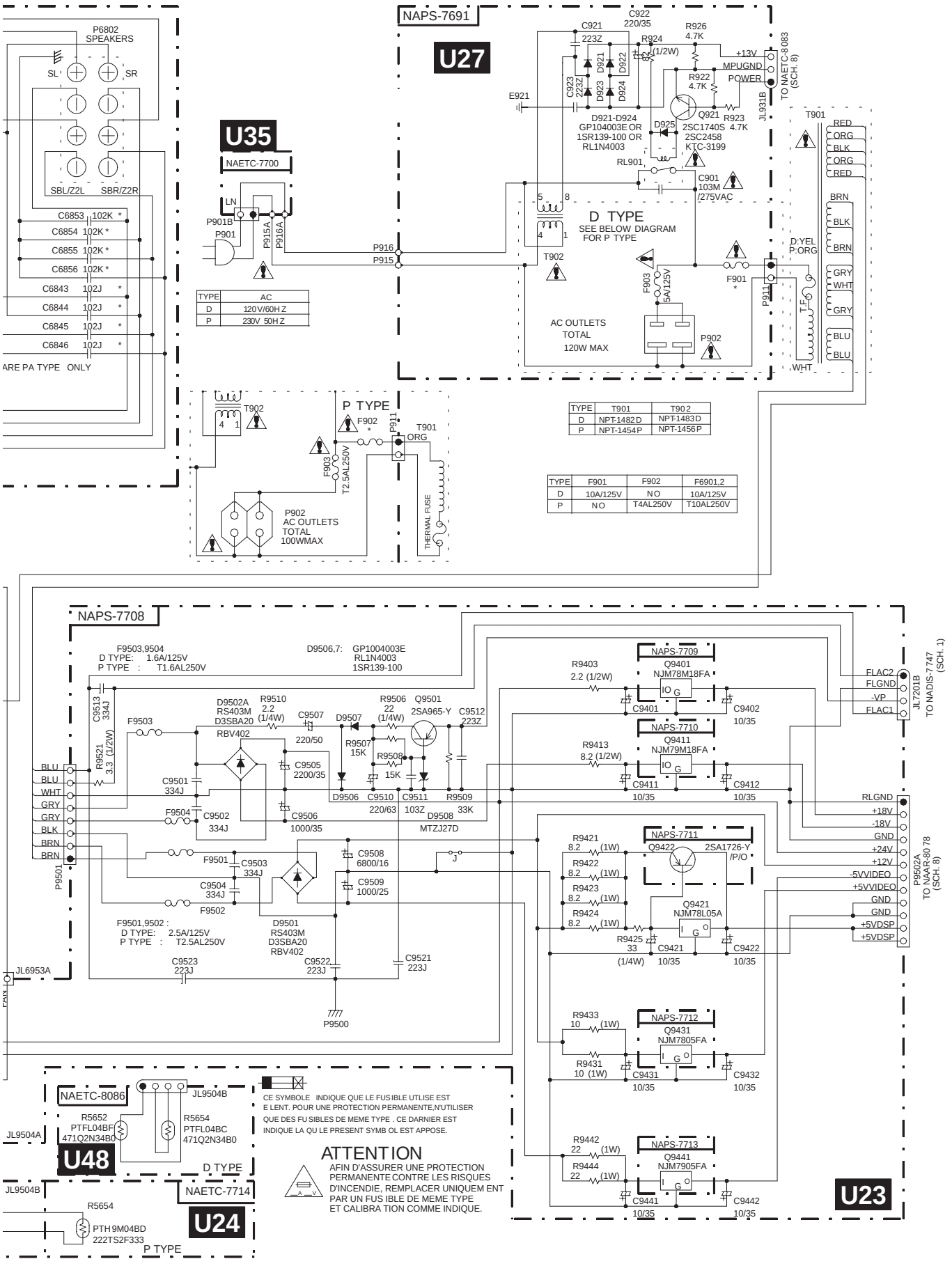


CIRCUIT NO.	DESCRIPTION
Q6000~Q6006,Q6010~Q6016	2SC1740S-R OR 2SC1740-S
Q6020~Q6022	KTA1267-GR OR 2SA933S-R OR 2SA933S-S OR 2SA1048-GR
Q6023~Q6026	2SA1015-GR OR 2SA1015-Y
Q6030~Q6032	2SC2229-Y OR 2SC2229-O
Q6033~Q6036,Q6100~Q6102	KTD2061-Y OR 2SC5171
Q6040~Q6042	2SA949-Y OR 2SA949-O
Q6043~Q6046	KTB1369-Y OR 2SA1930
Q6050~Q6056	2SC5200-O OR 2SC5200-Y
Q6060~Q6066	2SA1943-O OR 2SA1943-R
Q6070~Q6076	2SC2631-R OR 2SC2631-S
Q6090~Q6092	KTB1369-Y OR 2SA1930
Q6703	KTA1268-GR OR KTA1268-BL OR 2SA992-E OR 2SA992-F

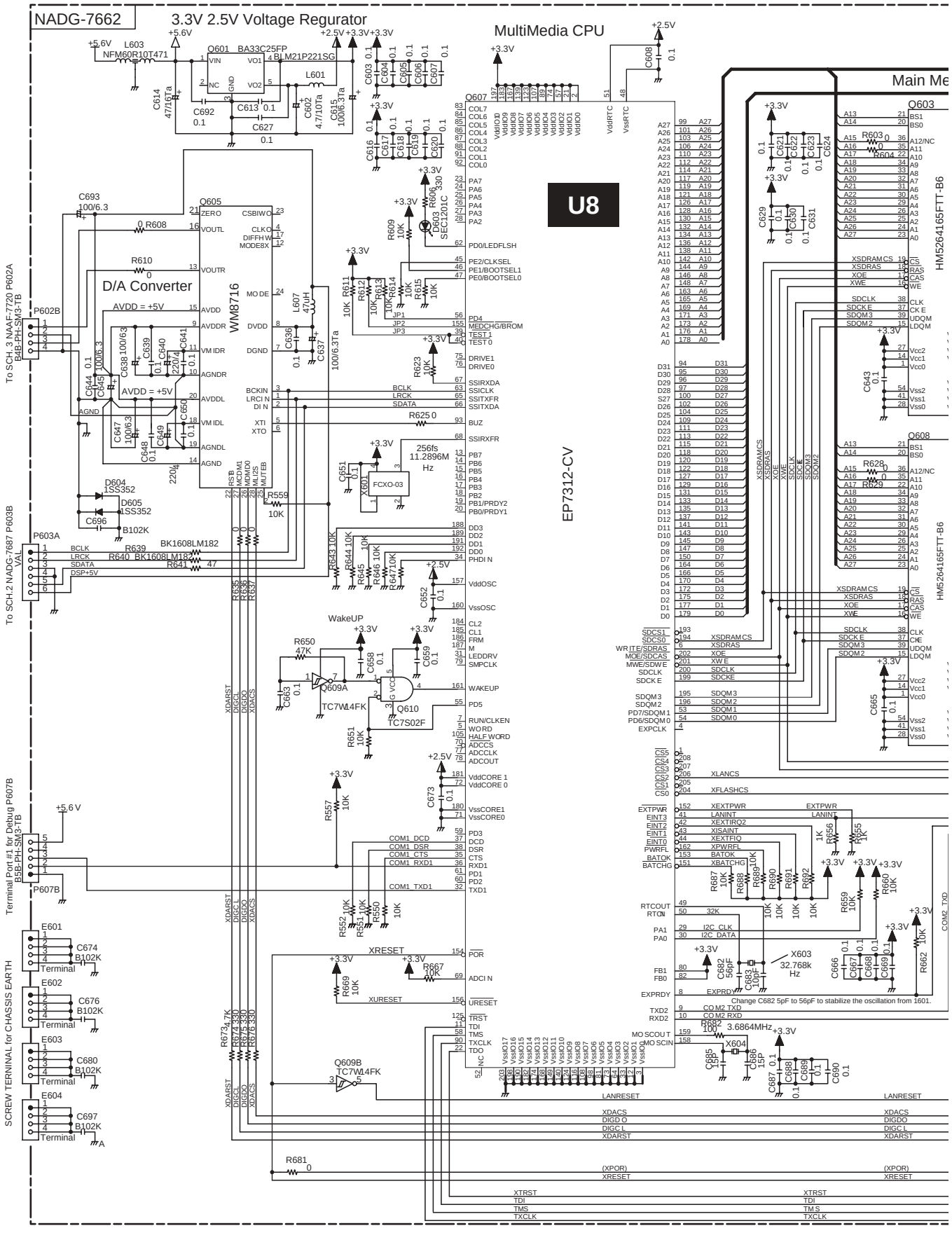
SCHEMATIC DIAGRAM 7 Power supply and speaker terminal sections



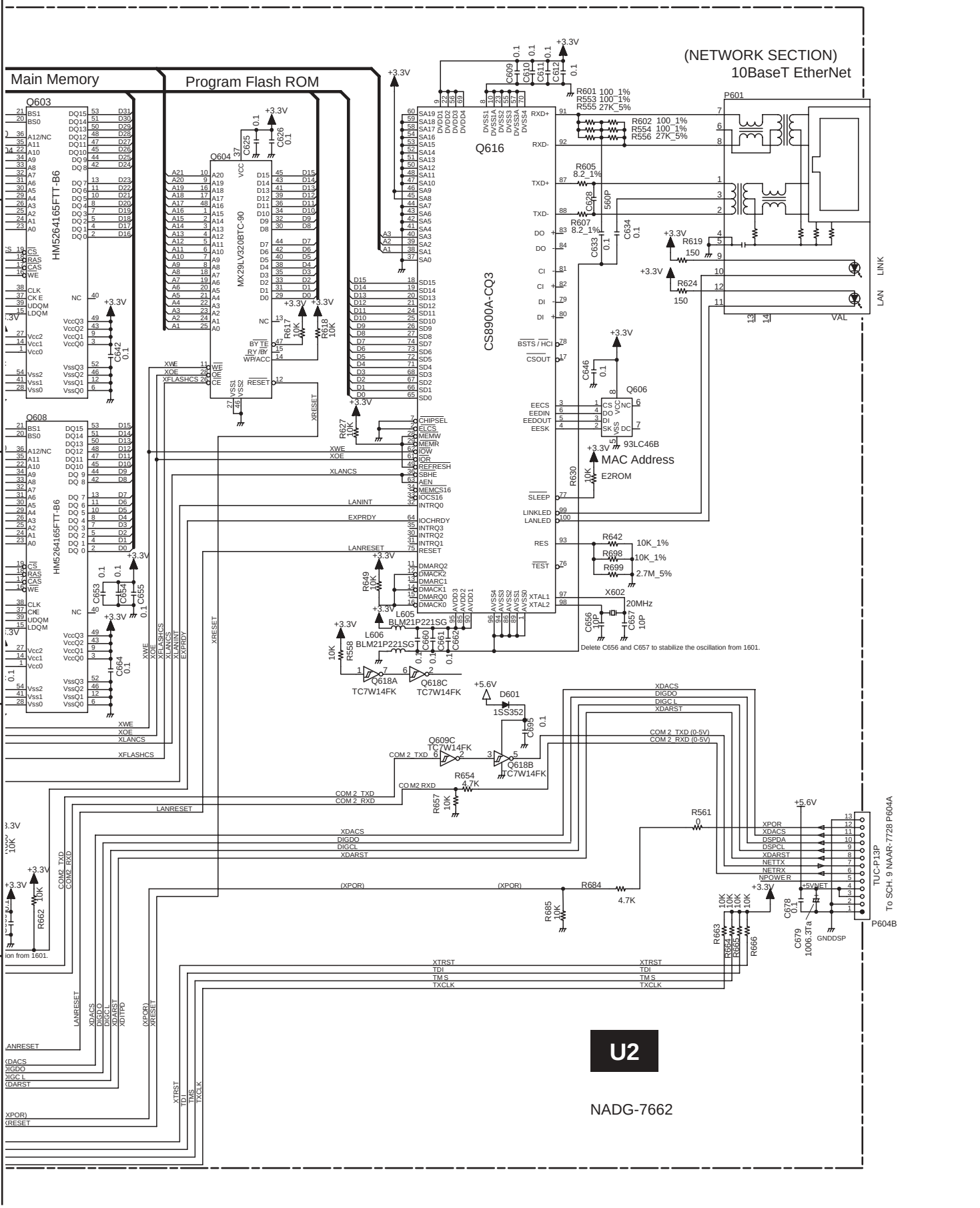
SCHEMATIC DIAGRAM 7 Power supply and speaker terminal sections



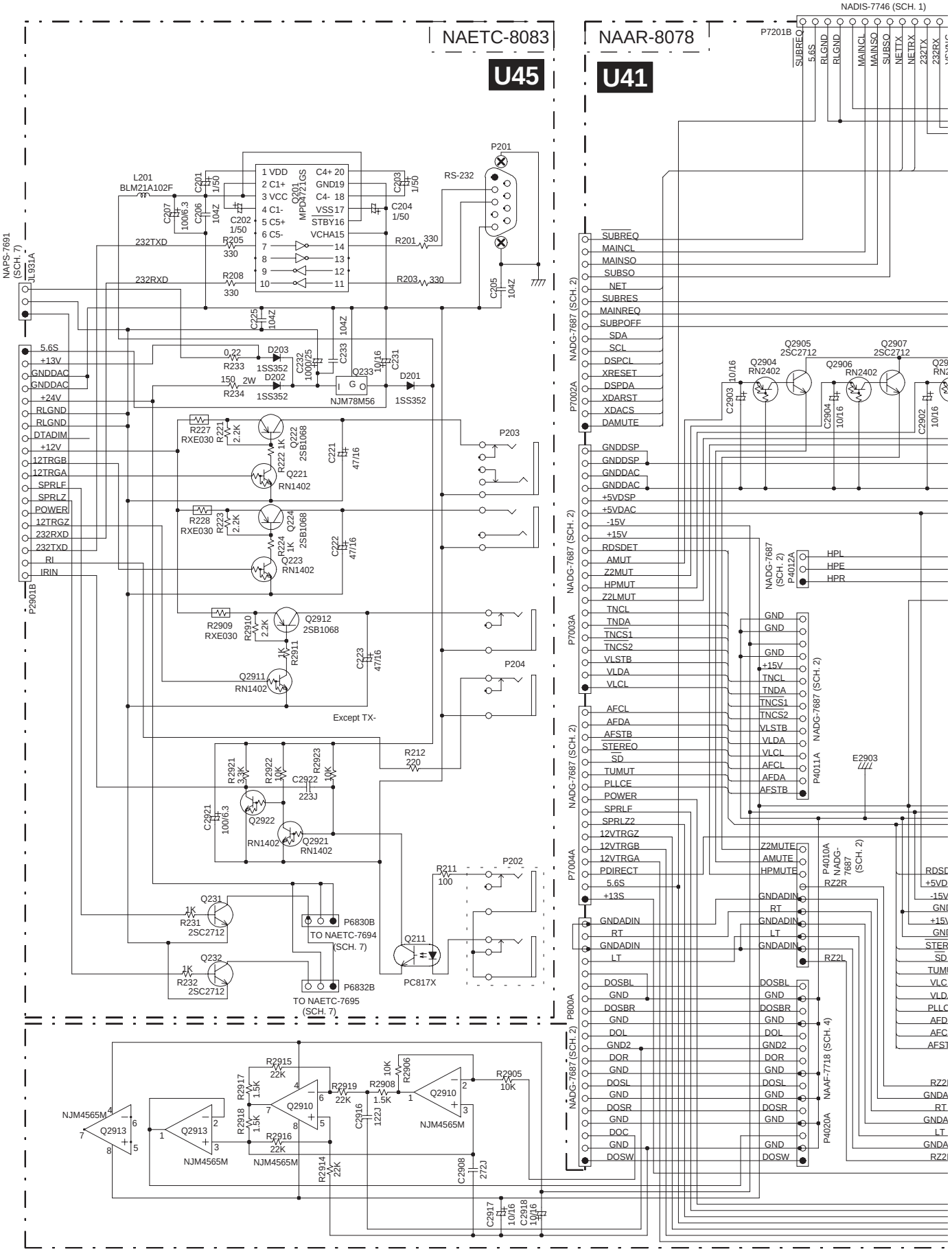
SCHEMATIC DIAGRAM 8 Net-tune circuit section



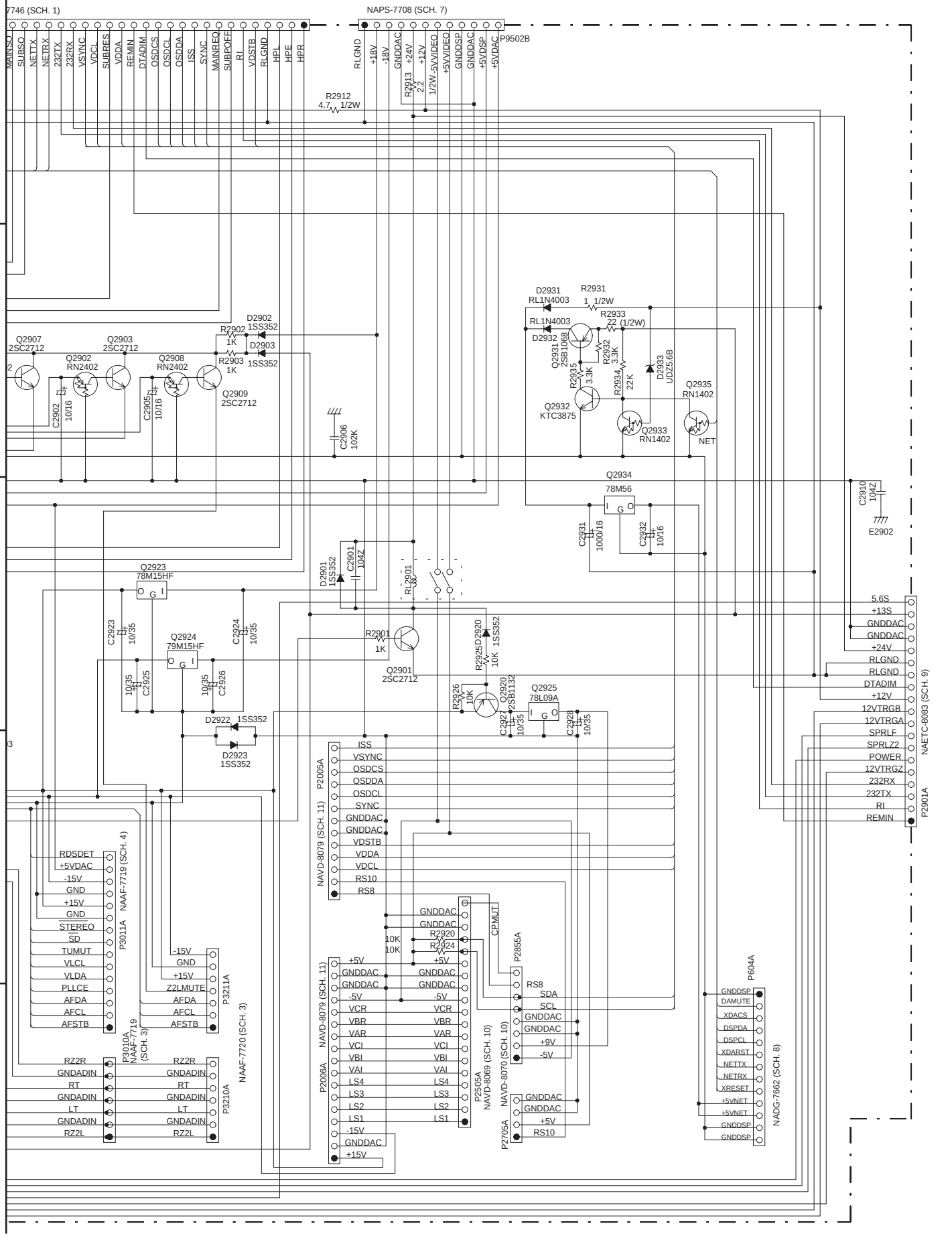
SCHEMATIC DIAGRAM 8 Net-tune circuit section



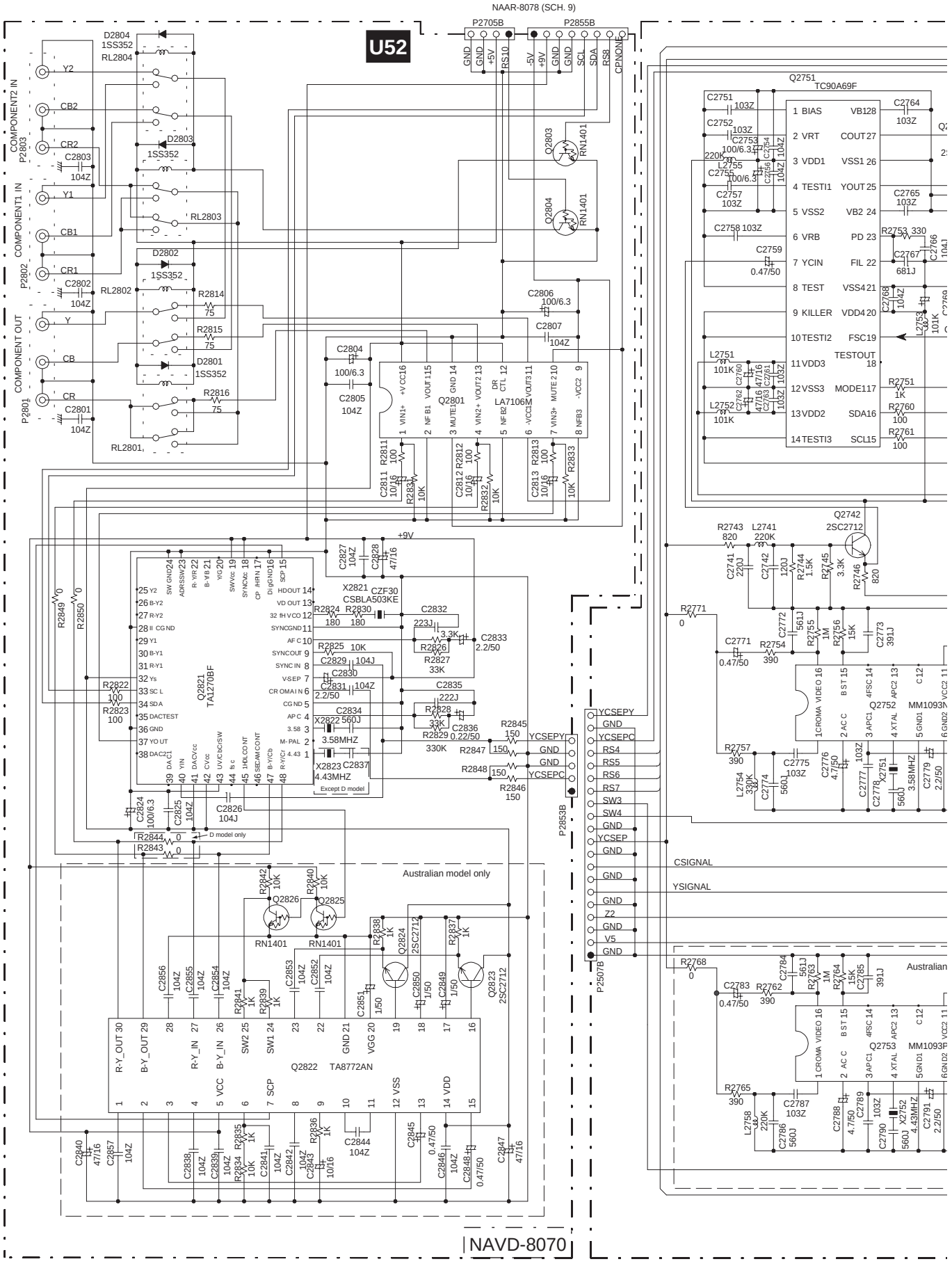
SCHEMATIC DIAGRAM 9 Main and control terminal sections



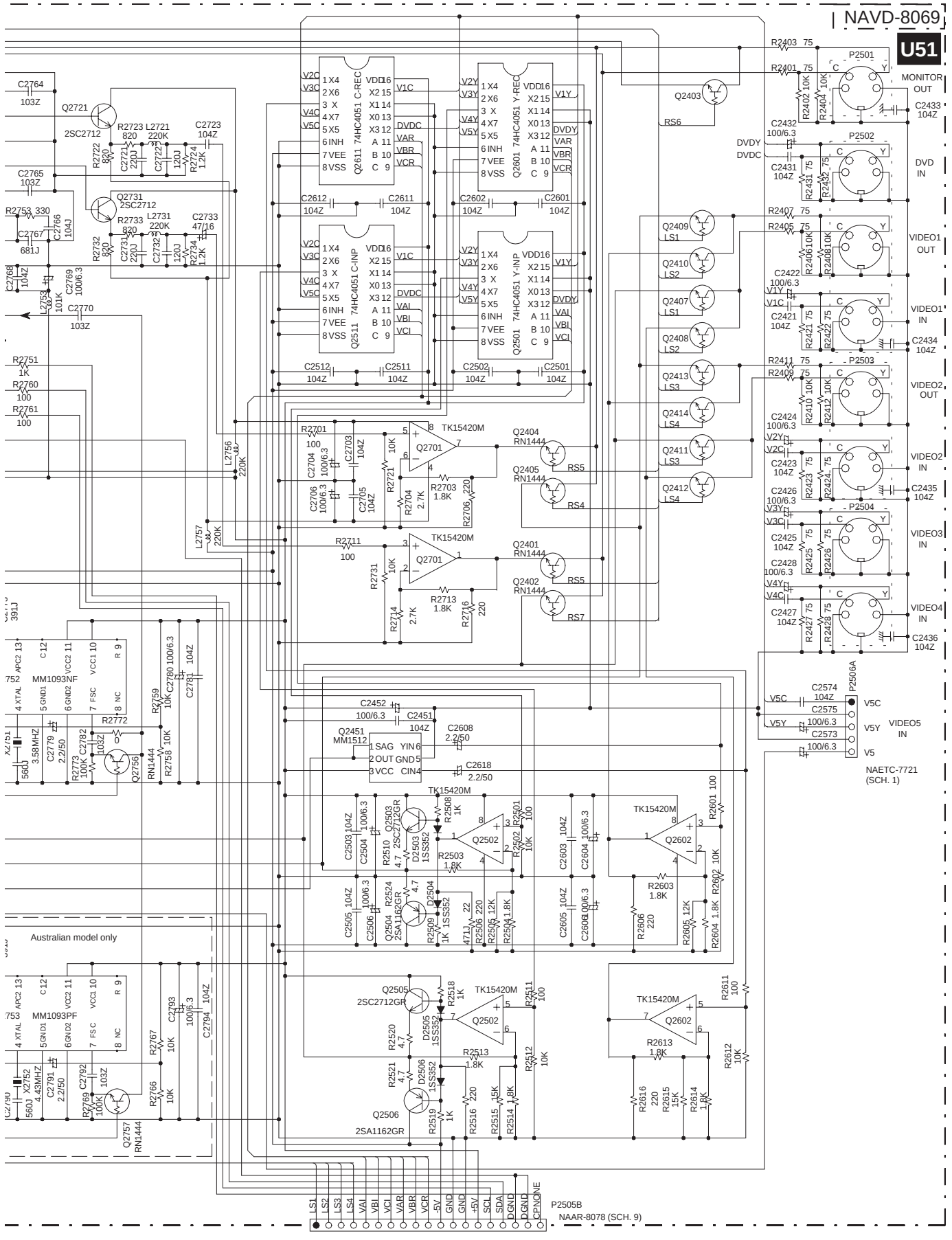
SCHEMATIC DIAGRAM 9 Main and control terminal sections



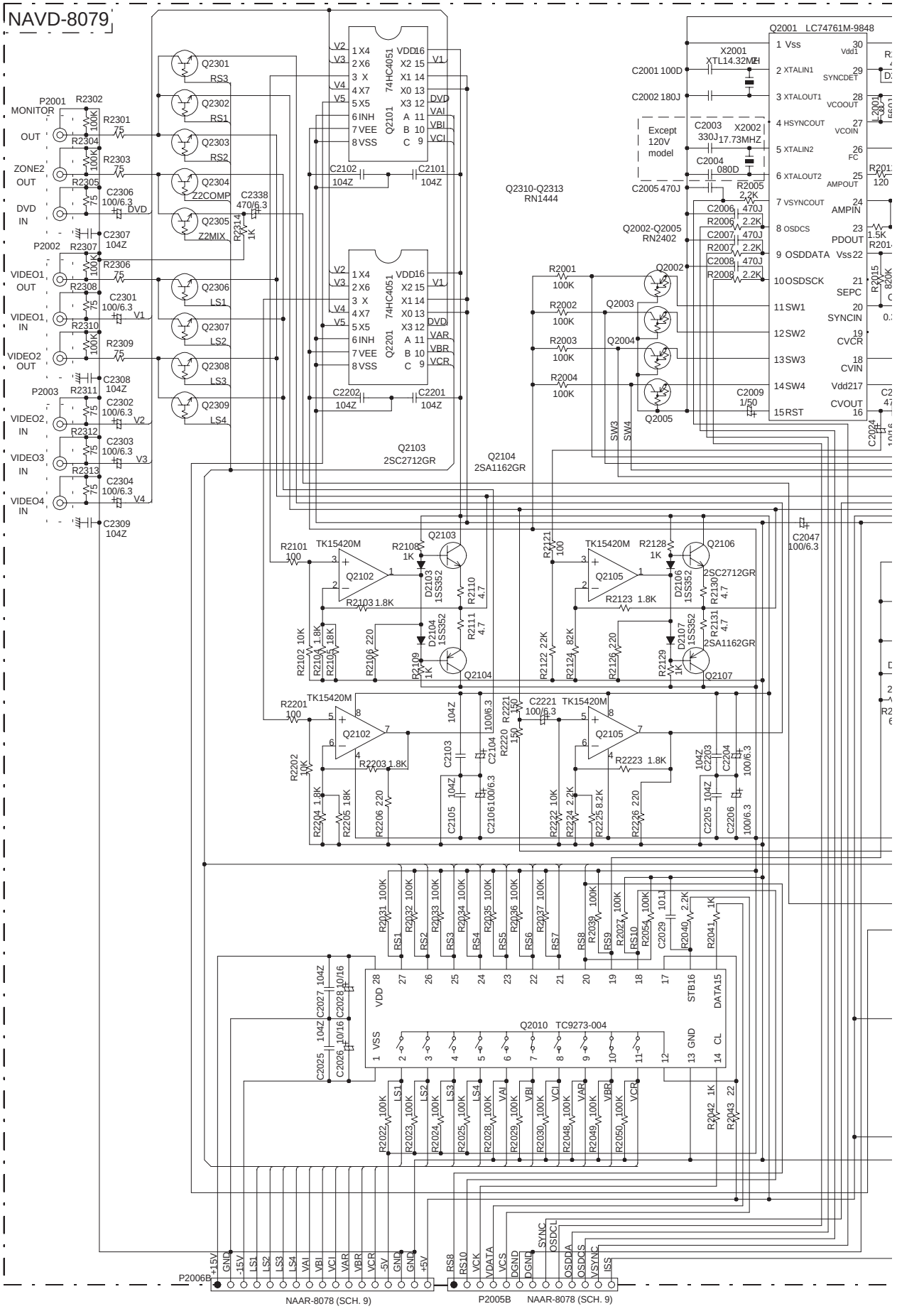
SCHEMATIC DIAGRAM 10 Component and S video sections



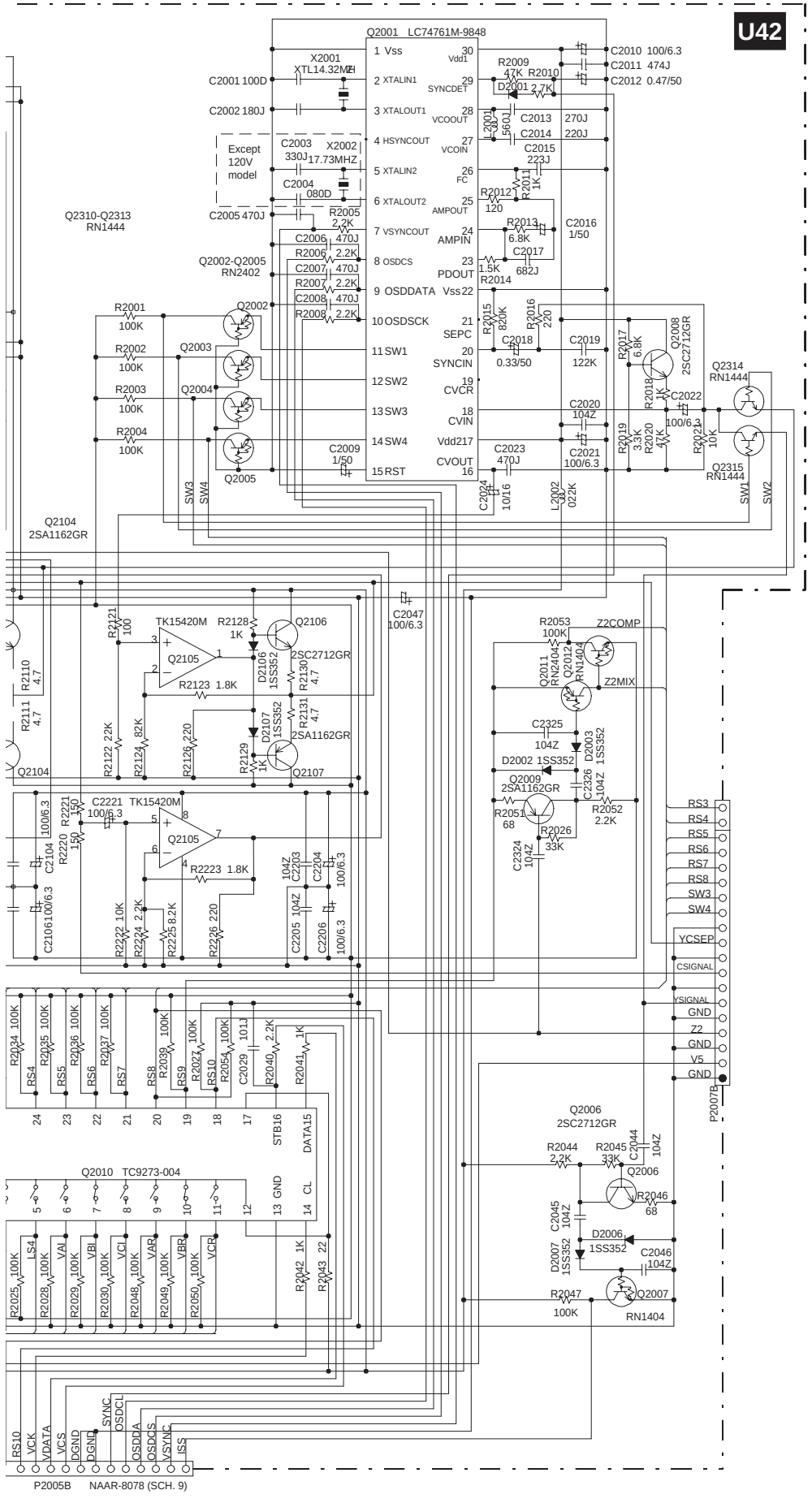
SCHEMATIC DIAGRAM 10 Component and S video sections



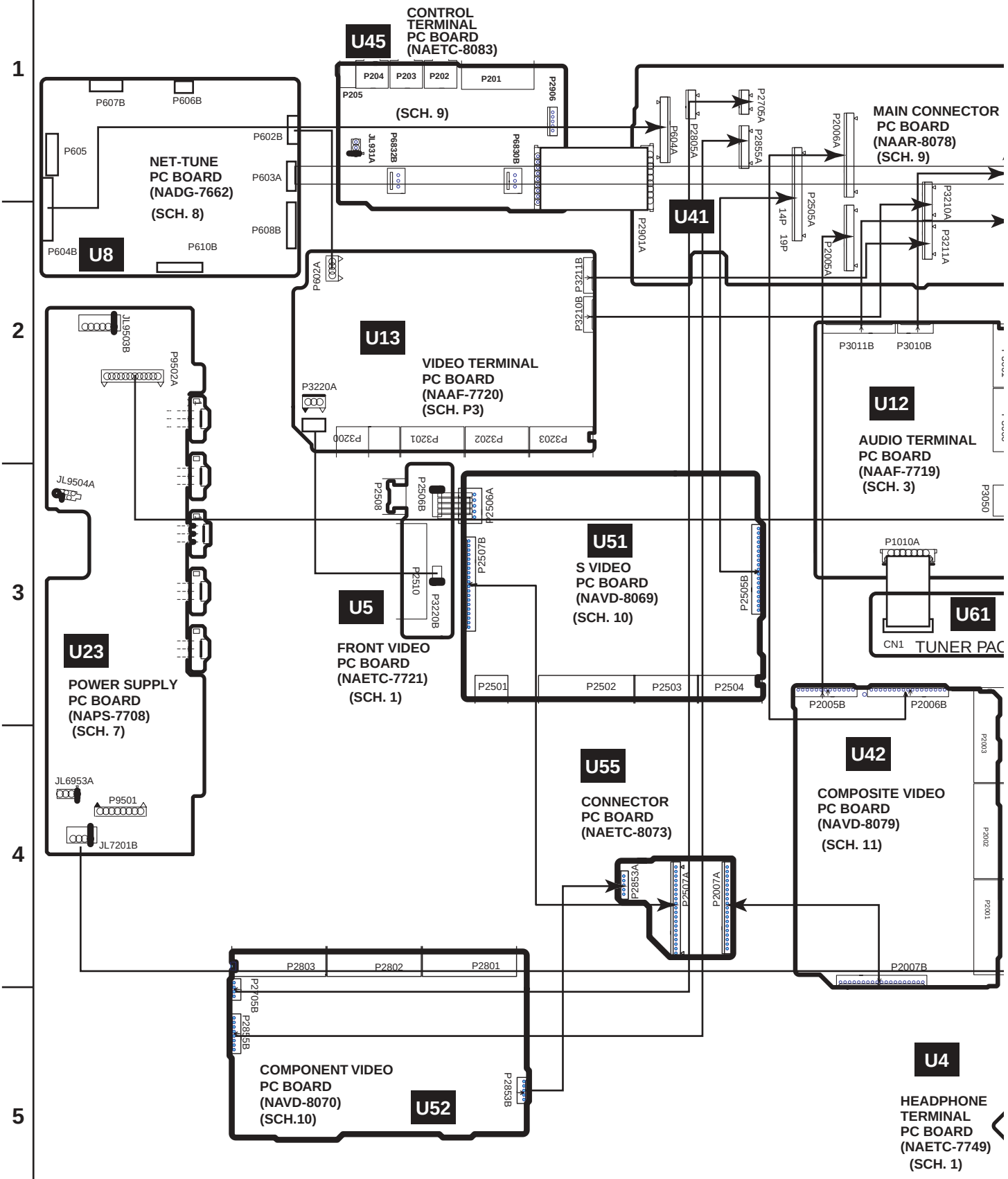
SCHEMATIC DIAGRAM 11 Composite video section



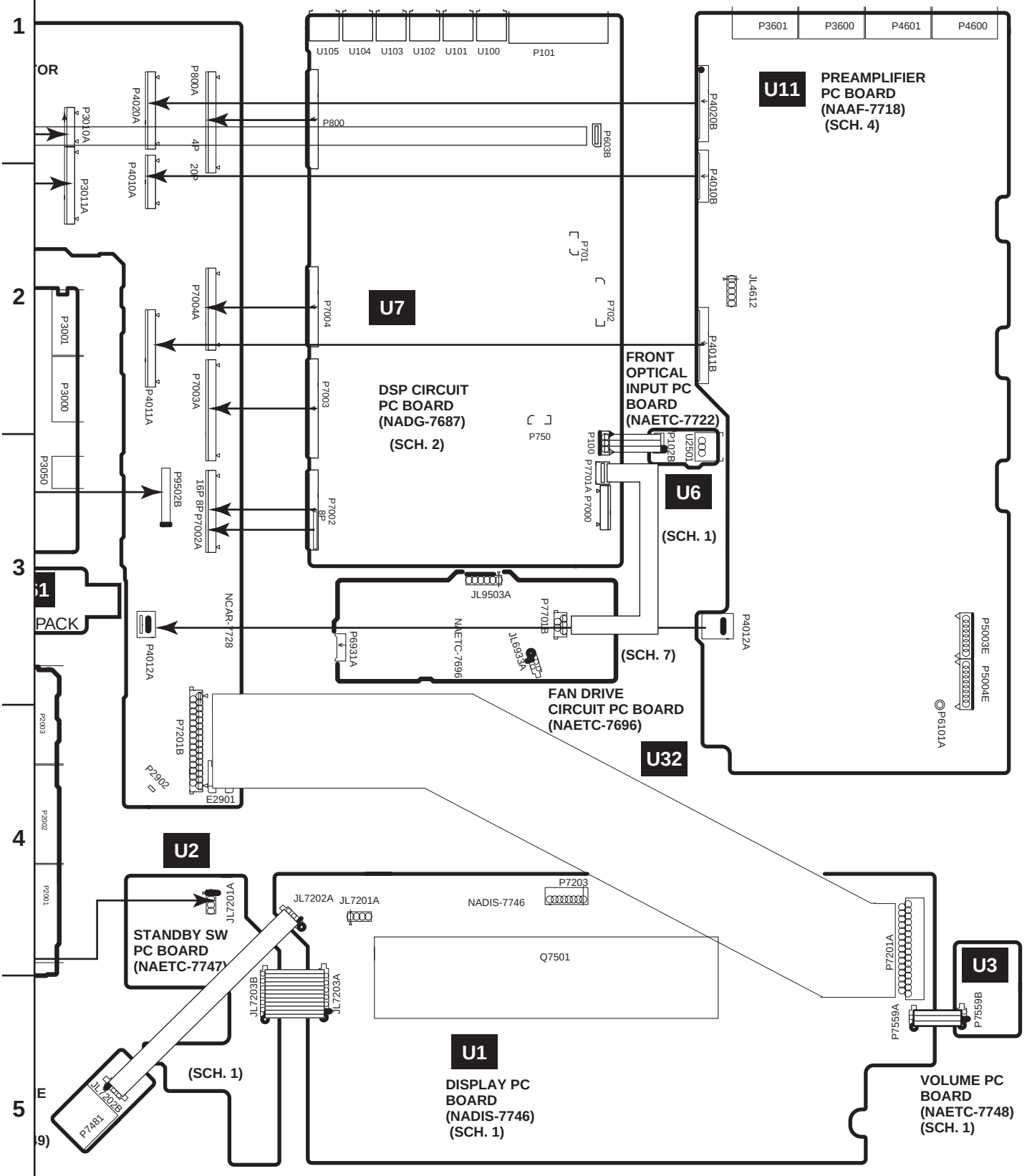
SCHEMATIC DIAGRAM 11 Composite video section



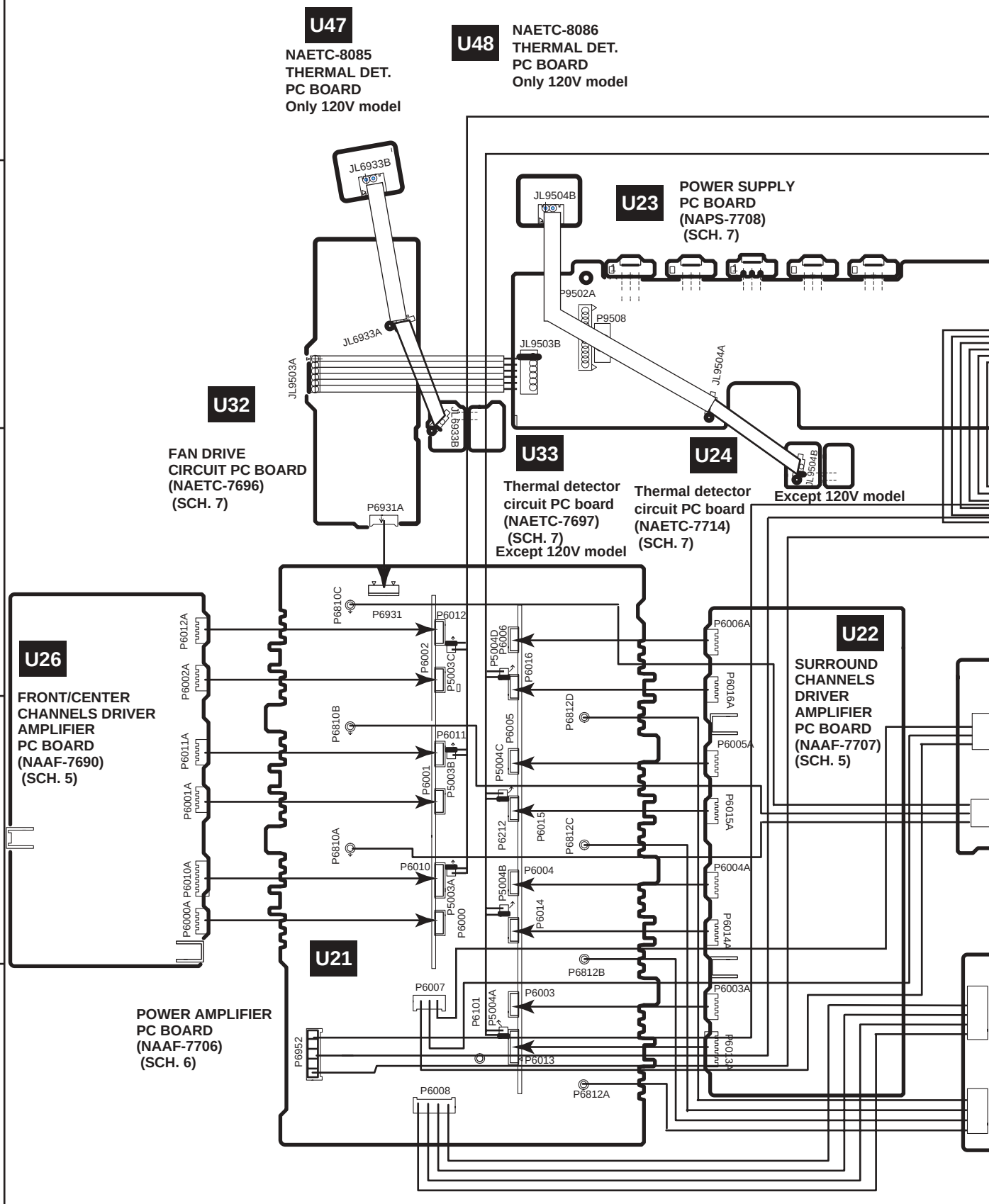
WIRING VIEW 1



WIRING VIEW 1



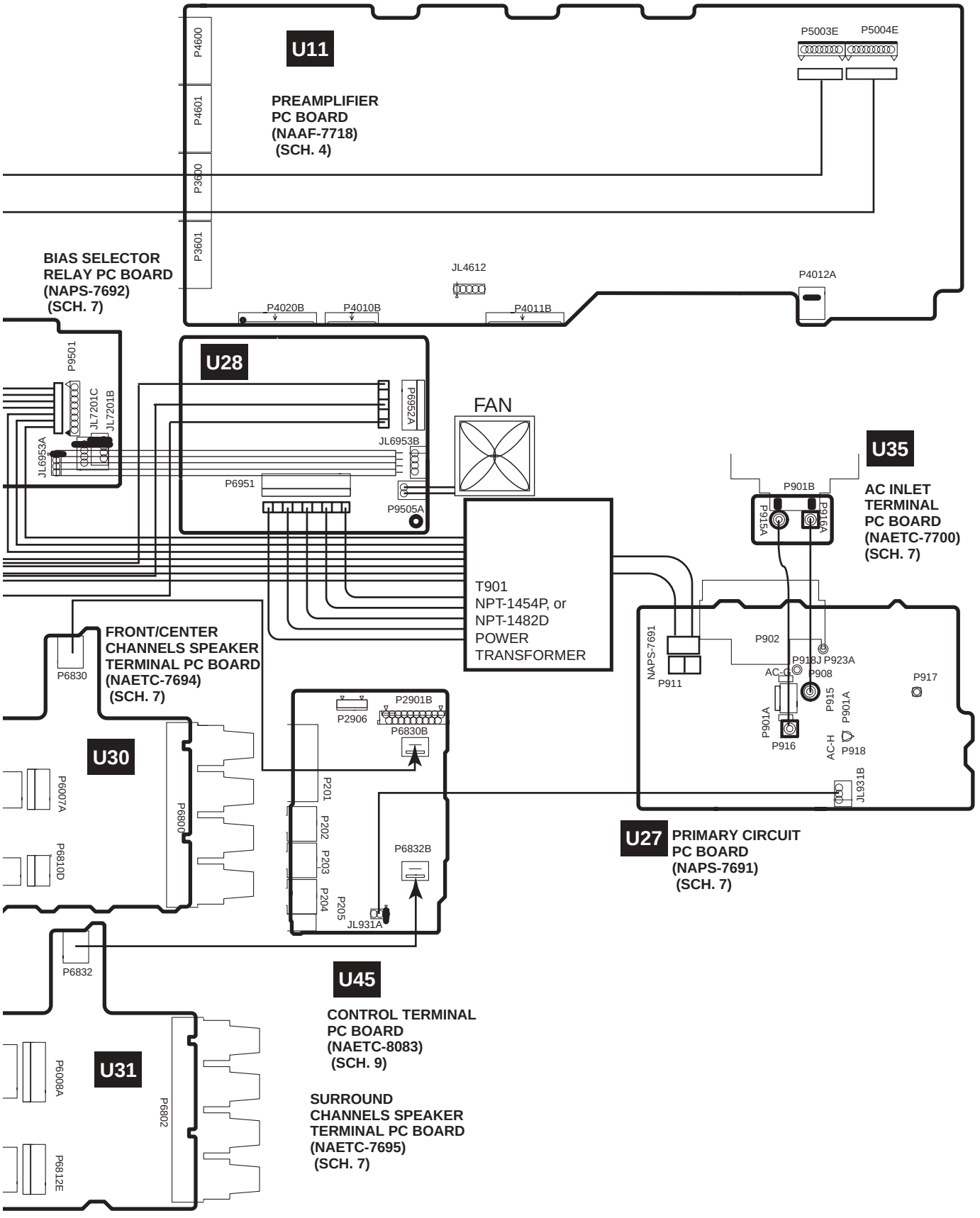
WIRING VIEW 1



A B C D

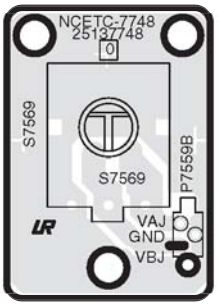
1 2 3 4 5

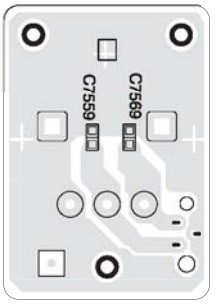
WIRING VIEW 1



PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-1

U3

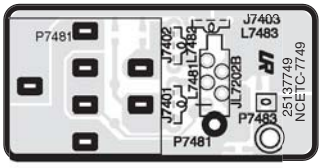


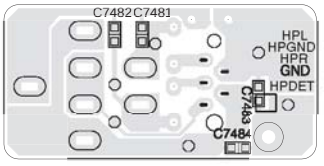


COMPONENT SIDE SOLDERING SIDE

MASTER VOLUME PC BOARD(NAETC-7748)

U4

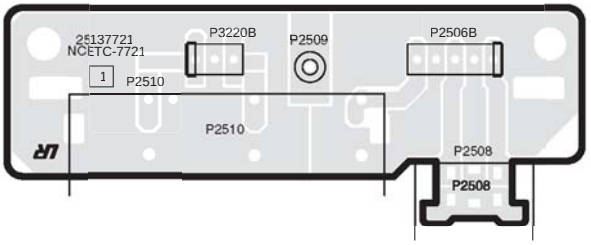


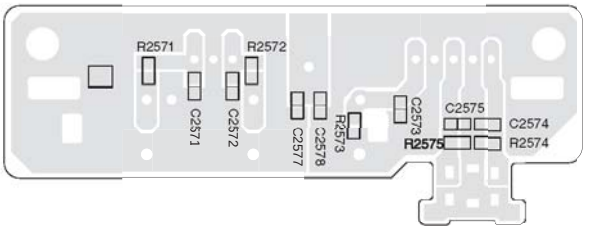


COMPONENT SIDE SOLDERING SIDE

HEADPHONE TERMINAL PC BOARD(NAETC-7749)

U5

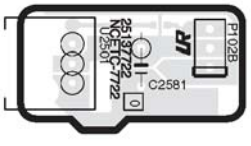


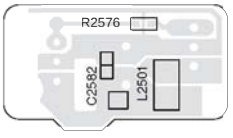


COMPONENT SIDE SOLDERING SIDE

FRONT VIDEO PC BOARD(NAETC-7721)

U6

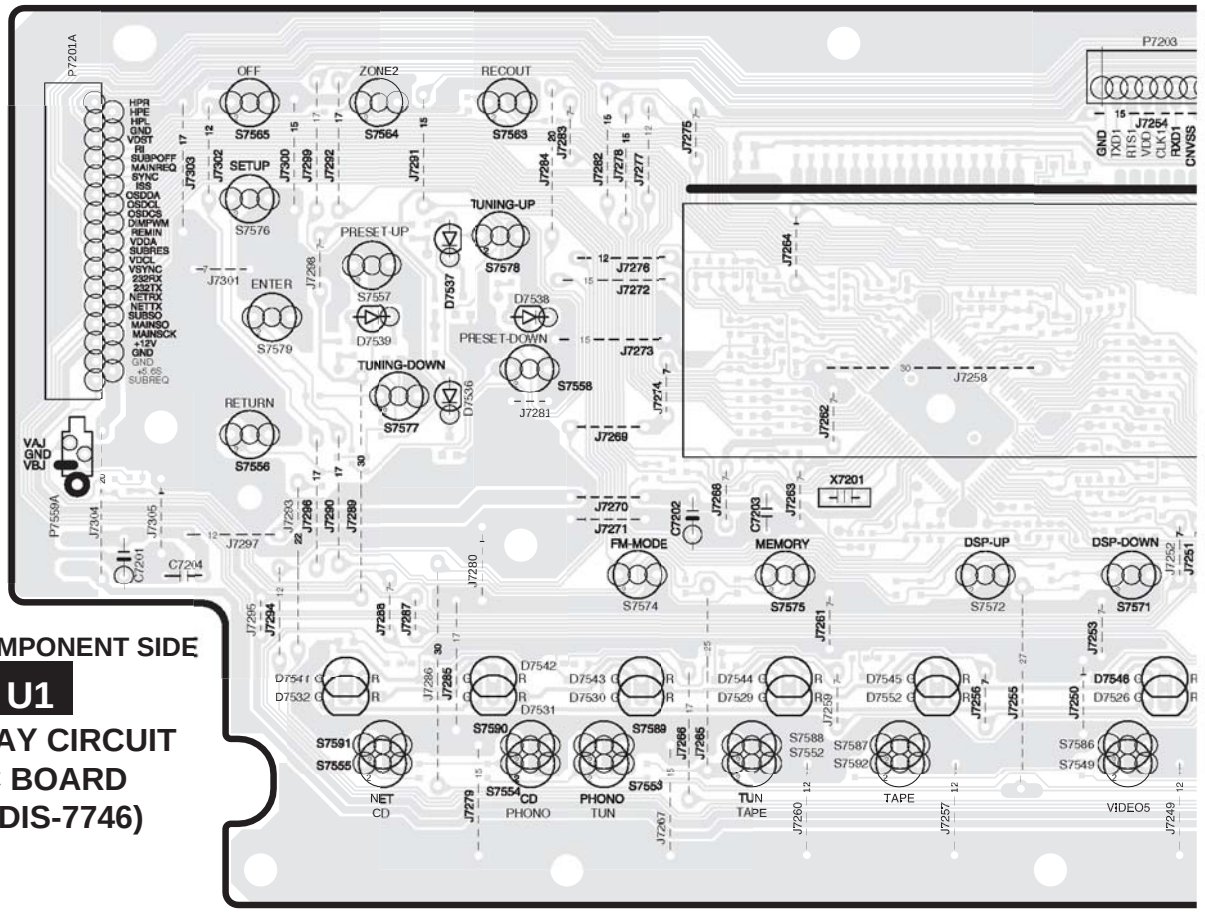




COMPONENT SIDE SOLDERING SIDE

OPTICAL INPUT PC BOARD(NAETC-7722)

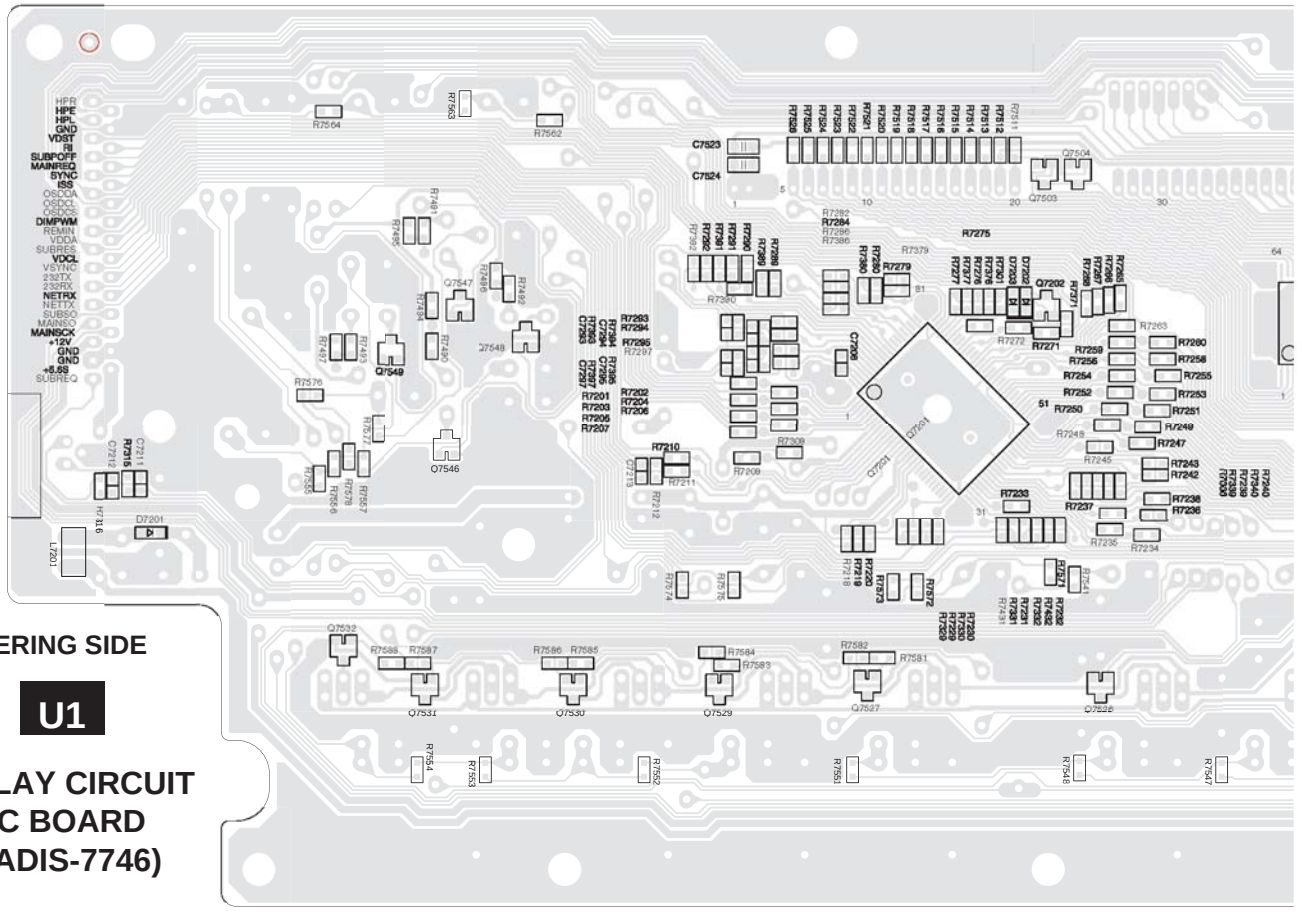
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-2



COMPONENT SIDE

U1

DISPLAY CIRCUIT PC BOARD (NADIS-7746)

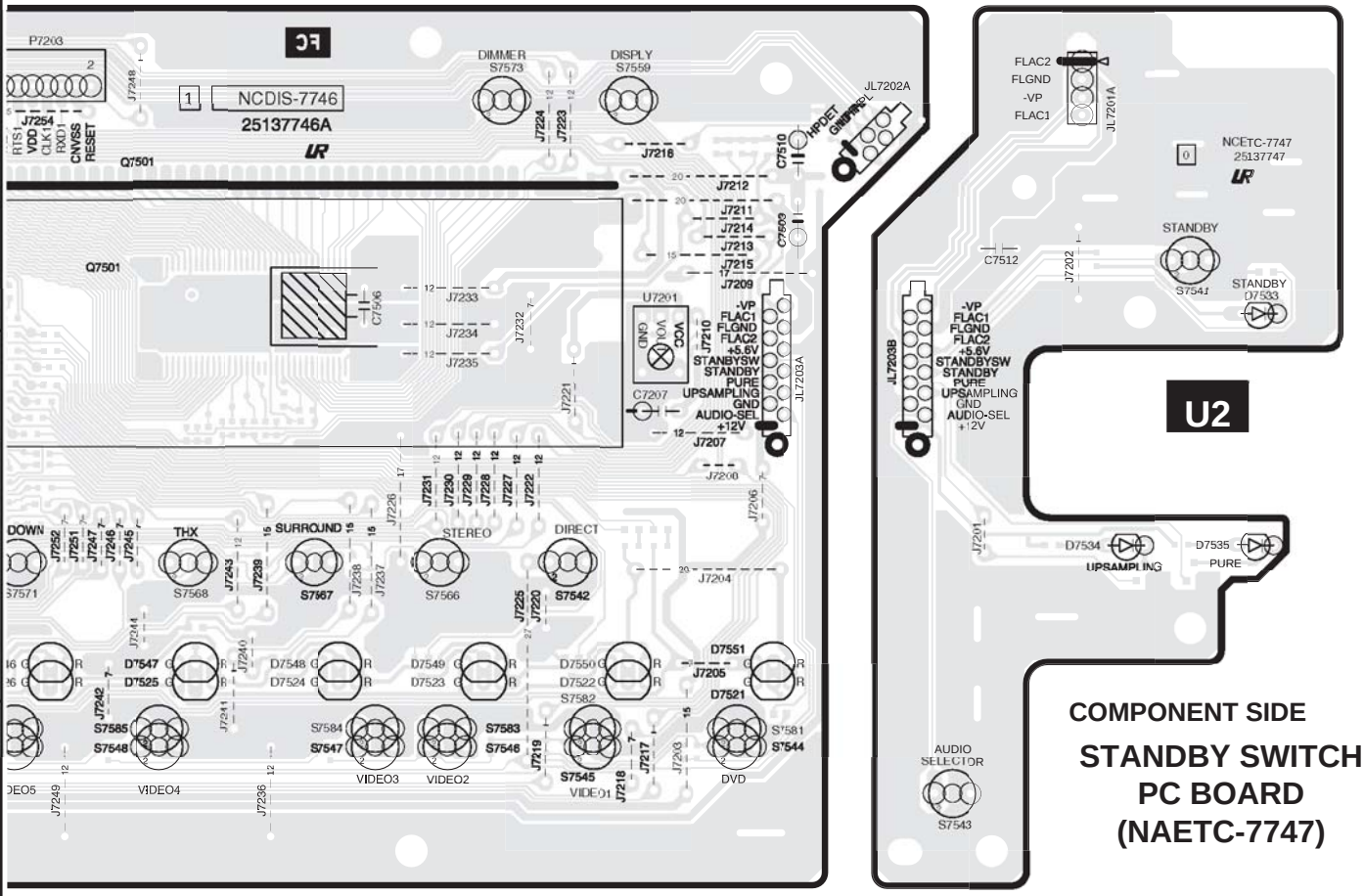


SOLDERING SIDE

U1

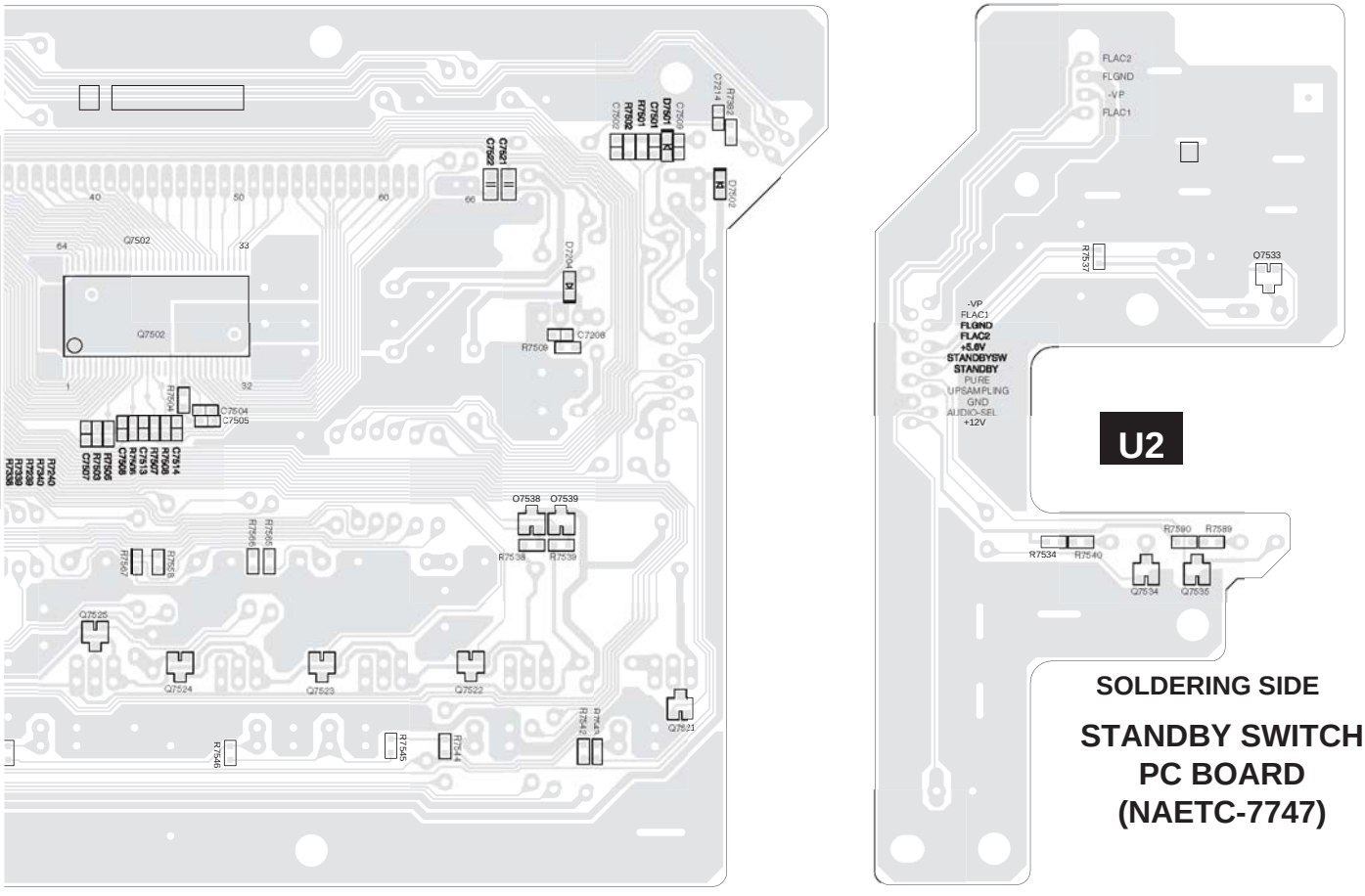
DISPLAY CIRCUIT PC BOARD (NADIS-7746)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-2



COMPONENT SIDE

STANDBY SWITCH PC BOARD (NAETC-7747)



SOLDERING SIDE

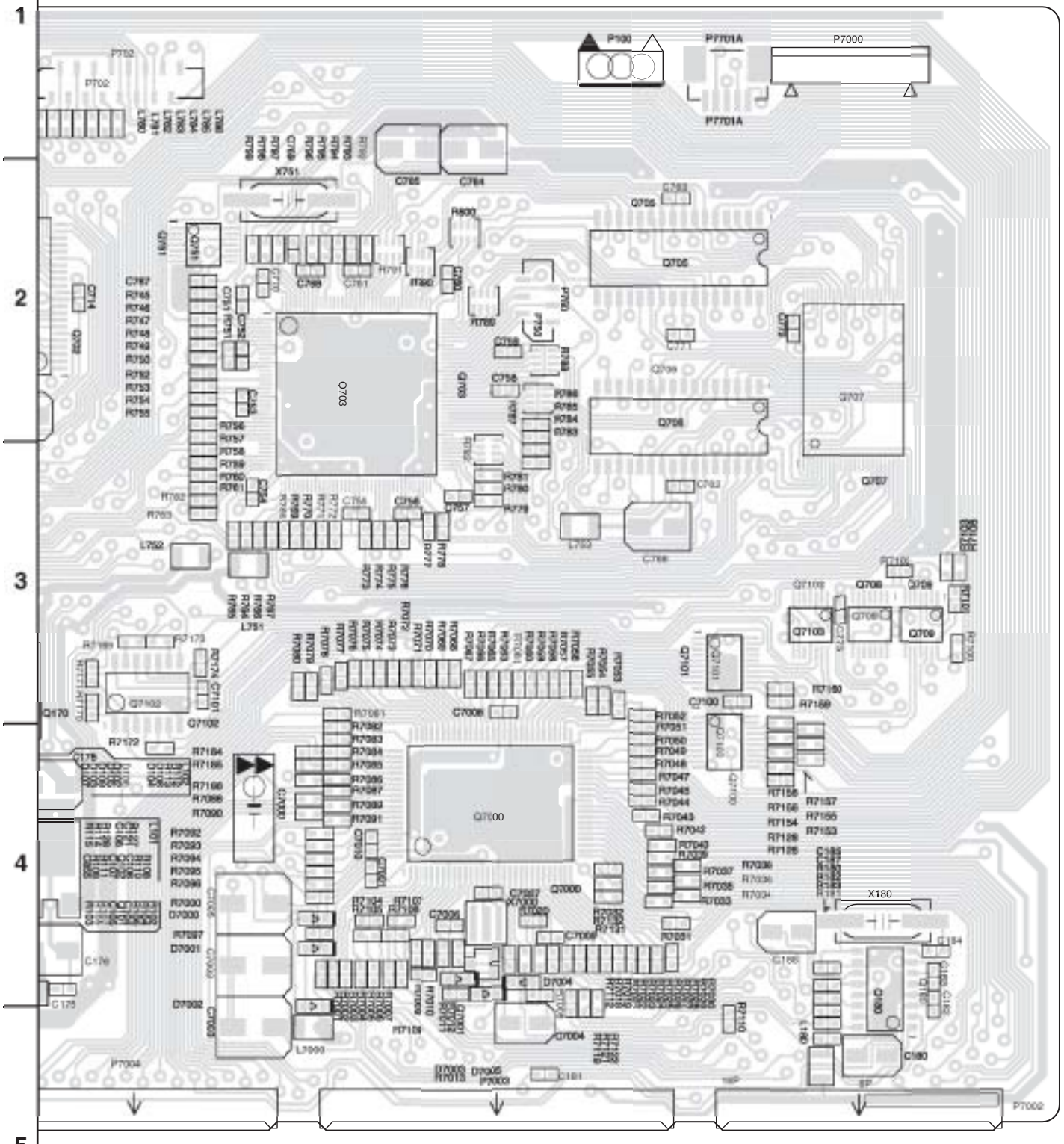
STANDBY SWITCH PC BOARD (NAETC-7747)

A B C D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-2

U7

1
2
3
4
5



SOLDERING VIEW FOR CHIP PARTS

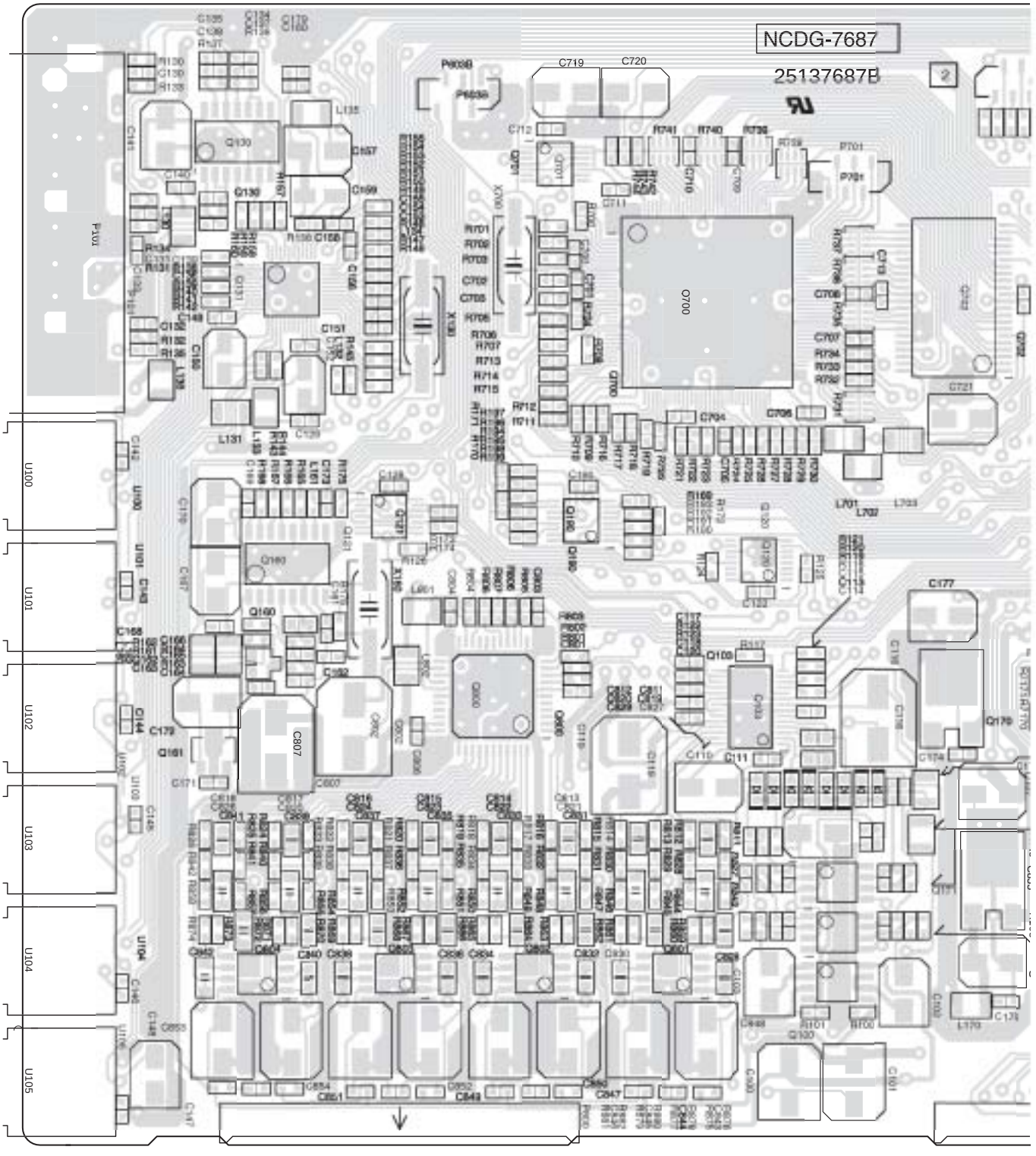
DSP CIRCUIT PC BOARD
(NADG-7687)

A B C D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-2

U7

1
2
3
4
5

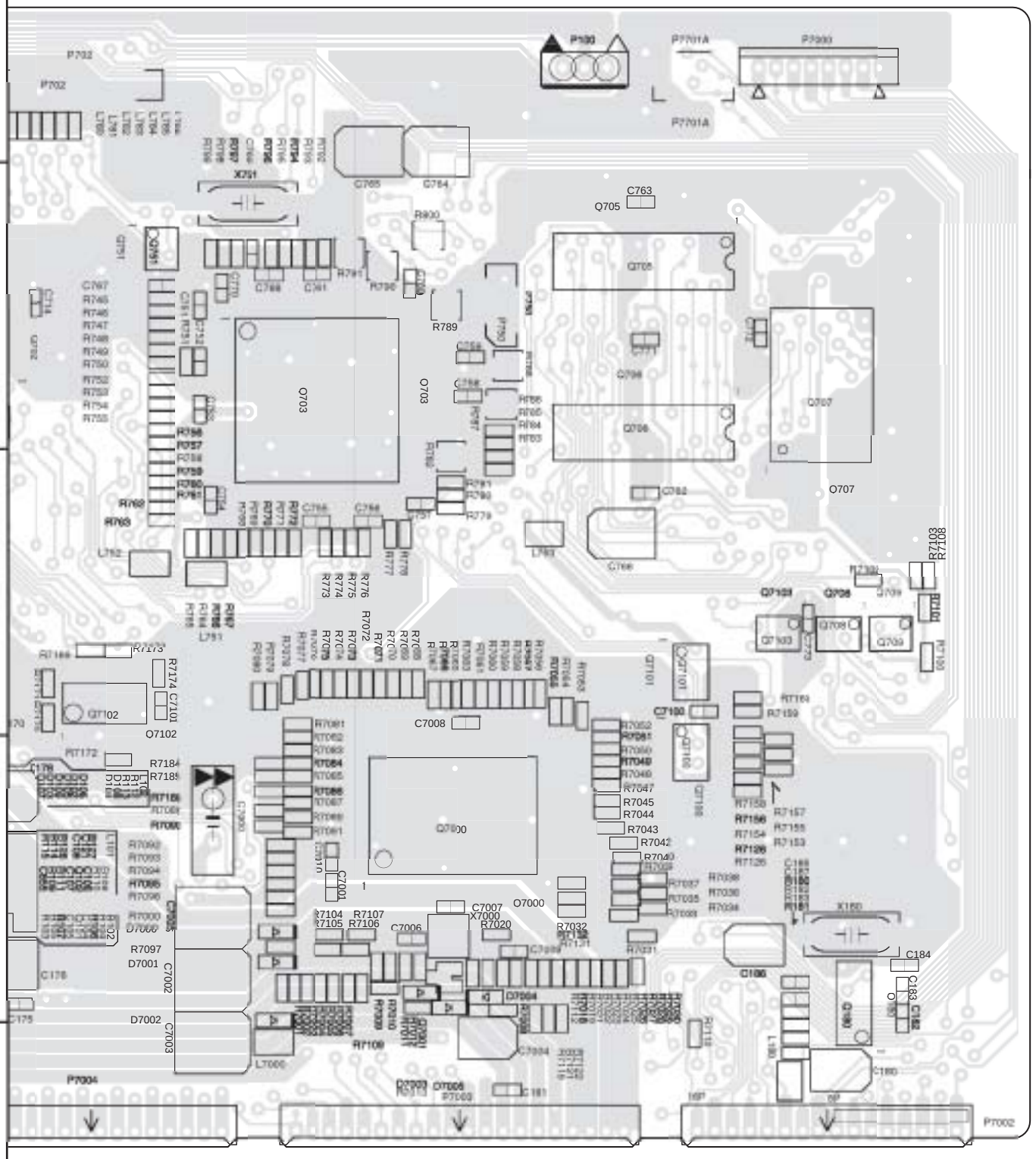


SOLDERING VIEW FOR CHIP PARTS

DSP CIRCUIT PC BOARD
(NADG-7687)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-1

U7



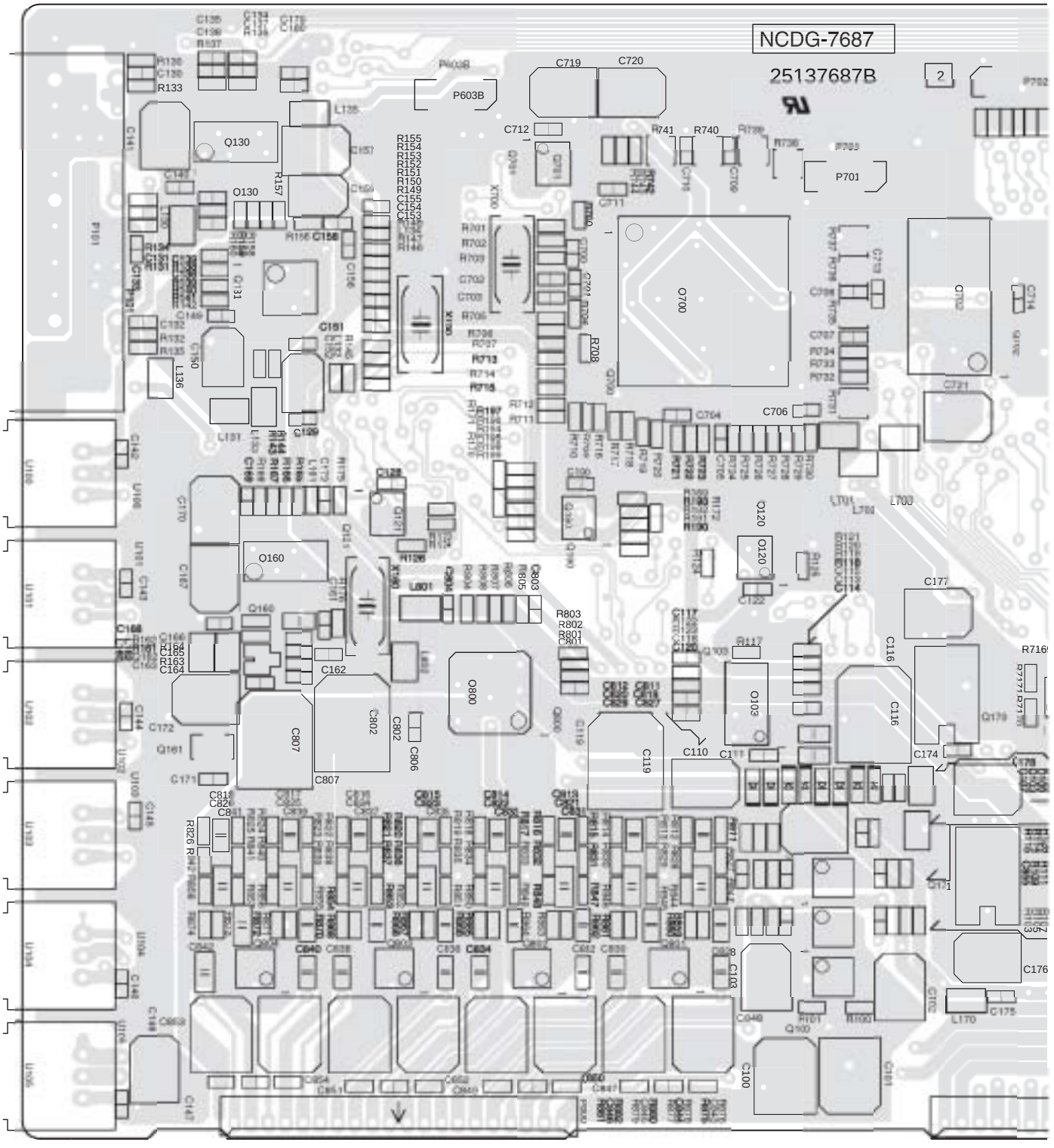
SOLDERING VIEW FOR COMPONENT PARTS

DSP CIRCUIT PC BOARD

(NADG-7687)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-1

U7



SOLDERING VIEW FOR COMPONENT PARTS

DSP CIRCUIT PC BOARD

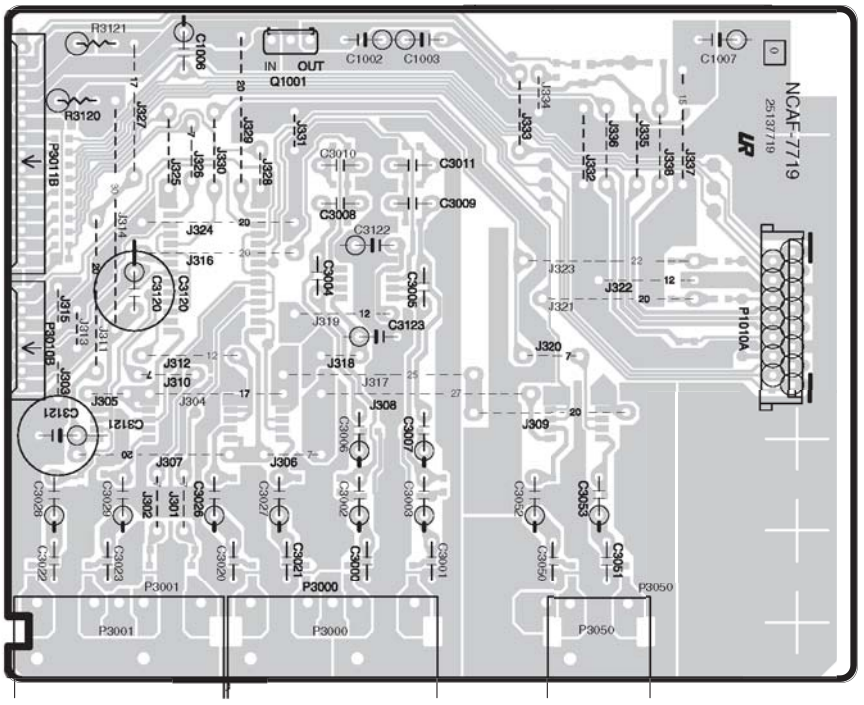
(NADG-7687)

A B C D

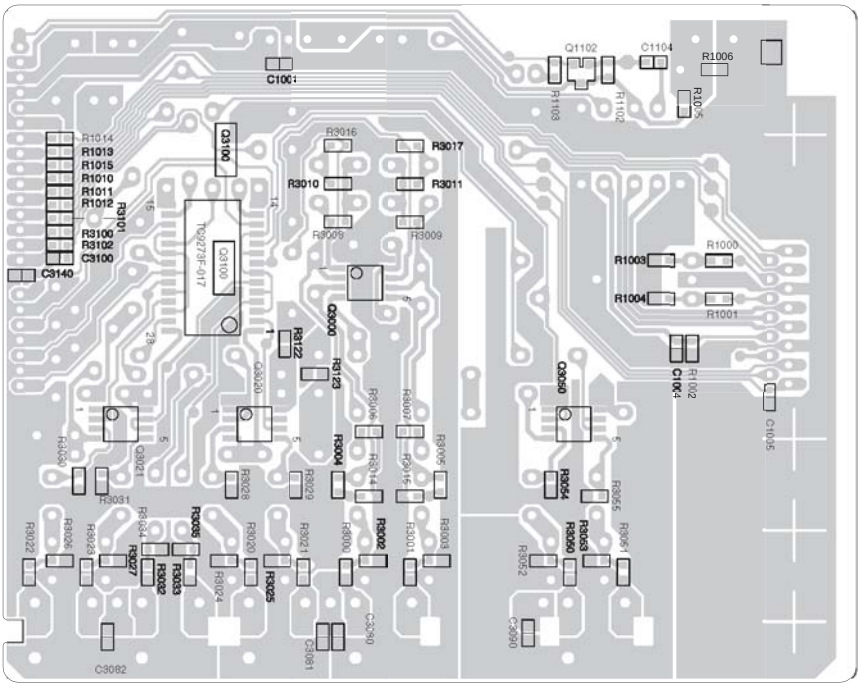
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 3-1

U12



COMPONENT SIDE

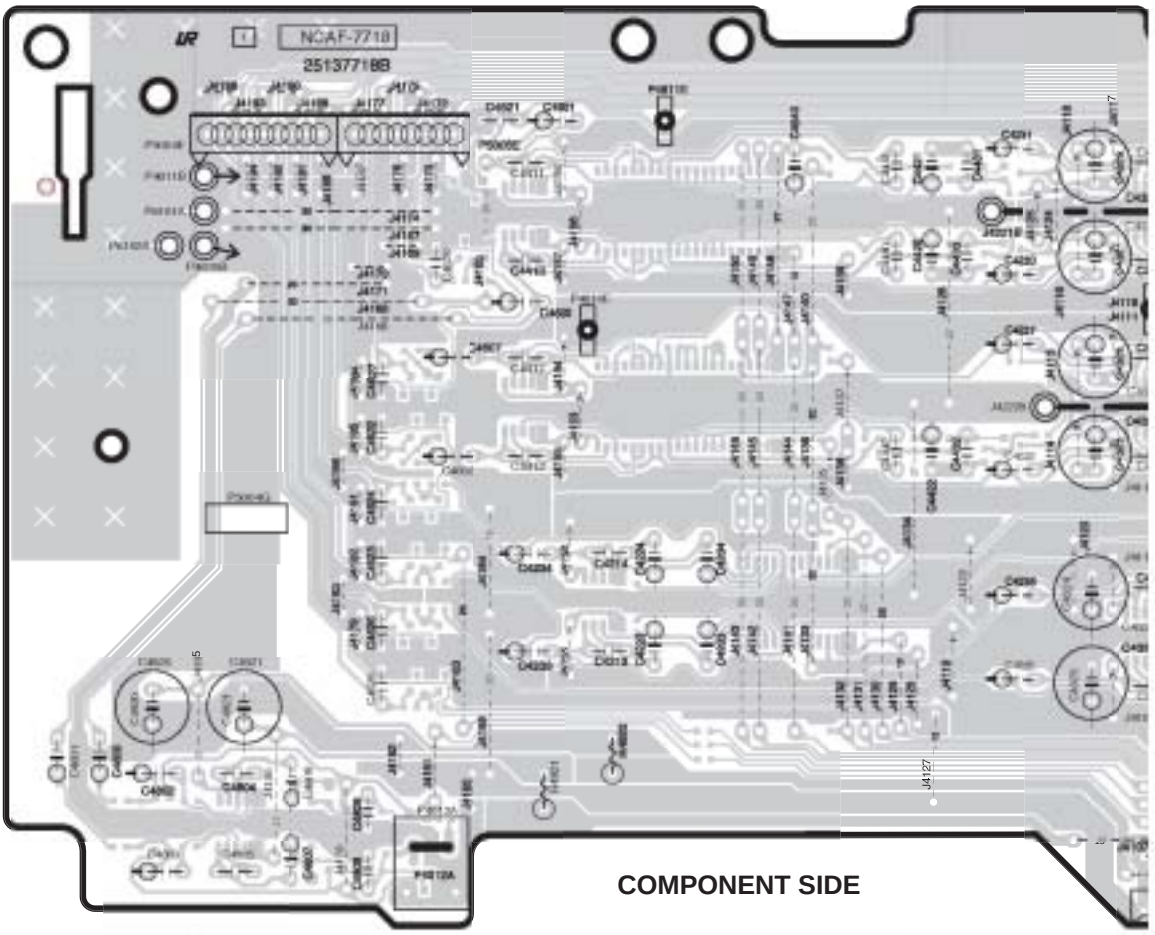


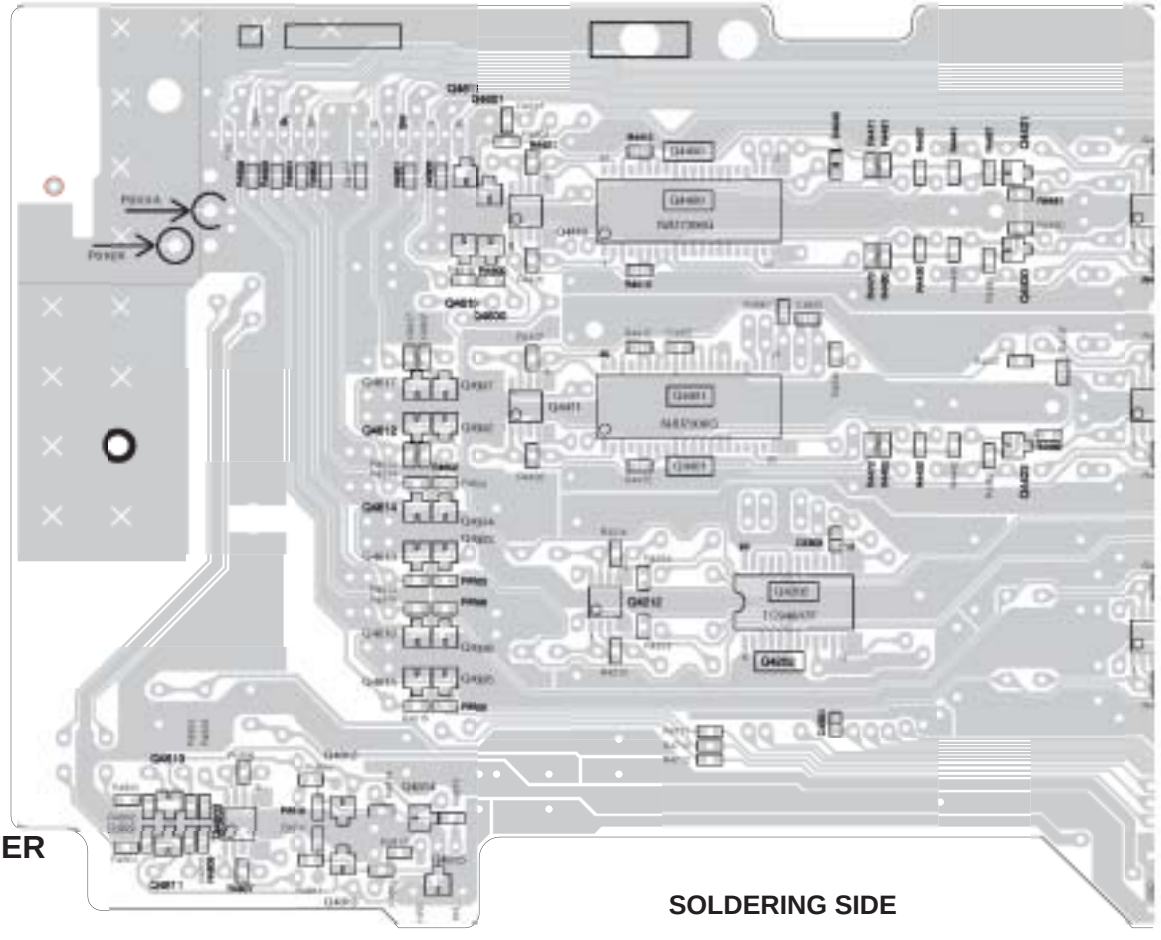
SOLDERING SIDE

AUDIO TERMINAL PC BOARD
(NAAF-7719)

PRINTED CIRCUIT BOARD VIEW 4-1

U11

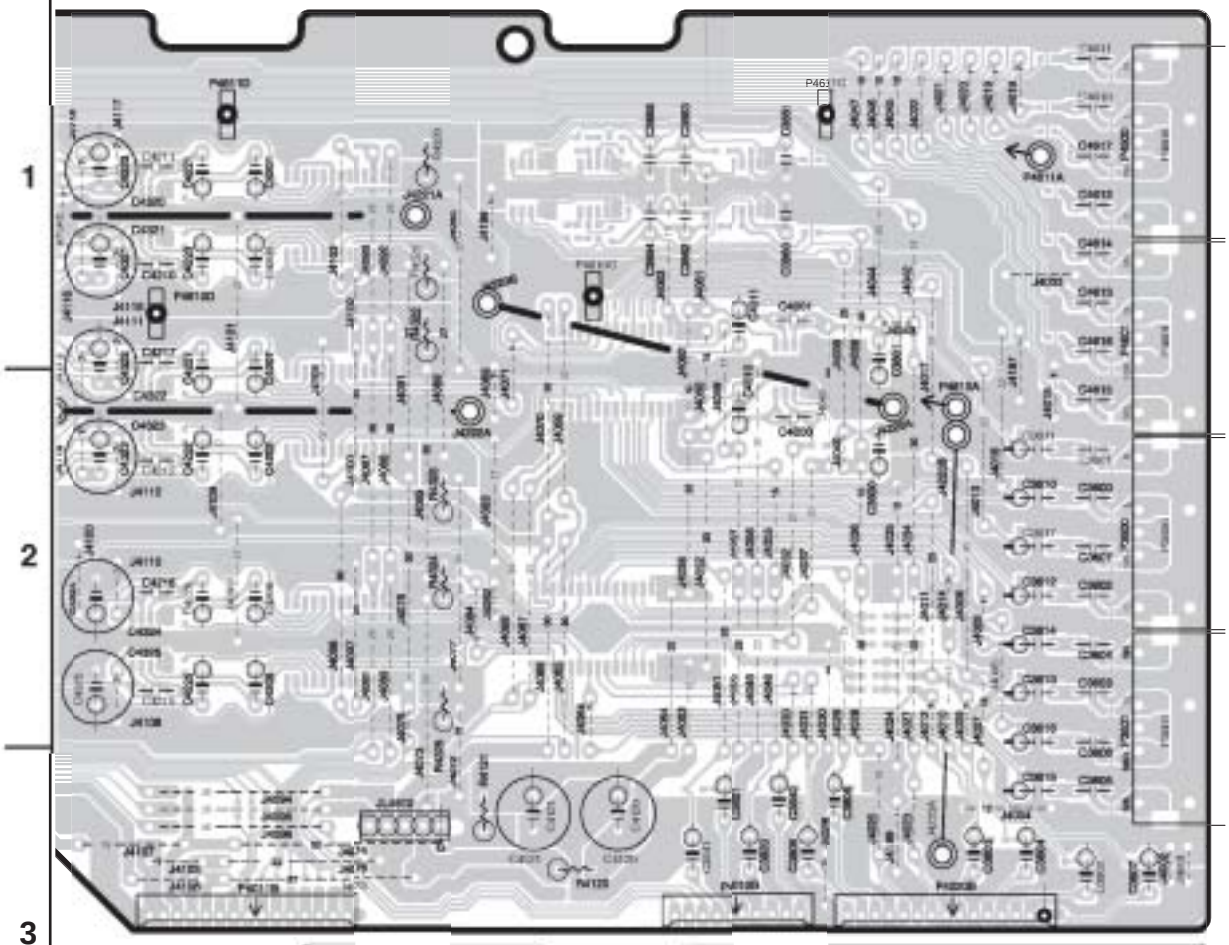




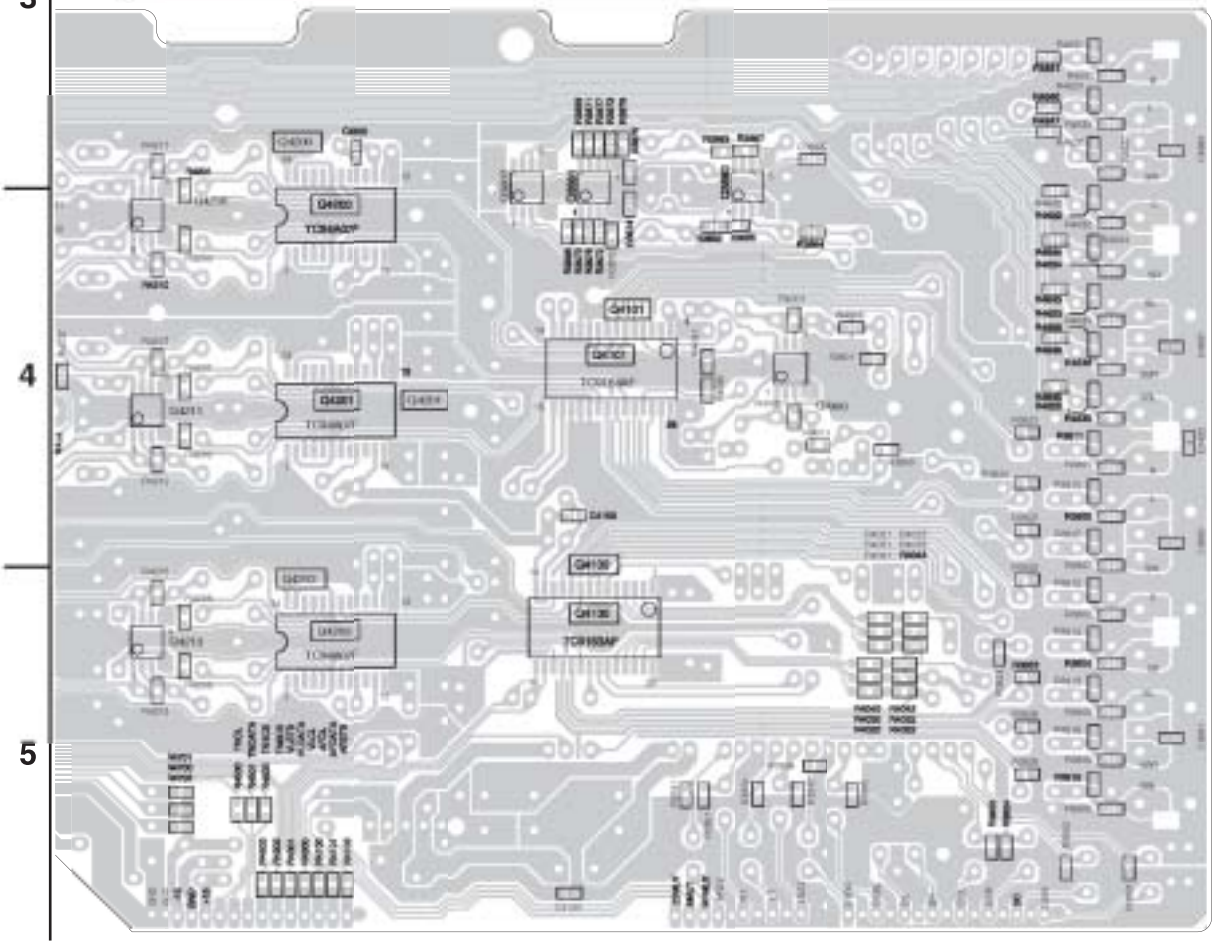
PRE AMPLIFER PC BOARD (NAAF-7718)

PRINTED CIRCUIT BOARD VIEW 4-2

U11



COMPONENT SIDE



SOLDERING SIDE

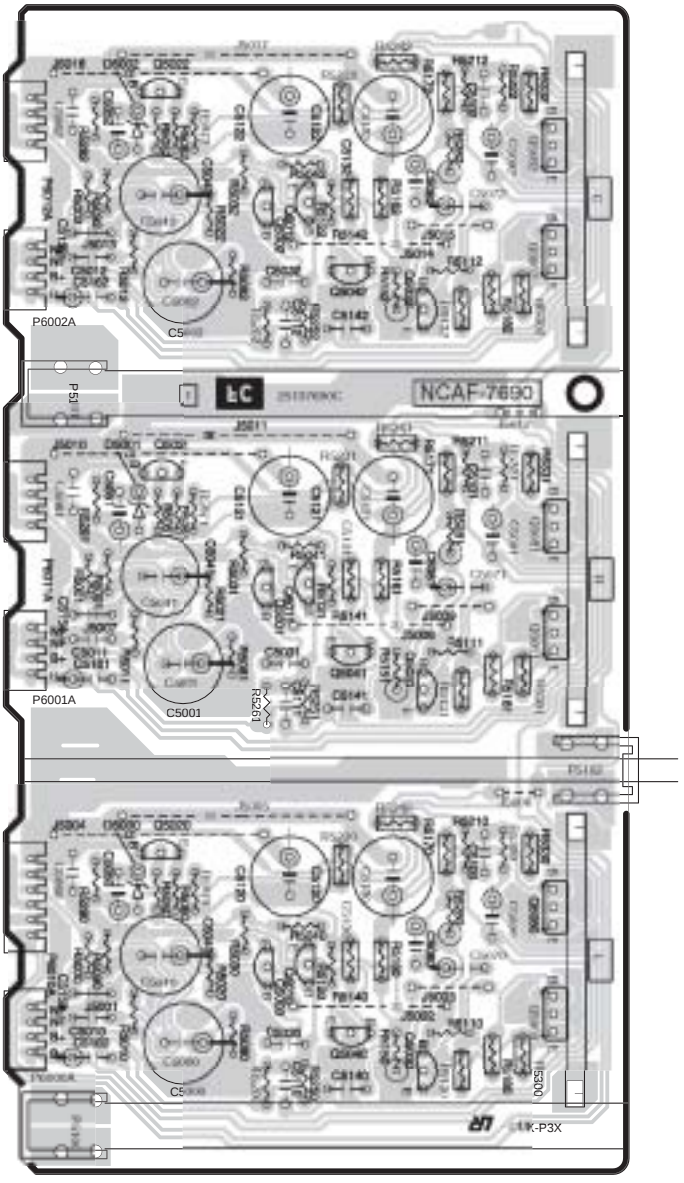
PRE AMPLIFER PC BOARD (NAAF-7718)

A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 5-2

U26

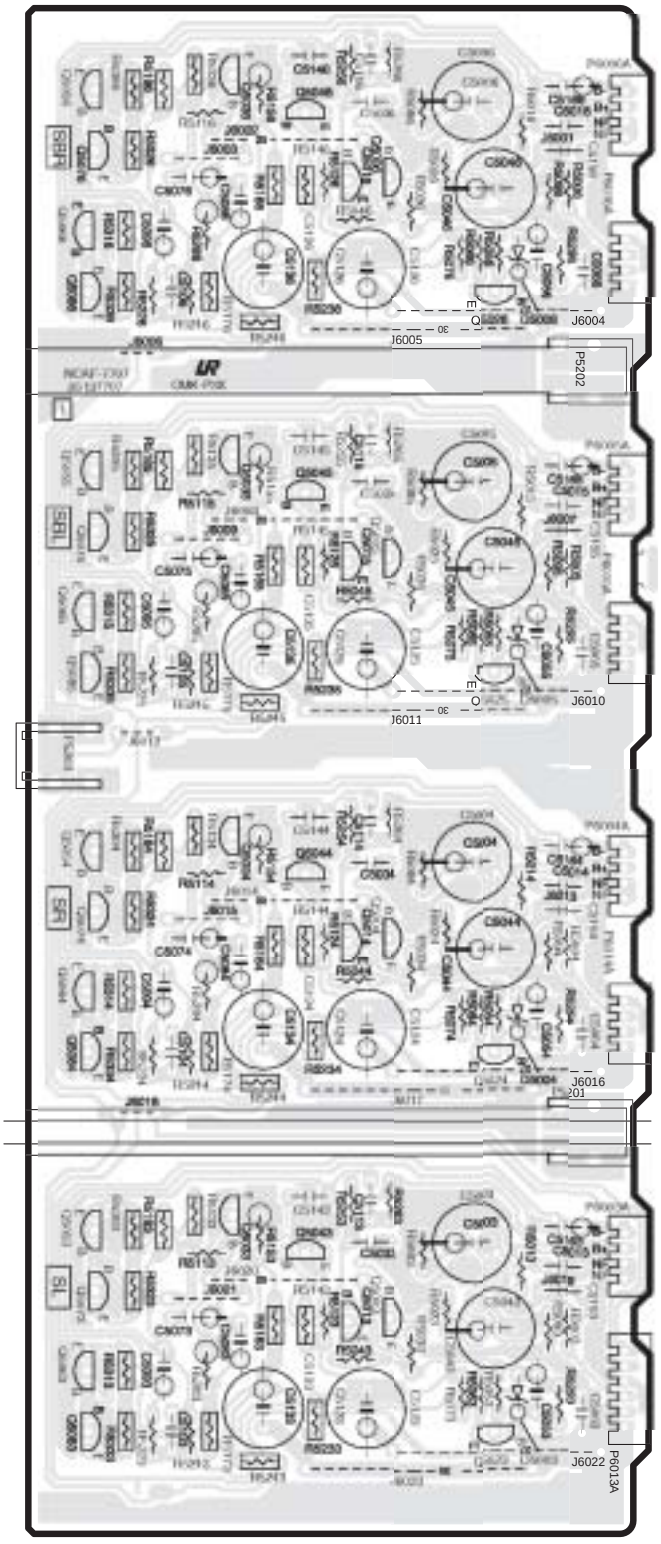


FRONT/CENTER DRIVER CIRCUIT PC BOARD (NAAF-7690)

	A	B	C	D
1				
2				
3				
4				
5				

PRINTED CIRCUIT BOARD VIEW 5-1

U22



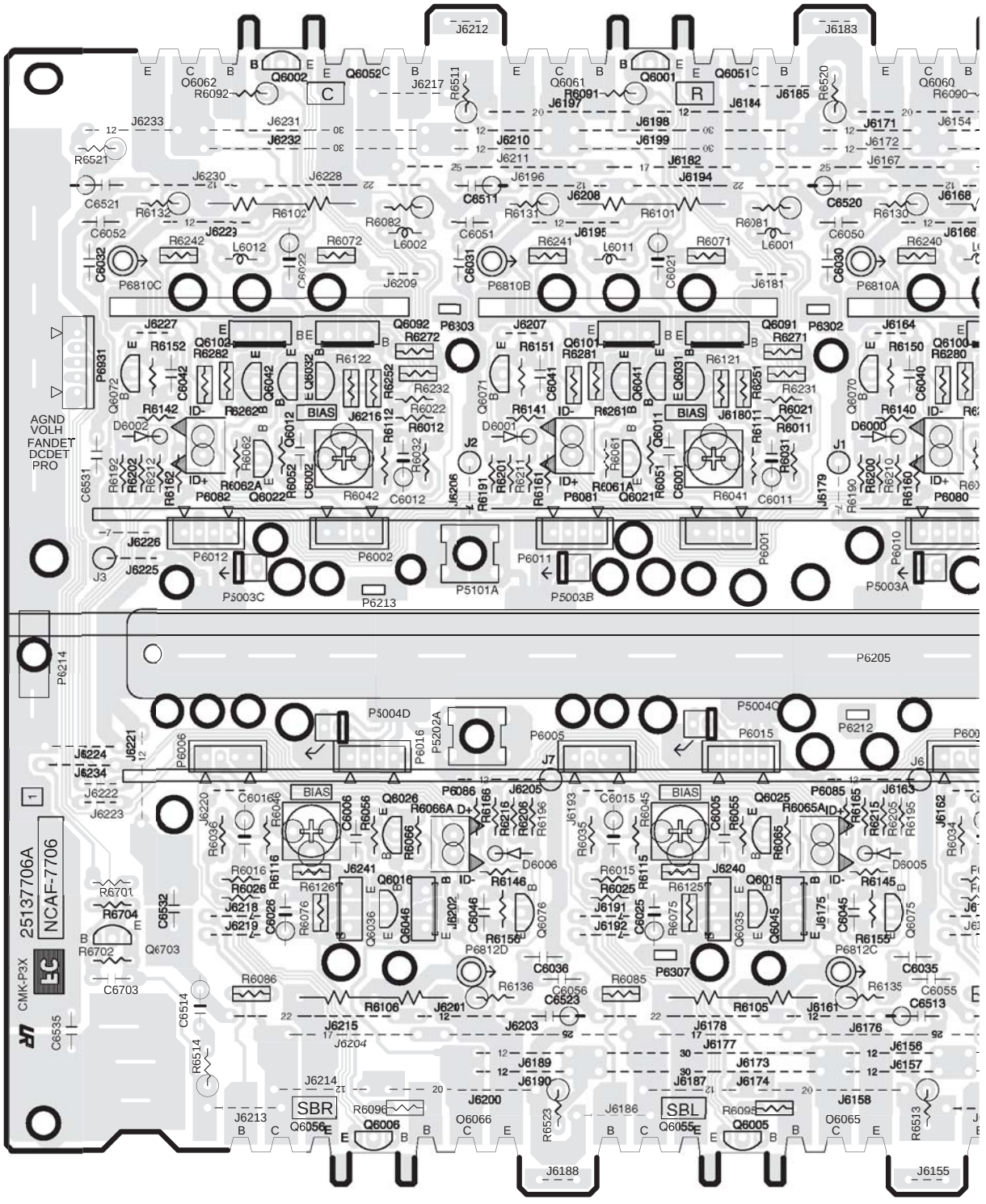
SURROUND DRIVER CIRCUIT PC BOARD (NAAF-7690)

A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 6-1

U21

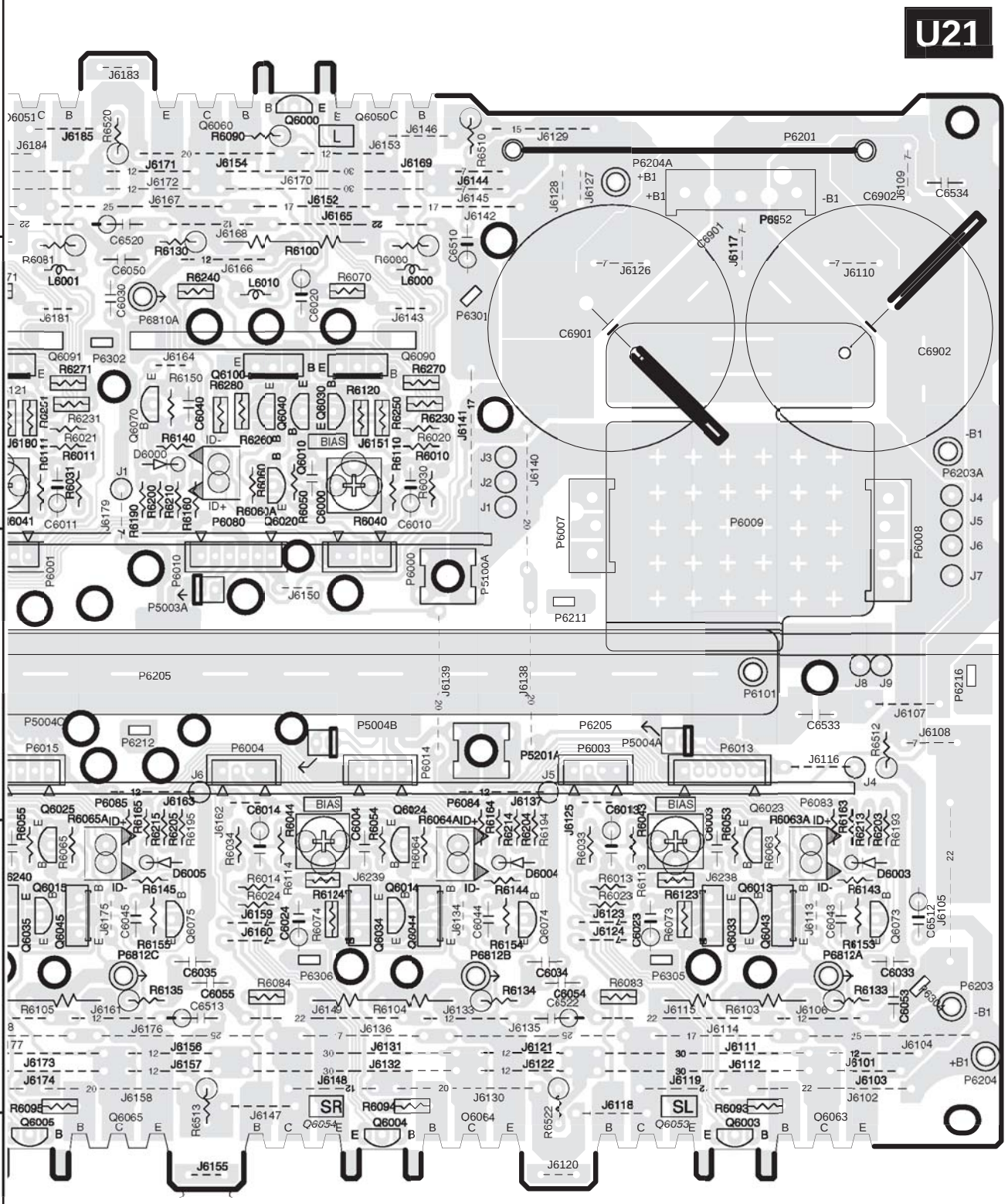


POWER AMPLIFIER PC BOARD
(NAAF-7706)

A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 6-2



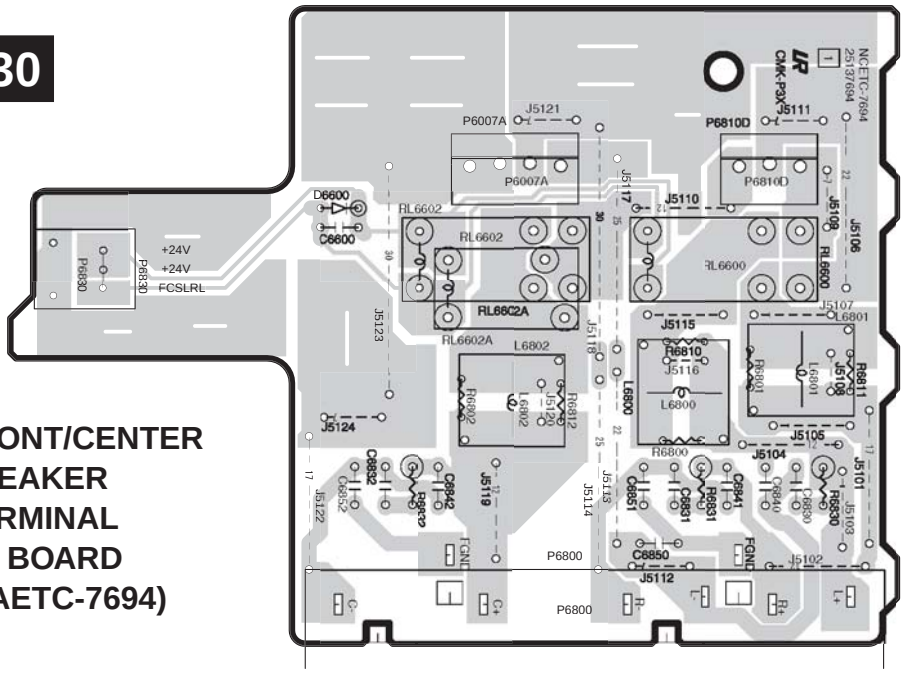
POWER AMPLIFIER PC BOARD
(NAAF-7706)

A B C D

1 2 3 4 5

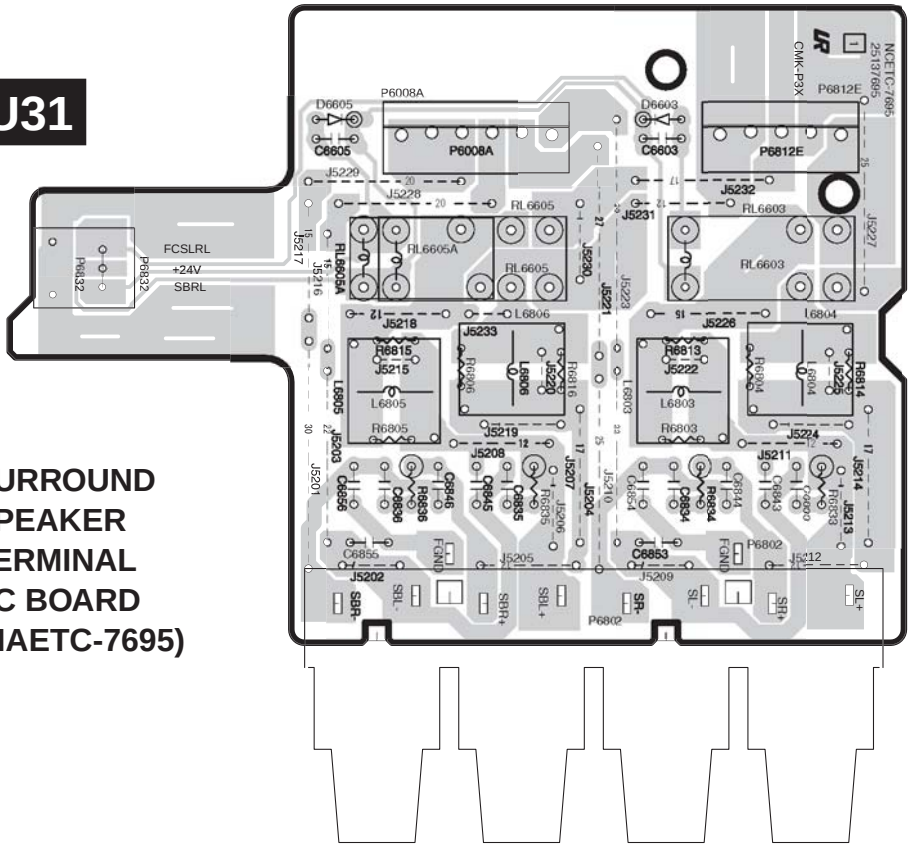
PRINTED CIRCUIT BOARD VIEW 7-1

U30



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

U31

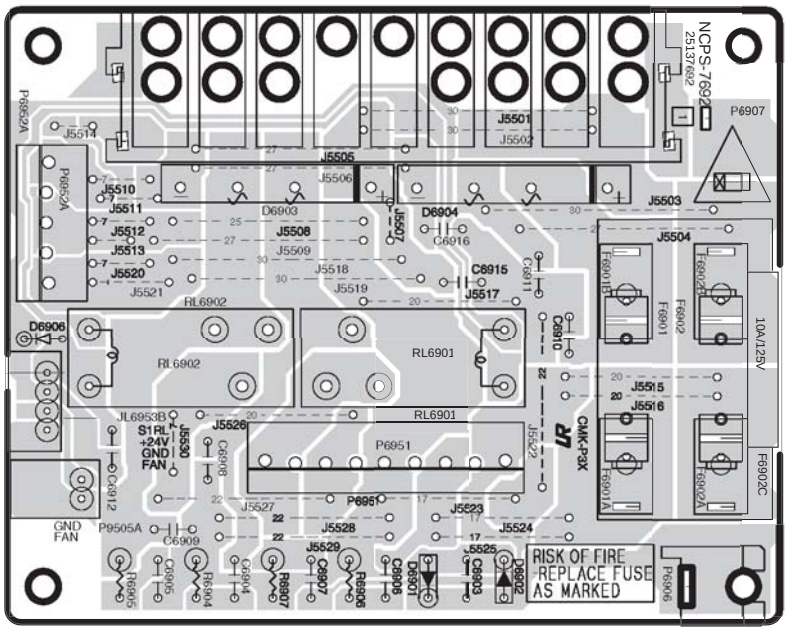


SURROUND SPEAKER TERMINAL PC BOARD (NAETC-7695)

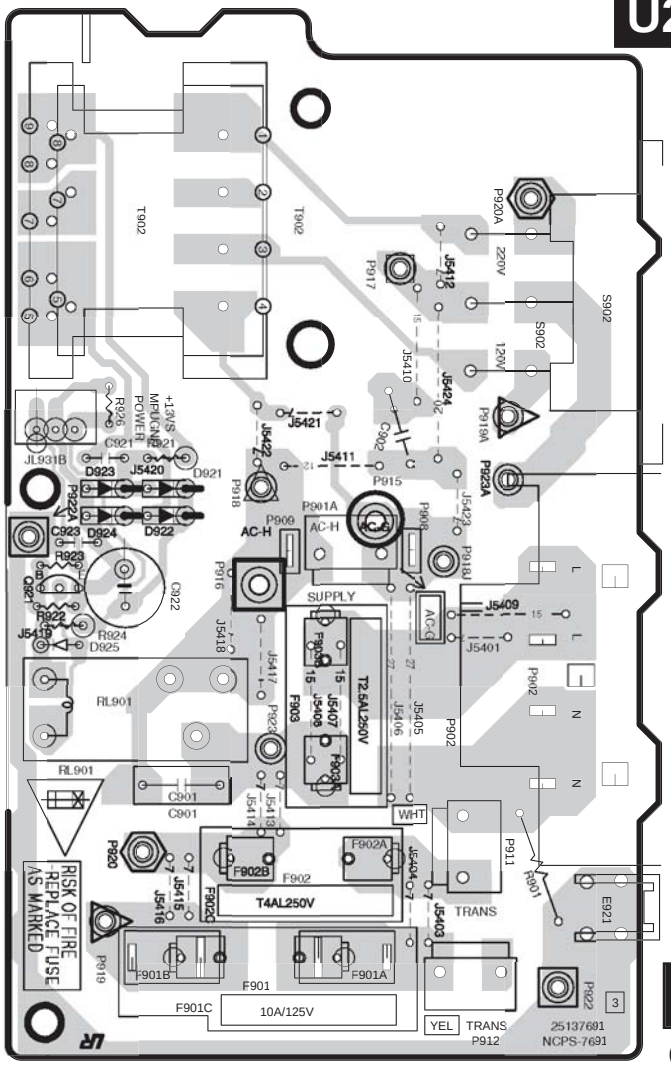
A B C D

1 2 3 4 5

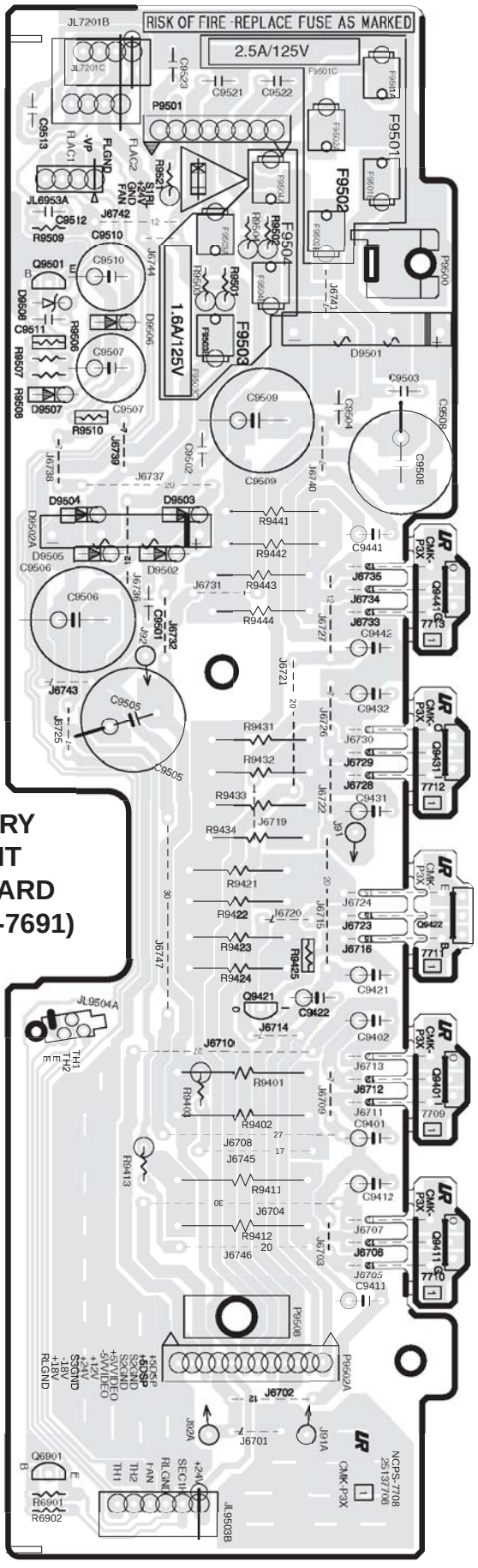
PRINTED CIRCUIT BOARD VIEW 7-2



U28 **BIAS SELECTOR CIRCUIT PC BOARD (NAPS-7692)**



PRIMARY CIRCUIT PC BOARD (NAPS-7691)



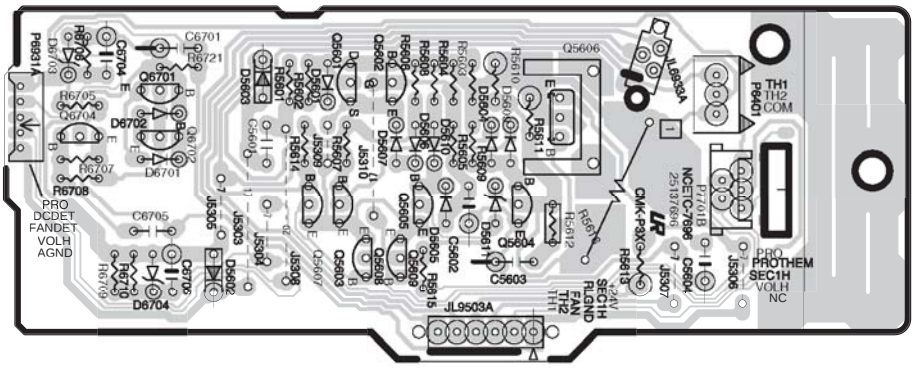
U23 **CONST. VOLTAGE PC BOARD (NAPS-7708)**

A B C D

1 2 3 4 5

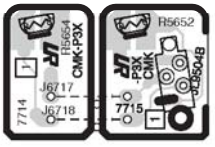
PRINTED CIRCUIT BOARD VIEW 7-3

U32



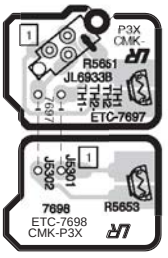
FAN DRIVE CIRCUIT PC BOARD
(NAETC-7696)

U24



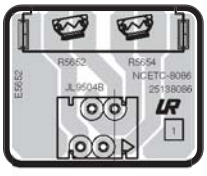
THERMAL DET.
PC BOARD
(NAETC-7714)
Australian model only

U33



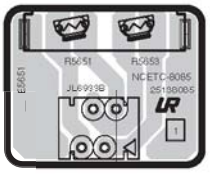
THERMAL DET.
PC BOARD
(NAETC-7697)
Australian model only

U48



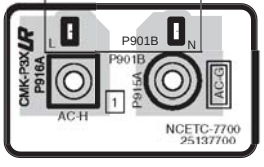
THERMAL DET.
PC BOARD
(NAETC-8086)
120V model only

U47



THERMAL DET.
PC BOARD
(NAETC-8085)
120V model only

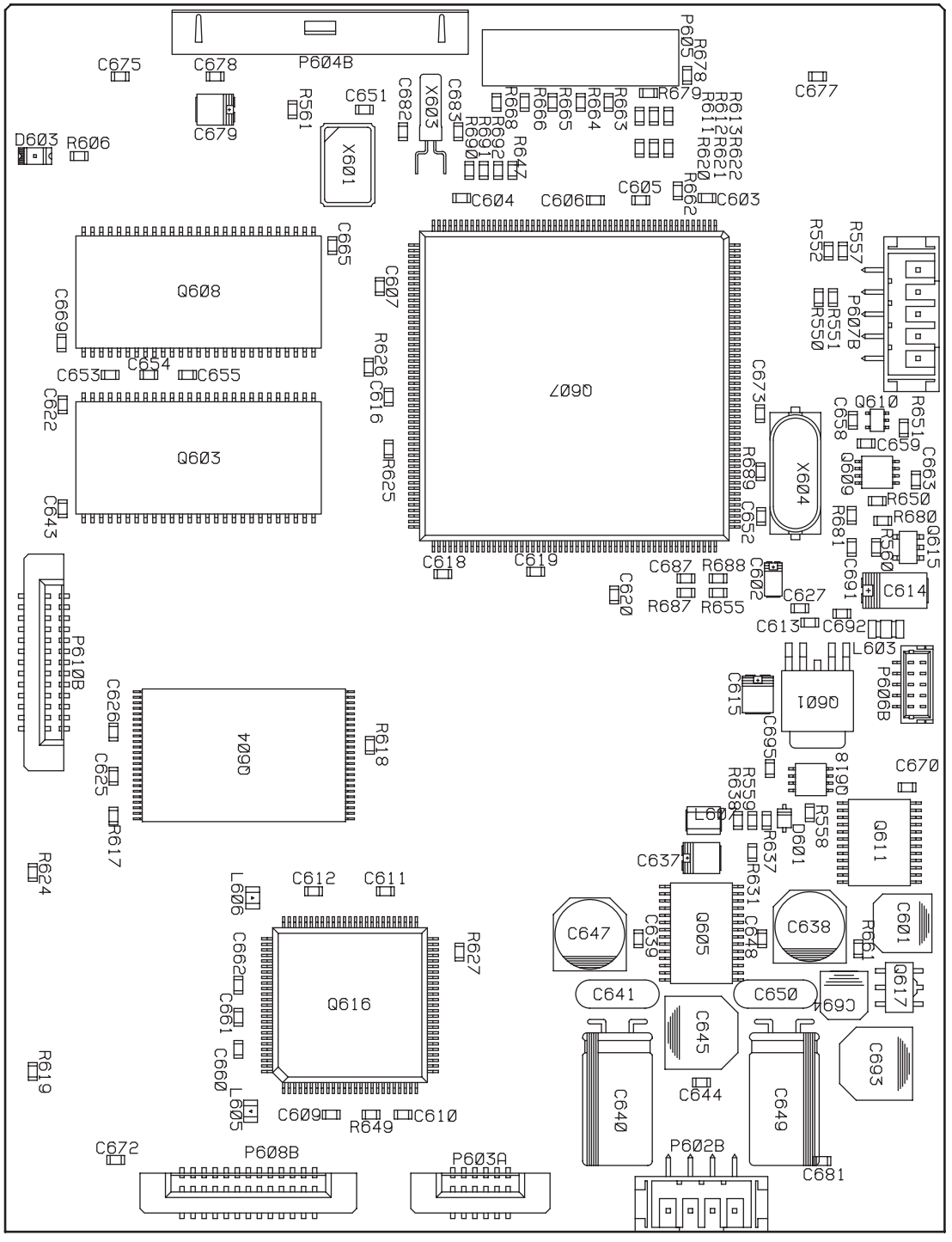
U35



AC INLET PC BOARD
(NAETC-7700)

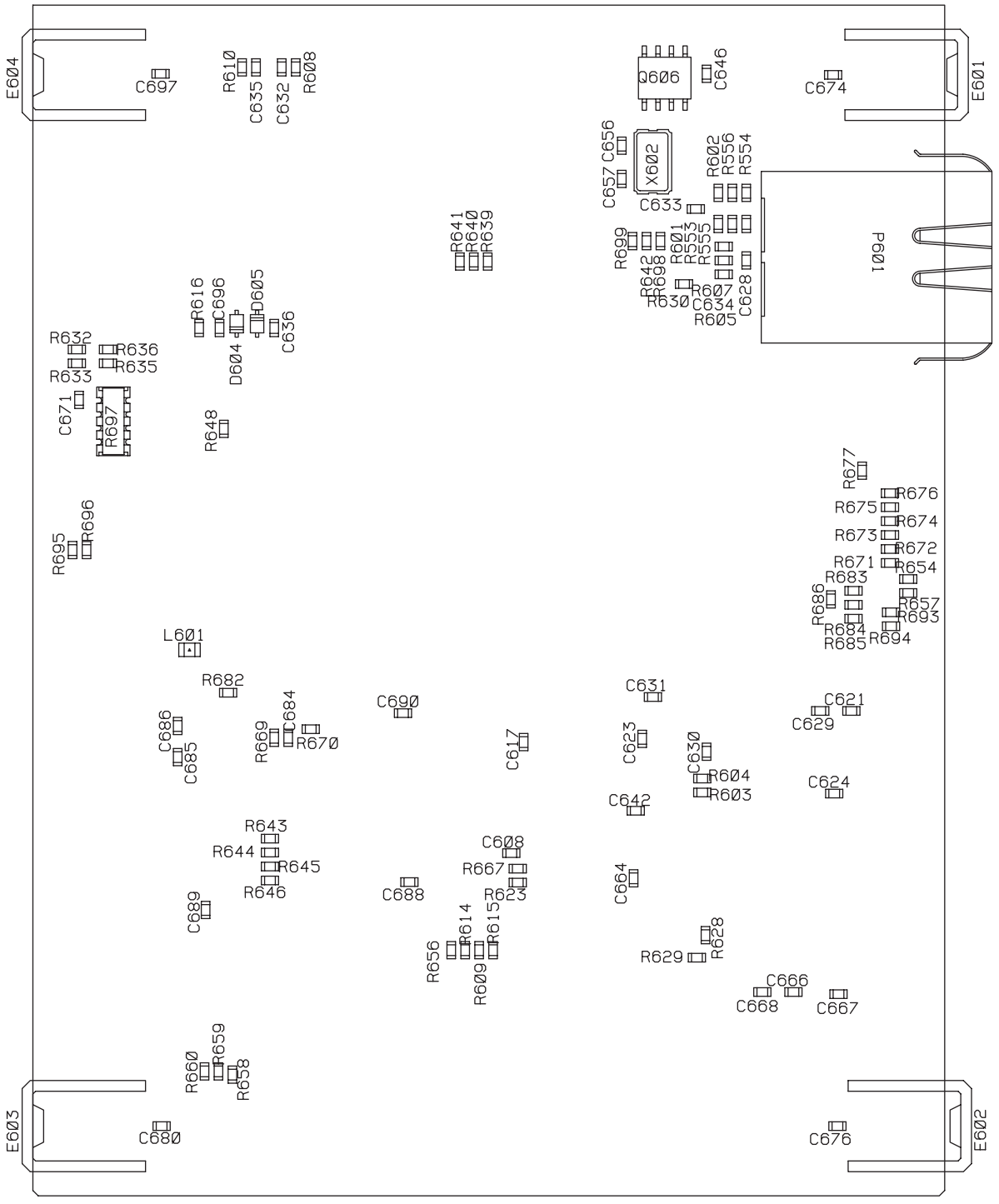
PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE 8

U8



Component side

NET-TUNE CIRCUIT PC BOARD(NADG-7662)



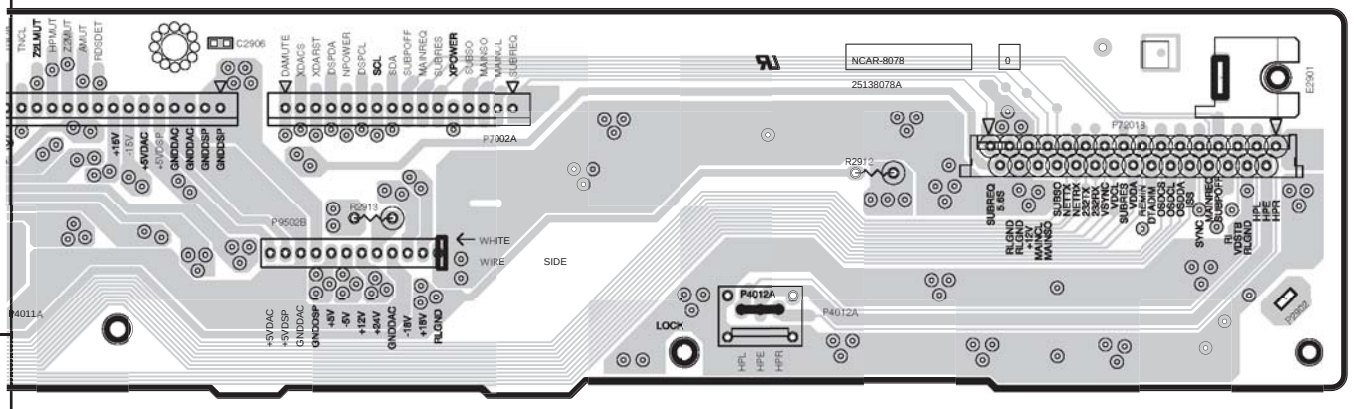
Soldering side

NET-TUNE CIRCUIT PC BOARD(NADG-7662)

A B C D

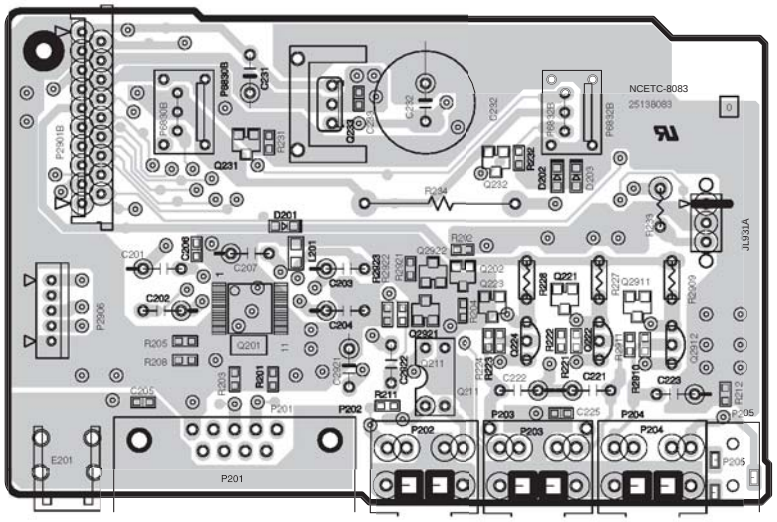
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 9-2



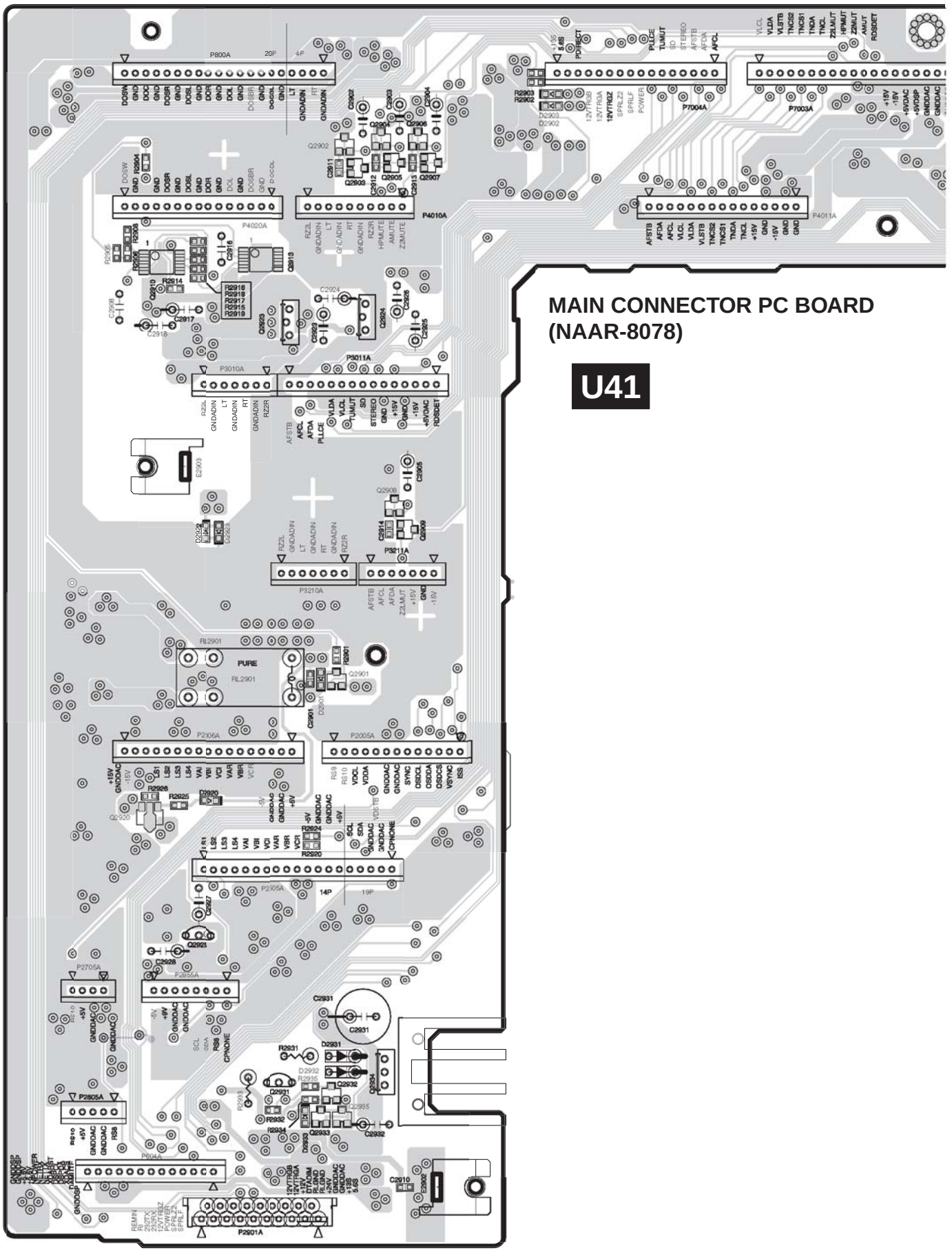
U41 **MAIN CONNECTOR PC BOARD (NAAR-8078)**

U45

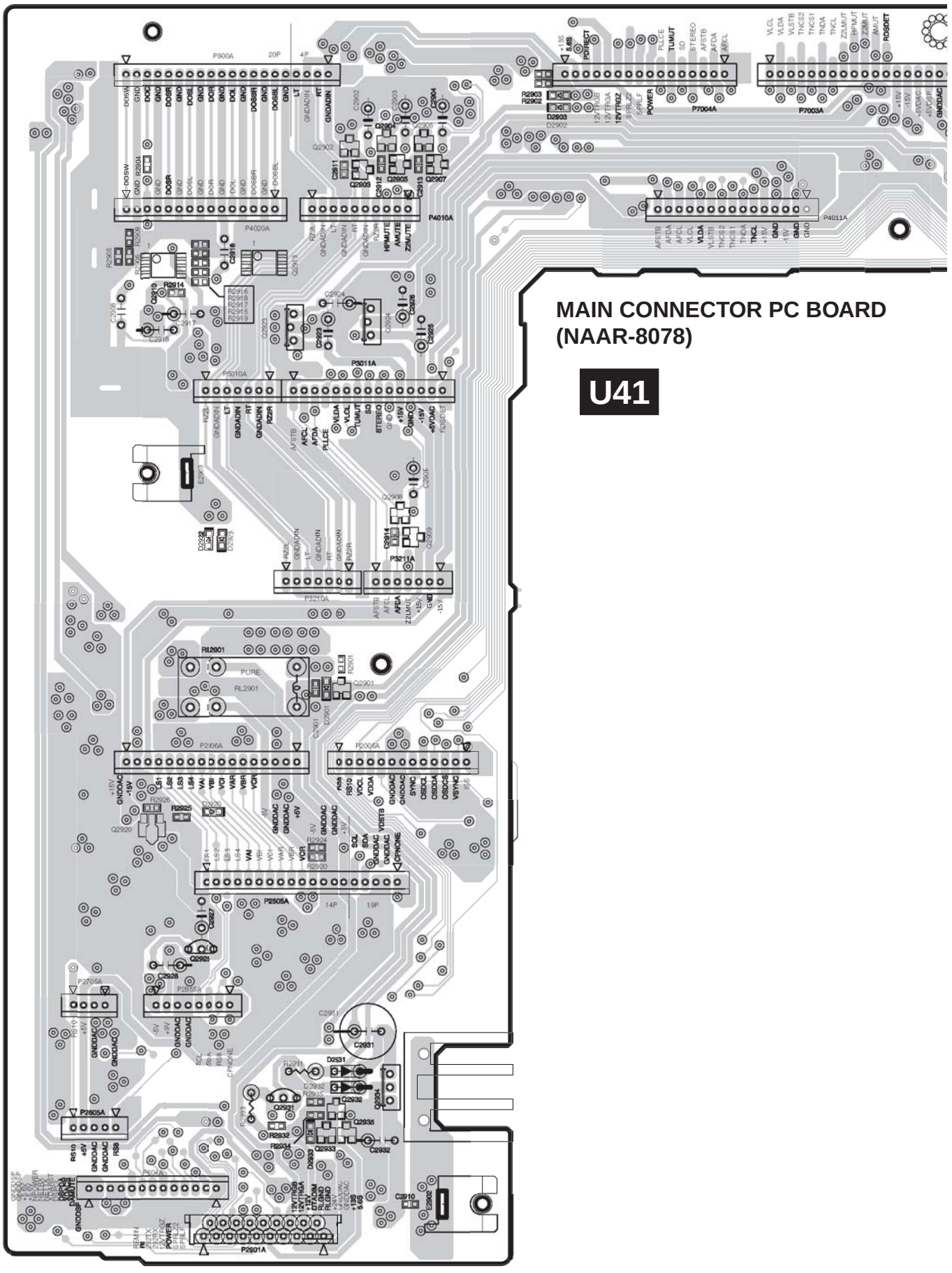


CONTROL TERMINAL PC BOARD (NAETC-8083)

PRINTED CIRCUIT BOARD VIEW 9-1



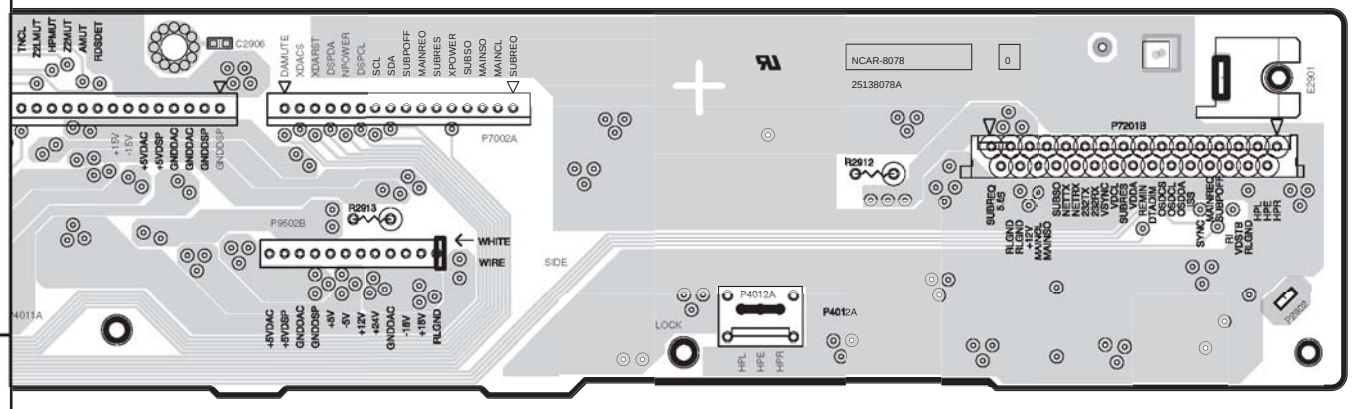
PRINTED CIRCUIT BOARD VIEW 9-1



MAIN CONNECTOR PC BOARD
(NAAR-8078)

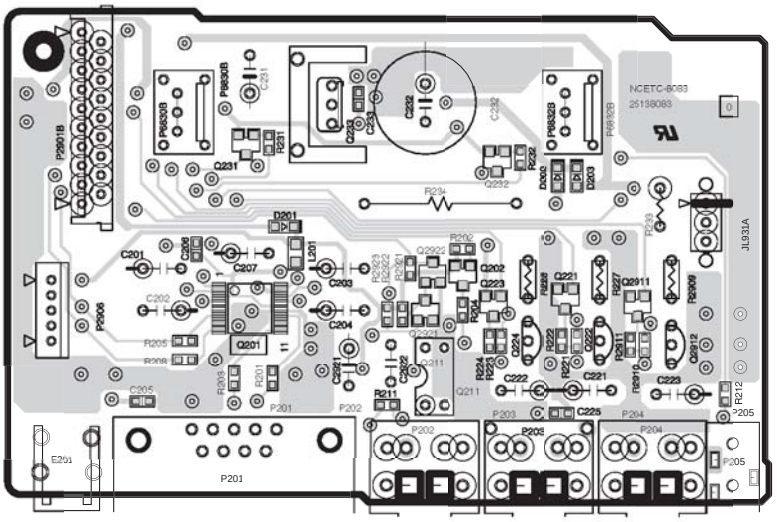
U41

PRINTED CIRCUIT BOARD VIEW 9-2



U41 **MAIN CONNECTOR PC BOARD (NAAR-8078)**

U45

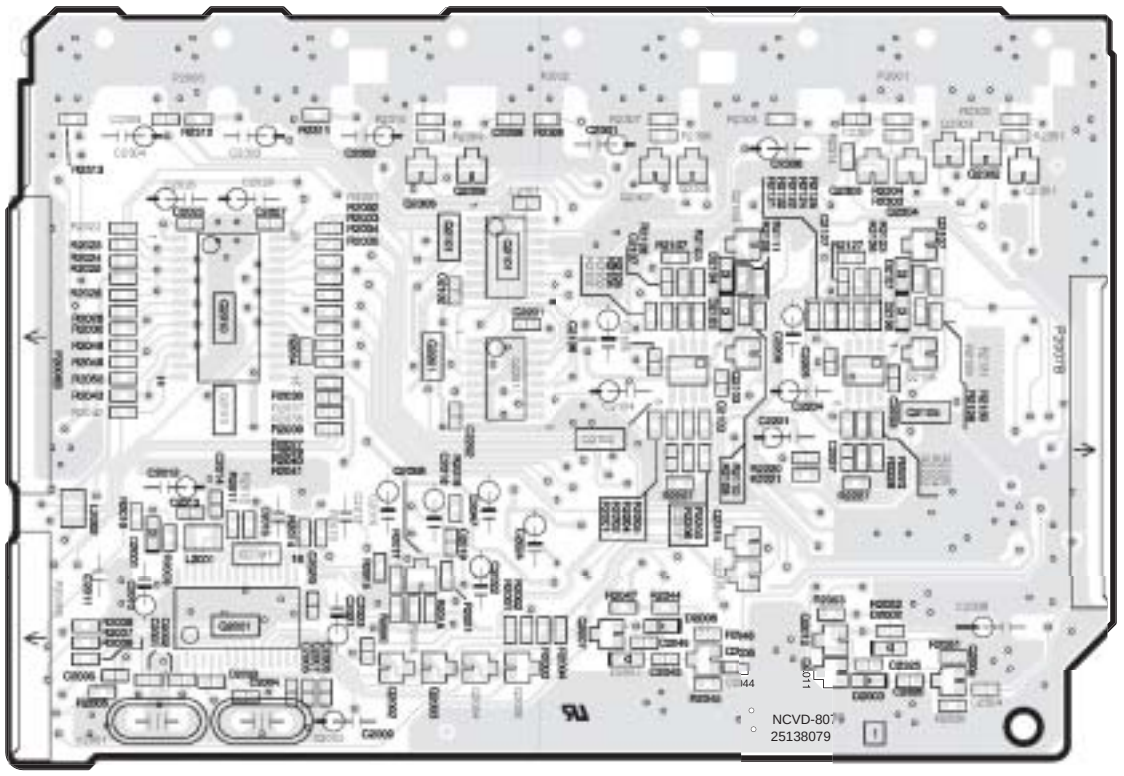


CONTROL TERMINAL PC BOARD (NAETC-8083)

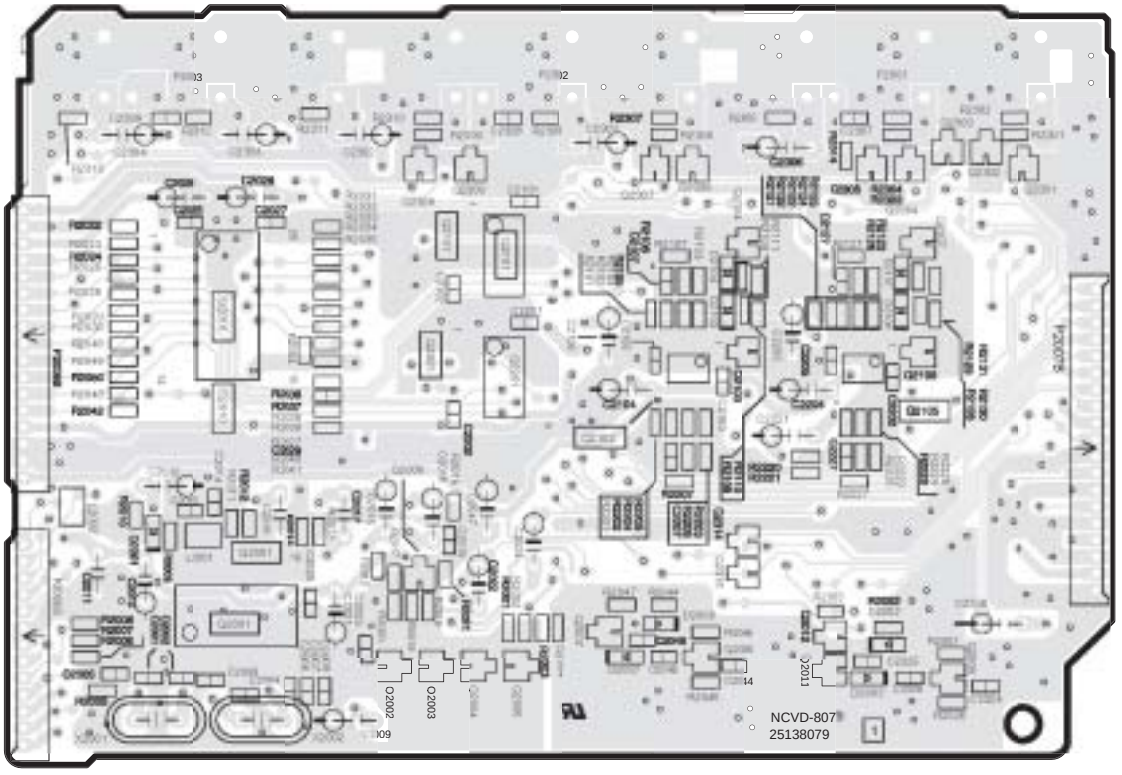
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 11



Soldering side A (Parts location side)



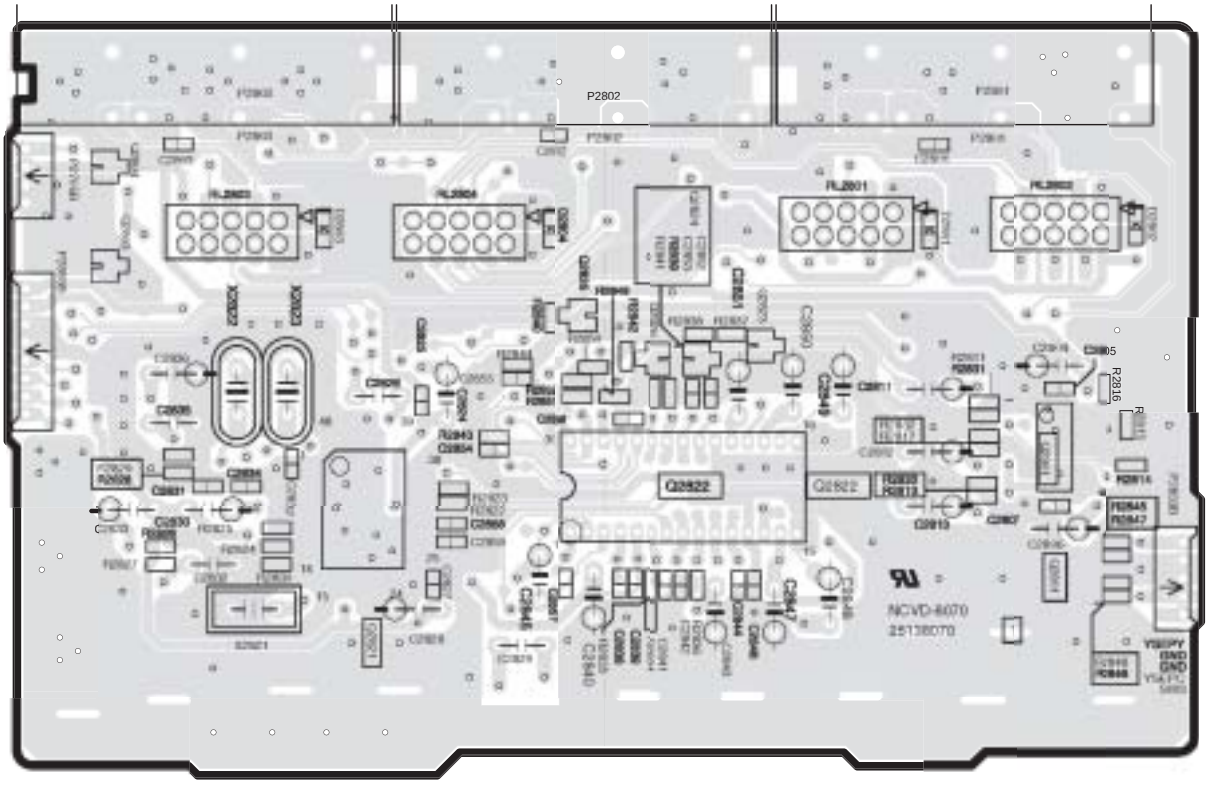
Soldering side B

U42 **COMPOSITE VIDEO PC BOARD (NAVD-8079)**

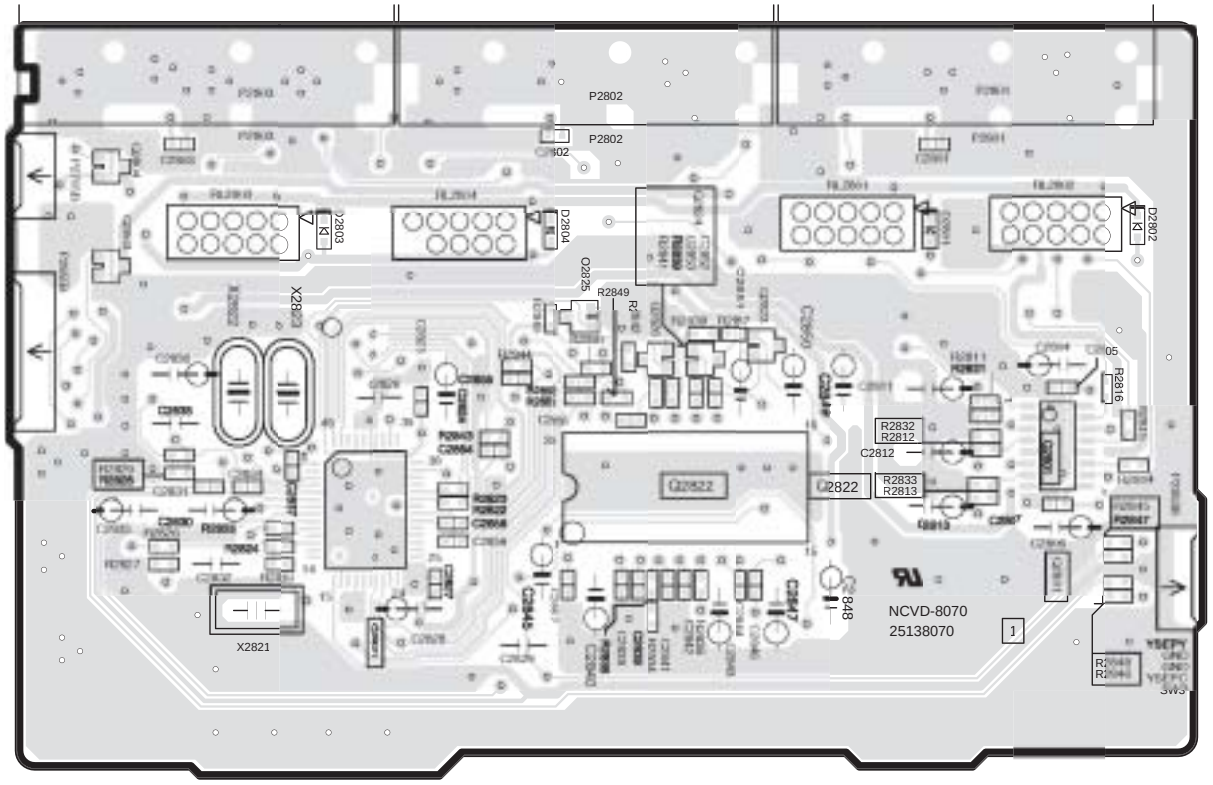
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 10-2



Soldering side A (Parts location side)



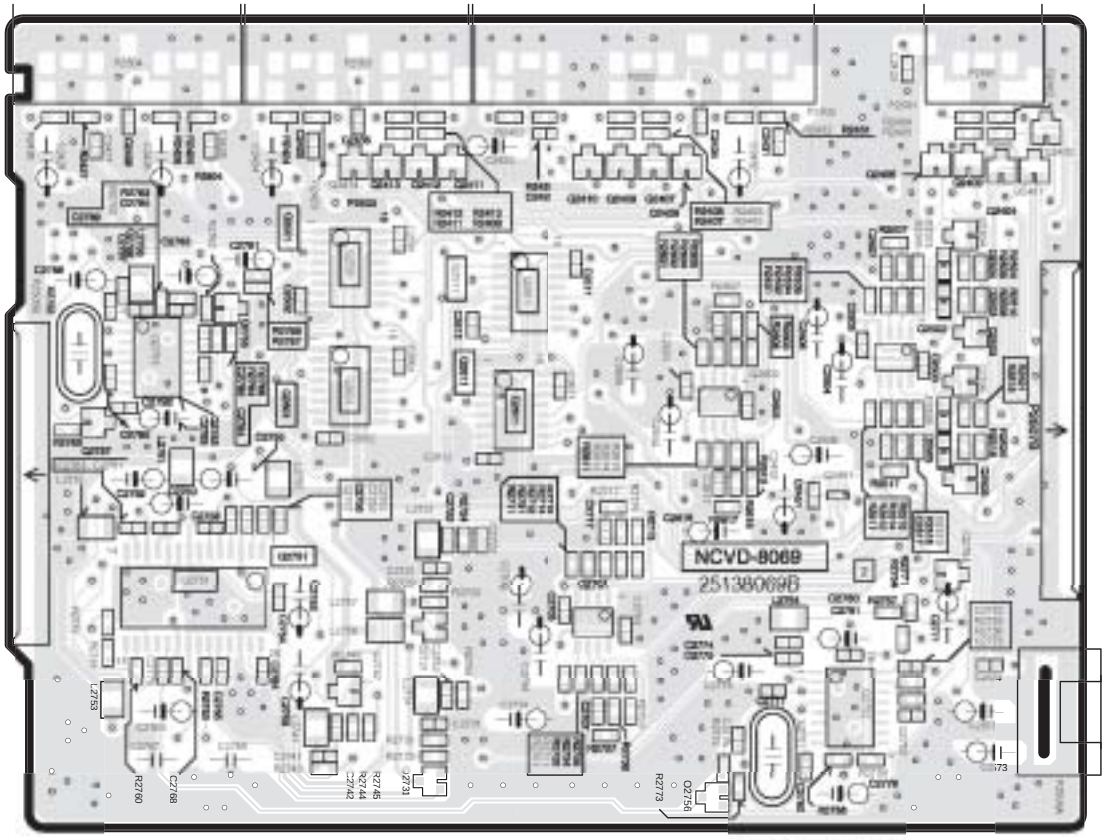
Soldering side B

U52 **COMPONENT VIDEO PC BOARD (NAVD-8070)**

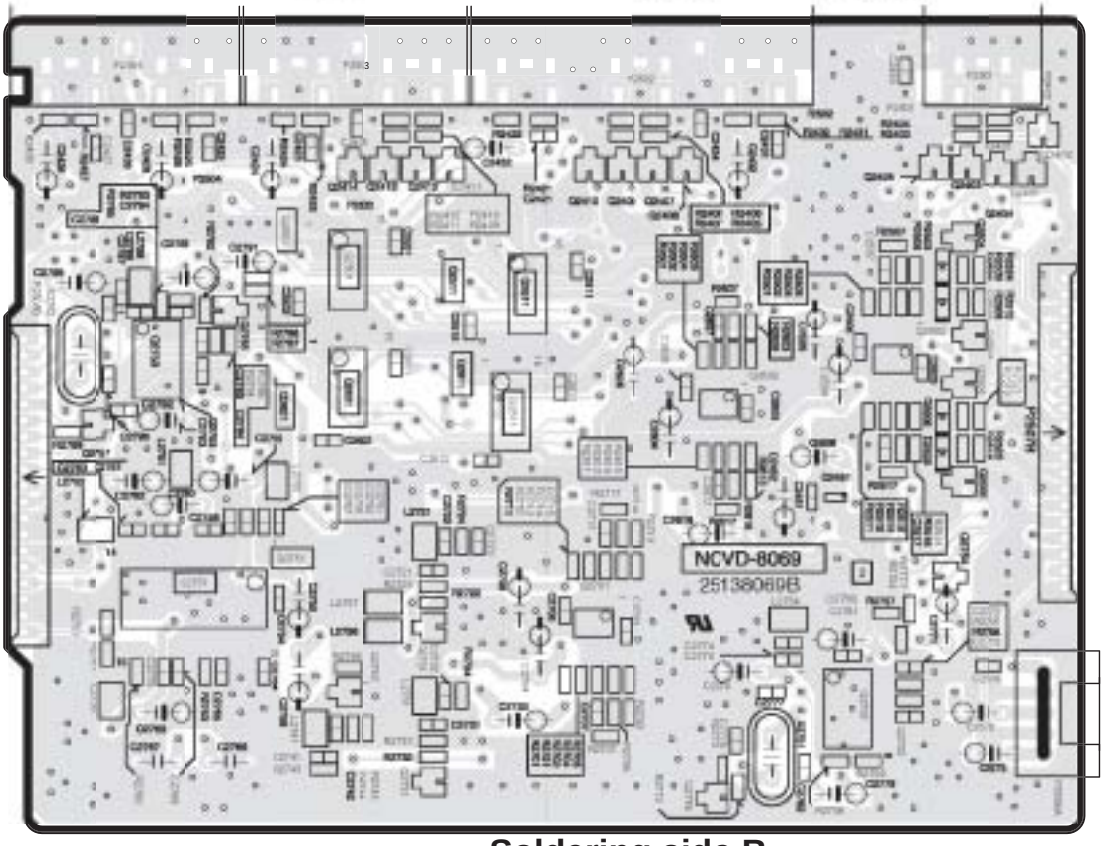
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 10-1



Soldering side A (Parts location side)

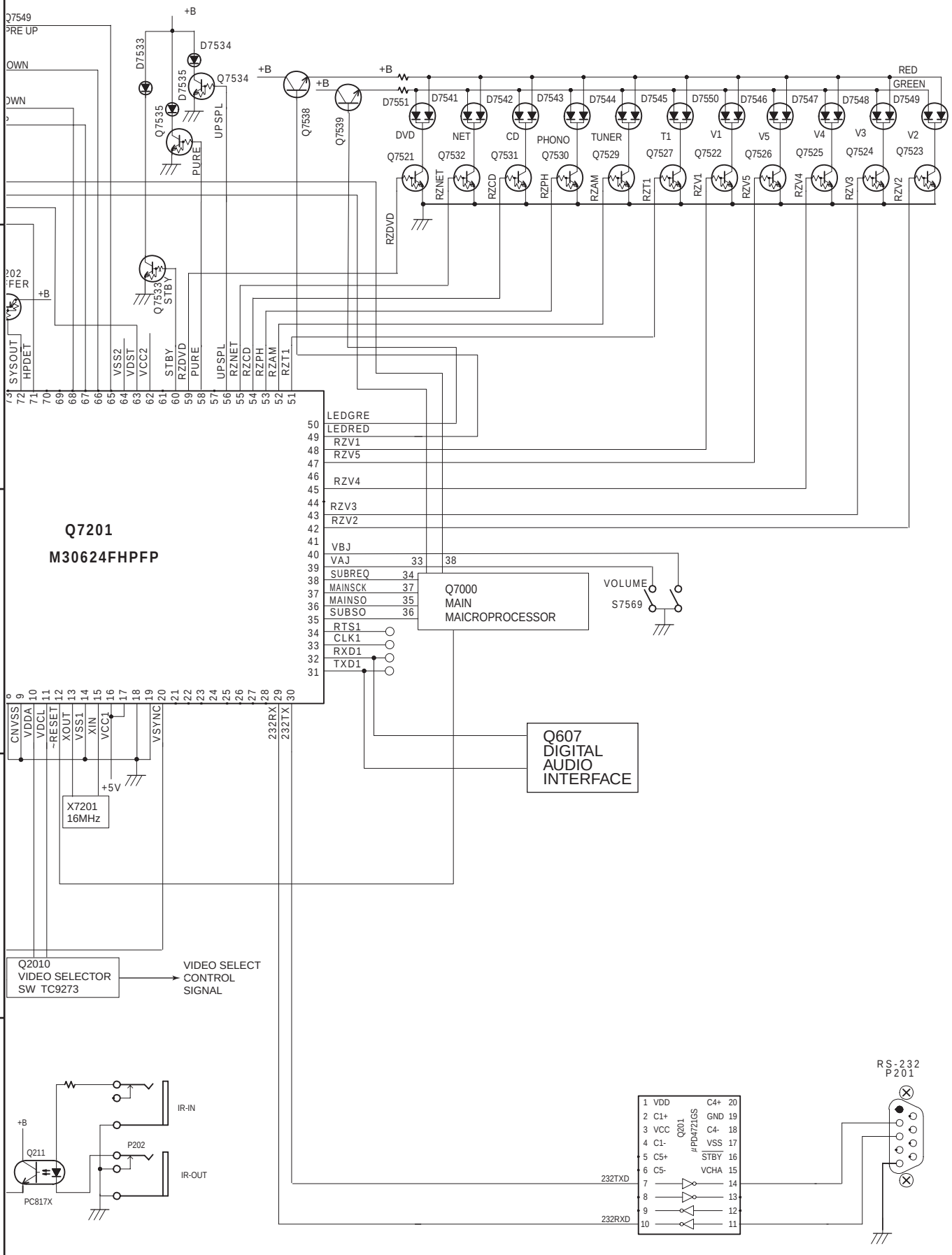


Soldering side B

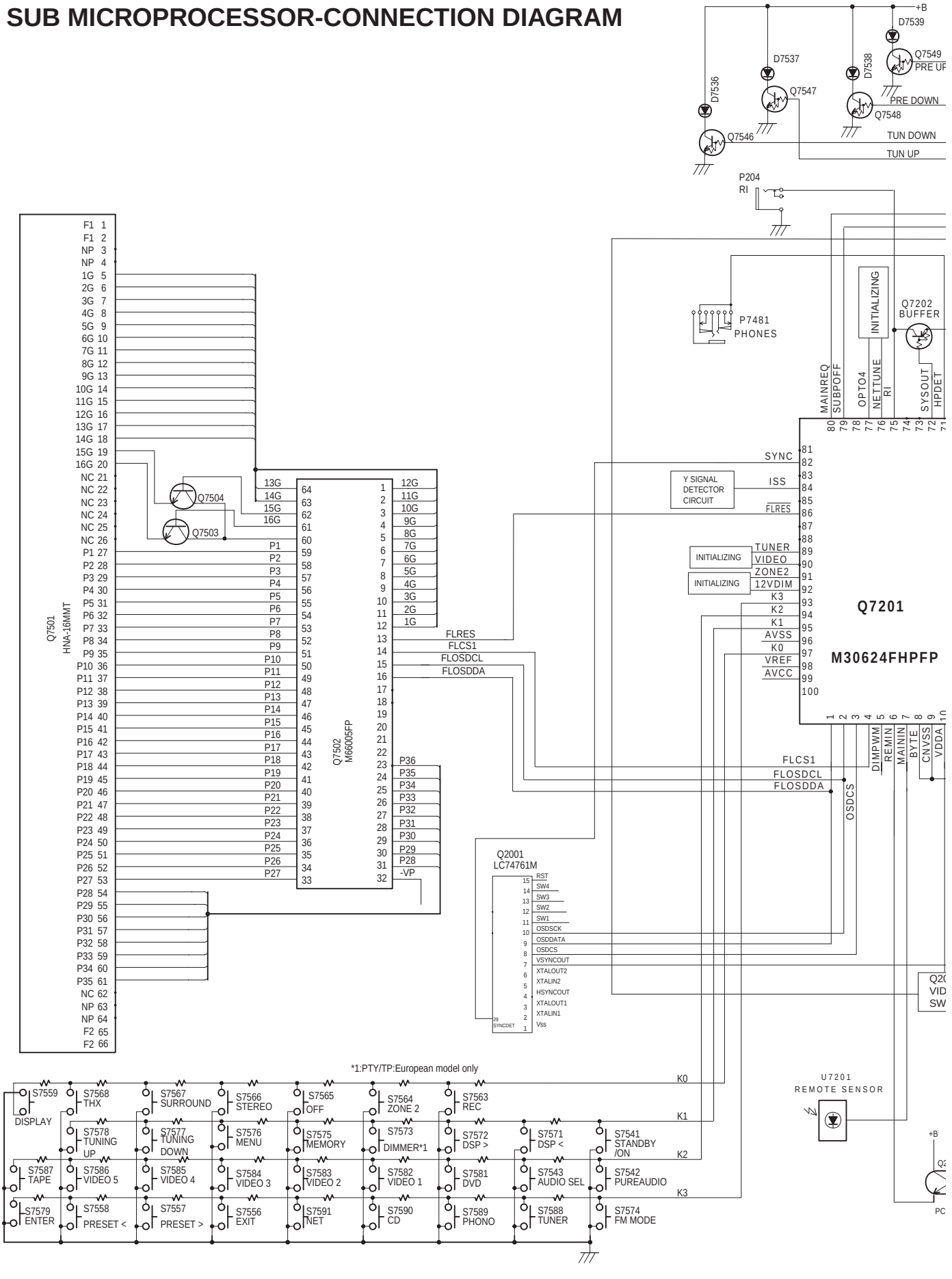
U51

S VIDEO PC BOARD
(NAVD-8069)

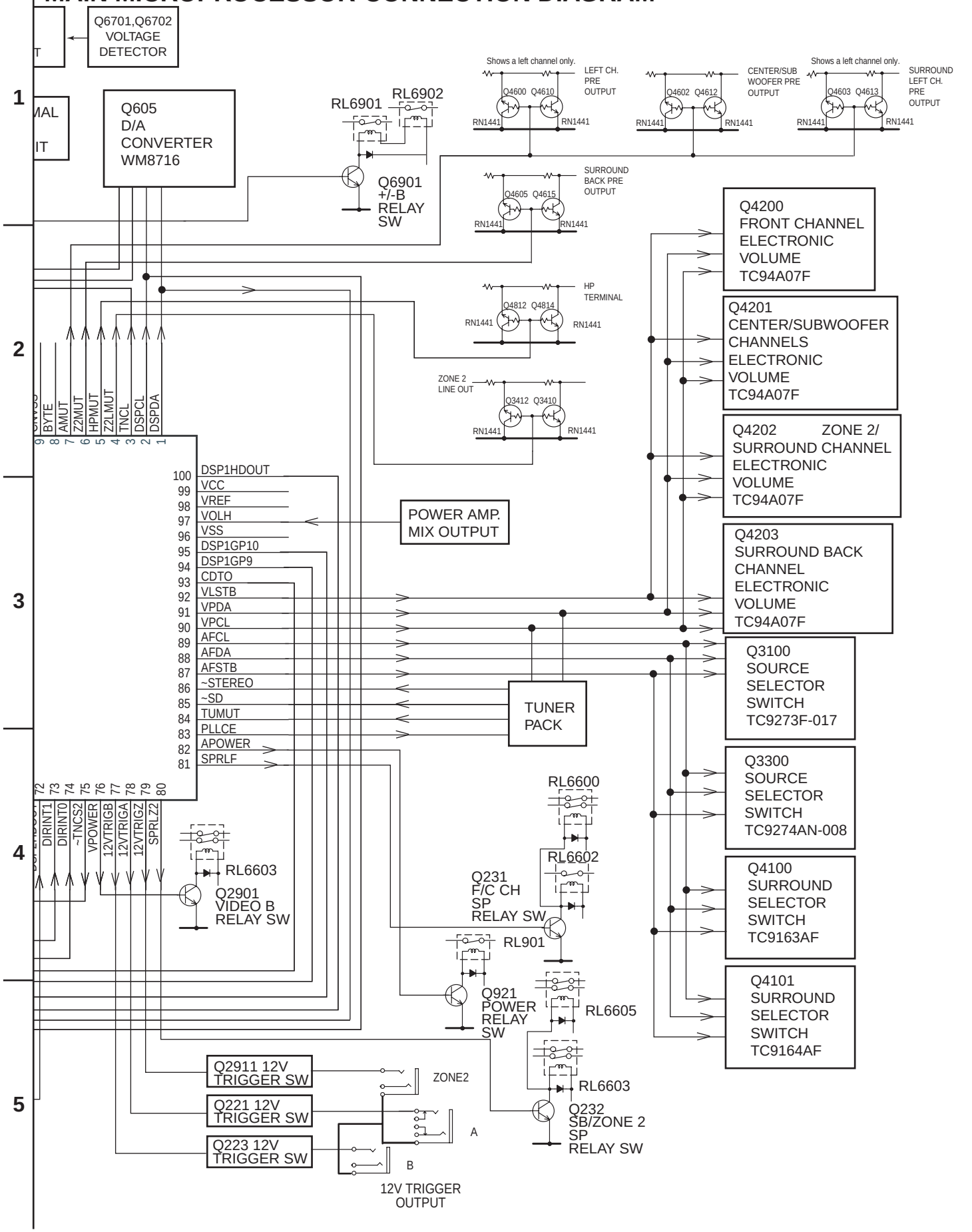
SUB MICROPROCESSOR-CONNECTION DIAGRAM



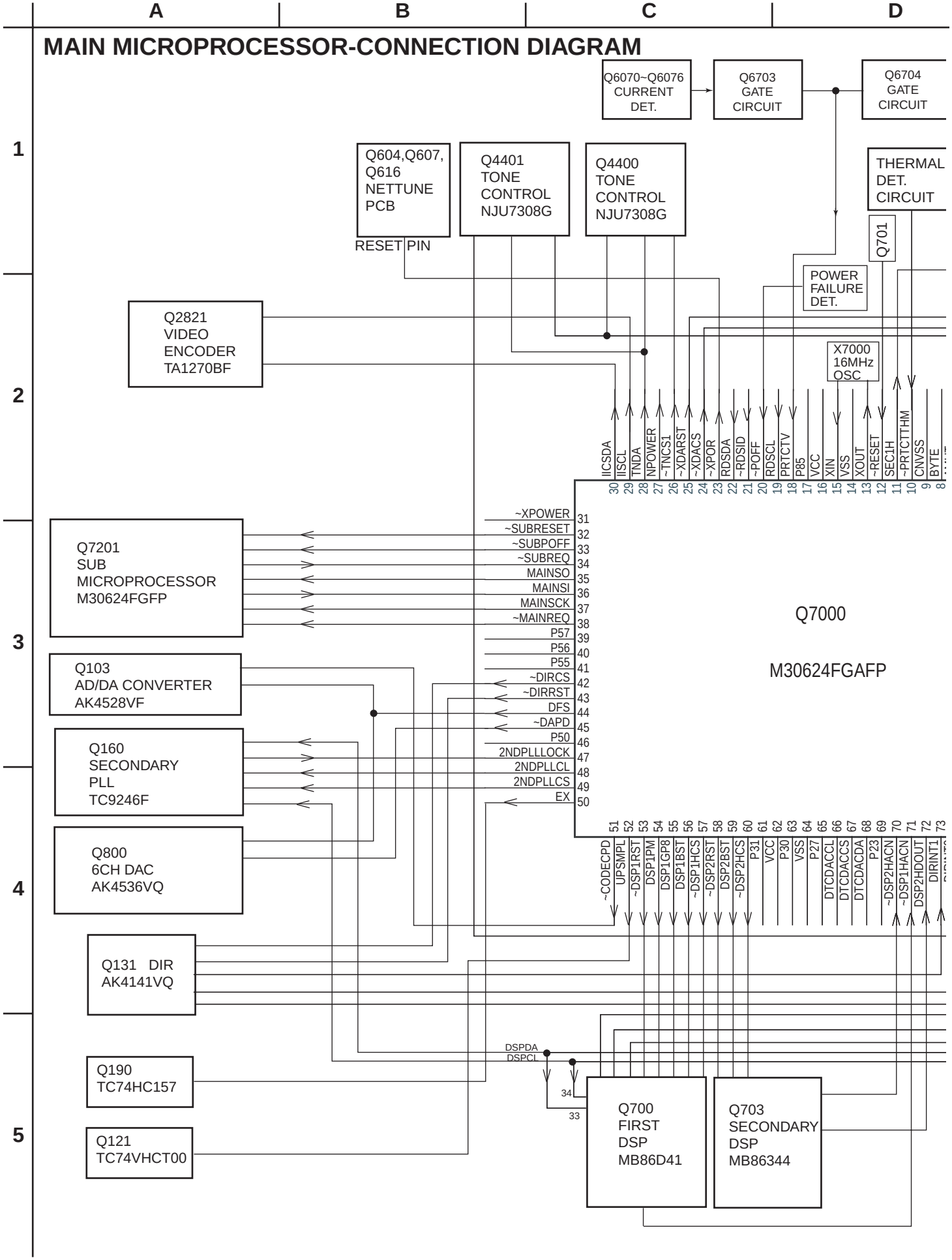
SUB MICROPROCESSOR-CONNECTION DIAGRAM



MAIN MICROPROCESSOR-CONNECTION DIAGRAM



MAIN MICROPROCESSOR-CONNECTION DIAGRAM



MAIN MICROPROCESSOR-TERMINAL DESCRIPTION

No.	Function	I/O	Description
1	DSPDA	O	Serial data output pin to transfer the data to DSP, DIR, Nettune DAC and Second PLL ICs.
2	DSPCL	O	Serial clock output pin to transfer the data to DSP, DIR and Nettune DAC ICs.
3	TNCL	CLK	Serial clock output pin for the tone control ICs.
4	Z2LMUT	O	Muting control signal output pin for line of zone 2 channel.
5	HPMUT	O	Muting control signal output pin for headphone.
6	Z2MUT	O	Muting control signal output pin for zone 2 channel when the power source is turned on.
7	AMUT	O	Muting control signal output pin of analog section.
8	VSS		External data bus width select pin.
9	VSS		Processor mode select pin
10	~PRTCTTHM	I	Detection input pin for thermal protect.
11	SEC1H	O	Primary voltage select pin for main amplifier.
12	~RESET		System reset input pin
13	XOUT		System clock output pin. Connect 16MHz ceramic resonator between #13 and #15.
14	VSS		Ground pin.
15	XIN		System clock input pin. Connect 16MHz ceramic resonator between #13 and #15.
16	VCC		Power supply pin. Apply 5V.
17		I	Not used.
18	PRTCTV	I	Detection input pin for protection circuit of abnormal voltage and current.
19	RDSCL	I	Serial clock input pin of RDS demodulator.
20	~POFF	I	Power failure detection input pin.
21	~RDSID	I	Identification input pin of RDS demodulator.
22	RDSDA	I	Serial data input pin to transfer RDS demodulator.
23	~XPOR	O	Reset output pin to multi media microprocessor when power is turned on.
24	~XDACS	O	Chip select output pin of DAC for Nettune.
25	~XDARST	O	Reset signal output pin of DAC for Nettune.
26	~TNCS1	O	Chip select output pin for tone control IC of front channel.
27	NPOWER	O	Power supply control output pin of audio circuit.
28	TNDA	O	Serial data output pin to tone control IC.
29	IICSCL	O	Serial clock output pin to Y/C, Component separation IC.
30	IICSDA	O	Serial data output pin to Y/C, Component separation IC.
31	~XPOWER	O	Power supply control output pin. Not used.
32	~SUBRESET	O	Reset signal output pin for submicroprocessor.
33	~SUBPOFF	O	Power off output pin to submicroprocessor
34	~SUBREQ	I	Transfer request signal input pin for submicroprocessor.
35	MAINSO	O	Serial data output pin to transfer data between main and submicroprocessor.
36	MAINSI	I	Serial data input pin to transfer data between main and submicroprocessor.
37	MAINSCK	O	Serial clock output pin to transfer data between main and submicroprocessor.
38	~MAINREQ	O	Request signal output pin to transfer data between main and submicroprocessor.
39	P57	O	Not used.
40	(2ndBTACT)	O	Not used.
41	P55	I	Mode setting pin to write the program on flash microprocessor.
42	~DIRCS	O	Chip select output pin to DIR(AK4114) IC.
43	~DIRRST	O	Reset output pin to DIR IC.
44	DFS	O	DFS output pin of DAC and CODEC ICs.
45	~DAPD	O	Power down output pin of DAC.
46	P50	I	Write mode setting pin of flash microprocessor.
47	K	I	Lock input pin of second PLL IC.
48	2NDPLLCL	O	Clock output pin to second PLL IC.
49	2NDPLLCS	O	Chip select output pin of second PLL IC.
50	EX	O	Input select output pin of nettune.

No.	Function	I/O	Description
51	~CODECPD	O	Power down output pin of CODEC IC.
52	UPSMPL	O	Clock select output pin for up-sampling.
53	~DSP1RST	O	Reset output pin of first DSP IC.
54	DSP1PM	O	PLL initializing output pin of first DSP IC.
55	DSP1GP8	O	PCM or Non PCM information output pin of first DSP IC.
56	DSP1BST	O	Host I/F bootstrap output pin of first DSP IC.
57	~DSP1HCS	O	Host I/F chip select output pin of first DSP IC.
58	~DSP2RST	O	Second DSP reset output pin.
59	DSP2BST	O	Host I/F bootstrap output pin of second DSP IC.
60	~DSP2HCS	O	Host I/F chip select output pin of second DSP IC.
61	(2ndBOOT)	O	"L" fixed output pin.
62	VCC		Power supply pin. Apply +5V.
63	(2ndPAGESE	O	"H" fixed output pin.
64	VSS		Power supply pin. Ground
65	(HPAGE)	O	"L" fixed output pin.
66	DTCDACCL	O	Clock output pin for DAC of DTC.D
67	DTCDACCS	O	Chip select output pin for DAC of DTC.D
68	DTCDACDA	O	data output pin for DAC of DTC.D
69	(2ndGP10)	O	"L" fixed output pin.
70	~DSP2HACN	I	Host I/F acknowledgement input pin of second DSP.2
71	~DSP1HACN	I	Host I/F acknowledgement input pin of first DSP.1.
72	DSP2HDOUT	I	Host I/F serial data output pin to second DSP IC.
73	DIRINT1	I	INT 1 input pin of DIR IC.
74	DIRINT0	I	INT 0 input pin of DIR IC.
75	~TNCS2	O	Chip select output pin to tone control IC.
76	VPOWER	O	Power supply relay control output pin of video circuit.
77	12VTRGB	O	12V trigger output pin B.
78	12VTRGA	O	12V trigger output pin A.
79	12VTRGZ	O	12V trigger output pin ZONE 2.
80	SPRLZ2	O	Speaker relay control output pin for Zone 2.
81	SPRLF	O	Speaker relay control output pin for all channels.
82	APOWER	O	Power supply relay control output pin of audio circuit.
83	PLLCE	O	Chip enable output pin to PLL IC.
84	TUMUT	O	Muting control output pin for tuner section.
85	~SD	I	Detection input pin for signal strength.
86	~STEREO	I	Detection input pin for FM stereo broadcast.
87	AFSTB	O	Strobe signal output pin of analog function switch ICs.
88	AFDA	O	Serial data output pin for function switch ICs.
89	AFCL	O	Serial clock output pin for function switch ICs.
90	VPCL	O	Serial clock output pin for electric volume and PLL ICs.
91	VPDA	O	Serial data output pin for electric volume and PLL ICs.
92	VLSTB	O	Strobe output pin of electrical volume.
93	CDT0	I	Serial data input pin for DSP and DIR ICs.
94	DSP1GP9	I	Permission information input pin to read bit stream information of first DSP.
95	DSP1GP10	I	INTREQ input pin of first DSP IC.
96	VSS		Ground pin for A/D converter.
97	VOLH	I	Input pin to measure the output voltage of main amplifier.
98	VREF		Reference voltage input pin for A/D converter.
99	VCC		Power supply pin for A/D converter.
100	DSP1HDOUT	I	Serial data output pin of host I/F of first DSP.

SUBMICROPROCESSOR-TERMINAL DESCRIPTION

No,	Function	I/O	Descriptions
1	FLOSDDA	O	Serial data output pin for FL tube driver and OSD IC.
2	FLOSDCL	O	Serial clock output pin for FL tube driver and OSD IC.
3	OSDCS	O	Chip select output pin for OSD IC
4	FLCS1	O	Chip select output pin for FL tube driver
5	DIMPWM	O	Dimmer output pin. Not used.
6	REMIN	I	Signal input pin from external remote control
7	MAININ	I	Signal input pin from remote control
8	BYTE	I	External data bus width select pin.
9	CNVSS		Power supply pin
10	VDDA	O	Serial data output pin for video function switch IC
11	VDCL	O	Serial clock input pin for video function switch IC
12	~RESET	I	System reset input.
13	XOUT	O	Connect the ceramic oscillator 16MHz.
14	VSS		Ground pin
15	XIN	I	Connect the ceramic oscillator 16MHz.
16	VCC		Power supply pin. Apply 5V.
20	VSYNC	I	Vertical synchronizing signal input pin.
24	PURE	O	Pure audio relay control output pin. Not used.
29	232RX	I	Receiving input pin of RS232C.
30	232TX	O	Sending output pin of RS232C.
31	TXD1	O	Communication signal output pin for a network processor.
32	RXD1	I	Communication signal input pin for a network processor.
33	CLK1	I	Rewrite clock input pin from flash writer.
34	RTS1	O	Rewrite response output pin to flash writer.
35	SUBSO	O	Data sending output pin to communicate between microprocessors.
36	MAINSO	I	Data receiving input pin to communicate between microprocessors.
37	MAINCL	I	Clock receiving input pin to communicate between microprocessors.
38	SUBREQ	O	Request signal output pin to communicate between microprocessors.
39	VAJ	I	Pulse signal input terminal A pin from rotary encoder.
40	VBJ	I	Pulse signal input terminal B pin from rotary encoder.
42	RZV2	O	Video 2 indicator output pin.
43	RZV3	O	Video 3 indicator output pin.
45	RZV4	O	Video 4 indicator output pin.
47	RZV5	O	Video 5 indicator output pin.
48	RZV1	O	Video 1 indicator output pin.

No,	Function	I/O	Descriptions
49	LEDRED	O	Power supply control output pin for recording indicator.
50	LEDGRE	O	Power supply control output pin for zone 2 indicator
51	RZT1	O	Tape indicator output pin.
52	RZAM	O	AM indicator output pin.
53	RZFM	O	FM indicator output pin.
54	RZPH	O	Phono indicator output pin.
55	RZCD	O	CD indicator output pin.
56	UPSPL	O	Upsampling frequency indicator control output pin
58	PURE	O	Pure audio indicator output pin.
59	RZDVD	O	DVD indicator output pin.
60	STBY	O	STANDBY/RECEIVED indicator output pin.
62	VCC		Power supply pin. Apply 5V.
63	VDST	O	Strobe output pin for video switch control output pin
64	VSS2		Power supply pin. Connect to ground.
71	HPDET	I	Headphone detect5ion input pin.
72	SYSOUT	O	System code output pin
75	SYSIN	I	System code input pin.
76	AREA1	I	Initializing input pin for band aria.
77	AREA2	I	Initializing input pin for band aria.
79	SUBPOFF	I	Power failure intercept input pin between microprocessors.
80	MAINREQ	I	Request input to communicate data between microprocessors.
82	SYNCDET	I	External synchronizing detection input pin.
84	ISS	I	S video signal detection input pin.
86	FLRES	O	Reset signal output pin to the FL tube driver IC.
89	TUNER	I	Initializing input pin about tuner.
90	VIDEO	I	Initializing input pin about video.
91	ZONE2	I	Initializing input pin about zone 2.
92	12V DIM	I	Initializing input pin about dimmer.
93	K3	I	Operation key connection pin.
94	K2	I	Operation key connection pin.
95	K1	I	Operation key connection pin.
96	VSS		Power supply pin for A/D converter.
97	K0	I	Operation key connection pin.
98	VREF		Reference voltage input pin for A/D converter.
99	AVCC		Power supply pin for A/D converter. Apply 5V.

DTR-7.4

ADJUSTMENT AND CONFIRMATION PROCEDURES 1

Idling current adjustment

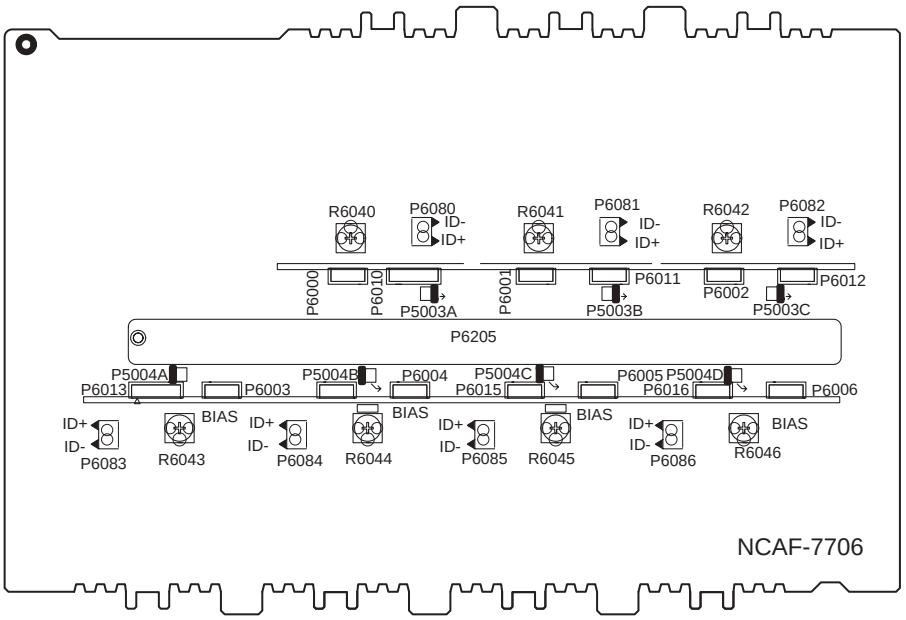
Before Idling current adjustment, turn the trimming resistors R6040 to R6046 to counter-clockwise.
Connect the DC voltmeter at the sockets P6080 to P6086.
After turn POWER to ON, adjust the trimming resistors R6040, R6041 and R6042 so that the reading of voltmeter becomes 11 mV. (Front and center channels)
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 6.0 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.

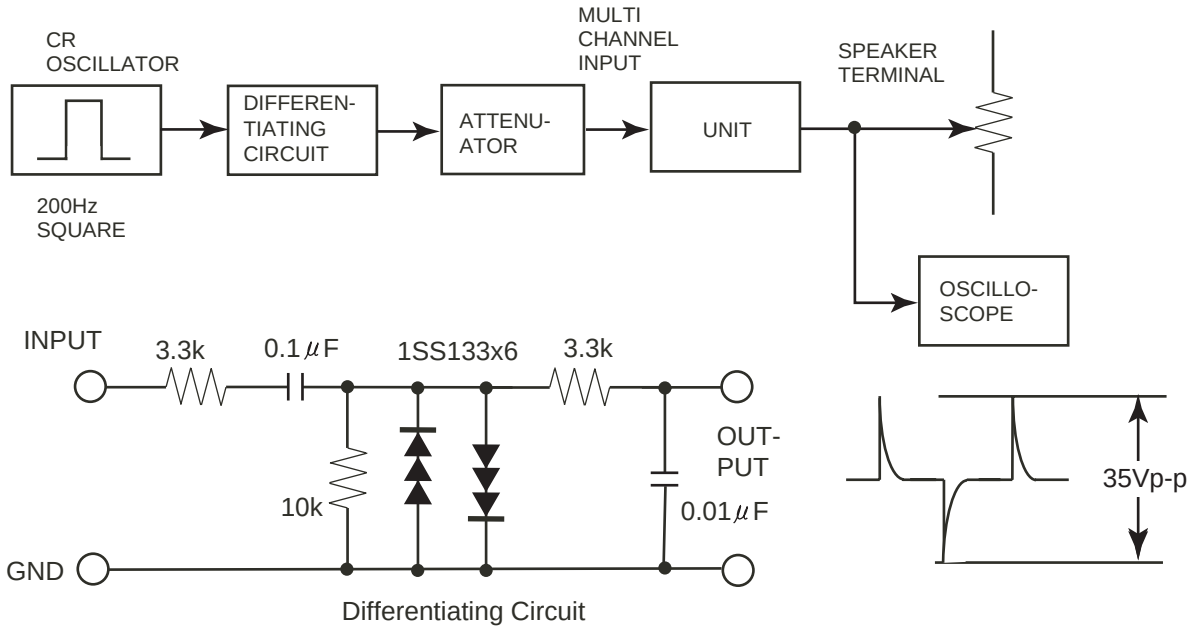
2. Confirmation of DC detection circuit

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

ADJUSTMENT AND CONFIRMATION PROCEDURES 2

3. Confirmation of Current detection circuit

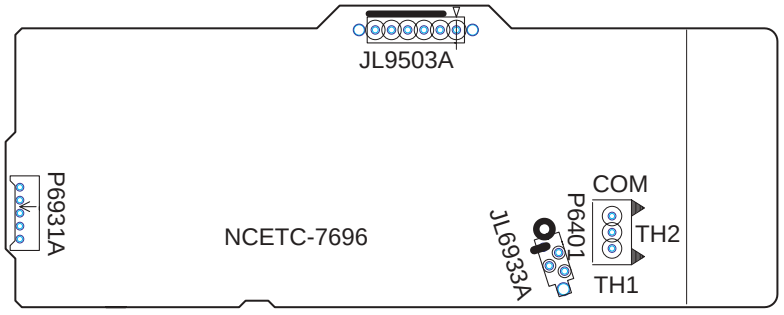
Set the unit to "TEST-1-00".
Connect the differentiating circuit and apply the 200Hz square signal to MULTI CHANNEL INPUT terminal of each channel.
Adjust the attenuator or Volume so that the output level becomes 35V p-p.
Confirm that the speaker relay does not turn OFF when a 3.0 ohm load is connected.
Confirm that the speaker relay turns OFF when a 1.5 ohm load is connected.



Differentiating Circuit

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.



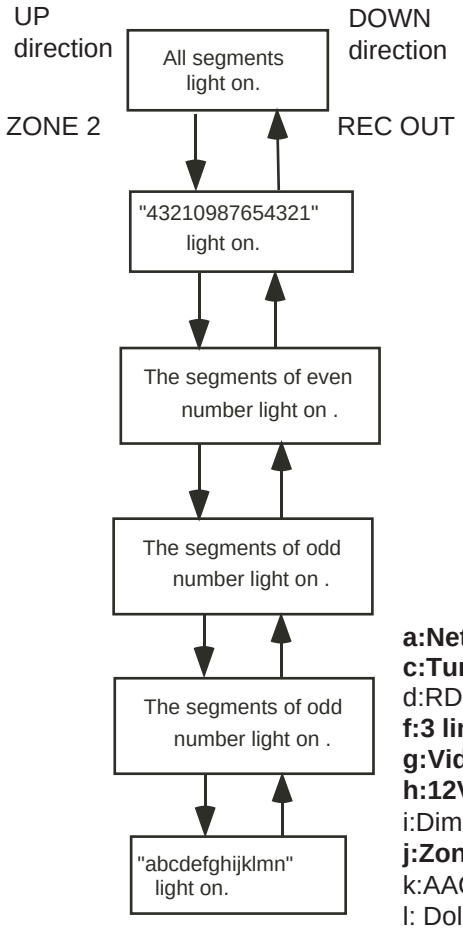
ADJUSTMENT AND CONFIRMATION PROCEDURES 3

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



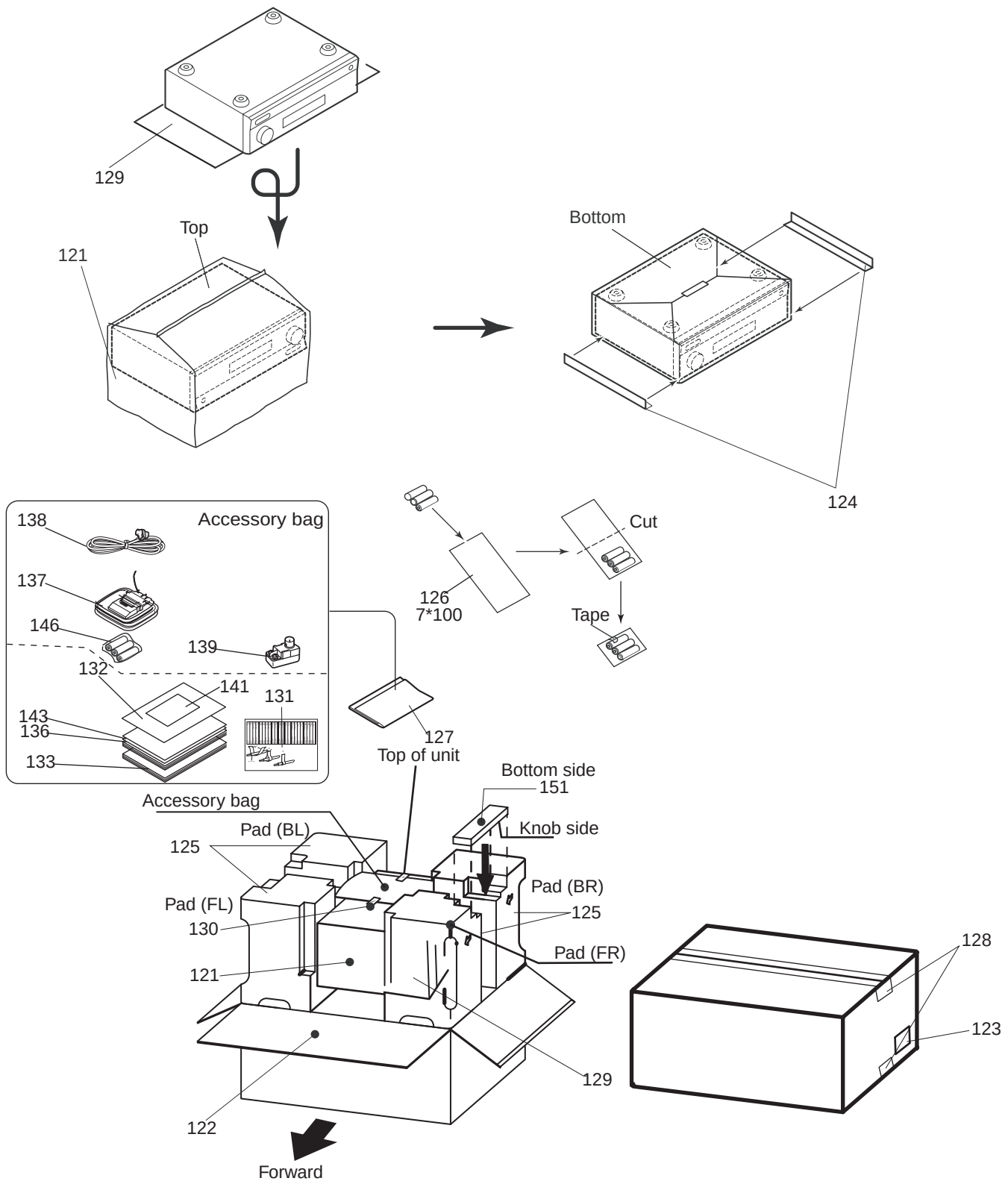
MDD N_U_N3CA_L____
MPA N_E_P3CA_L____

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
i:Dimmer interlock function "D":avaiable
j:Zone 2 Lineout function "L":avaiable
k:AAC function "A":avaiable
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.

PACKING VIEW



EXPLODED VIEW-PARTS LIST

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

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

NOTE: <D>: 120V model only <A>:Australian model only

REF. NO.	PART NO.		DESCRIPTION
1	27111304		Front bracket
2	27141787		Retainer HP
3	28133387		Back plate
4	28135278		Badge
5	27130745		Bracket
6	27130869		Bracket, heat sink
7	27130870A		Bracket PT
11	27100408-1B		Chassis
12	28191948		Clear plate
13	27255004		CS-1U,Clip
14	28184817-1		Top cover
15	28141467		Cushion
16	28141484		Cushion
17	28141494		Cushion
19	28141546		Cushion DG
20	28141547		Cushion PI
21	28141548		Cushion CH
23	28141563		t3*50*10,Cushion
30	27215363		Decorative frame
32	27212539		Front panel
34	28198905		Facet
35	28198933		Facet 5
36	28198936		Facet 6
39	27160489A		Heat sink
44	27190965		Holder
45	27190693A		KGLS-6RT,Holder
46	27190266		KGLS-12RT,Holder
47	27190164		KGLS-14S,Holder
48	27191112		KGPS-6RF,Holder
49	27190470		KGLS-18S,Holder
51	28325756		Knob, standby
53	28325913		Knob, volume
55	28325964A		Knob CL
56	28325965		Knob, tuning
57	29362772		Label, cover
58	29363509		Label, display
59	29363409-1		Label PT
60	27175319B		Leg
61	880016		P3035B,Plastic rivet
64	27123167		Rear panel <D>
	27123168		Rear panel <A>
66	27141797		Retainer, fan
68	27141798		Retainer R
69	27141799		Retainer L
70	27141681		Retainer PWB
72	801606		3SMH10W.SW+15B(CU),Special screw
73	838440089		4TTB+8C(BC),Self-tapping screw
74	801612		3TTB+8B(CU),Self-tapping screw
77	830440089		4TTC+8C(BC),Self-tapping screw
78	831430088		3TTW+8B(BC),Self-tapping screw
80	838430088		3TTB+8B(BC),Self-tapping screw
82	838430107		3TTB+10S(BC),Self-tapping screw
84	838450108		5TTB+10B(BC),Self-tapping screw
85	838930088		3TTB+8B(UN),Self-tapping screw
86	27225149		Shield case
87	27150471		Shield plate AMP

REF. NO.	PART NO.		DESCRIPTION
88	27150474		Shield plate, wire
89	27150485		Shield plate
90	27150470		Shield plate, fan
91	27270438		t0.5xϕ8xϕ3.2,Spacer
92	29110083		Tape, cloth
94	87643010		W3*10F(BC),Washer
95	260258		Wire tie
96	260208		Wire tie
97	8631901		N-9F(P 0.75),Nut
99	223025		AC262,Isolated plate
100	24502310		D09T-24PG10(EX),Fan
104	29363195		Label, hookup <D>
108	29363264		Label MAC
110	28141520A		t6.5x40x25,Cushion
F6901,F6902	252199	!	10A-UL,Fuse <D>
	252100	!	10A-EAK,Fuse <A>
F901	252199	!	10A-UL,Fuse <D>
F902	252077,	!	4A-SE-EAK,
	252243 or	!	4A-SE-TL250V or
	252277	!	4A-SE-TL250V <A>
F903	252164 or	!	5A-UL/T-237 or
	252258	!	5A-T/UL-ST2,Fuse <D>
	252075,	!	2.5A-SE-EAK,
	252241 or	!	2.5A-SE-TL250V or
	252275	!	2.5A-SE-TL250V,Fuse <A>
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 <A>
F9501A	29363313	!	T2.5AL1.6AL250V, Label, fuse <A>
F9503,F9504	252158 or	!	1.6A-UL/T-237 or
	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 <A>
P1010	2047151012		NCFC7-151012,Flat cable
P2901	2047191012		NCFC7-191012,Flat cable
P6009	27141825		Retainer, bus
P602	2009990753UL		NSAS-8P1059,Socket
P603	204406027		NCFC4-062512,Flat cable
P6205	27141826		Retainer, bus
P7201	2047312512		NCFC7-312512,Flat cable
P7701	2047051012		NCFC7-051012,Flat cable
Q6050~Q6056	2202823 or	*	2SC5200-O or
	2202822	*	2SC5200-R,Transistor
Q6060~Q6066	2202813 or	*	2SA1943-O or
	2202812	*	2SA1943-R,Transistor
T901	2301715	!	NPT-1482D,Power transformer <D>
	2301654	!	NPT-1454P,Power transformer <A>
U1	1A995546-2H		NADIS-7746-2H,Display circuit PC board ass'y <D>
	1A995546-2J		NADIS-7746-2J,Display circuit PC board ass'y <A>
U2	1A995547-2H		NAETC-7747-2H,Standby switch PC board ass'y <D>
	1A995547-2J		NAETC-7747-2J,Standby switch PC board ass'y <A>
U3	1A995548-2H		NAETC-7748-2H,Master volume PC board ass'y <D>
	1A995548-2J		NAETC-7748-2J,Master volume PC board ass'y <A>
U4	1A995549-2H		NAETC-7749-2H,Hedphone terminal PC board ass'y <D>
	1A995549-2J		NAETC-7749-2J,Hedphone terminal PC board ass'y <A>
U5	1A996521-2Q		NAETC-7721-2Q,Front video PC board ass'y
U6	1A996522-2Q		NAETC-7722-2Q,Optical input PC board ass'y
U7	1A996587-2P		NADG-7687-2P,DSP circuit PC board ass'y
U8	1A996562-3		NADG-7662-3,Net-tune PC board ass'y
U11	1A996518-2Q		NAAF-7718-2Q,Preamplifier PC board ass'y
U12	1A996519-2Q		NAAF-7719-2Q,Audio terminal PC board ass'y
U13	1A996520-2Q		NAAF-7720-2Q,Video terminal PC board ass'y
U14	1A996523-2Q		NAETC-7723-2Q,PC board for holder
U15	1A996524-2Q		NAETC-7724-2Q,PC board for holder

REF. NO.	PART NO.		DESCRIPTION
U21	1A996506-2M		NAAF-7706-2M,Power amplifier PC board ass'y <D>
	1A996506-2N		NAAF-7706-2N,Power amplifier PC board ass'y <A>
U22	1A996507-2M		NAAF-7707-2M,Driver circuit PC board ass'y <D>
	1A996507-2N		NAAF-7707-2N,Driver circuit PC board ass'y <A>
U23	1A996508-2M		NAPS-7708-2M,Constant voltage PC board ass'y <D>
	1A996508-2N		NAPS-7708-2N,Constant voltage PC board ass'y <A>
U24	1A996514-2N		NAETC-7714-2N,Thermal detector PC board ass'y <A>
U26	1A996590-2T		NAAF-7690-2T,F/C driver circuit PC board ass'y <D>
	1A996590-2U		NAAF-7690-2U,F/C driver circuit PC board ass'y <A>
U27	1A996591-2T		NAPS-7691-2T,Primary circuit PC board ass'y <D>
	1A996591-2U		NAPS-7691-2U,Primary circuit PC board ass'y <A>
U28	1A996592-2T		NAPS-7692-2T,Bias selector PC board ass'y <D>
	1A996592-2U		NAPS-7692-2U,Bias selector PC board ass'y <A>
U30	1A996594-2T		NAETC-7694-2T,Speaker terminal PC board ass'y <D>
	1A996594-2U		NAETC-7694-2U,Speaker terminal PC board ass'y <A>
U31	1A996595-2T		NAETC-7695-2T,Surround speaker terminal PC board ass'y <D>
	1A996595-2U		NAETC-7695-2U,Surround speaker terminal PC board ass'y
U32	1A996596-2T		NAETC-7696-2T,Fan drive circuit PC board ass'y <D>
	1A996596-2U		NAETC-7696-2U,Fan drive circuit PC board ass'y <A>
U33	1A996597-2U		NAETC-7697-2U,Thermal detector PC board ass'y <A>
U35	1A996500-2T		NAETC-7700-2T,AC inlet PC board ass'y <D>
	1A996500-2U		NAETC-7700-2U,AC inlet PC board ass'y <A>
U36	1A996501-2U		NAETC-7701-2U,PC board for holder <A>
U37	1A996502-2T		NAETC-7702-2T,PC board for holder <D>
	1A996502-2U		NAETC-7702-2U,PC board for holder <A>
U41	1A996578-1P		NAAR-8078-1P,Main connector PC board ass'y <D>
	1A996578-1Q		NAAR-8078-1Q,Main connector PC board ass'y <A>
U42	1A996579-1P		NAVD-8079-1P,Component video PC board ass'y <D>
	1A996579-1Q		NAVD-8079-1Q,Component video PC board ass'y <A>
U45	1A996583-1P		NAETC-8083-1P,Control terminal PC board ass'y <D>
	1A996583-1Q		NAETC-8083-1Q,Control terminal PC board ass'y <A>
U47	1A996585-1P		NAETC-8085-1P,Thermal detector PC board ass'y <D>
U48	1A996586-1P		NAETC-8086-1P,Thermal detector PC board ass'y <D>
U51	1A996569-1L		NAVD-8069-1L,S video PC board ass'y <D>
	1A996569-1M		NAVD-8069-1M,S video PC board ass'y <A>
U52	1A996570-1L		NAVD-8070-1L,Component video PC board ass'y <D>
	1A996570-1M		NAVD-8070-1M,Component video PC board ass'y <A>
U55	1A996573-1L		NAETC-8073-1L,S video PC board ass'y <D>
	1A996573-1M		NAETC-8073-1M,S video PC board ass'y <A>
U61	240146,		FAE385-A02F,
	240134A or		TFCE1U114B or
	240138A		ENG06501QR,Tuner pack <D>
	240147,		FAE485-E02F,
	240135 or		TFCE1E512A or
	240139A		ENG07501QR,Tuner pack <A>

PACKING-PARTS LIST			
REF. NO.	**PART NO.**		**DESCRIPTION**
121	29100153		1020x770,Polybag
122	29054095A		Carton box
123	29363519		Label UPC
124	29092135		Pad
125	29092125B		Pad
126	29100217		t0.1*70*100,Poly bag
127	29100097-1A		350*250,Poly bag
128	29110148		Tape PP
129	29095960		Protection sheet
130	29110149		Tape, cellophane
131	29363059A		Label, speaker cable
132	29355450		Instruction sheet, caution
133	29343586		Instruction manual E
136	29343587		Instruction manual, digest
137	232140		NMA-3057,AM loop antenna
138	292191		FM antenna
139	25065462		YAE21-0237,FM antenna adaptor <A>
141	29365089		Warranty card <D>
143	29343594		Instruction manual E, net-tune
146	3010054		R6/AA(UM-3), Battery
151	24140550		RC-550M,Remote controller
P901	253297KAW or	!	AS-UC-2 or
	253352TES	!	AS-UC-2,Power supply cord <D>
	253311VOL	!	AS-SAA,Power supply cord <A>

PRINTED CIRCUIT BOARD-PARTS LIST

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

NOTE: <D>: 120V model only <A>:Australian model only

DISPLAY CIRCUIT PC BOARD (NADIS-7746-2H/2J)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q7501	212245 or	16-BT-115GNK or
	212234	HNA-16MM40T
	ICs	
Q7201	22242003R3W	M30626FHPFP
Q7502	22241680AR2	M66005-0001AFP
	Remote sensor	
U7201	241352	SPS-444-1-VP
	Transistors	
Q7202	2216230R2 or	KRA103S or
	2214540R2	RN2403
Q7503,Q7504	2216175R2 or	KTC3875-GR or
Q7538,Q7539	2213145R2	2SC2712-GR
Q7521~Q7527	2216190R2 or	KRC102S or
Q7529~Q7532	2214470R2	RN1402
Q7546~Q7549	2216190R2 or	KRC102S or
	2214470R2	RN1402
	Diodes	
D7201,D7202	223234R2 or	1SS352 or
D7203	224490510R2 or	UDZ5.1B or
	224550510R2	UDZS5.1B,Zener
D7204,D7502	223269R2	1SS355
D7501	224491100R2 or	UDZ11B or
	224551100R2	UDZS11B,Zener
D7536~D7539	225291D	SEL4910D-D
D7541~D7551	225375	SML1216C
	Coils	
L7201	231237M022R2 or	NCH-1471 or
	233533M022R2	NCH-1587-022M
R7201,R7202	230958R1	BK1608LM182-T
	Oscillator	
X7201	3010322	CST16.00MXW0C1,Ceramic
	Capacitors	
C7201,C7202	355721019	CE04W6.3V-100M,Elect.
C7203,C7204	375524744	MMT50V-474J,Plastic film
C7206	332161040R1	CK725F1E-104Z1, Ceramic
C7207	355721019	CE04W6.3V-100M,Elect.
C7208	332161040R1	CK725F1E-104Z1, Ceramic
C7213,C7214	332101025R1	CK725B1H-102K1,Ceramic
C7293~C7295	332101025R1	CK725B1H-102K1,Ceramic
C7297	332101025R1	CK725B1H-102K1,Ceramic
C7501,C7502	332184740R1	CK725F1A-474Z1,Ceramic
C7503	355721019	CE04W6.3V-100M,Elect.
C7504,C7508	342101014R1	CC725CH1H-101J1,Ceramic
C7505,C7507	332161040R1	CK725F1E-104Z1, Ceramic
C7506	375524744	MMT50V-474J,Plastic film
C7509	332184740R1	CK725F1A-474Z1,Ceramic
C7510	355783309	CE04W50V-33M,Elect.
	Resistors	
R7203~R7207	435031024R1	RN72K1J-102JE,Carbon
R7209~R7212	435031024R1	RN72K1J-102JE,Carbon
R7218,R7219	435031034R1	RN72K1J-103JE,Carbon
R7220,R7263	435031024R1	RN72K1J-102JE,Carbon
R7229,R7230	435032214R1	RN72K1J-221JE,Carbon
R7231~R7234	435031014R1	RN72K1J-101JE,Carbon
R7235~R7238	435032214R1	RN72K1J-221JE,Carbon
R7239,R7240	435031034R1	RN72K1J-103JE,Carbon
R7242,R7243	435031034R1	RN72K1J-103JE,Carbon

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R7245	435031034R1		RN72K1J-103JE,Carbon	
R7247,R7248	435031034R1		RN72K1J-103JE,Carbon	
R7249,R7250	435034724R1		RN72K1J-472JE,Carbon	
R7251~R7256	435031034R1		RN72K1J-103JE,Carbon	
R7258~R7260	435031034R1		RN72K1J-103JE,Carbon	
R7265~R7268	435031034R1		RN72K1J-103JE,Carbon	
R7271,R7282	435031034R1		RN72K1J-103JE,Carbon	
R7272	435032214R1		RN72K1J-221JE,Carbon	
R7275	435034724R1		RN72K1J-472JE,Carbon	
R7277	435030004R1		RN72K1J-000JE,Carbon	
R7279,R7280	435031024R1		RN72K1J-102JE,Carbon	
R7284,R7286	435031034R1		RN72K1J-103JE,Carbon	
R7289	435030004R1		RN72K1J-000JE,Carbon <D>	
R7289	435031034R1		RN72K1J-103JE,Carbon <A>	
R7290	435033334R1		RN72K1J-333JE,Carbon <A>	
R7293~R7295	435034724R1		RN72K1J-472JE,Carbon	
R7297	435034724R1		RN72K1J-472JE,Carbon	
R7301	435032244R1		RN72K1J-224JE,Carbon	
R7309,R7329	435031034R1		RN72K1J-103JE,Carbon	
R7315,R7316	435031024R1		RN72K1J-102JE,Carbon	
R7330	435034724R1		RN72K1J-472JE,Carbon	
R7338~R7340	435031034R1		RN72K1J-103JE,Carbon	
R7371,R7376	435031034R1		RN72K1J-103JE,Carbon	
R7379,R7380	435031034R1		RN72K1J-103JE,Carbon	
R7382	435031024R1		RN72K1J-102JE,Carbon	
R7386	435031034R1		RN72K1J-103JE,Carbon	
R7389	435033334R1		RN72K1J-333JE,Carbon <A>	
R7390	435031034R1		RN72K1J-103JE,Carbon <D>	
R7390	435035634R1		RN72K1J-563JE,Carbon	
R7391,R7392	435031034R1		RN72K1J-103JE,Carbon	
R7393~R7395	435032724R1		RN72K1J-272JE,Carbon	
R7397	435032724R1		RN72K1J-272JE,Carbon	
R7431	435032214R1		RN72K1J-221JE,Carbon	
R7432,R7547	435032224R1		RN72K1J-222JE,Carbon	
R7490~R7497	435034714R1		RN72K1J-471JE,Carbon	
R7501,R7502	435032214R1		RN72K1J-221JE,Carbon	
R7504	435032734R1		RN72K1J-273JE,Carbon	
R7505~R7509	435033314R1		RN72K1J-331JE,Carbon	
R7511~R7526	435031034R1		RN72K1J-103JE,Carbon	
R7538	435031814R1		RN72K1J-181JE,Carbon	
R7539	435031514R1		RN72K1J-151JE,Carbon	
R7541,R7542	435033314R1		RN72K1J-331JE,Carbon	
R7543,R7552	435034714R1		RN72K1J-471JE,Carbon	
R7544,R7553	435035614R1		RN72K1J-561JE,Carbon	
R7545,R7554	435038214R1		RN72K1J-821JE,Carbon	
R7546,R7555	435031224R1		RN72K1J-122JE,Carbon	
R7548,R7557	435033924R1		RN72K1J-392JE,Carbon	
R7551,R7558	435031234R1		RN72K1J-123JE,Carbon	
R7556,R7566	435032224R1		RN72K1J-222JE,Carbon	
R7562,R7564	435038214R1		RN72K1J-821JE,Carbon	
R7563,R7572	435035614R1		RN72K1J-561JE,Carbon	
R7565,R7575	435031224R1		RN72K1J-122JE,Carbon	
R7567,R7577	435033924R1		RN72K1J-392JE,Carbon	
R7571	435034714R1		RN72K1J-471JE,Carbon	
R7573	435038214R1		RN72K1J-821JE,Carbon	
R7574	435033314R1		RN72K1J-331JE,Carbon	
R7576	435032224R1		RN72K1J-222JE,Carbon	
R7578	435031234R1		RN72K1J-123JE,Carbon	
R7581,R7583	435030004R1		RN72K1J-000JE,Carbon	
R7585,R7587	435030004R1		RN72K1J-000JE,Carbon	
	Switches			
S7542	25035714 or		NPS-111-S677 or	
S7556~S7559	25035718		NPS-111-S681	
S7563~S7568	25035714 or		NPS-111-S677 or	
S7571~S7579	25035718		NPS-111-S681	
S7581~S7591	25035714 or		NPS-111-S677 or	
	25035718		NPS-111-S681	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Sockets			
JL7202A	25051089		NSCT-5P876	
JL7203A	25051096		NSCT-12P883	
P7201A	25051875		NSCT-31P1662	
P7559A	25051087		NSCT-3P874	
	Plug			
P7203	25056056		NPLG-8P1006	
	Holder			
Q7501A	27191074A		(FL)	
STANDBY SWITCH PC BOARD (NAETC-7747-2H/2J)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Transistors			
Q7533~Q7535	2216190R2 or		KRC102S or	
	2214470R2		RN1402	
	Diodes			
D7533	225290		SEL4110R	
D7534	225292D		SEL4310G-D	
D7535	225374		SEL2E10C	
	Resistors			
R7534,R7537	435034714R1		RN72K1J-471JE,Carbon	
R7540	435034714R1		RN72K1J-471JE,Carbon	
R7589,R7590	435032714R1		RN72K1J-271JE,Carbon	
	Switches			
S7541,S7543	25035714 or		NPS-111-S677 or	
	25035718		NPS-111-S681	
	Sockets			
JL7201A	25051108		NSCT-4P895	
JL7203B	25051096		NSCT-12P883	
MASTER VOLUME PC BOARD (NAETC-7748-2H/2J)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Capacitors			
C7559,C7569	332161040R1		CK725F1E-104Z1, Ceramic	
	Rotary encoder			
S7569	25065611		EC16B24C25	
	Socket			
P7559B	25051087		NSCT-3P874	
HEADPHONE TERMINAL PC BOARD (NAETC-7749-2H/2J)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Capacitors			
C7481,C7482	342101014R1		CC725CH1H-101J1,Ceramic	
C7483	332161040R1		CK725F1E-104Z1, Ceramic	
	Terminal			
P7481	25045385		YKB26-5153	
	Socket			
JL7202B	25051089		NSCT-5P876	
DSP CIRCUIT PC BOARD (NADG-7687-2P)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q100	22241448R2		NJM4580M-D	
Q101,Q102	22241448R2		NJM4580M-D	
Q103	22241522R2		AK4528VF	
Q120	22274040ER2TO		TC74VHC4040FT	
Q121	22274000GR2TO		TC74VHCT00AFT	
Q130	222740046R2		74HCU04F	
Q131	22241633R3		AK4114VQ	
Q160	22240928R2		TC9246F	
Q161	222780053R2JR		78L05(NJM78L05UA)	
Q170	22278028DR2JR		NJM2391DL1-285	
Q171	22278033DR2NE		MPC2933T or	
	22278033DR2JR		NJM2391DL1-33	
Q190	22274157ER2TO		TC74VHC157FT or	
	22274157IR2TI		SN74AHC157PWR	
Q700	22242002R3		MB86D41BPFV-G-BND	
Q7000	22241512R3W		M30624FGAFP	
Q701,Q751	22274074ER2TO		TC74VHC74FT or	
	22274074IR2TI		SN74AHC74PWR	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	ICs			
Q703	22241847R3		MB86344BPFV	
Q705,Q706	22241612R2 or		CY7C1019BV33-15VCT or	
	22241887R2		CY7C1019CV33-15VCT	
Q7100,Q7101	22274541ER2TO		TC74VHC541FT or	
	22274541IR2TI		SN74AHC541PWR	
Q7102	222740077R2TO		TC74HCT7007AF	
Q800	22241521R3		AK4356VQ	
Q801~Q804	22241449R2,		NJM5532M-D,	
	22241409R2 or		BA15532F or	
	22241472R2		NJM2114M-D	
	Photo couplers			
U100~U102	24120101		TORX179L	
U104,U105	24120102		TOTX179L	
	Transistors			
Q162,Q7001	2214490R2 or		RN1404 or	
	2216210R2		KRC104S	
	Diodes			
D102~D109	223234R2 or		1SS352 or	
D7000~D7004	223269R2		1SS355	
D7005	224660624R2,		HZU6.2B,	
	224490620R2 or		UDZ6.2B or	
	224550620R2		UDZS6.2B	
	Oscillators			
X160	3010331R2		HC-49/U03C24.576MHz,Crystal	
X700	3010394R2		HC-49/U03C13.900MHz,Crystal	
X7000	3010329R2		CSTCV16.00MXJ0C,Ceramic	
X751	3010368R2		XTL-13.5M,Crystal	
	Coils			
L101,L102	231237M022R2 or		NCH-1471 or	
L131	233533M022R2		NCH-1587-022M	
L130,L136	231237K470R2 or		NCH-1479 or	
L160,L162	233533K470R2		NCH-1587-470K	
L132,L134	230958R1		BK1608LM182-T	
L133,L135	231237M022R2 or		NCH-1471 or	
L701,L751	233533M022R2		NCH-1587-022M	
L161	230958R1		BK1608LM182-T	
L170,L753	231237K470R2 or		NCH-1479 or	
	233533K470R2		NCH-1587-470K	
L7000	231237K220R2 or		NCH-1477 or	
	233533K220R2		NCH-1587-220K	
L801,L802	231237M022R2 or		NCH-1471 or	
	233533M022R2		NCH-1587-022M	
R124,R125	230959R1		BK1608LL241-T	
R133~R135	230958R1		BK1608LM182-T	
	Capacitors			
C100,C101	356744709R2		CEWX16V-47M,Elect.	
C102,C103	356724709R2		CEWX6.3V-47M,Elect.	
C104~C107	342101014R1		CC725CH1H-101J1,Ceramic	
C108,C110	356724709R2		CEWX6.3V-47M,Elect.	
C111,C115	332161040R1		CK725F1E-104Z1, Ceramic	
C113,C114	373021524R2		ECHU50V-152J,Chip film	
C116,C119	356723319R2		CEWX6.3V-330M,Elect.	
C118	342101014R1		CC725CH1H-101J1,Ceramic	
C120~C122	332161040R1		CK725F1E-104Z1, Ceramic	
C128,C129	332161040R1		CK725F1E-104Z1, Ceramic	
C130~C132	342101014R1		CC725CH1H-101J1,Ceramic	
C133,C140	332161040R1		CK725F1E-104Z1, Ceramic	
C134~C136	332121045R1		CK725B1C-104K1,Ceramic	
C137~C139	342100802R1		CC725CH1H-080D1,Ceramic	
C141,C148	356724709R2		CEWX6.3V-47M,Elect.	
C142~C144	332161040R1		CK725F1E-104Z1, Ceramic	
C146,C147	332161040R1		CK725F1E-104Z1, Ceramic	
C149,C151	332161040R1		CK725F1E-104Z1, Ceramic	
C150	356741009R2		CEWX16V-10M,Elect.	
C152,C167	356724709R2		CEWX6.3V-47M,Elect.	
C155	332101025R1		CK725B1H-102K1,Ceramic	
C156	342101014R1		CC725CH1H-101J1,Ceramic	
C157,C177	3567A1019R2		CEWX4V-100M,Elect.	
C158,C160	332161040R1		CK725F1E-104Z1, Ceramic	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Capacitors			
C159	356784799R2		CEWX50V-0.47M,elect.	
C161,C173	342101504R1		CC725CH1H-150J1,Ceramic	
C162	342101204R1		CC725CH1H-120J1,Ceramic	
C163,C164	342104704R1		CC725CH1H-470J1,Ceramic	
C165	342111024R1		CC725CH1E-102J1,Ceramic	
C166	337394745R1		CK732B1C-474K,Ceramic	
C168,C169	332161040R1		CK725F1E-104Z1, Ceramic	
C170,C172	356724709R2		CEWX6.3V-47M,Elect.	
C171,C174	332161040R1		CK725F1E-104Z1, Ceramic	
C175,C179	332161040R1		CK725F1E-104Z1, Ceramic	
C176	356744709R2		CEWX16V-47M,Elect.	
C178	3567A1019R2		CEWX4V-100M,Elect.	
C190	332161040R1		CK725F1E-104Z1, Ceramic	
C700,C701	332161040R1		CK725F1E-104Z1, Ceramic	
C7000	3000078 or		DX-5R5L104 or	
	3000121		SCDA5R5104V,Super	
C7001	332161040R1		CK725F1E-104Z1, Ceramic	
C7002,C7003	356721019R2		CEWX6.3V-100M,Elect.	
C7004	356780109R2		CEWX50V-1M,Elect.	
C7005	356721019R2		CEWX6.3V-100M,Elect.	
C7006~C7010	332161040R1		CK725F1E-104Z1, Ceramic	
C702,C703	342102204R1		CC725CH1H-220J1,Ceramic	
C704~C712	332161040R1		CK725F1E-104Z1, Ceramic	
C7100,C7101	332161040R1		CK725F1E-104Z1, Ceramic	
C719,C720	3567A1019R2		CEWX4V-100M,Elect.	
C751~C763	332161040R1		CK725F1E-104Z1, Ceramic	
C764~C766	3567A1019R2		CEWX4V-100M,Elect.	
C767,C768	332161040R1		CK725F1E-104Z1, Ceramic	
C769,C770	342102204R1		CC725CH1H-220J1,Ceramic	
C801	342101014R1		CC725CH1H-101J1,Ceramic	
C802,C807	356723319R2		CEWX6.3V-330M,Elect.	
C803,C806	332161040R1		CK725F1E-104Z1, Ceramic	
C819,C820	373024724R2		ECHU50V-472J,Chip film	
C823,C824	373024724R2		ECHU50V-472J,Chip film	
C826	373043334R2		ECHU16V-333J,Chip film	
C827~C830	373026814R2		ECHU50V-681J,Chip film	
C831~C834	373023314R2		ECHU50V-331J,Chip film	
C835~C838	373026814R2		ECHU50V-681J,Chip film	
C839,C840	373023314R2		ECHU50V-331J,Chip film	
C841,C842	373041534R2		ECHU16V-153J,Chip film	
C847,C848	356744709R2		CEWX16V-47M,Elect.	
C849,C850	356741019R2		CEWX16V-100M,Elect.	
C851~C854	356744709R2		CEWX16V-47M,Elect.	
C855	332101035R1		CK725B1H-103K1,Ceramic	
	Resistors			
L702,L752	433228294R1		RN72K2B-829JE,Carbon	
R100,R101	435031044R1		RN72K1J-104JE,Carbon	
R102,R103	435031844R1		RN72K1J-184JE,Carbon	
R104,R105	435031034R1		RN72K1J-103JE,Carbon	
R106~R111	435034724R1		RN72K1J-472JE,Carbon	
R112~R115	435032204R1		RN72K1J-220JE,Carbon	
R117~R119	435033314R1		RN72K1J-331JE,Carbon	
R120	435034704R1		RN72K1J-470JE,Carbon	
R121	435033314R1		RN72K1J-331JE,Carbon	
R122,R123	435031024R1		RN72K1J-102JE,Carbon	
R126	435033314R1		RN72K1J-331JE,Carbon	
R127	435034724R1		RN72K1J-472JE,Carbon	
R128	435033324R1		RN72K1J-332JE,Carbon	
R130~R132	435037504R1		RN72K1J-750JE,Carbon	
R136~R138	435031034R1		RN72K1J-103JE,Carbon	
R139~R141	435034714R1		RN72K1J-471JE,Carbon	
R143~R147	435034704R1		RN72K1J-470JE,Carbon	
R149	435031024R1		RN72K1J-102JE,Carbon	
R150	435032214R1		RN72K1J-221JE,Carbon	
R151~R153	435031024R1		RN72K1J-102JE,Carbon	
R154,R155	435032214R1		RN72K1J-221JE,Carbon	
R156	435031834R1		RN72K1J-183JE,Carbon	
R157~R160	435034714R1		RN72K1J-471JE,Carbon	
R161,R162	435031524R1		RN72K1J-152JE,Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R163	435035624R1		RN72K1J-562JE,Carbon	
R164	435031014R1		RN72K1J-101JE,Carbon	
R165,R173	435031034R1		RN72K1J-103JE,Carbon	
R166~R168	435031024R1		RN72K1J-102JE,Carbon	
R169,R193	435034704R1		RN72K1J-470JE,Carbon	
R174~R175	435033314R1		RN72K1J-331JE,Carbon	
R176	435036814R1		RN72K1J-681JE,Carbon	
R190	435031024R1		RN72K1J-102JE,Carbon	
R191,R192	435033314R1		RN72K1J-331JE,Carbon	
R194,R197	435034704R1		RN72K1J-470JE,Carbon	
R195,R196	435033314R1		RN72K1J-331JE,Carbon	
R198,R199	435033314R1		RN72K1J-331JE,Carbon	
R700~R703	435033314R1		RN72K1J-331JE,Carbon	
R7000	435031014R1		RN72K1J-101JE,Carbon	
R7001,R7002	435032214R1		RN72K1J-221JE,Carbon	
R7003	435033314R1		RN72K1J-331JE,Carbon	
R7004~R7007	435034714R1		RN72K1J-471JE,Carbon	
R7008	435032244R1		RN72K1J-224JE,Carbon	
R7009,R7012	435032224R1		RN72K1J-222JE,Carbon	
R7010,R7011	435031024R1		RN72K1J-102JE,Carbon	
R7013	435031034R1		RN72K1J-103JE,Carbon	
R7018,R7019	435031024R1		RN72K1J-102JE,Carbon	
R7020	435032224R1		RN72K1J-222JE,Carbon	
R7023~R7025	435034714R1		RN72K1J-471JE,Carbon	
R7026,R7028	435033314R1		RN72K1J-331JE,Carbon	
R7027	435034714R1		RN72K1J-471JE,Carbon	
R7029,R7030	435031014R1		RN72K1J-101JE,Carbon	
R7031~R7033	435031024R1		RN72K1J-102JE,Carbon	
R7034,R7036	435032224R1		RN72K1J-222JE,Carbon	
R7035,R7037	435032214R1		RN72K1J-221JE,Carbon	
R7038	435031024R1		RN72K1J-102JE,Carbon	
R7042	435033314R1		RN72K1J-331JE,Carbon	
R7043~R7045	435034714R1		RN72K1J-471JE,Carbon	
R7047~R7050	435034714R1		RN72K1J-471JE,Carbon	
R705~R708	435033314R1		RN72K1J-331JE,Carbon	
R7051~R7060	435031024R1		RN72K1J-102JE,Carbon	
R7069~R7074	435031024R1		RN72K1J-102JE,Carbon	
R7075	435033314R1		RN72K1J-331JE,Carbon	
R7076~R7086	435031024R1		RN72K1J-102JE,Carbon	
R7087~R7092	435033314R1		RN72K1J-331JE,Carbon	
R709~R712	435034704R1		RN72K1J-470JE,Carbon	
R7093~R7097	435031024R1		RN72K1J-102JE,Carbon	
R7102,R7109	435031034R1		RN72K1J-103JE,Carbon	
R7103	435031004R1		RN72K1J-100JE,Carbon	
R7104~R7107	435031024R1		RN72K1J-102JE,Carbon	
R7110	435032234R1		RN72K1J-223JE,Carbon	
R7112	435034734R1		RN72K1J-473JE,Carbon	
R7119	435031054R1		RN72K1J-105JE,Carbon	
R7126,R7128	435033314R1		RN72K1J-331JE,Carbon	
R713~R716	435033314R1		RN72K1J-331JE,Carbon	
R7131,R7132	435031034R1		RN72K1J-103JE,Carbon	
R7153~R7160	435033314R1		RN72K1J-331JE,Carbon	
R7169~R7174	435031024R1		RN72K1J-102JE,Carbon	
R717,R718	435031024R1		RN72K1J-102JE,Carbon	
R7184~R7186	435032234R1		RN72K1J-223JE,Carbon	
R719,R727	435033314R1		RN72K1J-331JE,Carbon	
R720,R725	435031024R1		RN72K1J-102JE,Carbon	
R730	435031024R1		RN72K1J-102JE,Carbon	
R732~R735	435033314R1		RN72K1J-331JE,Carbon	
R743,R747	435031024R1		RN72K1J-102JE,Carbon	
R750,R770	435031024R1		RN72K1J-102JE,Carbon	
R755,R756	435034704R1		RN72K1J-470JE,Carbon	
R757~R759	435033314R1		RN72K1J-331JE,Carbon	
R760,R761	435035604R1		RN72K1J-560JE,Carbon	
R762~R765	435033314R1		RN72K1J-331JE,Carbon	
R767,R768	435035604R1		RN72K1J-560JE,Carbon	
R769,R771	435033314R1		RN72K1J-331JE,Carbon	
R772,R773	435035604R1		RN72K1J-560JE,Carbon	
R774,R775	435034704R1		RN72K1J-470JE,Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R777,R778	435035604R1		RN72K1J-560JE,Carbon	
R779~R781	435031024R1		RN72K1J-102JE,Carbon	
R782	43474056004R1		RM0KJ560X04,CR array	
R783	435032214R1		RN72K1J-221JE,Carbon	
R784	435031024R1		RN72K1J-102JE,Carbon	
R785,R786	435035604R1		RN72K1J-560JE,Carbon	
R787~R791	43474056004R1		RM0KJ560X04,CR array	
R792~R794	435035604R1		RN72K1J-560JE,Carbon	
R795	435034724R1		RN72K1J-472JE,Carbon	
R796~R798	435031024R1		RN72K1J-102JE,Carbon	
R801,R804	435031024R1		RN72K1J-102JE,Carbon	
R802,R803	435034704R1		RN72K1J-470JE,Carbon	
R805~R808	435034704R1		RN72K1J-470JE,Carbon	
R811~R814	435033324R1		RN72K1J-332JE,Carbon	
R815~R818	435030004R1		RN72K1J-000JE,Carbon	
R819~R822	435033324R1		RN72K1J-332JE,Carbon	
R823,R824	435030004R1		RN72K1J-000JE,Carbon	
R825,R826	435033324R1		RN72K1J-332JE,Carbon	
R827~R830	435031224R1		RN72K1J-122JE,Carbon	
R831~R834	435032224R1		RN72K1J-222JE,Carbon	
R835~R838	435031224R1		RN72K1J-122JE,Carbon	
R839,R840	435032224R1		RN72K1J-222JE,Carbon	
R841,R842	435031224R1		RN72K1J-122JE,Carbon	
R843~R858	435034724R1		RN72K1J-472JE,Carbon	
R859~R872	435031814R1		RN72K1J-181JE,Carbon	
R873,R874	435034724R1		RN72K1J-472JE,Carbon	
R875~R882	435032204R1		RN72K1J-220JE,Carbon	
	Terminal			
P101	25045624		NPJ-3PDO431	
	Sockets			
P603B	25052572R2		NSCT-6P2469	
P7002,P7004	25051527		NSCT-16P1314	
P7003	25051241		NSCT-20P1031	
P7701A	25052277R2		NSCT-5P2174	
P800	25051241		NSCT-20P1031	
	Plugs			
P100	25055133		NPLG-3P117	
P7000	25056056		NPLG-8P1006	
NET-TUNE PC BOARD (NADG-7662-3)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q601	22241778R2		BA33C25FP	
Q603	22242010R2 or		IS42S16400-7T or	
	22241861R3		HM5264165FTT-B6	
Q604	22241862R3		MX29LV320BTC-90	
Q605	22241821R2		WM8716EDS	
Q606	22241872R2		93LC46BT/SN	
Q607	22241863R3		EP7312-CV	
Q608	22242010R2 or		IS42S16400-7T or	
	22241861R3		HM5264165FTT-B6	
Q609,Q618	22241161R2		TC7W14FU	
Q610	22241159R2		TC7S02FU	
Q616	22241867R3		CS8900A-CQ3	
	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	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Capacitors			
C602	395530477R2		F93-10V-4.7M,Chip tantal	
C603~C613	332161040R1		CK725F1E-104Z1, Ceramic	
C614~C627	395544707R2		F93-16V-47M,Chip tantal	
C628	342105614R1		CC725CH1H-561J1,Cermic	
C629~C631	332161040R1		CK725F1E-104Z1, Ceramic	
C633,C634	332101035R1		CK725B1H-103K1,Ceramic	
C636,C639	332161040R1		CK725F1E-104Z1, Ceramic	
C637,C679	395521017R2		F93-6.3V-100M,Chip tantal	
C638,C645	356721019R2		CEWX6.3V-100M,Elect.	
C640,C649	393322217		CE04W6.3V-220M(VX),Elect.	
C641,C650	374721044		ECQ-V50V-104J,Plastic film	
C642~C644	332161040R1		CK725F1E-104Z1, Ceramic	
C646,C648	332161040R1		CK725F1E-104Z1, Ceramic	
C647,C693	356721019R2		CEWX6.3V-100M,Elect.	
C651~C655	332161040R1		CK725F1E-104Z1, Ceramic	
C658~C669	332161040R1		CK725F1E-104Z1, Ceramic	
C673,C678	332161040R1		CK725F1E-104Z1, Ceramic	
C674,C676	332101025R1		CK725B1H-102K1,Ceramic	
C680	332101025R1		CK725B1H-102K1,Ceramic	
C682	342105604R1		CC725CH1H-560J1,Ceramic	
C683	342101002R1		CC725CH1H-100D1,Ceramic	
C685,C686	342101504R1		CC725CH1H-150J1,Ceramic	
C687~C690	332161040R1		CK725F1E-104Z1, Ceramic	
C692,C695	332161040R1		CK725F1E-104Z1, Ceramic	
C696,C697	332101025R1		CK725B1H-102K1,Ceramic	
	Resistors			
R550~R552	435031034R1		RN72K1J-103JE,Carbon	
R553,R554	435031012R1		RN72K1J-101FE,Carbon	
R555,R556	435032734R1		RN72K1J-273JE,Carbon	
R557~R559	435031034R1		RN72K1J-103JE,Carbon	
R561	435030004R1		RN72K1J-000JE,Carbon	
R601,R602	435031012R1		RN72K1J-101FE,Carbon	
R603,R604	435030004R1		RN72K1J-000JE,Carbon	
R605,R607	435030822R1		RN72K1J-082FE,Carbon	
R606	435033314R1		RN72K1J-331JE,Carbon	
R608,R610	435030004R1		RN72K1J-000JE,Carbon	
R609,R630	435031034R1		RN72K1J-103JE,Carbon	
R611~R615	435031034R1		RN72K1J-103JE,Carbon	
R617,R618	435031034R1		RN72K1J-103JE,Carbon	
R619,R624	435031514R1		RN72K1J-151JE,Carbon	
R623,R627	435031034R1		RN72K1J-103JE,Carbon	
R625	435030004R1		RN72K1J-000JE,Carbon	
R628,R629	435030004R1		RN72K1J-000JE,Carbon	
R635~R637	435030004R1		RN72K1J-000JE,Carbon	
R641	435034704R1		RN72K1J-470JE,Carbon	
R642,R698	435031032R1		RN72K1J-103FE,Carbon	
R643~R647	435031034R1		RN72K1J-103JE,Carbon	
R649,R651	435031034R1		RN72K1J-103JE,Carbon	
R650	435034734R1		RN72K1J-473JE,Carbon	
R654,R673	435034724R1		RN72K1J-472JE,Carbon	
R655,R656	435031024R1		RN72K1J-102JE,Carbon	
R657,R669	435031034R1		RN72K1J-103JE,Carbon	
R659,R660	435031034R1		RN72K1J-103JE,Carbon	
R662~R667	435031034R1		RN72K1J-103JE,Carbon	
R674~R676	435033314R1		RN72K1J-331JE,Carbon	
R681	435030004R1		RN72K1J-000JE,Carbon	
R682	435031014R1		RN72K1J-101JE,Carbon	
R684	435034724R1		RN72K1J-472JE,Carbon	
R685	435031034R1		RN72K1J-103JE,Carbon	
R687~R692	435031034R1		RN72K1J-103JE,Carbon	
R699	435032754R1		RN72K1J-275JE,Carbon	
	Sockets			
P603A	25052707R2		NSCT-6P2603	
P604B	25051238		NSCT-13P1028	
	Plugs			
P602B	25055964R2 or		NPLG-4P917 or	
	25056180R2		NPLG-4P1119	
P607B	25055965R2 or		NPLG-5P918 or	
	25056181R2		NPLG-5P1120	

PREAMPLIFIER PC BOARD (NAAF-7718-2Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q3860~Q3862	22241383R2 or		NJM4565M-D or	
Q3860~Q3862	22240489R1NE		MPC4570G2-T1(MST)	
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	
Q4410,Q4411	22241567R2		NJM2082M	
	Transistors			
Q4420~Q4422	2216756R2		2SA1163-BL	
Q4600~Q4607	2215410R2		RN1441	
Q4610~Q4617	2215410R2		RN1441	
Q4810~Q4815	2215410R2		RN1441	
	Diodes			
D4540	224550510R2 or		UDZS5.1B or	
	224490510R2		UDZ5.1B	
	Capacitors			
C3600~C3607	374723315		ECQ-B50V-331K,Plastic film	
C3610~C3617	393381007		CE04W50V-10M(VX),Elect.	
C3680,C3681	332161040R1		CK725F1E-104Z1, Ceramic	
C3800~C3802	393384707		CE04W50V-47M(VX),Elect.	
C3803~C3806	393381007		CE04W50V-10M(VX),Elect.	
C3807	393324717		CE04W6.3V-470M(VX),Elect.	
C3820,C3821	393384707		CE04W50V-47M(VX),Elect.	
C3840,C3841	393381007		CE04W50V-10M(VX),Elect.	
C3862,C3863	374721224		ECQ-B50V-122J,Plastic film	
C3864,C3865	374722724		ECQ-B50V-272J,Plastic film	
C4000,C4001	345023304		CC45SL50V-330J,Ceramic	
C4010,C4011	393381007		CE04W50V-10M(VX),Elect.	
C4100	342101014R1		CC725CH1H-101J1,Ceramic	
C4120,C4121	393342217		CE04W16V-220M(VX),Elect.	
C4200~C4207	393381007		CE04W50V-10M(VX),Elect.	
C4210~C4216	345021002		CC45SL50V-100D,Ceramic	
C4217	374721024		ECQ-B50V-102J,Plastic film	
C4220~C4227	393380107		CE04W50V-1M(VX),Elect.	
C4230~C4237	393384707		CE04W50V-47M(VX),Elect.	
C4300,C4302	342101014R1		CC725CH1H-101J1,Ceramic	
C4320~C4325	393342217		CE04W16V-220M(VX),Elect.	
C4410~C4412	374721015		ECQ-B50V-101K,Plastic film	
C4417	374721024		ECQ-B50V-102J,Plastic film	
C4420~C4422	393384707		CE04W50V-47M(VX),Elect.	
C4430~C4432	374721044		ECQ-V50V-104J,Plastic film	
C4440~C4442	374721534		ECQ-B50V-153J,Plastic film	
C4500,C4501	342101014R1		CC725CH1H-101J1,Ceramic	
C4540	393321017		CE04W6.3V-100M(VX),Elect.	
C4600~C4602	393384707		CE04W50V-47M(VX),Elect.	
C4607	393384707		CE04W50V-47M(VX),Elect.	
C4610~C4617	374721024		ECQ-B50V-102J,Plastic film	
C4680,C4681	332161040R1		CK725F1E-104Z1, Ceramic	
C4800,C4801	393341007		CE04W16V-10M(VX),Elect.	
C4802,C4803	393380227		CE04W50V-2.2M(VX),Elect.	
C4804,C4805	374721015		ECQ-B50V-101K,Plastic film	
C4806,C4807	393321017		CE04W6.3V-100M(VX),Elect.	
C4808,C4809	374722224		ECQ-B50V-222J,Plastic film	
C4920,C4921	393342217		CE04W16V-220M(VX),Elect.	
	Resistors			
R3600~R3607	435033314R1		RN72K1J-331JE,Carbon	
R3610~R3617	435035634R1		RN72K1J-563JE,Carbon	
R3620~R3627	435032244R1		RN72K1J-224JE,Carbon	
R3800~R3807	435032244R1		RN72K1J-224JE,Carbon	
R3820,R3821	435032244R1		RN72K1J-224JE,Carbon	
R3840,R3841	435032244R1		RN72K1J-224JE,Carbon	
R3862,R3863	435031524R1		RN72K1J-152JE,Carbon	
R3864~R3867	435031034R1		RN72K1J-103JE,Carbon	
R3868~R3871	435031524R1		RN72K1J-152JE,Carbon	
R3872~R3879	435032234R1		RN72K1J-223JE,Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R4000,R4001	435031034R1		RN72K1J-103JE,Carbon	
R4010,R4011	435031034R1		RN72K1J-103JE,Carbon	
R4020,R4021	435031234R1		RN72K1J-123JE,Carbon	
R4022,R4023	435032224R1		RN72K1J-222JE,Carbon	
R4030,R4031	435031234R1		RN72K1J-123JE,Carbon	
R4032,R4033	435032224R1		RN72K1J-222JE,Carbon	
R4040,R4041	435031824R1		RN72K1J-182JE,Carbon	
R4042,R4043	435030004R1		RN72K1J-000JE,Carbon	
R4060,R4061	435032244R1		RN72K1J-224JE,Carbon	
R4100,R4101	435032224R1		RN72K1J-222JE,Carbon	
R4103	435032224R1		RN72K1J-222JE,Carbon	
R4120,R4121	443522204		RS1/2WBJ-22,Metal oxide	
R4200~R4207	435031044R1		RN72K1J-104JE,Carbon	
R4210~R4217	435032244R1		RN72K1J-224JE,Carbon	
R4227	435032224R1		RN72K1J-222JE,Carbon	
R4237	435034714R1		RN72K1J-471JE,Carbon	
R4300~R4302	435032224R1		RN72K1J-222JE,Carbon	
R4320~R4325	443522204		RS1/2WBJ-22,Metal oxide	
R4410~R4412	435034724R1		RN72K1J-472JE,Carbon	
R4417,R4427	435034724R1		RN72K1J-472JE,Carbon	
R4420~R4422	435034724R1		RN72K1J-472JE,Carbon	
R4430~R4432	435032244R1		RN72K1J-224JE,Carbon	
R4440~R4442	435034734R1		RN72K1J-473JE,Carbon	
R4450~R4452	435033914R1		RN72K1J-391JE,Carbon	
R4457	435033914R1		RN72K1J-391JE,Carbon	
R4460~R4462	435034724R1		RN72K1J-472JE,Carbon	
R4470~R4472	435031054R1		RN72K1J-105JE,Carbon	
R4480~R4482	435033914R1		RN72K1J-391JE,Carbon	
R4500~R4503	435032224R1		RN72K1J-222JE,Carbon	
R4540,R4541	435033324R1		RN72K1J-332JE,Carbon	
R4600~R4607	435032714R1		RN72K1J-271JE,Carbon	
R4610~R4617	435031014R1		RN72K1J-101JE,Carbon	
R4620~R4627	435032234R1		RN72K1J-223JE,Carbon	
R4630~R4637	435034704R1		RN72K1J-470JE,Carbon	
R4640~R4647	435034704R1		RN72K1J-470JE,Carbon	
R4700~R4702	435031044R1		RN72K1J-104JE,Carbon	
R4710	435031524R1		RN72K1J-152JE,Carbon	
R4711	435033924R1		RN72K1J-392JE,Carbon	
R4712	435031024R1		RN72K1J-102JE,Carbon	
R4800~R4807	435032234R1		RN72K1J-223JE,Carbon	
R4808,R4809	435032224R1		RN72K1J-222JE,Carbon	
R4810,R4811	435033304R1		RN72K1J-330JE,Carbon	
R4812,R4813	435031034R1		RN72K1J-103JE,Carbon	
R4814~R4817	435033304R1		RN72K1J-330JE,Carbon	
R4920,R4921	443522204		RS1/2WBJ-22,Metal oxide	
	Terminals			
P3600,P4600	25045708		NPJ-4PDGPRW503	
P3601,P4601	25045710		NPJ-4PDELNT505	
	Sockets			
P4010B	25051235		NSCT-10P1025	
P4011B,P4020B	25051240		NSCT-15P1030	
	Plugs			
P4012A	25055734		NPLG-3P690	
P5003E	25055152		NPLG-8P136	
P5004E	25055153		NPLG-9P137	
AUDIO TERMINAL PC BOARD (NAAF-7719-2Q)				
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	
	Capacitors			
C3000,C3001	374722215		ECQ-B50V-221K,Plastic film	
C3002,C3003	393384707		CE04W50V-47M(VX),Elect.	
C3004,C3005	374721524		ECQ-B50V-152J,Plastic film	
C3006,C3007	354722219		CE04W6.3V-220M,Elect.	
C3008,C3009	374721234		ECQ-B50V-123J,Plastic film	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Capacitors			
C3010,C3011	374723924		ECQ-B50V-392J,Plastic film	
C3020~C3023	374723315		ECQ-B50V-331K,Plastic film	
C3026~C3029	393384707		CE04W50V-47M(VX),Elect.	
C3080~C3082	332161040R1		CK725F1E-104Z1, Ceramic	
C3100	342101014R1		CC725CH1H-101J1,Ceramic	
C3120,C3121	393342217		CE04W16V-220M(VX),Elect.	
C3122,C3123	393344707		CE04W16V-47M(VX),Elect.	
C1001	332161040R1		CK725F1E-104Z1, Ceramic	
C1002,C1007	354741009 or		CE04W16V-10M or	
	394641007		CE04W16V-10M(VR),Elect.	
C1003,C1006	354780339 or		CE04W50V-3.3M or	
	394680337		CE04W50V-3.3M(VR),Elect.	
C1004,C1005	342101014R1		CC725CH1H-101J1,Ceramic	
	Resistors			
R3000,R3001	435033314R1		RN72K1J-331JE,Carbon	
R3002,R3003	435035634R1		RN72K1J-563JE,Carbon	
R3004,R3005	435034744R1		RN72K1J-474JE,Carbon	
R3006,R3007	435035614R1		RN72K1J-561JE,Carbon	
R3008,R3009	435032744R1		RN72K1J-274JE,Carbon	
R3010,R3011	435032234R1		RN72K1J-223JE,Carbon	
R3014,R3015	435034734R1		RN72K1J-473JE,Carbon	
R3016,R3017	435031224R1		RN72K1J-122JE,Carbon	
R3020~R3027	435033314R1		RN72K1J-331JE,Carbon	
R3028~R3031	435032244R1		RN72K1J-224JE,Carbon	
R3032,R3033	435032224R1		RN72K1J-222JE,Carbon	
R3034,R3035	435032244R1		RN72K1J-224JE,Carbon	
R3100~R3102	435032224R1		RN72K1J-222JE,Carbon	
R3120,R3121	443522204		RS1/2WBJ-22,Metal oxide	
R3122,R3123	435031004R1		RN72K1J-100JE,Carbon	
R1000,R1001	435033314R1		RN72K1J-331JE,Carbon	
R1002~R1005	435031044R1		RN72K1J-104JE,Carbon	
R1006	435031014R1		RN72K1J-101JE,Carbon	
R1010~R1014	435032224R1		RN72K1J-222JE,Carbon	
R1015	435030004R1		RN72K1J-000JE,Carbon	
	Terminals			
P3000,P3001	25045582 or		NPJ-4PDRW393 or	
	25045491		NPJ-4PDBL308	
	Sockets			
P3010B	25051232		NSCT-7P1022	
P3011B	25051240		NSCT-15P1030	
P1010A	25052248,		NSCT-15P2145,	
	25051859 or		NSCT-15P1646 or	
	25052061		NSCT-15P1848	
VIDEO TERMINAL PC BOARD (NAAF-7720-2Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q3200~Q3205	22241383R2 or		NJM4565M-D or	
Q3400	22240489R1NE		MPC4570G2-T1(MST)	
Q3300	22240829		TC9274N-008	
	Transistors			
Q3410~Q3413	2215410R2		RN1441	
	Capacitors			
C3200~C3209	374723315		ECQ-B50V-331K,Plastic film	
C3212~C3223	393384707		CE04W50V-47M(VX),Elect.	
C3250,C3251	393381007		CE04W50V-10M(VX),Elect.	
C3252	354741009 or		CE04W16V-10M or	
	394641007		CE04W16V-10M(VR),Elect.	
C3280	332161040R1		CK725F1E-104Z1, Ceramic	
C3281~C3285	332161040R1		CK725F1E-104Z1, Ceramic	
C3300	342101014R1		CC725CH1H-101J1,Ceramic	
C3320,C3321	393342217		CE04W16V-220M(VX),Elect.	
C3400~C3403	393384707		CE04W50V-47M(VX),Elect.	
C3404,C3405	374721024		ECQ-B50V-102J,Plastic film	
	Resistors			
R3200~R3209	435033314R1		RN72K1J-331JE,Carbon	
R3212~R3223	435035634R1		RN72K1J-563JE,Carbon	
R3224~R3235	435032244R1		RN72K1J-224JE,Carbon	
R3236~R3239	435032224R1		RN72K1J-222JE,Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R3240~R3243	435032244R1		RN72K1J-224JE,Carbon	
R3250~R3252	435031044R1		RN72K1J-104JE,Carbon	
R3253	435031014R1		RN72K1J-101JE,Carbon	
R3254	435031044R1		RN72K1J-104JE,Carbon	
R3300~R3302	435032224R1		RN72K1J-222JE,Carbon	
R3310	435032244R1		RN72K1J-224JE,Carbon	
R3311	435031024R1		RN72K1J-102JE,Carbon	
R3320,R3321	443522204		RS1/2WBJ-22,Metal oxide	
R3400,R3401	435035634R1		RN72K1J-563JE,Carbon	
R3402,R3403	435032244R1		RN72K1J-224JE,Carbon	
R3404,R3405	435035614R1		RN72K1J-561JE,Carbon	
R3406,R3407	435031214R1		RN72K1J-121JE,Carbon	
R3408,R3409	435036814R1		RN72K1J-681JE,Carbon	
R3410,R3411	435031014R1		RN72K1J-101JE,Carbon	
	Terminals			
P3200~P3203	25045582 or		NPJ-4PDRW393 or	
	25045491		NPJ-4PDBL308	
	Sockets			
P3210B,P3211B	25051232		NSCT-7P1022	
	Plugs			
P3220A	25055133		NPLG-3P117	
P602A	25055148		NPLG-4P132	
FRONT VIDEO PC BOARD (NAETC-7721-2Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Capacitors			
C2571,C2572	332104715R1		CK725B1H-471K1,Ceramic	
C2577,C2578	332161040R1		CK725F1E-104Z1, Ceramic	
	Resistors			
R2571,R2572	435033314R1		RN72K1J-331JE,Carbon	
R2573~R2575	435037504R1		RN72K1J-750JE,Carbon	
	Terminal			
P2508	25051569		NSCT-4P1356	
P2510	25045675		NPJ-3PDB473	
	Sockets			
P2506B	2009990575UL		NSAS-10P0784	
P3220B	2009990420		NSAS-6P0564	
OPTICAL INPUT PC BOARD (NAETC-7722-2Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Photo coupler			
U2501	24120101		TORX179L	
	Coils			
L2501	231237M022R2 or		NCH-1471 or	
	233533M022R2		NCH-1587-022M	
	Capacitors			
C2581	354721019 or		CE04W6.3V-100M or	
	394621017		CE04W6.3V-100M(VR),Elect.	
C2582	332161040R1		CK725F1E-104Z1, Ceramic	
	Resistor			
R2576	435032204R1		RN72K1J-220JE,Carbon	
	Socket			
P102B	2009990513UL		NSAS-6P0675	
POWER AMPLIFIER PC BOARD (NAAF-7706-2M/2N)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Transistors			
Q6000~Q6006	2213284 or		2SC1740S-R or	
Q6010~Q6016	2213285		2SC1740S-S	
Q6020~Q6022	2215995,		KTA1267-GR,	
	2212125,		2SA1048-GR,	
	2213354 or		2SA933S-R or	
	2213355		2SA933S-S	
Q6023~Q6026	2211455 or		2SA1015-GR or	
	2211454		2SA1015-Y	
Q6030~Q6032	2211634 or		2SC2229-Y or	
	2211633		2SC2229-O	
Q6033~Q6036	2203434 or		KTD2061-Y or	
	2203010		2SC5171	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Transistors			
Q6040~Q6042	2211354 or		2SA949-Y or	
	2211353		2SA949-O	
Q6043~Q6046	2203424 or		KTB1369-Y or	
Q6090~Q6092	2203000		2SA1930	
Q6070~Q6076	2214984 or		2SC2631-R or	
	2214985		2SC2631-S	
Q6100~Q6102	2203434 or		KTD2061-Y or	
	2203010		2SC5171	
Q6703	2215885,		KTA1268-GR,	
	2211792,		2SA992-F,	
	2211793 or		2SA992-E or	
	2215886		KTA1268-BL	
	Diodes			
D6000~D6006	223163,		1SS133,	
	223205 or		1SS270A or	
	223222		WG713A	
	Coils			
L6000~L6002	5597-45502		FR CORE	
L6010~L6012	5597-45502		FR CORE	
	Capacitors			
C6000~C6006	374721024		ECQ-B50V-102J,Plastic film	
C6020~C6022	394500477		CE04W160V-4.7M(VZ),Elect.	
C6023~C6026	393384707		CE04W50V-47M(VX),Elect.	
C6030~C6036	374734734		ECQ-V100-473J,Plastic film	
C6510~C6514	394690477		CE04W100V-4.7M(VR),Elect.	
C6520~C6523	394690477		CE04W100V-4.7M(VR),Elect.	
C6531,C6532	374721034		ECQ-B50V-103J,Plastic film	
C6703	335622230		CK45F50V-223Z,Ceramic	
C6901,C6902	3504374		CE69W71V-15000M,Elect.	
	Resistors			
R6010~R6012	417344724		R16J-4.7K, Carbon	
R6013~R6016	417345624		R16J-5.6K, Carbon	
R6020~R6022	417343324		R16J-3.3K, Carbon	
R6023~R6026	417343924		R16J-3.9K, Carbon	
R6030~R6032	417341824		R16J-1.8K, Carbon	
R6033~R6036	417341024		R16J-1K, Carbon	
R6040~R6046	5210258		N06HR1KBC,Trimming	
R6050~R6056	417342724		R16J-2.7K, Carbon	
R6060~R6062	417341214		R16J-120, Carbon	
R6063~R6066	417343324		R16J-3.3K, Carbon	
R6070~R6072	415476804		R25J-68, NF carbon	
R6073~R6076	415471814		R25J-180, NF carbon	
R6080~R6082	443521004		RS1/2WBJ-10,Metal oxide	
R6083~R6086	415470224		R25J-2.2, NF carbon	
R6090~R6092	443521004		RS1/2WBJ-10,Metal oxide	
R6093~R6096	415470224		R25J-2.2, NF carbon	
R6100~R6106	4000201,		RF-5EGKR22,	
	4000132 or		RGC55 0.22 or	
	4500245		BPR55FK0.22,Metal plate	
R6110~R6116	417341034		R16J-10K, Carbon	
R6130~R6136	453630824		RNU1WCJ-8.2, Metal	
R6140~R6146	417342234		R16J-22K, Carbon	
R6150~R6156	417344724		R16J-4.7K, Carbon	
R6160~R6166	417343334		R16J-33K, Carbon	
R6190~R6196	417344734		R16J-47K, Carbon	
R6200~R6206	417344734		R16J-47K, Carbon	
R6210~R6216	417344734		R16J-47K, Carbon	
R6230~R6232	415471214		R25J-120, NF carbon	
R6240~R6242	415471214		R25J-120, NF carbon	
R6250~R6252	415471804		R25J-18, NF carbon	
R6260~R6262	415471804		R25J-18, NF carbon	
R6270~R6272	415470224		R25J-2.2, NF carbon	
R6280~R6282	415470224		R25J-2.2, NF carbon	
R6510~R6514	453532294		RNU1/2WCJ-0.22, Metal	
R6520~R6523	453532294		RNU1/2WCJ-0.22, Metal	
R6701	417342234		R16J-22K, Carbon	
R6702	417341034		R16J-10K, Carbon	
R6704	417344734		R16J-47K, Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	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	25056011		NPLG-6P0961	
P6011,P6012	25056009		NPLG-4P0959	
P6013	25056011		NPLG-6P0961	
P6014~P6016	25056009		NPLG-4P0959	
P6080~P6086	25055038		NPLG-2P29	
P6931	25055701		NPLG-5P657	
	Screws			
Q6090B~Q6092	838430107		3TTB+10S(BC)	
Q6100B~Q6102	838430107		3TTB+10S(BC)	
	Heat sinks			
Q6090A~Q6092	27160486		RAD-155	
DRIVER CIRCUIT PC BOARD (NAAF-7707-2M/2N)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Transistors			
Q5003~Q5006	2215896,	*	KTC3200-BL,	
Q5013~Q5016	2210755,	*	2SC1775A-E,	
	2210756 or	*	2SC1775A-F or	
	2211733	*	2SC1845-E	
Q5023~Q5026	2215896,		KTC3200-BL,	
	2210755,		2SC1775A-E,	
	2210756 or		2SC1775A-F or	
	2211733		2SC1845-E	
Q5033~Q5036	2215844,		KTA1024-Y,	
Q5043~Q5046	2211353,		2SA949-O,	
Q5053~Q5056	2211354 or		2SA949-Y or	
	2215843		KTA1024-O	
Q5083~Q5086	2215854,		KTC3206-Y,	
	2211633,		2SC2229-O,	
	2211634 or		2SC2229-Y or	
	2215853		KTC3206-O	
	Diodes			
D5003~D5006	224470562		MTZJ5.6B,Zener	
	Capacitors			
C5003~C5006	393381007		CE04W50V-10M(VX),Elect.	
C5013~C5016	374722215		ECQ-B50V-221K,Plastic film	
C5043~C5046	393341017		CE04W16V-100M(VX),Elect.	
C5053~C5056	393381007		CE04W50V-10M(VX),Elect.	
C5073~C5076	394691007		CE04W100V-10M(VR),Elect.	
C5083~C5086	394672207		CE04W63V-22M(VR),Elect.	
C5093~C5096	393384707		CE04W50V-47M(VX),Elect.	
C5103-C5106	374721015		ECQ-B50V-101K,Plastic film	
C5113~C5116	345020502		CC45SL50V-050D,Ceramic	
C5123~C5126	394694707		CE04W100V-47M(VR),Elect.	
C5133~C5136	394694707		CE04W100V-47M(VR),Elect.	
	Resistors			
R5003~R5006	417341024		R16J-1K, Carbon	
R5013~R5016	417345634		R16J-56K, Carbon	
R5023~R5026	417343314		R16J-330, Carbon	
R5033~R5036	417341214		R16J-120, Carbon	
R5043~R5046	417341214		R16J-120, Carbon	
R5053~R5056	417345624		R16J-5.6K, Carbon	
R5063~R5066	417342724		R16J-2.7K, Carbon	
R5073~R5076	417341044		R16J-100K, Carbon	
R5093~R5096	417341824		R16J-1.8K, Carbon	
R5113~R5116	417342224		R16J-2.2K, Carbon	
R5123~R5126	417342224		R16J-2.2K, Carbon	
R5133~R5136	415478214		R25J-820, NF carbon	
R5143~R5146	415478214		R25J-820, NF carbon	
R5153~R5156	443521034		RS1/2WBJ-10K,Metal oxide	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R5163~R5166	415471024		R25J-1.0K, NF carbon	
R5173~R5176	415478214		R25J-820, NF carbon	
R5183~R5186	415473304		R25J-33, NF carbon	
R5213~R5216	417341834		R16J-18K, Carbon	
R5223~R5226	417341834		R16J-18K, Carbon	
R5233~R5236	415471504		R25J-15, NF carbon	
R5243~R5246	415471504		R25J-15, NF carbon	
R5253~R5256	417345634		R16J-56K, Carbon	
R5283~R5286	443521034		RS1/2WBJ-10K,Metal oxide	
R5293~R5296	417341044		R16J-100K, Carbon	
R5303~R5306	415471014		R25J-100, NF carbon	
R5333~R5336	415471014		R25J-100, NF carbon	
	Sockets			
P6003A~P6006A	25052287		NSCT-4P2184	
P6013A	25052289		NSCT-6P2186	
P6014A~P6016A	25052287		NSCT-4P2184	
CONSTANT VOLTAGE PC BOARD (NAPS-7708-2M/2N)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q9401	222780185JRC		NJM78M18FA	
Q9411	222790185JRC		NJM79M18FA	
Q9421	222780053JRC		NJM78L05A	
Q9431	222780054JRC		NJM7805FA	
Q9441	222790054JRC		NJM7905FA	
	Transistors			
Q6901	2215864,		KTC3199-GR,	
	2212115,		2SC2458-GR,	
	2213284 or		2SC1740S-R or	
	2213285		2SC1740S-S	
Q9422	2202314 or		2SA1726-Y or	
	2202315		2SA1726-P	
Q9501	2211644		2SA965-Y	
	Diodes			
D9501,D9502A	22380285F,		RS403M,	
	22380022F or		RBV402 or	
	22380271F		D3SBA20	
D9506,D9507	22380260,		RL1N4003,	
	22380032 or		1SR139-100 or	
	22380035		GP104003E	
D9508	224472704		MTZJ27D,Zener	
	Capacitors			
C9401,C9402	394561007		CE04W35V-10M(VZ),Elect.	
C9411,C9412	394561007		CE04W35V-10M(VZ),Elect.	
C9421,C9422	394561007		CE04W35V-10M(VZ),Elect.	
C9431,C9432	394561007		CE04W35V-10M(VZ),Elect.	
C9441,C9442	394561007		CE04W35V-10M(VZ),Elect.	
C9501~C9504	374723344		ECQ-V50V-334J,Plastic film	
C9505	394662227S		CE04W35V-2200M(VR),Elect.	
C9506	394661027S		CE04W35V-1000M(VR),Elect.	
C9507	394682217		CE04W50V-220M(VR),Elect.	
C9508	394646827S		CE04W16V-6800M(VR),Elect.	
C9509	394651027S		CE04W25V-1000M(VR),Elect.	
C9510	394672217		CE04W63V-220M(VR),Elect.	
C9511	335621030		CK45F50V-103Z,Ceramic	
C9512	335622230		CK45F50V-223Z,Ceramic	
C9513	374723344		ECQ-V50V-334J,Plastic film	
C9521~C9523	374722234		ECQ-B50V-223J,Plastic film	
	Resistors			
R6901,R6902	417344724		R16J-4.7K, Carbon	
R9403	453530224		RNU1/2WCJ-2.2, Metal	
R9413	453530824		RNU1/2WCJ-8.2, Metal	
R9421~R9424	441620824F		RS1WBJ-8.2,Metal oxide	
R9425	415473304		R25J-33, NF carbon	
R9431,R9433	441621004F		RS1WBJ-10,Metal oxide	
R9442,R9444	441622204F		RS1WBJ-22,Metal oxide	
R9506	415472204		R25J-22, NF carbon	
R9507,R9508	417341534		R16J-15K, Carbon	
R9509	417343334		R16J-33K, Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R9510	415470224		R25J-2.2, NF carbon	
R9521	453530334		RNU1/2WCJ-3.3, Metal	
	Fuse holders			
F9501A,F9501B	25052133	!	NSCT-1P2031	
F9502A,F9502B	25052133	!	NSCT-1P2031	
F9503A,F9503B	25052133	!	NSCT-1P2031	
F9504A,F9504B	25052133	!	NSCT-1P2031	
	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	
	Labels			
F9501C	29361747		T2.5AL250V <A>	
F9503C	29361769		T1.6AL250V <A>	
THERMAL DETECTOR PC BOARD (NAETC-7714-2N)				
Australian model only				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Thermistors			
R5652	4000153		PTH9M04BF222TS2F333	
R5654	4000151		PTH9M04BD222TS2F333	
	Socket			
JL9504B	25051088		NSCT-4P875	
F/C DRIVER CIRCUIT PC BOARD (NAAF-7690-2T/2U)				
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 or	
	2202093		2SA1360-O	
Q5080~Q5082	2202104 or		2SC3423-Y or	
	2202103		2SC3423-O	
	Diodes			
D5000~D5002	224470562		MTZJ5.6B,Zener	
	Capacitors			
C5000~C5002	393362207		CE04W35V-22M(VX),Elect.	
C5010,C5011	374721015		ECQ-B50V-101K,Plastic film	
C5012	374722215		ECQ-B50V-221K,Plastic film	
C5040~C5042	393342217		CE04W16V-220M(VX),Elect.	
C5050~C5052	393381007		CE04W50V-10M(VX),Elect.	
C5070~C5072	394691007		CE04W100V-10M(VR),Elect.	
C5080~C5082	394672207		CE04W63V-22M(VR),Elect.	
C5090~C5092	393384707		CE04W50V-47M(VX),Elect.	
C5100,C5102	374721015		ECQ-B50V-101K,Plastic film	
C5110~C5112	345020502		CC45SL50V-050D,Ceramic	
C5120~C5122	394691017S		CE04W100V-100M(VR),Elect.	
C5130~C5132	394691017S		CE04W100V-100M(VR),Elect.	
	Resistors			
R5000~R5002	417341024		R16J-1K, Carbon	
R5010~R5012	417345634		R16J-56K, Carbon	
R5020~R5022	417343314		R16J-330, Carbon	
R5030~R5032	417343314		R16J-330, Carbon	
R5040~R5042	417343314		R16J-330, Carbon	
R5050~R5052	417345624		R16J-5.6K, Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R5060~R5062	417342724		R16J-2.7K, Carbon	
R5070~R5072	417341044		R16J-100K, Carbon	
R5090~R5092	417341824		R16J-1.8K, Carbon	
R5110~R5112	417342224		R16J-2.2K, Carbon	
R5120~R5122	417342224		R16J-2.2K, Carbon	
R5130~R5132	415478214		R25J-820, NF carbon	
R5140~R5142	415478214		R25J-820, NF carbon	
R5150~R5152	443521034		RS1/2WBJ-10K,Metal oxide	
R5160~R5162	415471024		R25J-1.0K, NF carbon	
R5170~R5172	415478214		R25J-820, NF carbon	
R5180~R5182	415473304		R25J-33, NF carbon	
R5210~R5212	417341834		R16J-18K, Carbon	
R5220~R5222	417341834		R16J-18K, Carbon	
R5230~R5232	415471504		R25J-15, NF carbon	
R5240~R5242	415471504		R25J-15, NF carbon	
R5250~R5252	417345634		R16J-56K, Carbon	
R5280~R5282	443521034		RS1/2WBJ-10K,Metal oxide	
R5290~R5292	417341044		R16J-100K, Carbon	
R5300~R5302	415476804		R25J-68, NF carbon	
R5330~R5332	415476804		R25J-68, NF carbon	
	Sockets			
P6000A~P6002A	25052287		NSCT-4P2184	
P6010A	25052289		NSCT-6P2186	
P6011A,P6012A	25052287		NSCT-4P2184	
	Heat sinks			
Q5050A~Q5052	27160517		RAD-177	
PRIMARY CIRCUIT PC BOARD (NAPS-7691-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Transistors			
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	2301716	!	NPT-1483D <D>	
	2301662	!	NPT-1456P <A>	
	Capacitors			
C901	3500196S	!	RE275V-103M,IS	
C921,C923	335622230		CK45F50V-223Z,Ceramic	
C922	394662217		CE04W35V-220M(VR),Elect.	
	Resistors			
R922,R923	417344724		R16J-4.7K, Carbon	
R924	443528204		RS1/2WBJ-82,Metal oxide	
R926	417344724		R16J-4.7K, Carbon	
	Fuse holders			
F901A,F901B	25052133	!	NSCT-1P2031 <D>	
F902A,F902B	25052133	!	NSCT-1P2031 <A>	
F903A,F903B	25052133	!	NSCT-1P2031	
	AC outlet			
P902	25051126	!	NSCT-4P913 <D>	
	25052115	!	NSCT-2P2013 <A>	
	Relay			
RL901	25065584 or	!	NRL-1P10A-DC12-140 or	
	25065516	!	NRL-1P10A-DC12-097	
	Socket			
JL931B	25050267		NSCT-3P95	
	Plug			
P911	25055675 or		NPLG-2P631 or	
	25056028		NPLG-2P0978	
	Fuse label			
F903C	29360462		5A/125V <D>	

BIAS SELECTOR PC BOARD (NAPS-7692-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Diodes			
D6901,D6902	22380260,		RL1N4003,	
	22380032 or		1SR139-100 or	
	22380035		GP104003E	
D6903,D6904	22380309 or		D15XB60 or	
	22380044		RBV-1506	
D6906	223163,		1SS133,	
	223205 or		1SS270A or	
	223222		WG713A	
	Capacitors			
C6903	374722234		ECQ-B50V-223J,Plastic film	
C6908~C6911	374733344		ECQ-V100-334J,Plastic film	
C6912	335621030		CK45F50V-103Z,Ceramic	
C6915,C6916	374733344		ECQ-V100-334J,Plastic film	
	Fuse holders			
F6901A,F6901B	25052133	!	NSCT-1P2031	
F6902A,F6902B	25052133	!	NSCT-1P2031	
	Relays			
RL6901,RL6902	25065584 or		NRL-1P10A-DC12-140 or	
	25065516		NRL-1P10A-DC12-097	
	Sockets			
JL6953B	25050268		NSCT-4P96	
	Plugs			
P6951	25055172		NPLG-9P156	
P6952A	25055168		NPLG-5P152	
P9505A	25055600		NPLG-2P568	
	Fuse label			
F6902C	29362801		T10AL250V <A>	
	Screws			
D6903B,D6904E	82143010		3P+10FN(BC)	
	Radiator			
D6903A	27160499		RAD-164	
	Washer			
D6903E,D6904E	870186		SW-3	
	Spring washer			
D6903C,D6904C	871430		SW-3(BC)(SP-WASHER)	
SPEAKER TERMINAL PC BOARD (NAETC-7694-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Diode			
D6600	223163,		1SS133,	
	223205 or		1SS270A or	
	223222		WG713A	
	Coils			
L6800~L6802	231176S		S-1.3C <A>	
	Capacitors			
C6600	335621030		CK45F50V-103Z,Ceramic	
C6830~C6832	374731034		ECQ-V100-103J,Plastic film	
C6840~C6842	374731024		ECQ-B100V-102J,Plastic film <A>	
C6850~C6852	335321025		CK45B50V-102K,Ceramic <A>	
	Resistors			
R6800~R6802	417342204		R16J-22, Carbon <A>	
R6810~R6812	417342204		R16J-22, Carbon <A>	
R6830~R6832	453630824		RNU1WCJ-8.2, Metal	
	Terminals			
P6800	25060357		NTM-6PDMN288 <D>	
P6800	25060358		NTM-6PDMN289 <A>	
	Relays			
RL6600,RL6602	25065563,		NRL-2P5A-DC24-129,	
	25065517,		NRL-2P5A-DC24-098,	
	25065586 or		NRL-2P5A-DC24-142 or	
	25065618		NRL-2P5A-DC24-158	
	Plugs			
P6007A	25055167		NPLG-4P151	
P6810D	25055166		NPLG-3P150	
	Tapes			
RL6600A	29110083		Cloth	
RL6602A	29110083		Cloth	

SURROUND SPEAKER TERMINAL PC BOARD (NAETC-7695-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Diodes			
D6603,D6605	223163,		1SS133,	
	223205 or		1SS270A or	
	223222		WG713A	
	Coils			
L6803~L6806	231176S		S-1.3C <A>	
	Capacitors			
C6603,C6605	335621030		CK45F50V-103Z,Ceramic	
C6833~C6836	374731034		ECQ-V100-103J,Plastic film	
C6843~C6846	374731024		ECQ-B100V-102J,Plastic film <A>	
C6853~C6856	335321025		CK45B50V-102K,Ceramic <A>	
	Resistors			
R6803~R6806	417342204		R16J-22, Carbon <A>	
R6813~R6816	417342204		R16J-22, Carbon <A>	
R6833~R6836	453630824		RNU1WCJ-8.2, Metal	
	Terminal			
P6802	25060353		NTM-8PDMN284 <D>	
P6802	25060354		NTM-8PDMN285 <A>	
	Relays			
RL6603,RL6605	25065563,		NRL-2P5A-DC24-129,	
	25065517,		NRL-2P5A-DC24-098,	
	25065586 or		NRL-2P5A-DC24-142 or	
	25065618		NRL-2P5A-DC24-158	
	Plugs			
P6008A	25055169		NPLG-6P153	
P6812E	25055168		NPLG-5P152	
P6832	25055734		NPLG-3P690	
	Tape			
RL6603A	29110083		Cloth	
RL6605A	29110083		Cloth	
FAN DRIVE CIRCUIT PC BOARD (NAETC-7696-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Transistors			
Q5601	2212445		2SK365-GR	
Q5602,Q5603	2215864,		KTC3199-GR,	
Q5607	2212115,		2SC2458-GR,	
Q6701,Q6702	2213284 or		2SC1740S-R or	
	2213285		2SC1740S-S	
Q5604,Q5605	2215820,		KRC104M,	
Q5608,Q5609	221282 or		DTC144ES or	
	2213560		RN1204	
Q5606	2203595,		KTC2026-GR,	
	2202705,		2SD2394-E,	
	2202706 or		2SD2394-F or	
	2203594		KTC2026-Y	
Q6704	2215995,		KTA1267-GR,	
	2212125,		2SA1048-GR,	
	2213354 or		2SA933S-R or	
	2213355		2SA933S-S	
	Diodes			
D5601	223163,		1SS133,	
D5604~D5607	223205 or		1SS270A or	
D5609,D5610	223222		WG713A	
D5602,D5603	22380260,		RL1N4003,	
	22380032 or		1SR139-100 or	
	22380035		GP104003E	
D5611	224471303		MTZJ13C,Zener	
D6701,D6702	223163,		1SS133,	
	223205 or		1SS270A or	
	223222		WG713A	
D6703,D6704	224470512		MTZJ5.1B,Zener	
	Capacitors			
C5602~C5604	394661017		CE04W35V-100M(VR),Elect.	
C6701,C6706	394621017		CE04W6.3V-100M(VR),Elect.	
C6704	394680107		CE04W50V-1M(VR),Elect.	
C6705	335622230		CK45F50V-223Z,Ceramic	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R5601	417343334		R16J-33K, Carbon	
R5602	417341054		R16J-1M, Carbon	
R5603	417341044		R16J-100K, Carbon	
R5604,R5606	417341034		R16J-10K, Carbon	
R5605	417341014		R16J-100, Carbon	
R5607,R5614	417342724		R16J-2.7K, Carbon	
R5608,R5609	417341034		R16J-10K, Carbon	
R5612	415471014		R25J-100, NF carbon	
R5613	453530474		RNU1/2WCJ-4.7, Metal	
R5615	417341034		R16J-10K, Carbon	
R5616	441721224F		RS2WBJ-1.2K,Metal oxide	
R6705,R6710	417341834		R16J-18K, Carbon	
R6706	417342234		R16J-22K, Carbon	
R6707	417341034		R16J-10K, Carbon	
R6708	417343334		R16J-33K, Carbon	
R6709	417345624		R16J-5.6K, Carbon	
	Sockets			
JL6933A	25051088		NSCT-4P875	
JL9503A	25051110		NSCT-6P897	
P6931A	25051230		NSCT-5P1020	
P7701B	25052201,		NSCT-5P2098,	
	25051271,		NSCT-5P1060,	
	25051812 or		NSCT-5P1599 or	
	25052014		NSCT-5P1801	
	Plug			
P6401	25055042		NPLG-3P32	
THERMAL DETECTOR PC BOARD (NAETC-7697-2U)				
Australian model only				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Thermistors			
R5651	4000153		PTH9M04BF222TS2F333	
R5653	4000151		PTH9M04BD222TS2F333	
	Sockets			
JL6933B	25051088		NSCT-4P875	
AC INLET PC BOARD (NAETC-7700-2T/2U)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	AC inlet			
P901B	25055960	!	NPLG-2P913	
MAIN CONNECTOR PC BOARD (NAAR-8078-1P/1Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q2923	222780155JRC		78M15HF(NJM78M15FA)	
Q2924	222790155JRC		79M15HF(NJM79M15FA)	
Q2934	222780565JRC		78M56(NJM78M56FA)	
Q2910,Q2913	22241383R2		NJM4565M-D	
Q2925	222780093JRCT		78L09(NJM78L09A)	
	Transistors			
Q2901,Q2903	2216175R2 or		KTC3875-GR or	
Q2905,Q2907	2213145R2		2SC2712-GR	
Q2902,Q2904	2216220R2 or		KRA102S or	
Q2906,Q2908	2214530R2		RN2402	
Q2909,Q2932	2216175R2 or		KTC3875-GR or	
	2213145R2		2SC2712-GR	
Q2920	2216400R2		2SB1132	
Q2931	2212855 or		2SB1068-U or	
	2212853		2SB1068-K	
Q2933,Q2935	2216190R2 or		KRC102S or	
	2214470R2		RN1402	
	Diodes			
D2901~D2903	223234R2 or		1SS352 or	
D2920	223269R2		1SS355	
D2922,D2923	223234R2 or		1SS352 or	
	223269R2		1SS355	
D2931,D2932	22380260 or		RL1N4003 or	
	22380035		GP104003E	
D2933	224490560R2		UDZ5.6B	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Capacitors			
C2901,C2910	332161040R1		CK725F1E-104Z1, Ceramic	
C2902~C2905	354741009		CE04W16V-10M,Elect.	
C2906	332101025R1		CK725B1H-102K1,Ceramic	
C2908	374722724		ECQ-B50V-272J,Plastic film	
C2916	374721224		ECQ-B50V-122J,Plastic film	
C2917,C2918	354741009		CE04W16V-10M,Elect.	
C2923~C2926	354761009		CE04W35V-10M,Elect.	
C2927,C2928	354761009		CE04W35V-10M,Elect.	
C2931	394641027		CE04W16V-1000M(VR),Elect.	
C2932	354741009		CE04W16V-10M,Elect.	
	Resistors			
R2901~R2903	435031024R1		RN72K1J-102JE,Carbon	
R2905,R2906	435031034R1		RN72K1J-103JE,Carbon	
R2908	435031524R1		RN72K1J-152JE,Carbon	
R2912	453530474		RNU1/2WCJ-4.7, Metal	
R2913	453530224		RNU1/2WCJ-2.2, Metal	
R2914~R2916	435032234R1		RN72K1J-223JE,Carbon	
R2917,R2918	435031524R1		RN72K1J-152JE,Carbon	
R2919,R2934	435032234R1		RN72K1J-223JE,Carbon	
R2920,R2924	435031034R1		RN72K1J-103JE,Carbon	
R2925,R2926	435031034R1		RN72K1J-103JE,Carbon	
R2931	453530104		RNU1/2WCJ-1, Metal	
R2932,R2935	435033324R1		RN72K1J-332JE,Carbon	
R2933	443522204		RS1/2WBJ-22,Metal oxide	
	Relays			
RL2901	25065563 or		NRL-2P5A-DC24-129 or	
	25065618		NRL-2P5A-DC24-158	
	Sockets			
P2901A	25051826		NSCT-19P1613	
P4012A	25051255		NSCT-3P1045	
P7201B	25051838		NSCT-31P1625	
P9502B	2009990748UL		NSAS-24P1045	
	Plugs			
P2005A,P604A	25055709		NPLG-13P665	
P2006A	25055806		NPLG-17P762	
P2505A	25055808		NPLG-19P764	
P2705A	25055804		NPLG-4P760	
P2855A	25055704		NPLG-8P660	
P3010A	25055703		NPLG-7P659	
P3011A	25055711		NPLG-15P667	
P3210A,P3211A	25055703		NPLG-7P659	
P4010A	25055706		NPLG-10P662	
P4011A,P4020A	25055711		NPLG-15P667	
P7002A,P7004A	25055805		NPLG-16P761	
P7003A,P800A	25055712		NPLG-20P668	
	Heat sink			
Q2934A	27160472		RAD-141	
COMPONENT VIDEO PC BOARD (NAVD-8079-1P/1Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q2001	22241884R2		LC74761M-9848	
Q2010	22241619R2		TC9273F-004	
Q2101	222740515R2		74HC4051AF	
Q2102,Q2105	22241443R2		TK15420M	
Q2201	222740515R2		74HC4051AF	
	Transistors			
Q2002~Q2005	2216220R2 or		KRA102S or	
	2214530R2		RN2402	
Q2006,Q2008	2216175R2 or		KTC3875-GR or	
Q2103,Q2106	2213145R2		2SC2712-GR	
Q2007,Q2012	2216210R2 or		KRC104S or	
	2214490R2		RN1404	
Q2009,Q2104	2216185R2 or		KTA1504-GR or	
Q2107	2214375R2		2SA1162-GR	
Q2011	2214550R2		RN2404	
Q2301~Q2309	2216031R2 or		RN1444-A or	
Q2314,Q2315	2216032R2		RN1444-B	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	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 <A>	
	Coils			
L2001	231292J056R2		NCH-1572	
L2002	231237K022R2 or		NCH-1471 or	
	233533K022R2		NCH-1587-022K	
	Capacitors			
C2001	342101002R1		CC725CH1H-100D1,Ceramic	
C2002	342101804R1		CC725CH1H-180J1,Ceramic	
C2003	342103304R1		CC725CH1H-330J1,Ceramic	
C2004	342100802R1		CC725CH1H-080D1,Ceramic <A>	
C2005~C2008	342104704R1		CC725CH1H-470J1,Ceramic	
C2009,C2016	354780109		CE04W50V-1M,Elect.	
C2010	354721019		CE04W6.3V-100M,Elect.	
C2011	375524744		MMT50V-474J,Plastic film	
C2012	354784799		CE04W50V-0.47M,Elect.	
C2013	342102704R1		CC725CH1H-270J1,Ceramic	
C2014	342102204R1		CC725CH1H-220J1,Ceramic	
C2015	374722234		ECQ-B50V-223J,Plastic film	
C2017	374726824		ECQ-B50V-682J,Plastic film	
C2018	354783399		CE04W50V-0.33M,Elect.	
C2019	332101225R1		CK725B1H-122K1,Ceramic	
C2020,C2025	332161040R1		CK725F1E-104Z1, Ceramic	
C2021,C2022	354721019		CE04W6.3V-100M,Elect.	
C2023	342104704R1		CC725CH1H-470J1,Ceramic	
C2024,C2026	354741009		CE04W16V-10M,Elect.	
C2027	332161040R1		CK725F1E-104Z1, Ceramic	
C2028	354741009		CE04W16V-10M,Elect.	
C2029	342101014R1		CC725CH1H-101J1,Ceramic	
C2044~C2046	332161040R1		CK725F1E-104Z1, Ceramic	
C2047	354721019		CE04W6.3V-100M,Elect.	
C2101~C2103	332161040R1		CK725F1E-104Z1, Ceramic	
C2104,C2106	354721019		CE04W6.3V-100M,Elect.	
C2105	332161040R1		CK725F1E-104Z1, Ceramic	
C2201~C2203	332161040R1		CK725F1E-104Z1, Ceramic	
C2204、C2206	354721019		CE04W6.3V-100M,Elect.	
C2205	332161040R1		CK725F1E-104Z1, Ceramic	
C2221	354721019		CE04W6.3V-100M,Elect.	
C2301~C2304	354721019		CE04W6.3V-100M,Elect.	
C2306	354721019		CE04W6.3V-100M,Elect.	
C2307~C2309	332161040R1		CK725F1E-104Z1, Ceramic	
C2324~C2326	332161040R1		CK725F1E-104Z1, Ceramic	
C2338	354724719		CE04W6.3V-470M,Elect.	
	Resistors			
R2001~R2004	435031044R1		RN72K1J-104JE,Carbon	
R2005~R2008	435032224R1		RN72K1J-222JE,Carbon	
R2009,R2020	435034734R1		RN72K1J-473JE,Carbon	
R2010	435032724R1		RN72K1J-272JE,Carbon	
R2011,R2018	435031024R1		RN72K1J-102JE,Carbon	
R2012	435031214R1		RN72K1J-121JE,Carbon	
R2013,R2017	435036824R1		RN72K1J-682JE,Carbon	
R2014	435031524R1		RN72K1J-152JE,Carbon	
R2015	435038244R1		RN72K1J-824JE,Carbon	
R2016,R2106	435032214R1		RN72K1J-221JE,Carbon	
R2019	435033324R1		RN72K1J-332JE,Carbon	
R2021,R2102	435031034R1		RN72K1J-103JE,Carbon	
R2022~R2025	435031044R1		RN72K1J-104JE,Carbon	
R2026,R2045	435033334R1		RN72K1J-333JE,Carbon	
R2027~R2037	435031044R1		RN72K1J-104JE,Carbon	
R2039	435031044R1		RN72K1J-104JE,Carbon	
R2040,R2044	435032224R1		RN72K1J-222JE,Carbon	
R2041,R2042	435031024R1		RN72K1J-102JE,Carbon	
R2043	435032204R1		RN72K1J-220JE,Carbon	
R2046,R2051	435036804R1		RN72K1J-680JE,Carbon	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R2047~R2050	435031044R1		RN72K1J-104JE,Carbon	
R2052	435032224R1		RN72K1J-222JE,Carbon	
R2053,R2054	435031044R1		RN72K1J-104JE,Carbon	
R2101,R2121	435031014R1		RN72K1J-101JE,Carbon	
R2103,R2104	435031824R1		RN72K1J-182JE,Carbon	
R2105,R2205	435031834R1		RN72K1J-183JE,Carbon	
R2108,R2109	435031024R1		RN72K1J-102JE,Carbon	
R2110,R2111	435030474R1		RN72K1J-047JE,Carbon	
R2122	435032234R1		RN72K1J-223JE,Carbon	
R2123	435031824R1		RN72K1J-182JE,Carbon	
R2124	435038234R1		RN72K1J-823JE,Carbon	
R2126	435032214R1		RN72K1J-221JE,Carbon	
R2128,R2129	435031024R1		RN72K1J-102JE,Carbon	
R2130,R2131	435030474R1		RN72K1J-047JE,Carbon	
R2201	435031014R1		RN72K1J-101JE,Carbon	
R2202,R2222	435031034R1		RN72K1J-103JE,Carbon	
R2203,R2204	435031824R1		RN72K1J-182JE,Carbon	
R2206,R2226	435032214R1		RN72K1J-221JE,Carbon	
R2220,R2221	435031514R1		RN72K1J-151JE,Carbon	
R2223	435031824R1		RN72K1J-182JE,Carbon	
R2224	435032224R1		RN72K1J-222JE,Carbon	
R2225	435038224R1		RN72K1J-822JE,Carbon	
R2301,R2303	435037504R1		RN72K1J-750JE,Carbon	
R2302,R2304	435031044R1		RN72K1J-104JE,Carbon	
R2305,R2306	435037504R1		RN72K1J-750JE,Carbon	
R2307,R2310	435031044R1		RN72K1J-104JE,Carbon	
R2308,R2309	435037504R1		RN72K1J-750JE,Carbon	
R2311~R2313	435037504R1		RN72K1J-750JE,Carbon	
R2314	435031024R1		RN72K1J-102JE,Carbon	
	Terminals			
P2001~P2003	25045363		NPJ-3PDYE208	
	Sockets			
P2005B	25051238		NSCT-13P1028	
P2006B	25051528		NSCT-17P1315	
P2007B	25051530		NSCT-19P1317	
CONTROL TERMINAL PC BOARD (NAETC-8083-1P/1Q)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q201	22241537R2		MPD4721GS	
Q233	222780565		78M56	
	Photo coupler			
Q211	24120080		PC817X	
	Transistors			
Q221,Q223	2216190R2 or		KRC102S or	
Q2911	2214470R2		RN1402	
Q222,Q224	2212855 or		2SB1068-U or	
Q2912	2212853		2SB1068-K	
Q231,Q232	2213145R2 or		2SC2712-GR or	
	2216175R2		KTC3875-GR	
Q2921,Q2922	2216190R2 or		KRC102S or	
	2214470R2		RN1402	
	Diodes			
D201~D203	223234R2 or		1SS352 or	
	223269R2		1SS355	
	Coil			
L201	230948R2		BLM21A102F	
	Capacitors			
C201~C204	354780109		CE04W50V-1M,Elect.	
C205,C206	332161040R1		CK725F1E-104Z1, Ceramic	
C207	354721019		CE04W6.3V-100M,Elect.	
C221~C223	354744709		CE04W16V-47M,Elect.	
C225,C233	332161040R1		CK725F1E-104Z1, Ceramic	
C231	354741009		CE04W16V-10M,Elect.	
C232	354751029S		CE04W25V-1000M,Elect.	
C2921	354721019		CE04W6.3V-100M,Elect.	
C2922	374722234		ECQ-B50V-223J,Plastic film	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Resistors			
R201,R203	435033314R1		RN72K1J-331JE,Carbon	
R205,R208	435033314R1		RN72K1J-331JE,Carbon	
R211	435031014R1		RN72K1J-101JE,Carbon	
R212	435032214R1		RN72K1J-221JE,Carbon	
R221,R223	435032224R1		RN72K1J-222JE,Carbon	
R222,R224	435031024R1		RN72K1J-102JE,Carbon	
R227,R228	4000195		RXE030,Thermistor	
R231,R232	435031024R1		RN72K1J-102JE,Carbon	
R233	453532294		RNU1/2WCJ-0.22, Metal	
R234	441721514F		RS2WBJ-150,Metal oxide	
R2909	4000195		RXE030,Thermistor	
R2910	435032224R1		RN72K1J-222JE,Carbon	
R2911	435031024R1		RN72K1J-102JE,Carbon	
R2921	435033324R1		RN72K1J-332JE,Carbon	
R2922,R2923	435031034R1		RN72K1J-103JE,Carbon	
	Terminals			
P201	25052379		NSCT-9P2277	
P202,P204	25045647		HSJ1002-01-1020	
P203	25045711		HSJ-1003-01-010	
	Sockets			
JL931A	25051107		NSCT-3P894	
P2901B	25051826		NSCT-19P1613	
P6830B,P6832B	25051255		NSCT-3P1045	
	Radiator			
Q233A	27160145		RAD-51	
THERMAL DETECTOR PC BOARD (NAETC-8085-1P)				
120V model only				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Themistors			
R5651	4000217		PTFL04BF471Q2N34B0 (80)	
R5653	4000220		PTFL04BC471Q2N34B0 (110)	
	Plug			
P6933B	25055625		NPLG-4P587	
	Shield case			
P5651	27225154		(THERMISTOR)	
THERMAL DETECTOR PC BOARD (NAETC-8086-1P)				
120V model only				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	Thermistors			
R5652	4000217		PTFL04BF471Q2N34B0 (80)	
R5654	4000220		PTFL04BC471Q2N34B0 (110)	
	Shield case			
P5652	27225154		(THERMISTOR)	
S VIDEO PC BOARD (NAVD-8069-1L/1M)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q2451	22241849R2		MM1512 <A>	
Q2501,Q2511	222740515R2		74HC4051AF	
Q2502,Q2602	22241443R2		TK15420M	
Q2601,Q2611	222740515R2		74HC4051AF	
Q2701	22241443R2		TK15420M	
Q2751	22241850R2		TC90A69F	
Q2752	22241858R2		MM1093NF	
Q2753	22241998R2		MM1093PF <A>	
	Transistors			
Q2401~Q2405	2216031R2 or		RN1444-A or	
Q2407~Q2414	2216032R2		RN1444-B <A>	
Q2503,Q2505	2216175R2 or		KTC3875-GR or	
Q2721,Q2731	2213145R2		2SC2712-GR	
Q2504,Q2506	2216185R2 or		KTA1504-GR or	
	2214375R2		2SA1162-GR	
Q2742	2216175R2 or		KTC3875-GR or	
	2213145R2		2SC2712-GR	
Q2756,Q2757	2216031R2 or		RN1444-A or	
	2216032R2		RN1444-B <A>	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Diodes			
D2503~D2506	223234R2 or		1SS352 or	
	223269R2		1SS355	
	Oscillators			
X2751	3010369		HC-49/U033.579545M	
X2752	3010381		HC-49/U034.433619M <A>	
	Coils			
L2721,L2731	231237K220R2 or		NCH-1477 or	
L2741	233533K220R2		NCH-1587-220K	
L2751~L2753	231237K101R2 or		NCH-1481 or	
	233533K101R2		NCH-1587-101K	
L2754	231237K330R2		NCH-1478	
L2755~L2757	231237K220R2 or		NCH-1477 or	
	233533K220R2		NCH-1587-220K	
L2758	231237K220R2 or		NCH-1477 or	
	233533K220R2		NCH-1587-220K <A>	
	Capacitors			
C2421,C2423	332161040R1		CK725F1E-104Z1, Ceramic	
C2422,C2424	354721019		CE04W6.3V-100M,Elect.	
C2425,C2427	332161040R1		CK725F1E-104Z1, Ceramic	
C2426,C2428	354721019		CE04W6.3V-100M,Elect.	
C2431	332161040R1		CK725F1E-104Z1, Ceramic	
C2432,C2452	354721019		CE04W6.3V-100M,Elect.	
C2433~C2436	332161040R1		CK725F1E-104Z1, Ceramic	
C2451	332161040R1		CK725F1E-104Z1, Ceramic	
C2501~C2503	332161040R1		CK725F1E-104Z1, Ceramic	
C2504,C2506	354721019		CE04W6.3V-100M,Elect.	
C2505	332161040R1		CK725F1E-104Z1, Ceramic	
C2511,C2512	332161040R1		CK725F1E-104Z1, Ceramic	
C2573,C2575	354721019		CE04W6.3V-100M,Elect.	
C2574	332161040R1		CK725F1E-104Z1, Ceramic	
C2601~C2603	332161040R1		CK725F1E-104Z1, Ceramic	
C2604,C2606	354721019		CE04W6.3V-100M,Elect.	
C2605	332161040R1		CK725F1E-104Z1, Ceramic	
C2608,C2618	354780229		CE04W50V-2.2M,Elect.	
C2611,C2612	332161040R1		CK725F1E-104Z1, Ceramic	
C2703,C2705	332161040R1		CK725F1E-104Z1, Ceramic	
C2704,C2706	354721019		CE04W6.3V-100M,Elect.	
C2721,C2731	342102204R1		CC725CH1H-220J1,Ceramic	
C2722,C2732	342101204R1		CC725CH1H-120J1,Ceramic	
C2723	332161040R1		CK725F1E-104Z1, Ceramic	
C2733	354744709		CE04W16V-47M,Elect.	
C2741	342102204R1		CC725CH1H-220J1,Ceramic	
C2742	342101204R1		CC725CH1H-120J1,Ceramic	
C2751,C2752	332151030R1		CK725F1H-103Z1,Ceramic	
C2753,C2755	354721019		CE04W6.3V-100M,Elect.	
C2754,C2756	332161040R1		CK725F1E-104Z1, Ceramic	
C2757,C2758	332151030R1		CK725F1H-103Z1,Ceramic	
C2759,C2771	354784799		CE04W50V-0.47M,Elect.	
C2760,C2762	354744709		CE04W16V-47M,Elect.	
C2761	332151030R1		CK725F1H-103Z1,Ceramic	
C2763~C2765	332151030R1		CK725F1H-103Z1,Ceramic	
C2766	374721044		ECQ-V50V-104J,Plastic film	
C2767	374726814		ECQ-B50V-681J,Plastic film	
C2768,C2781	332161040R1		CK725F1E-104Z1, Ceramic	
C2769,C2780	354721019		CE04W6.3V-100M,Elect.	
C2770,C2775	332151030R1		CK725F1H-103Z1,Ceramic	
C2772	342115614R1		CC725CH1E-561J1,Ceramic	
C2773	342103914R1		CC725CH1H-391J1,Ceramic	
C2774	342105604R1		CC725CH1H-560J1,Ceramic <A>	
C2774	342115614R1		CC725CH1E-561J1,Ceramic <D>	
C2776	354780479		CE04W50V-4.7M,Elect.	
C2777	332151030R1		CK725F1H-103Z1,Ceramic	
C2778	342105604R1		CC725CH1H-560J1,Ceramic	
C2779	354780229		CE04W50V-2.2M,Elect.	
C2782,C2787	332151030R1		CK725F1H-103Z1,Ceramic <A>	
C2783	354784799		CE04W50V-0.47M,Elect. <A>	
C2784	342115614R1		CC725CH1E-561J1,Ceramic <A>	
C2785	342103914R1		CC725CH1H-391J1,Ceramic <A>	
C2786,C2790	342105604R1		CC725CH1H-560J1,Ceramic <A>	

CIRCUIT NO.	PART NO.		DESCRIPTION	
	Capacitors			
C2788	354780479		CE04W50V-4.7M,Elect. <A>	
C2789,C2792	332151030R1		CK725F1H-103Z1,Ceramic <A>	
C2791	354780229		CE04W50V-2.2M,Elect. <A>	
C2793	354721019		CE04W6.3V-100M,Elect. <A>	
C2794	332161040R1		CK725F1E-104Z1, Ceramic <A>	
	Resistors			
R2401,R2403	435037504R1		RN72K1J-750JE,Carbon	
R2402,R2404	435031034R1		RN72K1J-103JE,Carbon	
R2405,R2407	435037504R1		RN72K1J-750JE,Carbon	
R2406,R2408	435031034R1		RN72K1J-103JE,Carbon	
R2409,R2411	435037504R1		RN72K1J-750JE,Carbon	
R2410,R2412	435031034R1		RN72K1J-103JE,Carbon	
R2421~R2427	435037504R1		RN72K1J-750JE,Carbon	
R2428	435037504R1		RN72K1J-750JE,Carbon <A>	
R2431,R2432	435037504R1		RN72K1J-750JE,Carbon	
R2501,R2511	435031014R1		RN72K1J-101JE,Carbon	
R2502,R2512	435031034R1		RN72K1J-103JE,Carbon	
R2503,R2504	435031824R1		RN72K1J-182JE,Carbon	
R2505,R2605	435031234R1		RN72K1J-123JE,Carbon	
R2506,R2516	435032214R1		RN72K1J-221JE,Carbon	
R2508,R2509	435031024R1		RN72K1J-102JE,Carbon	
R2510,R2520	435030474R1		RN72K1J-047JE,Carbon	
R2513,R2514	435031824R1		RN72K1J-182JE,Carbon	
R2515,R2615	435031534R1		RN72K1J-153JE,Carbon	
R2518,R2519	435031024R1		RN72K1J-102JE,Carbon	
R2521,R2524	435030474R1		RN72K1J-047JE,Carbon	
R2601,R2611	435031014R1		RN72K1J-101JE,Carbon	
R2602,R2612	435031034R1		RN72K1J-103JE,Carbon	
R2603,R2604	435031824R1		RN72K1J-182JE,Carbon	
R2606,R2616	435032214R1		RN72K1J-221JE,Carbon	
R2613,R2614	435031824R1		RN72K1J-182JE,Carbon	
R2701,R2711	435031014R1		RN72K1J-101JE,Carbon	
R2703,R2713	435031824R1		RN72K1J-182JE,Carbon	
R2704,R2714	435032724R1		RN72K1J-272JE,Carbon	
R2706,R2716	435032214R1		RN72K1J-221JE,Carbon	
R2721,R2731	435031034R1		RN72K1J-103JE,Carbon	
R2722,R2723	435038214R1		RN72K1J-821JE,Carbon	
R2724,R2734	435031224R1		RN72K1J-122JE,Carbon	
R2732,R2733	435038214R1		RN72K1J-821JE,Carbon	
R2743,R2746	435038214R1		RN72K1J-821JE,Carbon	
R2744	435031524R1		RN72K1J-152JE,Carbon	
R2745	435033324R1		RN72K1J-332JE,Carbon	
R2751	435031024R1		RN72K1J-102JE,Carbon	
R2753	435033314R1		RN72K1J-331JE,Carbon	
R2754,R2757	435033914R1		RN72K1J-391JE,Carbon	
R2755	435031054R1		RN72K1J-105JE,Carbon	
R2756	435031534R1		RN72K1J-153JE,Carbon	
R2758,R2759	435031034R1		RN72K1J-103JE,Carbon	
R2760,R2761	435031014R1		RN72K1J-101JE,Carbon	
R2762,R2765	435033914R1		RN72K1J-391JE,Carbon <A>	
R2763	435031054R1		RN72K1J-105JE,Carbon <A>	
R2764	435031534R1		RN72K1J-153JE,Carbon <A>	
R2766,R2767	435031034R1		RN72K1J-103JE,Carbon <A>	
R2768	435030004R1		RN72K1J-000JE,Carbon <A>	
R2769,R2773	435031044R1		RN72K1J-104JE,Carbon <A>	
R2771	435030004R1		RN72K1J-000JE,Carbon	
R2772	435030004R1		RN72K1J-000JE,Carbon <D>	
	Sockets			
P2501	25051955		NSCT-4P1742	
P2502	25051957		NSCT-12P1744	
P2503,P2504	25051956		NSCT-8P1743	
P2505B	25051530		NSCT-19P1317	
P2507B	25051241		NSCT-20P1031	
	Plug			
P2506A	25055236		NPLG-5P220	

COMPONENT VIDEO PC BOARD (NAVD-8070-1L/1M)				
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**	
	ICs			
Q2801	22241465R2		LA7106MFP	
Q2821	22241851R3		TA1270BF	
Q2822	22241999		TA8772AN <A>	
	Transistors			
Q2803,Q2804	2216330R2 or		KRC101S or	
	2214460R2		RN1401	
Q2823,Q2824	2216175R2 or		KTC3875-GR or	
	2213145R2		2SC2712-GR <A>	
Q2825,Q2826	2216330R2 or		KRC101S or	
	2214460R2		RN1401 <A>	
	Diodes			
D2801~D2804	223234R2 or		1SS352 or	
	223269R2		1SS355	
	Oscillators			
X2822	3010369		HC-49/U033.579545M	
X2823	3010381		HC-49/U034.433619M <A>	
	Capacitors			
C2801~C2803	332161040R1		CK725F1E-104Z1, Ceramic	
C2804,C2806	354721019		CE04W6.3V-100M,Elect.	
C2805,C2807	332161040R1		CK725F1E-104Z1, Ceramic	
C2811~C2813	354741009		CE04W16V-10M,Elect.	
C2824	354721019		CE04W6.3V-100M,Elect.	
C2825,C2827	332161040R1		CK725F1E-104Z1, Ceramic	
C2826,C2829	374721044		ECQ-V50V-104J,Plastic film	
C2828	354744709		CE04W16V-47M,Elect.	
C2830,C2833	354780229		CE04W50V-2.2M,Elect.	
C2831	332161040R1		CK725F1E-104Z1, Ceramic	
C2832	374722234		ECQ-B50V-223J,Plastic film	
C2834	342105604R1		CC725CH1H-560J1,Ceramic	
C2835	374722224		ECQ-B50V-222J,Plastic film	
C2836	354782299		CE04W50V-0.22M,Elect.	
C2837	342105604R1		CC725CH1H-560J1,Ceramic <A>	
C2838,C2839	332161040R1		CK725F1E-104Z1, Ceramic <A>	
C2840,C2847	354744709		CE04W16V-47M,Elect. <A>	
C2841,C2842	332161040R1		CK725F1E-104Z1, Ceramic <A>	
C2843	354741009		CE04W16V-10M,Elect. <A>	
C2844,C2846	332161040R1		CK725F1E-104Z1, Ceramic <A>	
C2845,C2848	354784799		CE04W50V-0.47M,Elect. <A>	
C2849~C2851	354780109		CE04W50V-1M,Elect. <A>	
C2852~C2857	332161040R1		CK725F1E-104Z1, Ceramic <A>	
	Oscillators			
X2821	3010370		CSBLA503KECZF30	
	Resistors			
R2811~R2813	435031014R1		RN72K1J-101JE,Carbon	
R2814~R2816	435037504R1		RN72K1J-750JE,Carbon	
R2822,R2823	435031014R1		RN72K1J-101JE,Carbon	
R2824,R2830	435031814R1		RN72K1J-181JE,Carbon	
R2825,R2831	435031034R1		RN72K1J-103JE,Carbon	
R2826	435033324R1		RN72K1J-332JE,Carbon	
R2827,R2828	435033334R1		RN72K1J-333JE,Carbon	
R2829	435033344R1		RN72K1J-334JE,Carbon	
R2832,R2833	435031034R1		RN72K1J-103JE,Carbon	
R2834	435031034R1		RN72K1J-103JE,Carbon <A>	
R2835~R2839	435031024R1		RN72K1J-102JE,Carbon <A>	
R2840,R2842	435031034R1		RN72K1J-103JE,Carbon <A>	
R2841	435031024R1		RN72K1J-102JE,Carbon <A>	
R2843,R2844	435030004R1		RN72K1J-000JE,Carbon <D>	
R2845~R2848	435031514R1		RN72K1J-151JE,Carbon	
R2849,R2850	435030004R1		RN72K1J-000JE,Carbon	
	Terminals			
P2801~P2803	25045607		NPJ-3PDGLR414	
	Relays			
RL2801~RL2804	25065610		NRL-2P1A-DC4.5-156	
	Sockets			
P2705B	25051526		NSCT-4P1313	
P2853B	25051230		NSCT-5P1020	
P2855B	25051233		NSCT-8P1023	

Integra Division of
ONKYO CORPORATION
Sales & Product Planning Div. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN
Tel: 072-831-8023 Fax: 072-831-8124 http://www.onkyo.com/jp/

Integra Division of
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 http://www.integrahometheater.com