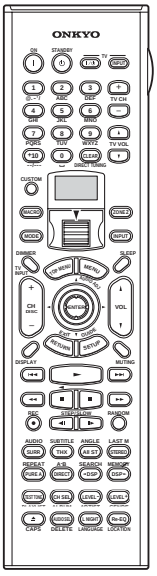
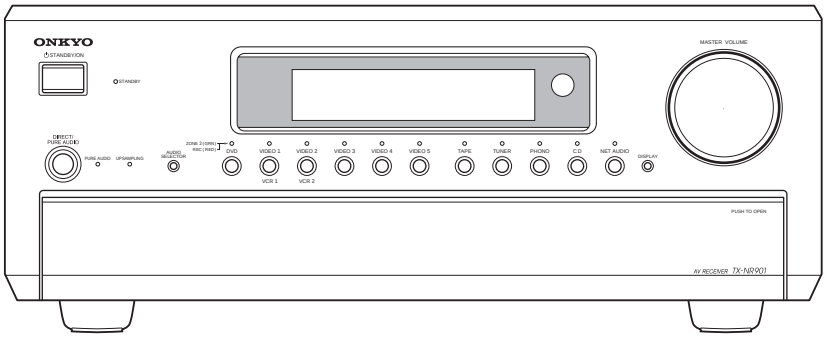
ONKYO SERVICE MANUAL

Ref. No. 3786
112003



AV RECEIVER
MODEL TX-NR901



Black and Golden models

BMDD,BMDC	120V, AC 60Hz
GMWT,GMWR	120/220~230V, AC 50/60Hz
BMPA,GMPA	230~240V, AC 50Hz
GMGK	220V, 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.

ONKYO®
IMAGINATIVE SIGHT & SOUND

SPECIFICATIONS

Amplifier Section

Power output: All channels:	110 W (8Ω , 20 Hz–20 kHz, FTC) (American Model) 180 W (6Ω , 1 kHz, EIAJ) (Asian Model) 150 W (6Ω , 1 kHz, DIN) (Australian model)
Dynamic power:	2 x 280W (3Ω , front) 2 x 220W (4Ω , front) 2 x 140W (8Ω , front)
THD (total harmonic distortion):	0.08% (rated power)
Damping factor:	60
Input sensitivity and impedance:	200 mV/50kΩ (LINE) 2.5 mV/50kΩ (PHONO MM)
Output level and impedance:	200 mV/470Ω (REC OUT)
Phono overload:	120 mV (MM, 1 kHz, 0.5%)
Frequency response:	10 Hz–100 kHz/+1 dB, –3 dB (CD, Direct)
Tone control:	±10 dB, 50 Hz (BASS) ±10 dB, 20,000 Hz (TREBLE)
S/N ratio (Direct mode):	110 dB (LINE, IHF-A, 0.5 V input) 80 dB (PHONO, IHF-A, 5 mV input)
Speaker impedance:	4–16

Video Section

Input sensitivity, output level and impedance:	1.0 Vp-p/75 Ω (component and S-Video Y) 0.7 Vp-p/75 Ω (component P_B/C_B, P_R/C_R) 0.286 Vp-p/75Ω (S-Video C) 1.0 Vp-p/75 Ω (composite)
Component video frequency response:	5 Hz–50 MHz

Tuner Section

■ FM

Tuning frequency range:	87.5–108.0 MHz
Usable sensitivity:	FM STEREO 17.2 dBf, 2.0 µV (75 Ω IHF) FM MONO 11.2 dBf, 1.0 µV (75 Ω IHF)
S/N ratio:	FM STEREO 70 dB (IHF-A) FM MONO 76 dB (IHF-A)
THD:	FM STEREO 0.3% FM MONO 0.2%
FM stereo separation:	45 dB at 1 kHz, 30 dB at 100 Hz–10 kHz

■ AM

Tuning frequency range:	530–1710 kHz (American model) 522–1611 kHz (Other models)
Usable sensitivity:	30 µV
S/N ratio:	40 dB
THD:	0.7%

General

Power supply:	American model: AC 120 V, 60 Hz Australian model: AC 230–240 V, 50 Hz Others models: AC 220–230V and 120V switchable 50/60 Hz
Power consumption:	American model: 9.0 A Australian and Worldwide models: 670 W
Standby power consumption:	2.5 W
Dimensions (W x H x D):	17-1/8" x 6-7/8" x 18-1/16" (435 x 175 x 459 mm)
Weight:	American and Australian models: 42.5 lbs. (19.3 kg) Worldwide models: 42.3 lbs. (19.2 kg)

■ Video Inputs

Component video inputs:	2 (Input 1, Input 2)
S-Video inputs:	6 (DVD, Video 1–5)
Video inputs:	6 (DVD, Video 1–5)

■ Video Outputs

Component video outputs:	1 (Component Monitor Out)
S-Video outputs:	3 (Video 1 Out, Video 2 Out, Video Monitor Out)
Video outputs:	4 (Video 1 Out, Video 2 Out, Video Monitor Out, Zone 2 Video Out)

■ Audio Inputs

Digital inputs:	8 (Optical 1–4, Optical Video 5 (fixed, on front panel), Coaxial 1–3)
Analog inputs:	8 (CD, Phono, Tape, DVD, Video 1–4, Video 5)
Multichannel analog inputs:	7.1 ch (Front L/R, Center, Surround L/R, Surround Back L/R, Subwoofer)

■ Audio Outputs

Digital outputs:	2 optical
Analog outputs:	4 (Tape Out, Video 1 Out, Video 2 Out, Zone 2 Out)
Pre outs:	8 (Front L/R, Center , Surround L/R, Surround Back L/R or Zone 2 L/R, Subwoofer)
Subwoofer pre out:	1
Speaker outputs:	7
Phones:	1

■ Other Sockets

RS-232:	1 (not American and Australian models)
IR in/out:	1
12V trigger out:	1
Ethernet (Net-Tune)	1 (10Base-T, RJ45)

Specifications and features are subject to change without notice.

SERVICE PROCEDURES 1

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'utiliser que fusibles de meme type. Ce darnier est la qu le present symbol est appse.

REF. NO.	PART NO.	DESCRIPTION
F901	252196	12A-UL/T-314,Fuse <D/T/R>
F902	252078	5A-SE-EAK,
	252244 or	5A-SE-TL250V or
	252278	5A-SE-TL250V, Fuse <T/A/R/K>
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 <T/A/R/K>
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 <T/A/R/K>
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 <T/A/R/K>

Note: <D>: 120V model only
<A>: Australian model only
<T>: Worldwide model only
<R>: Chinese model only
<K>: Korean model only

2. To initialize the unit

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

1.Press the STANDBY ON button to turn on the unit.
2.Press and hold down the VIDEO 1 button, then press the STANDBY/ON button.
3.After "CLEAR" is displayed, the preset memory and each mode stored in the memory, such as surround, are initialized and will return to the factory setting.
4.Unplug the power supply cord.

3. Safety-check out

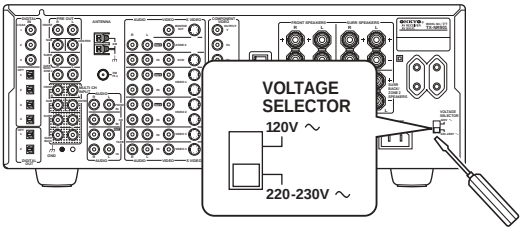
(Only U.S.A. model)
After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and screw on the back panel. Specifications: 3.3Mohm+/-10% at 500V.

4. Memory Preservation

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

5.Setting the voltage selector (Worldwide models only)

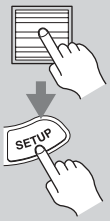
Worldwide models are equipped with a voltage selector so that you can set your TX-NR901 to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit. Determine the proper voltage for your area: 220-230 V or 120 V. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch and slide the switch all the way to the top (120 V) or bottom (220-230 V), whichever is appropriate.



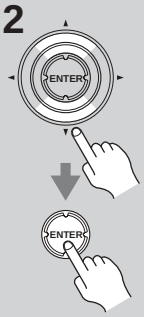
SERVICE PROCEDURES 2

Specifying the AM Frequency Step (Worldwide model only)

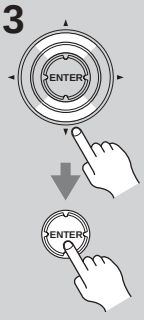
This section explains how to specify the AM frequency step. (This setting is not available on American and Australian models.)

1 

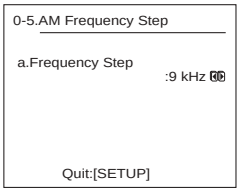
Press the scroll wheel, and then press the [SETUP] button.
The main menu appears onscreen.

2 

Use the Up/Down [▲]/[▼] buttons to select "0. Hardware Setup," and then press the [ENTER] button.
The Hardware Setup menu appears.

3 

Use the Up/Down [▲]/[▼] buttons to select "5. AM Frequency Step," and then press the [ENTER] button.
The AM Frequency Step menu appears.



4 

Use the Up/Down [▲]/[▼] buttons to select "a. Frequency Step," and then use the Left/Right [◄]/[►] buttons to select:
10 kHz: Select if 10 kHz steps are used in your area.
9 kHz: Select if 9 kHz steps are used in your area.

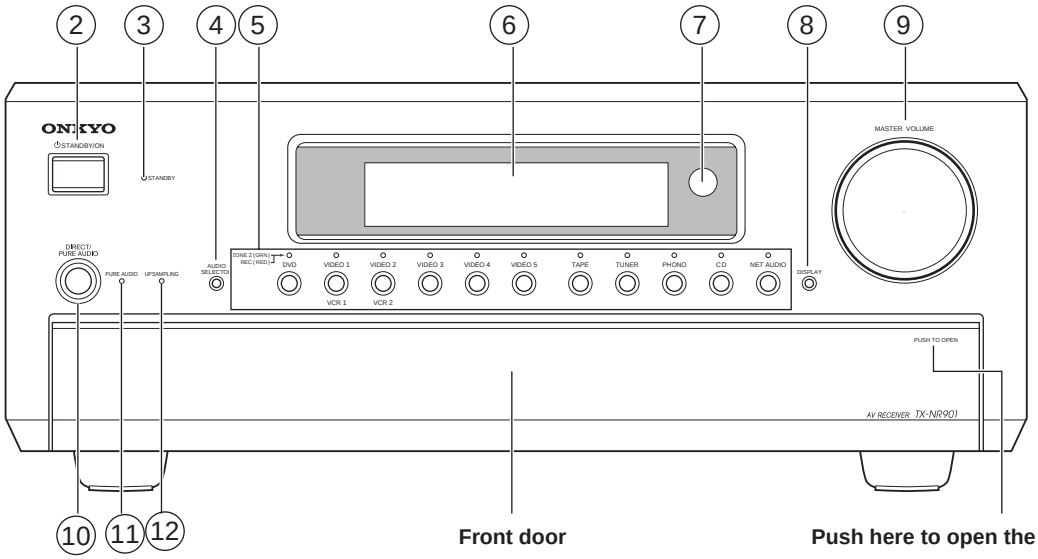
5 

Press the [SETUP] button.
The setup menu closes.

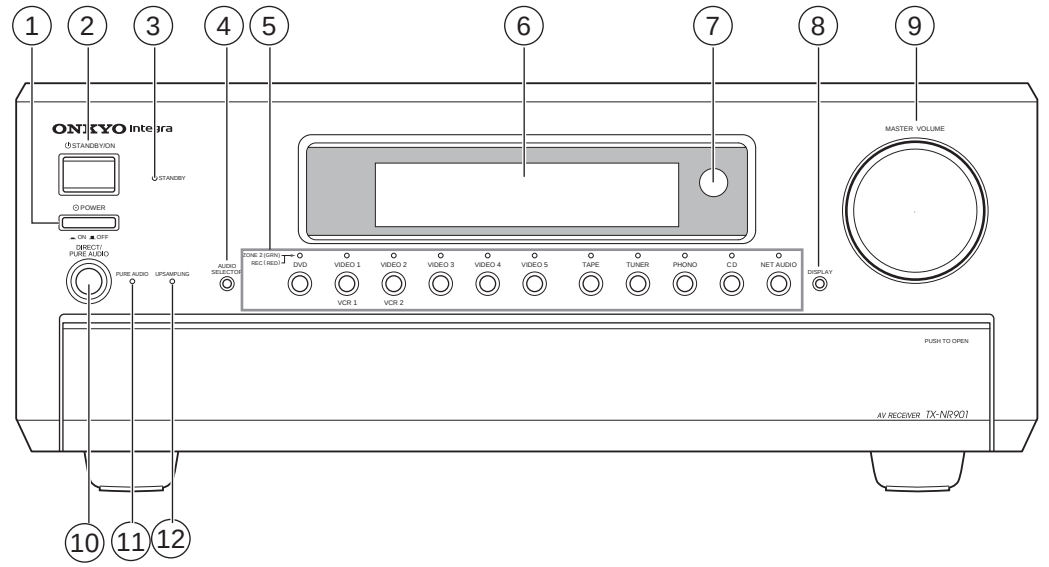
Note:
* This procedure can also be performed by using the TX-NR901's [SETUP] button, [▲]/[▼]/[◄]/[►] buttons, and [ENTER] button.

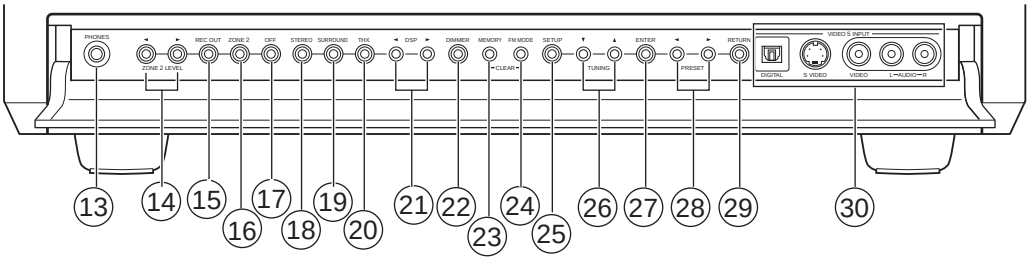
FRONT PANEL

American and Australian Models



Other Models





FRONT PANEL

1. **POWER switch**
   American and Australian models don't have this switch.

   This is the main power switch. When set to OFF, the TX-NR901 is completely shutdown. When set to ON, the TX-NR901 is in Standby mode and the STANDBY indicator lights up.

   Don't turn on the power until you've completed, and double checked all connections.
2. **STANDBY/ON button**
   This button is used to set the TX-NR901 to On or Standby. For models with a POWER switch, this button has no effect unless the POWER switch is set to ON.
3. **STANDBY indicator**
   This indicator lights up when the TX-NR901 is in Standby mode, and it ashes while a signal is being received from the remote controller.
4. **AUDIO SELECTOR button**
   This button is used to select the audio input signal format: analog, digital, or multichannel.
5. **Input selector buttons & indicators**
   These buttons are used to select the following input sources: DVD, VIDEO 1–5, TAPE, TUNER, PHONO, CD, and NET AUDIO. The indicators show the currently selected input source.

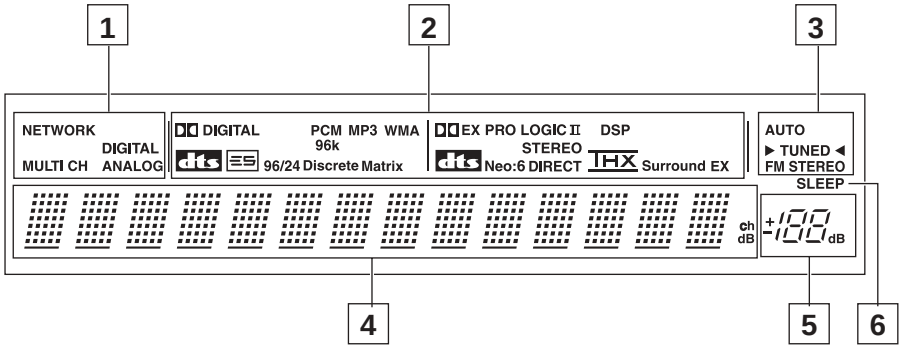
   The indicators also show which input source is selected for Zone 2, in which case they light up green, or which input source is selected for recording (REC OUT), in which case they light up red.
6. **Display**
   See "Display" on next page.
7. **Remote-control sensor**
   This sensor receives control signals from the remote controller.
8. **DISPLAY button**
   This button is used to display various information about the currently selected input source.
9. **MASTER VOLUME control**
   This control is used to set the volume of the TX-NR901 from 0 to 100.
10. **DIRECT/PURE AUDIO button**
    This button is used to select the Direct or Pure Audio listening modes.
11. **PURE AUDIO indicator**
    This indicator lights up when the Pure Audio listening mode is selected.
12. **UPSAMPLING indicator**
    This indicator lights up when the Upsampling function is on.
13. **PHONES jack**
    This 1/4-inch phone jack is for connecting a standard pair of stereo headphones for private listening.
14. **ZONE 2 LEVEL [◄] [►] buttons**
    These buttons are used to set the volume for Zone 2.
15. **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, VIDEO 2 OUT).
16. **ZONE 2 button**
    This button is used to select the input source for Zone 2.
17. **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.
18. **STEREO button**
    This button is used to select the Stereo listening mode.
19. **SURROUND button**
    This button is used to select the Dolby and DTS listening modes.
20. **THX button**
    This button is used to select the THX listening modes.
21. **DSP [◄] [►] buttons**
    These buttons are used to select the DSP (digital signal processor) listening modes.
22. **DIMMER button**
    This button is used to adjust the display brightness.
23. **MEMORY button**
    This button is used when storing and deleting radio presets.
24. **FM MODE button**
    This button is used to select the FM radio Auto and Mono modes.
25. **SETUP button**
    This button is used to access the onscreen setup menus (OSD) that appear on the TV.
26. **TUNING [▲] [▼] buttons**
    These buttons are used to tune into radio stations and to select items on the onscreen setup menus (OSD).
27. **ENTER button**
    This button is used when navigating the onscreen setup menus (OSD), entering names, and confirming settings.
28. **PRESET [◄] [►] buttons**
    These buttons are used to select radio presets and to select items on the onscreen setup menus (OSD).

FRONT PANEL

(29) **RETURN button**
This button is used to return to the previously displayed onscreen setup menu (OSD).

(30) **VIDEO 5 INPUTs**
These optical digital audio, S-Video, composite video, and analog audio inputs can be used to connect a camcorder, games console, and so on.

Display



1 **Audio input format indicators**
These indicators show the audio input format for the currently selected input source.

2 **Listening mode & digital audio format indicators**
These indicators show the currently selected listening mode and digital audio format.

3 **Tuning indicators**
AUTO indicator:
This indicator lights up when the tuner is tuned to an FM station and Stereo mode is selected. It goes off when Mono mode is selected.

TUNED indicator:
This indicator lights up when the tuner is tuned into an AM or FM station.

FM STEREO indicator:
This indicator lights up when the tuner is tuned to a stereo FM station. It goes off when Mono mode is selected.

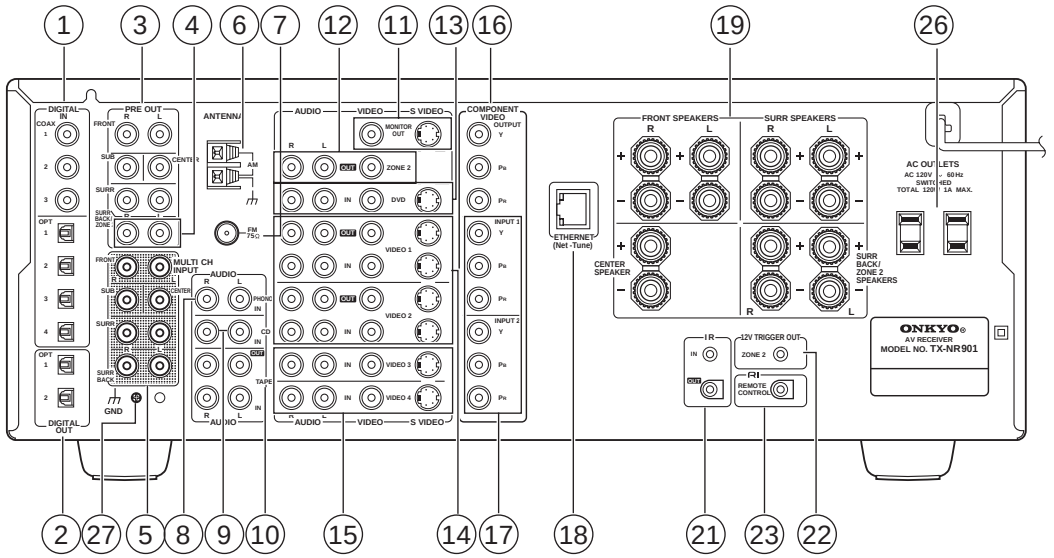
4 **Multipurpose display area**
Normally, the name of the currently selected input source is displayed here. When you select the AM or FM input source, the radio frequency and preset number are displayed. If you press the [DISPLAY] button, the currently selected listening mode and digital audio format are displayed.

5 **Volume level**
The volume level is displayed here.

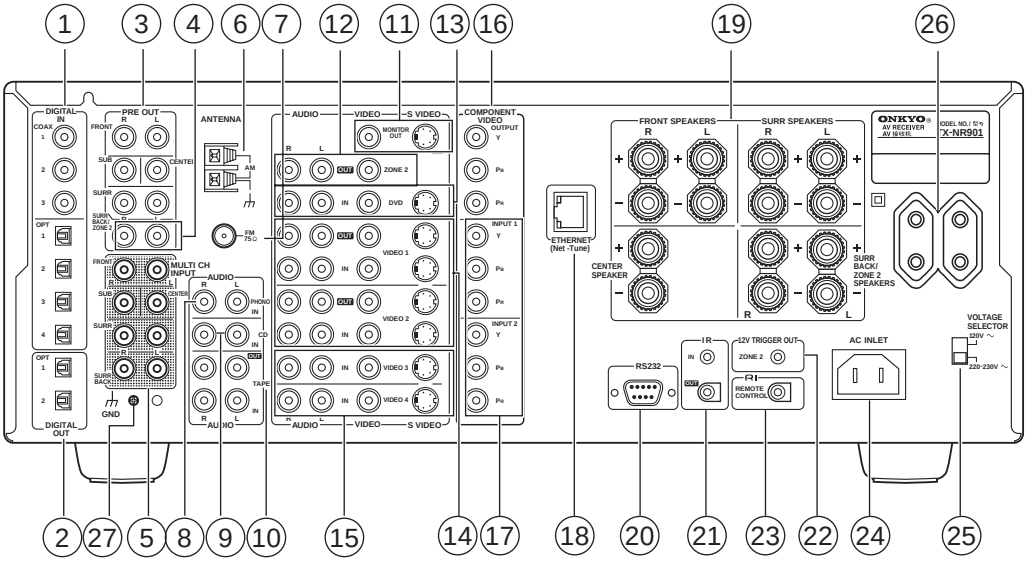
6 **SLEEP indicator**
This indicator lights up when the Sleep function has been set.

REAR PANEL

American and Australian Models



Other Models



1 DIGITAL IN COAX 1–3, OPT 1–4

These coaxial and optical digital audio inputs can be used to connect CD, DVD, or LD (laser disc) players and other components with digital audio outputs.

2 DIGITAL OUT OPT 1 & 2

These optical digital audio outputs can be used to connect a CD recorder or other digital recorder with digital inputs.

3 PRE OUT—FRONT L/R, SUB, CENTER, SURR L/R

If you use the TX-NR901 as a preamp, these analog audio outputs can be connected to the inputs on a separate power amp. The SUB output is used to connect a powered subwoofer.

REAR PANEL

④ **PRE OUT—SURR BACK/ZONE 2**
These analog audio outputs can be used to feed the L/R surround back inputs on a separate power amp when the TX-NR901 is used as a preamp, or to feed a power amp in Zone 2.

⑤ **MULTI CH INPUT—FRONT L/R, SUB, CENTER, SURR L/R, SURR BACK L/R**
These analog audio inputs can be used to connect AV components with multiple analog audio outputs, including DVD players with individual 5.1/7.1 surround analog audio outputs.

⑥ **AM ANTENNA**
These push terminals are for connecting an AM antenna.

⑦ **FM ANTENNA**
This connector is for connecting an FM antenna.

⑧ **PHONO IN**
These analog inputs can be used to connect a turntable with a moving-magnet cartridge.

⑨ **CD IN**
These analog inputs can be used to connect a CD player with analog outputs.

⑩ **TAPE IN/OUT**
These analog inputs and outputs can be used to connect a cassette recorder, Mini Disc recorder, or other recorder with analog inputs and outputs.

⑪ **MONITOR OUT**
This S-Video or composite video output can be connected to the video input on your TV or projector.

⑫ **ZONE 2 OUT**
These composite video and analog audio outputs can be used to feed a TV and an integrated amp in Zone 2.

⑬ **DVD IN**
These S-Video, composite video, and analog audio inputs can be used to connect a DVD player.

⑭ **VIDEO 1 & 2 IN/OUT**
These S-Video, composite video, and analog audio inputs and outputs can be used to connect one or two video recorders (e.g., VCRs).

⑮ **VIDEO 3 & 4 IN**
These S-Video, composite video, and analog audio inputs can be used to connect one or two video sources (e.g., cable TV, satellite TV, or a set-top box).

⑯ **COMPONENT VIDEO OUTPUT**
This component video output can be used to connect a TV or projector with a component video input.

⑰ **COMPONENT VIDEO INPUT 1 & 2**
These component video inputs can be used to connect one or two AV components with component video outputs, such as a DVD player.

⑱ **ETHERNET (Net-Tune)**
This port is for connecting the TX-NR901 to your Ethernet network (i.e., router or switch) for use with Net-Tune (i.e., Internet radio and MP3, WAV, and WMA playback).

⑲ **SPEAKERS**
These terminal posts are for connecting your speakers.The SURR BACK/ZONE 2 terminals can be used with surround back speakers in the main room or speakers in another room (Zone 2).

⑳ **RS232**
This port is for connecting the TX-NR901 to home automation and external controllers.

American and Australian models don't have this port.

㉑ **IR IN/OUT**
If you want to use the remote controller to control the TX-NR901 from Zone 2, or if the TX-NR901 is installed in a cabinet and the line of sight between the TX-NR901 and the remote controller is obstructed, a commercially available IR receiver can be connected to the IR IN. A commercially available IR emitter can be connected to the IR OUT to pass the IR signals along to another AV component.

㉒ **ZONE 2 12V TRIGGER OUT**
This output can be connected to the 12-volt trigger input on a power amp in Zone 2. The power amp can then be turned on or off automatically from the TX-NR901.

㉓ **RI REMOTE CONTROL**
This RI (Remote Interactive) socket can be connected to the RI socket on another Onkyo AV component.The TX-NR901's remote controller can then be used to control that component. To use RI, you must make an analog RCA/phono audio connection between the TX-NR901 and the other AV component, even if they are connected digitally.

㉔ **AC INLET**
The supplied power cord should be connected here.

American and Australian models do not have an AC INLET. They have an integral power cord instead.

㉕ **VOLTAGE SELECTOR**
This voltage selector provides compatibility with power systems around the world.

American and Australian models don't have this selector.

㉖ **AC OUTLETS**
These switched AC outlets can be used to supply power to other AV components. The connector type depends on the country in which you purchased your TX-NR901.

㉗ **Grounding screw**
This screw is for connecting a turntable's ground wire.

REMOTE CONTROLLER

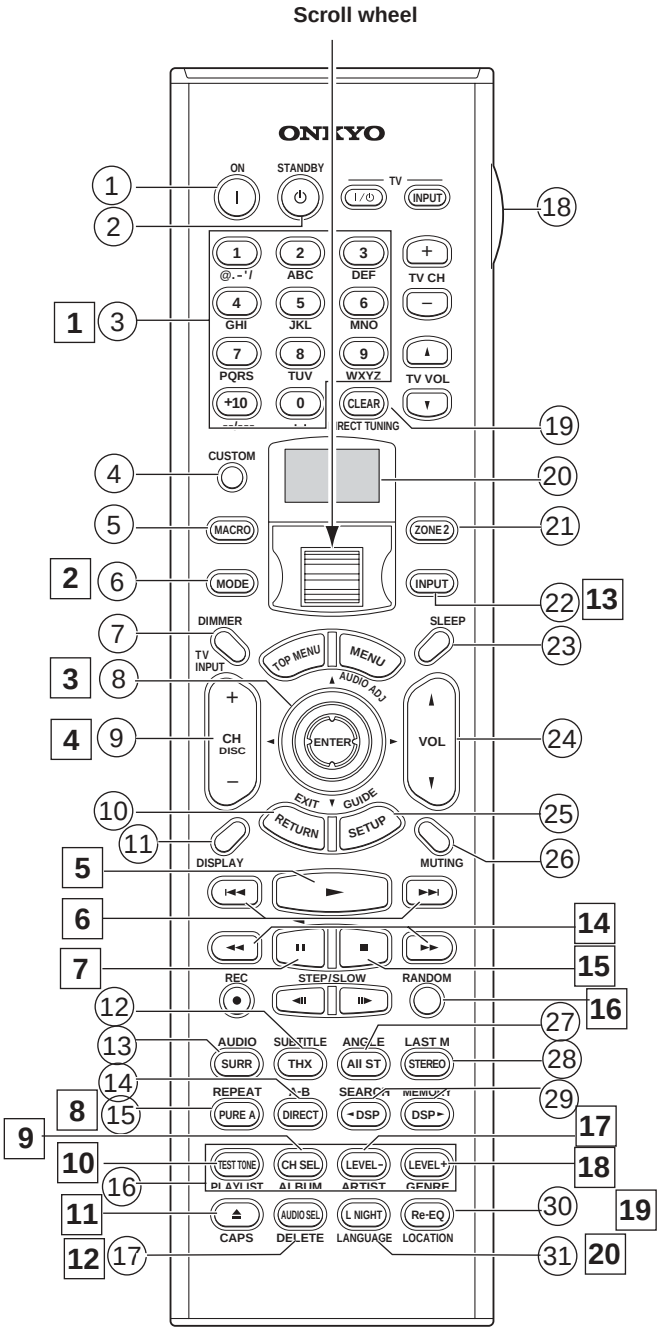
The TX-NR901's remote controller is a multipurpose device that can be used to control not just the TX-NR901 but your other AV components as well. This section explains how it's various operating modes can be used to control the TX-NR901 and various RI-compatible Onkyo components.

Amp Mode

Amp mode is used to control the TX-NR901.**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
Boxed numbers are for Net-Tune mode.

1. **ON button**
   This button is used to turn on the TX-NR901.
2. **STANDBY button**
   This button is used to set the TX-NR901 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. **SURR 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.



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 TX-NR901.

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 TX-NR901. This function can be set only with the remote controller.

㉗ **All 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.

Net-Tune Mode

Net-Tune mode is used with the Net-Tune functions. **To select Net-Tune mode, press the [MODE] button, and then roll the scroll wheel until "NET -T" appears on the display**.

Note:
While neither the [INPUT] button nor [MODE] button is illuminated, the scroll wheel changes the input source and remote controller mode simultaneously. (e.g., set the input source to "MSR V/IRD" and the mode to "NET-T.")

1 **Number/letter buttons**
These buttons are used to enter numbers and letters when searching for music in your Net-Tune Central music library

2 **MODE button**
This button is used with the scroll wheel to select the remote controller modes. Press this button first, and then roll the scroll wheel until "NET -T" appears on the display

3 **Up/Down/Left/Right [▲]/[▼]/[◀]/[▶] & ENTER buttons**
These buttons are used to navigate Internet radio and Net-Tune server menus. The ENTER button is used to confirm items and to start playback of Net-Tune server tracks.

4 **CH/DISC button**
This button is used to select Internet radio presets.

5 **Play [▶] button**
This button is used to start playback of Net-Tune server tracks.

6 **Previous/Next [⏮]/[⏭] buttons**
The Previous [⏮] button is used to select the previous track. During playback it selects the beginning of the current track. The Next [⏭] button is used to select the next track.

7 **Pause [❚❚] button**
This button is used to pause playback.

8 **REPEAT button**
This button is used for repeat playback.

9 **ALBUM button**
This button is used to search your Net-Tune Central music library by album.

10 **PLAYLIST button**
This button is used to search your Net-Tune Central library by playlist.

REMOTE CONTROLLER

11 **CAPS button**
This button is used to select lowercase letters, uppercase letters, and numbers when searching for Net-Tune Central music by album, artist, or playlist.

12 **DELETE button**
This button is used to delete characters entered with the number/letter buttons.

13 **INPUT button**
This button is used to select the input source. Press this button first, and then roll the scroll wheel until "MSRV" (Music Server—Net-Tune Central) or "IRD" (Internet Radio) appears on the display.

14 **FR/FF [◄◄]/[►►] buttons**
The FR [◄◄] button is used to start fast reverse. The FF [►►] button is used to start fast forward.

15 **Stop [■] button**
This button is used to stop playback.

16 **RANDOM button**
This button is used for random playback.

17 **ARTIST button**
This button is used to search your Net-Tune Central music library by artist.

18 **GENRE button**
This button is used to search your Net-Tune Central music library by genre, and to search for Internet radio stations by genre.

19 **LOCATION button**
This button is used to search for Internet radio stations by country.

20 **LANGUAGE button**
This button is used to search for Internet radio stations by language.

Connecting your RI-compatible Onkyo DVD player, CD player, MiniDisc recorder, or cassette recorder to the TX-NR901's RI socket allows you to control it with the TX-NR901's remote controller. You only need to point the remote controller at the TX-NR901.

To use the RI function, you must make an RI connection and an analog RCA/phono audio connection between the AV component and your TX-NR901, even if they are connected digitally.

DVD Mode

DVD mode is used to control an Onkyo DVD player connected to the TX-NR901 via RI. **To select DVD mode, press the [MODE] button, and then roll the scroll wheel until "DVD" appears on the display**.

Note:
While neither the [INPUT] button nor [MODE] button is illuminated, the scroll wheel changes the input source and remote controller mode simultaneously (e.g., set the input source and mode to "DVD.")

(1) **ON button**
This button is used to turn on the DVD player

(2) **STANDBY button**
This button is used to set the DVD player to Standby.

(3) **Number/letter buttons**
These buttons are used to enter title, chapter, and track numbers and to enter times for locating specific points in time.

(4) **MODE button**
This button is used with the scroll wheel to select the remote controller modes. Press this button first, and then roll the scroll wheel until "DVD" appears on the display.

(5) **TOP MENU button**
This button is used to select a DVD's top menu.

(6) **Up/Down/Left/Right [▲]/[▼]/[◄]/[►] & ENTER buttons**
These buttons are used to navigate DVD menus and the DVD player's onscreen setup menus. The ENTER button is used to start playback of the selected menu title, chapter, or track and to confirm settings.

(7) **CH/DISC button**
This button is used to select discs on a DVD changer.

(8) **RETURN/EXIT button**
This button is used to exit the DVD player's onscreen setup menu and to restart menu playback.

(9) **DISPLAY button**
This button is used to display information about the current disc, title, chapter, or track, including the elapsed time, remaining time, total time, and so on.

(10) **Previous/Next [|◄◄]/[►►|] buttons**
The Previous [|◄◄] button is used to select the previous chapter or track. During playback it selects the beginning of the current chapter or track. The Next [►►|] button is used to select the next chapter or track.

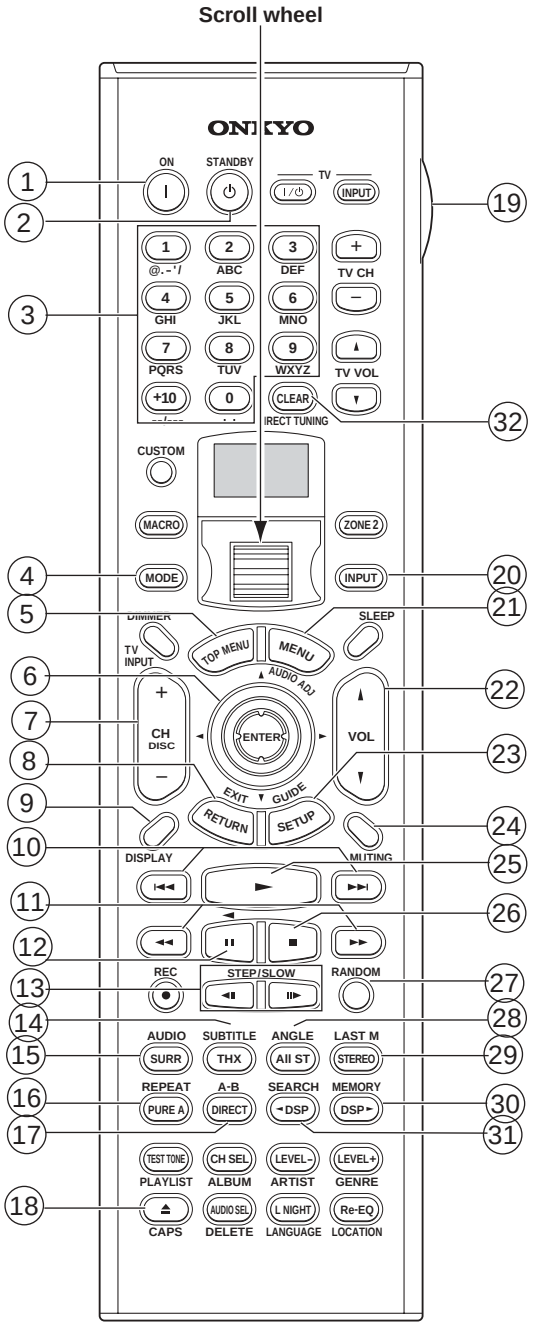
(11) **FR/FF [◄◄]/[►►] buttons**
The FR [◄◄] button is used to start fast reverse.The FF [►►] button is used to start fast forward.

(12) **Pause [❙❙] button**
This button is used to pause DVD playback.

(13) **STEP/SLOW [◄❙❙]/[❙❙►] buttons**
These buttons are used for frame-by-frame playback and slow-motion playback.

(14) **SUBTITLE button**
This button is used to select subtitles.

REMOTE CONTROLLER



(15) **AUDIO button**
This button is used to select foreign language soundtracks and audio formats (e.g., Dolby Digital or DTS).

(16) **REPEAT button**
This button is used to set the repeat playback functions.

(17) **A-B button**
This button is used to set the A–B repeat playback function.

(18) **Open/Close [⏏] button**
This button is used to open and close the disc tray

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

(20) **INPUT button**
This button is used to select the input source. Press this button first, and then roll the scroll wheel until "DVD" appears on the display.

(21) **MENU button**
This button is used to select a DVD's menu.

(22) **VOL button**
This button is used to set the volume of the TX-NR901.

(23) **SETUP/GUIDE button**
This button is used to access the DVD player's onscreen setup menus.

(24) **MUTING button**
This button is used to mute the TX-NR901. This function can be set only with the remote controller.

(25) **Play [▶] button**
This button is used to start DVD playback.

(26) **Stop [■] button**
This button is used to stop DVD playback.

(27) **RANDOM button**
This button is used with the random playback function.

(28) **ANGLE button**
This button is used to select different camera angles.

(29) **LAST M button**
This button is used with the last memory function, which allows you to resume DVD playback from where you left off.

(30) **MEMORY button**
This button is used with the memory playback function, which allows you to create a custom playlist of titles, chapters, or tracks.

(31) **SEARCH button**
This button is used to search for titles, chapters, tracks, and specific points in time.

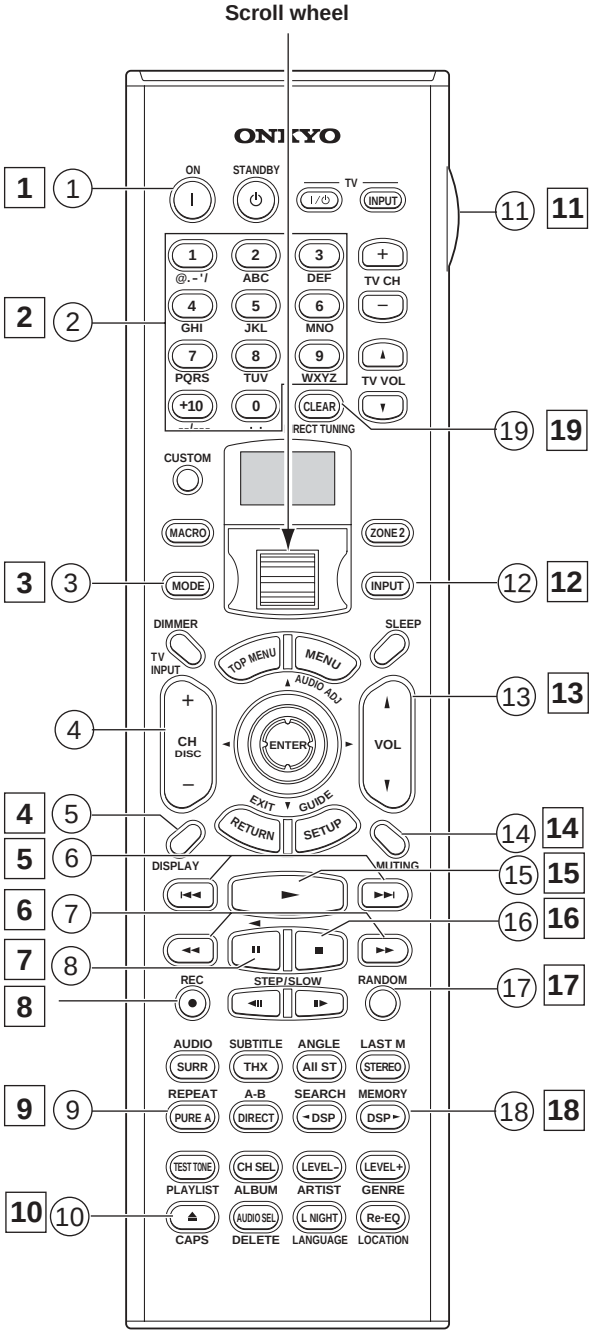
(32) **CLEAR button**
This button is used to cancel functions and to clear entered numbers.

REMOTE CONTROLLER

CD Mode

CD mode is used to control an Onkyo CD player connected to the TX-NR901 via RI. **To select CD mode, press the [MODE] button, and then roll the scroll wheel until "CD" appears on the display**.

Note:
While neither the [INPUT] button nor [MODE] button is illuminated, the scroll wheel changes the input source and remote controller mode simultaneously (e.g., set the input source and mode to "CD.")



Boxed numbers are for MiniDisc mode .

(1) **ON button**
This button is used to set the CD player to On or Standby .

(2) **Number/letter buttons**
These buttons are used to enter track numbers and to enter times for locating specific points in time.

(3) **MODE button**
This button is used with the scroll wheel to select the remote controller modes. Press this button first, and then roll the scroll wheel until "CD" appears on the display

(4) **CH/DISC button**
This button is used to select discs on a CD changer.

(5) **DISPLAY button**
This button is used to display information about the current disc or track, including the elapsed time, remaining time, total time, and so on.

(6) **Previous/Next [⏮]/[⏭] buttons**
The Previous [⏮] button is used to select the previous track. During playback it selects the beginning of the current track. The Next [⏭] button is used to select the next track.

(7) **FR/FF [◀◀]/[▶▶] buttons**
The FR [◀◀] button is used to start fast reverse. The FF [▶▶] button is used to start fast forward.

(8) **Pause [❙❙] button**
This button is used to pause CD playback.

(9) **REPEAT button**
This button is used to set the repeat playback functions.

(10) **Open/Close [⏏] button**
This button is used to open and close the disc tray

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

(12) **INPUT button**
This button is used to select the input source. Press this button rst, and then roll the scroll wheel until "CD" appears on the display.

(13) **VOL button**
This button is used to set the volume of the TX-NR901.

(14) **MUTING button**
This button is used to mute the TX-NR901. This function can be set only with the remote controller.

(15) **Play [▶] button**
This button is used to start CD playback.

(16) **Stop [■] button**
This button is used to stop CD playback.

REMOTE CONTROLLER

⑰ **RANDOM button**
This button is used with the random playback function.

⑱ **MEMORY button**
This button is used with the memory playback function, which allows you to create a custom playlist of tracks.

⑲ **CLEAR button**
This button is used to cancel functions and to clear entered numbers.

MiniDisc Mode

MiniDisc mode is used to control an Onkyo MiniDisc recorder connected to the TX-NR901 via RI. **To select MiniDisc mode, press the [MODE] button, and then roll the scroll wheel until "MD" appears on the display**.

Note:
While neither the [INPUT] button nor [MODE] button is illuminated, the scroll wheel changes the input source and remote controller mode simultaneously (e.g., set the input source and mode to "MD.")

1 **ON button**
This button is used to set the MiniDisc recorder to On or Standby.

2 **Number/letter buttons**
These buttons are used to enter track numbers and to enter times for locating specific points in time.

3 **MODE button**
This button is used with the scroll wheel to select the remote controller modes. Press this button first, and then roll the scroll wheel until "MD" appears on the display.

4 **DISPLAY button**
This button is used to display information about the current disc or track, including the elapsed time, remaining time, total time, and so on.

5 **Previous/Next [⏮]/[⏭] buttons**
The Previous [⏮] button is used to select the previous track. During playback it selects the beginning of the current track. The Next [⏭] button is used to select the next track.

6 **FR/FF [◀◀]/[▶▶] buttons**
The FR [◀◀] button is used to start fast reverse.The FF [▶▶] button is used to start fast forward.

7 **Pause [❚❚] button**
This button is used to pause MiniDisc playback.

8 **REC [●] button**
This button is used to start MiniDisc recording.

9 **REPEAT button**
This button is used to set the repeat playback functions.

10 **Eject [⏏] button**
This button is used to set eject the MiniDisc.

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

12 **INPUT button**
This button is used to select the input source. Press this button first, and then roll the scroll wheel until "MD" appears on the display.

13 **VOL button**
This button is used to set the volume of the TX-NR901.

14 **MUTING button**
This button is used to mute the TX-NR901. This function can be set only with the remote controller.

15 **Play [▶] button**
This button is used to start MiniDisc playback.

16 **Stop [■] button**
This button is used to stop MiniDisc playback.

17 **RANDOM button**
This button is used with the random playback function.

18 **MEMORY button**
This button is used with the memory playback function, which allows you to create a custom playlist of tracks.

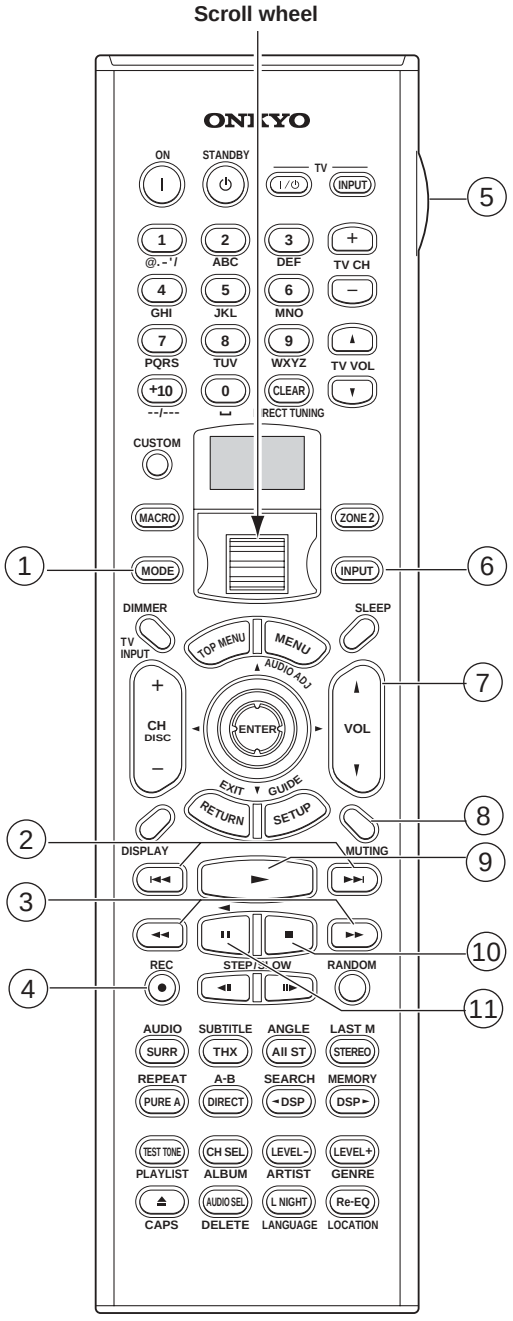
19 **CLEAR button**
This button is used to cancel functions and to clear entered numbers.

REMOTE CONTROLLER

Tape Mode

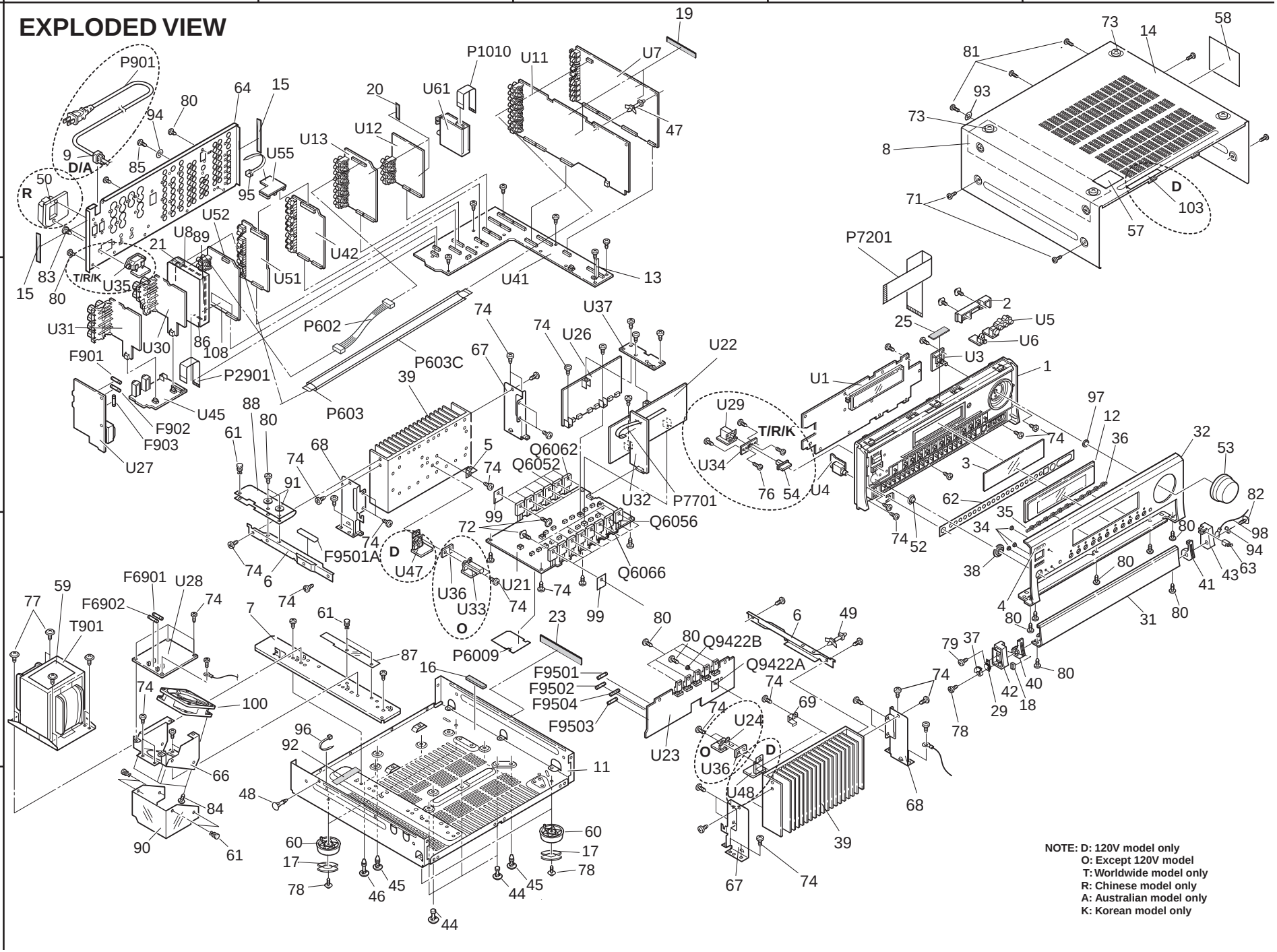
Tape mode is used to control an Onkyo cassette recorder connected to the TX-NR901 via . **To select Tape mode, press the scroll wheel. "AMP" appears on the display**.

Note:
While neither the [INPUT] button nor [MODE] button is illuminated, the scroll wheel changes the input source and remote controller mode simultaneously (e.g., set the input source and mode to "TAPE.")

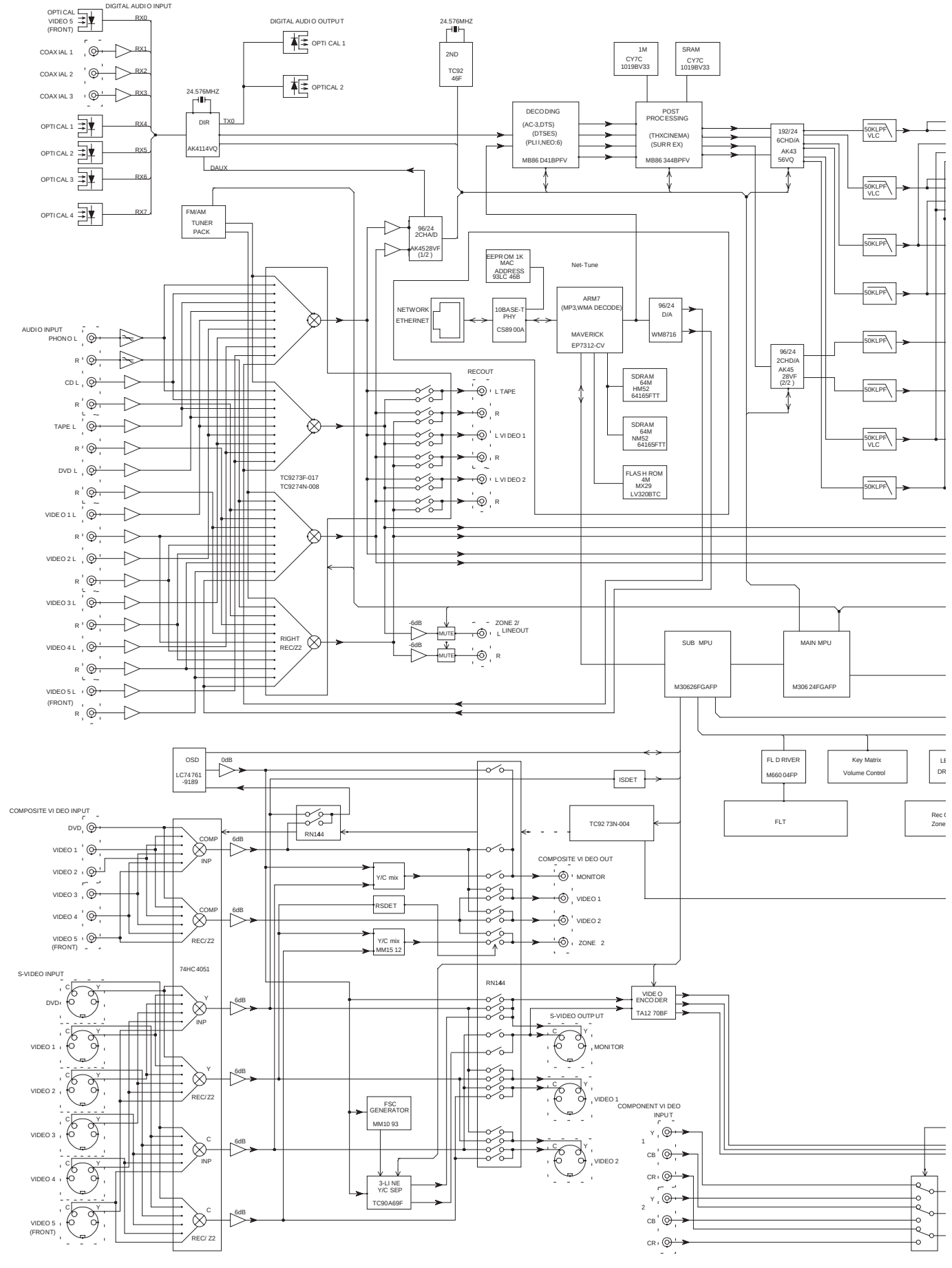


1. **MODE button**
   This button is used with the scroll wheel to select the remote controller modes. Press the scroll wheel until " AMP" appears on the display.
2. **Previous/Next [⏮]/[⏭] buttons**
   The Previous [⏮] button is used to select the previous track. During playback it selects the beginning of the current track. The Next [⏭] button is used to select the next track.
   The Previous/Next [⏮]/[⏭] buttons make not work properly with some cassette tapes depending on how they were recorded.
3. **Rewind/FF [◀◀]/[▶▶] buttons**
   The Rewind [◀◀] button is used to start rewind. The FF [▶▶] button is used to start fast forward.
4. **REC [●] button**
   This button is used to start tape recording.
5. **LIGHT button**
   This button is used to turn on or off the remote controller' s illuminated buttons.
6. **INPUT button**
   This button is used to select the input source. Press this button first, and then roll the scroll wheel until "TAPE" appears on the display
7. **VOL button**
   This button is used to set the volume of the TX-NR901.
8. **MUTING button**
   This button is used to mute the TX-NR901. This function can be set only with the remote controller
9. **Play [▶] button**
   This button is used to start tape playback.
10. **Stop [■] button**
    This button is used to stop tape playback.
11. **Reverse Play [◀] button**
    This button is used to start reverse playback.

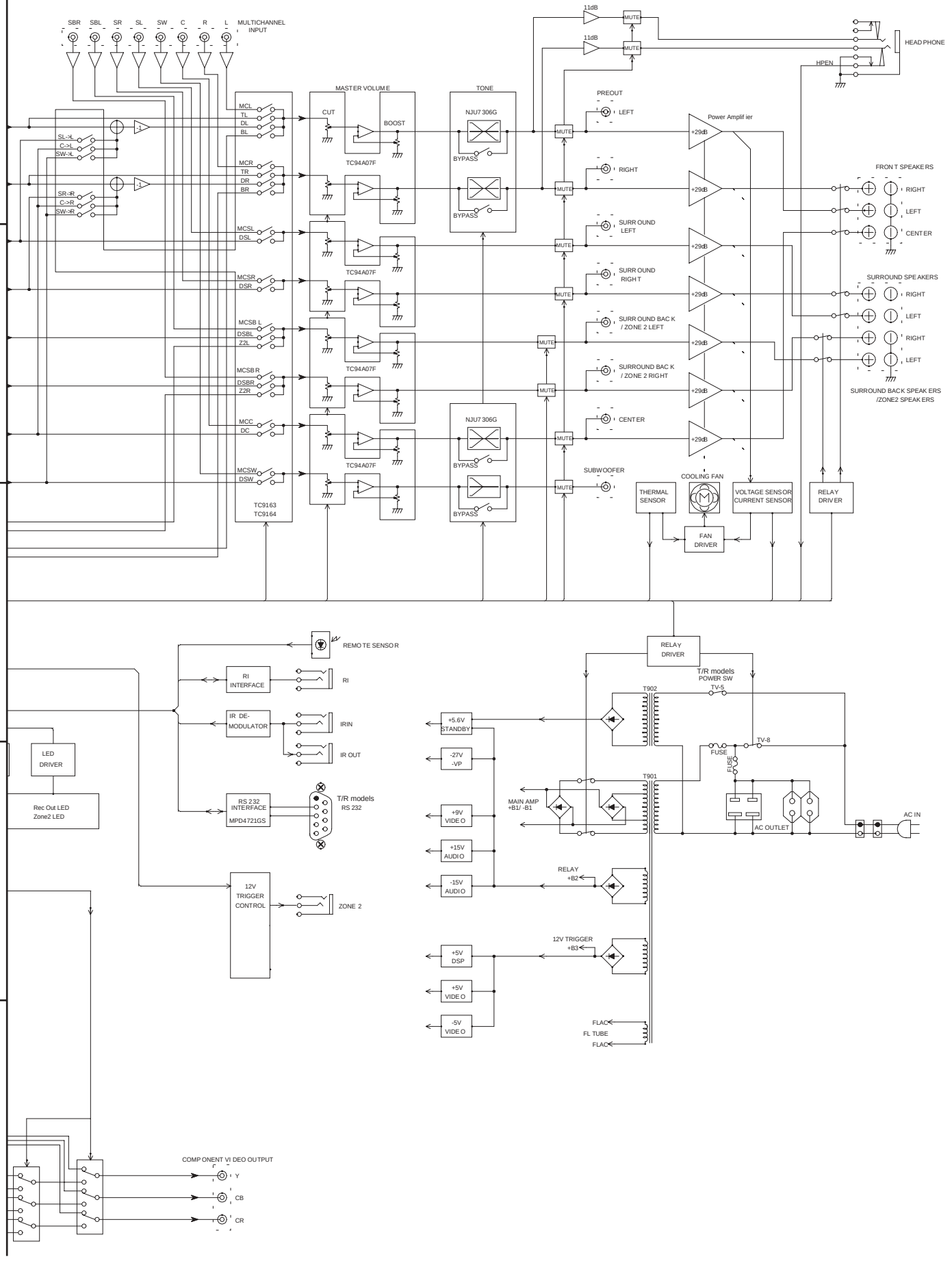
EXPLODED VIEW



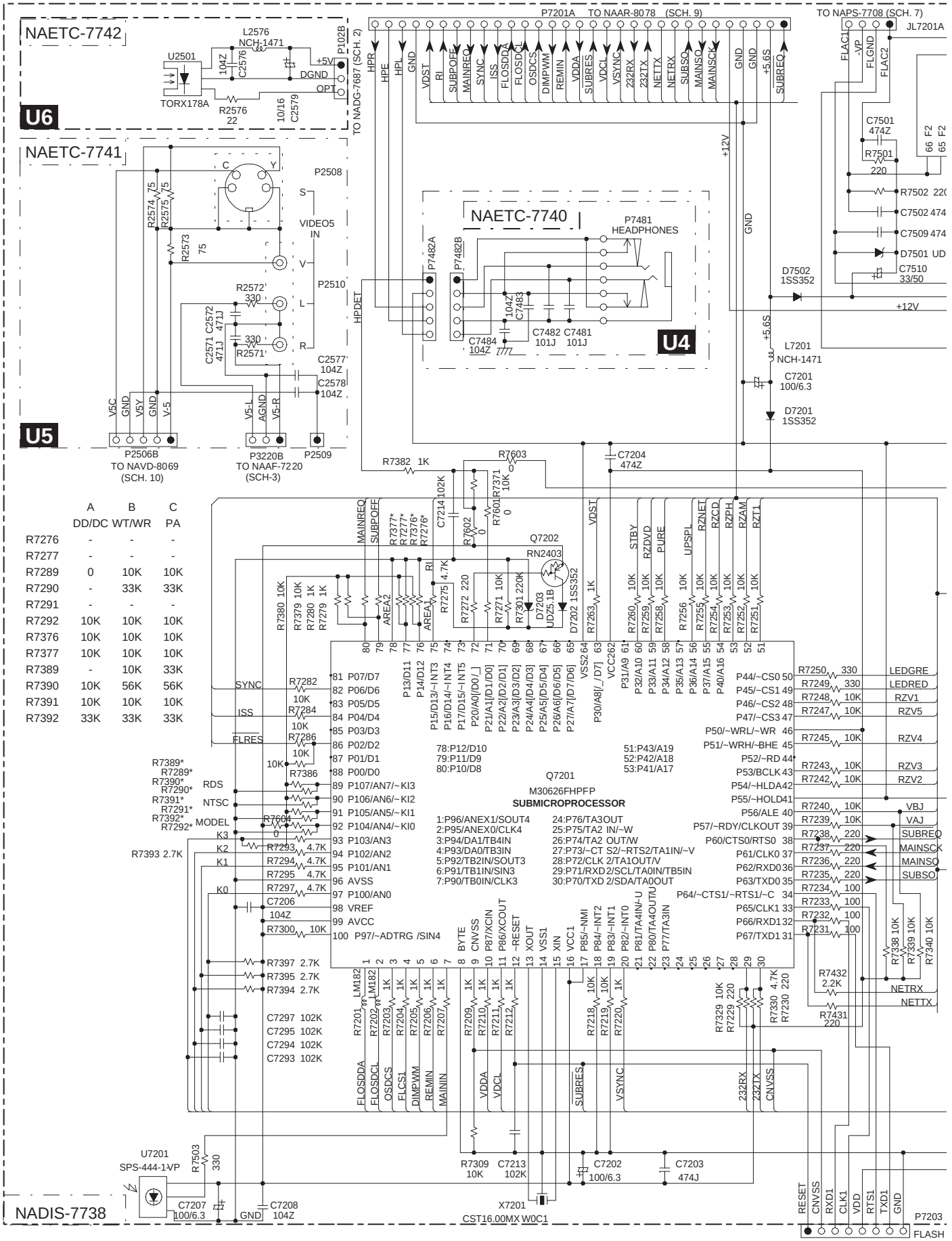
BLOCK DIAGRAM



BLOCK DIAGRAM

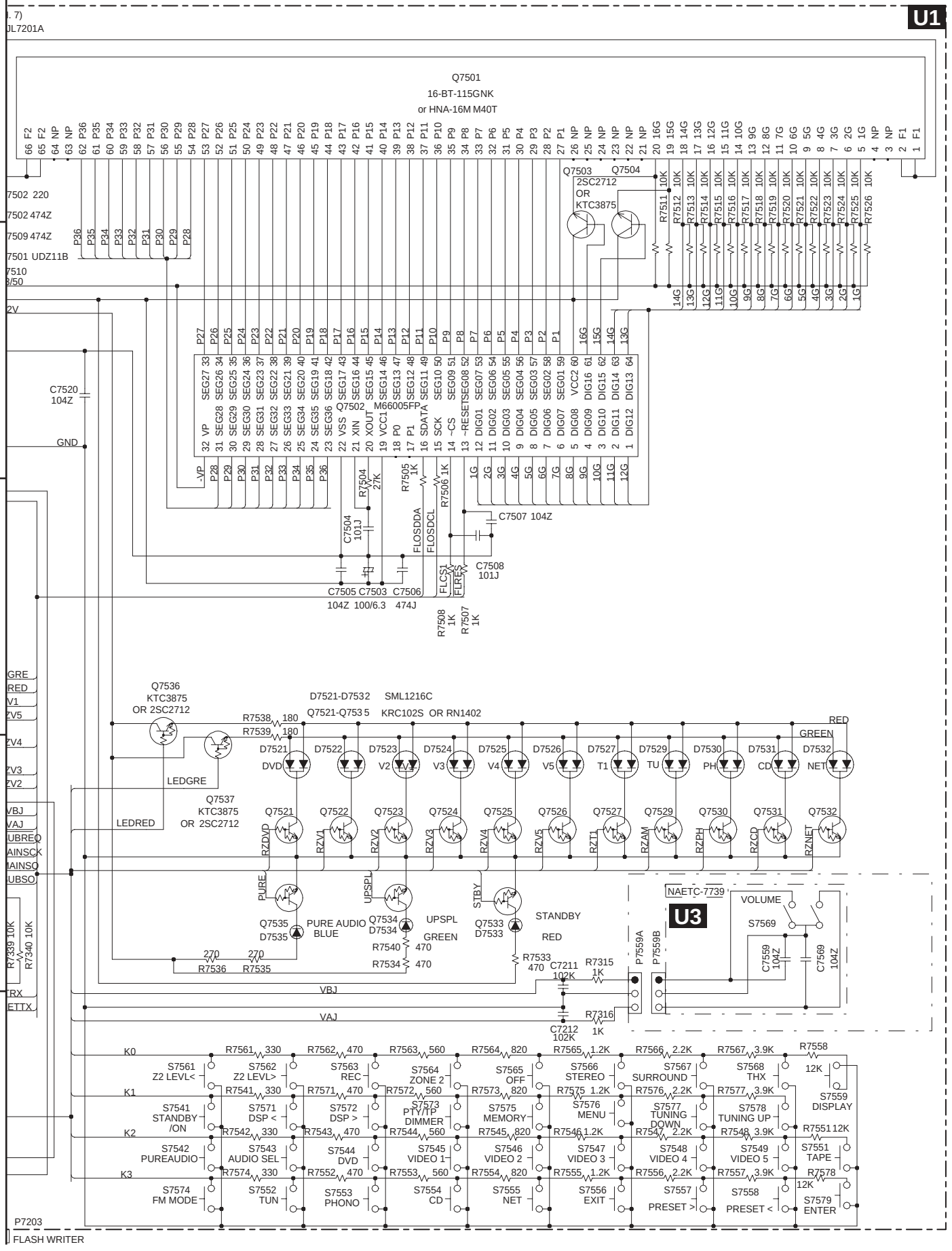


SCHEMATIC DIAGRAM 1 DISPLAY AND SUB MICROPROCESSOR SECTIONS

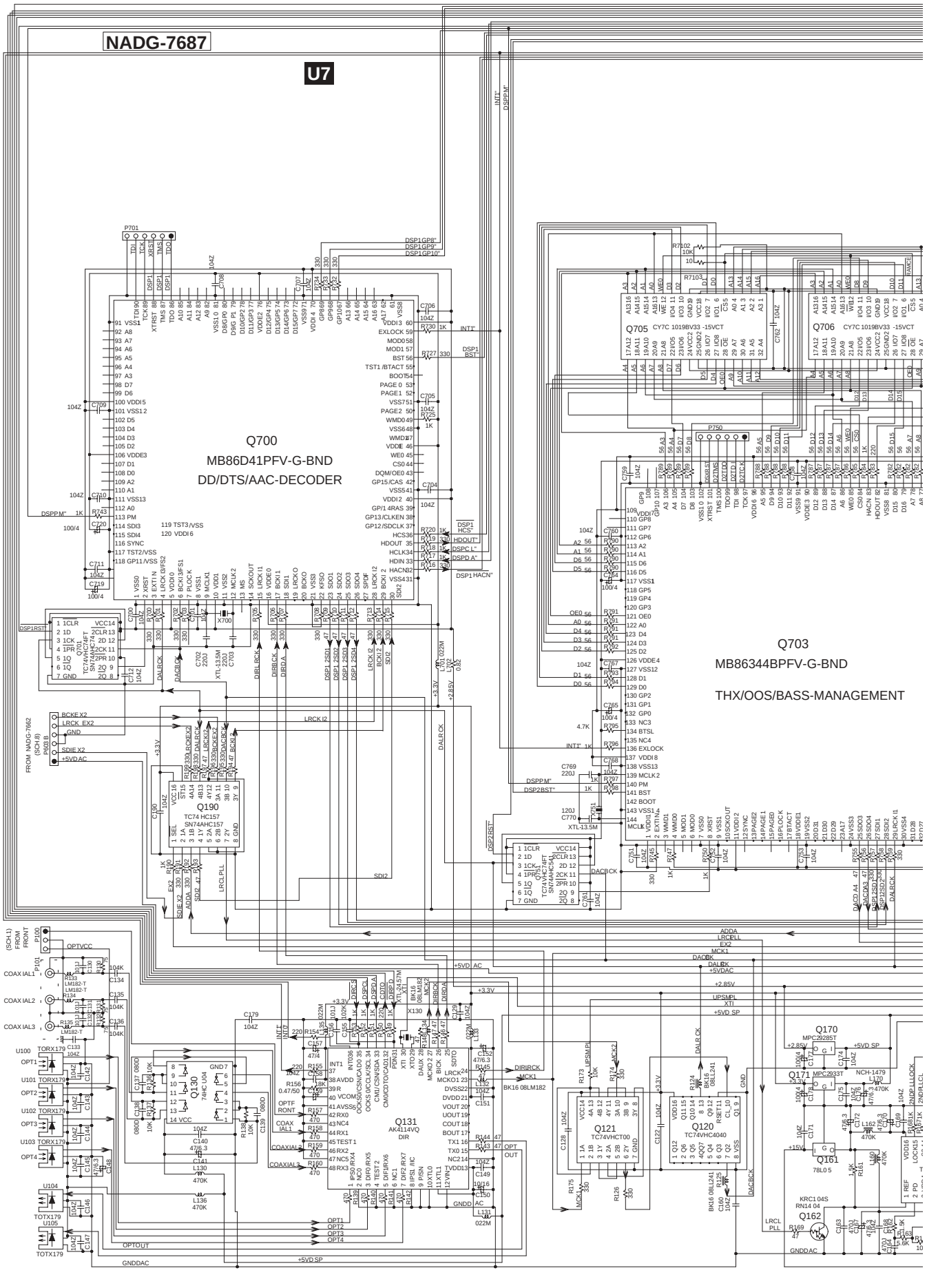


	A DD/DC	B WT/WR	C PA
R7276	-	-	-
R7277	-	-	-
R7289	0	10K	10K
R7290	-	33K	33K
R7291	-	-	-
R7292	10K	10K	10K
R7376	10K	10K	10K
R7377	10K	10K	10K
R7389	-	10K	33K
R7390	10K	56K	56K
R7391	10K	10K	10K
R7392	33K	33K	33K

SCHEMATIC DIAGRAM 1 DISPLAY AND SUB MICROPROCESSOR SECTIONS



SCHEMATIC DIAGRAM 2 DSP and Main microprocessor sections



SCHEMATIC DIAGRAM 2

DSP and Main microprocessor sections

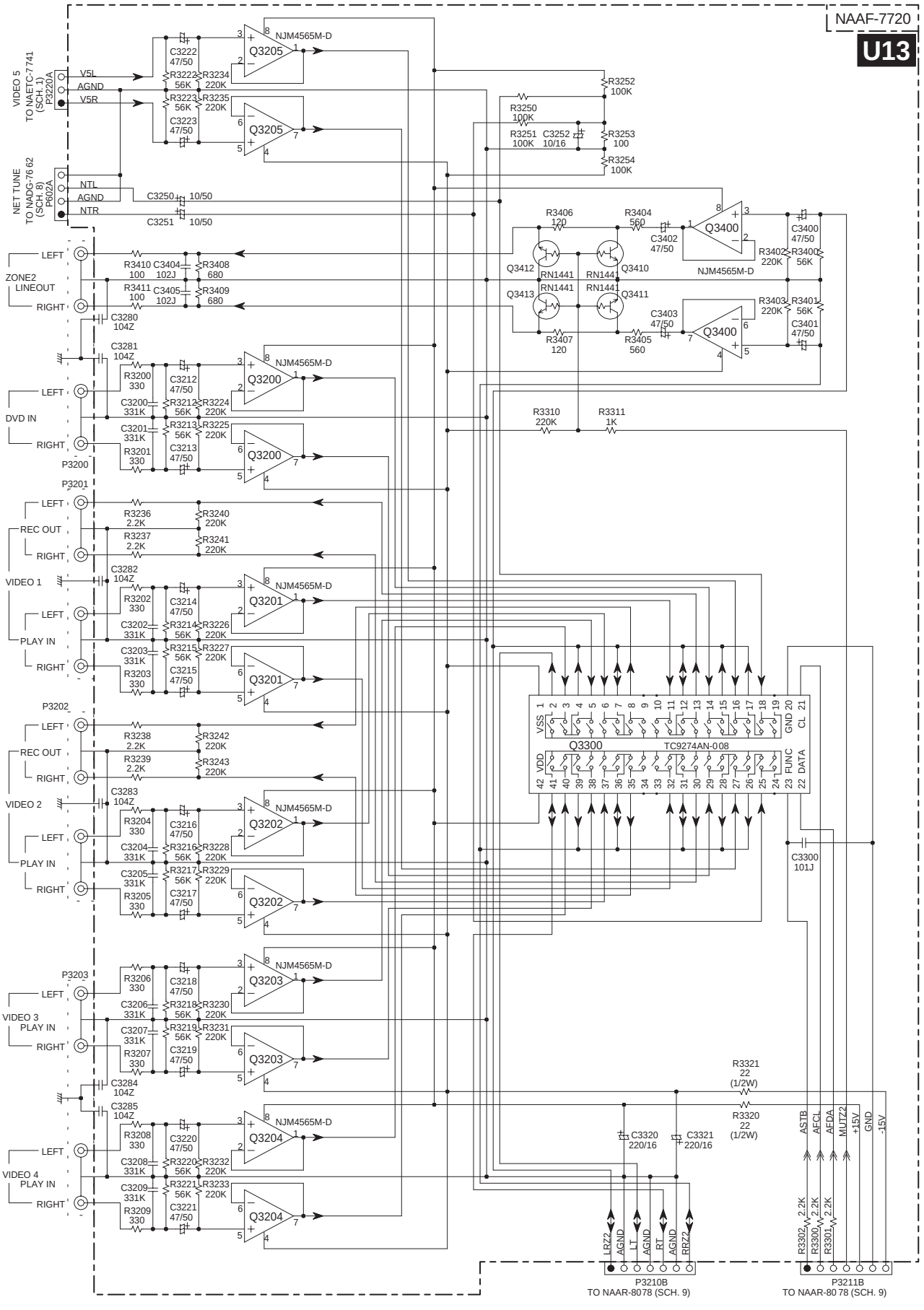
U7

NADG-7687

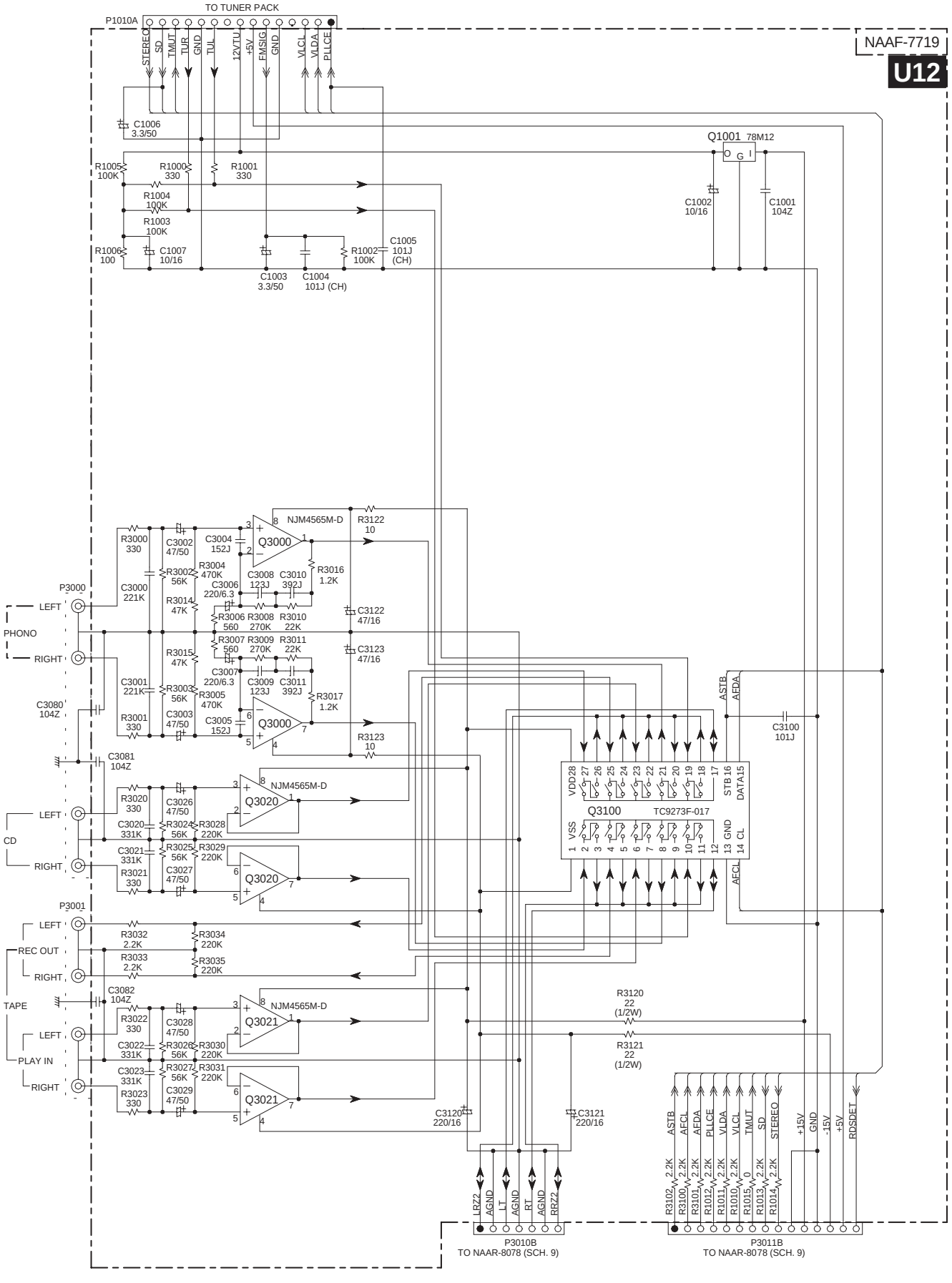
A	B	C	D

1 2 3 4 5

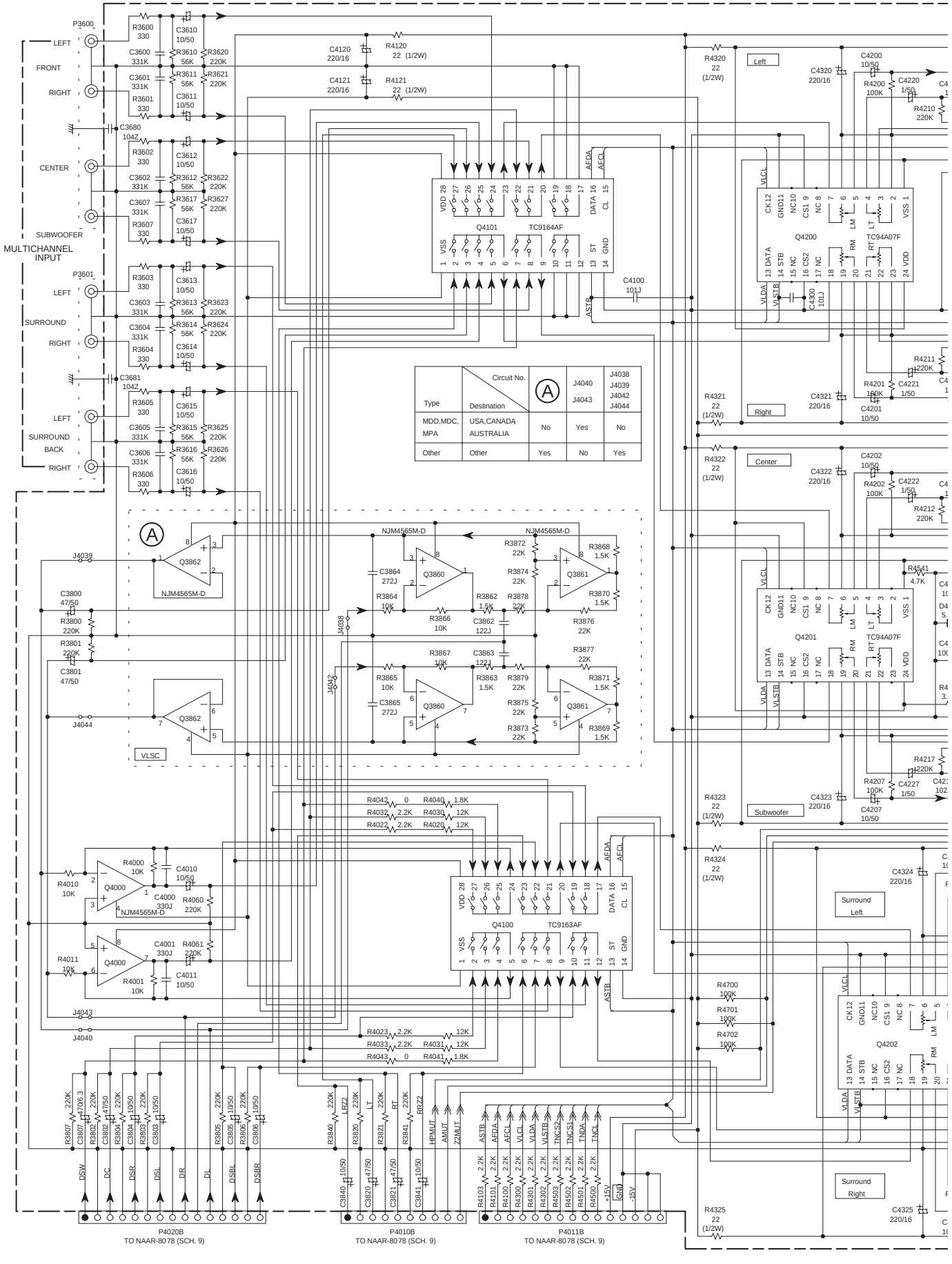
SCHEMATIC DIAGRAM 3 Audio I/O terminal section



SCHEMATIC DIAGRAM 3 Audio I/O terminal section

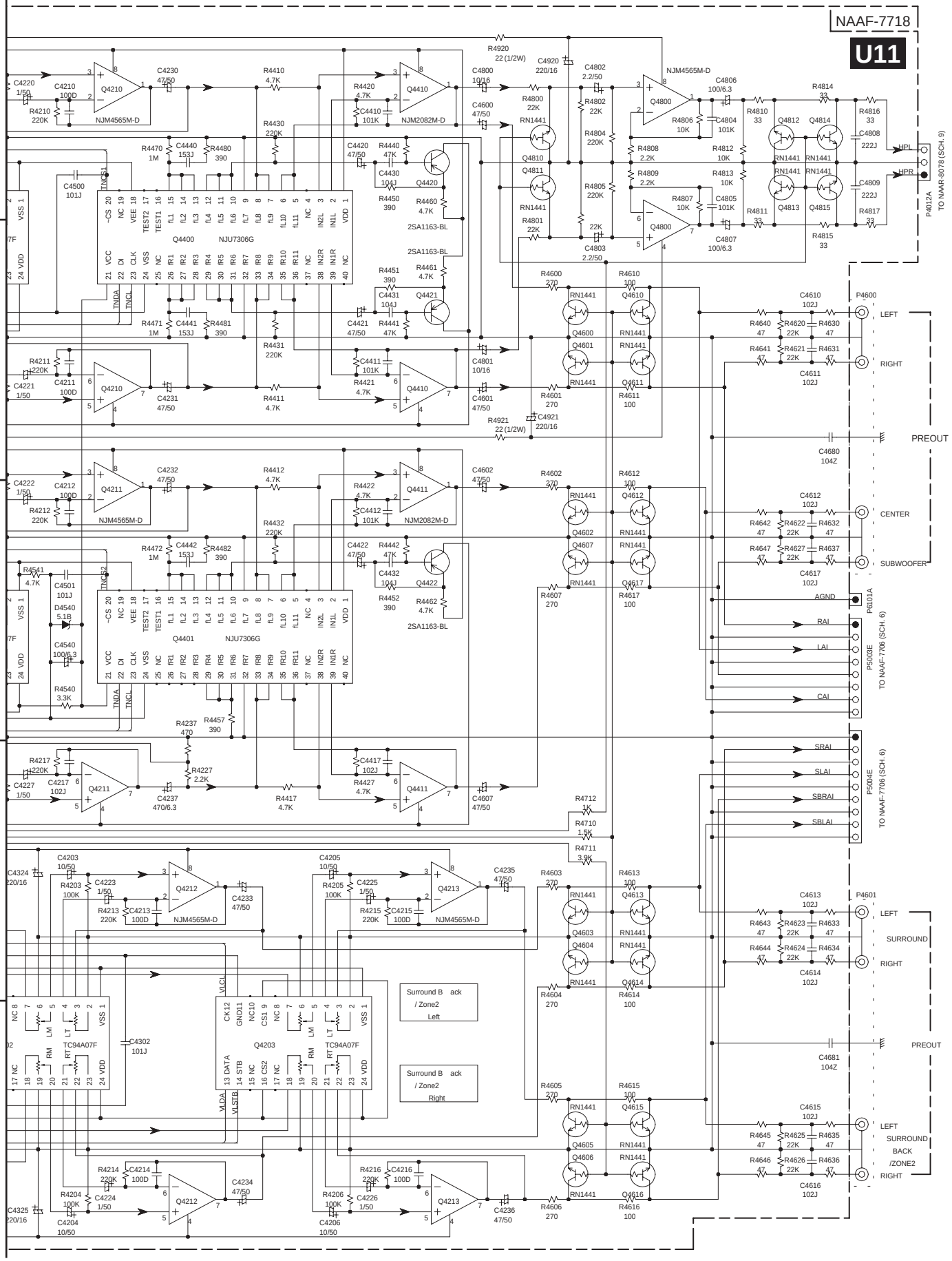


SCHEMATIC DIAGRAM 4 Preamplifier section



Type	Destination \ Circuit No.	A	J4040 J4043	J4038 J4039 J4042 J4044
MDD,MDC, MPA	USA,CANADA AUSTRALIA	No	Yes	No
Other	Other	Yes	No	Yes

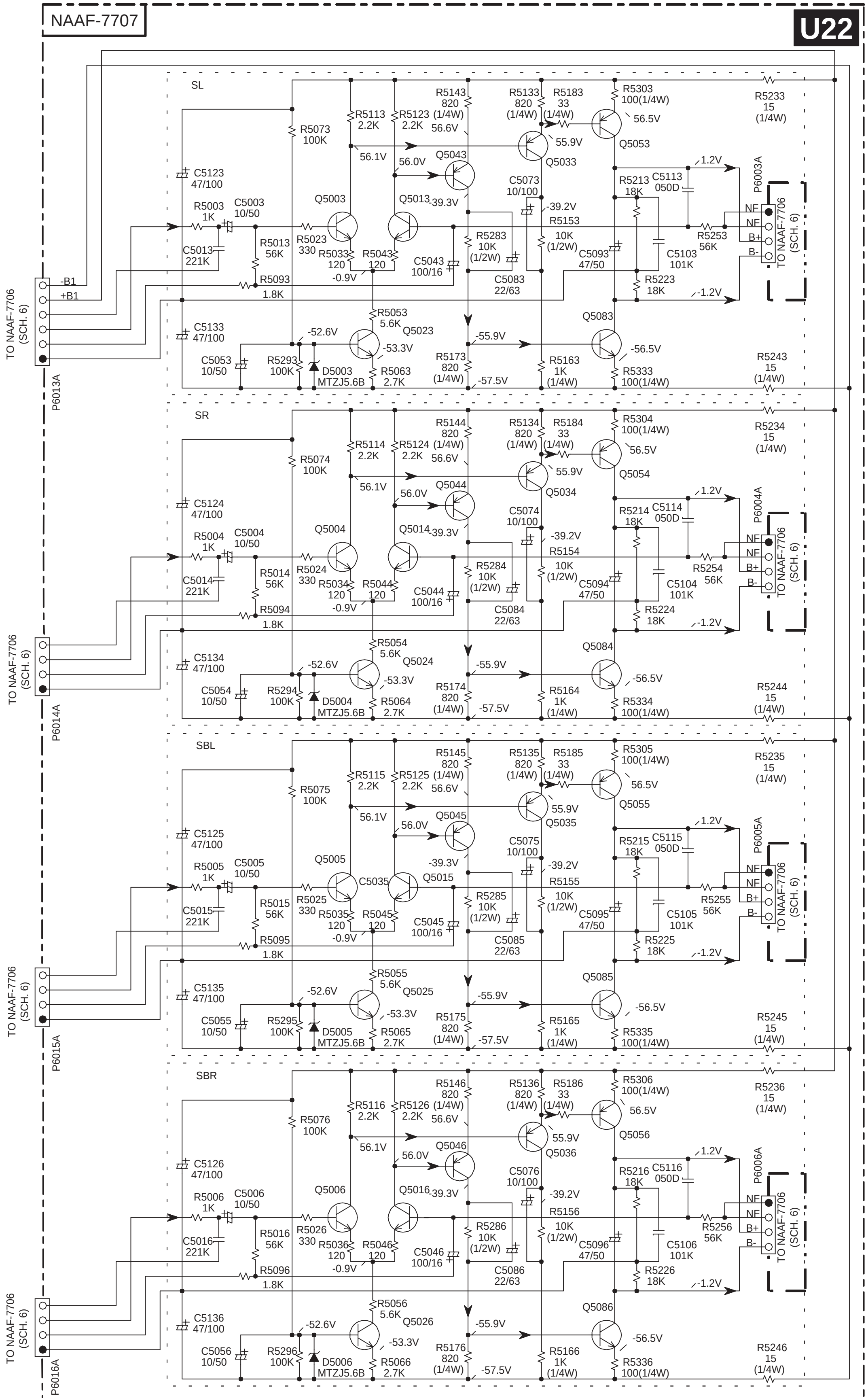
SCHEMATIC DIAGRAM 4 Preamplifier section



A	B	C	D

SCHEMATIC DIAGRAM 5 Driver section

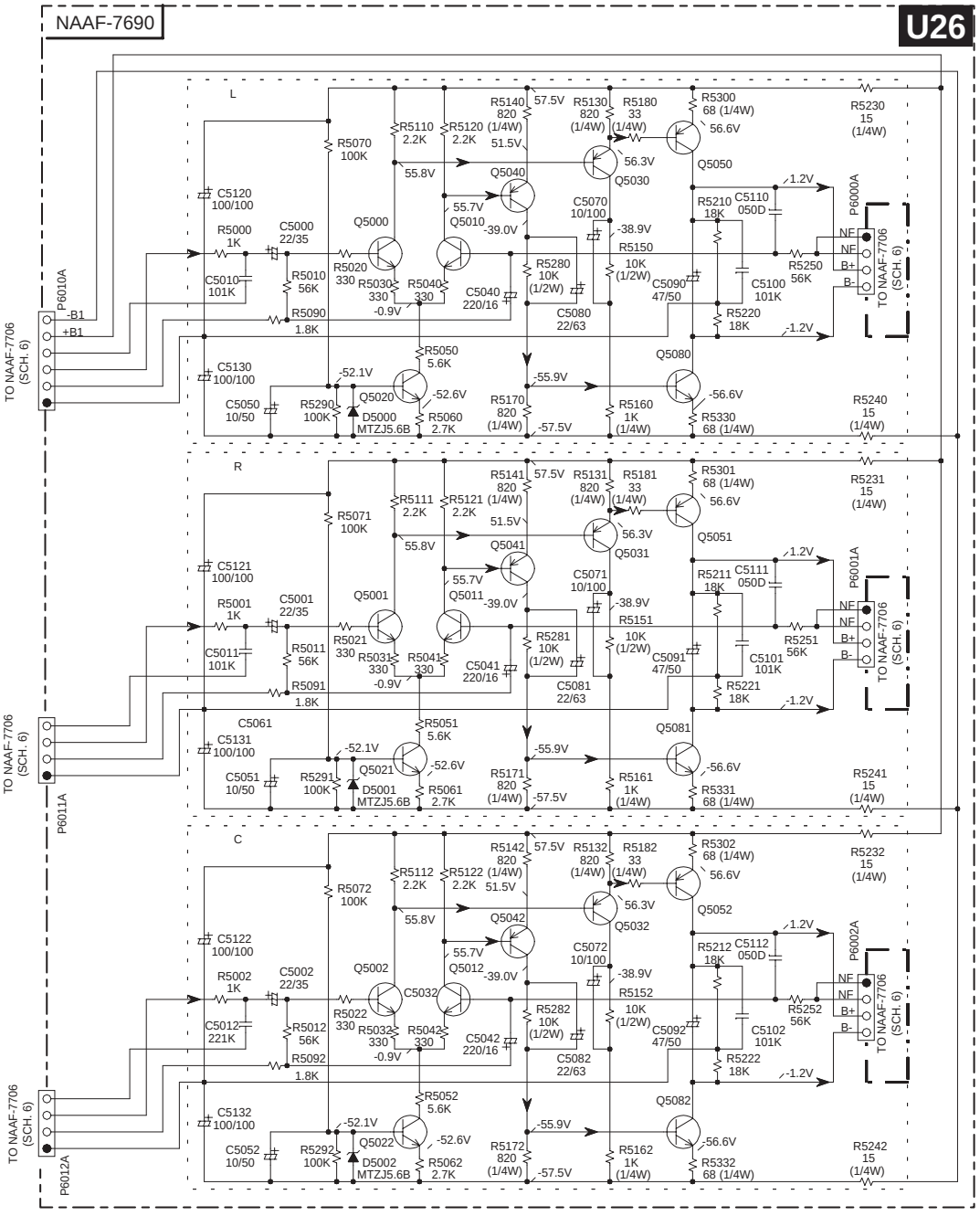
1
2
3
4
5



A B C D

1 2 3 4 5

SCHEMATIC DIAGRAM 5 Driver section

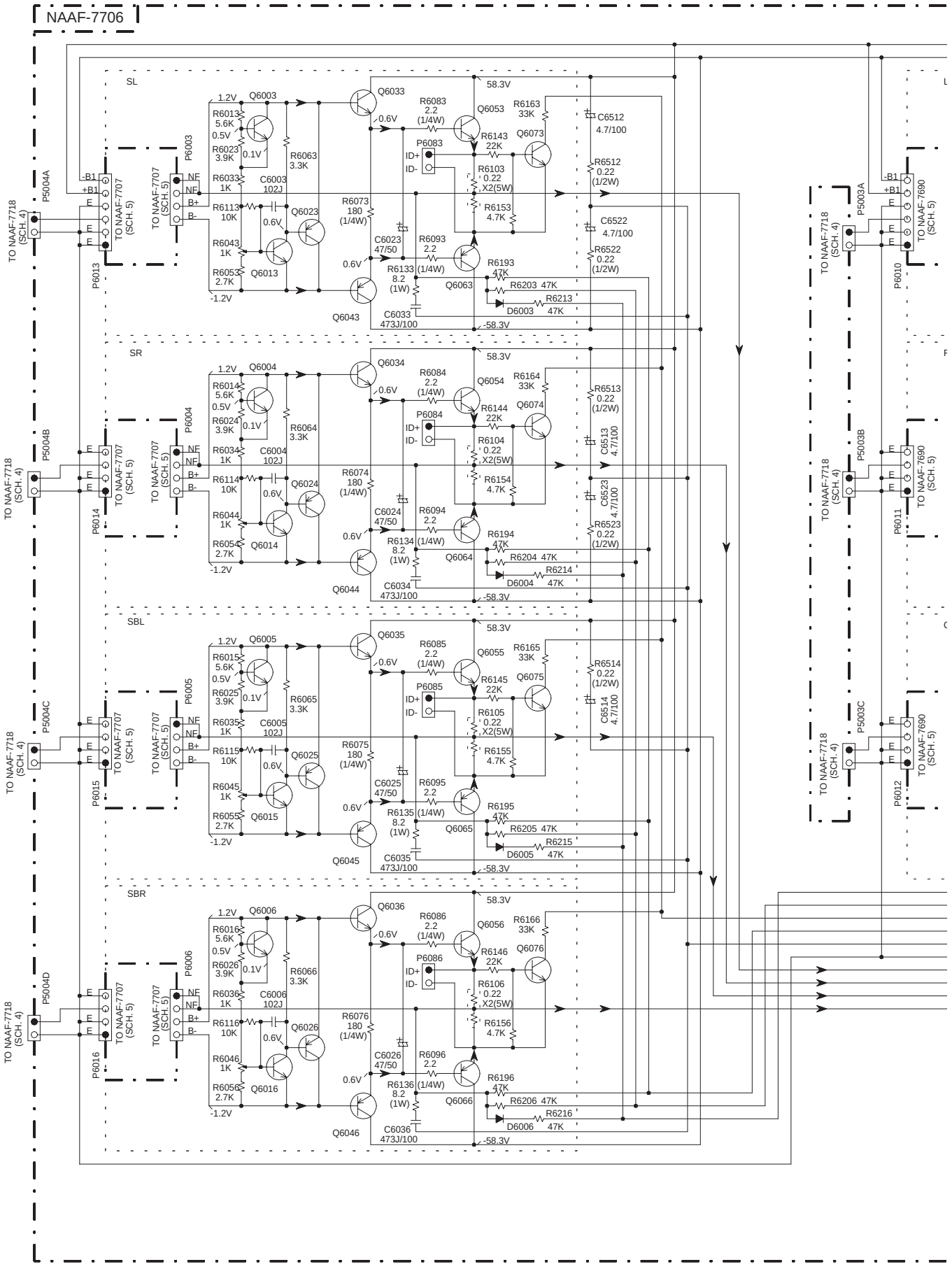


NOTE

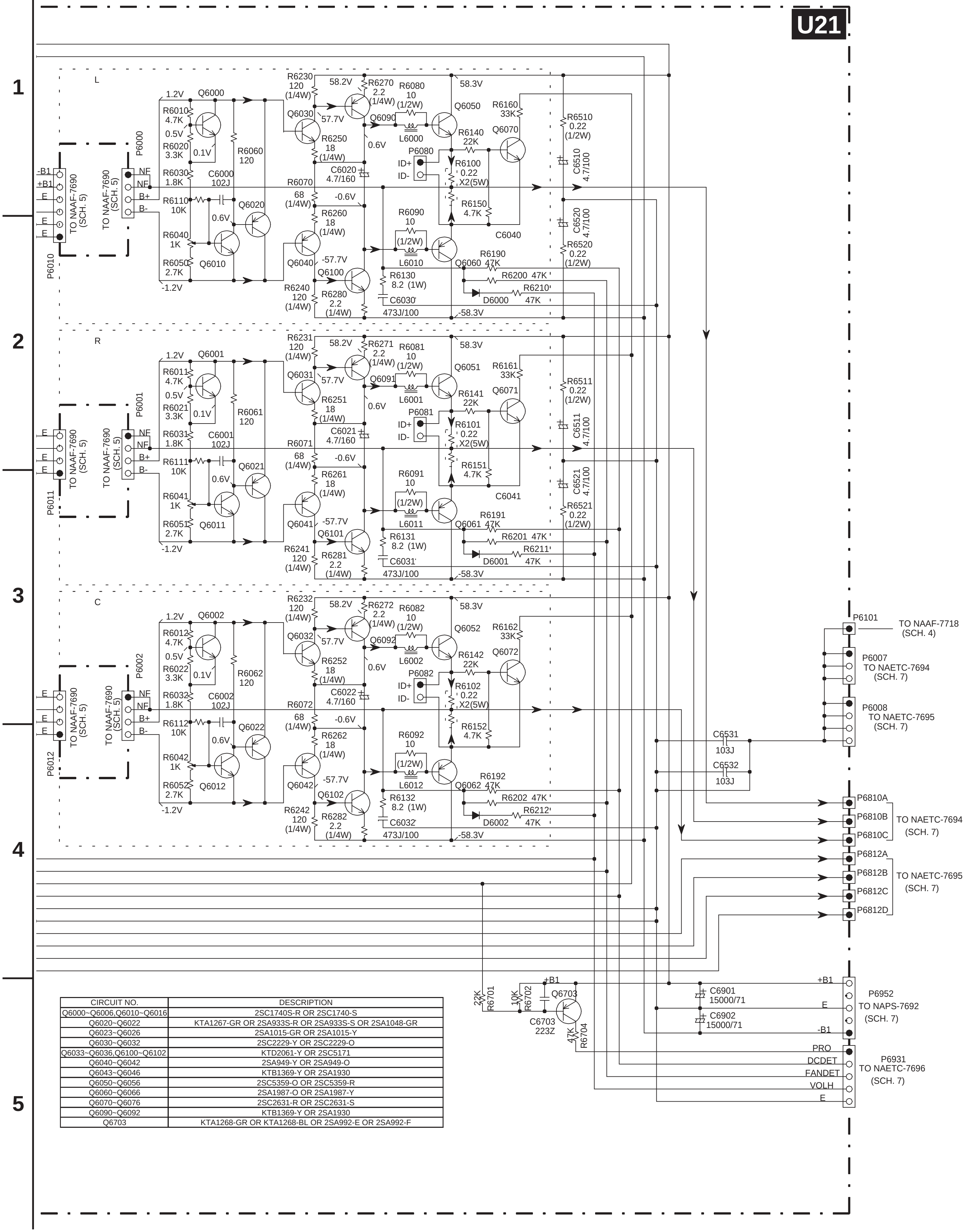
- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY.
- REPLACE ON LY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS ( ) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030-3pF 330-33pF 331-330pF 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

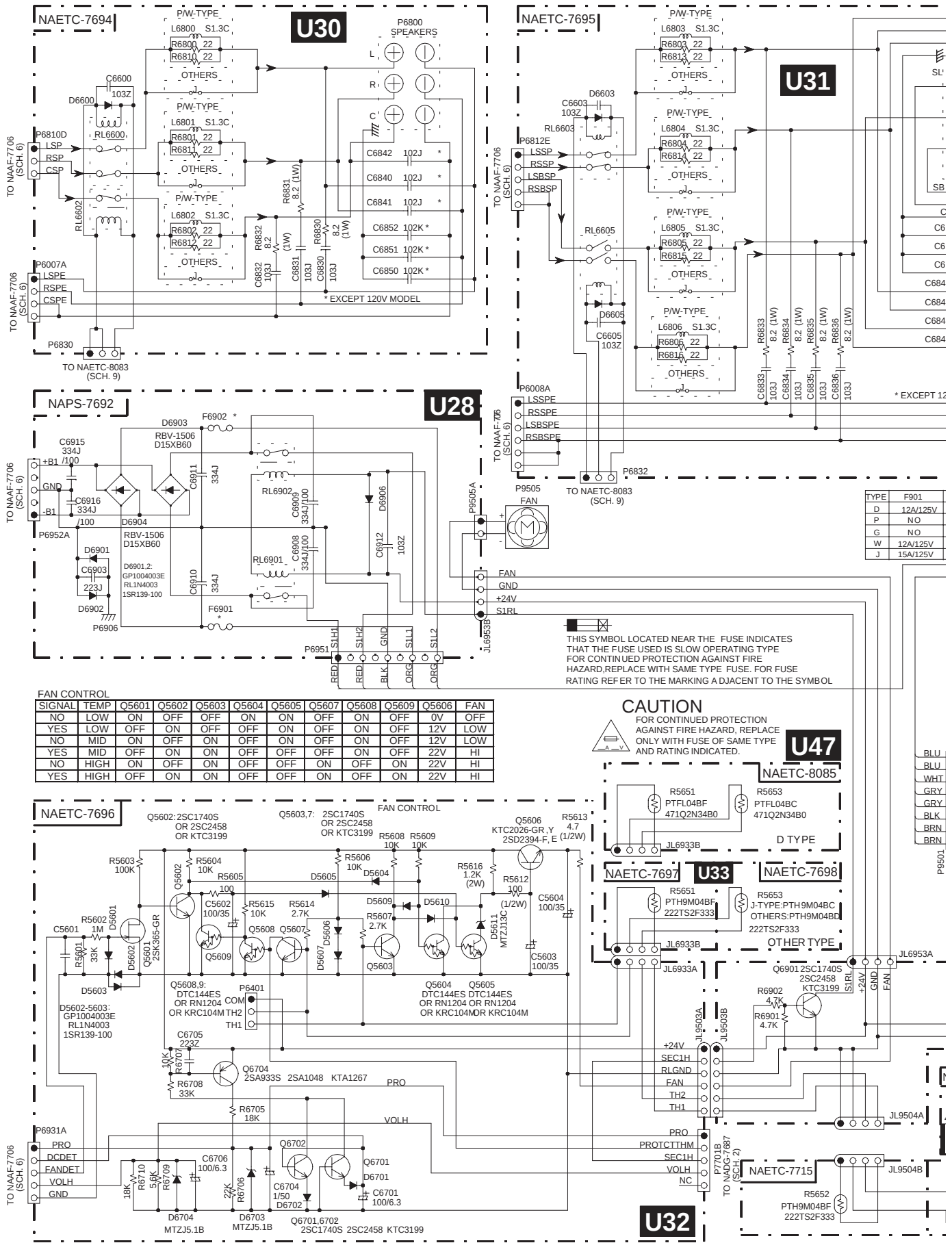


SCHEMATIC DIAGRAM 6 Power amplifier section

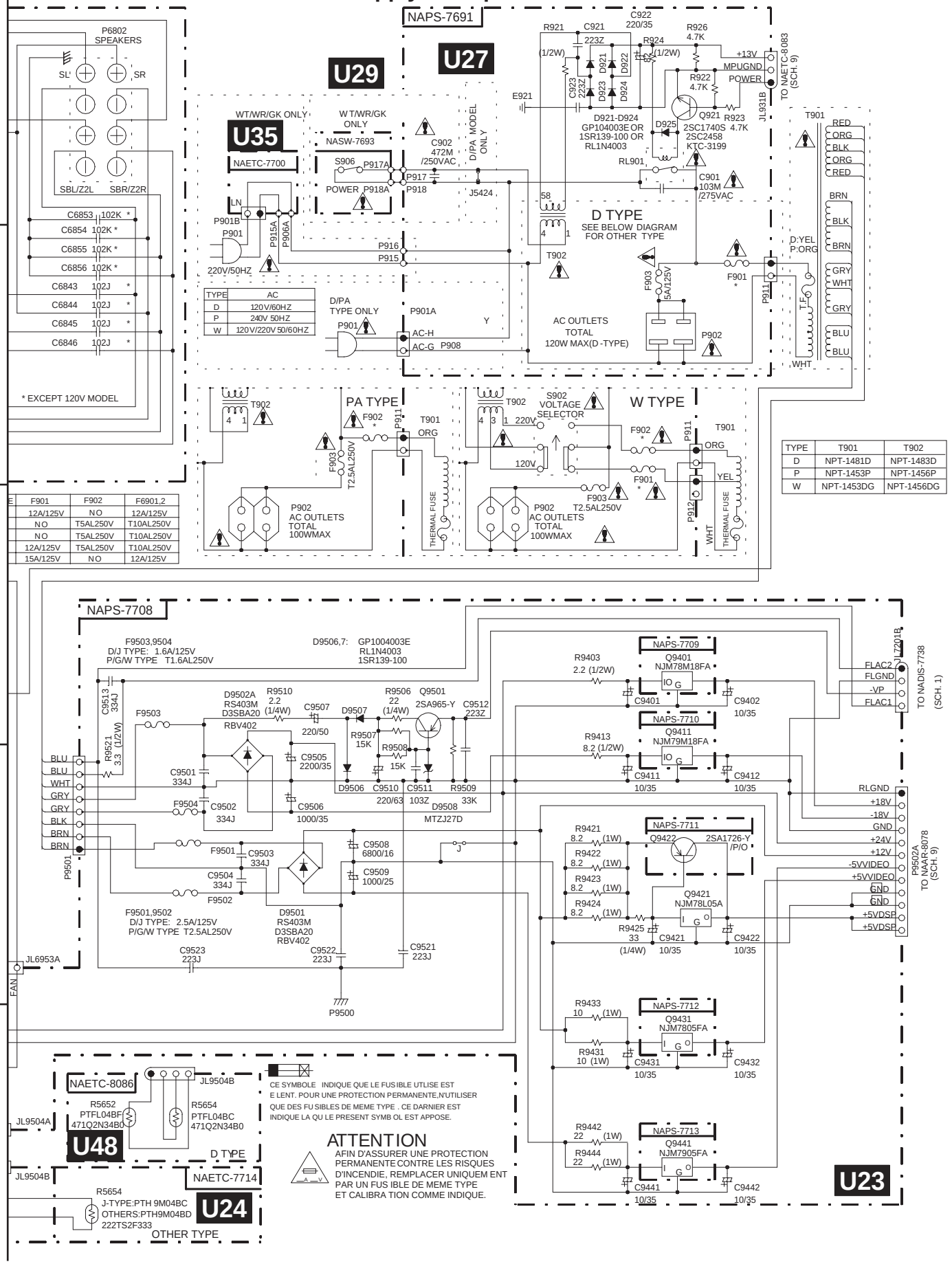


CIRCUIT NO.	DESCRIPTION
Q6000~Q6006,Q6010~Q6016	2SC1740S-R OR 2SC1740-S
Q6020~Q6022	KTA1267-GR OR 2SA933S-R OR 2SA933S-S OR 2SA1048-GR
Q6023~Q6026	2SA1015-GR OR 2SA1015-Y
Q6030~Q6032	2SC2229-Y OR 2SC2229-O
Q6033~Q6036,Q6100~Q6102	KTD2061-Y OR 2SC5171
Q6040~Q6042	2SA949-Y OR 2SA949-O
Q6043~Q6046	KTB1369-Y OR 2SA1930
Q6050~Q6056	2SC5359-O OR 2SC5359-R
Q6060~Q6066	2SA1987-O OR 2SA1987-Y
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

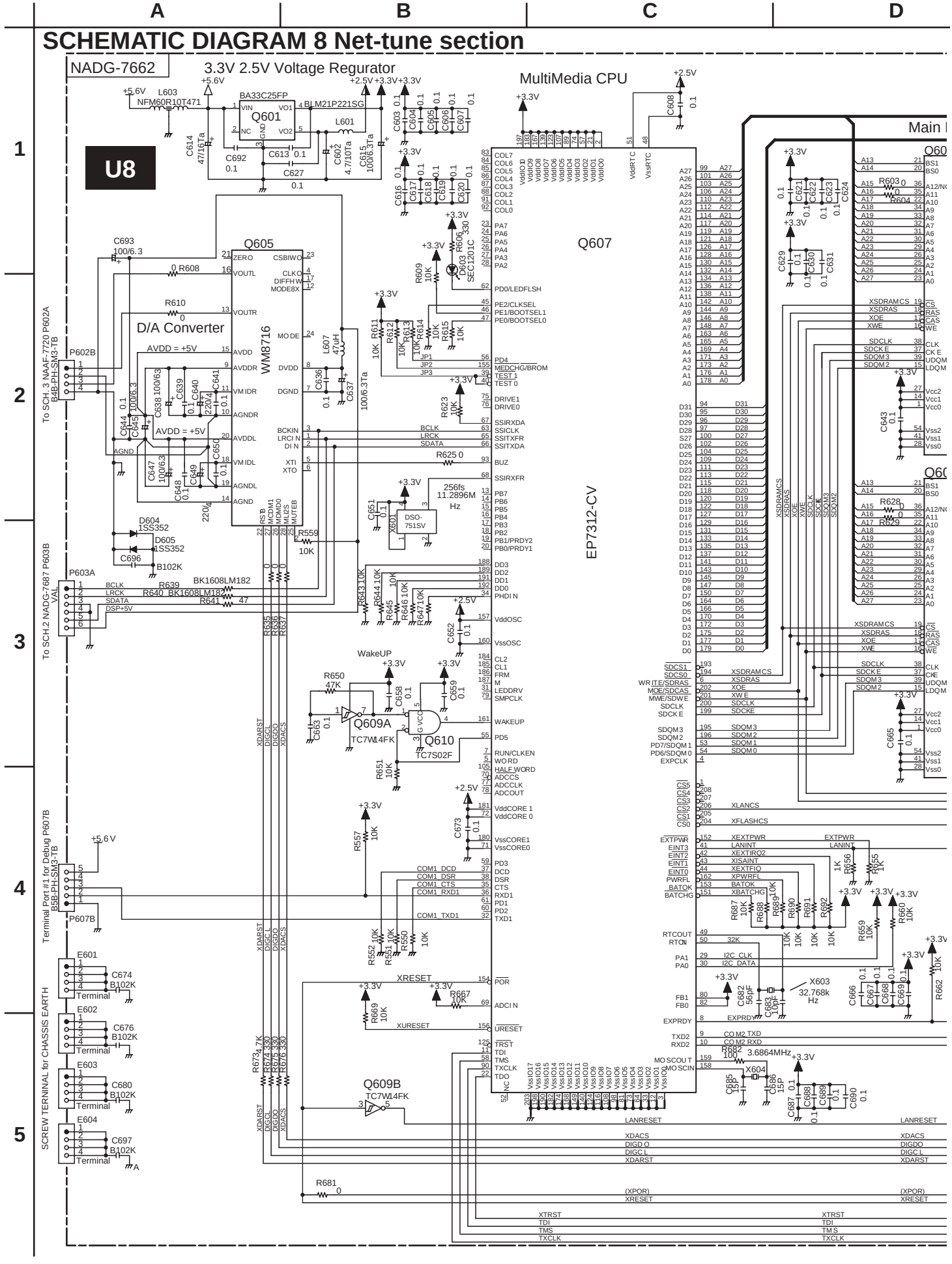
SCHEMATIC DIAGRAM 7 Power supply and speaker terminal sections



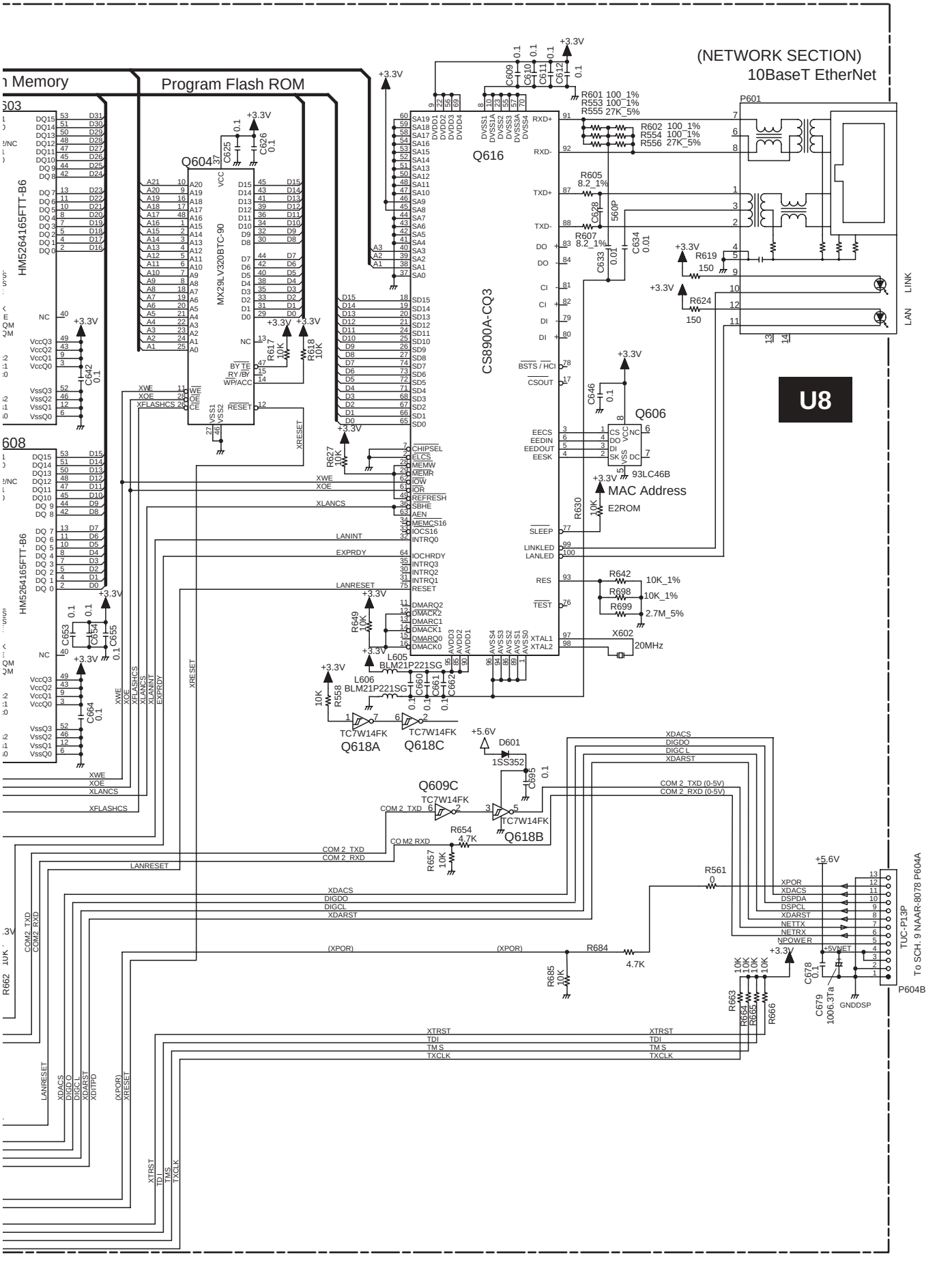
SCHEMATIC DIAGRAM 7 Power supply and speaker terminal sections



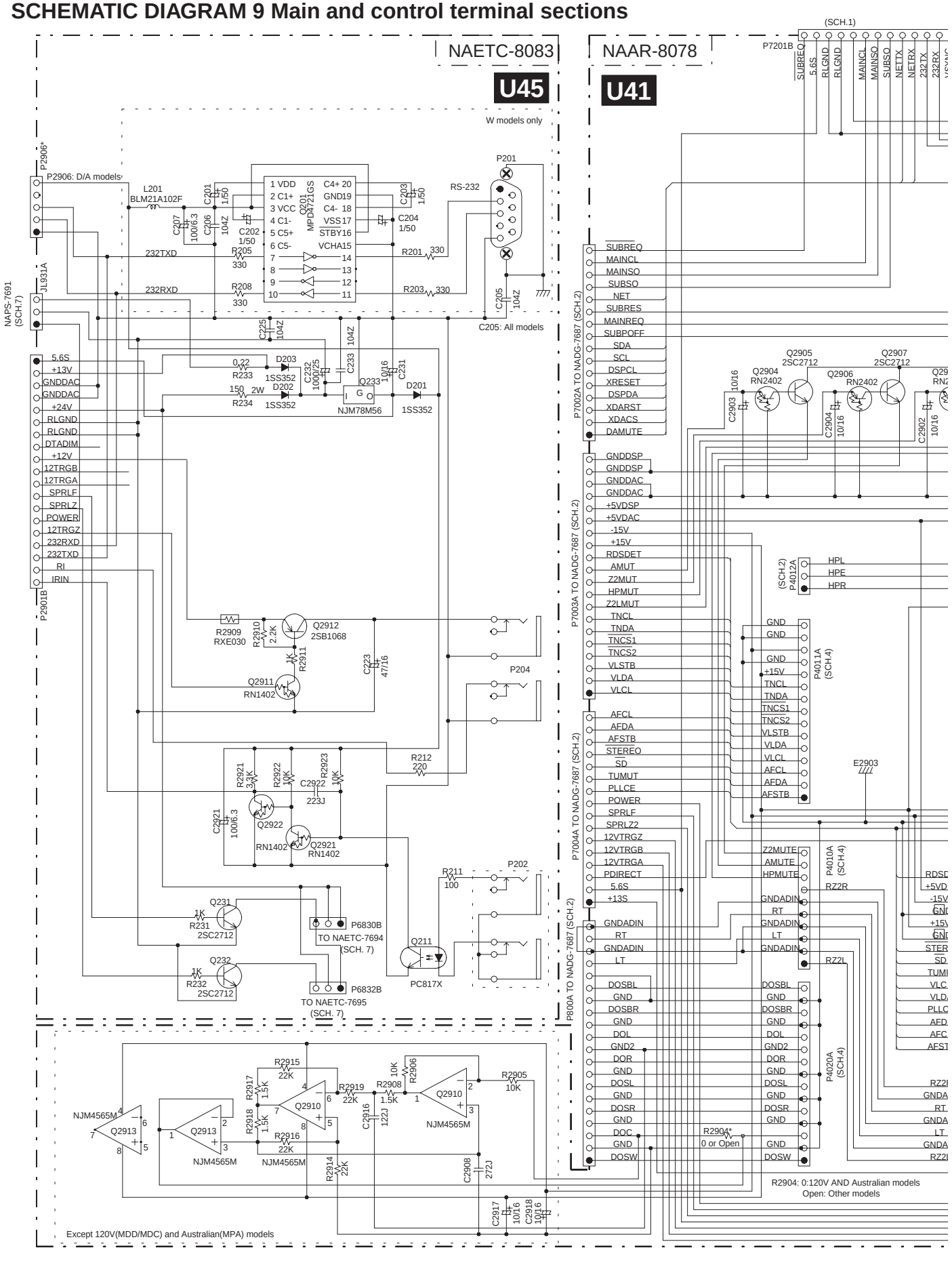
SCHEMATIC DIAGRAM 8 Net-tune section



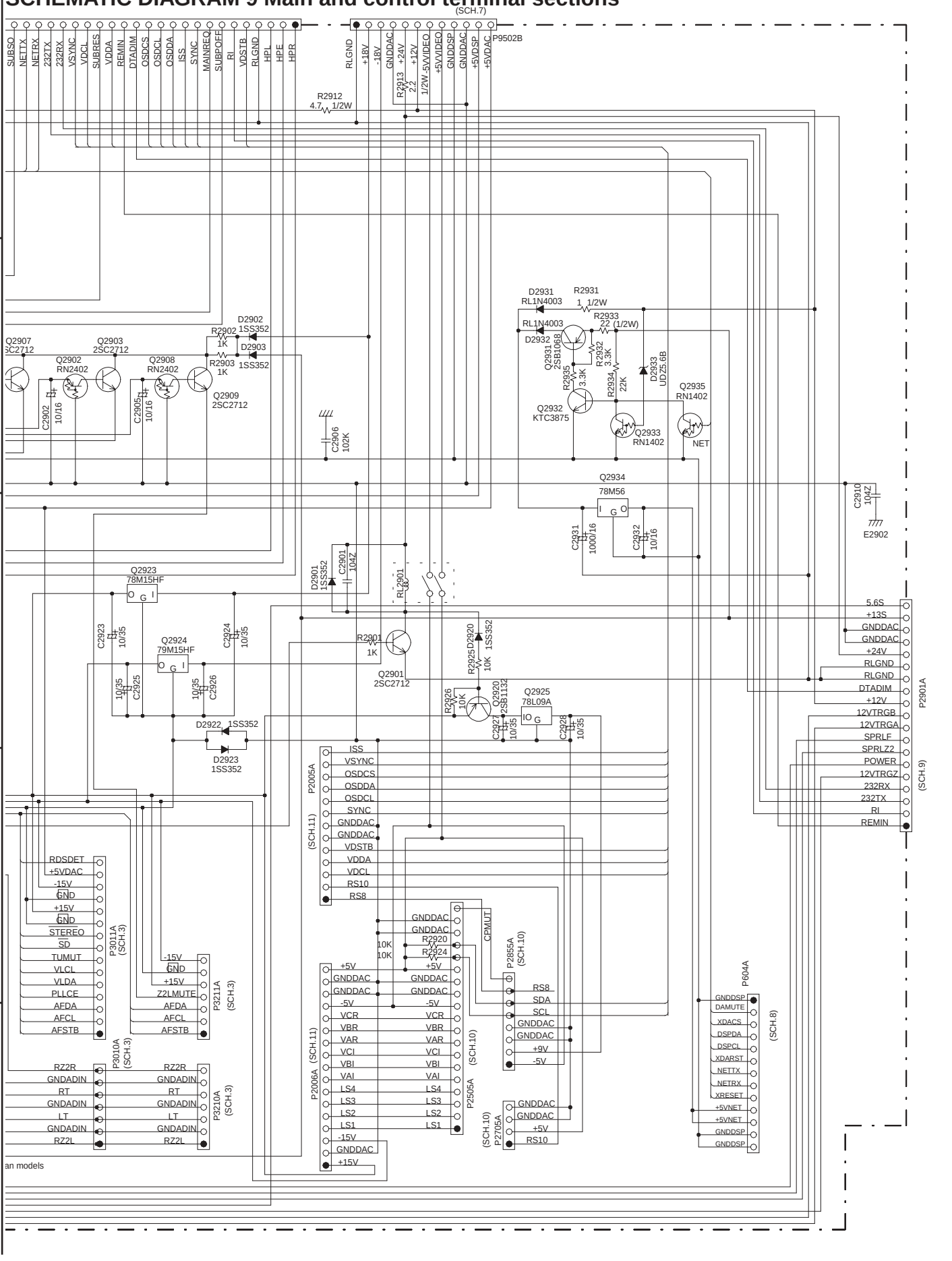
SCHEMATIC DIAGRAM 8 Net-tune section



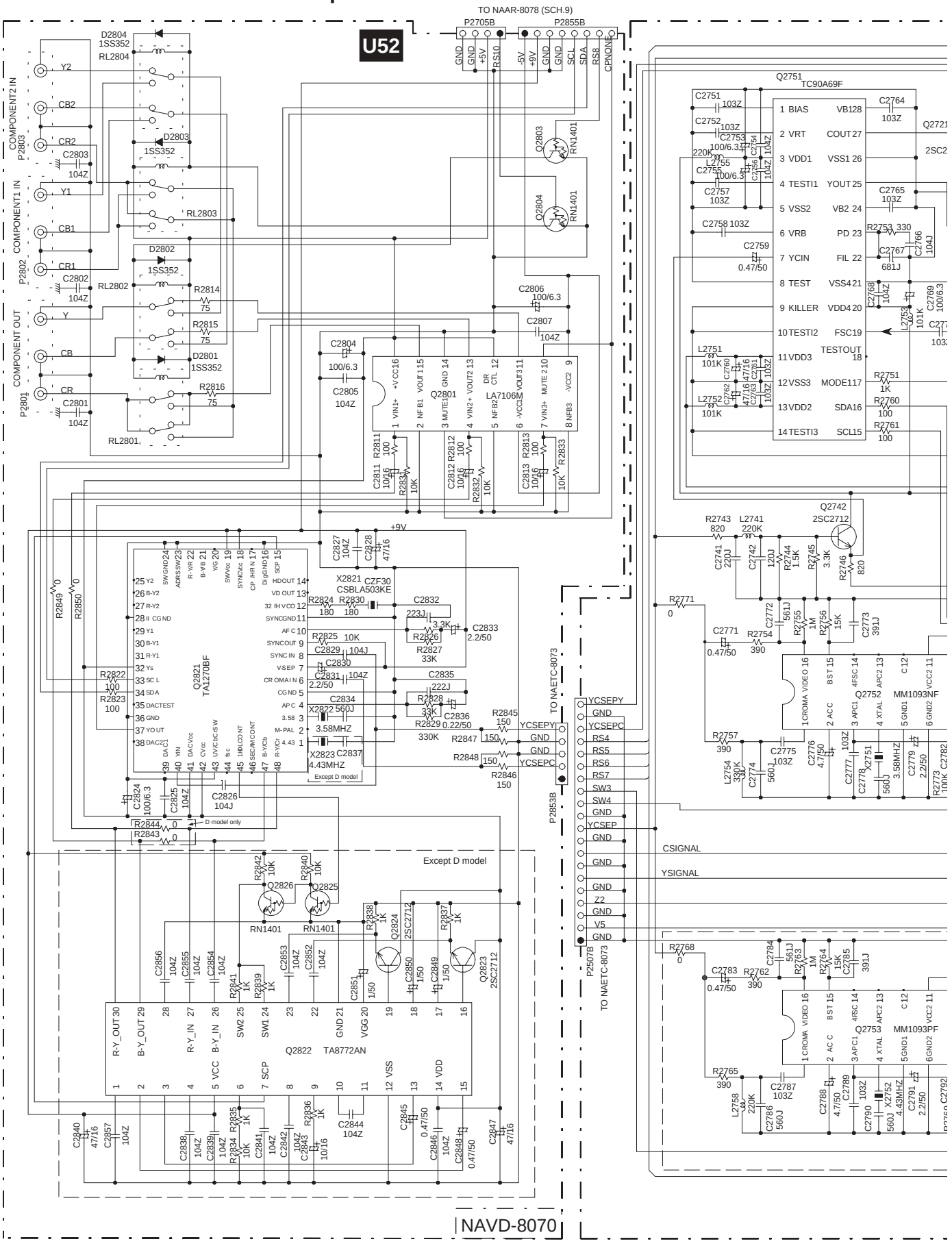
SCHEMATIC DIAGRAM 9 Main and control terminal sections



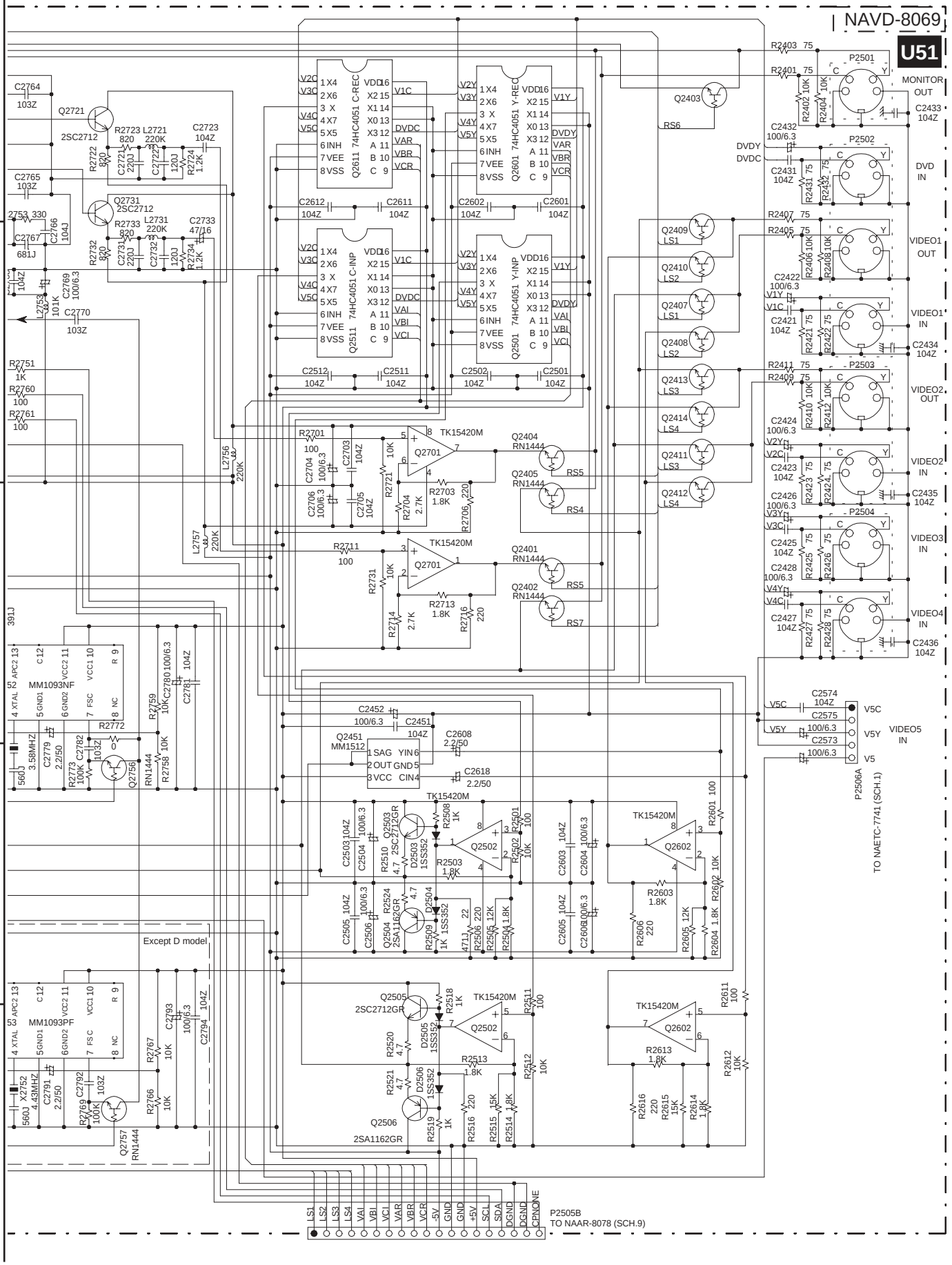
SCHEMATIC DIAGRAM 9 Main and control terminal sections



SCHEMATIC DIAGRAM 10 Component and S video sections

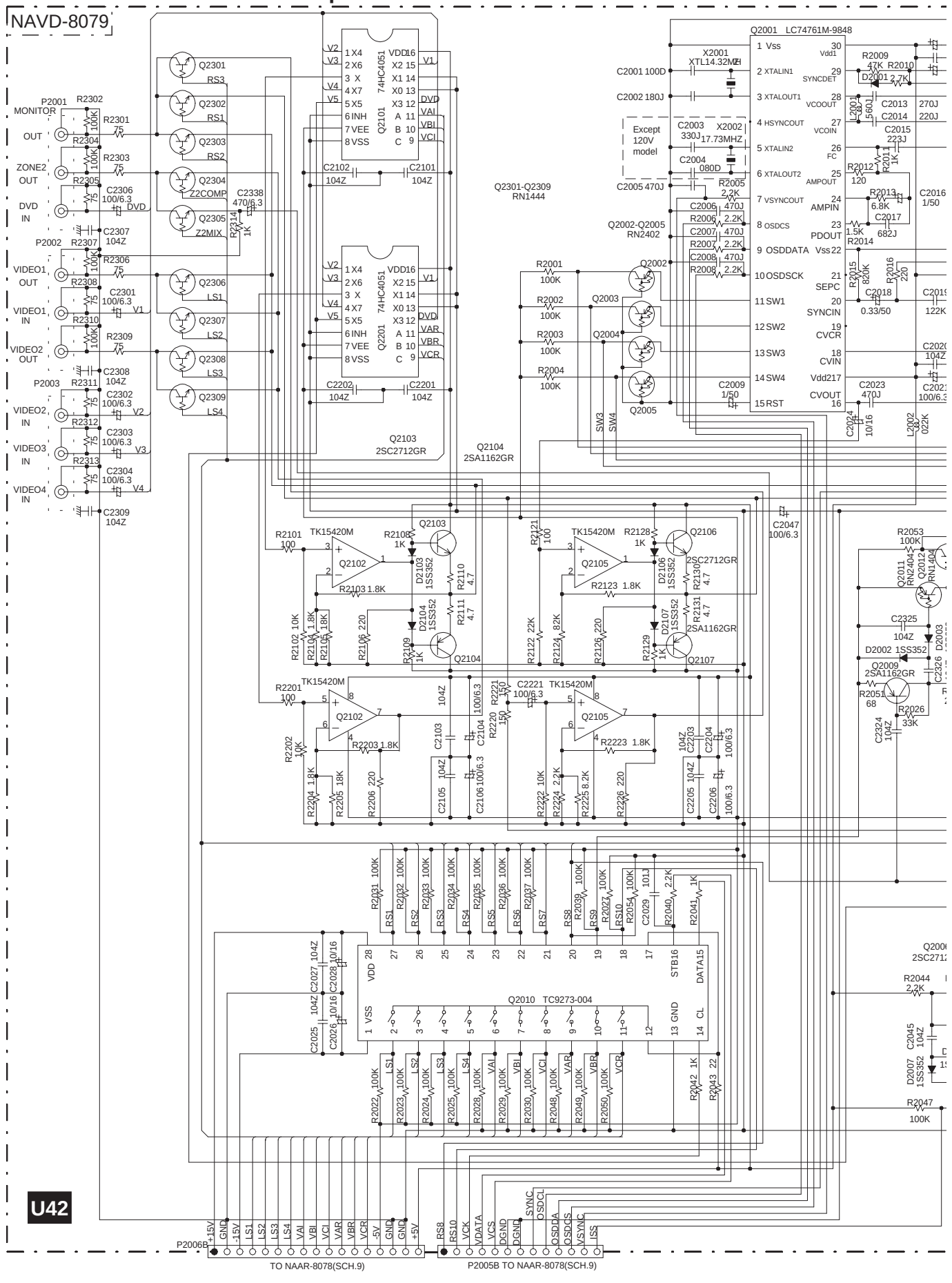


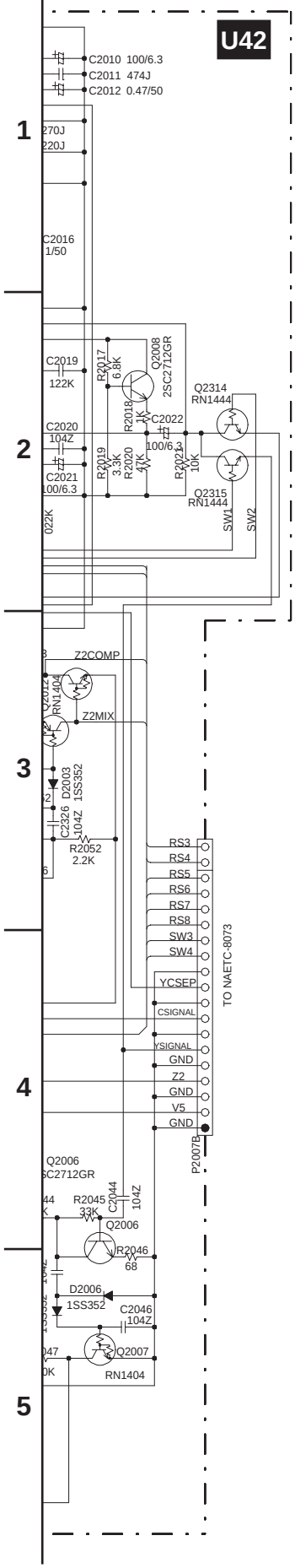
SCHEMATIC DIAGRAM 10 Component and S video sections



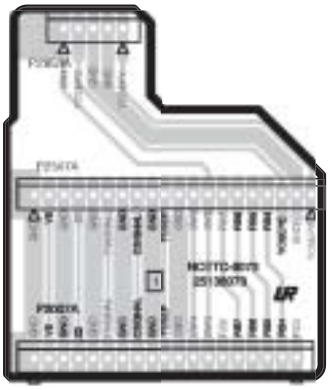
SCHEMATIC DIAGRAM 11 Composite video section

NAVD-8079



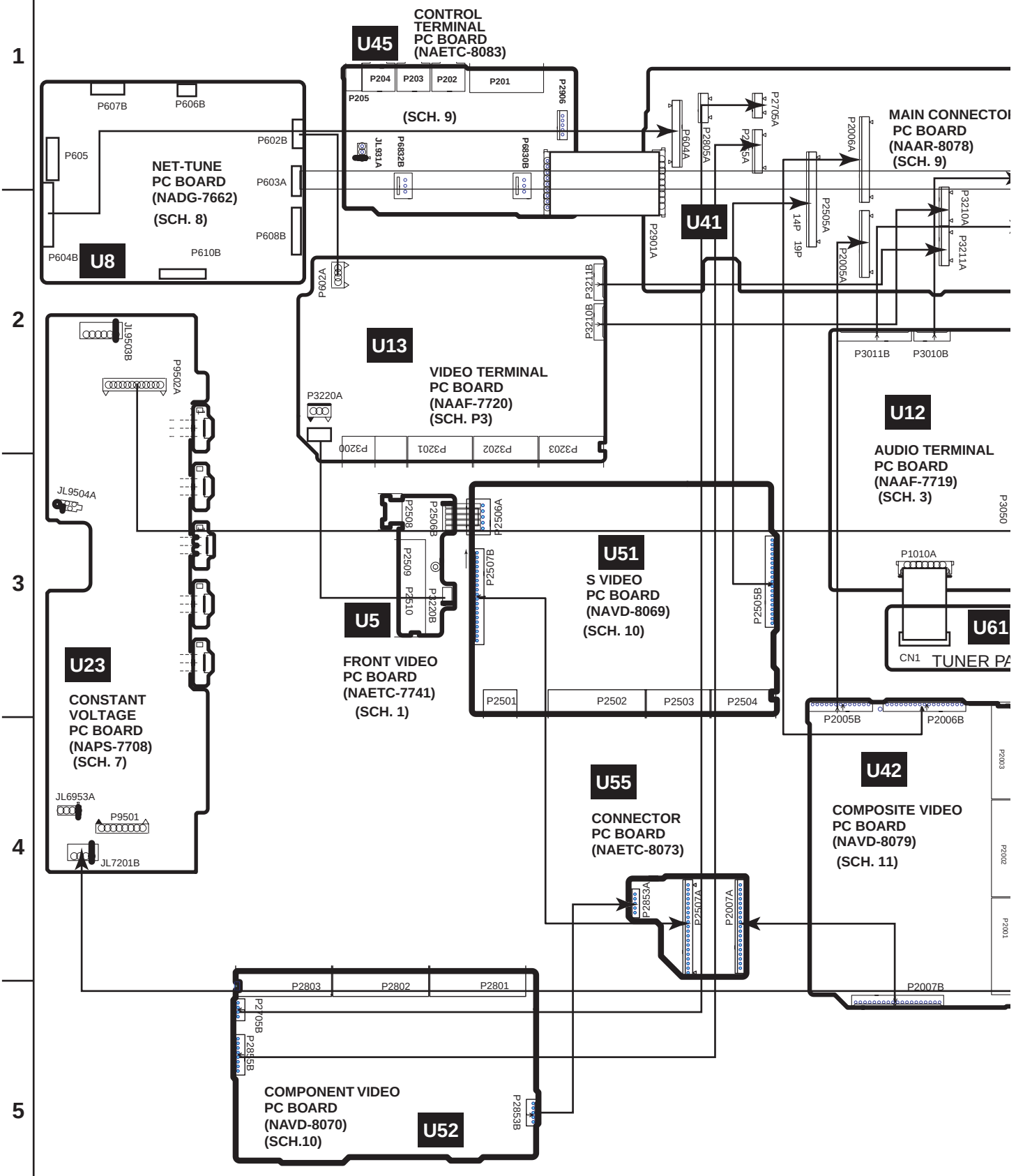


U55

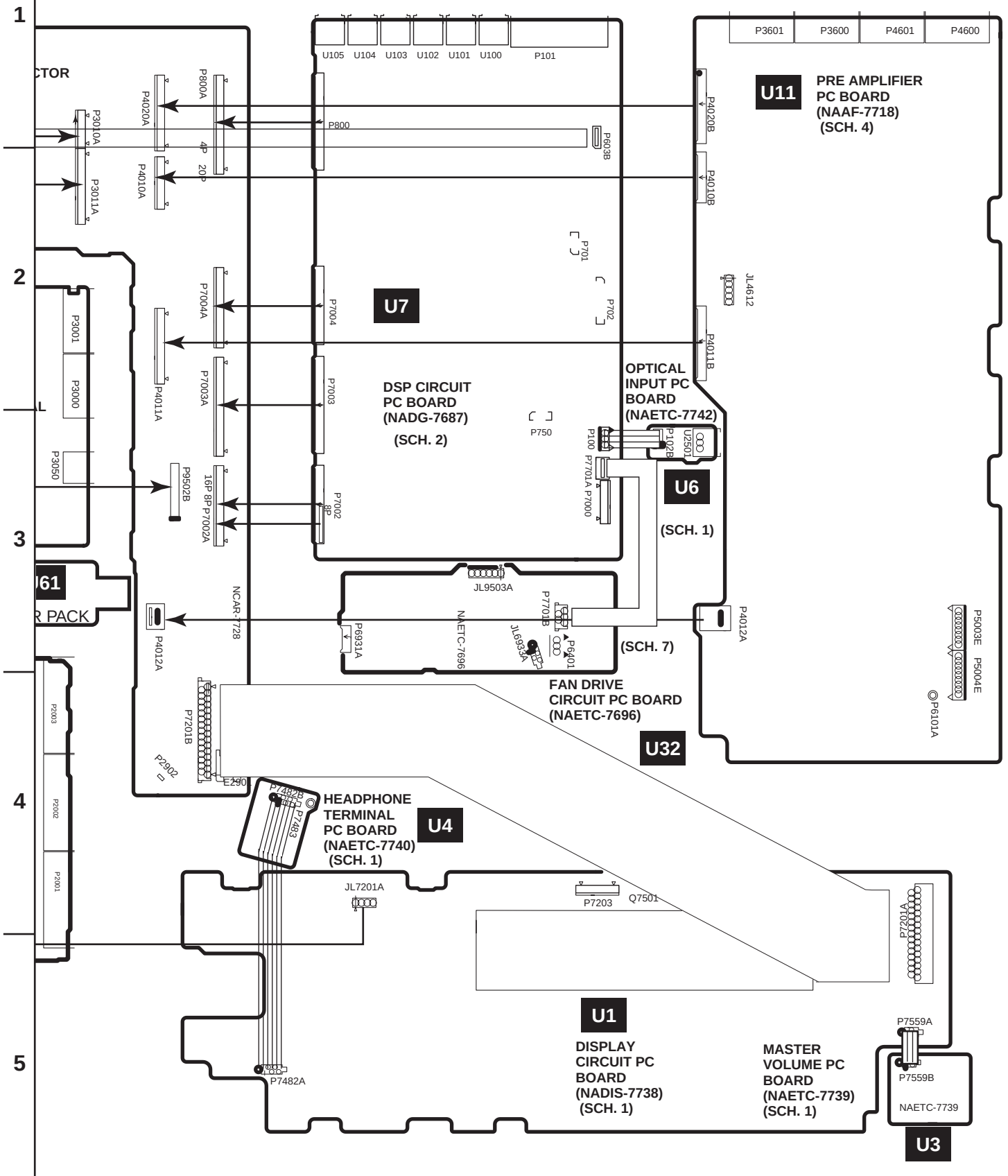


CONNECTOR PC BOARD (NAETC-8073)

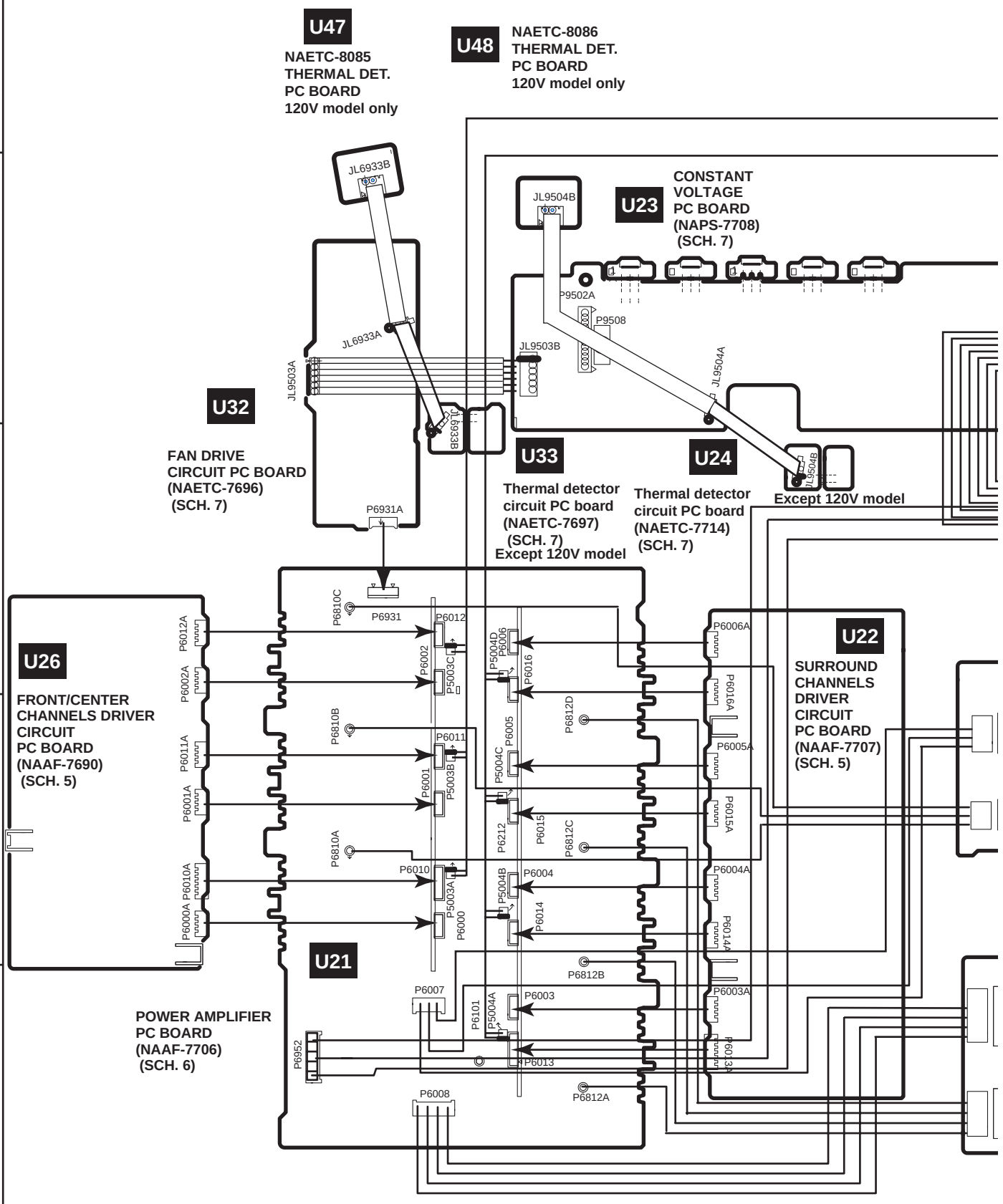
WIRING VIEW 1



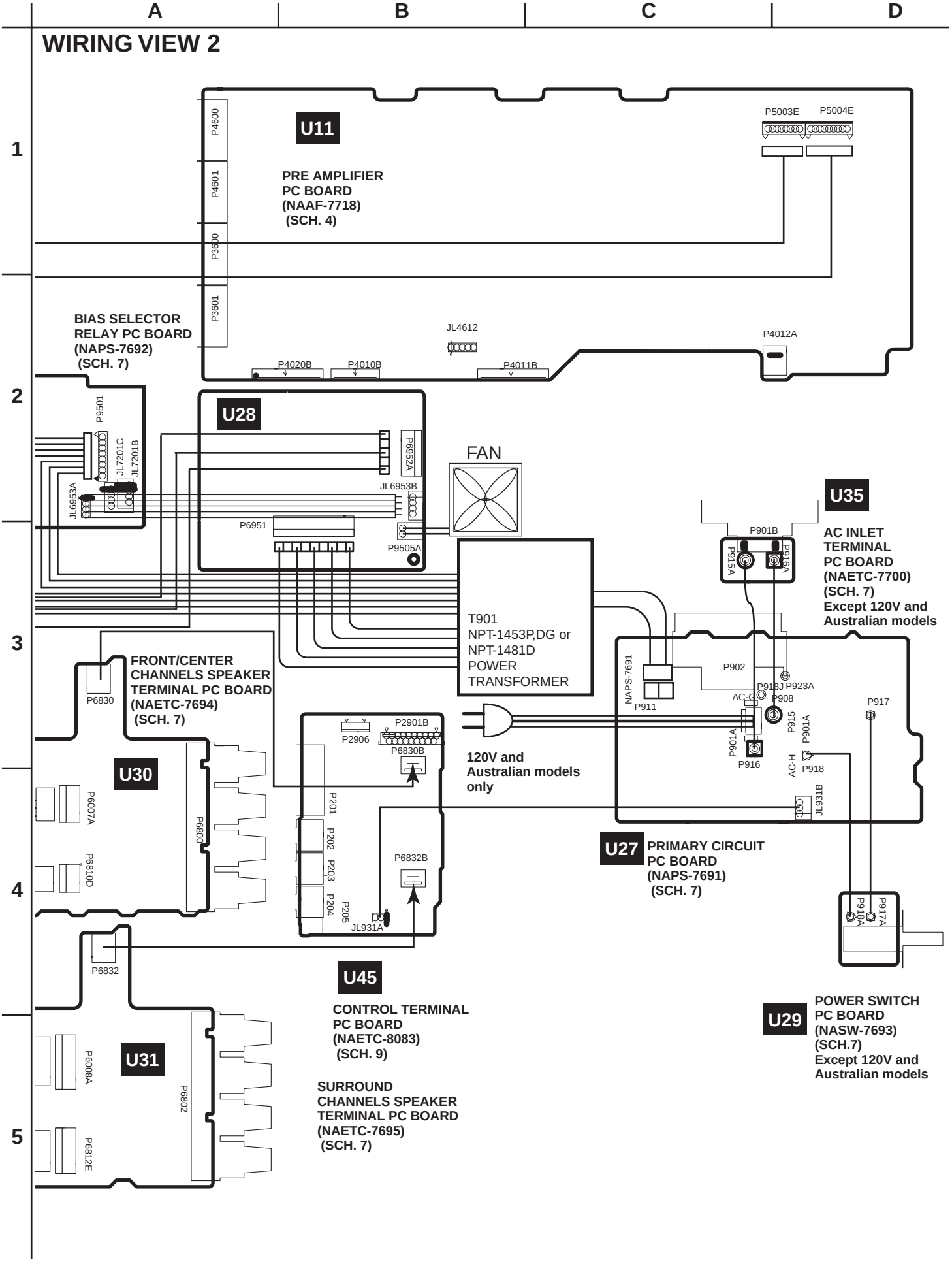
WIRING VIEW 1



WIRING VIEW 2

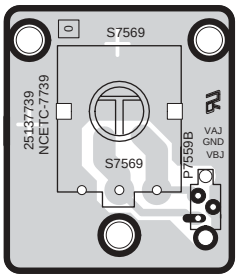


WIRING VIEW 2

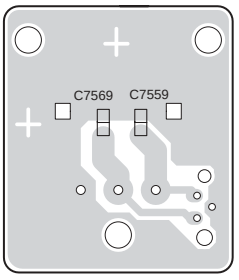


PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-1

U3



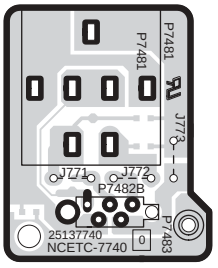
COMPONENT SIDE



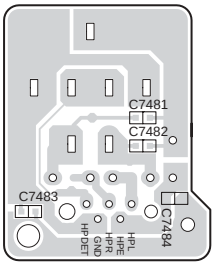
SOLDERING SIDE

VOLUME PC BOARD(NAETC-7739)

U4



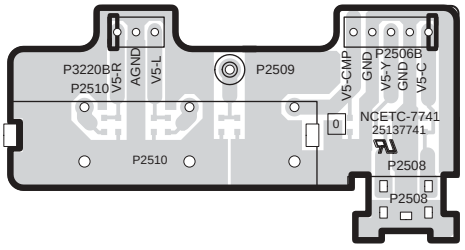
COMPONENT SIDE



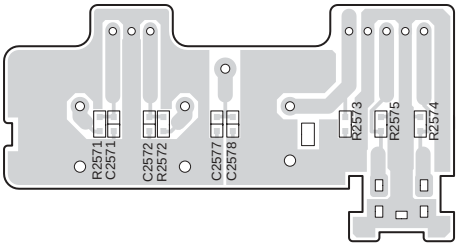
SOLDERING SIDE

HEADPHONE TERMINAL PC BOARD(NAETC-7740)

U5



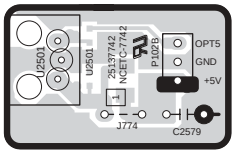
COMPONENT SIDE



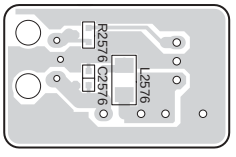
SOLDERING SIDE

FRONT VIDEO PC BOARD(NAETC-7741)

U6



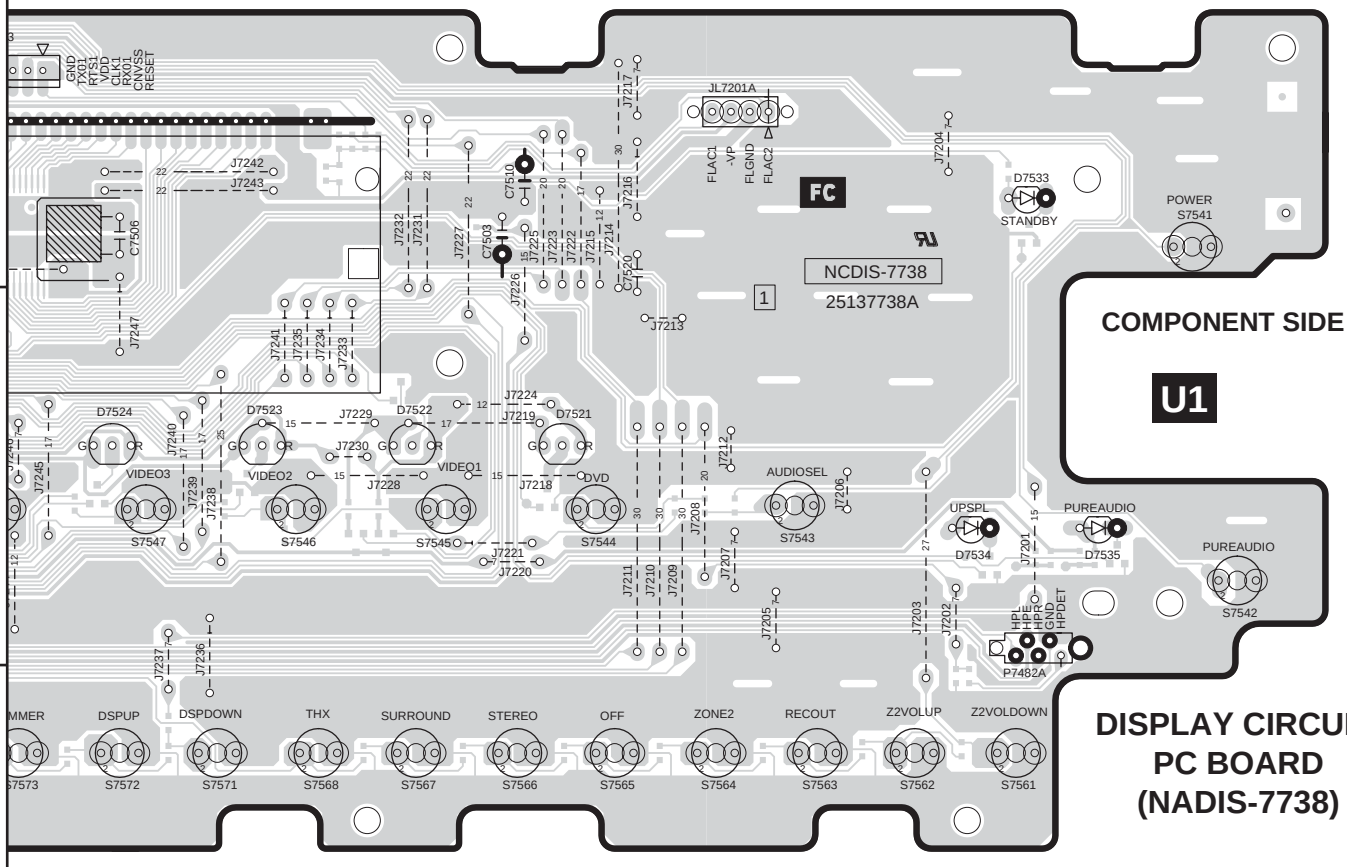
COMPONENT SIDE

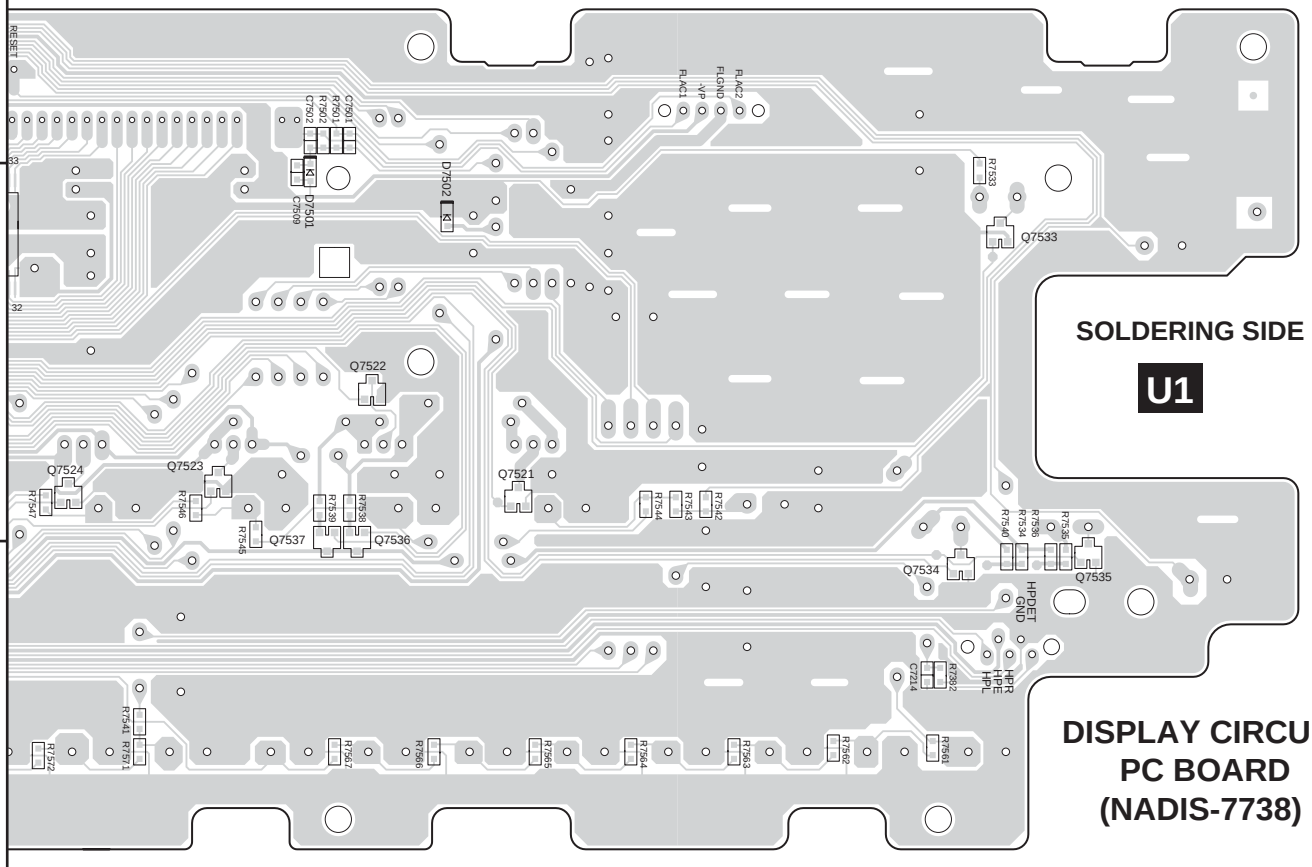


SOLDERING SIDE

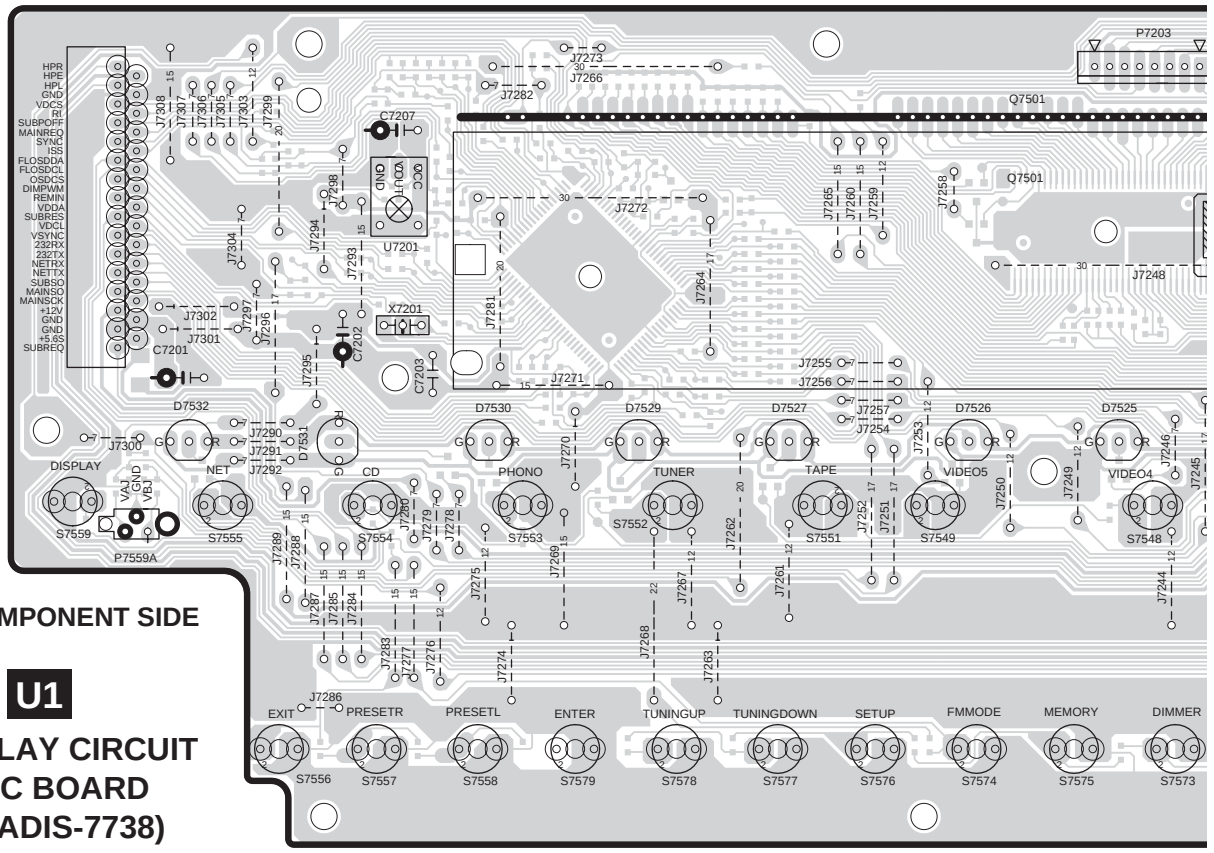
FRONT OPTICAL INPUT PC BOARD(NAETC-7742)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-3





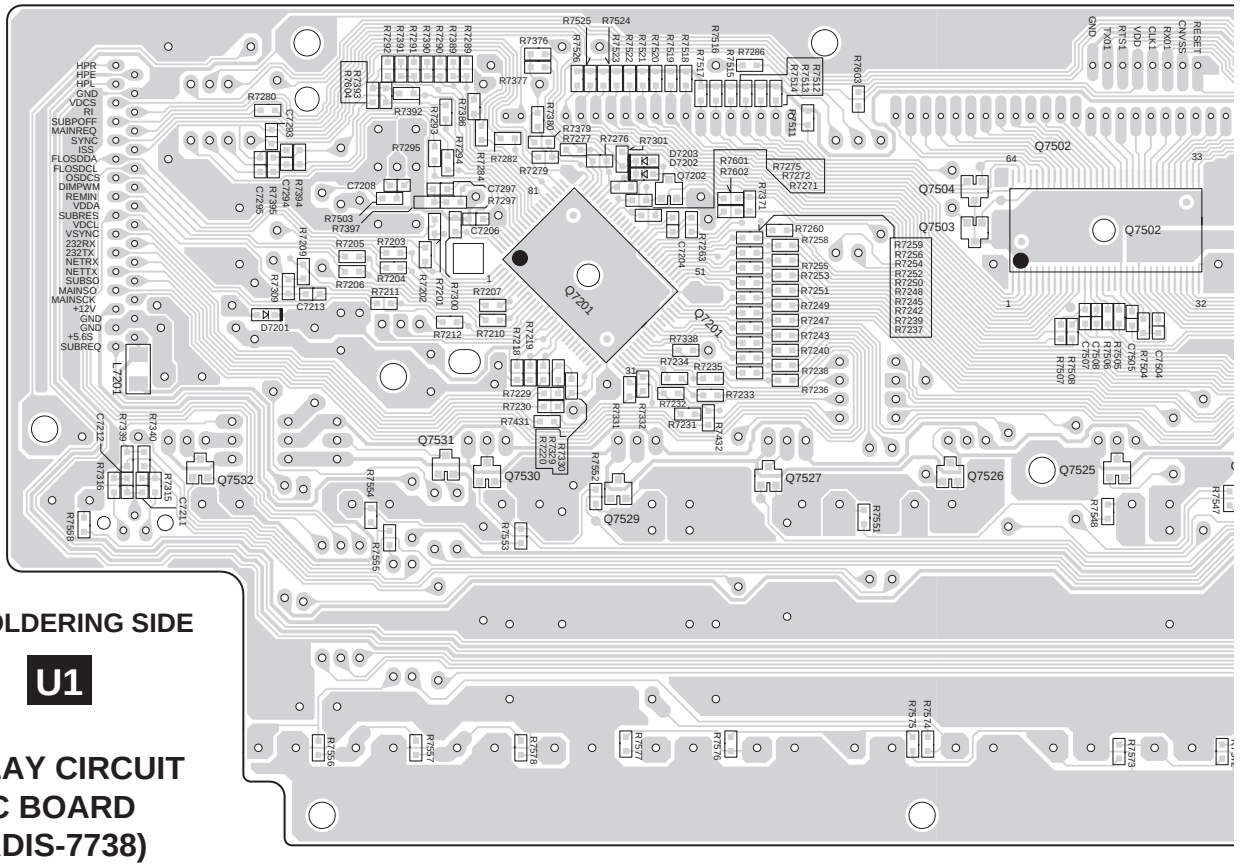
PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 1-2



COMPONENT SIDE

U1

DISPLAY CIRCUIT PC BOARD (NADIS-7738)



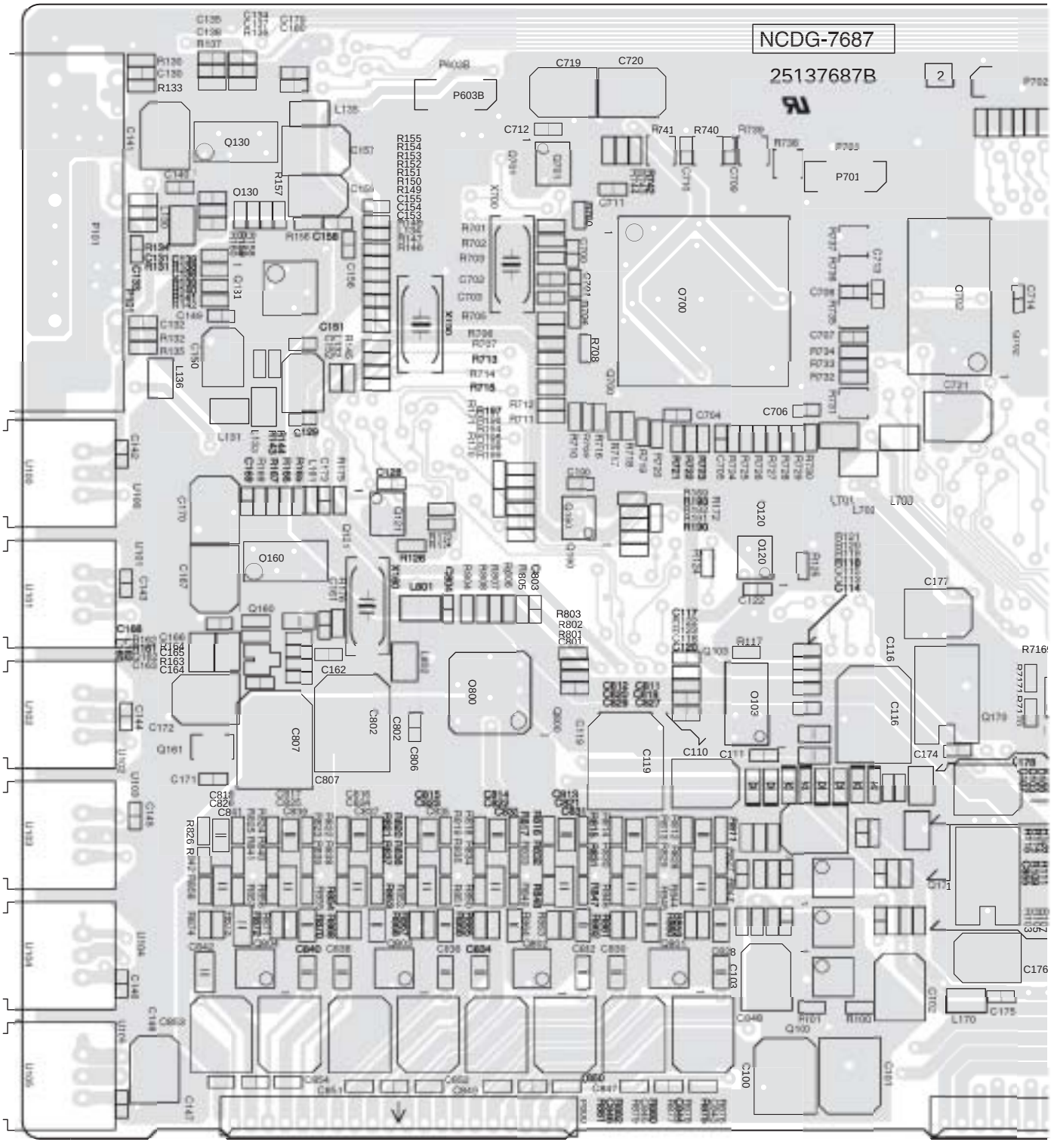
SOLDERING SIDE

U1

DISPLAY CIRCUIT PC BOARD (NADIS-7738)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-1

U7



SOLDERING VIEW FOR COMPONENT PARTS

DSP CIRCUIT PC BOARD

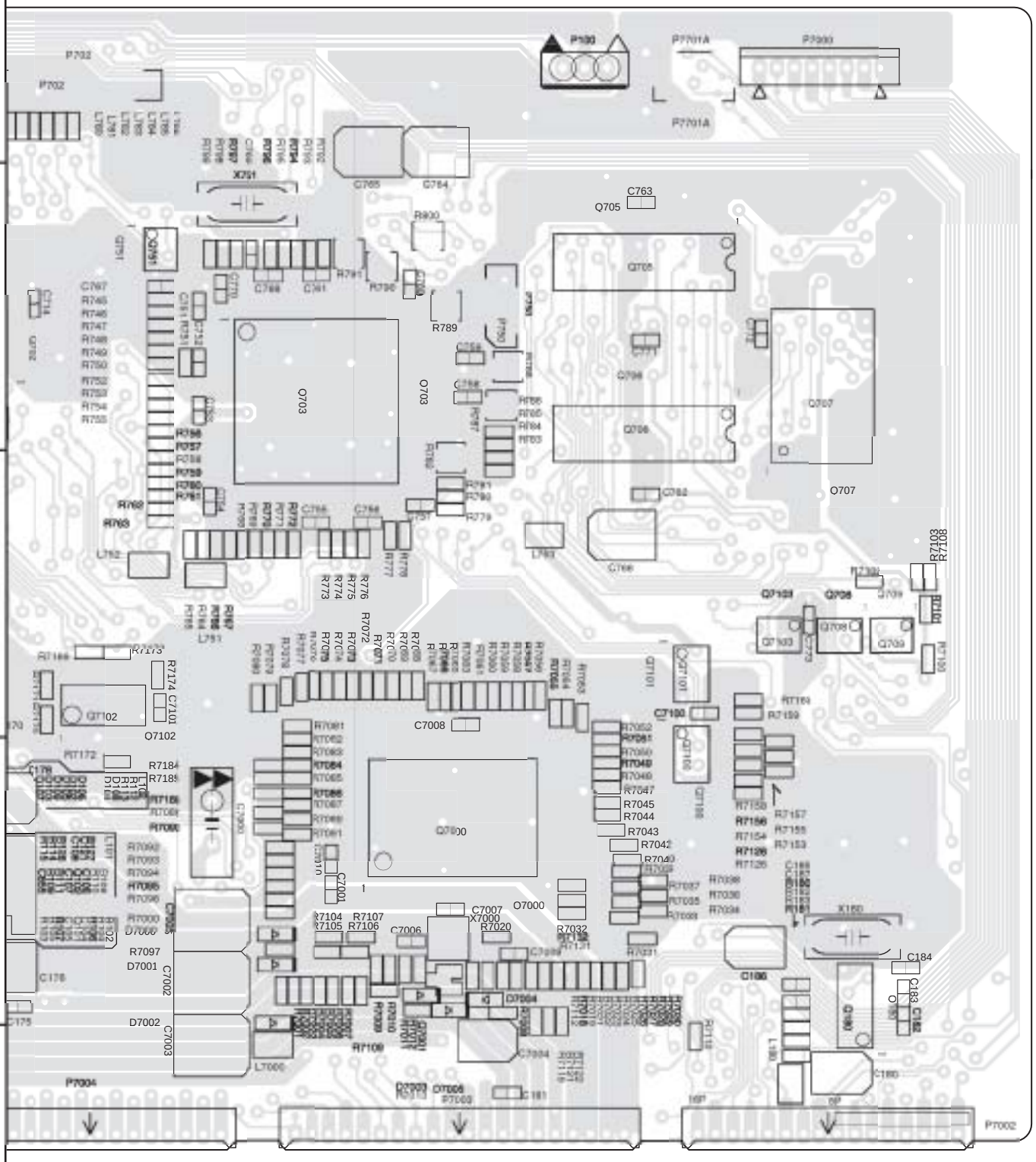
(NADG-7687)

A B C D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-1

U7

1
2
3
4
5

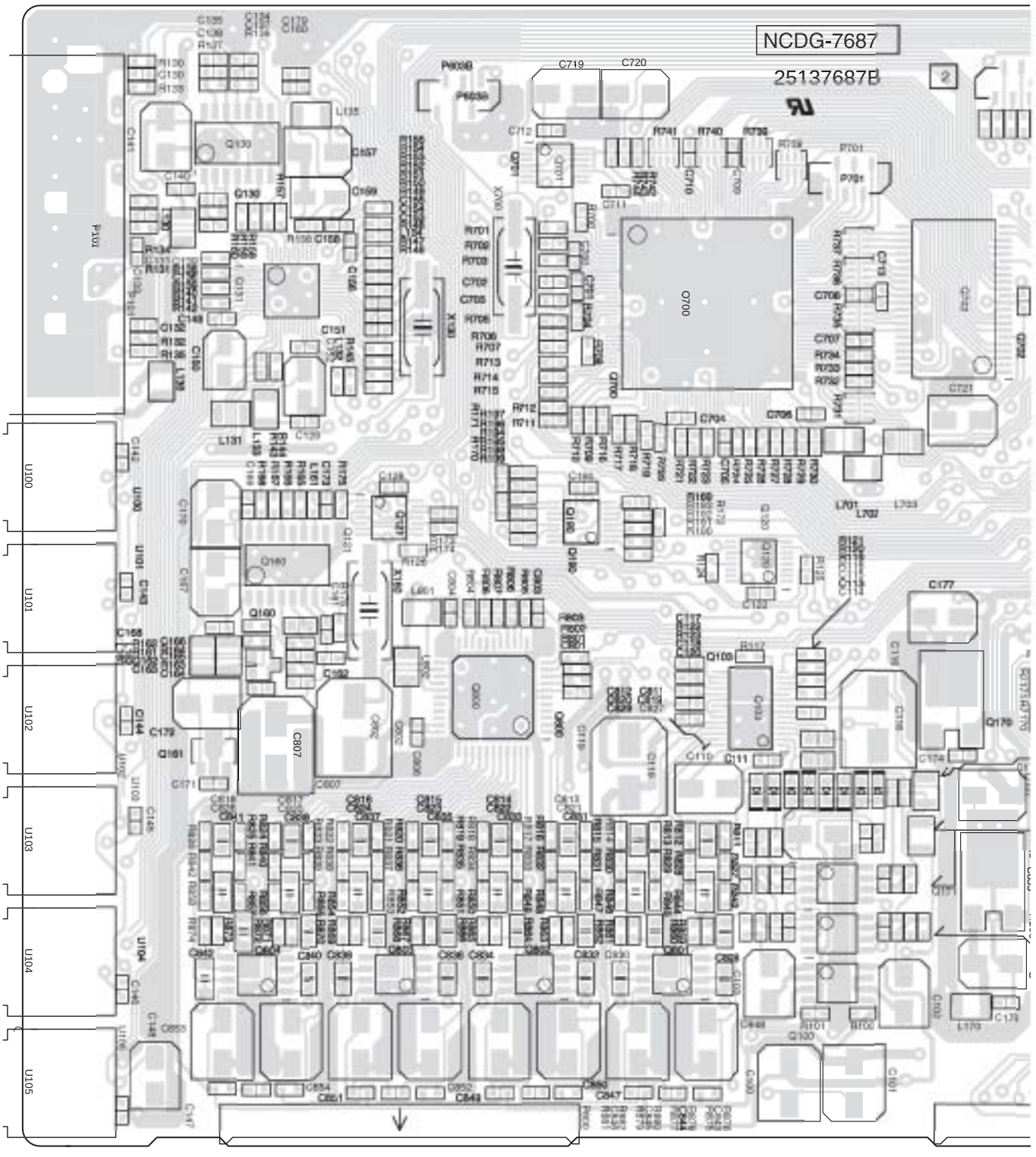


SOLDERING VIEW FOR COMPONENT PARTS

DSP CIRCUIT PC BOARD
(NADG-7687)

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-2

U7



SOLDERING VIEW FOR CHIP PARTS

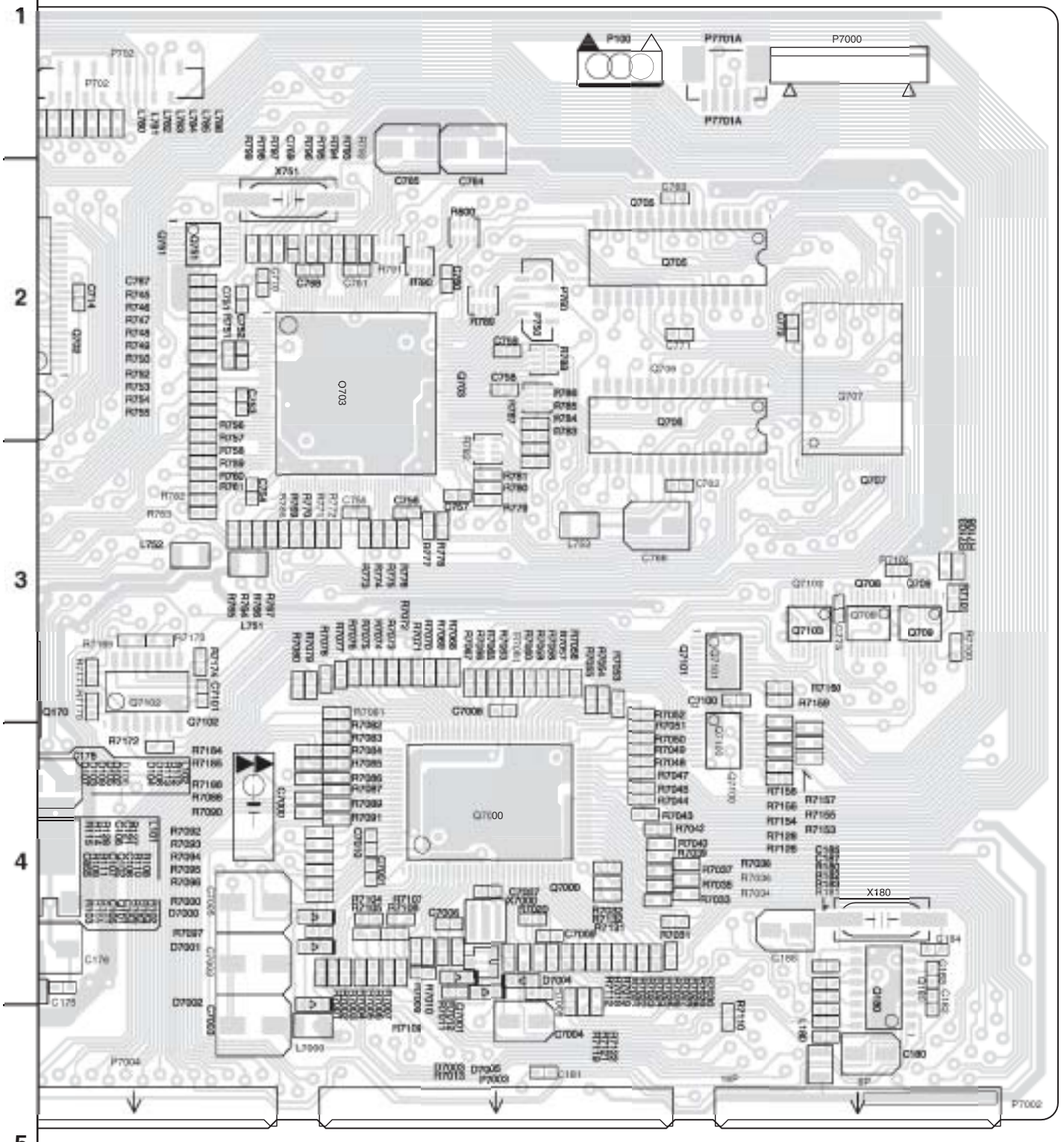
DSP CIRCUIT PC BOARD
(NADG-7687)

A B C D

PRINTED CIRCUIT BOARD VIEW FROM SOLDERING SIDE 2-2

U7

1
2
3
4
5



SOLDERING VIEW FOR CHIP PARTS

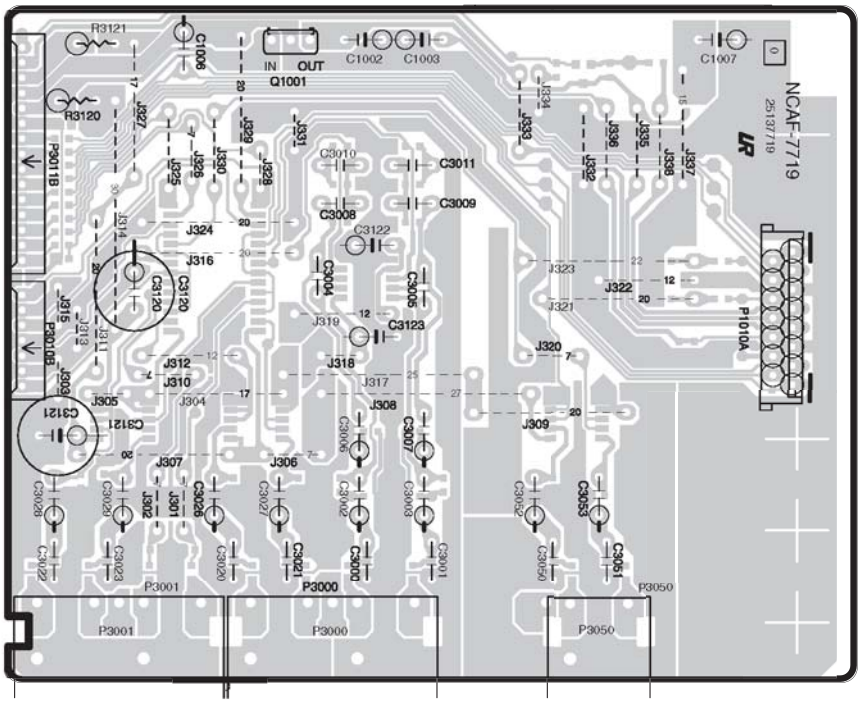
DSP CIRCUIT PC BOARD
(NADG-7687)

A B C D

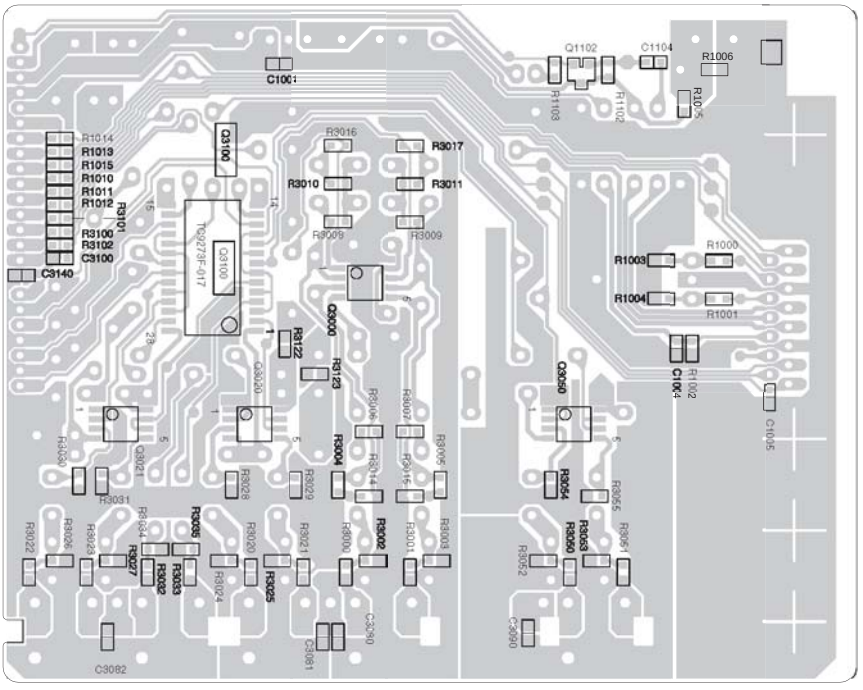
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 3-1

U12



COMPONENT SIDE



SOLDERING SIDE

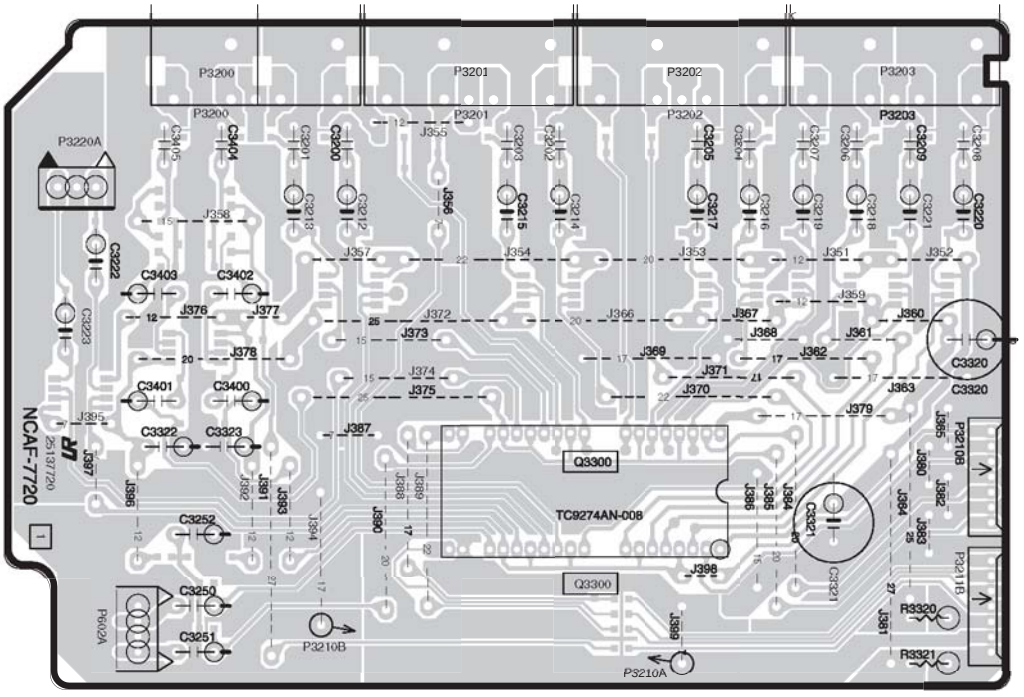
AUDIO TERMINAL PC BOARD
(NAAF-7719)

A B C D

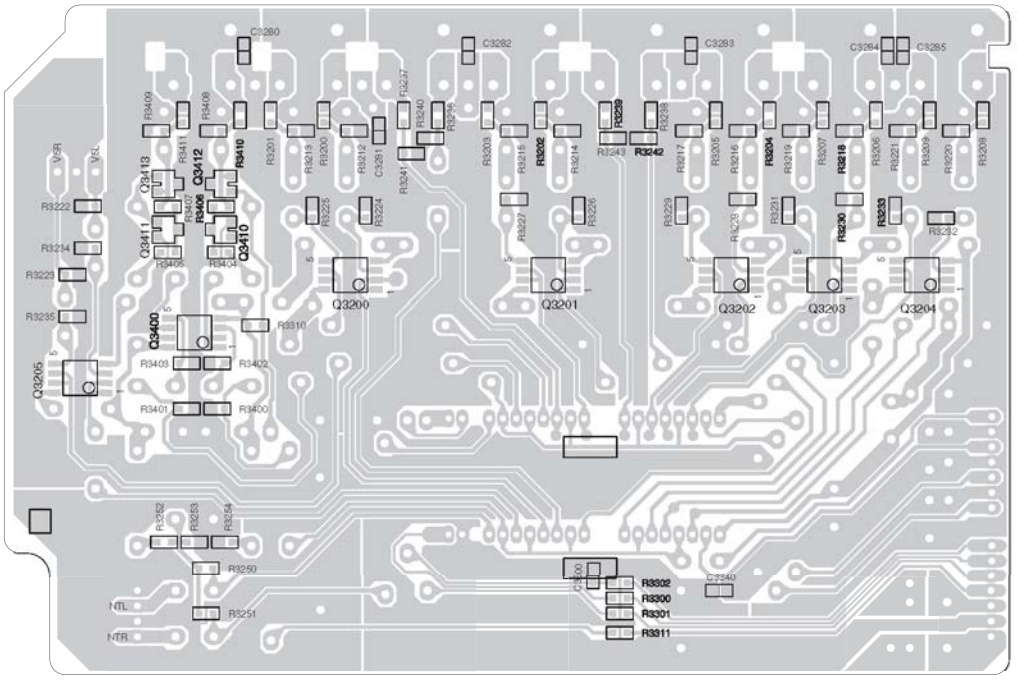
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 3-2

U13



COMPONENT SIDE

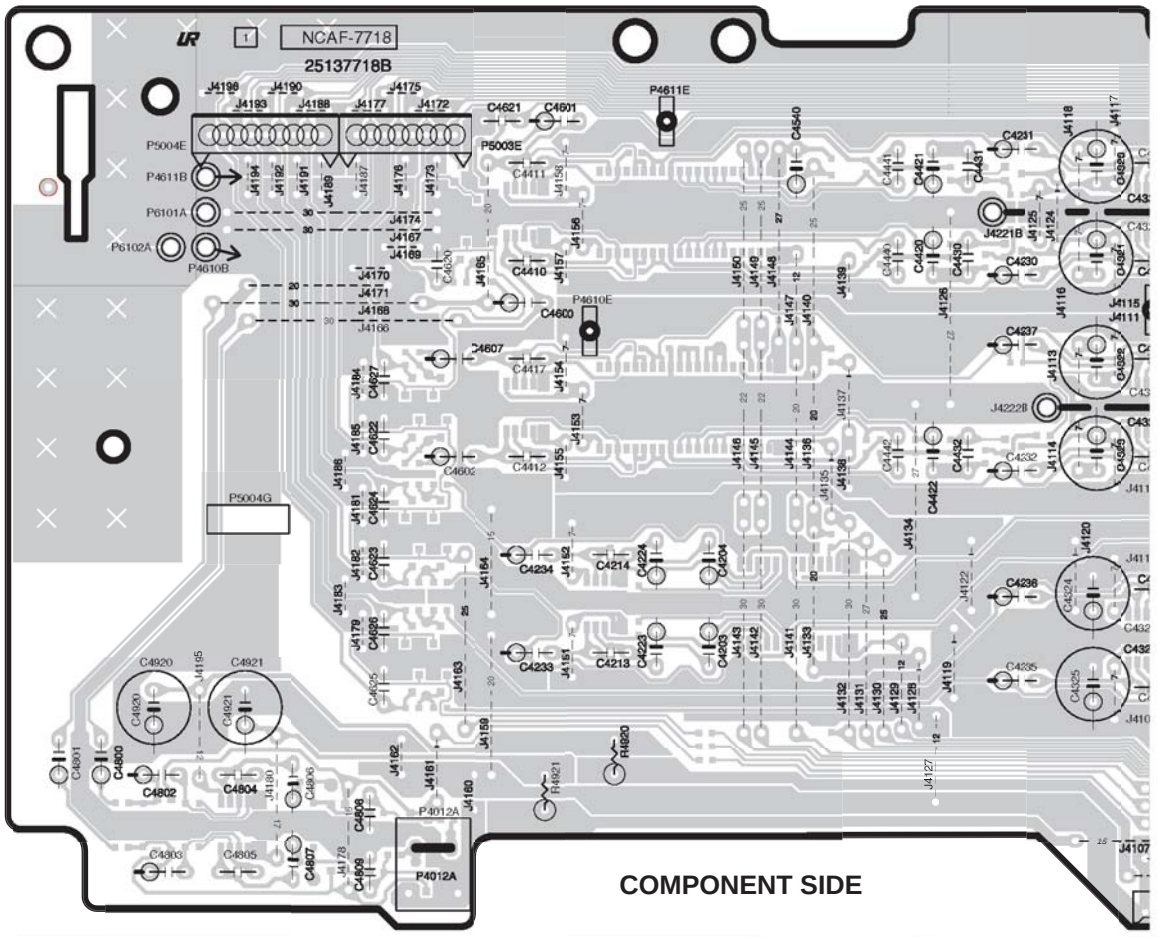


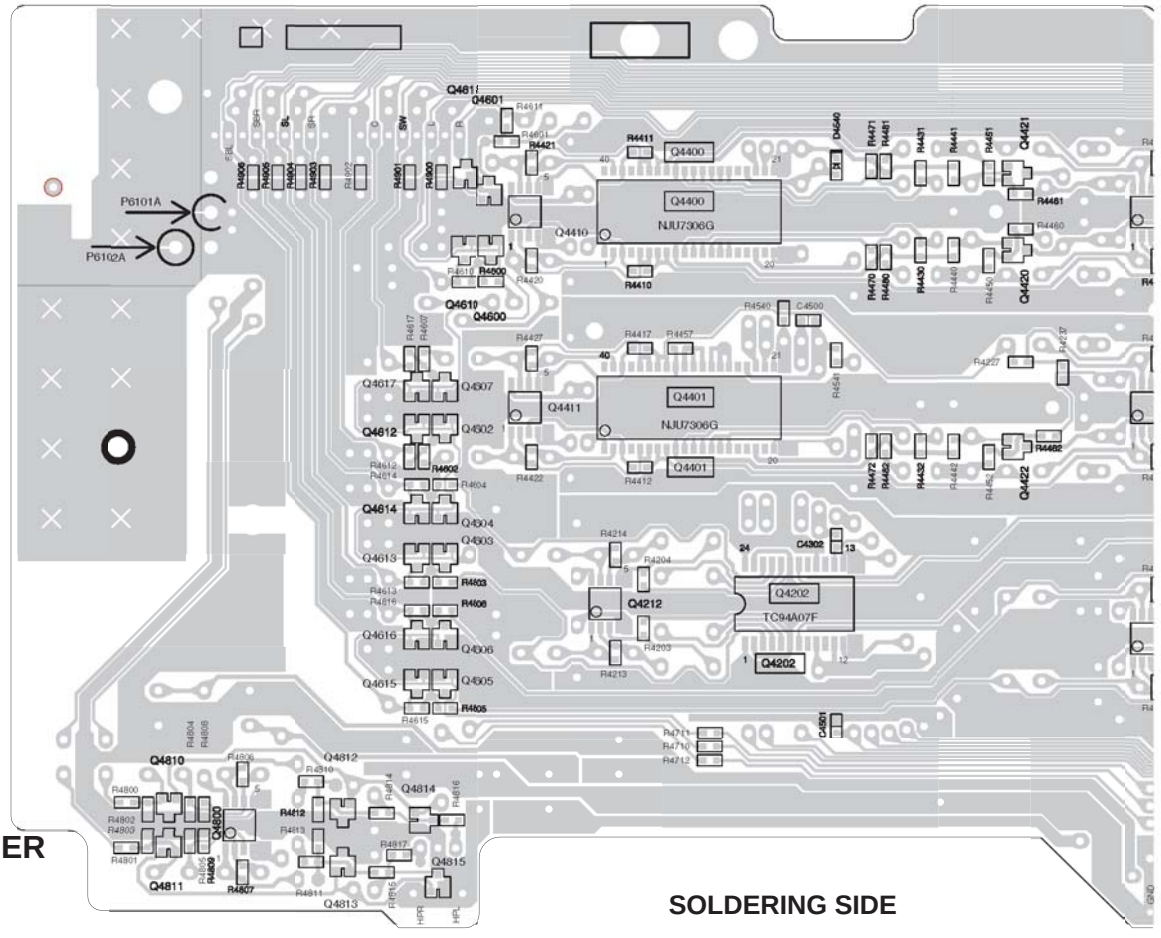
SOLDERING SIDE

VIDEO TERMINAL PC BOARD
(NAAF-7720)

PRINTED CIRCUIT BOARD VIEW 4-1

U11

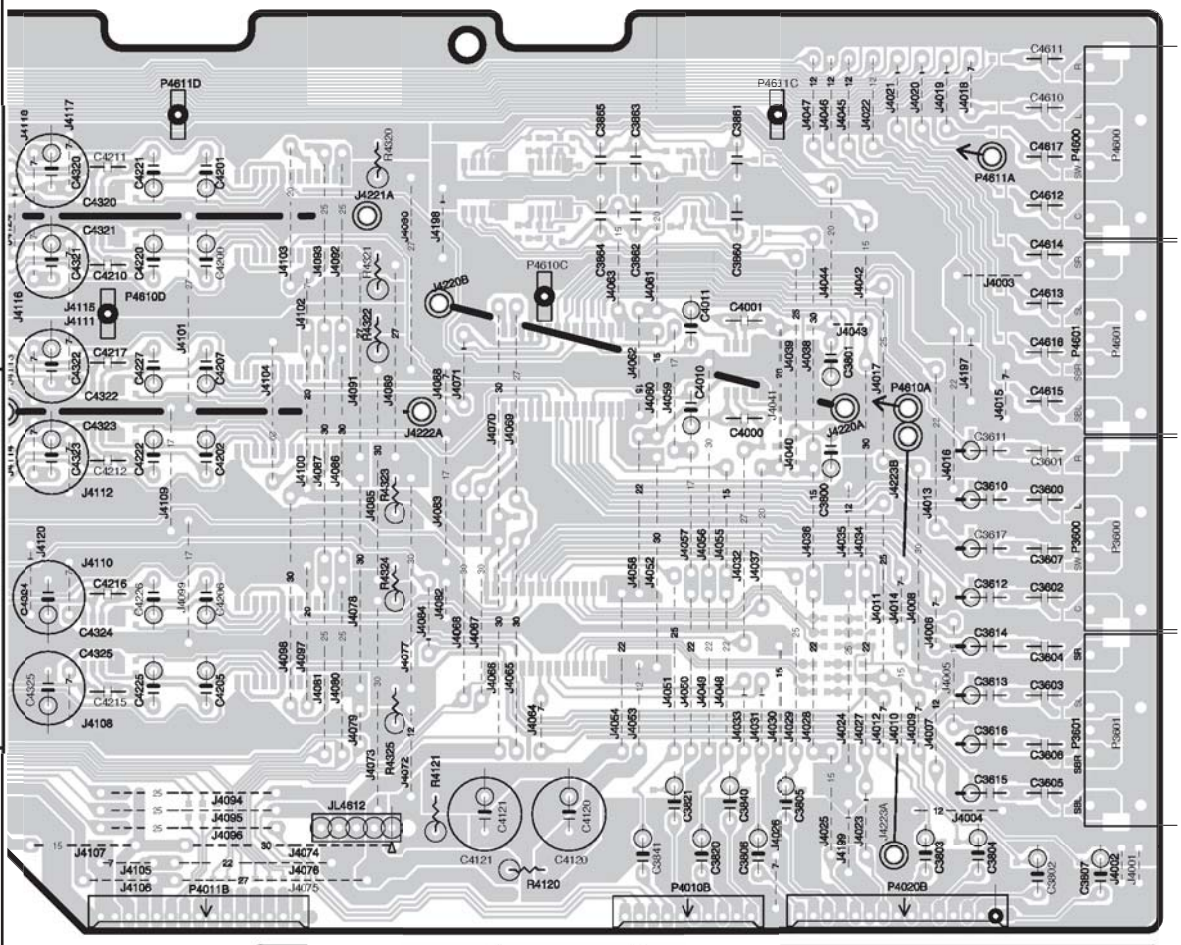




PRE AMPLIFER PC BOARD (NAAF-7718)

PRINTED CIRCUIT BOARD VIEW 4-2

U11



COMPONENT SIDE

SOLDERING SIDE

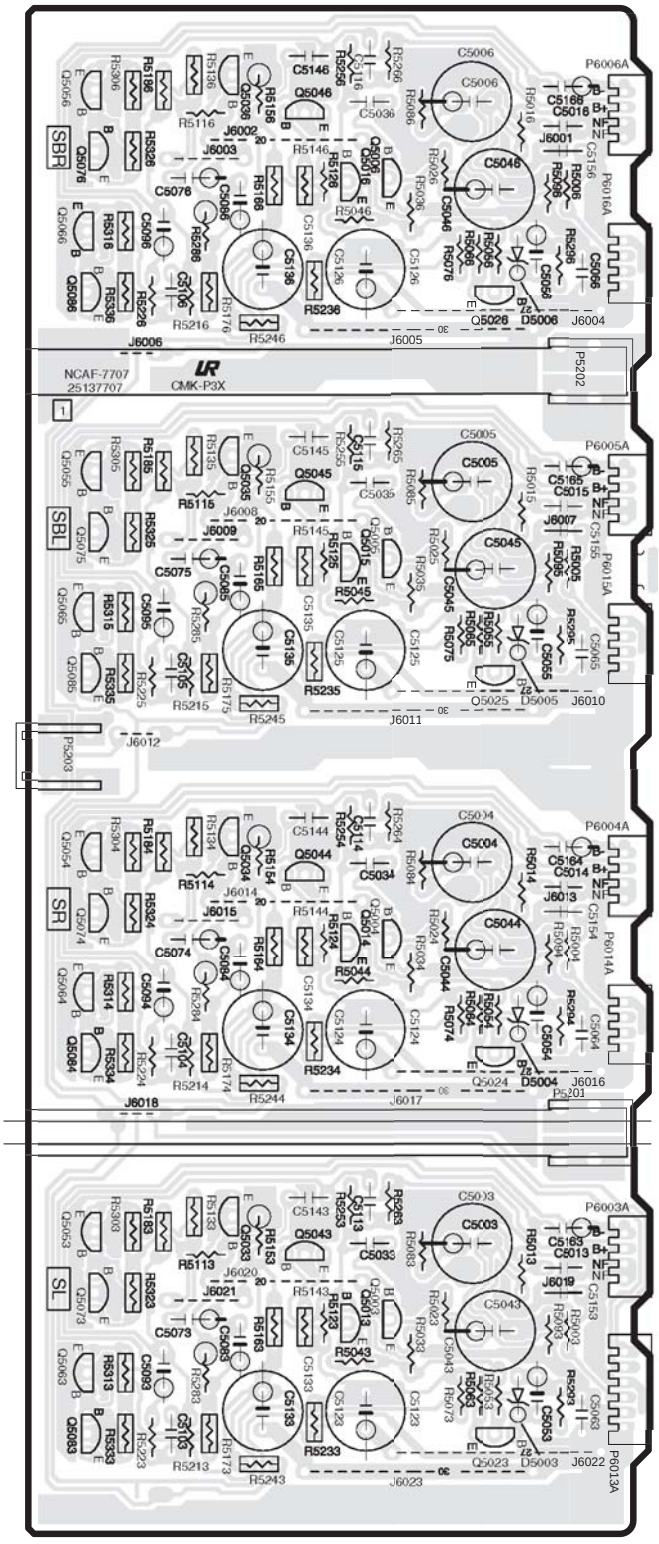
PRE AMPLIFER PC BOARD (NAAF-7718)

A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 5-1

U22



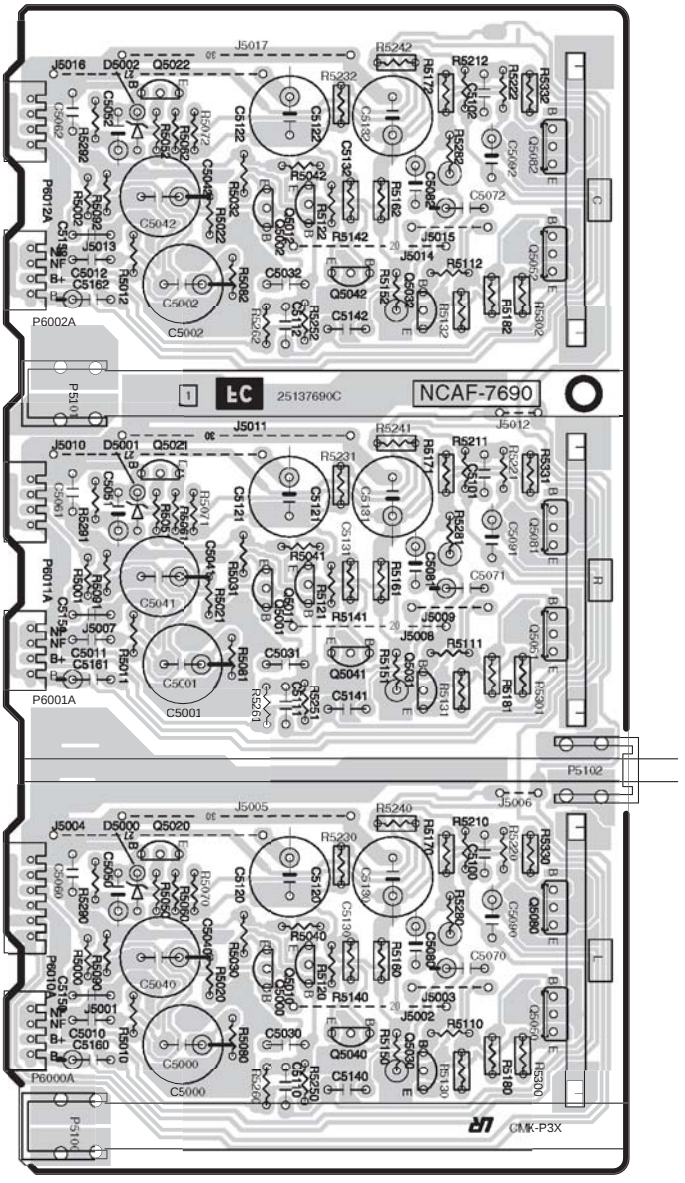
SURROUND DRIVER CIRCUIT PC BOARD (NAAF-7707)

A B C D

1 2 3 4 5

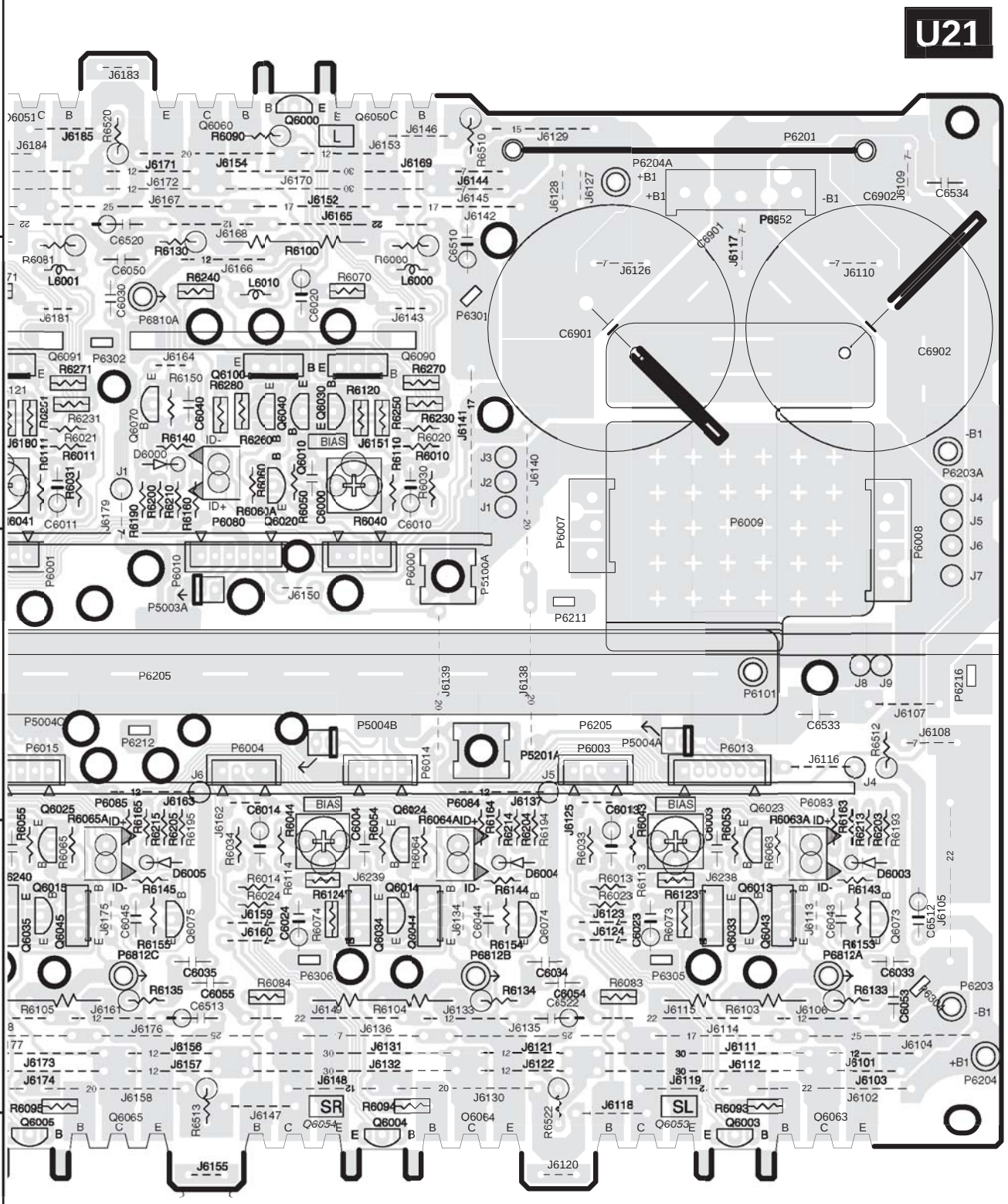
PRINTED CIRCUIT BOARD VIEW 5-2

U26



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

PRINTED CIRCUIT BOARD VIEW 6-2



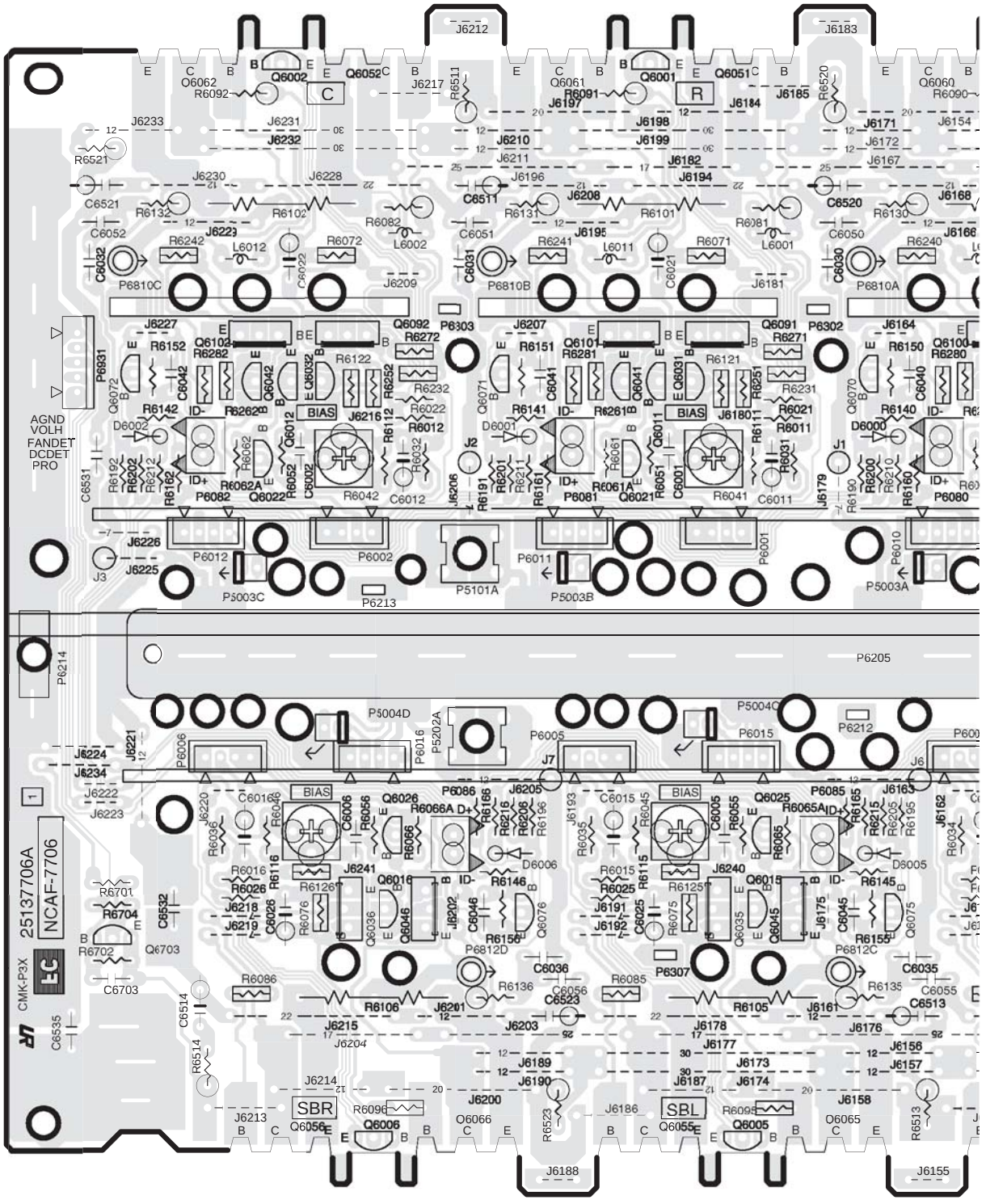
POWER AMPLIFIER PC BOARD
(NAAF-7706)

A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 6-1

U21



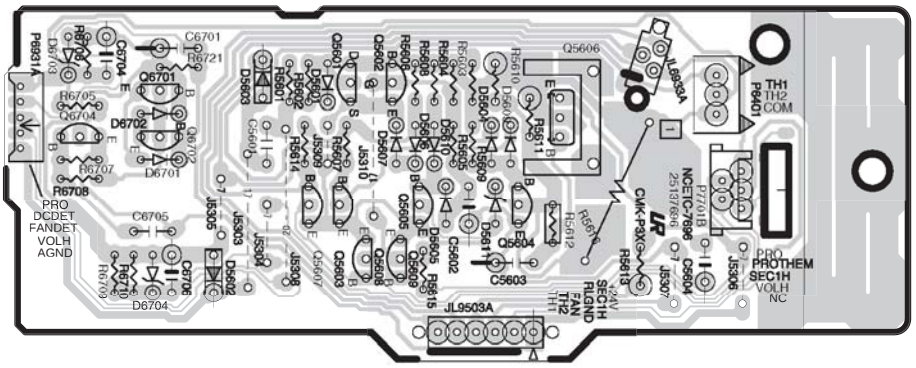
POWER AMPLIFIER PC BOARD
(NAAF-7706)

A B C D

1 2 3 4 5

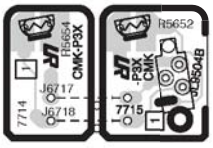
PRINTED CIRCUIT BOARD VIEW 7-3

U32



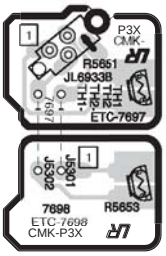
FAN DRIVE CIRCUIT PC BOARD
(NAETC-7696)

U24



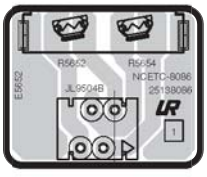
THERMAL DET.
PC BOARD
(NAETC-7714)
Except 120V model

U33



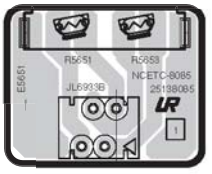
THERMAL DET.
PC BOARD
(NAETC-7697)
Except 120V model

U48



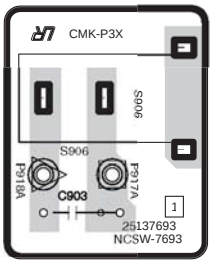
THERMAL DET.
PC BOARD
(NAETC-8086)
120V model only

U47



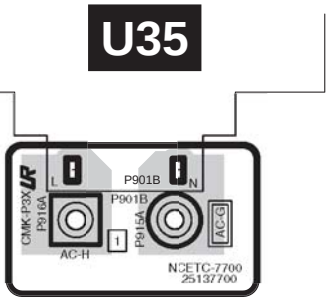
THERMAL DET.
PC BOARD
(NAETC-8085)
Only 120V model

U29



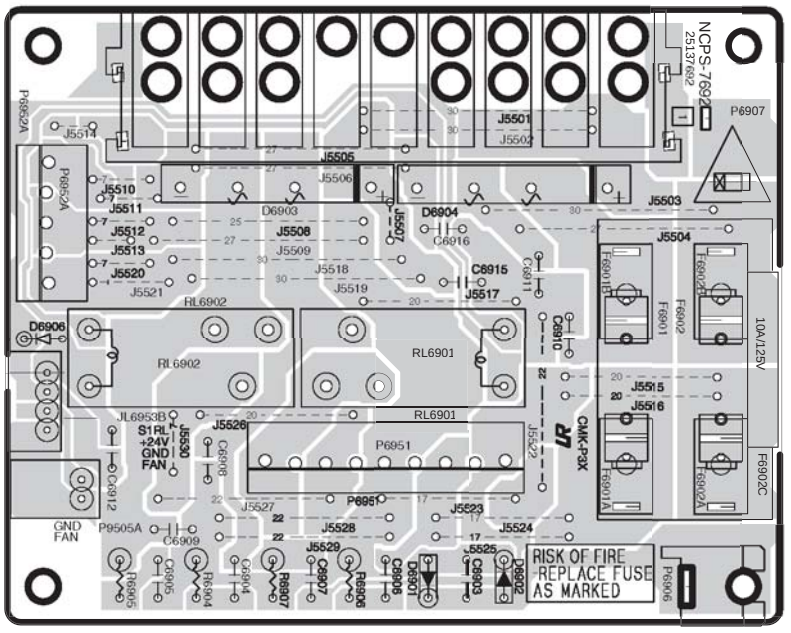
POWER SWITCH PC BOARD
(NASW-7693)
Except 120V and
Australian models

U35

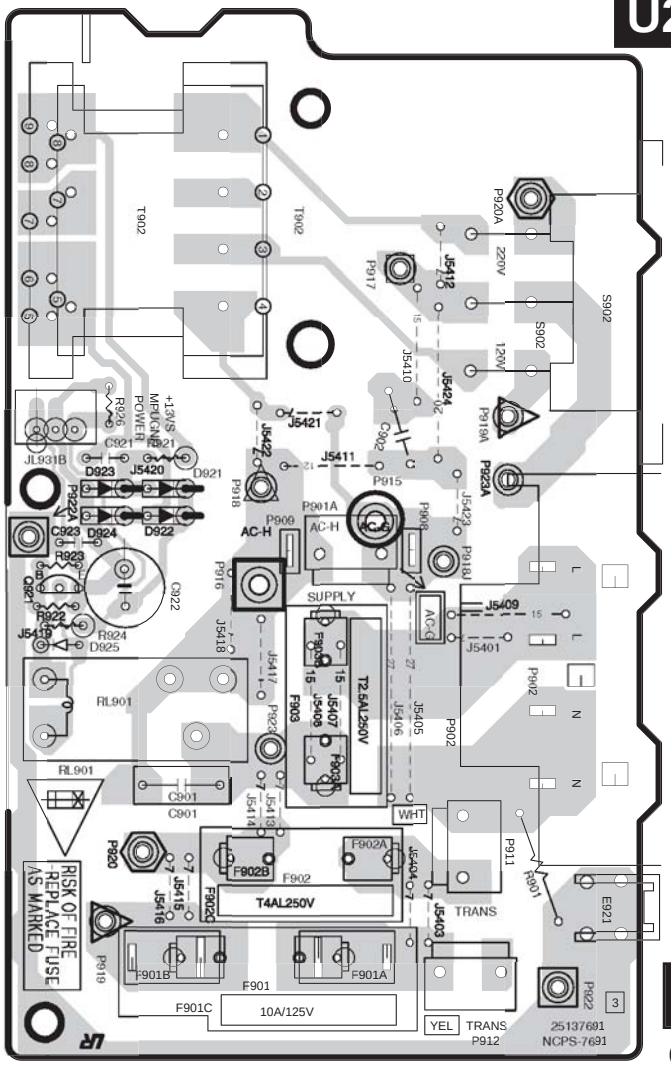


AC INLET PC BOARD
(NAETC-7700)
Except 120V and
Australian models

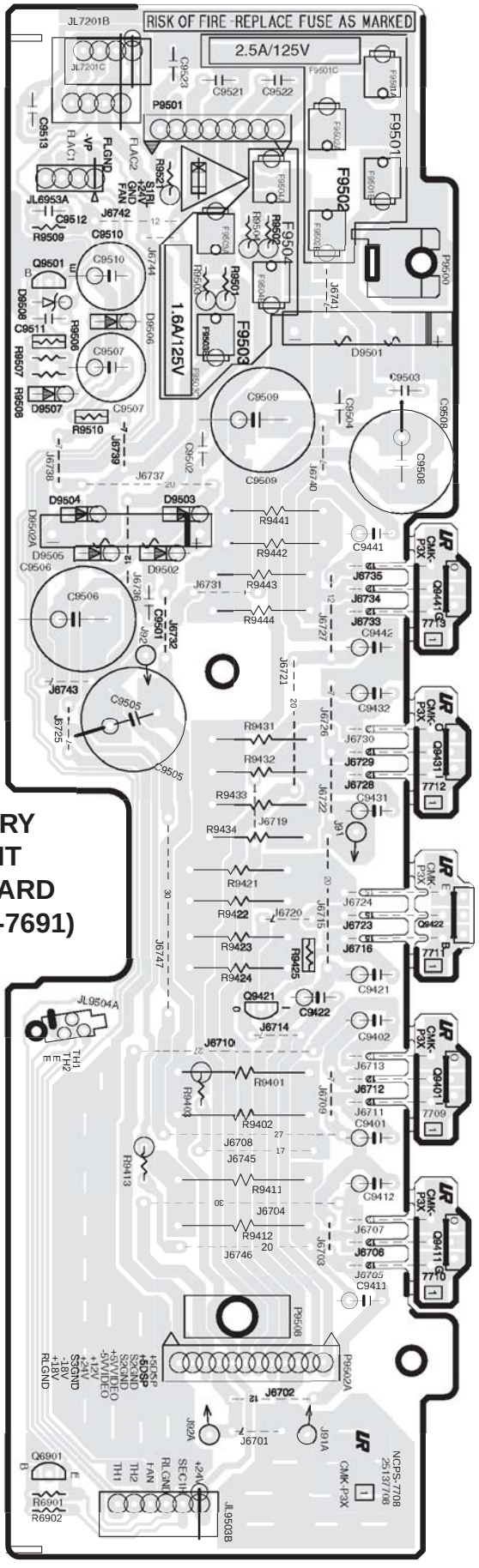
PRINTED CIRCUIT BOARD VIEW 7-2



U28 BIAS SELECTOR CIRCUIT PC BOARD (NAPS-7692)



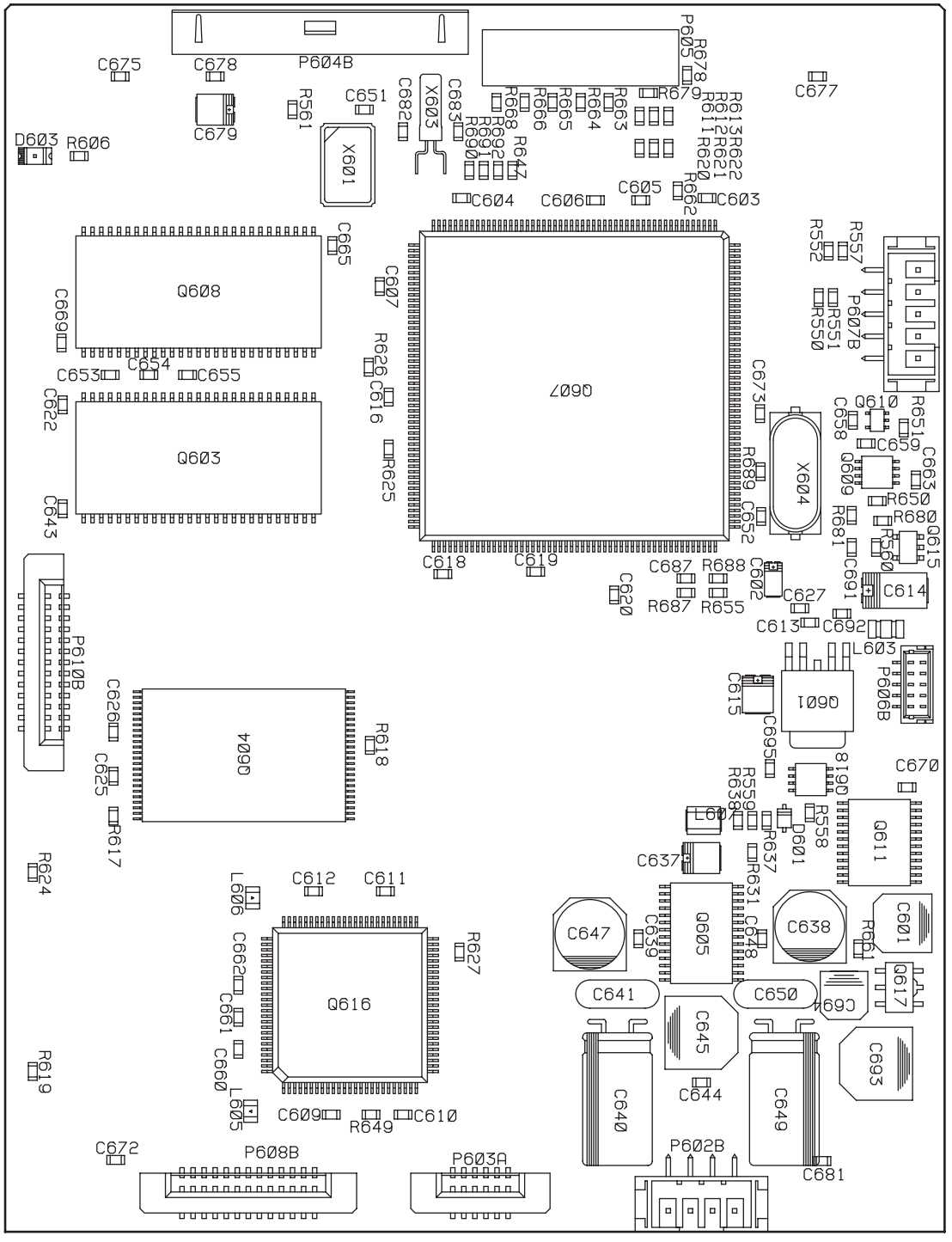
PRIMARY CIRCUIT PC BOARD (NAPS-7691)



U23 CONST. VOLTAGE PC BOARD (NAPS-7708)

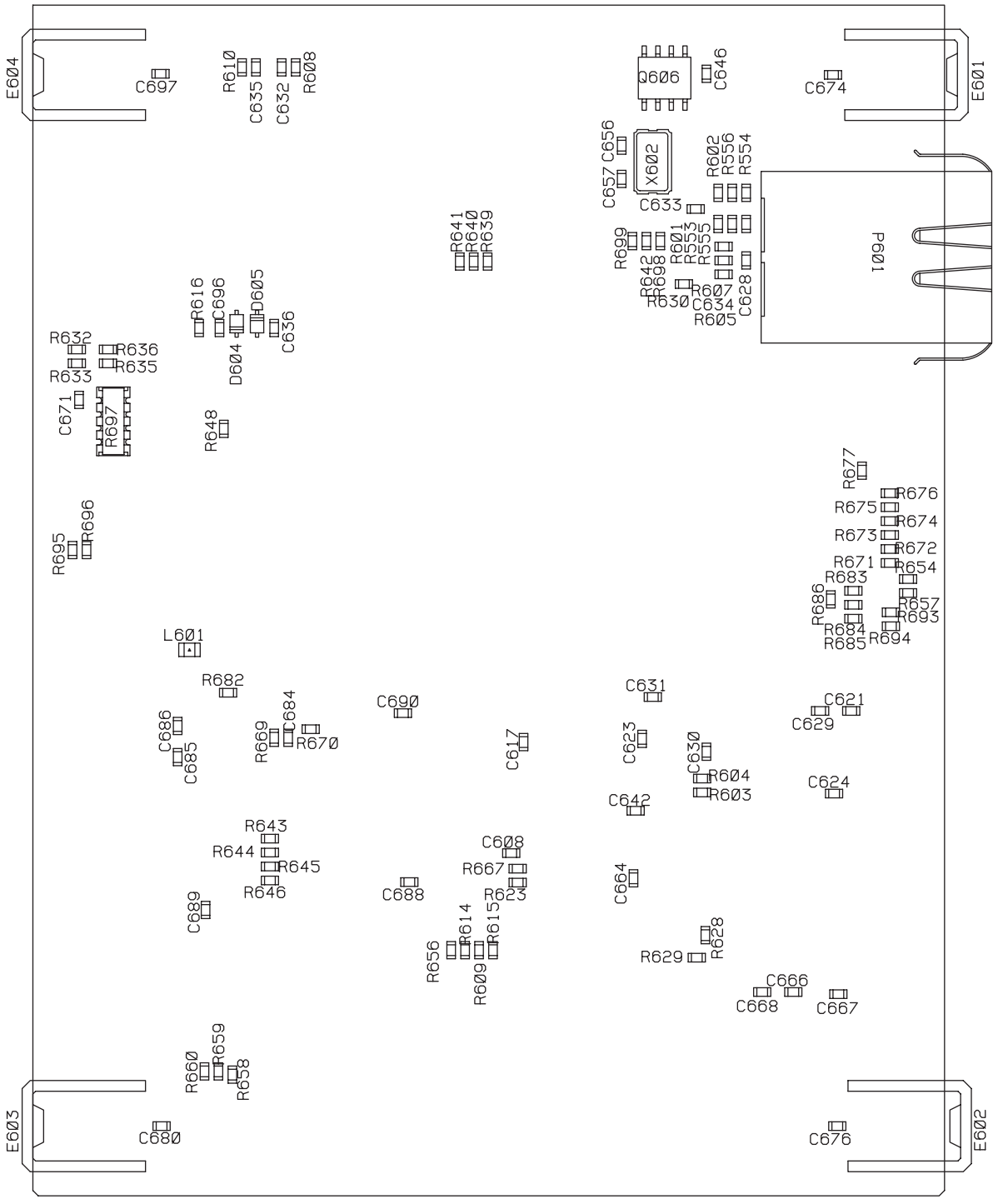
PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE 8

U8



Component side

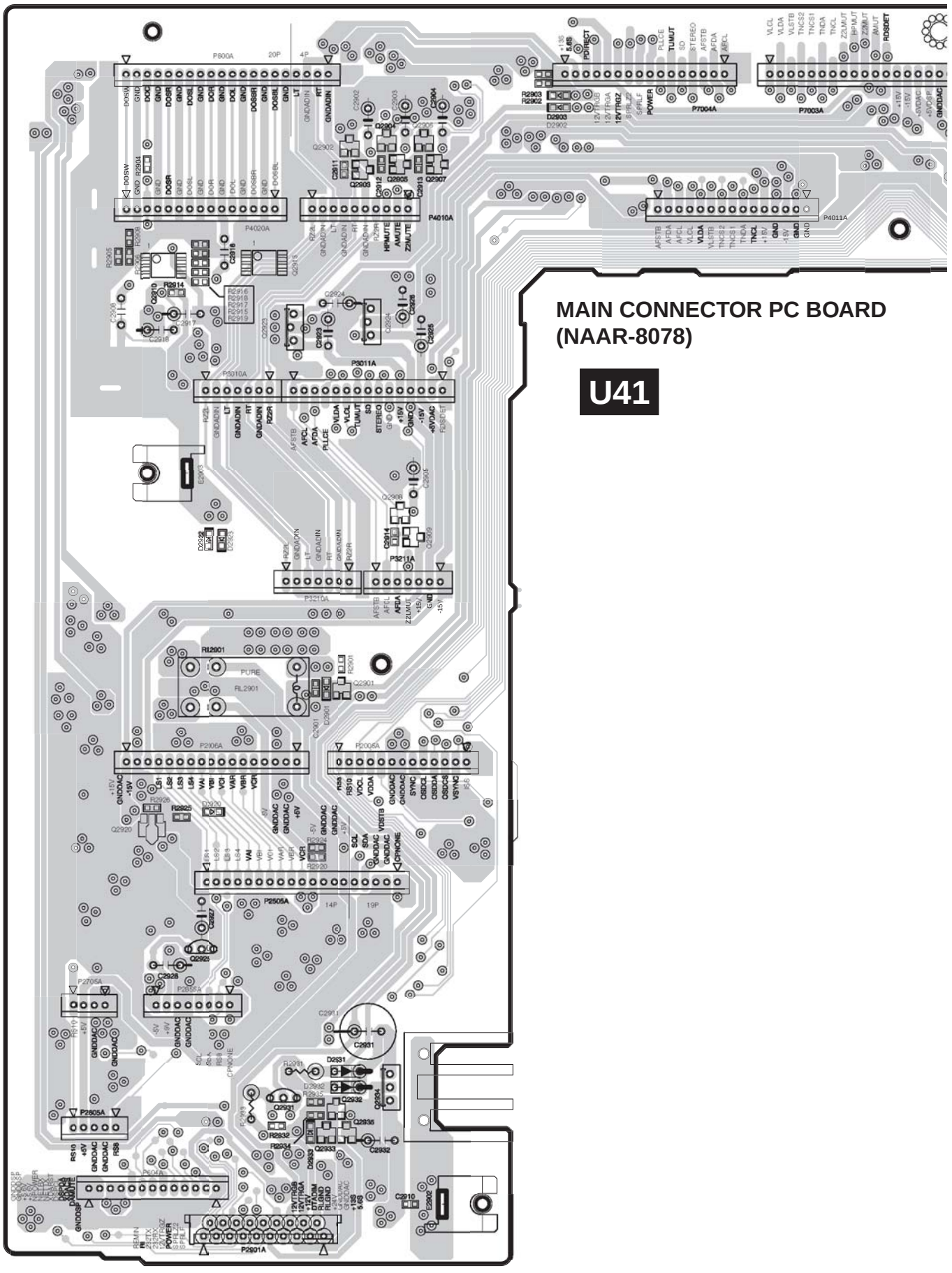
NET-TUNE CIRCUIT PC BOARD(NADG-7662)



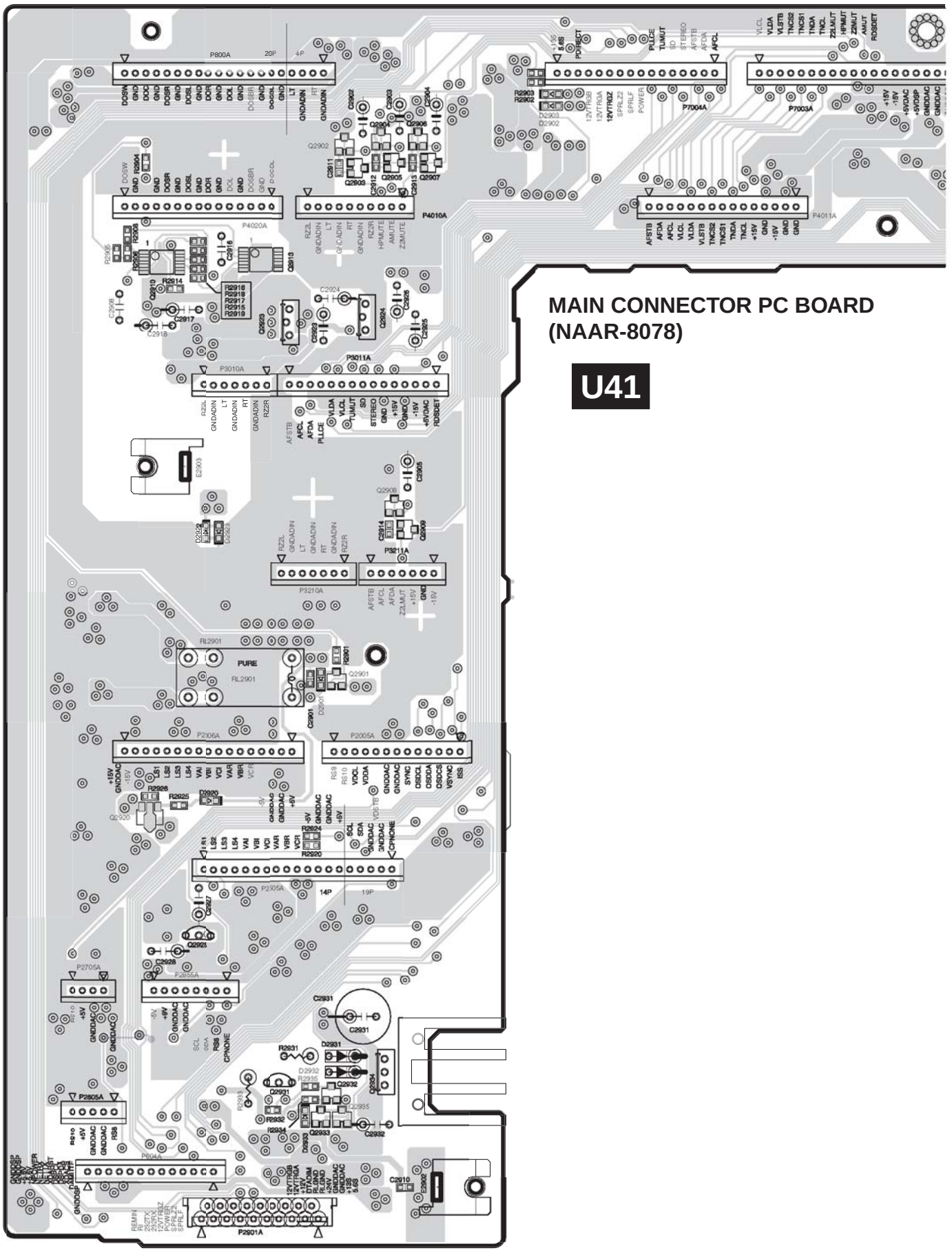
Soldering side

NET-TUNE CIRCUIT PC BOARD(NADG-7662)

PRINTED CIRCUIT BOARD VIEW 9-1



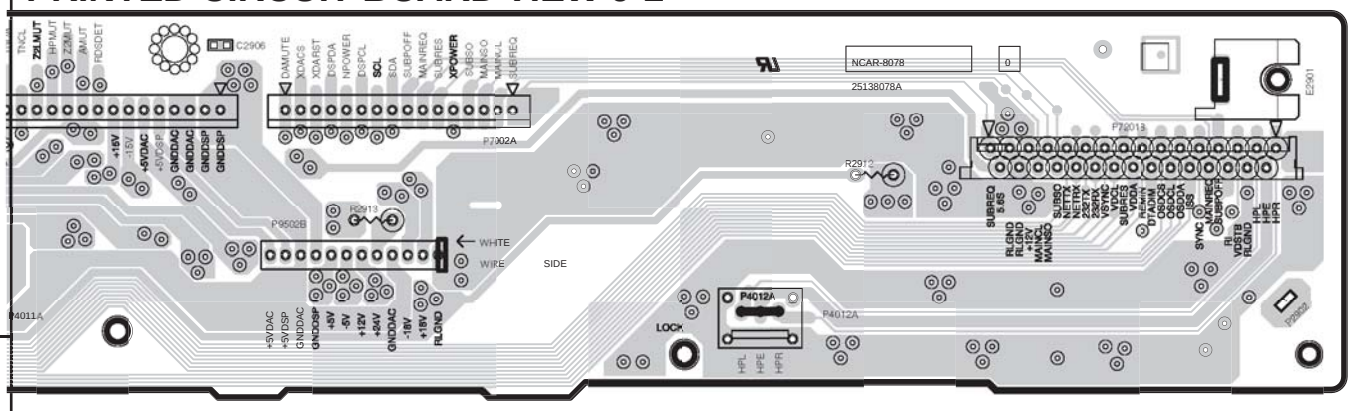
PRINTED CIRCUIT BOARD VIEW 9-1



A B C D

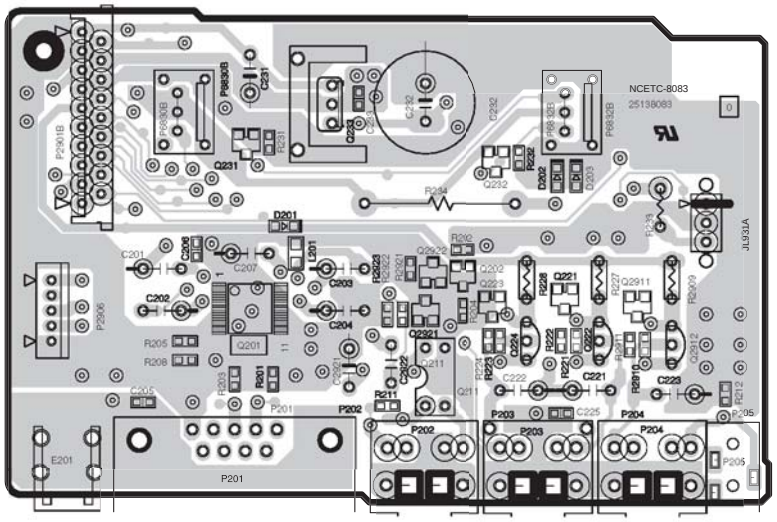
1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 9-2



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

U45

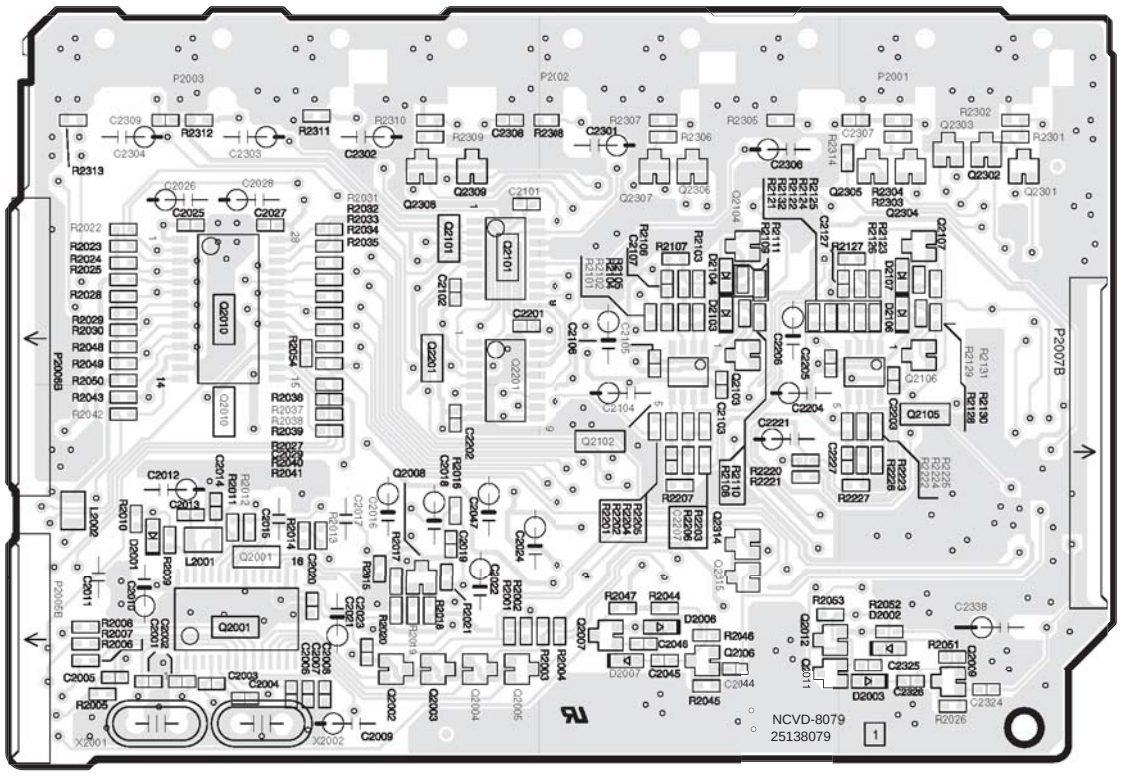


CONTROL TERMINAL PC BOARD (NAETC-8083)

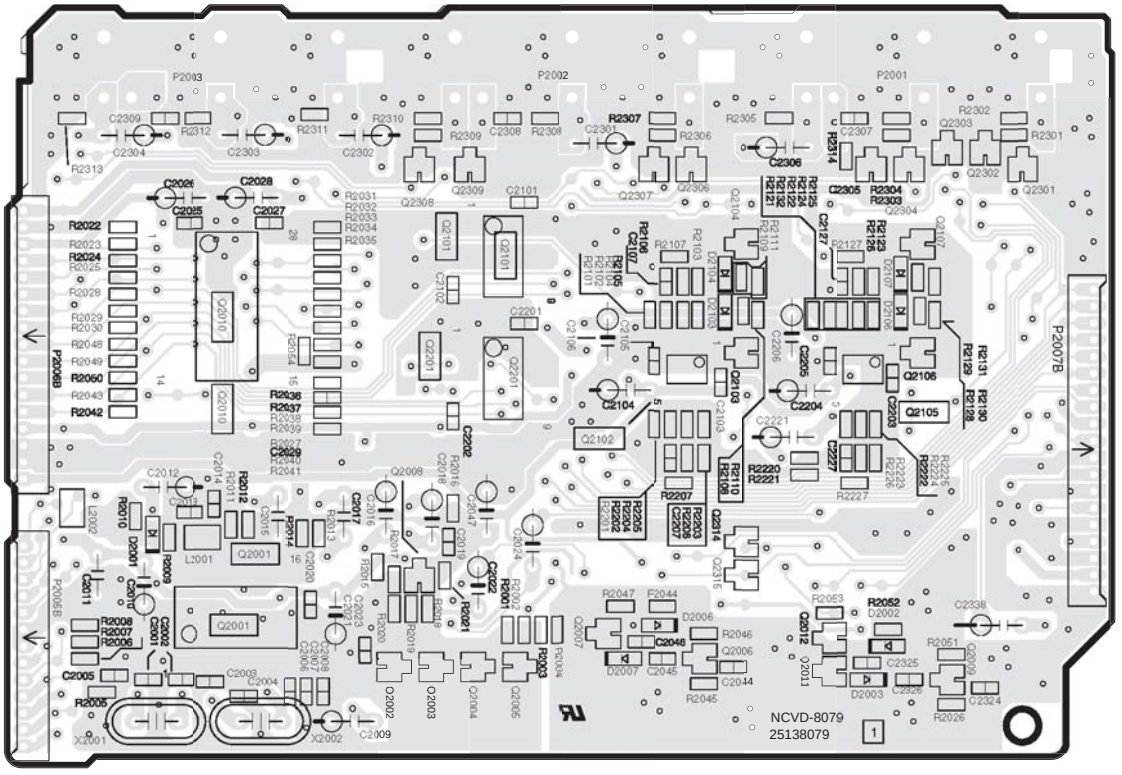
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 11



Soldering side A (Parts location side)



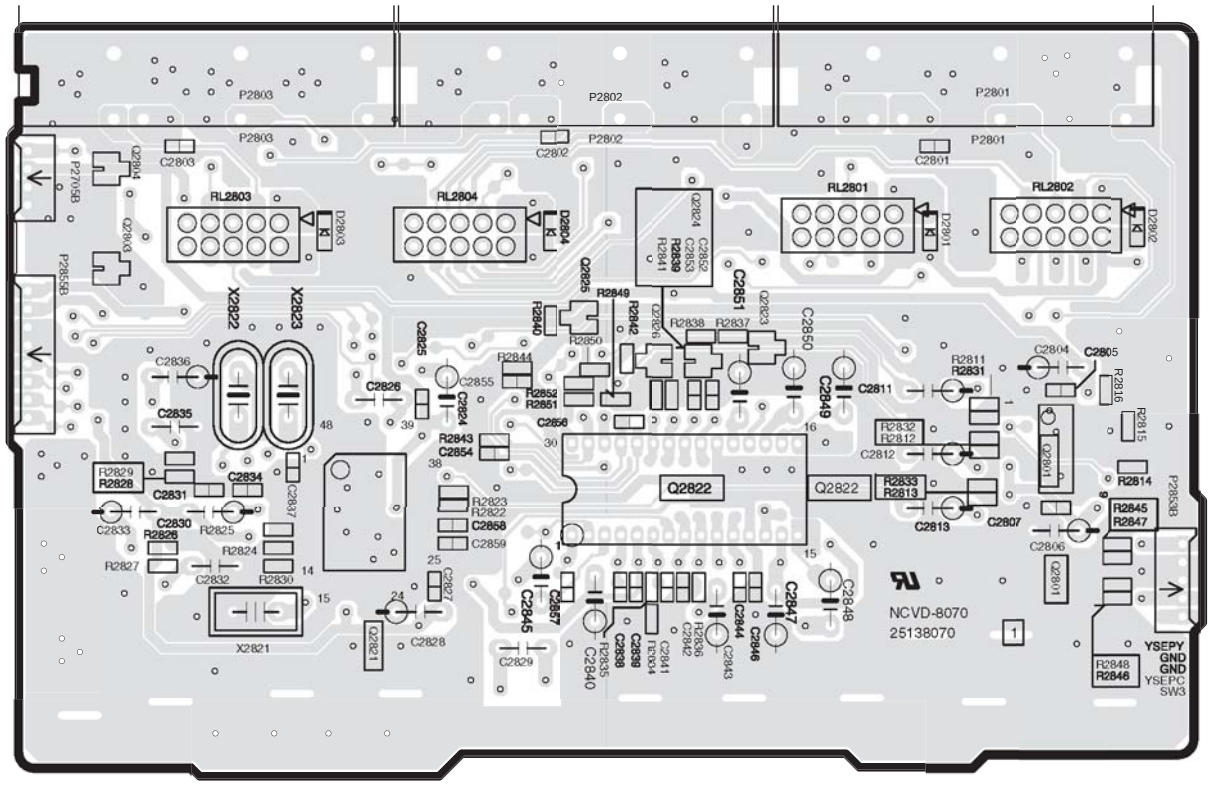
Soldering side B

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

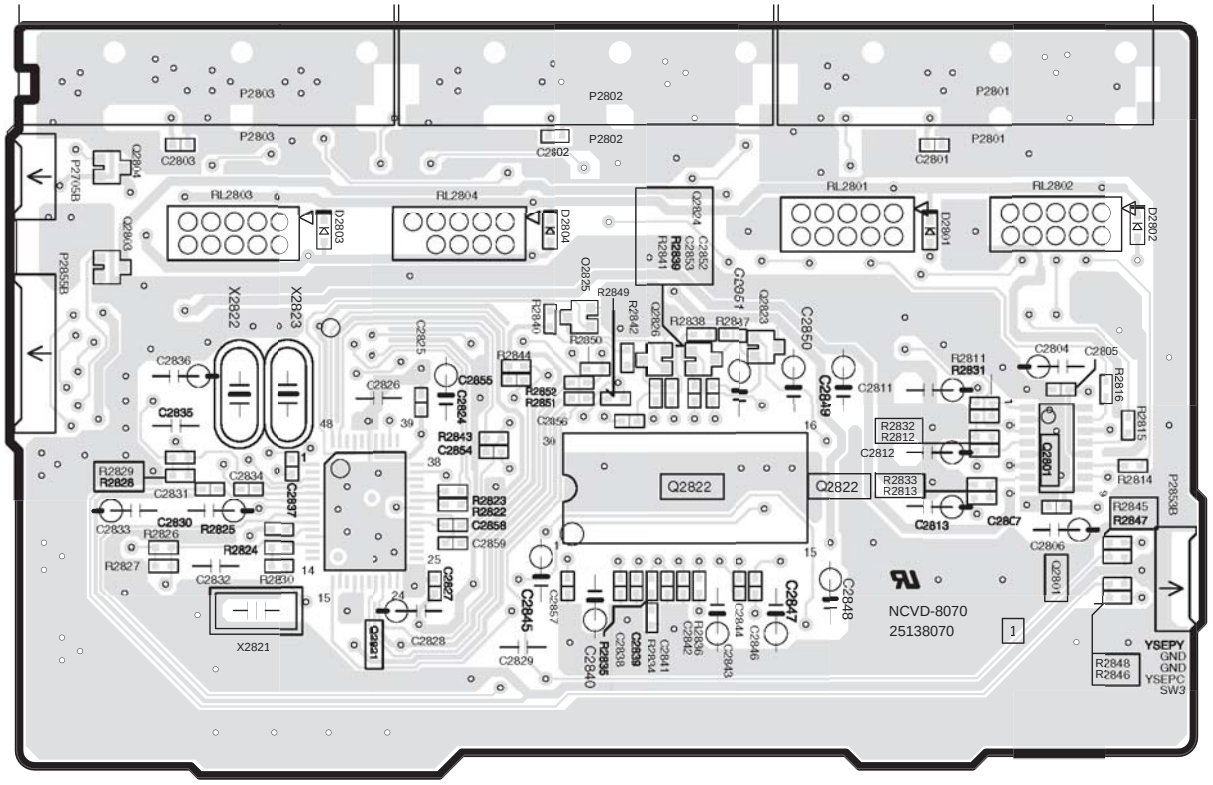
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 10-2



Soldering side A (Parts location side)



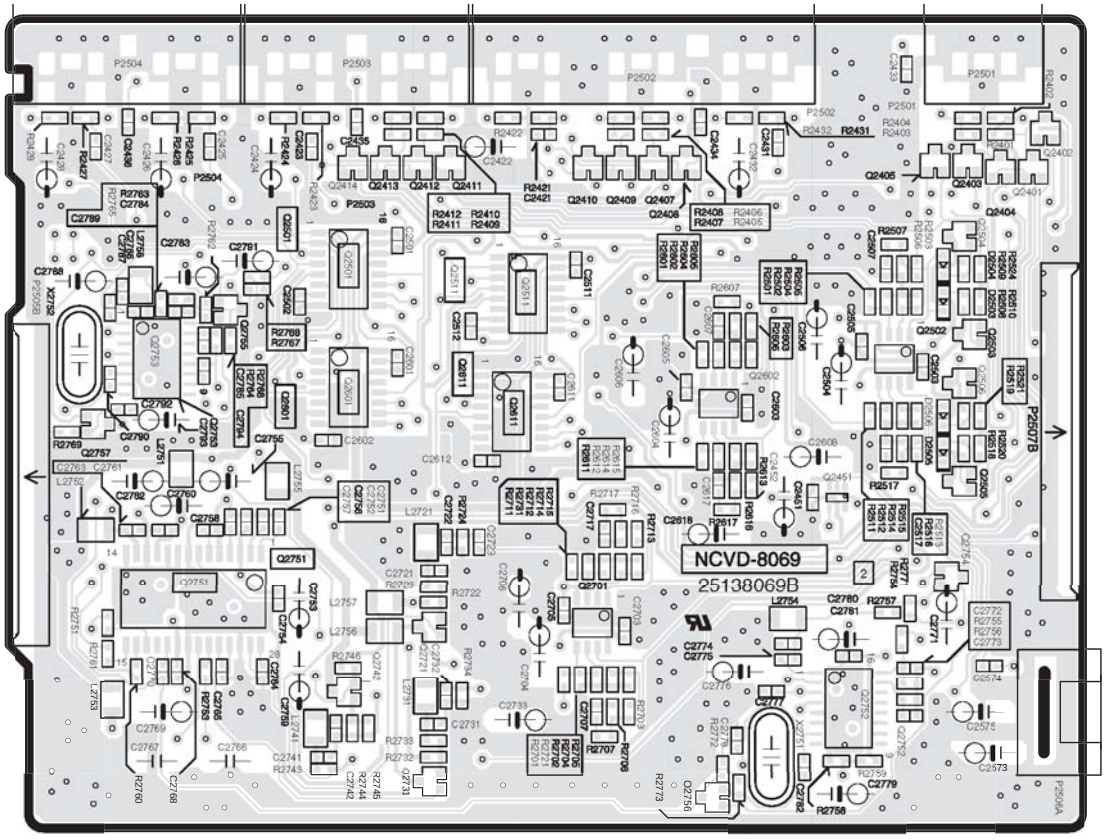
Soldering side B

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

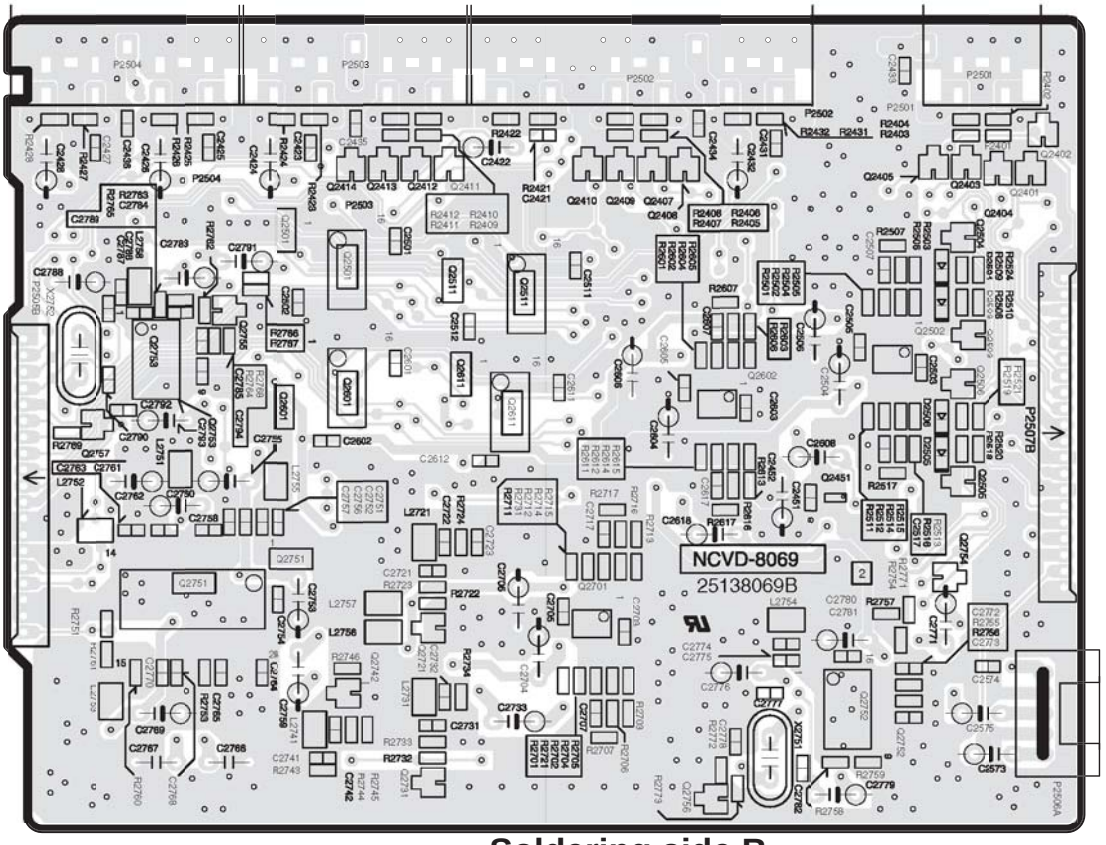
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEW 10-1



Soldering side A (Parts location side)



Soldering side B

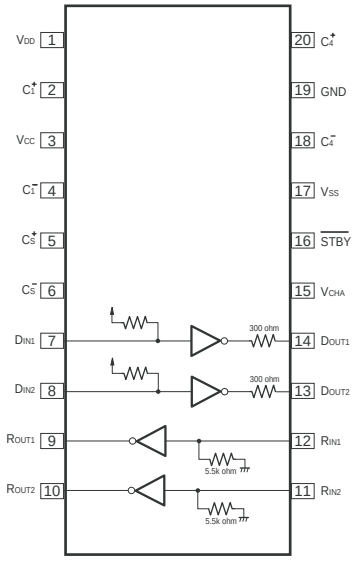
U51

S VIDEO PC BOARD
(NAVD-8069)

IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q201 uPD4721GS (RS-232C Driver/ Receiver)

Block diagram



Truth table

Driver

$\overline{STBY}$	DIN	DOUT	Remarks
L	X	Z	Standby mode (DC/DC converter is stopped)
H	L	H	Space level output
H	H	L	Mark level output

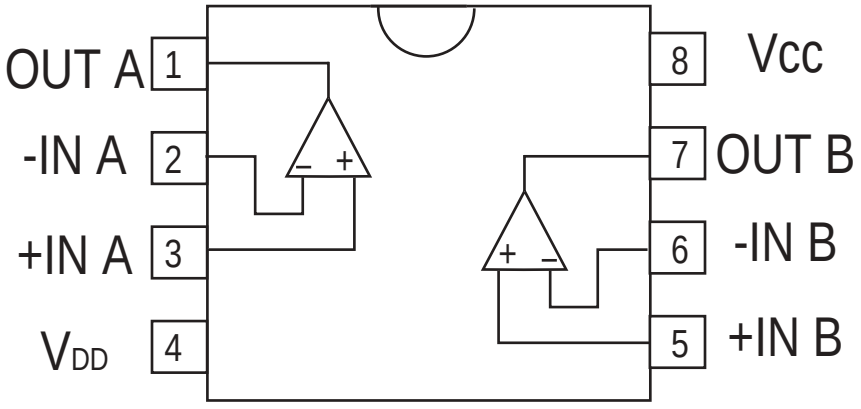
Receiver

$\overline{STBY}$	RIN	ROUT	Remarks
L	X	H	Standby mode (DC/DC converter is stopped)
H	L	H	Space level input
H	H	L	Space level input

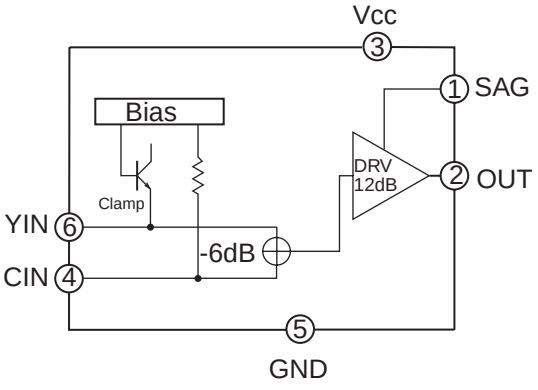
3 V/5 V switching

VCHA	Operating mode
L	5 V mode (double step-up)
H	3 V mode (3 times step-up)

Q2502,Q2602 TK15420M(Operation amplifier)

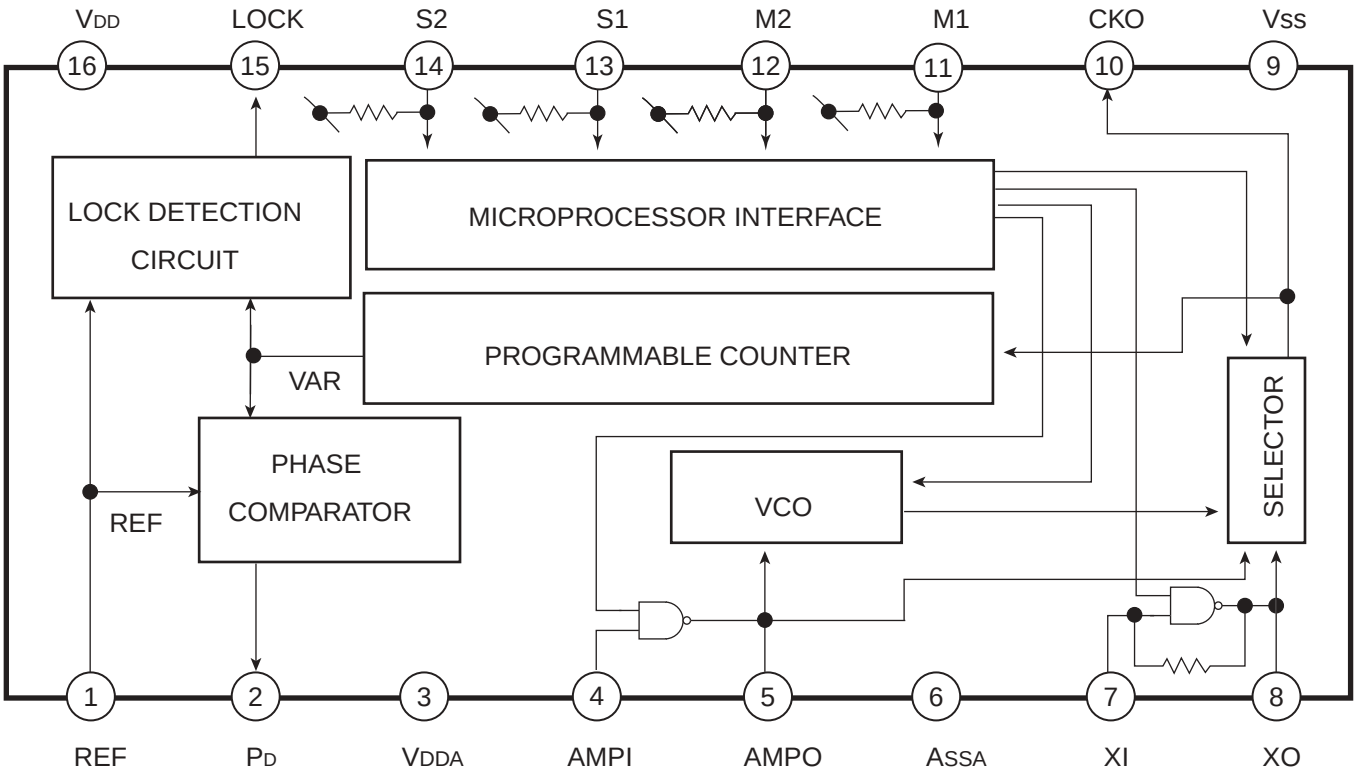


Q2451 MM1512(Y-C mixer circuit)



IC BLOCK DIAGRAMS AND DESCRIPTIONS

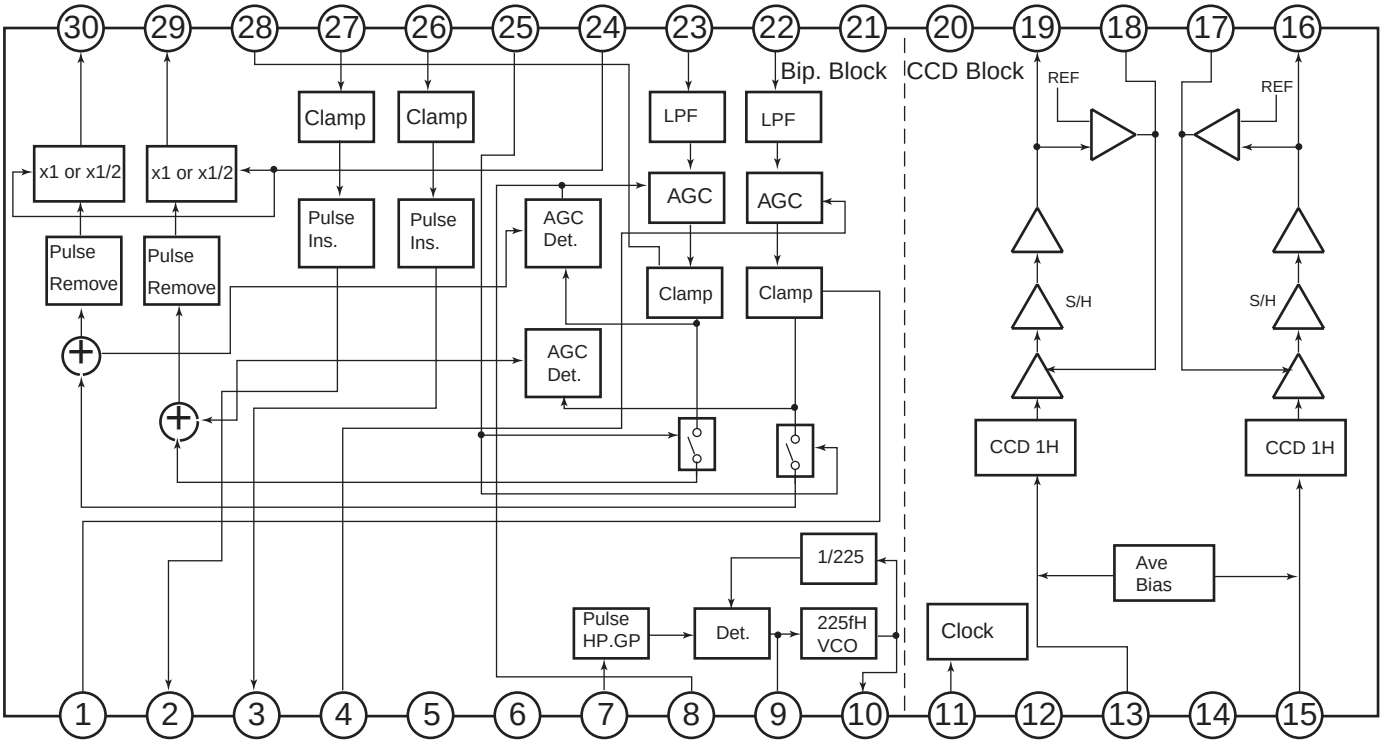
Q160 TC9246F(PLL IC for Digital Audio)



No.	Symbol	I/O	Function Description
1	REF	I	Reference signal input pin
2	PD	O	Phase error signal output pin
3	VDDA	-	Analog power supply
4	AMPI	I	Amplifier input pin for LPF or Oscillator 1
5	AMPO	O	Amplifier output pin for LPF or oscillator 1
6	VSSA	-	Analog ground pin
7	XI	I	Amplifier input pin for oscillator 3
8	XO	O	Output pin for oscillator 3
9	VSS	-	Digital ground pin
10	CKO	O	Oscillator clock output
11	M1	I	Mode select pin
12	M2	I	Mode select pin
13	S1	I	Parallel mode: Divided ratio select pin Serial mode: Data input pin from microprocessor
14	S2	I	Parallel mode: Divided ratio select pin Serial mode: Shift clock input pin
15	LOCK	O	Lock detect signal output pin
16	VDD	-	Digital power supply

IC BLOCK DIAGRAMS AND DESCRIPTIONS

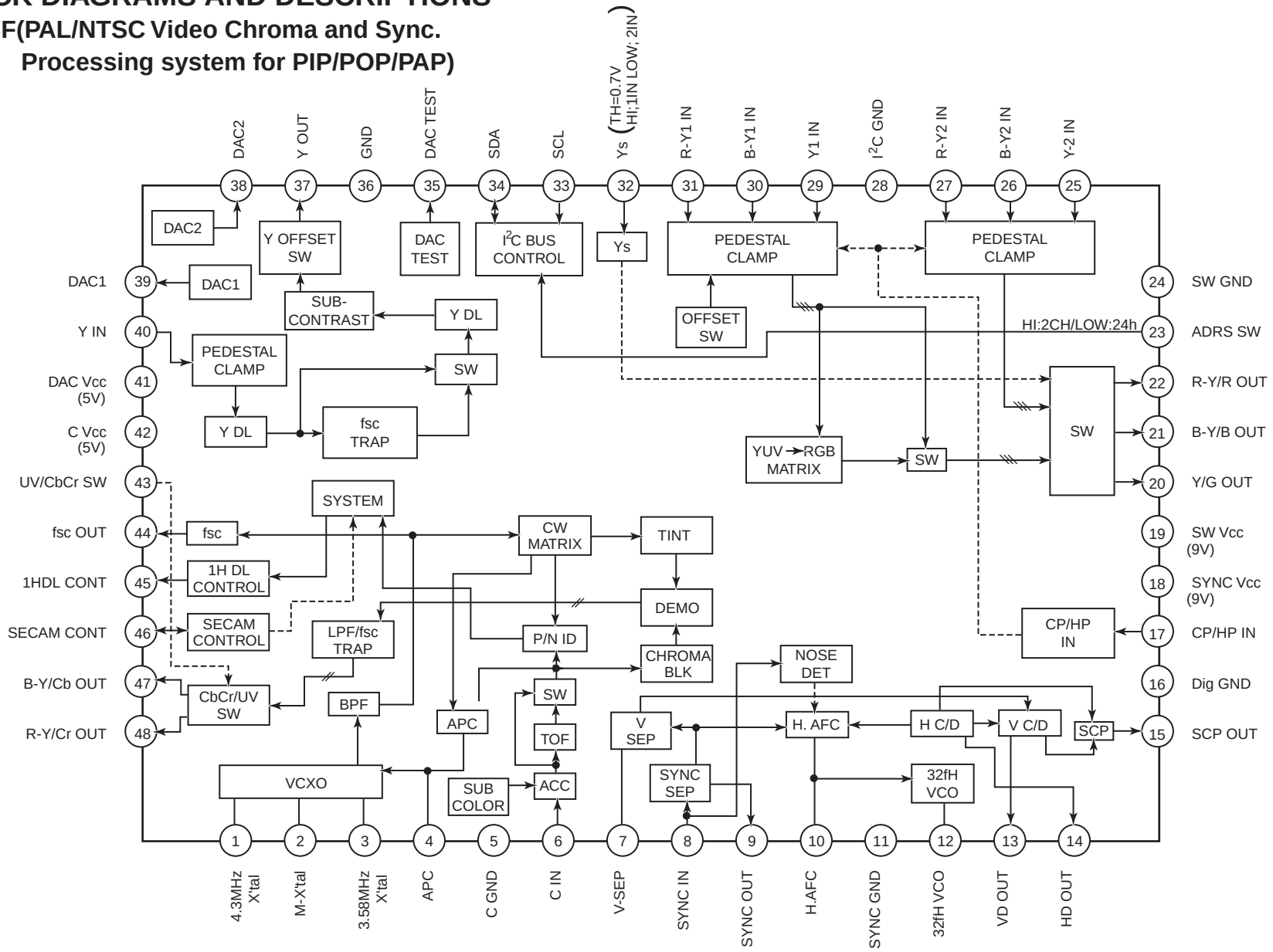
TA8772AN(PAL/SECAM/NTSC Base Band 1H Delay System for TV or VCR)



Pin No.	Pin Name	Function
1	R-Y Clamp Det.	This is a terminal for detecting DC clamp level of R-Y signal.
28	B-Y Clamp Det.	This is a terminal for detecting DC clamp level of B-Y signal.
2	R-Y to CCD	This is output terminal of R-Y signal. To pin 15.
3	B-Y to CCD	This is output terminal of B-Y signal. To pin 13.
4	R-Y AGC Det.	This is a terminal for detecting AGC.
8	B-Y AGC Det.	This is a terminal for detecting AGC.
5	Vcc	Power supply terminal for supplying 9V.
6	Filter Adj.	This is connected to GND via 10kohm.
7	S.C.P. In	This is the input terminal for S.C.P.
9	PLL Det.	This terminal outputs result of phase comparison between interval VCO and horizontal input signal.
10	Clock	This terminal outputs clock pulse which is used by CCD circuit.
11	Clock In	This terminal receives clock pulse for CCD circuit.
12	Vss	This terminal is Vss terminal for CCD. Connect to GND.
13	V_{IN1}	This is input terminal of B-Y signal for CCD circuit.
15	V_{IN2}	This is input terminal of R-Y signal for CCD circuit.
14	V_{DD}	Power supply terminal for supplying 5V
16	V_{OUT2}	This terminal outputs delayed signal of R-Y.
19	V_{OUT1}	This terminal outputs delayed signal of B-Y.
17	V_{OB2}	This terminal controls output DC level of pin 16.
18	V_{OB1}	This terminal controls output DC level of pin 19.
20	V_{GG}	This terminal is applied Vccx2 voltage by internal voltage booster.
21	GND	Ground terminal
22	R-Y from CCD	This is input terminal of delayed R-Y signal.
23	B-Y from CCD	This is input terminal of delayed B-Y signal.
24	MODE SW1	This terminal controls the gain of internal circuit for PAL, SECAM, or NTSC.
25	MODE SW2	This terminal controls switch of calculator for delayed signal and direct signal.
26	B-Y In	This is input terminal of B-Y signal.
27	R-Y In	This is input terminal of R-Y signal.
29	B-Y Out	This is output terminal of B-Y signal.
30	R-Y Out	This is output terminal of R-Y signal.

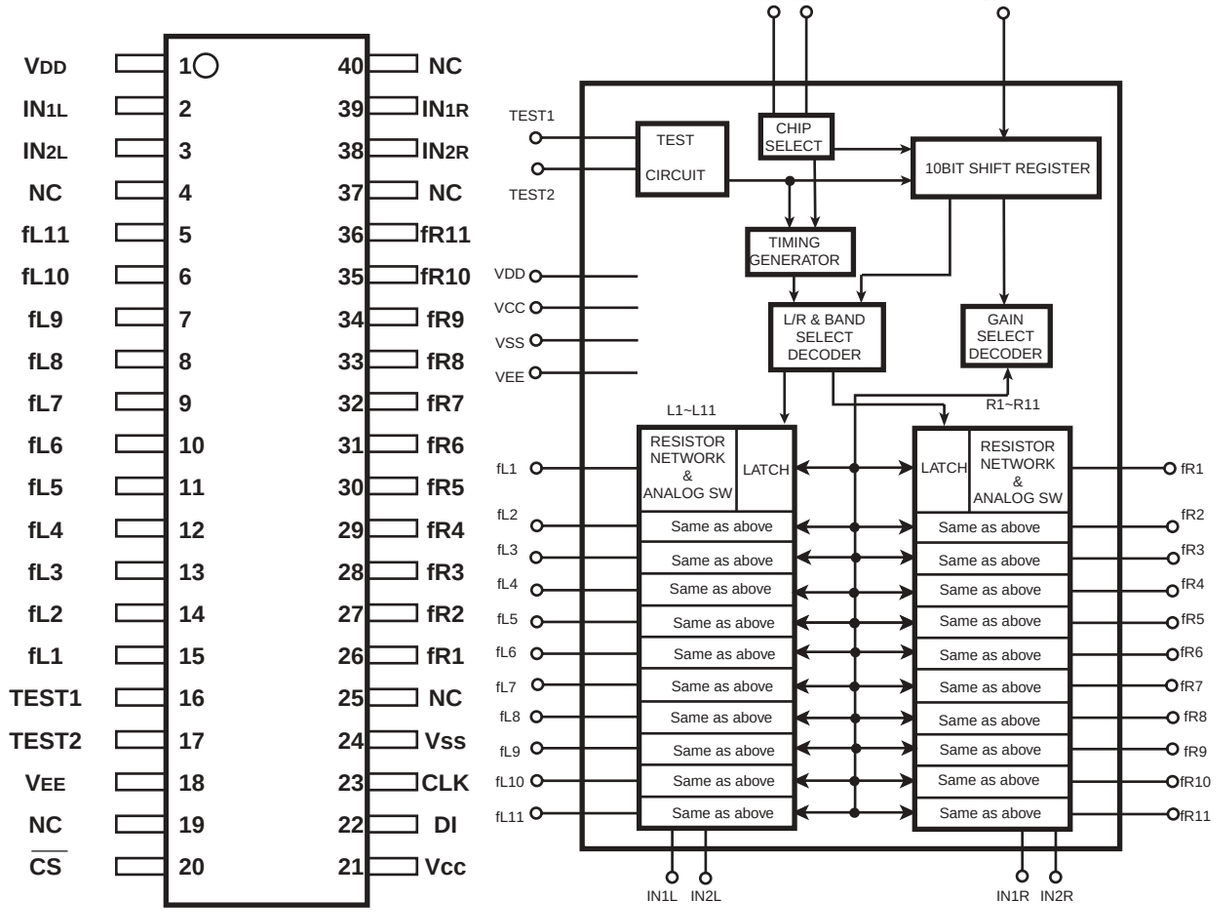
IC BLOCK DIAGRAMS AND DESCRIPTIONS

TA1270BF(PAL/NTSC Video Chroma and Sync. Processing system for PIP/POP/PAP)

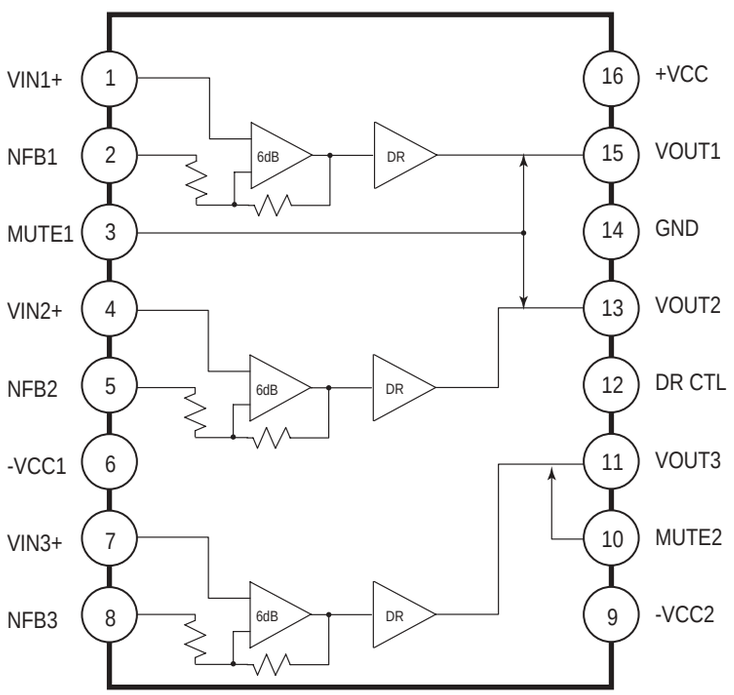


IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q4400,Q4401 NJU7306G(Electric Volume)



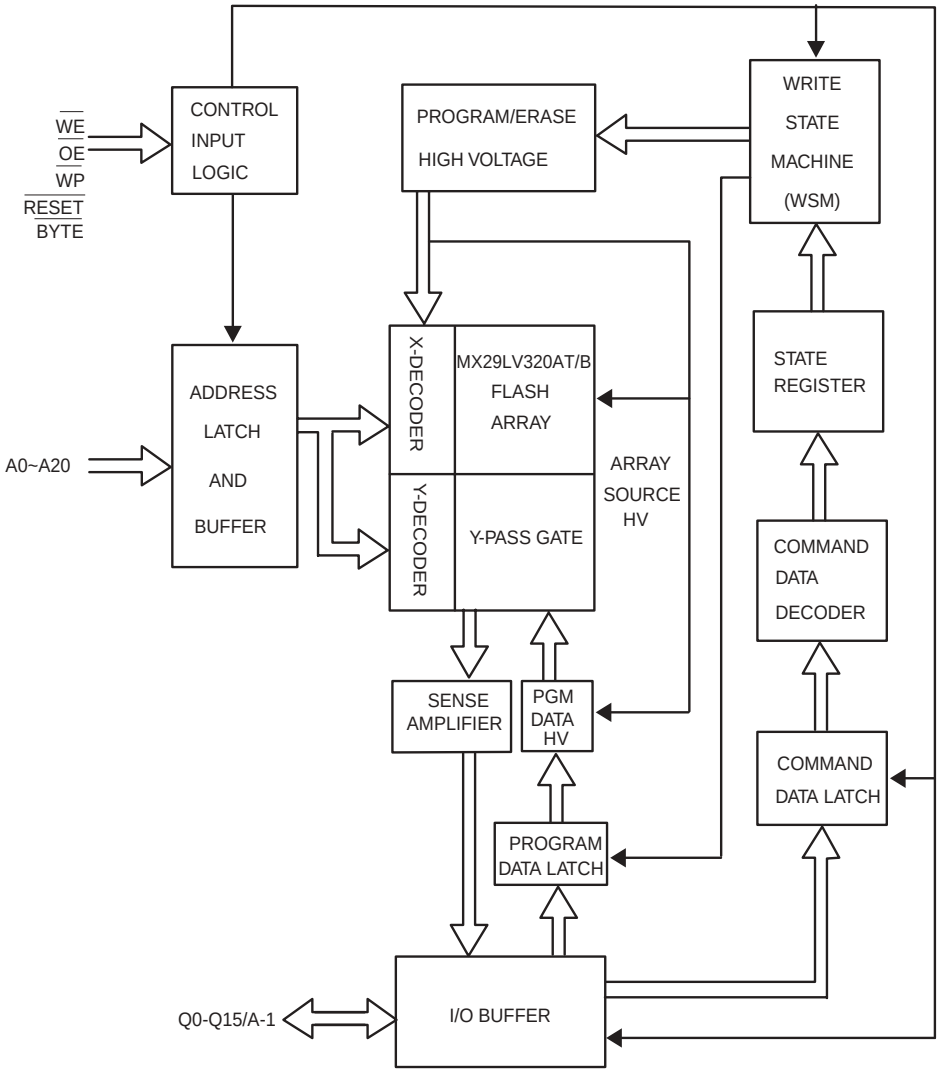
Q2801 LA7106MFP(75 ohm video driver)



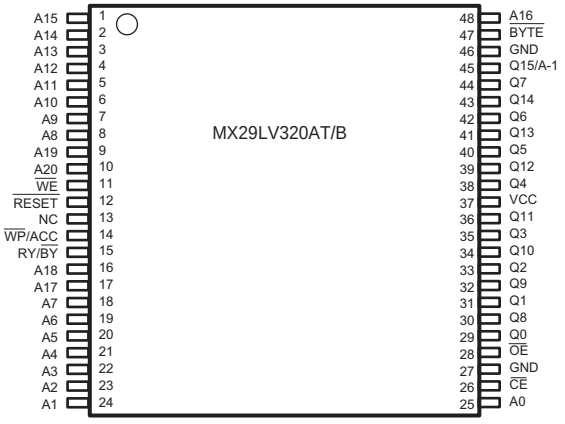
IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q604 MX29LV320AT/B(32Mbit CMOS Flash memory)

BLOCK DIAGRAM



BLOCK DIAGRAM

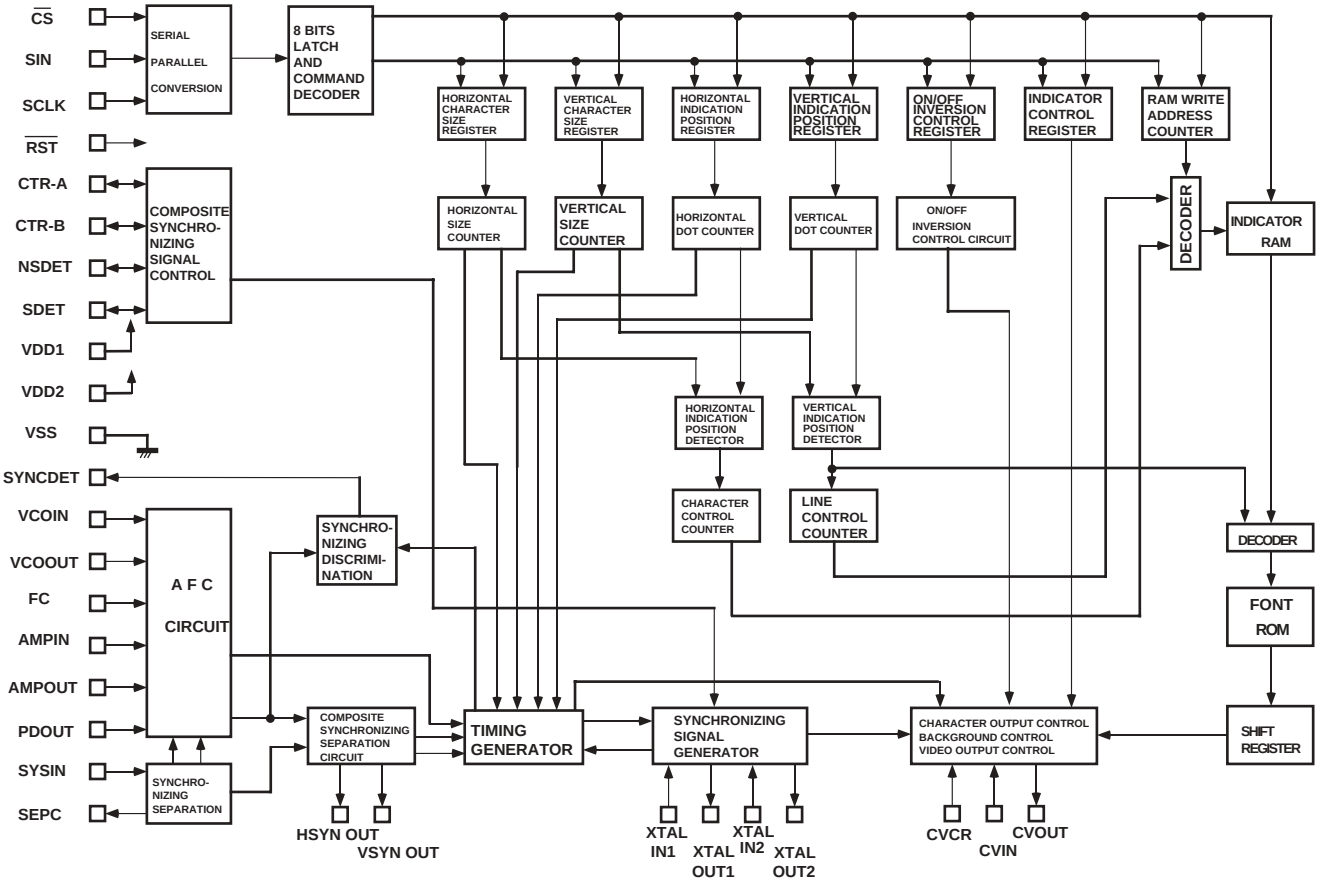


PIN DESCRIPTION

SYMBOL	PIN NAME
A0~A20	Address Input
Q0~Q14	Data Input/Output
Q15/A-1	Q15:Data Input/Output,word mode A-1:LSB Address Input,byte mode
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
$\overline{BYTE}$	Word/Byte Selection Pin
$\overline{RESET}$	Hardware Reset Pin/Sector Protect Unlock
RY/$\overline{BY}$	Read/Busy output
VCC	Power Supply Pin (+5V)
$\overline{WP}$/ACC	Hardware Write Protect/Acceleration Pin
GND	Ground Pin

IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q2001 LC74761M-9848(On-screen and controller)

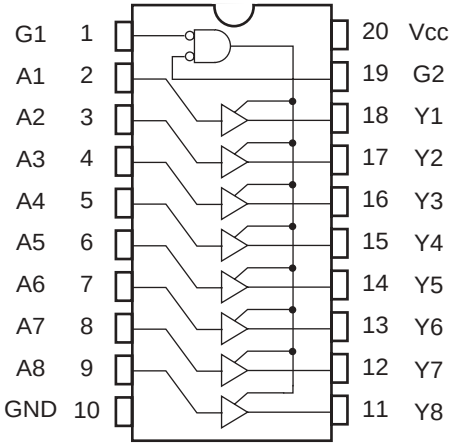


No.	Symbol	Description	No.	Symbol	Description
1	VSS	Ground terminal	16	CVOUT	Composite video output terminal
2	XTALIN1	Crystal oscillator connection terminals for.	17	VDD2	Power supply terminal for composite video signal
3	XTALOUT1	internal synchronizing signal generator	18	CVIN	Composite video signal input terminal
4	HSYNCOUT	Horizontal synchronizing signal output terminal	19	CVCR	Cromatic signal input term,inal
5	XTALIN2	Crystal oscillator connection terminals for.	20	SYNCIN	Video signal input terminal for internal synchronizing separation circuit
6	XTALOUT2	internal synchronizing signal generator	21	SEPC	Bias output pin for internal synchronizing separation circuit
7	VSYNCOUT	Vertical synchronizing signal output terminal	22	VSS	Ground terminal
8	CS	Chip enable input terminal	23	PDOUT	Power supply output terminal for AFC circuit
9	SIN	Serial data input terminal	24	AMPIN	Filter connection terminals
10	SCLK	Clock input terminal for serial data	25	AMPOUT	
11	CTR-A/SW1	Video control output terminal	26	FC	Power supply output terminal
12	CTR-B/SW2	Video control output terminal	27	VCOIN	LC resonator connection terminals for VCO
13	NSDET/SW3	Selection pin for PAL or NTSC	28	VCOOUT	
14	SDET/SW4	Signal detection terminal	29	SYNCDET	External synchronizing signal discrimination output terminal
15	RST	System reset input terminal	30	VDD1	Power supply terminal

Pin 11~14: The output signal changes according to the contents of a microprocessor.

IC BLOCK DIAGRAMS AND DESCRIPTIONS

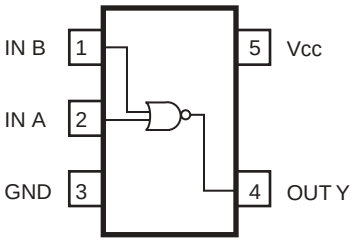
Q7100 TC74VHC541FT(Octal bus buffer)



INPUTS			OUTPUT
$\overline{G1}$	$\overline{G2}$	An	
H	X	X	Z
X	H	X	Z
L	L	H	H
L	L	L	L

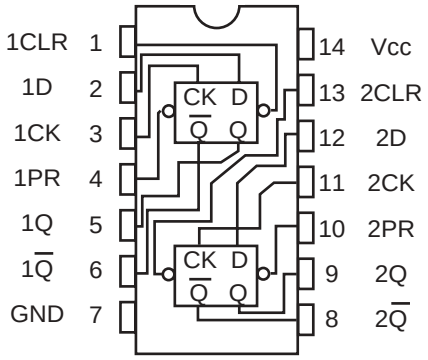
X :Don't care
Z :High impedance

Q610 TC7S02FU(2-input NOR gate)



A	B	Y
L	L	H
L	H	L
H	L	L
H	H	L

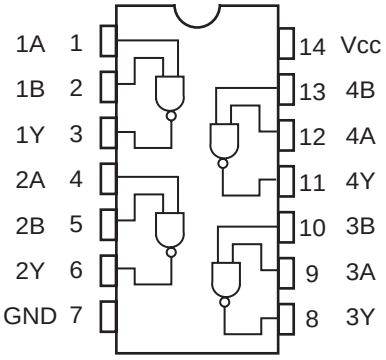
Q701,Q751 TC74VHC74FT(Dual D-FF with preset and clear)



INPUTS				OUTPUTS		FUNCTION
$\overline{CLR}$	$\overline{PR}$	D	CK	Q	$\overline{Q}$	
L	H	X	X	L	H	CLEAR
H	L	X	X	H	L	PRESET
L	L	X	X	H	H	———
H	H	L	↑	L	H	———
H	H	H	↑	H	L	———
H	H	X	↓	Qn	Qn	NO CHANGE

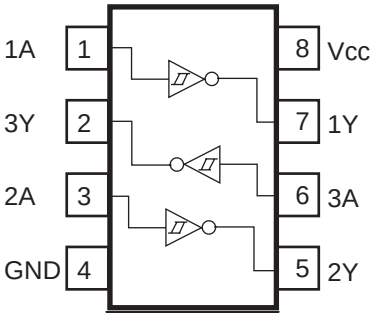
X: Don't care

Q121 TC74VHCT00A(2-input NAND gate)



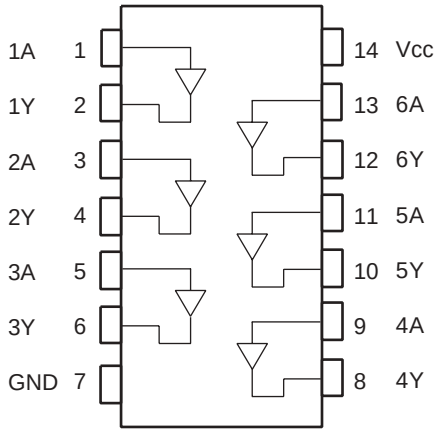
A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

Q609 TC7W14FU (Schmidt Inverter)



IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q7102 TC74HCT7007AF(Hex buffer)

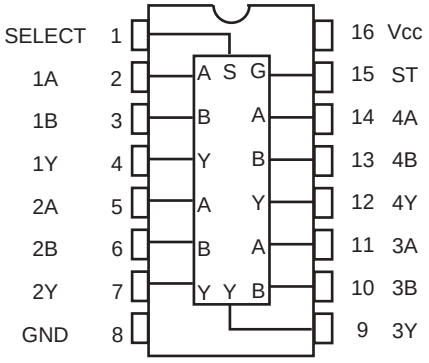


(TOP VIEW)

Truth table

A	Y
L	L
H	H

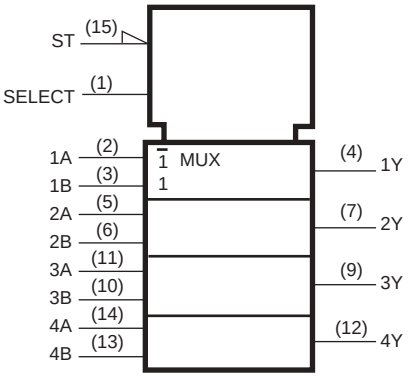
Q190 TC74VHC157FT(Quad 2-channel Multiplexer)



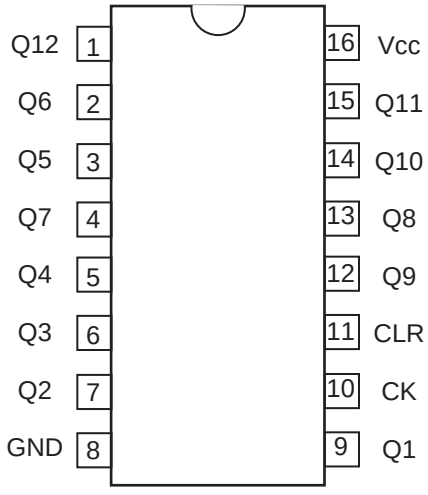
(TOP VIEW)

INPUTS				OUTPUT
$\overline{ST}$	SELECT	A	B	
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

X:Don't care

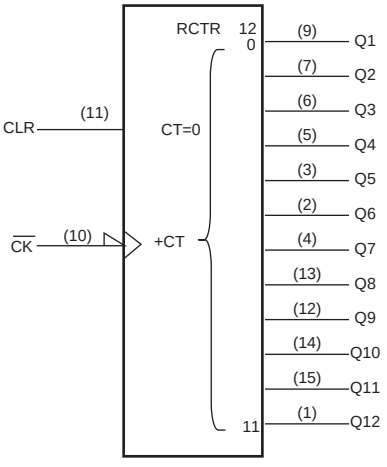


Q120 TC74VHC4040FT(12-stage ripple-carry binary counter)



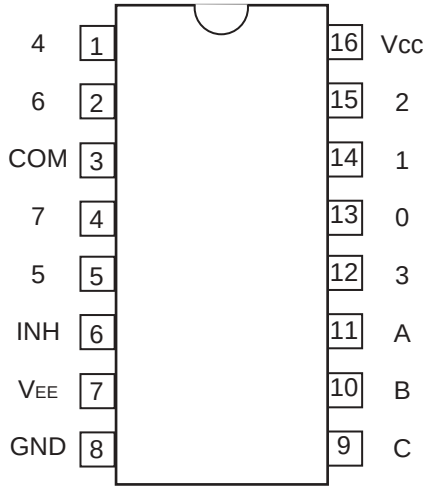
CK	CLR	OUTPUT
X	H	All "L"
↑	L	No change
↓	L	Next condition

X: Don't care



IC BLOCK DIAGRAMS AND DESCRIPTIONS

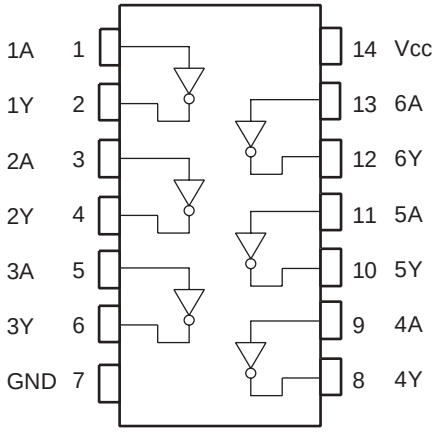
Q2101 74HC4051AF(8-channel analog multiplexer/demultiplexer)



CONTROL INPUTS				OUTPUT
INHIBIT	C	B	A	"ON"
L	L	L	L	0
L	L	L	H	1
L	L	H	L	2
L	L	H	H	3
L	H	L	L	4
L	H	L	K	5
L	H	H	L	6
L	H	H	H	7
H	X	X	X	NONE

Truth table

Q130 74HCU04F(Hex Inverters)



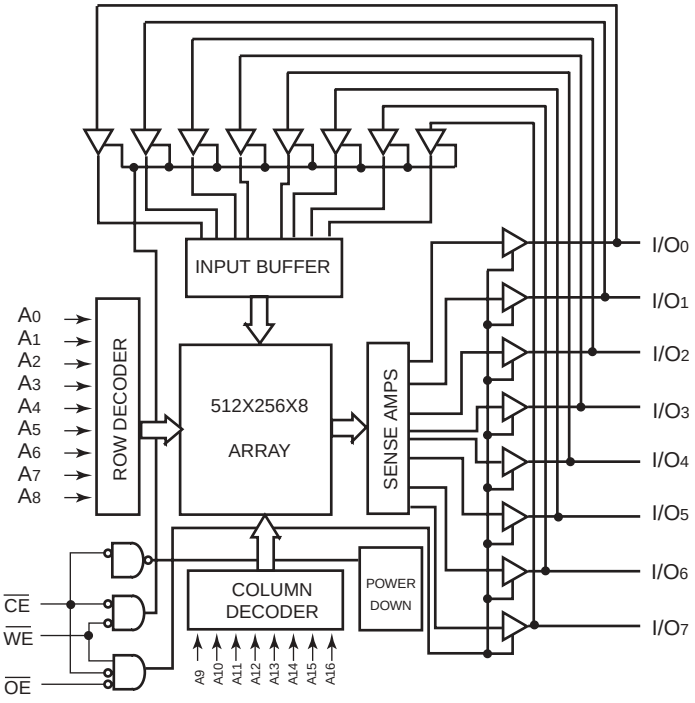
(TOP VIEW)

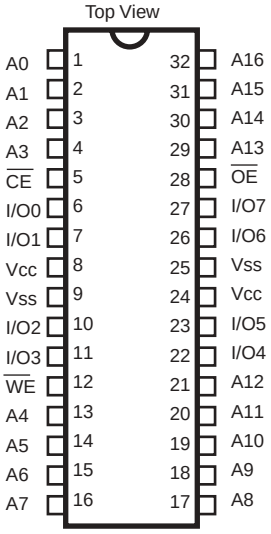
Truth table

A	Y
L	H
H	L

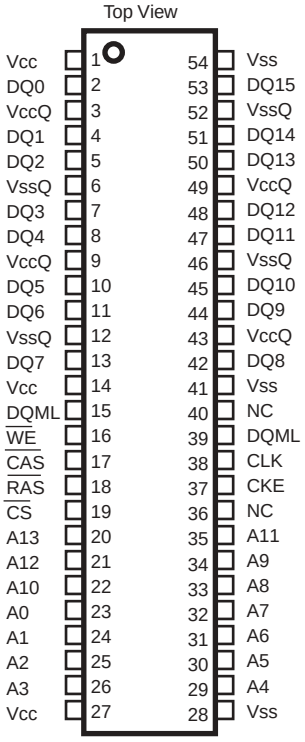
IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q705,Q706 CY7C1019BV/CV33-15VCT(128KX8 static RAM)





Q603,Q608 HM5264165FTT-B6(SDRAM)



Pin Name	Function
A0~A13	Address input
	Row address A8 to A11
	Column address A0 to A7
	Bank select address A12/A13(BS)
DQ0~DQ15	Data input/output
CS	Chip select
RAS	Row address strobe command
CAS	Column address strobe command
WE	Write enable
DQMU/DQML	Input/output mask
CLK	Clock input
CKE	Clock enable
Vcc	Power for internal circuit
Vss	Ground for internal circuit
VccQ	Power for DQ circuit
VssQ	Ground for DQ circuit
NC	No connection

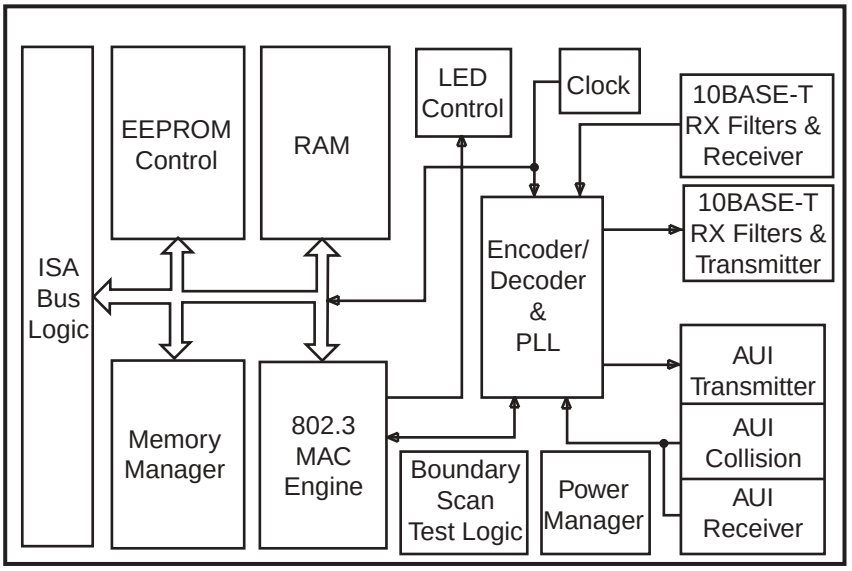
IC BLOCK DIAGRAMS AND DESCRIPTIONS

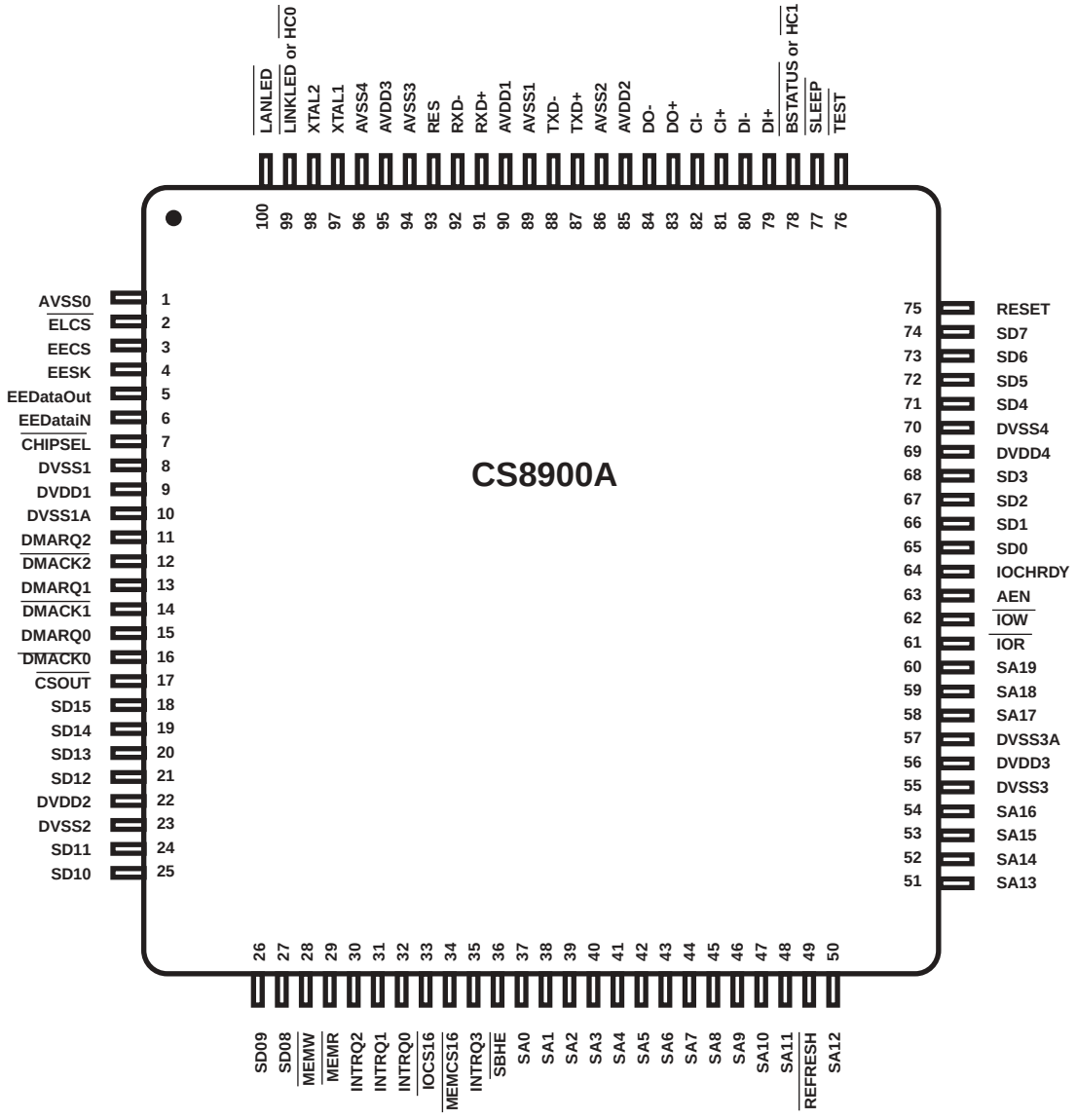
CS8900A(Ethernet Controller)

Pin No.	Symbol	Description
1	AVSS0	Analog ground pin
2	ELCS	External logic chip select pullup pin
3	EECS	EEPROM chip select output pin
4	EESK	EEPROM serial clock pin
5	EEDataOut	EEPROM data output pin
6	EEDataiN	EEPROM data input pin
7	CHIPSEL	Chip select pin
8	DVSS1	Digital ground pin
9	DVDD1	Digital power source pin
10	DVSS1A	Digital ground pin
11	DMARQ2	DMA(Direct Memory Access) request output pin
12	DMACK2	DMA acknowledge input pin
13	DMARQ1	DMA request output pin
14	DMACK1	DMA acknowledge input pin
15	DMARQ0	DMA request output pin
16	DMACK0	DMA acknowledge input pin
17	CSOUT	Chip select output pin for external boot EROM
18	SD15	System data bus output pin
19	SD14	System data bus output pin
20	SD13	System data bus output pin
21	SD12	System data bus output pin
22	DVDD2	Digital power source pin
23	DVSS2	Digital ground pin
24	SD11	System data bus output pin
25	SD10	System data bus output pin
26	SD09	System data bus output pin
27	SD08	System data bus output pin
28	MEMW	Memory write input pin
29	MEMR	Memory read input pin
30	INTRQ2	Interrupt request output pin
31	INTRQ1	Interrupt request output pin
32	INTRQ0	Interrupt request output pin
33	IOCS16	I/O chip select 16-bit output pin
34	MEMCS16	Memory chip select 16-bit output pin
35	INTRQ3	Interrupt request output pin
36	SBHE	System bus high enable input pin
37	SA0	System address bus input pin
38	SA1	System address bus input pin
39	SA2	System address bus input pin
40	SA3	System address bus input pin
41	SA4	System address bus input pin
42	SA5	System address bus input pin
43	SA6	System address bus input pin
44	SA7	System address bus input pin
45	SA8	System address bus input pin
46	SA9	System address bus input pin
47	SA10	System address bus input pin
48	SA11	System address bus input pin
49	REFRESH	Refresh input pin
50	SA12	System address bus input pin
51	SA13	System address bus input pin
52	SA14	System address bus input pin
53	SA15	System address bus input pin
54	SA16	System address bus input pin
55	DVSS3	Digital ground pin
56	DVDD3	Digital power source pin
57	DVSS3A	Digital ground pin
58	SA17	System address bus input pin
59	SA18	System address bus input pin
60	SA19	System address bus input pin
61	IOR	I/O read input pin
62	IOW	I/O write input pin
63	AEN	Address enable input pin
64	IOCHRDY	I/O channel ready output pin
65	SD0	System data bus output pin
66	SD1	System data bus output pin
67	SD2	System data bus output pin
68	SD3	System data bus output pin
69	DVDD4	Digital power source pin
70	DVSS4	Digital ground pin
71	SD4	System data bus output pin
72	SD5	System data bus output pin
73	SD6	System data bus output pin
74	SD7	System data bus output pin
75	RESET	Reset input
76	TEST	Test enable input pin
77	SLEEP	Hardware sleep input pin
78	BSTATUS or HC1	Bus status or host controlled output pin
79	DI+	AUI(Attachment Unit Interface) data differential output pin+
80	DI-	AUI data differential output pin -
81	CI+	AUI data differential input pin+
82	CI-	AUI data differential input pin-
83	DO+	AUI collision differential input pin+
84	DO-	AUI collision differential input pin-
85	AVDD2	Analog power source pin
86	AVSS2	Analog ground pin
87	TXD+	10BASE-T transmit, differential output pin +
88	TXD-	10BASE-T transmit, differential output pin -
89	AVSS1	Analog ground pin
90	AVDD1	Analog power source pin
91	RXD+	10BASE-T receive, differential input pin +
92	RXD-	10BASE-T- receive, differential input pin -
93	RES	Reference resistor input pin
94	AVSS3	Analog ground pin
95	AVDD3	Analog power source pin
96	AVSS4	Analog ground pin
97	XTAL1	20MHz crystal input pin
98	XTAL2	20MHz crystal output pin
99	LINKLED or HC0	Link good LED or host controlled output pin
100	LANLED	LAN activity LED output pin

IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q616 CS8900A(Ethernet Controller)

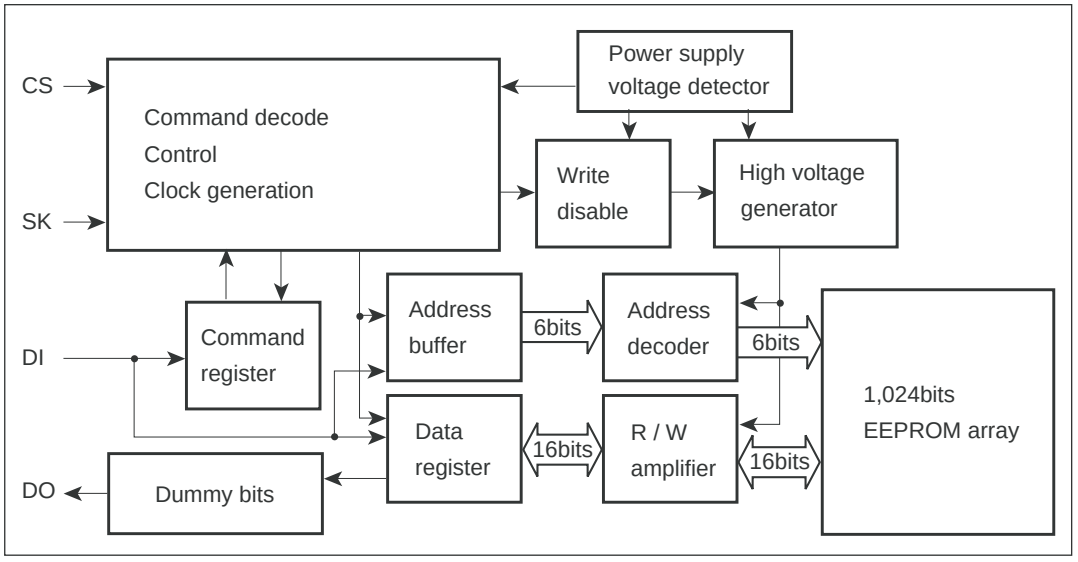




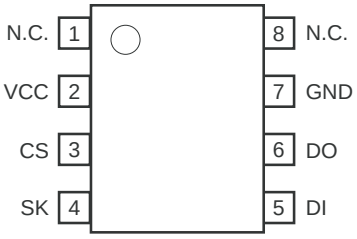
IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q606 BR93LC46F (64x16bits serial EEPROM)

BLOCK DIAGRAM



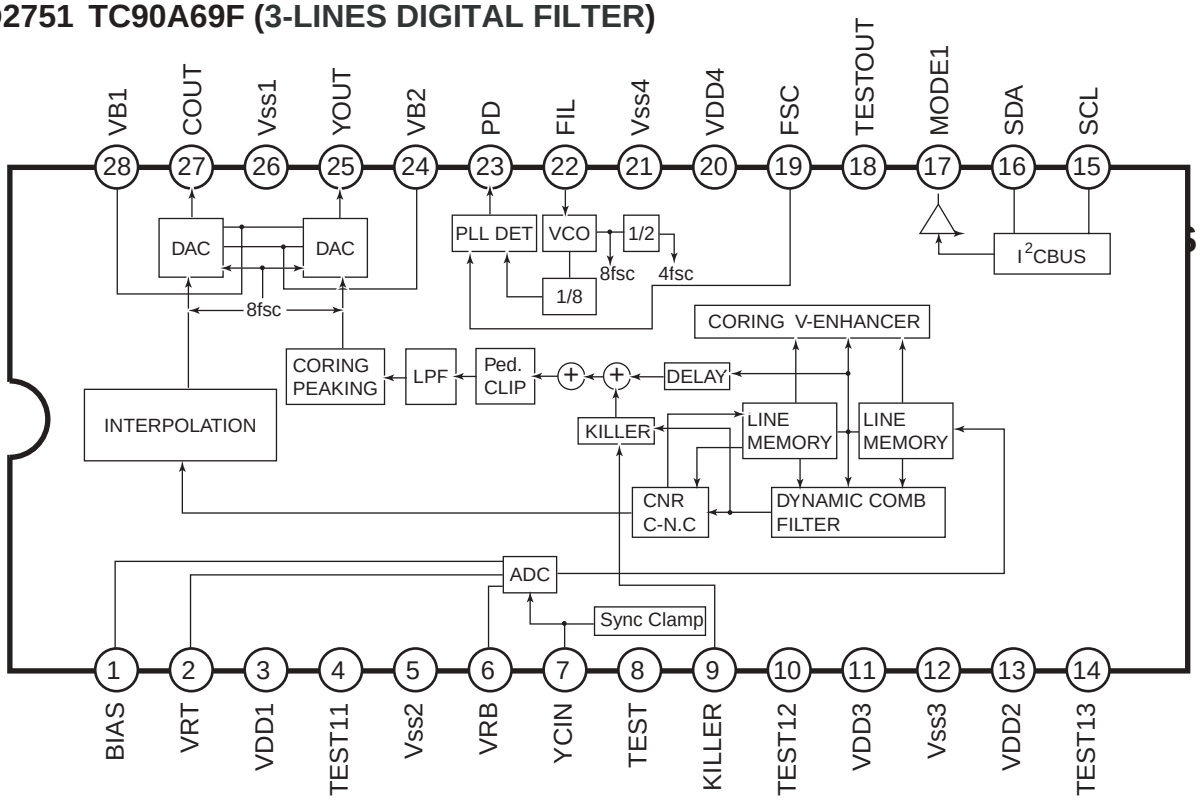
PIN LAYOUT



TERMINAL DESCRIPTION

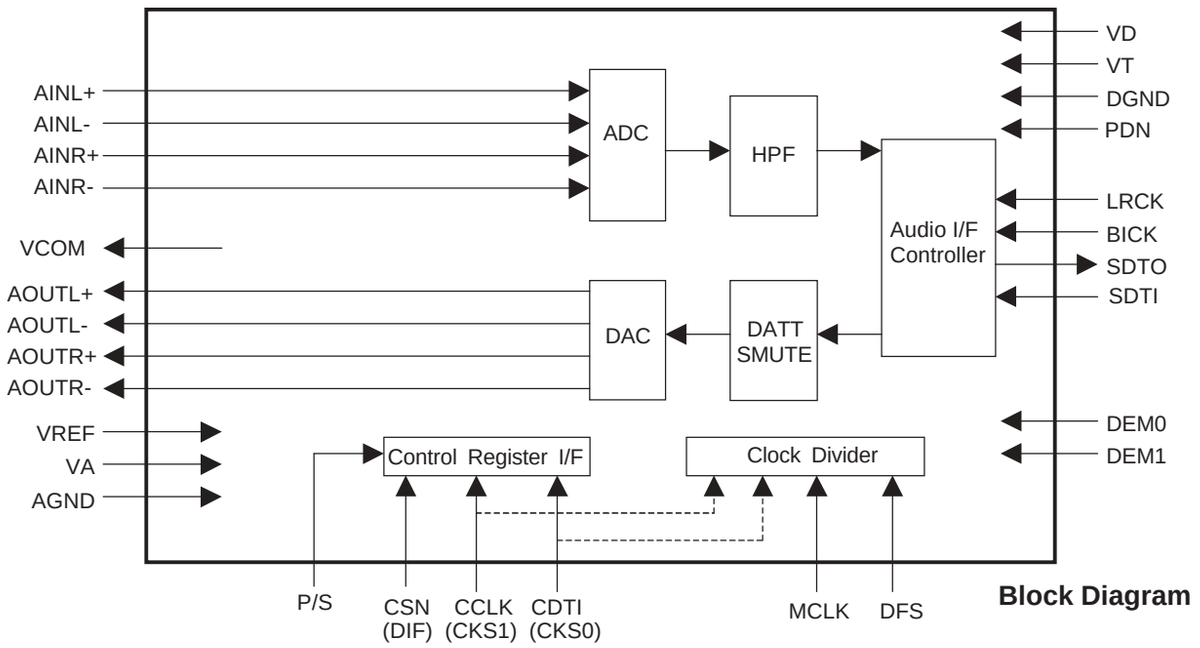
Function	Pin No.	Pin name
3	CS	Chip select input
4	SK	Serial clock input
5	DI	Start bit, operating code, address, and serial data input
6	DO	Serial data output, READY / BUSY internal status display output
7	GND	Ground
8	N.C.	Not connected
1	N.C.	Not connected
2	VCC	Power supply

Q2751 TC90A69F (3-LINES DIGITAL FILTER)



IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q103 AK4528VF(24 bit 96 kHz Audio CODEC)

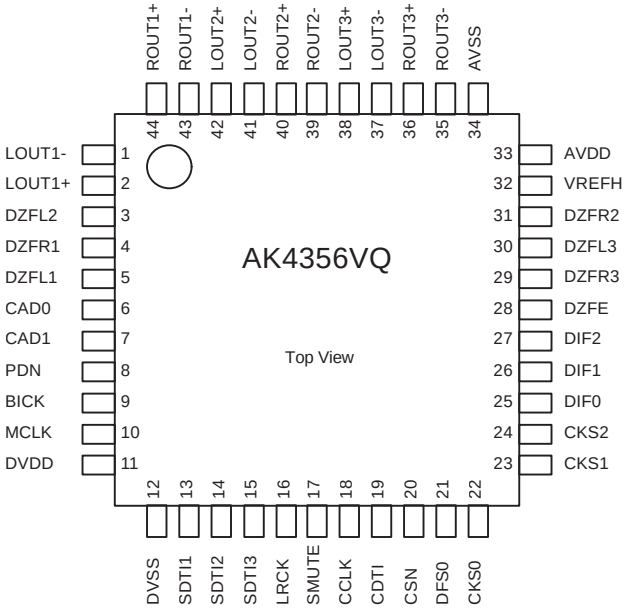


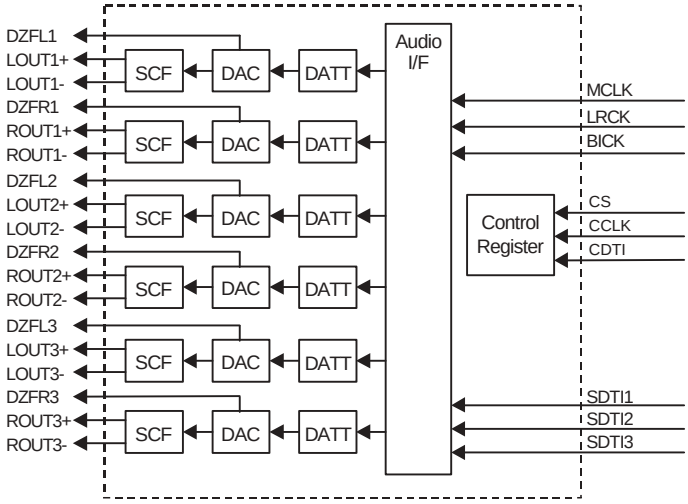
Block Diagram

No.	Pin Name	I/O	Function
1	VOM	O	Common Voltage Output Pin,VA/2. Bias voltage of ADC inputs and DAC outputs.
2	AINR+	I	Rch Positive Input Pin.
3	AINR-	I	Rch Negative Input Pin.
4	AINL+	I	Lch Positive Input Pin,
5	AINL-	I	Lch Negative input Pin.
6	VREF	I	Voltage Reference Input Pin,VA. Used as a voltage reference by ADC & DAC,VREF is connected externally to filtered VA.
7	AGND	-	Analog Ground Pin
8	VA	-	Analog Power Supply Pin,4.75~5.25V.
9	P/S	I	Parallel/Serial Mode Select Pin. "L":Serial Mode,"H":Parallel Mode
10	MCLK	I	Master Clock Input Pin
11	LRCK	I	Input/Output Channel Clock Pin
12	BICK	I	Audio Serial Data Clock Pin.
13	SDTO	O	Audio Serial Data Output Pin.
14	SDTI	I	Audio Serial Data Input Pin.
15	CDTI	I	Control Data Input Pin in Serial Mode.
	CKS0	I	Master Clock Select Pin.
16	CCLK	I	Control Data Clock Pin in Serial Mode.
	CKS1	I	Master Clock Select Pin.
17	CSN	I	Chip Select Pin in Serial Mode.
	DIF	I	Digital Audio Interface Select Pin, "L":24bit MSB justified,"H":I^{2}S compatible.
18	DFS	I	Double Speed Sampling Mode Pin.
19	PDN	I	Power-Down Mode Pin. "H":Power up, "L":Power down reset and initialize the control register.
20	DEM0	I	De-emphasis Control Pin
21	DEM1	I	De-emphasis Control Pin
22	VT	-	Output Buffer Power Supply Pin,2.7~5.25V
23	VD	-	Digital Power Supply Pin, 4.75~5.25V.
24	DGND	-	Digital Ground Pin
25	AOUTL-	O	Lch Negative Analog Output Pin.
26	AOUTL+	O	Lch Positive Analog Output PIn.
27	AOUTR-	O	Rch Negative Analog Output Pin.
28	AOUTR+	O	Rch Positive Analog Output PIn.

IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q800 AK4356VQ(192kHz 24Bit 6ch DAC for DVD-Audio)



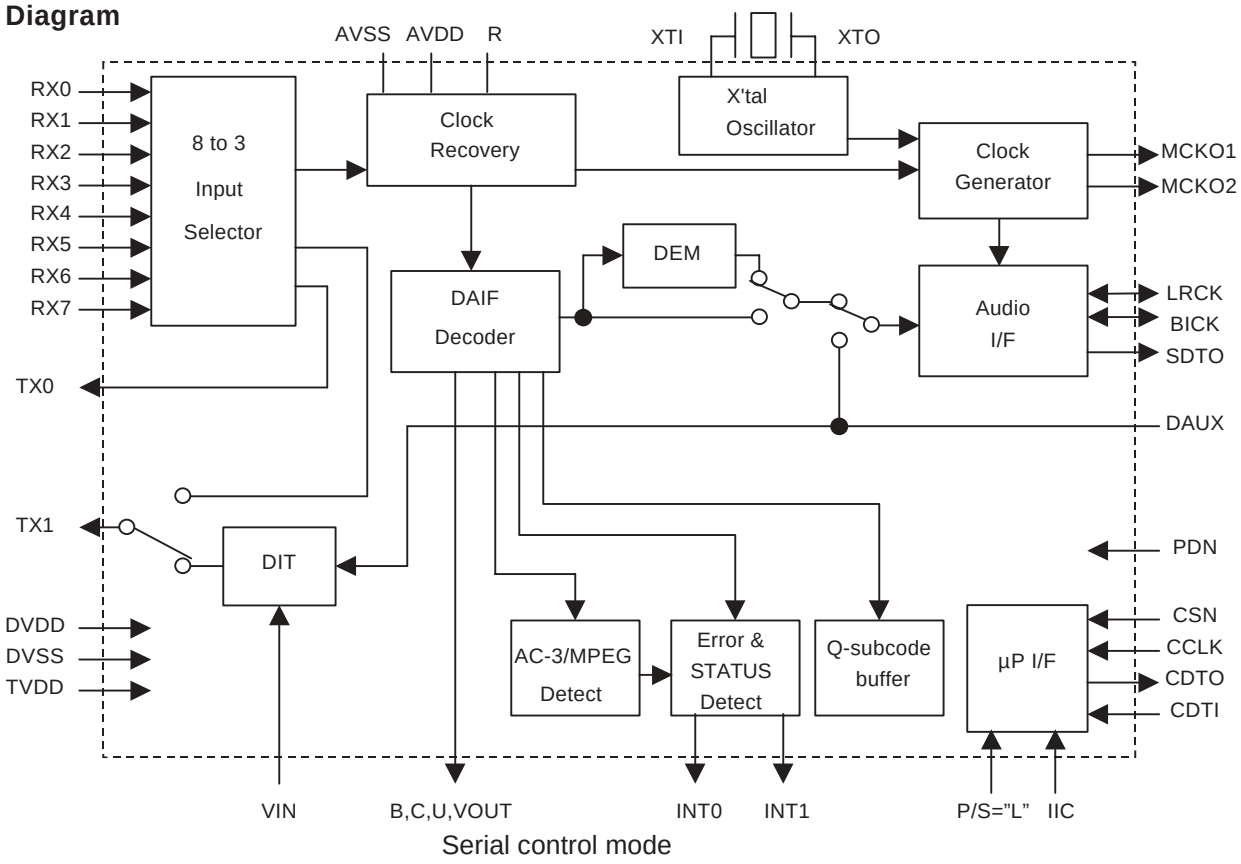


No.	Function	I/O	Description
1	LOUT1-	O	Analog positive output pin of left channel of DAC 1.
2	LOUT1+	O	Analog negative output pin of left channel of DAC 1.
3	DZFL2	O	Zero calibration pin of left channel of DAC 2.
4	DZFR1	O	Zero calibration pin of right channel of DAC 1.
5	DZFL1	O	Zero calibration pin of left channel of DAC 1.
6	CAD0	I	Chip address select 0 pin
7	CAD1	I	Chip address select 1 pin.
8	PDN	I	Power down and reset pin.
9	BICK	I	Audio serial data clock input pin.
10	MCLK	I	Master clock input pin.
11	DVDD	-	Digital section power supply pin. Apply 4.75V to 5.25V.
12	DVSS	-	Digital section ground pin. 0V
13	SDTI1	I	Audio serial data input pin of DAC 1.
14	SDTI2	I	Audio serial data input pin of DAC 2.
15	SDTI3	I	Audio serial data input pin of DAC 3.
16	LRCK	I	Input channel clock pin.
17	SMUTE	I	Soft muting pin.
18	CCLK	I	Control data clock pin.
19	CDTI	I	Control data input pin.
20	CSN	I	Chip select pin.
21	DFS0	I	Double speed sampling mode 0 pin.
22	CKS0	I	Input clock select 0 pin.
23	CKS1	I	Input clock select 1 pin.
24	CKS2	I	Input clock select 2 pin.
25	DIF0	I	Audio data interface format 0 pin.
26	DIF1	I	Audio data interface format 1 pin.
27	DIF2	I	Audio data interface format 2 pin.
28	DZFE	I	Input pin to use the offset calibration.
29	DZFR3	O	Zero calibration pin of right channel of DAC 3.
30	DZFL3	O	Zero calibration pin of left channel of DAC 3.
31	DZFR2	O	Zero calibration pin of right channel of DAC 2.
32	VREFH	I	Reference voltage input pin. Connect to AVDD.
33	AVDD	-	Analog power supply pin. Apply 4.75 V to 5.25 V.
34	AVSS	-	Analog ground pin.
35	ROUT3-	O	Analog positive output pin of right channel of DAC 3.
36	ROUT3+	O	Analog negative output pin of right channel of DAC 3.
37	LOUT3-	O	Analog positive output pin of left channel of DAC 3.
38	LOUT3+	O	Analog negative output pin of left channel of DAC 3.
39	ROUT2-	O	Analog positive output pin of right channel of DAC 2.
40	ROUT2+	O	Analog negative output pin of right channel of DAC 2.
41	LOUT2-	O	Analog positive output pin of left channel of DAC2.
42	LOUT2+	O	Analog negative output pin of left channel of DAC 2.
43	ROUT1-	O	Analog positive output pin of right channel of DAC 1.
44	ROUT1+	O	Analog negative output pin of right channel of DAC 1.

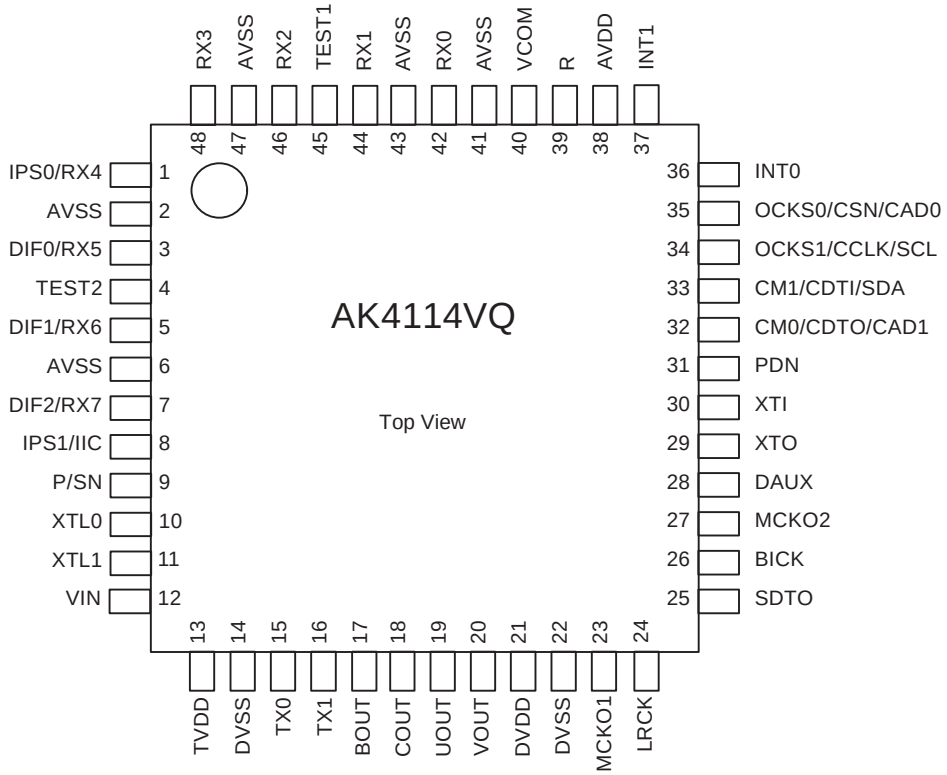
IC BLOCK DIAGRAM AND DESCRIPTIONS

Q131 AK4114VQ(192kHz 24bit Digital Audio Interface Transceiver)

Block Diagram

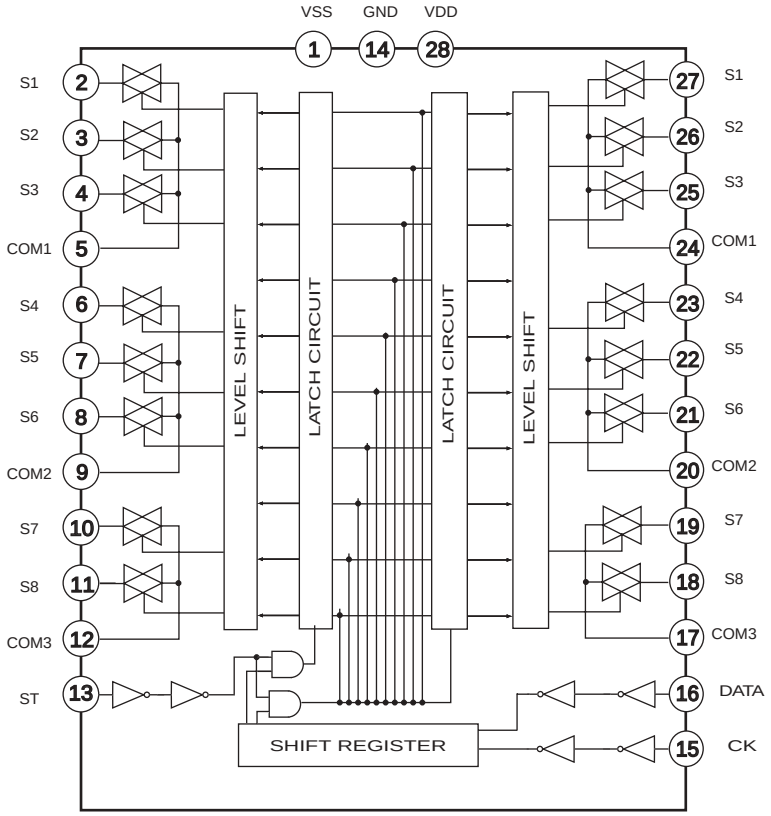


Serial control mode



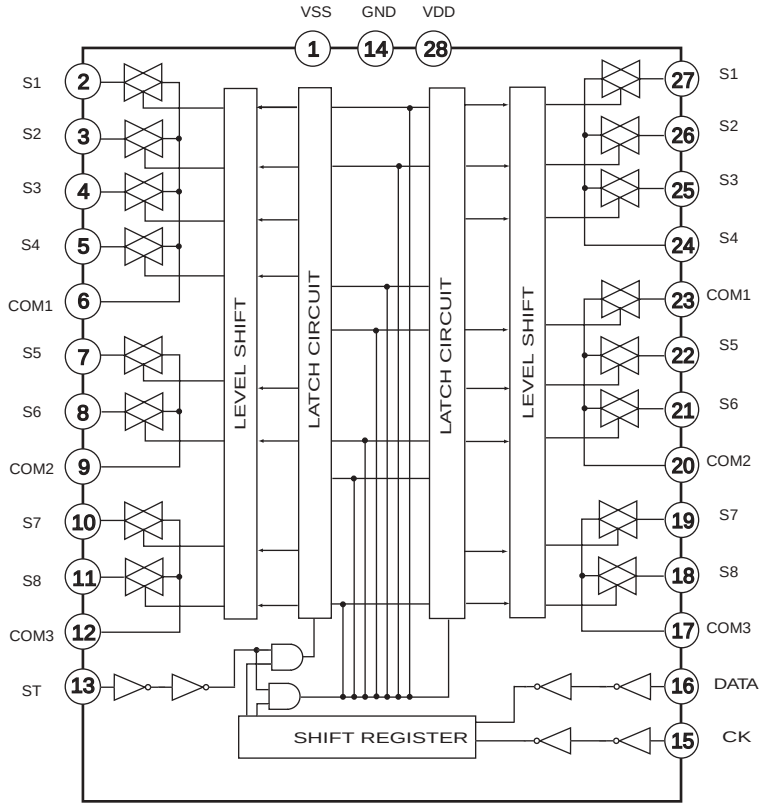
IC BLOCK DIAGRAMS AND DESCRIPTIONS

Q4100 TC9163AF(Function switch)



Pin No.	Symbol	Function
1	Vss	Negative power supply
14	GND	Ground
28	VDD	Positive power supply
2,3,4,6,7,8,10,11	S1~S8	Input/output terminals
27,26,25,23,22,21,19,18	S1~S8	Input/output terminals
5,9,12	COM1~COM3	Common terminals
24,20,17	COM1~COM3	Common terminals
13	ST	Strobe input terminal for data reading
15	CK	Clock input terminal for data transfer
16	DATA	Data input terminal for switch

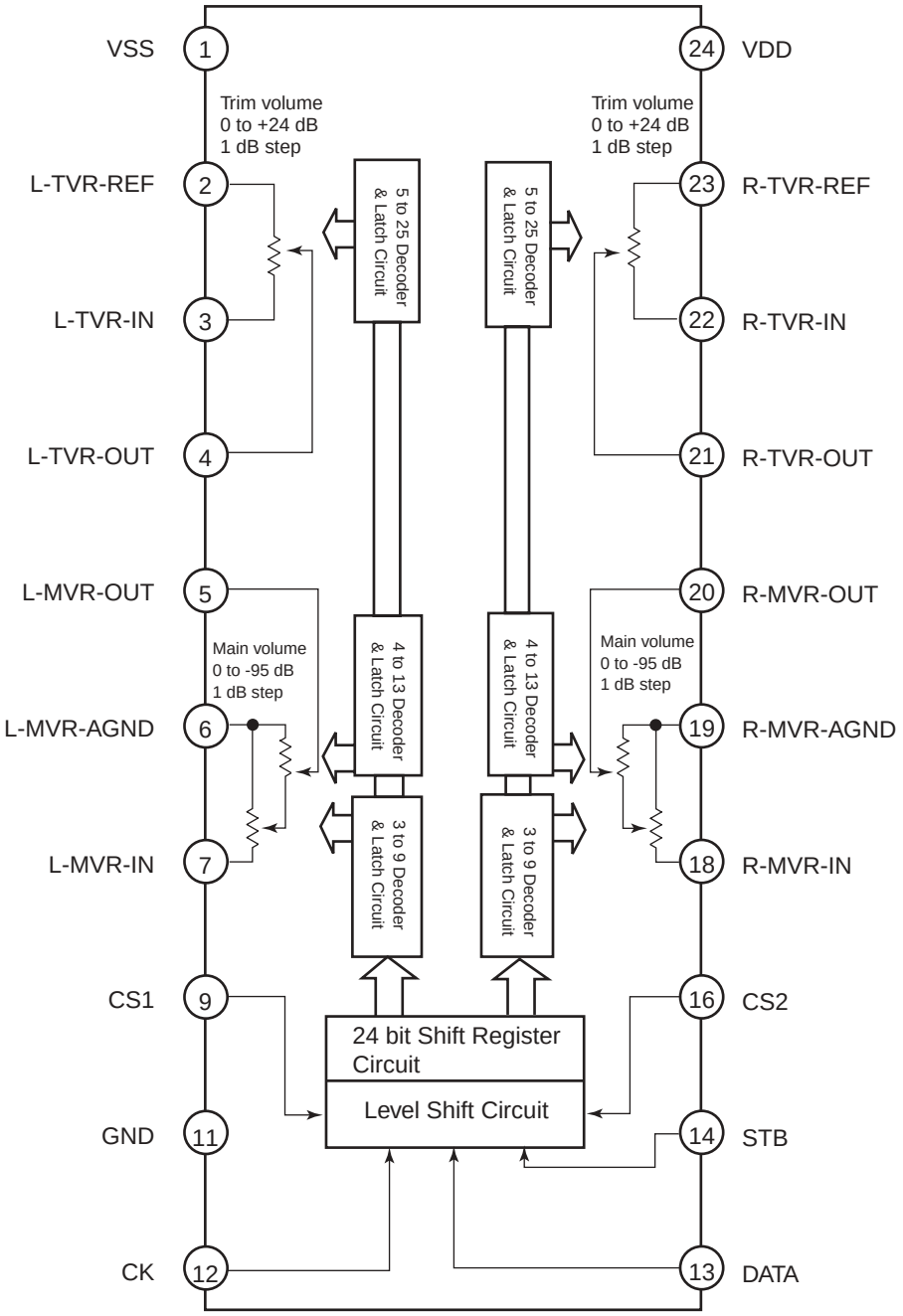
Q4101 TC9164AF(Function switch)



Pin No.	Symbol	Function
1	Vss	Negative power supply
14	GND	Ground
28	VDD	Positive power supply
2,3,4,6,7,8,10,11	S1~S8	Input/output terminals
27,26,25,23,22,21,19,18	S1~S8	Input/output terminals
5,9,12	COM1~COM3	Common terminals
24,20,17	COM1~COM3	Common terminals
13	ST	Strobe input terminal for data reading
15	CK	Clock input terminal for data transfer
16	DATA	Data input terminal for switch

IC BLOCK DIAGRAMS AND DESCRIPTIONS

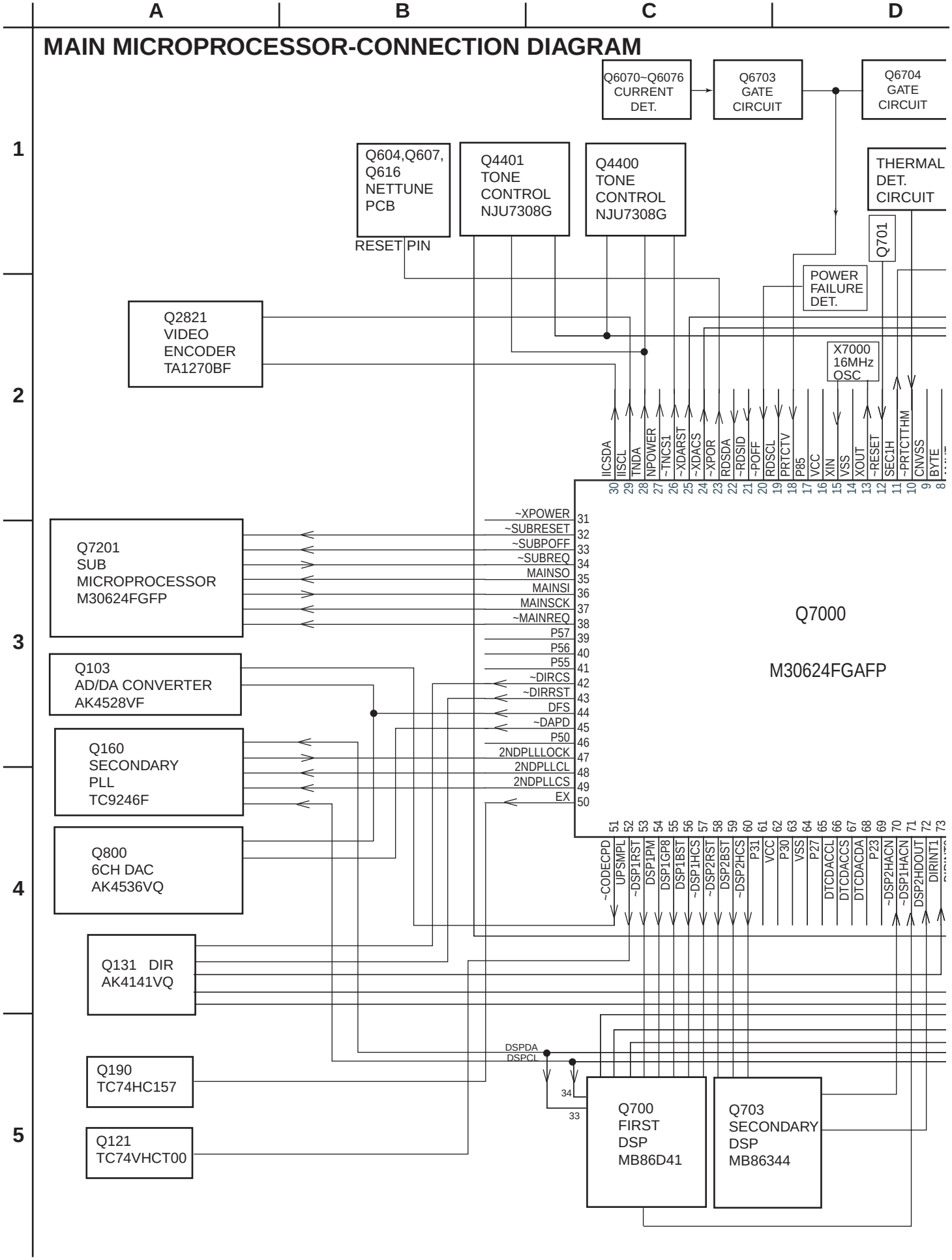
Q4200~Q4203 TC94A07F(Electric Volume)



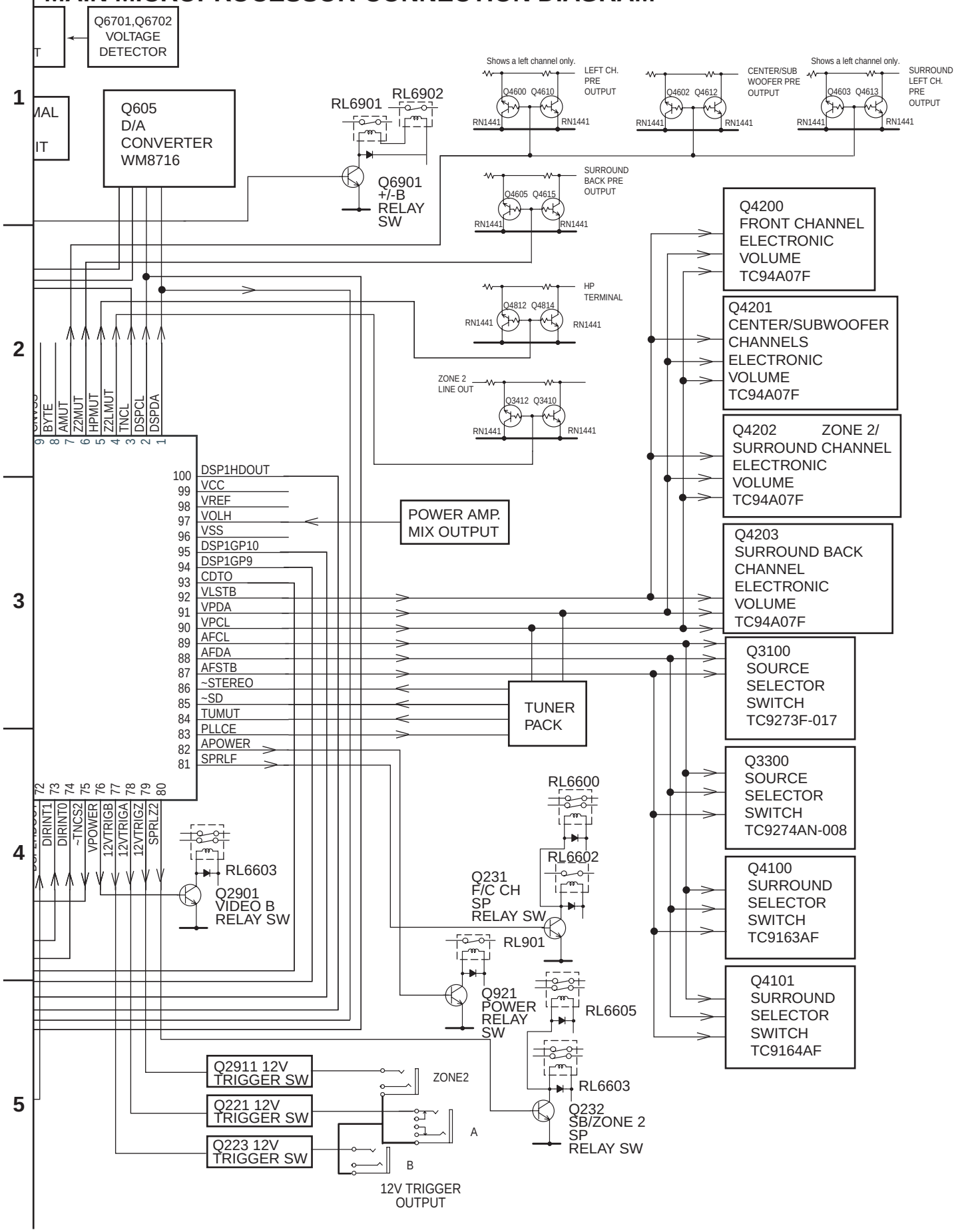
8,10,15,17:NC

No.	Symbol	Terminal
1	VSS	Negative power source
24	VDD	Positive power source
11	GND	Digital ground
2	L-TVR-REF	Trim volume analog reference terminals
23	R-TVR-REF	
3	L-TVR-IN	Trim volume input terminals
22	R-TVR-IN	
4	L-TVR-OUT	Trim volume output terminals
21	R-TVR-OUT	
5	L-MVR-OUT	Main volume output terminals
20	R-MVR-OUT	
6	L-MVR-AGND	Main volume analog reference terminals
19	R-MVR-AGND	
7	L-MVR-IN	Main volume input terminals
18	R-MVR-IN	
8	CS1	Chip select code switch terminals
16	CS2	
12	CK	Clock input
13	DATA	Data input
14	STB	Strobe input
8	NC	No connection
10		
15		
17		

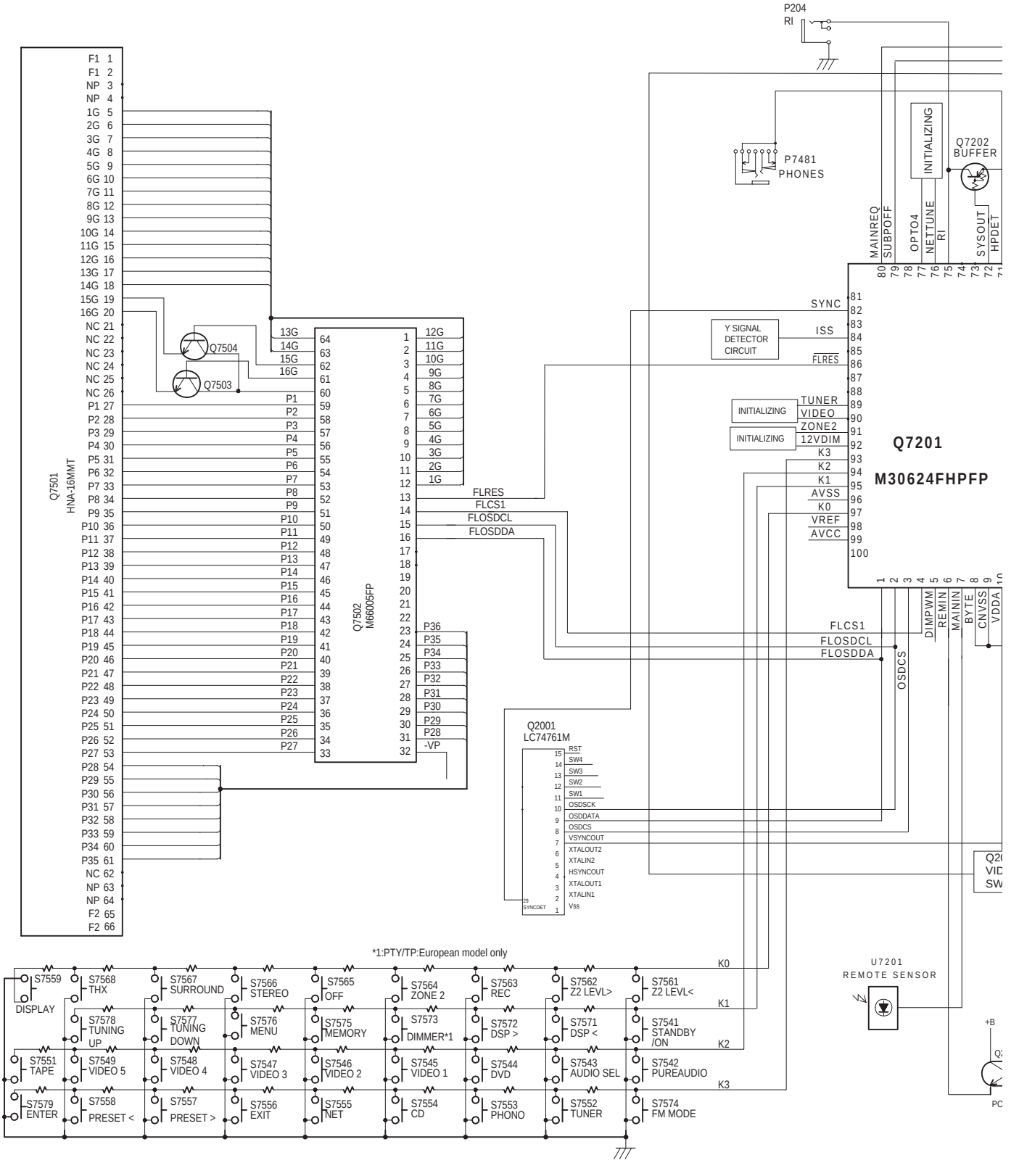
MAIN MICROPROCESSOR-CONNECTION DIAGRAM



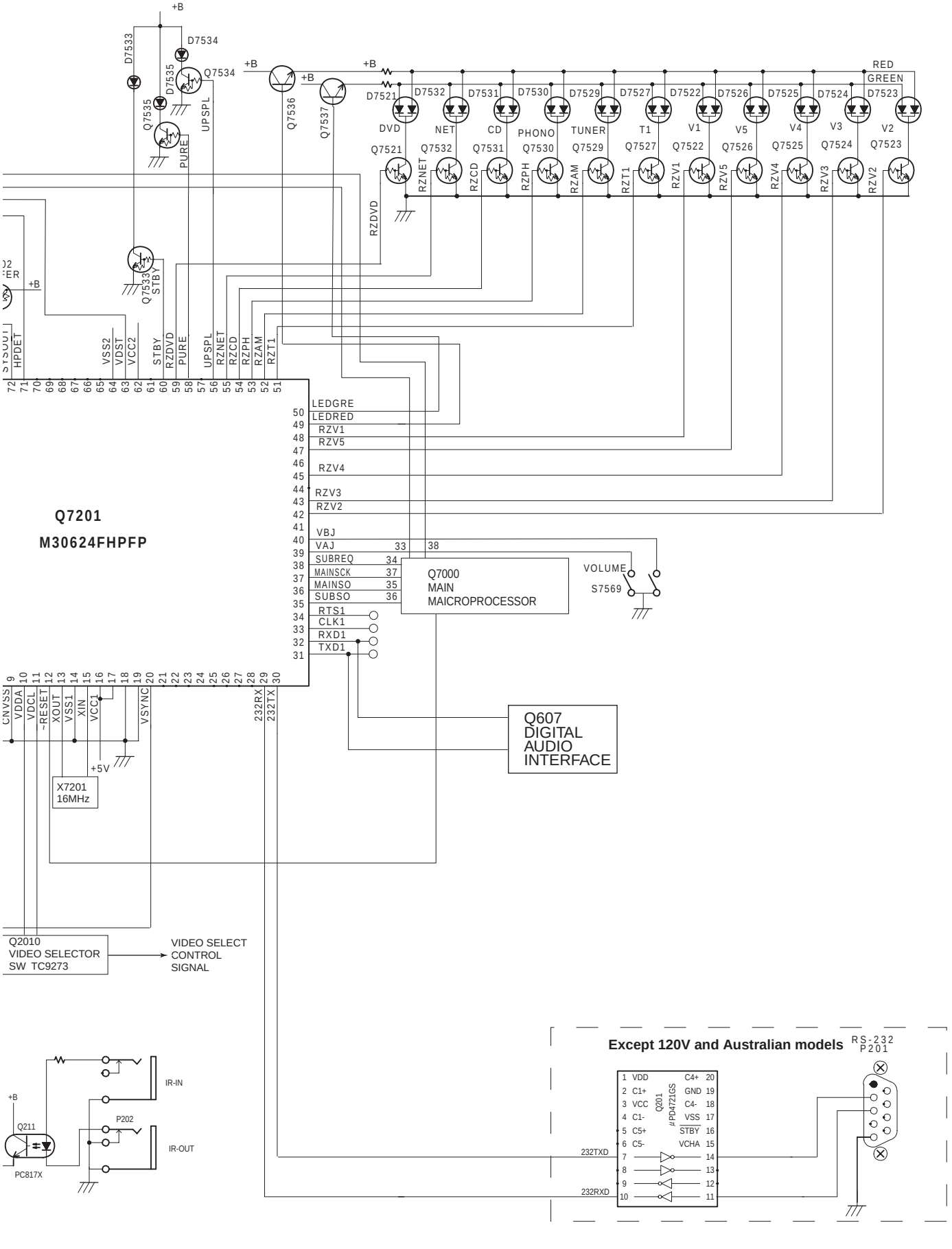
MAIN MICROPROCESSOR-CONNECTION DIAGRAM



SUB MICROPROCESSOR-CONNECTION DIAGRAM



SUB 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.

TX-NR901

ADJUSTMENT AND CONFIRMATION PROCEDURES 1

Idling current adjustment

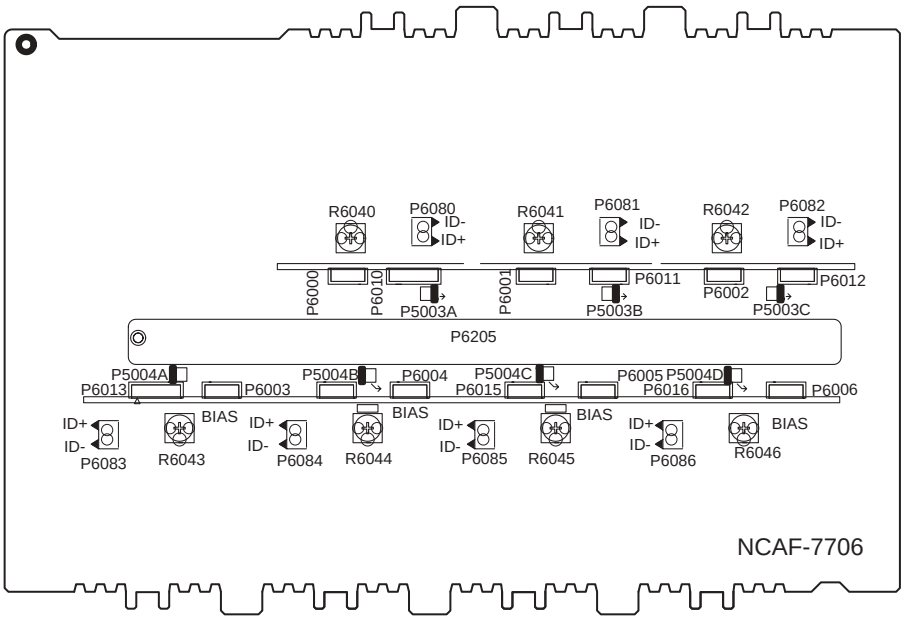
Before Idling current adjustment, turn the trimming resistors R6040 to R6046 to counter-clockwise.
Connect the DC voltmeter at the sockets P6080 to P6086.
After turn POWER to ON, adjust the trimming resistors R6040, R6041 and R6042 so that the reading of voltmeter becomes 11 mV. (Front and center channels)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

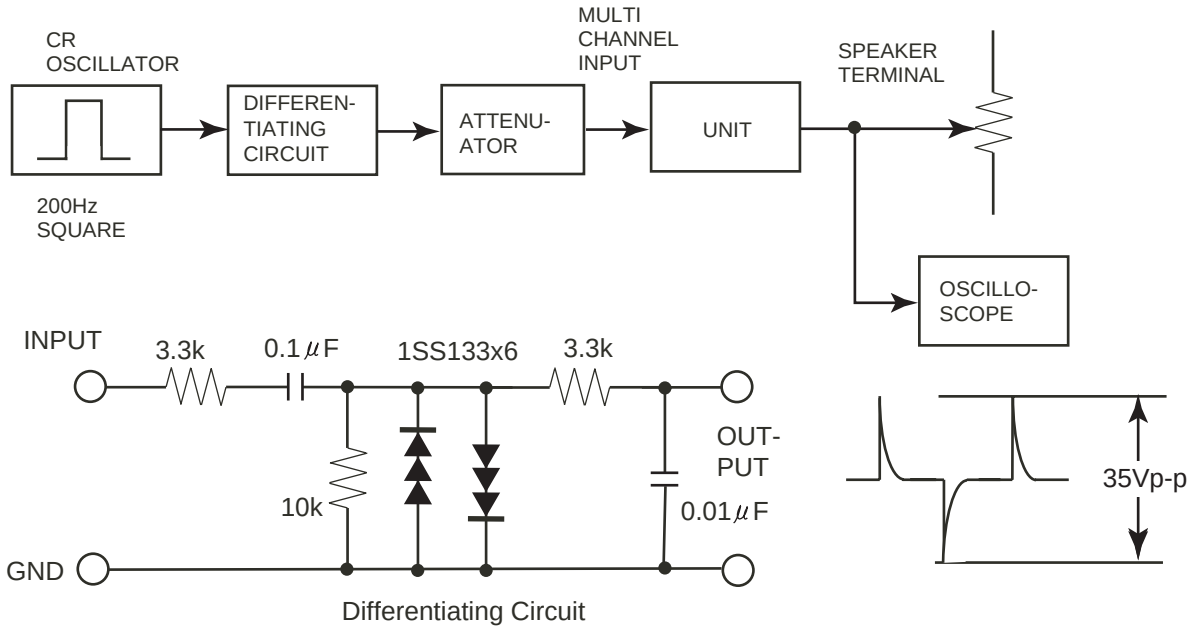
2. Confirmation of DC detection circuit

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

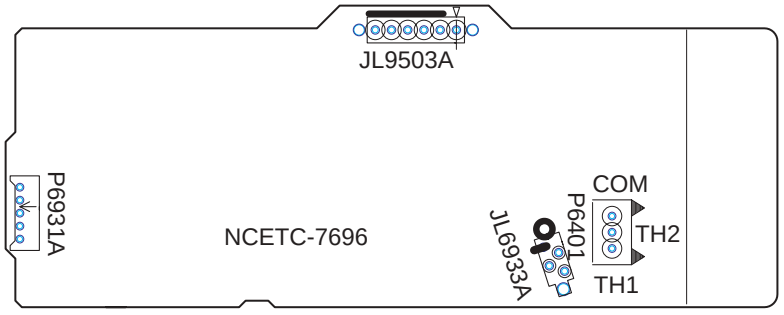
Set the unit to "TEST-1-00".
Connect the differentiating circuit and apply the 200Hz square signal to MULTI CHANNEL INPUT terminal of each channel.
Adjust the attenuator or Volume so that the output level becomes 35V p-p.
Confirm that the speaker relay does not turn OFF when a 3.0 ohm load is connected.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



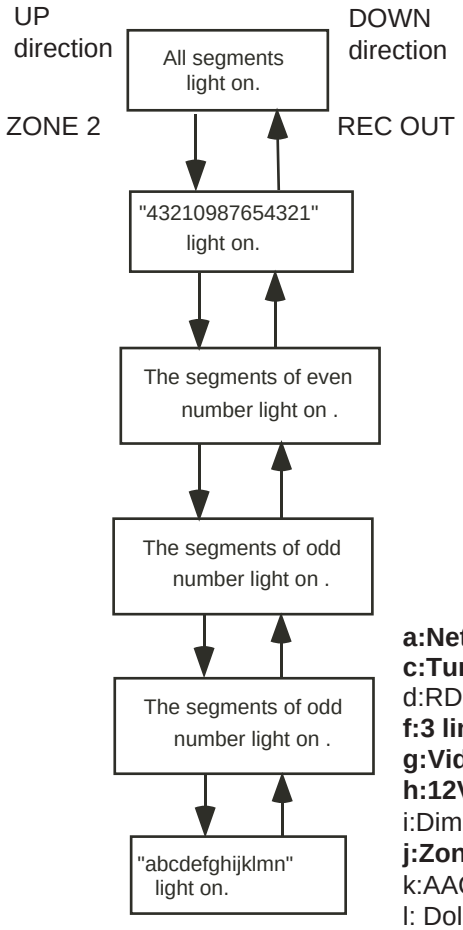
ADJUSTMENT AND CONFIRMATION PROCEDURES 3

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 N4U_ N3CZ_L__
MPA N4E_ P3CZ_L__
Other N4W_ P3CZ_L__

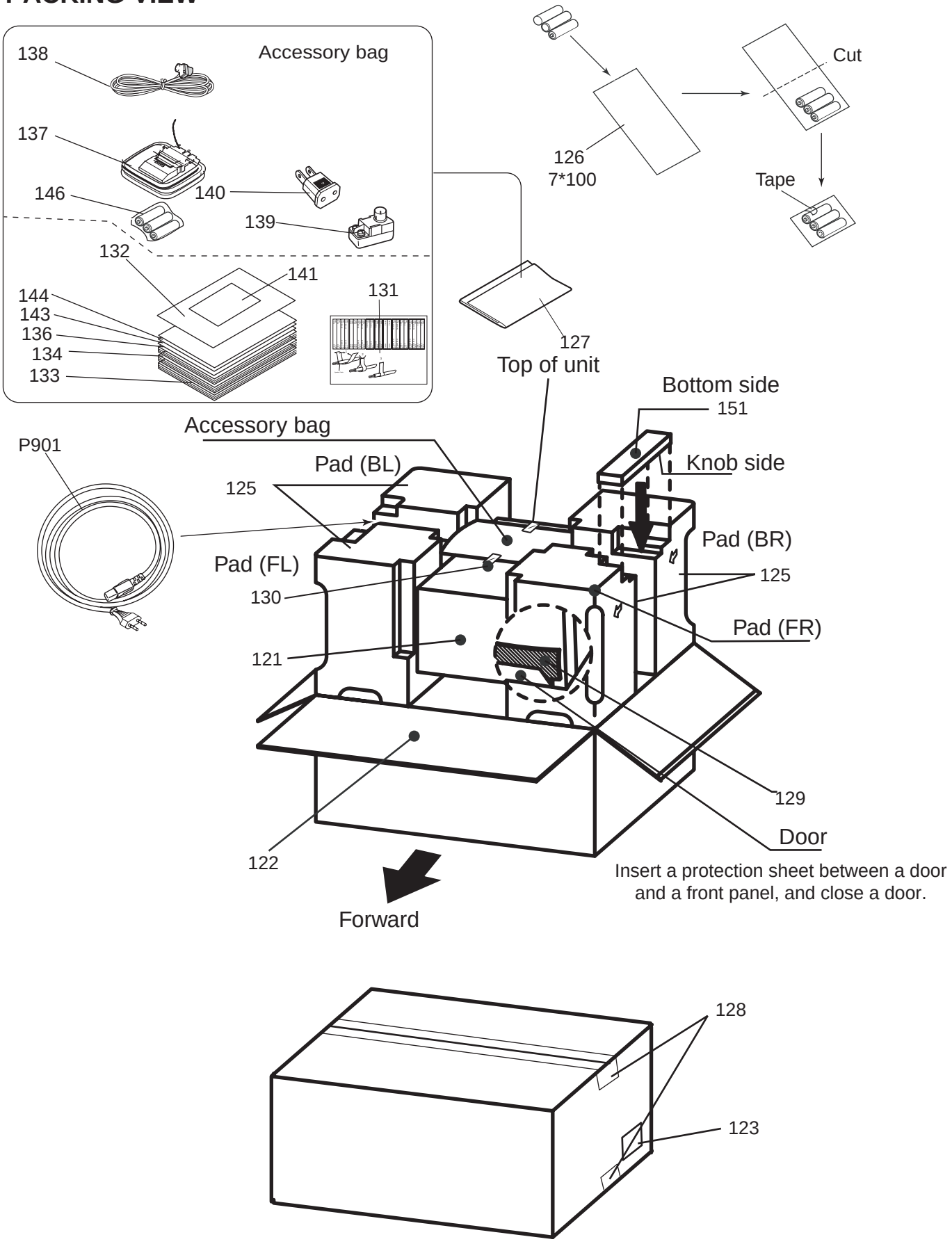
Press POWER button
to finish the test mode of FL tube.

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

PACKING VIEW



PRINTED CIRCUIT BOARD-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
<T>:Worldwide model only
<R>: Chinese model only
<A>: Australian model only
<K>:Korean model only

DISPLAY CIRCUIT PC BOARD (NADIS-7738-2A/2B/2C)

CIRCUIT NO.	PART NO.		DESCRIPTION
	FL tube		
Q7501	212245 or		16-BT-115GNK or
	212234		HNA-16MM40T
	ICs		
Q7201	22242003R3W		M30626FHPFP(Flash)
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
Q7536,Q7537	2213145R2		2SC2712-GR
Q7521~Q7527	2216190R2 or		KRC102S or
Q7529~Q7535	2214470R2		RN1402
	Diodes		
D7201,D7202	223234R2 or		1SS352 or
D7502	223269R2		1SS355
D7203	224490510R2 or		UDZ5.1B or
	224550510R2		UDZS5.1B,Zener
D7501	224491100R2 or		UDZ11B or
	224551100R2		UDZS11B,Zener
D7521~D7527	225375		SML1216C
D7529~D7532	225375		SML1216C
D7533	225290		SEL4110R
D7534	225292D		SEL4310G-D
D7535	225374		SEL2E10C
	Coils		
L7201	231237M022R2 or		NCH-1471 or
	233533M022R2		NCH-1587-022M
R7201,R7202	230958R1		BK1608LM182-T
	Oscillator		
X7201	3010322		CST16.00MXW0C1
	Capacitors		
C2571,C2572	347344714R1		CC732CH1H-471J,Ceramic
C2577,C2578	332161040R1		CK725F1E-104Z1, Ceramic
C7201,C7202	355721019		CE04W6.3V-100M,Elect.
C7203	375524744		MMT50V-474J,Plastic film
C7204,C7206	332174740R1		CK725F1C-474Z1,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	332174740R1		CK725F1C-474Z1,Ceramic
C7503	354721019S		CE04W6.3V-100M,Elect.
C7504,C7508	342101014R1		CC725CH1H-101J1,Ceramic
C7505,C7507	332161040R1		CK725F1E-104Z1, Ceramic
C7506	375524744		MMT50V-474J,Plastic film
C7509	332174740R1		CK725F1C-474Z1,Ceramic
C7510	355783309		CE04W50V-33M,Elect.

CIRCUIT NO.	PART NO.		DESCRIPTION
	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
R7245	435031034R1		RN72K1J-103JE,Carbon
R7247,R7248	435031034R1		RN72K1J-103JE,Carbon
R7249,R7250	435033314R1		RN72K1J-331JE,Carbon
R7251~R7256	435031034R1		RN72K1J-103JE,Carbon
R7258~R7260	435031034R1		RN72K1J-103JE,Carbon
R7271	435031034R1		RN72K1J-103JE,Carbon
R7272,R7431	435032214R1		RN72K1J-221JE,Carbon
R7275	435034724R1		RN72K1J-472JE,Carbon
R7279,R7280	435031024R1		RN72K1J-102JE,Carbon
R7282,R7284	435031034R1		RN72K1J-103JE,Carbon
R7286	435031034R1		RN72K1J-103JE,Carbon
R7289	435030004R1		RN72K1J-000JE,Carbon <D>
	435031034R1		RN72K1J-103JE,Carbon <T/A/R/K>
R7290	435033334R1		RN72K1J-333JE,Carbon <T/A/R/K>
R7292,R7300	435031034R1		RN72K1J-103JE,Carbon
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	435031034R1		RN72K1J-103JE,Carbon
R7376,R7377	435031034R1		RN72K1J-103JE,Carbon
R7379,R7380	435031034R1		RN72K1J-103JE,Carbon
R7382	435031024R1		RN72K1J-102JE,Carbon
R7386,R7391	435031034R1		RN72K1J-103JE,Carbon
R7389	435031034R1		RN72K1J-103JE,Carbon <T/R>
	435033334R1		RN72K1J-333JE,Carbon <A/K>
R7390	435031034R1		RN72K1J-103JE,Carbon <D>
	435035634R1		RN72K1J-563JE,Carbon <T/A/R/K>
R7392	435033334R1		RN72K1J-333JE,Carbon
R7393~R7395	435032724R1		RN72K1J-272JE,Carbon
R7397	435032724R1		RN72K1J-272JE,Carbon
R7432	435032224R1		RN72K1J-222JE,Carbon
R7501,R7502	435032214R1		RN72K1J-221JE,Carbon
R7503	435033314R1		RN72K1J-331JE,Carbon
R7504	435032734R1		RN72K1J-273JE,Carbon
R7505~R7508	435031024R1		RN72K1J-102JE,Carbon
R7511~R7526	435031034R1		RN72K1J-103JE,Carbon
R7533,R7534	435034714R1		RN72K1J-471JE,Carbon
R7535,R7536	435032714R1		RN72K1J-271JE,Carbon
R7538,R7539	435031814R1		RN72K1J-181JE,Carbon
R7540,R7543	435034714R1		RN72K1J-471JE,Carbon
R7541,R7542	435033314R1		RN72K1J-331JE,Carbon
R7544,R7553	435035614R1		RN72K1J-561JE,Carbon
R7545,R7554	435038214R1		RN72K1J-821JE,Carbon
R7546,R7555	435031224R1		RN72K1J-122JE,Carbon
R7547,R7556	435032224R1		RN72K1J-222JE,Carbon
R7548,R7557	435033924R1		RN72K1J-392JE,Carbon
R7551,R7558	435031234R1		RN72K1J-123JE,Carbon
R7552,R7562	435034714R1		RN72K1J-471JE,Carbon
R7561,R7574	435033314R1		RN72K1J-331JE,Carbon
R7563,R7572	435035614R1		RN72K1J-561JE,Carbon
R7564,R7573	435038214R1		RN72K1J-821JE,Carbon
R7565,R7575	435031224R1		RN72K1J-122JE,Carbon
R7566,R7576	435032224R1		RN72K1J-222JE,Carbon

CIRCUIT NO.	PART NO.		DESCRIPTION
	Resistors		
R7567,R7577	435033924R1		RN72K1J-392JE,Carbon
R7571	435034714R1		RN72K1J-471JE,Carbon
R7578	435031234R1		RN72K1J-123JE,Carbon
R7601~R7604	435030004R1		RN72K1J-000JE,Carbon
	Switches		
S7541~S7549	25035714 or		NPS-111-S677 or
S7551~S7559	25035718		NPS-111-S681
S7561~S7568	25035714 or		NPS-111-S677 or
S7571~S7579	25035718		NPS-111-S681
	Sockets		
JL7201A	25051108		NSCT-4P895
P7201A	25051875		NSCT-31P1662
P7482A	25051089		NSCT-5P876
P7559A	25051087		NSCT-3P874
	Plug		
P7203	25056056		NPLG-8P1006
	Holder		
Q7501A	27191074A		(FL)
MASTER VOLUME PC BOARD (NAETC-7739-2A/2B/2C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Capacitors		
C7559,C7569	332161040R1		CK725F1E-104Z1, Ceramic
	Rotary encoder		
S7569	25065575		EC16B2425
	Socket		
P7559B	25051087		NSCT-3P874
HEADPHONE TERMINAL PC BOARD (NAETC-7740-2A/2B/2C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Capacitor		
C7481,C7482	342101014R1		CC725CH1H-101J1,Ceramic
C7484	332161040R1		CK725F1E-104Z1, Ceramic
	Terminal		
P7481	25045467		YKB22-5153G
	Socket		
P7482B	25051089		NSCT-5P876
FRONT VIDEO PC BOARD (NAETC-7741-2A/2B/2C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Resistors		
R2571,R2572	435033314R1		RN72K1J-331JE,Carbon
R2573~R2575	435037504R1		RN72K1J-750JE,Carbon
	Terminal		
P2510	25045678		NPJ-3PDB475
	Sockets		
P2506B	2009990575UL		NSAS-10P0784
P2508	25051569		NSCT-4P1356
P3220B	2009990420		NSAS-6P0564
OPTICAL INPUT PC BOARD (NAETC-7742-2A/2B/2C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Photo coupler		
U2501	24120101		TORX179L
	Capacitors		
C2576	332161040R1		CK725F1E-104Z1, Ceramic
C2579	354741009		CE04W16V-10M,Elect.
	Resistor		
R2576	435032204R1		RN72K1J-220JE,Carbon
	Socket		
P102B	2009990513UL		NSAS-6P0675

DSP CIRCUIT PC BOARD (NADG-7687-2A/2B)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q100~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 or		MPC2933T or
	22278033DR2JR		NJM2391DL1-33
Q190	22274157ER2TO or		TC74VHC157FT or
	22274157IR2TI		SN74AHC157PWR
Q700	22242002R3		MB86D41BPFV-G-BND
Q7000	22241512R3W		M30624FGAFP
Q701,Q751	22274074ER2TO or		TC74VHC74FT or
	22274074IR2TI		SN74AHC74PWR
Q703	22241847R3		MB86344BPFV
Q705,Q706	22241612R2 or		CY7C1019BV33-15VCT or
	22241887R2		CY7C1019CV33-15VCT
Q7100,Q7101	22274541ER2TO or		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~U103	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
L170,L753	233533K470R2		NCH-1587-470K
L7000	231237K220R2 or		NCH-1477 or
L7000	233533K220R2		NCH-1587-220K
L801,L802	231237M022R2 or		NCH-1471 or
L801,L802	233533M022R2		NCH-1587-022M
R124,R125	230959R1		BK1608LL241-T
R133~R135	230958R1		BK1608LM182-T

CIRCUIT NO.	PART NO.		DESCRIPTION
	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~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
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
C821,C822	373024724R2		ECHU50V-472J,Chip film <D/A>
C823,C824	373024724R2		ECHU50V-472J,Chip film
C825	373024724R2		ECHU50V-472J,Chip film <D/A>
C826	373043334R2		ECHU16V-333J,Chip film
C827~C830	373026814R2		ECHU50V-681J,Chip film
C831~C834	373023314R2		ECHU50V-331J,Chip film <T/R/K>
C835~C838	373026814R2		ECHU50V-681J,Chip film
C839,C840	373023314R2		ECHU50V-331J,Chip film <T/R/K>
C841,C842	373041534R2		ECHU16V-153J,Chip film
C847,C848	356744709R2		CEWX16V-47M,Elect.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
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,R126	435033314R1		RN72K1J-331JE,Carbon
R122,R123	435031024R1		RN72K1J-102JE,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
R142	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
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Resistors		
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
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	435033324R1		RN72K1J-332JE,Carbon <D/A>
R815~R818	435030004R1		RN72K1J-000JE,Carbon <T/R/K>
R819~R822	435033324R1		RN72K1J-332JE,Carbon
R823,R824	435033324R1		RN72K1J-332JE,Carbon <D/A>
R823,R824	435030004R1		RN72K1J-000JE,Carbon <T/R/K>
R825,R826	435033324R1		RN72K1J-332JE,Carbon
R827~R830	435031224R1		RN72K1J-122JE,Carbon
R831~R834	435031224R1		RN72K1J-122JE,Carbon <D/A>
R831~R834	435032224R1		RN72K1J-222JE,Carbon <T/R/K>
R835~R838	435031224R1		RN72K1J-122JE,Carbon
R839,R840	435031224R1		RN72K1J-122JE,Carbon <D/A>
R839,R840	435032224R1		RN72K1J-222JE,Carbon <T/R/K>
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
	Terminals		
P101	25045666		NPJ-3PDO465 <D/A>
	25045624		NPJ-3PDO431 <T/R>

CIRCUIT NO.	PART NO.		DESCRIPTION
	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
	Cushion		
Q800A	28141445		(DAC)
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	22241161R2		TC7W14FU
Q610	22241159R2		TC7S02FU
Q616	22241867R3		CS8900A-CQ3
Q618	22241161R2		TC7W14FU
	Diodes		
D601	223234R2 or		1SS352 or
D604,D605	223269R2		1SS355
D603	225385R2		SEC1201C
	Oscillators		
X601	3010374R2		DSO-751SV,Crystal
X602	3010371R2		DSX630G,Crystal
X603	3010372R2		SM-26F,Crystal
X604	3010373R2		SMD-49,Crystal
	Coils		
L601	230949R2		BLM21P221SG
L603	3030048R2		NFE31PT471F1E9
L605,L606	230949R2		BLM21P221SG
L607	231237K470R2		NCH-1479
R639,R640	230958R1		BK1608LM182-T
	Capacitors		
C602	395530477R2		F93-10V-4.7M,Chip tantal
C603~C613	332161040R1		CK725F1E-104Z1, Ceramic
C614	395544707R2		F93-16V-47M,Chip tantal
C615	395521017R2		F93-6.3V-100M,Chip tantal
C616~C627	332161040R1		CK725F1E-104Z1,Cerami
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
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	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
R630	435031034R1		RN72K1J-103JE,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		
P601	25052724		NSCT-8P2620
P603A	25052707R2		NSCT-6P2603
P604B	25051238		NSCT-13P1028
	Plugs		
P602B	25055964R2 or		NPLG-4P917 or
P602B	25056180R2		NPLG-4P1119
P607B	25055965R2 or		NPLG-5P918 or
P607B	25056181R2		NPLG-5P1120
	Cushion		
Q605A	28141445		(DAC)
PRE AMPLIFIER PC BOARD (NAAF-7718-2A/2B)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q3860~Q3862	22241383R2 or		NJM4565M-D or
	22240489R1NE		MPC4570G2-T1(MST) <T/R/K>
Q4000,Q4800	22241383R2 or		NJM4565M-D or
Q4210~Q4213	22240489R1NE		MPC4570G2-T1(MST)
Q4100	22240943R2		TC9163AF
Q4101	22241221R2		TC9164AF
Q4200~Q4203	22241640R2		TC94A07F
Q4400,Q4401	22241451R9		NJU7306G
Q4410,Q4411	22241450R2 or		NJM2082M-D or
	22241567R2		NJM2082M

CIRCUIT NO.	PART NO.		DESCRIPTION
	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 <T/R/K>
C3864,C3865	374722724		ECQ-B50V-272J,Plastic film <T/R/K>
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 <T/R/K>
R3864~R3867	435031034R1		RN72K1J-103JE,Carbon <T/R/K>
R3868~R3871	435031524R1		RN72K1J-152JE,Carbon <T/R/K>
R3872~R3879	435032234R1		RN72K1J-223JE,Carbon <T/R/K>
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Resistors		
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	25045707		NPJ-4PDGPRW502 <D/A>
P3600,P4600	25045708		NPJ-4PDGPRW503 <T/R/K>
P3601,P4601	25045709		NPJ-4PDELNT504 <D/A>
P3601,P4601	25045710		NPJ-4PDELNT505 <T/R/K>
	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-7719-2A/2B)			
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		
C1001	332161040R1		CK725F1E-104Z1, Ceramic
C1002,C1007	354741009 or		CE04W16V-10M or
C1002,C1007	394641007		CE04W16V-10M(VR),Elect.
C1003,C1006	354780339 or		CE04W50V-3.3M or
C1003,C1006	394680337		CE04W50V-3.3M(VR),Elect.
C1004,C1005	342101014R1		CC725CH1H-101J1,Ceramic
C3000,C3001	374722215		ECQ-B50V-221K,Plastic film
C3002,C3003	393384707		CE04W50V-47M(VX),Elect.
C3004,C3005	374721524		ECQ-B50V-152J,Plastic film

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
C3006,C3007	354722219		CE04W6.3V-220M,Elect.
C3008,C3009	374721234		ECQ-B50V-123J,Plastic film
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.
	Resistors		
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
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~R3022	435033314R1		RN72K1J-331JE,Carbon
R3023~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
	Terminals		
P3000,P3001	25045575 or		NPJ-4PDRW389 or
P3000,P3001	25045303		NPJ-4PDBL162 <D/A>
P3000,P3001	25045582 or		NPJ-4PDRW393 or
P3000,P3001	25045491		NPJ-4PDBL308 <T/R/K>
	Sockets		
P1010A	25052248,		NSCT-15P2145,
P1010A	25051859 or		NSCT-15P1646 or
P1010A	25052061		NSCT-15P1848
P3010B	25051232		NSCT-7P1022
P3011B	25051240		NSCT-15P1030
VIDEO TERMINAL PC BOARD (NAAF-7720-2A/2B)			
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
C3252	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

CIRCUIT NO.	PART NO.		DESCRIPTION
	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
R3240~R3243	435032244R1		RN72K1J-224JE,Carbon
R3250~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	25045575 or		NPJ-4PDRW389 or
P3200~P3203	25045303		NPJ-4PDBL162 <D/A>
P3200~P3203	25045582 or		NPJ-4PDRW393 or
P3200~P3203	25045491		NPJ-4PDBL308 <T/R/K>
	Sockets		
P3210B,P3211B	25051232		NSCT-7P1022
P3211B	25051232		NSCT-7P1022
	Plugs		
P3220A	25055133		NPLG-3P117
P602A	25055148		NPLG-4P132
POWER AMPLIFIER PC BOARD (NAAF-7706-2A/2B)			
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
Q6100~Q6102	2203010		2SC5171
Q6040~Q6042	2211354 or		2SA949-Y or
	2211353		2SA949-O
Q6043~Q6046	2203424 or		KTB1369-Y or
	2203000		2SA1930
Q6070~Q6076	2214984 or		2SC2631-R or
	2214985		2SC2631-S
Q6090~Q6092	2203424 or		KTB1369-Y or
	2203000		2SA1930
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.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
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	3504373		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
	Sockets		
P5003	2009990666UL		NSAS-12P0929
P5004	2009990745UL		NSAS-16P1040
P6007	2009990759UL		NSAS-6P1070
P6008	2009990760UL		NSAS-8P1071
P6810	2009990668UL		NSAS-6P0931
P6812	2009990669UL		NSAS-6P0932
P6952	2009990671UL		NSAS-6P0934
	Plugs		
P6000~P6006	25056009		NPLG-4P0959
P6010,P6013	25056011		NPLG-6P0961
P6011,P6012	25056009		NPLG-4P0959
P6014~P6016	25056009		NPLG-4P0959
P6080~P6086	25055038		NPLG-2P29
P6931	25055701		NPLG-5P657
	Screws		
Q6090B~Q6092B	838430107		3TTB+10S(BC)
Q6100B~Q6102B	838430107		3TTB+10S(BC)
	Heat sinks		
Q6090A~Q6092A	27160486		RAD-155

DRIVER CIRCUIT PC BOARD (NAAF-7707-2A/2B)			
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
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-7708-2A/2B)			
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
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Labels		
F9501C	29361747		T2.5AL250V <T/A/R/K>
F9503C	29361769		T1.6AL250V <T/A/R/K>
THERMAL DETECTOR PC BOARD (NAETC-7714-2B)			
Except 120V model			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Thermistors		
R5652	4000153		PTH9M04BF222TS2F333
R5654	4000151		PTH9M04BD222TS2F333
	Socket		
JL9504B	25051088		NSCT-4P875
F/C DRIVER CIRCUIT PC BOARD (NAAF-7690-2A/2B/2C/2D/E)			
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
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Resistors		
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
	Screws		
Q5050B~P5052B	838430107		3TTB+10S(BC)
Q5080B~P5082B	838430107		3TTB+10S(BC)
	Heat sinks		
Q5050A~Q5052A	27160517		RAD-177
PRIMARY CIRCUIT PC BOARD (NAPS-7691-2A/2B/2C/2D/2E)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Transistor		
Q921	2215864,		KTC3199-GR,
	2212115,		2SC2458-GR,
	2213284 or		2SC1740S-R or
	2213285		2SC1740S-S
	Diodes		
D921~D924	22380260,		RL1N4003,
	22380032 or		1SR139-100 or
	22380035		GP104003E
D925	223163,		1SS133,
	223205 or		1SS270A or
	223222		WG713A
	Power transformer		
T902	2301716	!	NPT-1483D <D>
	2301663	!	NPT-1456DG <T/R/K>
	2301662	!	NPT-1456P <A>
	Capacitors		
C901	3500196S	!	RE275V-103M,IS
C902	3300030	!	DE1307E472M-KH, IS <T/R/K>
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	250113	!	SN5051<D/T/R>
F902A,F902B	25052133	!	NSCT-1P2031<T/A/R/K>
F903A,F903B	25052133	!	NSCT-1P2031
	AC outlet		
P902	25051126	!	NSCT-4P913 <D>
	25051125	!	NSCT-4P912 <T>
	25052115	!	NSCT-2P2013 <A>
	25052664	!	NSCT-2P2560 <R>
	Relay		
RL901	25065584 or	!	NRL-1P10A-DC12-140 or
	25065516	!	NRL-1P10A-DC12-097
	Switch		
S902	25065437	!	NSS-22157P <T/R/K>
	Socket		
JL931B	25050267		NSCT-3P95
	Fuse labels		
F901C	29362325		12A/250V <D/T/R>
F902C	29361938		T5AL250V <T/A/R/K>
F903C	29360462		5A/125V <D>

CIRCUIT NO.	PART NO.		DESCRIPTION
	Plugs		
P901A	25055675 or	!	NPLG-2P631 or
	25056028	!	NPLG-2P0978 <D/A>
P911	25055675 or		NPLG-2P631 or
	25056028		NPLG-2P0978
P912	25055675 or		NPLG-2P631 or
P912	25056028		NPLG-2P0978 <T/R/K>
	Tape		
RL901A	29110083		Cloth
BIAS SELECTOR PC BOARD (NAPS-7692-2A/2B/2C/2D/2E)			
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	250113	!	SN5051 <D>
	25052133	!	NSCT-1P2031 <T/A/R/K>
F6902A,F6902B	250113	!	SN5051 <D>
	25052133	!	NSCT-1P2031 <T/A/R/K>
	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	29362325		12A/250V <D>
F6902C	29362801		T10AL250V <T/A/R/K>
	Screws		
D6903B,D6904B	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)
	Tape		
D6903D	29110083		Cloth
RL6901A,RL6902	29110083		Cloth
POWER SWITCH PC BOARD (NASW-7693-2B/2D/2E)			
Except 120V and Australian models			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Switch		
S906	25035636	!	NPS-111-L590P
SPEAKER TERMINAL PC BOARD (NAETC-7694-2A/2B/2C/2D/2E)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Diode		
D6600	223163,		1SS133,
D6600	223205 or		1SS270A or
D6600	223222		WG713A

CIRCUIT NO.	PART NO.		DESCRIPTION
	Coils		
L6800~L6802	231176S		S-1.3C <T/A/R/K>
	Capacitors		
C6600	335621030		CK45F50V-103Z,Ceramic
C6830~C6832	374731034		ECQ-V100-103J,Plastic film
C6840~C6842	374731024		ECQ-B100V-102J,Plastic film <T/A/R/K>
C6850~C6852	335321025		CK45B50V-102K,Ceramic <T/A/R/K>
	Resistors		
R6800~R6802	417342204		R16J-22, Carbon <T/A/R/K>
R6810~R6812	417342204		R16J-22, Carbon <T/A/R/K>
R6830~R6832	453630824		RNU1WCJ-8.2, Metal
	Terminals		
P6800	25060357		NTM-6PDMN288 <D>
	25060358		NTM-6PDMN289 <T/A/R/K>
	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,RL6602A	29110083		Cloth
SURROUND SPEAKER TERMINAL PC BOARD (NAETC-7695-2A/2B/2C/2D/2E)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Diodes		
D6603,D6605	223163,		1SS133,
	223205 or		1SS270A or
	223222		WG713A
	Coils		
L6803~L6806	231176S		S-1.3C <T/A/R/K>
	Capacitors		
C6603,C6605	335621030		CK45F50V-103Z,Ceramic
C6833~C6836	374731034		ECQ-V100-103J,Plastic film
C6843~C6846	374731024		ECQ-B100V-102J,Plastic film <T/A/R>
C6853~C6856	335321025		CK45B50V-102K,Ceramic <T/A/R/K>
	Resistors		
R6803~R6806	417342204		R16J-22, Carbon <T/A/R/K>
R6813~R6816	417342204		R16J-22, Carbon <T/A/R/K>
R6833~R6836	453630824		RNU1WCJ-8.2, Metal
	Terminal		
P6802	25060353		NTM-8PDMN284 <D>
	25060354		NTM-8PDMN285 <T/A/R/K>
	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,RL6605A	29110083		Cloth
FAN DRIVE CIRCUIT PC BOARD (NAETC-7696-2A/2B/2C/2D/2E)			
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,

CIRCUIT NO.	PART NO.		DESCRIPTION
	Transistors		
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
	Resistors		
R5601,R6708	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,R6707	417341034		R16J-10K, Carbon
R5616	441721224F		RS2WBJ-1.2K,Metal oxide
R6705,R6710	417341834		R16J-18K, Carbon
R6707	417341034		R16J-10K, 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-7697-2B/2C/2D/2E)			
Except 120V model			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Thermistors		
R5651	4000153		PTH9M04BF222TS2F333
R5653	4000151		PTH9M04BD222TS2F333
	Socket		
JL6933B	25051088		NSCT-4P875
AC INLET PC BOARD (NAETC-7700-2B/2D/2E)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	AC inlet		
P901B	25055960	!	NPLG-2P913 <T/R/K>

MAIN CONNECTOR PC BOARD (NAAR-8078-1A/1B/1C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q2910,Q2913	22241383R2		NJM4565M-D <T/R/K>
Q2923	222780155JRC		78M15HF(NJM78M15FA)
Q2924	222790155JRC		79M15HF(NJM79M15FA)
Q2925	222780093JRCT		78L09(NJM78L09A)
Q2934	222780565JRC		78M56(NJM78M56FA)
	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
Q2909,Q2932	2213145R2		2SC2712-GR
Q2920	2216400R2		2SB1132
Q2931	2212855 or		2SB1068-U or
Q2931	2212853		2SB1068-K
Q2933,Q2935	2216190R2 or		KRC102S or
Q2933,Q2935	2214470R2		RN1402
	Diodes		
D2901~D2903	223234R2 or		1SS352 or
D2920	223269R2		1SS355
D2922,D2923	223234R2 or		1SS352 or
D2922,D2923	223269R2		1SS355
D2931,D2932	22380260 or		RL1N4003 or
D2931,D2932	22380035		GP104003E
D2933	224490560R2		UDZ5.6B
	Capacitors		
C2901	332161040R1		CK725F1E-104Z1, Ceramic
C2902~C2905	354741009		CE04W16V-10M,Elect.
C2906	332101025R1		CK725B1H-102K1,Ceramic
C2908	374722724		ECQ-B50V-272J,Plastic film <T/R/K>
C2910	332161040R1		CK725F1E-104Z1, Ceramic
C2916	374721224		ECQ-B50V-122J,Plastic film <T/R/K>
C2917,C2918	354741009		CE04W16V-10M,Elect. <T/R/K>
C2923~C2928	354761009		CE04W35V-10M,Elect.
C2931	394641027		CE04W16V-1000M(VR),Elect.
C2932	354741009		CE04W16V-10M,Elect.
	Resistors		
R2901~R2903	435031024R1		RN72K1J-102JE,Carbon
R2904	435030004R1		RN72K1J-000JE,Carbon <D/A>
R2905,R2906	435031034R1		RN72K1J-103JE,Carbon <T/R/K>
R2908	435031524R1		RN72K1J-152JE,Carbon <T/R/K>
R2912	453530474		RNU1/2WCJ-4.7, Metal
R2913	453530224		RNU1/2WCJ-2.2, Metal
R2914~R2916	435032234R1		RN72K1J-223JE,Carbon <T/R/K>
R2917,R2918	435031524R1		RN72K1J-152JE,Carbon <T/R/K>
R2919	435032234R1		RN72K1J-223JE,Carbon <T/R/K>
R2920,R2924	435031034R1		RN72K1J-103JE,Carbon
R2925,R2926	435031034R1		RN72K1J-103JE,Carbon
R2931	453530104		RNU1/2WCJ-1, Metal
R2932	435033324R1		RN72K1J-332JE,Carbon
R2933	443522204		RS1/2WBJ-22,Metal oxide
R2934,R2935	435032234R1		RN72K1J-223JE,Carbon
	Relay		
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Plugs		
P2855A	25055704		NPLG-8P660
P3010A,P3210A	25055703		NPLG-7P659
P3011A	25055711		NPLG-15P667
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
	Screw		
Q2934B	82143010		3P+10FN(BC)
COMPONENT VIDEO PC BOARD (NAVD-8079-1A/1B/1C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q2001	22241884R2		LC74761M-9848
Q2010	22241619R2		TC9273F-004
Q2101,Q2201	222740515R2		74HC4051AF
Q2102,Q2105	22241443R2		TK15420M
	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
	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 <T/A/R>
	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 <T/A/K>
C2004	342100802R1		CC725CH1H-080D1,Ceramic <T/A/K>
C2005~C2008	342104704R1		CC725CH1H-470J1,Ceramic
C2009	354780109		CE04W50V-1M,Elect.
C2010	354721019		CE04W6.3V-100M,Elect.
C2011	375524744		MMT50V-474J,Plastic film
C2012	354784799		CE04W50V-0.47M,Elect.
C2013,C2014	342102704R1		CC725CH1H-270J1,Ceramic
C2015	374722234		ECQ-B50V-223J,Plastic film
C2016	354780109		CE04W50V-1M,Elect.
C2017	374726824		ECQ-B50V-682J,Plastic film
C2018	354783399		CE04W50V-0.33M,Elect.
C2019	332101225R1		CK725B1H-122K1,Ceramic
C2020	332161040R1		CK725F1E-104Z1, Ceramic
C2021,C2022	354721019		CE04W6.3V-100M,Elect.
C2023	342104704R1		CC725CH1H-470J1,Ceramic
C2024,C2026	354741009		CE04W16V-10M,Elect.
C2025,C2027	332161040R1		CK725F1E-104Z1, Ceramic
C2028	354741009		CE04W16V-10M,Elect.

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
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	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
R2047~R2050	435031044R1		RN72K1J-104JE,Carbon
R2052,R2224	435032224R1		RN72K1J-222JE,Carbon
R2053,R2054	435031044R1		RN72K1J-104JE,Carbon
R2101,R2121	435031014R1		RN72K1J-101JE,Carbon
R2102,R2202	435031034R1		RN72K1J-103JE,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
R2203,R2204	435031824R1		RN72K1J-182JE,Carbon
R2206,R2226	435032214R1		RN72K1J-221JE,Carbon
R2220,R2321	435031514R1		RN72K1J-151JE,Carbon
R2222	435031034R1		RN72K1J-103JE,Carbon
R2223	435031824R1		RN72K1J-182JE,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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Terminals		
P2001~P2003	25045299		NPJ-3PDYE158 <D/A>
	25045363		NPJ-3PDYE208 <T/R>
	Sockets		
P2005B	25051238		NSCT-13P1028
P2006B	25051528		NSCT-17P1315
P2007B	25051530		NSCT-19P1317
CONTROL TERMINAL PC BOARD (NAETC-8083-1A/1B/1C)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q201	22241537R2		MPD4721GS <T/R>
Q233	222780565		78M56
	Photo coupler		
Q211	24120080		PC817X
	Transistors		
Q231,Q232	2213145R2 or		2SC2712-GR or
	2216175R2		KTC3875-GR
Q2911	2216190R2 or		KRC102S or
Q2921,Q2922	2214470R2		RN1402
Q2912	2212855 or		2SB1068-U or
	2212853		2SB1068-K
	Diodes		
D201~D203	223234R2 or		1SS352 or
	223269R2		1SS355
	Coil		
L201	230948R2		BLM21A102F <T/R>
	Capacitors		
C201~C204	354780109		CE04W50V-1M,Elect. <T/R>
C205,C225	332161040R1		CK725F1E-104Z1, Ceramic
C206	332161040R1		CK725F1E-104Z1, Ceramic <T/R>
C207	354721019		CE04W6.3V-100M,Elect. <T/R>
C223	354744709		CE04W16V-47M,Elect.
C231	354741009		CE04W16V-10M,Elect.
C232	354751029S		CE04W25V-1000M,Elect.
C233	332161040R1		CK725F1E-104Z1, Ceramic
C2921	354721019		CE04W6.3V-100M,Elect.
C2922	374722234		ECQ-B50V-223J,Plastic film
	Resistors		
R201,R203	435033314R1		RN72K1J-331JE,Carbon <T/R>
R205,R208	435033314R1		RN72K1J-331JE,Carbon <T/R>
R211	435031014R1		RN72K1J-101JE,Carbon
R212	435032214R1		RN72K1J-221JE,Carbon
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 <T/R>
P202	25045647		HSJ1002-01-1020
P204	25045647		HSJ1002-01-1020
	Sockets		
JL931A	25051107		NSCT-3P894
P2901B	25051826		NSCT-19P1613
P6830B,P6832B	25051255		NSCT-3P1045
	Plug		
P2906	25055701		NPLG-5P657 <D/A>
	Radiator		
Q233A	27160145		RAD-51
	Screw		
Q233B	82143010		3P+10FN(BC)

THERMAL DETECTOR PC BOARD (NAETC-8085-1A)			
120V model only			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Thermistors		
R5651	4000217		PTFL04BF471Q2N34B0 (80)
R5653	4000220		PTFL04BC471Q2N34B0 (110)
	Plug		
P6933B	25055625		NPLG-4P587
	Shield case		
P5651	27225154		(THERMISTOR)
THERMAL DETECTOR PC BOARD (NAETC-8086-1A)			
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-8069-1A/1B/1C/1D)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q2451	22241849R2		MM1512
Q2501,Q2511	222740515R2		74HC4051AF
Q2502,Q2602	22241443R2		TK15420M
Q2601,Q2611	222740515R2		74HC4051AF
Q2701	22241443R2		TK15420M
Q2751	22241850R2		TC90A69F
Q2752	22241858R2		MM1093NF
Q2753	22241998R2		MM1093PF <T/A/R/K>
	Transistors		
Q2401~Q2405	2216031R2 or		RN1444-A or
Q2407~Q2414	2216032R2		RN1444-B
Q2503,Q2505	2216175R2 or		KTC3875-GR or
Q2721,Q2731	2213145R2		2SC2712-GR
Q2504,Q2506	2216185R2 or		KTA1504-GR or
Q2407~Q2414	2214375R2		2SA1162-GR
Q2742	2216175R2 or		KTC3875-GR or
	2213145R2		2SC2712-GR
Q2756,Q2757	2216031R2 or		RN1444-A or
	2216032R2		RN1444-B <T/A/R/K>
	Diodes		
D2503~D2506	223234R2 or		1SS352 or
	223269R2		1SS355
	Oscillators		
X2751	3010369		HC-49/U033.579545M
X2752	3010381		HC-49/U034.433619M
	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 <T/A/R/K>
	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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Capacitors		
C2504,C2506	354721019		CE04W6.3V-100M,Elect.
C2505,C2574	332161040R1		CK725F1E-104Z1, Ceramic
C2511,C2512	332161040R1		CK725F1E-104Z1, Ceramic
C2573,C2575	354721019		CE04W6.3V-100M,Elect.
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,C2754	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.
C2756,C2768	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
C2769,C2780	354721019		CE04W6.3V-100M,Elect.
C2770	332151030R1		CK725F1H-103Z1,Ceramic
C2772	342115614R1		CC725CH1E-561J1,Ceramic
C2773	342103914R1		CC725CH1H-391J1,Ceramic
C2774	342105604R1		CC725CH1H-560J1,Ceramic <T/A/R/K>
C2774	342115614R1		CC725CH1E-561J1,Ceramic <D>
C2775,C2777	332151030R1		CK725F1H-103Z1,Ceramic
C2776	354780479		CE04W50V-4.7M,Elect.
C2778	342105604R1		CC725CH1H-560J1,Ceramic
C2779	354780229		CE04W50V-2.2M,Elect.
C2781	332161040R1		CK725F1E-104Z1, Ceramic
C2782,C2787	332151030R1		CK725F1H-103Z1,Ceramic <T/A/R/K>
C2783	354784799		CE04W50V-0.47M,Elect. <T/A/R/K>
C2784	342115614R1		CC725CH1E-561J1,Ceramic <T/A/R/K>
C2785	342103914R1		CC725CH1H-391J1,Ceramic <T/A/R/K>
C2786,C2790	342105604R1		CC725CH1H-560J1,Ceramic <T/A/R/K>
C2788	354780479		CE04W50V-4.7M,Elect. <T/A/R/K>
C2789,C2792	332151030R1		CK725F1H-103Z1,Ceramic <T/A/R/K>
C2791	354780229		CE04W50V-2.2M,Elect. <T/A/R/K>
C2793	354721019		CE04W6.3V-100M,Elect. <T/A/R/K>
C2794	332161040R1		CK725F1E-104Z1, Ceramic <T/A/R/K>
	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~R2428	435037504R1		RN72K1J-750JE,Carbon
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

CIRCUIT NO.	PART NO.		DESCRIPTION
	Resistors		
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	435032724R1		RN72K1J-272JE,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 <T/A/R/K>
R2763	435031054R1		RN72K1J-105JE,Carbon <T/A/R/K>
R2764	435031534R1		RN72K1J-153JE,Carbon <T/A/R/K>
R2766,R2767	435031034R1		RN72K1J-103JE,Carbon <T/A/R/K>
R2768	435030004R1		RN72K1J-000JE,Carbon <T/A/R/K>
R2769,R2773	435031044R1		RN72K1J-104JE,Carbon <T/A/R/K>
R2771	435030004R1		RN72K1J-000JE,Carbon
R2772	435030004R1		RN72K1J-000JE,Carbon <D>
	Sockets		
P2501	25051750		NSCT-4P1537 <D/A>
	25051955		NSCT-4P1742 <T/R/K>
P2502	25051568		NSCT-12P1355 <D/A>
	25051957		NSCT-12P1744 <T/R/K>
P2503,P2504	25051748		NSCT-8P1535 <D/A>
	25051956		NSCT-8P1743 <T/R/K>
P2505B	25051530		NSCT-19P1317
P2507B	25051241		NSCT-20P1031
	Plug		
P2506A	25055236		NPLG-5P220
COMPONENT VIDEO PC BOARD (NAVD-8070-1A/1B/1C/1D)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	ICs		
Q2801	22241465R2		LA7106MFP
Q2821	22241851R3		TA1270BF
Q2822	22241999		TA8772AN <T/A/R/K>
	Transistors		
Q2803,Q2804	2216330R2 or		KRC101S or
	2214460R2		RN1401
Q2823	2216175R2 or		KTC3875-GR or
	2213145R2		2SC2712-GR
Q2824	2216175R2 or		KTC3875-GR or
	2213145R2		2SC2712-GR <T/A/R/K>
Q2825,Q2826	2216330R2 or		KRC101S or
	2214460R2		RN1401 <T/A/R>
	Diodes		
D2801~D2804	223234R2 or		1SS352 or
	223269R2		1SS355

CIRCUIT NO.	PART NO.		DESCRIPTION
	Oscillators		
X2821	3010370		CSBLA503KECZF30,Ceramic
X2822	3010369		HC-49/U033.579545M
X2823	3010381		HC-49/U034.433619M <T/A/R/K>
	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 <T/A/R/K>
C2838,C2839	332161040R1		CK725F1E-104Z1, Ceramic <T/A/R/K>
C2840,C2847	354744709		CE04W16V-47M,Elect. <T/A/R/K>
C2841,C2842	332161040R1		CK725F1E-104Z1, Ceramic <T/A/R/K>
C2843	354741009		CE04W16V-10M,Elect. <T/A/R/K>
C2844,C2846	332161040R1		CK725F1E-104Z1, Ceramic <T/A/R/K>
C2845,C2848	354784799		CE04W50V-0.47M,Elect. <T/A/R/K>
C2849~C2851	354780109		CE04W50V-1M,Elect. <T/A/R/K>
C2852~C2857	332161040R1		CK725F1E-104Z1, Ceramic <T/A/R/K>
	Resistors		
R2811~R2813	435031014R1		RN72K1J-101JE,Carbon
R2814~R2816	435037504R1		RN72K1J-750JE,Carbon
R2822,R2823	435031014R1		RN72K1J-101JE,Carbon
R2824,R2825	435031814R1		RN72K1J-181JE,Carbon
R2826	435033324R1		RN72K1J-332JE,Carbon
R2827,R2828	435033334R1		RN72K1J-333JE,Carbon
R2829	435033344R1		RN72K1J-334JE,Carbon
R2830	435031814R1		RN72K1J-181JE,Carbon
R2831~R2834	435031034R1		RN72K1J-103JE,Carbon
R2835~R2839	435031024R1		RN72K1J-102JE,Carbon <T/A/R/K>
R2840,R2842	435031034R1		RN72K1J-103JE,Carbon <T/A/R/K>
R2841	435031024R1		RN72K1J-102JE,Carbon <T/A/R/K>
R2843,R2844	435030004R1		RN72K1J-000JE,Carbon <D>
R2845~R2848	435031514R1		RN72K1J-151JE,Carbon
R2849,R2850	435030004R1		RN72K1J-000JE,Carbon
	Terminals		
P2801~P2803	25045629		NPJ-3PDGLR436 <D/A>
	25045607		NPJ-3PDGLR414 <T/R/K>
	Relays		
RL2801~RL2804	25065610		NRL-2P1A-DC4.5-156
	Sockets		
P2705B	25051526		NSCT-4P1313
P2853B	25051230		NSCT-5P1020
P2855B	25051233		NSCT-8P1023
CONNECTOR PC BOARD (NAETC-8073-1A/1B/1C/1D)			
CIRCUIT NO.	**PART NO.**		**DESCRIPTION**
	Plugs		
P2853A	25055701		NPLG-5P657
P2007A	25055808		NPLG-19P764
P2507A	25055712		NPLG-20P668

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: <B>: Black model only <G>: Golden model only
<D>: 120V model only <A>:Australian model only
<T>: Worldwide model only <R>: Chinese model only
<K>: Korean model only

REF. NO.	PART NO.		DESCRIPTION
1	27111236D		Front bracket <B>
	27111238D		Front bracket <G>
2	27191153B		Holder HP
3	28133385		Back plate <B>
	28133386		Back plate <G>
4	28135244		Badge <B>
	28135245		Badge <G>
5	27130745		Bracket
6	27130869		Bracket, heatsink
7	27130870A		Bracket PT
8	27141876-1		Bracket, cover
9	27300750	!	Bushing, cord <D/A>
11	27100408-1B		Chassis
12	28191936		Clear plate
13	27255004		CS-1U,Clip
14	28184870A		Top cover <B>
	28184876 or		Top cover
	28184888		Top cover <G>
15	28141467		Cushion
16	28141484		Cushion
17	28141494		Cushion
18	28141511		t1.0*5*5,Cushion
19	28141546		Cushion DG
20	28141547		Cushion PI
21	28141548		Cushion CH
22	28141562		t5*30*5,Cushion
23	28141563		t3*50*10,Cushion
25	28141567		t6*50*10,Cushion
28	27141828		Retainer B
29	27301947		Damper
31	28148551		Door <B>
	28148553		Door <G> <A>
	28148554		Door <G> <T/R/K>
32	27212547		Front panel <B>
	27212550		Front panel <G> <A>
	27212549		Front panel <G> <T/R/K>
34	28198905		Facet
35	28198933		Facet 5
36	28198936		Facet 6
37	27301946		Gear
38	27268050		Guide, pure <B>
	27268052		Guide, pure <G>
39	27160489A		Heatsink
40	28180156		Hinge L <B>
	28180157		Hinge L <G>
41	28180158		Hinge R <B>
	28180159		Hinge R <G>
42	27191173		Holder L <B>
	27191174		Holder L <G>
43	27191175		Holder R <B>
	27191176		Holder R <G>
44	27190965		Holder
45	27190693A		KGLS-6RT,Holder
46	27190266		KGLS-12RT,Holder

REF. NO.	PART NO.		DESCRIPTION
47	27190164		KGLS-14S,Holder
48	27191112		KGPS-6RF,Holder
49	27190470		KGLS-18S,Holder
50	27191130	!	Holder, outlet <R>
52	28325948		Konb, pure <B>
	28325949		Konb, pure <G>
53	28325898		Knob, volume <B>
	28325900		Knob, volume <G>
54	28325499A		Knob, power
57	29362772		Label, cover
58	29363509		Label, display
59	29363408-1		Label PT
60	27175319B		Leg
61	880016		P3035B,Plastic rivet
62	27262680		Plate, door <B>
	27262682		Plate, door <G>
63	27230047		Push latch
64	27123152		Rear panel <D>
	27123154		Rear panel <A>
	27123155		Rear panel <R>
	27123153		Rear panel <T>
	27123252		Rear panel <K>
66	27141797		Retainer, fan
67	27141798		Retainer R
68	27141799		Retainer L
69	27141681		Retainer PWB
70	801433		3SMS8W.SW+14B(BC),Special screw
71	838440089		4TTB+8C(BC),Self-tapping screw <B>
	838240089		4TTB+8C(NI),Steel screw <G>
72	801606		3SMH10W.SW+15B(CU),Special screw
73	801608		TRX M4x8, Truss screw <B>
	801609		TRX M4x8, Truss screw <G>
74	801612		3TTB+8B(CU),Self-tapping screw
76	82143010		3P+10FN(BC),Pan head screw <T/R/K>
77	830440089		4TTC+8C(BC),Self-tapping screw
78	831430088		3TTW+8B(BC),Self-tapping screw
79	838120088		2TTB+8B,Self-tapping screw
80	838430088		3TTB+8B(BC),Self-tapping screw
81	838430088		3TTB+8B(BC),Self-tapping screw <B>
	838930088		3TTB+8B(UN),Self-tapping screw <G>
82	838430107		3TTB+10S(BC),Self-tapping screw
83	838440089		4TTB+8C(BC),Self-tapping screw <T/R/K>
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
88	27150474		Shield plate, wire
89	27150485		Shield plate
90	27150470		Shield plate, fan
91	27270438		t0.5xϕ8xϕ3.2,Spacer
92	29110083		Tape, cloth
93	87763006		W3X6B,Washer
94	87643010		W3*10F(BC),Washer
95	260258		Wire tie
96	260208		Wire tie
97	8631901		N-9F(P 0.75),Nut
98	2061112100UL		Cord ass'y
99	223025		AC262,Isolated plate
100	24502310		D09T-24PG10(EX),Fan
103	29363194		Label, hookup <D>
108	29363264		Label MAC
F6901,F6902	252196	!	12A-UL/T-314,Fuse <D>
	252100	!	10A-EAK,Fuse <T/A/R/K>
F901	252196	!	12A-UL/T-314,Fuse <D/T/R>

REF. NO.	PART NO.		DESCRIPTION
F902	252078	!	5A-SE-EAK,
	252244 or	!	5A-SE-TL250V or
	252278	!	5A-SE-TL250V, Fuse <T/A/R/K>
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 <T/A/R/K>
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 <T/A/R/K>
F9501A	29363313	!	T2.5AL1.6AL250V,Label,fuse <T/A/R/K>
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 <T/A/R/K>
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
P603C	79012		Tube UL
P6205	27141826		Retainer, bus
P7201	2047312512		NCFC7-312512,Flat cable
P7701	2047051012		NCFC7-051012,Flat cable
P901	253347VOL	!	AS-UC-2,Power supply cord <D>
	253307VOL or	!	AS-SAA or
	253197HIT	!	AS-SAA,Power supply cord <A>
Q6050~Q605	2203083 or	*	2SC5359-O or
	2203082	*	2SC5359-R,Transistor
Q6060~Q606	2203073 or	*	2SA1987-O or
	2203072	*	2SA1987-R,Transistor
T901	2301714	!	NPT-1481D,Power transformer <D>
	2301650	!	NPT-1453P,Power transformer <A>
	2301651	!	NPT-1453DG,Power transformer <T/R/K>
U1	1A996538-2A		NADIS-7738-2A,Display circuit PC board ass'y <D>
	1A996538-2B		NADIS-7738-2B,Display circuit PC board ass'y <T/R>
	1A996538-2C		NADIS-7738-2C,Display circuit PC board ass'y <A/K>
U3	1A996539-2A		NAETC-7739-2A,Master volume PC board ass'y <D>
	1A996539-2B		NAETC-7739-2B,Master volume PC board ass'y <T/R>
	1A996539-2C		NAETC-7739-2C,Master volume PC board ass'y <A/K>
U4	1A996540-2A		NAETC-7740-2A,Headphone terminal PC board ass'y <D>
	1A996540-2B		NAETC-7740-2B,Headphone terminal PC board ass'y <T/R>
	1A996540-2C		NAETC-7740-2C,Headphone terminal PC board ass'y <A/K>
U5	1A996541-2A		NAETC-7741-2A,Front video PC board ass'y <D>
	1A996541-2B		NAETC-7741-2B,Front video PC board ass'y <T/R>
	1A996541-2C		NAETC-7741-2C,Front video PC board ass'y <A/K>
U6	1A996542-2A		NAETC-7742-2A,Optical input PC board ass'y <D>
	1A996542-2B		NAETC-7742-2B,Optical input PC board ass'y <T/R>
	1A996542-2C		NAETC-7742-2C,Optical input PC board ass'y <A/K>
U7	1A996587-2A		NADG-7687-2A,DSP circuit PC board ass'y <D/A>
	1A996587-2B		NADG-7687-2B,DSP circuit PC board ass'y <R/T/K>
U8	1A996562-3		NADG-7662-3,Net-tune PC board ass'y
U11	1A996518-2A		NAAF-7718-2A,Pre amplifier PC board ass'y <D/A>
	1A996518-2B		NAAF-7718-2B,Pre amplifier PC board ass'y <R/T/K>
U12	1A996519-2A		NAAF-7719-2A,Audio terminal PC board ass'y <D/A>
	1A996519-2B		NAAF-7719-2B,Audio terminal PC board ass'y <R/T/K>
U13	1A996520-2A		NAAF-7720-2A,Video terminal PC board ass'y <D/A>
	1A996520-2B		NAAF-7720-2B,Video terminal PC board ass'y <R/T/K>
U21	1A996506-2A		NAAF-7706-2A,Power amplifier PC board ass'y <D>
	1A996506-2B		NAAF-7706-2B,Power amplifier PC board ass'y <A/R/T/K>
U22	1A996507-2A		NAAF-7707-2A,Driver circuit PC board ass'y <D>
	1A996507-2B		NAAF-7707-2B,Driver circuit PC board ass'y <A/R/T/K>

REF. NO.	PART NO.		DESCRIPTION
U23	1A996508-2A		NAPS-7708-2A,Constant voltage PC board ass'y <D>
	1A996508-2B		NAPS-7708-2B,Constant voltage PC board ass'y <A/R/T/K>
U24	1A996514-2B		NAETC-7714-2B,Thermal detector PC board ass'y <A/R/T/K>
U26	1A996590-2A		NAAF-7690-2A,F/C driver circuit PC board ass'y <D>
	1A996590-2B		NAAF-7690-2B,F/C driver circuit PC board ass'y <T>
	1A996590-2C		NAAF-7690-2C,F/C driver circuit PC board ass'y <A>
	1A996590-2D		NAAF-7690-2D,F/C driver circuit PC board ass'y <R>
	1A996590-2E		NAAF-7690-2E,F/C driver circuit PC board ass'y <K>
U27	1A996591-2A		NAPS-7691-2A,Primary circuit PC board ass'y <D>
	1A996591-2B		NAPS-7691-2B,Primary circuit PC board ass'y <T>
	1A996591-2C		NAPS-7691-2C,Primary circuit PC board ass'y <A>
	1A996591-2D		NAPS-7691-2D,Primary circuit PC board ass'y <R>
	1A996591-2E		NAPS-7691-2E,Primary circuit PC board ass'y <K>
U28	1A996592-2A		NAPS-7692-2A,Bias selector PC board ass'y <D>
	1A996592-2B		NAPS-7692-2B,Bias selector PC board ass'y <T>
	1A996592-2C		NAPS-7692-2C,Bias selector PC board ass'y <A>
	1A996592-2D		NAPS-7692-2D,Bias selector PC board ass'y <R>
	1A996592-2E		NAPS-7692-2E,Bias selector PC board ass'y <K>
U29	1A996593-2B		NASW-7693-2B,Power switch PC board ass'y <T>
	1A996593-2D		NASW-7693-2D,Power switch PC board ass'y <R>
	1A996593-2E		NASW-7693-2E,Power switch PC board ass'y <K>
U30	1A996594-2A		NAETC-7694-2A,Speaker terminal PC board ass'y <D>
	1A996594-2B		NAETC-7694-2B,Speaker terminal PC board ass'y <T>
	1A996594-2C		NAETC-7694-2C,Speaker terminal PC board ass'y <A>
	1A996594-2D		NAETC-7694-2D,Speaker terminal PC board ass'y <R>
	1A996594-2E		NAETC-7694-2E,Speaker terminal PC board ass'y <K>
U31	1A996595-2A		NAETC-7695-2A,Surround speaker terminal PC board ass'y <D>
	1A996595-2B		NAETC-7695-2B,Surround speaker terminal PC board ass'y <T>
	1A996595-2C		NAETC-7695-2C,Surround speaker terminal PC board ass'y <A>
	1A996595-2D		NAETC-7695-2D,Surround speaker terminal PC board ass'y <R>
	1A996595-2E		NAETC-7695-2E,Surround speaker terminal PC board ass'y <K>
U32	1A996596-2A		NAETC-7696-2A,Fan drive circuit PC board ass'y <D>
	1A996596-2B		NAETC-7696-2B,Fan drive circuit PC board ass'y <T>
	1A996596-2C		NAETC-7696-2C,Fan drive circuit PC board ass'y <A>
	1A996596-2D		NAETC-7696-2D,Fan drive circuit PC board ass'y <R>
	1A996596-2E		NAETC-7696-2D,Fan drive circuit PC board ass'y <K>
U33	1A996597-2B		NAETC-7697-2B,Thermal detector PC board ass'y <T>
	1A996597-2C		NAETC-7697-2C,Thermal detector PC board ass'y <A>
	1A996597-2D		NAETC-7697-2D,Thermal detector PC board ass'y <R>
	1A996597-2E		NAETC-7697-2E,Thermal detector PC board ass'y <K>
U34	1A996599-2B		NAETC-7699-2B,PC board for holder <T>
	1A996599-2C		NAETC-7699-2C,PC board for holder <A>
	1A996599-2D		NAETC-7699-2D,PC board for holder <R>
	1A996599-2E		NAETC-7699-2E,PC board for holder <K>
U35	1A996500-2B		NAETC-7700-2B,AC inlet PC board ass'y <T>
	1A996500-2D		NAETC-7700-2D,AC inlet PC board ass'y <R>
	1A996500-2E		NAETC-7700-2E,AC inlet PC board ass'y <K>
U36	1A996501-2B		NAETC-7701-2B,PC board for holder <T>
	1A996501-2C		NAETC-7701-2C,PC board for holder <A>
	1A996501-2D		NAETC-7701-2D,PC board for holder <R>
	1A996501-2E		NAETC-7701-2E,PC board for holder <K>
U37	1A996502-2A		NAETC-7702-2A,PC board for holder <D>
	1A996502-2B		NAETC-7702-2B,PC board for holder <T>
	1A996502-2C		NAETC-7702-2C,PC board for holder <A>
	1A996502-2D		NAETC-7702-2D,PC board for holder <R>
	1A996502-2E		NAETC-7702-2E,PC board for holder <K>
U41	1A996578-1A		NAAR-8078-1A,Main connector PC board ass'y <D>
	1A996578-1B		NAAR-8078-1B,Main connector PC board ass'y <T/R/K>
	1A996578-1C		NAAR-8078-1C,Main connector PC board ass'y <A>
U42	1A996579-1A		NAVD-8079-1A,Composite video PC board ass'y <D>
	1A996579-1B		NAVD-8079-1B,Composite video PC board ass'y <T/R/K>
	1A996579-1C		NAVD-8079-1C,Composite video PC board ass'y <A>
U45	1A996583-1A		NAETC-8083-1A,Control terminal PC board ass'y <D>
	1A996583-1B		NAETC-8083-1B,Control terminal PC board ass'y <T/R/K>
	1A996583-1C		NAETC-8083-1C,Control terminal PC board ass'y <A>
U47	1A996585-1A		NAETC-8085-1A,Thermal detector PC board ass'y <D>

REF. NO.	PART NO.		DESCRIPTION
U48	1A996586-1A		NAETC-8086-1A,Thermal detector PC board ass'y <D>
U51	1A996569-1A		NAVD-8069-1A,S video PC board ass'y <D>
	1A996569-1B		NAVD-8069-1B,S video PC board ass'y <T/K>
	1A996569-1C		NAVD-8069-1C,S video PC board ass'y <A>
	1A996569-1D		NAVD-8069-1D,S video PC board ass'y <R>
U52	1A996570-1A		NAVD-8070-1A,Component video PC board ass'y <D>
	1A996570-1B		NAVD-8070-1B,Component video PC board ass'y <T/K>
	1A996570-1C		NAVD-8070-1C,Component video PC board ass'y <A>
	1A996570-1D		NAVD-8070-1D,Component video PC board ass'y <R>
U55	1A996573-1A		NAETC-8073-1A,Connector PC board ass'y <D>
	1A996573-1B		NAETC-8073-1B,Connector PC board ass'y <T/K>
	1A996573-1C		NAETC-8073-1C,Connector PC board ass'y <A>
	1A996573-1D		NAETC-8073-1D,Connector PC board ass'y <R>
U61	240146,		FAE385-A02F,
	240138A or		ENG06501QR or
	240134A		TFCE1U114B, Tuner pack <D>
	240147,		FAE485-E02F,
	240139A or		ENG07501QR or
	240135		TFCE1E512A,Tuner pack <T/A/R/K>

PACKING-PARTS LIST

REF. NO.	PART NO.		DESCRIPTION
121	29100153		1020x770,Polybag
122	29054101		Carton box <B>
	29054104		Carton box <G> <A>
	29054103		Carton box <G> <T/R>
123	29363507		Label UPC <D/C>
	29363505		Label EAN <B> <A>
	29363506		Label EAN <G>
125	29092125B		Pad
126	29100217		t0.1*70*100,Poly bag
127	29100097-1A		350*250,Poly bag
128	29110148		Tape PP
129	29095906		Protection sheet
130	29110149		Tape, cellophane
131	29363059A		Label, speaker cable
132	29355450		Instruction sheet, caution
133	29343573		Instruction manual E
134	29343574		Instruction manual FrEs <C>
	29343575		Instruction manual CtCs <T/R>
136	29343577		Instruction manual, digist <D>
137	232140		NMA-3057,AM loop anrtenna
138	292191		FM antenna
139	25065462		YAE21-0237,FM antenna adaptor <T/A/R/K>
140	25056005		CV-K-1,Conversion plug <T/K>
141	29365090A		Warranty card <D>
143	29343590A		Instruction manual E, net-tune
144	29343591		Instruction manual FrEs, net-tune <C>
	29343592A		Instruction manual CtCs, net-tune <T/R>
146	3010054		R6/AA(UM-3),Battery
151	24140549		RC-549M,Remote controller <D/A/C>
	24140548		RC-548M,Remote controller <T/R/K>
P901	253358VOL	!	AS-CCC,Power supply cord <R>
	253298KAW	!	AS-CEE-3,Power supply cord <T/K>

NOTE: <B>: Black model only <G>: Golden model only
<D>: 120V model only <A>:Australian model only <K>: Korean model only
<T>: Worldwide model only <R>: Chinese model only <C>: Canadian model only

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