

# Service Manual

ORDER NO.  
RRV1797

AUDIO/VIDEO STEREO RECEIVER

# VSX-D466S

●Refer to the service manual RRV1713 for VSX-D506S/KUXJI.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type  | Model     | Power Requirement | Remarks |
|-------|-----------|-------------------|---------|
|       | VSX-D466S |                   |         |
| KUXJI | ○         | AC120V            |         |

# 1. CONTRAST OF MISCELLANEOUS PARTS

- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - Ref. No.: Numbers following P and hyphen (-) indicate the page(s) and location number(s) in the RRV1713 service manual, respectively.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.
- Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560  $\Omega$   $\rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/4PU  $\boxed{5}\boxed{6}\boxed{1}$  J  
 47 k $\Omega$   $\rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PU  $\boxed{4}\boxed{7}\boxed{3}$  J  
 0.5  $\Omega$   $\rightarrow R50$  ..... RN2H  $\boxed{R}\boxed{5}\boxed{0}$  K  
 1  $\Omega$   $\rightarrow 1R0$  ..... RS1P  $\boxed{1}\boxed{R}\boxed{0}$  K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 k $\Omega$   $\rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC  $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$  F

## ■ CONTRAST OF VSX-D466S/KUXJI

VSX-D466S/KUXJI and VSX-D506S/KUXJI have the same construction except for the following:

| Ref. No. | Mark | Symbol and Description              | Part No.  |           | Remarks |
|----------|------|-------------------------------------|-----------|-----------|---------|
|          |      |                                     | VSX-D506S | VSX-D466S |         |
|          |      |                                     | KUXJI     | KUXJI     |         |
| P3-1     | NSP  | <b>PACKING</b>                      |           |           |         |
| P3-1     | NSP  | Alkaline Dry Cell Battery (LR6, AA) | AEX1007   | Not used  |         |
| P3-3     |      | Dry Cell Battery (LR03, AAA)        | Not used  | PEM1005   |         |
| P3-4     |      | Operating Instructions (English)    | ARB7091   | ARB7120   |         |
| P3-9     |      | Sub Instruction Manual (English)    | ARH7015   | Not used  |         |
| P3-9     |      | Remote Control Unit (CU-VSX115)     | AXD7124   | Not used  |         |
| P3-9     |      | Remote Control Unit (CU-VSX114)     | Not used  | AXD7116   |         |
| P3-12    |      | Packing Case                        | AHD7357   | AHD7473   |         |
| P3-15    |      | Battery Cover                       | AZN7327   | AZN2256   |         |
| P6-23    |      | <b>EXTERIOR</b>                     |           |           |         |
|          |      | Rear Panel                          | ANC7479   | ANC7586   |         |
| P7-13    | NSP  | <b>FRONT PANEL SECTION</b>          |           |           |         |
| P7-13    |      | FRONT & R/C AMP ASSY                | AWK7342   | AWK7405   |         |
| P7-13    |      | FL/U-COM ASSY                       | AWZ8610   | AWZ8872   |         |
| P7-13    |      | Front Panel                         | AMB7390   | AMB7447   |         |

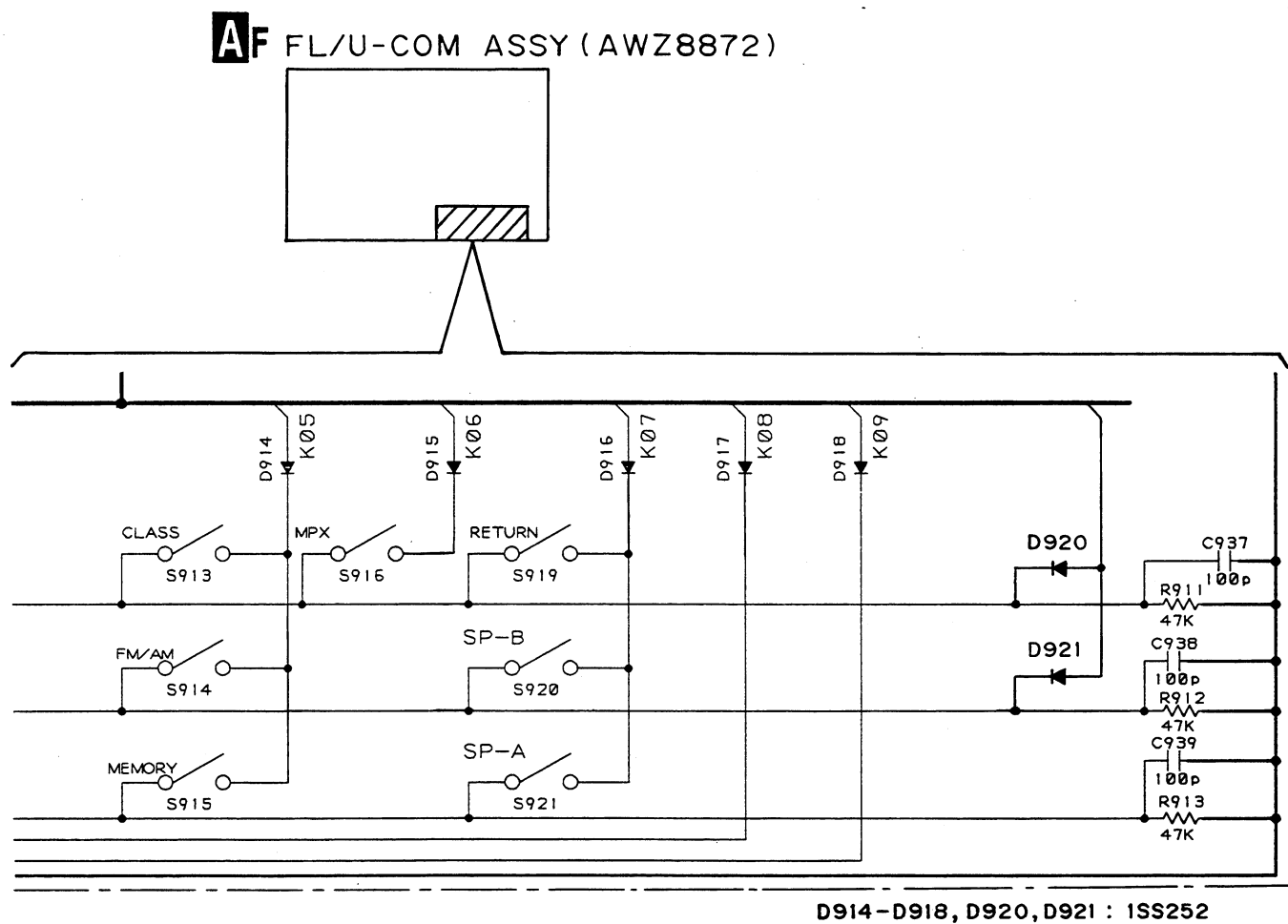
## FL/U-COM ASSY

AWZ8872 and AWZ8610 have the same construction except for the following:

| Mark | Symbol and Description | Part No. |         | Remarks |
|------|------------------------|----------|---------|---------|
|      |                        | AWZ8610  | AWZ8872 |         |
| D921 |                        | Not used | 1SS252  |         |

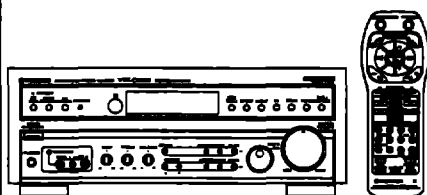
## 2. SCHEMATIC DIAGRAM

### 2.1 FL/U-COM ASSY



# Service Manual

**PIONEER**  
The Art of Entertainment



ORDER NO.  
RRV1713

AUDIO/VIDEO STEREO RECEIVER

# VSX-D506S

## VSX-456

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type   | Model     |         | Power Requirement | Remarks |
|--------|-----------|---------|-------------------|---------|
|        | VSX-D506S | VSX-456 |                   |         |
| KUXJ I | ○         | ○       | AC120V            |         |
| KCXJ I | ○         | ○       | AC120V            |         |

## CONTENTS

|                                        |    |                                          |    |
|----------------------------------------|----|------------------------------------------|----|
| 1. SAFETY INFORMATION .....            | 2  | 7. GENERAL INFORMATION .....             | 52 |
| 2. EXPLODED VIEWS AND PARTS LIST ..... | 3  | 7.1 PARTS .....                          | 52 |
| 3. SCHEMATIC DIAGRAM .....             | 8  | 7.1.1 IC .....                           | 52 |
| 4. PCB CONNECTION DIAGRAM .....        | 28 | 7.1.2 DISPLAY .....                      | 58 |
| 5. PCB PARTS LIST .....                | 41 | 7.2 BLOCK DIAGRAM .....                  | 60 |
| 6. ADJUSTMENT .....                    | 50 | 7.3 REMOTE CONTROL UNIT .....            | 61 |
|                                        |    | 8. PANEL FACILITIES AND SPECIFICATIONS . | 65 |

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## 1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

### WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

### NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

### REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

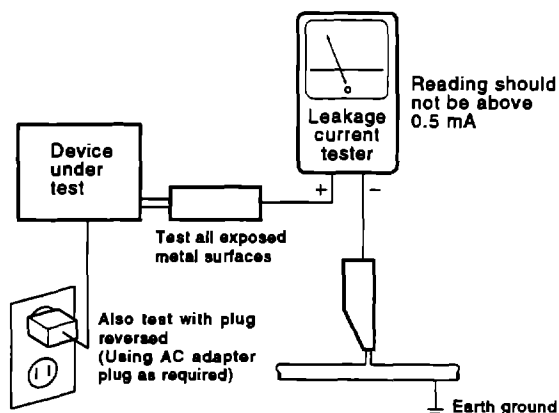
### (FOR USA MODEL ONLY)

#### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

#### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\triangle$  on the schematics and on the parts list in this Service Manual.

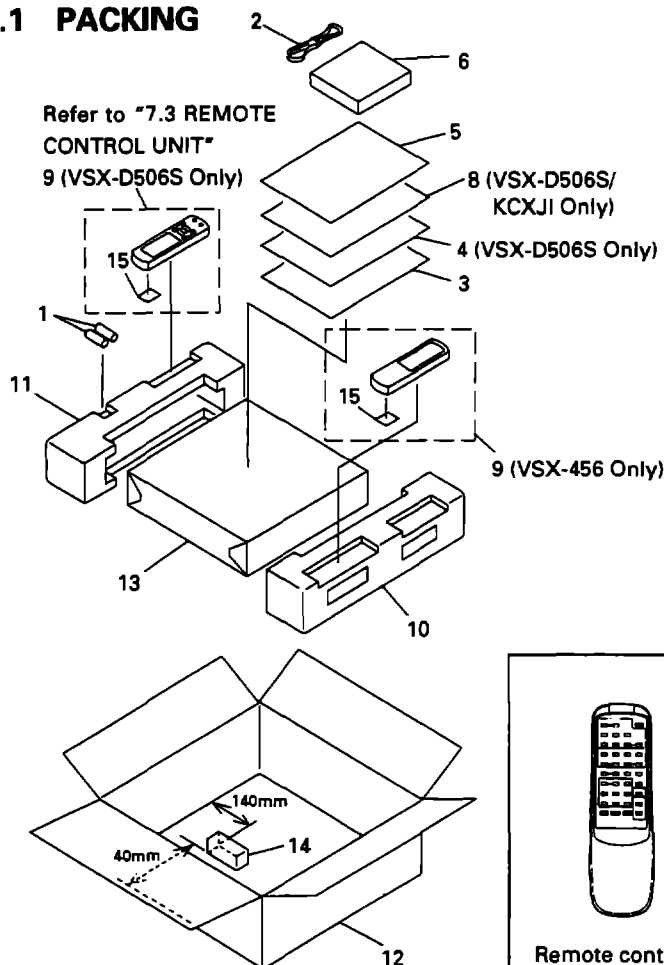
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## 2. EXPLODED VIEWS AND PARTS LIST

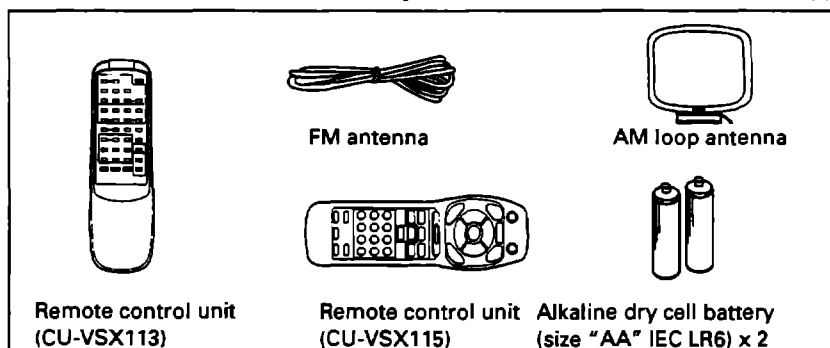
- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
  - Screws adjacent to  $\nabla$  mark on the product are used for disassembly.

### 2.1 PACKING



#### (1) PARTS LIST

| Mark | No. | Description                      | Parts No.              |
|------|-----|----------------------------------|------------------------|
| NSP  | 1   | Dry Cell Battery                 | See Contrast table (2) |
|      | 2   | FM Antenna                       | ADH7004                |
|      | 3   | Operating Instructions           | See Contrast table (2) |
|      | 4   | Sub Instruction Manual (English) | See Contrast table (2) |
| NSP  | 5   | Warranty Card                    | See Contrast table (2) |
|      | 6   | AM Loop Antenna                  | ATB7009                |
|      | 7   | .....                            |                        |
|      | 8   | Operating Instructions (French)  | See Contrast table (2) |
|      | 9   | Remote Control Unit              | See Contrast table (2) |
|      | 10  | Front Pad                        | AHA7137                |
|      | 11  | Rear Pad                         | AHA7140                |
|      | 12  | Packing Case                     | See Contrast table (2) |
|      | 13  | Packing Sheet                    | AHG7010                |
|      | 14  | Sub Pad B                        | AHB7027                |
|      | 15  | Battery Cover                    | See Contrast table (2) |



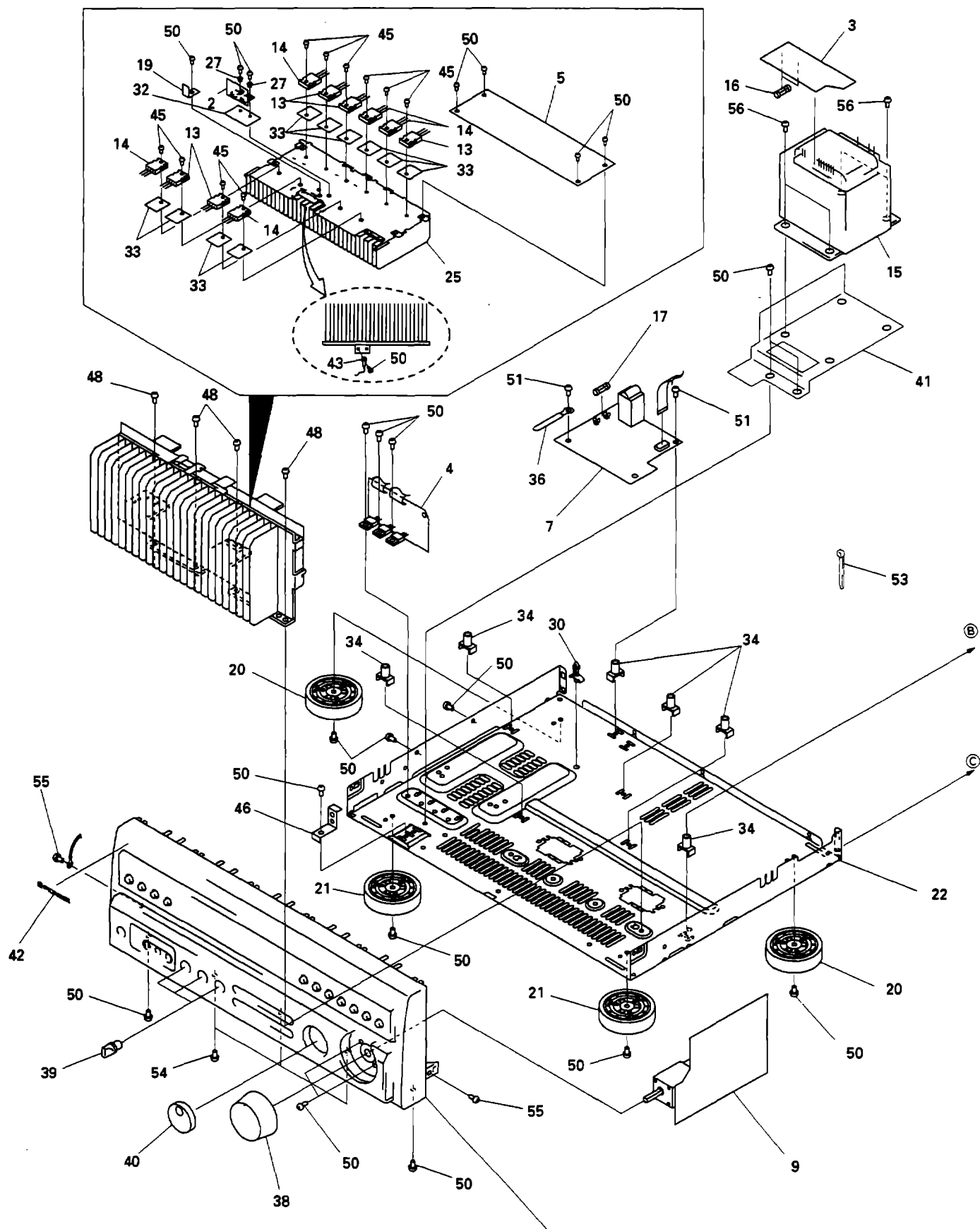
#### (2) CONTRAST TABLE

VSX-D506S/KCXJI, VSX-456/KUXJI, KCXJI and VSX-D506S/KUXJI have the same construction except for the following :

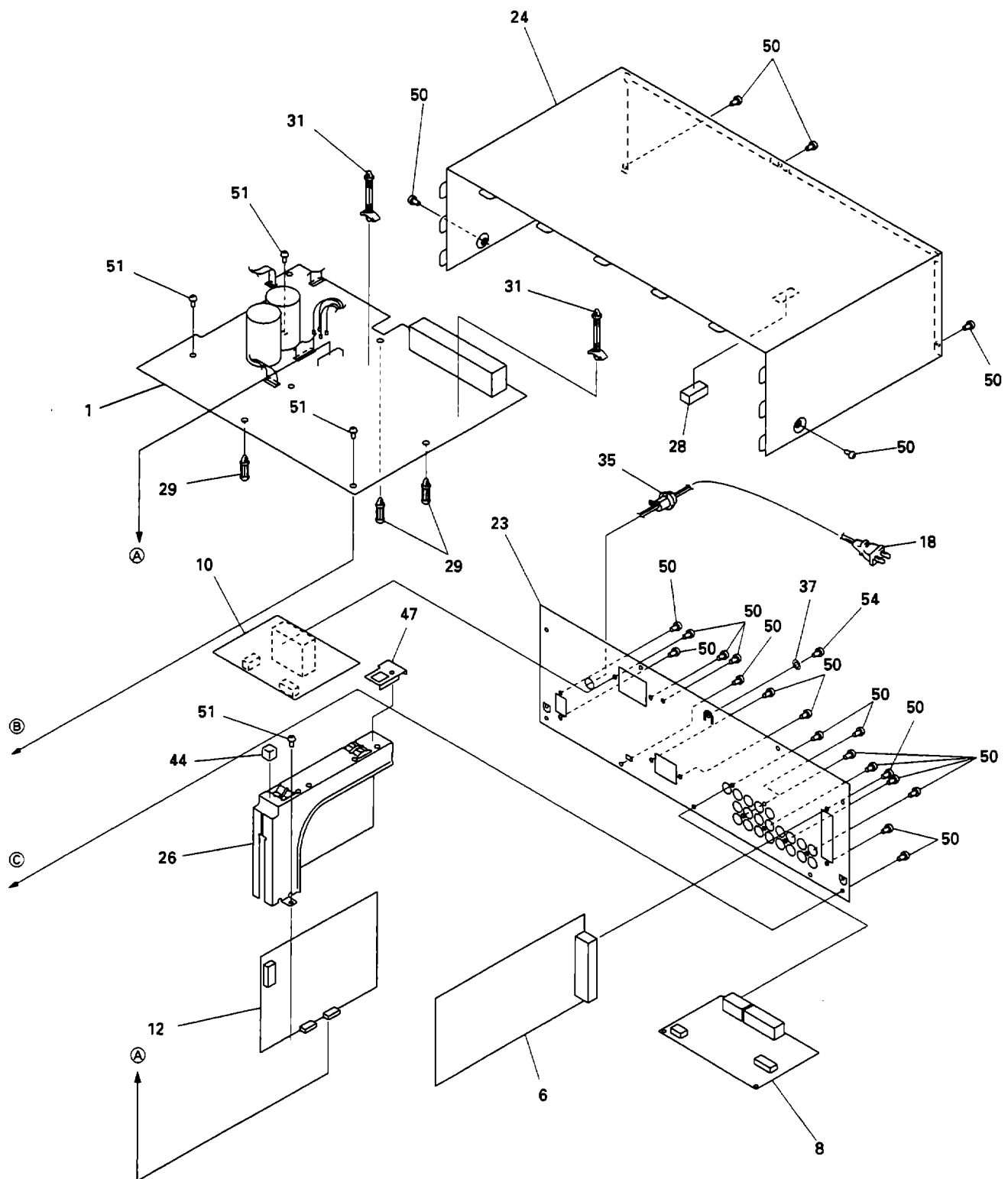
| Mark       | No. | Srmbol & Description                       | Part No.  |          |          |          | Remarks |
|------------|-----|--------------------------------------------|-----------|----------|----------|----------|---------|
|            |     |                                            | VSX-D506S |          | VSX-456  |          |         |
|            |     |                                            | KUXJI     | KCXJI    | KUXJI    | KCXJI    |         |
| NSP<br>NSP | 1   | Alkaline Dry Cell Battery (LR6,AA)         | AEX1007   | AEX1007  | Not used | Not used |         |
|            | 1   | Dry Cell Battery (R6P,AA)                  | Not used  | Not used | VEM-013  | VEM-013  |         |
|            | 3   | Operating Instructions (English)           | ARB7091   | ARB7091  | ARB7089  | Not used |         |
|            | 3   | Operating Instructions<br>(English/French) | Not used  | Not used | Not used | ARE7098  |         |
|            | 4   | Sub Operating Instructions<br>(English)    | ARH7015   | ARH7015  | Not used | Not used |         |
| NSP        | 5   | Warranty Card                              | ARY1051   | ARY1075  | ARY1051  | ARY1075  |         |
|            | 8   | Operating Instructions<br>(French)         | Not used  | ARC7141  | Not used | Not used |         |
|            | 9   | Remote Control Unit (CU-VSX115)            | AXD7124   | AXD7124  | Not used | Not used |         |
|            | 9   | Remote Control Unit (CU-VSX113)            | Not used  | Not used | AXD7119  | AXD7119  |         |
|            | 12  | Packing Case                               | AHD7357   | AHD7357  | AHD7356  | AHD7356  |         |
|            | 15  | Battery Cover                              | AZN7327   | AZN7327  | AZA7123  | AZA7123  |         |

# VSX-D506S, VSX-456

## 2.2 EXTERIOR



Refer to "2.3 FRONT PANEL SECTION"



# VSX-D506S, VSX-456

## (1) PARTS LIST

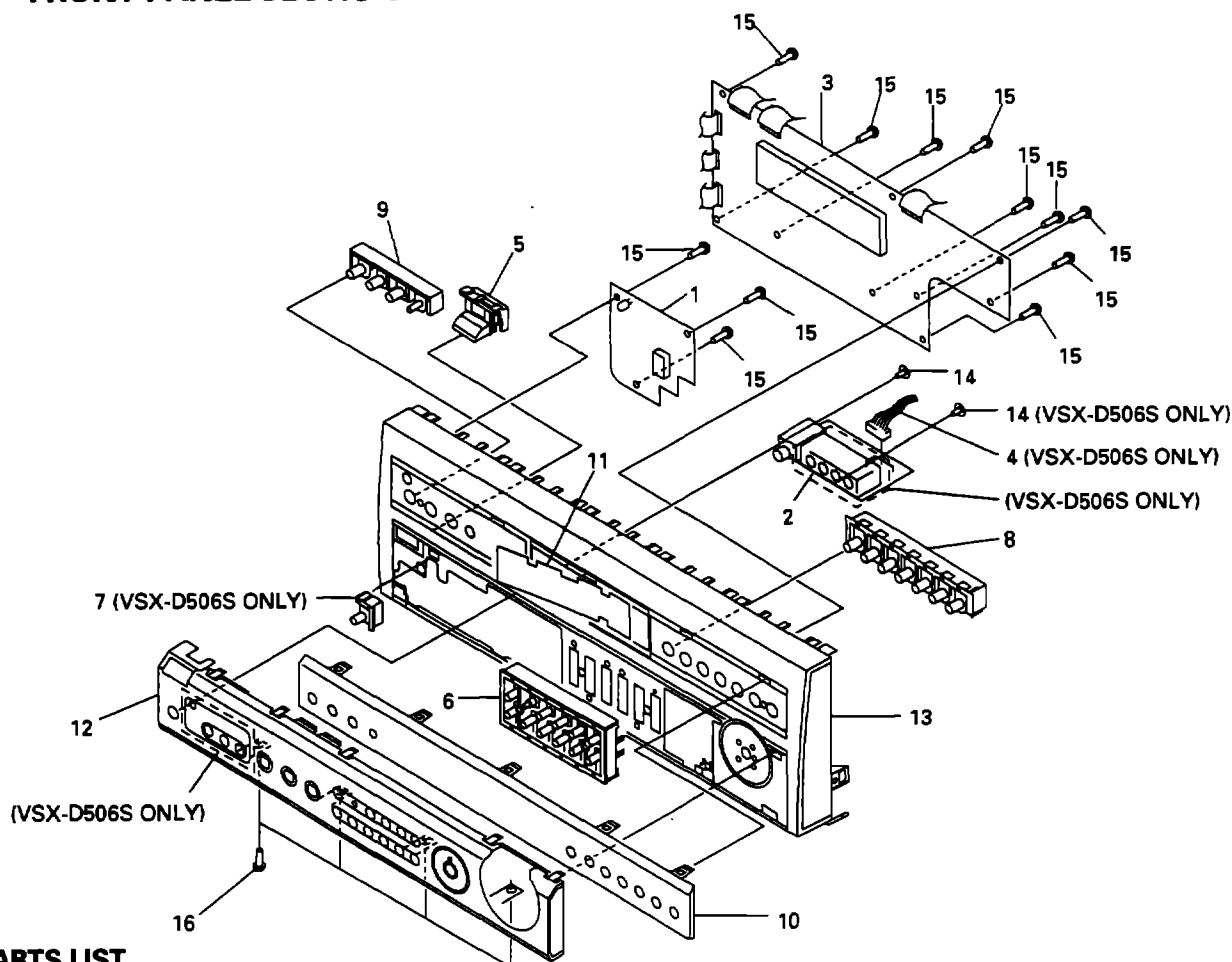
| Mark | No. | Description                 | Parts No.              | Mark | No. | Description | Parts No.    |
|------|-----|-----------------------------|------------------------|------|-----|-------------|--------------|
| NSP  | 1   | INPUT ASSY                  | AWZ8609                |      | 46  | PCB Stopper | ANG7136      |
|      | 2   | MOS FET ASSY                | AWZ8497                |      | 47  | ISO Plate   | ANG7141      |
|      | 3   | TRANS ASSY                  | AWZ8593                |      | 48  | Screw       | ABA7019      |
|      | 4   | REG.1 ASSY                  | AWZ8599                |      | 49  | .....       |              |
|      | 5   | R/C AMP ASSY                | AWZ8805                |      | 50  | Screw       | BBZ30P080FZK |
| NSP  | 6   | FM/AM TUNER MOJULE          | AXQ7219                |      | 51  | Screw       | BBZ30P200FMC |
|      | 7   | PRIMARY ASSY                | AWZ8598                | NSP  | 52  | .....       |              |
|      | 8   | VIDEO/SR ASSY               | See Contrast table (2) |      | 53  | Binder      | ZCA-BK1      |
|      | 9   | VOLUME ASSY                 | AWZ8600                |      | 54  | Screw       | ABA7008      |
|      | 10  | R/C SPEAKER ASSY            | AWZ8597                |      | 55  | Screw       | ABA-298      |
|      | 11  | .....                       |                        |      | 56  | Screw       | ABA1147      |
|      | 12  | PRO LOGIC ASSY              | See Contrast table (2) |      |     |             |              |
| △    | 13  | Transistor                  | 2SA1962                |      |     |             |              |
| △    | 14  | Transistor                  | 2SC5242                |      |     |             |              |
| △    | 15  | Power Transformer (AC 120V) | See Contrast table (2) |      |     |             |              |
| △    | 16  | Fuse (FU3, FU4 : 1.6A)      | REK1077                |      |     |             |              |
| △    | 17  | Fuse (FU1 : 6.3A)           | REK1085                |      |     |             |              |
| △    | 18  | AC Power Cord               | PDG1015                |      |     |             |              |
|      | 19  | FET Plate                   | ANG7124                |      |     |             |              |
|      | 20  | Insulator Assy              | DXA1490                |      |     |             |              |
|      | 21  | Insulator                   | PNW1912                |      |     |             |              |
|      | 22  | Chassis                     | ANA7052                |      |     |             |              |
|      | 23  | Rear Panel                  | See Contrast table (2) |      |     |             |              |
|      | 24  | Bonnet Case                 | ANE7136                |      |     |             |              |
|      | 25  | Radiator                    | ANH7050                |      |     |             |              |
| NSP  | 26  | Shield Case                 | ANK7032                |      |     |             |              |
|      | 27  | Bushing                     | AEC1402                |      |     |             |              |
|      | 28  | Cushion                     | AEB7076                |      |     |             |              |
|      | 29  | PCB Support                 | AEC1581                |      |     |             |              |
|      | 30  | PCB Support                 | AEC7006                |      |     |             |              |
| NSP  | 31  | PCB Support                 | AEC7056                |      |     |             |              |
|      | 32  | Sheet                       | AEE1028                |      |     |             |              |
|      | 33  | Sheet                       | AEE7010                |      |     |             |              |
|      | 34  | PCB Mold                    | AMR2533                |      |     |             |              |
|      | 35  | Cord Stopper                | CM-22C                 |      |     |             |              |
| NSP  | 36  | Clamper                     | RNE1277                |      |     |             |              |
|      | 37  | Washer                      | VEC1254                |      |     |             |              |
|      | 38  | Round Knob L                | AAB7082                |      |     |             |              |
|      | 39  | Round Knob S                | AAB7106                |      |     |             |              |
|      | 40  | Jog Knob                    | AAB7048                |      |     |             |              |
|      | 41  | Trans Flame                 | ANG7140                |      |     |             |              |
|      | 42  | Name Plate                  | PAM1608                |      |     |             |              |
| NSP  | 43  | Cord with Plug (J105)       | DE012CD0               |      |     |             |              |
| NSP  | 44  | Cushion                     | AEB7081                |      |     |             |              |
|      | 45  | Screw                       | ABA1037                |      |     |             |              |

## (2) CONTRAST TABLE

VSX-D506S/KCXJI, VSX-456/KUXJI, KCXJI and VSX-D506S/KUXJI have the same construction except for the following :

| Mark | No. | Srmbol & Description        | Part No.  |         |         |         | Remarks |
|------|-----|-----------------------------|-----------|---------|---------|---------|---------|
|      |     |                             | VSX-D506S |         | VSX-456 |         |         |
|      |     |                             | KUXJI     | KCXJI   | KUXJI   | KCXJI   |         |
| Δ    | 8   | VIDEO/SR ASSY               | AWZ8509   | AWZ8509 | AWZ8601 | AWZ8601 |         |
|      | 12  | PRO LOGIC ASSY              | AWZ8611   | AWZ8611 | AWZ8510 | AWZ8510 |         |
|      | 15  | Power Transformer (AC 120V) | ATS7164   | ATS7165 | ATS7164 | ATS7165 |         |
|      | 23  | Rear Panel                  | ANC7479   | ANC7526 | ANC7478 | ANC7528 |         |

## 2.3 FRONT PANEL SECTION



### • PARTS LIST

| Mark | No. | Description       | Parts No.              | Mark | No.         | Description            | Parts No. |
|------|-----|-------------------|------------------------|------|-------------|------------------------|-----------|
| NSP  | 1   | Power Switch ASSY | See Contrast table (2) | 11   | FL Filter   | AAK7294                |           |
| NSP  | 2   | Front Input ASSY  | See Contrast table (2) | 12   | Sub Panel   | See Contrast table (2) |           |
|      | 3   | FL U-COM ASSY     | See Contrast table (2) | 13   | Front Panel | See Contrast table (2) |           |
| NSP  | 4   | Housing 5P Shield | See Contrast table (2) | 14   | Screw       | See Contrast table (2) |           |
|      | 5   | Power Button      | AAD7325                | 15   | Screw       | BPZ30P080FMC           |           |
|      | 6   | Tuner Button      | AAD7326                | 16   | Screw       | BBZ30P080FZK           |           |
|      | 7   | Input Button      | See Contrast table (2) |      |             |                        |           |
|      | 8   | Func. Button      | AAD7328                |      |             |                        |           |
|      | 9   | SFC Button        | AAD7329                |      |             |                        |           |
|      | 10  | FL Panel          | AAK7293                |      |             |                        |           |

### (2) CONTRAST TABLE

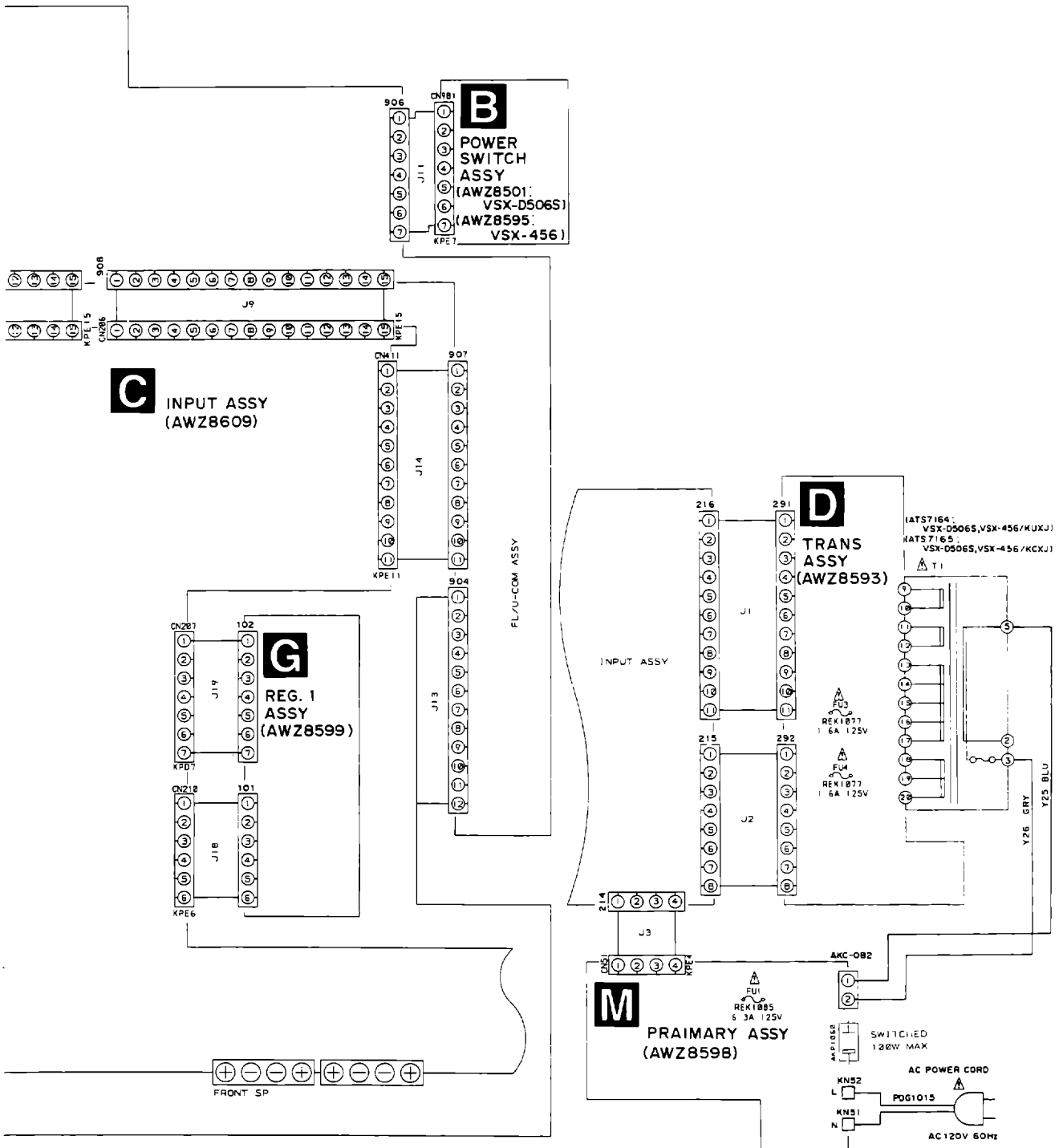
VSX-D506S/KCXJI, VSX-456/KUXJI, KCXJI and VSX-D506S/KUXJI have the same construction except for the following :

| Mark | No. | Srmbol & Description | Part No.  |         |          |          | Remarks |
|------|-----|----------------------|-----------|---------|----------|----------|---------|
|      |     |                      | VSX-D506S |         | VSX-456  |          |         |
|      |     |                      | KUXJI     | KCXJI   | KUXJI    | KCXJI    |         |
| NSP  | 1   | POWER SWITCH ASSY    | AWZ8501   | AWZ8501 | AWZ8595  | AWZ8595  |         |
| NSP  | 2   | FRONT INPUT ASSY     | AWZ8502   | AWZ8502 | AWZ8596  | AWZ8596  |         |
|      | 3   | FL/U-COM ASSY        | AWZ8610   | AWZ8610 | AWZ8594  | AWZ8594  |         |
| NSP  | 4   | Housing 5P Shield    | ADX1653   | ADX1653 | Not used | Not used |         |
|      | 7   | Input Button         | AAD7327   | AAD7327 | Not used | Not used |         |
|      | 12  | Sub Panel            | AAP7024   | AAP7024 | AAP7023  | AAP7023  |         |
|      | 13  | Front Panel          | AMB7390   | AMB7390 | AMB7389  | AMB7389  |         |
|      | 14  | Screw                | ABA7009   | ABA7009 | Not used | Not used |         |

### 3. SCHEMATIC DIAGRAM.

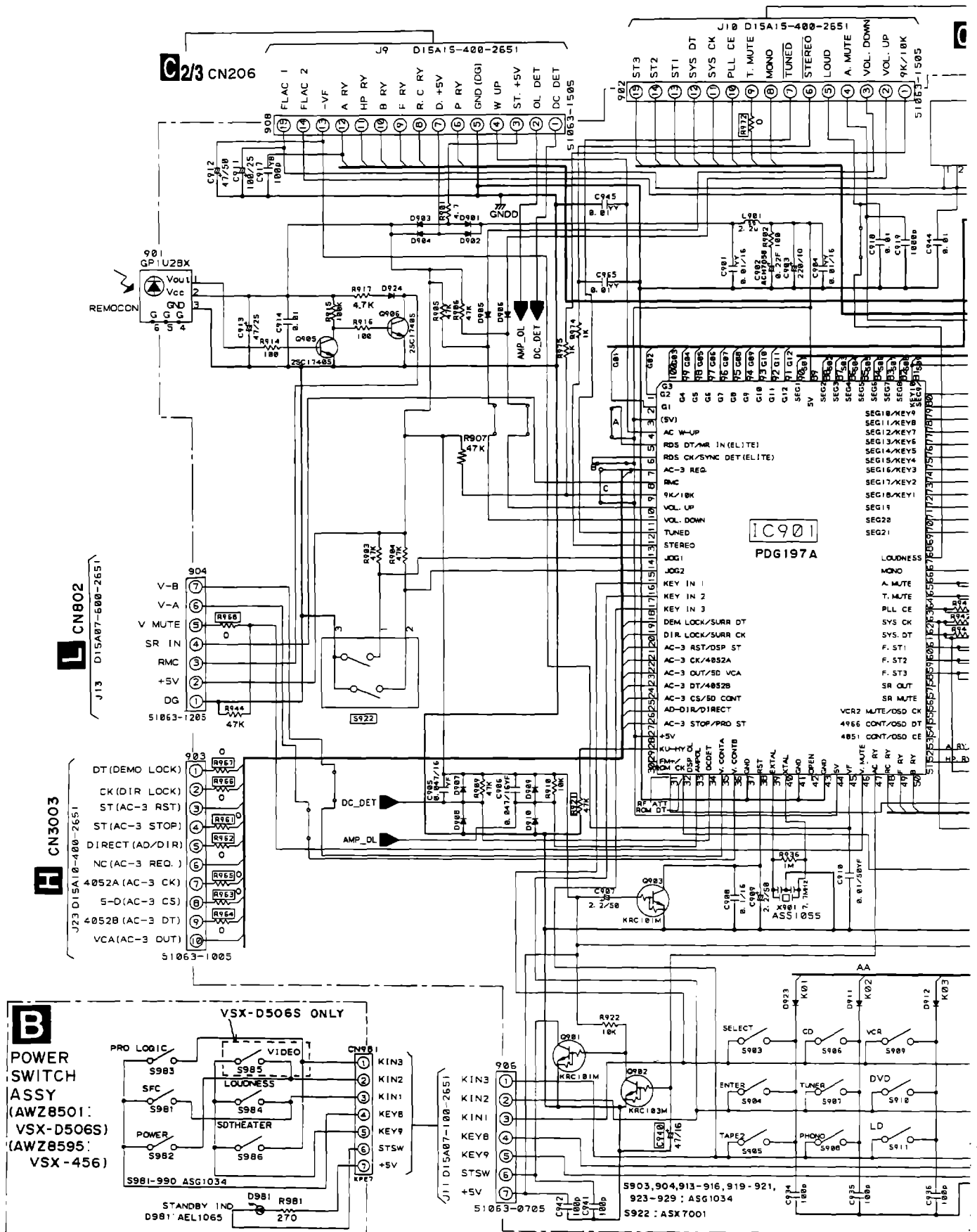


**NOTE: When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**



# VSX-D506S, VSX-456

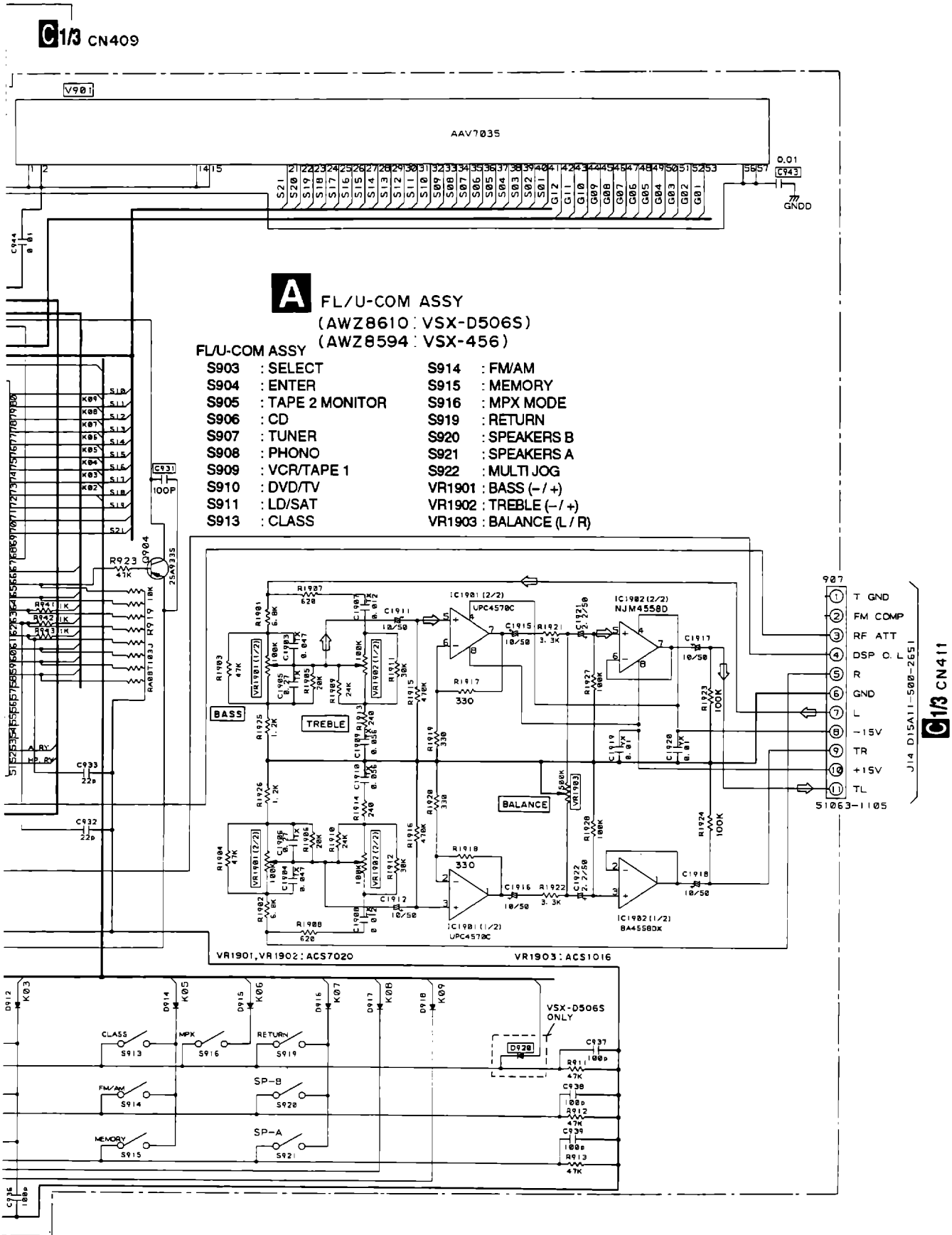
## 3.2 FL/U-COM ASSY AND POWER SWITCH ASSY



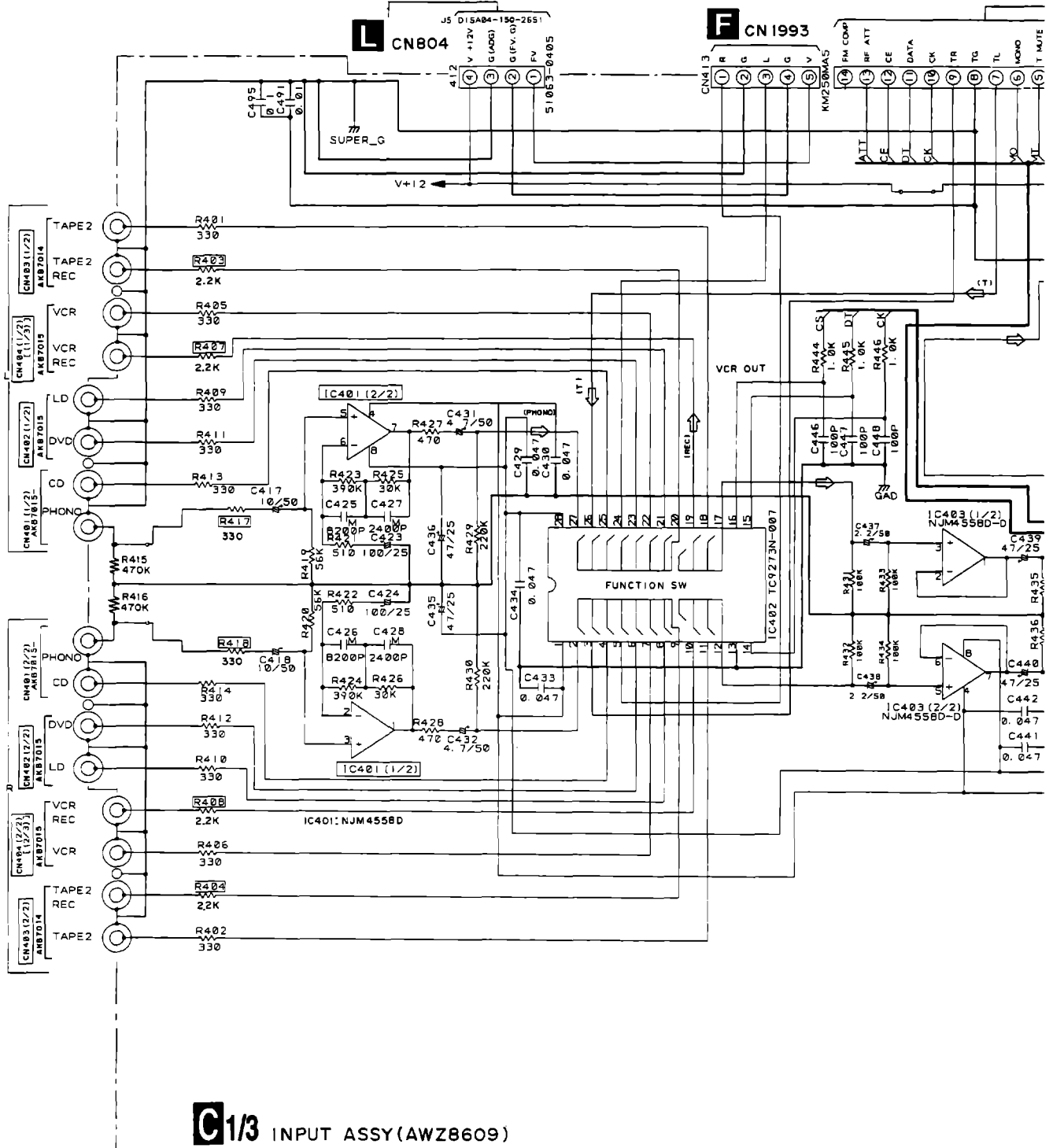
### POWER SW ASSY

- S981 : SFC MODE
- S982 : POWER STANDBY/ON
- S983 : DOLBY PRO LOGIC

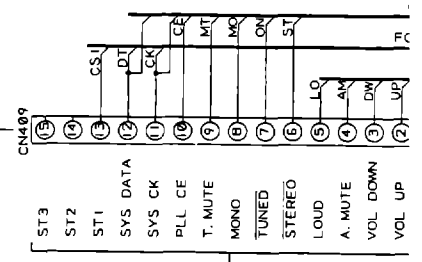
- S984 : LOUDNESS
- S985 : VIDEO INPUT
- S986 : 5-D THEATER

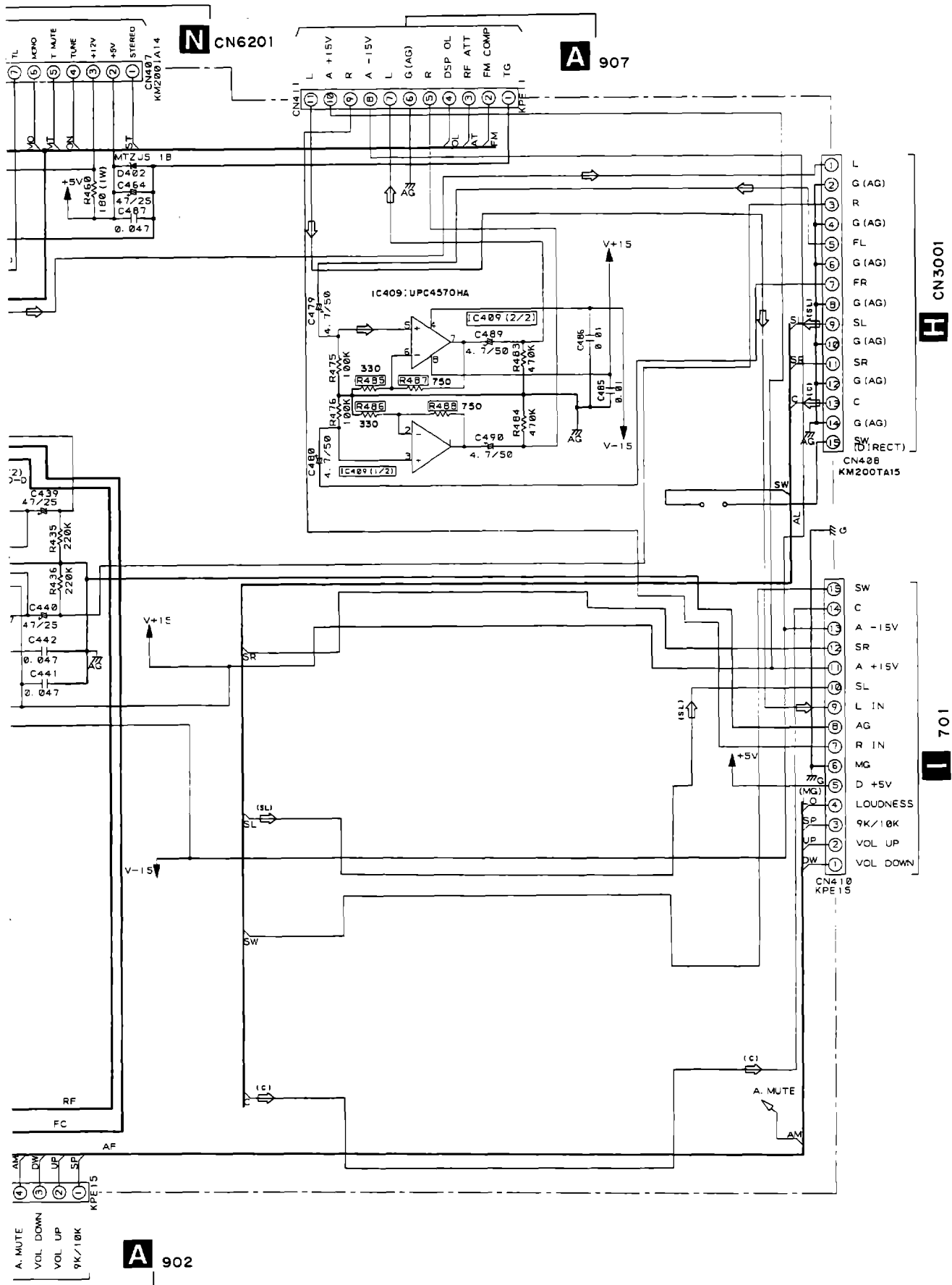


## 3.3 INPUT ASSY (1/3)



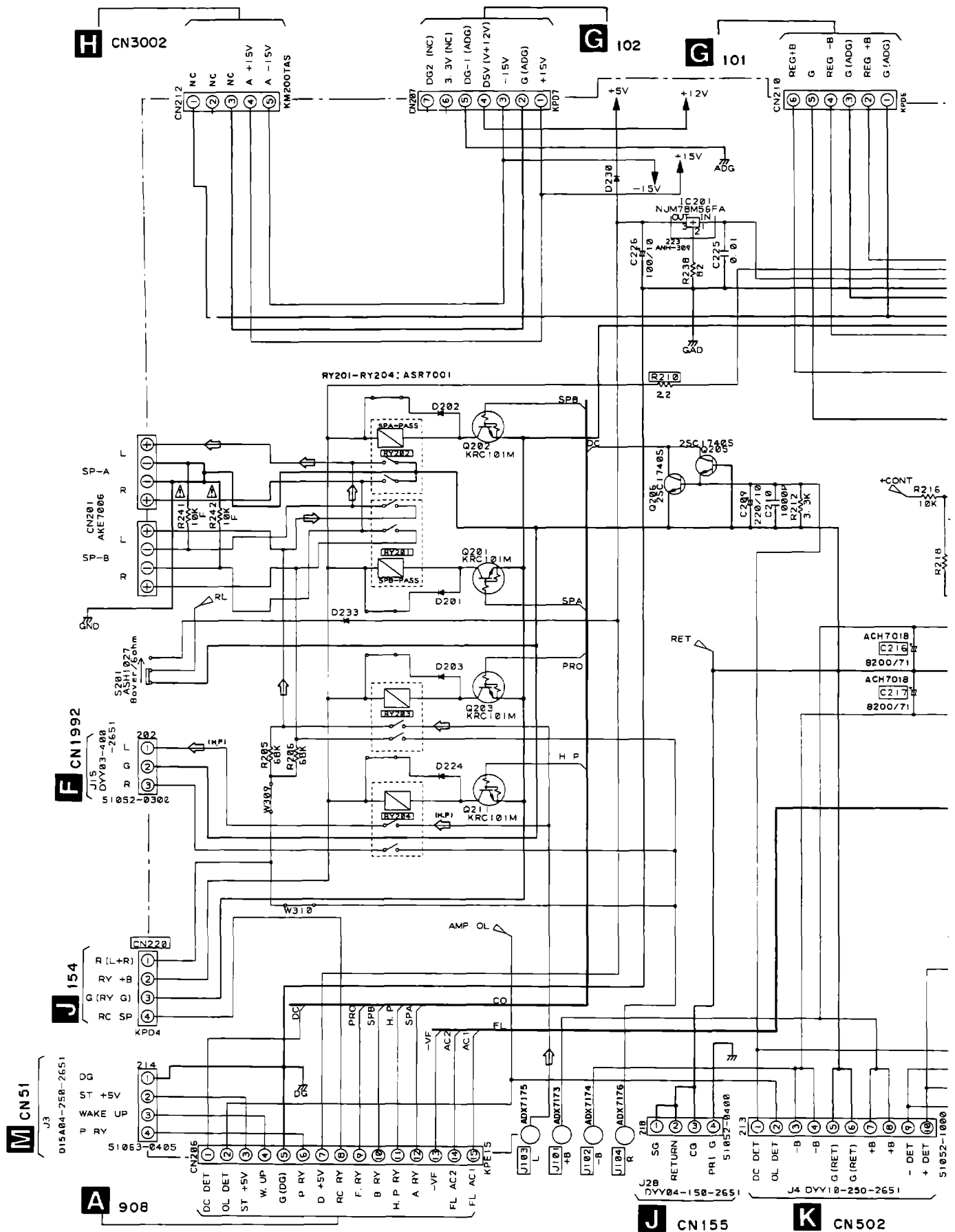
- ⇒: AUDIO SIGNAL ROUTE
- (SL)⇒: AUDIO SIGNAL ROUTE (REAR)
- (C)⇒: AUDIO SIGNAL ROUTE (CENTER)
- (T)⇒: AUDIO SIGNAL ROUTE (TUNER)
- (P)⇒: AUDIO SIGNAL ROUTE (PHONO)
- (REC)⇒: AUDIO SIGNAL ROUTE (REC)





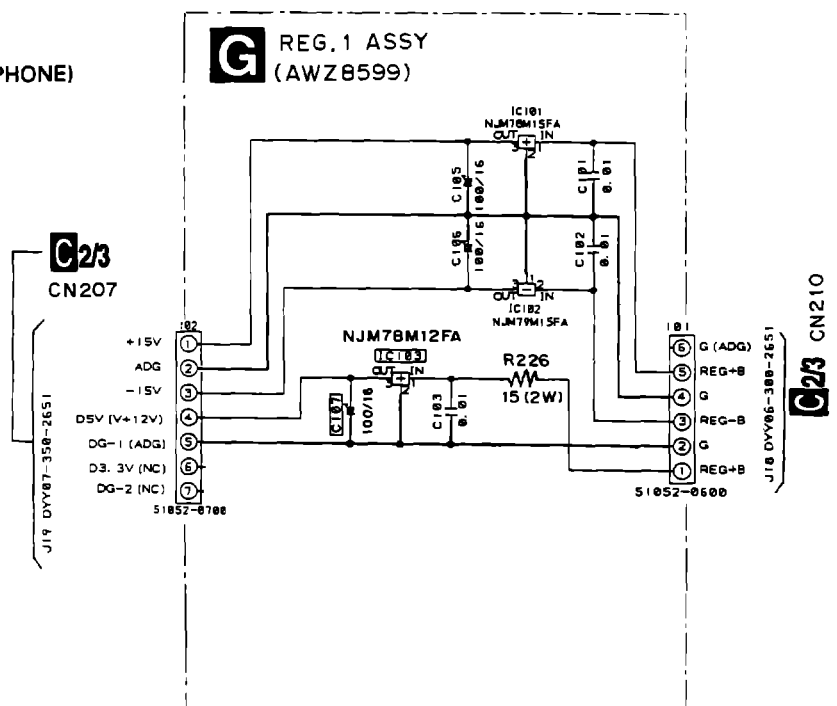
# VSX-D506S, VSX-456

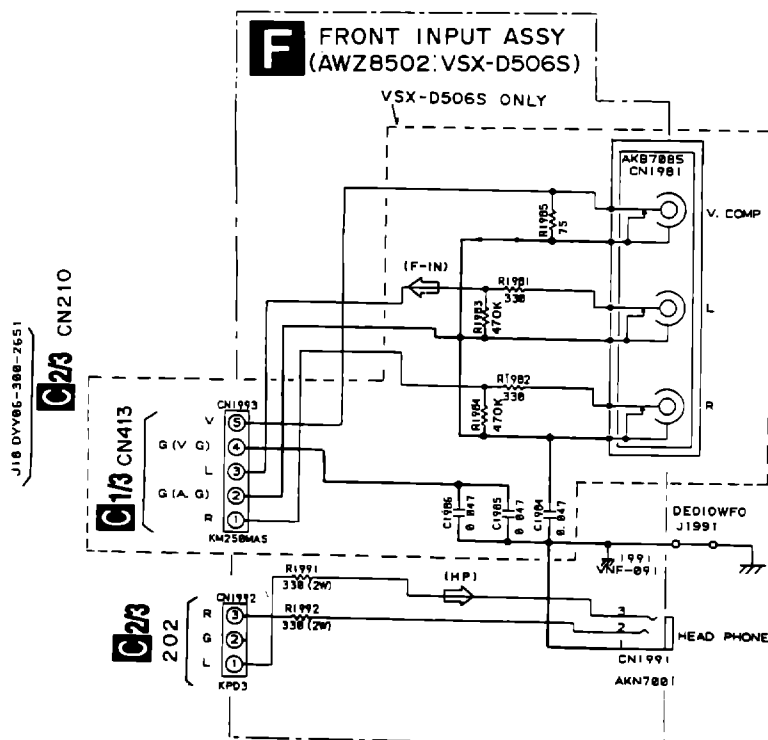
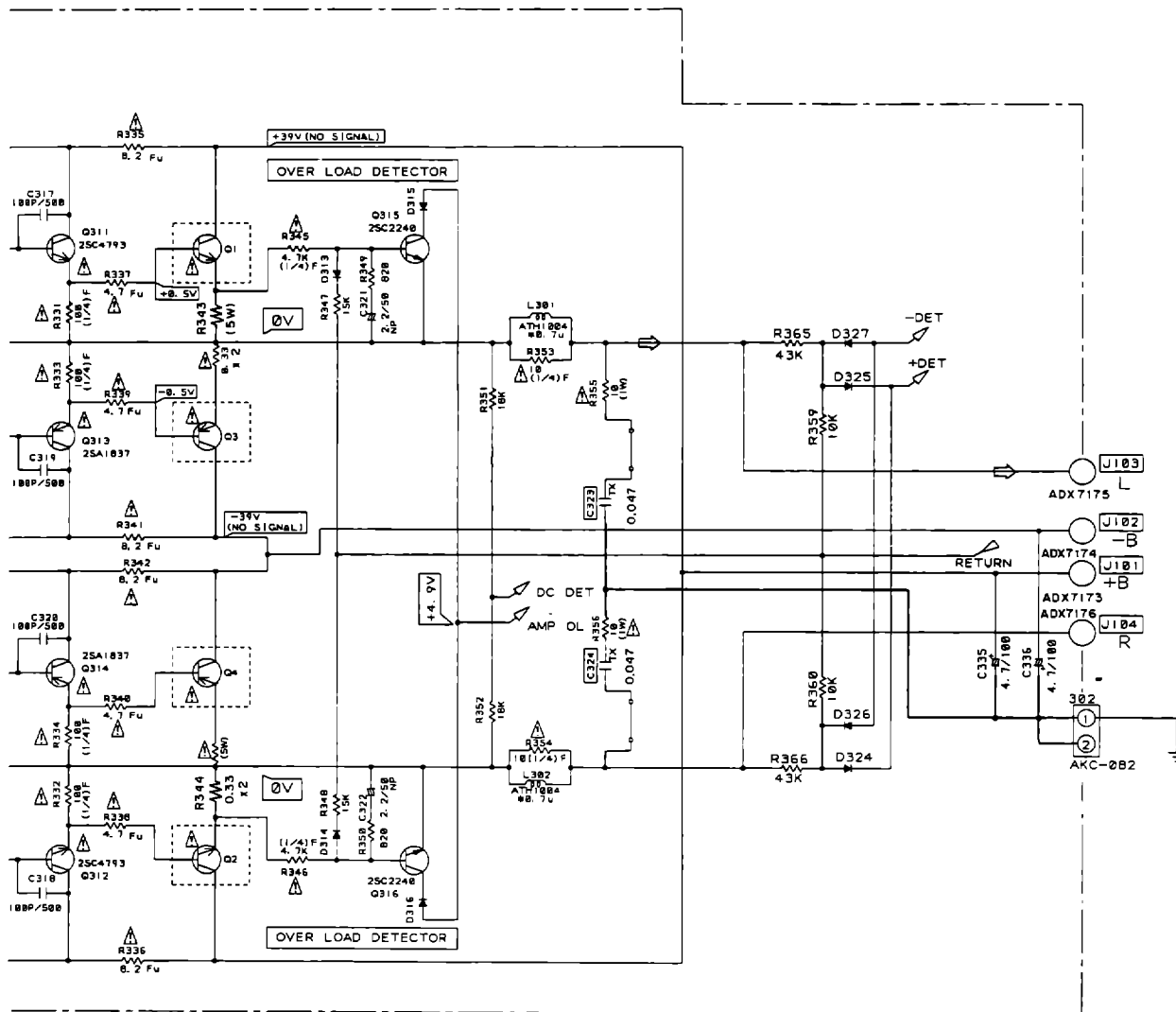
## 3.4 INPUT ASSY (2/3), TRANS ASSY AND MOS FET ASSY



INPUT ASSY  
S201 : IMPEDANCE SELECTOR







Noted

1. Resistors  
Indicated in ohm 1/4W  
tolerance  $\pm 5\%$   
unless otherwise noted  
K: Kohm, M: Mohm  
F: Non flammable type  
Fu: Non flammable quick open type  
FL: Non flammable type (RD1/4LMF\*\*\*J type)
2. Capacitors  
Indicated in capacity ( $\mu\text{F}$ )/voltage (V)  
unless otherwise noted  
 $p = p\text{F}$   
Indication without voltage is 50V except  
electrolytic capacitor  
NL=CEANL      TX=CFTXA
3. Diodes  
Other diodes (not noted) are 1SS252

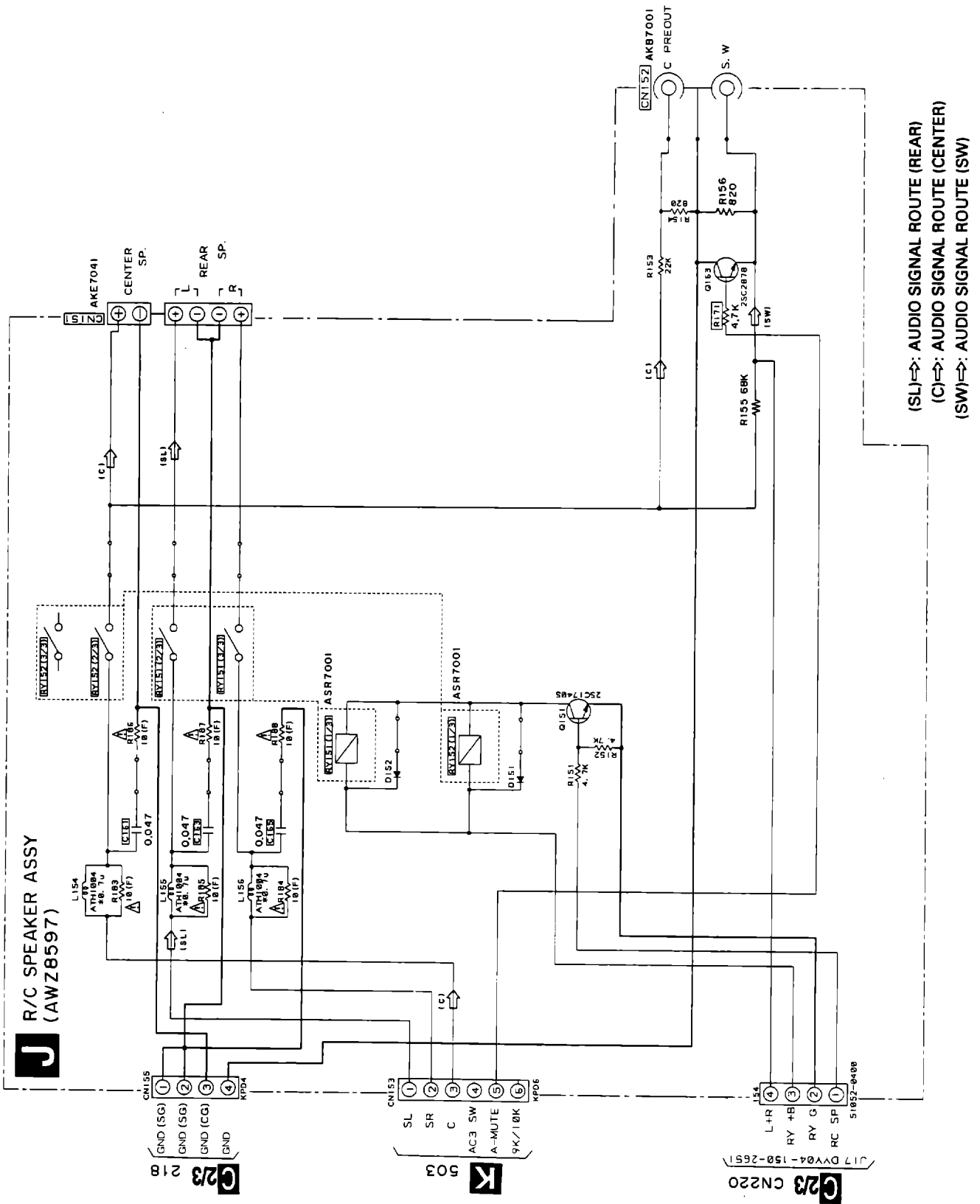
### 3.6 PRO LOGIC ASSY





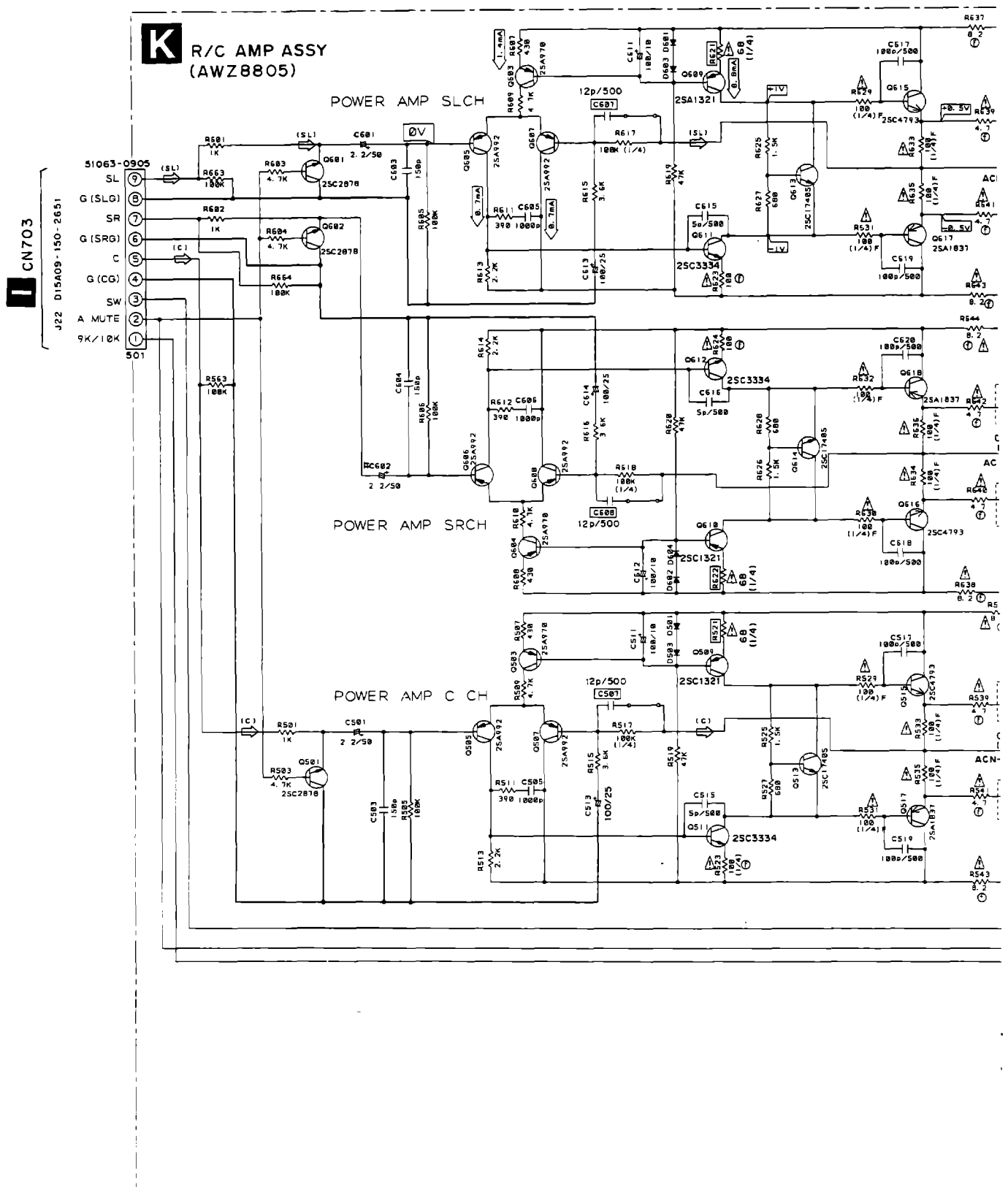


## 3.8 R/C SPEAKER ASSY



# VSX-D506S, VSX-456

## 3.9 R/C AMP ASSY

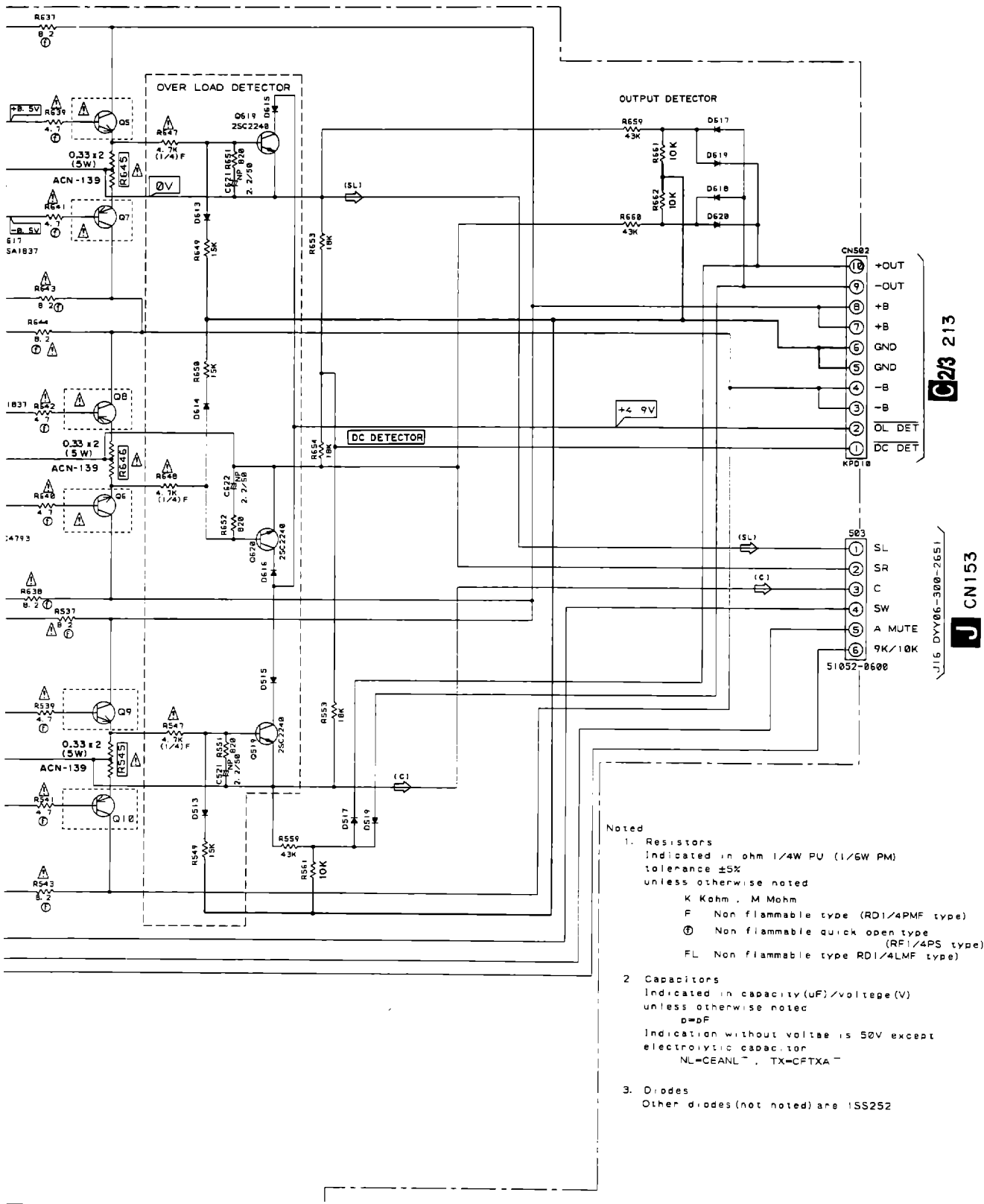


## VSX-D506S, VSX-456

⇒: AUDIO SIGNAL ROUTE

**(SL)⇒: AUDIO SIGNAL ROUTE (REAR)**

(C)⇒: AUDIO SIGNAL ROUTE (CENTER)



Noted

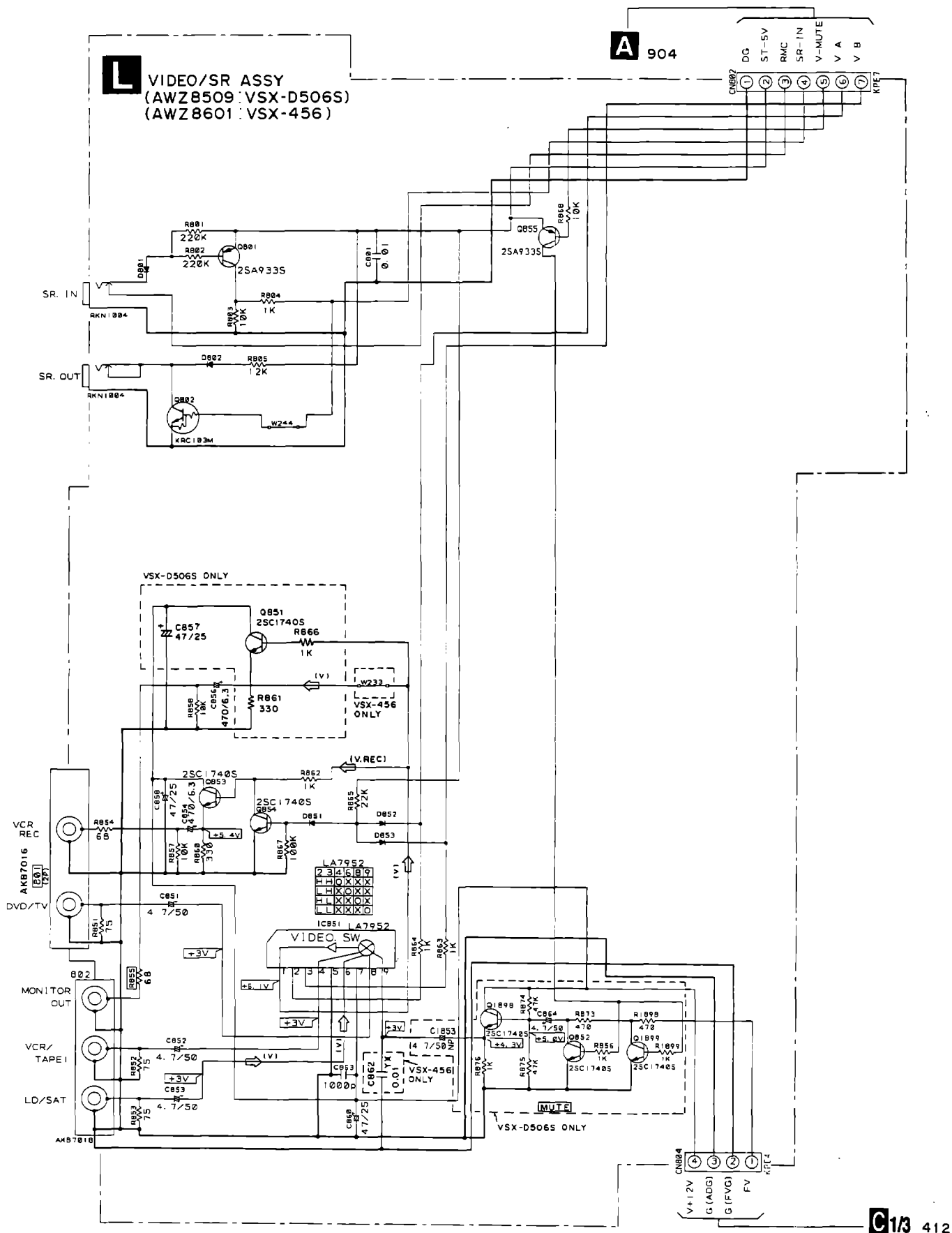
1. Resistors  
Indicated in ohm 1/4W PU (1/5W PM)  
tolerance  $\pm 5\%$   
unless otherwise noted
- K Kohm , M Mohm
- F Non flammable type (RD1/4PMF type)
- ① Non flammable quick open type  
(RF1/4PS type)
- FL Non flammable type RD1/4LMF type)

- 2 Capacitors  
Indicated in capacity (uF)/voltage (V)  
unless otherwise noted  
p=pF  
Indication without voltage is 50V except  
electrolytic capacitor  
NL=CEANL, TX=CTXA

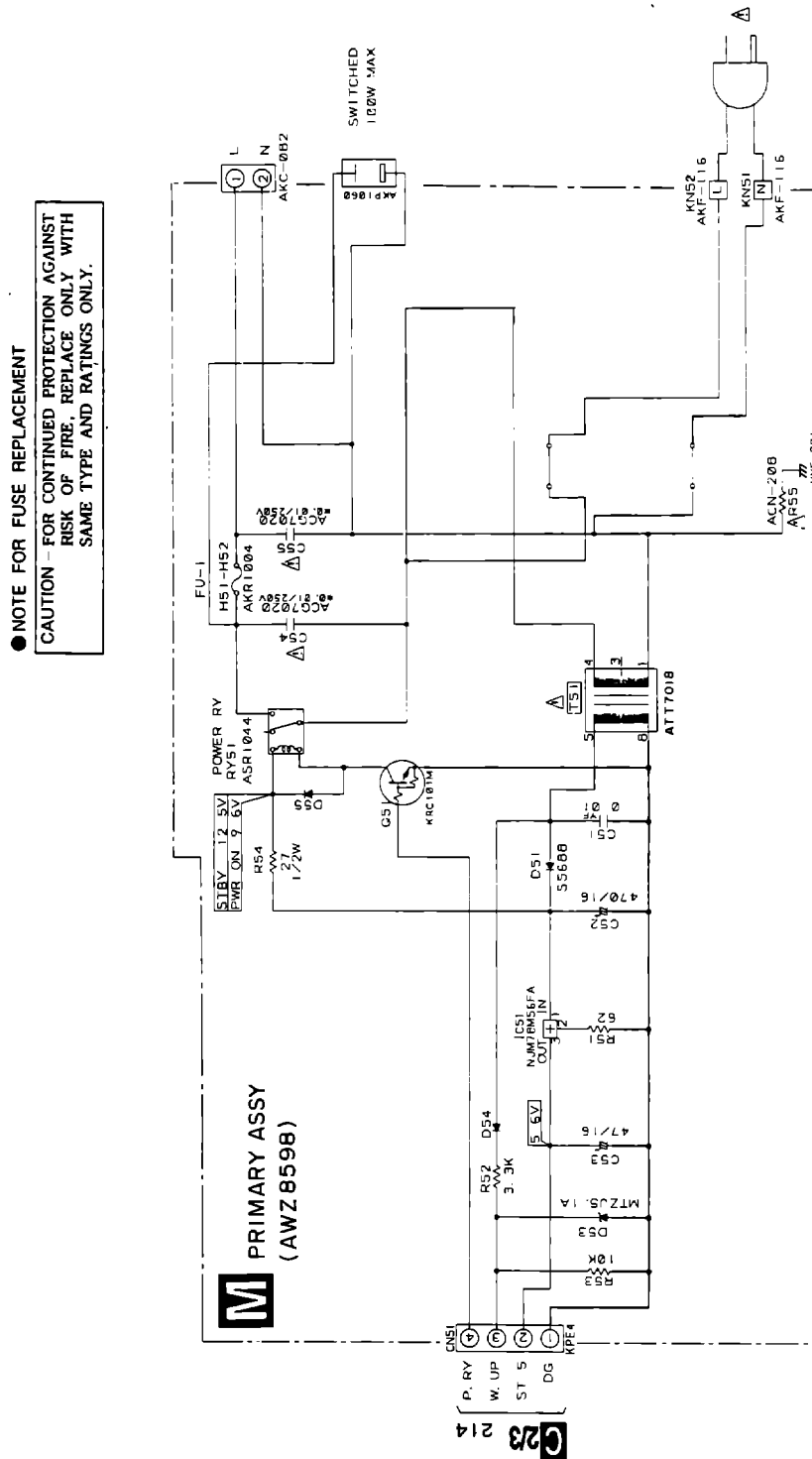
3. Diodes  
Other diodes (not noted) are 1SS252

## VSX-D506S, VSX-456

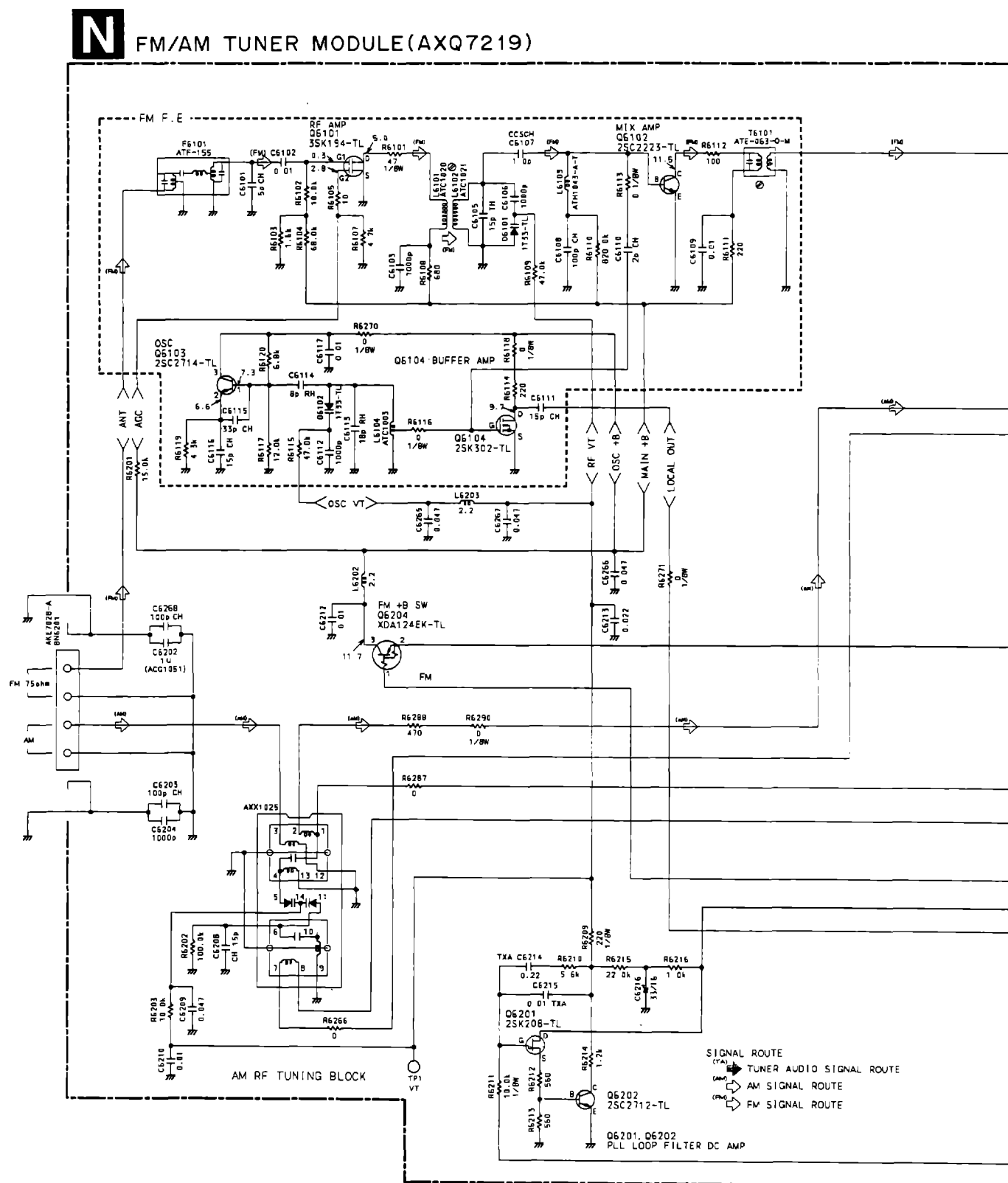
### 3.10 VIDEO SR ASSY AND PRIMARY ASSY



(V)⇒: VIDEO SIGNAL ROUTE  
(V.REC)⇒: VIDEO REC SIGNAL ROUTE

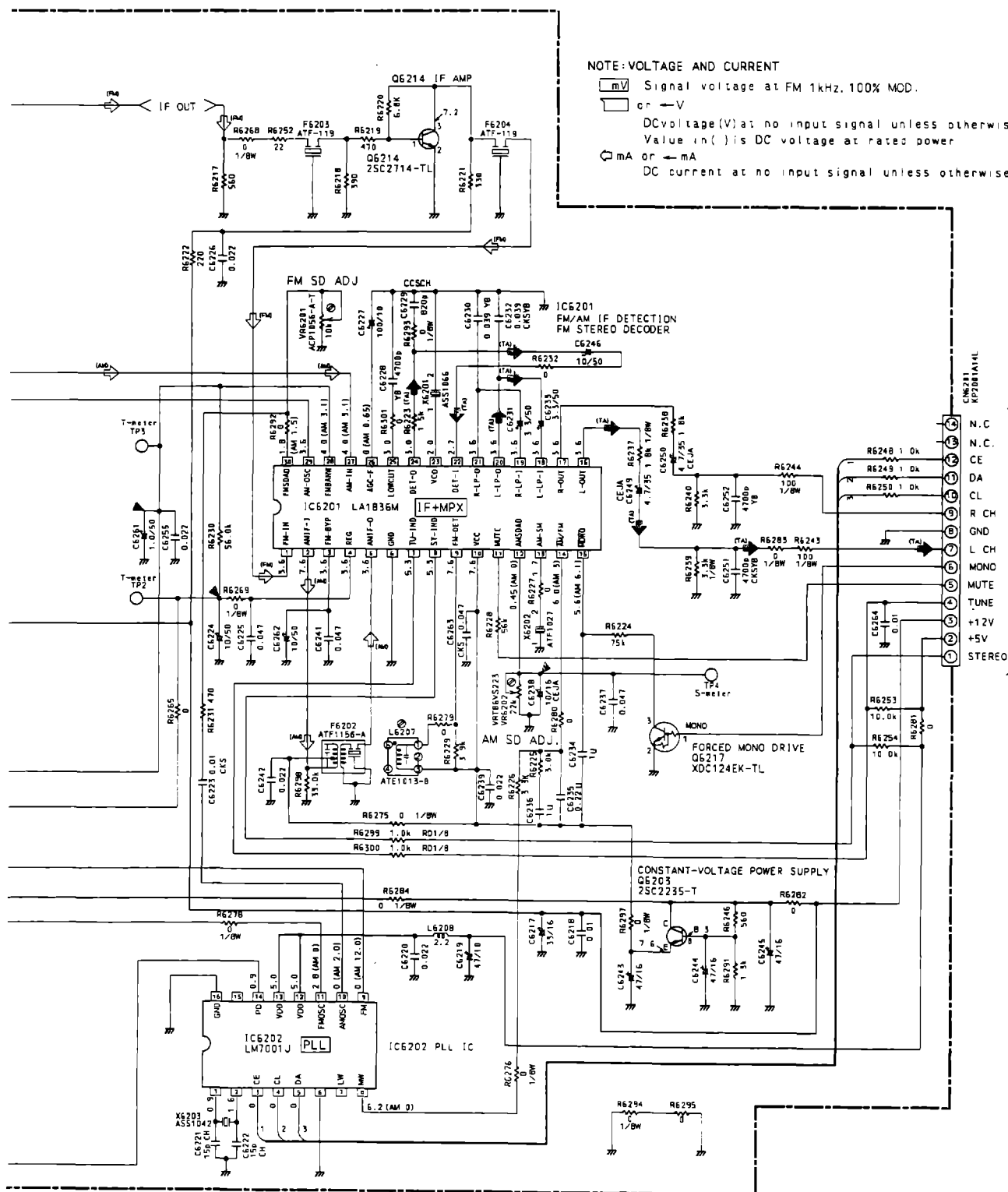


### 3.11 FM/AM TUNER MODULE



## NOTE: VOLTAGE AND CURRENT

- mV Signal voltage at FM 1kHz, 100% MOD.  
 or V  
 DC voltage (V) at no input signal unless otherwise noted  
 Value in ( ) is DC voltage at rated power  
 mA or mA  
 DC current at no input signal unless otherwise noted.

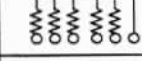


#### 4. PCB CONNECTION DIAGRAM

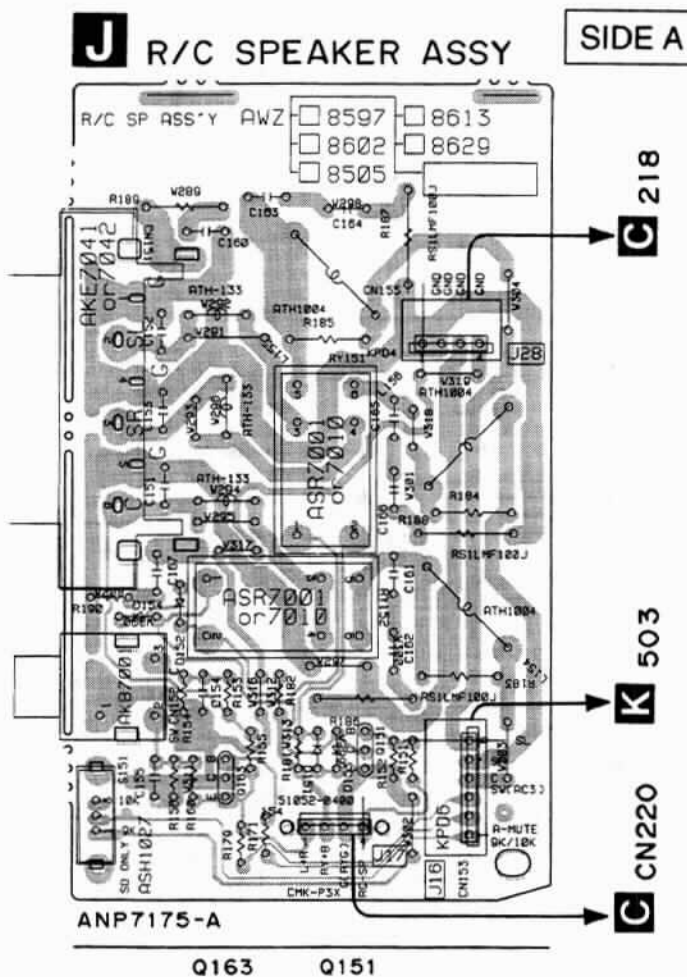
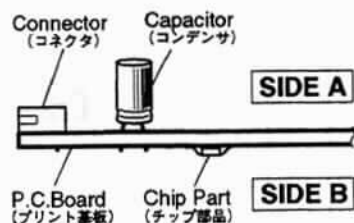
#### 4.1 R/C SPEAKER ASSY AND MOS FET ASSY

**NOTE FOR PCB DIAGRAMS:**

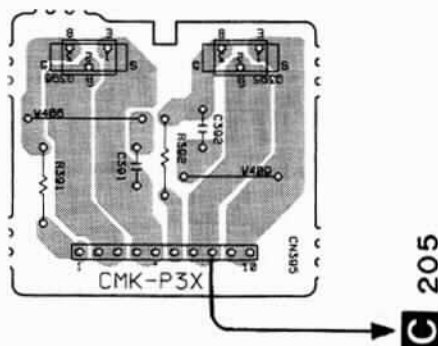
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams                                                            | Symbol in Schematic Diagrams                                                      | Part Name                |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|
|  |  | Transistor               |
|  |  | Transistor with resistor |
|  |  | Field effect transistor  |
|  |  | Resistor array           |
|  |  | 3-terminal regulator     |

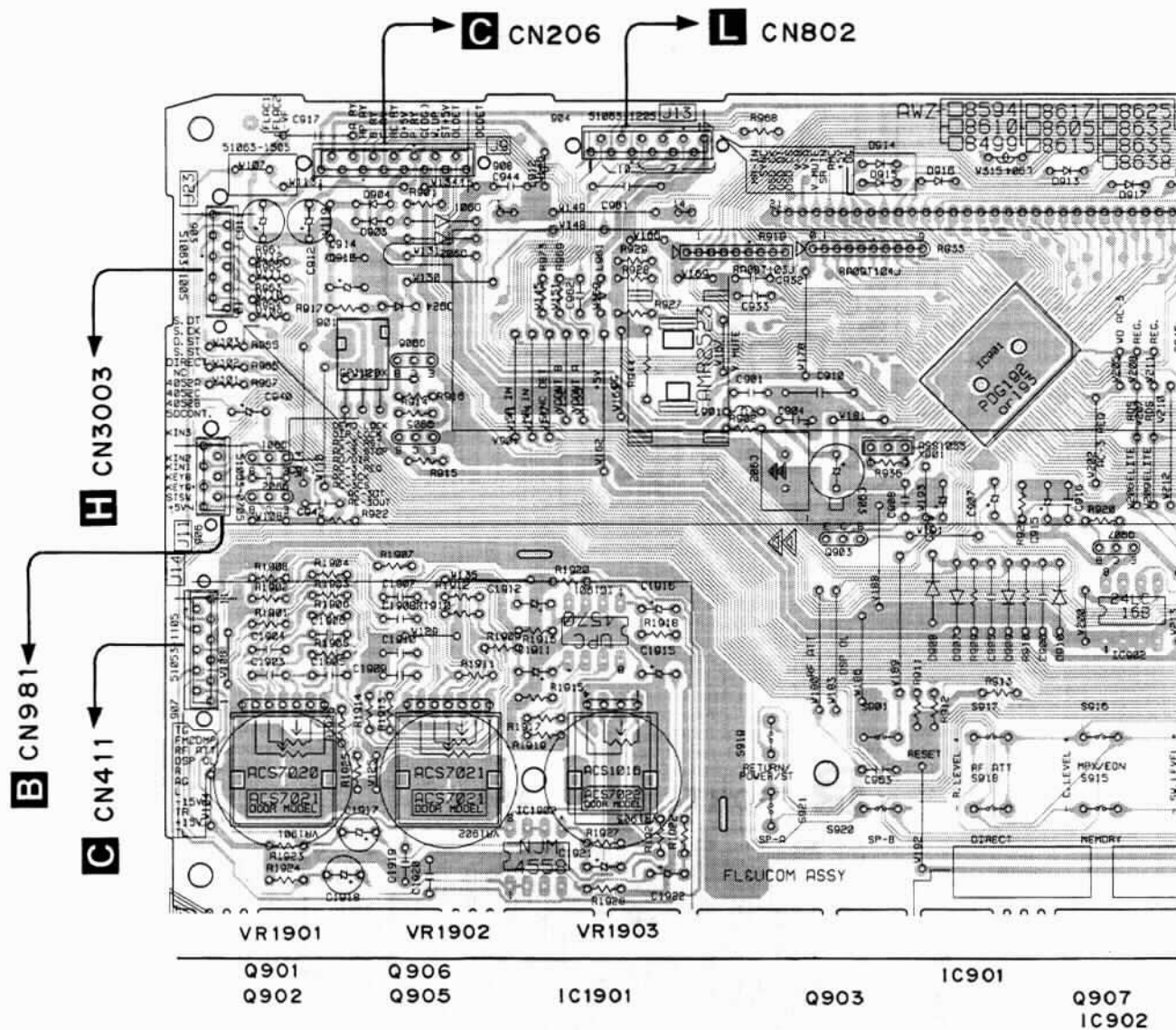
3. The parts mounted on this PCB include all necessary parts for several destinations.  
For further information for respective destinations, be sure to check with the schematic diagram.
4. Viewpoint of PCB diagrams



**E** MOS FET ASSY



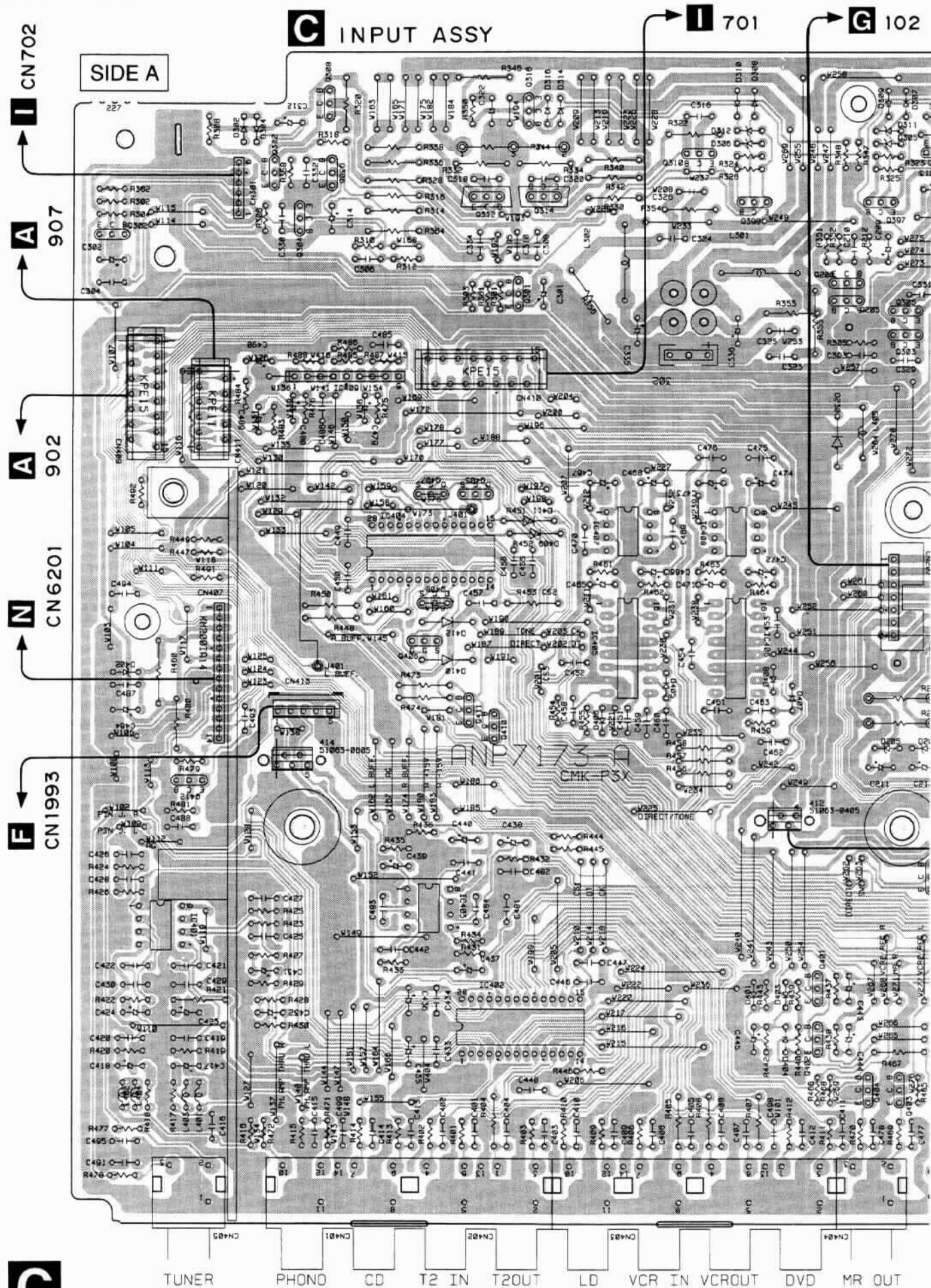


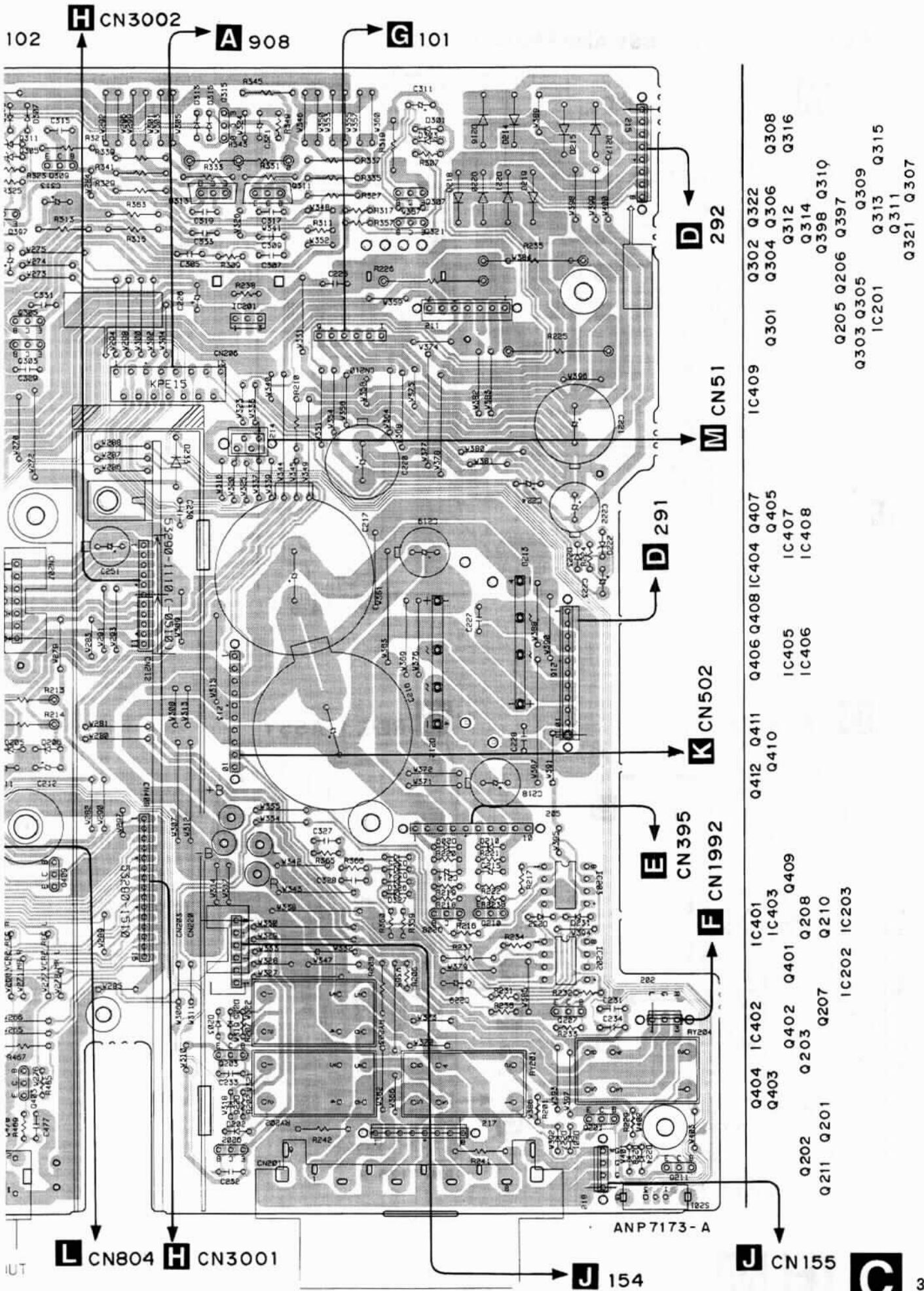




# VSX-D506S, VSX-456

## 4.4 INPUT ASSY





**M** PRIMARY ASSY

CMK-P3X  
SD J ONLY  
VAC1  
VAC2  
VAC3  
VAC4  
VAC5  
VAC6  
VAC7  
VAC8  
VAC9  
VAC10  
VAC11  
VAC12  
VAC13  
VAC14  
VAC15  
VAC16  
VAC17  
VAC18  
VAC19  
VAC20  
VAC21  
VAC22  
VAC23  
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VAC49  
VAC50  
VAC51  
VAC52  
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VAC54  
VAC55  
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VAC57  
VAC58  
VAC59  
VAC60  
VAC61  
VAC62  
VAC63  
VAC64  
VAC65  
VAC66  
VAC67  
VAC68  
VAC69  
VAC70  
VAC71  
VAC72  
VAC73  
VAC74  
VAC75  
VAC76  
VAC77  
VAC78  
VAC79  
VAC80  
VAC81  
VAC82  
VAC83  
VAC84  
VAC85  
VAC86  
VAC87  
VAC88  
VAC89  
VAC90  
VAC91  
VAC92  
VAC93  
VAC94  
VAC95  
VAC96  
VAC97  
VAC98  
VAC99  
VAC100

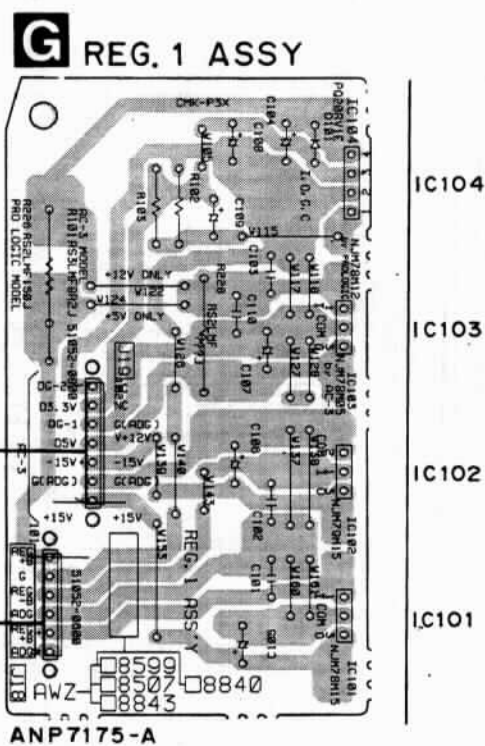
NEUTRAL  
LIVE  
AC POWER CORD

SIDE A

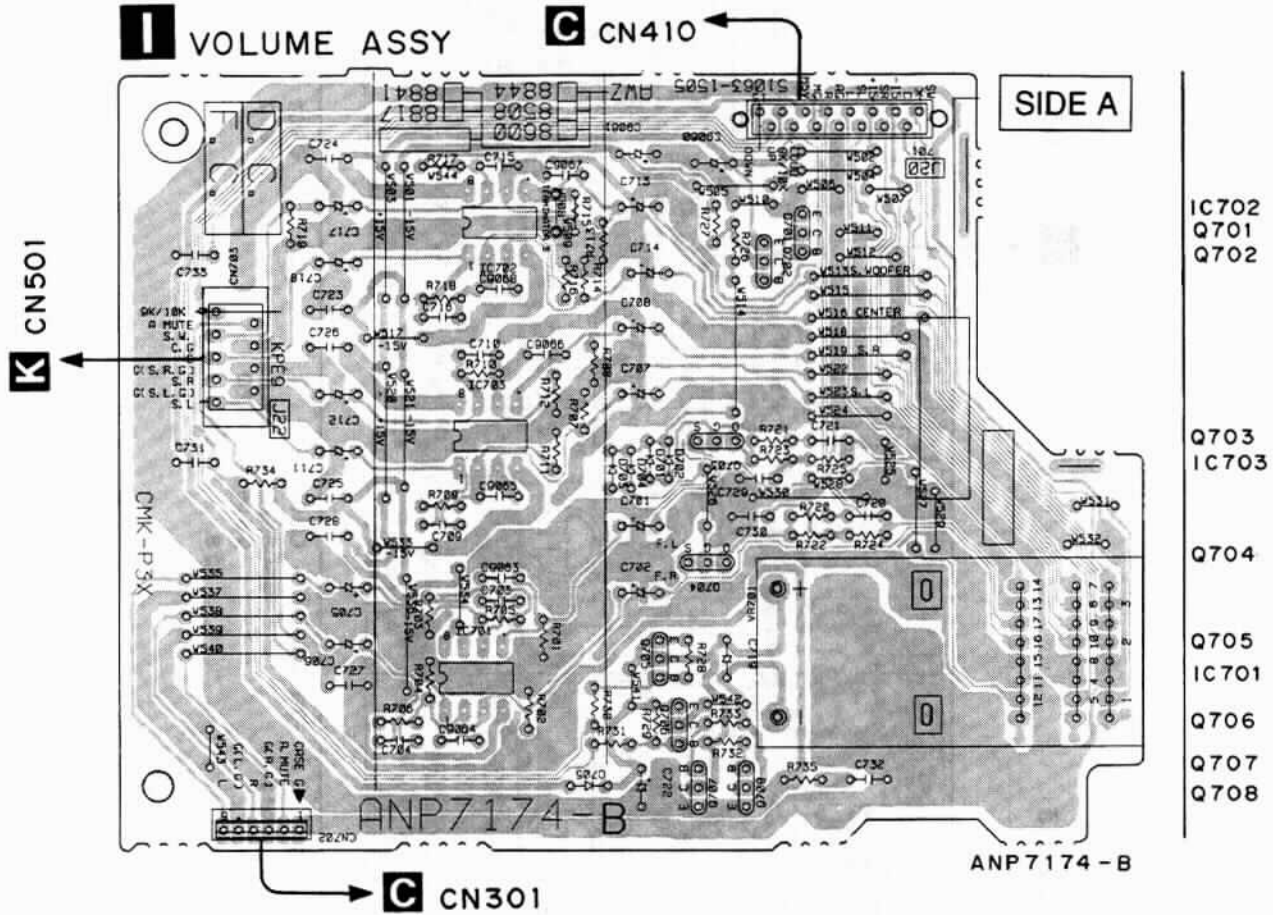
POWER TRANSFORMER

RISK OF FIRE-REPLACE FUSE AS MARKED.

ANP7174-B

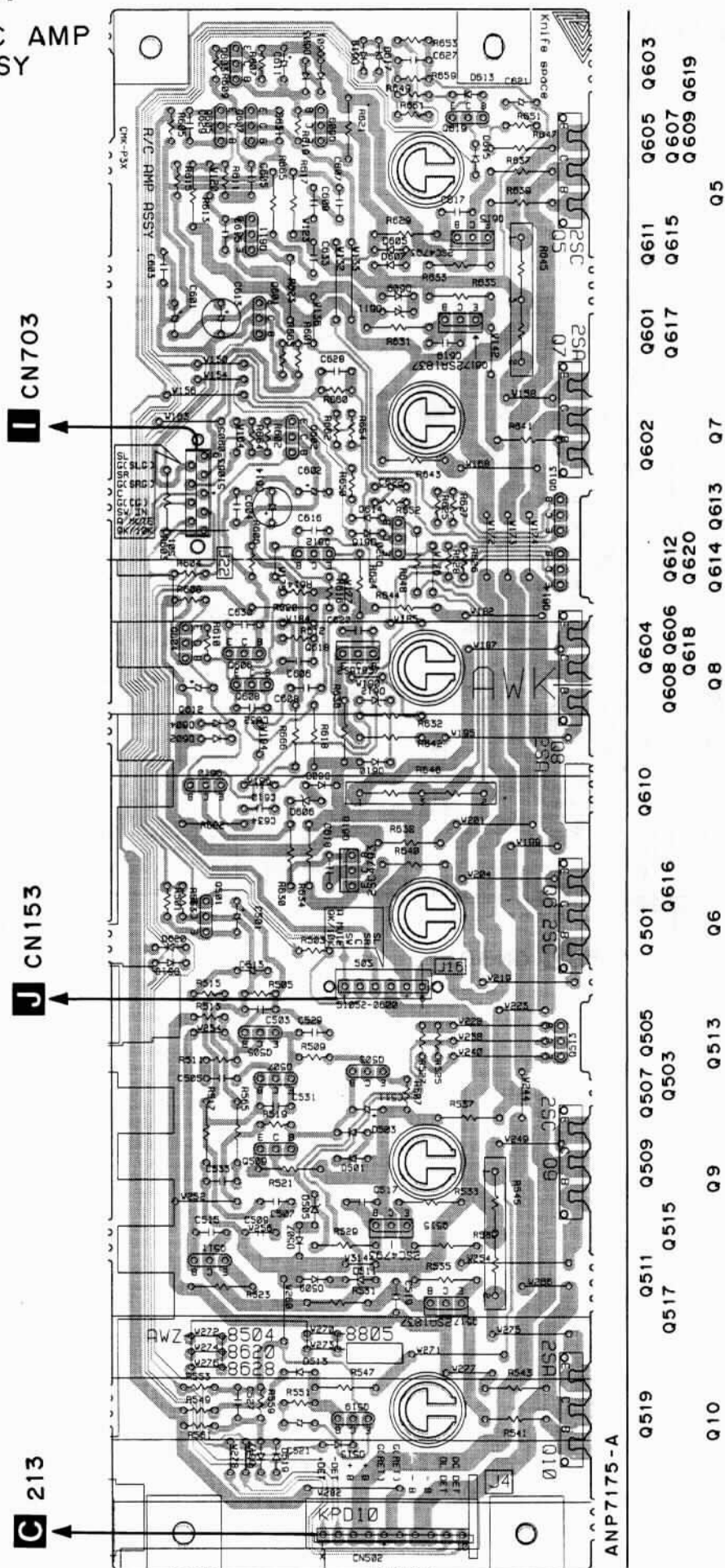


## 4.6 VOLUME ASSY



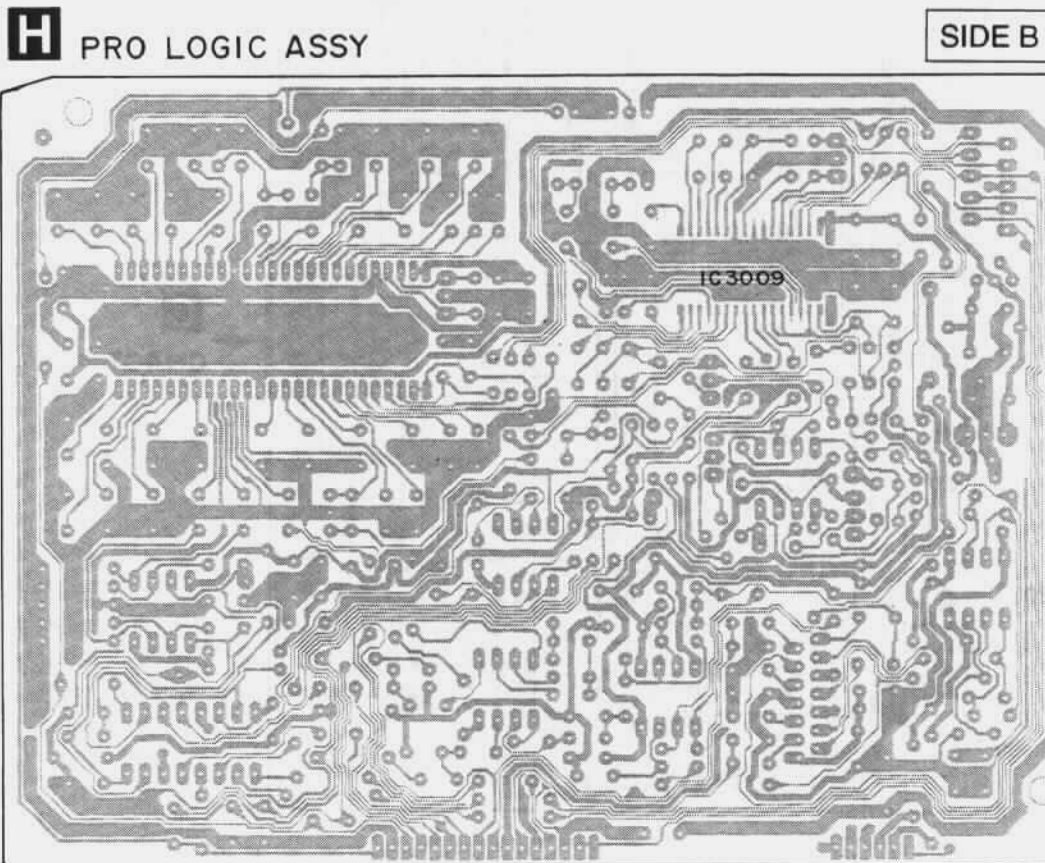
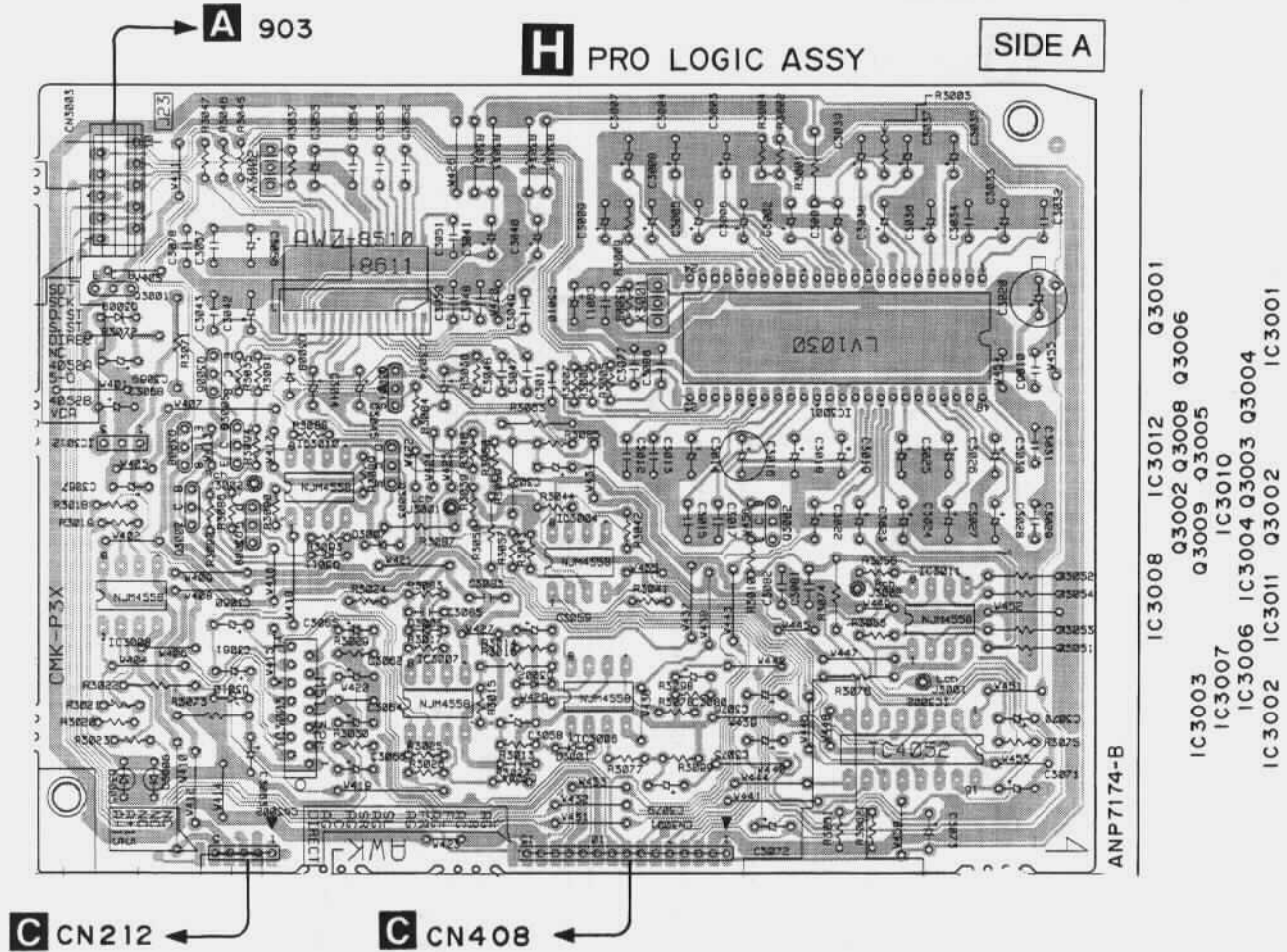
#### 4.7 R/C AMP ASSY

**K** R/C AMP  
ASSY



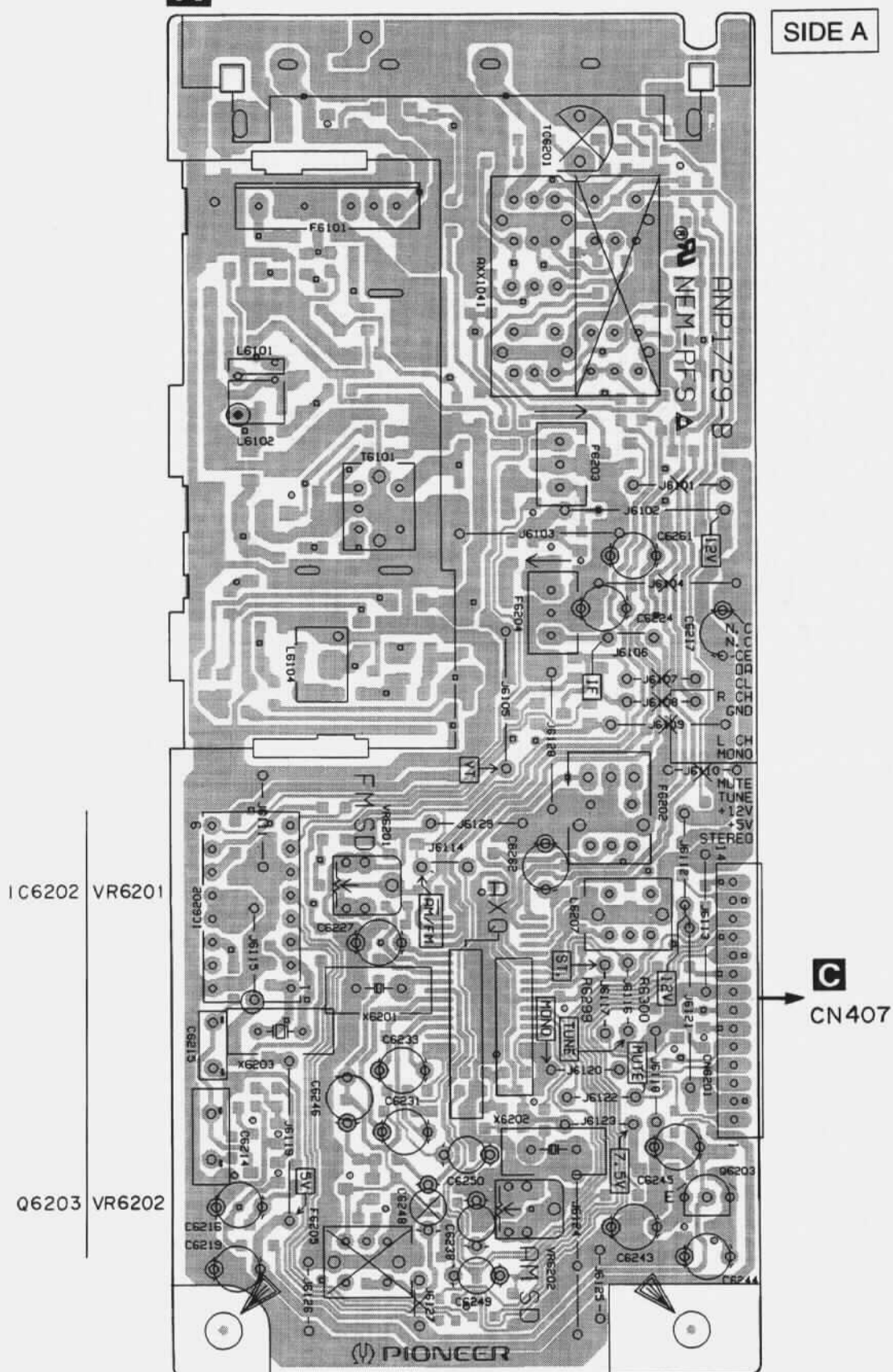
**K**

# 4.8 PRO LOGIC ASSY

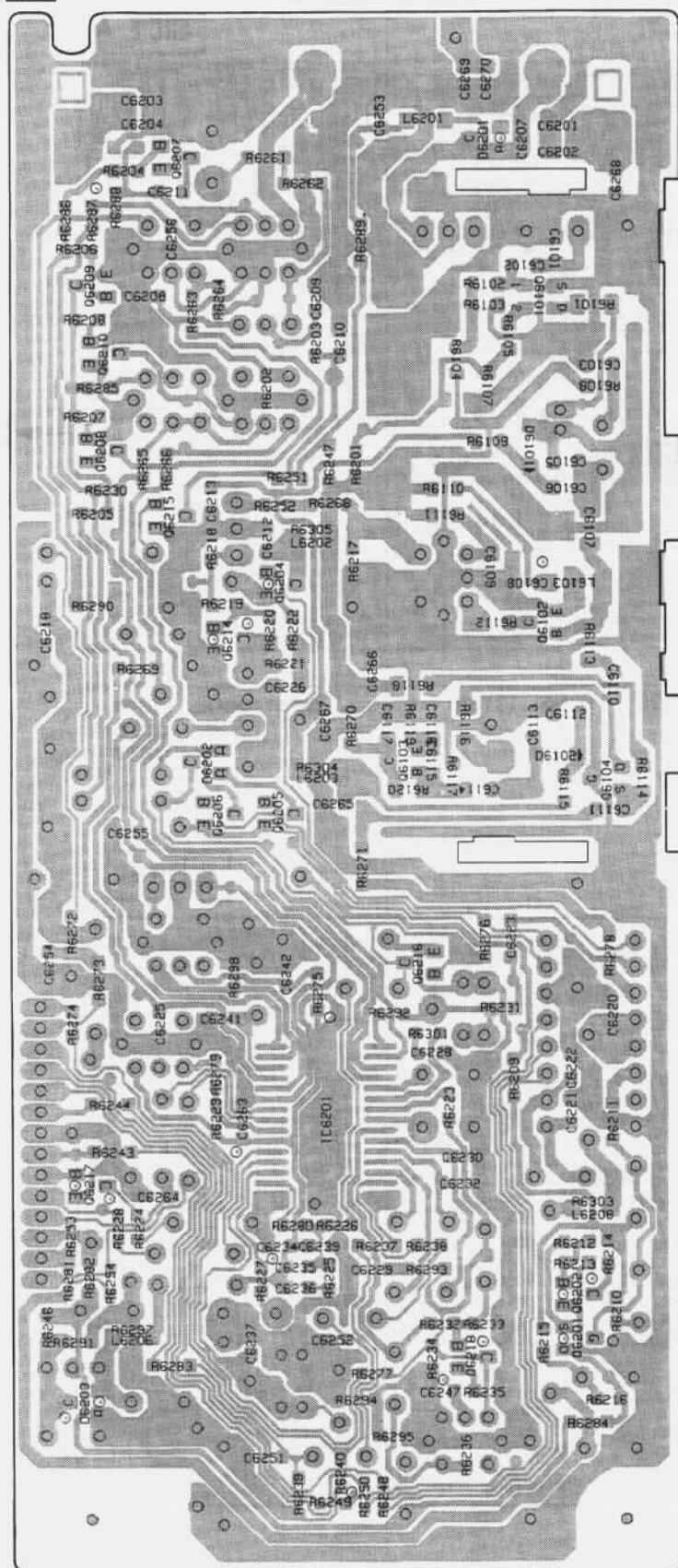


## 4.9 FM/AM TUNER MODULE

### **N** FM/AM TUNER MODULE



**N** FM/AM TUNER MODULE



SIDE B

Q6207

Q6209  
Q6101

Q6210

Q6208

Q6215

Q6204  
Q6102  
Q6214

Q6103  
Q6104  
Q6206  
Q6205

Q6216

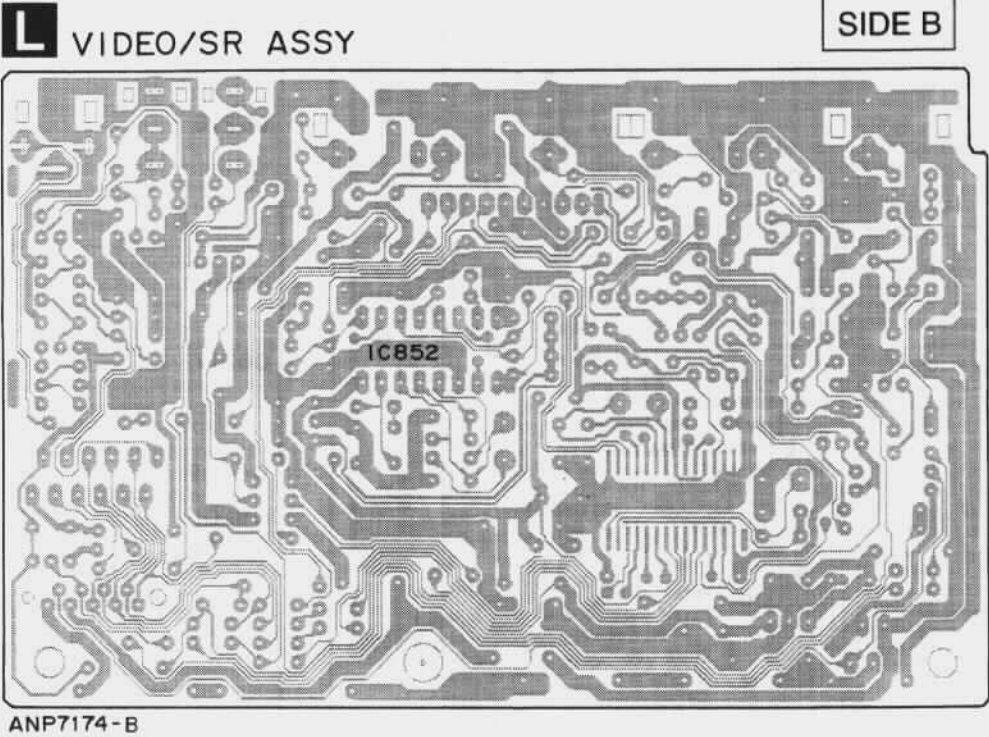
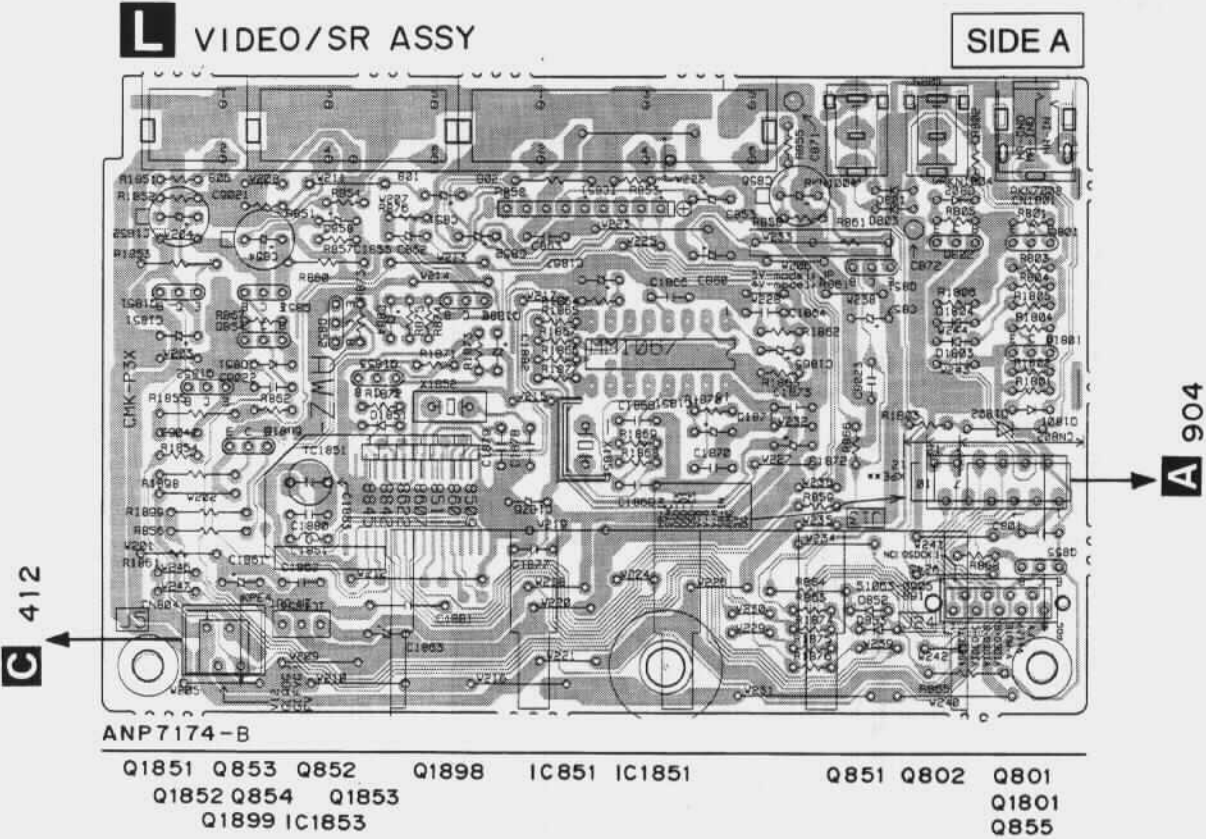
IC6201

Q6217

Q6202  
Q6201  
Q6218

( ANP1729-B )

4.10 VIDEO/SR ASSY



## 5. PCB PARTS LIST

- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.  
*Ex.1* When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560  $\Omega$   $\rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/4PU **561 J**

47 k $\Omega$   $\rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PU **473 J**

0.5  $\Omega$   $\rightarrow R50$  ..... RN2H **R50 K**

1  $\Omega$   $\rightarrow 1R0$  ..... RS1P **1R0 K**

*Ex.2* When there are 3 effective digits (such as in high precision metal film resistors).

5.62 k $\Omega$   $\rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC **5621 F**

### ■ LIST OF WHOLE PCB ASSEMBLIES

| Mark | PCB Assemblies       | Part No.  |         |         |         | Remarks |
|------|----------------------|-----------|---------|---------|---------|---------|
|      |                      | VSX-D506S |         | VSX-456 |         |         |
|      |                      | KUXJI     | KCXJI   | KUXJI   | KCXJI   |         |
| NSP  | MOTHER ASSY          | AWK7341   | AWK7341 | AWK7341 | AWK7341 |         |
| NSP  | └ MOS FET ASSY       | AWZ8497   | AWZ8497 | AWZ8497 | AWZ8497 |         |
|      | └ TRANS ASSY         | AWZ8593   | AWZ8593 | AWZ8593 | AWZ8593 |         |
|      | └ INPUT ASSY         | AWZ8609   | AWZ8609 | AWZ8609 | AWZ8609 |         |
|      | FRONT & R/C AMP ASSY | AWK7342   | AWK7342 | AWK7333 | AWK7333 |         |
| NSP  | └ POWER SWITCH ASSY  | AWZ8501   | AWZ8501 | AWZ8595 | AWZ8595 |         |
| NSP  | └ FRONT INPUT ASSY   | AWZ8502   | AWZ8502 | AWZ8596 | AWZ8596 |         |
| NSP  | └ R/C SPEAKER ASSY   | AWZ8597   | AWZ8597 | AWZ8597 | AWZ8597 |         |
|      | └ REG. 1 ASSY        | AWZ8599   | AWZ8599 | AWZ8599 | AWZ8599 |         |
|      | └ FL/U-COM ASSY      | AWZ8610   | AWZ8610 | AWZ8594 | AWZ8594 |         |
|      | └ R/C AMP ASSY       | AWZ8805   | AWZ8805 | AWZ8805 | AWZ8805 |         |
|      | COMPLEX ASSY         | AWK7343   | AWK7343 | AWK7334 | AWK7334 |         |
| NSP  | └ VIDEO/SR ASSY      | AWZ8509   | AWZ8509 | AWZ8601 | AWZ8601 |         |
|      | └ PRIMARY ASSY       | AWZ8598   | AWZ8598 | AWZ8598 | AWZ8598 |         |
| NSP  | └ VOLUME ASSY        | AWZ8600   | AWZ8600 | AWZ8600 | AWZ8600 |         |
|      | └ PRO LOGIC ASSY     | AWZ8611   | AWZ8611 | AWZ8510 | AWZ8510 |         |
|      | FM/AM TUNER MODULE   | AXQ7219   | AXQ7219 | AXQ7219 | AXQ7219 |         |

### ■ CONTRAST OF PCB ASSEMBLIES

#### **B** POWER SWITCH ASSY

AWZ8595, AWZ8501 have the same construction except for the following.

| Mark | Symbol & Description | Part No. |          | Remarks |
|------|----------------------|----------|----------|---------|
|      |                      | AWZ8501  | AWZ8595  |         |
|      | S985                 | ASG1034  | Not used |         |

#### **F** FRONT INPUT ASSY

AWZ8596, and AWZ8502 have the same construction except for the following.

| Mark | Symbol & Description | Part No.    |          | Remarks |
|------|----------------------|-------------|----------|---------|
|      |                      | AWZ8502     | AWZ8596  |         |
|      | C1984-C1986          | CGCYX473M16 | Not used |         |
|      | R1981, R1982         | RD1/4PU331J | Not used |         |
|      | R1983, R1984         | RD1/4PU474J | Not used |         |
|      | R1985                | RD1/4PU750J | Not used |         |
|      | CN1981               | AKB7085     | Not used |         |
|      | CN1993               | KM250MA5    | Not used |         |

# VSX-D506S, VSX-456

## **A** FL/U-COM ASSY

AWZ8594, AWZ8610 have the same construction except for the following.

| Mark | Srmbol & Description | Part No. |          | Remarks |
|------|----------------------|----------|----------|---------|
|      |                      | AWZ8610  | AWZ8594  |         |
|      | D920                 | 1SS252   | Not used |         |

## **L** VIDEO/SR ASSY

AWZ8601 and AWZ8509 have the same construction except for the following.

| Mark | Srmbol & Description     | Part No.    |             | Remarks |
|------|--------------------------|-------------|-------------|---------|
|      |                          | AWZ8509     | AWZ8601     |         |
|      | Q851, Q852, Q1898, Q1899 | 2SC1740S    | Not used    |         |
|      | C857                     | CEAS470M25  | Not used    |         |
|      | C862                     | Not used    | CGCYX103M16 |         |
|      | C864                     | CEAS4R7M50  | Not used    |         |
|      | C1853                    | CEANP4R7M50 | Not used    |         |
|      | R855                     | RD1/4PU680J | RD1/4PU750J |         |
|      | R856, R866, R876, R1899  | RD1/4PU102J | Not used    |         |
|      | R861                     | RD1/4PM331J | Not used    |         |
|      | R873, R1898              | RD1/4PM471J | Not used    |         |
|      | R874, R875               | RD1/4PU473J | Not used    |         |

## **H** PRO LOGIC ASSY

AWZ8510 and AWZ8611 have the same construction except for the following.

| Mark | Srmbol & Description | Part No.    |             | Remarks |
|------|----------------------|-------------|-------------|---------|
|      |                      | AWZ8611     | AWZ8510     |         |
|      | IC3009               | M65849FP    | Not used    |         |
|      | Q3001                | 2SD468      | Not used    |         |
|      | Q3002                | Not used    | 2SA933S     |         |
|      | Q3004                | 2SK246      | Not used    |         |
|      | Q3005, Q3006         | KRC103M     | Not used    |         |
|      | D3008                | 1SS252      | Not used    |         |
|      | D3009                | MTZJ5.1C    | Not used    |         |
|      | C3040, C3041         | CEAS1R0M50  | Not used    |         |
|      | C3042, C3044, C3045  | CEAS2R2M50  | Not used    |         |
|      | C3043                | CKCYB471K50 | Not used    |         |
|      | C3046                | CFTXA683J50 | Not used    |         |
|      | C3047, C3053         | CQMA222J50  | Not used    |         |
|      | C3048, C3054         | CFTXA103J50 | Not used    |         |
|      | C3049, C3052         | CFTXA683J50 | Not used    |         |
|      | C3050, C3051         | CFTXA104J50 | Not used    |         |
|      | C3055                | CEANP1R0M50 | Not used    |         |
|      | C3056                | CEAS470M10  | Not used    |         |
|      | C3057                | CGCYX104M25 | Not used    |         |
|      | C3069                | CEAS470M16  | Not used    |         |
|      | C3074                | CEANL4R7M50 | Not used    |         |
|      | R3010                | Not used    | RD1/4PU472J |         |
|      | R3031, R3032         | RD1/4PU752J | Not used    |         |
|      | R3033, R3034         | RD1/4PU103J | Not used    |         |
|      | R3035, R3036         | RD1/4PU473J | Not used    |         |
|      | R3037                | RD1/4PU105J | Not used    |         |
|      | R3039, R3040         | RD1/4PU224J | Not used    |         |
|      | R3041, R3042         | RD1/4PU102J | RD1/4PU682J |         |
|      | R3043, R3044         | RD1/4PU102J | RD1/4PU752J |         |
|      | R3045, R3046, R3047  | RD1/4PU102J | Not used    |         |
|      | R3057, R3058         | Not used    | RD1/4PU683J |         |
|      | R3059, R3060         | Not used    | RD1/4PU753J |         |
|      | R3072                | RD1/4PU681J | Not used    |         |
|      | R3084                | RD1/4PU104J | Not used    |         |
|      | R3091                | RD1/4PU475J | Not used    |         |
|      | R3094                | RD1/4PU223J | Not used    |         |
|      | X3002                | ASS7014     | Not used    |         |

## PARTS LIST FOR VSX-D506S

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

**E MOS FET ASSY****SEMICONDUCTORS**

|      |               |          |
|------|---------------|----------|
| Q395 | POWER MOS FET | IRF540A  |
| Q396 | POWER MOS FET | IRF9540A |

**RESISTORS**

|   |                 |                      |              |
|---|-----------------|----------------------|--------------|
| Δ | R391, R392      | CARBON FILM RESISTOR | RD1/4PMF101J |
|   | Other Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J  |

**D TRANS ASSY****SEMICONDUCTORS**

|            |       |        |
|------------|-------|--------|
| D291, D292 | DIODE | S5688G |
|------------|-------|--------|

**CAPACITORS**

|      |                  |            |
|------|------------------|------------|
| C295 | ELECT. CAPACITOR | CEAS470M50 |
|------|------------------|------------|

**RESISTORS**

|               |                      |             |
|---------------|----------------------|-------------|
| All Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J |
|---------------|----------------------|-------------|

**OTHERS**

|           |                   |            |
|-----------|-------------------|------------|
| H291-H294 | FUSE CLIP         | AKR1004    |
|           | CABLE HOLDER(11P) | 51052-1100 |
|           | CABLE HOLDER(8P)  | 51052-0800 |

**C INPUT ASSY****SEMICONDUCTORS**

|              |                  |             |
|--------------|------------------|-------------|
| IC201        | REGULATOR IC     | NJM78M56FA  |
| IC202, IC203 | OP-AMP IC        | NJM4558D-D  |
| IC401        | OP-AMP IC        | NJM4558D-D  |
| IC402        | ANALOG SWITCH IC | TC9273N-007 |
| IC403        | OP-AMP IC        | NJM4558D-D  |

|            |            |           |
|------------|------------|-----------|
| IC409      | OP-AMP IC  | UPC4570HA |
| Q201-Q203  | TRANSISTOR | KRC101M   |
| Q205, Q206 | TRANSISTOR | 2SC1740S  |
| Q207       | TRANSISTOR | 2SC2878   |
| Q208       | TRANSISTOR | 2SC2705   |

|            |            |         |
|------------|------------|---------|
| Q210       | TRANSISTOR | 2SA1145 |
| Q211       | TRANSISTOR | KRC101M |
| Q301, Q302 | TRANSISTOR | 2SC2878 |
| Q303-Q306  | TRANSISTOR | 2SA992  |
| Q307, Q308 | TRANSISTOR | 2SA1321 |

|   |            |            |         |
|---|------------|------------|---------|
| Δ | Q309, Q310 | TRANSISTOR | 2SC3334 |
| Δ | Q311, Q312 | TRANSISTOR | 2SC4793 |
| Δ | Q313, Q314 | TRANSISTOR | 2SA1837 |
|   | Q315, Q316 | TRANSISTOR | 2SC2240 |
|   | Q321, Q322 | TRANSISTOR | 2SA970  |

|            |              |          |
|------------|--------------|----------|
| Q397, Q398 | TRANSISTOR   | 2SC1740S |
| D201-D203  | DIODE        | 1SS252   |
| D209, D210 | ZENNER DIODE | MTZJ18B  |
| D212, D213 | DIODE        | D5SBA20  |
| D214-D217  | DIODE        | S5688G   |

|           |              |          |
|-----------|--------------|----------|
| D222      | ZENER DIODE  | MTZJ4.3C |
| D223      | ZENNER DIODE | MTZJ18B  |
| D224      | DIODE        | 1SS252   |
| D230-D233 | DIODE        | 1SS252   |
| D301-D304 | DIODE        | 1SS252   |

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

|           |             |          |
|-----------|-------------|----------|
| D313-D316 | DIODE       | 1SS252   |
| D324-D327 | DIODE       | 1SS252   |
| D402      | ZENER DIODE | MTZJ5.1B |

**COILS AND FILTERS**

|            |      |         |
|------------|------|---------|
| L301, L302 | COIL | ATH1004 |
|------------|------|---------|

**SWITCHES AND RELAYS**

|             |              |         |
|-------------|--------------|---------|
| S201        | SLIDE SWITCH | ASH1027 |
| RY201-RY204 | RELAY        | ASR7001 |

**CAPACITORS**

|            |                                  |             |
|------------|----------------------------------|-------------|
| C209       | ELECT. CAPACITOR                 | CEAS221M10  |
| C210       | CERAMIC CAPACITOR                | CKCYB102K50 |
| C214, C215 | ELECT. CAPACITOR                 | CEAS1R0M50  |
| C216, C217 | ELECT. CAPACITOR<br>(8200μF/71V) | ACH7018     |
| C218, C219 | ELECT. CAPACITOR                 | CEAS101M2A  |

|      |                   |             |
|------|-------------------|-------------|
| C221 | ELECT. CAPACITOR  | CEAS222M35  |
| C222 | ELECT. CAPACITOR  | CEAS102M35  |
| C223 | ELECT. CAPACITOR  | CEAS470M16  |
| C224 | ELECT. CAPACITOR  | CEAS470M25  |
| C225 | CERAMIC CAPACITOR | CKCYF103Z50 |

|            |                     |             |
|------------|---------------------|-------------|
| C226       | ELECT. CAPACITOR    | CEAS101M10  |
| C227, C228 | CKA (0.01μF/AC250V) | ACG1005     |
| C229       | ELECT. CAPACITOR    | CEAS4R7M50  |
| C301, C302 | ELECT. CAPACITOR    | CEAS2R2M50  |
| C303, C304 | CERAMIC CAPACITOR   | CCCSL151J50 |

|            |                   |             |
|------------|-------------------|-------------|
| C305, C306 | CERAMIC CAPACITOR | CKCYB102K2H |
| C307, C308 | CERAMIC CAPACITOR | CCCSL100D2H |
| C311, C312 | ELECT. CAPACITOR  | CEAS101M10  |
| C313, C314 | ELECT. CAPACITOR  | CEAS101M25  |
| C315, C316 | CERAMIC CAPACITOR | CCCSL5R0C2H |

|            |                      |             |
|------------|----------------------|-------------|
| C317-C320  | CERAMIC CAPACITOR    | CCCSL101K2H |
| C321, C322 | ELECT. CAPACITOR     | CEANP2R2M50 |
| C323, C324 | AUDIO FILM CAPACITOR | CFTXA473J50 |
| C335, C336 | ELECT. CAPACITOR     | CEAS4R7M2A  |
| C417, C418 | ELECT. CAPACITOR     | CEAS100M50  |

|            |                        |             |
|------------|------------------------|-------------|
| C423, C424 | ELECT. CAPACITOR       | CEAS101M25  |
| C425, C426 | PLASTIC FILM CAPACITOR | CQMA822J50  |
| C427, C428 | PLASTIC FILM CAPACITOR | CQMA242J50  |
| C429, C430 | CERAMIC CAPACITOR      | CGCYX473M25 |
| C431, C432 | ELECT. CAPACITOR       | CEAS4R7M50  |

|            |                   |             |
|------------|-------------------|-------------|
| C433, C434 | CERAMIC CAPACITOR | CGCYX473M25 |
| C437, C438 | ELECT. CAPACITOR  | CEAS2R2M50  |
| C439, C440 | ELECT. CAPACITOR  | CEAS470M25  |
| C441, C442 | CERAMIC CAPACITOR | CGCYX473M25 |
| C446-C448  | CERAMIC CAPACITOR | CCCSL101J50 |

|            |                   |             |
|------------|-------------------|-------------|
| C464       | ELECT. CAPACITOR  | CEAS470M25  |
| C479, C480 | ELECT. CAPACITOR  | CEAS4R7M50  |
| C485, C486 | CERAMIC CAPACITOR | CKCYF103Z50 |
| C487       | CERAMIC CAPACITOR | CGCYX473M25 |
| C489, C490 | ELECT. CAPACITOR  | CEAS4R7M50  |

|      |                   |             |
|------|-------------------|-------------|
| C491 | CERAMIC CAPACITOR | CGCYX103M16 |
| C495 | CERAMIC CAPACITOR | CGCYX104M12 |

# VSX-D506S, VSX-456

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

## RESISTORS

|   |                 |                                |               |
|---|-----------------|--------------------------------|---------------|
|   | R241,R242       | CARBON FILM RESISTOR           | RD1/4PMF103J  |
|   | R313,R314       | CARBON FILM RESISTOR           | RD1/4PM362J   |
|   | R315,R316       | CARBON FILM RESISTOR           | RD1/4PM104J   |
|   | R319,R320       | CARBON FILM RESISTOR           | RD1/4LMF680J  |
| Δ | R321,R322       | FUSIBLE RESISTOR               | RF1/4PS101J   |
| Δ | R327-R334       | CARBON FILM RESISTOR           | RD1/4PMF101J  |
| Δ | R335,R336       | FUSIBLE RESISTOR               | RF1/4PS8R2J   |
| Δ | R337-R340       | FUSIBLE RESISTOR               | RF1/4PS4R7J   |
| Δ | R341,R342       | FUSIBLE RESISTOR               | RF1/4PS8R2J   |
| Δ | R343,R344       | FUSIBLE RESISTOR<br>(0.33Ω,5W) | ACN-139       |
| Δ | R345,R346       | CARBON FILM RESISTOR           | RD1/4PMF472J  |
| Δ | R353,R354       | CARBON FILM RESISTOR           | RRD1/4PMF100J |
|   | R355,R356       | METAL OXIDE RESISTOR           | RS1LMF100J    |
|   | R460            | METAL OXIDE RESISTOR           | RS1PMF181J    |
|   | Other Resistors | CARBON FILM RESISTOR           | RD1/4PU□□□J   |

## OTHERS

|                   |            |
|-------------------|------------|
| CABLE HOLDER(3P)  | 51052-0300 |
| CABLE HOLDER(10P) | 51052-1000 |
| CABLE HOLDER(4P)  | 51063-0405 |
| CABLE HOLDER(8P)  | 51052-0800 |
| CABLE HOLDER(11P) | 51052-1100 |

|                  |            |
|------------------|------------|
| CABLE HOLDER(4P) | 51052-0400 |
| GROUND PLATE     | VNF-091    |
| PIN JACK(4P)     | AKB7014    |
| CABLE HOLDER(4P) | 51063-0405 |

|             |                      |          |
|-------------|----------------------|----------|
| CN201       | SPEAKER TERMINAL 8-P | AKE7006  |
| CN206       | CONNECTOR(15P)       | KPE15    |
| CN212       | 5P PLUG              | KM200TA5 |
| CN301       | 6P PLUG              | KM200TA6 |
| CN401,CN402 | PIN JACK(4P)         | AKB7015  |

|             |                |           |
|-------------|----------------|-----------|
| CN404       | PIN JACK(4P)   | AKB7015   |
| CN407       | 14P PLUG       | KM200IA14 |
| CN408       | 15P PLUG       | KM200TA15 |
| CN409,CN410 | CONNECTOR(15P) | KPE15     |
| CN411       | CONNECTOR(11P) | KPE11     |

|       |          |          |
|-------|----------|----------|
| CN413 | PLUG 5-P | KM250MA5 |
|-------|----------|----------|

## B POWER SW ASSY

### SEMICONDUCTORS

|      |          |         |
|------|----------|---------|
| D981 | LED(RED) | AEL1065 |
|------|----------|---------|

### SWITCHES AND RELAYS

|           |        |         |
|-----------|--------|---------|
| S981-S986 | SWITCH | ASG1034 |
|-----------|--------|---------|

### RESISTORS

|      |                      |             |
|------|----------------------|-------------|
| R981 | CARBON FILM RESISTOR | RD1/4PU271J |
|------|----------------------|-------------|

### OTHERS

|       |               |      |
|-------|---------------|------|
| CN981 | CONNECTOR(7P) | KPE7 |
|-------|---------------|------|

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

## F FRONT INPUT ASSY

### CAPACITORS

|             |                   |             |
|-------------|-------------------|-------------|
| C1984-C1986 | CERAMIC CAPACITOR | CGCYX473M16 |
|-------------|-------------------|-------------|

### RESISTORS

|              |                      |            |
|--------------|----------------------|------------|
| R1991, R1992 | METAL OXIDE RESISTOR | RS2LMF331J |
|--------------|----------------------|------------|

### OTHERS

|        |              |          |
|--------|--------------|----------|
| CN1981 | PIN JACK(3P) | AKB7085  |
| CN1991 | JACK         | AKN7001  |
| CN1993 | PLUG 5-P     | KM250MA5 |

## J R/C SPEAKER ASSY

### SEMICONDUCTORS

|           |            |          |
|-----------|------------|----------|
| Q151      | TRANSISTOR | 2SC1740S |
| Q163      | TRANSISTOR | 2SC2878  |
| D151,D152 | DIODE      | 1SS252   |

### COILS AND FILTERS

|           |      |         |
|-----------|------|---------|
| L154-L156 | COIL | ATH1004 |
|-----------|------|---------|

### SWITCHES AND RELAYS

|             |       |         |
|-------------|-------|---------|
| RY151,RY152 | RELAY | ASR7001 |
|-------------|-------|---------|

### CAPACITORS

|           |                      |             |
|-----------|----------------------|-------------|
| C161,C163 | AUDIO FILM CAPACITOR | CFTXA473J50 |
| C165      | AUDIO FILM CAPACITOR | CFTXA473J50 |

### RESISTORS

|                 |                      |              |
|-----------------|----------------------|--------------|
| R183-R185       | CARBON FILM RESISTOR | RD1/4PMF100J |
| R186-R188       | METAL OXIDE RESISTOR | RS1LMF100J   |
| Other Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J  |

### OTHERS

|       |                      |            |
|-------|----------------------|------------|
|       | CABLE HOLDER(4P)     | 51052-0400 |
| CN151 | SPEAKER TERMINAL 6-P | AKE7041    |
| CN152 | 2P PIN JACK          | AKB7001    |

## G REG.1 ASSY

### SEMICONDUCTORS

|       |              |            |
|-------|--------------|------------|
| IC101 | REGULATOR IC | NJM78M15FA |
| IC102 | REGULATOR IC | NJM79M15FA |
| IC103 | REGULATOR IC | NJM78M12FA |

### CAPACITORS

|           |                   |             |
|-----------|-------------------|-------------|
| C101-C103 | CERAMIC CAPACITOR | CKCYF103Z50 |
| C105-C107 | ELECT. CAPACITOR  | CEAS101M16  |

### RESISTORS

|        |                      |            |
|--------|----------------------|------------|
| Δ R226 | METAL OXIDE RESISTOR | RS2LMF150J |
|--------|----------------------|------------|

### OTHERS

|                  |            |
|------------------|------------|
| CABLE HOLDER(6P) | 51052-0600 |
| CABLE HOLDER(7P) | 51052-0700 |

## A FL/U-COM ASSY

### SEMICONDUCTORS

|        |           |          |
|--------|-----------|----------|
| IC1901 | OP-AMP IC | UPC4570C |
|--------|-----------|----------|

| Mark | No.       | Description | Parts No.  |
|------|-----------|-------------|------------|
|      | IC1902    | OP-AMP IC   | NJM4558D-D |
|      | IC901     | CONTROL MCU | PDG197A    |
|      | Q901      | TRANSISTOR  | KRC101M    |
|      | Q902      | TRANSISTOR  | KRC103M    |
|      | Q903      | TRANSISTOR  | KRC101M    |
|      | Q904      | TRANSISTOR  | 2SA933S    |
|      | Q905,Q906 | TRANSISTOR  | 2SC1740S   |
|      | D901-D912 | DIODE       | 1SS252     |
|      | D914-D918 | DIODE       | 1SS252     |
|      | D920      | DIODE       | 1SS252     |
|      | D923,D924 | DIODE       | 1SS252     |

## COILS AND FILTERS

|      |                |         |
|------|----------------|---------|
| L901 | AXIAL INDUCTOR | LAU2R2J |
|------|----------------|---------|

## SWICHS AND RELAYS

|           |                |         |
|-----------|----------------|---------|
| S903-S911 | SWITCH         | ASG1034 |
| S913-S916 | SWITCH         | ASG1034 |
| S919-S921 | SWITCH         | ASG1034 |
| S922      | ROTARY ENCODER | ASX7001 |

## CAPACITORS

|             |                      |              |
|-------------|----------------------|--------------|
| C1903,C1904 | AUDIO FILM CAPACITOR | CFTXA473J50  |
| C1905,C1906 | AUDIO FILM CAPACITOR | CFTXA274J50  |
| C1907,C1908 | AUDIO FILM CAPACITOR | CFTXA123J50  |
| C1909,C1910 | AUDIO FILM CAPACITOR | CFTXA563J50  |
| C1911,C1912 | ELECT. CAPACITOR     | CEAS100M50   |
| C1915-C1918 | ELECT. CAPACITOR     | CEAS100M50   |
| C1919,C1920 | CERAMIC CAPACITOR    | CGCYX103M16  |
| C1921,C1922 | ELECT. CAPACITOR     | CEAS2R2M50   |
| C901        | CERAMIC CAPACITOR    | CKPUYY103M16 |
| C902        | CAPACITOR(???)       | ACH7058      |
| C903        | ELECT. CAPACITOR     | CEAS221M10   |
| C904        | CERAMIC CAPACITOR    | CKPUYY103M16 |
| C905,C906   | CERAMIC CAPACITOR    | CKPUYF473Z16 |
| C907        | ELECT. CAPACITOR     | CEAS2R2M50   |
| C908        | CERAMIC CAPACITOR    | CGCYX104M16  |
| C909        | ELECT. CAPACITOR     | CEAS2R2M50   |
| C910        | AXIAL CAPACITOR      | CKPYF103Z50  |
| C911        | ELECT. CAPACITOR     | CEAS101M25   |
| C912        | ELECT. CAPACITOR     | CEAS470M50   |
| C913        | ELECT. CAPACITOR     | CEAS470M25   |
| C914        | CERAMIC CAPACITOR    | CKCYF103Z50  |
| C917        | AXIAL CAPACITOR      | CKPUYB101K50 |
| C918        | CERAMIC CAPACITOR    | CKPUYY103M16 |
| C919        | CERAMIC CAPACITOR    | CKPUYB102K50 |
| C931        | AXIAL CAPACITOR      | CKPUYB101K50 |
| C932,C933   | AXIAL CAPACITOR      | CCPUSL220J50 |
| C934-C939   | AXIAL CAPACITOR      | CKPUYB101K50 |
| C940        | ELECT. CAPACITOR     | CEAS470M16   |
| C941,C942   | AXIAL CAPACITOR      | CKPUYB101K50 |
| C943,C944   | CERAMIC CAPACITOR    | CKPUYF103Z25 |
| C945,C965   | CERAMIC CAPACITOR    | CKPUYY103M16 |

## RESISTORS

|      |                      |          |
|------|----------------------|----------|
| R919 | RESISTOR ARRAY (10K) | RA8T103J |
|------|----------------------|----------|

| Mark | No.             | Description               | Parts No.   |
|------|-----------------|---------------------------|-------------|
|      | VR1901,VR1902   | VARIABLE RESISTOR (100KΩ) | ACS7020     |
|      | VR1903          | VARIABLE (500-X1)         | ACS1016     |
|      | Other Resistors | CARBON FILM RESISTOR      | RD1/4PU□□□□ |

## OTHERS

|                             |            |
|-----------------------------|------------|
| REMOTE RECEIVER UNIT        | GP1U28X    |
| CABLE HOLDER(15P)           | 51063-1505 |
| CABLE HOLDER(10P)           | 51063-1005 |
| CABLE HOLDER(12P)           | 51063-1205 |
| CABLE HOLDER(7P)            | 51063-0705 |
| CABLE HOLDER(11P)           | 51063-1105 |
| CABLE HOLDER(15P)           | 51063-1505 |
| FL TUBE                     | AAV7035    |
| CERAMIC RESONATOR (7.70MHz) | ASS1055    |

V901

X901

## K R/C AMP ASSY

### SEMICONDUCTORS

|             |                  |          |
|-------------|------------------|----------|
| Q501        | TRANSISTOR       | 2SC2878  |
| Q503        | TRANSISTOR       | 2SA970   |
| Q505,Q507   | TRANSISTOR       | 2SA992   |
| Q509        | TRANSISTOR       | 2SA1321  |
| Q511        | TRANSISTOR       | 2SC3334  |
| △ Q513      | TRANSISTOR       | 2SC1740S |
| △ Q515      | POWER TR         | 2SC4793  |
| △ Q517      | POWER TR         | 2SA1837  |
| Q519        | TRANSISTOR       | 2SC2240  |
| Q601,Q602   | TRANSISTOR       | 2SC2878  |
| Q603,Q604   | TRANSISTOR       | 2SA970   |
| Q605-Q608   | TRANSISTOR       | 2SA992   |
| Q609,Q610   | TRANSISTOR       | 2SA1321  |
| Q611,Q612   | TRANSISTOR       | 2SC3334  |
| △ Q613,Q614 | TRANSISTOR       | 2SC1740S |
| △ Q615,Q616 | POWER TRANSISTOR | 2SC4793  |
| △ Q617,Q618 | POWER TRANSISTOR | 2SA1837  |
| Q619,Q620   | TRANSISTOR       | 2SC2240  |
| D501,D503   | DIODE            | 1SS252   |
| D513,D515   | DIODE            | 1SS252   |
| D517,D519   | DIODE            | 1SS252   |
| D601-D604   | DIODE            | 1SS252   |
| D613-D620   | DIODE            | 1SS252   |

### CAPACITORS

|           |                   |             |
|-----------|-------------------|-------------|
| C501      | ELECT. CAPACITOR  | CEAS2R2M50  |
| C503      | CERAMIC CAPACITOR | CCCSL151J50 |
| C505      | CERAMIC CAPACITOR | CKCYB102K2H |
| C507      | CERAMIC CAPACITOR | CCCSL120K2H |
| C511      | ELECT. CAPACITOR  | CEAS101M10  |
| C513      | ELECT. CAPACITOR  | CEAS101M25  |
| C515      | CERAMIC CAPACITOR | CCCSL5R0C2H |
| C517,C519 | CERAMIC CAPACITOR | CCCSL101K2H |
| C521      | ELECT. CAPACITOR  | CEANP2R2M50 |
| C601,C602 | ELECT. CAPACITOR  | CEAS2R2M50  |
| C603,C604 | CERAMIC CAPACITOR | CCCSL151J50 |
| C605,C606 | CERAMIC CAPACITOR | CKCYB102K2H |

# VSX-D506S, VSX-456

| Mark | No.       | Description       | Parts No.   |
|------|-----------|-------------------|-------------|
|      | C607,C608 | CERAMIC CAPACITOR | CCCSL120K2H |
|      | C611,C612 | ELECT. CAPACITOR  | CEAS101M10  |
|      | C613,C614 | ELECT. CAPACITOR  | CEAS101M25  |
|      | C615,C616 | CERAMIC CAPACITOR | CCCSL5R0C2H |
|      | C617-C620 | CERAMIC CAPACITOR | CCCSL101K2H |
|      | C621,C622 | ELECT. CAPACITOR  | CEANP2R2M50 |

## RESISTORS

|   |                 |                      |              |
|---|-----------------|----------------------|--------------|
|   | R517            | CARBON FILM RESISTOR | RD1/4PM104J  |
|   | R521            | CARBON FILM RESISTOR | RD1/4LMF680J |
| Δ | R523            | FUSIBLE RESISTOR     | RF1/4PS101J  |
| Δ | R529,R531       | CARBON FILM RESISTOR | RD1/4PMF101J |
| Δ | R533,R535       | CARBON FILM RESISTOR | RD1/4PMF101J |
| Δ | R537            | FUSIBLE RESISTOR     | RF1/4PS8R2J  |
| Δ | R539,R541       | FUSIBLE RESISTOR     | RF1/4PS4R7J  |
| Δ | R543            | FUSIBLE RESISTOR     | RF1/4PS8R2J  |
| Δ | R545            | RESISTOR (0.33Ω, 5W) | ACN-139      |
| Δ | R547            | CARBON FILM RESISTOR | RD1/4PMF472J |
|   | R617,R618       | CARBON FILM RESISTOR | RD1/4PM104J  |
|   | R621,R622       | CARBON FILM RESISTOR | RD1/4LMF680J |
| Δ | R623,R624       | FUSIBLE RESISTOR     | RF1/4PS101J  |
| Δ | R629-R636       | CARBON FILM RESISTOR | RD1/4PMF101J |
| Δ | R637,R638       | FUSIBLE RESISTOR     | RF1/4PS8R2J  |
| Δ | R639-R642       | FUSIBLE RESISTOR     | RF1/4PS4R7J  |
| Δ | R643,R644       | FUSIBLE RESISTOR     | RF1/4PS8R2J  |
| Δ | R645,R646       | RESISTOR (0.33Ω, 5W) | ACN-139      |
| Δ | R647,R648       | CARBON FILM RESISTOR | RD1/4PMF472J |
|   | Other Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J  |

## OTHERS

|                  |            |
|------------------|------------|
| CABLE HOLDER(9P) | 51063-0905 |
| CABLE HOLDER(6P) | 51052-0600 |

## L VIDEO S/R ASSY

### SEMICONDUCTORS

|              |              |          |
|--------------|--------------|----------|
| IC851        | VIDEO SEITCH | LA7952   |
| Q1898, Q1899 | TRANSISTOR   | SC1740S  |
| Q801         | TRANSISTOR   | 2SA933S  |
| Q802         | TRANSISTOR   | KRC103M  |
| Q851-Q854    | TRANSISTOR   | 2SC1740S |
| Q855         | TRANSISTOR   | 2SA933S  |
| D801         | DIODE        | 1SS252   |
| D802         | DIODE        | 1SS252   |
| D851-D853    | DIODE        | 1SS252   |

### CAPACITORS

|            |                   |             |
|------------|-------------------|-------------|
| C1853      | ELECT. CAPACITOR  | CEANP4R7M50 |
| C801       | CERAMIC CAPACITOR | CKCYF103Z50 |
| C851-C853  | ELECT. CAPACITOR  | CEAS4R7M50  |
| C854, C856 | ELECT. CAPACITOR  | CEAS471M6R3 |
| C857, C858 | ELECT. CAPACITOR  | CEAS470M25  |
| C860       | ELECT. CAPACITOR  | CEAS470M25  |
| C863       | CERAMIC CAPACITOR | CKCYB102K50 |
| C864       | ELECT. CAPACITOR  | CEAS4R7M50  |

| Mark | No.             | Description          | Parts No.   |
|------|-----------------|----------------------|-------------|
|      | R860, R861      | CARBON FILM RESISTOR | RD1/4PM331J |
|      | Other Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J |

## OTHERS

|             |                |         |
|-------------|----------------|---------|
|             | PIN JACK(2P)   | AKB7016 |
|             | 3P RCA PINJACK | AKB7018 |
| JA803,JA807 | JACK           | RKN1004 |
| CN802       | CONNECTOR(7P)  | KPE7    |
| CN804       | CONNECTOR(4P)  | KPE4    |

## M PRIMARY ASSY

### SEMICONDUCTORS

|         |              |            |
|---------|--------------|------------|
| IC51    | REGULATOR IC | NJM78M56FA |
| Q51     | TRANSISTOR   | KRC101M    |
| D51     | DIODE        | S5688G     |
| D53     | ZENER DIODE  | MTZJ5.1A   |
| D54,D55 | DIODE        | 1SS252     |

### TRANSFORMERS

|   |     |                   |         |
|---|-----|-------------------|---------|
| Δ | T51 | POWER TRANSFORMER | ATT7018 |
|---|-----|-------------------|---------|

### SWITCHES AND RELAYS

|  |      |       |         |
|--|------|-------|---------|
|  | RY51 | RELAY | ASR1044 |
|--|------|-------|---------|

### CAPACITORS

|         |                      |             |
|---------|----------------------|-------------|
| C51     | CERAMIC CAPACITOR    | CGCYX103M25 |
| C52     | ELECT. CAPACITOR     | CEAS471M16  |
| C53     | ELECT. CAPACITOR     | CEAS470M16  |
| C54,C55 | CKA (10000pF/AC250V) | ACG7020     |

### RESISTORS

|                 |                       |             |
|-----------------|-----------------------|-------------|
| R54             | CARBON FILM RESISTOR  | RD1/2PM270J |
| R55             | RESISTOR(2.2MΩ, 1/2W) | ACN-208     |
| Other Resistors | CARBON FILM RESISTOR  | RD1/4PU□□□J |

## OTHERS

|         |               |         |
|---------|---------------|---------|
|         | SOCKET(1P)    | AKP1060 |
|         | GROUND PLATE  | VNF-091 |
| CN51    | CONNECTOR(4P) | KPE4    |
| H51,H52 | FUSE CLIP     | AKR1004 |

## I VOLUME ASSY

### SEMICONDUCTORS

|             |            |          |
|-------------|------------|----------|
| IC701-IC703 | IC         | UPC4570C |
| Q701        | TRANSISTOR | KRC103M  |
| Q702        | TRANSISTOR | KRA103M  |
| Q703,Q704   | N-FET      | 2SK246   |
| Q705,Q706   | TRANSISTOR | 2SA1115  |
| Q707,Q708   | TRANSISTOR | 2SC2603  |
| D701,D703   | DIODE      | 1SS252   |
| D705        | DIODE      | 1SS252   |

### CAPASITORS

|           |                   |              |
|-----------|-------------------|--------------|
| C701,C702 | ELECT. CAPACITOR  | CEAS4R7M50   |
| C703,C704 | AXIAL CAPACITOR   | CCPUSL560J50 |
| C705-C708 | ELECT. CAPACITOR  | CEAS4R7M50   |
| C709,C710 | CERAMIC CAPACITOR | CKPUYB151K50 |

| Mark | No.       | Description          | Parts No.    |
|------|-----------|----------------------|--------------|
|      | C711,C712 | ELECT. CAPACITOR     | CEAS4R7M50   |
|      | C714      | ELECT. CAPACITOR     | CEAS4R7M50   |
|      | C716      | AXIAL CAPACITOR      | CKPUYB101K50 |
|      | C718      | ELECT. CAPACITOR     | CEAS4R7M50   |
|      | C719      | ELECT. CAPACITOR     | CEANP100M50  |
|      | C720,C721 | CERAMIC CAPACITOR    | CCCSL271J50  |
|      | C722      | ELECT. CAPACITOR     | CEAS220M50   |
|      | C723-C728 | CERAMIC CAPACITOR    | CGCYX104M25  |
|      | C729,C730 | AUDIO FILM CAPACITOR | CFTXA473J50  |

**RESISTORS**

|                 |                                  |             |
|-----------------|----------------------------------|-------------|
| VR701           | VARIABLE RESISTOR<br>(100Ω-A5x6) | ACX7028     |
| Other Resistors | CARBON FILM RESISTOR             | RD1/4PU□□□□ |

**OTHERS**

|       |                   |            |
|-------|-------------------|------------|
|       | CABLE HOLDER(15P) | 51063-1505 |
| CN702 | 6P SOCKET         | KP200TA6L  |
| CN703 | CONNECTOR(9P)     | KPE9       |

## PRO LOGIC ASSY

**SEMICONDUCTORS**

|               |                   |             |
|---------------|-------------------|-------------|
| IC3001        | DOLBY PROLOGIC IC | LV1030      |
| IC3002        | LOGIC IC          | TC4052BP    |
| IC3003        | DUAL ATT/BAL IC   | M51132L     |
| IC3004        | OP-AMP IC         | NJM4558D-D  |
| IC3006-IC3008 | OP-AMP IC         | NJM4558D-D  |
| IC3009        | DSP IC            | M65849FP    |
| IC3010        | OP-AMP IC         | NJM4558D-D  |
| IC3012        | REGULATOR IC      | NJM78M09FA  |
| Q3001         | TRANSISTOR        | 2SD468      |
| Q3003,Q3004   | N-FET             | 2SK246      |
| Q3005         | TRANSISTOR        | KRC103M     |
| Q3006         | TRANSISTOR        | KRA103M     |
| Q3007         | TRANSISTOR        | KRC103M     |
| Q3008         | TRANSISTOR        | KRA103M     |
| Q3009         | N-FET             | 2SK246      |
| D3001,D3002   | DIODE             | 1SS252      |
| D3005,D3006   | LED(RED)          | BR3371XJ30A |
| D3007,D3008   | DIODE             | 1SS252      |
| D3009         | ZENER DIODE       | MTZJ5.1C    |
| D3010         | ZENER DIODE       | MTZJ12C     |
| D3011         | DIODE             | 1SS252      |

**CAPACITORS**

|             |                        |             |
|-------------|------------------------|-------------|
| C3001,C3002 | ELECT. CAPACITOR       | CEAS1R0M50  |
| C3003       | ELECT. CAPACITOR       | CEAS221M10  |
| C3004-C3007 | ELECT. CAPACITOR       | CEAS100M50  |
| C3008       | ELECT. CAPACITOR       | CEAS2R2M50  |
| C3009       | ELECT. CAPACITOR       | CEASR33M50  |
| C3010,C3016 | ELECT. CAPACITOR       | CEAS221M10  |
| C3011       | AUDIO FILM CAPACITOR   | CFTXA823J50 |
| C3012       | PLASTIC FILM CAPACITOR | CQMA332J50  |
| C3013       | AUDIO FILM CAPACITOR   | CFTXA823J50 |
| C3014       | ELECT. CAPACITOR       | CEASR47M50  |

| Mark | No.         | Description            | Parts No.   |
|------|-------------|------------------------|-------------|
|      | C3015       | PLASTIC FILM CAPACITOR | CQMA473J50  |
|      | C3017       | AUDIO FILM CAPACITOR   | CFTXA474J50 |
|      | C3018       | ELECT. CAPACITOR       | CEAS470M10  |
|      | C3019       | ELECT. CAPACITOR       | CEAS1R0M50  |
|      | C3020       | ELECT. CAPACITOR       | CEAS221M16  |
|      | C3021-C3024 | ELECT. CAPACITOR       | CEAS100M50  |
|      | C3025,C3027 | ELECT. CAPACITOR       | CEASR47M50  |
|      | C3026,C3028 | ELECT. CAPACITOR       | CEANL4R7M50 |
|      | C3029       | AUDIO FILM CAPACITOR   | CFTXA154J50 |
|      | C3030       | ELECT. CAPACITOR       | CEANL3R3M50 |
|      | C3031,C3032 | AUDIO FILM CAPACITOR   | CFTXA154J50 |
|      | C3033       | ELECT. CAPACITOR       | CEANL3R3M50 |
|      | C3035       | ELECT. CAPACITOR       | CEANL4R7M50 |
|      | C3036       | ELECT. CAPACITOR       | CEASR47M50  |
|      | C3037       | ELECT. CAPACITOR       | CEANL4R7M50 |
|      | C3038       | ELECT. CAPACITOR       | CEASR47M50  |
|      | C3039-C3041 | ELECT. CAPACITOR       | CEAS1R0M50  |
|      | C3042       | ELECT. CAPACITOR       | CEAS2R2M50  |
|      | C3043       | CERAMIC CAPACITOR      | CKCYB471K50 |
|      | C3044       | ELECT. CAPACITOR       | CEAS2R2M50  |
|      | C3045       | ELECT. CAPACITOR       | CEAS2R2M50  |
|      | C3046       | AUDIO FILM CAPACITOR   | CFTXA683J50 |
|      | C3047       | PLASTIC FILM CAPACITOR | CQMA222J50  |
|      | C3048       | AUDIO FILM CAPACITOR   | CFTXA103J50 |
|      | C3049       | AUDIO FILM CAPACITOR   | CFTXA683J50 |
|      | C3050,C3051 | AUDIO FILM CAPACITOR   | CFTXA104J50 |
|      | C3052       | AUDIO FILM CAPACITOR   | CFTXA683J50 |
|      | C3053       | PLASTIC FILM CAPACITOR | CQMA222J50  |
|      | C3054       | AUDIO FILM CAPACITOR   | CFTXA103J50 |
|      | C3055       | ELECT. CAPACITOR       | CEANP1R0M50 |
|      | C3056       | ELECT. CAPACITOR       | CEAS470M10  |
|      | C3057       | CERAMIC CAPACITOR      | CGCYX104M25 |
|      | C3058,C3059 | ELECT. CAPACITOR       | CEAS220M25  |
|      | C3060-C3062 | ELECT. CAPACITOR       | CEAS4R7M50  |
|      | C3063       | ELECT. CAPACITOR       | CEAS470M16  |
|      | C3064       | ELECT. CAPACITOR       | CEAS220M25  |
|      | C3065,C3066 | ELECT. CAPACITOR       | CEAS4R7M50  |
|      | C3067       | ELECT. CAPACITOR       | CEAS470M25  |
|      | C3068-C3071 | ELECT. CAPACITOR       | CEAS470M16  |
|      | C3072,C3073 | ELECT. CAPACITOR       | CEAS4R7M50  |
|      | C3074       | ELECT. CAPACITOR       | CEANL4R7M50 |
|      | C3075,C3076 | ELECT. CAPACITOR       | CEAS100M50  |
|      | C3077       | CERAMIC CAPACITOR      | CKCYB471K50 |
|      | C3079,C3080 | ELECT. CAPACITOR       | CEAS4R7M50  |
|      | C3081-C3084 | CERAMIC CAPACITOR      | CGCYX473M25 |
|      | C3085       | CERAMIC CAPACITOR      | CGCYX104M25 |
|      | C3086       | CERAMIC CAPACITOR      | CCCSL101J50 |

**RESISTORS**

|             |                    |              |
|-------------|--------------------|--------------|
| R3020       | METALFILM RESISTOR | RN1/4PC5102F |
| R3021,R3022 | METALFILM RESISTOR | RN1/4PC1003F |
| R3023       | METALFILM RESISTOR | RN1/4PC3902F |
| R3024       | METALFILM RESISTOR | RN1/4PC5102F |
| R3025,R3026 | METALFILM RESISTOR | RN1/4PC1003F |

# VSX-D506S, VSX-456

| Mark | No.             | Description          | Parts No.    |
|------|-----------------|----------------------|--------------|
|      | R3027           | METALFILM RESISTOR   | RN1/4PC3902F |
|      | R3071           | METAL OXIDE RESISTOR | RS1LMF270J   |
|      | R3073           | CARBON FILM RESISTOR | RD1/2PM820J  |
|      | Other Resistors | CARBON FILM RESISTOR | RD1/4PU□□□J  |

## OTHERS

|        |                                |            |
|--------|--------------------------------|------------|
| CN3001 | 15P SOCKET                     | KP200TA15L |
| CN3002 | 5P SOCKET                      | KP200TA5L  |
| CN3003 | CONNECTOR(10P)                 | KPE10      |
| X3001  | CERAMIC RESONATOR<br>(8.00MHz) | DSS1053    |
| X3002  | CERAMIC RESONATOR<br>(4.00MHz) | ASS7014    |

## N FM/AM TUNER MODULE

### SEMICONDUCTORS

|             |                     |          |
|-------------|---------------------|----------|
| IC6201      | AM/FM +MPX IC       | LA1836M  |
| IC6202      | PLL IC              | LM7001J  |
| Q6101       | DUALGATE-FET (CHIP) | 3SK194   |
| Q6102       | TRANSISTOR          | 2SC2223  |
| Q6103       | TRANSISTOR          | 2SC2714  |
| Q6104       | MOS-FET             | 2SK302   |
| Q6201       | NCH-FET(SMD)        | 2SK208   |
| Q6202       | TRANSISTOR          | 2SC2712  |
| Q6203       | TRANSISTOR          | 2SC2235  |
| Q6204       | TRANSISTOR          | XDA124EK |
| Q6214       | TRANSISTOR          | 2SC2714  |
| Q6217       | TRANSISTOR          | XDC124EK |
| D6101,D6102 | VARI-CAP            | 1T33     |

### COILS AND FILTERS

|             |                               |              |
|-------------|-------------------------------|--------------|
| L6101       | COIL                          | ATC1020      |
| L6102       | COIL                          | ATC1021      |
| L6103       | CHIP COIL                     | ATH1043      |
| L6104       | FM COIL                       | ATC1003      |
| L6202,L6203 | CHIP COIL                     | LCTA2R2J3225 |
| L6207       | FM DETECTION COIL             | ATE1013      |
| L6208       | CHIP COIL                     | LCTA2R2J3225 |
| F6101       | CERAMIC FILTER                | ATF-155      |
| F6202       | AM CERAMIC FILTER<br>(450KHz) | ATF1156      |
| F6203,F6204 | CERAMIC FILTER                | ATF-119      |

### TRANSFORMERS

|       |              |         |
|-------|--------------|---------|
| T6101 | FM IF TRANS. | ATE-063 |
|-------|--------------|---------|

### CAPACITORS

|       |                   |              |
|-------|-------------------|--------------|
| C6101 | CHIP CAPACITOR    | CCSQCH5R0C50 |
| C6102 | CERAMIC CAPACITOR | CKSQYB103K50 |
| C6103 | CHIP CAPACITOR    | CKSQYB102K50 |
| C6105 | CHIP CAPACITOR    | CCSQTH150J50 |
| C6106 | CHIP CAPACITOR    | CKSQYB102K50 |
| C6107 | CHIP CAPACITOR    | CCSCK1R0C50  |
| C6108 | CHIP CAPACITOR    | CCSQCH101J50 |
| C6109 | CERAMIC CAPACITOR | CKSQYB103K50 |
| C6110 | CHIP CAPACITOR    | CCSQCK2R0C50 |
| C6111 | CHIP CERAMIC C.   | CCSQCH150J50 |
| C6112 | CHIP CAPACITOR    | CKSQYB102K50 |
| C6113 | CHIP CAPACITOR    | CCSQRH180J50 |

| Mark | No.   | Description       | Parts No.    |
|------|-------|-------------------|--------------|
|      | C6114 | CHIP CAPACITOR    | CCSQRH080D50 |
|      | C6115 | CHIP CAPACITOR    | CCSQCH330J50 |
|      | C6116 | CHIP CERAMIC C.   | CCSQCH150J50 |
|      | C6117 | CERAMIC CAPACITOR | CKSQYB103K50 |

|       |                                  |              |
|-------|----------------------------------|--------------|
| C6202 | CAPACITOR (CERAMIC)<br>(1μF/16V) | ACG1051      |
| C6203 | CHIP CAPACITOR                   | CCSQCH101J50 |
| C6204 | CHIP CAPACITOR                   | CKSQYB102K50 |
| C6208 | CHIP CERAMIC C.                  | CCSQCH150J50 |
| C6209 | CERAMIC CAPACITOR                | CKSQYB473K50 |

|       |                      |              |
|-------|----------------------|--------------|
| C6210 | CERAMIC CAPACITOR    | CKSQYB103K50 |
| C6212 | CHIP CAPACITOR       | CKSQYF103Z50 |
| C6213 | CHIP CAPACITOR       | CKSQYB223K50 |
| C6214 | AUDIO FILM CAPACITOR | CFTXA224J50  |
| C6215 | AUDIO FILM CAPACITOR | CFTXA103J50  |

|             |                  |              |
|-------------|------------------|--------------|
| C6216,C6217 | ELECT. CAPACITOR | CEAS330M16   |
| C6218       | CHIP CAPACITOR   | CKSQYF103Z50 |
| C6219       | ELECT. CAPACITOR | CEAS470M10   |
| C6220       | CHIP CAPACITOR   | CKSQYF223Z50 |
| C6221,C6222 | CHIP CERAMIC C.  | CCSQCH150J50 |

|       |                   |              |
|-------|-------------------|--------------|
| C6223 | CHIP CAPACITOR    | CKSYF103Z50  |
| C6224 | ELECT. CAPACITOR  | CEAS100M50   |
| C6225 | CERAMIC CAPACITOR | CKSQYF473Z50 |
| C6226 | CHIP CAPACITOR    | CKSQYF223Z50 |
| C6227 | ELECT. CAPACITOR  | CEAS101M10   |

|       |                   |              |
|-------|-------------------|--------------|
| C6228 | CERAMIC CAPACITOR | CKSQYB472K50 |
| C6229 | CERAMIC CHIP C.   | CCSCH821J50  |
| C6230 | CHIP CAPACITOR    | CKSQYB393K50 |
| C6231 | ELECT. CAPACITOR  | CEAS3R3M50   |
| C6232 | CERAMIC CAPACITOR | CKSYB393K50  |

|       |                                  |              |
|-------|----------------------------------|--------------|
| C6233 | ELECT. CAPACITOR                 | CEAS3R3M50   |
| C6234 | CAPACITOR (CERAMIC)<br>(1μF/16V) | ACG1051      |
| C6235 | CERAMIC CAPACITOR                | CKSQYF224Z25 |
| C6236 | CAPACITOR (CERAMIC)<br>(1μF/16V) | ACG1051      |

|       |                   |              |
|-------|-------------------|--------------|
| C6237 | CERAMIC CAPACITOR | CKSQYB473K50 |
|-------|-------------------|--------------|

|             |                   |              |
|-------------|-------------------|--------------|
| C6238       | ELECT. CAPACITOR  | CEJA100M16   |
| C6239       | CHIP CAPACITOR    | CKSQYF223Z50 |
| C6241       | CERAMIC CAPACITOR | CKSQYF473Z50 |
| C6242       | CHIP CAPACITOR    | CKSQYF223Z50 |
| C6243-C6245 | ELECT. CAPACITOR  | CEAS470M16   |

|             |                   |              |
|-------------|-------------------|--------------|
| C6246       | ELECT. CAPACITOR  | CEAS100M50   |
| C6249,C6250 | ELECT. CAPACITOR  | CEJA4R7M35   |
| C6251       | CHIP CAPACITOR    | CKSYB472K50  |
| C6252       | CERAMIC CAPACITOR | CKSQYB472K50 |
| C6255       | CHIP CAPACITOR    | CKSQYF223Z50 |

|       |                   |              |
|-------|-------------------|--------------|
| C6261 | ELECT. CAPACITOR  | CEAS1R0M50   |
| C6262 | ELECT. CAPACITOR  | CEAS100M50   |
| C6263 | CHIP CAPACITOR    | CKSYF473Z50  |
| C6264 | CERAMIC CAPACITOR | CKSQYB103K50 |
| C6265 | CERAMIC CAPACITOR | CKSQYB473K50 |

|       |                   |              |
|-------|-------------------|--------------|
| C6266 | CERAMIC CAPACITOR | CKSQYF473Z50 |
| C6267 | CERAMIC CAPACITOR | CKSQYB473K50 |
| C6268 | CHIP CAPACITOR    | CCSQCH101J50 |

| Mark             | No.             | Description          | Parts No.   |
|------------------|-----------------|----------------------|-------------|
| <b>RESISTORS</b> |                 |                      |             |
|                  | R6101           | CHIP RESISTOR        | RS1/8S470J  |
|                  | R6113,R6116     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6118           | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6209           | CHIP RESISTOR        | RS1/8S221J  |
|                  | R6211           | CHIP RESISTOR        | RS1/8S103J  |
|                  | R6237           | CHIP RESISTOR        | RS1/8S182J  |
|                  | R6239           | CHIP RESISTER        | RS1/8S332J  |
|                  | R6243,R6244     | CHIP RESISTOR        | RS1/8S101J  |
|                  | R6268-R6271     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6275,R6276     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6278,R6283     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6284,R6290     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6293,R6294     | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6297           | CHIP RESISTOR        | RS1/8S0R0J  |
|                  | R6299,R6300     | CARBON FILM RESISTOR | RD1/4PU102J |
|                  | VR6201          | VR (10K $\Omega$ )   | ACP1056     |
|                  | VR6202          | VR                   | VRTB6VS223  |
|                  | Other Resistors | CHIP RESISTOR        | RS1/10S0R0J |

## OTHERS

|        |                                 |            |
|--------|---------------------------------|------------|
|        | AM RF TUNING BLOCK              | AXX1025    |
| BN6201 | TERMINAL 4-P                    | AKE7028    |
| CN6201 | 14P SOCKET                      | KP2001A14L |
| X6201  | CRYSTAL RESONATOR<br>(456KHz)   | ASS1066    |
| X6202  | CERAMIC RESONATOR<br>(450KHz)   | ATF1027    |
| X6203  | CRYSTAL RESONATOR<br>(7.200MHz) | ASS1042    |

## 6. ADJUSTMENT

### 6.1 TUNER SECTION

#### ■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1-1.

| Step No. | Adjustment Title                 | FM SG (1kHz, $\pm 75$ kHz dev.) |                    | Reception Frequency Display | Adjustment Location | Specifications                                                                                                                   |
|----------|----------------------------------|---------------------------------|--------------------|-----------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
|          |                                  | Frequency (MHz)                 | Level (dB $\mu$ V) |                             |                     |                                                                                                                                  |
| 1        | Center Adjustment                | 98<br>Non modulation            | 80 or more         | —                           | L6207               | Adjust so that the DC voltage between the IC6201-Pin 4 and Pin 28 (or $\oplus$ leads of C6224 and C6261) becomes $0V \pm 50$ mv. |
| 2        | Front End Sensitivity Adjustment | 98                              | 10 to 30           | 98MHz                       | L6102<br>T6101      | Adjust so that the DC voltage between the IC6201-Pin 12 and GND (or $\oplus$ leads of C6238 and GND) becomes at maximum level.   |
| 3        | Stereo Distortion                | 98                              | 80                 | 98MHz                       | T6101               | Minimize the distortion with 1/8 rotation of the core.                                                                           |
| 4        | TUNED IND. Lighting Level        | 98                              | $15 \pm 2$         | 98MHz                       | VR6201              | Adjust so that the indicator of TUNED IND. starts to light up.                                                                   |

#### Notes:

- Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
- Make indicator adjustments in order of AM  $\rightarrow$  FM.

#### ■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1-1.

| Step No. | Adjustment Title          | AM SG (400Hz, 30% Mod.) |                      | Reception Frequency Display | Adjustment Location | Specifications                                                |
|----------|---------------------------|-------------------------|----------------------|-----------------------------|---------------------|---------------------------------------------------------------|
|          |                           | Frequency (kHz)         | Level (dB $\mu$ V/m) |                             |                     |                                                               |
| 1        | TUNED IND. Lighting Level | 999*1                   | 47 ( $\pm 2$ dB)     | 999kHz*1                    | VR6202              | Adjust so that the indicator of TUNED IND. stars to light up. |

\*1: For the area using 10kHz step, frequencies should be 1000 kHz

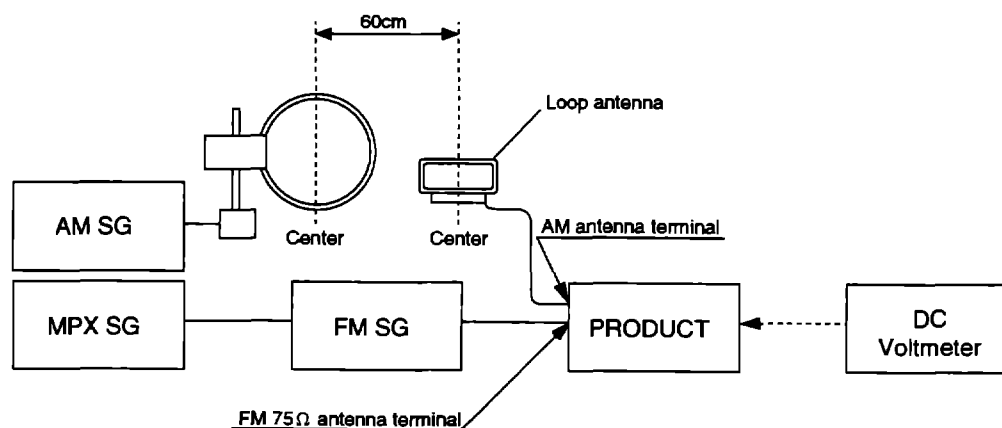
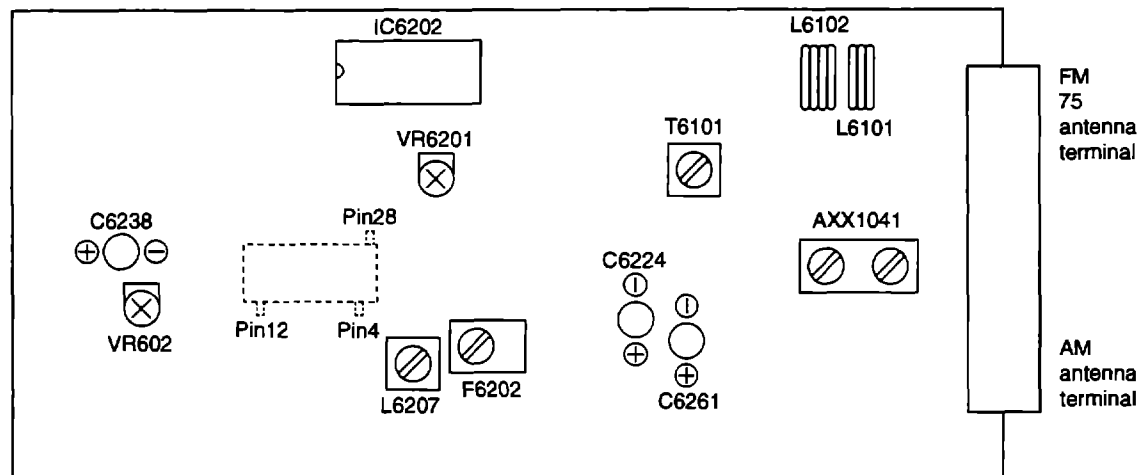


Fig. 1-1 AM and FM Adjustment Wiring Diagram

**FM/AM TUNER MODULE**



**Fig. 1-2 Adjustment Points**

## 7. GENERAL INFORMATION

### 7.1 PARTS

#### 7.1.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

#### ■ PDG197A (FL/U-COM ASSY : IC901)

#### ● Microcomputer Port Function Table

| PIN No. | PIN NAME     | FUNCTION | RESET       |   | FUNCTION           |  |
|---------|--------------|----------|-------------|---|--------------------|--|
| 1       | G1/A1        | O/O      | Hi-Z or PD  | O | FL Grid 2          |  |
| 2       | G0/A0        | O/O      | Hi-Z or PD  | O | FL Grid 1          |  |
| 3       | NC           | (5V)     |             |   | (5V)               |  |
| 4       | PE0/ECO/INT0 | I/I/I    | Hi-Z        | I | AC WAKE-UP         |  |
| 5       | PE1/EC1/INT1 | I/I/I    | Hi-Z        | I | no use             |  |
| 6       | PE2/INT2     | I/I      | Hi-Z        | I | no use             |  |
| 7       | PE3/INT3/NMI | I/I/I    | Hi-Z        | I | no use             |  |
| 8       | PE4/RMC      | I/I      | Hi-Z        | I | RMC                |  |
| 9       | PE5          | I/I      | Hi-Z        | I | 9K/10K             |  |
| 10      | PE6/PWM      | O/O      | H           | O | VOL.UP             |  |
| 11      | PE7/T0/ADJ   | O/O/O    | H           | O | VOL.DOWN           |  |
| 12      | PC0/KR0      | IO/I     | Hi-Z        | I | TUNED              |  |
| 13      | PC1/KR1      | IO/I     | Hi-Z        | I | STEREO             |  |
| 14      | PC2/KR2      | IO/I     | Hi-Z        | I | JOG 1              |  |
| 15      | PC3/KR3      | IO/I     | Hi-Z        | I | JOG 2              |  |
| 16      | PC4/KR4      | IO/I     | Hi-Z        | I | KEY IN 1           |  |
| 17      | PC5/KR5      | IO/I     | Hi-Z        | I | KEY IN 2           |  |
| 18      | PC6/KR6      | IO/I     | Hi-Z        | I | KEY IN 3           |  |
| 19      | PC7/KR7      | IO/I     | Hi-Z        | O | PRO-LOGIC DT       |  |
| 20      | PB0/CINT     | IO/I     | Hi-Z        | O | PRO-LOGIC CK       |  |
| 21      | PB1/CS0      | IO/I     | Hi-Z        | O | DSP ST             |  |
| 22      | PB2/SCK0     | IO/IO    | Hi-Z        | O | 4052 CONT A        |  |
| 23      | PB3/SIO      | IO/I     | Hi-Z        | O | 5-D THEATER ON/OFF |  |
| 24      | PB4/SO0      | IO/I     | Hi-Z        | O | 4052 CONT B        |  |
| 25      | PB5/SCK1     | IO/IO    | Hi-Z        | O | 5-D CONTROL        |  |
| 26      | PB6/SI1      | IO/I     | Hi-Z        | O | DSP-DELAY/DIRECT   |  |
| 27      | PB7/SO1      | IO/O     | Hi-Z        | O | PRO-LOGIC ST       |  |
| 28      | AVREF        | I        | (5V)        | I | 5V                 |  |
| 29      | PA0/AN0      | IO/AI    | Hi-Z        | I | KU-HY Selection    |  |
| 30      | PA1/AN1      | IO/AI    | Hi-Z        | O | BAND               |  |
| 31      | PA2/AN2      | IO/AI    | Hi-Z        | O | no use             |  |
| 32      | PA3/AN3      | IO/AI    | Hi-Z        | O | no use             |  |
| 33      | PA4/AN4      | IO/AI    | Hi-Z        | I | AMP OL             |  |
| 34      | PA5/AN5      | IO/AI    | Hi-Z        | I | AMP DC             |  |
| 35      | PA6/AN6      | IO/AI    | Hi-Z        | O | V.CONT B           |  |
| 36      | PA7/AN7      | IO/AI    | Hi-Z        | O | V.CONT A           |  |
| 37      | AVss         | (GND)    | GND         |   | GND                |  |
| 38      | RST          | I        | LOW         | I | RST                |  |
| 39      | EXTAL        | I        | Oscillation | I | Oscillation        |  |
| 40      | XTAL         | O        | Oscillation | O | Oscillation        |  |
| 41      | Vss          | (GND)    | GND         |   | GND                |  |
| 42      | TX           | O        |             | O | OPEN               |  |
| 43      | TEX          | I        |             | I | GND                |  |
| 44      | VDD          | (5V)     | 5V          |   | 5V                 |  |
| 45      | VFDP         | (Vf)     | Vf          |   | Vf                 |  |
| 46      | PD0/A55      | O/O      | Hi-Z or PD  | O | V.MUTE             |  |
| 47      | PD1/A54      | O/O      | Hi-Z or PD  | O | AC RY              |  |
| 48      | PD2/A53      | O/O      | Hi-Z or PD  | O | R.C. RY            |  |
| 49      | PD3/A52      | O/O      | Hi-Z or PD  | O | FRONT RY           |  |
| 50      | PD4/A51      | O/O      | Hi-Z or PD  | O | SP-B RY            |  |

| PIN No. | PIN NAME | FUNCTION | RESET      |   | FUNCTION     |  |  |
|---------|----------|----------|------------|---|--------------|--|--|
| 51      | PD5/A50  | O/O      | Hi-Z or PD | 0 | HP RY        |  |  |
| 52      | PD6/A49  | O/O      | Hi-Z or PD | 0 | SP-A RY      |  |  |
| 53      | PD7/A48  | O/O      | Hi-Z or PD | 0 | no use       |  |  |
| 54      | PF0/A47  | O/O      | Hi-Z or PD | 0 | no use       |  |  |
| 55      | PF1/A46  | O/O      | Hi-Z or PD | 0 | no use       |  |  |
| 56      | PF2/A45  | O/O      | Hi-Z or PD | 0 | ( OPEN )     |  |  |
| 57      | PF3/A44  | O/O      | Hi-Z or PD | 0 | ( OPEN )     |  |  |
| 58      | PF4/A43  | O/O      | Hi-Z or PD | 0 | F. ST 3      |  |  |
| 59      | PF5/A42  | O/O      | Hi-Z or PD | 0 | F. ST 2      |  |  |
| 60      | PF6/A41  | O/O      | Hi-Z or PD | 0 | F. ST 1      |  |  |
| 61      | PF7/A40  | O/O      | Hi-Z or PD | 0 | SYS. DT      |  |  |
| 62      | PG0/A39  | O/O      | Hi-Z or PD | 0 | SYS. CK      |  |  |
| 63      | PG1/A38  | O/O      | Hi-Z or PD | 0 | PLL CE       |  |  |
| 64      | PG2/A37  | O/O      | Hi-Z or PD | 0 | T. MUTE      |  |  |
| 65      | PG3/A36  | O/O      | Hi-Z or PD | 0 | A. MUTE      |  |  |
| 66      | PG4/A35  | O/O      | Hi-Z or PD | 0 | MONO         |  |  |
| 67      | PG5/A34  | O/O      | Hi-Z or PD | 0 | LOUDNESS     |  |  |
| 68      | PG6/A33  | O/O      | Hi-Z or PD | 0 | ( OPEN )     |  |  |
| 69      | PG7/A32  | O/O      | Hi-Z or PD | 0 | SEG.21       |  |  |
| 70      | PH0/A31  | O/O      | Hi-Z or PD | 0 | SEG.20       |  |  |
| 71      | PH1/A30  | O/O      | Hi-Z or PD | 0 | SEG.19       |  |  |
| 72      | PH2/A29  | O/O      | Hi-Z or PD | 0 | SEG.18/KEY 1 |  |  |
| 73      | PH3/A28  | O/O      | Hi-Z or PD | 0 | SEG.17/KEY 2 |  |  |
| 74      | PH4/A27  | O/O      | Hi-Z or PD | 0 | SEG.16/KEY 3 |  |  |
| 75      | PH5/A26  | O/O      | Hi-Z or PD | 0 | SEG.15/KEY 4 |  |  |
| 76      | PH6/A25  | O/O      | Hi-Z or PD | 0 | SEG.14/KEY 5 |  |  |
| 77      | PH7/A24  | O/O      | Hi-Z or PD | 0 | SEG.13/KEY 6 |  |  |
| 78      | A23      | 0        | Hi-Z or PD | 0 | SEG.12/KEY 7 |  |  |
| 79      | A22      | 0        | Hi-Z or PD | 0 | SEG.11/KEY 8 |  |  |
| 80      | A21      | 0        | Hi-Z or PD | 0 | SEG.10/KEY 9 |  |  |
| 81      | A20      | 0        | Hi-Z or PD | 0 | SEG. 9/KEY10 |  |  |
| 82      | A19      | 0        | Hi-Z or PD | 0 | SEG. 8       |  |  |
| 83      | A18      | 0        | Hi-Z or PD | 0 | SEG. 7       |  |  |
| 84      | A17      | 0        | Hi-Z or PD | 0 | SEG. 6       |  |  |
| 85      | A16      | 0        | Hi-Z or PD | 0 | SEG. 5       |  |  |
| 86      | G15/A15  | O/O      | Hi-Z or PD | 0 | SEG. 4       |  |  |
| 87      | G14/A14  | O/O      | Hi-Z or PD | 0 | SEG. 3       |  |  |
| 88      | G13/A13  | O/O      | Hi-Z or PD | 0 | SEG. 2       |  |  |
| 89      | Vdd      | 5V       | 5V         |   | 5V           |  |  |
| 90      | G12/A12  | O/O      | Hi-Z or PD | 0 | SEG. 1       |  |  |
| 91      | G11/A11  | O/O      | Hi-Z or PD | 0 | FL Grid12    |  |  |
| 92      | G10/A10  | O/O      | Hi-Z or PD | 0 | FL Grid11    |  |  |
| 93      | G9/A9    | O/O      | Hi-Z or PD | 0 | FL Grid10    |  |  |
| 94      | G8/A8    | O/O      | Hi-Z or PD | 0 | FL Grid 9    |  |  |
| 95      | G7/A7    | O/O      | Hi-Z or PD | 0 | FL Grid 8    |  |  |
| 96      | G6/A6    | O/O      | Hi-Z or PD | 0 | FL Grid 7    |  |  |
| 97      | G5/A5    | O/O      | Hi-Z or PD | 0 | FL Grid 6    |  |  |
| 98      | G4/A4    | O/O      | Hi-Z or PD | 0 | FL Grid 5    |  |  |
| 99      | G3/A3    | O/O      | Hi-Z or PD | 0 | FL Grid 4    |  |  |
| 100     | G2/A2    | O/O      | Hi-Z or PD | 0 | FL Grid 3    |  |  |

# VSX-D506S, VSX-456

| Pin No. | Port Function                    | Logic                                              | Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------|----------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4       | AC WAKE UP input                 | 50 or 60 Hz squar wave                             | Same as the conventional model.<br>Normal operation mode when signals are input.<br>When signals are absent and 2 waves are dropped, the "STOP mode" should be set.<br>Note) To prevent incorrect operations due to noise and static electricity, implement noise removal measures.                                                                                                                                                                                              |
| 8       | SR remote controller input       | SR remote controller code (no carrier, Hi active). | The output of the light-receiving section of the remote controller of the unit and output from SR IN of the light-receiving section of the remote controller of other unit are input.                                                                                                                                                                                                                                                                                            |
| 9       | Freq. step select input (9K/10K) | H/L                                                | Selects frequency steps of the tuner.<br>FM AM<br>H 100K 10K                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 10      | VOL.UP output                    | Lo active                                          | Motor volume control. Defined as Lo when VOL.UP.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 11      | VOL.DOWN output                  | Lo active                                          | Motor volume control. Defined as Lo when VOL.DOWN.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 12      | TUNED input                      | Hi active                                          | Lo is input when the tuner is being tuned.<br>"TUNED" lights up in the FL display.<br>Functions only during TUNER FUNCTION and normally does not function.                                                                                                                                                                                                                                                                                                                       |
| 13      | STEREO input                     | Hi active                                          | Lo is input when the tuner receives a stereo broadcasting.<br>"STEREO" lights up on the FL display.<br>Does not function when the forcible monaural is ON.<br>Functions only during TUNER FUNCTION and normally does not function.                                                                                                                                                                                                                                               |
| 14      | JOG 1 input                      | Pulse Lo input<br>Normally H                       | JOG counterclockwise direction input.<br>The input sensitivity is the same as the conventional model.<br>(1 click, 1 step?)                                                                                                                                                                                                                                                                                                                                                      |
| 15      | JOG 2 input                      | Pulse Lo input<br>Normally H                       | JOG clockwise direction input.<br>The input sensitivity is the same as the conventional model.<br>(1 click, 1 step?)                                                                                                                                                                                                                                                                                                                                                             |
| 16-18   | KEY SCAN input                   |                                                    | KEY SCAN input of the unit key.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 29      | Destination select               | H/L                                                | H:KU series model (including /SD)<br>L:HY series model (including /HL, YP)                                                                                                                                                                                                                                                                                                                                                                                                       |
| 32      | DSP input level sensitivity      | Analog input                                       | 0 to 5V input level is input to DSP. When the input level exceeds 2.1V, (ATT)"OVERLOAD" lights up on the FL display.<br>Functions only when analog signals (including AUTO) are input to the DSP. Does not function when the front speaker is set to "LARGE" or in a 2ch playback (including DIRECT).<br>When the front speaker is set to "SMALL", this port functions in 2ch playback (including DIRECT).<br>AC-3 model only.<br>Set to the output port in the PRO-LOGIC model. |
| 33      | OL.DETECT input                  | Lo active                                          | Input of the protection circuit as OVERLOAD DETECTOR.<br>When Lo is input, this port opens relays other than the AC relay.<br>"OVERLOAD" flashes on the 8th digits of the FL display for five seconds.                                                                                                                                                                                                                                                                           |

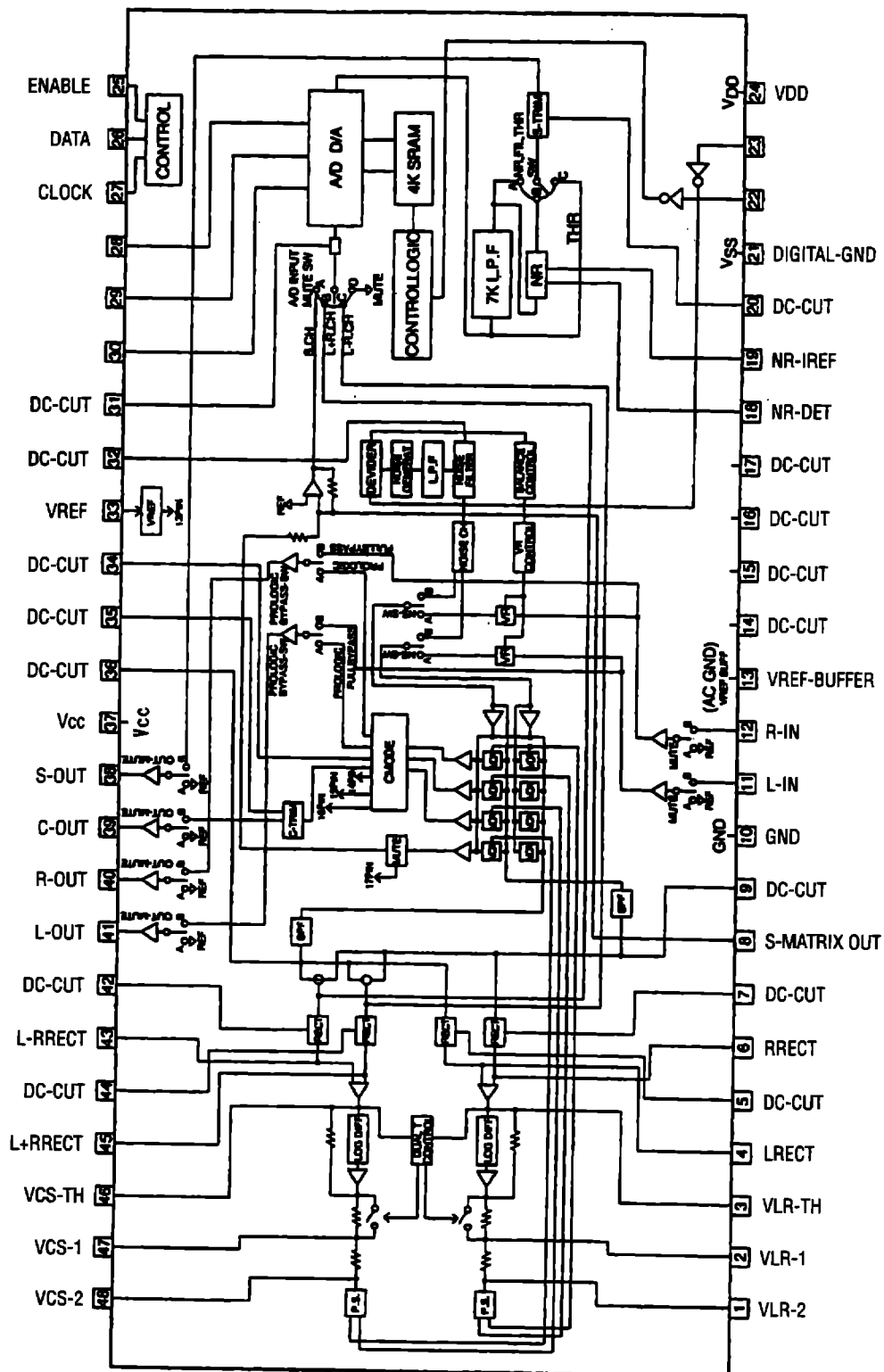
| Pin No.        | Port Function                                   | Logic                                           | Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 34             | DC.DETECT input                                 | Lo active                                       | Input of the protection circuit as DC DETECTOR.<br>When Lo is input, this port opens relays other than the AC relay.<br>"POWEROFF" flashes on the 8th digits of the FL display.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 35, 36         | VIDEO IC CONT. output                           | H/L<br>Depending on LA7952                      | 2-bit parallel control for the video function IC.<br>Refer to SW specification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 38             | RESET                                           | Lo active                                       | Same specification as VSX-605S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 39<br>40       | Oscillation input<br>Oscillation output         |                                                 | 7.7MHz (ASS1055)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 46             | VIDEO signal MUTE output                        | Lo active                                       | Output for muting MOTOR OUT<br>Becomes H when in the audio FUNCTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 30             | RDS decoder VDD ON/OFF and FM/AM selection      | H active                                        | Turns ON/OFF the RDS decoder Tr switch for VDD.<br>Lo when in AM and Hi in FM of the function tuner. Lo when the power is OFF.<br>H at other times even when functions other than TUNER are set.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 58             | TC9299 ST output                                | Depending on TC9299                             | Serial control STROBE for the electric volume (for REAR, CENT., SUB WF) TC9299 (x2).<br>3 lines of 58, 61, and 62 (AC-3 model only).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 59             | TC9162 ST output                                | Depending on TC9162                             | Serial control STROBE for the function IC TC9162.<br>3 lines of 59, 61, and 62 (AC-3 model only).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 60             | TC9273 ST output                                | Depending on TC9273                             | Serial control STROBE for the function IC TC9273.<br>3 lines of 60, 61, and 62.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 61             | SYS.DATA output                                 | Depending on TC9273, TC9162, TC9299, and LM7001 | Controls PLL IC, AUDIO FUNC. IC, E.VOL. IC with a serial control data.<br>(TC9162 and TC9299 are only for AC-3 model)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 62             | SYS.CK output                                   | Depending on TC9273, TC9162, TC9299, and LM7001 | Controls PLL IC, AUDIO FUNC. IC, E.VOL. IC with a serial control clock.<br>(TC9162 and TC9299 are only for AC-3 model)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 63             | PLL CE. output                                  | Depending on LM7001                             | CHIP ENABLE for the tuner PLL IC serial control.<br>3 lines of 61, 62, and 63                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 64             | T.MUTE ON/OFF output                            | H active                                        | Muting control for the tuner output.<br>Muting timing is the same as the conventional model.<br>Set to H in functions other than TUNER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 66             | TUNERT forcible monaural ON/OFF output          | H active                                        | Set to H when the forcible monaural is ON in the MPX mode of the TUNER function.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 51             | HP.RY ON/OFF output                             | H active                                        | Turns ON/OFF the Tr switch for the headphone RY.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 52<br>50<br>49 | SP-A RY<br>SP-B RY<br>FRONT RY<br>ON/OFF output | H active                                        | Turns ON/OFF the Tr switch for the front SP to be connected in series. Logic is as follows.<br><div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div></div> <div>52</div> <div>50</div> <div>49</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div>SP-A ON</div> <div>H</div> <div>Lo</div> <div>H</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div>SP-B ON</div> <div>Lo</div> <div>H</div> <div>H</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div>A,B ON</div> <div>Lo</div> <div>Lo</div> <div>H</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div>A,B OFF</div> <div>Hi</div> <div>Hi</div> <div>Lo</div> </div> |

# VSX-D506S, VSX-456

| Pin No.                    | Port Function                                                     | Logic                             | Function                                                                                                                                                                                                                                |
|----------------------------|-------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 48                         | R.C. RY<br>ON/OFF output                                          | H active                          | Turns ON/OFF the Tr switch for the rear, center SP RY.                                                                                                                                                                                  |
| 48-52                      | Protect operation                                                 |                                   | RY for protection is not provided for this model. The following functions are performed by setting ports 58 to 62 to Lo.<br>Muting when power ON<br>Instantaneous shut-off when power OFF<br>AMP DC protect<br>AMP over loading protect |
| 47                         | AC RY ON/OFF output                                               | H active                          | Turns ON/OFF the Tr switch for AC power RY.<br>Lo when stand by, H when power ON.                                                                                                                                                       |
| 65                         | A.MUTE output                                                     | Lo active                         | Controls the audio system muting.<br>Muting timing is the same as the conventional model.                                                                                                                                               |
| 67                         | LOUDNESS ON/OFF<br>output                                         | H active                          | Turns ON/OFF the Tr switch for LOUDNESS.<br>"LOUDNESS" lights up on the FL display when ON.<br>Forcibly turned OFF when DIRECT ON.                                                                                                      |
| 69-90<br>(excluding<br>89) | FL drive segment<br>output<br>Also serves as 72 to 81<br>KEY SCAN |                                   | FL driver<br>Main unit KEY SCAN output<br>81 is dedicated for selecting a destination.                                                                                                                                                  |
| 1,2<br>&<br>91-100         | FL drive grid output                                              |                                   | FL driver<br>(91 is for AC-3 model only)                                                                                                                                                                                                |
| 26                         | DIRECT ON/OFF output                                              | H active                          | /HY model only.<br>Turns ON/OFF the DIRECT Tr switch.<br>When DIRECT ON (port High), character "DIRECT" lights up on the FL display.                                                                                                    |
| 22<br>24                   | TC4052 CONTROL<br>output                                          | H/L                               | Control output for the IC TC4052 for selecting FRONT signal.                                                                                                                                                                            |
| 23                         | M51132 ON/OFF<br>output                                           | Lo active                         | Control output for the IC M51132L for 5-D THEATER.<br>When ON (port Low), character "5-D THEATER" lights up on the FL display.                                                                                                          |
| 21                         | M65846 ST output                                                  | Depending on M65846               | STROBE for the serial control of DSP IC M65846.<br>Three lines of 19, 20, and 21.                                                                                                                                                       |
| 20                         | SURR.CK output                                                    | Depending on LV1030<br>and M65846 | CLOCK for the serial control of PRO-LOGIC IC and DSP IC.                                                                                                                                                                                |
| 27                         | PRO-LOGIC CE output                                               | Depending on LV1030               | CHIP ENABLE for the serial control of PRO-LOGIC IC LV1030.<br>Three lines of 19, 20, and 27.                                                                                                                                            |
| 19                         | SURR.DT output                                                    | Depending on LV1030<br>and M65846 | DATA for the serial control of PRO-LOGIC IC and DSP IC.                                                                                                                                                                                 |
| 25                         | 5D-CONT                                                           | Low active                        | Turns ON when the 5D-THEATER surround is effective.                                                                                                                                                                                     |

■ LV1030 (PRO LOGIC ASSY : IC3001)

- **Dolby PRO LOGIC**
- **Block Diagram**

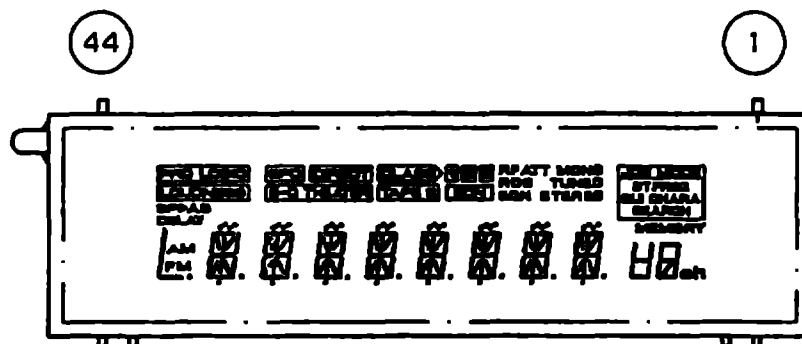


## VSX-D506S, VSX-456

### 7.1.2 DISPLAY

■ **AAV7035 (V901 : FL/U-COM ASSY)**

- **FL Tube**

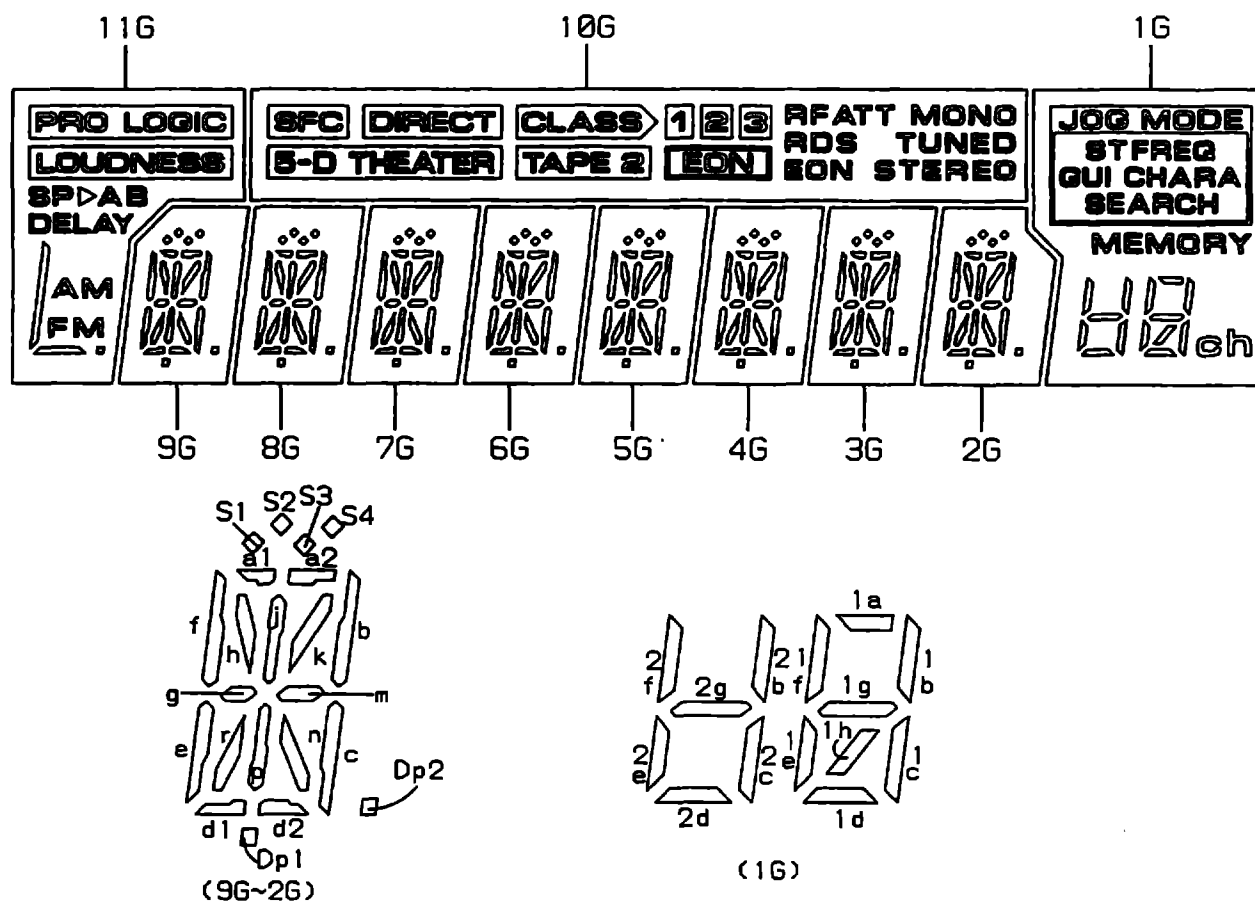


## ● Pin Assignment

[illegible]

NOTE 1) F1,F2 --- Filament  
2) NP ----- No pin  
3) NX ----- No extend pin  
4) DL ----- Datum Line  
5) 1G~11G --- Grid

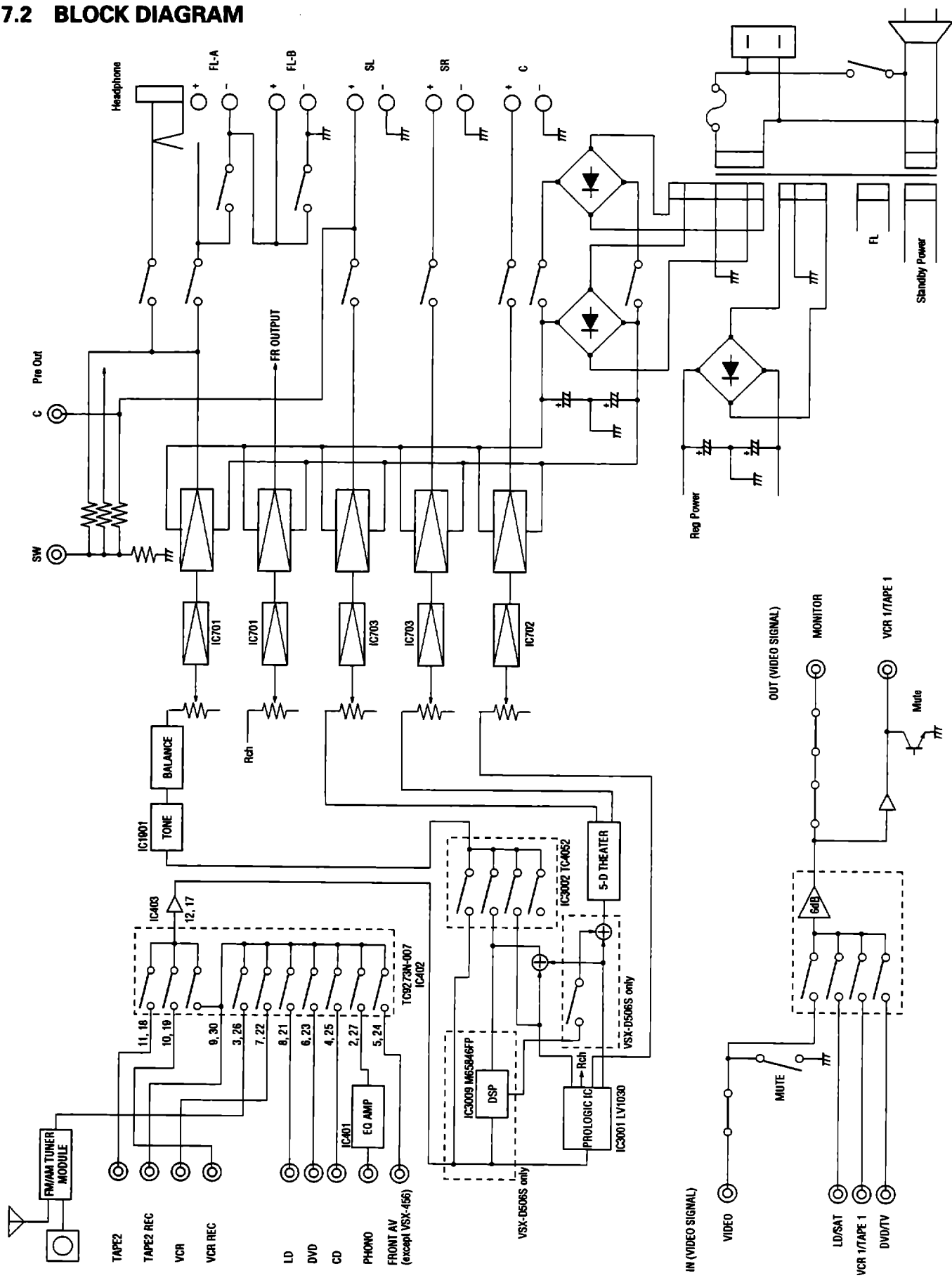
- **Grid Assignment**



## ● Anode Connection

|     | 11G                                                                                 | 10G                                                                                 | 9G~2G  | 1G                                                                                                                                                                             |
|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P1  |    | MONO                                                                                | a1     | 2b, 2c                                                                                                                                                                         |
| P2  | ◦                                                                                   | TUNED                                                                               | a2     | 2g                                                                                                                                                                             |
| P3  | FM                                                                                  | STEREO                                                                              | h      | 2d                                                                                                                                                                             |
| P4  | AM                                                                                  | RFATT                                                                               | j      | 2e                                                                                                                                                                             |
| P5  | DELAY                                                                               | RDS                                                                                 | k      | 2f                                                                                                                                                                             |
| P6  | B                                                                                   | EON                                                                                 | b      | 1a                                                                                                                                                                             |
| P7  | A                                                                                   |    | f      | 1b                                                                                                                                                                             |
| P8  | SP▷                                                                                 |    | m      | 1f                                                                                                                                                                             |
| P9  |  |  | g      | 1g                                                                                                                                                                             |
| P10 |  |  | c      | 1c                                                                                                                                                                             |
| P11 | -                                                                                   |  | e      | 1h                                                                                                                                                                             |
| P12 | -                                                                                   |  | r      | 1e                                                                                                                                                                             |
| P13 | -                                                                                   |  | p      | 1d                                                                                                                                                                             |
| P14 | -                                                                                   |  | n      | ch                                                                                                                                                                             |
| P15 | -                                                                                   |  | d1     | MEMORY                                                                                                                                                                         |
| P16 | -                                                                                   | -                                                                                   | d2     | SEARCH                                                                                                                                                                         |
| P17 | -                                                                                   | -                                                                                   | Dp1    | CHARA                                                                                                                                                                          |
| P18 | -                                                                                   | -                                                                                   | S1, S3 | GUI                                                                                                                                                                            |
| P19 | -                                                                                   | -                                                                                   | S4     | FREQ                                                                                                                                                                           |
| P20 | -                                                                                   | -                                                                                   | S2     | ST                                                                                                                                                                             |
| P21 | -                                                                                   | -                                                                                   | Dp2    | <br> |

7.2 BLOCK DIAGRAM



## 7.3 REMOTE CONTROL UNIT [CU-VSX115 (AXD7124)]

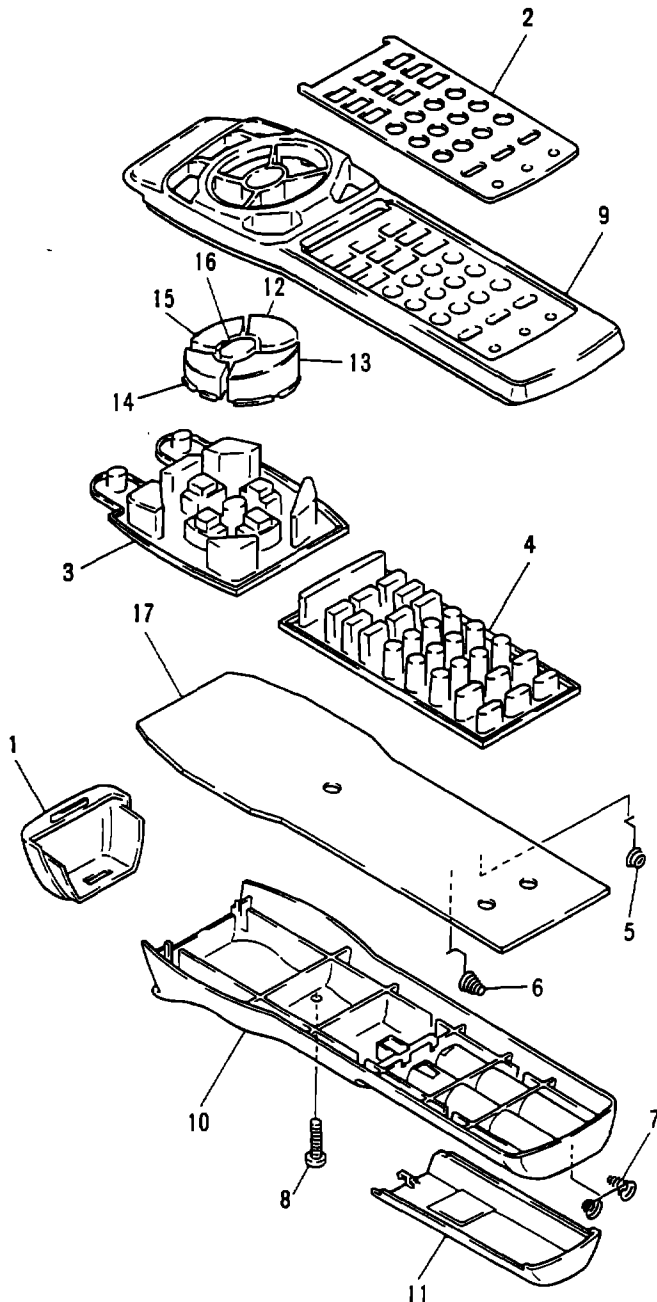
### 7.3.1 EXPLODED VIEWS AND PARTS LIST

**NOTES:** • Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

#### ■ Parts List

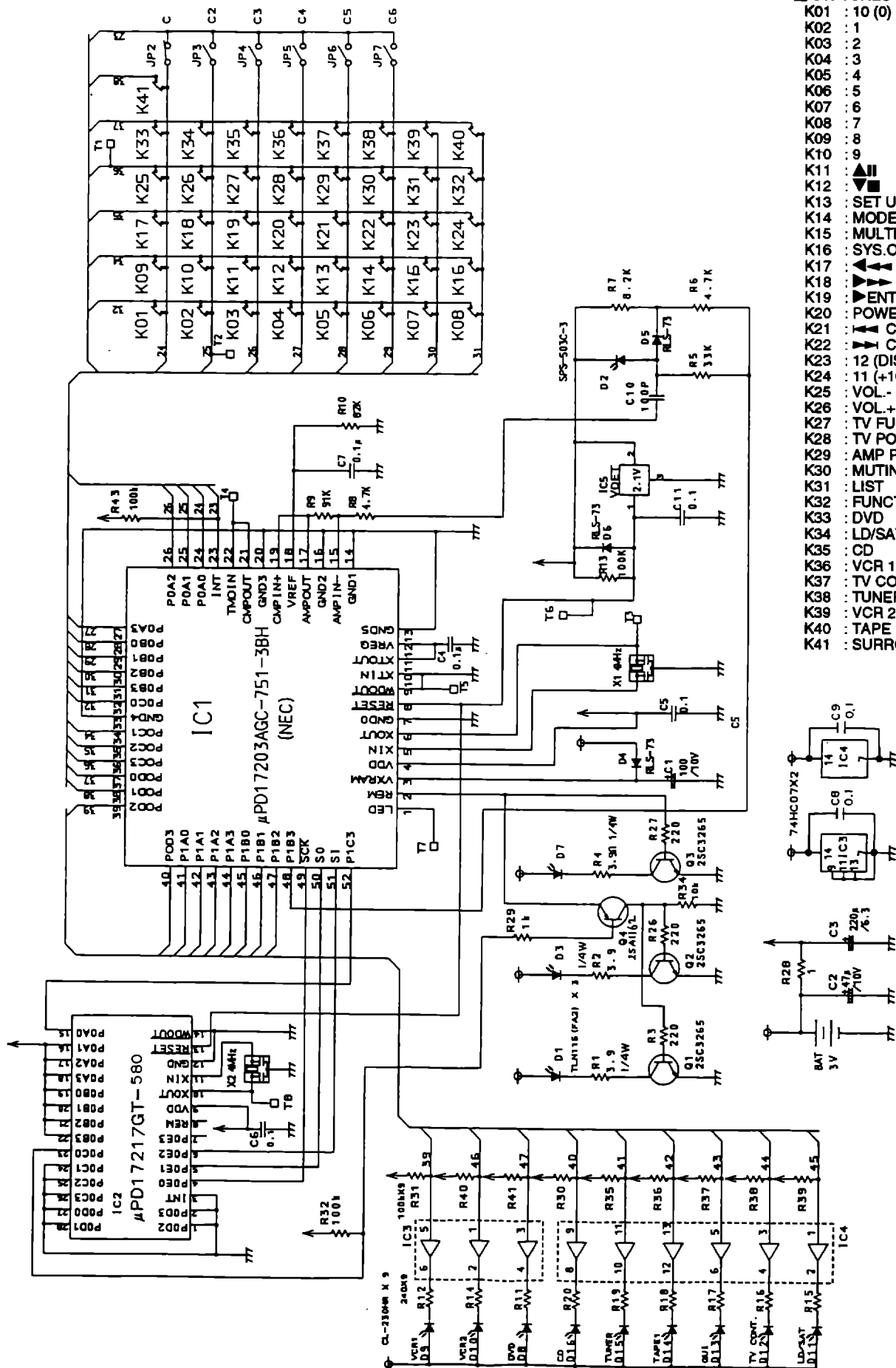
| Mark | No. | Description       | Part No. |
|------|-----|-------------------|----------|
|      | 1   | Filter            | AZA7152  |
|      | 2   | Name plate        | AZA7242  |
|      | 3   | Rubber sheet (A)  | AZA7236  |
|      | 4   | Rubber sheet (B)  | AZA7243  |
|      | 5   | Spring (+)        | AZB7049  |
|      | 6   | Spring (-)        | AZB7050  |
|      | 7   | Spring            | AZB7051  |
|      | 8   | Screw             | AZB7052  |
|      | 9   | Remo-con case (A) | AZN7672  |
|      | 10  | Remo-con case (B) | AZN7326  |
|      | 11  | Battery cover     | AZN7327  |
|      | 12  | Main key (FF)     | AZN7666  |
|      | 13  | Main key (STOP)   | AZN7329  |
|      | 14  | Main key (REV)    | AZN7665  |
|      | 15  | Main key (PAUSE)  | AZN7331  |
|      | 16  | Main key (PLAY)   | AZN7664  |
| NSP  | 17  | PCB               | AZW7243  |



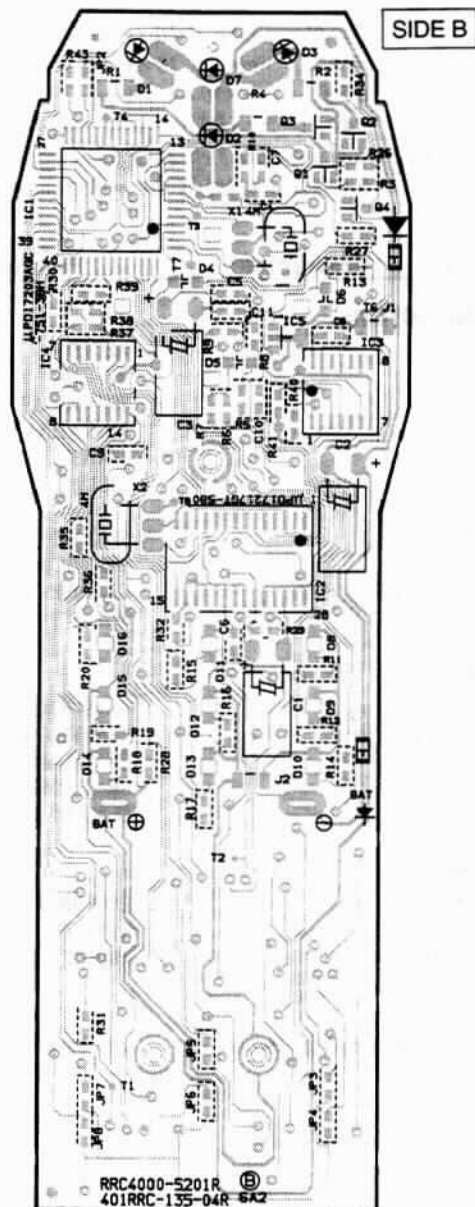
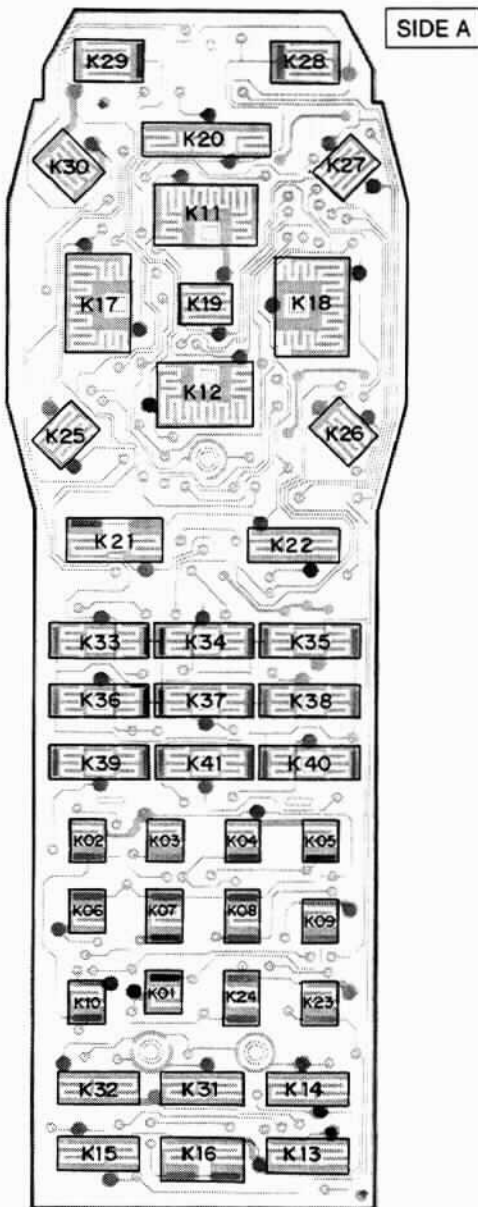
## 7.3.2 SCHEMATIC AND PCB DIAGRAMS

### ■ SCHEMATIC DIAGRAM

NOTE: When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".



### ■PCB CONNECTION DIAGRAM



# VSX-D506S, VSX-456

## 7.3.3 PCB PARTS LIST

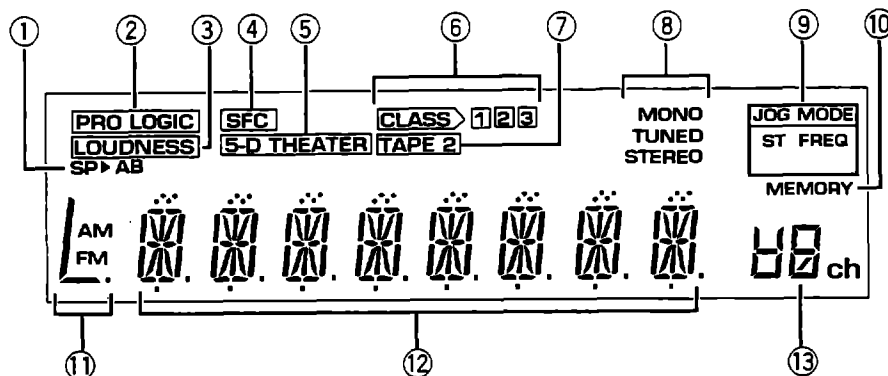
- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.  
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).  
 $560\ \Omega \rightarrow 56 \times 10^1 \rightarrow 561 \dots\dots\dots RD1/4PU \boxed{561} J$   
 $47\ k\Omega \rightarrow 47 \times 10^3 \rightarrow 473 \dots\dots\dots RD1/4PU \boxed{473} J$   
 $0.5\ \Omega \rightarrow R50 \dots\dots\dots RN2H \boxed{R50} K$   
 $1\ \Omega \rightarrow 1R0 \dots\dots\dots RS1P \boxed{1R0} K$   
Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).  
 $5.62\ k\Omega \rightarrow 562 \times 10^1 \rightarrow 5621 \dots\dots\dots RN1/4PC \boxed{5621} F$

| Mark                  | No.             | Description      | Part No.     |
|-----------------------|-----------------|------------------|--------------|
| <b>SEMICONDUCTORS</b> |                 |                  |              |
|                       | IC1             |                  | AZC7275      |
|                       | IC2             |                  | AZC7274      |
|                       | IC3, IC4        |                  | TC74HC07AF   |
|                       | IC5             |                  | RH5VA21AA    |
|                       | Q4-Q6           |                  | 2SA1037K     |
|                       | Q1-Q3           |                  | 2SC3265      |
|                       | D1, D3, D7      |                  | SE1003-C     |
|                       | D2              |                  | SPS-503C-3   |
|                       | D8-D20          | LED              | CL-230HR-CD  |
|                       | D4 - D6         |                  | RLS-73       |
| <b>CAPACITORS</b>     |                 |                  |              |
|                       | C2              |                  | CEAS470M10   |
|                       | C4-C7, C11      |                  | CKSQYB104K25 |
|                       | C3              |                  | CEAS221M6R3  |
|                       | C1              |                  | CEAS101M6R3  |
|                       | C8 -C10         |                  | CCSQCH101J50 |
| <b>RESISTORS</b>      |                 |                  |              |
|                       | R2001, R2002    |                  | RS1/8S0R0J   |
|                       | R1, R2, R4      |                  | RS1/8S3R9J   |
|                       | Other Resistors |                  | RS1/10S□□□J  |
| <b>OTHERS</b>         |                 |                  |              |
|                       | X1, X2          | RESONATOR (4MHz) | KBR-4.0M     |

## 8. PANEL FACILITIES AND SPECIFICATIONS

### ■MODEL VSX-D506S and VSX-456

#### Display



① **Speakers A, B indicator**

The indicator of the speaker system (A, B) selected will light.

② **PRO LOGIC indicator**

Lights when Dolby Pro Logic is selected.

③ **LOUDNESS indicator**

Lights when LOUDNESS is ON.

④ **SFC indicator**

Lights when STUDIO or ARENA has been selected with the SFC MODE button.

⑤ **5-D THEATER indicator**

Lights when 5-D THEATER is ON.

⑥ **CLASS 1, 2, 3 indicators**

The indicator of the class number selected lights.

⑦ **TAPE 2 indicator**

Lights when TAPE 2 MONITOR is ON.

⑧ **TUNER indicator**

**MONO:**

Lights when the monaural mode is set using the MPX MODE button.

**TUNED:**

Lights when broadcasts are being received.

**STEREO:**

Lights when stereo broadcasts are received during auto stereo mode.

⑨ **JOG MODE indicator**

**ST:**

Lights when the station mode is selected.

**FREQ:**

Lights when the frequency mode is selected.

⑩ **MEMORY indicator**

Lights when station memory mode is selected.

⑪ **AM/FM indicators**

The indicator of the band currently selected (AM/FM) lights.

⑫ **CHARACTER display**

⑬ **STATION display**

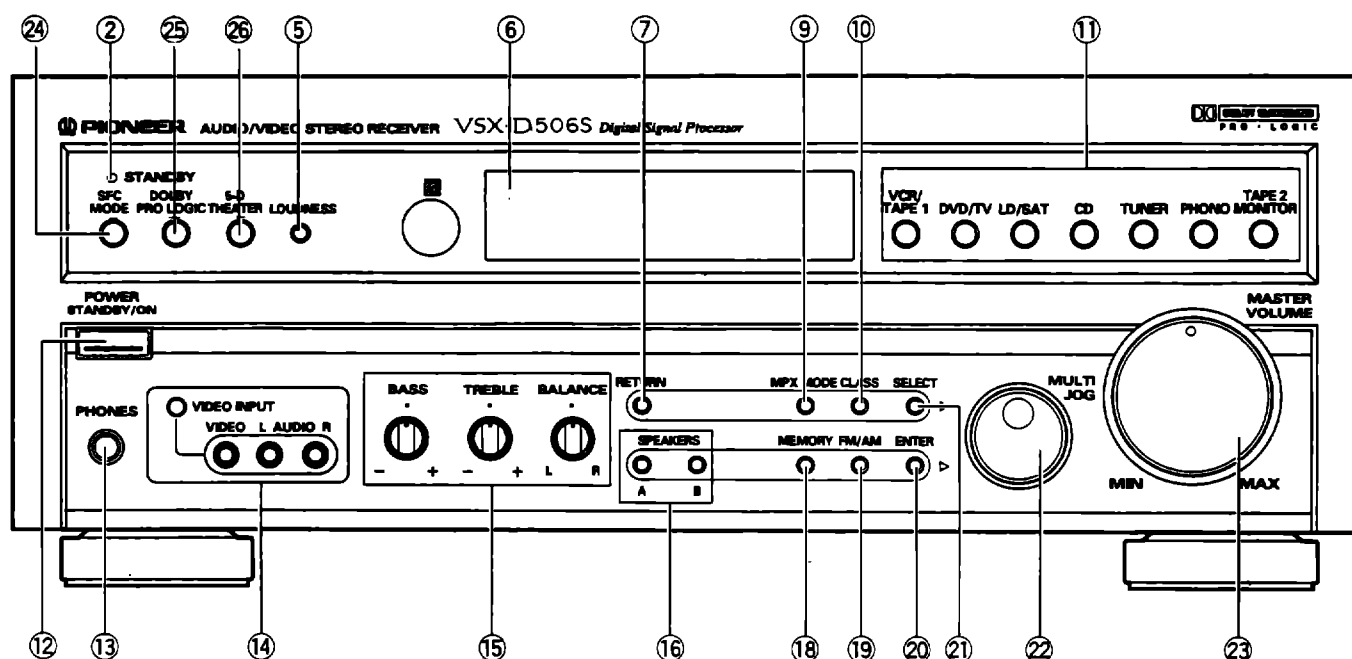
Indicates the station number currently selected.

# VSX-D506S, VSX-456

## ■ MODEL VSX-D506S

\* The size of characters shown in the figure may differ from that on the actual product.

### Front panel



② **STANDBY indicator**

⑤ **LOUDNESS button**

Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.

⑥ **Display**

⑦ **RETURN button**

⑨ **MPX MODE button**

Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

⑩ **CLASS button**

⑪ **Function buttons**

⑫ **POWER STANDBY/ON button**

⑬ **PHONES jack (Headphone terminal)**

⑭ **VIDEO INPUT button/terminal**

Connect to a video camera, etc.

⑮ **TONE and BALANCE controls**

Use to adjust tone and volume balance.

⑮ **SPEAKERS A, B buttons**

ON/OFF switches for the A and B speaker systems.

⑮ **MEMORY button**

⑮ **FM/AM button**

Use to switch the FM/AM frequency band reception.

⑮ **ENTER button**

⑮ **SELECT button**

Use to switch the control of the MULTI JOG between station mode and frequency mode when operating the tuner.

⑮ **MULTI JOG**

Use to select the frequency and station number when operating the tuner.

⑮ **MASTER VOLUME**

⑮ **SFC MODE button**

⑮ **DOLBY PRO LOGIC button**

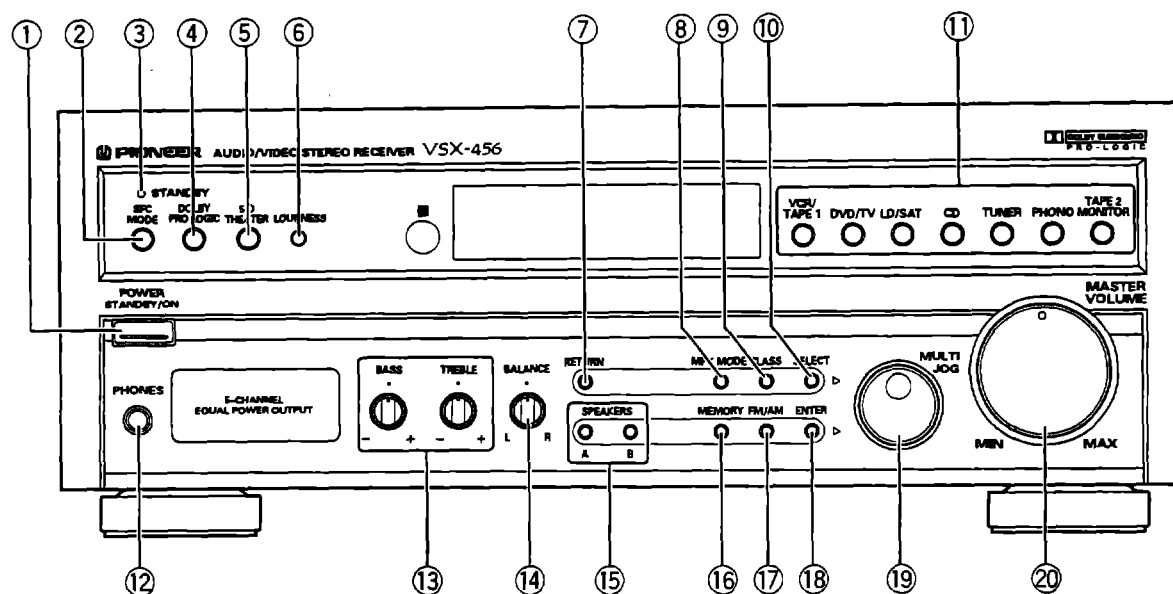
Switches DOLBY PRO LOGIC SURROUND on and off.

⑮ **5-D THEATER button**

## MODEL VSX-456

### Front Panel

- The size of characters in the figure may differ from that on the actual product.



① **POWER STANDBY/ON button**

② **SFC MODE button**

③ **STANDBY indicator**

④ **DOLBY PRO-LOGIC button**

⑤ **5-D THEATER button**

⑥ **LOUDNESS button**

Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.

⑦ **RETURN button**

⑧ **MPX MODE button**

Use to switch the auto stereo/monaural mode for receiving FM broadcasts.  
When the received broadcast signal is weak, press this button to set the monaural mode.

⑨ **CLASS button**

⑩ **SELECT button**

Use to switch the control of the MULTI JOG between station mode and frequency mode when operating the tuner.

⑪ **Function buttons**

⑫ **PHONES jack (Headphone terminal)**

⑬ **TONE control**

Use to adjust tone.

⑭ **BALANCE control**

Use to adjust volume balance.

⑮ **SPEAKERS A, B buttons**

ON/OFF switches for the A and B speaker systems.

⑯ **MEMORY button**

⑰ **FM/AM button**

Use to switch the FM/AM frequency band reception.

⑱ **ENTER button**

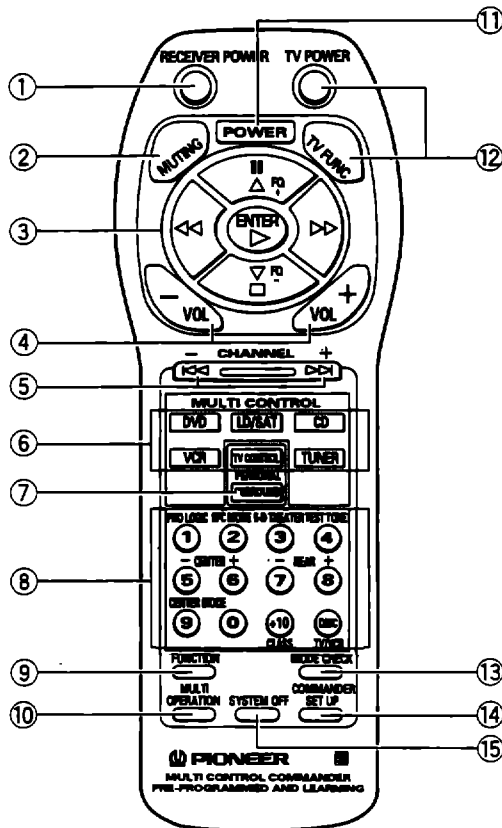
⑲ **MULTI JOG**

Use to select the frequency and station number when operating the tuner.

⑳ **MASTER VOLUME**

## MODEL VSX-D506S

### Remote control unit

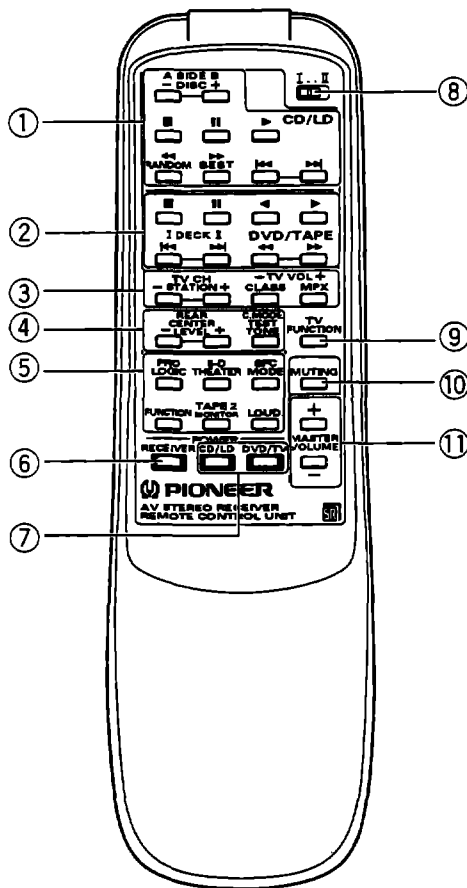


- ① **RECEIVER POWER button**
- ② **MUTING button**  
Press to mute the volume.
- ③ **[When set to SURROUND (OPERATIONS)]**  
△, ▽, ◀, ▶ (Select/Adjust) buttons  
**[When set to other than SURROUND (OPERATIONS)]**  
⏸ (Pause), □ (Stop), ◀◀ (Rewind), ▶▶ (Fast Forward), ▶ (Play) buttons
- ④ **VOL (-, +) buttons**
- ⑤ **[TV Operations]**  
Selects the TV broadcast channel.  
**[CD, LD, DVD operations]**  
◀◀, ▶▶ (Chapter/Track Search) buttons
- ⑥ **MULTI CONTROL function buttons**  
Used to set and operate the MULTI CONTROL, and switch the function.  
TV CONTROL: Press to operate TV.

- ⑦ **SURROUND/PERSONAL button**  
**[When setting MULTI operations]**  
Press when setting to the personal mode using multi operations.  
**[When setting to other than multi operation]**  
Press when performing surround operations and setting/changing setting modes.
- ⑧ **Number/surround setting buttons**  
**[When setting surround (operations)]**  
PRO LOGIC (VSX-D506S): Turns Dolby Pro Logic ON/OFF.  
SFC MODE (VSX-D506S): Switches the surround effects.  
5-D THEATER (VSX-D506S): When turned ON, the rear channel sound becomes stereo-like (deep and clear).  
TEST TONE: When turned ON (while in surround mode), volume balance adjustment signals are output in order from the speakers and can be adjusted.  
CENTER -, +: Adjusts the center level.  
REAR -, +: Adjusts the rear level.
- [Tuner Operations]**  
Number buttons: Use for setting the frequency value when the station call is selected or during direct access.  
CLASS: Switches the CLASS number.
- [VCR operations]**  
TV/VCR: Switches between TV/VCR.
- [CD Operations]**  
DISC: Use to select the DISC number.
- ⑨ **FUNCTION button**  
Switches the function.
- ⑩ **MULTI OPERATION button**  
Use to set the multi operation.
- ⑪ **POWER button**  
Turns ON/OFF the power of devices other than this unit.
- ⑫ **TV buttons**
- ⑬ **MODE CHECK button**
- ⑭ **COMMANDER SET UP button**  
Use to control and learn operations of other manufacturer's equipment, and set multi operation functions.
- ⑮ **SYSTEM OFF button**  
Use to turn OFF the power of all equipment connected to the main unit.

## MODEL VSX-456

### REMOTE CONTROL UNIT



#### ① CD/LD buttons

(When the MODE switch is set to I.)

Sets CD.

DISC  $\rightarrow$   $\leftarrow$ ,  $\blacksquare$ , II,  $\blacktriangleright$ , RANDOM, BEST,  $\lll$ ,  $\ggg$

(When the MODE switch is set to II.)

Sets LD.

SIDE A/B,  $\blacksquare$ , II,  $\blacktriangleright$ ,  $\lll$ ,  $\ggg$ ,  $\lll$ ,  $\ggg$

#### ② DVD/TAPE buttons

(When the MODE switch is set to I.)

Sets DVD.

$\blacksquare$ , II,  $\blacktriangleright$ ,  $\lll$ ,  $\ggg$ ,  $\lll$ ,  $\ggg$

(When the MODE switch is set to II.)

Sets TAPE DECK.

$\blacksquare$ , II,  $\blacktriangleright$ ,  $\lll$ , DECK I/II,  $\lll$ ,  $\ggg$

#### ③ TV/TUNER buttons

(When the MODE switch is set to I.)

Sets AM/FM tuner.

STATION  $\rightarrow$   $\leftarrow$ , CLASS, MPX

(When the MODE switch is set to II.)

Sets TV.

TV CH (channel)  $\rightarrow$   $\leftarrow$ , TV VOL (volume)  $\rightarrow$   $\leftarrow$

#### ④ SURROUND ADJUSTMENT buttons

(When the MODE switch is set to I.)

CENTER LEVEL  $\rightarrow$   $\leftarrow$

Adjusts the center level.

TEST TONE

When SFC MODE or DOLBY PRO LOGIC is ON, volume balance adjustment signals are output in order from each speaker and center/rear level can be adjusted.

(When the MODE switch is set to II.)

REAR LEVEL  $\rightarrow$   $\leftarrow$

Adjusts the rear level.

C.MODE

Switches the center mode.

#### ⑤ RECEIVER buttons

PRO LOGIC

Use to turn ON/OFF DOLBY PRO LOGIC surround.

5-D THEATER

Use to select from 2 types of 5-D THEATER.

$\rightarrow$  5-D PRO LOGIC  $\rightarrow$  5-D SURR  
SURR OFF  $\leftarrow$

SFC MODE

Use to select from 2 types of SFC MODE.

$\rightarrow$  STUDIO  $\rightarrow$  ARENA  
SFC OFF  $\leftarrow$

FUNCTION

Use to switch the function.

TAPE 2 MONITOR

Use to turn ON the TAPE 2 MONITOR.

LOUD. (LOUDNESS)

When turned ON in low volume setting, the low and high range sound levels increase, making the sounds clearer.

#### ⑥ POWER (RECEIVER) button

Use to switch the RECEIVER power to ON or STANDBY.

#### ⑦ POWER (CD/LD, DVD/TV) buttons

(When the MODE switch is set to I.)

Use to turn ON/OFF the CD, DVD power.

(When the MODE switch is set to II.)

Use to turn ON/OFF the LD, TV power.

#### ⑧ MODE switch

Use to switch the remote control unit modes.

#### ⑨ TV FUNCTION button

Use to switch the TV function.

#### ⑩ MUTING button

Turns ON when the volume is muted.

#### ⑪ MASTER VOLUME $\rightarrow$ $\leftarrow$ buttons

Use to adjust the volume.

# VSX-D506S, VSX-456

## MODEL VSX-D506S

### SPECIFICATIONS

#### Amplifier Section

**Continuous average power output of 100 watts\* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 %\*\* total harmonic distortion (front).**

[Multi-voltage model only]

Continuous Power Output (DIN)

Front (1 kHz, T.H.D. 1 %, 8  $\Omega$ )

VSX-D506S ..... 110 W + 110 W

[U.S. and Canadian models only]

Continuous Power Output

Front ..... 100 W + 100 W (1 kHz, 0.8 %, 8  $\Omega$ )

Center ..... 100 W (1 kHz, 0.8 %, 8  $\Omega$ )

Rear ..... 100 W (1 kHz, 0.8 %, 8  $\Omega$ )

Input (Sensitivity/Impedance)

PHONO MM ..... 2.8 mV/47 k $\Omega$

LD/SAT, CD, VCR/TAPE 1, TAPE 2

DVD/TV, VIDEO ..... 200 mV/47 k $\Omega$

Phono Overload Level (T.H.D. 0.1 %, 1 kHz)

PHONO MM ..... 100 mV

Frequency Response

PHONO MM ..... 20 Hz to 20,000 Hz  $\pm$  0.3 dB

LD/SAT, CD, VCR/TAPE 1, TAPE 2

DVD/TV, VIDEO ..... 5 Hz to 100,000 Hz  $\pm$  0.3 dB

Output (Level/Impedance)

VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/2.2 k $\Omega$

Tone Control

BASS .....  $\pm$  9 dB (100 Hz)

TREBLE .....  $\pm$  9 dB (10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM

VSX-D506S ..... 72 dB

LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO

VSX-D506S ..... 96 dB

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM ..... 75 dB

LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV, VIDEO

VSX-D506S ..... 79 dB

\* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

\*\* Measured by Audio Spectrum Analyzer.

#### VIDEO Section

Input (Sensitivity/Impedance)

LD/SAT, VCR, DVD/TV, VIDEO ..... 1 Vp-p/75  $\Omega$

Output (Level/Impedance)

VCR REC, MONITOR TV ..... 1 Vp-p/75  $\Omega$

Frequency Response

LD/SAT, VCR, DVD/TV, VIDEO

→ MONITOR ..... 5 Hz to 7 MHz  $\pm$  0.3 dB

Signal-to-Noise Ratio ..... 55 dB

Cross Talk ..... 55 dB

#### FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz

Usable Sensitivity ..... Mono: 11.2 dBf, IHF (1.0  $\mu$ V/75  $\Omega$ )

50 dB Quieting Sensitivity ..... Mono: 16.8 dBf

Stereo: 38.6 dBf

Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)

Stereo: 70 dB (at 85 dBf)

Distortion ..... Stereo: 0.5 % (1 kHz)

Alternate Channel Selectivity ..... 60 dB (400 kHz)

Stereo Separation ..... 40 dB (1 kHz)

Frequency Response ..... 30 Hz to 15 kHz ( $\pm$  1) dB

Antenna Input ..... 75  $\Omega$  unbalanced

#### AM Tuner Section

Frequency Range ..... 531 kHz to 1,602 kHz (9 kHz step)

530 kHz to 1,700 kHz (10 kHz step)

Sensitivity (IHF, Loop antenna) ..... 350  $\mu$ V/m

Selectivity ..... 25 dB

Signal-to-Noise Ratio ..... 50 dB

Antenna ..... Loop antenna

#### Miscellaneous

Power Requirements

U.S. and Canadian models ..... AC 120 V, 60 Hz

Multi-voltage model ..... AC 110 V/120-127 V/220 V/240 V

(Switchable), 50/60 Hz

Power Consumption

U.S. and Canadian models

VSX-D506S ..... 260 W, 360 VA

Multi-voltage model

VSX-D506S ..... 265 W

In Standby Condition ..... 2.5 W

AC Outlet (Multi-voltage, U.S. and Canadian models only)

U.S. and Canadian models

SWITCHED ..... 100 W (0.8 A) MAX

Multi-voltage model

SWITCHED ..... 100 W MAX

Dimensions

VSX-D506S ..... 420 (W)  $\times$  155 (H)  $\times$  374 (D) mm

16-9/16 (W)  $\times$  6-1/8 (H)  $\times$  14-3/4 (D) in

Weight (without package)

VSX-D506S

U.S. and Canadian models ..... 9.1 kg (20 lb 1 oz)

Multi-voltage model ..... 9.2 kg (20 lb 5 oz)

#### Furnished Parts

FM Antenna ..... 1

AM Loop Antenna ..... 1

Dry Cell Batteries (AA/LR6) ..... 2

Remote Control Unit ..... 1

Operating Instructions ..... 1

Sub instruction manual (Remote Control Unit) ..... 1

#### NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby", "AC-3", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

## MODEL VSX-456

### SPECIFICATIONS

#### Amplifier section

**Continuous average power output of 100 watts\* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09%\*\* total harmonic distortion (front).**

[Multi-voltage model only]

Continuous Power Output (DIN)

Front (1kHz, T.H.D. 1 %, 8  $\Omega$ ) ..... 110 W + 110 W

Continuous Power Output

Front ..... 100 W + 100 W (1kHz, 0.8 %, 8  $\Omega$ )

Center ..... 100 W (1kHz, 0.8 %, 8  $\Omega$ )

Rear ..... 100 W + 100 W (1kHz, 0.8 %, 8  $\Omega$ )

Input (Sensitivity/Impedance)

PHONO MM ..... 2.8 mV/47 k $\Omega$

CD, VCR/TAPE 1, TAPE 2, DVD/TV, LD/SAT

..... 200 mV/47 k $\Omega$

Phono Overload level (T.H.D. 0.1 %, 1kHz)

PHONO MM ..... 100 mV

Frequency Response

PHONO MM ..... 20 Hz to 20,000 Hz  $\pm$  0.3 dB

CD, VCR/TAPE 1, TAPE 2, DVD/TV, LD/SAT

..... 5 Hz to 100,000 Hz  $\pm$  3 dB

Output (Level/Impedance)

VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/2.2 k $\Omega$

VIDEO OUT ..... 200 mV/2.2 k $\Omega$

Tone Control

BASS .....  $\pm$  9 dB (150 Hz)

TREBLE .....  $\pm$  9 dB (10 kHz)

LOUDNESS ..... + 8 dB/+ 6 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM ..... 72 dB

CD, VCR/TAPE 1, TAPE 2, DVD/TV, LD/SAT ..... 96 dB

Signal-to Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM ..... 75 dB

CD, VCR/TAPE 1, TAPE 2, DVD/TV, LD/SAT ..... 79 dB

\* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.

\*\* Measured by Audio Spectrum Analyzer.

#### VIDEO Section

Input (Sensitivity/Impedance)

VCR, DVD/TV, LD/SAT ..... 1 Vp-p/75  $\Omega$

Output (Level/Impedance)

VCR ..... 1 Vp-p/75  $\Omega$

Frequency Response

VCR, DVD/TV, LD/SAT  $\rightarrow$  MONITOR

..... 5 Hz to 7 MHz  $\pm$  3 dB

Signal-to-Noise Ratio ..... 55 dB

Cross Talk ..... 55 dB

#### FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz

Usable Sensitivity ..... Mono: 11.2 dBf, IHF (1.0  $\mu$ V/75  $\Omega$ )

50 dB Quieting Sensitivity ..... Mono: 16.8 dBf

Stereo: 38.6 dBf

Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)

Stereo: 70 dB (at 85 dBf)

Distortion ..... Stereo: 0.5 % (1 kHz)

Alternate Channel Selectivity ..... 60 dB (400 kHz)

Stereo Separation ..... 40 dB (1 kHz)

Frequency Response ..... 30 Hz to 15 kHz ( $\pm$ 1) dB

Antenna Input ..... 75  $\Omega$  unbalanced

#### AM Tuner Section

Frequency Range ..... 531 kHz to 1,602 kHz (9 kHz step)

530 kHz to 1,700 kHz (10 kHz step)

Sensitivity (IHF, Loop antenna) ..... 350  $\mu$ V/m

Selectivity ..... 25 dB

Signal-to-Noise Ratio ..... 50 dB

Antenna ..... Loop antenna

#### Miscellaneous

Power Requirements

U.S. model ..... AC 120 V, 60 Hz

Multi-voltage model ... AC 110 V/120-127 V/220 V/ 240 V

(Switchable), 50/60 Hz

Power Consumption

U.S. model ..... 260 W, 360 VA

Multi-voltage model ..... 264 W

In Standby Condition ..... 7 W

AC Outlet

U.S. model

SWITCHED ..... 100 W (0.8 A) MAX

Multi-voltage model

SWITCHED ..... 100 W MAX

Dimensions ..... 420 (W)  $\times$  155 (H)  $\times$  374 (D) mm

16-9/16 (W)  $\times$  6-1/8 (H)  $\times$  14-3/4 (D) in

Weight (without package)

U.S. model ..... 9.1 kg (20 lb 1 oz)

Multi-voltage model ..... 9.2 kg (20 lb 5 oz)

#### Furnished Parts

FM Antenna ..... 1

AM Loop Antenna ..... 1

Dry Cell Batteries

[size "AA" (IEC R6)] ..... 2

Remote Control Unit ..... 1

Operating Instructions ..... 1

#### NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

