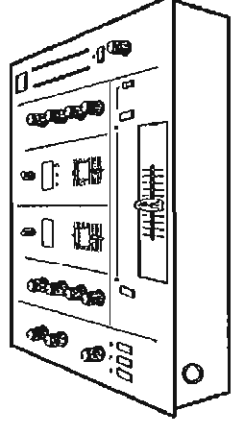


# Service Manual



ORDER NO.  
RRV1711

## DJ MIXER **DJM-3000**

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

| Type | Model    | Power Requirement         | The voltage can be converted by the following method. |
|------|----------|---------------------------|---|
|      | DJM-3000 |                           |   |
| KUC  | ○        | AC120V                    | _____   |
| SYL  | ○        | AC110V/120V/220-230V/240V | With the voltage selector                             |

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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.

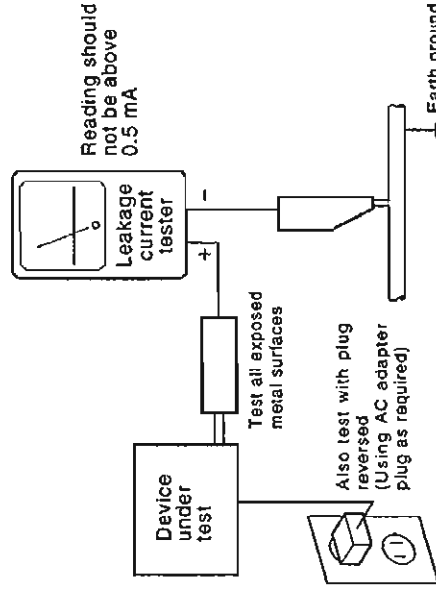
## (FOR USA MODEL ONLY)

### 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  $\Delta$  on the schematics and on the parts list in this Service Manual.

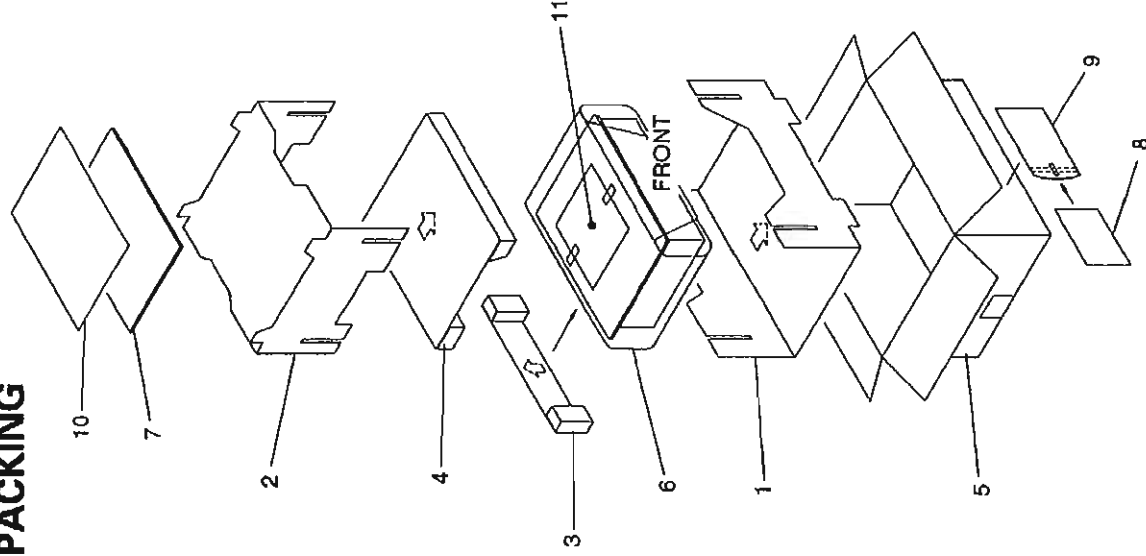
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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 △ 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.  
 ● Screw adjacent to ▼ mark on the product are used for disassembly.

### 2.1 PACKING



#### (1) Parts List

| Mark No. | Description            | Parts No.              |
|----------|------------------------|------------------------|
| 1        | PAD A                  | DHA1370                |
| 2        | PAD B                  | DHA1371                |
| 3        | PAD C                  | DHA1372                |
| 4        | PAD D                  | DHA1375                |
| 5        | PACKING CASE           | See Contrast table (2) |
| 6        | SHEET                  | RHX1006                |
| 7        | OPERATING INSTRUCTIONS | See Contrast table (2) |
| 8        | CARD                   | See Contrast table (2) |
| 9        | VINYL BAG              | See Contrast table (2) |
| 10       | WARRANTY CARD          | See Contrast table (2) |
| NSP      | CAUTION CARD 220V      | See Contrast table (2) |

### (2) Contrast Table

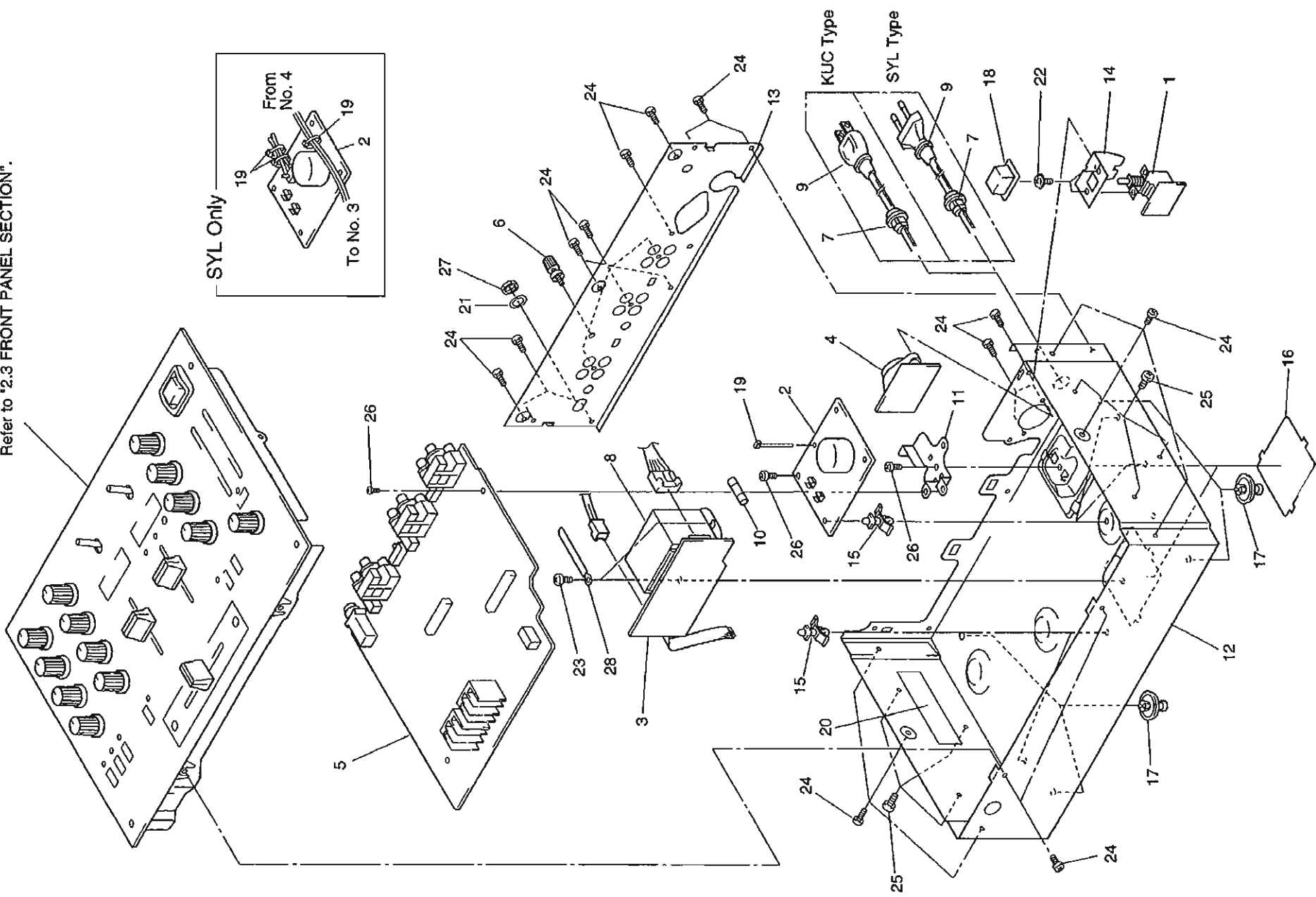
DJM-300/KUC and SYL have the same construction except for the following:

| Mark No. | Description  | Part No.    |             | Remarks |
|----------|--|-------------|-------------|---------|
|          |  | DJM-300/KUC | DJM-300/SYL |         |
| 5        | Packing Case   | DHG1737     | DHG1736     |         |
| 7        | Operating Instructions ( English/French )  | DRB1206     | Not used    |         |
| 7        | Operating Instructions ( English/French/German/Italian/Dutch/Swedish/Spanish/Chinese ) | Not used    | DRB1207     |         |
| NSP      | Card   | DRY1032     | Not used    |         |
| NSP      | Vinyl Bag  | DHL4011     | Not used    |         |
| NSP      | Warranty Card  | DRY1171     | Not used    |         |
| NSP      | Caution Card 220V  | Not used    | ARR7003     |         |

# DJM-300

## 2.2 EXTERIOR

Refer to "2.3 FRONT PANEL SECTION".



## (1) Parts List

| Mark No. | Description              | Parts No.              | Mark No. | Description  | Parts No.              |
|----------|--------------------------|------------------------|----------|--------------|------------------------|
| NSP 1    | POWER SW ASSY            | DWR1262                | 21       | WASHER       | DBE1010                |
| NSP 2    | POWER SUP ASSY           | See Contrast table (2) | 22       | SCREW        | AMZ30P040FMC           |
| NSP 3    | TRANS ASSY               | See Contrast table (2) | 23       | SCREW        | BBZ40P060FMC           |
| NSP 4    | VOLTAGE SELECT ASSY      | See Contrast table (2) | 24       | SCREW        | BBZ30P080FZK           |
|          |                          |                        | 25       | SCREW        | BBZ40P080FZK           |
| 5        | TERMINAL ASSY            | DWZ1072                | 26       | SCREW        | BBZ30P060FMC           |
| 6        | TERMINAL SCREW           | AKE-031                | 27       | NUT          | NKX2FUC                |
| 7        | CORD STOPPER             | See Contrast table (2) | 28       | CORD CLAMPER | See Contrast table (2) |
| △ 8      | POWER TRANSFORMER (T701) | See Contrast table (2) |          |              |                        |
| △ 9      | AC POWER CORD            | See Contrast table (2) |          |              |                        |
| △ 10     | FUSE (FU701)             | See Contrast table (2) |          |              |                        |
| 11       | PCB STAY                 | DNF1544                |          |              |                        |
| NSP 12   | CHASSIS                  | DNA1208                |          |              |                        |
| NSP 13   | REAR PANEL               | See Contrast table (2) |          |              |                        |
| 14       | PLATE (SW)               | DNF1545                |          |              |                        |
| NSP 15   | PCB HOLDER               | PNW2100                |          |              |                        |
| 16       | BOTTOM COVER             | DEC2037                |          |              |                        |
| 17       | FOOT (RUBBER)            | REC-434                |          |              |                        |
| 18       | POWER KNOB               | DAC1847                |          |              |                        |
| 19       | BINDER                   | ZCA-SKB90BK            |          |              |                        |
| 20       | 65 LABEL                 | See Contrast table (2) |          |              |                        |

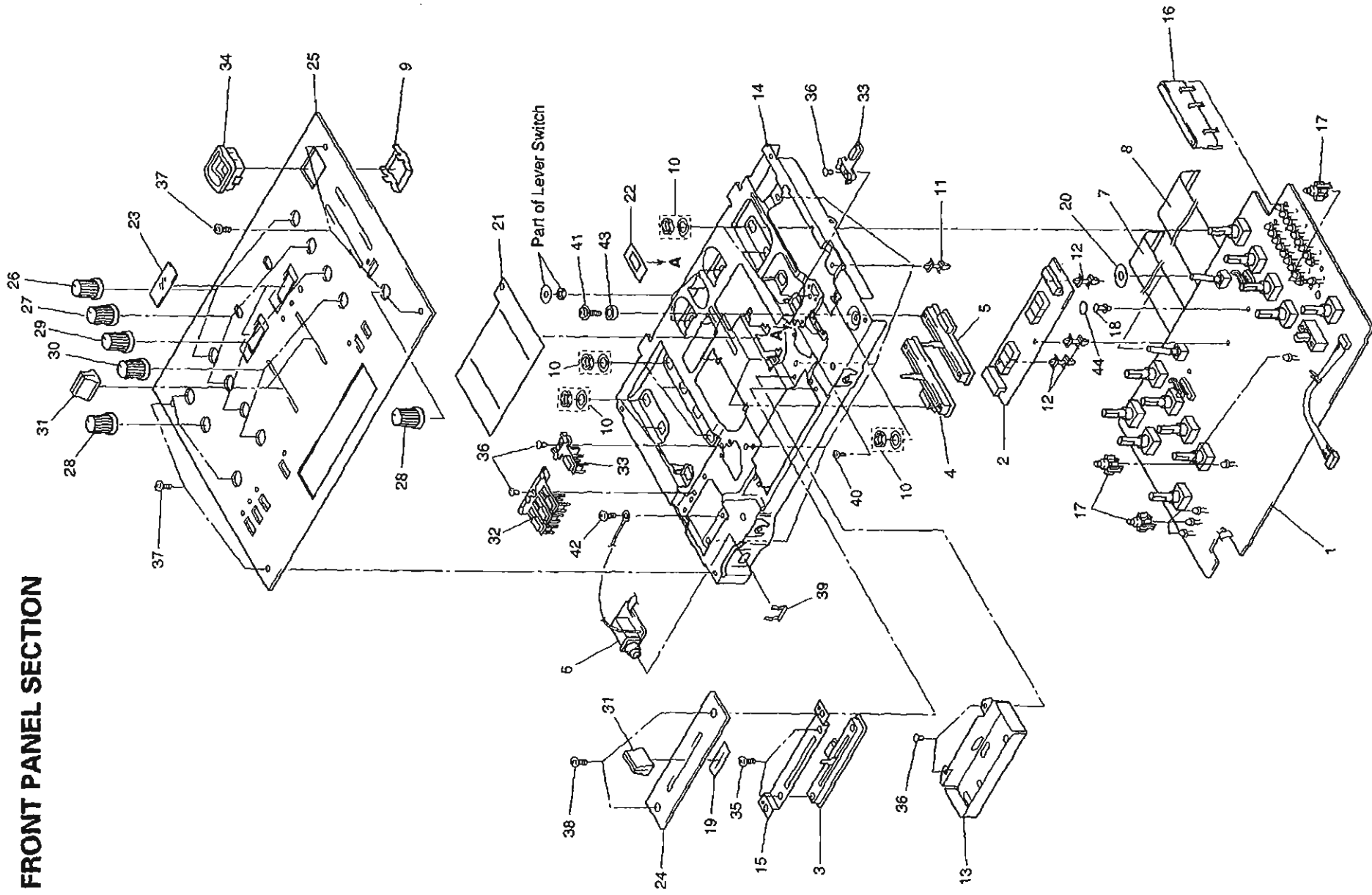
## (2) Contrast Table

DJM-300/KUC and SYL have the same construction except for the following:

| Mark | No. | Description              | Part No.            |                      | Remarks |
|------|-----|--------------------------|---------------------|----------------------|---------|
|      |     |                          | DJM-300/KUC         | DJM-300/SYL          |         |
| NSP  | 2   | POWER SUP Assy           | DWR1267             | DWR1260              |         |
| NSP  | 3   | TRANS Assy               | DWR1268             | DWR1261              |         |
| NSP  | 4   | VOLTAGE SELECT Assy      | Not used            | DWR1263              |         |
|      | 7   | Cord Stopper             | CM-22C              | CM-22B               |         |
| △    | 8   | Power transformer (T701) | DTT1137             | DTT1136              |         |
| △    | 9   | AC Power Cord            | PDG1015             | PDG1003              |         |
| △    | 10  | Fuse (FU701)             | VEK1008<br>(400 mA) | AEK1049<br>(T315 mA) |         |
| NSP  | 13  | Rear Panel               | DNC1438             | DNC1437              |         |
|      | 20  | 65 Label                 | ORW1069             | Not used             |         |
| NSP  | 28  | Cord Clamper             | Not used            | ZCB-4772B            |         |

# DJM-300

## 2.3 FRONT PANEL SECTION

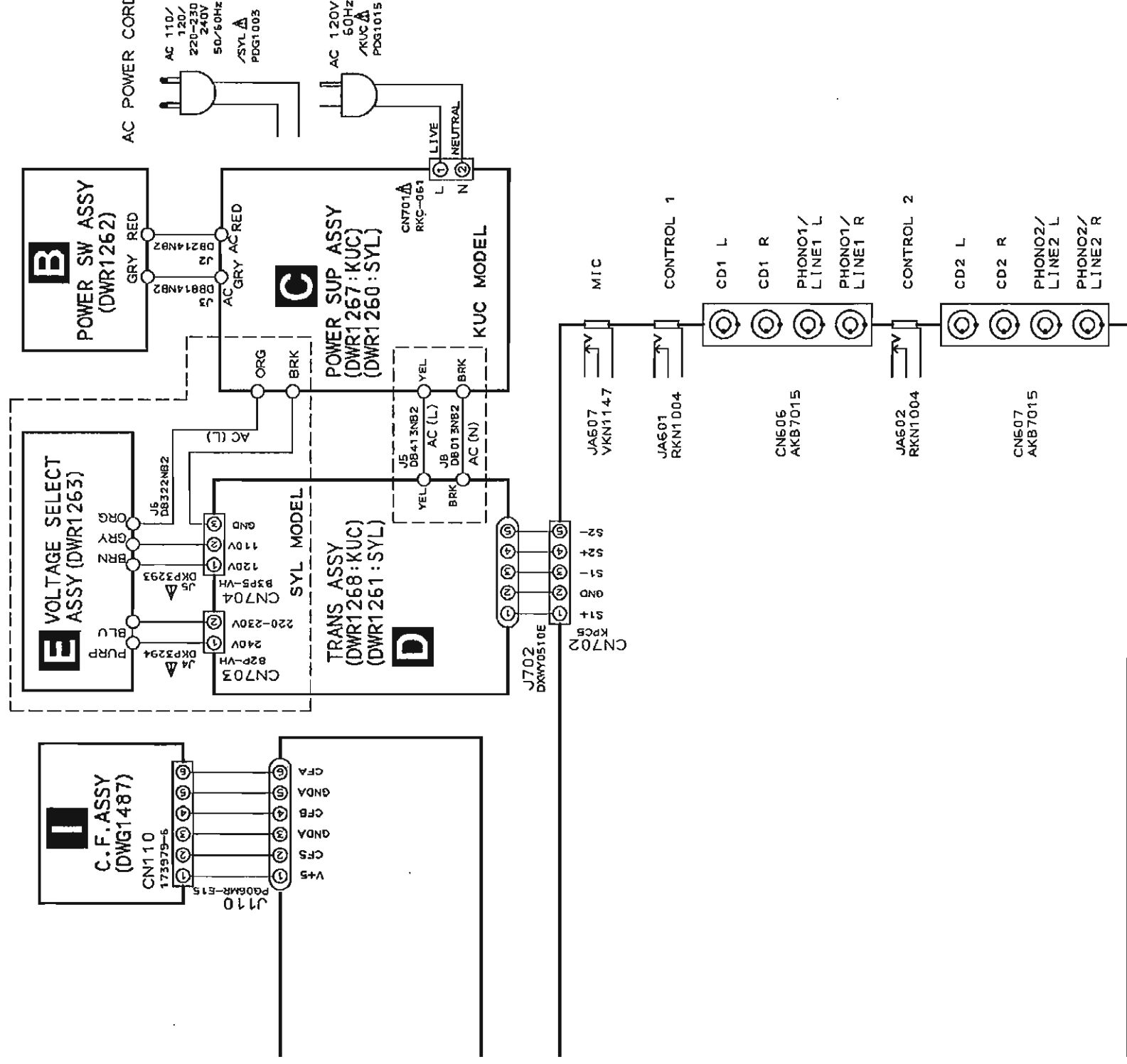


## (1) Parts List

| Mark No. | Description        | Parts No.    | Mark No. | Description     | Parts No.    |
|----------|--------------------|--------------|----------|-----------------|--------------|
| 1        | VR ASSY            | DWG1485      | 36       | RIVET           | RBM-003      |
| NSP      | 7SEG ASSY          | DWG1486      | 37       | SCREW           | BBZ30P080FZK |
| NSP      | C. F. ASSY         | DWG1487      | 38       | SCREW           | CBZ30P080FZK |
| NSP      | CH1 FADER ASSY     | DWG1488      | 39       | SNAP PLATE      | VNE1102      |
| NSP      | CH2 FADER ASSY     | DWG1489      | 40       | SCREW           | AMZ26P040FMC |
| NSP      | HP ASSY            | DWZ1071      | 41       | SCREW           | PMH20P060FMC |
| 7        | 24P FFC/30V        | DDD1108      | 42       | SCREW           | BBZ30P060FMC |
| 8        | 31P FFC/30V        | DDD1113      | 43       | SPACER          | DLA1801      |
| 9        | POWER GUIDE SPACER | DBC2038      | 44       | SPACER (WASHER) | DEC1982      |
| 10       | VR NUT             | DBN1003      |          |                 |              |
| NSP      | PCB SPACER (14)    | DEC1387      |          |                 |              |
| 12       | PCB SPACER (10)    | DEC1388      |          |                 |              |
| 13       | CF COVER           | DEC2039      |          |                 |              |
| NSP      | PANEL STAY         | DND1203      |          |                 |              |
| 15       | PLATE (SLIDER)     | DNF1518      |          |                 |              |
| 16       | LEVEL METER HOLDER | DNK3354      |          |                 |              |
| 17       | LED HOLDER         | DNK3356      |          |                 |              |
| NSP      | CARD SPACER        | REC1156      |          |                 |              |
| 19       | FADER PACKING B    | DED1100      |          |                 |              |
| 20       | LEVER SW PACKING   | DED1120      |          |                 |              |
| 21       | FADER PACKING C    | DED1121      |          |                 |              |
| 22       | SLIDE SW PACKING B | DED1125      |          |                 |              |
| 23       | DISPLAY PANEL      | DAH1824      |          |                 |              |
| 24       | SLIDER PANEL (B)   | DAH1825      |          |                 |              |
| 25       | CONTROL PANEL      | DNB1068      |          |                 |              |
| 26       | ROTARY VR KNOB G   | DAAI133      |          |                 |              |
| 27       | ROTARY VR KNOB DG  | DAAI135      |          |                 |              |
| 28       | ROTARY VR KNOB B   | DAAI136      |          |                 |              |
| 29       | ROTARY VR KNOB GY  | DAAI139      |          |                 |              |
| 30       | ROTARY VR KNOB GG  | DAAI140      |          |                 |              |
| 31       | FADER KNOB         | DAC1846      |          |                 |              |
| 32       | KNOB ASSY          | DAC1871      |          |                 |              |
| 33       | TACT KNOB          | DAC1872      |          |                 |              |
| 34       | POWER KNOB GUIDE   | DNK3207      |          |                 |              |
| 35       | SCREW              | AMZ30P040FMC |          |                 |              |



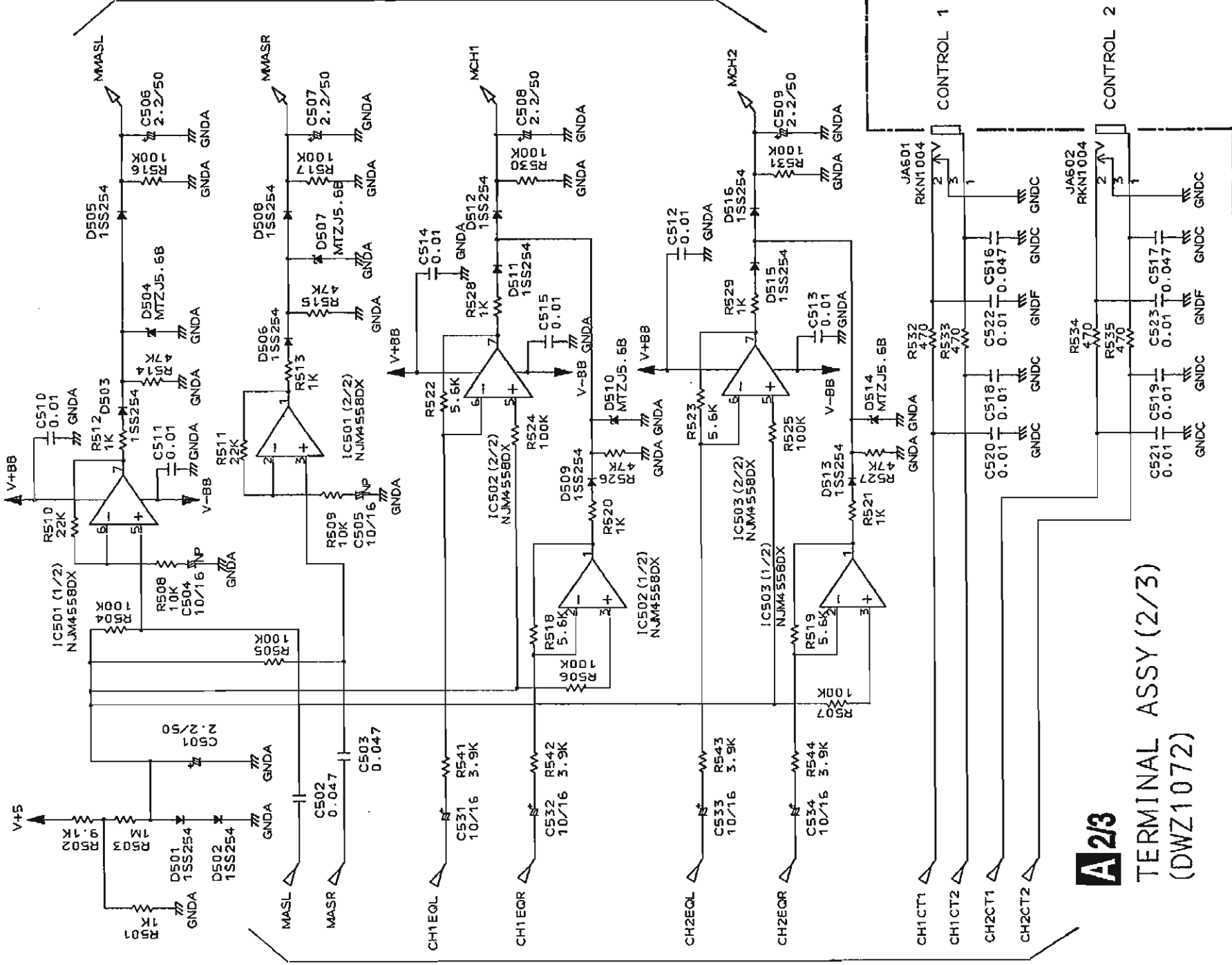








3.3 TERMINAL ASSY (2/3)



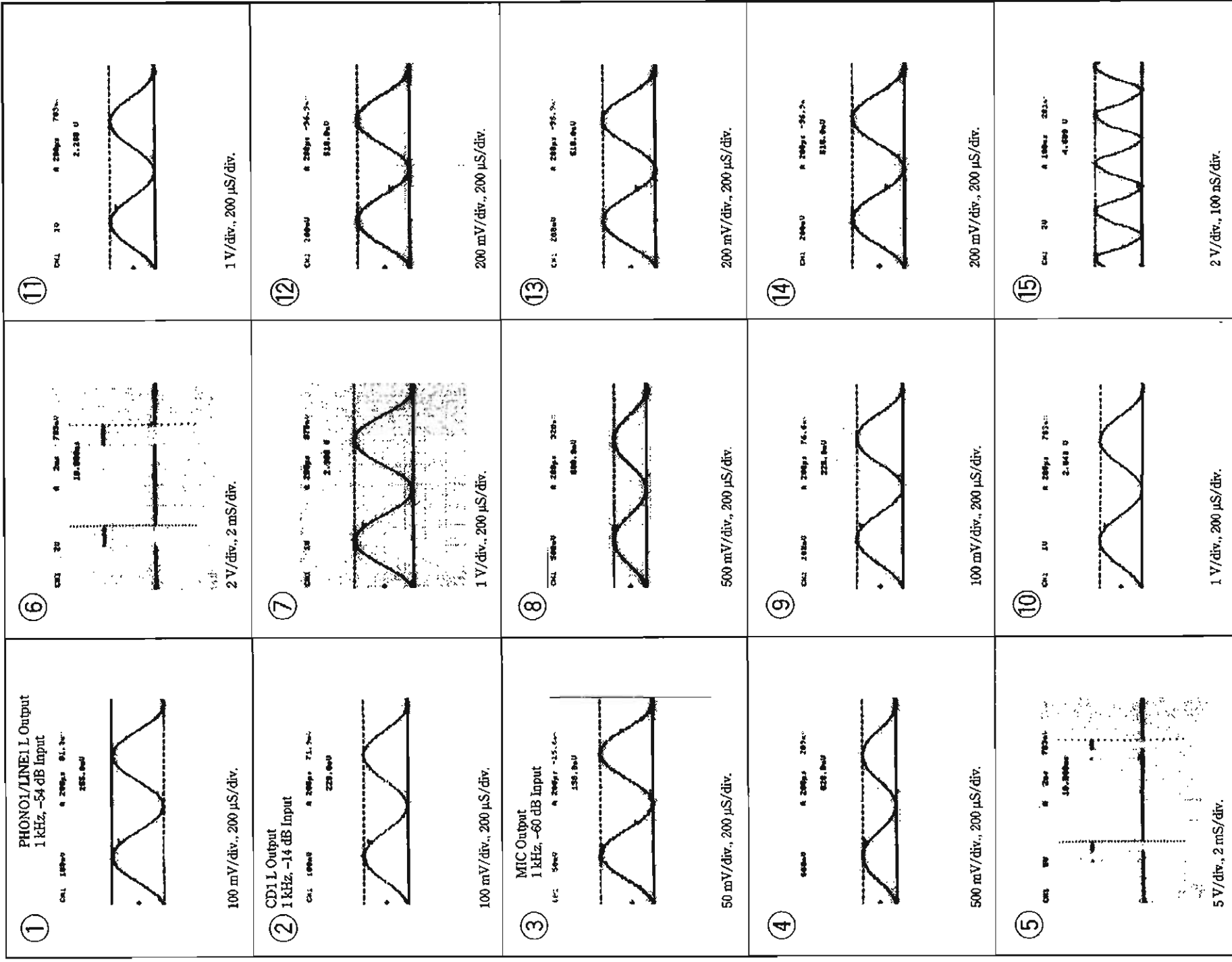
A/1/3

A2/3

TERMINAL ASSY (2/3)  
(DWZ1072)

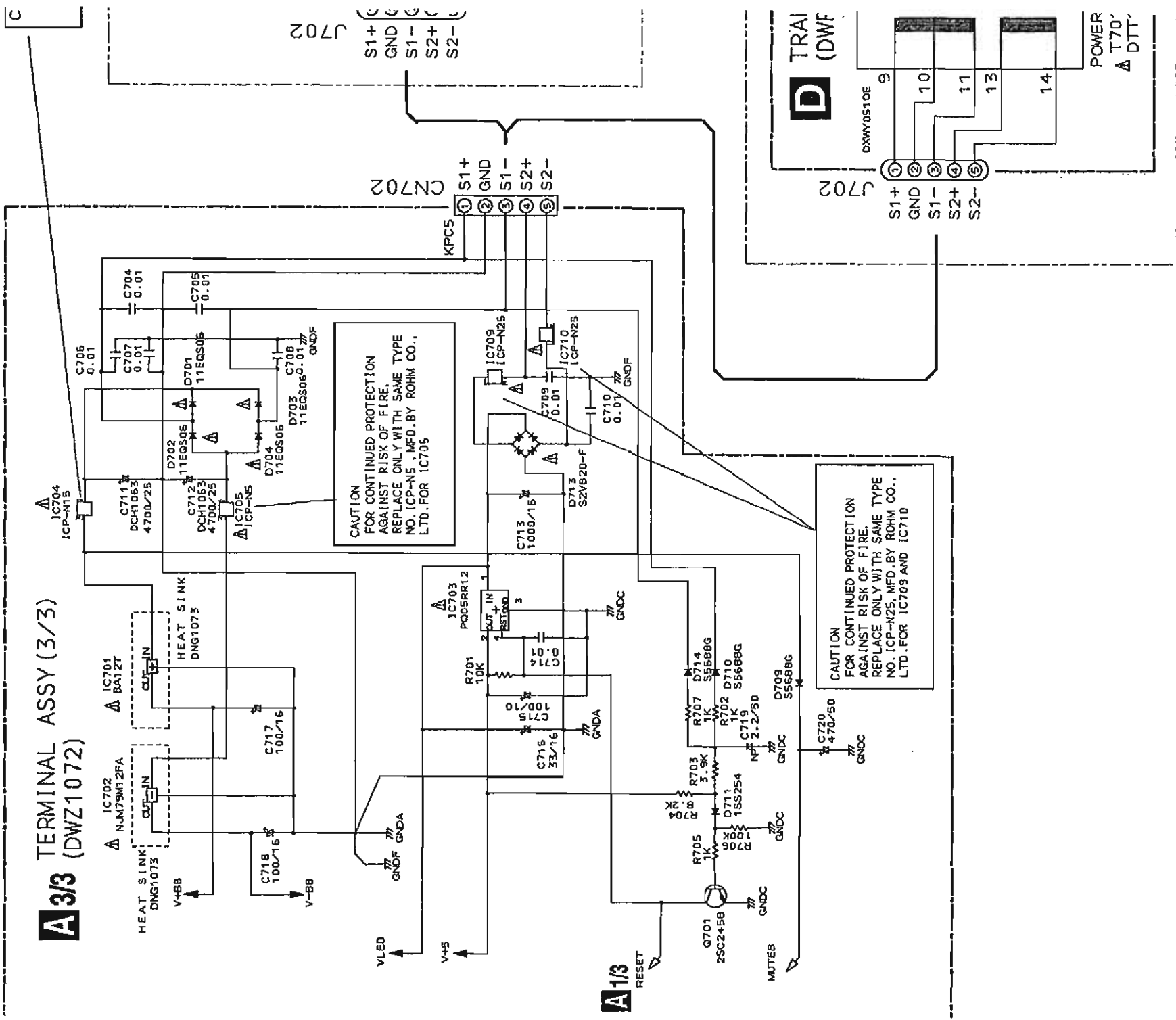
## Waveforms

Note: The encircled numbers denote measuring point in the schematic diagram and block diagram.



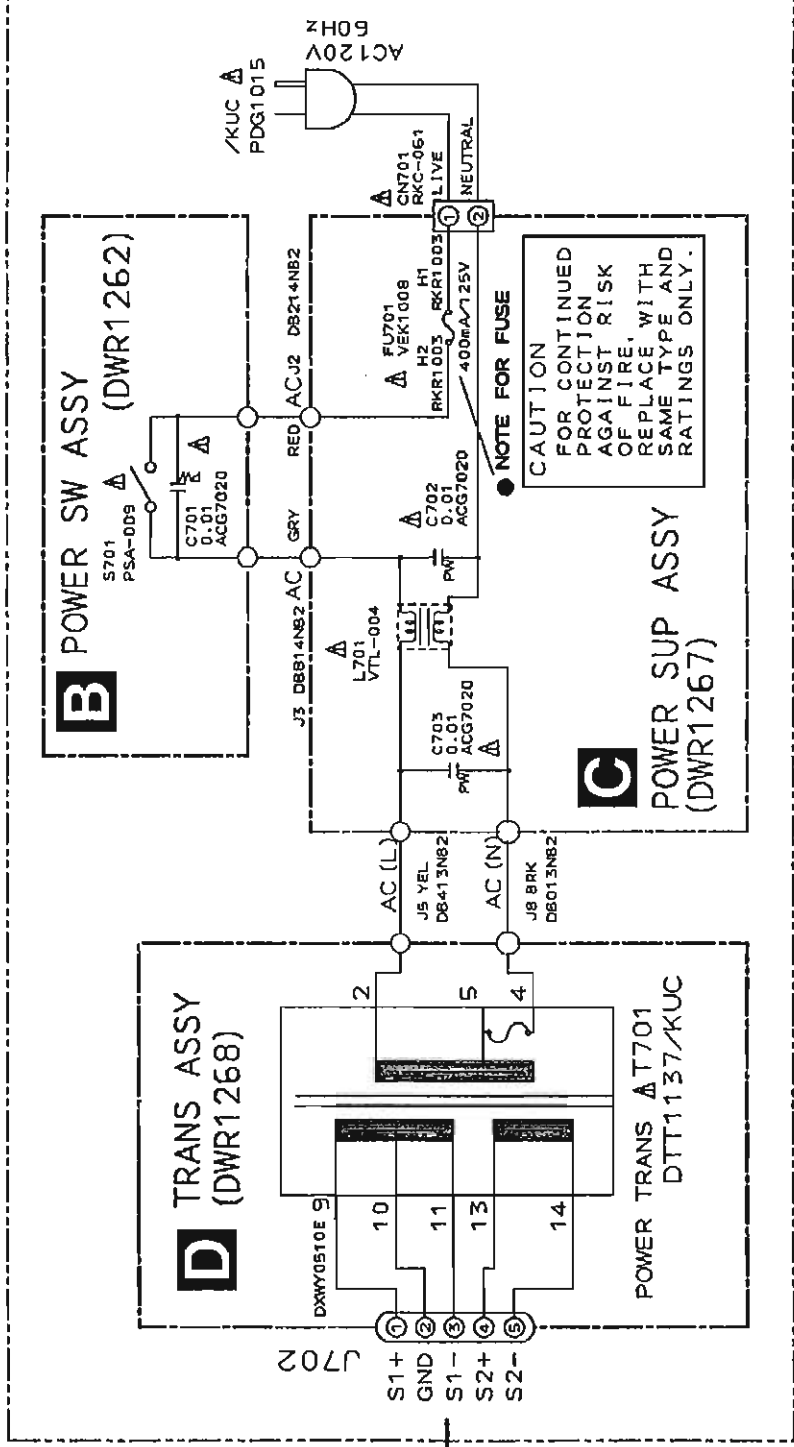
# DJM-300

## 3.4 TERMINAL ASSY (3/3), POWER SW ASSY, POWER SUP ASSY, TRANS ASSY AND VOLTAGE SELECT ASSY

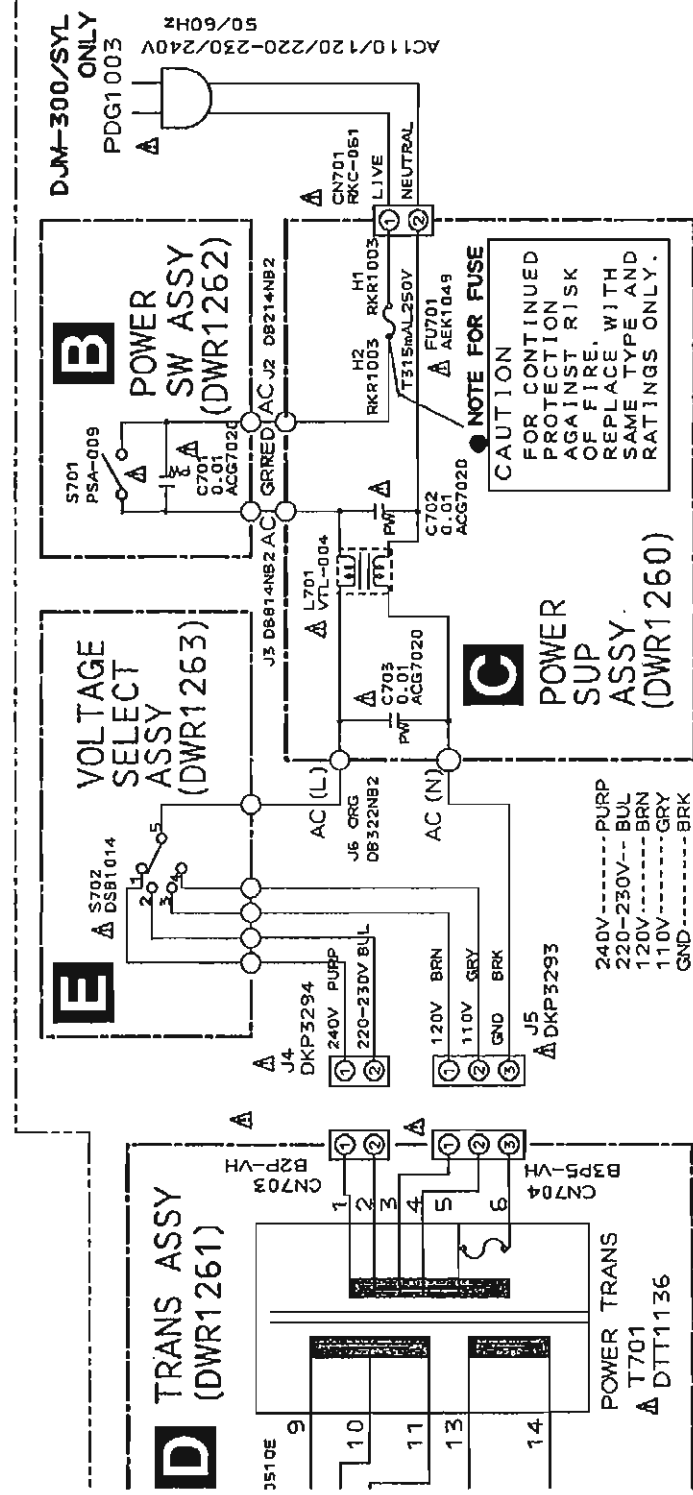


**CAUTION**  
 FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,  
 REPLACE ONLY WITH SAME TYPE NO. ICP-N15,  
 MFD. BY ROHM CO., LTD. FOR IC704

KUC MODEL



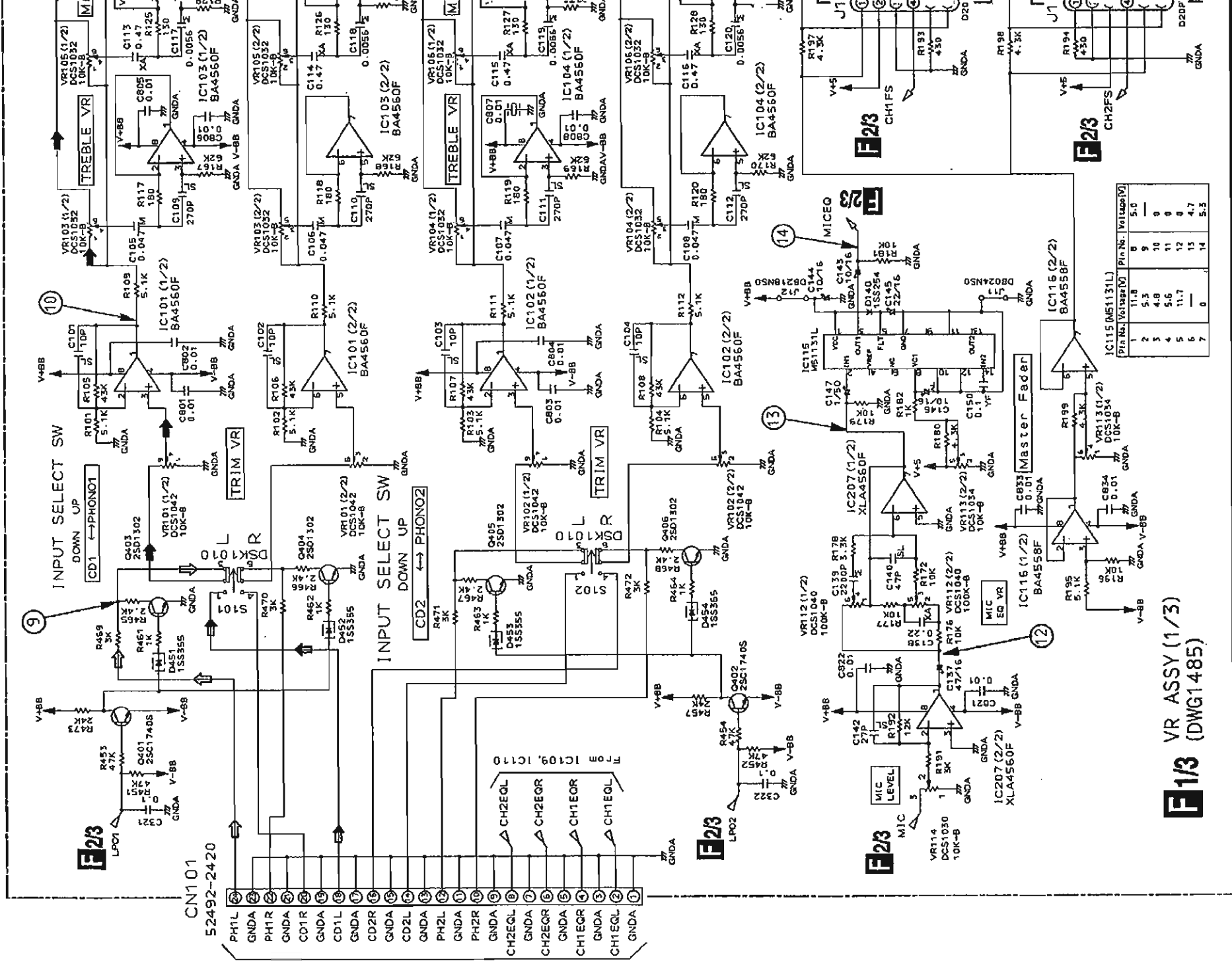
SYL MODEL



**SWITCHES** (Underline indicates switch position):

S702: VOLTAGE SELECTOR  
 AC110V / 120V / 220-230V / 240V

3.5 VR ASSY (1/3), CH1 FADER ASSY, CH2 FADER ASSY AND C. F. ASSY



A/3 CN801

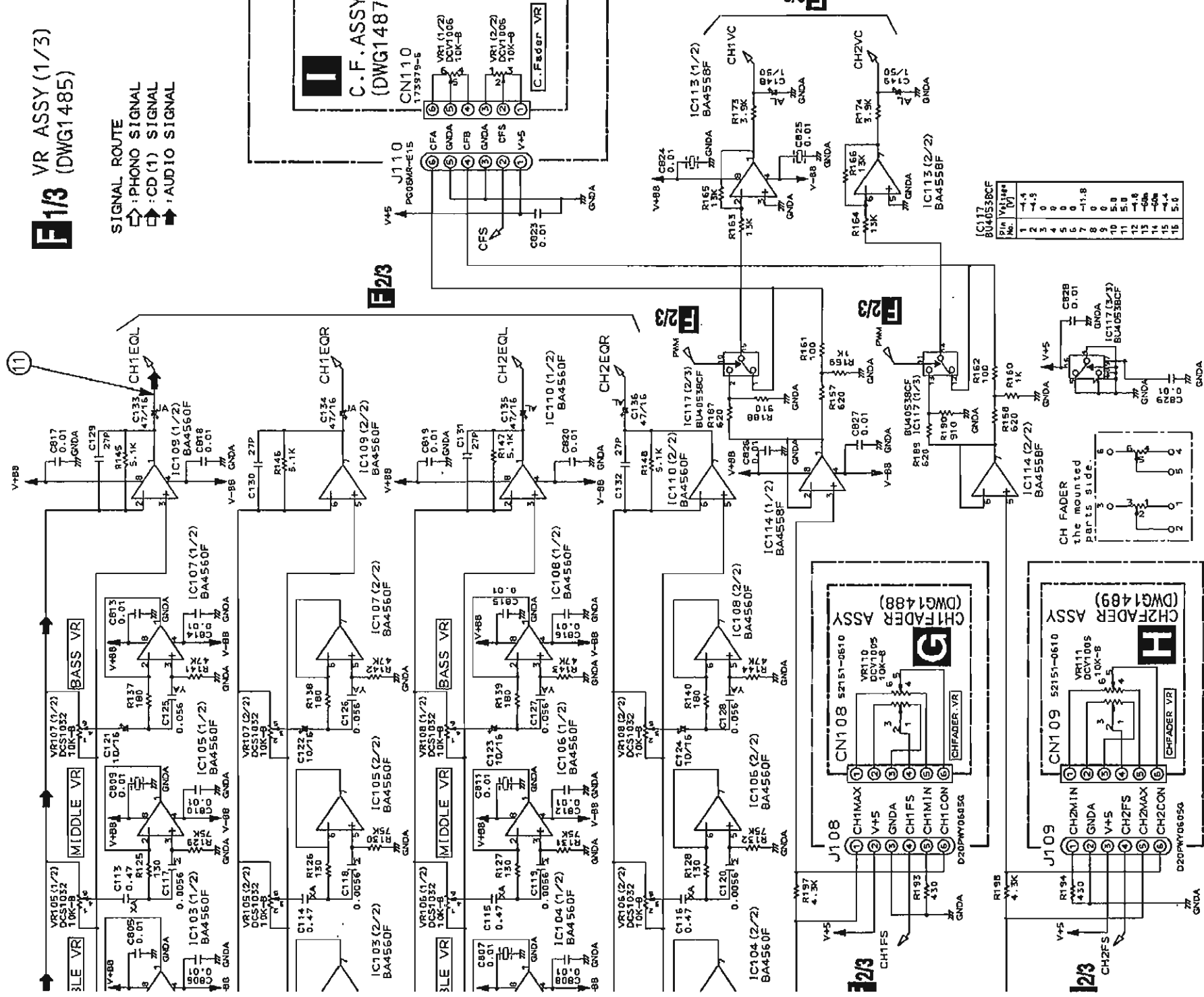
F1/3 VR ASSY (1/3)  
DWG1485



SWITCHES (Underline indicates switch position):

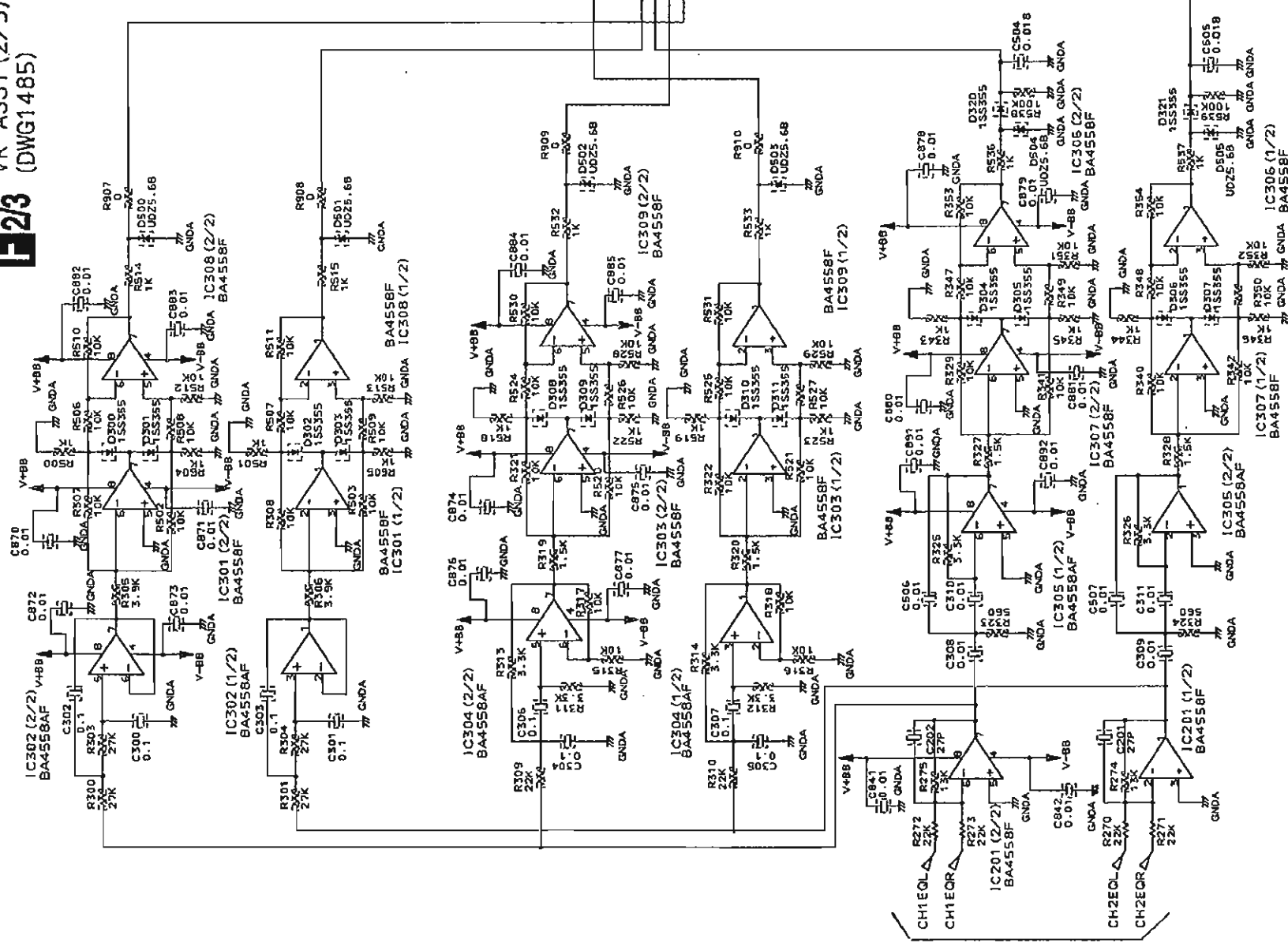
S101: INPUT SELECTOR PHONO1 / LINE1

S102: INPUT SELECTOR PHONO2 / LINE2



3.6 VR ASSY (2/3)

F2/3 VR ASSY (2/3) (DWG1485)



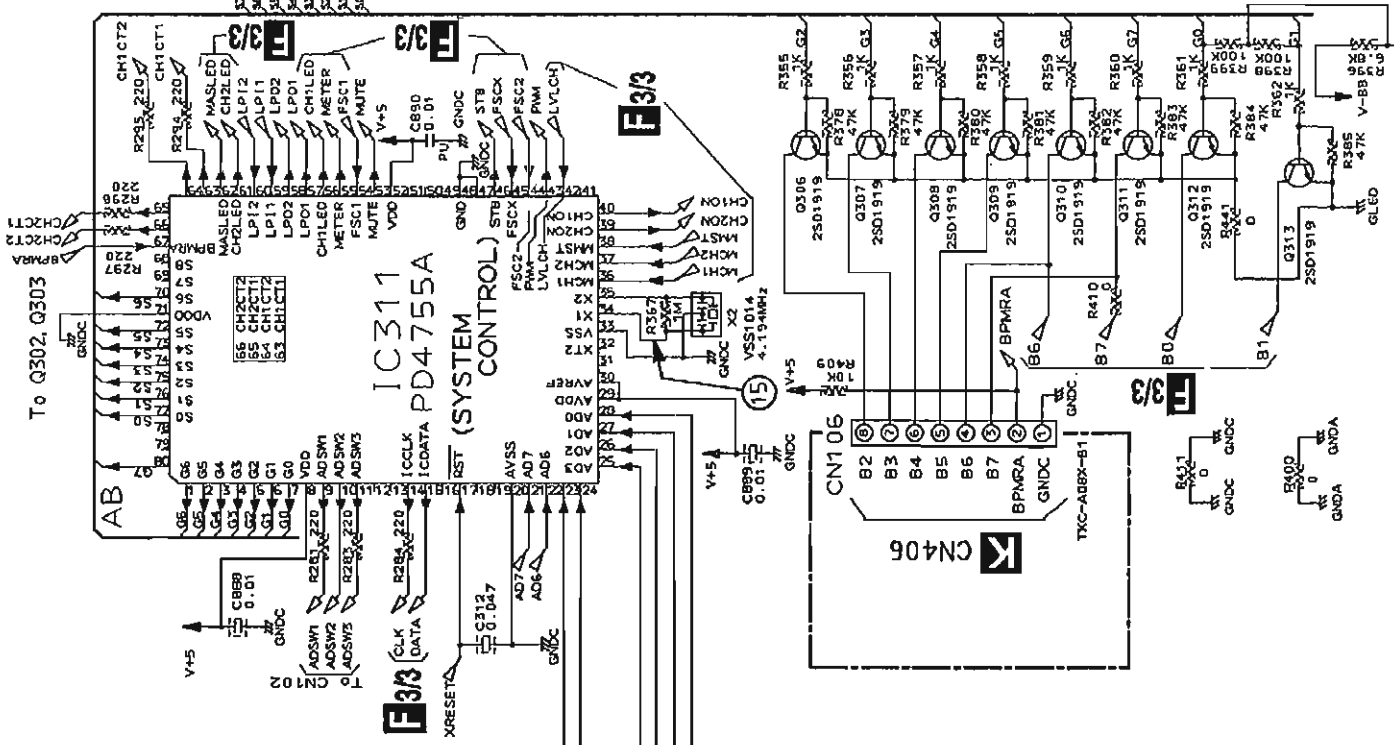
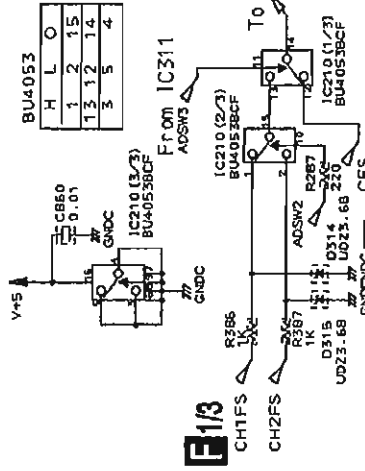
F2/3

IC311 (PD4755A)

| Pin No. | Voltage (V) | Pin No. | Voltage (V) | Pin No. | Voltage (V) | Pin No. | Voltage (V) |
|---------|-------------|---------|-------------|---------|-------------|---------|-------------|
| 1-5     | 0.47        | 18-19   | 31.32       | 48      | 0           | 61      | 0           |
| 6-9     | 0.25        | 20      | 0.66        | 49      | 4.9         | 76      | 1.7         |
| 10      | 0.58        | 21      | 0.66        | 50      | 6.26        | 77      | 1.7         |
| 11      | 1.0         | 22      | 2.19        | 51      | 0           | 78      | 0.47        |
| 12      | 1.3         | 23      | 5.1         | 52      | 5.0         | 79      | 0.54        |
| 13      | 1.0         | 24      | 19.40       | 53      | 0           | 80      | 0.47        |
| 14      | 5.0         | 25      | 4.1         | 54      | 0.56        |         |             |
| 15      | 0           | 26      | -0.37       | 55      | 11.7        |         |             |
| 16      | 0           | 27      | 1.28        | 56      | 0.4         |         |             |
| 17      | 5.0         | 28      | 45.46       | 57      | 1.1         |         |             |
|         |             | 29      | 5.0         | 58      | 0.4         |         |             |
|         |             | 30      | 5.0         | 59      | 0.4         |         |             |
|         |             |         |             | 60      | 0.4         |         |             |
|         |             |         |             | 62      | 0.4         |         |             |
|         |             |         |             | 63      | 0.4         |         |             |
|         |             |         |             | 64      | 0.4         |         |             |
|         |             |         |             | 65      | 0.4         |         |             |
|         |             |         |             | 66      | 0.4         |         |             |
|         |             |         |             | 67      | 0.4         |         |             |
|         |             |         |             | 68      | 0.4         |         |             |
|         |             |         |             | 69      | 0.4         |         |             |
|         |             |         |             | 70      | 0.4         |         |             |
|         |             |         |             | 71      | 0.4         |         |             |
|         |             |         |             | 72      | 0.55        |         |             |
|         |             |         |             | 73      | 1.1         |         |             |
|         |             |         |             | 74      | 1.1         |         |             |

IC230 BU4053BCF

| Pin No. | Voltage |
|---------|---------|
| 1       | 3.3     |
| 2       | 3.3     |
| 3       | 0       |
| 4       | 0       |
| 5       | 0       |
| 6       | 0       |
| 7       | 0       |
| 8       | 0       |
| 9       | 0       |
| 10      | 0.6     |
| 11      | 1.0     |
| 12      | 0       |
| 13      | 3.3     |
| 14      | 3.3     |
| 15      | 3.3     |
| 16      | 3.3     |
| 17      | 5.0     |

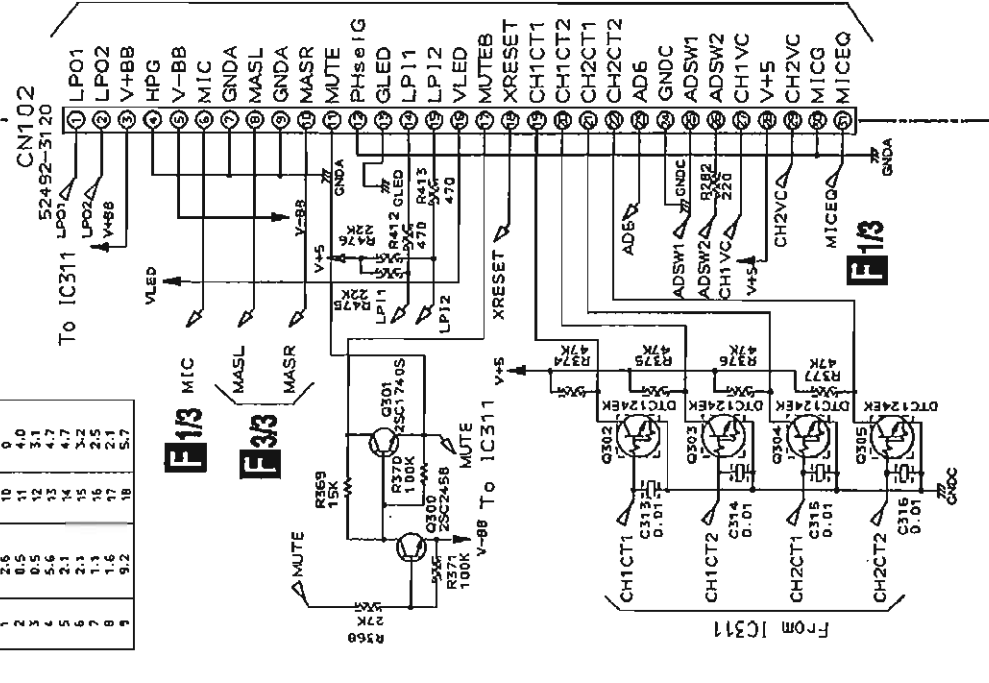


IC311 (SYSTEM CONTROL) PD4755A

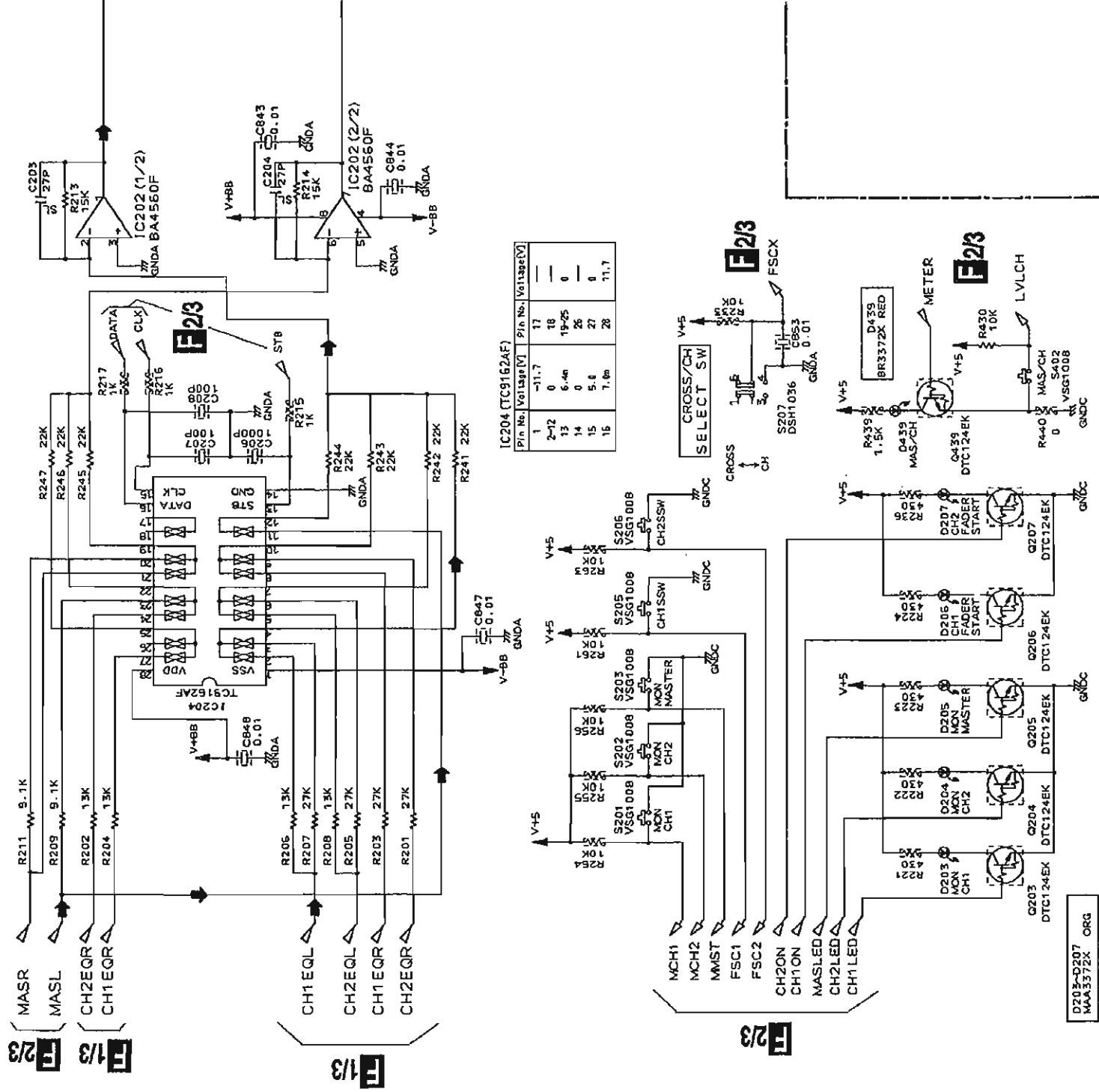
IC312 (LB1740)

| Pin No. | Voltage [V] | Pin No. | Voltage [V] |
|---------|-------------|---------|-------------|
| 1       | 2.6         | 10      | 0           |
| 2       | 0.5         | 11      | 4.0         |
| 3       | 0.5         | 12      | 3.1         |
| 4       | 2.6         | 13      | 4.7         |
| 5       | 2.1         | 14      | 3.2         |
| 6       | 2.1         | 15      | 2.5         |
| 7       | 1.1         | 16      | 2.1         |
| 8       | 1.6         | 17      | 2.1         |
| 9       | 9.2         | 18      | 5.7         |

F2/3 VR ASSY (2/3) (DWG1485)



3.7 VR ASSY (3/3), HP ASSY AND 7SEG ASSY



**SWITCHES (Underline indicates switch position):**

- S201: MONITOR SELECTOR CH-1
- S202: MONITOR SELECTOR CH-2
- S203: MONITOR SELECTOR MASTER
- S205: FADER START CH-1
- S206: FADER START CH-2
- S207: CH / CROSS
- S402: INPUT LEVEL CH-1 - CH-2

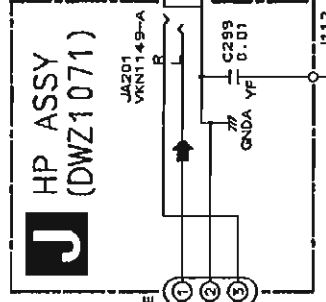
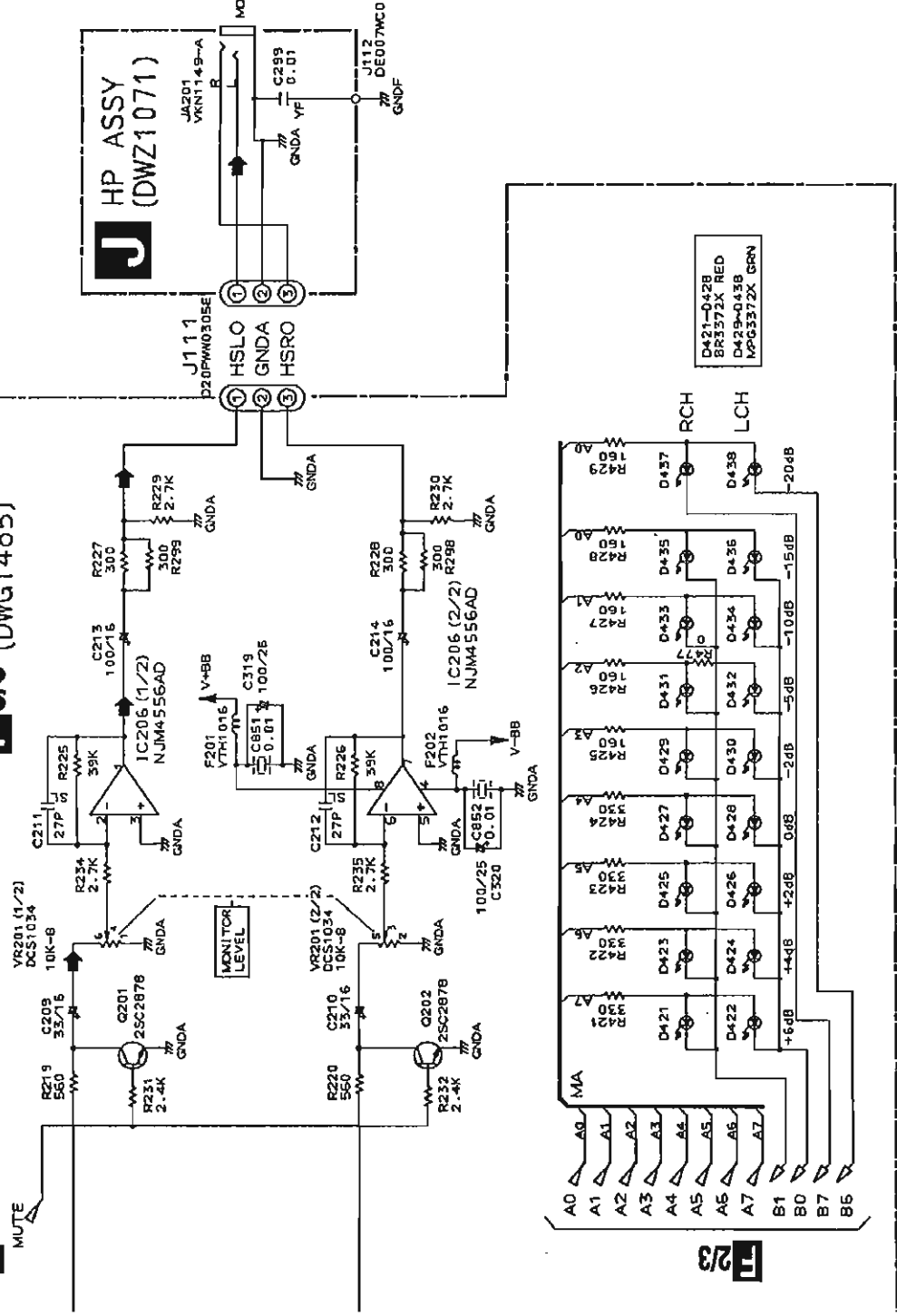
**F3/3** VR ASSY (3/3)  
 (DWG1485)

D203-D207  
 MAA-3372X ORG

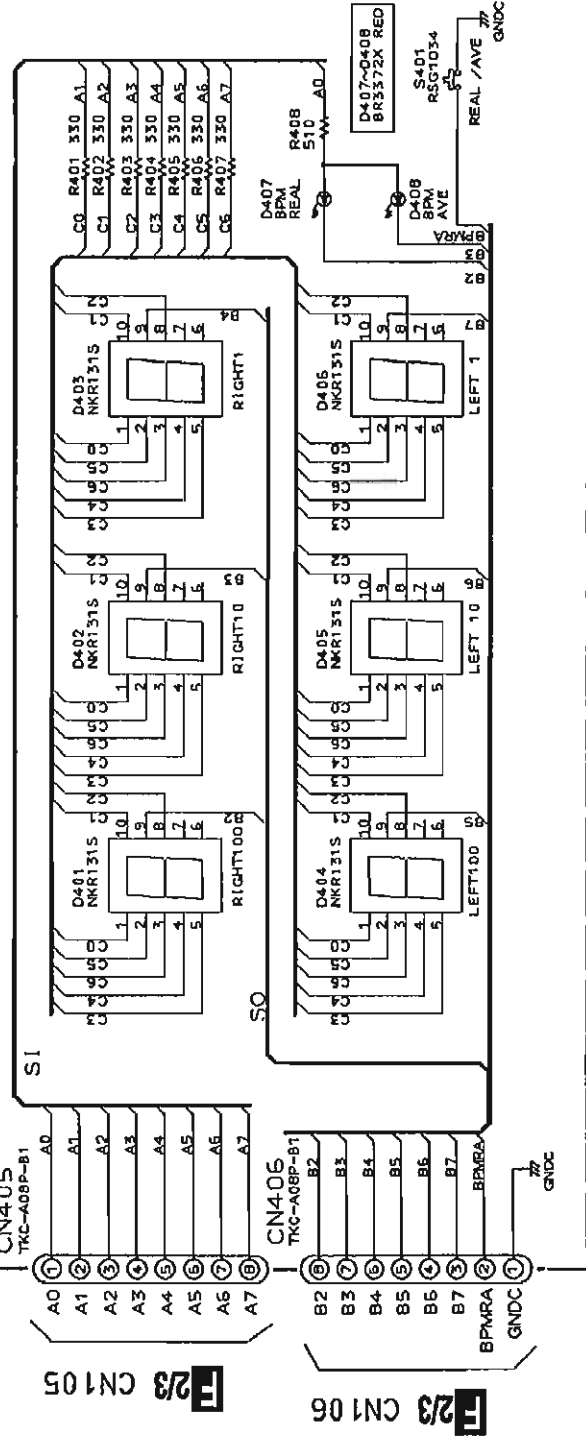
**F23**

**F3/3** VR ASSY (3/3)  
(DWG1485)

SIGNAL ROUTE  
➔ : AUDIO SIGNAL



**K** 7SEG ASSY (DWG1486)



SWITCHES (Underline indicates switch position):



## 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  $\times 10^1 = 561$  ..... RD1/4PU 5 6 1 J

47k  $\Omega$   $\rightarrow$  47  $\times 10^3 = 473$  ..... RD1/4PU 4 7 3 J

0.5  $\Omega$   $\rightarrow$  R50 ..... RN2H R 5 0 K

1  $\Omega$   $\rightarrow$  1R0 ..... RSIP 1 R 0 K

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

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

## LIST OF WHOLE PCB ASSEMBLIES

| Mark | Symbol & Description | Part No.    |             | Remarks |
|------|----------------------|-------------|-------------|---------|
|      |                      | DJ-M300/KUC | DJ-M300/SYL |         |
| NSP  | MAIN ASSY            | DWM2026     | DWM2026     |         |
| NSP  | VR ASSY              | DWG1485     | DWG1485     |         |
| NSP  | 7SEG ASSY            | DWG1486     | DWG1486     |         |
| NSP  | C. F. ASSY           | DWG1487     | DWG1487     |         |
| NSP  | CH1 FADER ASSY       | DWG1488     | DWG1488     |         |
| NSP  | CH2 FADER ASSY       | DWG1489     | DWG1489     |         |
| NSP  | HP ASSY              | DWZ1071     | DWZ1071     |         |
| NSP  | SUB ASSY             | DWM2028     | DWM2027     |         |
| NSP  | POWER SW ASSY        | DWR1262     | DWR1262     |         |
| NSP  | POWER SUP ASSY       | DWR1267     | DWR1260     | *       |
| NSP  | TRANS ASSY           | DWR1268     | DWR1261     |         |
| NSP  | VOLTAGE SELECT ASSY  | Not used    | DWR1263     |         |
| NSP  | TERMINAL ASSY        | DWZ1072     | DWZ1072     |         |

Note \* : Although DWR1267 and DWR1260 are different in part number, they consist of the same components.

## CONTRAST OF PCB ASSEMBLIES

### TRANS Assy

DWR1268 and DWR1261 have the same construction except for the following:

| Mark  | Symbol & Description | Part No. |         | Remarks |
|-------|----------------------|----------|---------|---------|
|       |                      | DWR1268  | DWR1261 |         |
| CN704 | 3P-VH Connector      | Not used | B3P5-VH | *       |

\* : Refer to **D** in the "3. SCHEMATIC DIAGRAM".



| Mark No. | Description            | Parts No.           | Mark No. | Description                     | Parts No.    |
|----------|------------------------|---------------------|----------|---------------------------------|--------------|
| <b>K</b> | <b>7SEG ASSY</b>       |                     | <b>C</b> | <b>POWER SUP ASSY</b>           |              |
|          | SEMICONDUCTORS         |                     |          | COILS AND FILTERS               |              |
|          | D407, D408             | BR3372XJ210K        | △        | L701                            | VTL-004      |
|          | D401-D406              | NKR131S             |          |                                 |              |
|          | SWITCHES AND RELAYS    |                     |          | CAPACITORS                      |              |
|          | S401                   | RSG1034             | △        | C702, C703 (10000 pF/250V)      | ACG7020      |
|          | RESISTORS              |                     |          | OTHERS                          |              |
|          | Other Resistors        | RD1/4PU□□□□         | △        | PCB BINDER                      | DEF1015      |
|          |                        |                     |          | TERMINAL                        | RKC-061      |
|          | OTHERS                 |                     |          | FUSE HOLDER                     | RKR1003      |
|          | CN405, CN406           | TKC-A08P-B1         | <b>D</b> | <b>TRANS ASSY</b>               |              |
| <b>I</b> | <b>C. F. ASSY</b>      |                     |          | TRANS Assy has no service part. |              |
|          | RESISTORS              |                     | <b>A</b> | <b>TERMINAL ASSY</b>            |              |
|          | VR1 (10 kΩ-B)          | DCV1006             |          | SEMICONDUCTORS                  |              |
|          | OTHERS                 |                     | △        | IC701                           | BA12T        |
|          | CN110                  | MT CONNECTOR 6P     |          | IC210                           | BU4053BC     |
|          |                        |                     |          | IC704                           | ICP-N15      |
|          |                        |                     |          | IC708, IC710                    | ICP-N25      |
|          |                        |                     |          | IC705                           | ICP-N5       |
| <b>G</b> | <b>CH1 FADER ASSY</b>  |                     |          | M51131L                         | M51131L      |
|          | RESISTORS              |                     |          | NJM2068D                        | NJM2068D     |
|          | VR110 (10 kΩ-B)        | DCV1005             |          | NJM4558DX                       | NJM4558DX    |
|          | OTHERS                 |                     | △        | NJM4580D                        | NJM4580D     |
|          | CN108                  | 6P JUMPER CONNECTOR |          | NJM79M12FA                      | NJM79M12FA   |
|          |                        |                     |          | PQ05RR12                        | PQ05RR12     |
| <b>H</b> | <b>CH2 FADER ASSY</b>  |                     |          | 29C2458                         | 29C2458      |
|          | RESISTORS              |                     | △        | 29C2878                         | 29C2878      |
|          | VR111 (10 kΩ-B)        | DCV1005             |          | 29D2878                         | 29D2878      |
|          | OTHERS                 |                     | △        | 11EQS06                         | 11EQS06      |
|          | CN109                  | 6P JUMPER CONNECTOR |          | ISS254                          | ISS254       |
|          |                        |                     |          | ISS254                          | ISS254       |
|          |                        |                     |          | ISS254                          | ISS254       |
|          |                        |                     |          | MTZ15.6B                        | MTZ15.6B     |
| <b>J</b> | <b>HP ASSY</b>         |                     | △        | D713                            | S2VB20       |
|          | CAPACITORS             |                     | △        | D709, D710, D714                | S5688C       |
|          | C299                   | CKSQYF103Z50        |          |                                 | VSH1007      |
|          | OTHERS                 |                     |          | SWITCHES AND RELAYS             |              |
|          | J111                   |                     |          | S601, S602                      |              |
|          | JA201                  | D20PWW0305E         |          | CAPACITORS                      |              |
|          |                        | VKN1149             |          | C601-C612, C625-C628            | CCCSL101J50  |
|          |                        |                     |          | C650, C651, C670-C677           | CCCSL101J50  |
|          |                        |                     |          | C231, C232, C657-C660           | CCPUSL100J50 |
|          |                        |                     |          | C654                            | CCPUSL220J50 |
|          |                        |                     |          | C504, C505                      | CEANF100M16  |
| <b>B</b> | <b>POWER SW ASSY</b>   |                     |          | CEANF2R2M50                     | CEANF2R2M50  |
|          | SWITCHES AND RELAYS    |                     |          | CEANPR33M50                     | CEANPR33M50  |
|          | △ S701                 | PSA-009             |          | CEAS1R0M50                      | CEAS1R0M50   |
|          | CAPACITORS             |                     |          | CEAS100M16                      | CEAS100M16   |
|          | △ C701 (10000 pF/250V) | ACG7020             |          | CEAS100M16                      | CEAS100M16   |



# DJM-300

| Mark No.                     | Description         | Parts No.    |
|------------------------------|---------------------|--------------|
| C652, C653, C655, C691-C694  |                     | CEAS100M16   |
| C821, C822                   |                     | CEAS100M16   |
| C715                         |                     | CEAS101M10   |
| C717, C718                   |                     | CEAS101M16   |
| C713                         |                     | CEAS102M16   |
| C145, C146, C629-C632        |                     | CEAS220M16   |
| C501, C506-C509              |                     | CEAS2R2M50   |
| C716                         |                     | CEAS330M16   |
| C613-C616, C645-C648         |                     | CEAS470M16   |
| C720                         |                     | CEAS471M50   |
| C649, C685-C690              |                     | CGCY473K25   |
| C510-C515, C518-C523         |                     | CKCYF103Z50  |
| C704-C710, C714, C905, C906  |                     | CKCYF103Z50  |
| C502, C503, C516, C517       |                     | CKCYF473Z50  |
| C699, C700, C856, C857, C860 |                     | CKPUYF103Z25 |
| C901-C904, C907-C914         |                     | CKPUYF103Z25 |
| C637-C640                    |                     | CQMA22J50    |
| C641-C644                    |                     | CQMA68J50    |
| C711, C712                   |                     | DCH1063      |
| <b>RESISTORS</b>             |                     |              |
| All Resistors                |                     | RD1/4PU□□□   |
| <b>OTHERS</b>                |                     |              |
| CN801                        | FFC CONNECTOR 24P   | 52045-2445   |
| CN802                        | FFC CONNECTOR 31P   | 52045-3145   |
| CN606-CN608                  | 4P PIN JACK         | AKB7015      |
|                              | HEAT SINK           | DNG1073      |
|                              | HEAT SINK           | DNG1073      |
| CN702                        | 5P JUMPER CONNECTOR | KPC5         |
| JA601, JA602                 | JACK                | RKN1004      |
| JA607                        | MIC JACK            | VKN1147      |
| KN101                        | EARTH METAL FITTING | VNF1084      |

## 6. ADJUSTMENTS

There is no information to be shown in this chapter.

## 7. GENERAL INFORMATION

### 7.1 IC

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

#### ■ PD4755A (IC311: VR ASSY)

#### ● System Control Micro-computer

##### ● Pin Function

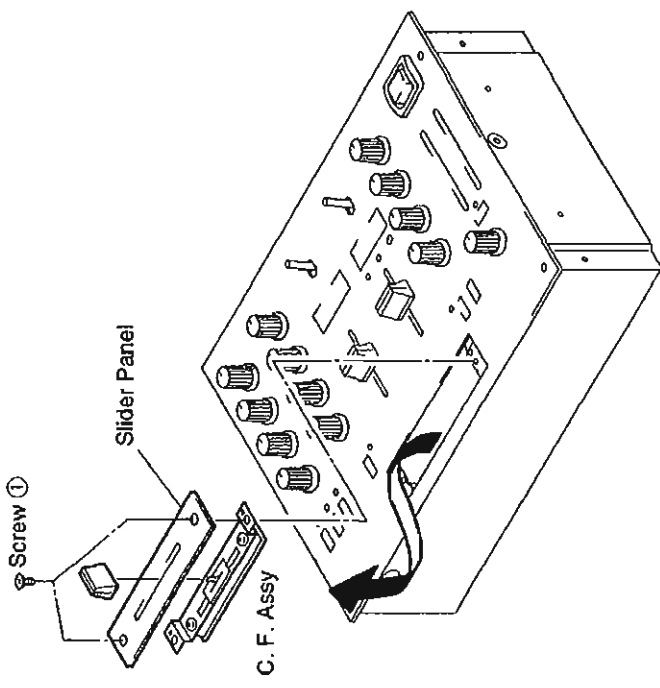
| No. | Port                      | Pin Name | I/O | Description                                    |
|-----|---------------------------|----------|-----|--|
| 1   | P84/FIP6<br> <br>P90/FIP2 | GRID6    | O   | 7seg. display output                           |
|     |                           | GRID2    |     |  |
| 6   | P81/FIP1                  | GRID1    |     |  |
| 7   | P80/FIP0                  | GRID0    |     |  |
| 8   | VDD                       | —        | —   | Power supply                                   |
| 9   | P27/SCK0                  | ADSW1    | O   | Switching analog SW signal 1                   |
| 10  | P26/S00/SB1               | ADSW2    | O   | Switching analog SW signal 2                   |
| 11  | P25/S10/SB0               | ADSW3    | O   | Switching analog SW signal 3                   |
| 12  | P24/BUSY                  | —        | —   | —  |
| 13  | P23/STB                   | —        | —   | —  |
| 14  | P22/SCK1                  | IC CLK   | I   | Analog SW IC serial communication clock output |
| 15  | P21/SO1                   | IC DATA  | O   | Analog SW IC serial data output                |
| 16  | P20/SI1                   | —        | —   | —  |
| 17  | XRESET                    | XRST     | O   | u - COM. reset L: Reset                        |
| 18  | P74                       | —        | —   | —  |
| 19  | P73                       | —        | —   | —  |
| 20  | AVSS                      | GRF      | —   | A/D converter GND                              |
| 21  | P17/ANI7                  | AD7      | I   | A/D converter input CH7                        |
| 22  | P16/ANI6                  | AD6      | I   | A/D converter input CH6                        |
| 23  | P15/ANI5                  | AD5      | I   | GFB3 CH2 "H" level BPM signal                  |
| 24  | P14/ANI4                  | AD4      | I   | GFB2 CH2 "M" level BPM signal                  |
| 25  | P13/ANI3                  | AD3      | I   | GFB1 CH2 "L" level BPM signal                  |
| 26  | P12/ANI2                  | AD2      | I   | GFB3 CH1 "H" level BPM signal                  |
| 27  | P11/ANI1                  | AD1      | I   | GFB2 CH1 "M" level BPM signal                  |
| 28  | P10/ANI0                  | AD0      | I   | GFB1 CH1 "L" level BPM signal                  |
| 29  | AVDD                      | —        | —   | A/D converter analog power supply              |
| 30  | AVREF                     | —        | —   | A/D converter reference voltage input          |

| No. | Port          | Pin Name | I/O | Description  |
|-----|---------------|----------|-----|--|
| 31  | P04/XT1       | —        | —   | Connect to Crystal for Sub system clock oscillation  |
| 32  | XT2           | —        | —   |  |
| 33  | VSS           | —        | —   | GND  |
| 34  | X1            | —        | —   | Connect to Crystal for Main system clock oscillation |
|     |               | —        | —   |  |
| 35  | X2            | —        | —   |  |
| 36  | P37           | MCH1     | —   | CH1 Monitor SW ON: L                                 |
| 37  | P36/BUZ       | MCH2     | —   | CH2 Monitor SW ON: L                                 |
| 38  | P35/PCL       | MMST     | —   | Master Monitor SW ON: L                              |
| 39  | P34/TI2       | CH2 ON   | O   | CH2 Fader start on LED H: Light up                   |
| 40  | P33/TI1       | CH1 ON   | O   | CH1 Fader start on LED H: Light up                   |
| 41  | P32/TO2       | —        | —   | —  |
| 42  | P31/TO1       | LVLCH    | —   | Switching level meter L: ON                          |
| 43  | P30/TO0       | PWM      | O   | Switching feder signal H: ON                         |
| 44  | P03/INT3/CI0  | FSC2     | —   | CH2 FD control ON/OFF L: ON                          |
| 45  | P02/INTP2     | FSCX     | —   | Cross FD control H: Cross, L: CH                     |
| 46  | P01/INTP1     | STB      | O   | Analog SW IC selection signal                        |
| 47  | P00/INTP0/II0 | —        | —   | —  |
| 48  | IC (VPP)      | —        | —   | Internal connection                                  |
| 49  | P72           | —        | —   | —  |
| 50  | P71           | —        | —   | —  |
| 51  | P70           | —        | —   | —  |
| 52  | —             | —        | —   | —  |
| 53  | P127/FIP33    | MUTE     | O   | Mute control L: ON                                   |
| 54  | P126/FIP32    | FSC1     | —   | CH1 FD control ON/OFF L: ON                          |
| 55  | P125/FIP31    | METER    | O   | CH meter LED H: Light up                             |
| 56  | P124/FIP30    | CHILED   | O   | CH1 monitor LED H: Light up                          |
| 57  | P123/FIP29    | LPO1     | O   | Switching LINE1/PHONO1 L: LINE                       |
| 58  | P122/FIP28    | LPO2     | O   | Switching LINE1/PHONO1 L: LINE                       |

## 7.2 DISASSEMBLY

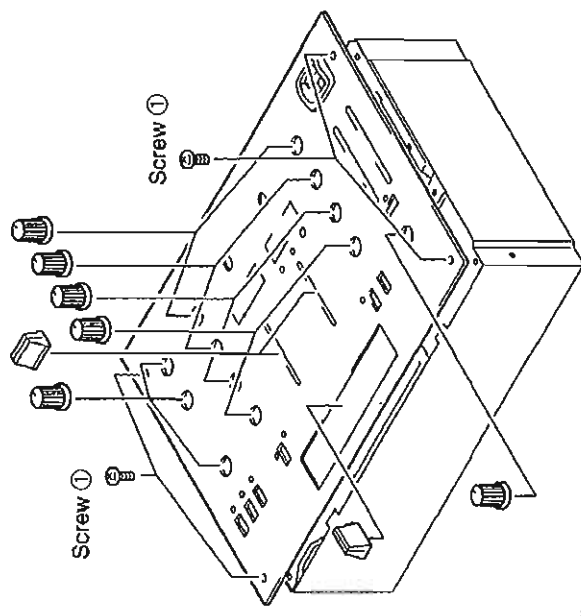
### ■ Cross-Fader Section

1. Remove the Fader Knob.
2. Remove the two screws ① fixing the Slider Panel.
3. Raise the C. F. Assy at the front and then raise the entire unit.



### ■ Control Panel Section

1. Remove all knobs from the Control Panel surface.
2. Remove the four screws ①.

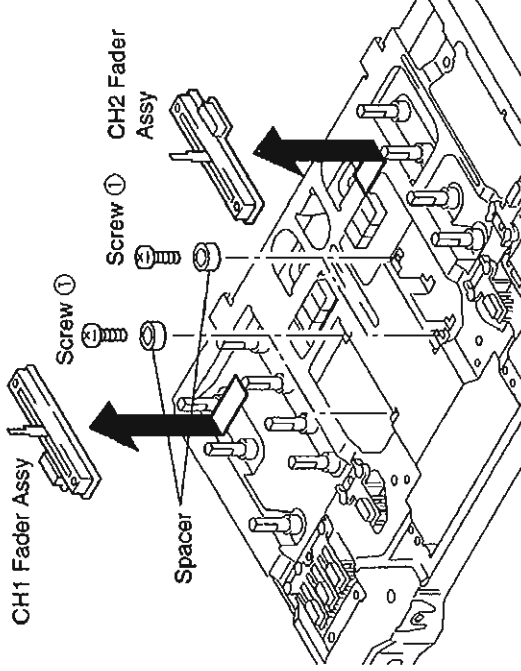


- Knob Colors
- EQ-HI: Gray (Red)
  - EQ-MID: Gray (Yellow)
  - EQ-LOW: Gray (Green)
  - TRIM: Dark Gray
  - Other: BLACK

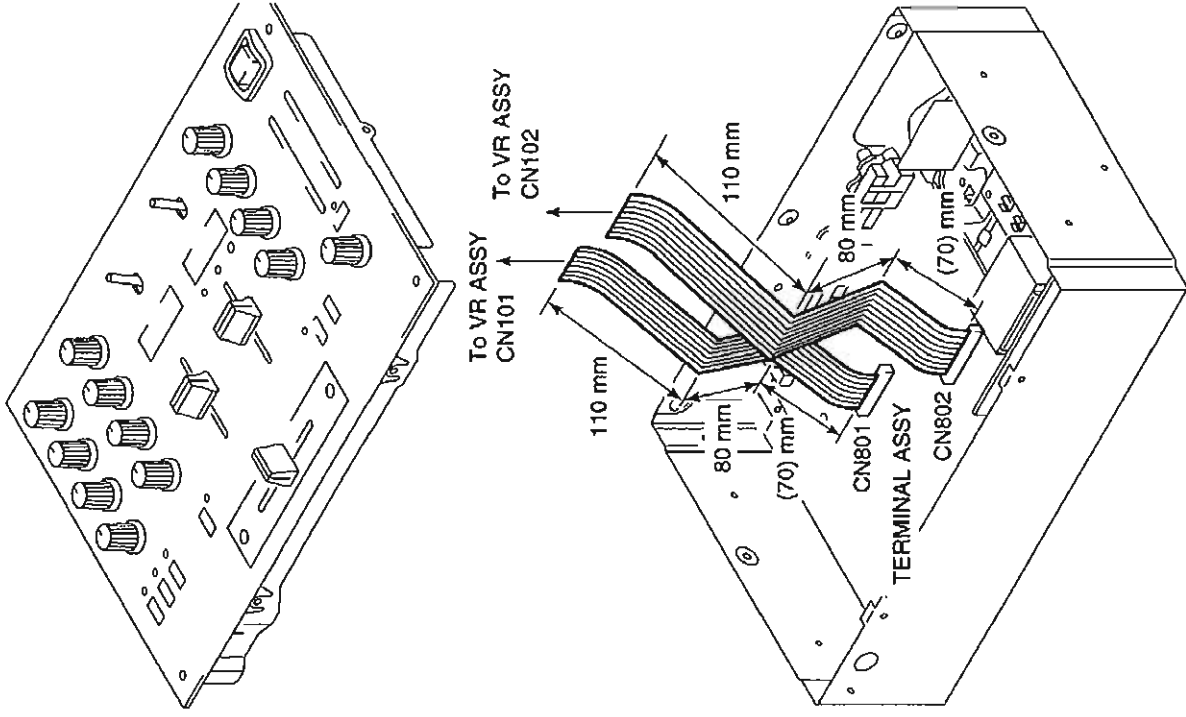
| No. | Port       | Pin Name | I/O | Description                              |
|-----|------------|----------|-----|--|
| 59  | P121/FIP27 | LP11     | —   | LINE1/PHONO1 SW L: LINE                  |
| 60  | P120/FIP26 | LP12     | —   | LINE2/PHONO2 SW L: LINE                  |
| 61  | P117/FIP25 | CH2LED   | O   | CH2 monitor LED H: Light up              |
| 62  | P116/FIP23 | MASLED   | O   | Master monitor LED H: Light up           |
| 63  | P115/FIP22 | CH1CT1   | O   | Player control signal CH1 START: H       |
| 64  | P114/FIP21 | CH1CT2   | O   | CH1 STOP: H                              |
| 65  | P113/FIP20 | CH2CT1   | O   | CH2 START: H                             |
| 66  | P112/FIP19 | CH2CT2   | O   | CH2 STOP: H                              |
| 67  | P111/FIP18 | BPMRA    | —   | Switching BPM REAL/AVE L: ON             |
| 68  | P110/FIP17 | SEG8     | —   | 7 seg display output                     |
| 69  | P107/FIP17 | SEG7     | —   | 7 seg display output                     |
| 70  | P106/FIP16 | SEG6     | —   | 7 seg display output                     |
| 71  | VLOAD      | —        | —   | Connect to FIP driver pull-down resistor |
| 72  | P105/FIP15 | SEG5     | —   | 7 seg display output                     |
| 77  | P100/FIP10 | SEG0     | —   | 7 seg display output                     |
| 78  | P97/FIP9   | —        | —   |  |
| 79  | P96/FIP8   | —        | —   |  |
| 80  | P95/FIP7   | GRID7    | —   |  |

**Removal of the CH1 Fader Assy and CH2 Fader Assy**

1. Remove the Control Panel. (Refer to the preceding item.)
2. Remove the two screws ① and spacer fixing the CH1 Fader Assy.
3. Slide the CH1 Fader Assy to the side and raise it.
4. Proceed in the same way for CH2 Fader Assy.



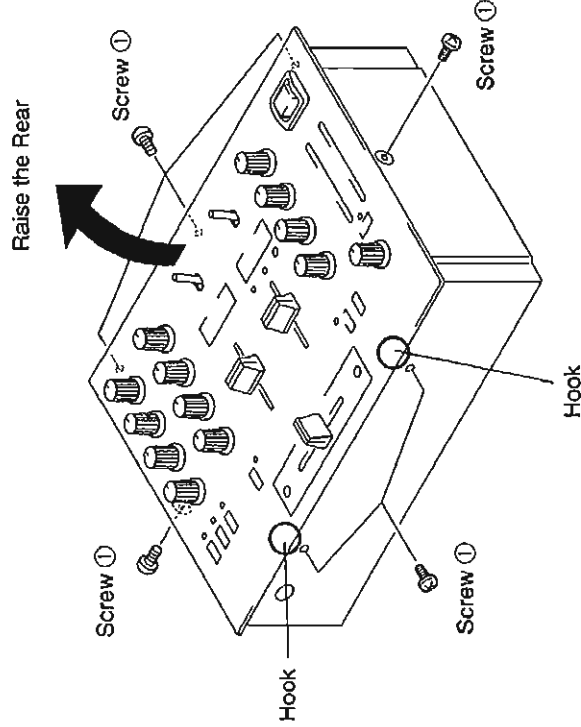
**Bending Positions for the flexible wiring of the FFC card**



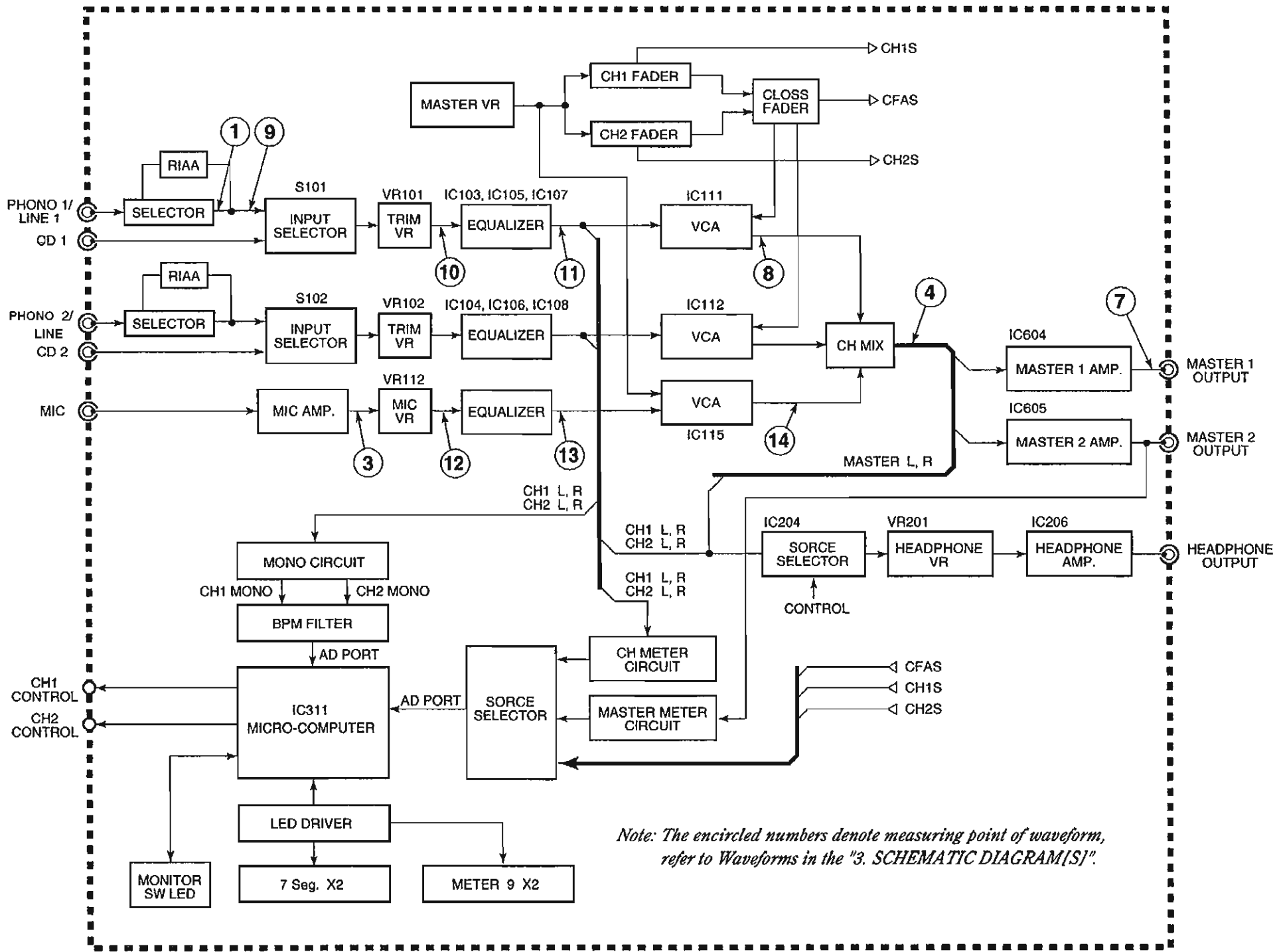
**Screw Removal for Unit Diagnosis**

1. Remove the two screws ① on both sides, the two screws ② at the front, and the three screws ③ at the rear in this order.
2. Raise the rear and remove the Control Panel.

*Note: At the time of installation, install in reverse order of the removal (Rear → Front → Sides).*



7.3 BLOCK DIAGRAM



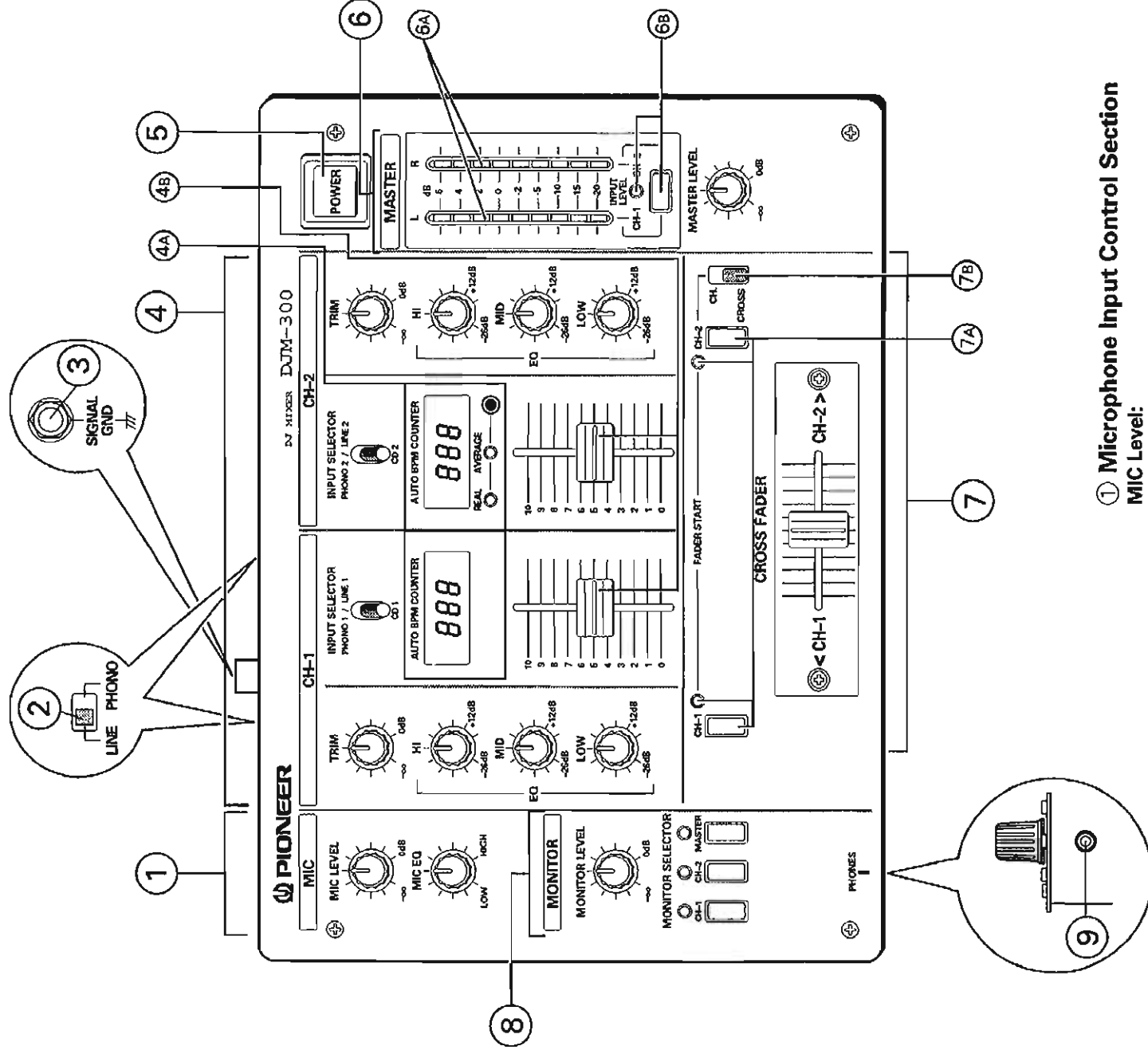
Note: The encircled numbers denote measuring point of waveform, refer to Waveforms in the "3. SCHEMATIC DIAGRAM[S]".

## 8. PANEL FACILITIES AND SPECIFICATIONS

### ■ PANEL FACILITIES

Control panel

② and ③ shows the rear view, while ⑨ shows the front view.



#### ① Microphone Input Control Section

##### MIC Level:

Used for adjusting the volume of the microphone.

##### MIC EQ (Microphone Equalizer):

Used for adjusting the sound quality of the microphone.  
Flat at center click.

Emphasizes the high tone (treble) when rotated to the right.

Emphasizes the low tone (bass) when rotated to the left.

## ② Rear Panel Input Source Selection Switch

Used for selecting the device connected to PHONO 1/LINE 1 and PHONO 2/LINE 2 input terminals.

PHONO: Analog player (MM output)

LINE: Audio equipment whose output level is the line level

### NOTE:

*Do not switch with the power ON.*

*When switched, the master output will be muted.*

## ③ Ground Terminal (SIGNAL GND)

Connects to the GND cord of the analog player.

This terminal is for only an analog player, not for a safety ground.

## ④ CH1, CH2 Input Control Section

### Input selection switch (INPUT SELECTOR):

Selects which one of the two units connected to each CH to use.

CH1: Switches between PHONO 1/LINE 1 and CD1

CH2: Switches between PHONO 2/LINE 2 and CD2

### TRIM:

Used for adjusting the level of the input signal.

The level increases when rotated to the right. (To +6 dB)

The level decreases when rotated to the left. (To  $-\infty$ )

### EQ (Equalizer):

#### Hi:

Used for adjusting the high tone.

Flat at center click.

Increases when rotated to the right.

Decreases when rotated to the left.

#### MID:

Used for adjusting the middle tone.

Flat at center click.

Increases when rotated to the right.

Decreases when rotated to the left.

#### LOW:

Used for adjusting the low tone.

Flat at center click.

Increases when rotated to the right.

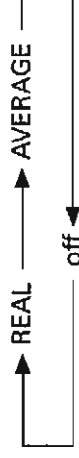
Decreases when rotated to the left.

## ④A BPM Display

### Counter:

- Displays the BPM of the source input to CH1 and CH2 digitally. Displays “---” when BPM could not be measured for more than 5 seconds or when switched off. Displays in real mode when the power is turned on.

**Real-mode/average mode selection button and indicator:** Each time the button is pressed, the display mode and indicator light switch as follows.



### (When REAL is selected.)

Displays the measured BPM value at real time.

The measurement error is greater than AVERAGE.

Blinks while measuring.

### (When AVERAGE is selected.)

The display timing becomes slower, but the display will be stabilized by the averaging process.

While measuring, the previous value will remain displayed.

## ④B Channel Fader Volume

Used for adjusting the volume of CH1 to CH2.

## ⑤ Power Supply Switch (POWER)

Turns ON/OFF the power of this unit.

When the power is turned ON, the unit will be muted for about 2 seconds to protect the connected units.

## ⑥ Master Control Section

### ⑥A Level meter

The level meter display mode selection switch enables two levels to be displayed. When the level meter display mode indicator is off, the master level is displayed. When it is lit, the CH1 and CH2 input levels are displayed. The peak level is held for 2 seconds. The display range is -20 dB to +6 dB.

## ⑥B Level Meter Display Mode Selection Button and Indicator

Used for switching the level meter display mode.

Each time the button is pressed, the mode will be switched between the master level display and input level display (CH1, CH2).

The INPUT LEVEL indicator is lit during the input level display.

When the power is turned on, the mode will first be set to the master level display.

## ⑦ Cross Fader Section

### Cross Fader Volume (CROSS FADER)

Operates when the cross fader switch is at the CROSS side.

Controls and outputs the CH1 and CH2 signals.

When the control is set to the left side, the CH1 signal increases (To 0 dB) and the CH2 signal decreases (To  $-\infty$ ). When set to the right side, the CH2 signal increases (To 0 dB) and the CH1 signal decreases (To  $-\infty$ ).

### ⑦a Fader Start Switch (FADER START) and indicator (Refer to Page 14.)

When pressed, the indicator lights up and the fader start switch turns ON. When pressed another time, the indicator goes off and the fader start switch goes off.

When the optional CD player (CDJ-500 or CDJ-500II) is connected to the unit using the commercially available cord with mini plug (no resistor), this ON/OFF switch is used to start automatic playing of the CD player using the channel fader or cross fader.

### ⑦b Cross Fader Switch (CH./CROSS)

CH.:

Select when mixing sounds using the channel fader volume. (Direct mix.)

When the fader start switch is ON, fader should be started by the channel fader.

CROSS:

Select when mixing sounds using the cross fader. (Cross fader mix.)

When the fader start switch is ON, fader should be started by the cross fader.

### Master Volume Level Adjustment (MASTER LEVEL)

Used to adjust the level of the master output volume.

The signal mixing the CH1 and CH2 channel fader levels and microphone inputs will be output.

## ⑧ Headphone Monitor Section

### Monitor Level Knob (MONITOR LEVEL)

Used for adjusting the headphone monitor volume.

### Monitor Select Switch (CH-1/CH-2/MASTER) and indicators

When pressed, the indicator lights up and the fader start switch turns ON. When pressed another time, the indicator goes off and the fader start switch turns off.

Used for selecting the headphone monitor sources (CH-1, CH-2, MASTER).

When the button of the desired source is pressed, the sound of the channel selected will be output to the headphone terminal.

For CH-1 and CH-2, the sound before the channel fader is set will be output.

For MASTER, the sound after the master control is set will be output.

Two sources can be selected simultaneously. When MASTER is pressed when CH-1 and CH-2 are selected simultaneously, only MASTER will be selected. When only one of the channels and MASTER are selected simultaneously, the one channel and MASTER will be selected. (Three sources cannot be selected simultaneously.)

(Relation between Monitor Select Switch and Headphone Output)

| Monitor Select Switch |      | Headphone Output  |                   |
|-----------------------|------|-------------------|-------------------|
| CH-1                  | CH-2 | L                 | R                 |
| ON                    | OFF  | CH1 (L)           | CH1 (R)           |
| OFF                   | ON   | CH2 (L)           | CH2 (R)           |
| OFF                   | OFF  | MASTER (L)        | MASTER (R)        |
| ON                    | ON   | CH1 (L) + CH2 (L) | CH1 (L) + CH2 (R) |
| ON                    | OFF  | CH1 (MONO)        | MASTER (MONO)     |
| OFF                   | ON   | CH2 (MONO)        | MASTER (MONO)     |

## ⑨ Headphone Terminal (PHONES)



# DJM-300

## ■ SPECIFICATIONS

### Audio Section

Input terminal (Input level/impedance)  
CD ..... -14 dBV (200 mV) / 22 k $\Omega$   
LINE ..... -14 dBV (200 mV) / 47 k $\Omega$   
PHONO ..... -52.5 dBV (2.37 mV) / 47 k $\Omega$   
MIC ..... -60 dBV (1 mV) / 3 k $\Omega$

Output terminal (Output level/impedance)  
MASTER OUT (RCA) ..... 0 dBV (1 V) / 1 k $\Omega$   
PHONES ..... -4 dBV (0.63 V) / 150  $\Omega$

Frequency characteristics  
CD/LINE ..... 20 Hz to 20 kHz  
PHONO ..... 20 Hz to 20 kHz  
MIC ..... 20 Hz to 20 kHz

SN ratio  
CD/LINE ..... 80 dB  
PHONO ..... 75 dB  
MIC ..... 67 dB

Total harmonic distortion rate  
CD/LINE, PHONO, MIC  
..... Below 0.05 % (In 3 Vrms output)

Cross talk ..... 70 dB

Channel equalizer  
LOW ..... +12 dB, -26 dB (70 Hz)  
MID ..... +12 dB, -26 dB (1 kHz)  
HI ..... +12 dB, -26 dB (13 kHz)

Microphone equalizer .....  $\pm$ 12 dB (10 kHz)

### Electrical Section, Others

Power supply voltage ..... AC 120 V, 60 Hz (KUC)  
Power supply voltage ..... AC 110/120/220-230/240 V, 50/60 Hz (SYL)  
Power consumption ..... 16 W (KUC)  
Power consumption ..... 17 W (SYL)  
Operating temperature ..... +5 °C to +35 °C (41°F to 95°F)  
Operating humidity ..... 5 % to 85 %  
External dimensions ..... 308 (W) x 225.3 (D) x 107 (H) mm  
(12-1/8 (W) x 8-11/16 (D) x 4-1/4 (H) in.)  
Weight ..... 3.5 kg (7 lb 12 oz)

### Accessories

- Operating instructions ..... 1

### NOTE:

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