

# JVC

## SERVICE MANUAL

### COMPACT COMPONENT SYSTEM

# DX-MX90BK CA-MX90BK

(UNIT No. AX-MX90BK)



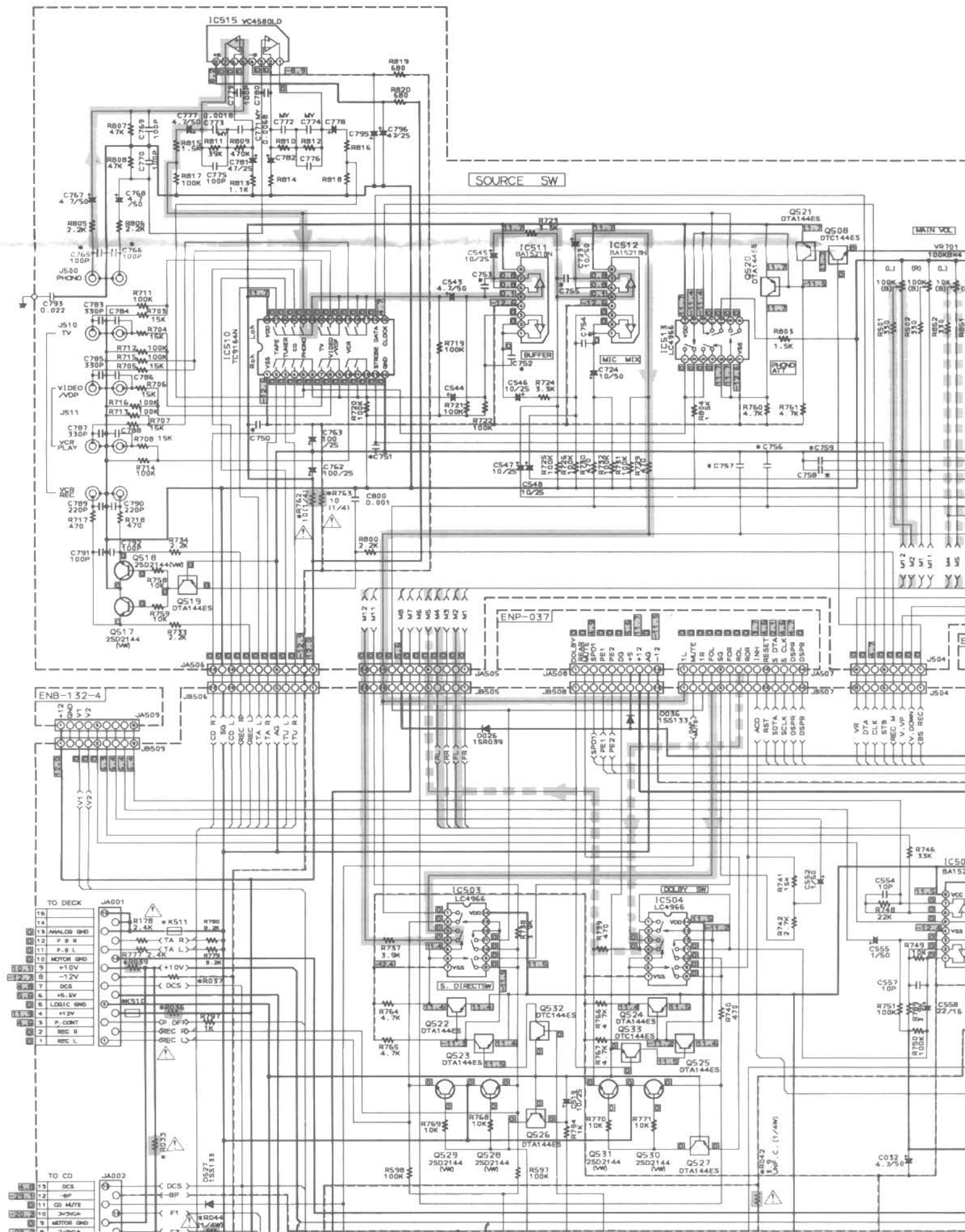
\* For instruction manual, please refer to the CA-MX90BK(SM.NO.20267) or DX-MX90BK(SM.NO.20268).

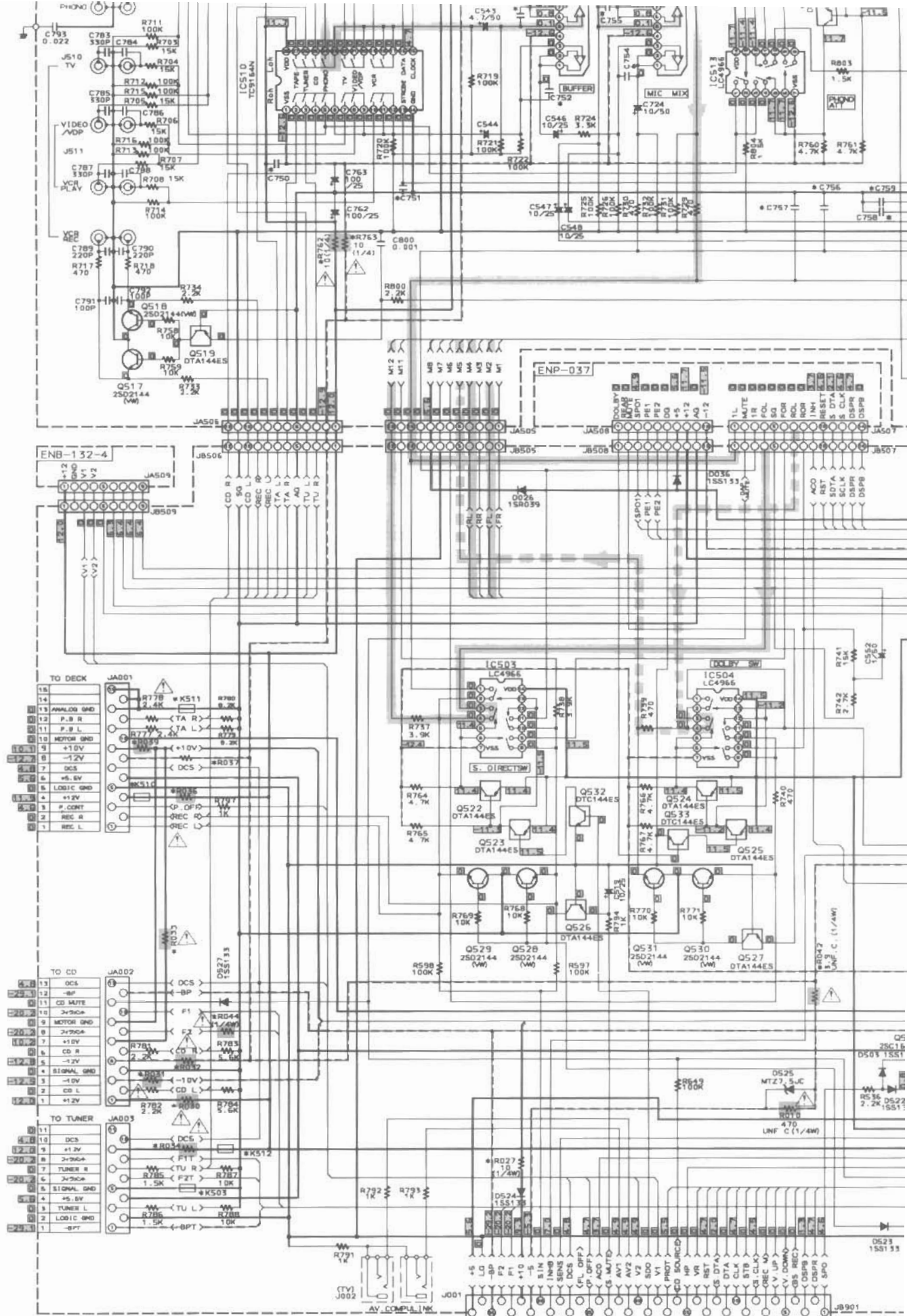
## Contents

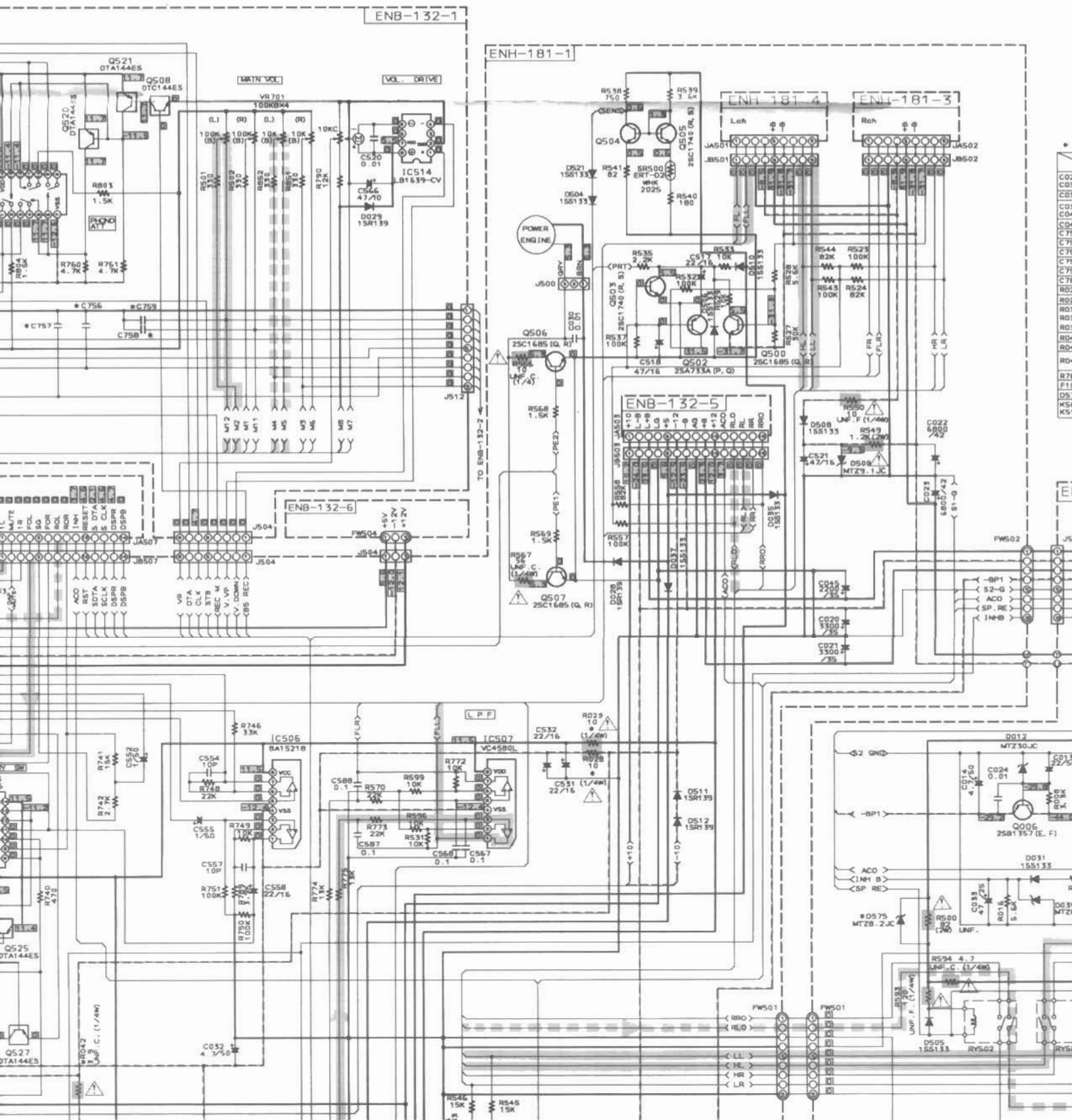
|   |      |   |                           |
|---|------|---|---------------------------|
| Safety Precautions .....                                  | 1-2  | Internal Wiring of the FL Display ..... | 1-17                      |
| Technical Explanations .....                              | 1-3  | Block Diagram .....                     | 1-19                      |
| Disassembly Procedures .....                              | 1-5  | Connection Diagram .....                | Insertion                 |
| Mini Suggestion for Inspection<br>with Active Power ..... | 1-6  | Printed Circuit Boards .....            | Insertion                 |
| Description of Major LSIs .....                           | 1-7  | Schematic Diagrams/Block Diagrams ..... | Insertion                 |
| Internal Block Diagrams of the Other ICs .....            | 1-11 | Parts List .....                        | Separate-volume Insertion |

# Schematic Diagrams

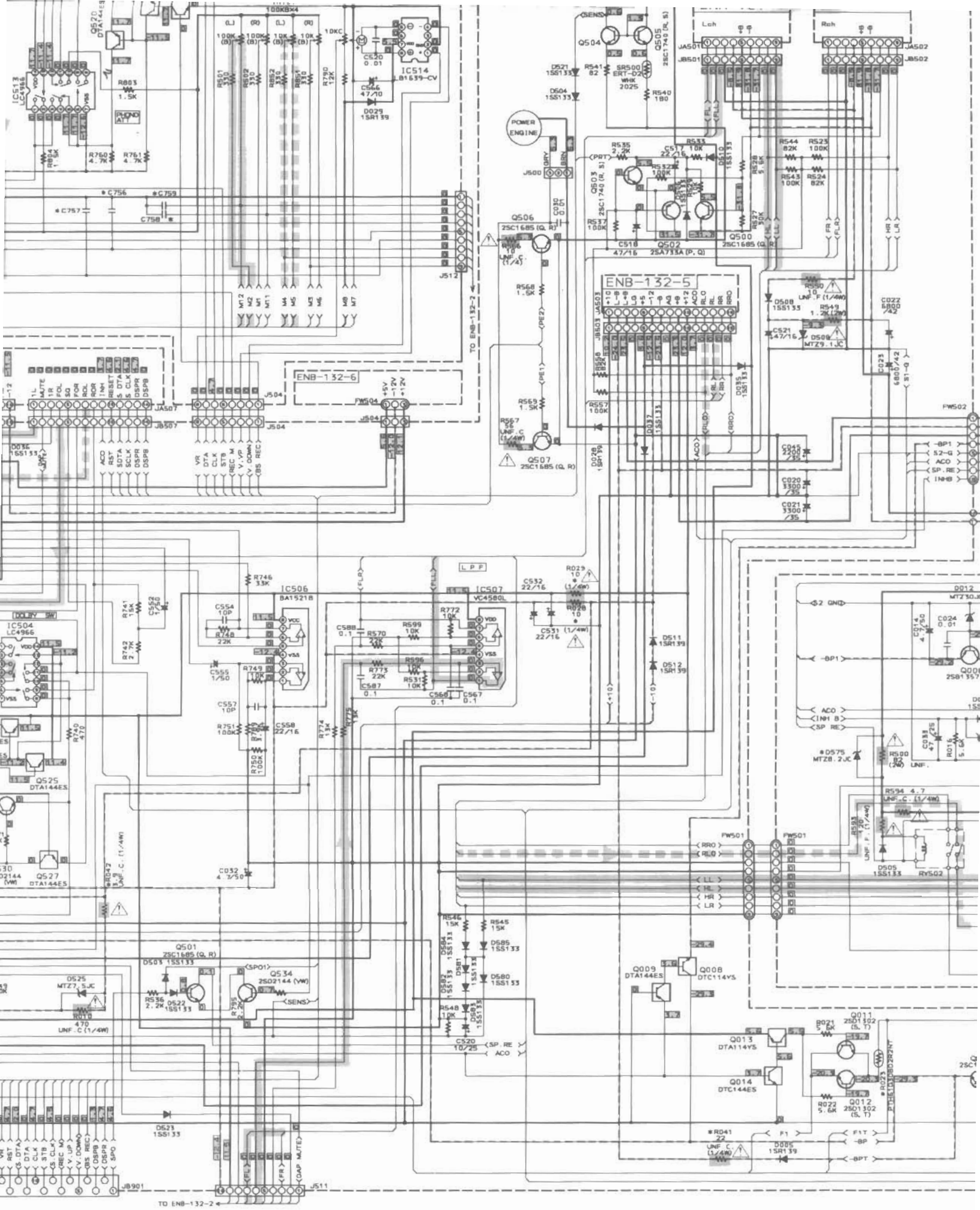
## 1. Source Select & Speaker Terminal Section











TO ENB-132-2

FWS02

D012

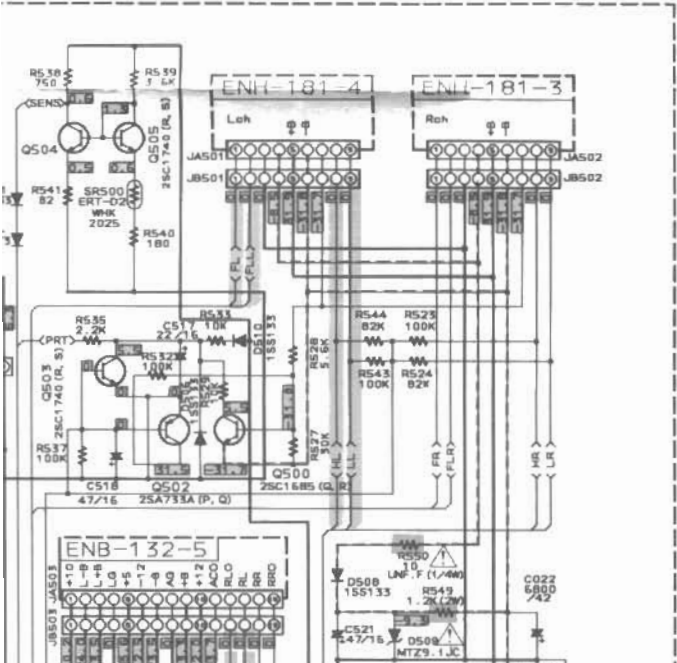
Q008

D005

Q011

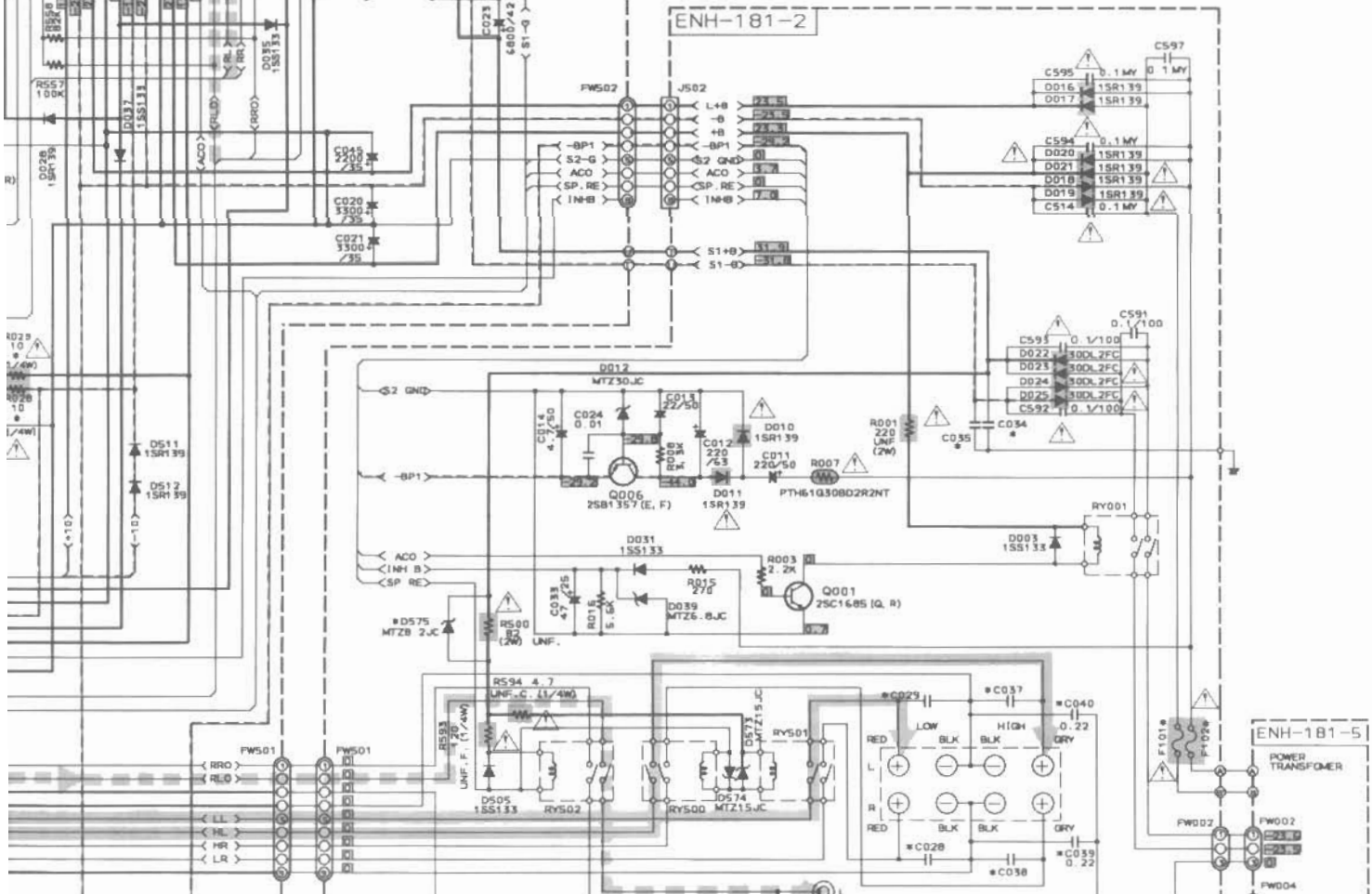
Q012

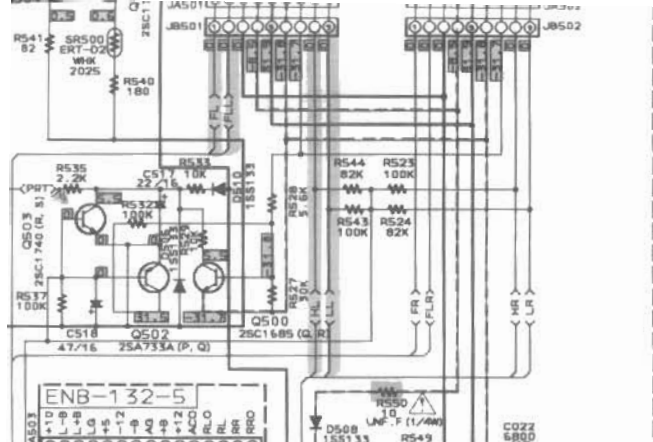
28C



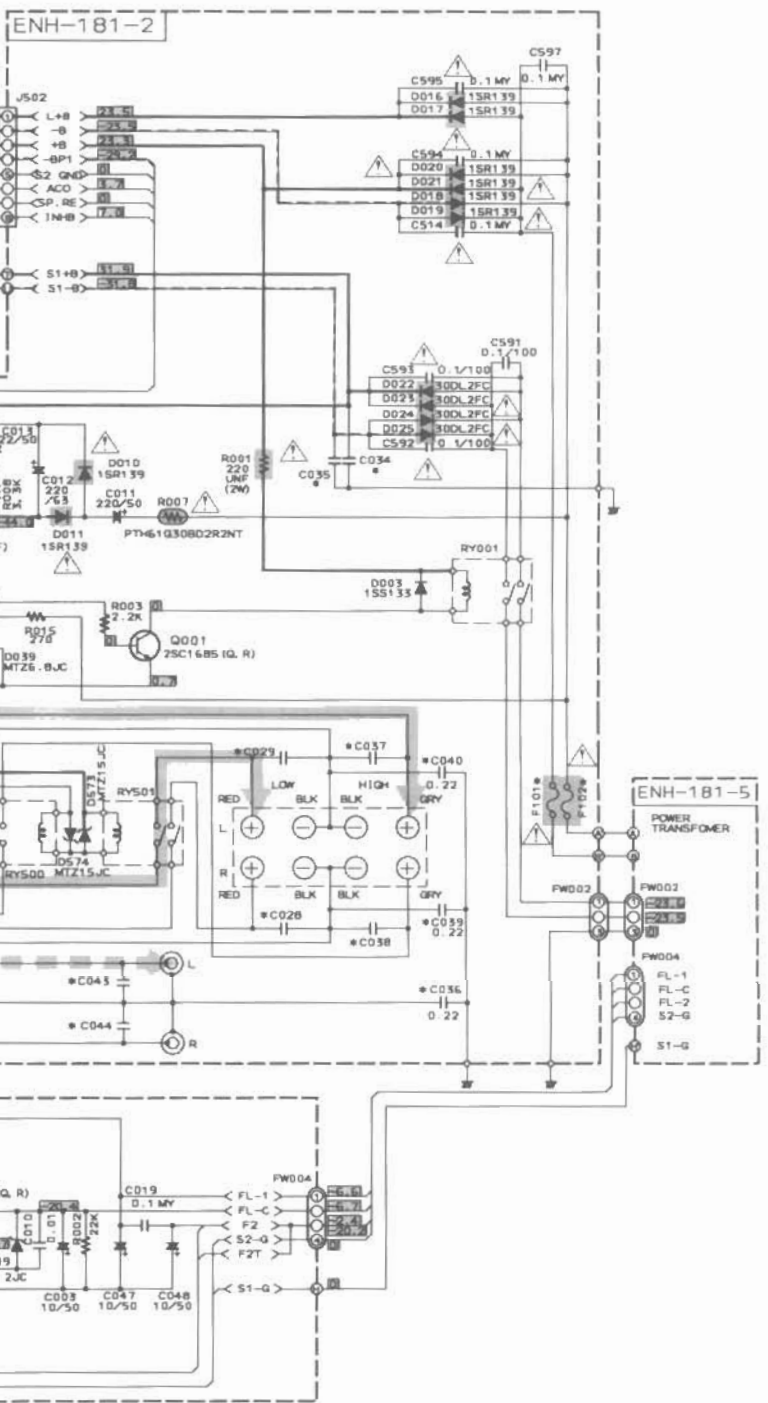
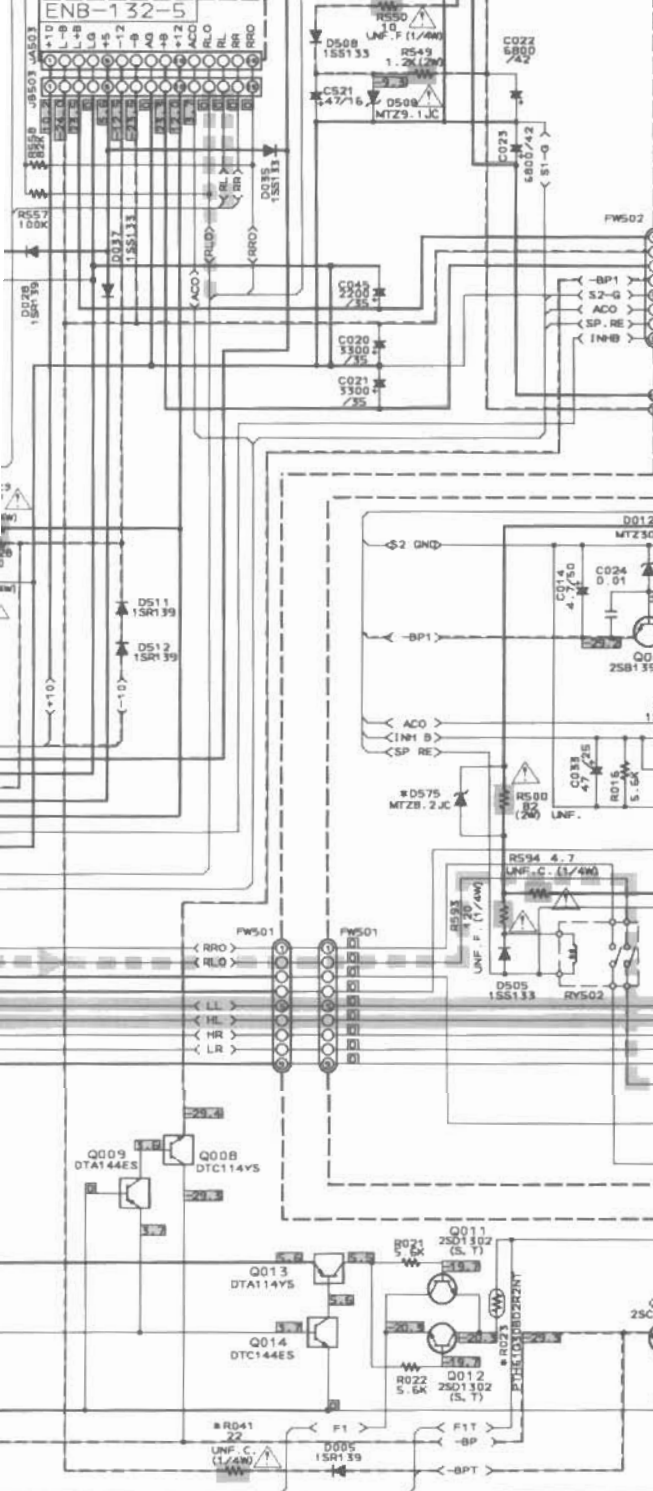
\* MARK

|           | J                 | C                 | U              | A              | E, EF<br>BS    | G, G1          |
|-----------|-------------------|-------------------|----------------|----------------|----------------|----------------|
| C028, 029 | NONE              | NONE              | NONE           | NONE           | 0 001          | 0 001          |
| C037, 038 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C034, 035 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C036, 039 | NONE              | NONE              | NONE           | NONE           | 0 022          | 0 022          |
| C040      | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C043, 044 | NONE              | NONE              | NONE           | NONE           | 0 001          | 0 001          |
| C750, 751 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C752, 753 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C754, 755 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C756, 757 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C758, 759 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C765, 766 | 100P              | 100P              | 220P           | 220P           | 220P           | 220P           |
| R023      | SHORT             | SHORT             | SHORT          | SHORT          | SHORT          | SHORT          |
| R027-029  | UNF. C.           | UNF. F.           | UNF. F.        | UNF. F.        | UNF. F.        | UNF. F.        |
| R030-034  | 3.9               | 1.9               |                |                |                |                |
| R036, 037 | UNF. C.<br>(1/4W) | UNF. C.<br>(1/4W) | SHORT          | SHORT          | SHORT          | SHORT          |
| R039      |                   |                   |                |                |                |                |
| R041      | USED              | USED              | SHORT          | SHORT          | SHORT          | SHORT          |
| R042      | USED              | SHORT             | SHORT          | SHORT          | SHORT          | SHORT          |
| R044      | 5.6<br>UNF. C.    | 5.6<br>UNF. C.    | 6.8<br>UNF. F. | 5.6<br>UNF. F. | 5.6<br>UNF. F. | 5.6<br>UNF. F. |
| R762, 763 | UNF. C.           | UNF. C.           | UNF. F.        | UNF. F.        | UNF. F.        | UNF. F.        |
| F101, 102 | 2.5A/125V         | 2.5A/125V         | T2A            | T2A            | T2A            | T2A            |
| D575      | NONE              | USED              | USED           | USED           | USED           | USED           |
| K503      |                   |                   |                |                |                |                |
| K510-512  | SHORT             | SHORT             | USED           | USED           | USED           | USED           |

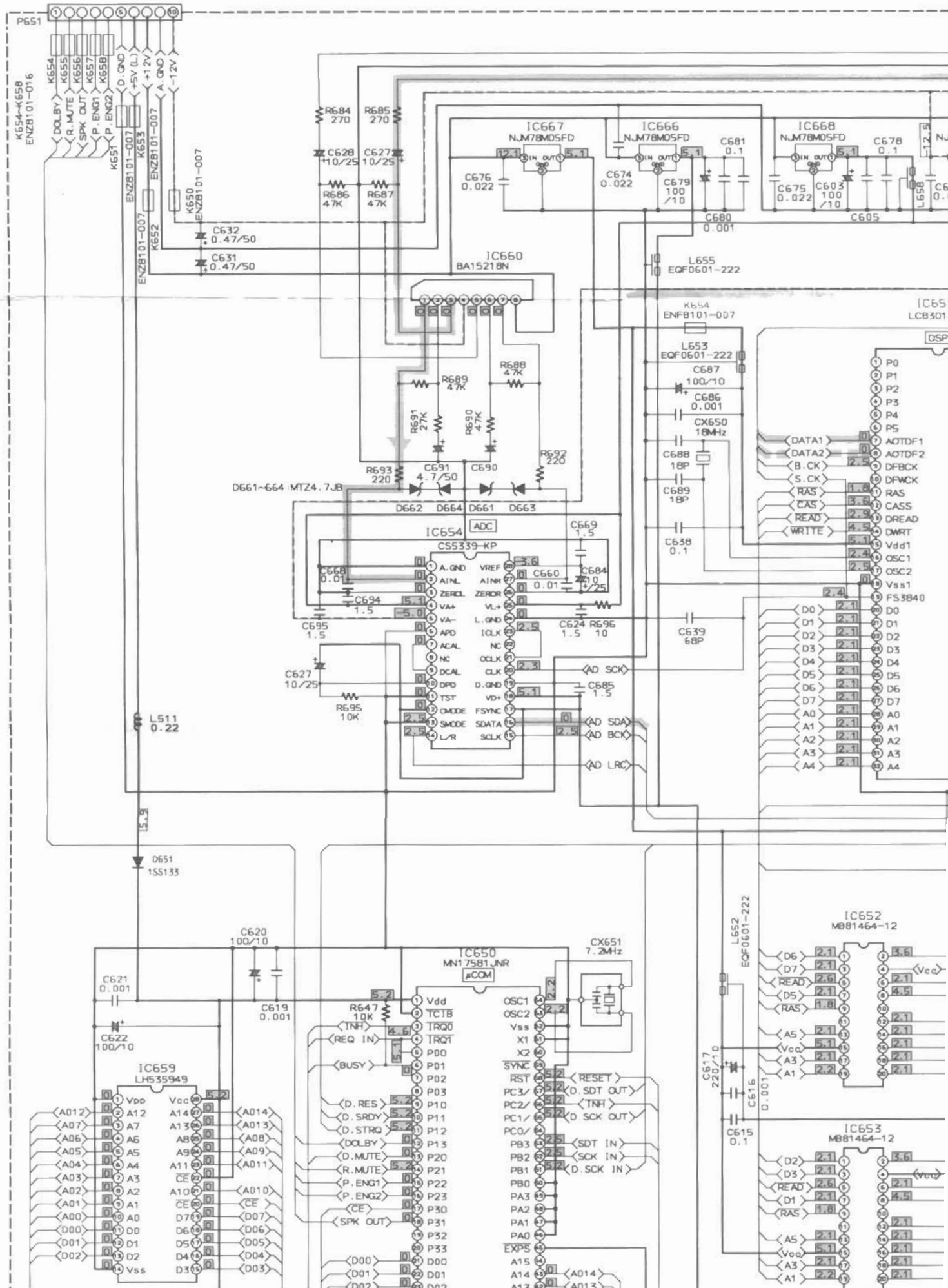




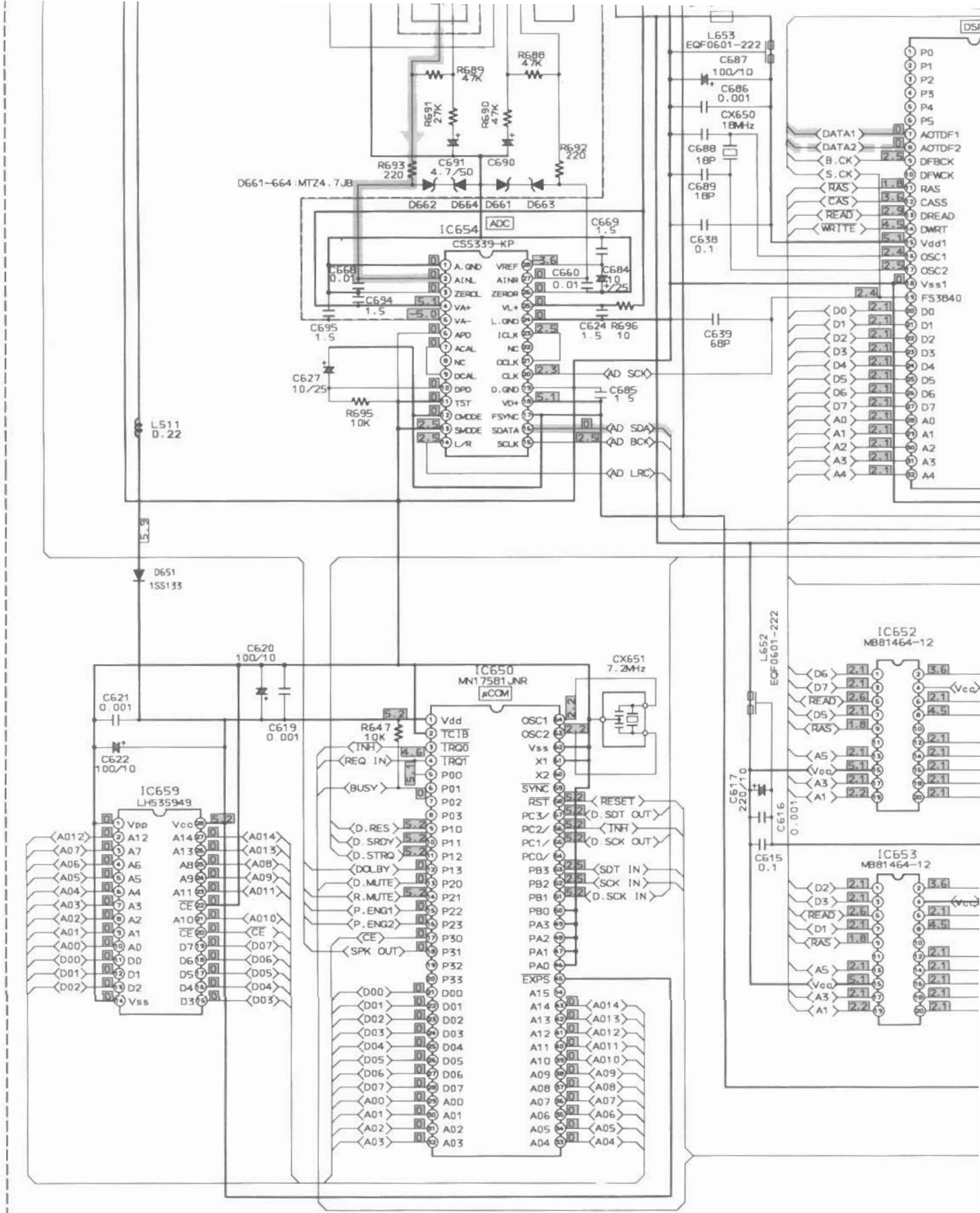
|           | J                 | C                 | U              | A              | L, EF<br>BS    | Q, G1          |
|-----------|-------------------|-------------------|----------------|----------------|----------------|----------------|
| C028, 029 | NONE              | NONE              | NONE           | NONE           | 0.001          | 0.001          |
| C037, 038 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C034, 035 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C036, 039 | NONE              | NONE              | NONE           | NONE           | 0.022          | 0.022          |
| C043, 044 | NONE              | NONE              | NONE           | NONE           | 0.001          | 0.001          |
| C750, 751 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C752, 753 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C754, 755 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C756, 757 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C758, 759 | NONE              | NONE              | NONE           | NONE           | NONE           | NONE           |
| C765, 766 | 100P              | 100P              | 220P           | 220P           | 220P           | 220P           |
| RD23      | SHORT             | SHORT             | SHORT          | SHORT          | SHORT          | SHORT          |
| RD27-223  | UNF. C.           | UNF. F.           | UNF. F.        | UNF. F.        | UNF. F.        | UNF. F.        |
| RD30-034  | 1.5               | 3.3               |                |                |                |                |
| RD36, 037 | UNF. C.<br>(1/4W) | UNF. C.<br>(1/4W) | SHORT          | SHORT          | SHORT          | SHORT          |
| RD39      |                   |                   |                |                |                |                |
| RD41      | USED              | USED              | SHORT          | SHORT          | SHORT          | SHORT          |
| RD42      | USED              | SHORT             | SHORT          | SHORT          | SHORT          | SHORT          |
| R044      | 5.6<br>UNF. C.    | 5.6<br>UNF. C.    | 6.8<br>UNF. F. | 5.6<br>UNF. F. | 5.6<br>UNF. F. | 5.6<br>UNF. F. |
| R762, 763 | UNF. C.           | UNF. C.           | UNF. F.        | UNF. F.        | UNF. F.        | UNF. F.        |
| F101, 102 | 2.5A/125V         | 2.5A/125V         | T2A            | T2A            | T2A            | T2A            |
| D575      | NONE              | USED              | USED           | USED           | USED           | USED           |
| KS03      |                   |                   |                |                |                |                |
| KS10-S12  | SHORT             | SHORT             | USED           | USED           | USED           | USED           |



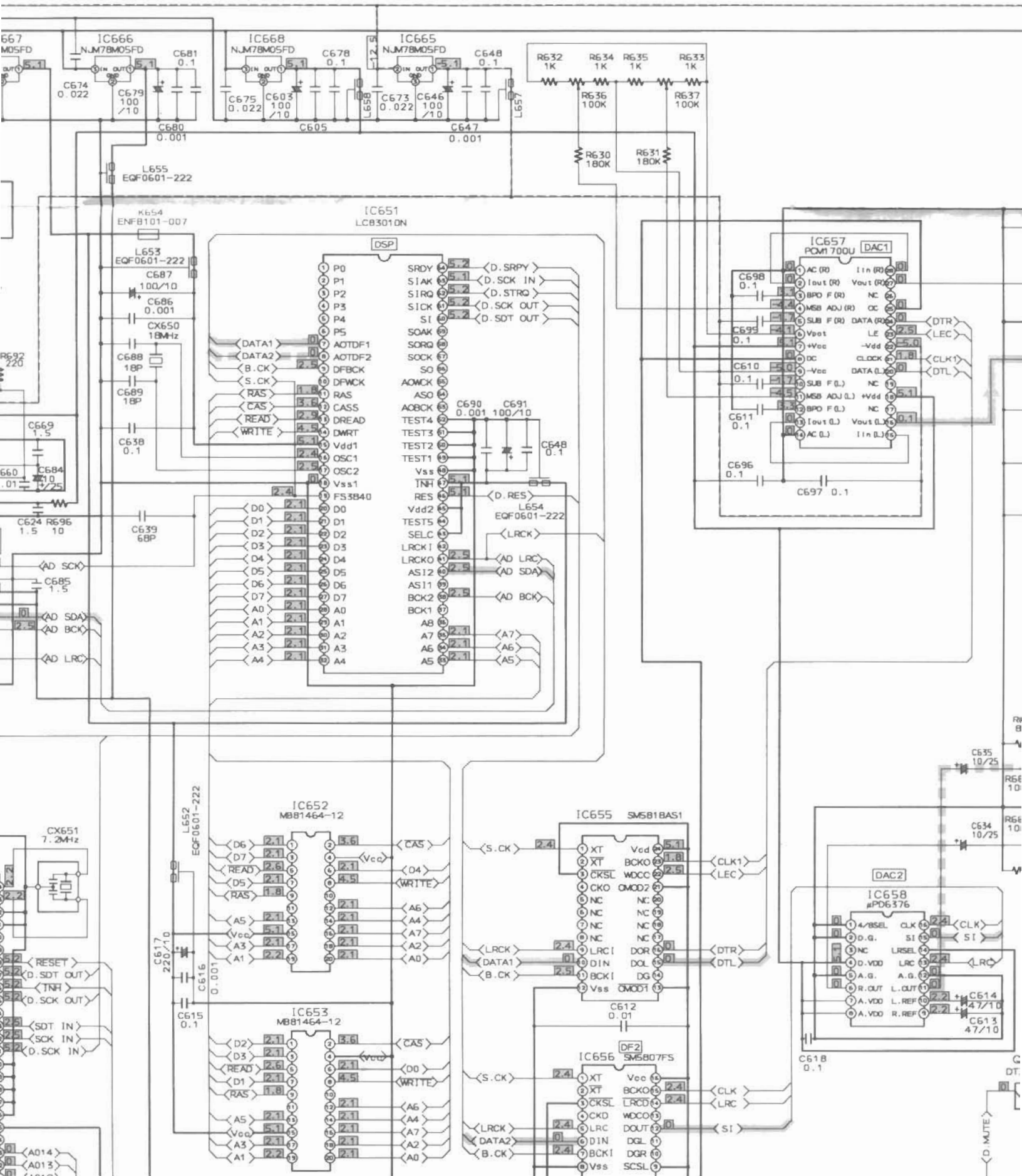
2. DAP Section

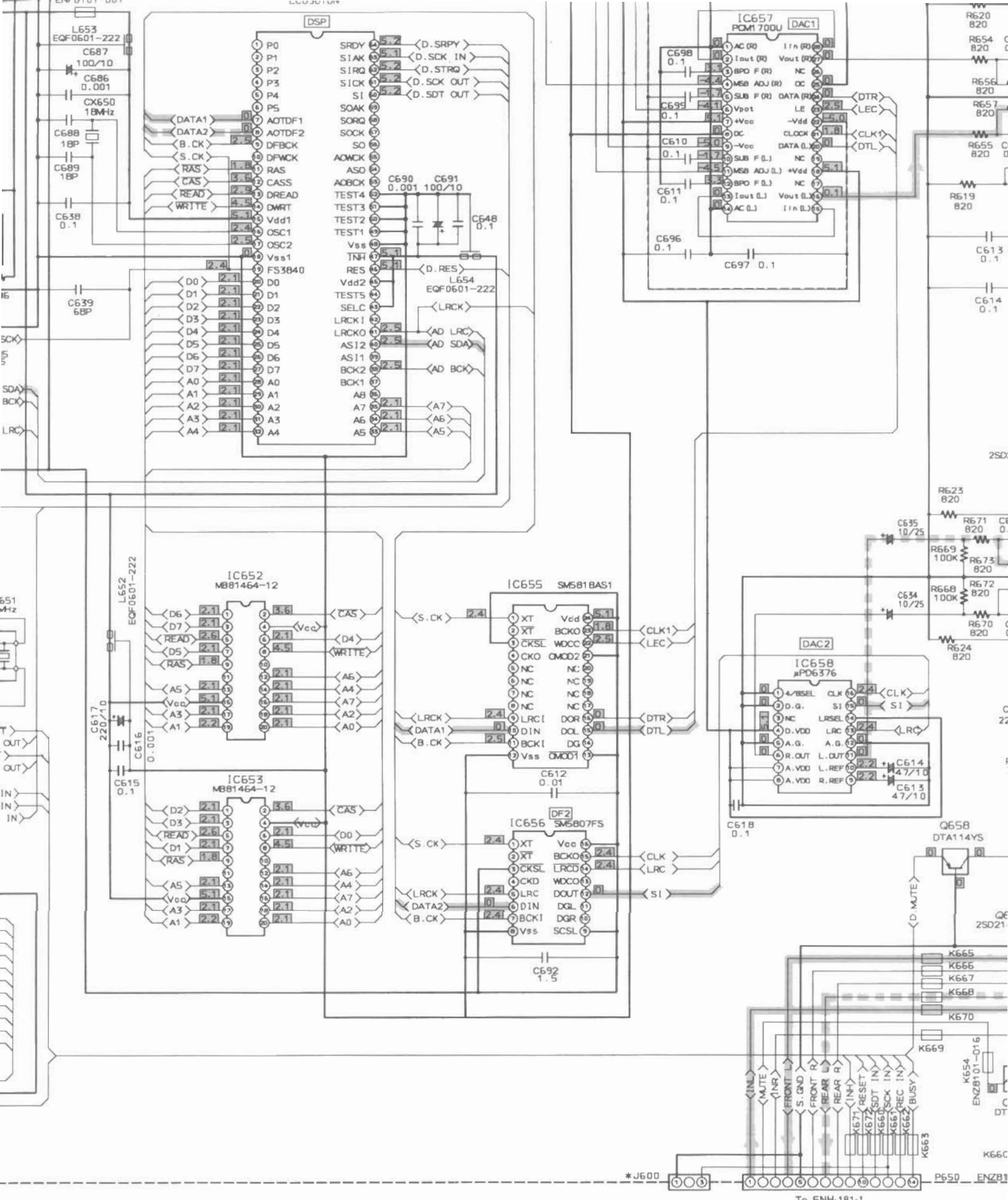






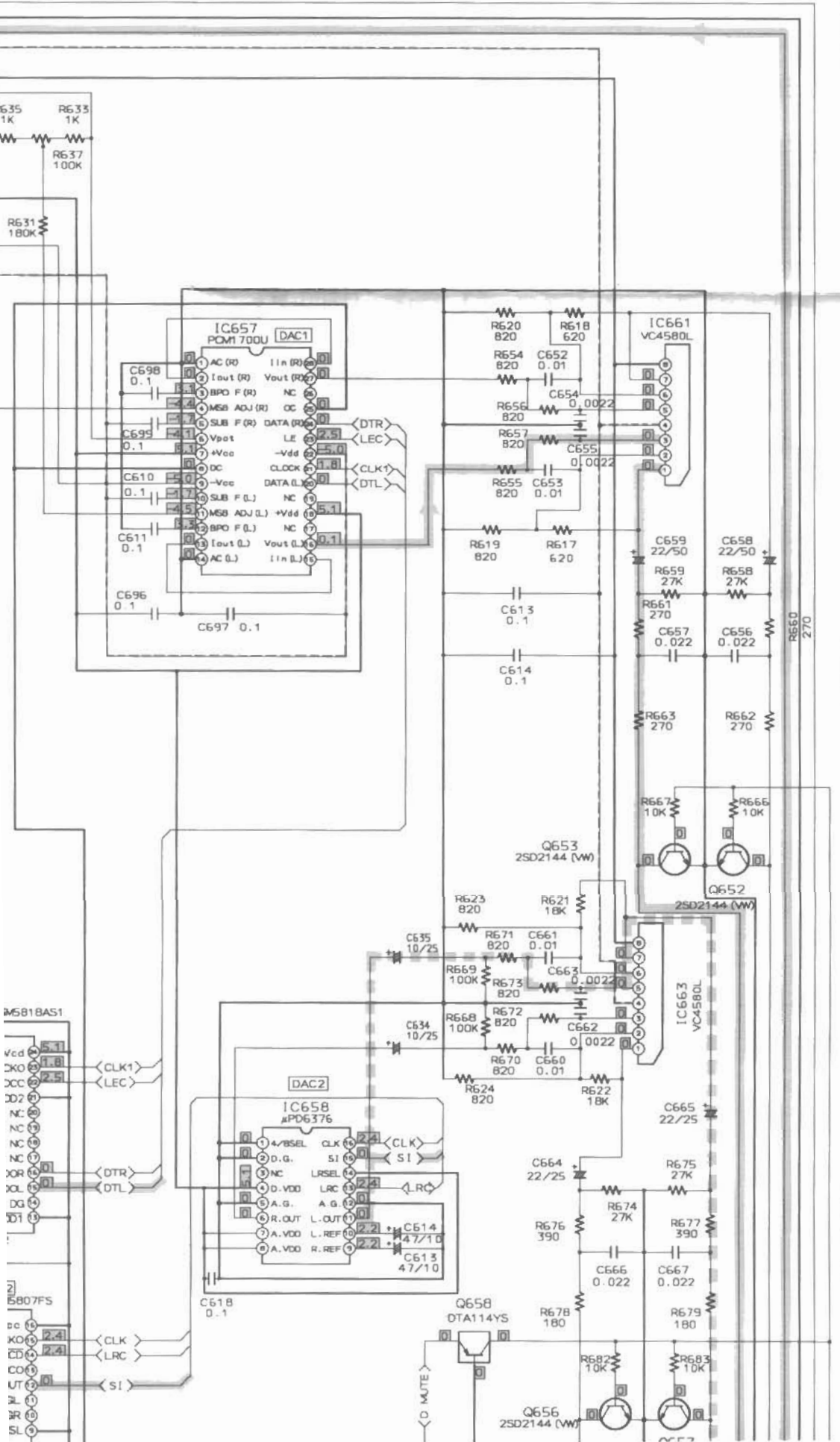
ENP-037

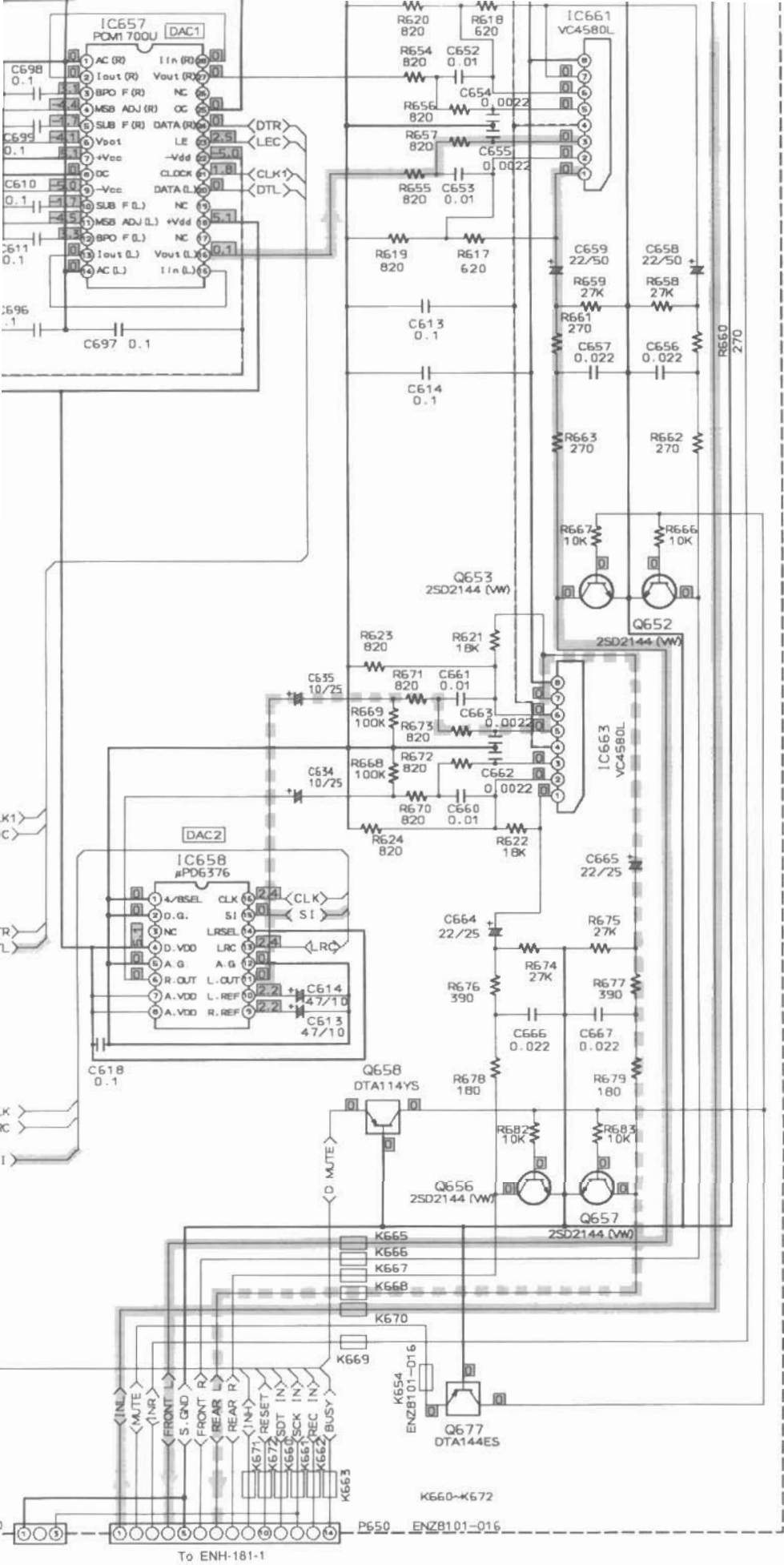




\*J600 To ENH-181-1

|   | J, C | E, EK<br>A, BS | G, GI | U    |
|---|------|----------------|-------|------|
| * | NONE | USED           | USED  | USED |

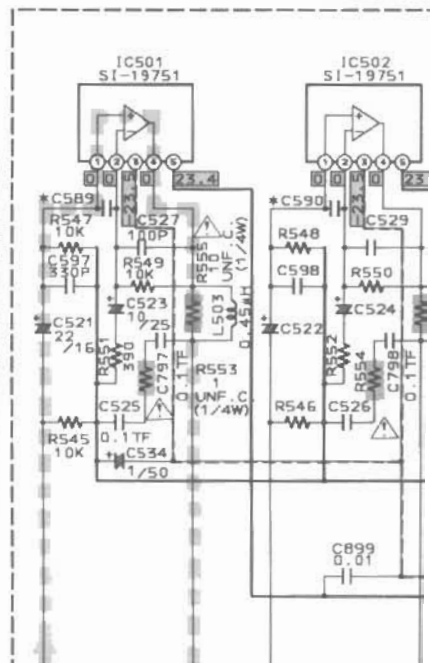
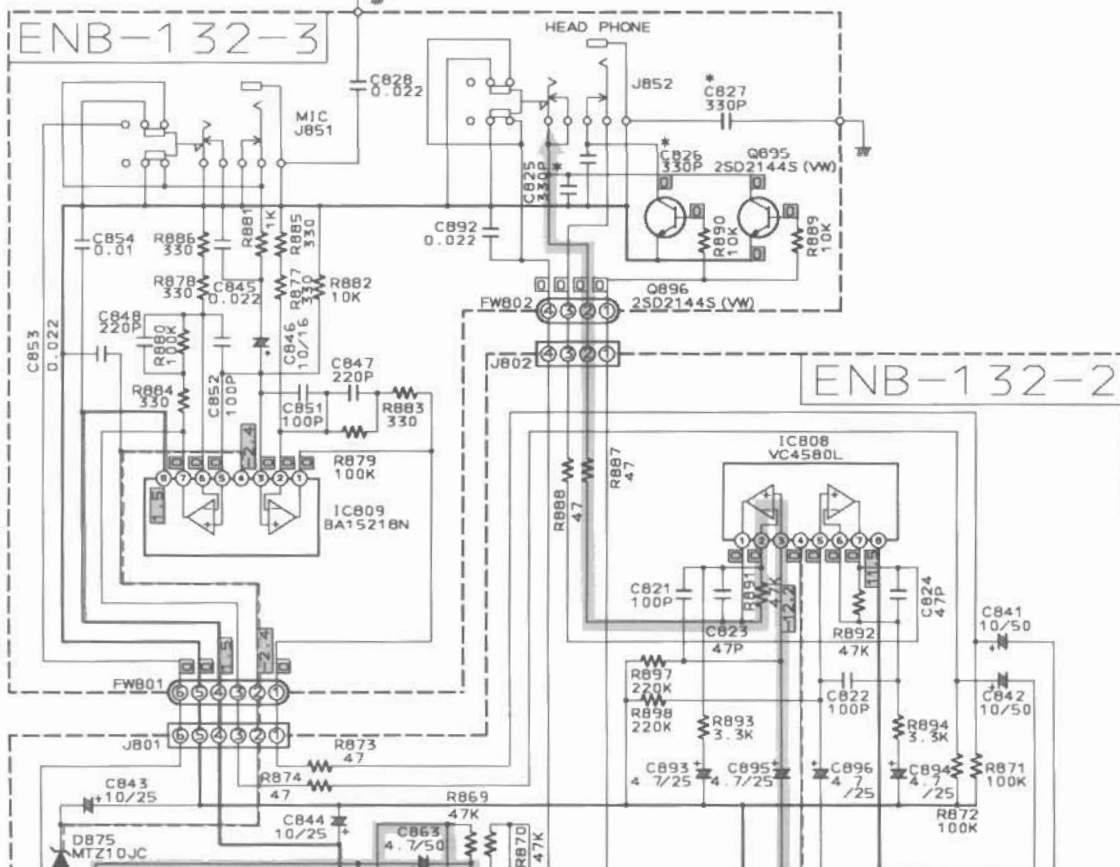
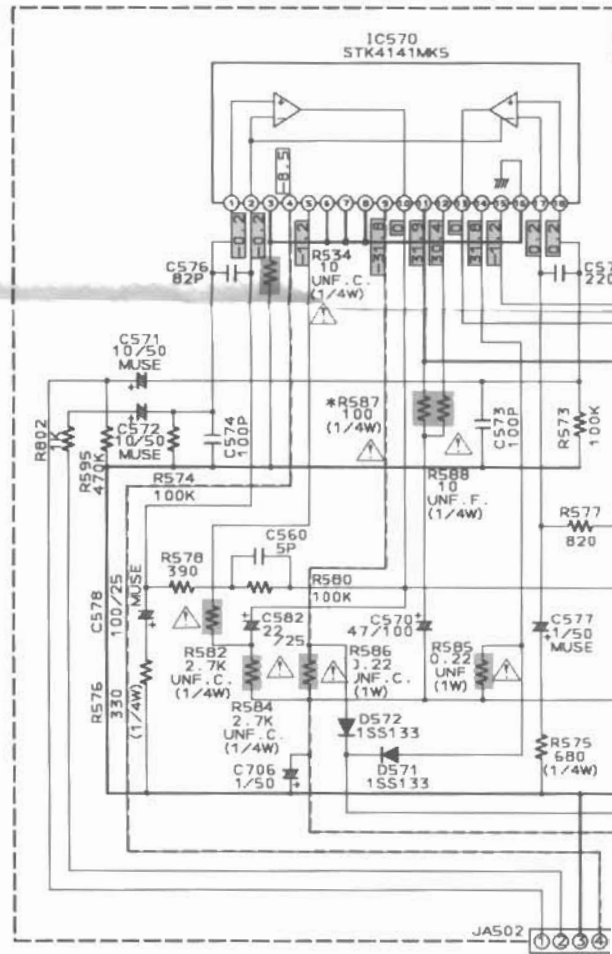
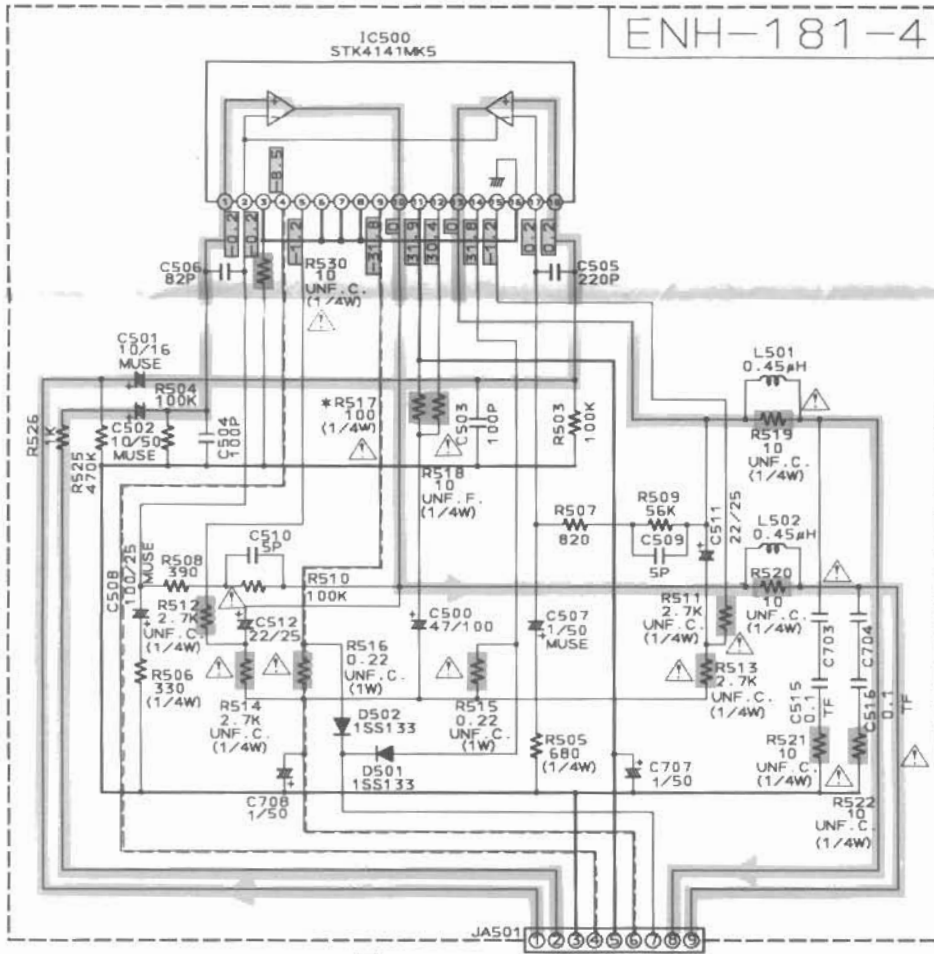


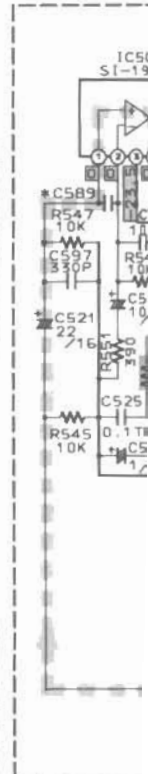
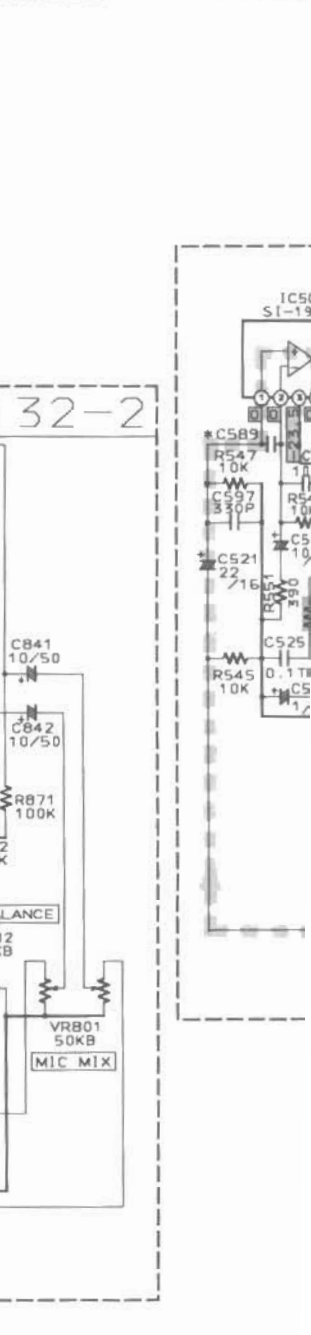
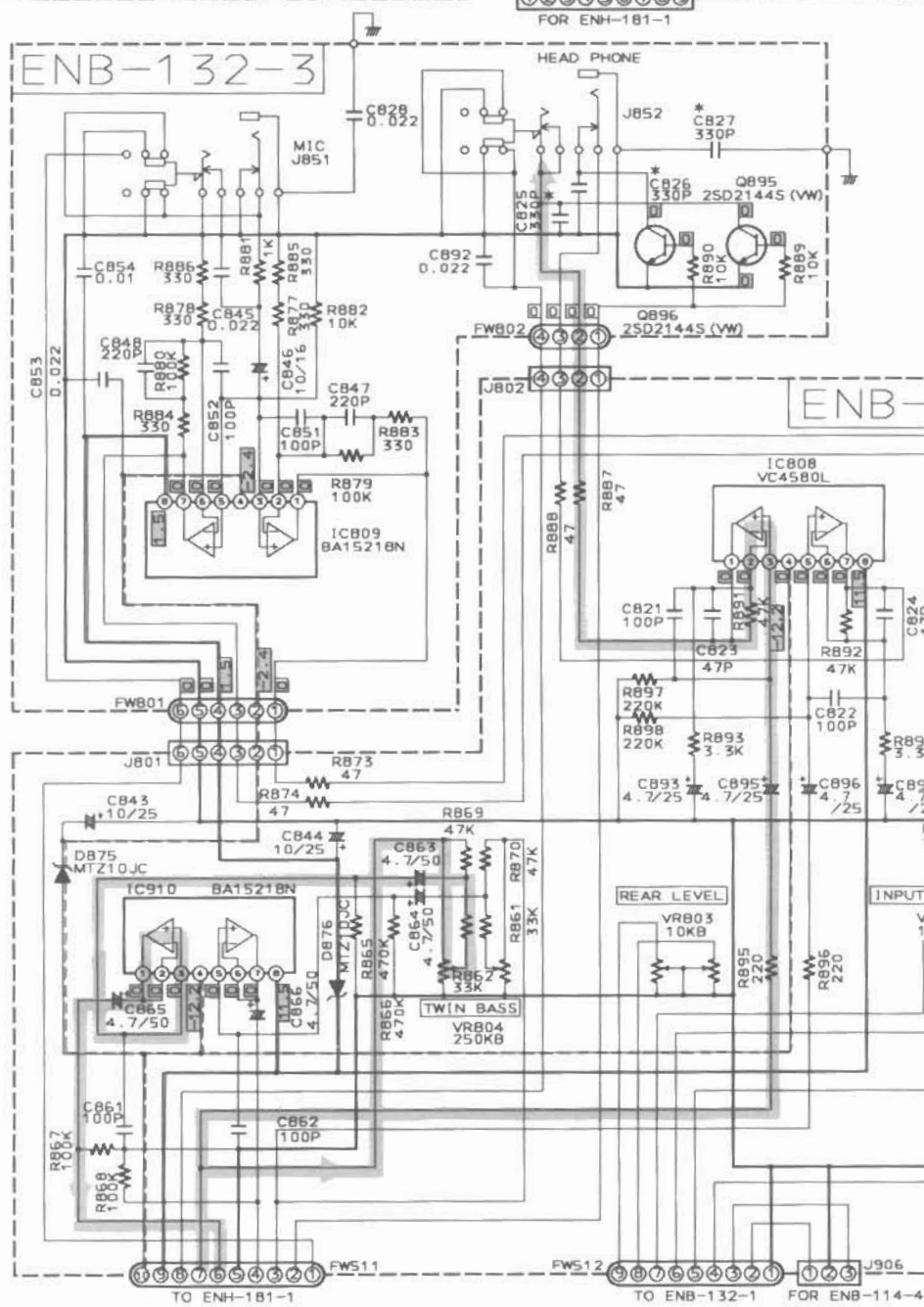
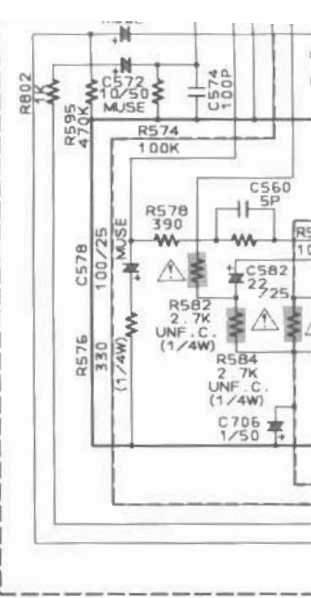
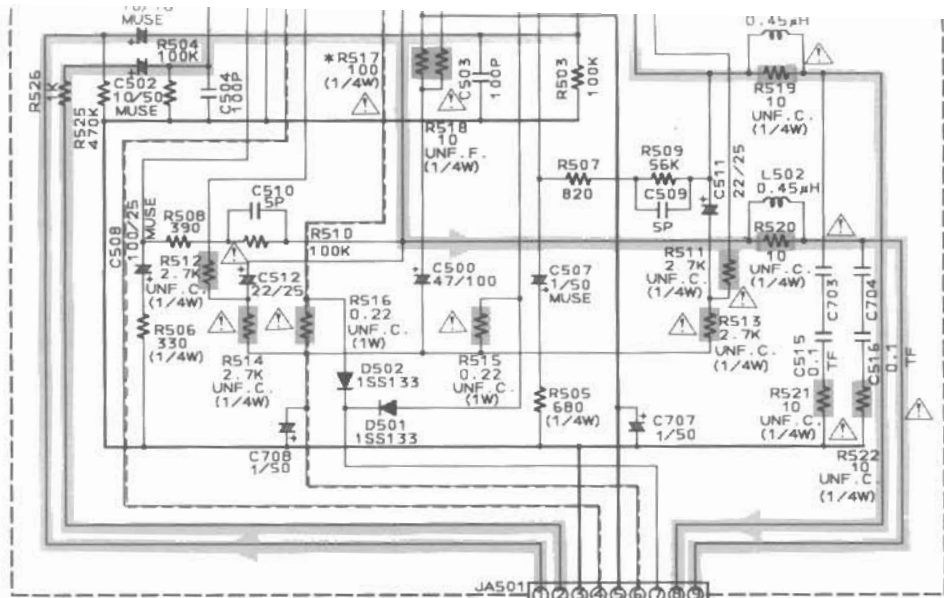


To ENH-181-1

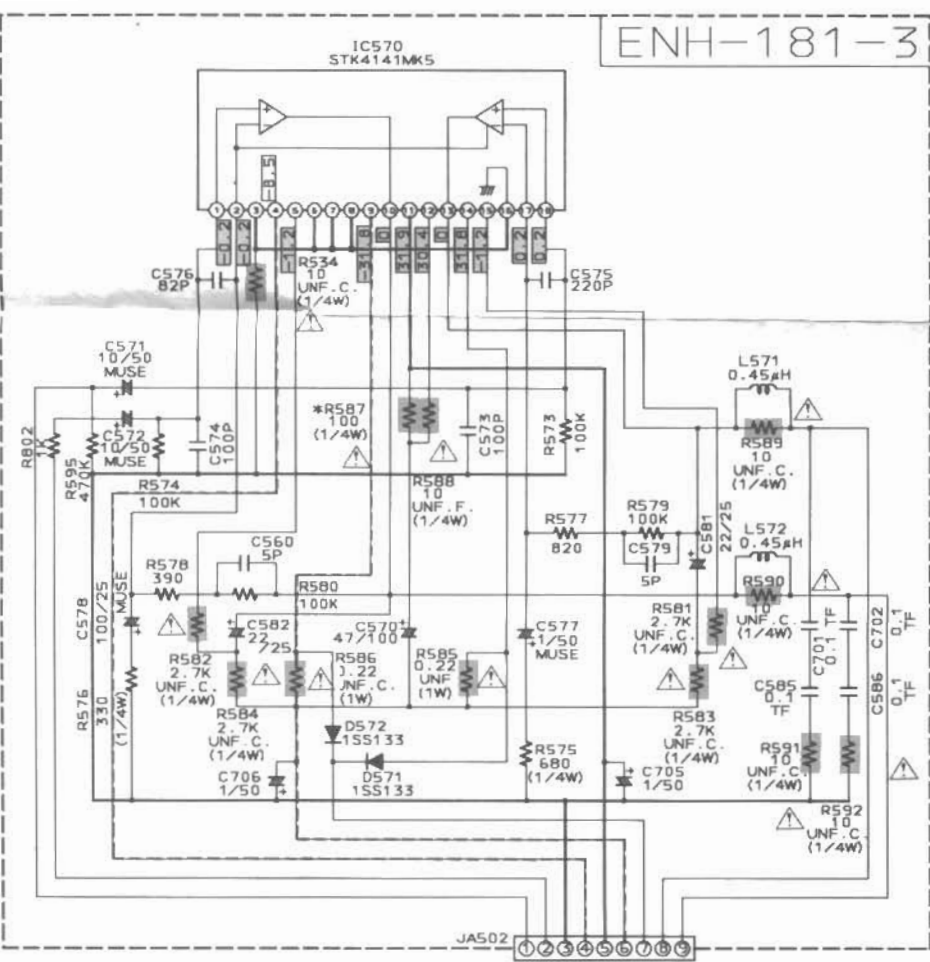


### 3. TWIN BASS & Power Amplifier Section

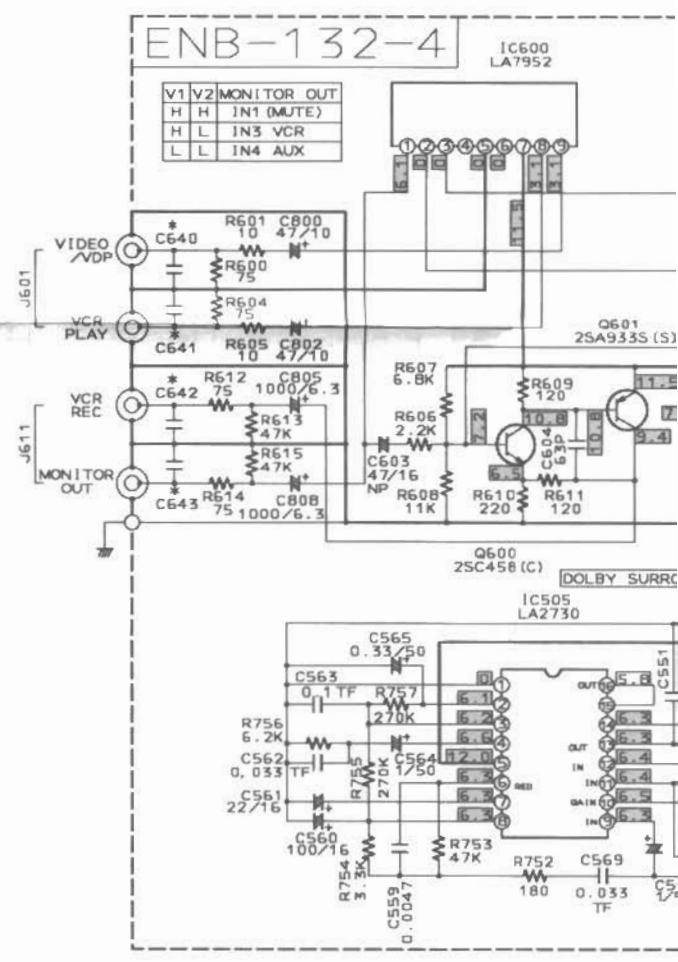




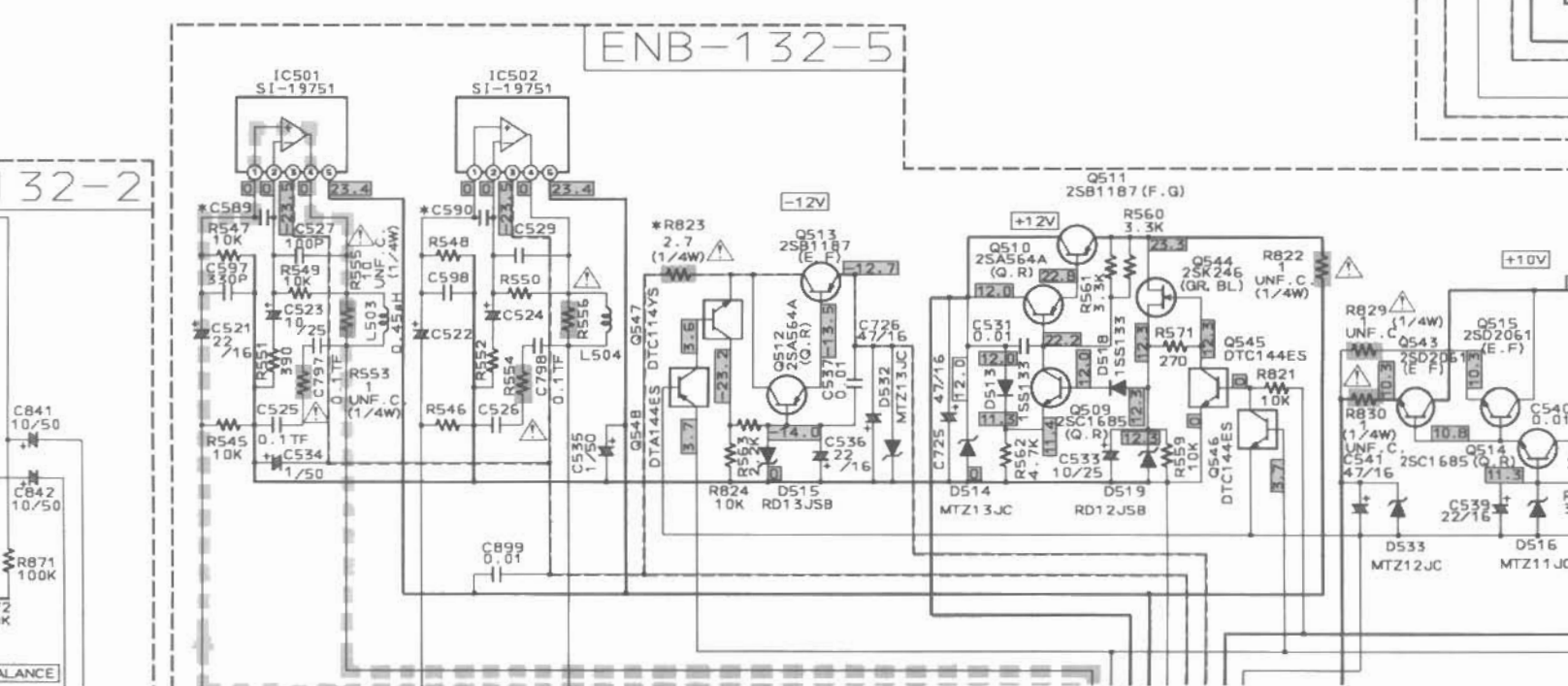
### ENH-181-3

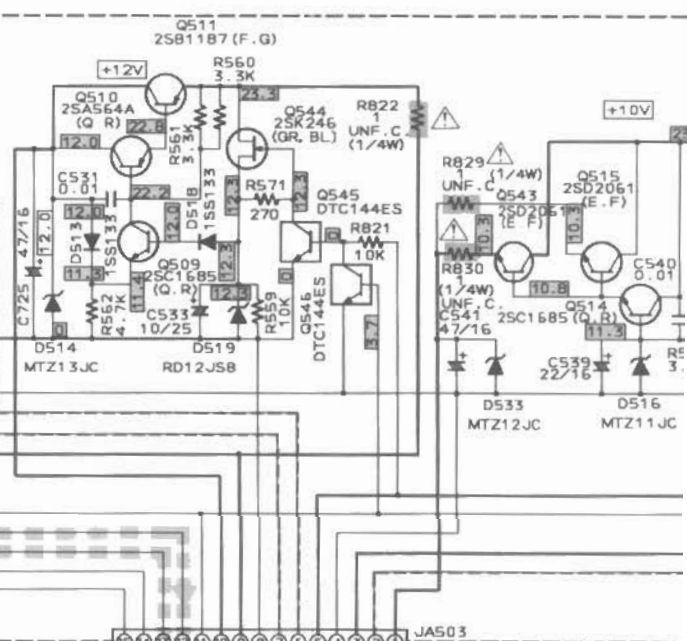
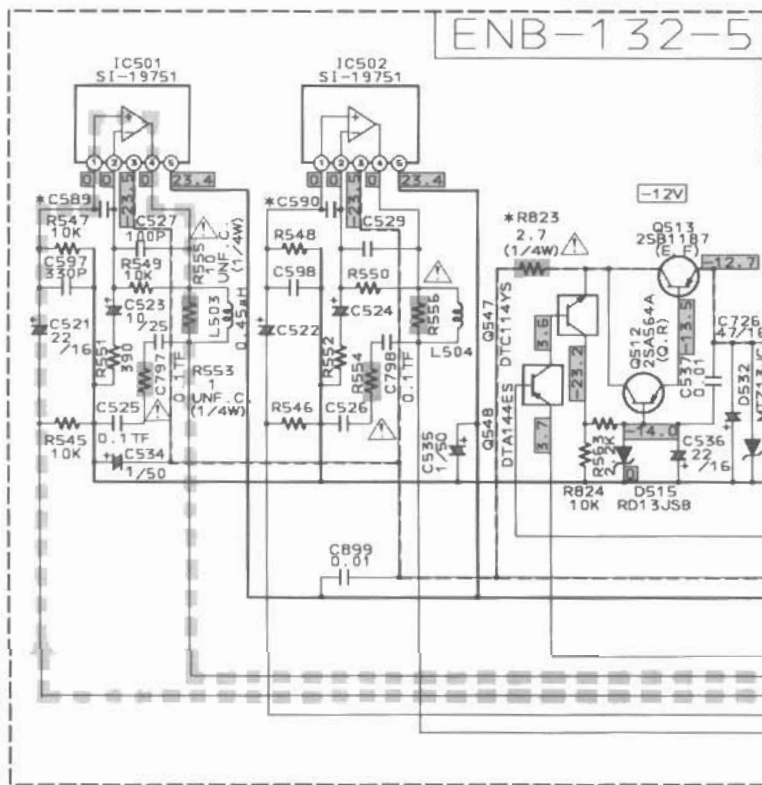
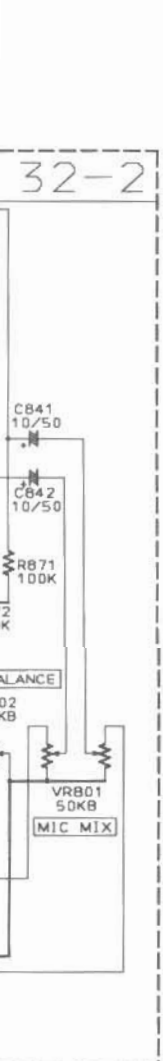
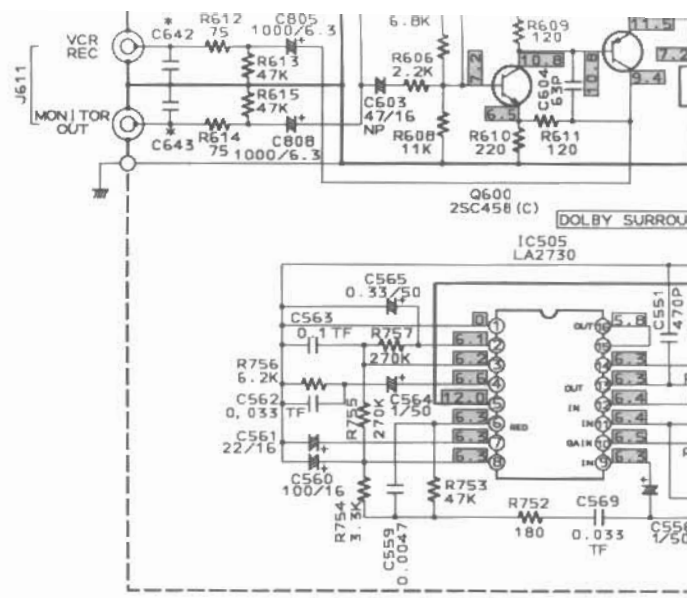
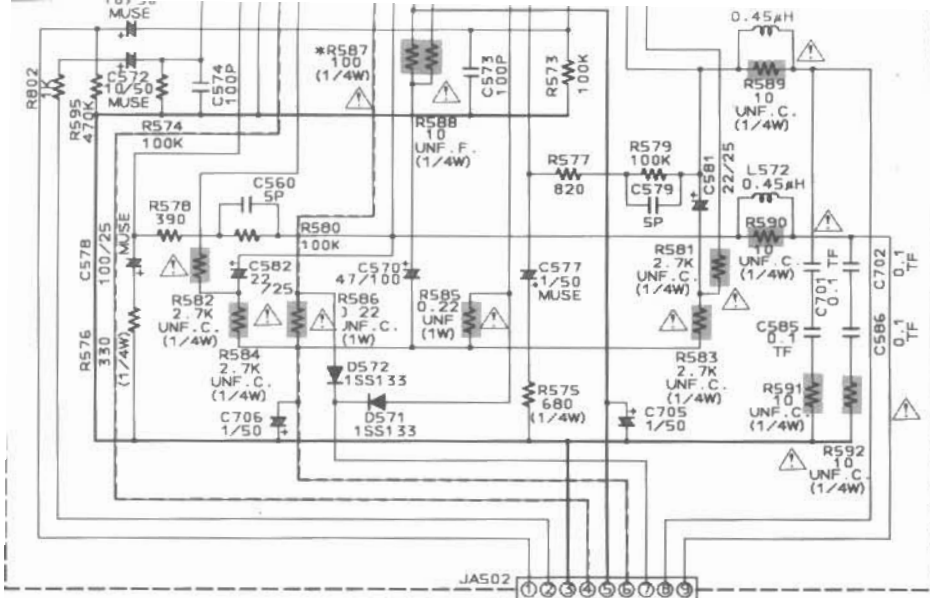


### ENB-132-4



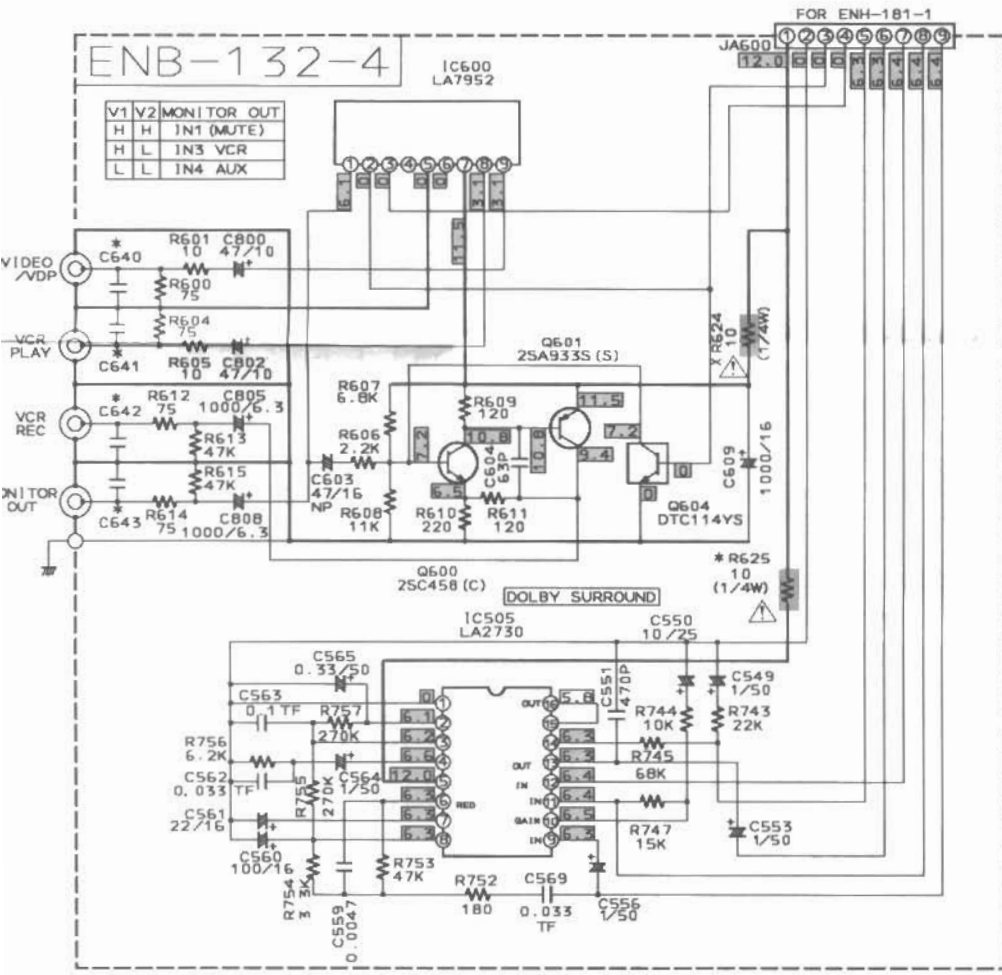
### ENB-132-5





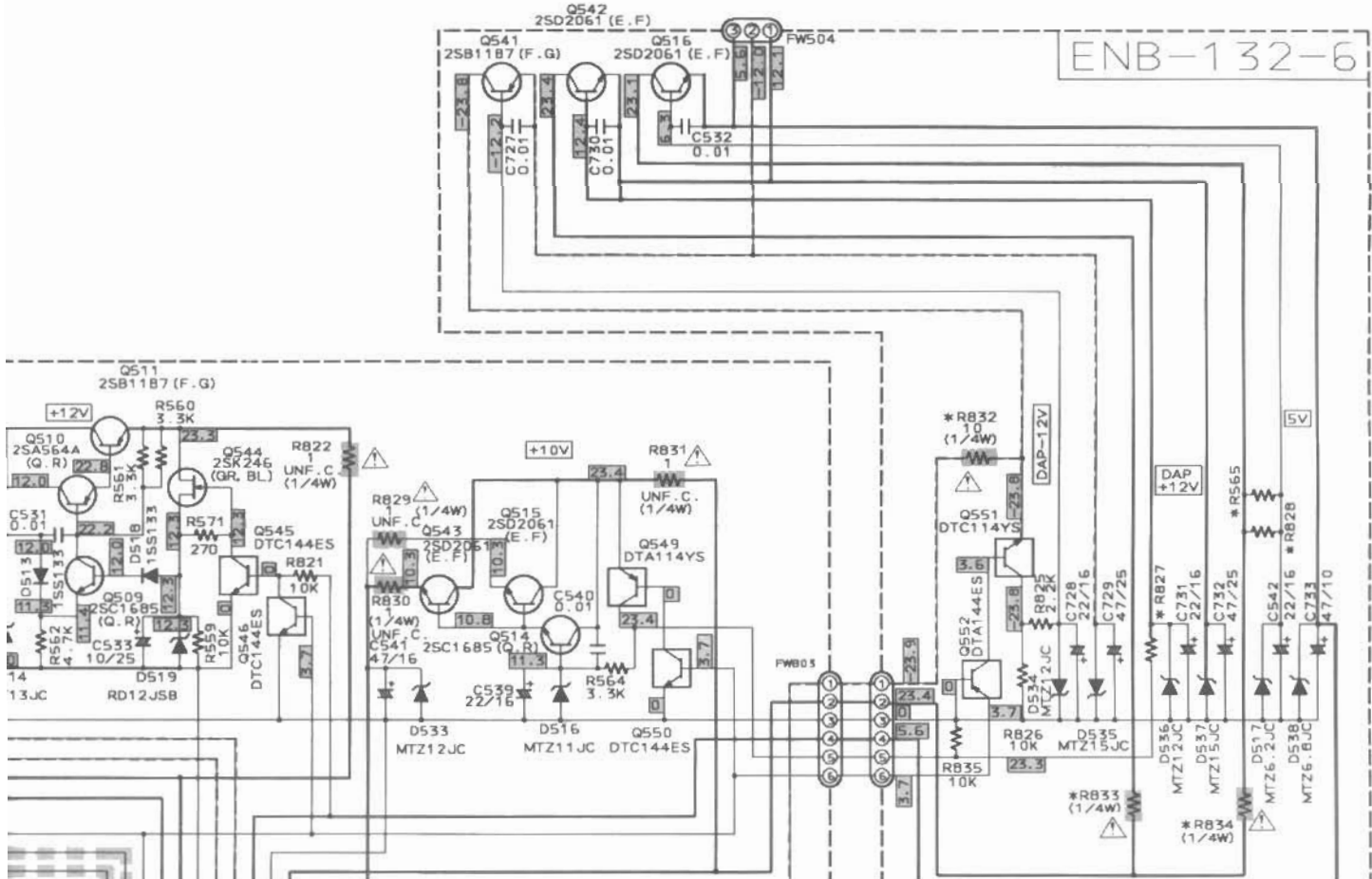
ENB-132-5

- Notes :**
1. Show
  2. indic
  3. indic
  4. indic
  5. indic
  6. When repla with  $\Delta$ , I
  7. This is the The design

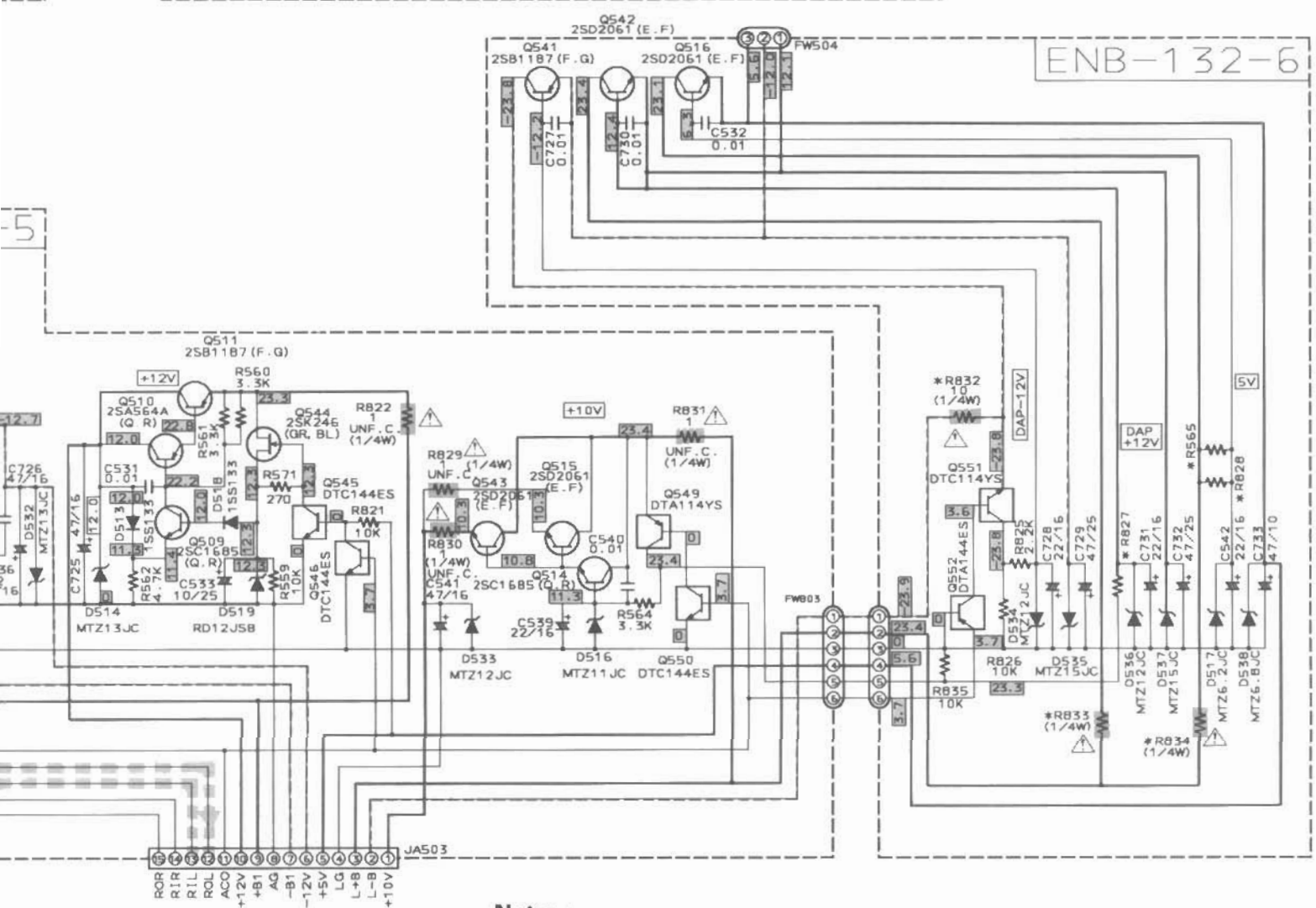
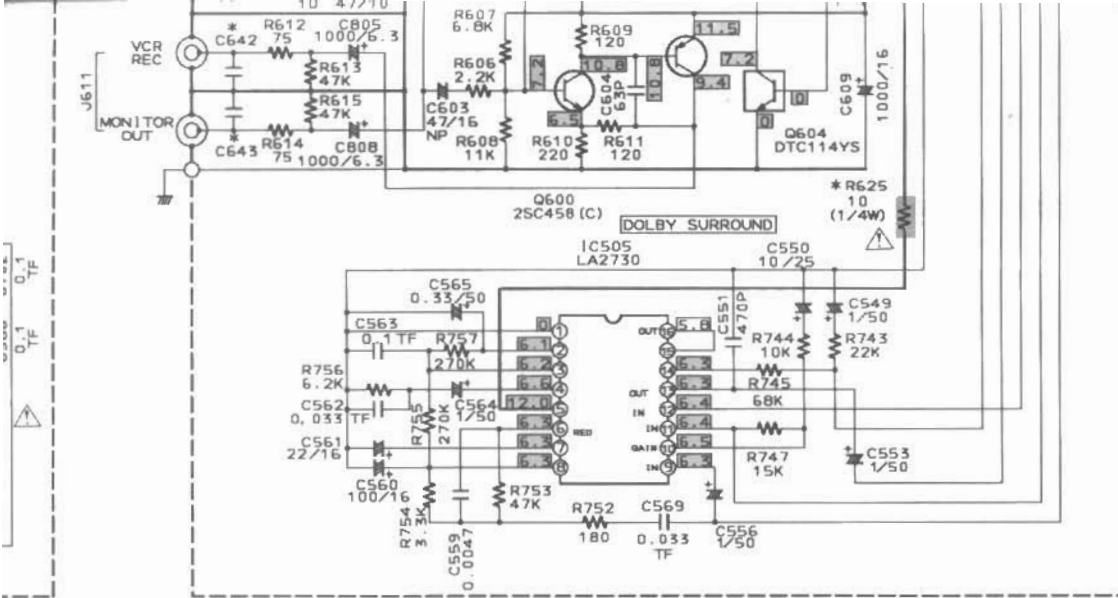


\* MARK

|           | J C     | U       | E, EF   | AB      | G GI |
|-----------|---------|---------|---------|---------|------|
| C825-827  | NONE    | USED    | USED    | USED    |      |
| R517, 587 | UNF. C. | UNF. F. | UNF. F. | UNF. F. |      |
| R565, 828 | 10K     | 5.1K    | 5.1K    | 5.1K    |      |
| R624, 625 | UNF. C. | UNF. F. | UNF. F. | UNF. F. |      |
| R823, 832 | UNF. C. | UNF. F. | UNF. F. | UNF. F. |      |
| R827      | 3.3K    | 1.5K    | 1.5K    | 1.5K    |      |
| R833, 834 | 3.9     | 4.7     | 4.7     | 4.7     |      |
|           | UNF. C. | UNF. F. | UNF. F. | UNF. F. |      |





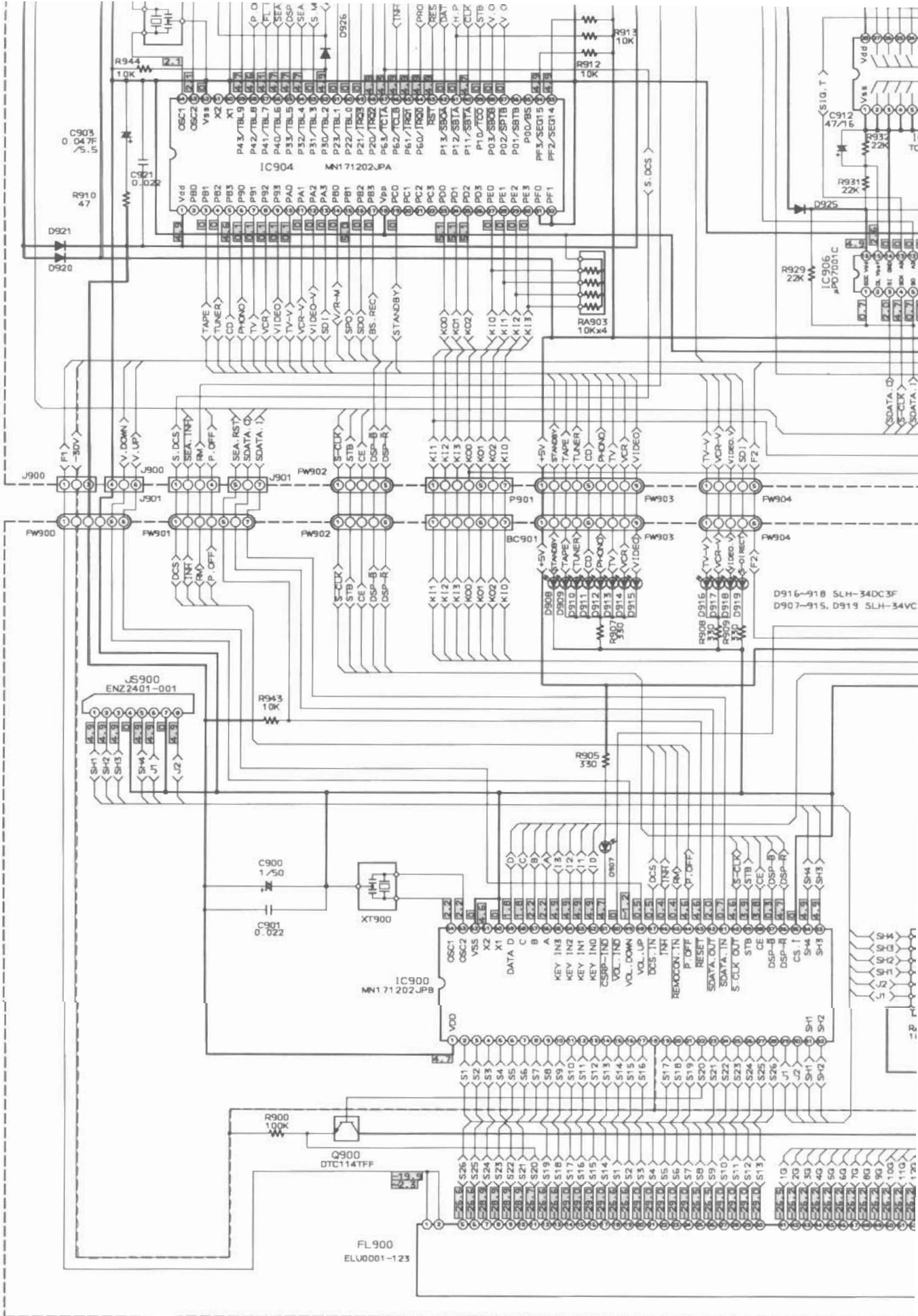


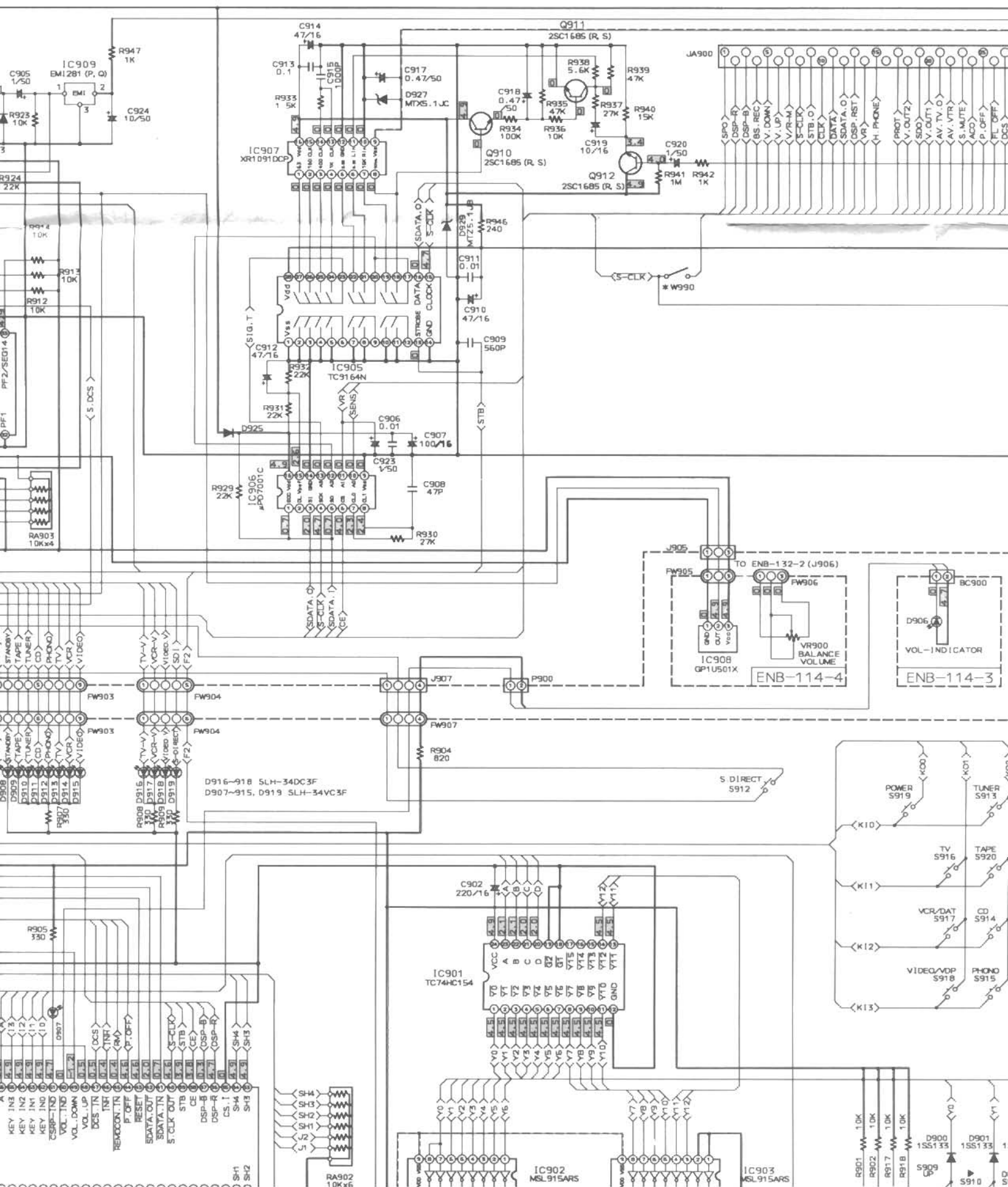
**Notes :**

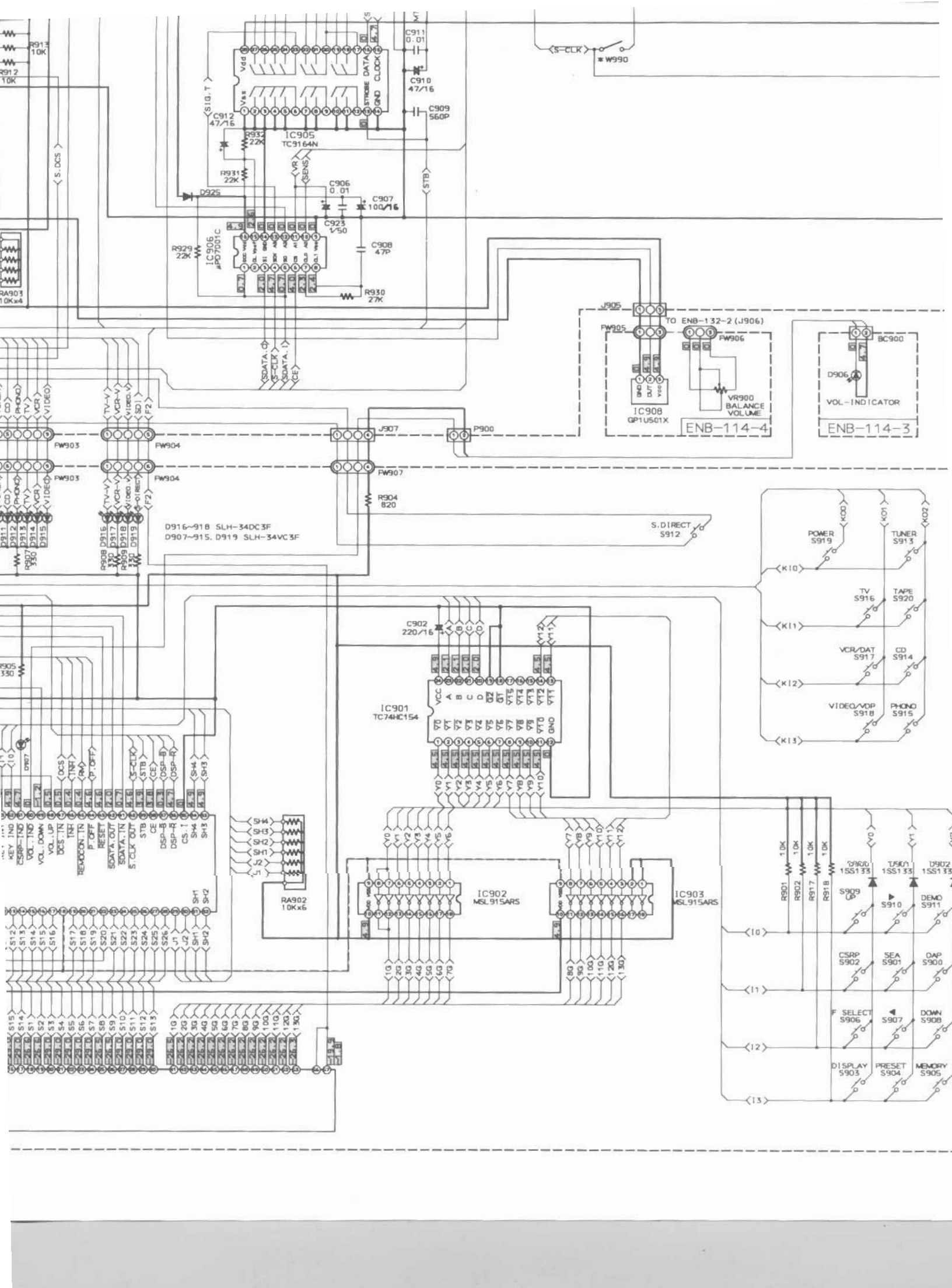
1. Shows DC voltage to the chassis with no signal input.
2. indicates + B power supply.
3. indicates - B power supply.
4. indicates Front signal path.
5. indicates Rear signal path.
6. When replacing the parts in the darkned are ( ) and those marked with , be sure to use the designated parts to ensure safety.
7. This is the standard circuit diagram.

The design and contents are subject to change without notice.

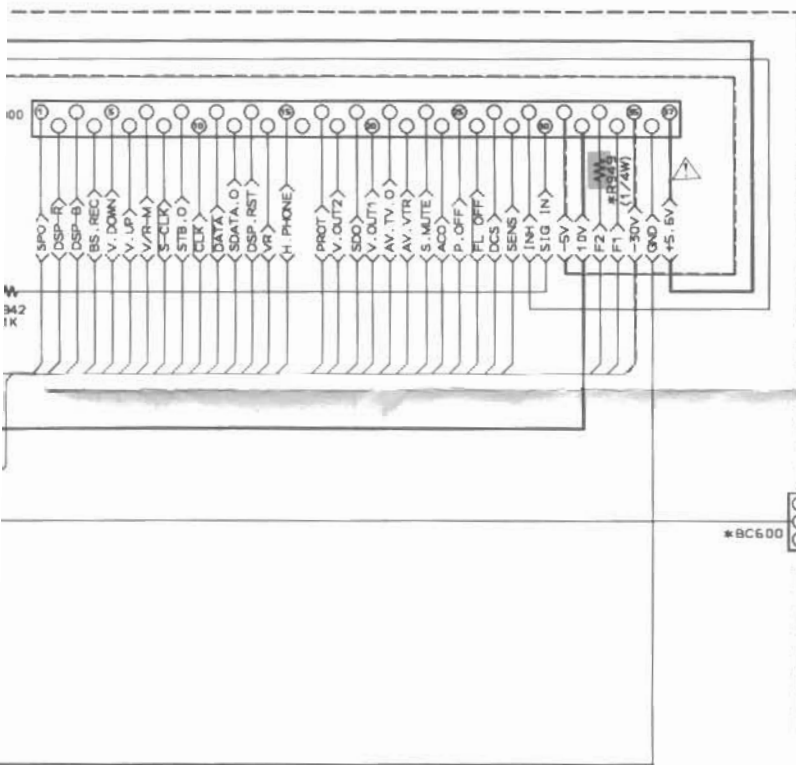






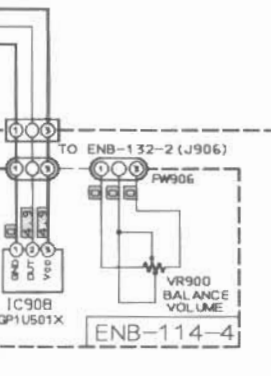




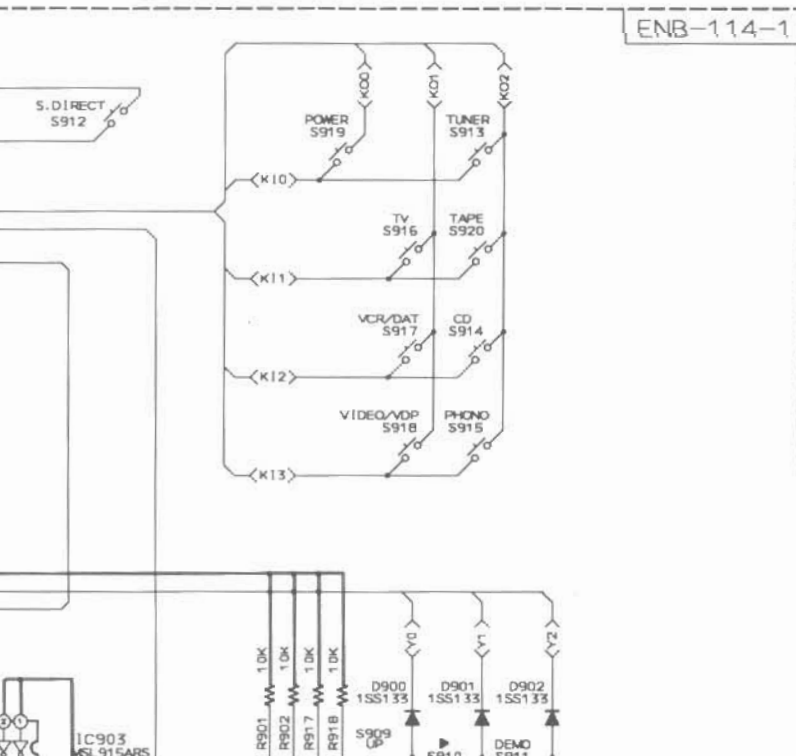


\* MARK

|       | J. C           | E. EF<br>A. BS | G. GI          | U              |
|-------|----------------|----------------|----------------|----------------|
| R949  | 2.7<br>UNF. C. | 4.7<br>UNF. F. | 4.7<br>UNF. F. | 4.7<br>UNF. F. |
| BC600 | NONE           | USED           | USED           | USED           |
| W990  | USED           | NONE           | NONE           | NONE           |



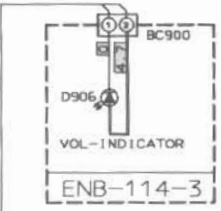
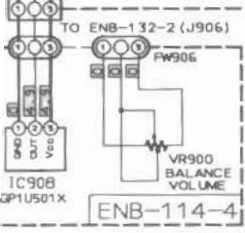
ENB-114-2



ENB-114-1

\*BC600 TO ENP-037 J600

ENB-114-2



ENB-114-1

