

# DENON

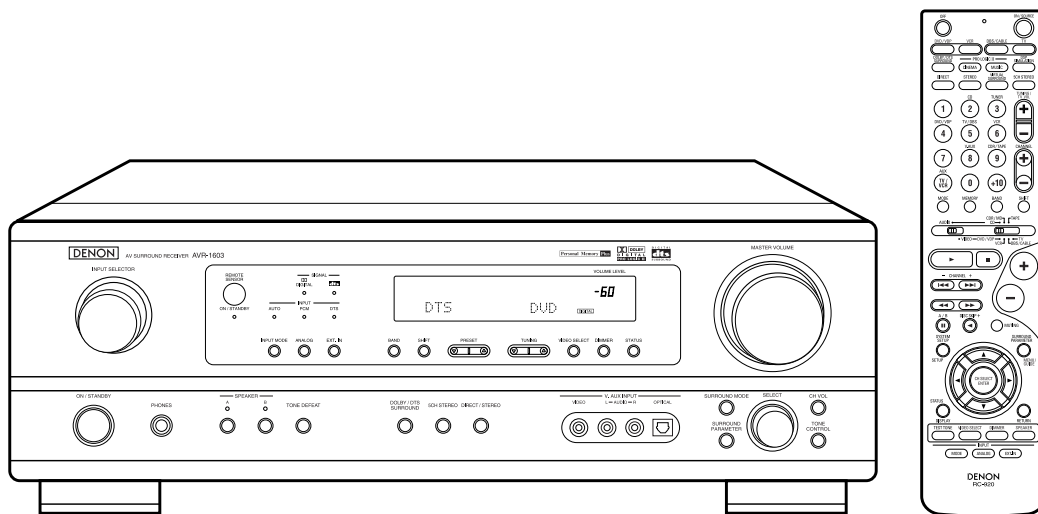
For U.S.A., Canada, Europe, U.K.,  
Australia, Asia, China, Hong Kong,  
Taiwan R.O.C. & Korea model

Hi-Fi Component

## SERVICE MANUAL

# MODEL AVR-1603/683

### AV SURROUND RECEIVER



• Some illustrations using in this service manual are slightly different from the actual set.

## DENON, Ltd.

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## SAFETY PRECAUTIONS

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

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

## SPECIFICATIONS

### Audio Section

#### Power Amplifier

|   |  |           |   |
|---|--|-----------|---|
| <b>Rated output:</b>                      | Front:                                 | 80W+80W   | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (U.S.A., & Canada Models)         |
|   |  | 70W+70W   | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (Europe, U.K., Australia & Asia)  |
|   |  | 110W+110W | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (U.S.A., & Canada Models)                |
|   |  | 100W+100W | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (Europe, U.K. & Australia Models)        |
|   |  | 110W+110W | (6Ω/ohms, EIAJ ) (Asia Model)   |
|   | Center:                                | 80W       | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (U.S.A., & Canada Models)         |
|   |  | 70W       | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (Europe, U.K. & Australia & Asia) |
|   |  | 110W      | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (U.S.A., & Canada Models)                |
|   |  | 100W      | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (Europe, U.K. & Australia Models)        |
|   |  | 110W      | (6Ω/ohms, EIAJ ) (Asia Model)   |
|   | Surround:                              | 80W+80W   | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (U.S.A., & Canada Models)         |
|   |  | 70W+70W   | (8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D ) (Europe, U.K. & Australia & Asia) |
|   |  | 110W+110W | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (U.S.A., & Canada Models)                |
|   |  | 100W+100W | (6Ω/ohms, 1kHz with 0.7% T.H.D ) (Europe, U.K. & Australia Models)        |
|   |  | 110W+110W | (6Ω/ohms, EIAJ ) (Asia Model)   |
| <b>Output terminals:</b>                  | Front:                                 | A or B    | 6 to 16Ω/ohms   |
|   |  | A+B       | 12 to 16Ω/ohms  |
|   | Center/Surround:                       |           | 6 to 16Ω/ohms   |
| <b>LINE input - SPEAKER OUT</b>           |  |           |   |
| <b>Input sensitivity/input impedance:</b> | 200mV/47kΩ/kohms                       |           |   |
| <b>Frequency response:</b>                | 10Hz~100kHz: +1, -3dB (TONE DEFEAT ON) |           |   |
| <b>S/N ratio:</b>                         | 98dB (IHF-A weighted) (TONE DEFEAT ON) |           |   |

### Video Section

#### Standard video jacks

**Input/output level and impedance:** 1Vp-p, 75Ω/ohms  
**Frequency response:** 5Hz~10MHz — +1, -3dB

#### S-video jacks

**Input/output level and impedance:** Y(brightness)signal — 1Vp-p, 75Ω/ohms  
 C(color)signal — 0.286Vp-p, 75Ω/ohms  
**Frequency response:** 5Hz~10MHz: — +1, -3dB

#### Color component video jacks (U.S.A. & Canada Models)

**Input/output level and impedance:** Y(brightness)signal — 1Vp-p, 75Ω/ohms  
 Pb/Cb(blue)signal — 0.7Vp-p, 75Ω/ohms  
 Pr/Cr(red)signal — 0.7Vp-p, 75Ω/ohms  
**Frequency response:** 5Hz~27MHz: — +0, -3dB

### Tuner section

|                                    |  |                                    |                              |
|------------------------------------|--|------------------------------------|------------------------------|
| <b>Receiving range:</b>            | <b>[FM]</b> (note: $\mu\text{V}$ at 75Ω/ohms, 0dBf = $1 \times 10^{-15}\text{W}$ ) | <b>[AM]</b>                        |                              |
|                                    | U.S.A., & Canada Models:   | 87.50MHz~107.90MHz                 | 520kHz~1710kHz               |
|                                    | Europe U.K. & Australia Models:  | 87.50MHz~108.00MHz                 | 522kHz~1611kHz               |
| <b>Usable sensitivity:</b>         | Asia Model:  | 87.50MHz~107.90MHz (0.2MHz steps)  | 520kHz~1710kHz (10kHz steps) |
|                                    |  | 87.50MHz~108.00MHz (0.05MHz steps) | 522kHz~1611kHz (9kHz steps)  |
| <b>50 dB quieting sensitivity:</b> | 1.0 $\mu\text{V}$ (11.2dBf)  | 18 $\mu\text{V}$                   |                              |
| <b>S/N ratio:</b>                  | MONO 1.6 $\mu\text{V}$ (15.3dBf)   |                                    |                              |
|                                    | STEREO 23 $\mu\text{V}$ (38.5dBf)  |                                    |                              |
| <b>Total harmonic distortion:</b>  | MONO 80dB (IHF-A weighted)   |                                    |                              |
|                                    | STEREO 75dB (IHF-A weighted)   |                                    |                              |
|                                    | MONO 0.15% (1kHz)  |                                    |                              |
|                                    | STEREO 0.3% (1kHz)   |                                    |                              |

## ■ General

|                                     |   |
|-------------------------------------|---|
| <b>Power supply:</b>                | AC120V, 60Hz (U.S.A. & Canada Models)<br>AC230V, 50Hz (Europe, U.K. & Australia Models)<br>AC115/230V, 50/60Hz (Asia Model) |
| <b>Power consumption:</b>           | 4.0A (USA & Canada model)<br>210W (Europe, U.K., Australia & Asia models)   |
| <b>Maximum external dimensions:</b> | 434 (W) × 147 (H) × 417 (D) mm (17-3/32" × 5-25/32" × 1-23/64")   |
| <b>Mass:</b>                        | 10.4kg (22 lbs 14.9 oz)   |

## ■ Remote control unit (RC-920)

|                             |  |
|-----------------------------|--|
| <b>Batteries:</b>           | R6P/AA Type (two batteries)                                    |
| <b>External dimensions:</b> | 55 (W) × 225 (H) × 34.5 (D) mm (2-11/64" × 8-55/64" × 1-9/64") |
| <b>Mass:</b>                | 165g (Approx. 5.8 oz) (including batteries)                    |

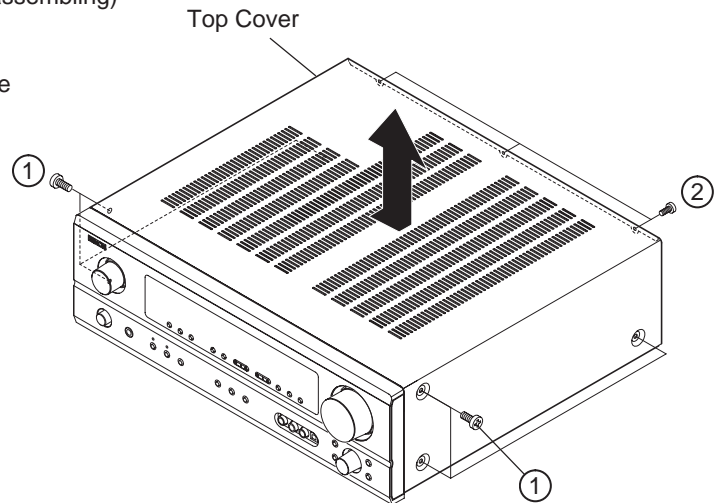
\* For purposes of improvement, specifications and design are subject to change without notice.

## DISASSEMBLY

(Follow the procedure below in the reverse order when reassembling)

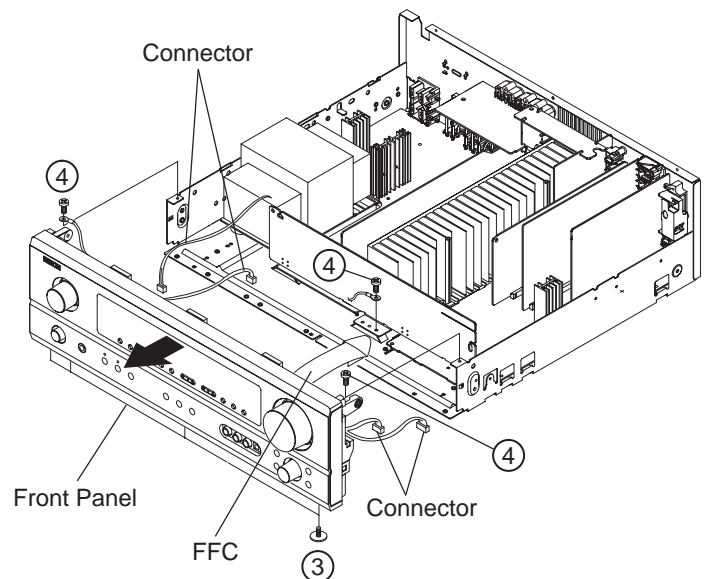
### 1. Top Cover

Remove 6 screws ① and 3 screws ②, then detach the Top Cover to the arrow direction.



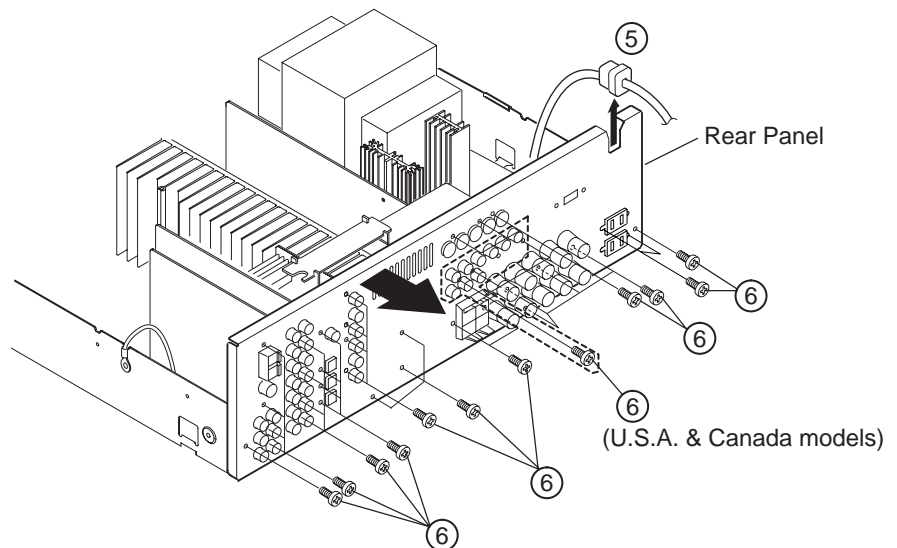
### 2. Front Panel

- (1) Remove 4 screws ③ and 3 screws ④.
- (2) Disconnect 3 connectors and FFC coming from the Front Panel side.
- (3) Disconnect the connector coming from the Trans., and detach the Front Panel to the arrow direction.



### 3. Rear Panel

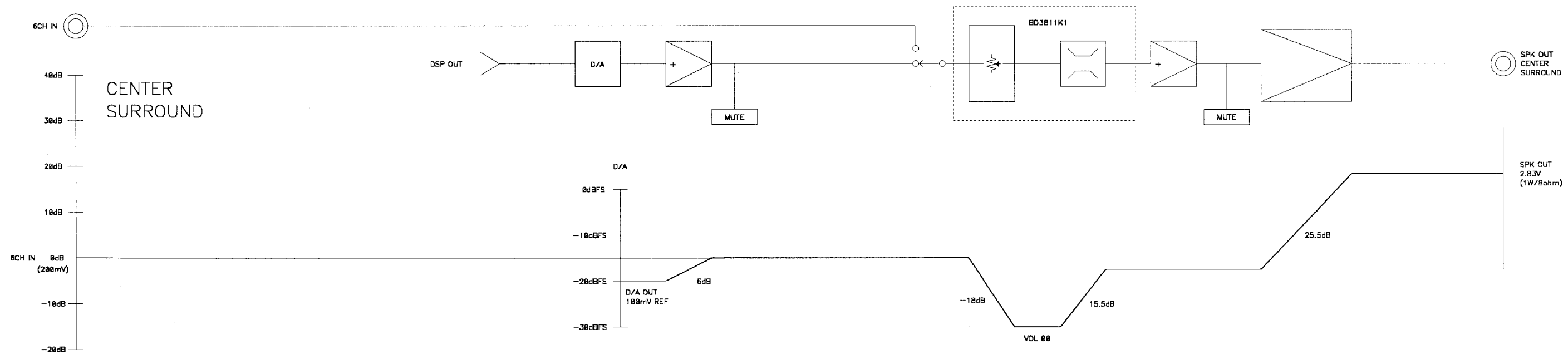
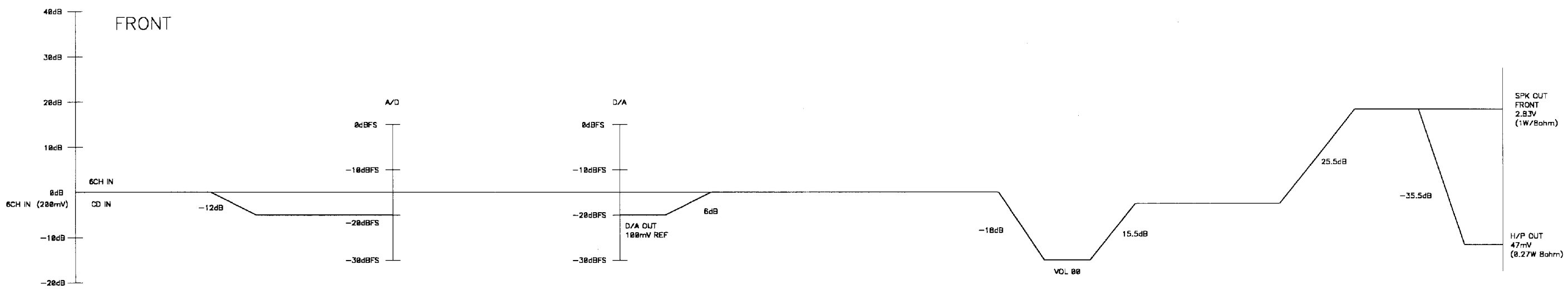
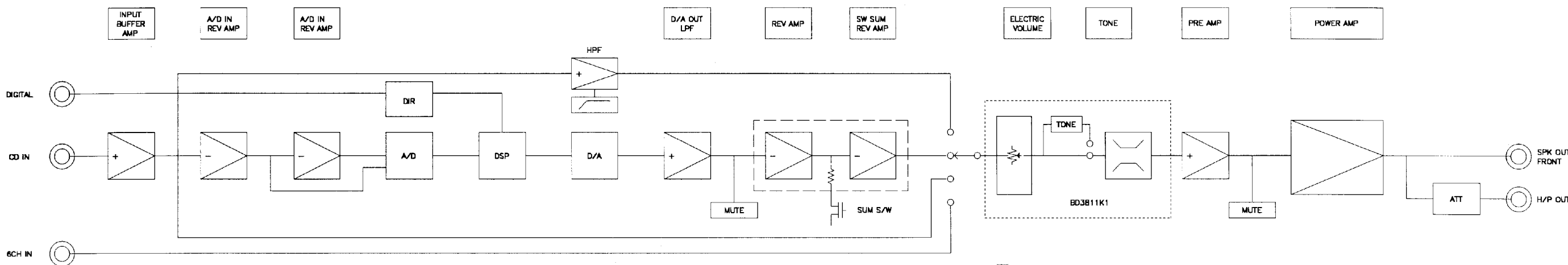
- (1) Take off the AC cord ⑤.
- (2) Remove 32 screws ⑥ (36 pieces for U.S.A. & Canada models).
- (3) Detach the Rear Panel to the arrow direction.



LEVEL DIAGRAMS

1 2 3 4 5 6 7 8

FRONT/CENTER/SURROUND

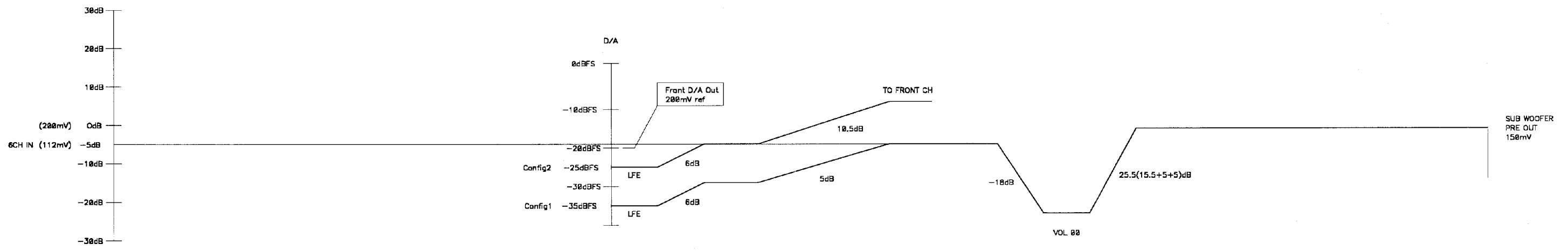
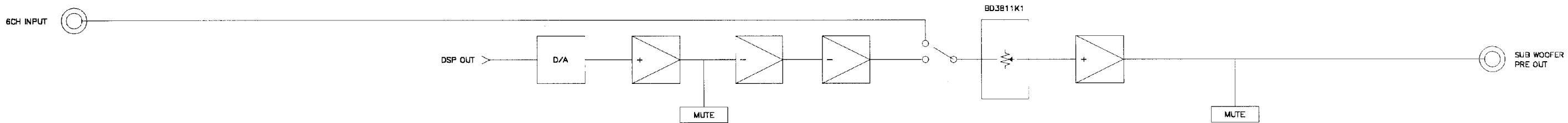


A  
B  
C  
D  
E

1 2 3 4 5 6 7 8

SUB WOOFER

SUB\_WOOFER



A

B

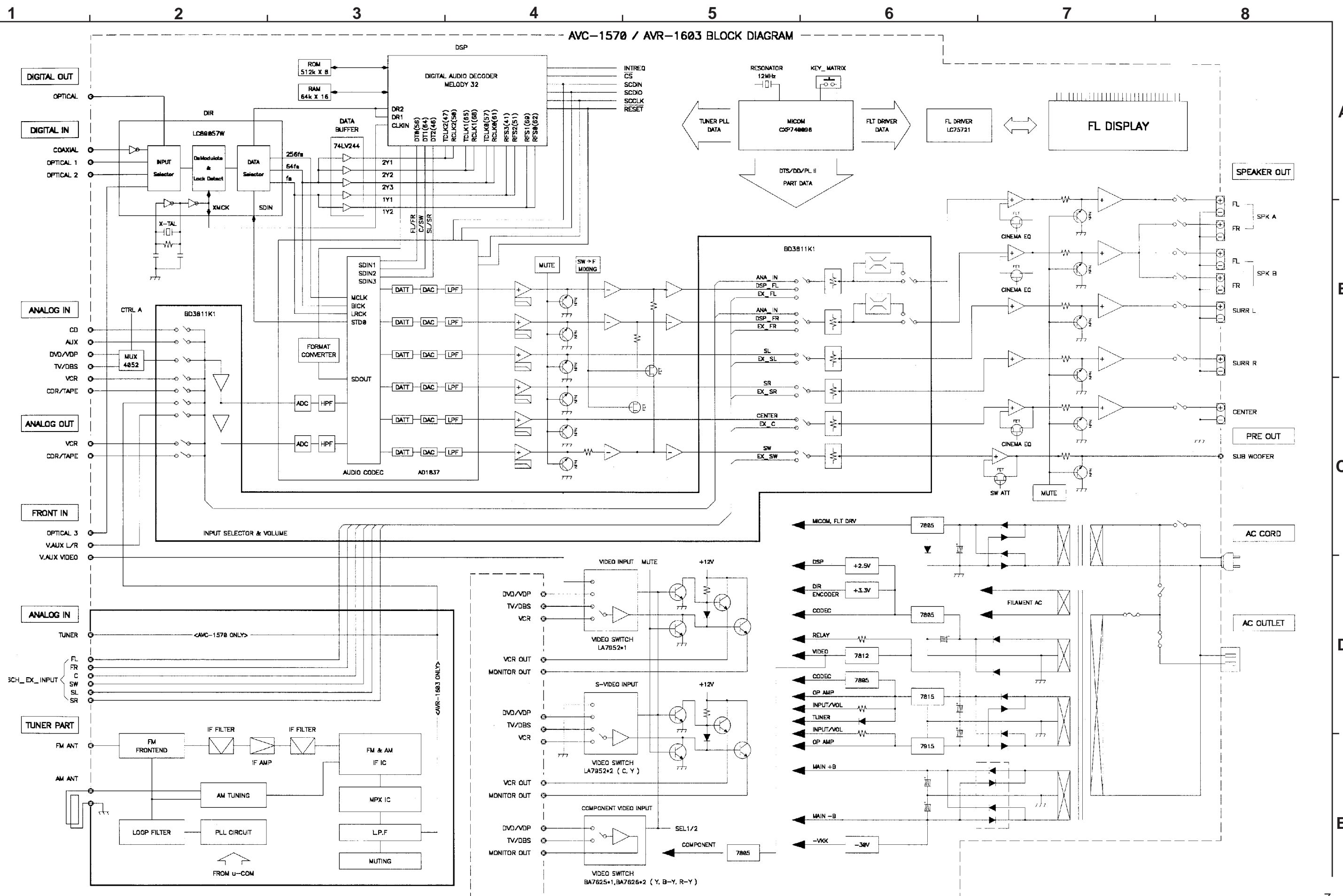
C

D

E

BLOCK DIAGRAM

AVC-1570 / AVR-1603 BLOCK DIAGRAM



A

B

C

D

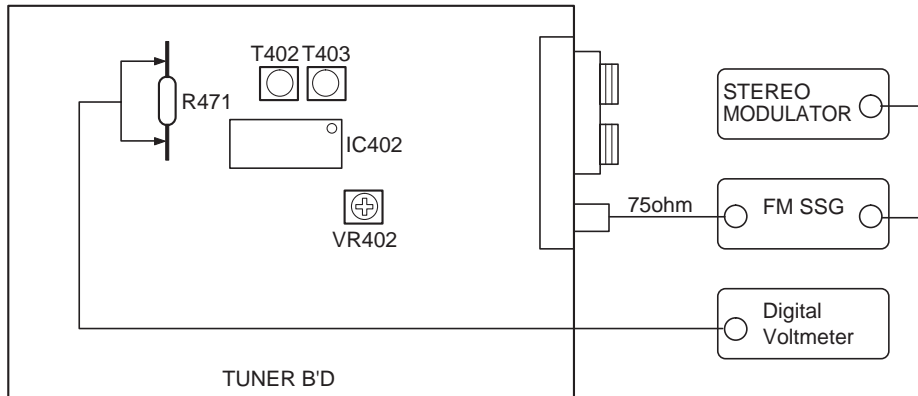
E

# ADJUSTMENT

## Tuner Section

### CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

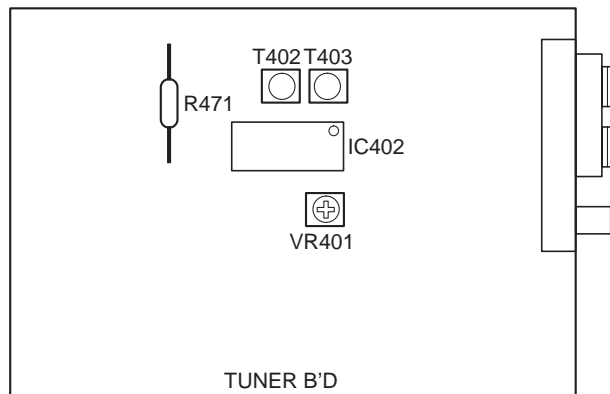
● FM



### FM ALIGNMENT

| Step | Alignment Item       | Tuning Frequency Setting | Input  |           |             |                |                  | Output                      |                     | Adjustment |                                       |
|------|----------------------|--------------------------|--------|-----------|-------------|----------------|------------------|-----------------------------|---------------------|------------|---------------------------------------|
|      |                      |                          | Type   | Frequency | Input Level | Modulation     | Coupling         | Type                        | Connect to          | Points     | Adjust to                             |
| 1    | Center Adjustment    | 98.1MHz (98.0MHz)        | FM SSG | 98.1MHz   | 60dBμ       | Mono 1kHz 100% | Antenna Terminal | Digital Voltmeter           | R471                | T402       | ± 50mV                                |
| 2    | Distortion           | 98.1MHz (98.0MHz)        | FM SSG | 98.1MHz   | 60dBμ       | Mono 1kHz 100% | Antenna Terminal | Distortion Meter            | Output Terminal (L) | T403       | Minimum Distortion                    |
| 3    | Repeat Steps 1 and 2 |                          |        |           |             |                |                  |                             |                     |            |                                       |
| 4    | Signal Level         | 98.1MHz (98.0MHz)        | FM SSG | 98.1MHz   | 20dBμ       | OFF            | Antenna Terminal | Light "TUNED" on FL Display | VR402               |            | 20 <sup>+14</sup> / <sub>-10</sub> dB |

● AM



### AM ALIGNMENT

| Step | Alignment Item | Frequency      | Input  | Output |            | Adjustment |                             | Remarks                |
|------|----------------|----------------|--------|--------|------------|------------|-----------------------------|------------------------|
|      |                |                |        | Type   | Connect to | Points     | Adjust to                   |                        |
| 1    | Signal Level   | 999 (1000) kHz | AM SSG | —      | —          | VR401      | Light "TUNED" on FL Display | SSG OUTPUT 74dBμ (EMF) |



## Audio Section

### Idling Current

Required measurement equipment : DC Voltmeter

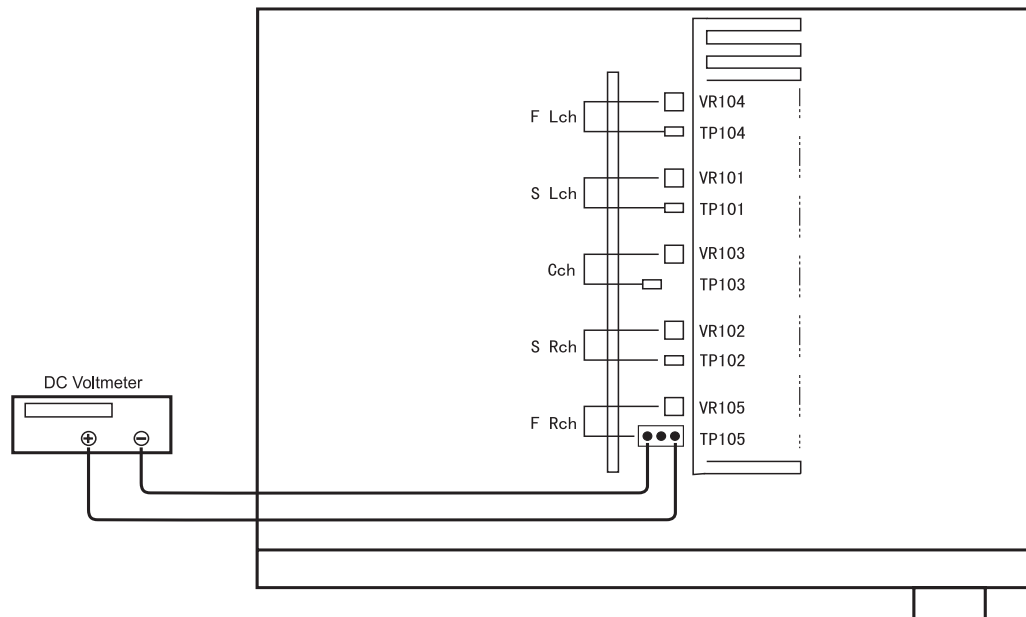
### Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 15 °C ~ 30 °C (59 °F ~ 86 °F).
- (2) Presetting
  - POWER (Power source switch) → OFF
  - SPEAKER (Speaker terminal) → No load (Do not connect speaker, dummy resistor, etc.)

### Adjustment

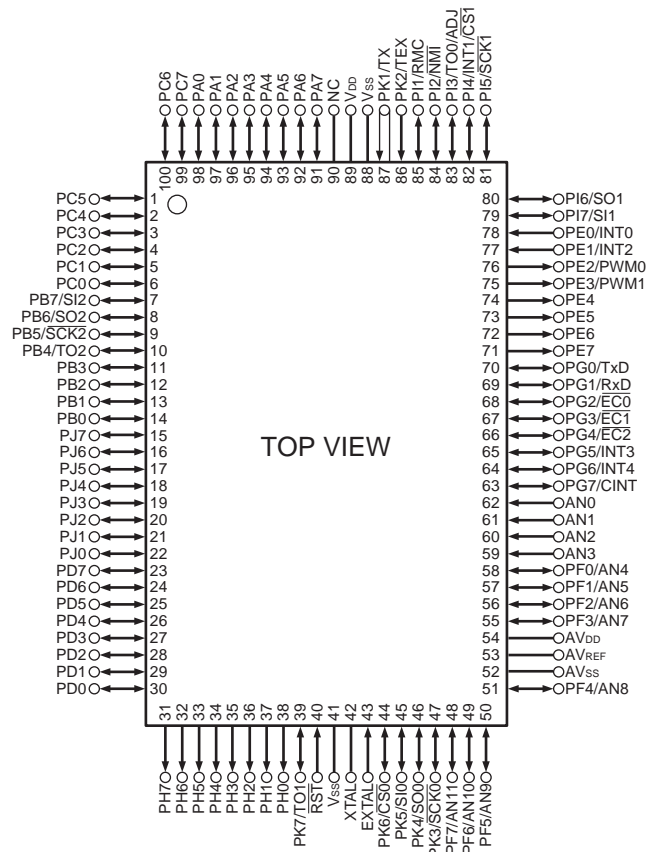
- (1) Remove top cover and set VR101, VR102, VR103, VR104, VR105 on Amp. Unit at full counterclockwise ( ⚙ ) position.
- (2) Connect DC Voltmeter to test points (FRONT-Lch: TP104, FRONT-Rch: TP105, CENTER ch: TP103, SURROUND-Lch: TP101, SURROUND-Rch: TP102).
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.
 

|               |              |                            |
|---------------|--------------|----------------------------|
| MASTER VOLUME | : "---       | counterclockwise ( ⚙ min.) |
| MODE          | : 5CH STEREO |                            |
| FUNCTION      | : CD         |                            |
- (5) Within 2 minutes after the power on, turn VR101 clockwise ( ⚙ ) to adjust the TEST POINT voltage to 1.5 mV  $\pm$ 0.5 mV DC.
- (6) After 10 minutes from the preset above, turn VR101 to set the voltage to 2.5 mV  $\pm$ 0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.



# SEMICONDUCTORS

- IC's
  - CXP740096
  - (IC201)



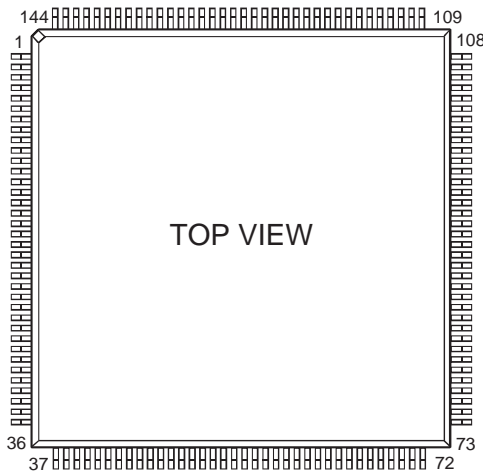
## CXP740096 Terminal Function

| Pin No. | Pin Name     | I/O | Function                 |
|---------|--------------|-----|--------------------------|
| 1       | 3811K1MUTE   | O   | BD3811K1 CONTROL         |
| 2       | 3811K1CLK    | O   | BD3811K1 CONTROL         |
| 3       | 3811K1DATA   | O   | BD3811K1 CONTROL         |
| 4       | CDR/TAPE     | O   | CDR/TAPE INHIBIT         |
| 5       | VCR          | O   | VCR INHIBIT              |
| 6       | ERR MUTE     | O   | ERR MUTE                 |
| 7       | ERR MUTE OFF | O   | ERR MUTE OFF             |
| 8       | 89057 AUDIO  | I   | LC89057 CONTROL          |
| 9       | 89057 EMPHA  | I   | LC89057 CONTROL          |
| 10      | SW SUM       | O   | SW SUMMING CONTROL       |
| 11      | M32 SDIN     | I   | DATA INPUT FROM MELODY32 |
| 12      | 89057 SDIN   | I   | DATA INPUT FROM LC89057  |
| 13      | EPROM RESET  | O   | EPROM RESET              |
| 14      | 89057 RESET  | O   | LC89057 RESET            |
| 15      | M32 CS       | O   | MELODY32 CS              |
| 16      | M32 SDOUT    | O   | MELODY32 CONTROL DATA    |
| 17      | 89057 CE     | O   | LC89057 CE               |
| 18      | 89057 SDOUT  | O   | CONTROL DATA             |
| 19      | 89057 SCLK   | O   | CONTROL CLOCK            |
| 20      | 1837 RESET   | O   | CODEC RESET              |
| 21      | NC           | —   |                          |
| 22      | SW MUTE      | O   | SW MUTE                  |
| 23      | RELAY F-B    | O   | FRONT B RELAY            |

| Pin No. | Pin Name        | I/O | Function                |
|---------|-----------------|-----|-------------------------|
| 24      | RELAY F-A       | O   | FRONT A RELAY           |
| 25      | RELAY SURR      | O   | SURROUND RELAY          |
| 26      | RELAY CNT       | O   | CENTER RELAY            |
| 27      | RELAY H/P       | O   | H/P RELAY               |
| 28      | FUNC UP         | I   | ENCODER INPUT(FUNCTION) |
| 29      | H/P DETECT      | I   | H/P DETECT              |
| 30      | FUNC DOWN       | I   | ENCODER INPUT(FUNCTION) |
| 31      | NC              | —   |                         |
| 32      | CNT MUTE        | O   | CENTER MUTE             |
| 33      | FRONT MUTE      | O   | FRONT MUTE              |
| 34      | SURR MUTE       | O   | SURROUND MUTE           |
| 35      | NC              | —   |                         |
| 36      | NC              | —   |                         |
| 37      | NC              | —   |                         |
| 38      | FL DRV RESET    | O   | LC75721NE RESET         |
| 39      | RELAY POWER     | O   | POWER RELAY             |
| 40      | RESET           | I   | RESET                   |
| 41      | GND             | I   |                         |
| 42      | XTAL            | —   |                         |
| 43      | EXTAL           | —   |                         |
| 44      | FL DRV CE       | O   | LC75721NE CE            |
| 45      | FL DRV DATA     | O   | LC75721NE DATA          |
| 46      | FL DRV/2090 CLK | O   | CONTROL CLOCK           |
| 47      | 2090 DATA       | O   | BU2090F DATA            |
| 48      | VOL DOWN        | I   | ENCODER INPUT(VOLUME)   |
| 49      | VOL UP          | I   | ENCODER INPUT(VOLUME)   |
| 50      | SEL DOWN        | I   | ENCODER INPUT(SELECT)   |
| 51      | SEL UP          | I   | ENCODER INPUT(SELECT)   |
| 52      | AVSS            | —   |                         |
| 53      | VREF            | —   |                         |
| 54      | AVDD            | —   |                         |
| 55      | NC              | —   |                         |
| 56      | GND             | —   |                         |
| 57      | STEP OPT        | I   | AREA SELECT             |
| 58      | SET OPT         | I   | MODEL SELECT            |
| 59      | GND             | —   |                         |
| 60      | KEY IN3         | I   | KEY INPUT               |
| 61      | KEY IN2         | I   | KEY INPUT               |
| 62      | KEY IN1         | I   | KEY INPUT               |
| 63      | 9K/10K STEP     | I   | TUNER STEP SELECT       |
| 64      | PROTECT         | I   | PROTECTION              |
| 65      | 89057 INT       | I   | LC89057 INTERRUPT       |
| 66      | M32 SCLK        | O   | MELODY32 CLOCK          |
| 67      | 1837 CE         | O   | CODEC CE                |
| 68      | M32 RESET       | O   | MELODY32 RESET          |
| 69      | NC              | —   |                         |
| 70      | NC              | —   |                         |
| 71      | NC              | —   |                         |
| 72      | NC              | —   |                         |
| 73      | NC              | —   |                         |
| 74      | NC              | —   |                         |
| 75      | NC              | —   |                         |
| 76      | NC              | —   |                         |

| Pin No. | Pin Name   | I/O | Function                    |
|---------|------------|-----|-----------------------------|
| 77      | PWR DOWN   | I   | POWER DOWN DETECT           |
| 78      | RDS CLK    | O   | TDA7330 CONTROL CLOCK       |
| 79      | RDS DATA   | O   | TDA7330 CONTROL DATA        |
| 80      | NC         | —   |                             |
| 81      | VIDEO MUTE | O   | VIDEO MUTE                  |
| 82      | M32 INTREQ | I/O | MELODY32 CONTROL            |
| 83      | VIDEO SEL1 | O   | VIDEO SELECT1               |
| 84      | VIDEO SEL2 | O   | VIDEO SELECT2               |
| 85      | REMOCON    | I   | REMOTE CONTROL SIGNAL INPUT |
| 86      | GND        | —   |                             |
| 87      | GND        | —   |                             |
| 88      | VSS        | —   |                             |
| 89      | VDD        | —   |                             |
| 90      | NC         | —   |                             |
| 91      | NC         | —   |                             |
| 92      | PLL DATA   | O   | PLL CONTROL                 |
| 93      | PLL CLK    | O   | PLL CONTROL                 |
| 94      | PLL DT IN  | O   | PLL CONTROL                 |
| 95      | TU MUTE    | O   | TUNER MUTE                  |
| 96      | STEREO     | I   | STEREO DETECT               |
| 97      | TUNED      | I   | TUNED DETECT                |
| 98      | PLL CE     | O   | PLL CONTROL                 |
| 99      | NC         | —   |                             |
| 100     | NC         | —   |                             |

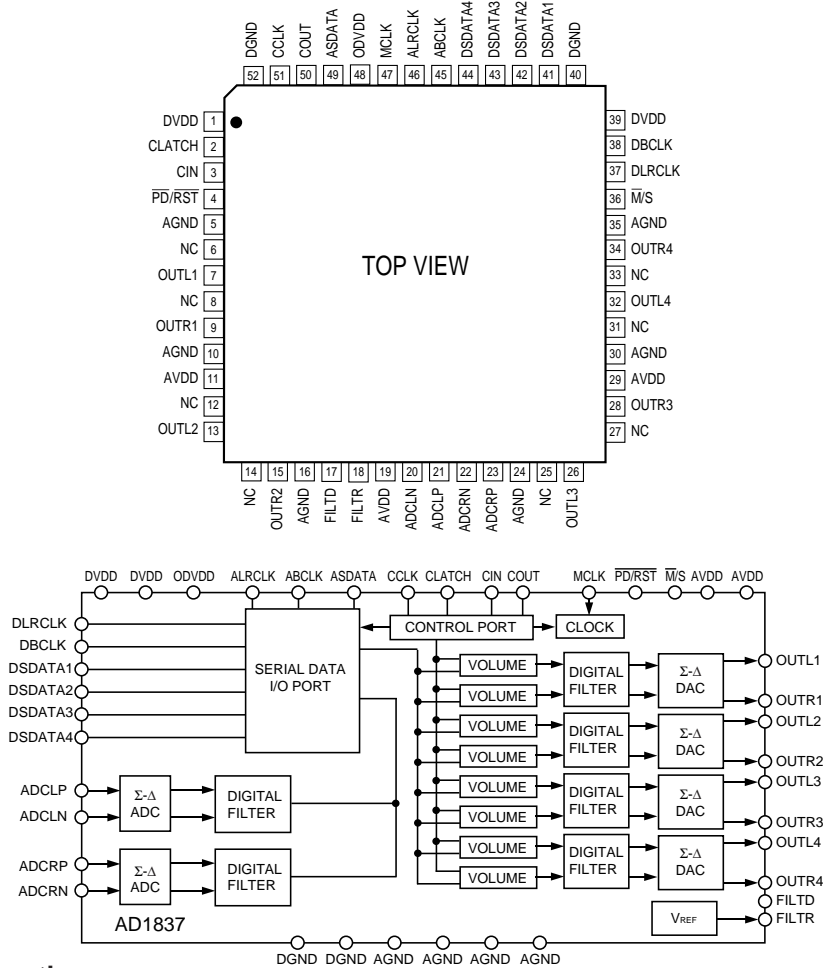
MELODY32 (IC802)



MELODY32 Terminal Function

| Pin No. | Pin Name           | Pin No. | Pin Name           | Pin No. | Pin Name           | Pin No. | Pin Name           | Pin No. | Pin Name           | Pin No. | Pin Name           |
|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 1       | D14                | 25      | V <sub>DDEXT</sub> | 49      | DR2                | 73      | RESET              | 97      | A11                | 121     | WR                 |
| 2       | D15                | 26      | HACK               | 50      | RCLK2              | 74      | TDO                | 98      | A12                | 122     | RD                 |
| 3       | HAD0               | 27      | HCMS               | 51      | RFS2               | 75      | TDI                | 99      | A13                | 123     | D0                 |
| 4       | HAD1               | 28      | HCIOMS             | 52      | RXD                | 76      | TMS                | 100     | V <sub>DDEXT</sub> | 124     | D1                 |
| 5       | GND                | 29      | GND                | 53      | TXD                | 77      | GND                | 101     | A14                | 125     | D2                 |
| 6       | HAD2               | 30      | HALE               | 54      | GND                | 78      | TCK                | 102     | A15                | 126     | D3                 |
| 7       | HAD3               | 31      | HRD                | 55      | GND                | 79      | TRST               | 103     | A16                | 127     | V <sub>DDINT</sub> |
| 8       | HAD4               | 32      | HWR                | 56      | DT0                | 80      | GND                | 104     | A17                | 128     | D4                 |
| 9       | HAD5               | 33      | GND                | 57      | TCLK0              | 81      | EMU                | 105     | GND                | 129     | GND                |
| 10      | HAD6               | 34      | PF0                | 58      | V <sub>DDINT</sub> | 82      | V <sub>DDINT</sub> | 106     | A18                | 130     | CLKOUT             |
| 11      | HAD7               | 35      | PF1                | 59      | TF50               | 83      | OPMODE             | 107     | A19                | 131     | V <sub>DDEXT</sub> |
| 12      | HAD8               | 36      | PF2                | 60      | DR0                | 84      | A0                 | 108     | A20                | 132     | CLKIN              |
| 13      | V <sub>DDEXT</sub> | 37      | PF3                | 61      | RCLK0              | 85      | A1                 | 109     | A21                | 133     | XTAL               |
| 14      | HAD9               | 38      | PF4                | 62      | RFS0               | 86      | A2                 | 110     | BGH                | 134     | GND                |
| 15      | HAD10              | 39      | PF5                | 63      | V <sub>DDEXT</sub> | 87      | A3                 | 111     | BG                 | 135     | D5                 |
| 16      | GND                | 40      | V <sub>DDEXT</sub> | 64      | DT1                | 88      | A4                 | 112     | BR                 | 136     | D6                 |
| 17      | HAD11              | 41      | PF6                | 65      | TCLK1              | 89      | A5                 | 113     | BMS                | 137     | D7                 |
| 18      | HAD12              | 42      | PF7                | 66      | TFS1               | 90      | V <sub>DDEXT</sub> | 114     | IOMS               | 138     | D8                 |
| 19      | V <sub>DDINT</sub> | 43      | TMR0               | 67      | DR1                | 91      | A6                 | 115     | MS0                | 139     | D9                 |
| 20      | HAD13              | 44      | TMR1               | 68      | RCLK1              | 92      | A7                 | 116     | MS1                | 140     | D10                |
| 21      | HAD14              | 45      | TMR2               | 69      | RFS1               | 93      | A8                 | 117     | MS2                | 141     | D11                |
| 22      | HAD15              | 46      | DT2                | 70      | BMODE0             | 94      | GND                | 118     | V <sub>DDEXT</sub> | 142     | D12                |
| 23      | HA16               | 47      | TCLK2              | 71      | BMODE1             | 95      | A9                 | 119     | MS3                | 143     | V <sub>DDEXT</sub> |
| 24      | HACK_P             | 48      | TFS2               | 72      | BYPASS             | 96      | A10                | 120     | ACK                | 144     | D13                |

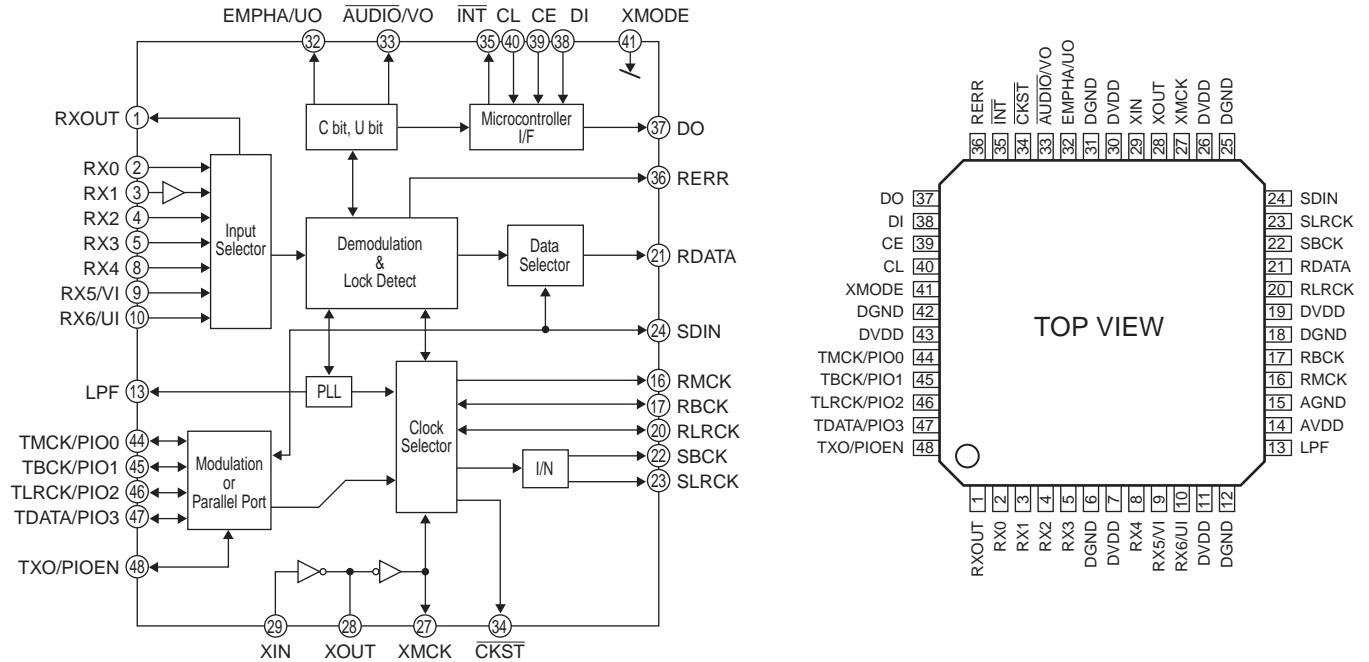
AD1837 (IC808)



AD1837 Terminal Function

| Pin No.          | Pin Name | Input/Output | Description  |
|------------------|----------|--------------|--|
| 1,39             | DVDD     |              | Digital Power Supply. Connect to digital 5V supply.            |
| 2                | CLATCH   | I            | Latch Input for Control Data                                   |
| 33               | CIN      | I            | Serial Control Input   |
| 4                | PD/RST   | I            | Power-Down/Reset   |
| 5,10,16,24,30,35 | AGND     |              | Analog Ground  |
| 6,12,25,31       | NC       |              | Not connected  |
| 7,13,26,32       | OUTLx    | O            | DACx Left Channel Output                                       |
| 8,14,27,33       | NC       |              | Not connected  |
| 9,15,28,34       | OUTRx    | O            | DACx Right Channel Output                                      |
| 11,19,29         | AVDD     |              | Analog Power Supply. Connect to analog 5V supply.              |
| 17               | FILTD    |              | Filter Capacitor Connection. Recommend 10μF/100nF.             |
| 18               | FILTR    |              | Reference Filter Capacitor Connection. Recommended 10μF/100nF. |
| 20               | ADCLN    | I            | ADC Left Channel Negative Input                                |
| 21               | ADCLP    | I            | ADC Left Channel Positive Input                                |
| 22               | ADCRN    | I            | ADC Right Channel Negative Input                               |
| 23               | ADCRP    | I            | ADC Right Channel Positive Input                               |
| 36               | M/S      | I            | ADC Master/Slave Select  |
| 37               | DLRCLK   | I/O          | DAC LR Clock   |
| 38               | DBCLK    | I/O          | DAC Bit Clock  |
| 40,52            | DGND     |              | Digital Ground   |
| 41-44            | DSDATAx  | I            | DACx Input Data (Left and Right Supply)                        |
| 45               | ABCLK    | I/O          | ADC Bit Clock  |
| 46               | ALRCLK   | I/O          | ADC LR Clock   |
| 47               | MCLK     | I            | Master Clock Input   |
| 48               | ADVDD    |              | Digital Output Driver Power Supply                             |
| 49               | ASDATA   | O            | ADC Serial Data Output   |
| 50               | COUT     | O            | Output for Control Data  |
| 51               | CCLK     | I            | Control Clock Input for Control Data                           |

LC89057W (IC807)



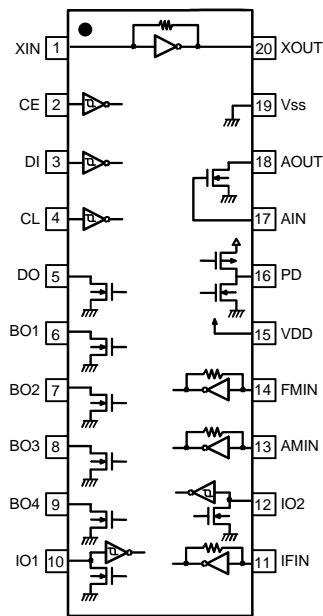
LC89057W Terminal Function

| Pin No. | Pin Name | I/O            | Function  |
|---------|----------|----------------|---|
| 1       | RXOUT    | O              | Input bi-phase select data output terminal                              |
| 2       | RX0      | I <sub>s</sub> | TTL compatible digital data input terminal                              |
| 3       | RX1      | I              | Coaxial compatible amp built-in digital data input terminal             |
| 4       | RX2      | I <sub>s</sub> | TTL compatible digital data input terminal                              |
| 5       | RX3      | I <sub>s</sub> | TTL compatible digital data input terminal                              |
| 6       | DGND     | —              | Digital GND   |
| 7       | DVDD     | —              | Digital power   |
| 8       | RX4      | I <sub>s</sub> | TTL compatible digital data input terminal                              |
| 9       | RX5/VI   | I <sub>s</sub> | TTL compatible digital data/Validity flag input terminal for modulation |
| 10      | RX6/UI   | I <sub>s</sub> | TTL compatible digital data/User data input terminal for modulation     |
| 11      | DVDD     | —              | Digital power for PLL   |
| 12      | DGND     | —              | Digital GND for PLL   |
| 13      | LPF      | O              | PLL loop filter connecting terminal                                     |
| 14      | AVDD     | —              | Analog power for PLL  |
| 15      | AGND     | —              | Analog GND for PLL  |
| 16      | RMCK     | O              | RMCK clock output terminal (256fs, 512fs, XIN, VCO)                     |
| 17      | RBCK     | O/I            | RBCK clock in/output terminal (64fs)                                    |
| 18      | DGND     | —              | Digital GND   |
| 19      | DVDD     | —              | Digital power   |
| 20      | RLRCK    | O/I            | RLRCK clock in/output terminal (fs)                                     |
| 21      | RDATA    | O              | Serial audio data output terminal                                       |
| 22      | SBCK     | O              | SBCK clock output terminal (32fs, 64fs, 128fs)                          |
| 23      | SLRCK    | O              | SLRCK clock output terminal (fs/2, fs, 2fs)                             |
| 24      | SDIN     | I <sub>s</sub> | Serial audio data input terminal  |
| 25      | DGND     | —              | Digital GND   |
| 26      | DVDD     | —              | Digital power   |
| 27      | XMCK     | O              | Osc. amp output terminal  |

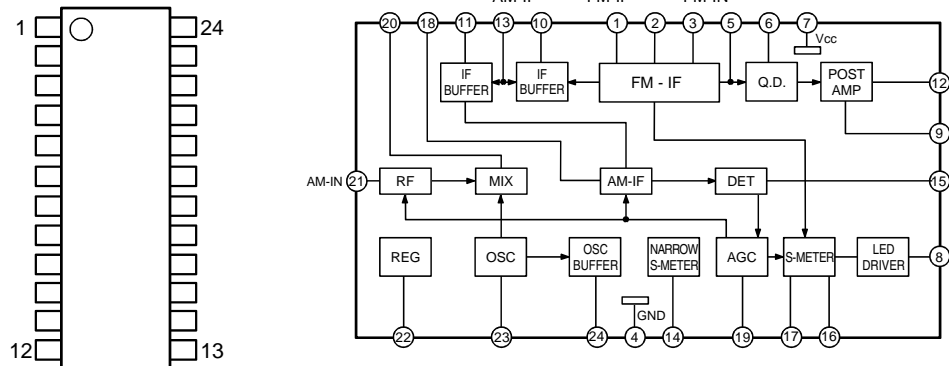
| Pin No. | Pin Name   | I/O            | Function  |
|---------|------------|----------------|---|
| 28      | XOUT       | O              | X'tal osc. connecting output terminal   |
| 29      | XIN        | I              | X'tal osc. connection, external clock input terminal (24.576MHz or 12.288MHz)                             |
| 30      | DVDD       | —              | Digital power   |
| 31      | DGND       | —              | Digital GND   |
| 32      | EMPHA/UO   | I/O            | Emphasis information/U-data output/Chip address setting terminal  |
| 33      | AUDIO/VO   | I/O            | Non-PCM detect/V-flag output/ Chip address setting terminal   |
| 34      | CKST       | I/O            | Clock switch transition period output/Demodulation master or slave function switching terminal            |
| 35      | INT        | I/O            | Interrupt output for $\mu$ com (Interrupt factor selectable)/Modulation or general I/O switching terminal |
| 36      | RERR       | O              | PLL lock error, data error flag output  |
| 37      | DO         | O              | $\mu$ com I/F, read out data output terminal (3-state)  |
| 38      | DI         | I <sub>s</sub> | $\mu$ com I/F, write data input terminal  |
| 39      | CE         | I <sub>s</sub> | $\mu$ com I/F, chip enable input terminal   |
| 40      | CL         | I <sub>s</sub> | $\mu$ com I/F, clock input terminal   |
| 41      | XMODE      | I <sub>s</sub> | System reset input terminal   |
| 42      | DGND       | —              | Digital GND   |
| 43      | DVDD       | —              | Digital power   |
| 44      | TMCK/PIO0  | I/O            | 256fs system clock input for modulation/General I/O in/output terminal                                    |
| 45      | TBCK/PIO1  | I/O            | 64fs bit clock input for modulation/General I/O in/output terminal  |
| 46      | TLRCK/PIO2 | I/O            | fs clock input for modulation/General I/O in/output terminal  |
| 47      | TDATA/PIO3 | I/O            | Serial audio data input for modulation/General I/O in/output terminal                                     |
| 48      | TXO/PIOEN  | O/I            | Modulation data output/ General I/O enable input terminal   |

\* For latch-up countermeasure, perform each power supply ON/OFF in the same timing.

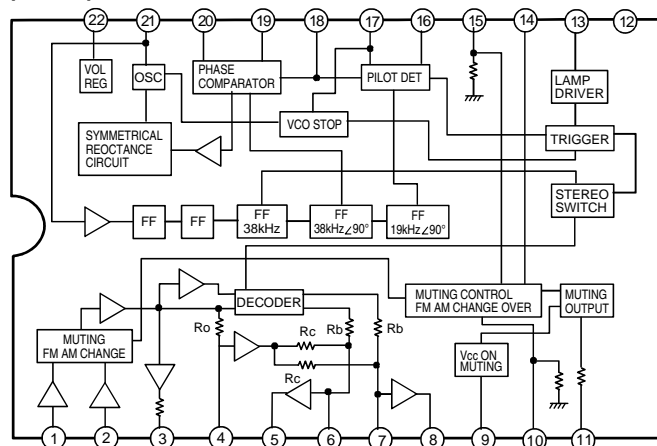
**LC72131 (IC401)**



**LA1266 (IC402)**

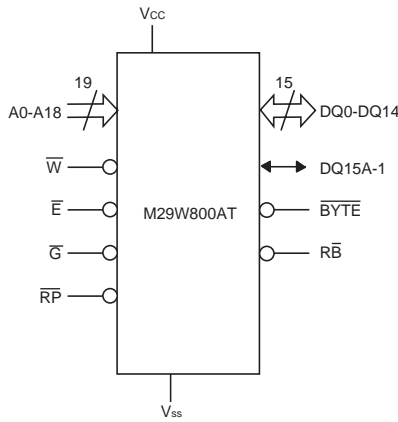
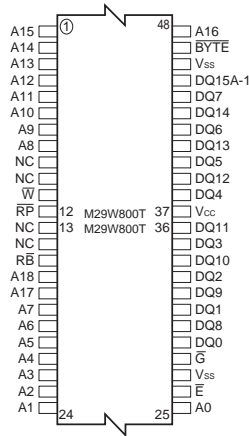


**LA3401 (IC403)**





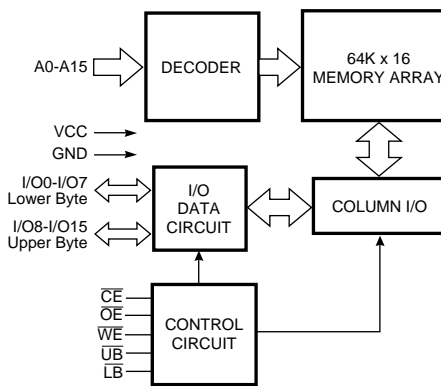
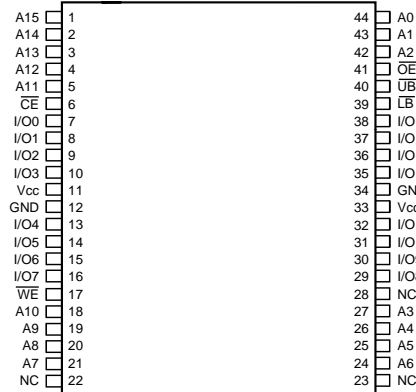
### M29W800AT (IC805)



### PIN DESCRIPTION

| Symbol           | Pin Name                           |
|------------------|------------------------------------|
| A0-A18           | Address Inputs                     |
| DQ0-DQ7          | Data Input/Outputs, Command Inputs |
| DQ8-DQ14         | Data Input/Outputs                 |
| DQ15A-1          | Data Input/Output or Address Input |
| $\bar{E}$        | Chip Enable                        |
| $\bar{G}$        | Output Enable                      |
| $\bar{W}$        | Write Enable                       |
| $\bar{R}\bar{P}$ | Reset/Block Temporary Unprotect    |
| $\bar{R}\bar{B}$ | Ready/Busy Output                  |
| BYTE             | Byte/Word Organization             |
| Vcc              | Supply Voltage                     |
| Vss              | Ground                             |
| NC               | No Connected Internally            |
| DU               | Don't Use as Internally Connected  |

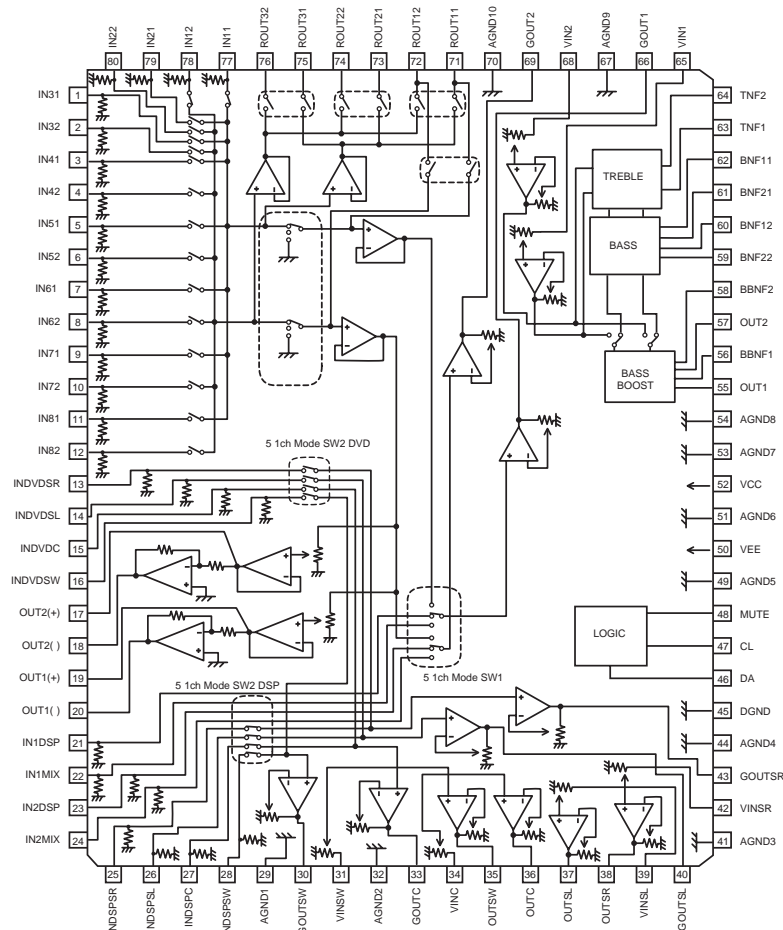
### IS61LV6416 (IC806)



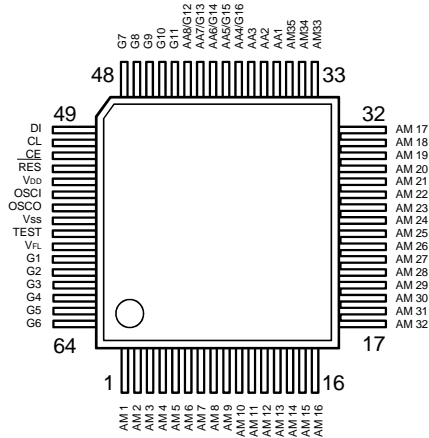
### PIN DESCRIPTION

| Symbol           | Pin Name                        |
|------------------|---------------------------------|
| A0-A15           | Address inputs                  |
| I/O0-I/O15       | Data Inputs/Outputs             |
| $\bar{C}\bar{E}$ | Chip Enable Input               |
| $\bar{O}\bar{E}$ | Output Enable Input             |
| $\bar{W}\bar{E}$ | Write Enable Input              |
| $\bar{L}\bar{B}$ | Lower-byte Control (I/O0-I/O7)  |
| $\bar{U}\bar{B}$ | Upper-byte Control (I/O8-I/O15) |
| NC               | No Connection                   |
| Vcc              | Power                           |
| GND              | Ground                          |

### BD3811K1 (IC701)



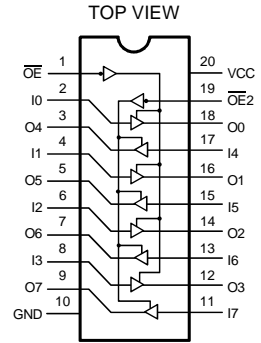
**LC75721E (IC301)**



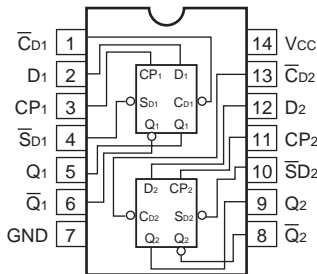
**LC75721E Terminal Function**

| Symbol          | Function                        |
|-----------------|---------------------------------|
| V <sub>DD</sub> | Power terminal +5V              |
| V <sub>SS</sub> | Power terminal GND              |
| V <sub>FL</sub> | Power terminal FL drive         |
| DI              | Serial data transfer terminal   |
| CL              | DI: Data                        |
| CE              | CL: Clock                       |
|                 | CE: Chip enable                 |
| OSCI            | External CR connecting terminal |
| OSCO            |                                 |
| RES             | System reset terminal           |
| AM1~AM35        | Anode output terminal           |
| AA1~AA3         |                                 |
| AA4/G16         |                                 |
| AA5/G15         | Anode/Grid output terminal      |
| AA6/G14         |                                 |
| AA7/G13         |                                 |
| AA8/G12         |                                 |
| G1~G11          | Grid output terminal            |
| TEST            | LSI test terminal               |

**MM74LCX244 (IC809~811)**



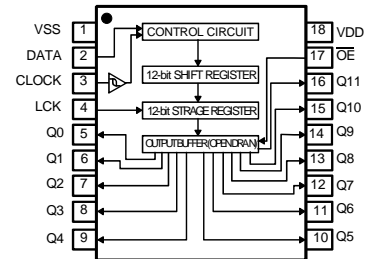
**74LCX74 (IC821)**



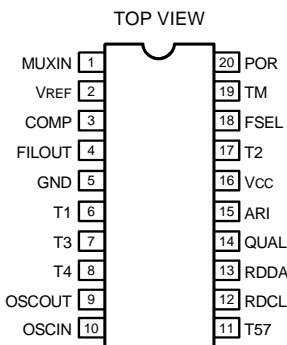
**Pin Descriptions**

| Pin Names   | Description         |
|---|---------------------|
| D <sub>1</sub> , D <sub>2</sub>                                   | Data Inputs         |
| CP <sub>1</sub> , CP <sub>2</sub>                                 | Clock Pulse Inputs  |
| CD <sub>1</sub> , CD <sub>2</sub>                                 | Direct Clear Inputs |
| SD <sub>1</sub> , SD <sub>2</sub>                                 | Direct Set Inputs   |
| Q <sub>1</sub> , Q <sub>1</sub> , Q <sub>2</sub> , Q <sub>2</sub> | Outputs             |

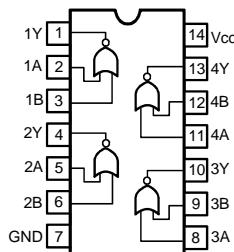
**BU2090F (IC302)**



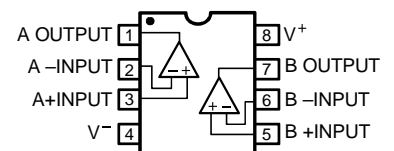
**TDA7330BD (IC202)**



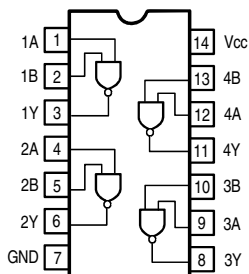
**MM74LCX02 (IC813)**



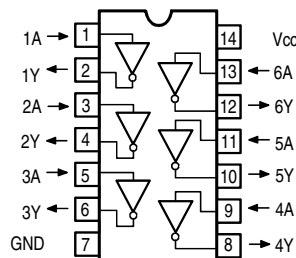
**NJM2068MD (IC815~820, 721, 761, 762, 763, 781, 782, 783, 817, 818, 819) BA4510F (IC815, 816)**



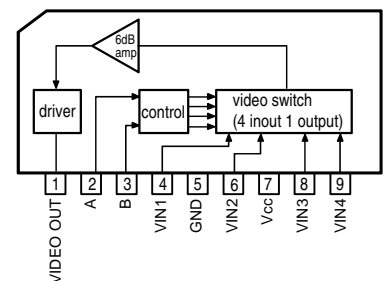
**SN74LV00APW (IC814)**



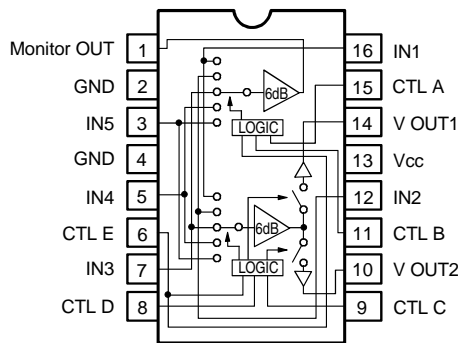
**74HCU04 (IC803)**



**LA7952 (IC601, 621, 622)**



**BA7625 (IC651)**  
**BA7626 (IC652,653)**



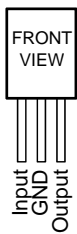
| A | B | E | MONITOR OUT |
|---|---|---|-------------|
| L | L | * | IN 1        |
| H | L | * | IN 2        |
| L | H | * | IN 3        |
| H | H | L | IN 4        |
| H | H | H | IN 5        |

| C | D | E | V OUT 1 |
|---|---|---|---------|
| L | L | * | —       |
| H | L | * | IN 2    |
| L | H | * | IN 3    |
| H | H | L | IN 4    |
| H | H | H | IN 5    |

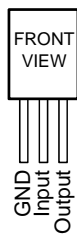
| C | D | E | V OUT 2 |
|---|---|---|---------|
| L | L | * | IN 1    |
| H | L | * | —       |
| L | H | * | IN 3    |
| H | H | L | IN 4    |
| H | H | H | IN 5    |

Note 1: \* mark means that feasible for either H or L.  
 Note 2: Each input terminal is provided with sink chip clamp (BA7625).  
 Each input terminal takes 20kohm at the end (BA7626).

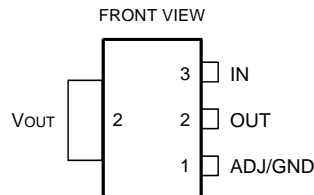
**KIA7806AP (IC602)**  
**KIA7805AP (IC104,103,822)**  
**KIA7815AP (IC101)**  
**KIA7812AP (IC271)**



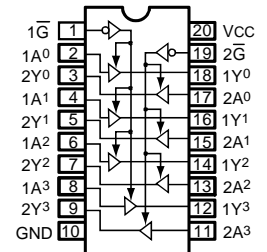
**KIA7915PI (IC102)**



**RC1117S25T (IC824)**  
**RC1117S33ST (IC823)**

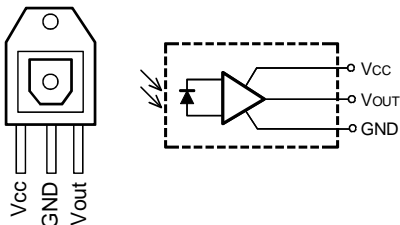


**MM74HCT244 (IC812)**

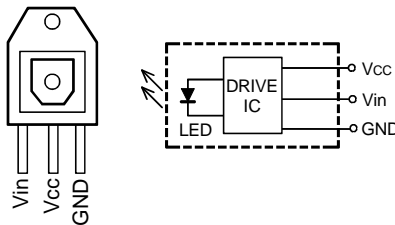


● **OPTICAL**

**INPUT**  
**GP1FA502RZ (IC801~803)**

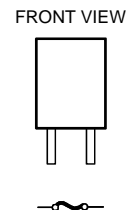


**OUTPUT**  
**GP1FA502TZ (IC817)**



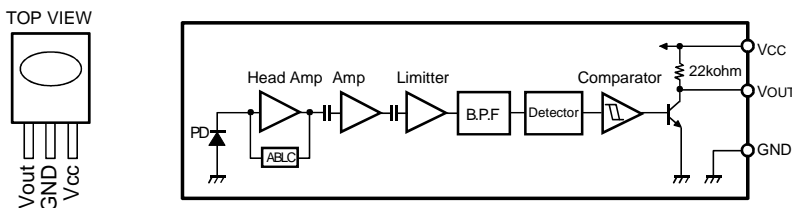
● **IC PROTECTOR**

**ICP-N15 (IC105)**



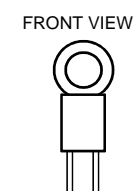
● **IR SENSOR**

**NJL64H380A (RMC301)**



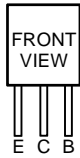
● **POSISTOR**

**P43T7D330BW16**

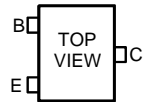


● TRANSISTORS

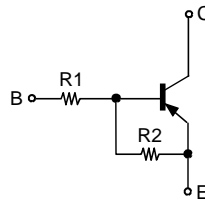
DTA114ES  
DTC114TS  
DTC114YS  
DTC144ES



DTA114EK  
DTA114YK  
DTA144EK  
DTC114EK  
DTC114YK  
DTC144EK

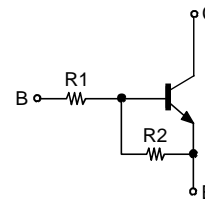


DTA Series



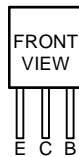
|          | R1        | R2        |
|----------|-----------|-----------|
| DTA114EK | 10kohm /Ω | 10kohm /Ω |
| DTA114ES | 10kohm /Ω | 10kohm /Ω |
| DTA114YK | 10kohm /Ω | 47kohm /Ω |
| DTA144EK | 47kohm /Ω | 47kohm /Ω |

DTC Series

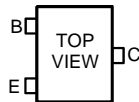


|          | R1        | R2        |
|----------|-----------|-----------|
| DTC114EK | 10kohm /Ω | 10kohm /Ω |
| DTC114TS | 10kohm /Ω | —         |
| DTC114YK | 10kohm /Ω | 47kohm /Ω |
| DTC114YS | 10kohm /Ω | 47kohm /Ω |
| DTC144EK | 47kohm /Ω | 47kohm /Ω |
| DTC144ES | 47kohm /Ω | 47kohm /Ω |

2SC1740S  
2SC3199Y  
KSA916Y  
KSA992F  
KSC1845F  
KTA1266Y  
KTA1268BL  
KTC2874B  
KTC3198Y  
KTC3200BL



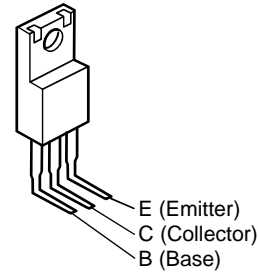
2SC2412K  
KTC3880S



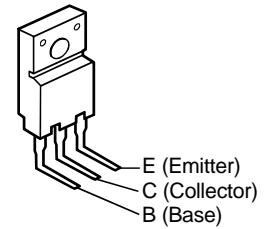
2SK117



2SD947F

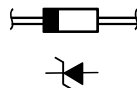


2SD3290Y  
2SB1560Y

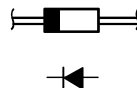


● DIODES (LED included)

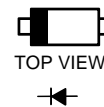
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MTZJ5.1B  
MTZJ6.8B  
MTZJ7.5A  
MTZJ8.2B  
MTZJ11B  
MTZJ18B  
MTZJ20B



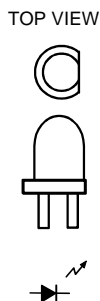
1N4007  
1SS133



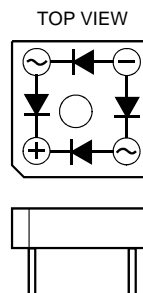
KDS160



HL-50RDRF4T

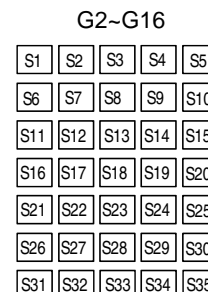
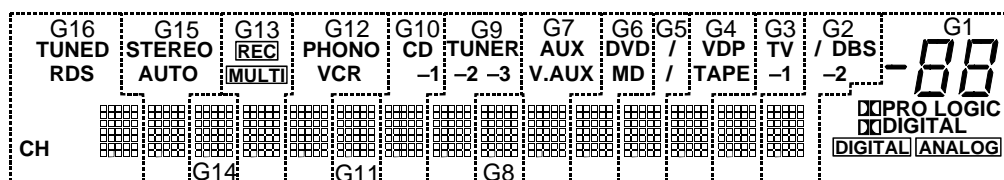
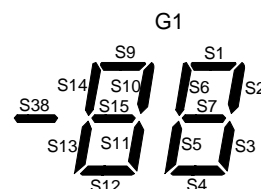
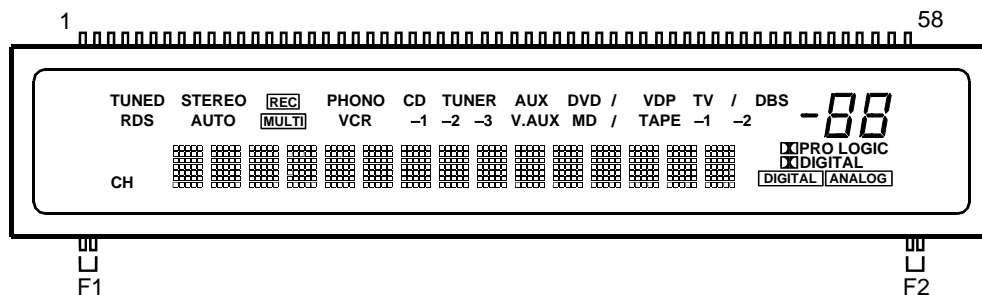


KBPC604



● FL DISPLAY

16-st-42GNK (FL301)



Pin Assignment

|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PIN NO.    | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| CONNECTION | F1  | F1  | S1  | S2  | S3  | S4  | S5  | S6  | S7  | S8  | S9  | S10 | S11 | S12 | S13 | S14 | S15 | S16 | S17 | S18 |
| PIN NO.    | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  |
| CONNECTION | S19 | S20 | S21 | S22 | S23 | S24 | S25 | S26 | S27 | S28 | S29 | S30 | S31 | S32 | S33 | S34 | S35 | S36 | S37 | S38 |
| PIN NO.    | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  |     |     |
| CONNECTION | G16 | G15 | G14 | G13 | G12 | G11 | G10 | G9  | G8  | G7  | G6  | G5  | G4  | G3  | G2  | G1  | F2  | F2  |     |     |

F1, F2 : Filament  
 G1-G16: Grid  
 S1-S38 : Anode

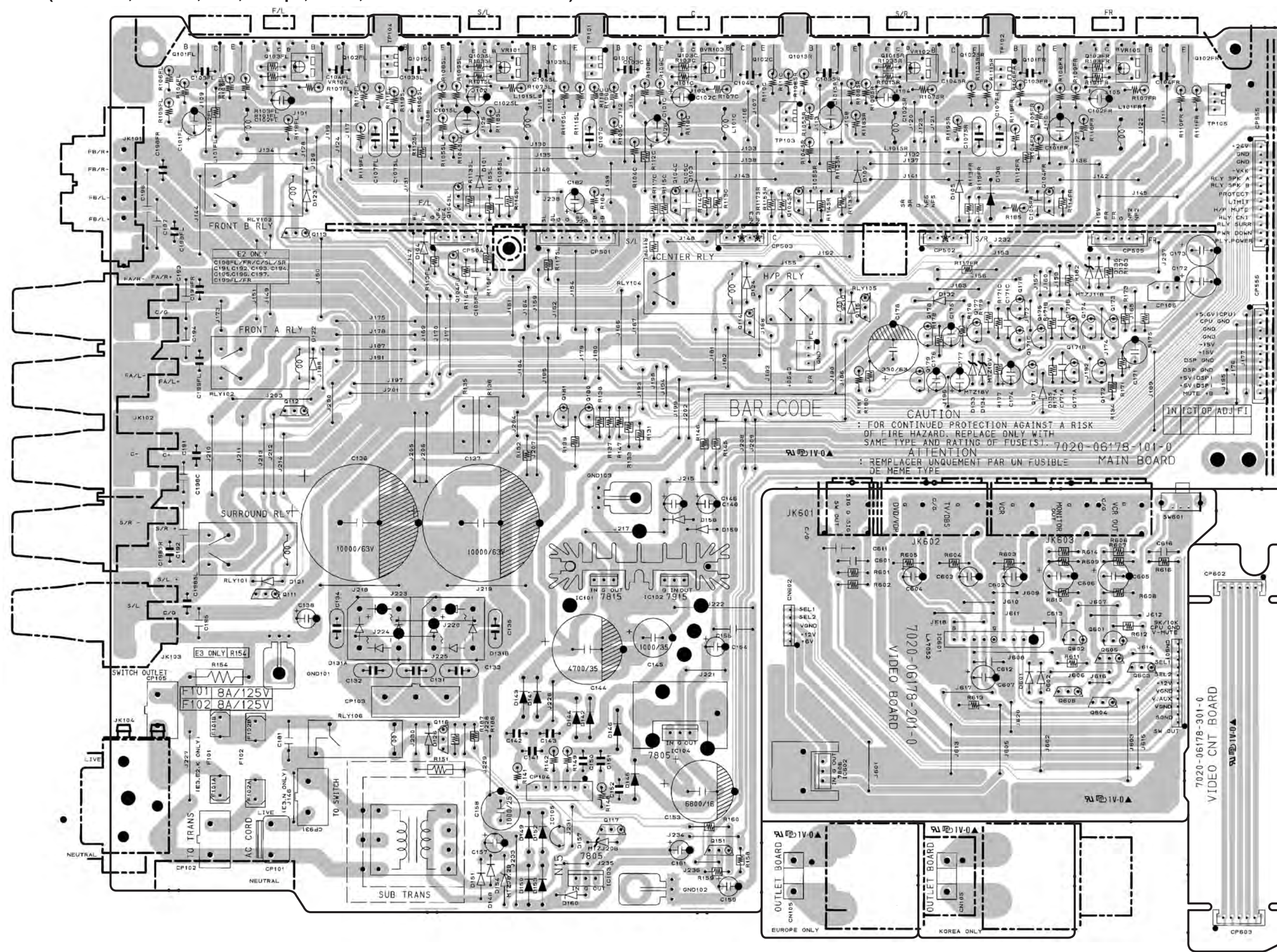
Anode & Grid Assignment

|    | G1 | G2-G16 |     | G1        | G2-G16 |     | G1 | G2-G16 |     | G1 | G2-G16 |
|----|----|--------|-----|-----------|--------|-----|----|--------|-----|----|--------|
| S1 | S1 | S1     | S10 | S10       | S10    | S19 | —  | S19    | S28 | —  | S28    |
| S2 | S2 | S2     | S11 | S11       | S11    | S20 | —  | S20    | S29 | —  | S29    |
| S3 | S3 | S3     | S12 | S12       | S12    | S21 | —  | S21    | S30 | —  | S30    |
| S4 | S4 | S4     | S13 | S13       | S13    | S22 | —  | S22    | S31 | —  | S31    |
| S5 | S5 | S5     | S14 | S14       | S14    | S23 | —  | S23    | S32 | —  | S32    |
| S6 | S6 | S6     | S15 | S15       | S15    | S24 | —  | S24    | S33 | —  | S33    |
| S7 | S7 | S7     | S16 | —         | S16    | S25 | —  | S25    | S34 | —  | S34    |
| S8 | —  | S8     | S17 | DIGITAL   | S17    | S26 | —  | S26    | S35 | —  | S35    |
| S9 | S9 | S9     | S18 | PRO LOGIC | S18    | S27 | —  | S27    |     |    |        |

|     | G1      | G2  | G3 | G4   | G5     | G6  | G7    | G8 | G9    | G10 | G11 | G12   | G13   | G14 | G15    | G16   |
|-----|---------|-----|----|------|--------|-----|-------|----|-------|-----|-----|-------|-------|-----|--------|-------|
| S36 | DIGITAL | /   | TV | VDP  | /(DVD) | DVD | AUX   | —  | TUNER | CD  | —   | PHONO | REC   | —   | STEREO | TUNED |
| S37 | ANALOG  | -2  | -1 | TAPE | /(MD)  | MD  | V.AUX | —  | -2    | -1  | —   | VCR   | MULTI | —   | AUTO   | RDS   |
| S38 | S38     | DBS | —  | —    | —      | —   | —     | —  | -3    | —   | —   | —     | —     | —   | —      | CH    |

PRINTED WIRING BOARDS

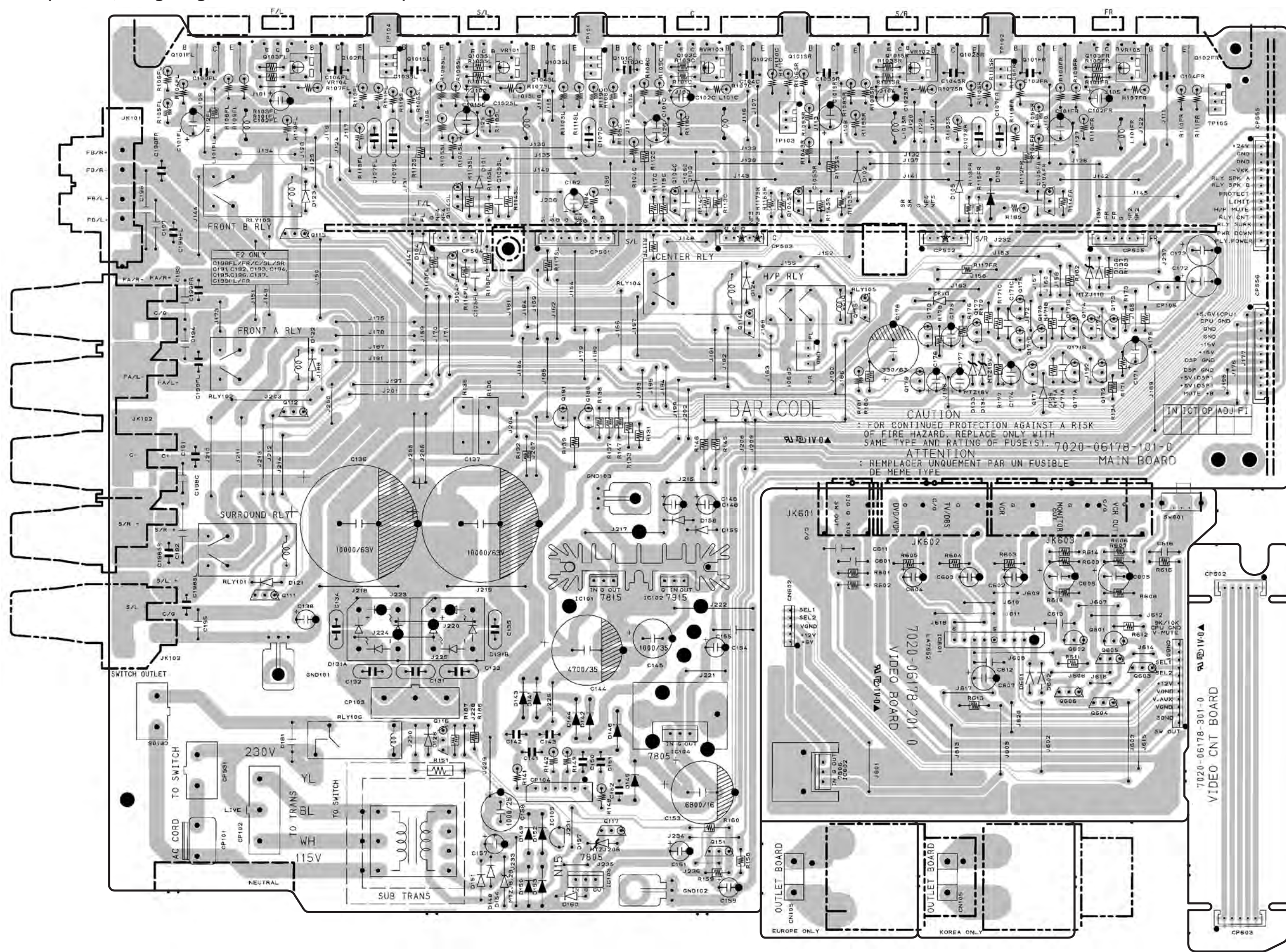
1 2 3 4 5 6 7 8  
MAIN P.W.B. UNIT(for U.S.A., Canada, U.K., Europe, China, Korea & Australia models)



A  
B  
C  
D  
E

COMPONENT SIDE

1 2 3 4 5 6 7 8  
MAIN P.W.B. UNIT(for Asia, HongKong, & Taiwan R.O.C. models)



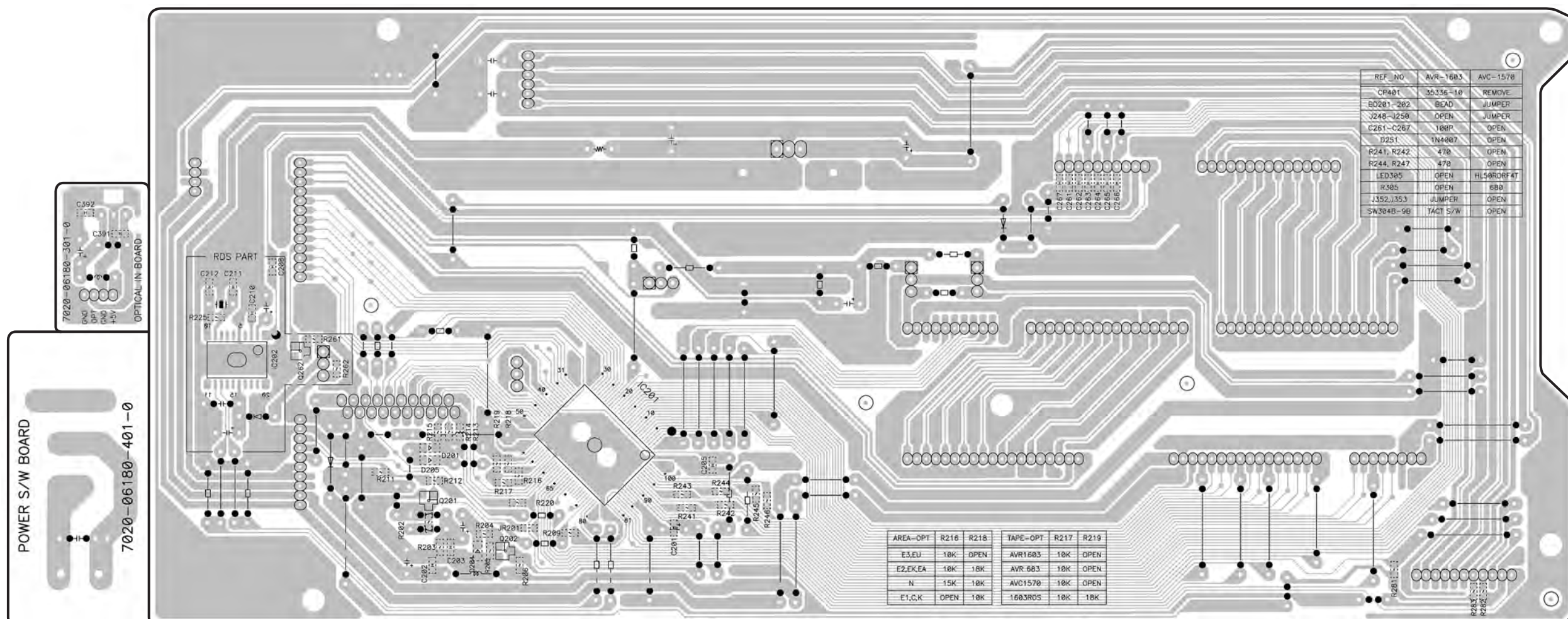
COMPONENT SIDE

A  
B  
C  
D  
E

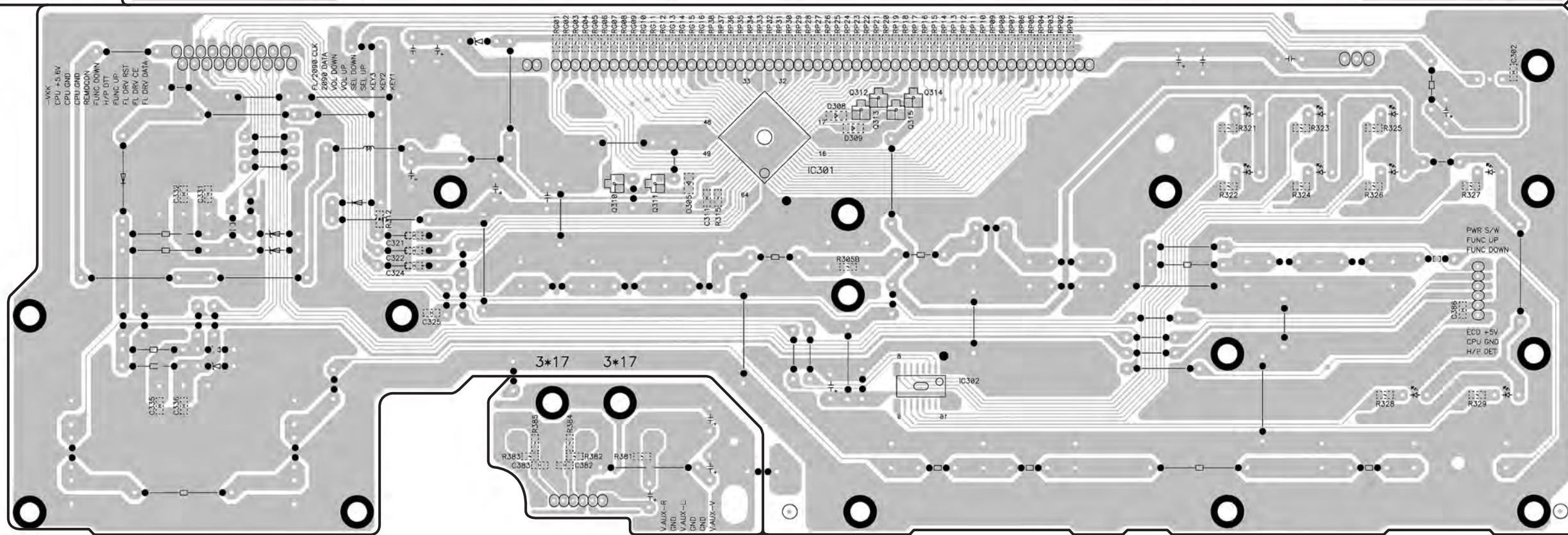




1 2 3 4 5 6 7 8

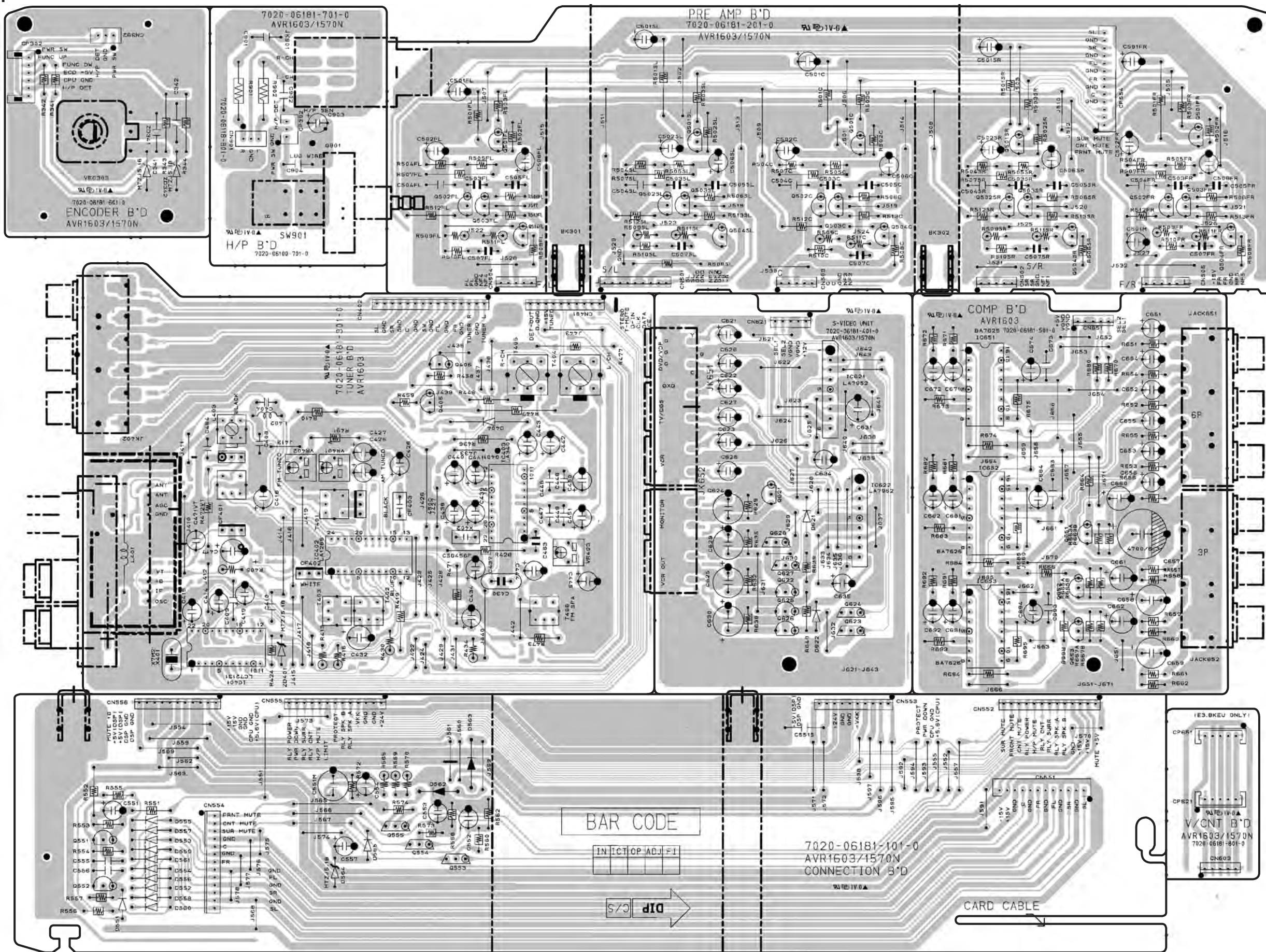


A  
B  
C  
D  
E



FOIL SIDE

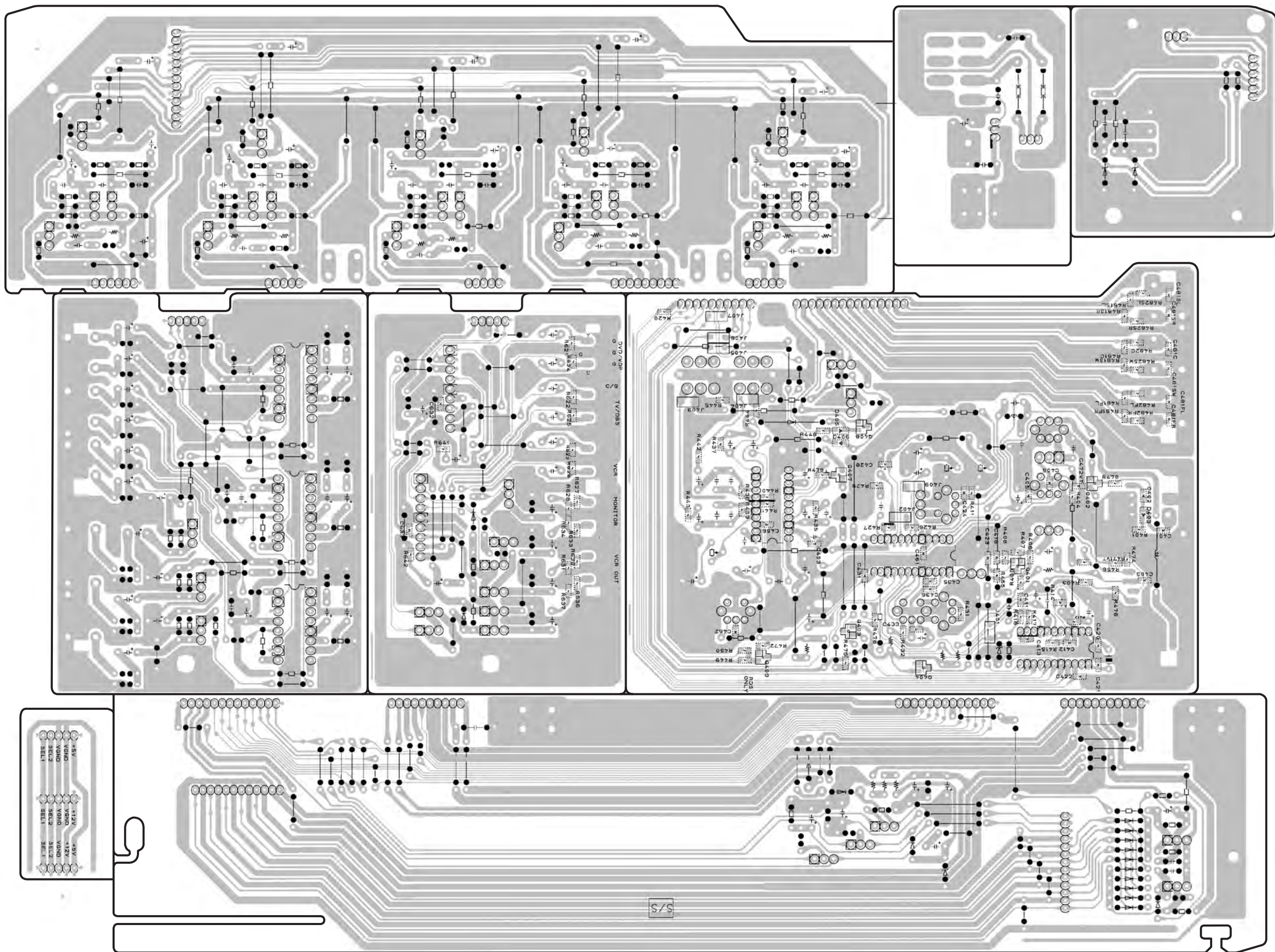
CNT P.W.B. UNIT



COMPONENT SIDE

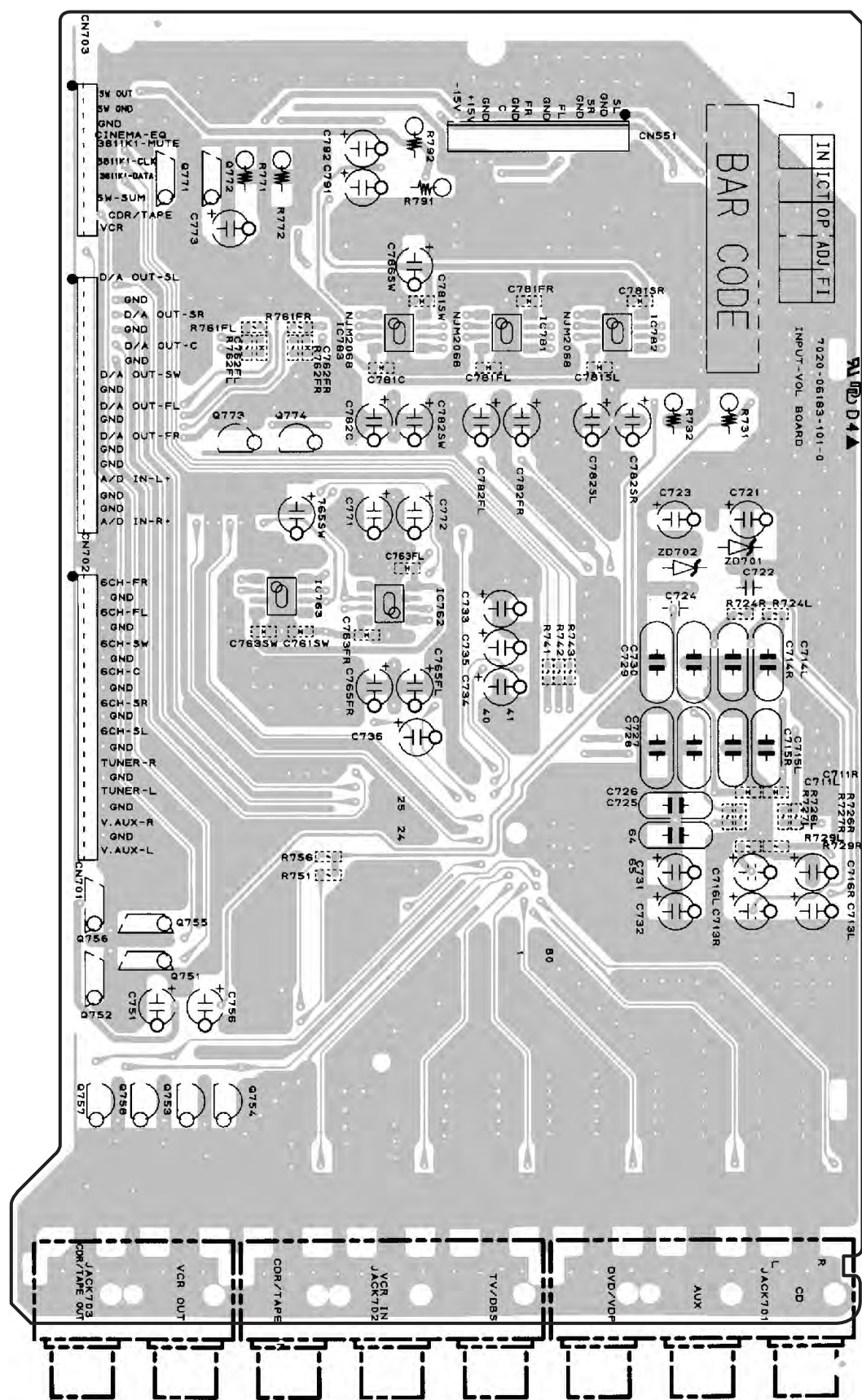
1 2 3 4 5 6 7 8

A  
B  
C  
D  
E

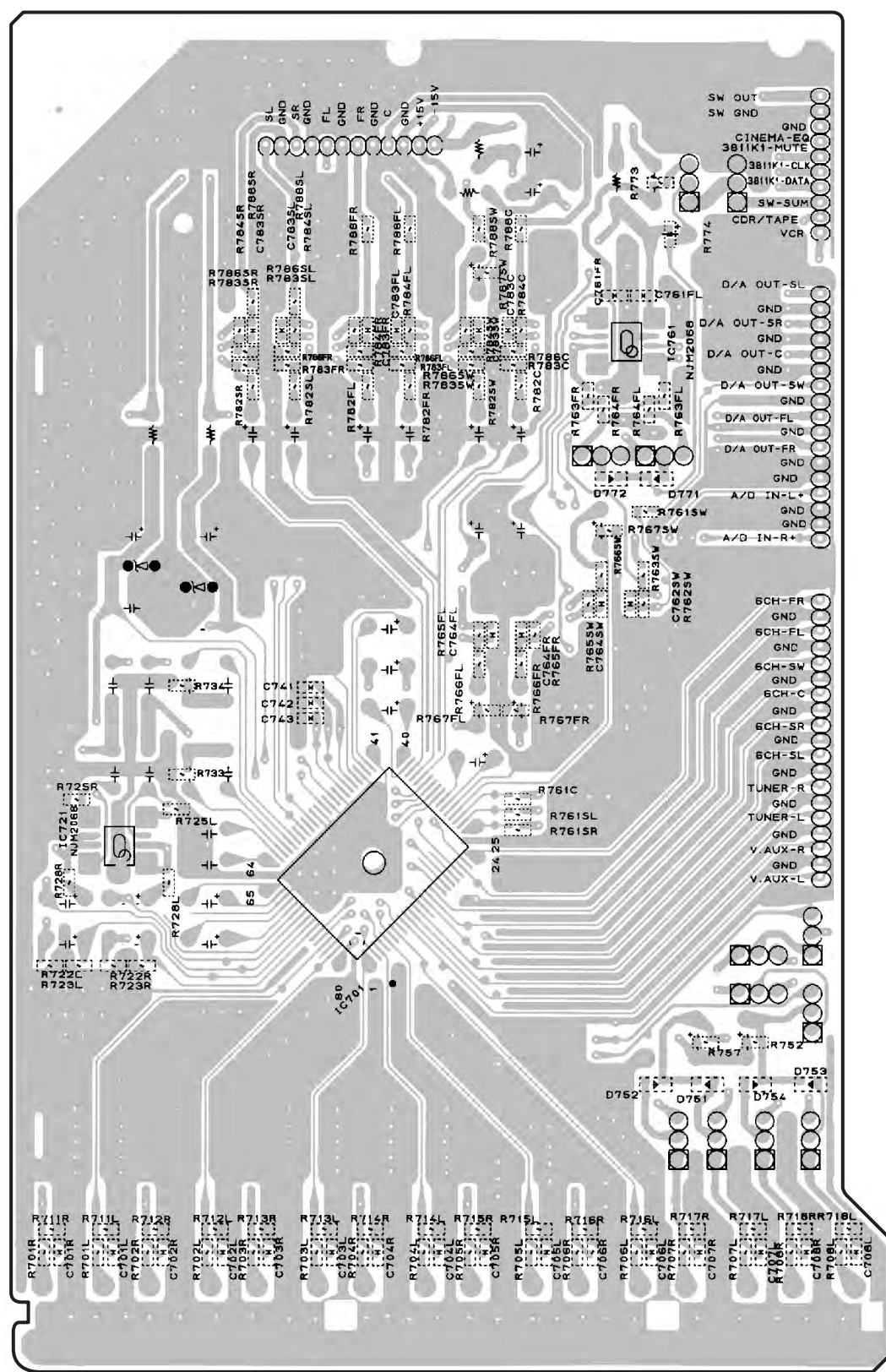


FOIL SIDE

1 2 3 4 5 6 7 8  
INPUT-VOL P.W.B. UNIT



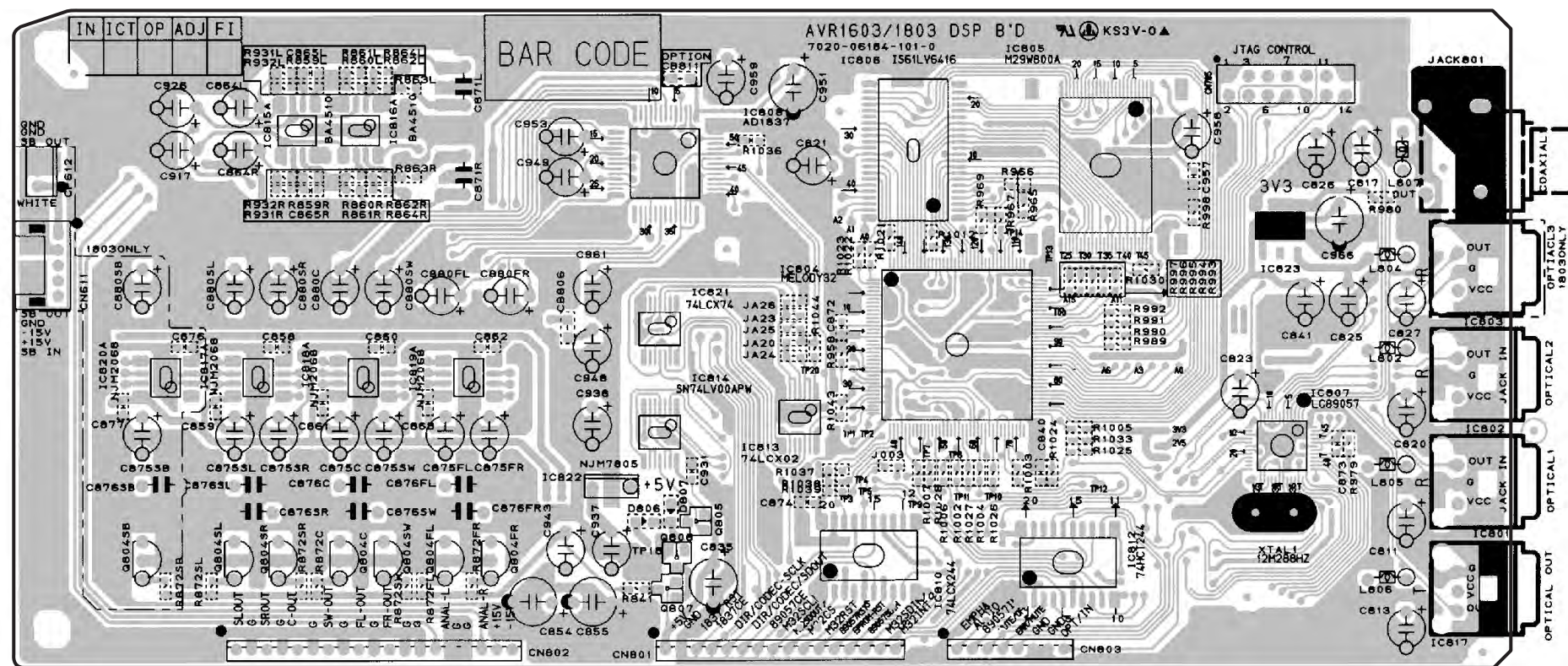
COMPONENT SIDE



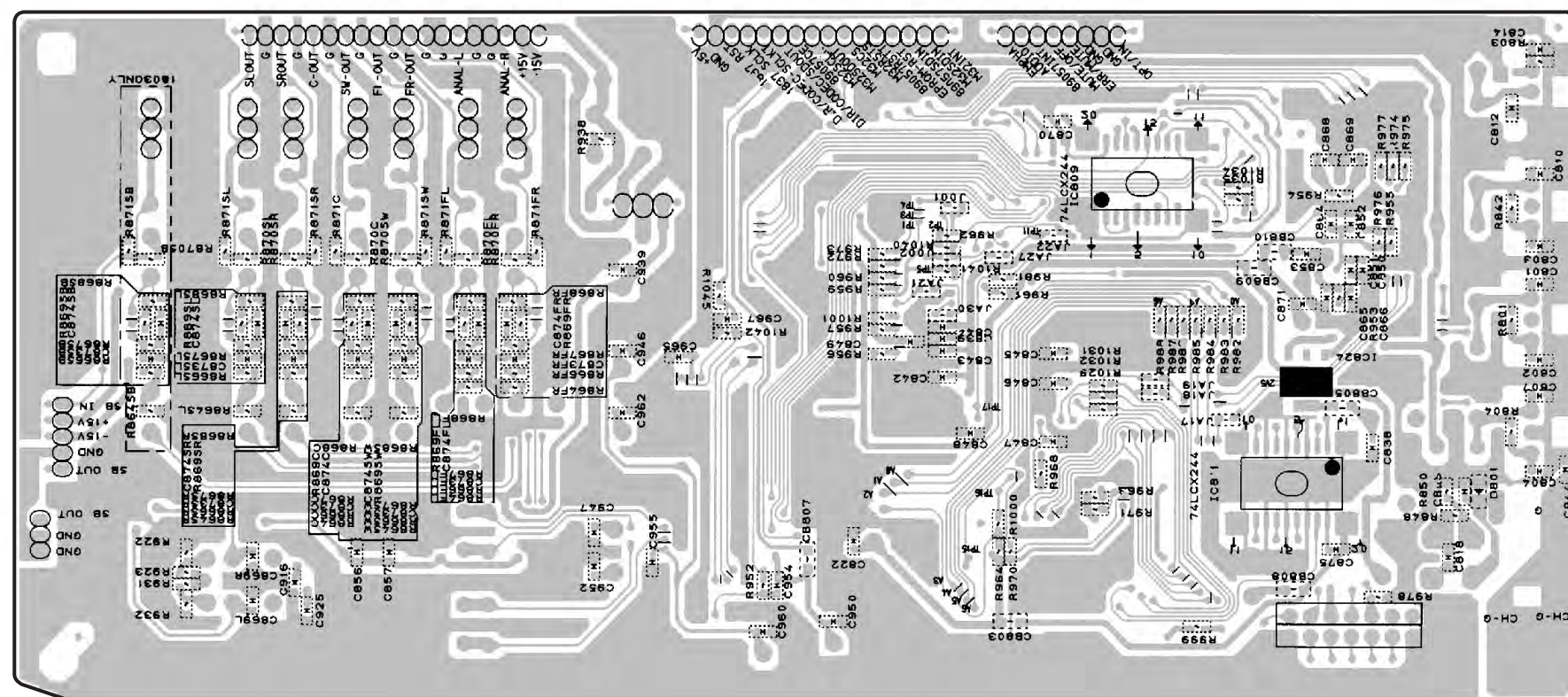
FOIL SIDE

A  
B  
C  
D  
E

DSP P.W.B. UNIT



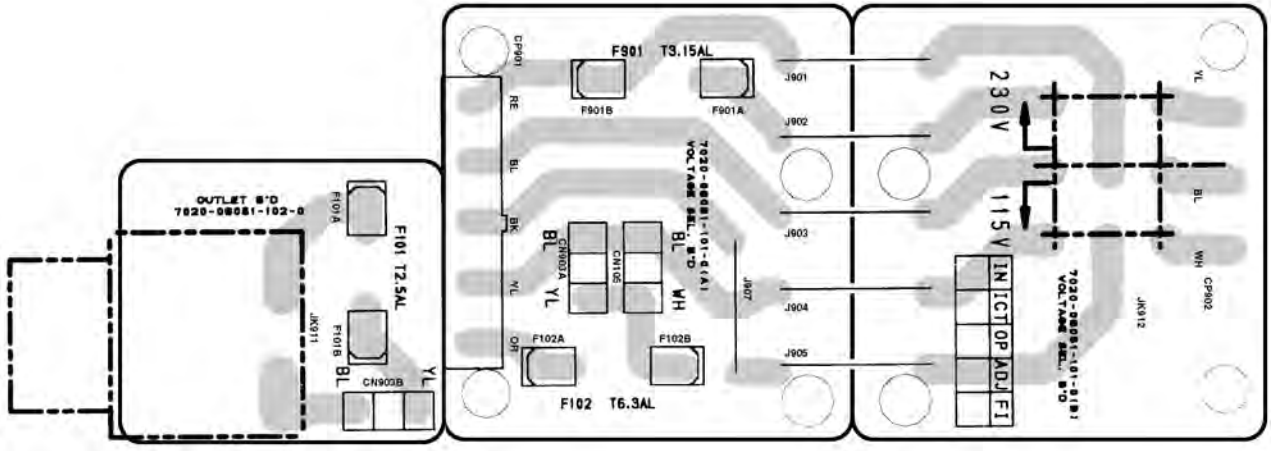
COMPONENT SIDE



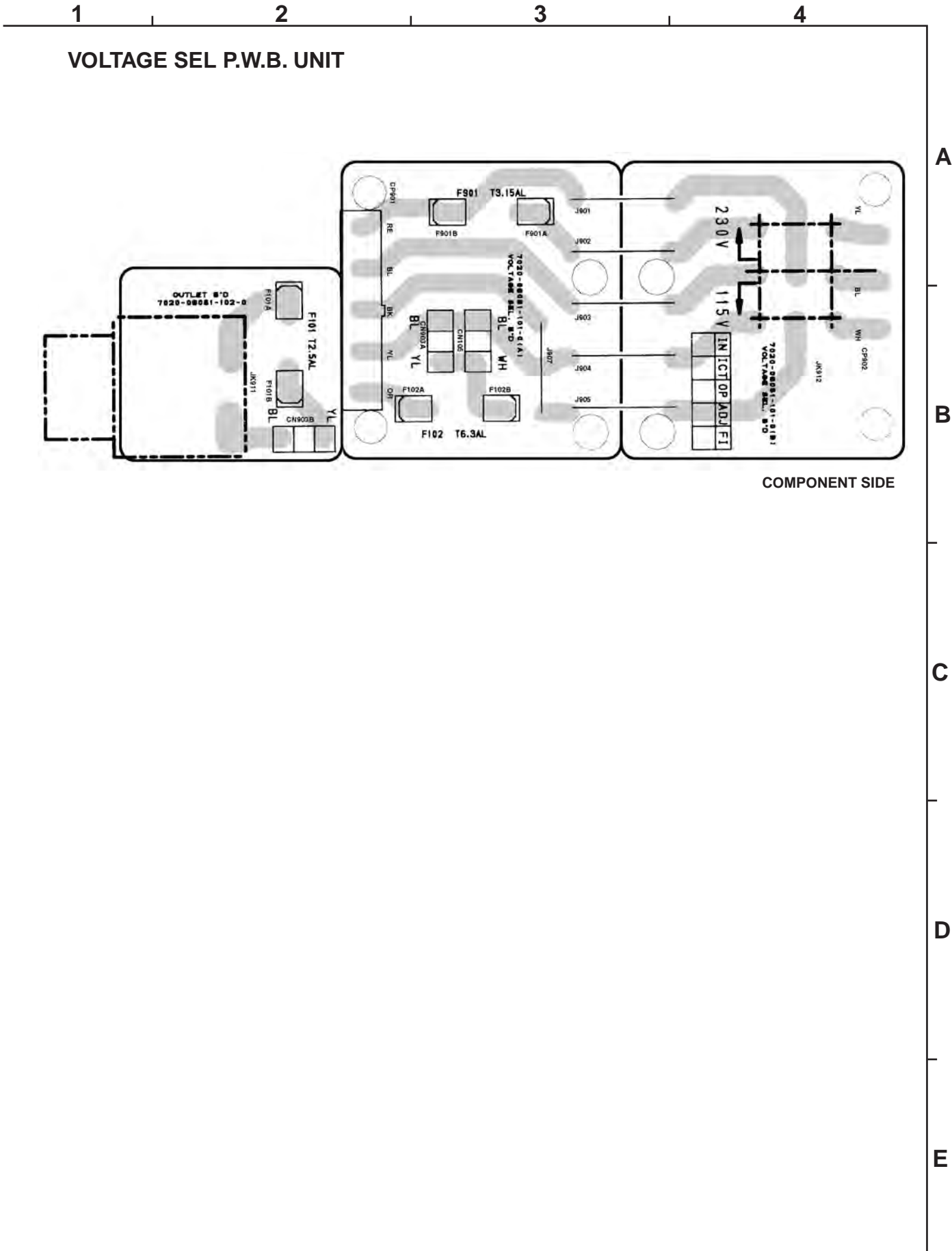
FOIL SIDE

A  
B  
C  
D  
E

# VOLTAGE SEL P.W.B. UNIT



COMPONENT SIDE



# NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

**WARNING:**

Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

● **Resistors**

Ex.: RN 14K 2E 182 G FR  
 Type Shape Power Resist- Allowable Others  
 and per- ance error

|                       |           |          |                          |
|-----------------------|-----------|----------|--------------------------|
| RD : Carbon           | 2B : 1/8W | F : ±1%  | P : Pulse-resistant type |
| RC : Composition      | 2E : 1/4W | G : ±2%  | NL : Low noise type      |
| RS : Metal oxide film | 2H : 1/2W | J : ±5%  | NB : Non-burning type    |
| RW : Winding          | 3A : 1W   | K : ±10% | FR : Fuse-resistor       |
| RN : Metal film       | 3D : 2W   | M : ±20% | F : Lead wire forming    |
| RK : Metal mixture    | 3F : 3W   |          |                          |
|                       | 3H : 5W   |          |                          |

\* **Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm  
 ↑ ↑  
 Indicates number of zeros after effective number.  
 2-digit effective number.

• Units: ohm

1 R 2 ⇒ 1.2 ohm  
 ↑ ↑  
 1-digit effective number.  
 2-digit effective number, decimal point indicated by R.

• Units: ohm

● **Capacitors**

Ex.: CE 04W 1H 2R2 M BP  
 Type Shape Dielectric Capacity Allowable Others  
 and per- strength error

|                                  |           |             |                                  |
|----------------------------------|-----------|-------------|----------------------------------|
| CE : Aluminum foil electrolytic  | 0J : 6.3V | F : ±1%     | HS : High stability type         |
| CA : Aluminum solid electrolytic | 1A : 10V  | G : ±2%     | BP : Non-polar type              |
| CS : Tantalum electrolytic       | 1C : 16V  | J : ±5%     | HR : Ripple-resistant type       |
| CQ : Film                        | 1E : 25V  | K : ±10%    | DL : For charge and discharge    |
| CK : Ceramic                     | 1V : 35V  | M : ±20%    | HF : For assuring high frequency |
| CC : Ceramic                     | 1H : 50V  | Z : +80%    | U : UL part                      |
| CP : Oil                         | 2A : 100V | -20%        | C : CSA part                     |
| CM : Mica                        | 2B : 125V | P : +100%   | W : UL-CSA type                  |
| CF : Metallized                  | 2C : 160V | -0%         | F : Lead wire forming            |
| CH : Metallized                  | 2D : 200V | C : ±0.25pF |                                  |
|                                  | 2E : 250V | D : ±0.5pF  |                                  |
|                                  | 2H : 500V | = : Others  |                                  |
|                                  | 2J : 630V |             |                                  |

\* **Capacity (electrolyte only)**

2 2 2 ⇒ 2200µF  
 ↑ ↑  
 Indicates number of zeros after effective number.  
 2-digit effective number.

• Units: µF.

2 R 2 ⇒ 2.2µF  
 ↑ ↑  
 1-digit effective number.  
 2-digit effective number, decimal point indicated by R.

• Units: µF.

\* **Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022µF  
 ↑ ↑ (More than 2) — Indicates number of zeros after effective number.  
 2-digit effective number.

• Units: pF.

2 2 1 ⇒ 220pF  
 ↑ ↑ (0 or 1) — Indicates number of zeros after effective number.  
 2-digit effective number.

• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

# PARTS LIST OF P.W.B. UNIT ASS'Y

## MAIN P.W.B. ASS'Y

Note : The symbols in the column "Remarks" indicate the following destinations.

E3 : U.S.A. & Canada model  
 EU : U.S.A. model (AVR-683)  
 E2 : Europe model  
 EK : U.K. model  
 EA : Australia model  
 E1 : Asia model  
 E1C : China model  
 E1H : Hong Kong model  
 E1T : Taiwan R.O.C. model  
 E1K : Korea model

| Ref. No.                    | Part No.     | Part Name            | Remarks | Ref. No.               | Part No.     | Part Name                | Remarks |
|-----------------------------|--------------|----------------------|---------|------------------------|--------------|--------------------------|---------|
| <b>SEMICONDUCTORS GROUP</b> |              |                      |         | <b>RESISTORS GROUP</b> |              |                          |         |
| IC101                       | 963 0057 903 | IC KIA7815AP         |         | D123                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| IC102                       | 963 0021 502 | IC KIA7915PI         |         | D124                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| IC103                       | 960 0159 501 | IC KIA7805API        |         | D125                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| IC104                       | 963 0057 709 | IC KIA7805AP         |         | D126                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| IC105                       | 960 0195 808 | IC ICP-N15           |         | D131A                  | 960 0197 107 | Diode KBPC604 6A         |         |
| IC601                       | 960 0180 101 | IC LA7952            |         | D131B                  | 960 0197 107 | Diode KBPC604 6A         |         |
| IC602                       | 960 0044 108 | IC KIA7806AP         | for E3  | D132                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q104C                       | 960 0196 506 | Transistor KSC1845F  |         | D133                   | 963 0046 202 | Zener diode MTZJ18B      |         |
| Q104FL                      | 960 0196 506 | Transistor KSC1845F  |         | D134                   | 963 0046 202 | Zener diode MTZJ18B      |         |
| Q104FR                      | 960 0196 506 | Transistor KSC1845F  |         | D135                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q104SL                      | 960 0196 506 | Transistor KSC1845F  |         | D136                   | 963 0058 504 | Zener diode MTZJ11B-0.5W |         |
| Q104SR                      | 960 0196 506 | Transistor KSC1845F  |         | D137                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q111                        | 960 0196 904 | Transistor DTC114YS  |         | D138                   | 963 0058 407 | Diode 1N4007             |         |
| Q112                        | 960 0196 904 | Transistor DTC114YS  |         | D141                   | 963 0058 407 | Diode 1N4007             |         |
| Q113                        | 960 0196 904 | Transistor DTC114YS  |         | D142                   | 963 0058 407 | Diode 1N4007             |         |
| Q114                        | 960 0196 904 | Transistor DTC114YS  |         | D143                   | 963 0058 407 | Diode 1N4007             |         |
| Q115                        | 960 0196 904 | Transistor DTC114YS  |         | D144                   | 963 0058 407 | Diode 1N4007             |         |
| Q116                        | 960 0196 409 | Transistor 2SC1740SR |         | D145                   | 963 0058 407 | Diode 1N4007             |         |
| Q117                        | 960 0196 904 | Transistor DTC114YS  |         | D146                   | 963 0058 407 | Diode 1N4007             |         |
| Q151                        | 960 0196 409 | Transistor 2SC1740SR |         | D148                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q171                        | 960 0005 202 | Transistor KTC3198Y  |         | D149                   | 963 0058 407 | Diode 1N4007             |         |
| Q171A                       | 960 0196 302 | Transistor KTA1268BL |         | D150                   | 963 0058 407 | Diode 1N4007             |         |
| Q171B                       | 960 0196 302 | Transistor KTA1268BL |         | D151                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q171C                       | 960 0196 302 | Transistor KTA1268BL |         | D152                   | 963 0058 407 | Diode 1N4007             |         |
| Q172                        | 960 0005 202 | Transistor KTC3198Y  |         | D153                   | 963 0058 407 | Diode 1N4007             |         |
| Q173                        | 960 0005 202 | Transistor KTC3198Y  |         | D154                   | 960 0095 908 | Zener diode MTZJ8.2B     |         |
| Q174                        | 960 0005 202 | Transistor KTC3198Y  |         | D157                   | 963 0058 708 | Zener diode MTZJ20B      |         |
| Q175                        | 960 0005 202 | Transistor KTC3198Y  |         | D158                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q176                        | 960 0005 202 | Transistor KTC3198Y  |         | D159                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q177                        | 960 0005 202 | Transistor KTC3198Y  |         | D160                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q178                        | 960 0005 105 | Transistor KTA1266Y  |         | D601                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q179                        | 960 0189 005 | Transistor KSA916Y   |         | D602                   | 963 0096 508 | Diode 1N4148-52RE        |         |
| Q180                        | 960 0196 302 | Transistor KTA1268BL |         |                        |              |                          |         |
| Q181                        | 960 0196 302 | Transistor KTA1268BL |         |                        |              |                          |         |
| Q601                        | 960 0005 202 | Transistor KTC3198Y  |         |                        |              |                          |         |
| Q602                        | 960 0005 202 | Transistor KTC3198Y  |         |                        |              |                          |         |
| Q603                        | 960 0196 904 | Transistor DTC114YS  |         |                        |              |                          |         |
| Q604                        | 960 0196 904 | Transistor DTC114YS  |         |                        |              |                          |         |
| Q605                        | 960 0196 904 | Transistor DTC114YS  |         |                        |              |                          |         |
| Q606                        | 960 0196 904 | Transistor DTC114YS  |         |                        |              |                          |         |
| D101                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D102                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D103                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D104                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D105                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D121                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |
| D122                        | 963 0096 508 | Diode 1N4148-52RE    |         |                        |              |                          |         |



| Ref. No. | Part No.     | Part Name                 | Remarks   | Ref. No.                | Part No.     | Part Name                | Remarks |
|----------|--------------|---------------------------|-----------|-------------------------|--------------|--------------------------|---------|
| R107FR   | 963 0047 900 | Metal film 4.7 kohm 1W    |           | <b>CAPACITORS GROUP</b> |              |                          |         |
| R107SL   | 963 0047 900 | Metal film 4.7 kohm 1W    |           | C101C                   | 093 9005 888 | Electrolytic 47uF/50V    |         |
| R107SR   | 963 0047 900 | Metal film 4.7 kohm 1W    |           | C101FL                  | 093 9005 888 | Electrolytic 47uF/50V    |         |
| R108C    | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C101FR                  | 093 9005 888 | Electrolytic 47uF/50V    |         |
| R108FL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C101SL                  | 093 9005 888 | Electrolytic 47uF/50V    |         |
| R108FR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C101SR                  | 093 9005 888 | Electrolytic 47uF/50V    |         |
| R108SL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C102C                   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| R108SR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C102FL                  | 963 9005 752 | Electrolytic 10uF/35V    |         |
| R109C    | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C102FR                  | 963 9005 752 | Electrolytic 10uF/35V    |         |
| R109FR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C102SL                  | 963 9005 752 | Electrolytic 10uF/35V    |         |
| R109FL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C102SR                  | 963 9005 752 | Electrolytic 10uF/35V    |         |
| R109SL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C103C                   | 963 9003 084 | Ceramic 100pF/500V       |         |
| R109SR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C103FL                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R110C    | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C103FR                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R110FR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C103SL                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R110FL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C103SR                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R110SL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C104C                   | 963 9003 084 | Ceramic 100pF/500V       |         |
| R110SR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C104FL                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R111C    | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C104FR                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R111FL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C104SL                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R111FR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C104SR                  | 963 9003 084 | Ceramic 100pF/500V       |         |
| R111SL   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C105C                   | 960 9003 108 | Ceramic 0.022uF/25V      |         |
| R111SR   | 963 9005 477 | Metal oxide 0.22 ohm 1W   |           | C105FL                  | 960 9003 108 | Ceramic 0.022uF/25V      |         |
| R118C    | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C105FR                  | 960 9003 108 | Ceramic 0.022uF/25V      |         |
| R118FL   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C105SL                  | 960 9003 108 | Ceramic 0.022uF/25V      |         |
| R118FR   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C105SR                  | 960 9003 108 | Ceramic 0.022uF/25V      |         |
| R118SL   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C107C                   | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R118SR   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C107FL                  | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R119C    | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C107FR                  | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R119FL   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C107SL                  | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R119FR   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C107SR                  | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R119SL   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C131                    | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R119SR   | 963 9005 480 | Metal oxide 10 ohm 1W     |           | C132                    | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R135     | 963 0045 203 | Winding 0.1 ohm 5W        |           | C133                    | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R136     | 963 0045 203 | Winding 0.1 ohm 5W        |           | C134                    | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R141     | 960 0180 606 | Metal film 0.22 ohm 1W    |           | C135                    | 963 9003 097 | Mylar film 0.1uF/250V    |         |
| R142     | 960 0180 606 | Metal film 0.22 ohm 1W    |           | C136                    | 963 0087 203 | Electrolytic 10000uF/63V |         |
| R148     | 960 0180 606 | Metal film 0.22 ohm 1W    |           | C137                    | 963 0087 203 | Electrolytic 10000uF/63V |         |
| R149     | 960 0180 606 | Metal film 0.22 ohm 1W    |           | C138                    | 963 9005 749 | Electrolytic 1uF/50V     |         |
| R151     | 963 9003 343 | Metal film 68 ohm 1/4W    |           | C141                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
| R154     | 963 0043 108 | Metal film 2.2 Mohm 2W    | for E3,EU | C142                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
| R179     | 963 9003 055 | Metal film 47 kohm 1/4W   |           | C143                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
| R181     | 963 0047 900 | Metal film 4.7 kohm 1W    |           | C144                    | 963 9003 110 | Electrolytic 4700uF/35V  |         |
| R185     | 963 9005 655 | Metal film 22 ohm 1/4W    |           | C145                    | 963 9003 123 | Electrolytic 1000uF/35V  |         |
| VR101    | 960 0091 601 | Semi fixed resistor 1kohm |           | C146                    | 963 9005 749 | Electrolytic 1uF/50V     |         |
| VR102    | 960 0091 601 | Semi fixed resistor 1kohm |           | C148                    | 963 9005 749 | Electrolytic 1uF/50V     |         |
| VR103    | 960 0091 601 | Semi fixed resistor 1kohm |           | C150                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
| VR104    | 960 0091 601 | Semi fixed resistor 1kohm |           | C151                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
| VR105    | 960 0091 601 | Semi fixed resistor 1kohm |           | C152                    | 963 0021 900 | Mylar film 0.047uF/100V  |         |
|          |              |                           |           | C153                    | 963 0021 104 | Electrolytic 6800uF/16V  |         |
|          |              |                           |           | C154                    | 963 9005 752 | Electrolytic 10uF/35V    |         |
|          |              |                           |           | C155                    | 963 0020 202 | Ceramic 0.1uF/50V        |         |

| Ref. No. | Part No.     | Part Name                | Remarks      | New | Ref. No.                 | Part No.     | Part Name                | Remarks                        | Q'ty | New |
|----------|--------------|--------------------------|--------------|-----|--------------------------|--------------|--------------------------|--------------------------------|------|-----|
| C157     | 963 9005 749 | Electrolytic 1uF/50V     |              |     | <b>OTHER PARTS GROUP</b> |              |                          |                                |      |     |
| C158     | 963 9003 136 | Electrolytic 1000uF/25V  |              |     | CN601                    | 963 0086 709 | 11P connector socket     |                                | 1    |     |
| C159     | 963 9005 749 | Electrolytic 1uF/50V     |              |     | CN602                    | 963 0085 603 | 5P connector socket      |                                | 1    |     |
| C161     | 963 9005 752 | Electrolytic 10uF/35V    |              |     | CP101                    | 960 0118 908 | AC cord connector base   |                                | 1    |     |
| C171     | 963 9005 312 | Electrolytic 100uF/10V   |              |     | CP102                    | 960 0128 901 | 3P connector base        | for E3,EU,E2,<br>E1C,E1K,EK,EA | 1    |     |
| C171A    | 963 0020 202 | Ceramic 0.1uF/50V        |              |     |                          | 960 0128 901 | 3P connector base        | for E1,E1H,E1T                 | 1    |     |
| C171B    | 963 0020 202 | Ceramic 0.1uF/50V        |              |     | CP103                    | 960 0128 901 | 3P connector base        |                                | 1    |     |
| C171C    | 963 0020 202 | Ceramic 0.1uF/50V        |              |     | CP104                    | 960 0128 804 | 6P connector base        |                                | 1    |     |
| C172     | 963 9005 833 | Electrolytic 220uF/6.3V  |              |     | CP105                    | 960 0123 304 | 3P connector base        | for E2,E1,<br>E1H,E1K,E1T      | 1    |     |
| C173     | 963 9005 833 | Electrolytic 220uF/6.3V  |              |     | CP106                    | 960 0123 207 | 3P connector base        |                                | 1    |     |
| C174     | 963 9005 752 | Electrolytic 10uF/35V    |              |     | CP501                    | 963 0086 806 | 9P connector base        |                                | 1    |     |
| C175     | 963 9005 914 | Electrolytic 4.7uF/50V   |              |     | CP502-504                | 963 0086 903 | 5P connector base        |                                | 3    |     |
| C176     | 963 9005 749 | Electrolytic 1uF/50V     |              |     | CP505                    | 963 0087 009 | 6P connector base        |                                | 1    |     |
| C177     | 963 9005 749 | Electrolytic 1uF/50V     |              |     | CP555                    | 960 0239 609 | 13P connector base       |                                | 1    |     |
| C178     | 963 9003 149 | Electrolytic 330uF/63V   |              |     | CP556                    | 963 0087 805 | 11P connector base       |                                | 1    |     |
| C181     | 963 0076 104 | Ceramic 0.047uF/250V(AC) | for E2,EK,EA |     | CP602,603                | 963 0086 903 | 5P connector base        |                                | 2    |     |
| C182     | 963 9004 795 | Electrolytic 10uF/100V   |              |     | CP901                    | 963 0048 909 | 3P connector base        |                                | 1    |     |
| C191     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | CP931                    | 960 0123 304 | 3P connector base        | for E2,E1,E1C,<br>E1K,E1H,E1T  | 1    |     |
| C192     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | △ F101,102               | 960 0188 705 | Fuse 125V-S8A            | for E3,EU                      | 2    |     |
| C193     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | △ F101                   | 960 0142 602 | Fuse 250V-S2.5A          | for E2,E1K,EK,EA               | 1    |     |
| C194     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | △ F102                   | 963 0044 709 | Fuse 250V-S3.15A         | for E2,E1C,<br>E1K,EK,EA       | 1    |     |
| C195     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | F101A,102A               | 960 0005 804 | Fuse clip holder         |                                | 2    |     |
| C196     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | F101B,102B               | 960 0005 804 | Fuse clip holder         |                                | 2    |     |
| C197     | 963 9006 007 | Ceramic 2200pF/16V       | for E2,EK,EA | *   | F102A,F102B              | 960 0005 804 | Fuse clip holder         | for E1C                        | 2    |     |
| C198C    | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | GND101-103               | 960 9006 600 | Terminal                 |                                | 3    |     |
| C198FL   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | JK103                    | 960 0194 809 | 2P speaker terminal      |                                | 1    |     |
| C198FR   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | △ JK104                  | 960 0187 803 | AC outlet(2P)            | for E3,EU                      | 1    |     |
| C198SL   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     |                          | 960 0143 203 | AC outlet                | for E2,EK,EA                   | 1    |     |
| C198SR   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | L101C,FL,<br>FR,SL,SR    | 963 0049 005 | Inductor 0.5uh           |                                | 5    |     |
| C199FL   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | RLY101-104               | 960 0181 702 | Relay G5PA-2             |                                | 4    |     |
| C199FR   | 960 9006 202 | Ceramic 0.01uF/50V       | for E2,EK,EA |     | RLY105                   | 963 0071 303 | Relay RSB24S             |                                | 1    |     |
| C601     | 963 9004 520 | Ceramic 100pF/50V        |              |     | RLY106                   | 960 0181 605 | Relay G5PA-1-8           |                                | 1    |     |
| C602     | 963 9005 309 | Electrolytic 47uF/10V    |              |     | TP101-105                | 960 0161 405 | 3P connector base        |                                | 1    |     |
| C603     | 963 9005 309 | Electrolytic 47uF/10V    |              |     |                          | 963 0076 104 | Ceramic 0.047uf/250V(AC) |                                | 1    |     |
| C604     | 963 9005 309 | Electrolytic 47uF/10V    |              |     |                          | 960 0158 308 | SW Push block            |                                | 1    |     |
| C605     | 963 9005 891 | Electrolytic 470uF/6.3V  |              |     |                          | 963 0074 009 | 8P Speaker terminal      |                                | 1    |     |
| C606     | 963 9005 891 | Electrolytic 470uF/6.3V  |              |     |                          | 960 0194 508 | 1P Pin jack              |                                | 1    |     |
| C607     | 963 9005 794 | Electrolytic 100uF/16V   |              |     |                          | 960 0194 605 | 2P Pin jack              |                                | 1    |     |
| C611     | 963 9004 546 | Ceramic 0.01uF/16V       |              |     |                          | 960 0188 404 | 3P Pin jack              |                                | 1    |     |
| C612     | 963 9004 562 | Ceramic 0.047uF/50V      |              |     |                          | —            | Heat sink reg TR         |                                | 1    | *   |
| C613     | 963 9004 562 | Ceramic 0.047uF/50V      |              |     |                          |              |                          |                                |      |     |

## CPU P.W.B. ASS'Y

| Ref. No. | Part No.     | Part Name               | Remarks      | Q'ty | New | Ref. No.                    | Part No.     | Part Name                  | Remarks      |
|----------|--------------|-------------------------|--------------|------|-----|-----------------------------|--------------|----------------------------|--------------|
|          | —            | Heat sink reg TR        |              | 1    | *   | <b>SEMICONDUCTORS GROUP</b> |              |                            |              |
|          | —            | Heat sink               |              | 1    | *   | IC201                       | 963 0095 800 | IC CXP740096-156Q          |              |
| △        | 963 0094 924 | Mini trans              | for E3       | 1    | *   | IC202                       | 963 0057 602 | IC TDA7330BD               |              |
| △        | 963 0094 937 | Mini trans              | for E2,EK,EA | 1    | *   | IC271                       | 960 0222 506 | IC KIA7812AP               |              |
| △        | 963 0094 911 | Mini trans              | for E1C      | 1    | *   | IC301                       | 960 0180 004 | IC LC75721E                |              |
| △        | 963 0094 940 | Mini trans              | for E1H      | 1    | *   | IC302                       | 963 0074 504 | IC BU2090F                 |              |
| △        | 963 0094 911 | Mini trans              | for E1K      | 1    | *   | IC391                       | 963 0084 905 | IC GP1FA502RZ              |              |
| △        | 963 0094 940 | Mini trans              | for E1T      | 1    | *   | Q201                        | 963 0075 202 | Transistor DTC144EK        |              |
| △        | 963 0094 940 | Mini trans              | for E1       | 1    | *   | Q202                        | 963 0045 902 | Transistor 2SC2412KT96(BR) |              |
| △        | 963 0094 924 | Mini trans              | for EU       | 1    | *   | Q251                        | 963 0075 309 | Transistor DTA114ES        |              |
|          | 963 0018 007 | Screw 3x8 B-type ZNY/BH |              | 1    |     | Q252                        | 960 0196 603 | Transistor KTC2874B        |              |
|          | 963 0018 007 | Screw 3x8 B-type ZNY/BH |              | 1    |     | Q253                        | 960 0196 603 | Transistor KTC2874B        |              |
|          |              |                         |              |      |     | Q310                        | 963 0058 203 | Transistor DTA114EK        |              |
|          |              |                         |              |      |     | Q311                        | 963 0058 203 | Transistor DTC114EK        |              |
|          |              |                         |              |      |     | Q312                        | 963 0058 203 | Transistor DTA114EK        |              |
|          |              |                         |              |      |     | Q313                        | 963 0058 203 | Transistor DTC114EK        |              |
|          |              |                         |              |      |     | Q314                        | 963 0058 203 | Transistor DTA114EK        |              |
|          |              |                         |              |      |     | Q315                        | 963 0058 203 | Transistor DTC114EK        |              |
|          |              |                         |              |      |     | D201                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | D202                        | 963 0058 407 | Diode 1N4007               |              |
|          |              |                         |              |      |     | D203                        | 963 0096 508 | Diode 1N4148-52RE          |              |
|          |              |                         |              |      |     | D204                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | D205                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | D206                        | 963 0096 508 | Diode 1N4148-52RE          | for E2,EK,EA |
|          |              |                         |              |      |     | D251                        | 963 0058 407 | Diode 1N4007               |              |
|          |              |                         |              |      |     | D302                        | 963 0096 508 | Diode 1N4148-52RE          |              |
|          |              |                         |              |      |     | D303                        | 963 0096 508 | Diode 1N4148-52RE          |              |
|          |              |                         |              |      |     | D304                        | 963 0096 508 | Diode 1N4148-52RE          |              |
|          |              |                         |              |      |     | D305                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | D308                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | D309                        | 963 0096 605 | Diode 1N4148WS             |              |
|          |              |                         |              |      |     | ZD201                       | 963 0047 502 | Zener diode MTZJ3.3B       |              |
|          |              |                         |              |      |     | ZD301                       | 960 0095 802 | Zener diode MTZJ6.8B       |              |
|          |              |                         |              |      |     | ZD331                       | 960 0095 500 | Zener diode MTZJ5.1B       |              |
|          |              |                         |              |      |     | ZD332                       | 960 0095 500 | Zener diode MTZJ5.1B       |              |
|          |              |                         |              |      |     | ZD335                       | 960 0095 500 | Zener diode MTZJ5.1B       |              |
|          |              |                         |              |      |     | ZD336                       | 960 0095 500 | Zener diode MTZJ5.1B       |              |
|          |              |                         |              |      |     | LED301-304                  | 960 0197 204 | LED HL50RDRF4T             |              |
|          |              |                         |              |      |     | LED306-309                  | 960 0197 204 | LED HL50RDRF4T             |              |

| Ref. No.               | Part No.     | Part Name                  | Remarks                | Ref. No.                | Part No.     | Part Name                 | Remarks      |
|------------------------|--------------|----------------------------|------------------------|-------------------------|--------------|---------------------------|--------------|
| <b>RESISTORS GROUP</b> |              |                            |                        | <b>CAPACITORS GROUP</b> |              |                           |              |
| R202                   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |                        | RP06                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R203                   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |                        | RP07                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R204                   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |                        | RP08                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R205                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP09                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R206                   | 963 9004 232 | Carbon chip 220 kohm 1/16W |                        | RP10                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R209                   | 963 9004 083 | Carbon chip 100 kohm 1/16W |                        | RP11                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R211                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP12                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R212                   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |                        | RP13                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R213                   | 963 9004 122 | Carbon chip 12 kohm 1/16W  |                        | RP14                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R214                   | 963 9004 122 | Carbon chip 12 kohm 1/16W  |                        | RP15                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R215                   | 963 9004 122 | Carbon chip 12 kohm 1/16W  |                        | RP16                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R216                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  | for E3,E2,EK,EA,EU     | RP17                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R217                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP18                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R218                   | 963 9004 177 | Carbon chip 18 kohm 1/16W  | for E2,EK,EA           | RP19                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
|                        | 963 9004 070 | Carbon chip 10 kohm 1/16W  | for E1,E1C,E1H,E1K,E1T | RP20                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R219                   | 963 9004 177 | Carbon chip 18 kohm 1/16W  | for E2,EK,EA           | RP21                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R220                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP22                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R225                   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W | for E2,EK,EA           | RP23                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R241                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP24                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R242                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP25                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R243                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP26                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R244                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP27                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R245                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP28                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R246                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        | RP29                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R271                   | 963 9005 626 | Metal oxide 4.7 ohm 1W     |                        | RP30                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R281                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP31                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R282                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP32                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R283                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP33                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R305B                  | 963 9004 847 | Carbon chip 3.3 kohm 1/16W |                        | RP34                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R312                   | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                        | RP35                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R315                   | 963 0075 105 | Carbon chip 10 kohm 1/16W  |                        | RP36                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R321                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        | RP37                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R322                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        | RP38                    | 963 9004 397 | Carbon chip 56 kohm 1/16W |              |
| R323                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R324                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R326                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R327                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R328                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R329                   | 963 9004 436 | Carbon chip 680 ohm 1/16W  |                        |                         |              |                           |              |
| R381                   | 963 9004 465 | Carbon chip 75 ohm 1/16W   |                        |                         |              |                           |              |
| R382                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        |                         |              |                           |              |
| R383                   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |                        |                         |              |                           |              |
| R384                   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |                        |                         |              |                           |              |
| R385                   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |                        |                         |              |                           |              |
| RG01                   | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                        |                         |              |                           |              |
| RP02                   | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                        |                         |              |                           |              |
| RP03                   | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                        |                         |              |                           |              |
| RP04                   | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                        |                         |              |                           |              |
| RP05                   | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                        |                         |              |                           |              |
|                        |              |                            |                        | BC201                   | 963 0061 504 | Electrolytic 8200uF/5.5V  |              |
|                        |              |                            |                        | C201                    | 963 9004 698 | Ceramic chip 0.01uF/50V   |              |
|                        |              |                            |                        | C202                    | 963 9004 711 | Ceramic chip 0.1uF/50V    |              |
|                        |              |                            |                        | C203                    | 963 9004 698 | Ceramic chip 0.01uF/50V   |              |
|                        |              |                            |                        | C204                    | 963 9005 914 | Electrolytic 4.7uF/50V    |              |
|                        |              |                            |                        | C205                    | 963 9004 711 | Ceramic chip 0.1uF/50V    |              |
|                        |              |                            |                        | C206                    | 096 3905 309 | Electrolytic 47uF/10V     | for E2,EK,EA |
|                        |              |                            |                        | C207                    | 963 9004 546 | Ceramic 0.01uF/16V        | for E2,EK,EA |
|                        |              |                            |                        | C208                    | 963 9005 354 | Ceramic chip 270pF/50V    | for E2,EK,EA |
|                        |              |                            |                        | C209                    | 963 9005 752 | Electrolytic 10uF/35V     | for E2,EK,EA |
|                        |              |                            |                        | C210                    | 963 9004 698 | Ceramic chip 0.01uF/50V   | for E2,EK,EA |
|                        |              |                            |                        | C211                    | 963 9004 614 | Ceramic chip 27pF/50V     | for E2,EK,EA |
|                        |              |                            |                        | C212                    | 963 9004 614 | Ceramic chip 27pF/50V     | for E2,EK,EA |
|                        |              |                            |                        | C221                    | 963 9005 312 | Electrolytic 100uF/10V    |              |
|                        |              |                            |                        | C251                    | 963 9005 927 | Electrolytic 0.1uF/50V    |              |
|                        |              |                            |                        | C261                    | 963 9004 575 | Ceramic chip 100pF/50V    |              |

| Ref. No. | Part No.     | Part Name                | Remarks | Ref. No.                 | Part No.     | Part Name                    | Remarks                             | Q'ty |
|----------|--------------|--------------------------|---------|--------------------------|--------------|------------------------------|-------------------------------------|------|
| C262     | 963 9004 575 | Ceramic chip 100pF/50V   |         | <b>OTHER PARTS GROUP</b> |              |                              |                                     |      |
| C263     | 963 9004 575 | Ceramic chip 100pF/50V   |         | BD201,202                | 963 0053 800 | Beads inductor               |                                     | 2    |
| C264     | 963 9004 575 | Ceramic chip 100pF/50V   |         | CN201                    | 963 0096 906 | 6P wire                      |                                     | 1    |
| C265     | 963 9004 575 | Ceramic chip 100pF/50V   |         | CN202                    | 963 0099 408 | 4P wire                      |                                     | 1    |
| C266     | 963 9004 575 | Ceramic chip 100pF/50V   |         | CN302                    | 963 0096 702 | 6P wire                      |                                     | 1    |
| C267     | 963 9004 575 | Ceramic chip 100pF/50V   |         | CN931                    | 963 0089 502 | 2P wire                      | for E2,E1,G1C,G1H,<br>G1K,G1T,EK,EA | 1    |
| C271     | 963 9005 794 | Electrolytic 100uF/16V   |         | CP201                    | 963 0097 604 | 6P connector base            |                                     | 1    |
| C272     | 963 9005 752 | Electrolytic 10uF/35V    |         | CP202                    | 963 0050 104 | 4P connector base            |                                     | 1    |
| C301     | 963 9005 778 | Electrolytic 10uF/50V    |         | CP301A                   | 963 0097 905 | 20P connector base           |                                     | 1    |
| C302     | 963 9004 753 | Ceramic chip 0.047uF/50V |         | CP301B                   | 960 0129 007 | 20P FFC connector base       |                                     | 1    |
| C303     | 963 9005 309 | Electrolytic 47uF/10V    |         | CP303                    | 963 0049 102 | 3P connector base            |                                     | 1    |
| C304     | 960 9003 108 | Ceramic 0.022uF/25V      |         | CP401                    | 963 0088 008 | 10P connector base           |                                     | 1    |
| C305     | 963 9005 859 | Electrolytic 47uF/16V    |         | CP402                    | 963 0097 507 | 15P connector base           |                                     | 1    |
| C306     | 963 9004 766 | Mylar film 0.1uF/100V    |         | CP552                    | 960 0239 609 | 13P connector base           |                                     | 1    |
| C307     | 963 9005 749 | Electrolytic 1uF/50V     |         | CP553                    | 963 0088 008 | 10P connector base           |                                     | 1    |
| C308     | 963 0021 900 | Mylar film 0.047uF/100V  |         | CP601                    | 963 0087 805 | 11P connector base           |                                     | 1    |
| C309     | 963 0021 900 | Mylar film 0.047uF/100V  |         | CP701                    | 963 0087 504 | 19P connector base           |                                     | 1    |
| C310     | 963 9005 749 | Electrolytic 1uF/50V     |         | CP702                    | 963 0087 902 | 17P connector base           |                                     | 1    |
| C311     | 963 9005 406 | Ceramic chip 30pF/50V    |         | CP703                    | 963 0088 008 | 10P connector base           |                                     | 1    |
| C312     | 963 9005 859 | Electrolytic 47uF/16V    |         | CP801                    | 963 0087 407 | 16P connector base           |                                     | 1    |
| C313     | 963 9005 419 | Mylar film 0.047uF/63V   |         | CP802                    | 963 0087 504 | 19P connector base           |                                     | 1    |
| C321     | 963 9004 685 | Ceramic chip 1000pF/50V  |         | CP803                    | 963 0097 400 | 8P connector base            |                                     | 1    |
| C322     | 963 9004 575 | Ceramic chip 100pF/50V   |         | FL301                    | 960 0180 509 | FI 16-ST-42GNK               |                                     | 1    |
| C324     | 963 9004 575 | Ceramic chip 100pF/50V   |         | G301                     | 963 0088 202 | 1P contact ass'y             |                                     | 1    |
| C325     | 963 9004 575 | Ceramic chip 100pF/50V   |         | JK301                    | 963 0084 206 | 3P jack                      |                                     | 1    |
| C331     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | L301                     | 960 0128 008 | Inductor 100uh               |                                     | 1    |
| C332     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | L302                     | 960 0010 307 | Inductor 10uh                |                                     | 1    |
| C335     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | L391                     | 960 0215 908 | Inductor 4.7uh               |                                     | 1    |
| C336     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | RMC301                   | 960 0181 100 | Remocon module               |                                     | 1    |
| C381     | 963 9005 309 | Electrolytic 47uF/10V    |         | SW301B-309B              | 963 0095 305 | Tact SW                      |                                     | 9    |
| C382     | 963 9004 575 | Ceramic chip 100pF/50V   |         | SW301C-309C              | 963 0045 708 | Tact SW                      |                                     | 9    |
| C383     | 963 9004 575 | Ceramic chip 100pF/50V   |         | SW302A-304A              | 963 0095 305 | Tact SW                      |                                     | 3    |
| C384     | 963 9005 749 | Electrolytic 1uF/50V     |         | SW305A                   | 963 0045 708 | Tact SW                      |                                     | 1    |
| C385     | 963 9005 749 | Electrolytic 1uF/50V     |         | SW931                    | 963 0098 807 | SW push                      | for E2,E1,G1C,G1H,<br>G1K,G1T,EK,EA | 1    |
| C386     | 963 9004 753 | Ceramic chip 0.047uF/50V |         | VEC301,302               | 963 0095 208 | Encoder SW                   |                                     | 2    |
| C391     | 963 9004 591 | Ceramic chip 22pF/50V    |         | X201                     | 960 0181 003 | Ceramic resonator CST12.0MTW |                                     | 1    |
| C392     | 963 9004 711 | Ceramic chip 0.1uF/50V   |         | X202                     | 963 0099 505 | Crystal 4.332MHz             | for E2,EK,EA                        | 1    |
| C393     | 963 9005 859 | Electrolytic 47uF/16V    |         | —                        |              | Heat sink                    |                                     | 1    |
| C931     | 963 0076 104 | Ceramic 0.047uF/250V(AC) |         | 963 0018 007             |              | Screw 3x8 B-type ZNY/BH      |                                     | 1    |
|          |              |                          |         | 960 0184 408             |              | FLT holder                   |                                     | 1    |

## CNT P.W.B. ASS'Y

| Ref. No.                    | Part No.     | Part Name                  | Remarks      | Ref. No.               | Part No.     | Part Name            | Remarks  |
|-----------------------------|--------------|----------------------------|--------------|------------------------|--------------|----------------------|--|
| <b>SEMICONDUCTORS GROUP</b> |              |                            |              | <b>RESISTORS GROUP</b> |              |                      |  |
| IC401                       | 963 0043 700 | IC LC72131-PLL             |              | Q626                   | 960 0005 202 | Transistor KTC3198Y  |  |
| IC402                       | 963 0043 904 | IC LA1266                  |              | Q627                   | 960 0196 904 | Transistor DTC114YS  |  |
| IC403                       | 963 0044 000 | IC LA3401                  |              | Q628                   | 960 0196 904 | Transistor DTC114YS  |  |
| IC621                       | 960 0180 101 | IC LA7952                  |              | Q651                   | 960 0005 105 | Transistor KTA1266Y  | for E3,EU  |
| IC622                       | 960 0180 101 | IC LA7952                  |              | Q652                   | 960 0005 105 | Transistor KTA1266Y  | for E3,EU  |
| IC651                       | 960 0175 200 | IC BA7625                  | for E3,EU    | Q653                   | 960 0005 105 | Transistor KTA1266Y  | for E3,EU  |
| IC652                       | 963 0083 304 | IC BA7626                  | for E3,EU    | D403                   | 963 0096 605 | Diode 1N4148WS       |  |
| IC653                       | 963 0083 304 | IC BA7626                  | for E3,EU    | D404                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q401                        | 963 0099 301 | Transistor KTC3880S-O      |              | D405                   | 963 0096 605 | Diode 1N4148WS       |  |
| Q402                        | 963 0079 305 | Transistor DTA114YK        |              | D406                   | 963 0096 605 | Diode 1N4148WS       |  |
| Q403                        | 963 0058 203 | Transistor DTA114EK        |              | D551                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q404                        | 963 0058 203 | Transistor DTA114EK        |              | D552                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q405                        | 960 0196 603 | Transistor KTC2874B        |              | D553                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q406                        | 960 0196 603 | Transistor KTC2874B        |              | D554                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q407                        | 963 0079 305 | Transistor DTC114YK        |              | D555                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q408                        | 963 0058 203 | Transistor DTA114EK        |              | D556                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q409                        | 963 0099 301 | Transistor KTC3880S-O      | for E2,EK,EA | D557                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q501C                       | 960 0196 603 | Transistor KTC2874B        |              | D558                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q501FL                      | 960 0196 603 | Transistor KTC2874B        |              | D559                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q501FR                      | 960 0196 603 | Transistor KTC2874B        |              | D560                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q501SL                      | 960 0196 603 | Transistor KTC2874B        |              | D561                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q501SR                      | 960 0196 603 | Transistor KTC2874B        |              | D562                   | 963 0058 407 | Diode 1N4007         |  |
| Q502C                       | 960 0196 205 | Transistor KSA992F         |              | D563                   | 963 0058 407 | Diode 1N4007         |  |
| Q502FL                      | 960 0196 205 | Transistor KSA992F         |              | D564                   | 960 0095 500 | Zener diode MTZJ5.1B |  |
| Q502FR                      | 960 0196 205 | Transistor KSA992F         |              | D565                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q502SL                      | 960 0196 205 | Transistor KSA992F         |              | D621                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q502SR                      | 960 0196 205 | Transistor KSA992F         |              | D622                   | 963 0096 508 | Diode 1N4148-52RE    |  |
| Q503C                       | 960 0196 205 | Transistor KSA992F         |              | ZD341                  | 960 0095 500 | Zener diode MTZJ5.1B |  |
| Q503FL                      | 960 0196 205 | Transistor KSA992F         |              | ZD342                  | 960 0095 500 | Zener diode MTZJ5.1B |  |
| Q503FR                      | 960 0196 205 | Transistor KSA992F         |              | ZD401                  | 960 0095 500 | Zener diode MTZJ5.1B |  |
| Q503SL                      | 960 0196 205 | Transistor KSA992F         |              |                        |              |                      |  |
| Q503SR                      | 960 0196 205 | Transistor KSA992F         |              |                        |              |                      |  |
| Q504C                       | 960 0196 506 | Transistor KSC1845F        |              |                        |              |                      |  |
| Q504FL                      | 960 0196 506 | Transistor KSC1845F        |              |                        |              |                      |  |
| Q504FR                      | 960 0196 506 | Transistor KSC1845F        |              |                        |              |                      |  |
| Q504SL                      | 960 0196 506 | Transistor KSC1845F        |              |                        |              |                      |  |
| Q504SR                      | 960 0196 506 | Transistor KSC1845F        |              |                        |              |                      |  |
| Q551                        | 960 0196 700 | Transistor KTC3200BL       |              |                        |              |                      |  |
| Q552                        | 960 0196 302 | Transistor KTA1268BL       |              |                        |              |                      |  |
| Q553                        | 963 0075 309 | Transistor DTA114ES        |              |                        |              |                      |  |
| Q554                        | 963 0075 309 | Transistor DTA114ES        |              |                        |              |                      |  |
| Q555                        | 963 0075 309 | Transistor DTA114ES        |              |                        |              |                      |  |
| Q621                        | 960 0005 202 | Transistor KTC3198Y        |              |                        |              |                      |  |
| Q622                        | 960 0005 202 | Transistor KTC3198Y        |              |                        |              |                      |  |
| Q623                        | 960 0196 904 | Transistor DTC114YS        |              |                        |              |                      |  |
| Q624                        | 960 0196 904 | Transistor DTC114YS        |              |                        |              |                      |  |
| Q625                        | 960 0005 202 | Transistor KTC3198Y        |              |                        |              |                      |  |
| R401                        | 963 9004 821 | Carbon chip 10 ohm 1/16W   |              |                        |              |                      |  |
| R403                        | 963 9004 339 | Carbon chip 470 ohm 1/16W  |              |                        |              |                      |  |
| R404                        | 963 9004 083 | Carbon chip 100 kohm 1/16W |              |                        |              |                      |  |
| R405                        | 960 9003 807 | Metal film 100 ohm 1/4W    |              |                        |              |                      |  |
| R406                        | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |              |                        |              |                      |  |
| R407                        | 963 9004 339 | Carbon chip 470 ohm 1/16W  |              |                        |              |                      |  |
|                             | 963 9005 008 | Carbon chip 620 ohm 1/16W  |              |                        |              |                      | for E3,EU<br>for E2,E1,E1C,E1H,<br>E1K,E1T,EK,EA |
| R408                        | 963 9004 119 | Carbon chip 1.2 kohm 1/16W |              |                        |              |                      | for E3,EU,E1,E1C,<br>E1H,E1K,E1T<br>for E2,EK,EA |
|                             | 963 9004 436 | Carbon chip 680 ohm 1/16W  |              |                        |              |                      |  |
| R409                        | 963 9004 339 | Carbon chip 470 ohm 1/16W  |              |                        |              |                      |  |
| R411                        | 963 9005 011 | Carbon chip 68 kohm 1/16W  |              |                        |              |                      |  |
| R412                        | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |              |                        |              |                      |  |
| R413                        | 960 9006 503 | Metal film 220 ohm 1/4W    |              |                        |              |                      |  |

| Ref. No. | Part No.     | Part Name                  | Remarks                          | Ref. No. | Part No.     | Part Name                   | Remarks                          |
|----------|--------------|----------------------------|----------------------------------|----------|--------------|-----------------------------|----------------------------------|
| R414     | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |                                  | R481FR   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W  |                                  |
| R415     | 963 9003 398 | Carbon chip 1 kohm 1/16W   |                                  | R481SL   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W  |                                  |
| R416     | 963 9005 561 | Metal oxide 680 ohm 1W     |                                  | R481SR   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W  |                                  |
| R417     | 963 9003 398 | Carbon chip 1 kohm 1/16W   |                                  | R481SW   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W  |                                  |
| R418     | 963 9004 274 | Carbon chip 33 kohm 1/16W  |                                  | R482C    | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R420     | 963 9004 847 | Carbon chip 3.3 kohm 1/16W |                                  | R482FL   | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R426     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                                  | R482FR   | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R427     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                                  | R482SL   | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R429     | 963 9004 850 | Carbon chip 82 ohm 1/16W   |                                  | R482SR   | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R430     | 960 9003 807 | Metal film 100 ohm 1/4W    |                                  | R482SW   | 963 9003 385 | Carbon chip 100 ohm 1/16W   |                                  |
| R431     | 963 9004 371 | Carbon chip 5.1 kohm 1/16W |                                  | R509C    | 960 9005 902 | Metal film 1.2 kohm 1/4W    |                                  |
| R432     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                                  | R509FL   | 960 9005 902 | Metal film 1.2 kohm 1/4W    |                                  |
| R434     | 960 9003 807 | Metal film 100 ohm 1/4W    |                                  | R509FR   | 960 9005 902 | Metal film 1.2 kohm 1/4W    |                                  |
| R435     | 963 9004 847 | Carbon chip 3.3 kohm 1/16W |                                  | R509SL   | 960 9005 902 | Metal film 1.2 kohm 1/4W    |                                  |
| R437     | 963 9004 083 | Carbon chip 100 kohm 1/16W |                                  | R509SR   | 960 9005 902 | Metal film 1.2 kohm 1/4W    |                                  |
| R438     | 963 9004 083 | Carbon chip 100 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R511C    | 960 9004 301 | Metal film 47 ohm 1/4W      |                                  |
|          | 963 9004 164 | Carbon chip 150 kohm 1/16W | for E2,EK,EA                     | R511FL   | 960 9004 301 | Metal film 47 ohm 1/4W      |                                  |
| R439     | 963 9004 083 | Carbon chip 100 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R511FR   | 960 9004 301 | Metal film 47 ohm 1/4W      |                                  |
|          | 963 9004 164 | Carbon chip 150 kohm 1/16W | for E2,EK,EA                     | R511SL   | 960 9004 301 | Metal film 47 ohm 1/4W      |                                  |
| R440     | 963 9004 863 | Carbon chip 120 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R511SR   | 960 9004 301 | Metal film 47 ohm 1/4W      |                                  |
|          | 963 9004 232 | Carbon chip 220 kohm 1/16W | for E2,EK,EA                     | R559     | 963 9005 642 | Metal film 1.2 kohm 1W      |                                  |
| R441     | 963 9004 863 | Carbon chip 120 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R565     | 963 9005 642 | Metal film 1.2 kohm 1W      |                                  |
|          | 963 9004 232 | Carbon chip 220 kohm 1/16W | for E2,EK,EA                     | R570     | 963 9005 642 | Metal film 1.2 kohm 1W      |                                  |
| R442     | 963 9004 847 | Carbon chip 3.3 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R621     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
|          | 963 9004 216 | Carbon chip 2.2 kohm 1/16W | for E2,EK,EA                     | R622     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
| R443     | 963 9004 847 | Carbon chip 3.3 kohm 1/16W | for E3,E1,E1C,E1H,<br>E1K,E1T,EU | R623     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
|          | 963 9004 216 | Carbon chip 2.2 kohm 1/16W | for E2,EK,EA                     | R624     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
| R444     | 963 9004 481 | Carbon chip 8.2 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R625     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
|          | 963 9004 847 | Carbon chip 3.3 kohm 1/16W | for E2,EK,EA                     | R626     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
| R445     | 963 9004 481 | Carbon chip 8.2 kohm 1/16W | for E3,EU,E1,E1C,<br>E1H,E1K,E1T | R627     | 963 9005 943 | Carbon chip 68 ohm 1/16W    |                                  |
|          | 963 9004 847 | Carbon chip 3.3 kohm 1/16W | for E2,EK,EA                     | R628     | 963 9004 070 | Carbon chip 10 kohm 1/16W   |                                  |
| R448     | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |                                  | R630     | 963 9005 943 | Carbon chip 68 ohm 1/16W    |                                  |
| R449     | 963 9005 037 | Carbon chip 3.9 kohm 1/16W | for E2,EK,EA                     | R631     | 963 9004 070 | Carbon chip 10 kohm 1/16W   |                                  |
| R450     | 963 9003 398 | Carbon chip 1 kohm 1/16W   | for E2,EK,EA                     | R634     | 963 9004 070 | Carbon chip 10 kohm 1/16W   |                                  |
| R455     | 963 9004 876 | Carbon chip 330 ohm 1/16W  |                                  | R635     | 963 9003 275 | Carbon film 390 ohm 1/5W    |                                  |
| R456     | 963 9003 385 | Carbon chip 100 ohm 1/16W  |                                  | R637     | 963 9004 070 | Carbon chip 10 kohm 1/16W   |                                  |
| R470     | 963 9003 398 | Carbon chip 1 kohm 1/16W   |                                  | R641     | 963 9004 465 | Carbon chip 75 ohm 1/16W    |                                  |
| R471VT   | 963 9004 203 | Carbon chip 220 ohm 1/16W  |                                  | R901     | 960 9009 270 | Metal film 470 ohm 2W       |                                  |
| R472     | 963 9003 385 | Carbon chip 100 ohm 1/16W  | for E2,EK,EA                     | R902     | 960 9009 270 | Metal film 470 ohm 2W       |                                  |
| R474     | 963 9004 889 | Carbon chip 180 ohm 1/16W  | for E2,EK,EA                     | VR401    | 960 0096 606 | Semi fixed resistor 20kohm  |                                  |
| R475     | 963 9004 122 | Carbon chip 12 kohm 1/16W  |                                  | VR402    | 963 0056 205 | Semi fixed resistor 50kohm  | for E3,E1,E1C,E1H,<br>E1K,E1T,EU |
| R476     | 963 9004 397 | Carbon chip 56 kohm 1/16W  |                                  |          | 960 0096 402 | Semi fixed resistor 100kohm | for E2,EK,EA                     |
| R478     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |                                  | VR403    | 963 0052 005 | Semi fixed resistor 200kohm |                                  |
| R479     | 963 9004 083 | Carbon chip 100 kohm 1/16W |                                  |          |              |                             |                                  |
| R481C    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |                                  |          |              |                             |                                  |
| R481FL   | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |                                  |          |              |                             |                                  |

| Ref. No.                | Part No.     | Part Name                | Remarks                             | Ref. No. | Part No.     | Part Name                | Remarks                |
|-------------------------|--------------|--------------------------|-------------------------------------|----------|--------------|--------------------------|------------------------|
| <b>CAPACITORS GROUP</b> |              |                          |                                     |          |              |                          |                        |
| C341                    | 963 9004 546 | Ceramic 0.01uF/16V       |                                     |          | 963 9005 448 | Ceramic 330pF/50V        | for E2,EK,EA           |
| C342                    | 963 9004 546 | Ceramic 0.01uF/16V       |                                     |          | 963 9004 931 | Ceramic 180pF/50V        | for E1,E1C,E1H,E1K,E1T |
| C401                    | 963 9004 685 | Ceramic chip 1000pF/50V  |                                     | C448     | 963 9004 960 | Ceramic 470pF/50V        | for E3,EU              |
| C402                    | 963 9004 685 | Ceramic chip 1000pF/50V  |                                     |          | 963 9005 448 | Ceramic 330pF/50V        | for E1,E1C,E1H,E1K,E1T |
| C403                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C449     | 963 9004 960 | Ceramic 470pF/50V        | for E3,EU              |
| C404                    | 963 9004 892 | Ceramic 2pF/50V          |                                     |          | 963 9005 448 | Ceramic 330pF/50V        | for E1,E1C,E1H,E1K,E1T |
| C405                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C450     | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C406                    | 963 9004 902 | Ceramic chip 18pF/50V    |                                     | C451     | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C408                    | 960 9004 709 | Ceramic 6pF/50V          |                                     | C453     | 963 9004 614 | Ceramic chip 27pF/50V    |                        |
| C409                    | 963 9004 520 | Ceramic 100pF/50V        |                                     | C456     | 963 9004 672 | Ceramic chip 680pF/50V   |                        |
| C410                    | 963 9004 915 | Ceramic 470pF/50V        |                                     | C461     | 963 9004 591 | Ceramic chip 22pF/50V    |                        |
| C411                    | 963 9004 685 | Ceramic chip 1000pF/50V  |                                     | C462     | 963 9004 654 | Ceramic chip 470pF/50V   | for E2,EK,EA           |
| C412                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C463     | 963 9004 782 | Mylar film 0.056uF/100V  |                        |
| C413                    | 963 9004 575 | Ceramic chip 100pF/50V   |                                     | C464     | 963 9004 973 | Ceramic 3pF/50V          |                        |
| C414                    | 963 9005 846 | Electrolytic 2.2uF/50V   |                                     | C471VT   | 963 9005 749 | Electrolytic 1uF/50V     |                        |
| C415                    | 963 9005 862 | Electrolytic 47uF/16V    |                                     | C472VT   | 963 9004 753 | Ceramic chip 0.047uF/50V |                        |
| C416                    | 963 9005 765 | Electrolytic 10uF/35V    |                                     | C481C    | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C417                    | 963 9005 794 | Electrolytic 100uF/16V   |                                     | C481FL   | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C418                    | 963 9004 698 | Ceramic chip 0.01uF/50V  |                                     | C481FR   | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C419                    | 963 9005 765 | Electrolytic 10uF/35V    |                                     | C481SL   | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C420                    | 963 9004 591 | Ceramic chip 22pF/50V    |                                     | C481SR   | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C421                    | 963 9005 998 | Ceramic chip 24pF/50V    |                                     | C481SW   | 963 9004 575 | Ceramic chip 100pF/50V   |                        |
| C423                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C501C    | 963 9005 820 | Electrolytic 22uF/16V    |                        |
| C424                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C501FL   | 963 9005 820 | Electrolytic 22uF/16V    |                        |
| C425                    | 963 9005 914 | Electrolytic 4.7uF/50V   |                                     | C501FR   | 963 9005 820 | Electrolytic 22uF/16V    |                        |
| C426                    | 963 9005 956 | Electrolytic 3.3uF/50V   |                                     | C501M    | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C427                    | 963 9005 914 | Electrolytic 4.7uF/50V   |                                     | C501SL   | 963 9005 820 | Electrolytic 22uF/16V    |                        |
| C428                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C501SR   | 963 9005 820 | Electrolytic 22uF/16V    |                        |
| C430                    | 963 0021 900 | Mylar film 0.047uF/100V  |                                     | C502C    | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C431                    | 963 9004 627 | Ceramic chip 33pF/50V    |                                     | C502FL   | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C432                    | 963 9005 862 | Electrolytic 47uF/16V    |                                     | C502FR   | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C433                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C502SL   | 963 9005 765 | Electrolytic 10uF/35V    |                        |
| C434                    | 963 9005 749 | Electrolytic 1uF/50V     | for E3,EU                           | C502SR   | 963 9005 765 | Electrolytic 10uF/35V    |                        |
|                         | 963 9005 985 | Electrolytic 0.33uF/50V  | for E2,E1,E1C,E1H,<br>E1K,E1T,EK,EA | C503C    | 963 9003 165 | Ceramic 220pF/500V       |                        |
| C435                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C503FL   | 963 9003 165 | Ceramic 220pF/500V       |                        |
| C436                    | 963 9004 737 | Ceramic chip 0.022uF/25V |                                     | C503FR   | 963 9003 165 | Ceramic 220pF/500V       |                        |
| C437                    | 963 9005 862 | Electrolytic 47uF/16V    |                                     | C503SL   | 963 9003 165 | Ceramic 220pF/500V       |                        |
| C438                    | 963 9005 749 | Electrolytic 1uF/50V     |                                     | C503SR   | 963 9003 165 | Ceramic 220pF/500V       |                        |
| C439                    | 963 9005 972 | Electrolytic 0.22uF/50V  |                                     | C504C    | 963 9003 178 | Ceramic 220pF/50V        |                        |
| C440                    | 963 9005 749 | Electrolytic 1uF/50V     |                                     | C504FL   | 963 9003 178 | Ceramic 220pF/50V        |                        |
| C441                    | 963 9005 749 | Electrolytic 1uF/50V     |                                     | C504FR   | 963 9003 178 | Ceramic 220pF/50V        |                        |
| C442                    | 963 9005 846 | Electrolytic 2.2uF/50V   |                                     | C504SL   | 963 9003 178 | Ceramic 220pF/50V        |                        |
| C443                    | 963 9005 765 | Electrolytic 10uF/35V    |                                     | C504SR   | 963 9003 178 | Ceramic 220pF/50V        |                        |
| C444                    | 963 9005 914 | Electrolytic 4.7uF/50V   |                                     | C505C    | 963 9003 181 | Ceramic 33pF/500V        |                        |
| C445                    | 963 9005 765 | Electrolytic 10uF/35V    |                                     | C505FL   | 963 9003 181 | Ceramic 33pF/500V        |                        |
| C446                    | 963 9005 053 | Ceramic 270pF/50V        | for E3,EU                           | C505FR   | 963 9003 181 | Ceramic 33pF/500V        |                        |
|                         | 963 9005 448 | Ceramic 330pF/50V        | for E2,EK,EA                        | C505SL   | 963 9003 181 | Ceramic 33pF/500V        |                        |
|                         | 963 9004 931 | Ceramic 180pF/50V        | for E1,E1C,E1H,E1K,E1T              | C505SR   | 963 9003 181 | Ceramic 33pF/500V        |                        |
| C447                    | 963 9005 053 | Ceramic 270pF/50V        | for E3,EU                           | C506C    | 963 9005 312 | Electrolytic 100uF/10V   |                        |
|                         |              |                          |                                     | C506FL   | 963 9005 312 | Electrolytic 100uF/10V   |                        |
|                         |              |                          |                                     | C506FR   | 963 9005 312 | Electrolytic 100uF/10V   |                        |



| Ref. No. | Part No.     | Part Name                | Remarks | Ref. No.                 | Part No.     | Part Name              | Remarks                     | Q'ty |
|----------|--------------|--------------------------|---------|--------------------------|--------------|------------------------|-----------------------------|------|
| C506SL   | 963 9005 312 | Electrolytic 100uF/10V   |         | C691                     | 963 9005 749 | Electrolytic 1uF/50V   |                             |      |
| C506SR   | 963 9005 312 | Electrolytic 100uF/10V   |         | C692                     | 963 9005 749 | Electrolytic 1uF/50V   |                             |      |
| C507C    | 963 9003 194 | Mylar film 0.0022uF/100V |         | C693                     | 963 9003 108 | Ceramic 0.022uF/25V    |                             |      |
| C507FL   | 963 9003 194 | Mylar film 0.0022uF/100V |         | C694                     | 963 9005 312 | Electrolytic 100uF/10V |                             |      |
| C507FR   | 963 9003 194 | Mylar film 0.0022uF/100V |         | C901                     | 963 9004 533 | Ceramic 0.001uF/50V    |                             |      |
| C507SL   | 963 9003 194 | Mylar film 0.0022uF/100V |         | C902                     | 963 9004 533 | Ceramic 0.001uF/50V    |                             |      |
| C507SR   | 963 9003 194 | Mylar film 0.0022uF/100V |         | C903                     | 963 9005 749 | Electrolytic 1uF/50V   |                             |      |
| C551     | 963 9005 846 | Electrolytic 2.2uF/50V   |         | C904                     | 963 9003 108 | Ceramic 0.022uF/25V    |                             |      |
| C551M    | 963 9005 817 | Electrolytic 100uF/35V   |         | <b>OTHER PARTS GROUP</b> |              |                        |                             |      |
| C551S    | 963 9004 562 | Ceramic 0.047uF/50V      |         | CF401,402                | 960 0187 104 | Ceramic filter         | for E3,EU                   | 2    |
| C552     | 963 9005 927 | Electrolytic 0.1uF/50V   |         | CF401,402                | 960 0177 509 | Ceramic filter         | for E2,EK,EA                | 2    |
| C553     | 963 9005 927 | Electrolytic 0.1uF/50V   |         | CF401                    | 960 0187 104 | Ceramic filter         | for E1,E1,b,<br>E1K,E1H,E1T | 1    |
| C554     | 963 9005 927 | Electrolytic 0.1uF/50V   |         | CF402                    | 960 0177 509 | Ceramic filter         | for E1,E1,b,<br>E1K,E1H,E1T | 1    |
| C555     | 963 9004 546 | Ceramic 0.01uF/16V       |         | CF403                    | 960 0187 609 | Ceramic resonator      |                             | 1    |
| C556     | 963 9004 546 | Ceramic 0.01uF/16V       |         | CN392                    | 963 0087 300 | 3P wire                |                             | 1    |
| C557     | 963 9005 752 | Electrolytic 10uF/35V    |         | CN401                    | 963 0085 409 | 10P connector socket   |                             | 1    |
| C621     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN402                    | 963 0097 303 | 15P connector socket   |                             | 1    |
| C622     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN501                    | 963 0085 506 | 9P connector socket    |                             | 1    |
| C623     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN502-504                | 963 0085 603 | 5P connector socket    |                             | 3    |
| C624     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | CN505                    | 963 0085 700 | 6P connector socket    |                             | 1    |
| C625     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | CN552                    | 960 0239 900 | 13P connector socket   |                             | 1    |
| C626     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN553                    | 963 0085 409 | 10P connector socket   |                             | 1    |
| C627     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN555                    | 960 0239 900 | 13P connector socket   |                             | 1    |
| C628     | 963 9005 309 | Electrolytic 47uF/10V    |         | CN554                    | 963 0097 002 | 13P wire               |                             | 1    |
| C629     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | CN556                    | 963 0086 709 | 11P connector socket   |                             | 1    |
| C630     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | CN603                    | 963 0085 603 | 5P connector socket    |                             | 1    |
| C631     | 963 9005 794 | Electrolytic 100uF/16V   |         | CN621                    | 963 0085 603 | 5P connector socket    |                             | 1    |
| C632     | 963 9004 753 | Ceramic chip 0.047uF/50V |         | CN651                    | 963 0085 603 | 5P connector socket    | for E3,EU                   | 1    |
| C633     | 963 9004 753 | Ceramic chip 0.047uF/50V |         | CN901                    | 963 0090 902 | 3P wire                |                             | 1    |
| C634     | 963 9005 749 | Electrolytic 1uF/50V     |         | CP302                    | 963 0075 600 | 6P connector base      |                             | 1    |
| C635     | 963 9005 749 | Electrolytic 1uF/50V     |         | CP392                    | 963 0048 909 | 3P connector base      |                             | 1    |
| C651     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | CP551                    | 963 0097 701 | 12P connector base     |                             | 1    |
| C652     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | CP554                    | 963 0097 808 | 13P connector base     |                             | 1    |
| C653     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | CP621                    | 963 0086 903 | 5P connector base      |                             | 1    |
| C654     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | CP651                    | 963 0086 903 | 5P connector base      | for E3,EU                   | 1    |
| C655     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | FE401                    | 960 0187 706 | Front end FTE4-401TB   |                             | 1    |
| C656     | 963 9005 914 | Electrolytic 4.7uF/50V   |         | G401                     | —            | 1P contact ass'y       |                             | 1    |
| C657     | 963 9005 969 | Electrolytic 4700uF/6.3V |         | G901                     | —            | 1P contact ass'y       |                             | 1    |
| C658     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | JK901                    | 963 0095 402 | Head phone jack        |                             | 1    |
| C659     | 963 9005 891 | Electrolytic 470uF/6.3V  |         | L401                     | 963 0052 102 | Inductor 1uh           |                             | 1    |
| C660     | 963 9005 312 | Electrolytic 100uF/10V   |         | L402                     | 960 0010 307 | Inductor 10uh          |                             | 1    |
| C661     | 963 9005 312 | Electrolytic 100uF/10V   |         | L403                     | 963 0056 409 | If MW coil             |                             | 1    |
| C662     | 963 9005 312 | Electrolytic 100uF/10V   |         |                          |              |                        |                             |      |
| C671     | 963 9005 749 | Electrolytic 1uF/50V     |         |                          |              |                        |                             |      |
| C672     | 963 9005 749 | Electrolytic 1uF/50V     |         |                          |              |                        |                             |      |
| C673     | 963 9003 108 | Ceramic 0.022uF/25V      |         |                          |              |                        |                             |      |
| C674     | 963 9005 312 | Electrolytic 100uF/10V   |         |                          |              |                        |                             |      |
| C681     | 963 9005 749 | Electrolytic 1uF/50V     |         |                          |              |                        |                             |      |
| C682     | 963 9005 749 | Electrolytic 1uF/50V     |         |                          |              |                        |                             |      |
| C683     | 963 9003 108 | Ceramic 0.022uF/25V      |         |                          |              |                        |                             |      |
| C684     | 963 9005 312 | Electrolytic 100uF/10V   |         |                          |              |                        |                             |      |

**INPUT VOLUME P.W.B. ASS'Y**

| Ref. No. | Part No.     | Part Name                   | Remarks      | Q'ty | Ref. No.                    | Part No.     | Part Name                  | Remarks |
|----------|--------------|-----------------------------|--------------|------|-----------------------------|--------------|----------------------------|---------|
| SW901    | 960 0176 209 | Push SW                     | for E3,EU    | 1    | <b>SEMICONDUCTORS GROUP</b> |              |                            |         |
| T401     | 960 0186 600 | If MW coil PCFMAF-270       |              | 1    | IC701                       | 963 0096 401 | IC BD3811K1                |         |
| T402     | 960 0007 349 | If FM coil M292MEA-K5611FKG |              | 1    | IC721                       | 963 0024 004 | IC NJM2068M                |         |
| T403     | 960 0007 352 | If FM coil 292MEA-K5612X    |              | 1    | IC761                       | 963 0024 004 | IC NJM2068M                |         |
| T404     | 960 0071 207 | MPX filter                  | for E2,EK,EA | 1    | IC762                       | 963 0024 004 | IC NJM2068M                |         |
| T405     | 960 0071 207 | MPX filter                  | for E2,EK,EA | 1    | IC763                       | 963 0024 004 | IC NJM2068M                |         |
| T406     | 960 0037 607 | Antibirdie filter           | for E2,EK,EA | 1    | IC781                       | 963 0024 004 | IC NJM2068M                |         |
|          |              |                             |              |      | IC782                       | 963 0024 004 | IC NJM2068M                |         |
|          |              |                             |              |      | IC783                       | 963 0024 004 | IC NJM2068M                |         |
| VEC303   | 963 0095 208 | Encoder SW                  |              | 1    | Q751                        | 963 0075 503 | Transistor DTC144ES        |         |
| X401     | 963 0099 107 | Crystal 7.2MHz              |              | 1    | Q752                        | 963 0075 503 | Transistor DTA114ES        |         |
| X402     | 963 0043 302 | Ceramic resonator CSB456F11 |              | 1    | Q753                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          | 963 0052 403 | 3P antenna terminal         |              | 1    | Q754                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          | 963 0099 204 | 3P pin jack                 | for E3,EU    | 1    | Q755                        | 963 0075 503 | Transistor DTC144ES        |         |
|          | 960 0181 304 | 3P S terminal               |              | 1    | Q756                        | 963 0075 309 | Transistor DTA114ES        |         |
|          | 960 0181 401 | 4P S terminal               |              | 1    | Q757                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          | 960 0188 307 | 6P pin jack                 |              | 1    | Q758                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          | 960 0188 404 | 6P pin jack                 |              | 1    | Q771                        | 963 0075 503 | Transistor DTC144ES        |         |
|          | 960 0184 000 | Bracket                     |              | 4    | Q772                        | 963 0075 309 | Transistor DTA114ES        |         |
|          | 963 0054 003 | Tuner pack shield           |              | 1    | Q773                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          | 963 0099 000 | Earth "D"plate              |              | 1    | Q774                        | 960 0196 807 | Transistor 2SK117Y         |         |
|          |              |                             |              |      | D751                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | D752                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | D753                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | D754                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | D771                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | D772                        | 963 0096 605 | Diode 1N4148WS             |         |
|          |              |                             |              |      | ZD701                       | 960 0222 603 | Zener diode MTZJ7.5A       |         |
|          |              |                             |              |      | ZD702                       | 960 0222 603 | Zener diode MTZJ7.5A       |         |
|          |              |                             |              |      | <b>RESISTORS GROUP</b>      |              |                            |         |
|          |              |                             |              |      | R701L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R701R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R702L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R702R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R703L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R703R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R704L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R704R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R705L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R705R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R706L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R706R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R707L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R707R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R708L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R708R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
|          |              |                             |              |      | R711L                       | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         |
|          |              |                             |              |      | R711R                       | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         |

| Ref. No. | Part No.     | Part Name                  | Remarks | Ref. No. | Part No.     | Part Name                  | Remarks |
|----------|--------------|----------------------------|---------|----------|--------------|----------------------------|---------|
| R712L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R763SW   | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         |
| R712R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R764FL   | 963 9004 410 | Carbon chip 6.2 kohm 1/16W |         |
| R713L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R764FR   | 963 9004 410 | Carbon chip 6.2 kohm 1/16W |         |
| R713R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R765FL   | 963 9004 151 | Carbon chip 15 kohm 1/16W  |         |
| R714L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R765FR   | 963 9004 151 | Carbon chip 15 kohm 1/16W  |         |
| R714R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R765SW   | 963 9004 478 | Carbon chip 7.5 kohm 1/16W |         |
| R715L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R766FL   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R715R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R766FR   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R716L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R766SW   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R716R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R767FL   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R717L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R767FR   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R717R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R767SW   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R718L    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R771     | 963 9005 639 | Metal film 100 ohm 1W      |         |
| R718R    | 963 9004 245 | Carbon chip 2.2 Mohm 1/16W |         | R772     | 963 9005 639 | Metal film 100 ohm 1W      |         |
| R722L    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R773     | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
| R722R    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R774     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |         |
| R723L    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R782C    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R723R    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R782FL   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R724L    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R782FR   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R724R    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R782SL   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R725L    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R782SR   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R725R    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R782SW   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         |
| R726L    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R783C    | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R726R    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R783FL   | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R727L    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R783FR   | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R727R    | 963 9004 300 | Carbon chip 39 kohm 1/16W  |         | R783SL   | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R728L    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R783SR   | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R728R    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R783SW   | 963 9004 355 | Carbon chip 4.7 kohm 1/16W |         |
| R729L    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R784C    | 963 9005 684 | Carbon chip 13 kohm 1/16W  |         |
| R729R    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         | R784FL   | 963 9004 478 | Carbon chip 7.5 kohm 1/16W |         |
| R731     | 963 9005 668 | Metal film 220 ohm 1W      |         | R784FR   | 963 9004 478 | Carbon chip 7.5 kohm 1/16W |         |
| R732     | 963 9005 668 | Metal film 220 ohm 1W      |         | R784SL   | 963 9005 684 | Carbon chip 13 kohm 1/16W  |         |
| R733     | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         | R784SR   | 963 9005 684 | Carbon chip 13 kohm 1/16W  |         |
| R734     | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         | R784SW   | 963 9004 122 | Carbon chip 12 kohm 1/16W  |         |
| R741     | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R786C    | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
| R742     | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R786FL   | 963 9005 671 | Carbon chip 1.3 kohm 1/16W |         |
| R743     | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R786FR   | 963 9005 671 | Carbon chip 1.3 kohm 1/16W |         |
| R751     | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         | R786SL   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
| R752     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |         | R786SR   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
| R756     | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         | R786SW   | 963 9005 008 | Carbon chip 620 ohm 1/16W  |         |
| R757     | 963 9004 070 | Carbon chip 10 kohm 1/16W  |         | R787SW   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R761C    | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R788C    | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| R761FL   | 963 9005 707 | Carbon chip 3.6 kohm 1/16W |         | R788FL   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| R761FR   | 963 9005 707 | Carbon chip 3.6 kohm 1/16W |         | R788FR   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| R761SL   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R788SL   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| R761SR   | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R788SR   | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| R761SW   | 963 9005 037 | Carbon chip 3.9 kohm 1/16W |         | R788SW   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R762FL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         | R791     | 963 9005 639 | Metal film 100 ohm 1W      |         |
| R762FR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         | R792     | 963 9005 639 | Metal film 100 ohm 1W      |         |
| R762SW   | 963 9004 449 | Carbon chip 6.8 kohm 1/16W |         |          |              |                            |         |
| R763FL   | 963 9004 151 | Carbon chip 15 kohm 1/16W  |         |          |              |                            |         |
| R763FR   | 963 9004 151 | Carbon chip 15 kohm 1/16W  |         |          |              |                            |         |

| Ref. No.                | Part No.     | Part Name                | Remarks      | Ref. No.                 | Part No.     | Part Name                | Remarks     |
|-------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|-------------|
| <b>CAPACITORS GROUP</b> |              |                          |              | C762FR                   | 963 9004 575 | Ceramic chip 100pF/50V   |             |
| C701L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C762SW                   | 963 9004 575 | Ceramic chip 100pF/50V   |             |
| C701R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C763FL                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C702L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C763FR                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C702R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C763SW                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C703L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C764FL                   | 963 9004 627 | Ceramic chip 33pF/50V    |             |
| C703R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C764FR                   | 963 9004 627 | Ceramic chip 33PF/50V    |             |
| C704L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C764SW                   | 963 9004 643 | Ceramic chip 47pF/50V    |             |
| C704R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C765FL                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C705L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C765FR                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C705R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C765SW                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C706L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C771                     | 963 9005 875 | Electrolytic 47uF/25V    |             |
| C706R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C772                     | 963 9005 875 | Electrolytic 47uF/25V    |             |
| C707L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C773                     | 963 9005 749 | Electrolytic 1uF/50V     |             |
| C707R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C781C                    | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C708L                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C781FL                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C708R                   | 963 9004 575 | Ceramic chip 100pF/50V   | for E2,EK,EA | C781FR                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C711L                   | 963 9004 698 | Ceramic chip 0.01uF/50V  |              | C781SL                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C711R                   | 963 9004 698 | Ceramic chip 0.01uF/50V  |              | C781SR                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C713L                   | 963 9005 765 | Electrolytic 10uF/35V    |              | C781SW                   | 963 9004 753 | Ceramic chip 0.047uF/50V |             |
| C713R                   | 963 9005 765 | Electrolytic 10uF/35V    |              | C782C                    | 963 9005 914 | Electrolytic 4.7uF/50V   |             |
| C714L                   | 963 9003 152 | Mylar film 0.068uF/100V  |              | C782FL                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C714R                   | 963 9003 152 | Mylar film 0.068uF/100V  |              | C782FR                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C715L                   | 963 9003 152 | Mylar film 0.068uF/100V  |              | C782SL                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C715R                   | 963 9003 152 | Mylar film 0.068uF/100V  |              | C782SR                   | 963 9005 765 | Electrolytic 10uF/35V    |             |
| C716L                   | 963 9005 765 | Electrolytic 10uF/35V    |              | C782SW                   | 963 9005 914 | Electrolytic 4.7uF/50V   |             |
| C716R                   | 963 9005 765 | Electrolytic 10uF/35V    |              | C783C                    | 963 9004 630 | Ceramic chip 39pF/50V    |             |
| C721                    | 963 9005 875 | Electrolytic 47uF/25V    |              | C783FL                   | 963 9004 669 | Ceramic chip 56pF/50V    |             |
| C722                    | 960 9004 602 | Ceramic 0.047uF/50V      |              | C783FR                   | 963 9004 669 | Ceramic chip 56pF/50V    |             |
| C723                    | 963 9005 875 | Electrolytic 47uF/25V    |              | C783SL                   | 963 9004 630 | Ceramic chip 39pF/50V    |             |
| C724                    | 960 9004 602 | Ceramic 0.047uF/50V      |              | C783SR                   | 963 9004 630 | Ceramic chip 39pF/50V    |             |
| C725                    | 963 9005 736 | Mylar film 0.0047uF/100V |              | C783SW                   | 963 9004 575 | Ceramic chip 100pF/50V   |             |
| C726                    | 963 9005 736 | Mylar film 0.0047uF/100V |              | C786SW                   | 963 9005 914 | Electrolytic 4.7uF/50V   |             |
| C727                    | 963 9004 766 | Mylar film 0.1uF/100V    |              | C791                     | 963 9005 875 | Electrolytic 47uF/25V    |             |
| C728                    | 963 9004 766 | Mylar film 0.1uF/100V    |              | C792                     | 963 9005 875 | Electrolytic 47uF/25V    |             |
| C729                    | 963 9004 766 | Mylar film 0.1uF/100V    |              | <b>OTHER PARTS GROUP</b> |              |                          | <b>Q'ty</b> |
| C730                    | 963 9004 766 | Mylar film 0.1uF/100V    |              | CN551                    | 963 0096 809 | 12P shield wire          | 1           |
| C731                    | 963 9005 765 | Electrolytic 10uF/35V    |              | CN701                    | 963 0086 204 | 19P connector socket     | 1           |
| C732                    | 963 9005 765 | Electrolytic 10uF/35V    |              | CN702                    | 963 0085 302 | 17P connector socket     | 1           |
| C733                    | 963 9005 765 | Electrolytic 10uF/35V    |              | CN703                    | 963 0085 409 | 10P connector socket     | 1           |
| C734                    | 963 9005 765 | Electrolytic 10uF/35V    |              |                          | 960 0188 200 | 4P pin jack              | 1           |
| C735                    | 963 9005 765 | Electrolytic 10uF/35V    |              |                          | 960 0188 307 | 6P pin jack              | 1           |
| C736                    | 963 9005 765 | Electrolytic 10uF/35V    |              |                          | 963 0094 102 | Plate input              | 1           |
| C741                    | 963 9004 575 | Ceramic chip 100pF/50V   |              |                          | 963 0094 005 | Input cushion            | 1           |
| C742                    | 963 9004 575 | Ceramic chip 100pF/50V   |              |                          |              |                          |             |
| C743                    | 963 9004 575 | Ceramic chip 100pF/50V   |              |                          |              |                          |             |
| C751                    | 963 9005 749 | Electrolytic 1uF/50V     |              |                          |              |                          |             |
| C756                    | 963 9005 749 | Electrolytic 1uF/50V     |              |                          |              |                          |             |
| C761FL                  | 963 9004 753 | Ceramic chip 0.047uF/50V |              |                          |              |                          |             |
| C761FR                  | 963 9004 753 | Ceramic chip 0.047uF/50V |              |                          |              |                          |             |
| C761SW                  | 963 9004 753 | Ceramic chip 0.047uF/50V |              |                          |              |                          |             |
| C762FL                  | 963 9004 575 | Ceramic chip 100pF/50V   |              |                          |              |                          |             |

## DSP P.W.B. ASS'Y

| Ref. No.                    | Part No.     | Part Name                  | Remarks | Ref. No. | Part No.     | Part Name                  | Remarks |
|-----------------------------|--------------|----------------------------|---------|----------|--------------|----------------------------|---------|
| <b>SEMICONDUCTORS GROUP</b> |              |                            |         |          |              |                            |         |
| IC802                       | 963 0084 905 | IC GP1FA502RZ              |         | R863L    | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| IC803                       | 963 0084 905 | IC GP1FA502RZ              |         | R863R    | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         |
| IC804                       | 963 0096 304 | IC DSP MELODY 32 LQFP      |         | R864C    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC805                       | 963 0095 703 | IC M29W800AT               |         | R864FL   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC806                       | 963 0095 606 | IC IS61LV6416-12T          |         | R864FR   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC807                       | 963 0096 100 | IC LC89057W                |         | R864L    | 963 9005 930 | Carbon chip 750 kohm 1/10W |         |
| IC808                       | 963 0096 207 | IC AD1837                  |         | R864R    | 963 9005 930 | Carbon chip 750 kohm 1/10W |         |
| IC809                       | 963 0074 203 | IC MM74LCX244WMX           |         | R864SL   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC810                       | 963 0074 203 | IC MM74LCX244WMX           |         | R864SR   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC811                       | 963 0074 203 | IC MM74LCX244WMX           |         | R864SW   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| IC812                       | 963 0074 300 | IC MM74HCT244WMX           |         | R866C    | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC813                       | 963 0095 907 | IC 74LCX02MTC              |         | R866FL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC814                       | 960 0195 109 | IC SN74LV00APW             |         | R866FR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC815A                      | 963 0043 807 | IC BA4510F-T1              |         | R866SL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC816A                      | 963 0043 807 | IC BA4510F-T1              |         | R866SR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC817A                      | 963 0024 004 | IC NJM2068M                |         | R866SW   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC818A                      | 963 0024 004 | IC NJM2068M                |         | R867C    | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC819A                      | 963 0024 004 | IC NJM2068M                |         | R867FL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC817                       | 963 0085 001 | IC GP1FA502TZ              |         | R867FR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC821                       | 963 0096 003 | IC 74LCX74MTC              |         | R867SL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC822                       | 960 0159 501 | IC KIA7805API              |         | R867SR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC823                       | 963 0074 805 | IC RC1117S33ST             |         | R867SW   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| IC824                       | 963 0074 708 | IC RC1117S25T              |         | R868C    | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804C                       | 960 0196 603 | Transistor KTC2874B        |         | R868FL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804FL                      | 960 0196 603 | Transistor KTC2874B        |         | R868FR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804FR                      | 960 0196 603 | Transistor KTC2874B        |         | R868SL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804SL                      | 960 0196 603 | Transistor KTC2874B        |         | R868SR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804SR                      | 960 0196 603 | Transistor KTC2874B        |         | R868SW   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q804SW                      | 960 0196 603 | Transistor KTC2874B        |         | R869C    | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q805                        | 963 0058 203 | Transistor DTA114EK        |         | R869FL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q806                        | 963 0058 203 | Transistor DTC114EK        |         | R869FR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| Q807                        | 963 0058 203 | Transistor DTA114EK        |         | R869SL   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| D801                        | 963 0096 605 | Diode 1N4148WS             |         | R869SR   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| D806                        | 963 0096 605 | Diode 1N4148WS             |         | R869SW   | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         |
| D807                        | 963 0096 605 | Diode 1N4148WS             |         | R870C    | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| <b>RESISTORS GROUP</b>      |              |                            |         | R870FL   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R803                        | 963 9004 342 | Carbon chip 4.7 kohm 1/16W |         | R870FR   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R841                        | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R870SL   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R848                        | 963 9003 385 | Carbon chip 100 ohm 1/16W  |         | R870SR   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R850                        | 963 9004 465 | Carbon chip 75 ohm 1/16W   |         | R870SW   | 963 9003 398 | Carbon chip 1 kohm 1/16W   |         |
| R859L                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R871C    | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R859R                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R871FL   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R860L                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R871FR   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R860R                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R871SL   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R861L                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R871SR   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R861R                       | 963 9004 339 | Carbon chip 470 ohm 1/16W  |         | R871SW   | 963 9004 083 | Carbon chip 100 kohm 1/16W |         |
| R862L                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R872C    | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
| R862R                       | 963 9004 834 | Carbon chip 5.6 kohm 1/16W |         | R872FL   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
|                             |              |                            |         | R872FR   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
|                             |              |                            |         | R872SL   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
|                             |              |                            |         | R872SR   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |
|                             |              |                            |         | R872SW   | 963 9004 216 | Carbon chip 2.2 kohm 1/16W |         |



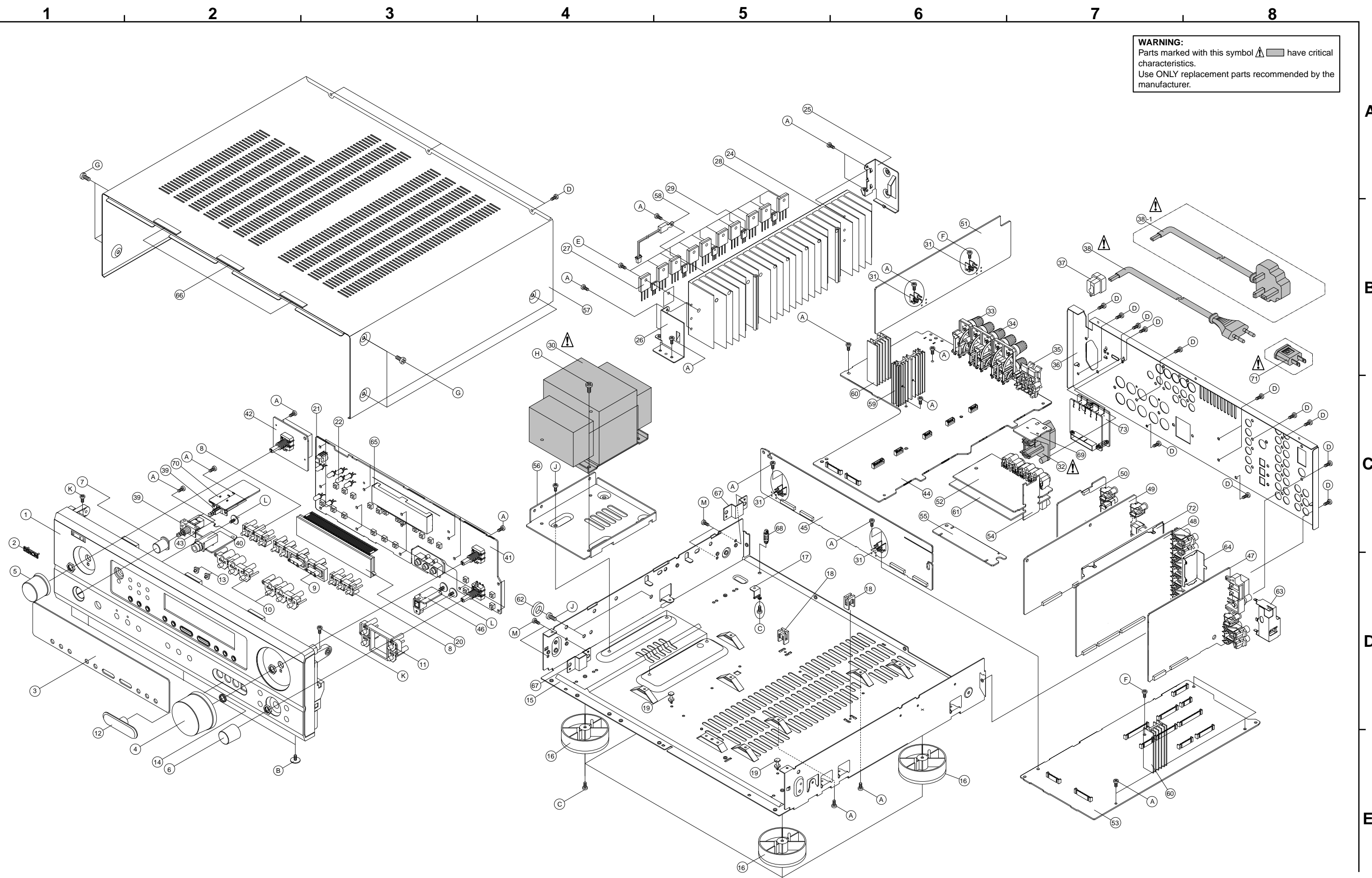
| Ref. No. | Part No.     | Part Name                | Remarks | Ref. No. | Part No.     | Part Name                | Remarks |
|----------|--------------|--------------------------|---------|----------|--------------|--------------------------|---------|
| C823     | 963 9005 752 | Electrolytic 10uF/35V    |         | C873SW   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C825     | 963 9005 749 | Electrolytic 1uF/50V     |         | C874     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         |
| C826     | 963 9005 752 | Electrolytic 10uF/35V    |         | C874C    | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C835     | 963 9005 901 | Electrolytic 470uF/10V   |         | C874FL   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C838     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C874FR   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C839     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C874SL   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C840     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | C874SR   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C841     | 963 9005 846 | Electrolytic 2.2uF/50V   |         | C874SW   | 963 9004 672 | Ceramic chip 680pF/50V   |         |
| C842     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         |
| C843     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875C    | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C844     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875FL   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C845     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875FR   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C846     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875SL   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C847     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875SR   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C848     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C875SW   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C849     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C876C    | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C850     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C876FL   | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C851     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C876FR   | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C852     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C876SL   | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C853     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C876SR   | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C854     | 963 9005 804 | Electrolytic 100uF/25V   |         | C876SW   | 963 9008 611 | Mylar film 0.0033uF/100V |         |
| C855     | 963 9005 804 | Electrolytic 100uF/25V   |         | C880C    | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C856     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C880FL   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C857     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C880FR   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C858     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C880SL   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C859     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C880SR   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C860     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C880SW   | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C861     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |          |              |                          |         |
| C862     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C916     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C863     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C917     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C864     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C925     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C864L    | 963 9005 862 | Electrolytic 47uF/16V    |         | C926     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C864R    | 963 9005 862 | Electrolytic 47uF/16V    |         | C931     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         |
| C865     | 963 9004 737 | Ceramic chip 0.022uF/25V |         | C937     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C865L    | 963 9005 723 | Ceramic chip 120pF/50V   |         | C938     | 963 9005 749 | Electrolytic 1uF/50V     |         |
| C865R    | 963 9005 723 | Ceramic chip 120pF/50V   |         | C939     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         |
| C866     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C943     | 963 9005 927 | Electrolytic 0.1uF/50V   |         |
| C868     | 963 9005 998 | Ceramic chip 24pF/50V    |         | C944     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         |
| C869     | 963 9005 998 | Ceramic chip 24pF/50V    |         | C946     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C869L    | 963 9004 575 | Ceramic chip 100pF/50V   |         | C947     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C869R    | 963 9004 575 | Ceramic chip 100pF/50V   |         | C948     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C870     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | C949     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C871     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C950     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C871L    | 963 9009 500 | Mylar film 0.001uF/100V  |         | C951     | 963 9005 901 | Electrolytic 470uF/10V   |         |
| C871R    | 963 9009 500 | Mylar film 0.001uF/100V  |         | C952     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C872     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         | C953     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C873     | 963 9004 698 | Ceramic chip 0.01uF/50V  |         | C955     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C873C    | 963 9004 672 | Ceramic chip 680pF/50V   |         | C957     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C873FL   | 963 9004 672 | Ceramic chip 680pF/50V   |         | C958     | 963 9005 312 | Electrolytic 100uF/10V   |         |
| C873FR   | 963 9004 672 | Ceramic chip 680pF/50V   |         | C959     | 963 9005 752 | Electrolytic 10uF/35V    |         |
| C873SL   | 963 9004 672 | Ceramic chip 680pF/50V   |         | C960     | 963 9004 708 | Ceramic chip 0.1uF/50V   |         |
| C873SR   | 963 9004 672 | Ceramic chip 680pF/50V   |         | C961     | 963 9005 752 | Electrolytic 10uF/35V    |         |


**VOLTAGE SEL. P.W.B. ASS'Y**  
**(for Asia, Hong Kong & Taiwan R.O.C. model only)**

| Ref. No.   | Part No.     | Part Name              | Remarks        | Q'ty        |
|--|--------------|------------------------|----------------|-------------|
| C962   | 963 9004 708 | Ceramic chip 0.1uF/50V |                |             |
| C965   | 963 9004 708 | Ceramic chip 0.1uF/50V |                |             |
| C966   | 963 9005 901 | Electrolytic 470uF/10V |                |             |
| C967   | 963 9004 708 | Ceramic chip 0.1uF/50V |                |             |
| <b>OTHER PARTS GROUP</b>                         |              |                        |                | <b>Q'ty</b> |
| CB803  | 963 0050 502 | Chip emifil            |                | 1           |
| CB805-810  | 963 0050 502 | Chip emifil            |                | 6           |
| CN801  | 963 0086 107 | 16P connector socket   |                | 1           |
| CN802  | 963 0086 204 | 19P connector socket   |                | 1           |
| CN803  | 963 0097 206 | 8P connector socket    |                | 1           |
| JACK801  | 963 0052 500 | Coaxial                |                | 1           |
| L802   | 963 0050 803 | Inductor 4.7uh         |                | 1           |
| L805,806   | 963 0050 803 | Inductor 4.7uh         |                | 2           |
| L807   | 963 0050 900 | Inductor 2.2uh         |                | 1           |
| XTAL1  | 963 0095 101 | Crystal 12.288MHz      |                | 1           |
| <b>OTHER PARTS GROUP (E1,G1H,G1T model only)</b> |              |                        |                |             |
| CP901  | 963 0061 203 | 5P connector base      | for E1,E1H,E1T | 1           |
| CP902  | 963 0059 309 | 3P wire                | for E1,E1H,E1T | 1           |
| CN105  | 963 0059 105 | 2P wire                | for E1,E1H,E1T | 1           |
| CN903  | 963 0058 805 | 2P wire                | for E1,E1H,E1T | 1           |
| △ F101   | 960 0142 602 | Fuse 250V-T2.5A        | for E1,E1H,E1T | 1           |
| F101A  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| F101B  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| △ F102   | 963 0057 107 | Fuse 250V-T6.3A        | for E1,E1H,E1T | 1           |
| F102A  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| F102B  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| △ F901   | 963 0044 709 | Fuse 250V-T3.15A       | for E1,E1H,E1T | 1           |
| F901A  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| F901B  | 960 0005 804 | Fuse clip              | for E1,E1H,E1T | 1           |
| △ JK911  | 960 0143 203 | AC outlet              | for E1,E1H,E1T | 1           |
| JK912  | 963 0056 904 | Slide SW               | for E1,E1H,E1T | 1           |
|  | 963 0051 103 | Card spacer            | for E1,E1H,E1T | 1           |
|  | 963 0044 602 | P.C. supporter         | for E1,E1H,E1T | 2           |



# EXPLODED VIEW



**WARNING:**  
Parts marked with this symbol  have critical characteristics.  
Use **ONLY** replacement parts recommended by the manufacturer.

A  
B  
C  
D  
E

Note : The symbols in the column "Remarks" indicate the following destinations.

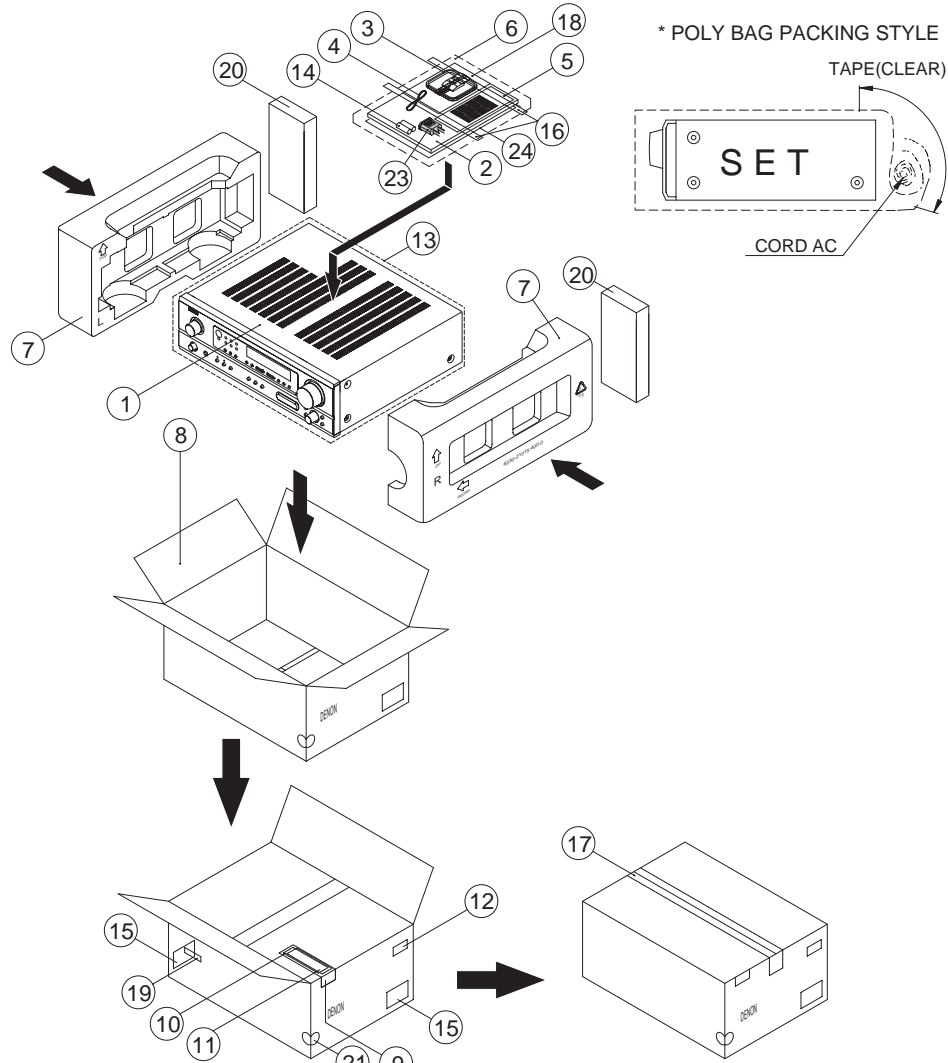
E3 : U.S.A. & Canada model      E1 : Asia model  
 EU : U.S.A. model (AVR-683)    E1C : China model  
 E2 : Europe model                E1H : Hong Kong model  
 EK : U.K. model                    E1T : Taiwan R.O.C. model  
 EA : Australia model              E1K : Korea model

### PARTS LIST OF EXPLODED VIEW

| Ref. No. | Part No.     | Part Name                      | Remarks                            | Q'ty | Ref. No.     | Part No.          | Part Name                    | Remarks                             | Q'ty                                |           |   |
|----------|--------------|--------------------------------|------------------------------------|------|--------------|-------------------|------------------------------|-------------------------------------|-------------------------------------|-----------|---|
|          | 963 0092 010 | Main P.W.B. Total Ass'y        | for E3,EU                          | 1    |              | 963 0093 022      | Front Panel                  | for EU                              | 1                                   |           |   |
|          | 963 0092 023 |                                | for E2,EK,EA                       |      |              | 963 0093 035      | Front Panel                  | for E2,EK,EA                        | 1                                   |           |   |
|          | 963 0092 036 |                                | for E1,E1T,E1H                     |      |              | 963 0093 048      | Front Panel                  | for E1,E1C,E1T,<br>E1H,E1K          | 1                                   |           |   |
|          | 963 0092 049 |                                | for E1C                            |      |              | 2                 | 963 0051 501                 | DENON Badge                         | for black model                     | 1         |   |
|          | 963 0092 052 |                                | for E1K                            |      |              |                   | 963 0051 514                 | DENON Badge                         | for gold model                      | 1         |   |
| 44       |              | Main P.W.B. Sub Ass'y          |                                    | 3    | 963 0093 116 | Window            | for E3,EU,E1,E1C,E1T,E1H,E1K | 1                                   |                                     |           |   |
| 50       |              | Video P.W.B. Sub Ass'y         |                                    |      | 963 0093 129 | Window            | for E2,EK,EA                 | 1                                   |                                     |           |   |
| 55       |              | Video CNT P.W.B. Sub Ass'y     |                                    | 4    | 963 0093 213 | Volume Knob       | for black model              | 1                                   |                                     |           |   |
| 69       |              | Outlet P.W.B. Sub Ass'y        | for E2,E1,E1T,E1H,E1K              |      | 963 0093 200 | Volume Knob       | for gold model               | 1                                   |                                     |           |   |
|          | 963 0092 117 | CPU P.W.B. Total Ass'y         | for E3,EU                          | 1    | 5            | 963 0093 310      | Function Knob                | for black model                     | 1                                   |           |   |
|          | 963 0092 120 |                                | for E2,EK,EA                       |      |              | 963 0093 307      | Function Knob                | for gold model                      | 1                                   |           |   |
|          | 963 0092 133 |                                | for E1,E1T,E1H                     |      |              | 6                 | 963 0093 417                 | Select Knob                         | for black model                     | 1         |   |
|          | 963 0092 146 |                                | for E1C                            |      |              | 963 0093 420      | Select Knob                  | for gold model                      | 1                                   |           |   |
|          | 963 0092 159 |                                | for E1K                            |      |              | 7                 | 963 0093 514                 | Power Push Button                   | for black model                     | 1         |   |
| 41       |              | Front P.W.B. Sub Ass'y         |                                    |      | 963 0093 501 | Power Push Button | for gold model               | 1                                   |                                     |           |   |
| 46       |              | Optical-In P.W.B. Sub Ass'y    |                                    | 8    | 963 0094 801 | 3key(A) Button    |                              | 2                                   |                                     |           |   |
| 53       |              | CPU P.W.B. Sub Ass'y           |                                    | 9    | 963 0098 205 | 6key Button       |                              | 1                                   |                                     |           |   |
| 70       |              | Power-Sw P.W.B. Sub Ass'y      | for E2,EK,EA,E1<br>E1C,E1T,E1H,E1K |      | 10           | 963 0094 610      | 3key(B) Button               | for black model                     | 2                                   |           |   |
|          | 963 0094 403 | Voltage Sel P.W.B. Total Ass'y | for E1,E1T,E1H                     | 1    |              | 963 0094 607      | 3key(B) Button               | for gold model                      | 2                                   |           |   |
|          | 73           | Voltage Sel P.W.B. Sub Ass'y   |                                    |      |              | 11                | 963 0094 717                 | 4key Button                         | for black model                     | 1         |   |
|          | 963 0092 214 | CNT P.W.B. Total Ass'y         | for E3,EU                          | 1    |              | 963 0094 704      | 4key Button                  | for gold model                      | 1                                   |           |   |
|          | 963 0092 227 |                                | for E2,EK,EA                       |      |              | 12                | 963 0098 302                 | RCA Cover                           | for E2,EK,EA,E3,EU                  | 1         |   |
|          | 963 0092 230 |                                | for E1,E1T,E1H                     |      |              | 13                | 960 0191 417                 | Lens LED                            |                                     | 2         |   |
|          | 963 0092 243 |                                | for E1C                            |      |              | 14                | 963 0092 900                 | Knob Spring                         |                                     | 1         |   |
|          | 963 0092 256 |                                | for E1K                            |      |              | 15                | 963 0098 108                 | Main Chassis                        |                                     | 1         |   |
| 42       |              | Encoder P.W.B. Sub Ass'y       |                                    |      | 16           | 960 0183 904      | Foot Ass'y                   |                                     | 4                                   |           |   |
| 43       |              | Head Phone P.W.B. Sub Ass'y    |                                    |      | 17           | 960 0184 107      | Bracket Supporter            |                                     | 1                                   |           |   |
| 45       |              | CNT P.W.B. Sub Ass'y           |                                    |      | 18           | 960 0003 301      | Supporter P.W.B.             |                                     | 2                                   |           |   |
| 47       |              | Tuner P.W.B. Sub Ass'y         |                                    |      | 19           | 963 0051 103      | Card Spacer                  |                                     | 2                                   |           |   |
| 51       |              | Pre-Amp P.W.B. Sub Ass'y       |                                    |      | 20           | 960 0180 509      | Display FLT 16-ST-42GNK      |                                     | 1                                   |           |   |
| 52       |              | S-Video P.W.B. Sub Ass'y       |                                    |      | 21           | 960 0181 100      | Remocon Module               |                                     | 1                                   |           |   |
| 54       |              | S-Video CNT P.W.B. Sub Ass'y   |                                    |      | 22           | 960 0197 204      | LED HL50RDRF4T               |                                     | 8                                   |           |   |
| 61       |              | C-Video P.W.B. Sub Ass'y       | for E3,EU                          |      | 24           | —                 | Main Heat Sink               | for E3,EU                           | 1                                   |           |   |
|          | 963 0092 311 | Input-Vol P.W.B. Total Ass'y   | for E3,EU                          | 1    |              | —                 | Main Heat Sink               | for E2,EK,EA,E1,<br>E1C,E1T,E1H,E1K | 1                                   |           |   |
|          | 963 0092 324 |                                | for E2,EK,EA                       |      |              | 25                | 960 0184 204                 | Heat Sink-B Bracket                 |                                     | 1         |   |
|          | 963 0092 337 |                                | for E1,E1T,E1H                     |      |              | 26                | 960 0184 301                 | Heat Sink-F Bracket                 |                                     | 1         |   |
|          | 963 0092 340 |                                | for E1C                            |      |              | 27                | 963 0044 107                 | Transistor 2SB1560-Y                | for E3,EU                           | 5         |   |
|          | 963 0092 353 |                                | for E1K                            |      |              |                   | 960 0090 107                 | Transistor 2SB1559Y                 | for E2,EK,EA,E1,<br>E1C,E1T,E1H,E1K | 5         |   |
| 48       |              | Input-Vol P.W.B. Sub Ass'y     |                                    |      | 28           | 963 0044 204      | Transistor 2SD2390-Y         | for E3,EU                           | 5                                   |           |   |
|          | 963 0092 418 | DSP P.W.B. Total Ass'y         | for E3,EU                          | 1    |              | 960 0090 000      | Transistor 2SD2389Y          | for E2,EK,EA,E1,<br>E1C,E1T,E1H,E1K | 5                                   |           |   |
|          | 963 0092 421 |                                | for E2,EK,EA                       |      |              | 29                | 963 0058 106                 | Transistor 2SD947F                  |                                     | 5         |   |
|          | 963 0092 434 |                                | for E1,E1T,E1H                     |      |              | △                 | 30                           | 963 0098 506                        | Power Trans                         | for E3,EU | 1 |
|          | 963 0092 447 |                                | for E1C                            |      |              |                   | 963 0098 409                 | Power Trans                         | for E2,EK,EA                        | 1         |   |
|          | 963 0092 450 |                                | for E1K                            |      |              |                   | 963 0098 412                 | Power Trans                         | for E1,E1T,E1H                      | 1         |   |
| 49       |              | DSP P.W.B. Sub Ass'y           |                                    |      | 963 0098 425 | Power Trans       | for E1K,E1C                  | 1                                   |                                     |           |   |
|          | 963 0093 019 | Front Panel                    | for E3                             | 1    | 31           | 960 0184 000      | Bracket Screw                |                                     | 2                                   |           |   |
|          |              |                                |                                    |      | △            | 32                | 960 0181 508                 | AC Outlet(2P)                       | for E3,EU                           | 1         |   |
|          |              |                                |                                    |      |              |                   | 960 0143 203                 | AC Outlet                           | for E2,EK,EA,E1,E1T,E1H             | 1         |   |
|          |              |                                |                                    |      | 960 0144 202 | AC Outlet         | for E1K                      | 1                                   |                                     |           |   |
|          |              |                                |                                    |      | 33           | 960 0194 809      | 2P Pin Jack                  |                                     | 1                                   |           |   |

| Ref. No. | Part No.     | Part Name              | Remarks                             | Q'ty | Ref. No.      | Part No.     | Part Name                              | Remarks                             | Q'ty |
|----------|--------------|------------------------|-------------------------------------|------|---------------|--------------|--|-------------------------------------|------|
| 34       | 963 0074 009 | 8P Pin Jack            |                                     | 1    | <b>SCREWS</b> |              |  |                                     |      |
| 35       | 960 0158 308 | Push SW Block          |                                     | 1    | A             | 963 0018 007 | Screw, Tap Tite 3x8 B-Type Zny/Bh      | for E3,EU,E2,EK,EA                  | 44   |
| 36       | 963 0092 719 | Back Chassis           | for E3                              | 1    |               | 963 0018 007 | Screw, Tap Tite 3x8 B-Type Zny/Bh      | for E1,E1C,E1T,E1H,E1K              | 41   |
|          | 963 0092 722 | Back Chassis           | for EU                              | 1    | B             | 960 9008 527 | Screw 3x8 Bk Washer Pi12               | for E3,EU,E2,EK,EA                  | 4    |
|          | 963 0092 735 | Back Chassis           | for E2,EK,EA                        | 1    |               | 960 9008 420 | Screw 3x8 Zny Washer Pi12              | for E1,E1C,E1T,E1H,E1K              | 7    |
|          | 963 0092 748 | Back Chassis           | for E1,E1T,E1H                      | 1    | C             | 963 0048 200 | Screw, Tap Tite 3x10 B-Type Zny/Bh     |                                     | 5    |
|          | 963 0092 751 | Back Chassis           | for E1K                             | 1    | D             | 960 0108 714 | Screw, Tap Tite 3x10 B-Type(Dot) Bk/Bh | for E3,EU,E2,EK,EA                  | 40   |
|          | 963 0092 764 | Back Chassis           | for E1C                             | 1    |               | 960 0108 714 | Screw, Tap Tite 3x10 B-Type(Dot) Bk/Bh | for E1,E1C,E1T,E1H,E1K              | 42   |
| 37       | 960 0192 403 | AC Cord Stopper        |                                     | 1    | E             | 963 9004 009 | Screw, Tapping Ass'y                   |                                     | 15   |
| △        | 963 0098 603 | Cord Ass'y             | for E3,EU                           | 1    | F             | 963 0018 104 | Screw, Tap Tite 3x17 B-Type Zny/Bh     |                                     | 4    |
|          | 960 0202 500 | Cord Ass'y             | for E2                              | 1    | G             | 963 0048 307 | Screw 4x8 B-Type(Dot) Bk/Bh            | for black model                     | 6    |
|          | 963 0099 602 | Cord Ass'y             | for EA                              | 1    |               | 963 9004 012 | Screw 4x8 B-Type(Dot) Ni/Bh            | for gold model                      | 6    |
|          | 963 0060 408 | Cord Ass'y             | for E1,E1T                          | 1    | H             | 960 9008 417 | Screw, Tap Tite 4x8 P+S-Washer Zny/Bh  |                                     | 4    |
|          | 960 0143 009 | Cord Ass'y             | for EK,E1H                          | 1    | J             | 963 9004 025 | Screw, Tap Tite 4x6 S-Type Zny/Bh      |                                     | 6    |
|          | 963 0098 700 | Cord Ass'y             | for E1K                             | 1    | K             | 963 9004 038 | Screw 3x8 B-Type Zny                   |                                     | 2    |
|          | 963 0060 301 | Cord Ass'y             | for E1C                             | 1    | L             | 960 9008 420 | Screw 3x8 Zny Washer Pi12              | for E3,EU,E2,EK,EA                  | 3    |
| 39       | 960 0176 209 | Push SW                | for E3,EU                           | 1    |               | 960 9008 420 | Screw 3x8 Zny Washer Pi12              | for E1,E1C,E1T,E1H,E1K              | 7    |
|          | 963 0098 807 | Push SW                | for E2,EK,EA,E1,<br>E1C,E1T,E1H,E1K | 1    | M             | 963 9004 041 | Screw 3x5 Zny/Bh                       | for E2,EK,EA,E1,<br>E1T,E1K,E1H,E1C | 4    |
| 40       | 963 0095 402 | Head Phone Jack        |                                     | 1    |               |              |  |                                     |      |
| 56       | 963 0098 904 | Trans Bracket          |                                     | 1    |               |              |  |                                     |      |
| 57       | 963 0053 017 | Top Cabinet            | for black model                     | 1    |               |              |  |                                     |      |
|          | 963 0092 502 | Top Cabinet            | for gold model                      | 1    |               |              |  |                                     |      |
| 58       | 960 0187 900 | Posistor               |                                     | 1    |               |              |  |                                     |      |
| 59       | —            | Heat Sink Reg TR       |                                     | 1    |               |              |  |                                     |      |
| 60       | —            | Heat Sink Reg TR       |                                     | 1    |               |              |  |                                     |      |
| 62       | 963 0072 302 | Rubber Cushion         |                                     | 2    |               |              |  |                                     |      |
| 63       | 963 0054 003 | Shield Tuner Pack      |                                     | 1    |               |              |  |                                     |      |
| 64       | 963 0099 000 | Earth "D"Plate         |                                     | 1    |               |              |  |                                     |      |
| 65       | 960 0184 408 | Flt Holder             |                                     | 1    |               |              |  |                                     |      |
| 66       | 963 0089 104 | Rubber Sheet (Cabinet) |                                     | 3    |               |              |  |                                     |      |
| 67       | 963 0081 607 | Side Bracket           | for E2,EK,EA,E1,<br>E1C,E1T,E1H,E1K | 2    |               |              |  |                                     |      |
| 68       | 963 0044 602 | Supporter P.C.         |                                     | 1    |               |              |  |                                     |      |
| 71       | 963 0041 300 | AC Adapter             | for E1T                             | 1    |               |              |  |                                     |      |
| 72       | 963 0094 102 | Plate Input            |                                     | 1    |               |              |  |                                     |      |
| ★        | 960 0155 301 | Clamp                  |                                     | 4    |               |              |  |                                     |      |
| ★        | 960 0093 104 | Bushing Terminal       |                                     | 10   |               |              |  |                                     |      |
| ★        | 963 0098 001 | Cable Flat Card        | for E3,EU,E2,EK,E1,E1C,E1K          | 1    |               |              |  |                                     |      |
| ★        | 963 0054 207 | Fuse Caution Label     | for E3,EU                           | 1    |               |              |  |                                     |      |
| ★        | 963 0060 000 | Fuse Caution Label     | for E2,EK,EA,E1K                    | 1    |               |              |  |                                     |      |
| ★        | 963 0090 504 | Fuse Caution Label     | for E1C                             | 1    |               |              |  |                                     |      |

# PACKING VIEW

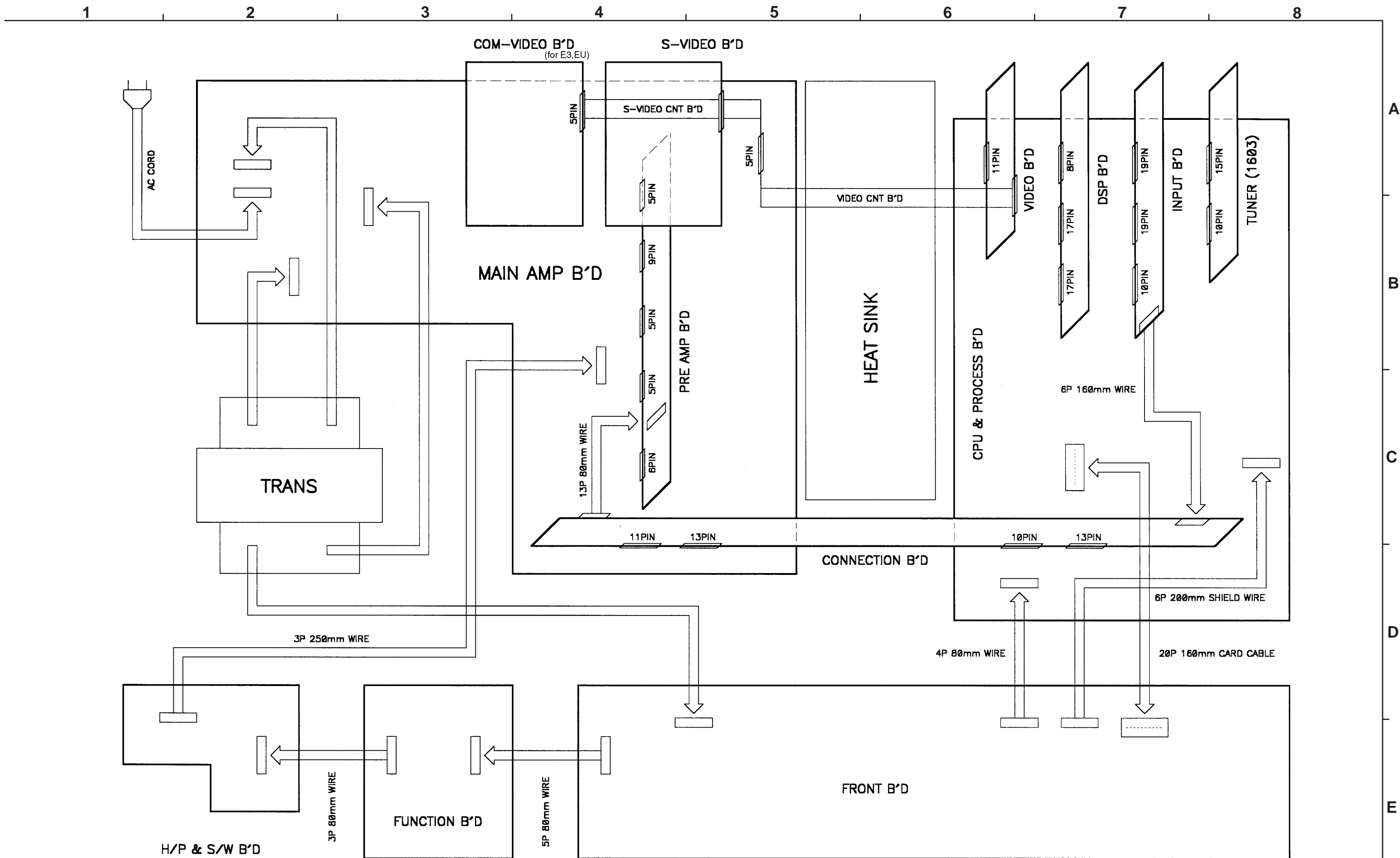


**Note :** The symbols in the column "Remarks" indicate the following destinations.  
 E3 : U.S.A. & Canada model      E1 : Asia model  
 EU : U.S.A. model (AVR-683)      E1C : China model  
 E2 : Europe model                  E1H : Hong Kong model  
 EK : U.K. model                      E1T : Taiwan R.O.C. model  
 EA : Australia model                E1K : Korea model

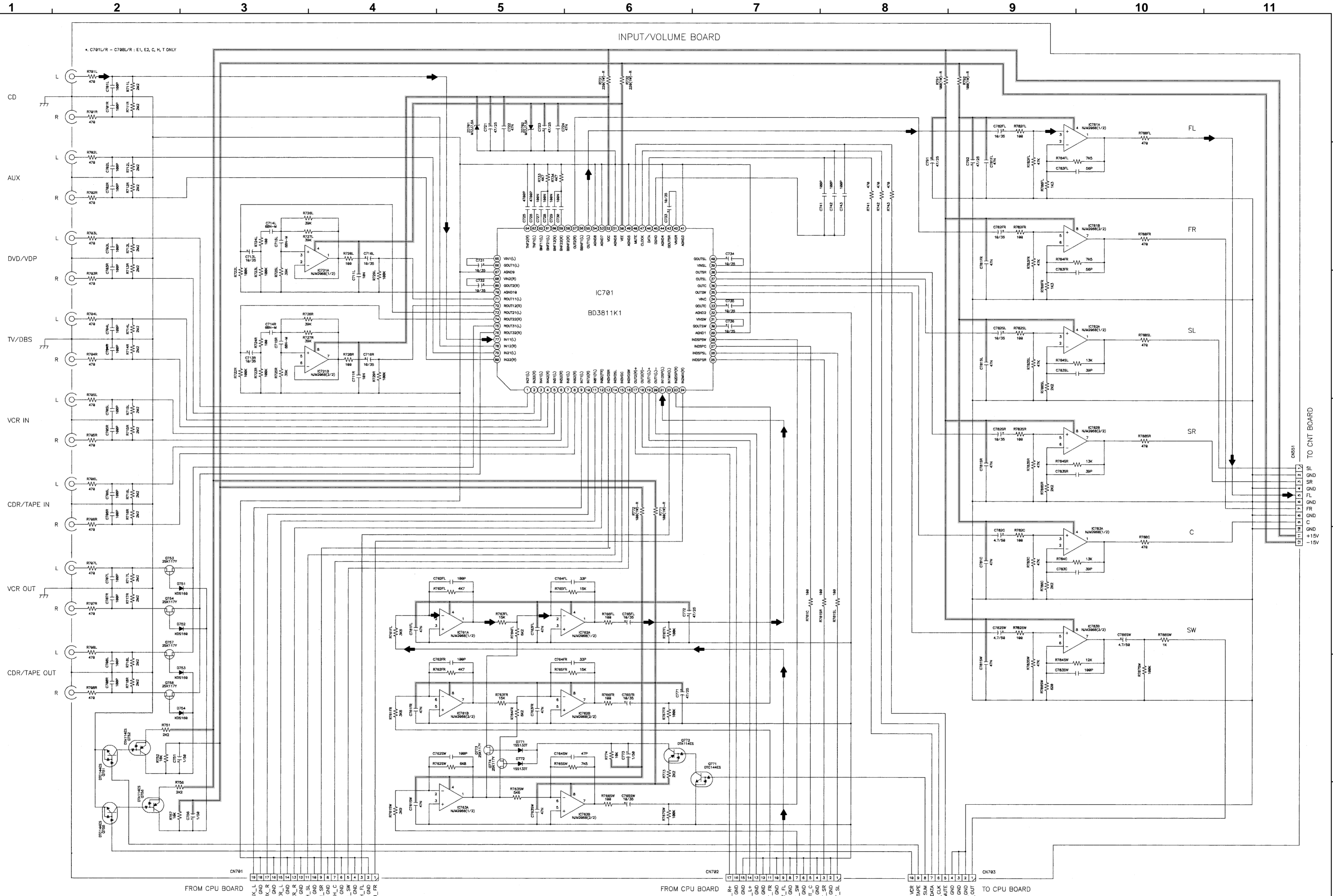
## PARTS LIST OF PACKING & ACCESSORIES

| Ref. No. | Part No.     | Part Name               | Remarks            | Q'ty | Ref. No. | Part No.     | Part Name              | Remarks        | Q'ty |
|----------|--------------|-------------------------|--------------------|------|----------|--------------|------------------------|----------------|------|
| 2        | 963 0091 011 | Instruction manual      | for E3,EU          | 1    |          | —            | UPC label              | for EU         | 1    |
|          | 963 0091 024 | Instruction manual      | for E2,EK,EA       | 1    |          | —            | Label E2 pos           | for E2         | 1    |
|          | 963 0091 037 | Instruction manual      | for E1,E1H,E1T     | 1    |          | —            | Label Ek pos           | for EK         | 2    |
|          | 963 0091 040 | Instruction manual      | for E1C            | 1    | 13       | 960 0185 601 | Set poly bag           |                | 1    |
|          | 963 0091 053 | Instruction manual      | for E1K            | 1    | 14       | —            | Battery                |                | 2    |
| 3        | 963 0052 306 | AM antenna wire         |                    | 1    | 15       | 930 0092 901 | Control label          |                | 2    |
| 4        | 963 0052 209 | FM antenna wire         |                    | 1    | 16       | —            | Tape                   |                | 1    |
| 5        | 963 0091 105 | Remocon RC920           |                    | 1    | 17       | —            | Tape packing           |                | 1    |
| 6        | 963 0045 106 | Poly bag                |                    | 1    | 18       | —            | Card S. S. List        |                | 1    |
| 7        | 960 0193 101 | Cushion snow L/R        |                    | 1    | 19       | —            | Label (RDS/Radio text) | for E2,EK,EA   | 1    |
| 8        | 963 0091 215 | Carton case             | for E3,E2          | 1    | 20       | 963 0055 918 | Pad snow               | for EK,EA,E1H  | 2    |
|          | 963 0091 228 | Carton case             | for EU             | 1    | 21       | —            | Label color            | for gold model | 2    |
|          | 963 0091 231 | Carton case             | for EK,EA          | 1    | ▲ 23     | 963 0061 300 | AC adapter             | for E1T        | 1    |
|          | 963 0091 244 | Carton case             | for E1,E1C,E1T,E1K | 1    | ★        | —            | Label kolin (rating)   | for E1T        | 1    |
|          | 963 0091 257 | Carton case             | for E1H            | 1    | ★        | —            | Label kolin (box)      | for E1T        | 1    |
| 9        | —            | Card envelope(warranty) | for E3,EU          | 1    | ★        | —            | Box label              | for E1C        | 1    |
| 10       | —            | Warranty card           | for E3,EU          | 1    | ★        | —            | Card warranty          | for E1K        | 1    |
| 11       | 960 0185 300 | Registration card       | for E3,EU          | 1    | ★        | 963 0025 809 | Preset label           | for E1,E1T,E1H | 1    |
| 12       | —            | UPC label               | for E3             | 1    | ★        | —            | Serial No. Label       |                | 1    |

# WIRING DIAGRAM



**SCHEMATIC DIAGRAMS (1/8)**



**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM. K=1,000 OHM M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.  
**WARNING:**  
 Parts marked with this symbol have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacturer.

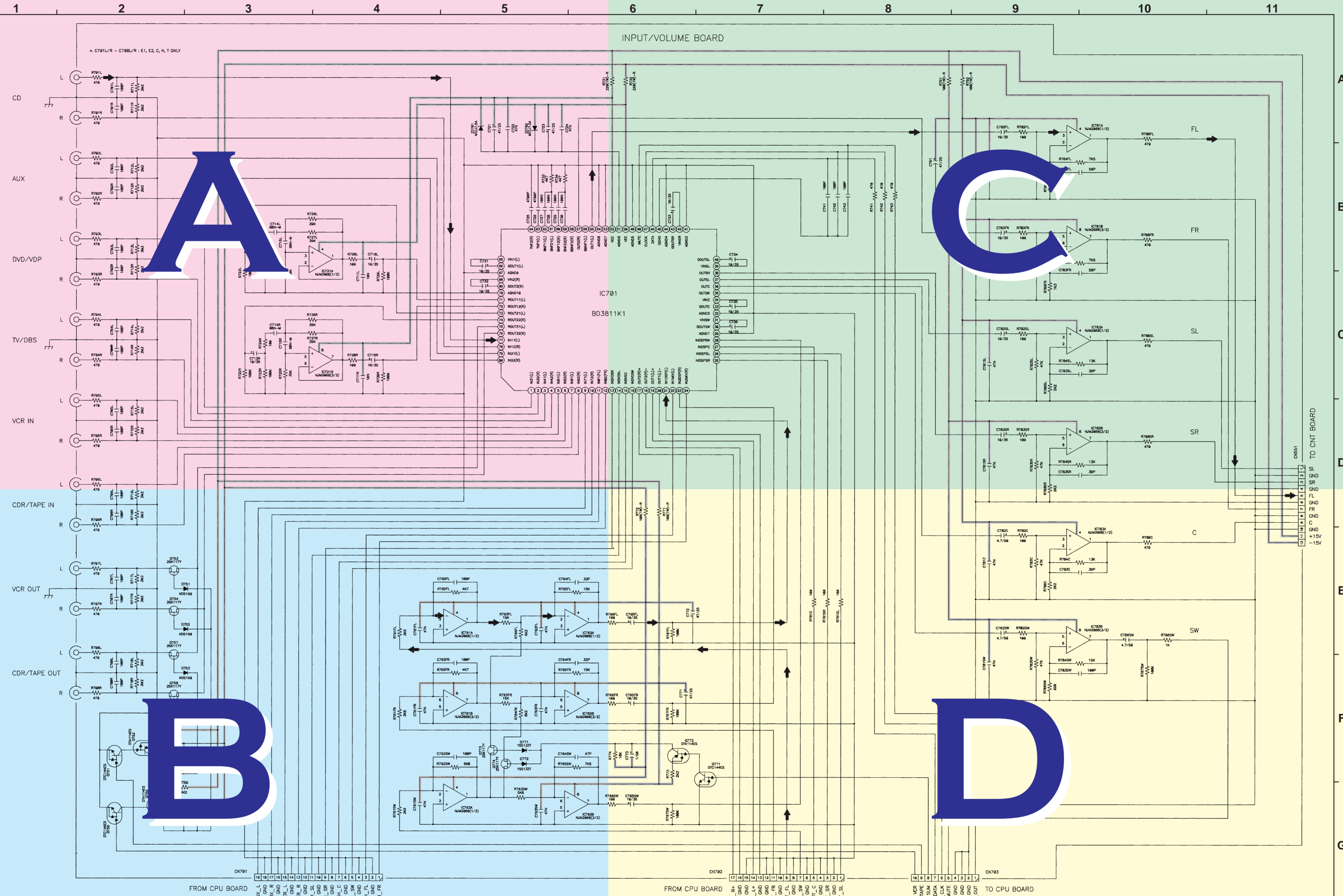
**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a  
 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 millamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
 corrected.

± B LINE  
 → SIGNAL LINE

**SCHEMATIC DIAGRAMS (1/8)**  
 INPUT-VOL UNIT

**SCHEMATIC DIAGRAMS (1/8)**



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 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.  
**WARNING:**  
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**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and corrected.

**SCHEMATIC DIAGRAMS (1/8)**  
INPUT-VOL UNIT

# SCHEMATIC DIAGRAMS (1/8)

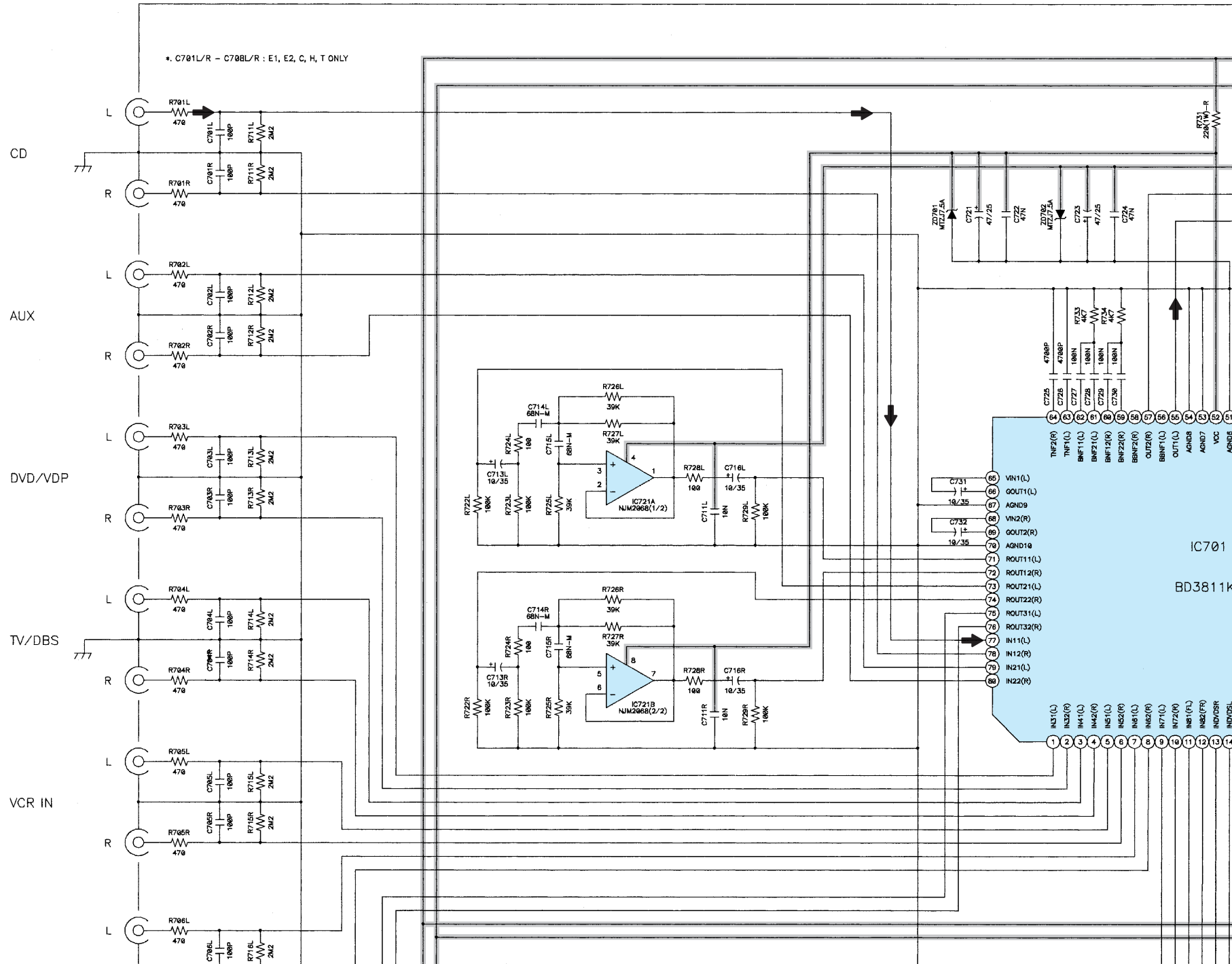
1

2

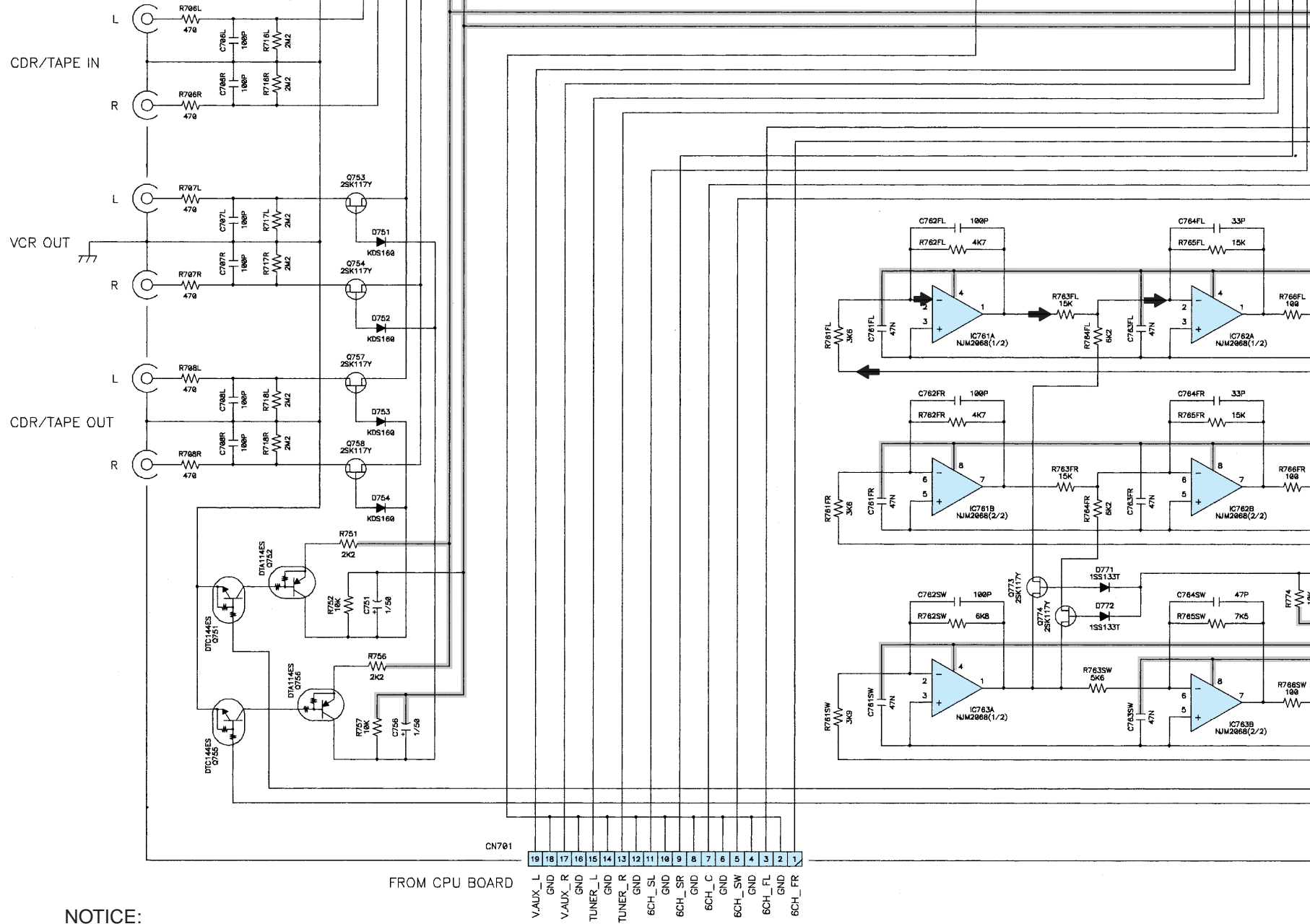
3

4

5







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 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
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**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and corrected.

6

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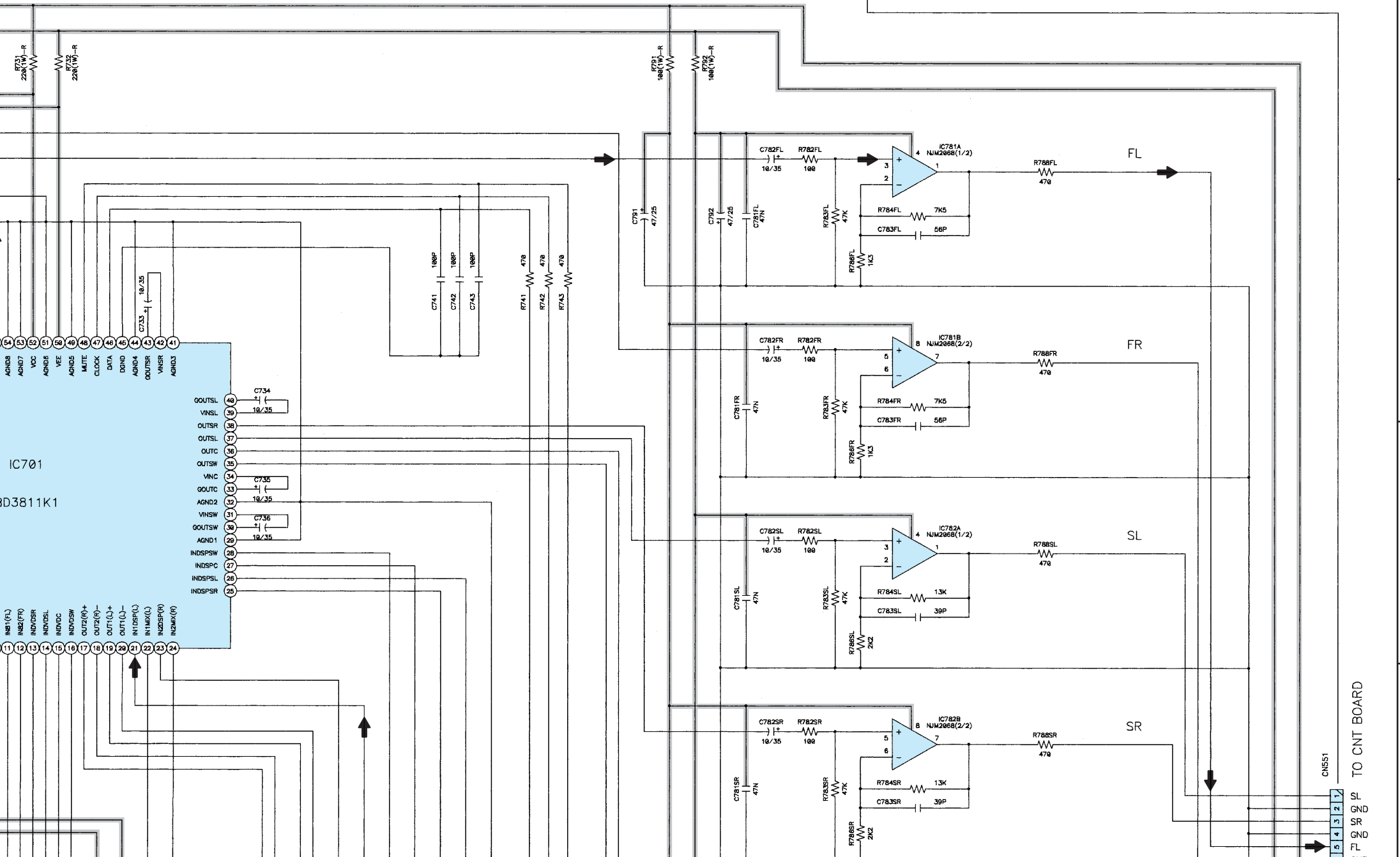
8

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11

INPUT/VOLUME BOARD



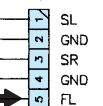
A

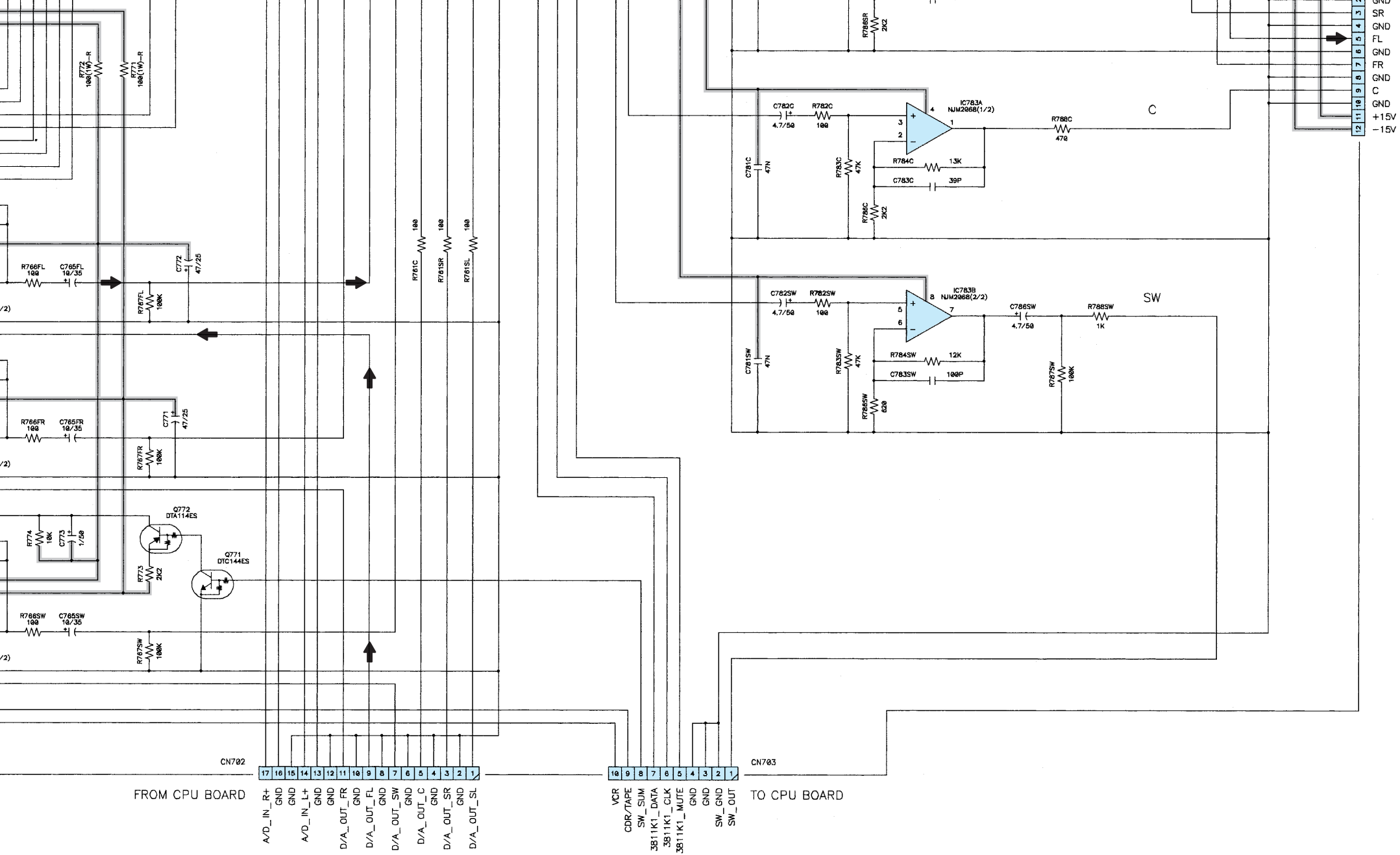
B

C

D

TO CNT BOARD





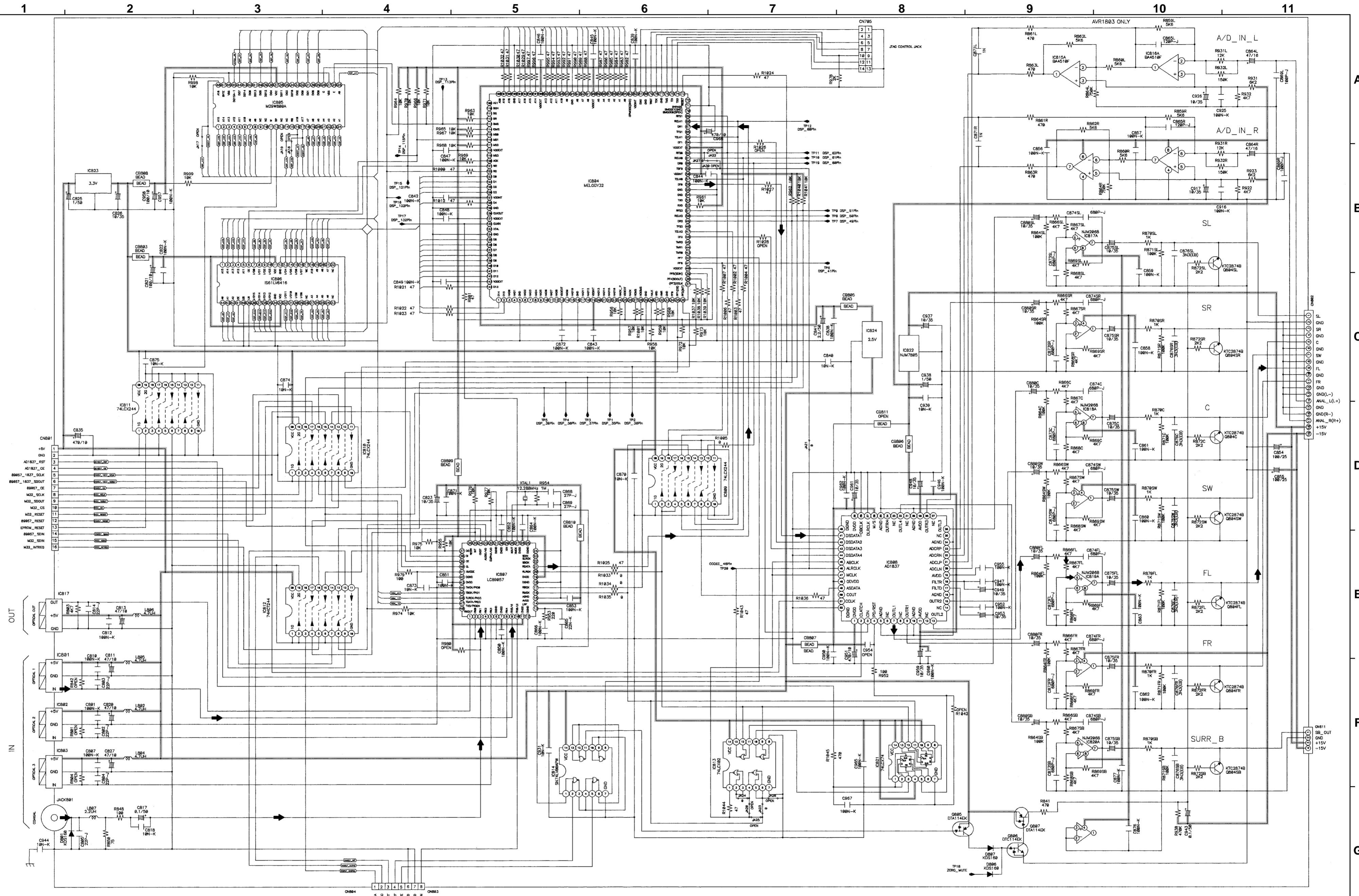
FROM CPU BOARD

TO CPU BOARD

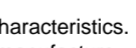
— ± B LINE  
 → SIGNAL LINE

**SCHEMATIC DIAGRAMS (1/8)**  
**INPUT-VOL UNIT**

SCHEMATIC DIAGRAMS (2/8)



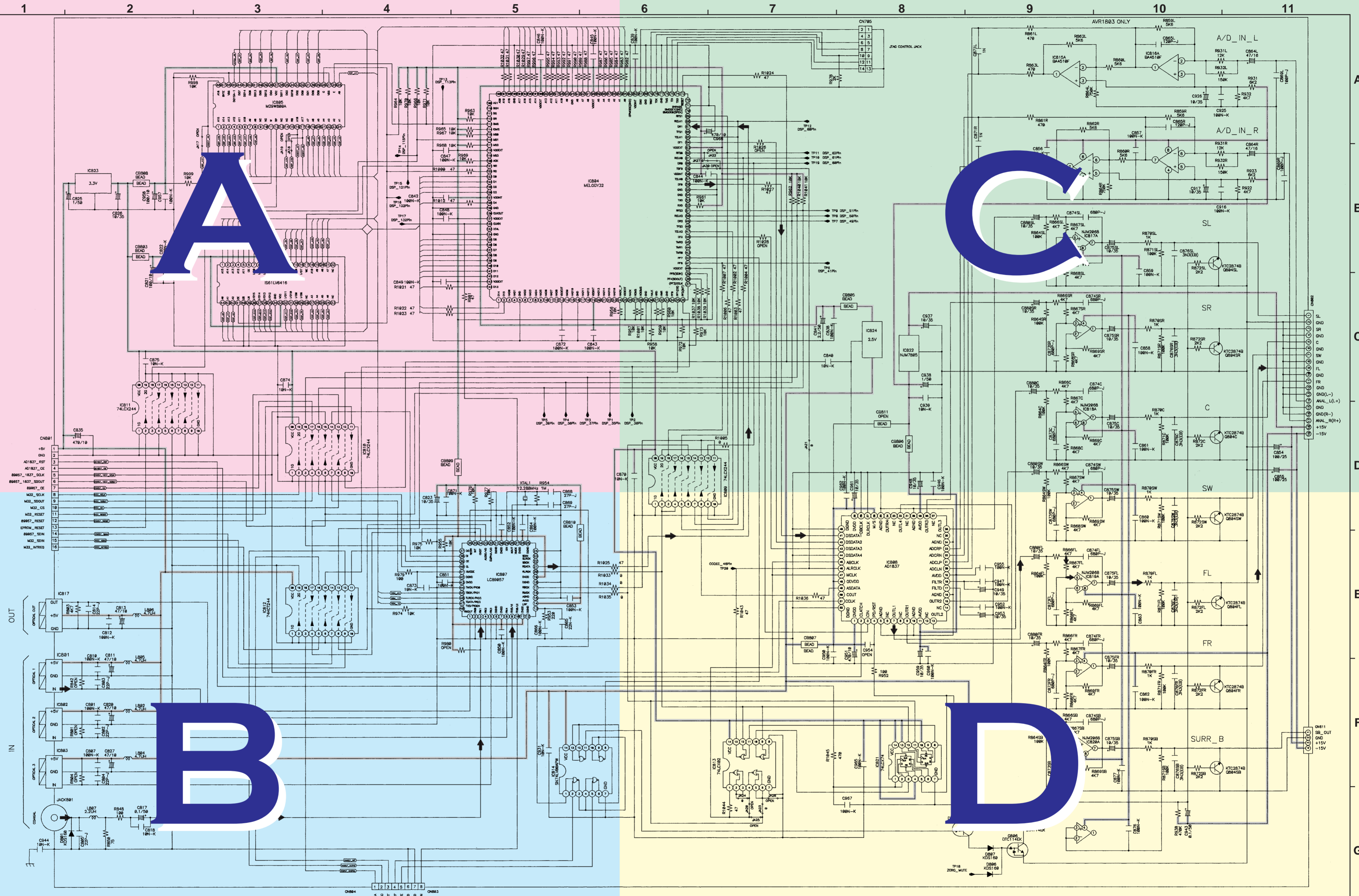
**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.  
**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
 corrected.

**WARNING:**  
 Parts marked with this symbol  have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacturer.  
**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a  
 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 millamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

— ± B LINE  
 → SIGNAL LINE

SCHEMATIC DIAGRAMS (2/8)  
DSP UNIT

SCHEMATIC DIAGRAMS (2/8)



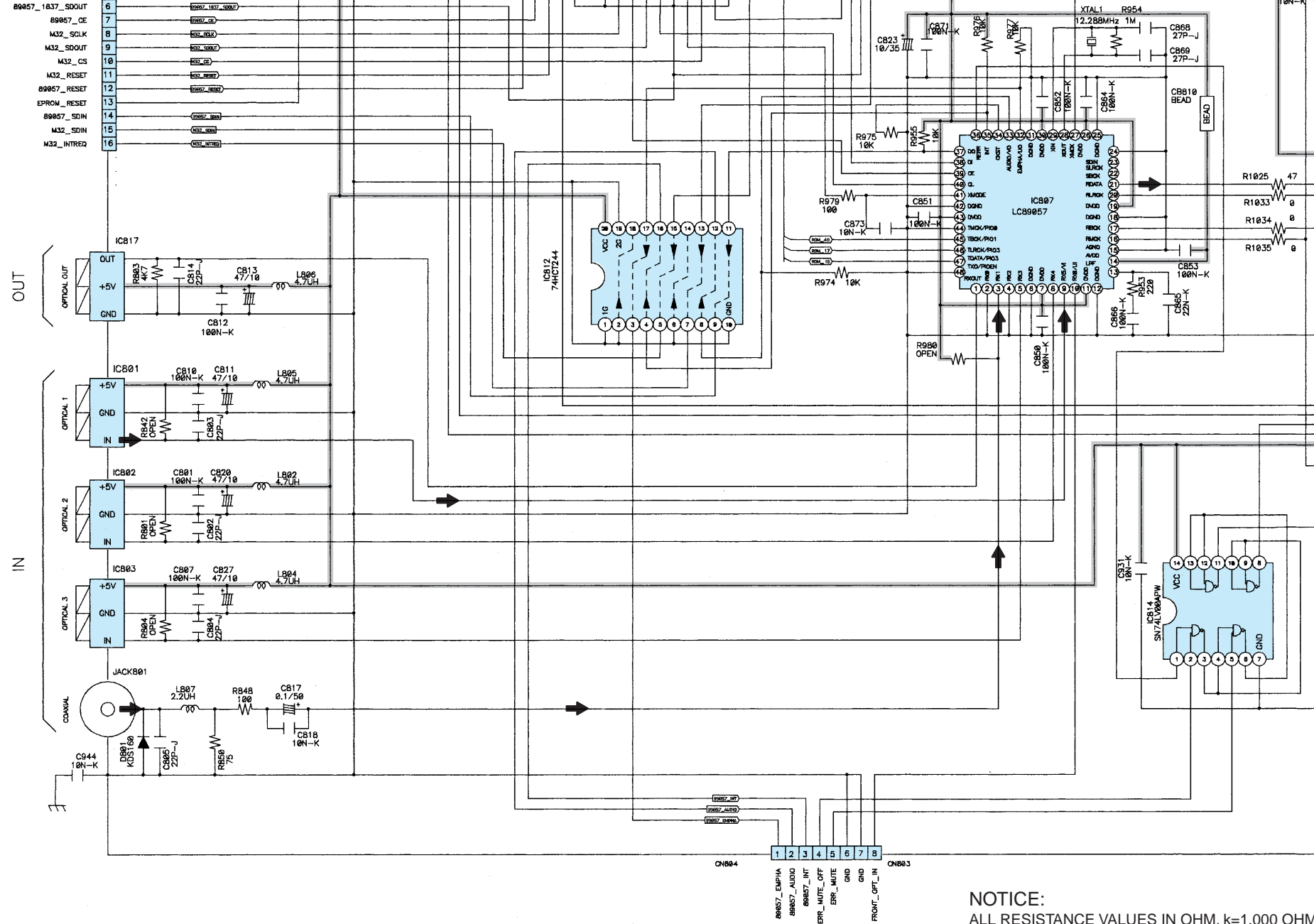
**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM, k=1,000 OHM M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD, P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.  
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 DO NOT return the unit to the customer until the problem is located and  
 corrected.

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 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

— ± B LINE  
 - - - SIGNAL LINE

SCHEMATIC DIAGRAMS (2/8)  
DSP UNIT





**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM. k=1,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=  
 EACH VOLTAGE AND CURRENT ARE MEASUREMENT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE  
 NOTICE.

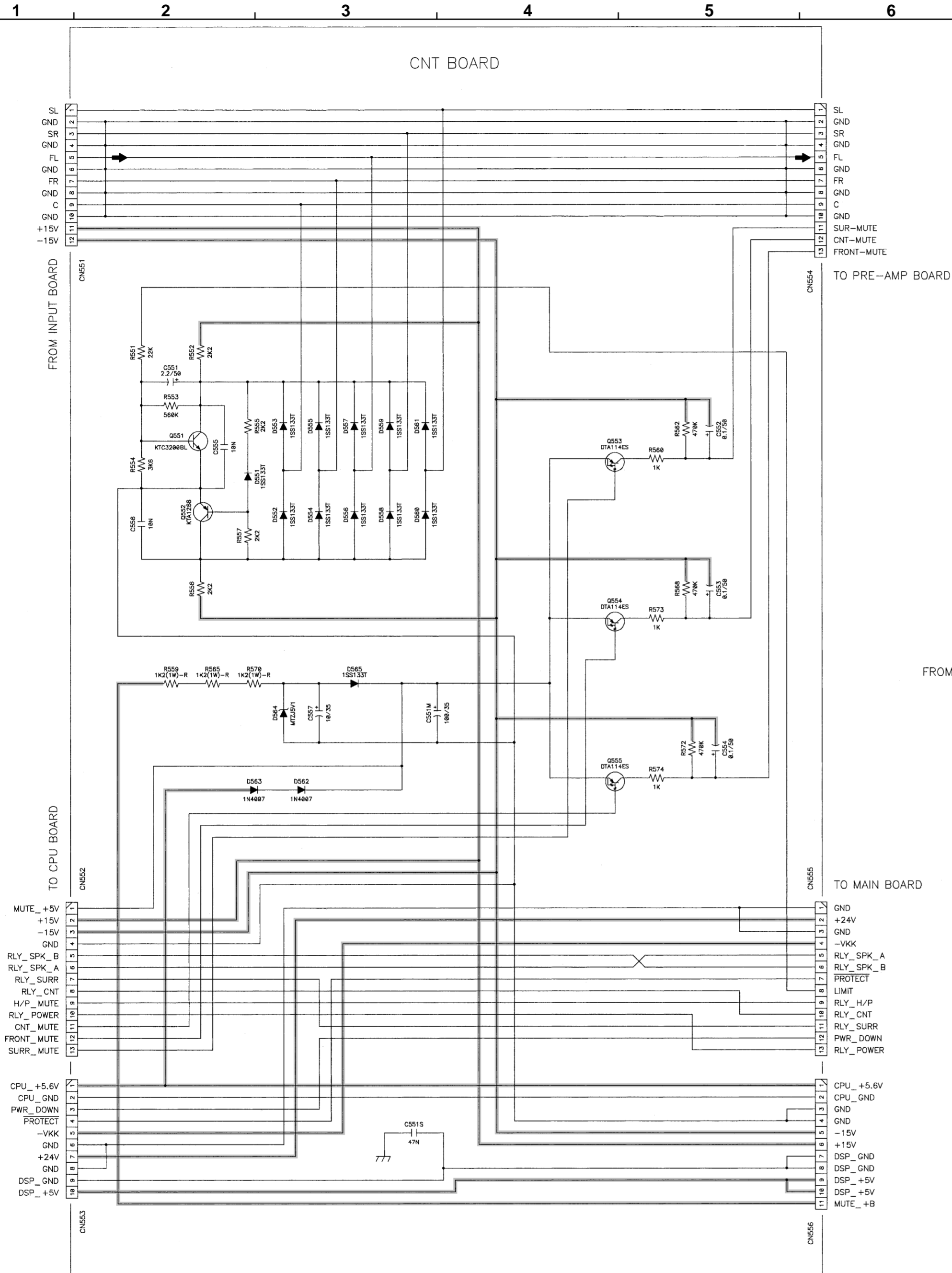
**WARNING:**  
 DO NOT return the unit to the customer until the pro  
 corrected.





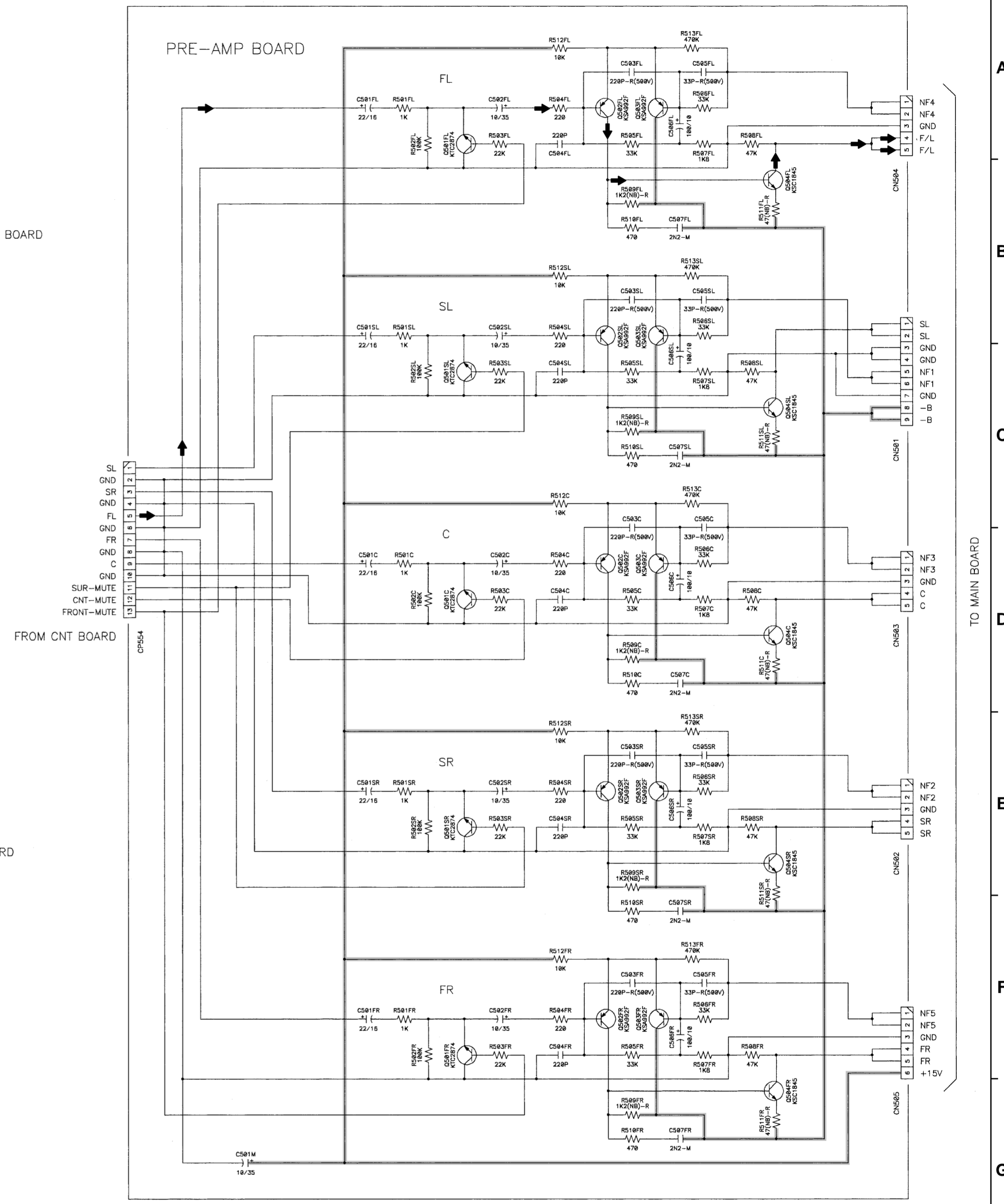


SCHEMATIC DIAGRAMS (3/8)



**NOTICE:**  
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 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.  
**WARNING:**  
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 Use ONLY replacement parts recommended by the manufacture.

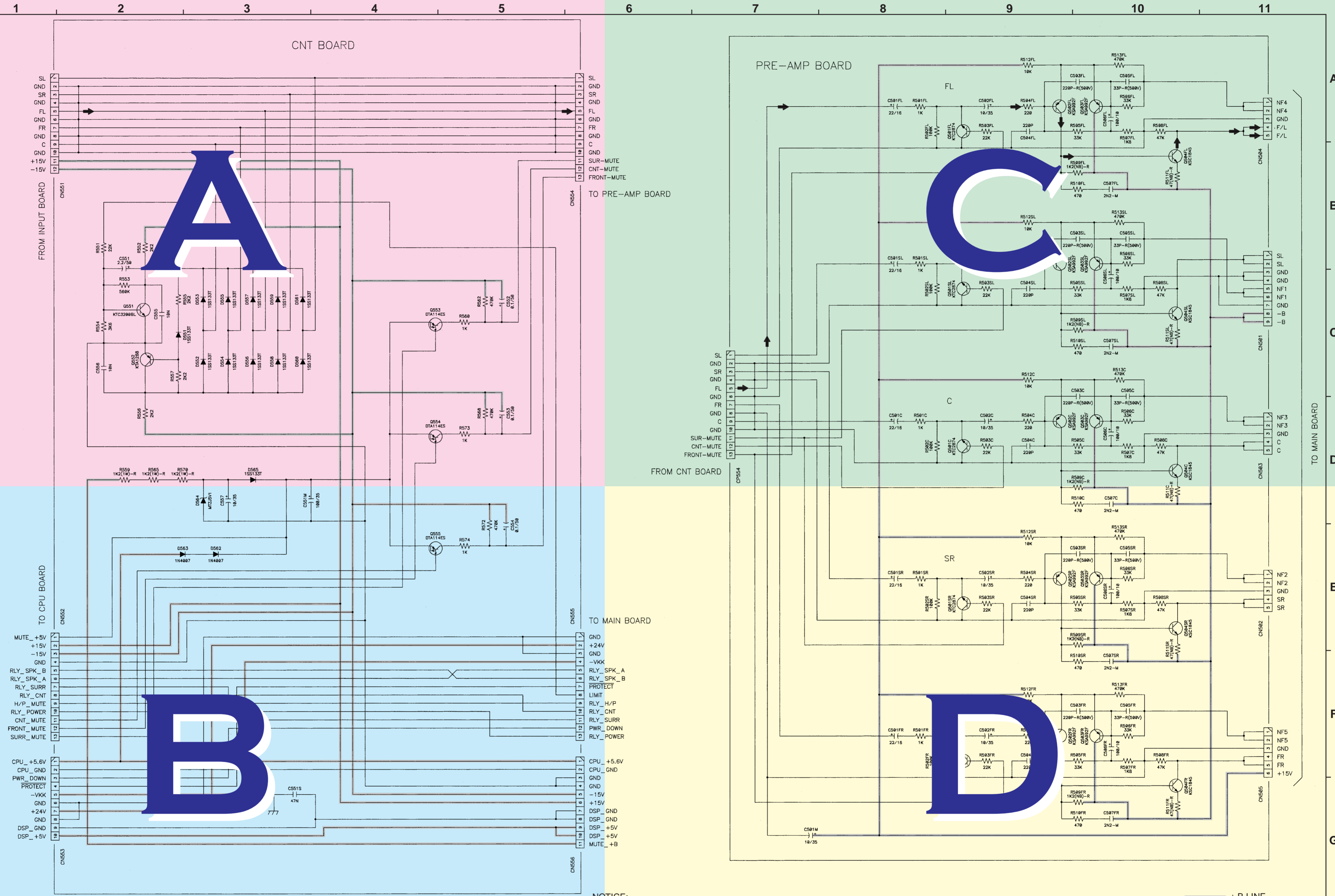
**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.  
**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and corrected.



± B LINE  
 SIGNAL LINE

SCHEMATIC DIAGRAMS (3/8)  
 CNT UNIT  
 PRE-AMP UNIT

SCHMATIC DIAGRAMS (3/8)



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 NOTICE.  
**WARNING:**  
 Parts marked with this symbol  $\Delta$  have critical characteristics.  
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**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a  
 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.  
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 corrected.

SCHMATIC DIAGRAMS (3/8)  
 CNT UNIT  
 PRE-AMP UNIT

# SCHEMATIC DIAGRAMS (3/8)

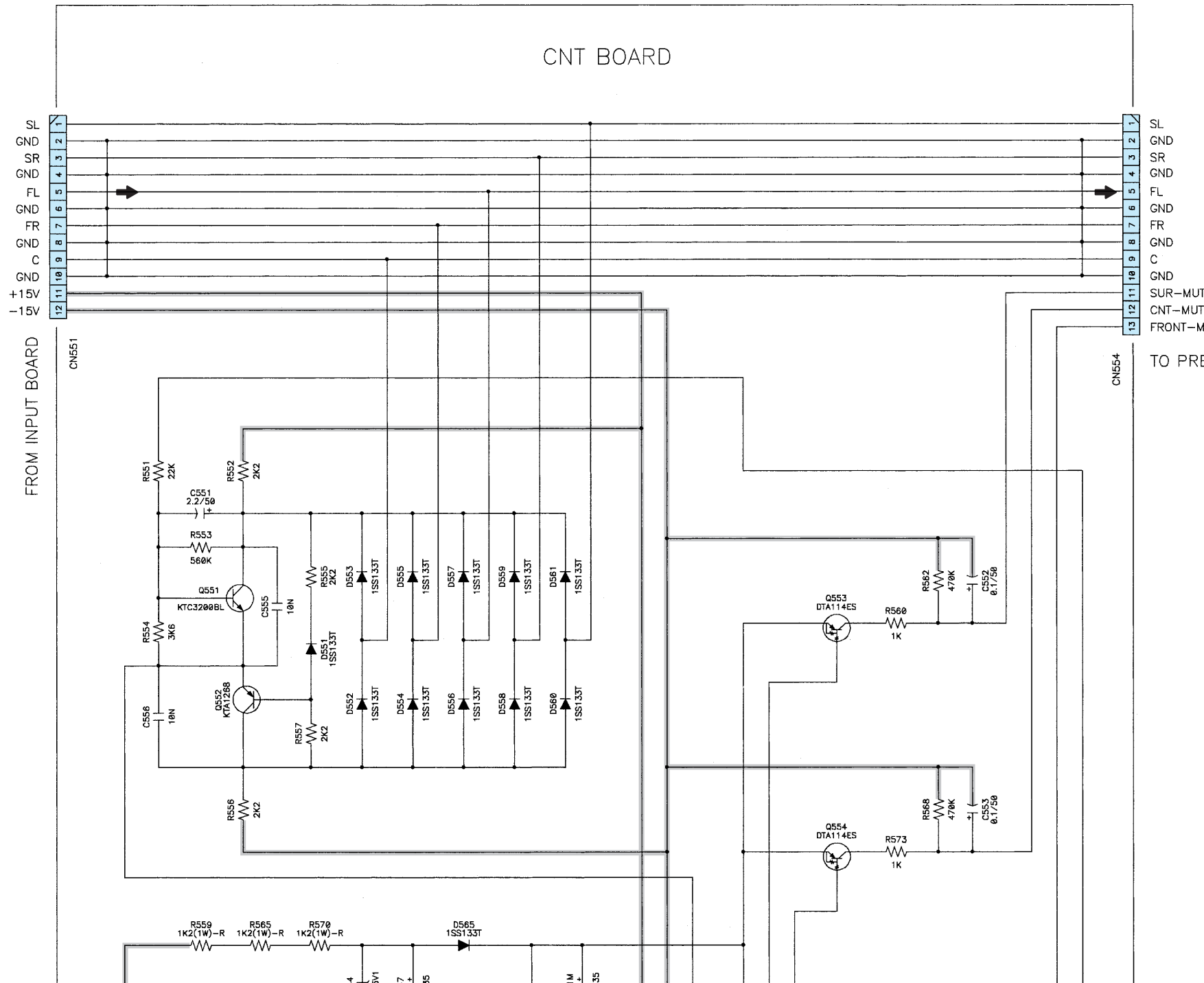
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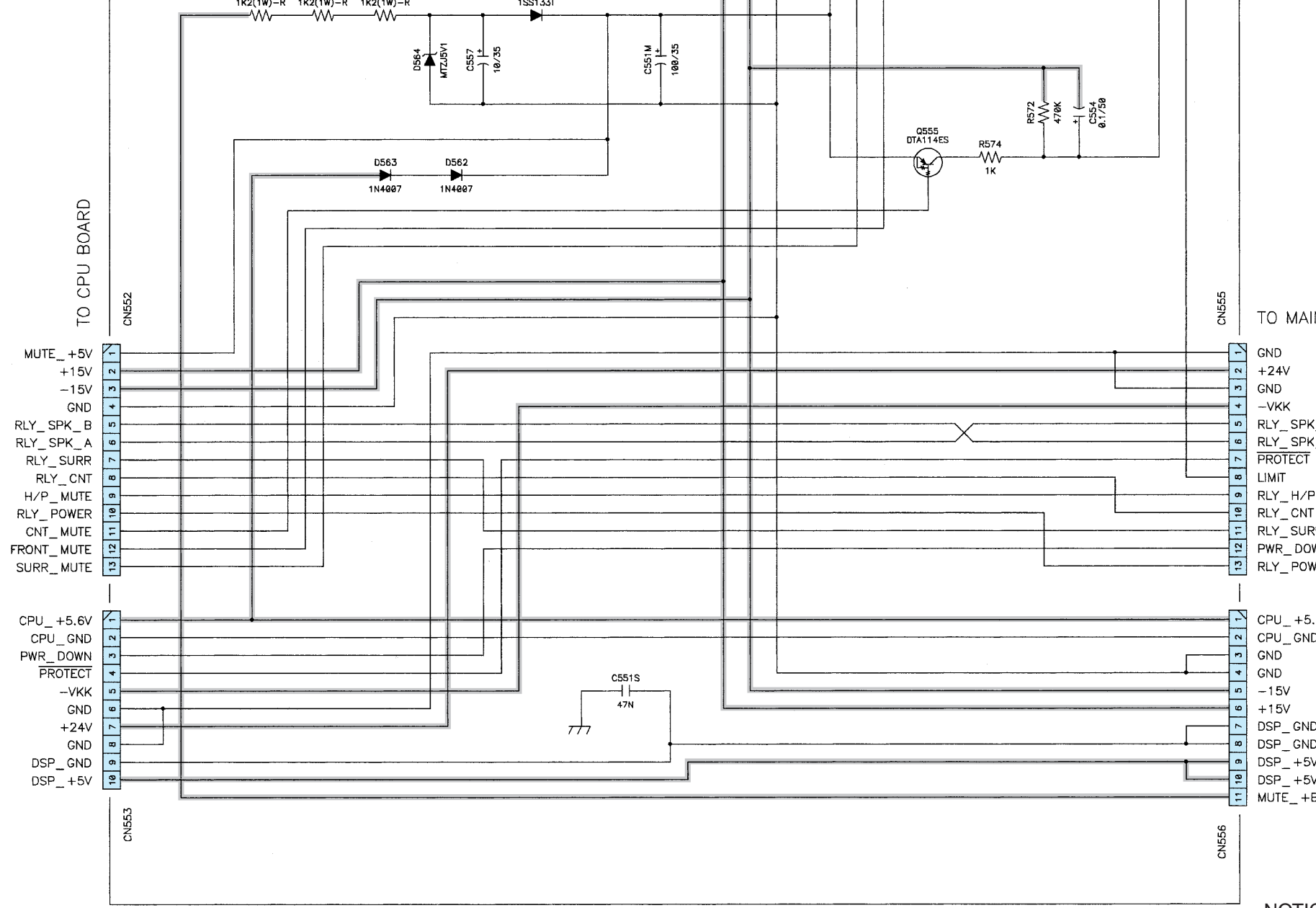
2

3

4

5





TO MAIN BOARD

NOTICE  
 ALL REVISIONS  
 ALL CHANGES  
 EACH VENDOR  
 CONDITION  
 CIRCULATED  
 NOTICE  
 WARNING  
 Parts must be  
 Use ONLY

6

7

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9

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11

PRE-AMP BOARD

FL

SL

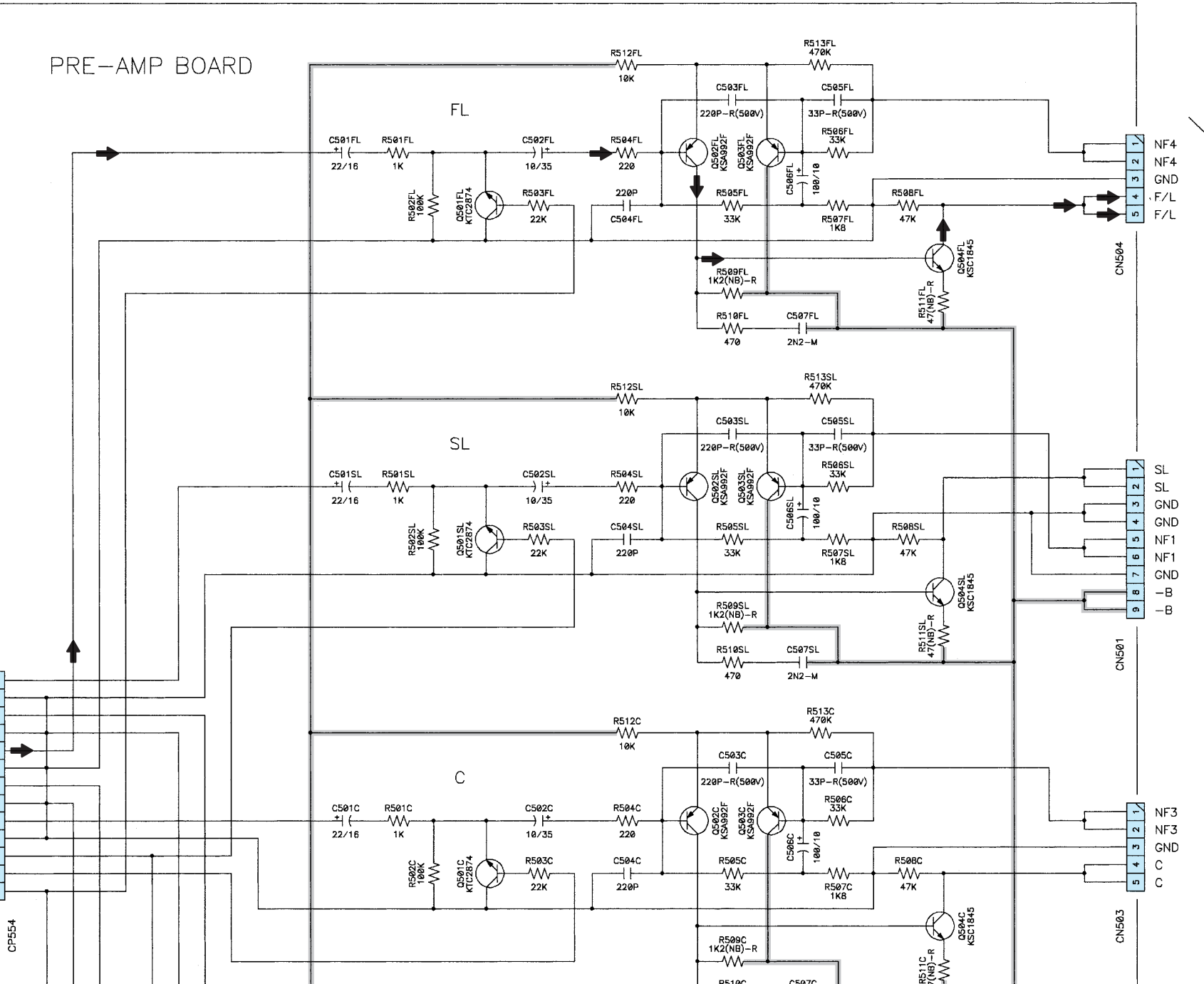
C

SL  
GND  
SR  
GND  
FL  
GND  
FR  
GND  
C  
GND  
SUR-MUTE  
CNT-MUTE  
FRONT-MUTE

TO PRE-AMP BOARD

SL  
GND  
SR  
GND  
FL  
GND  
FR  
GND  
C  
GND  
SUR-MUTE  
CNT-MUTE  
FRONT-MUTE

FROM CNT BOARD



A

B

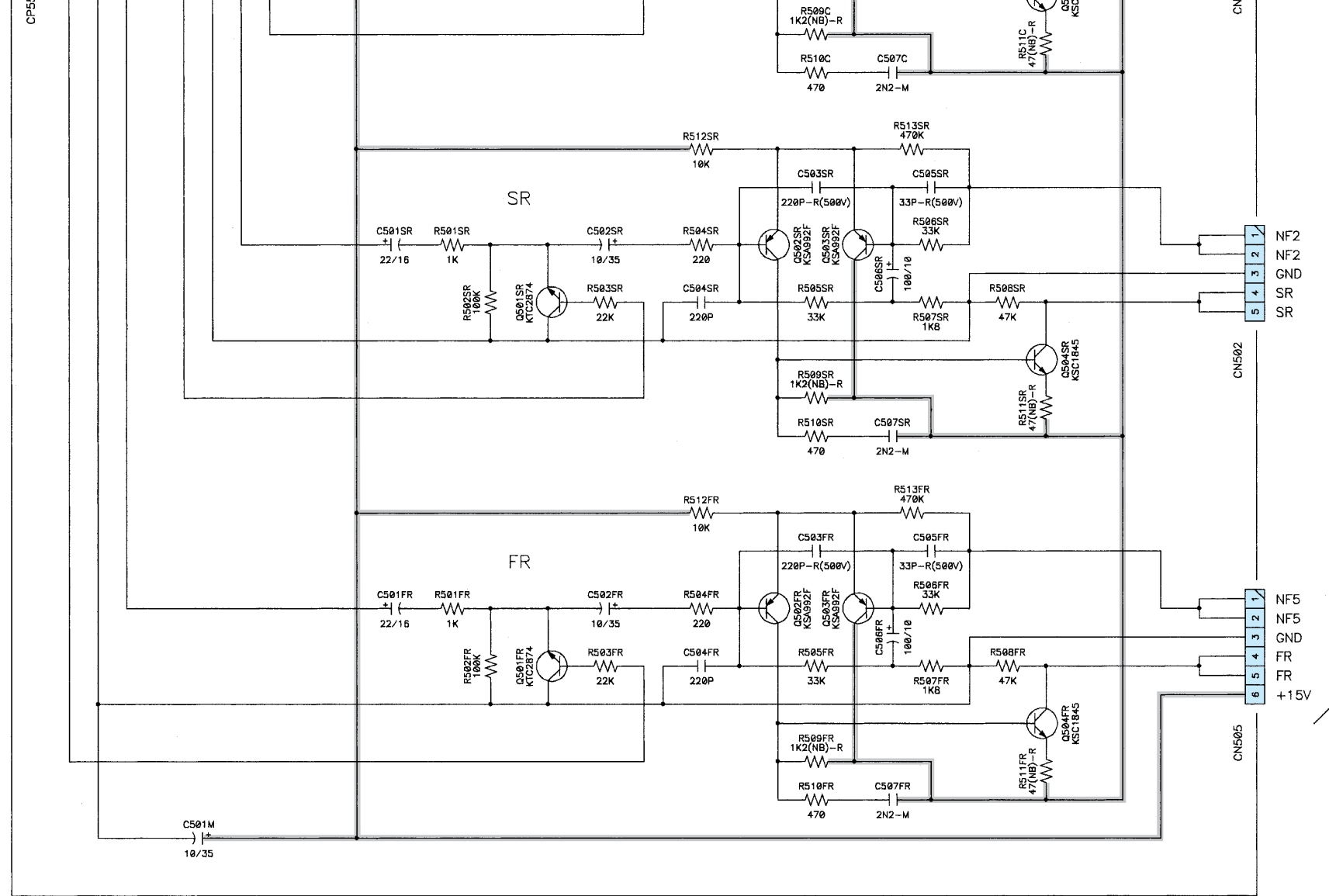
C

D

TO MAIN BOARD

TO MAIN BOARD

- GND
- 24V
- GND
- VKK
- RLY\_SPK\_A
- RLY\_SPK\_B
- PROTECT
- LIMIT
- RLY\_H/P
- RLY\_CNT
- RLY\_SURR
- PWR\_DOWN
- RLY\_POWER
- CPU\_+5.6V
- CPU\_GND
- GND
- GND
- 15V
- +15V
- DSP\_GND
- DSP\_GND
- DSP\_+5V
- DSP\_+5V
- MUTE\_+B



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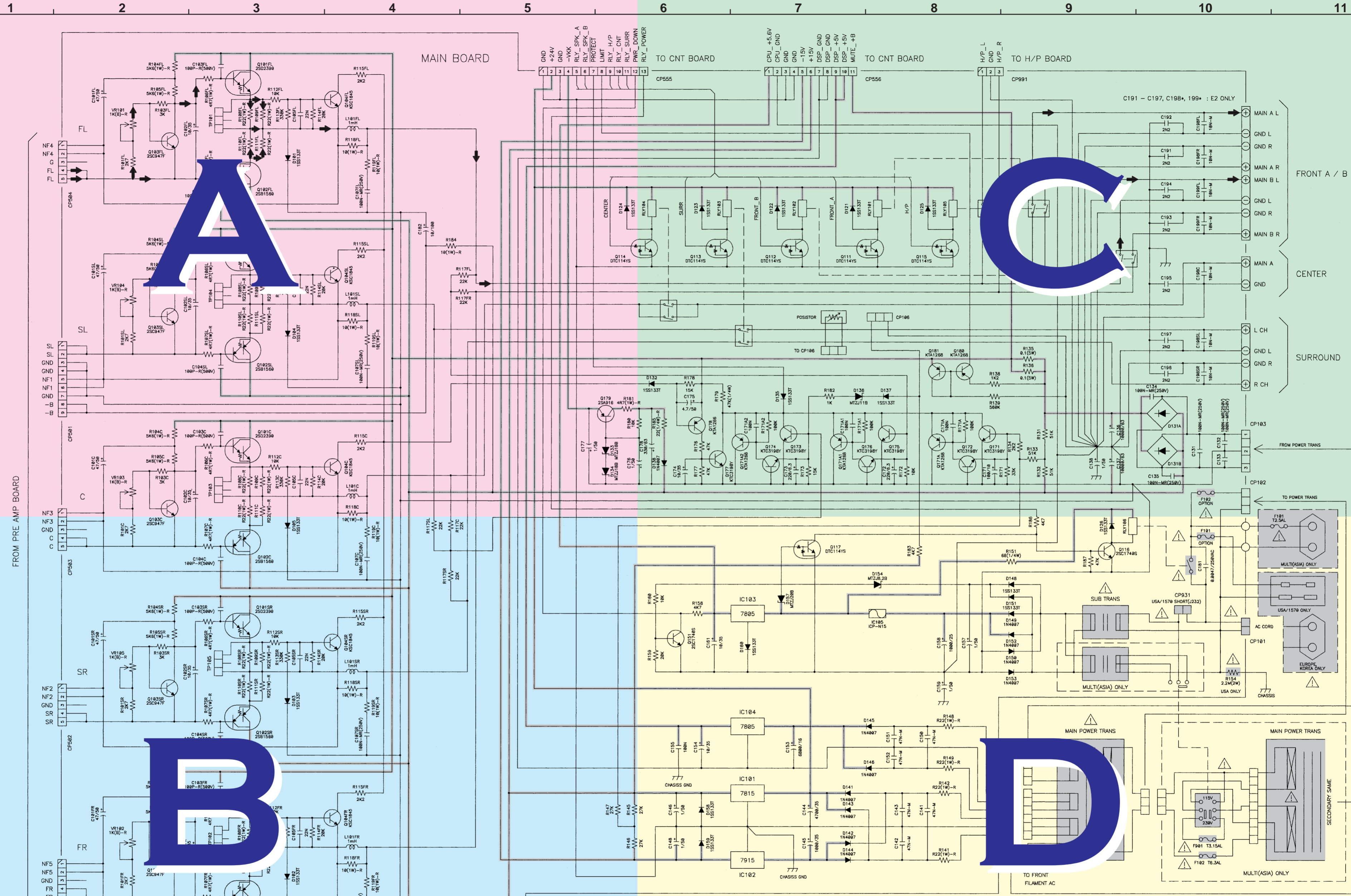
± B LINE  
 SIGNAL LINE

**SCHEMATIC DIAGRAMS (3/8)**  
**CNT UNIT**  
**PRE-AMP UNIT**





SCHEMATIC DIAGRAMS (4/8)



**NOTICE:**  
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 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

INDICATES SAFETY CRITICAL COMPONENTS.  
 TO REDUCE THE RISK OF ELECTRIC SHOCK, LEAKAGE  
 CURRENT OR RESISTANCE MEASUREMENTS SHALL BE  
 CARRIED OUT ( EXPOSED PARTS ARE ACCEPTABLY  
 INSULATED FROM THE SUPPLY CIRCUIT ) BEFORE  
 THE APPLIANCE RETURNED TO THE CUSTOMER.

**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
 corrected.

|              |         |         |         |           |
|--------------|---------|---------|---------|-----------|
| AVR-1570     | F101    | F102    | F901    | POSITION  |
| JAPAN(N)     | T8A     | T8A     | X       | MAIN B'D  |
| TAIWAN(T)    | 8A/125V | 8A/125V | X       | MAIN B'D  |
| AVR-1603     | F101    | F102    | F901    | POSITION  |
| USA(E3)      | 8A/125V | 8A/125V | X       | MAIN B'D  |
| EUROPE(E2)   | T2.5AL  | T3.15AL | X       | MAIN B'D  |
| CHINA(C)     | X       | X       | X       | MAIN B'D  |
| ASIA(H,T,E1) | T2.5AL  | T6.3AL  | T3.15AL | V.SEL B'D |
| KOREA(K)     | T2.5AL  | T3.15AL | X       | MAIN B'D  |

± B LINE  
 SIGNAL LINE

SCHEMATIC DIAGRAMS (4/8)  
 MAIN UNIT  
 OUTLET UNIT  
 VOLTAGE SEL UNIT

# SCHEMATIC DIAGRAMS (4/8)

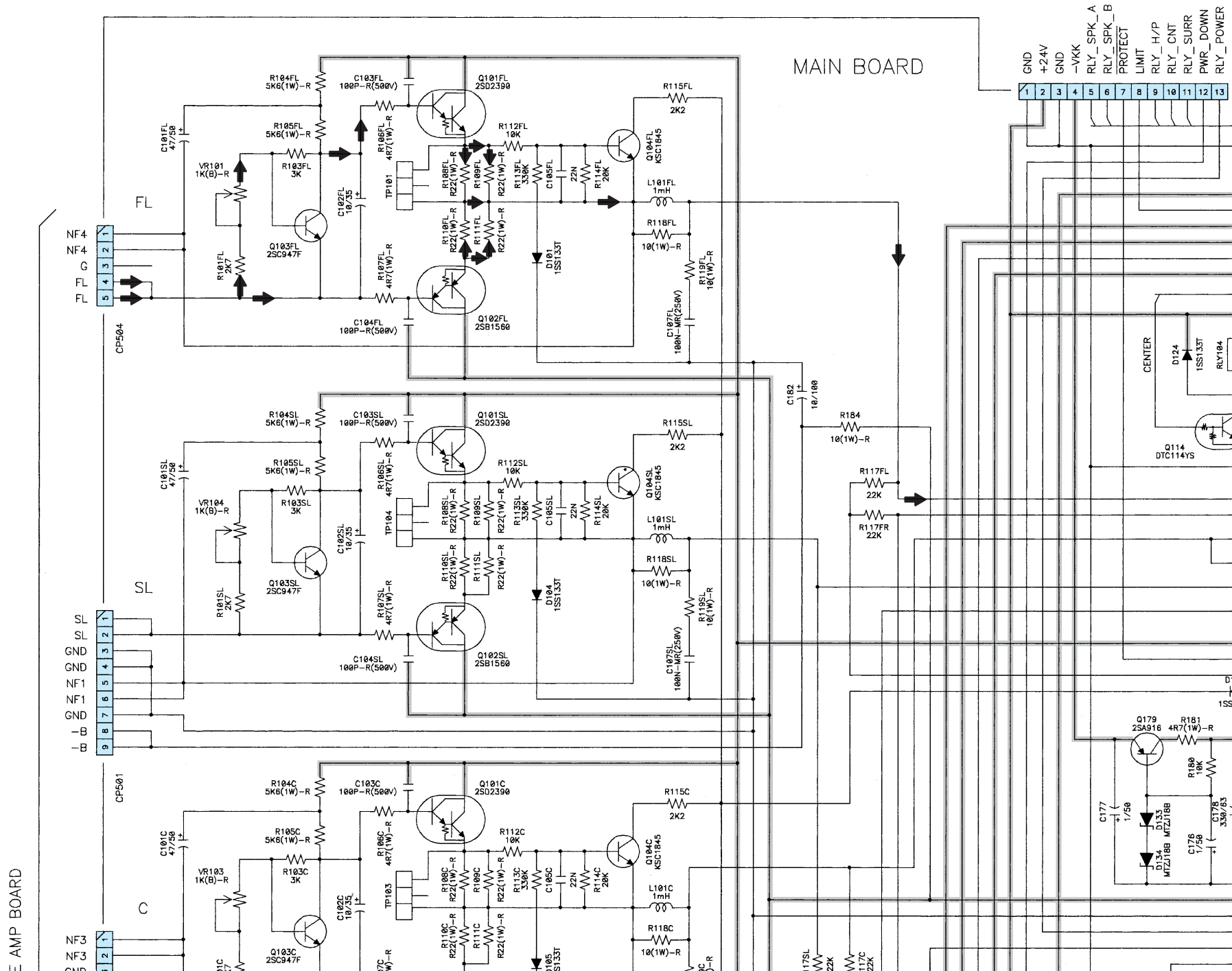
1

2

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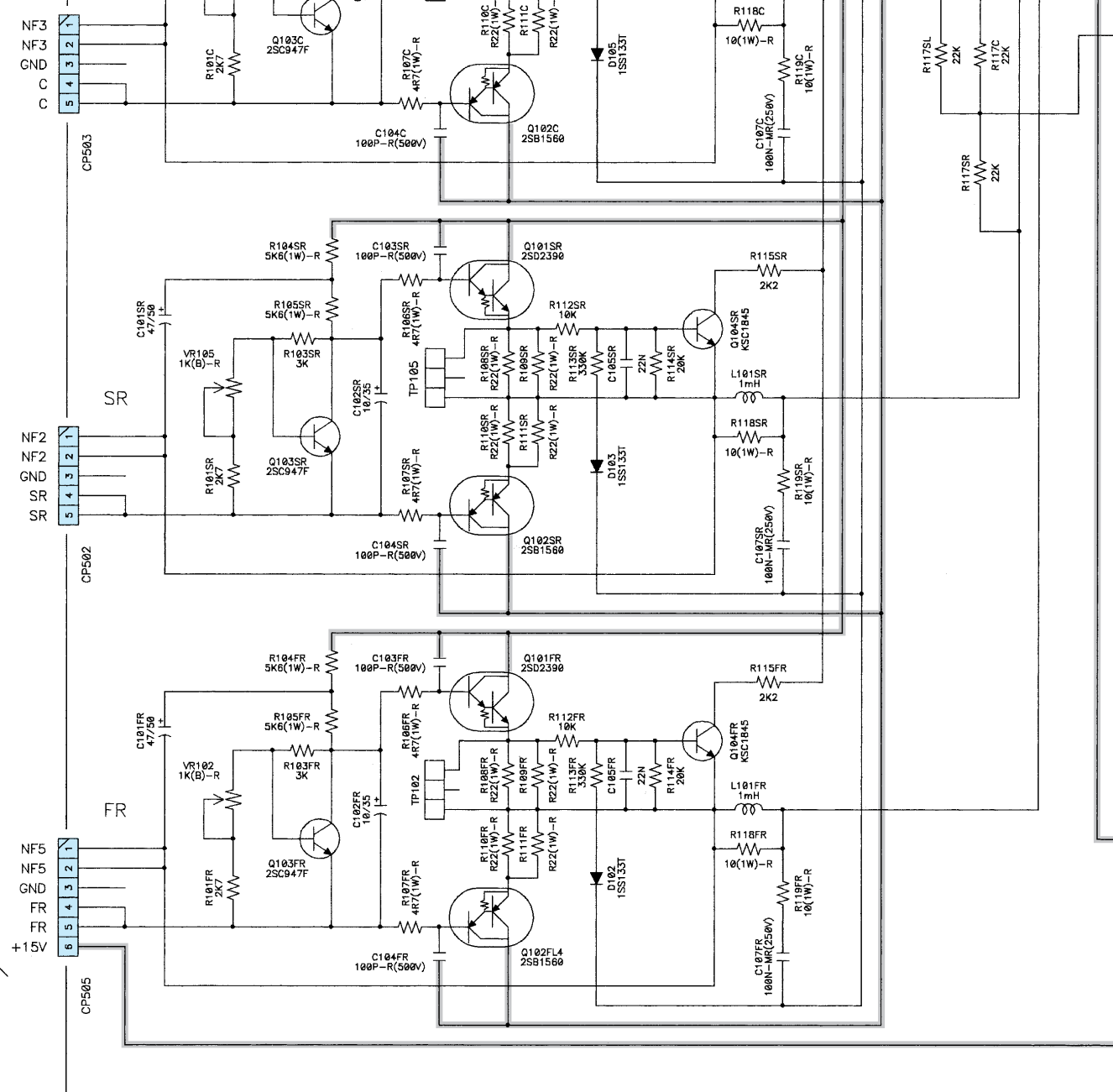


MAIN BOARD

- 1 GND
- 2 +24V
- 3 GND
- 4 -VKK
- 5 RLY\_SPK\_A
- 6 RLY\_SPK\_B
- 7 PROTECT
- 8 LIMIT
- 9 RLY\_H/P
- 10 RLY\_CNT
- 11 RLY\_SURR
- 12 PWR\_DOWN
- 13 RLY\_POWER

AMP BOARD


FROM PRE AMP



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**CAUTION:**  
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 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

 INDICATES SAFETY OF THE APPLIANCE RETURN TO THE MANUFACTURER TO REDUCE THE RISK OF ELECTRICAL SHOCK OR FIRE. THIS CHECK SHOULD BE CARRIED OUT ( EXPOSED PARTS SHOULD BE INSULATED FROM THE CHASSIS )

**WARNING:**  
 DO NOT return the unit to the manufacturer until corrected.

6

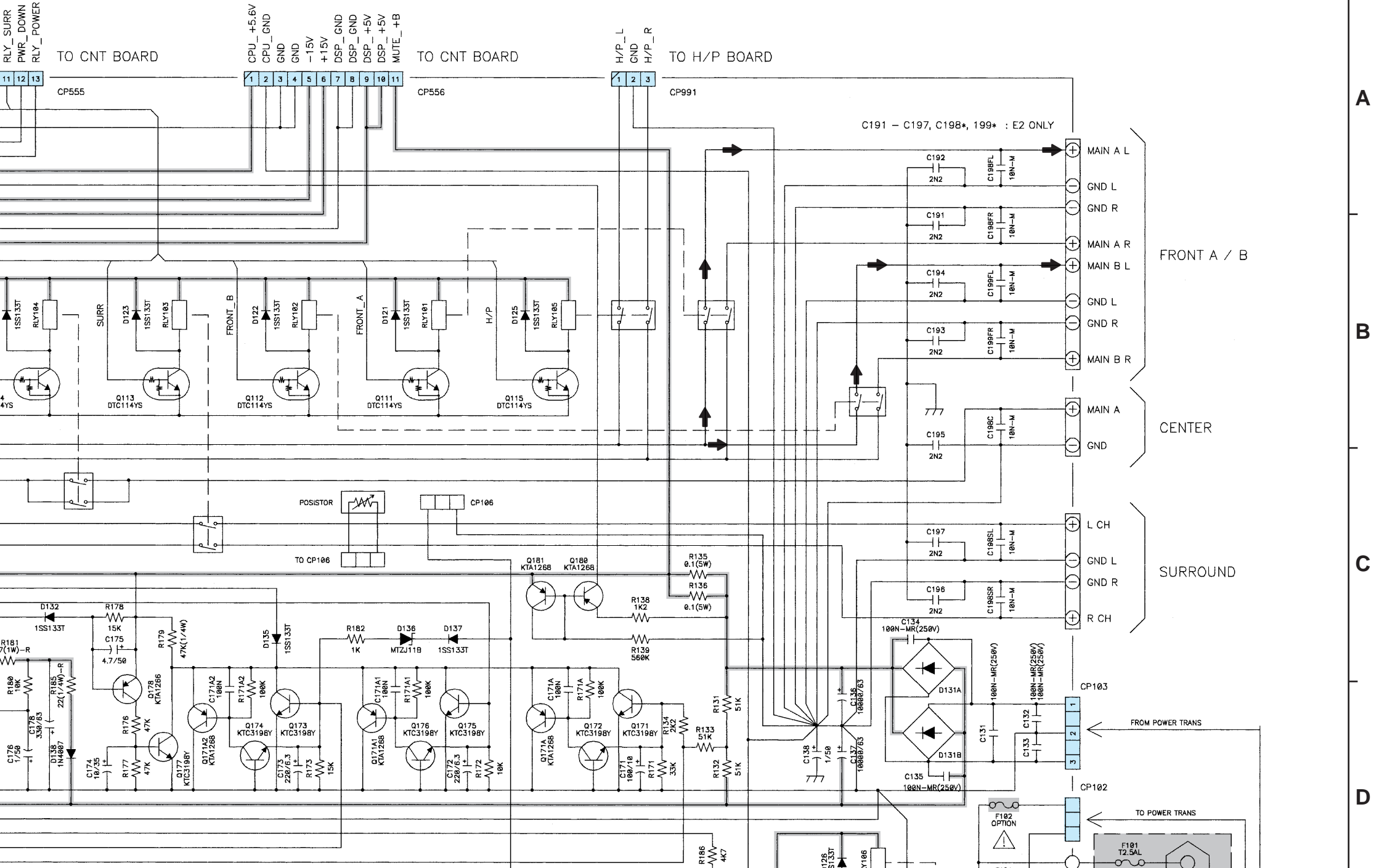
7

8

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10

11



A

B

C

D

FRONT A / B

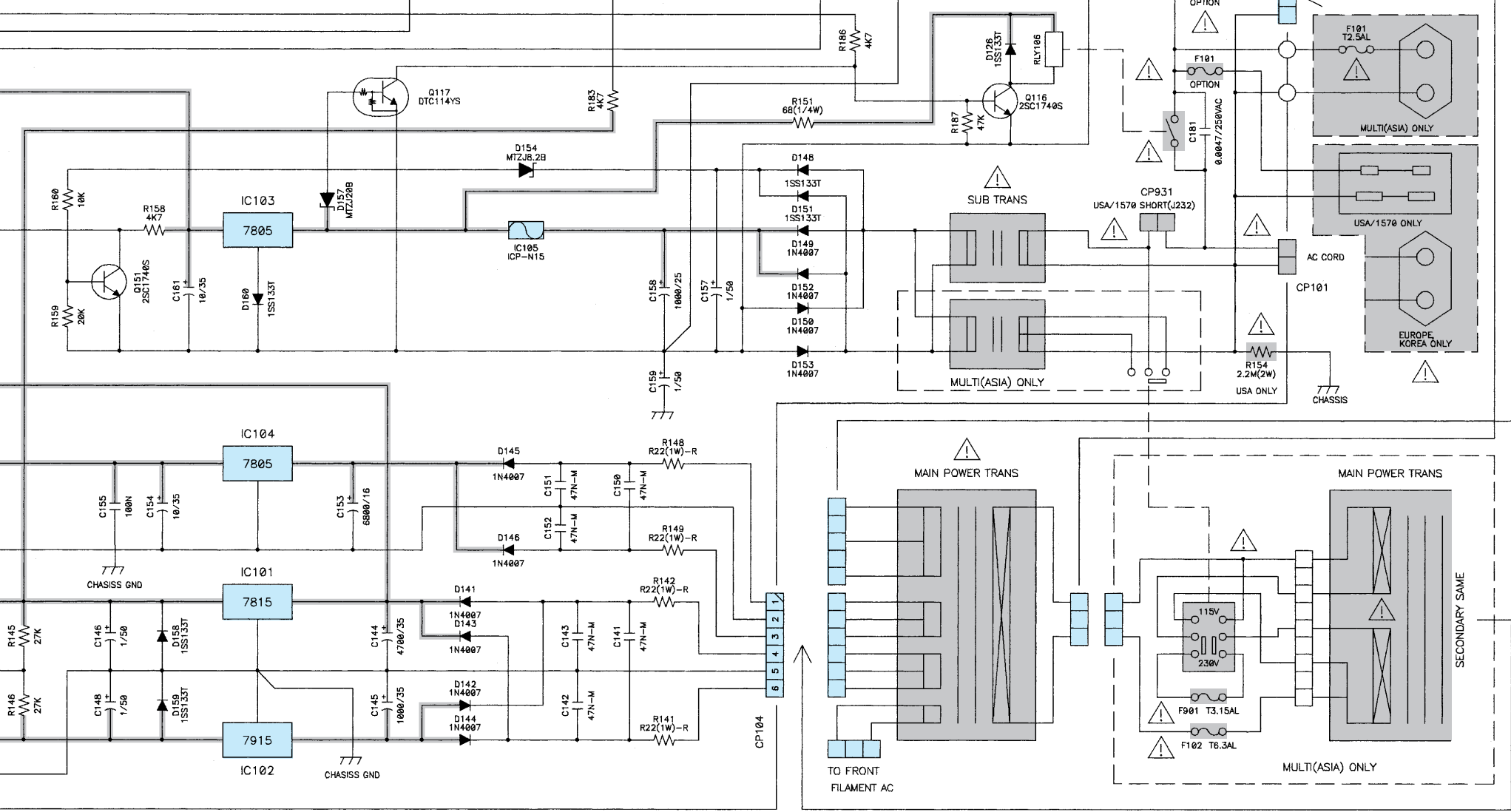
CENTER

SURROUND

C191 - C197, C198\*, 199\* : E2 ONLY

FROM POWER TRANS

TO POWER TRANS



SAFETY CRITICAL COMPONENTS.  
 RISK OF ELECTRIC SHOCK, LEAKAGE  
 RESISTANCE MEASUREMENTS SHALL BE  
 EXPOSED PARTS ARE ACCEPTABLY  
 (THE SUPPLY CIRCUIT ) BEFORE  
 RETURNED TO THE CUSTOMER.

WARNING:  
 Do not return the unit to the customer until the problem is located and  
 fixed.

| AVC-1570  | F101    | F102    | F901 | POSITION |
|-----------|---------|---------|------|----------|
| JAPAN(N)  | T8A     | T8A     | X    | MAIN B'D |
| TAIWAN(T) | 8A/125V | 8A/125V | X    | MAIN B'D |

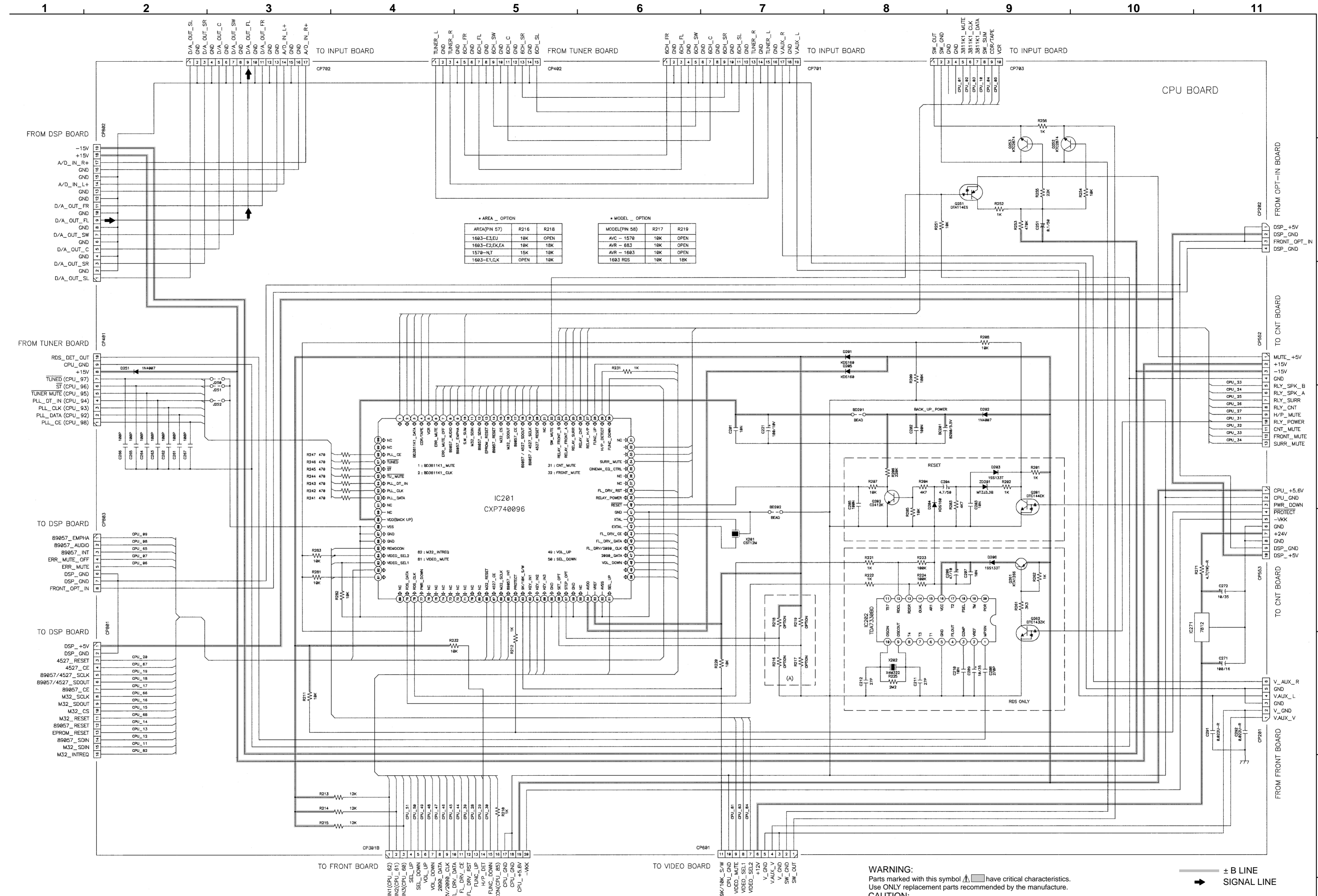
  

| AVR-1603     | F101    | F102    | F901    | POSITION  |
|--------------|---------|---------|---------|-----------|
| USA(E3)      | 8A/125V | 8A/125V | X       | MAIN B'D  |
| EUROPE(E2)   | T2.5AL  | T3.15AL | X       | MAIN B'D  |
| CHINA(C)     | X       | T3.15AL | X       | MAIN B'D  |
| ASIA(H,T,E1) | T2.5AL  | T6.3AL  | T3.15AL | V.SEL B'D |
| KOREA(K)     | T2.5AL  | T3.15AL | X       | MAIN B'D  |

± B LINE  
 → SIGNAL LINE

SCHEMATIC DIAGRAMS (4/8)  
 MAIN UNIT  
 OUTLET UNIT  
 VOLTAGE SEL UNIT

SCHMATIC DIAGRAMS (5/8)

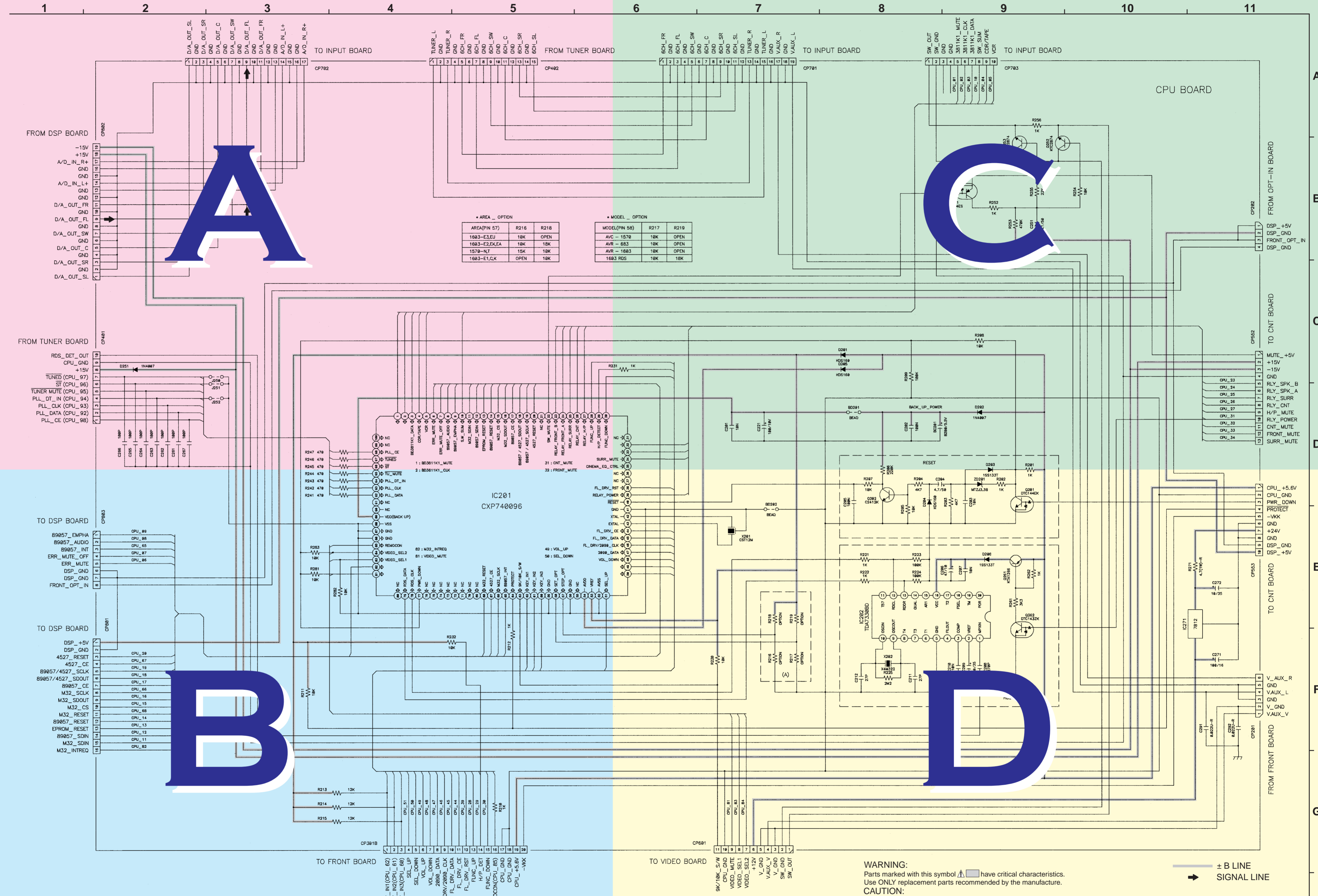


**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.

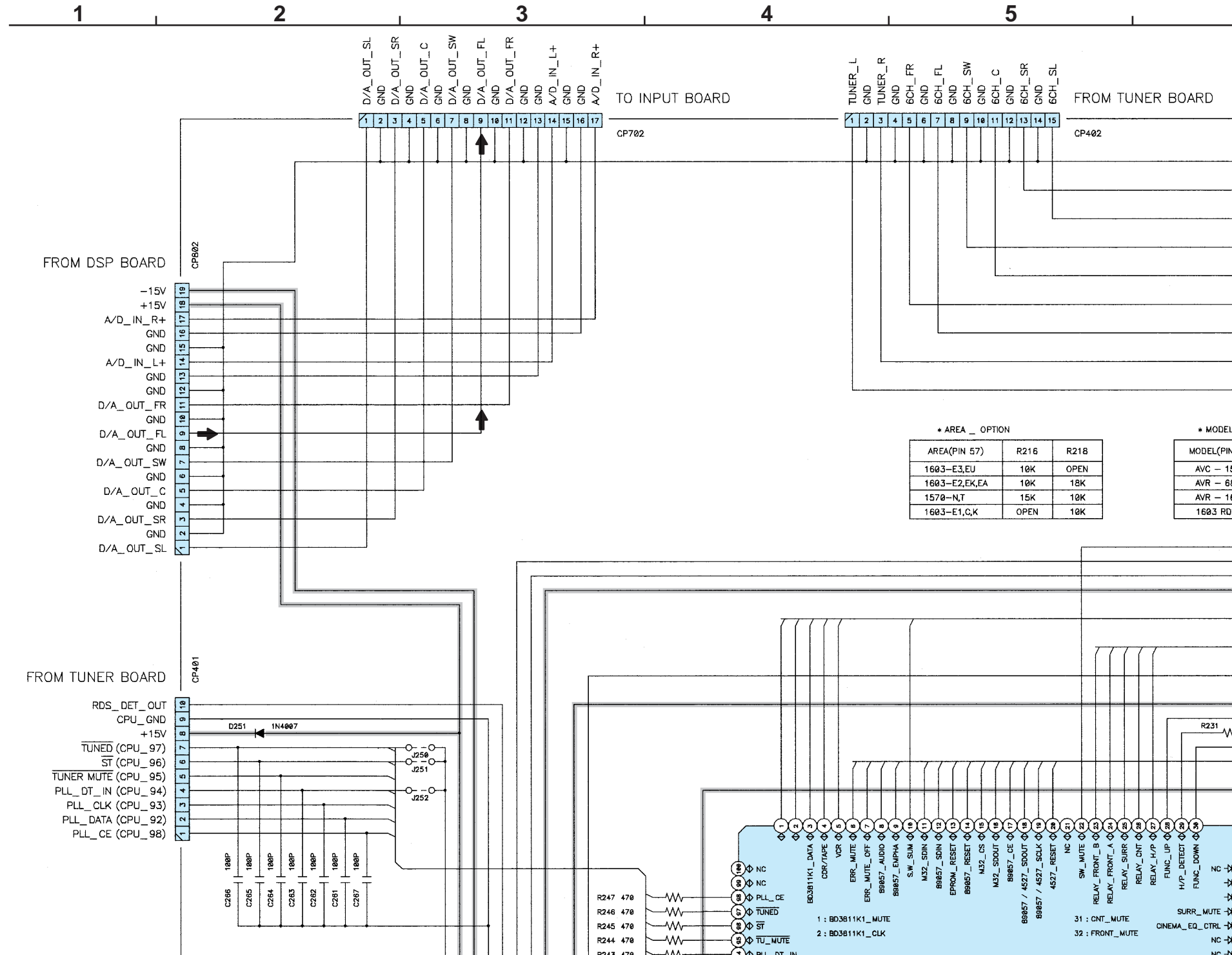
**WARNING:**  
 Parts marked with this symbol  $\Delta$  have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacture.  
**CAUTION:**  
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 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 millamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.  
**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
 corrected.

SCHMATIC DIAGRAMS (5/8)  
CPU UNIT

SCHEMATIC DIAGRAMS (5/8)

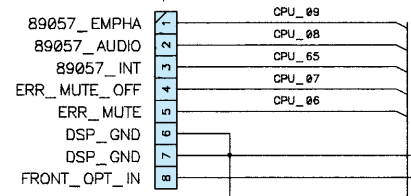


# SCHEMATIC DIAGRAMS (5/8)

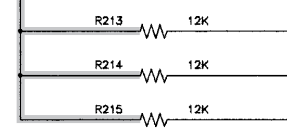
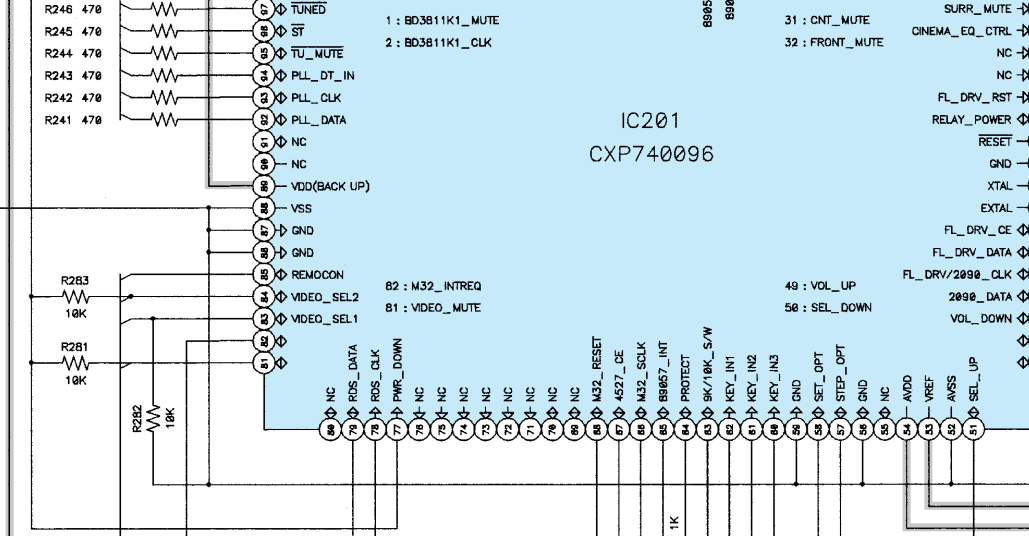
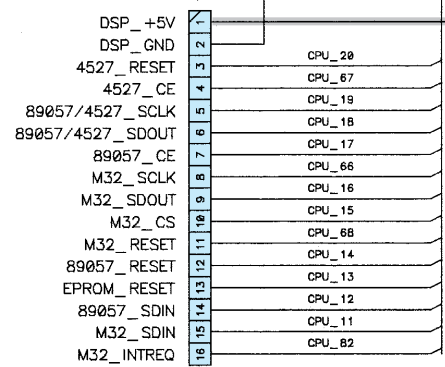




TO DSP BOARD

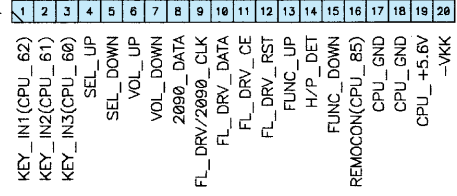


TO DSP BOARD

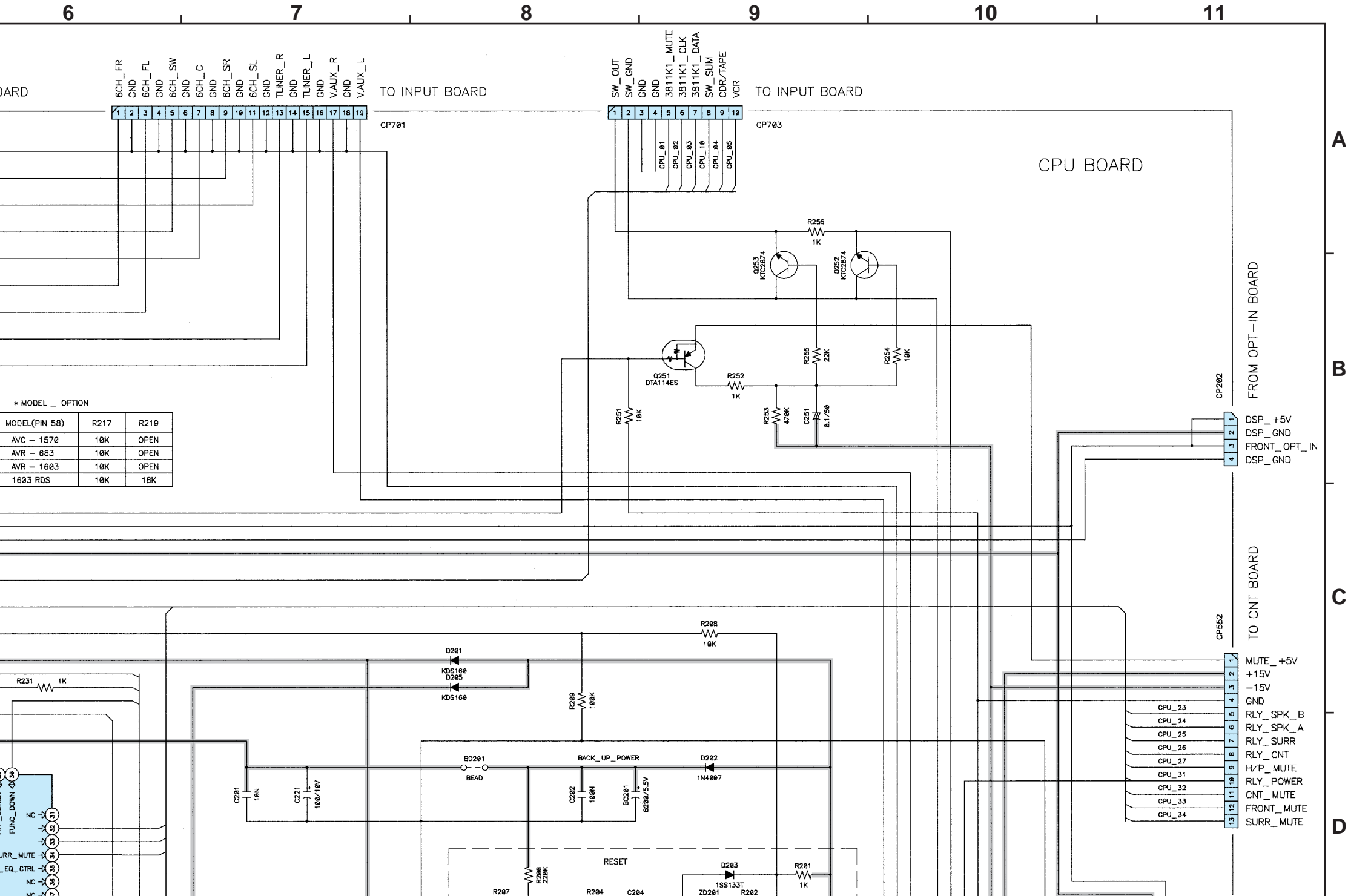


CP301B

TO FRONT BOARD



NO  
AL  
AL  
EA  
CO  
CIR  
NO



\* MODEL \_ OPTION

| MODEL(PIN 5B) | R217 | R219 |
|---------------|------|------|
| AVC - 1570    | 10K  | OPEN |
| AVR - 683     | 10K  | OPEN |
| AVR - 1603    | 10K  | OPEN |
| 1603 RDS      | 10K  | 18K  |

TO INPUT BOARD

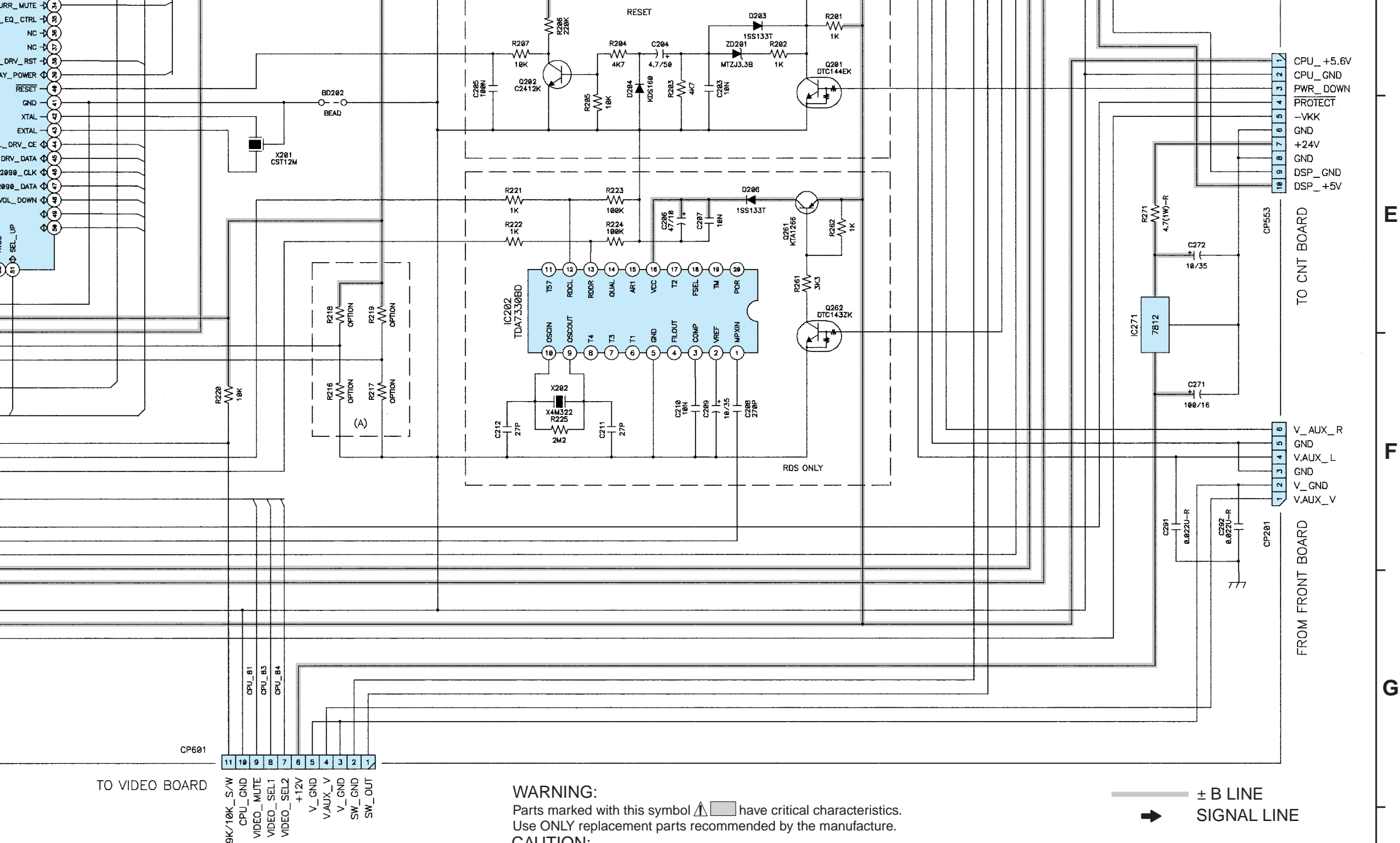
TO INPUT BOARD

CPU BOARD

FROM OPT-IN BOARD

TO CNT BOARD

MUTE\_+5V  
+15V  
-15V  
GND  
RLY\_SPK\_B  
RLY\_SPK\_A  
RLY\_SURR  
RLY\_CNT  
H/P\_MUTE  
CNT\_MUTE  
FRONT\_MUTE  
SURR\_MUTE



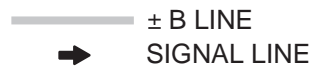
**NOTICE:**  
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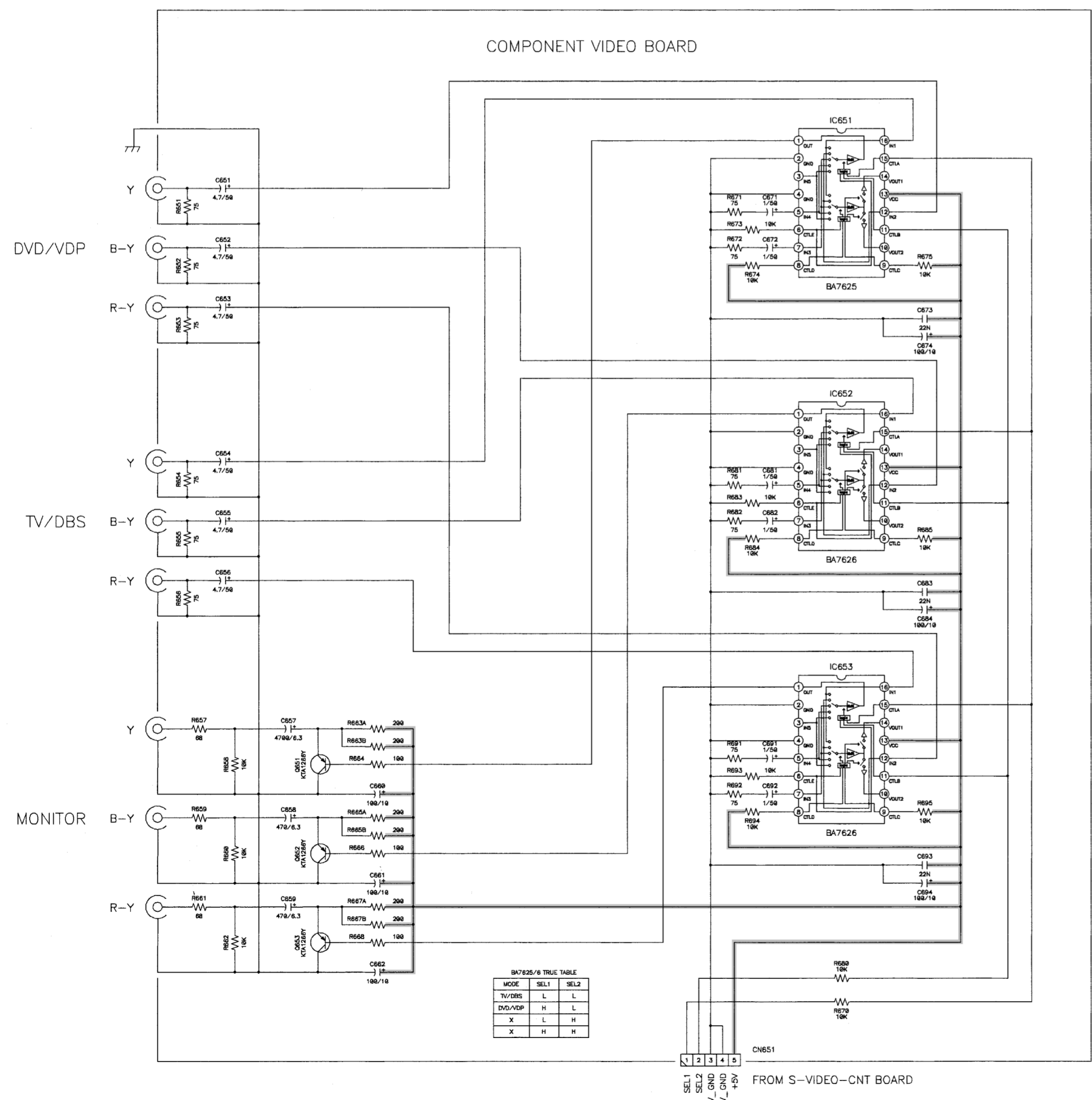
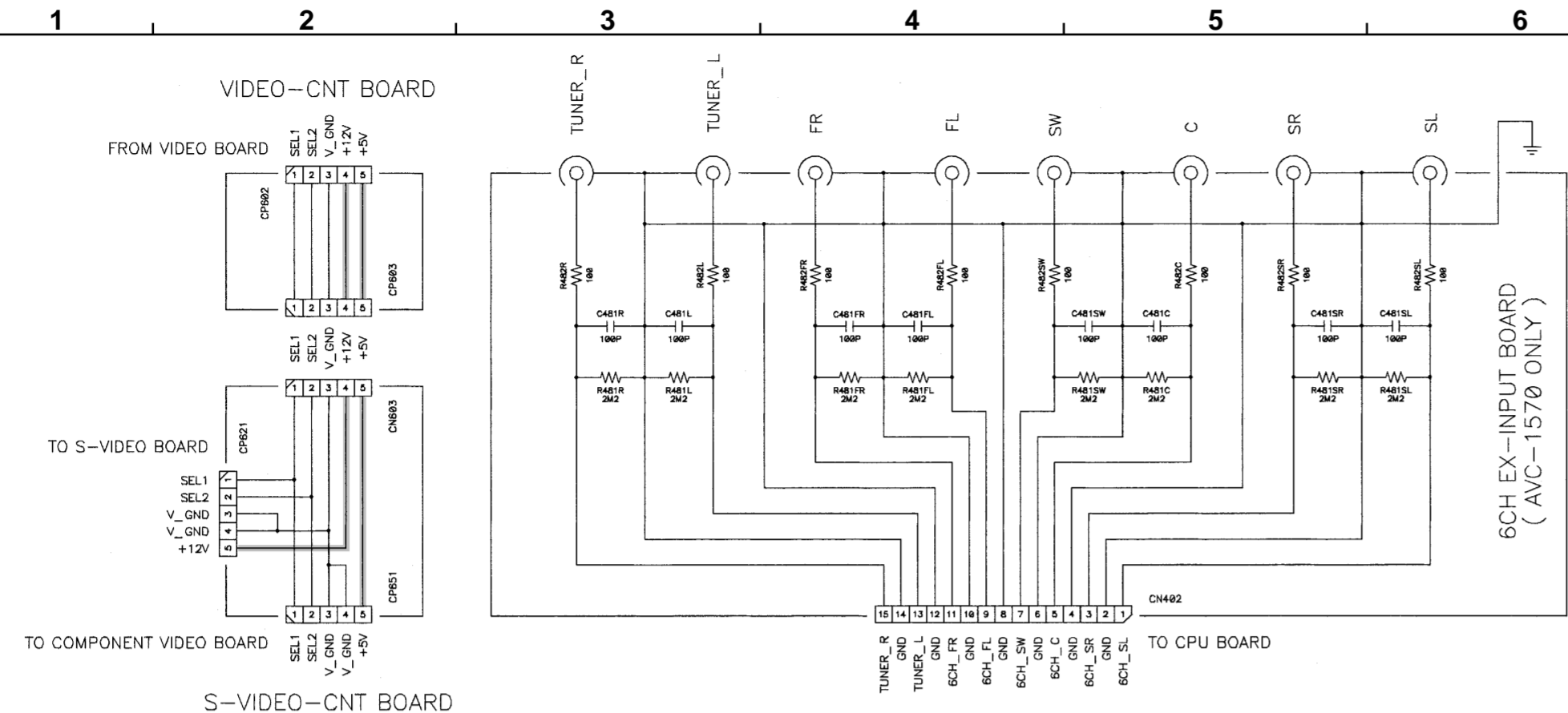
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**WARNING:**  
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## SCHEMATIC DIAGRAMS (5/8) CPU UNIT

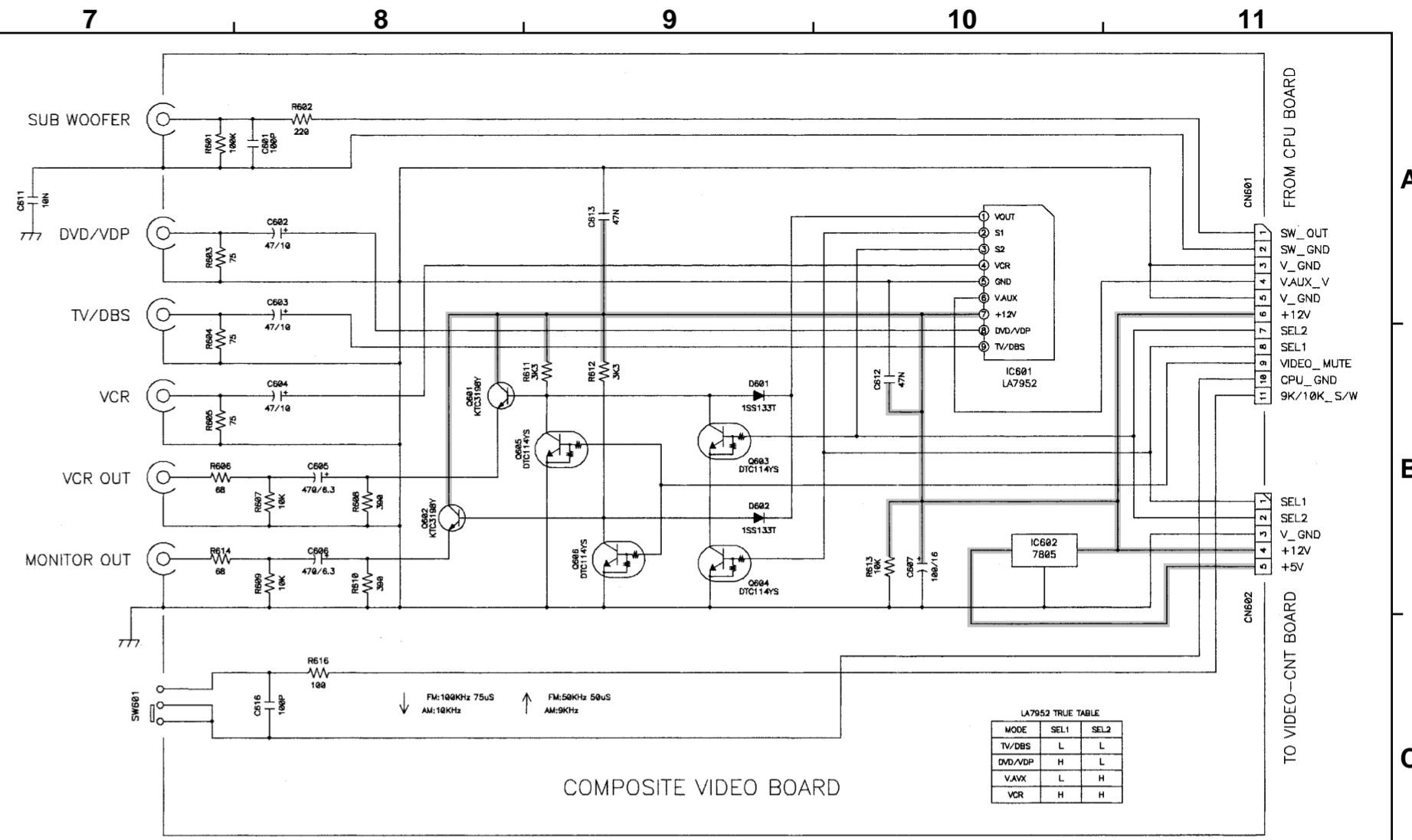


**SCHEMATIC DIAGRAMS (6/8)**



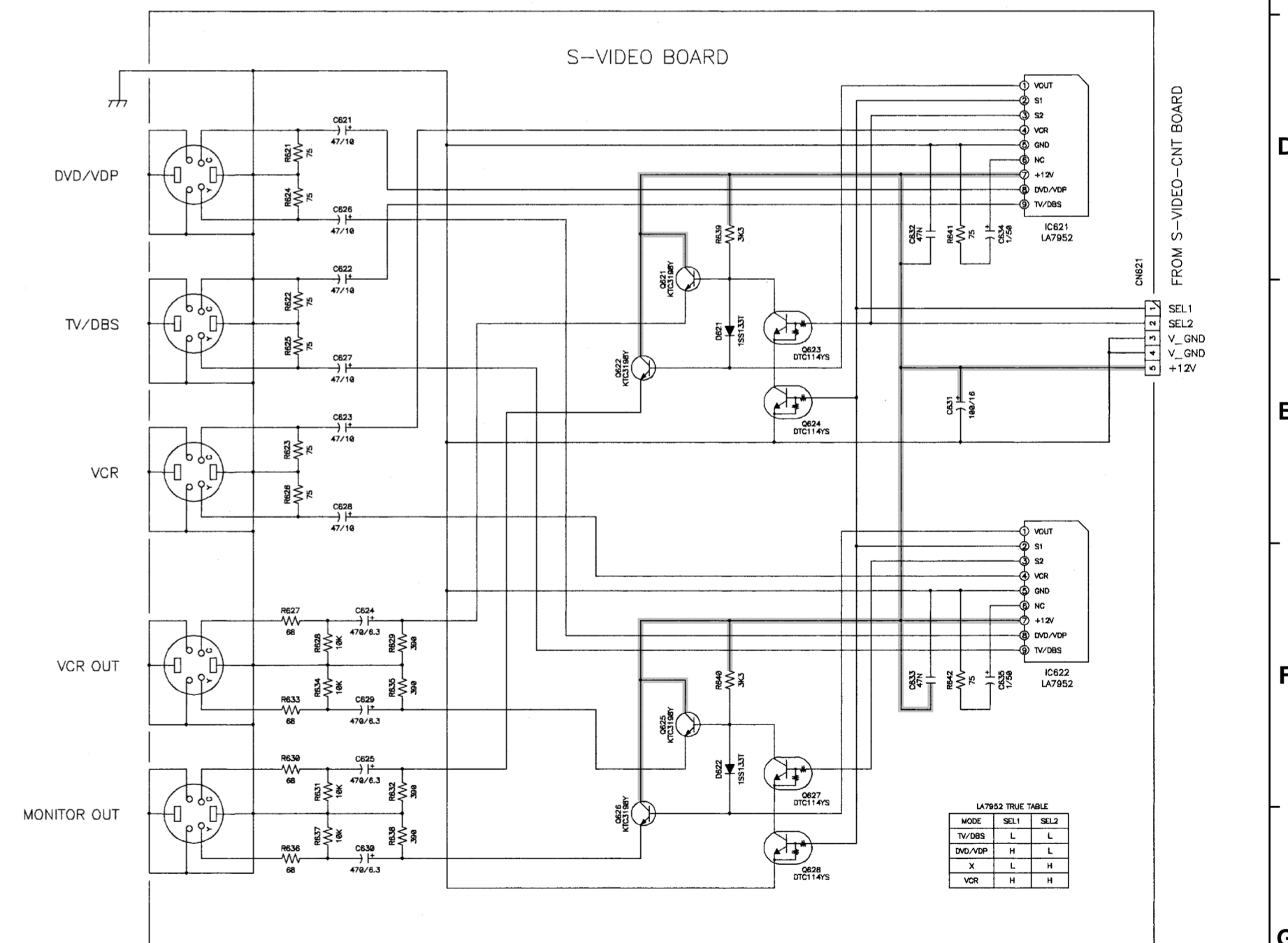
BA7625/6 TRUE TABLE

| MODE    | SEL1 | SEL2 |
|---------|------|------|
| TV/DBS  | L    | L    |
| DVD/VDP | H    | L    |
| X       | L    | H    |
| X       | H    | H    |



LA7952 TRUE TABLE

| MODE    | SEL1 | SEL2 |
|---------|------|------|
| TV/DBS  | L    | L    |
| DVD/VDP | H    | L    |
| V.AUX   | L    | H    |
| VCR     | H    | H    |



LA7953 TRUE TABLE

| MODE    | SEL1 | SEL2 |
|---------|------|------|
| TV/DBS  | L    | L    |
| DVD/VDP | H    | L    |
| X       | L    | H    |
| VCR     | H    | H    |

**NOTICE:**  
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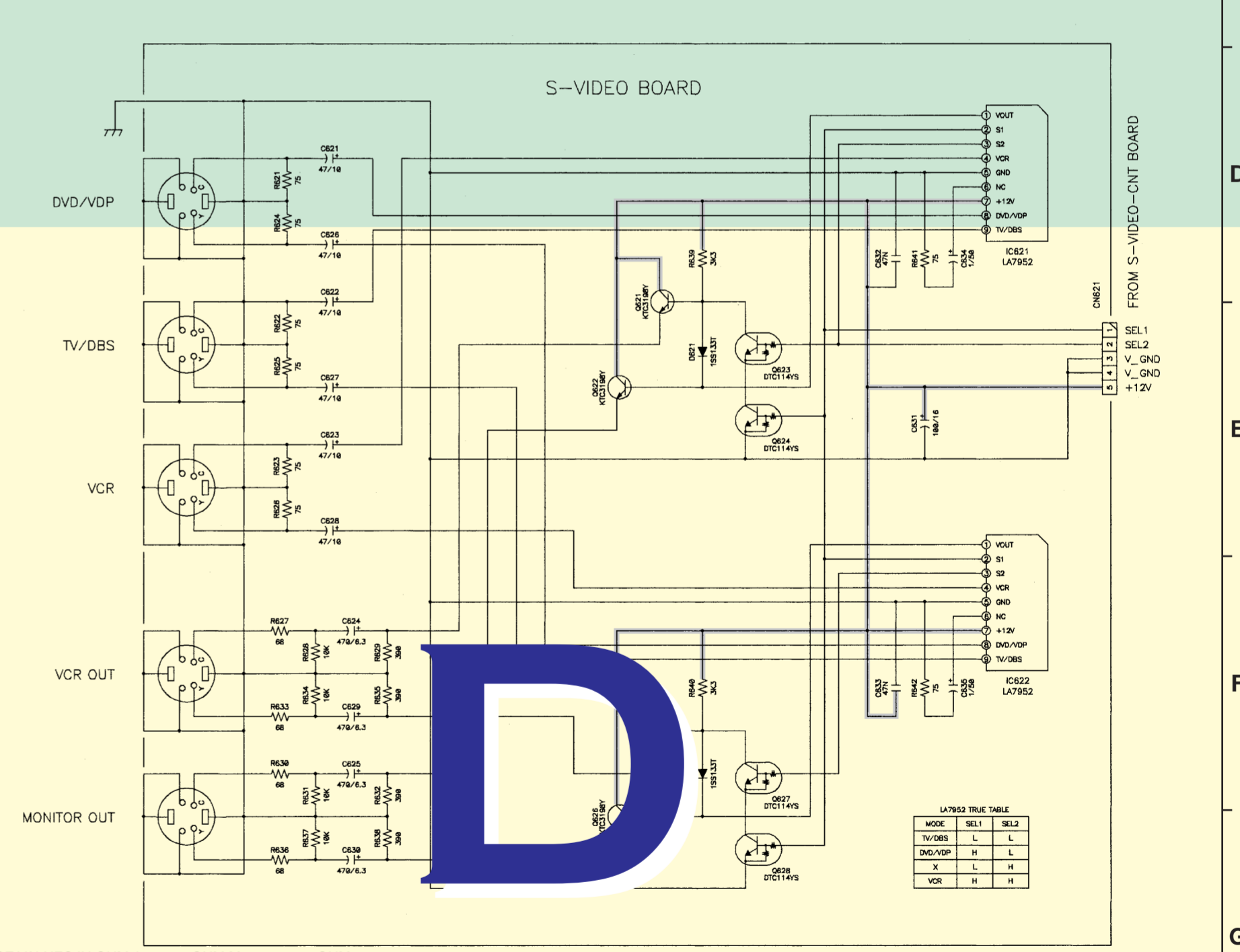
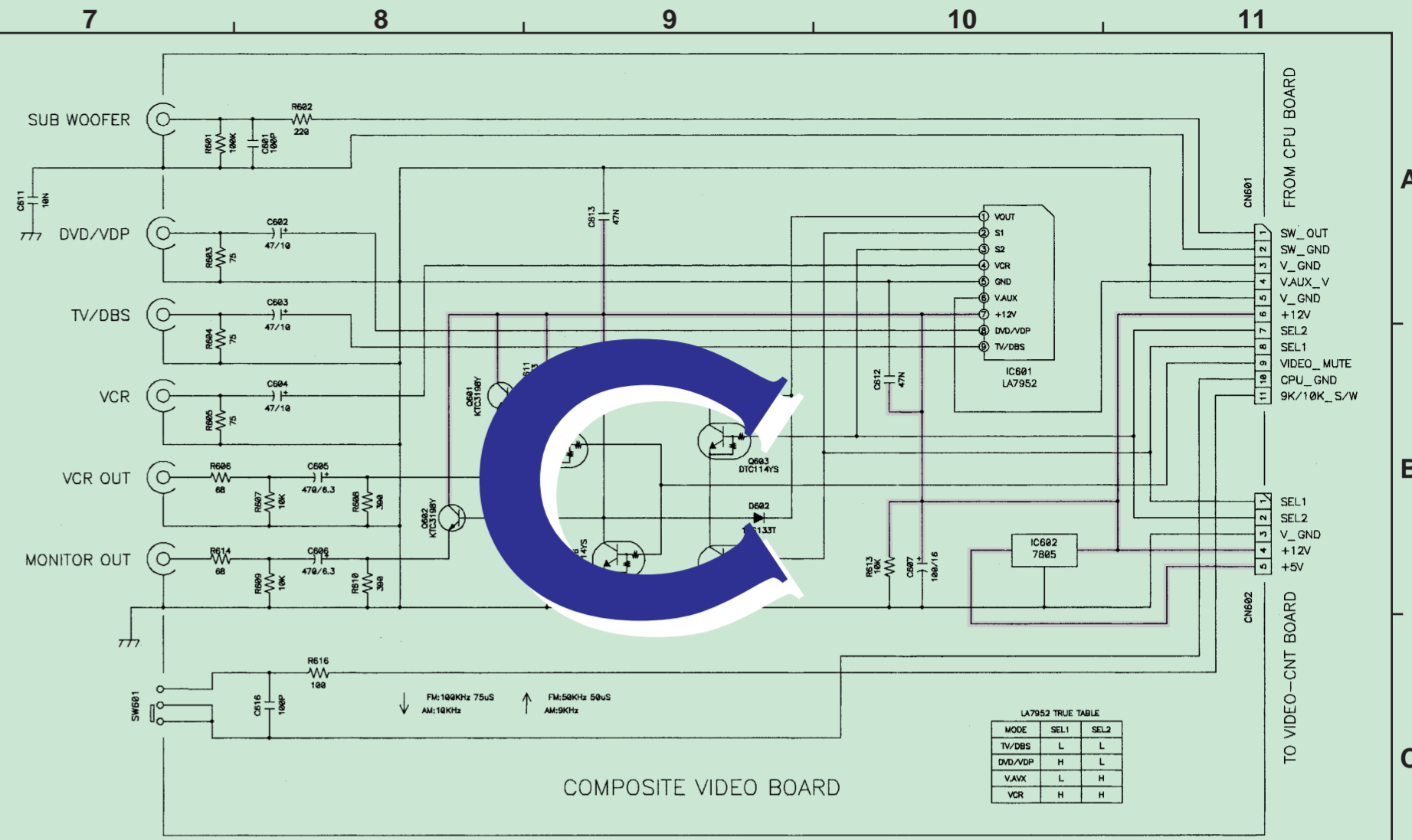
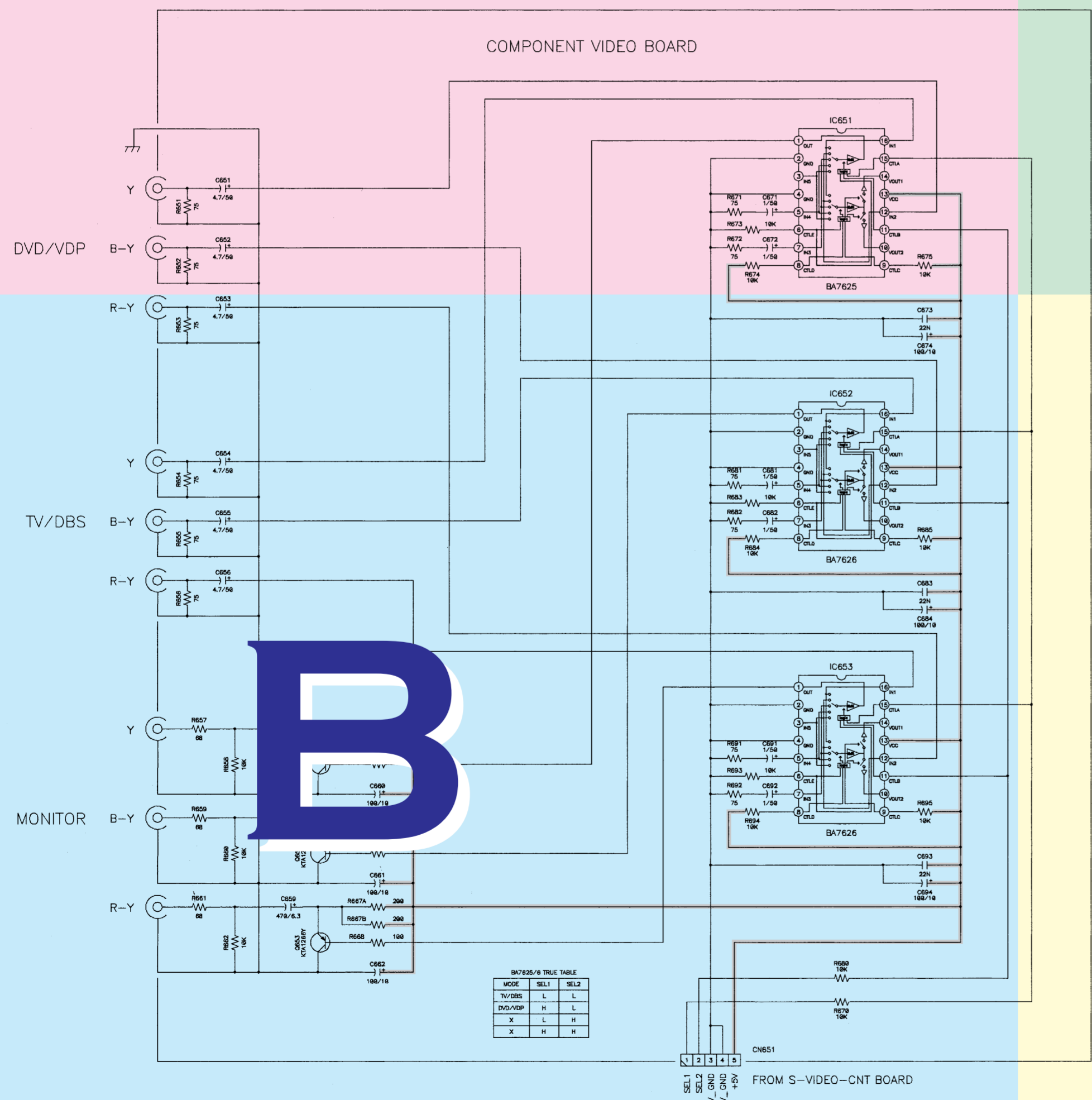
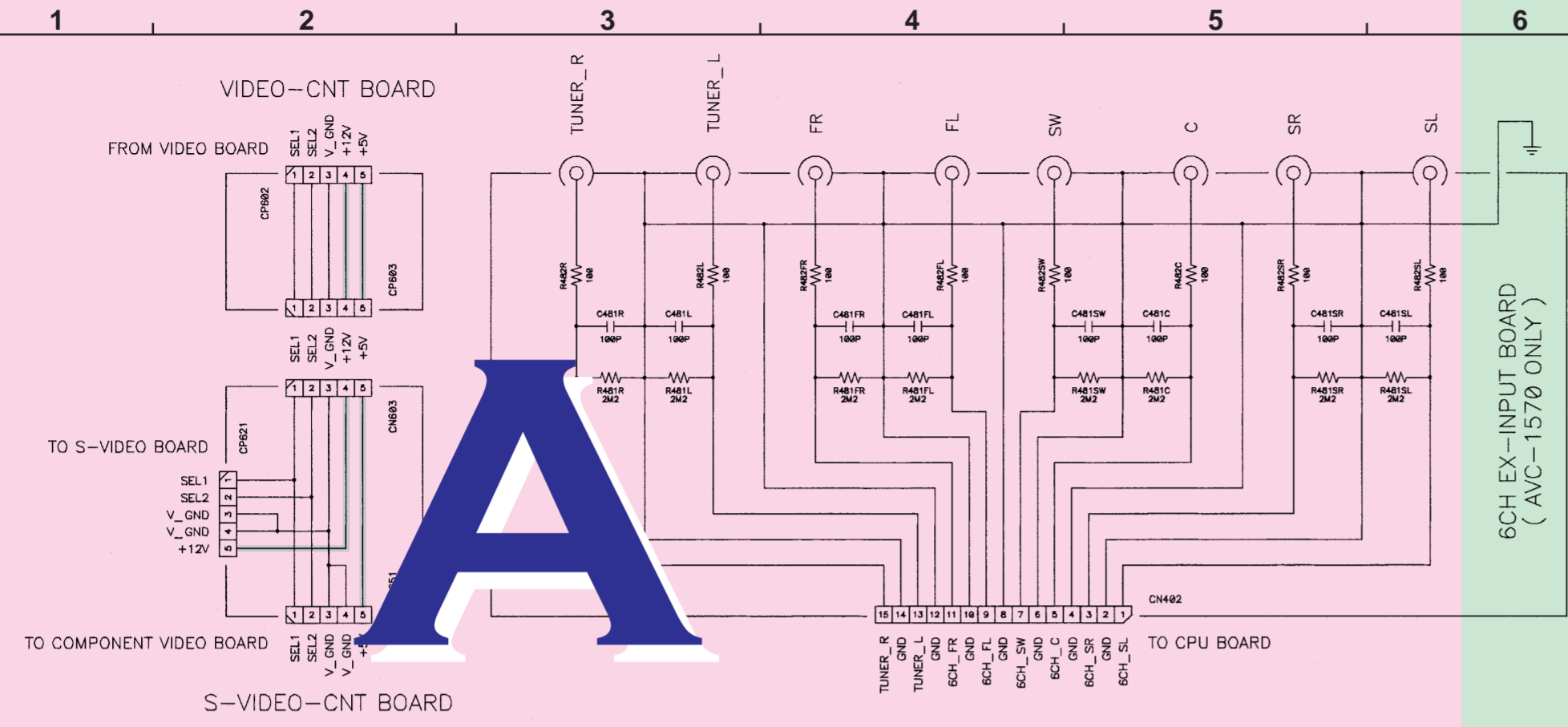
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**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and corrected.

**SCHEMATIC DIAGRAMS (6/8)**  
 VIDEO UNIT  
 VIDEO CNT UNIT  
 S-VIDEO UNIT  
 S-VIDEO CNT UNIT  
 C-VIDEO UNIT

± B LINE  
 SIGNAL LINE

**SCHEMATIC DIAGRAMS (6/8)**



**NOTICE:**  
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**SCHEMATIC DIAGRAMS (6/8)**

VIDEO UNIT  
 VIDEO CNT UNIT  
 S-VIDEO UNIT  
 S-VIDEO CNT UNIT  
 C-VIDEO UNIT

± B LINE SIGNAL LINE

# SCHEMATIC DIAGRAMS (6/8)

1

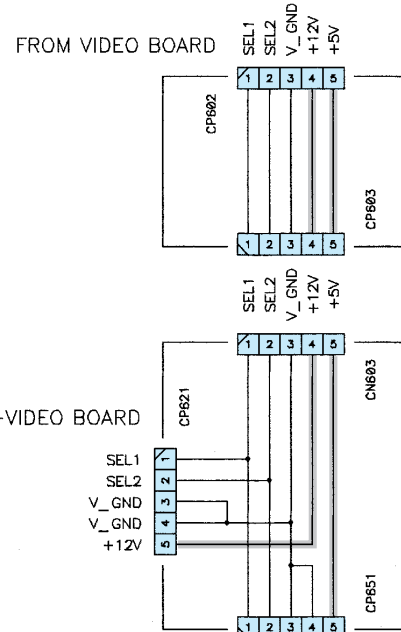
2

3

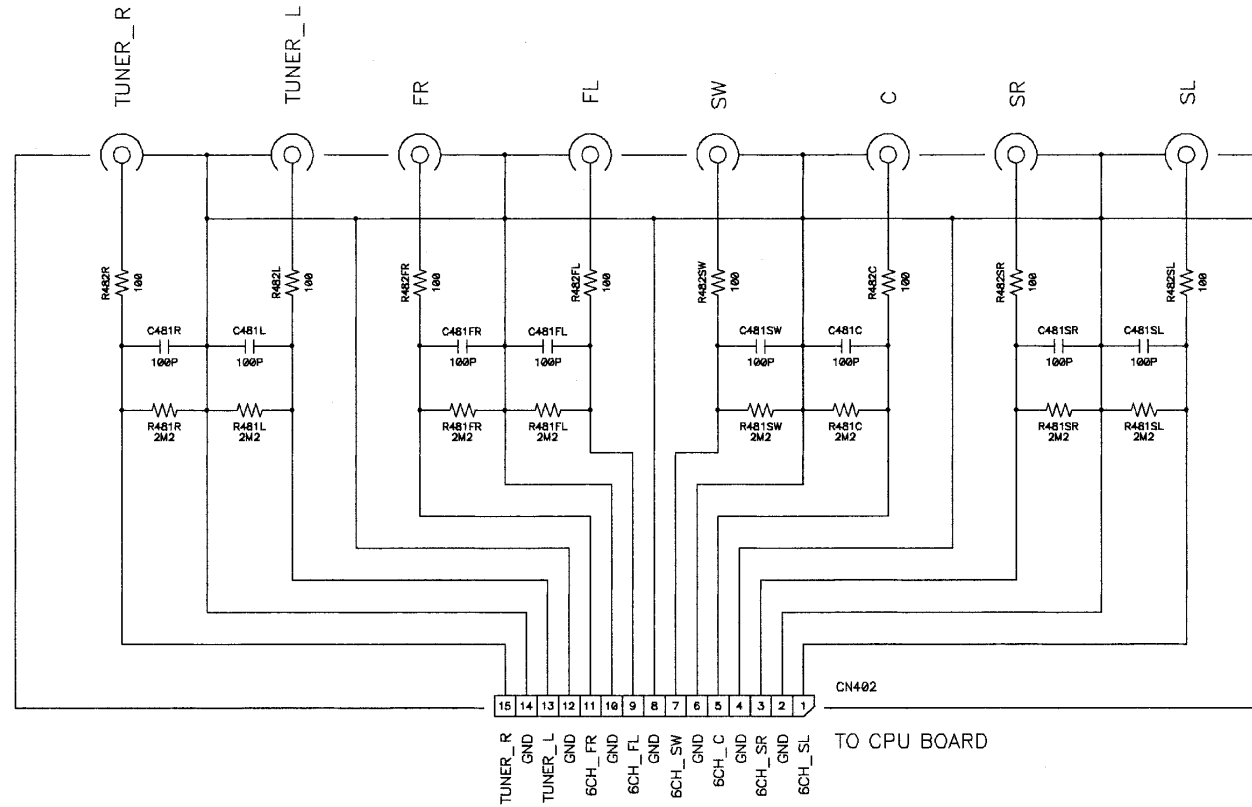
4

5

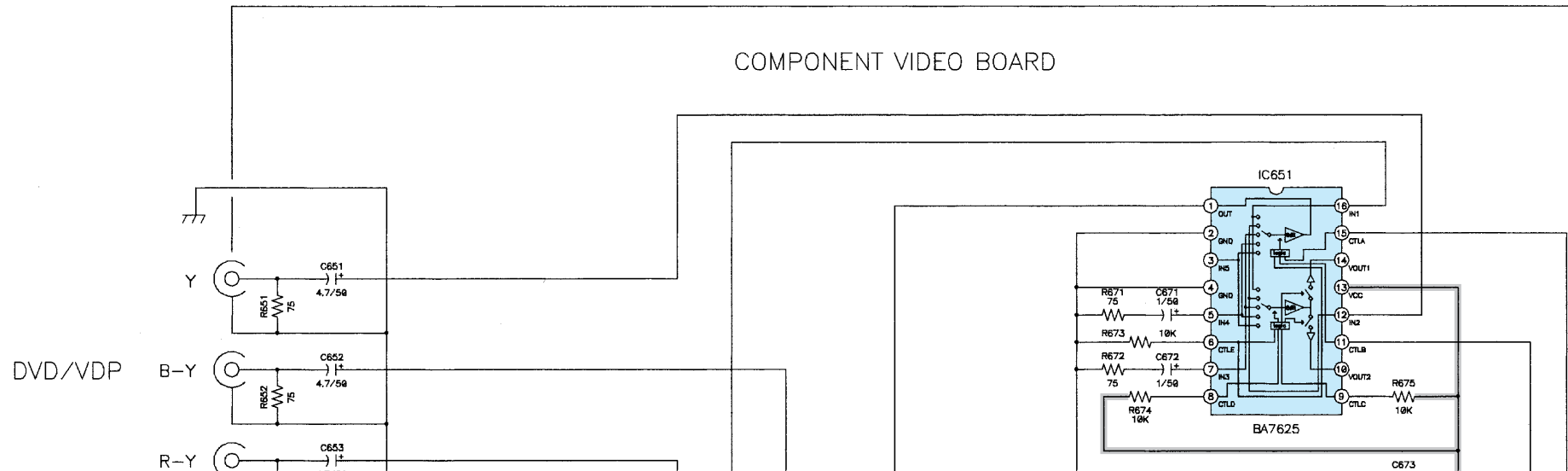
## VIDEO-CNT BOARD



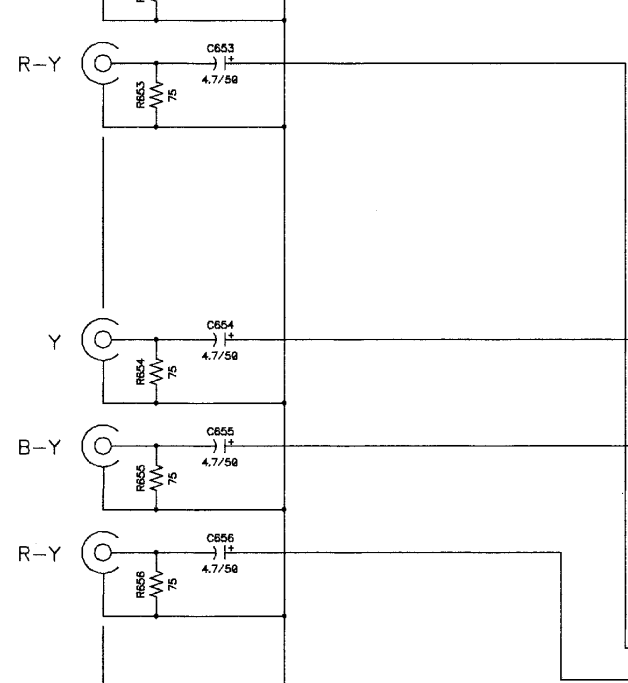
## S-VIDEO-CNT BOARD



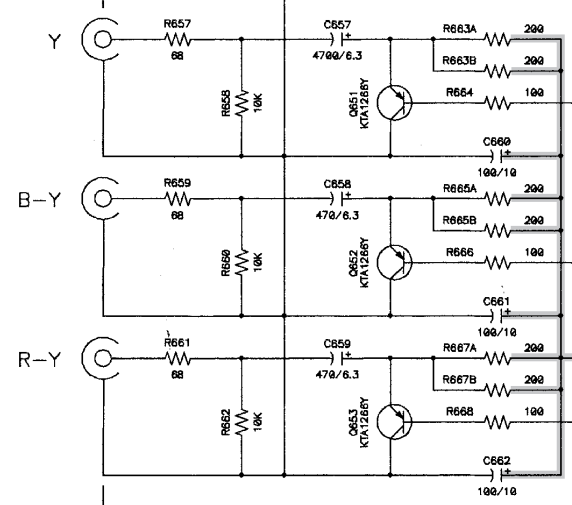
## COMPONENT VIDEO BOARD



TV/DBS

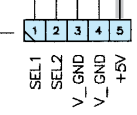


MONITOR

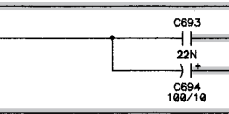
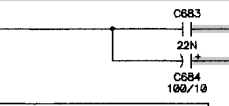
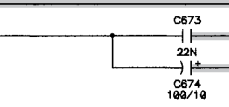
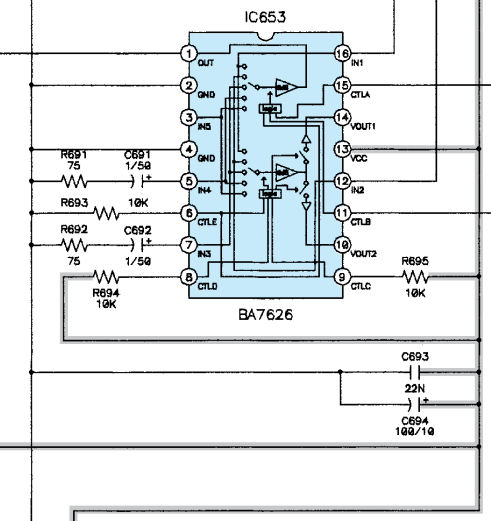
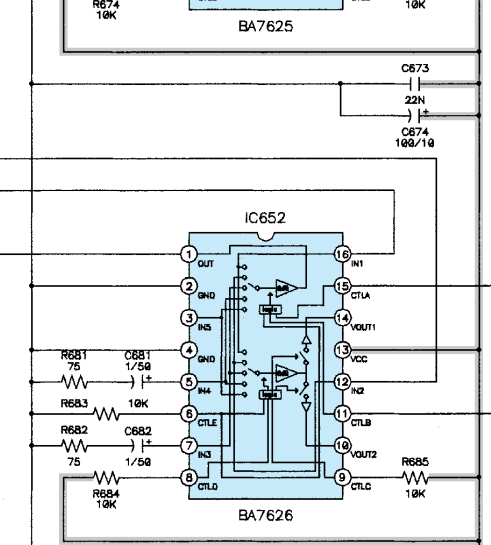


BA7625/6 TRUE TABLE

| MODE    | SEL1 | SEL2 |
|---------|------|------|
| TV/DBS  | L    | L    |
| DVD/VDP | H    | L    |
| X       | L    | H    |
| X       | H    | H    |



FROM S-VIDEO-CNT BOARD



6

7

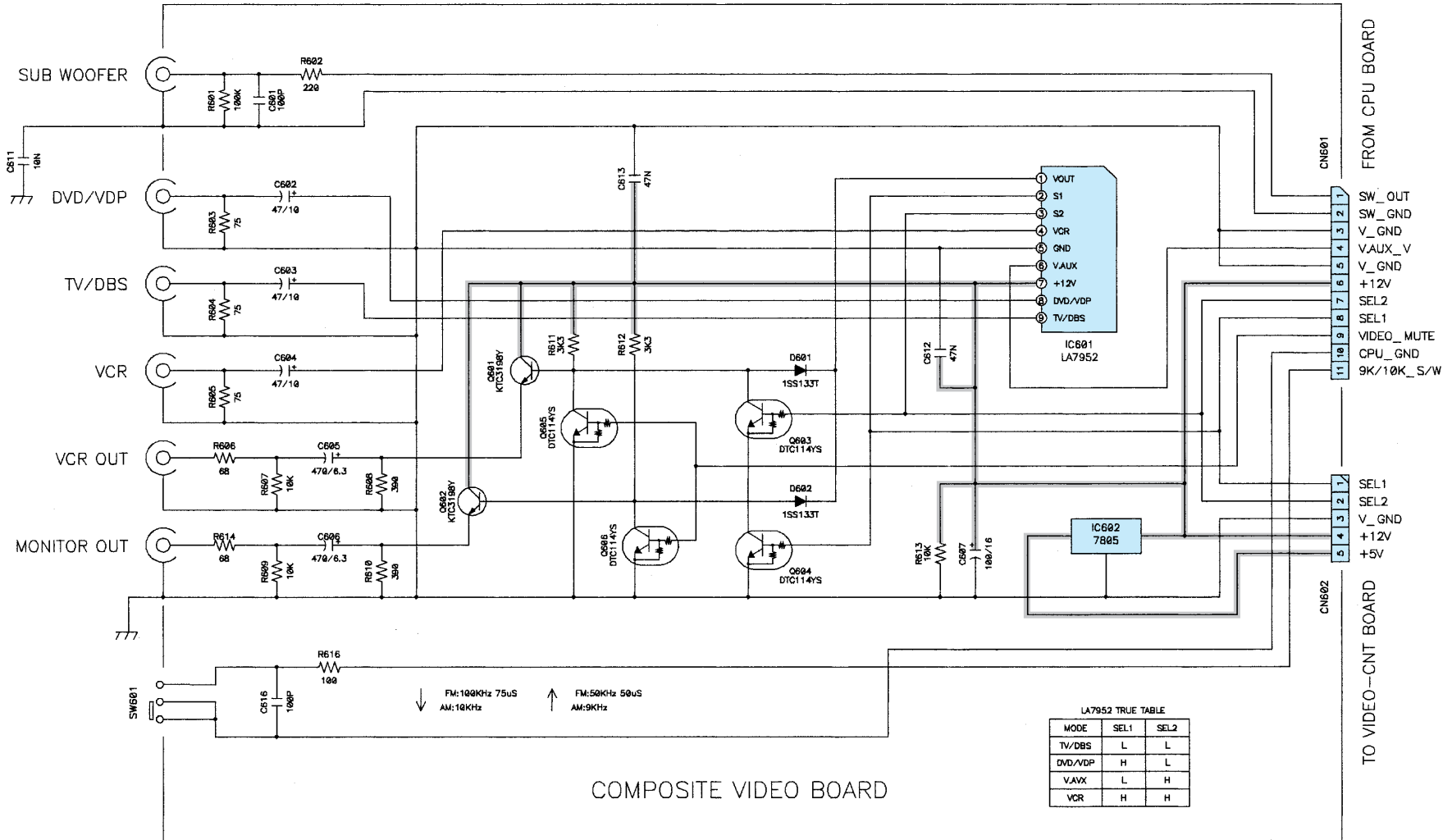
8

9

10

11

6CH EX-INPUT BOARD  
(AVC-1570 ONLY)

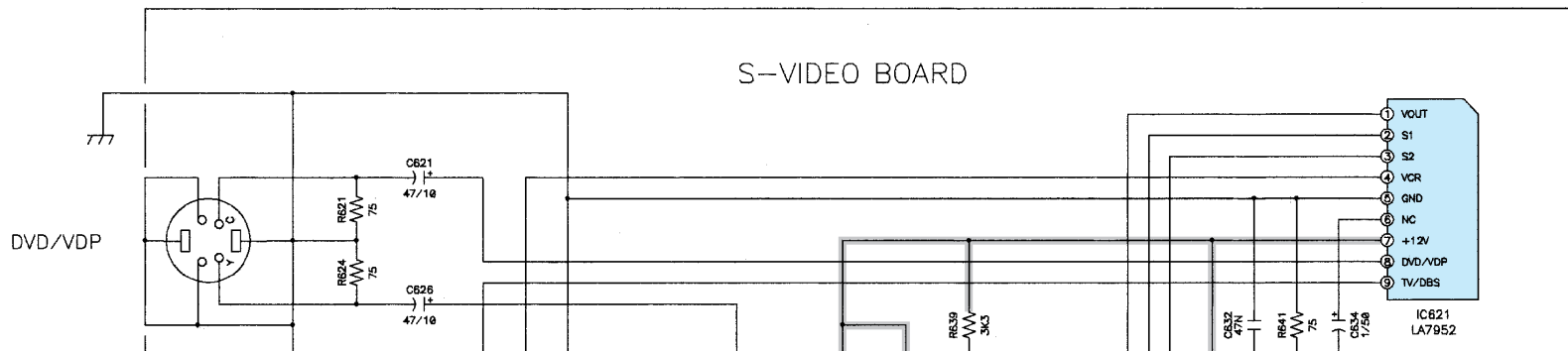


A

B

C

D



FROM CPU BOARD

TO VIDEO-CNT BOARD

TO S-VIDEO-CNT BOARD

SUB WOOFER

DVD/VDP

TV/DBS

VCR

VCR OUT

MONITOR OUT

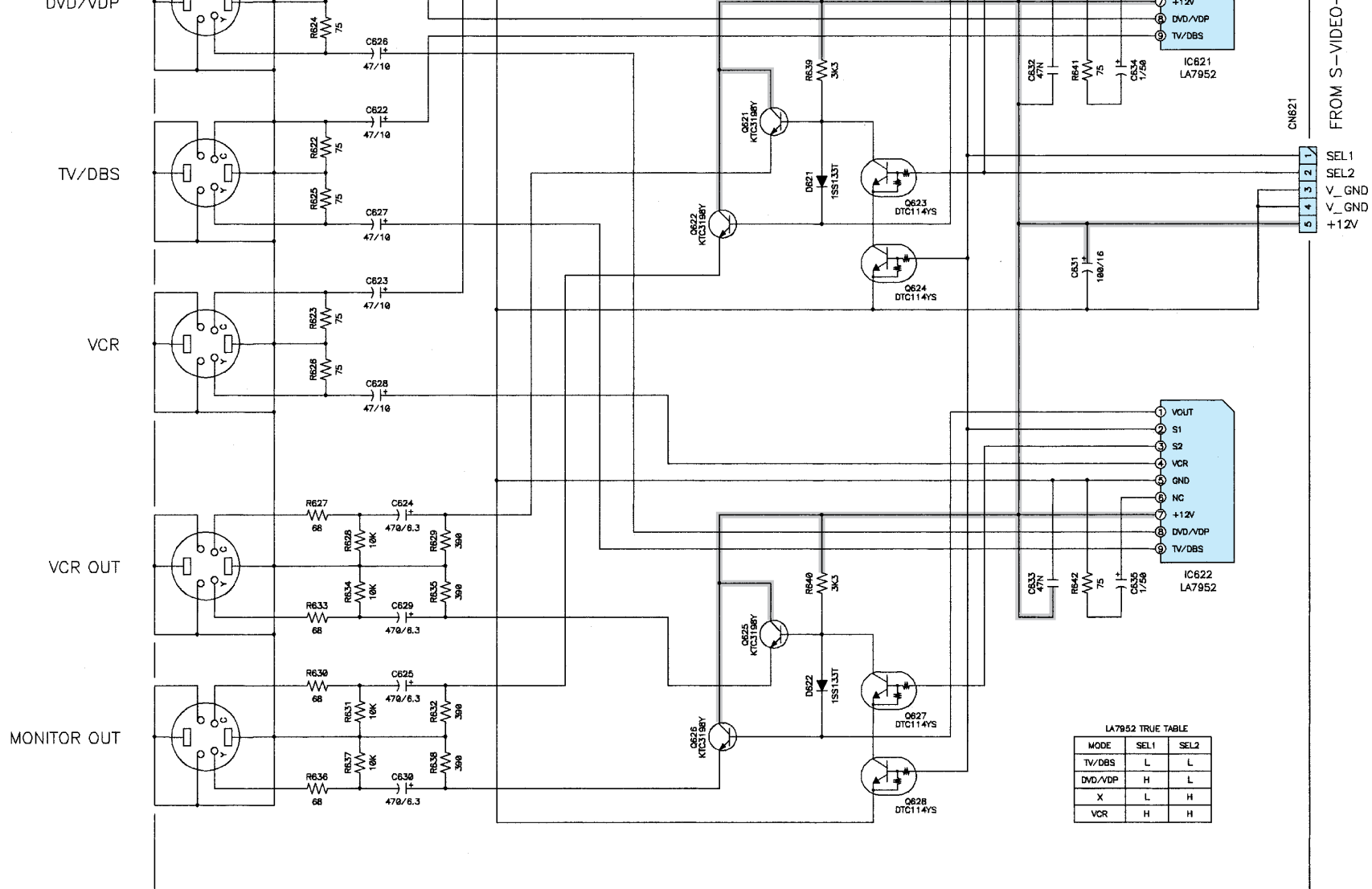
SW601

- 1 SW\_OUT
- 2 SW\_GND
- 3 V\_GND
- 4 V.AUX\_V
- 5 V\_GND
- 6 +12V
- 7 SEL2
- 8 SEL1
- 9 VIDEO\_MUTE
- 10 CPU\_GND
- 11 9K/10K\_S/W

- 1 SEL1
- 2 SEL2
- 3 V\_GND
- 4 +12V
- 5 +5V

- 1 VOUT
- 2 S1
- 3 S2
- 4 VCR
- 5 GND
- 6 NC
- 7 +12V
- 8 DVD/VDP
- 9 TV/DBS





**NOTICE:**

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**WARNING:**

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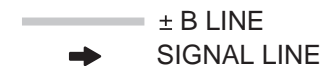
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**WARNING:**

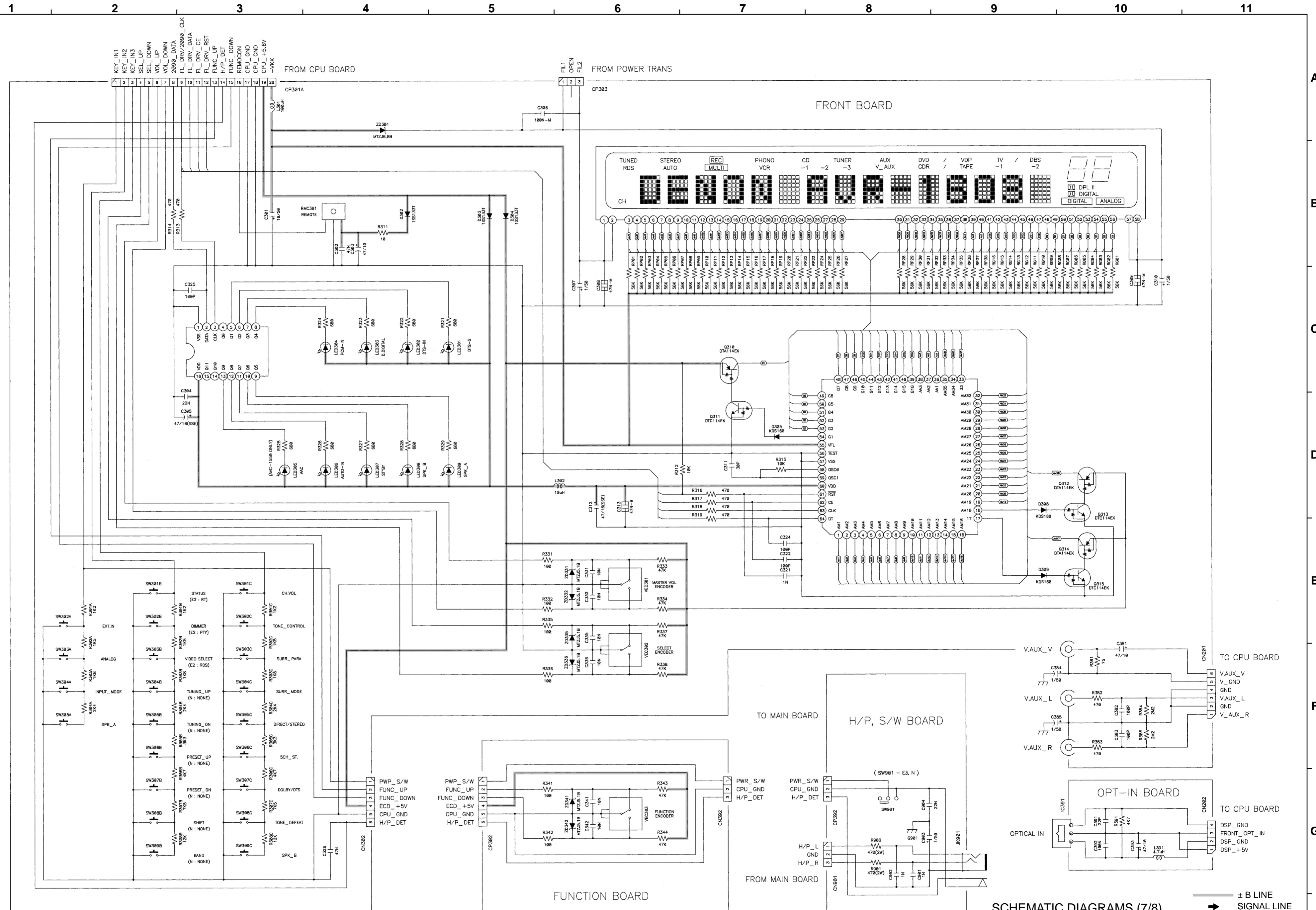
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**SCHEMATIC DIAGRAMS (6/8)**

- VIDEO UNIT
- VIDEO CNT UNIT
- S-VIDEO UNIT
- S-VIDEO CNT UNIT
- C-VIDEO UNIT



SCHEMATIC DIAGRAMS (7/8)



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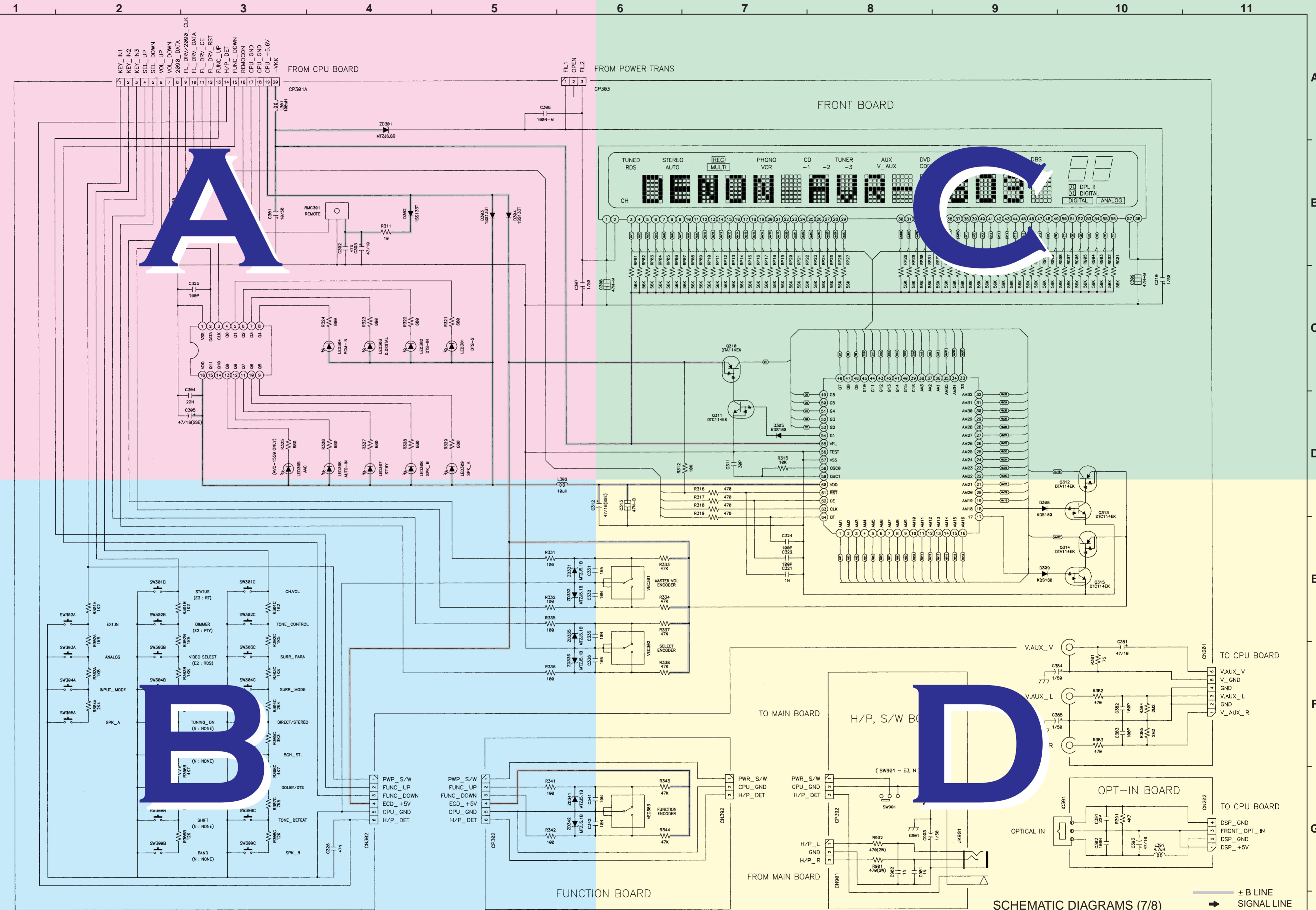
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SCHEMATIC DIAGRAMS (7/8)


FRONT UNIT  
 OPTICAL-IN UNIT  
 POWER-SW UNIT  
 ENCODER UNIT  
 HEADPHONE UNIT

± B LINE  
 SIGNAL LINE

SCHEMATIC DIAGRAMS (7/8)



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SCHEMATIC DIAGRAMS (7/8)  
 FRONT UNIT  
 OPTICAL-IN UNIT  
 POWER-SW UNIT  
 ENCODER UNIT  
 HEADPHONE UNIT

→ ± B LINE SIGNAL LINE

# SCHEMATIC DIAGRAMS (7/8)

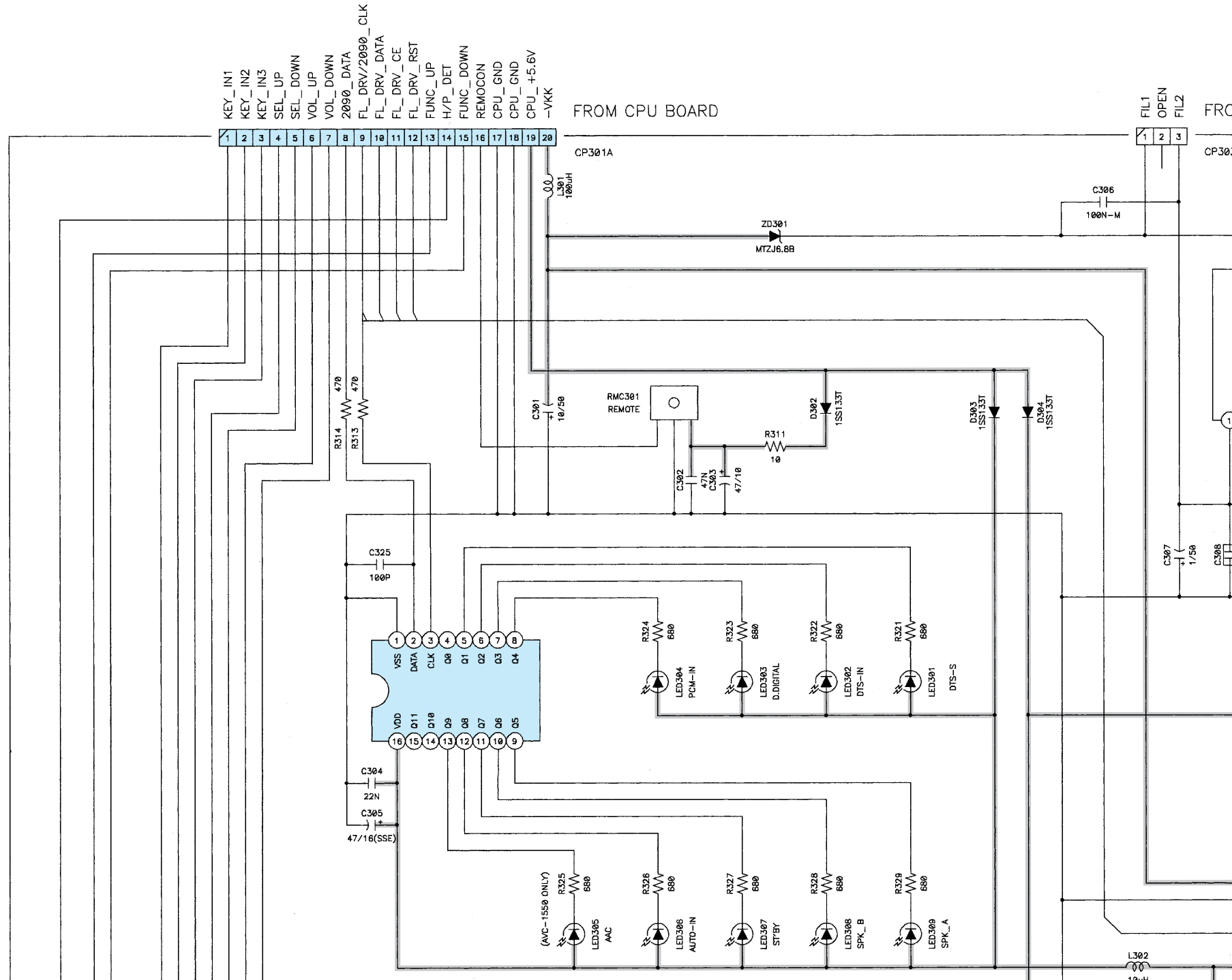
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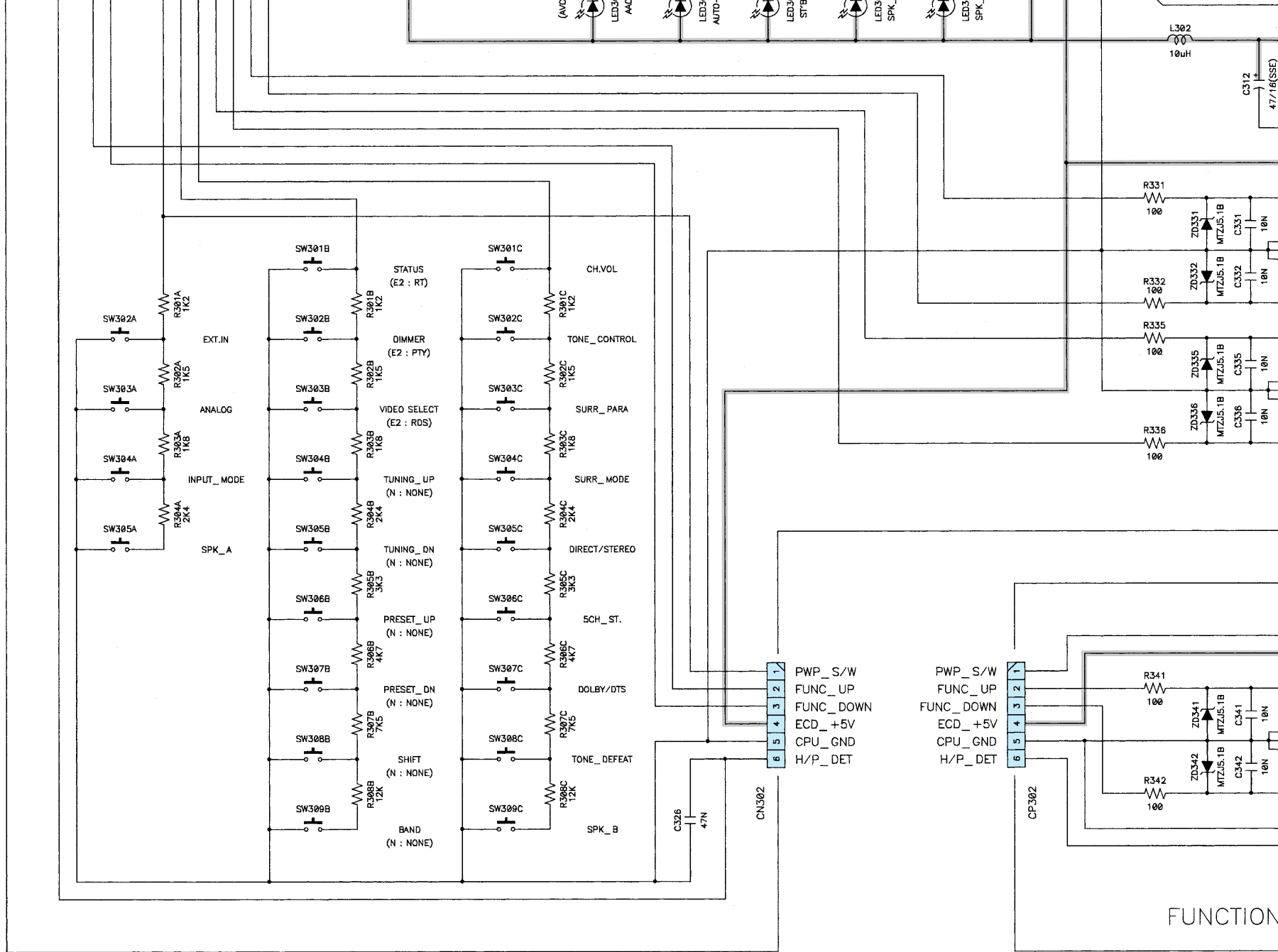
2

3


4

5





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**WARNING:**  
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FUNCTION

6

7

8

9

10

11

A

B

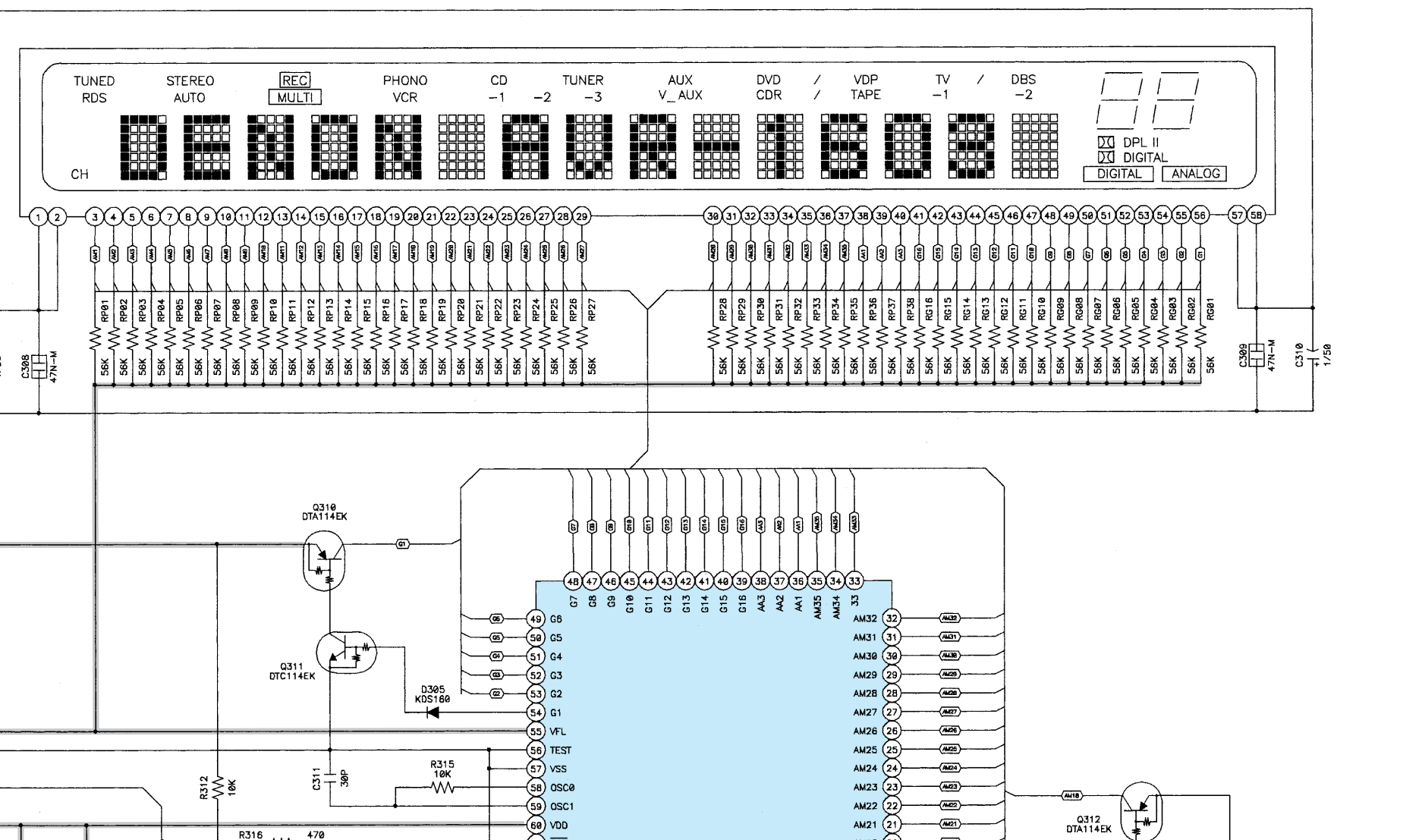
C

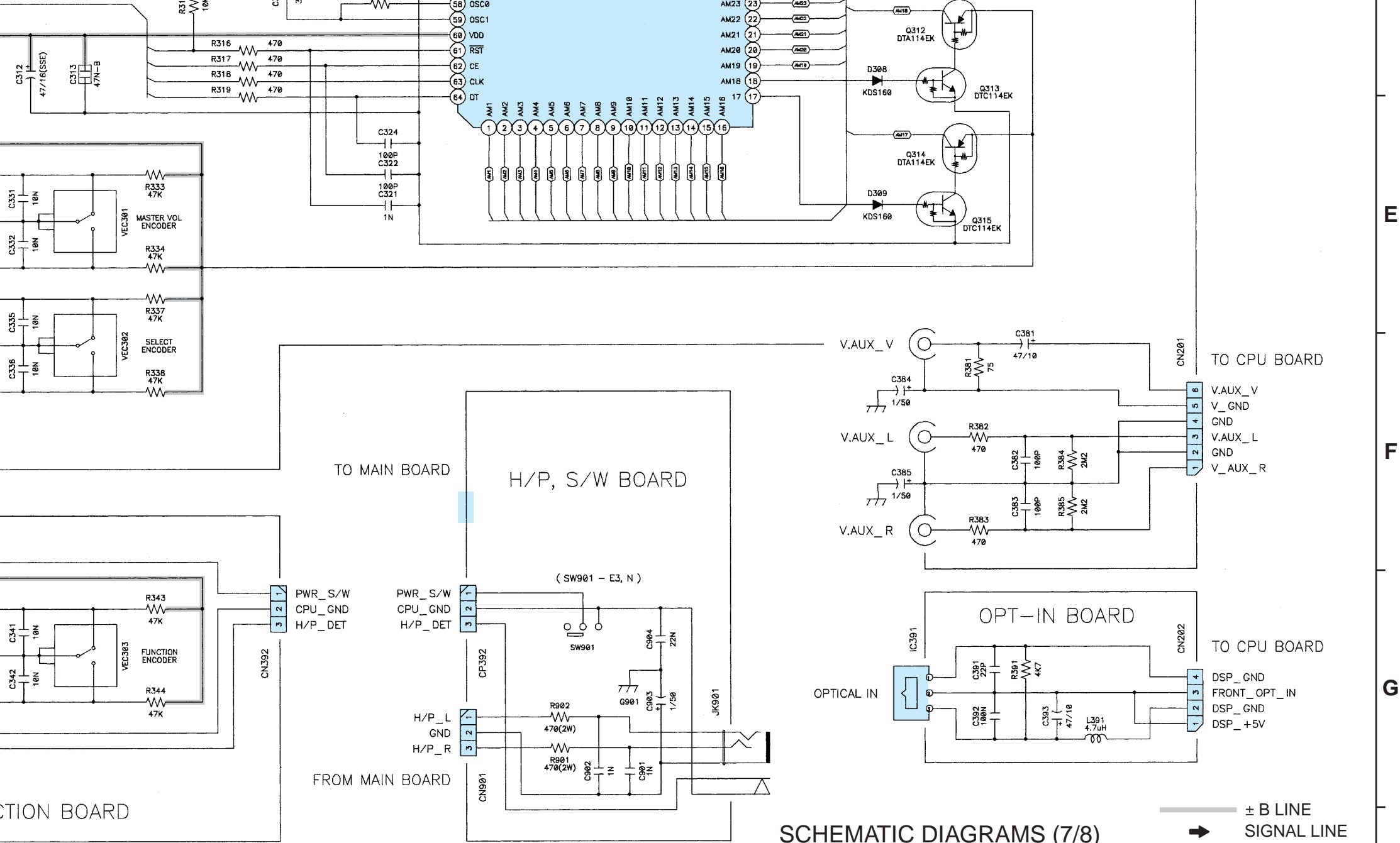
D

FROM POWER TRANS

CP303

### FRONT BOARD





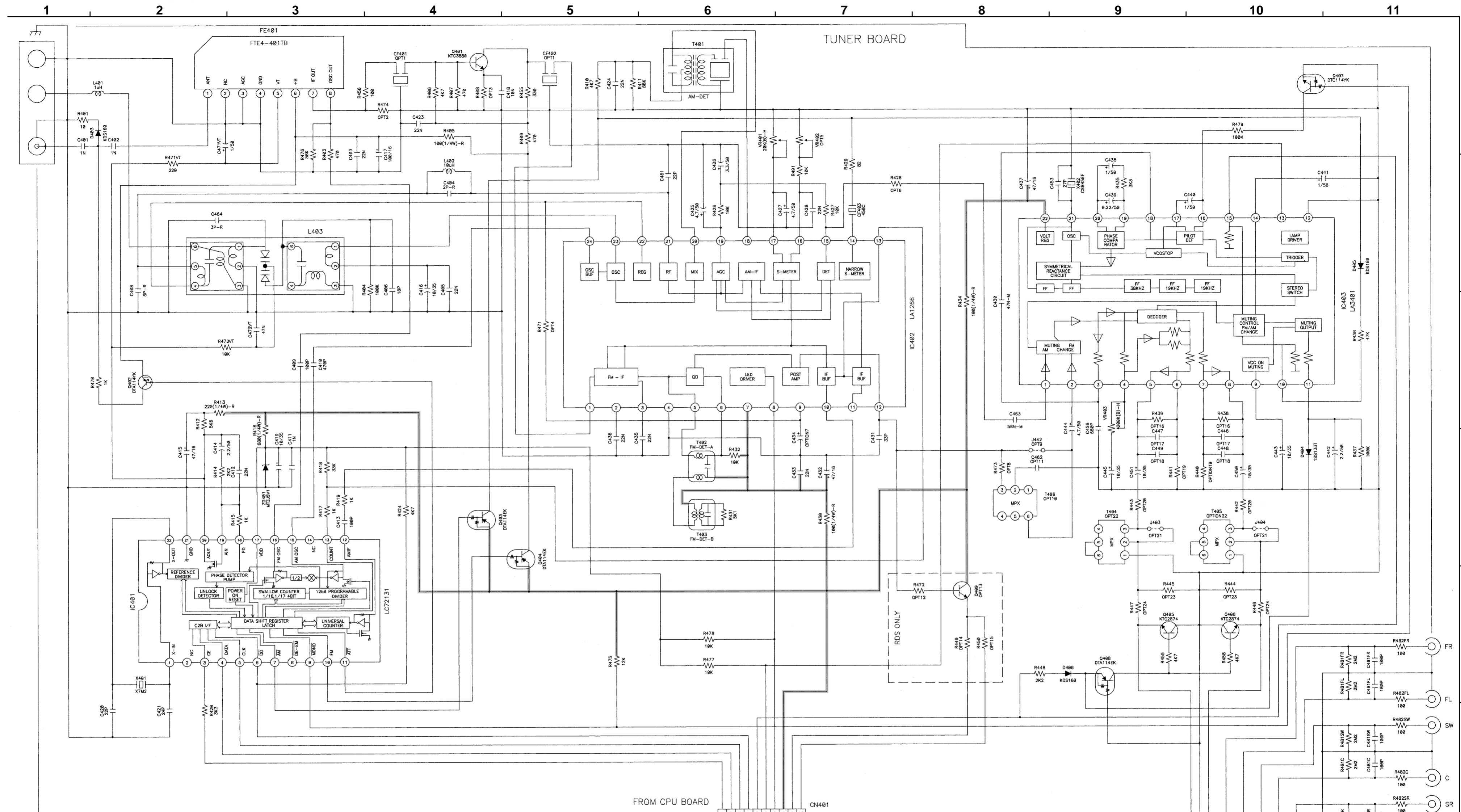
**SCHEMATIC DIAGRAMS (7/8)**

- FRONT UNIT
- OPTICAL-IN UNIT
- POWER-SW UNIT
- ENCODER UNIT
- HEADPHONE UNIT

 ± B LINE  
 SIGNAL LINE

to the customer until the problem is located and

SCHMATIC DIAGRAMS (8/8)



| R-NO. | USA(E3)     | EUROPE(E2) | MULTI, C, K |
|-------|-------------|------------|-------------|
| OPT1  | CF401/CF402 | SFE10.7MA8 | SFE10.7MS3  |
| OPT2  | R474        | -          | 180         |
| OPT3  | R407/R408   | 470/1.2K   | 620/680     |
| OPT4  | R471        | 18K        | 39K         |
| OPT5  | VR402       | 50KB       | 100KB       |
| OPT6  | R428        | 3.3K       | 10K         |
| OPT7  | C434        | 1/50       | 0.33/50     |
| OPT8  | R473        | -          | 2.4K        |

| R-NO. | USA(E3)   | EUROPE(E2) | MULTI, C, K |
|-------|-----------|------------|-------------|
| OPT9  | J442      | JUMPER     | -           |
| OPT10 | T406      | -          | ANTI-BIRDIE |
| OPT11 | C462      | -          | 470P        |
| OPT12 | R472      | -          | 100         |
| OPT13 | Q409      | -          | KTC3880     |
| OPT14 | R449      | -          | 3.9K        |
| OPT15 | R450      | -          | 1K          |
| OPT16 | R438,R439 | 100K       | 150K        |

| R-NO. | USA(E3)   | EUROPE(E2) | MULTI, C, K |
|-------|-----------|------------|-------------|
| OPT17 | C446,C447 | 270P       | 330P        |
| OPT18 | C448,C449 | 470P       | -           |
| OPT19 | R440,R441 | 120K       | 220K        |
| OPT20 | R442,R443 | 3.3K       | 2.2K        |
| OPT21 | J403,J404 | JUMPER     | -           |
| OPT22 | T404,T405 | -          | LPF(MPX)    |
| OPT23 | R444,R445 | 8.2K       | 3.3K        |
| OPT24 | R446,R447 | JUMPER     | 470         |

**NOTICE:**  
 ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE.

**WARNING:**  
 Parts marked with this symbol have critical characteristics.  
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**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a  
 leakage current check or (2) a line to chassis resistance check. If the leakage  
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side  
 of the power card is less than 460kohms, the unit is defective.

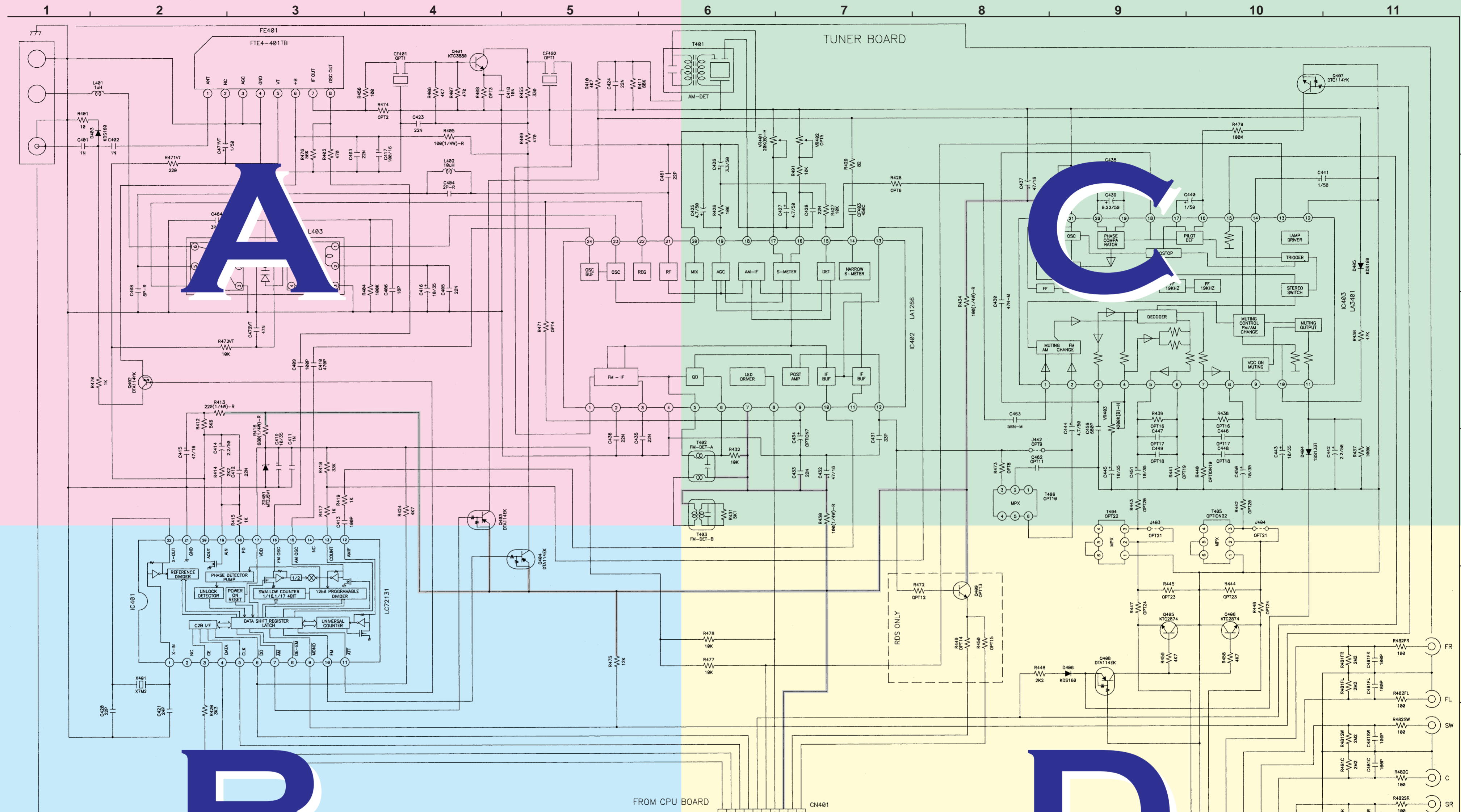
**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
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± B LINE  
 SIGNAL LINE

SCHMATIC DIAGRAMS (8/8)  
 TUNER UNIT



SCHMATIC DIAGRAMS (8/8)



| R-NO. | USA         | EUROPE(E2) | TI, C, K           |
|-------|-------------|------------|--------------------|
| OPT1  | CF401/CF402 | SFE10      | SFE10.7MS3 AB/MS3  |
| OPT2  | R474        |            |                    |
| OPT3  | R407/R408   | 470/1.2K   | 0.20/0.50 620/1.2K |
| OPT4  | R471        | 18K        | 39K 39K            |
| OPT5  | VR402       | 50KB       | 100KB 50KB         |
| OPT6  | R428        | 3.3K       | 10K 6.8K           |
| OPT7  | C434        | 1/50       | 0.33/50 0.33/50    |
| OPT8  | R473        |            | 2.4K               |

| R-NO. | USA(E3)   | EUROPE(E2) | MULTI, C, K |
|-------|-----------|------------|-------------|
| OPT9  | J442      |            | JUMPER      |
| OPT10 | T406      |            | ANTI-BIRDIE |
| OPT11 | C462      |            | 470P        |
| OPT12 | R472      |            | 100         |
| OPT13 | Q409      |            | KTC3880     |
| OPT14 | R449      |            | 3.9K        |
| OPT15 | R450      |            | 1K          |
| OPT16 | R438,R439 | 100K       | 150K 100K   |

| R-NO. | USA(E3)   | EUROPE(E2) | MULTI, C, K |
|-------|-----------|------------|-------------|
| OPT17 | C446,C447 | 270P       | 330P 180P   |
| OPT18 | C448,C449 | 470P       |             |
| OPT19 | R440,R441 | 120K       | 220K        |
| OPT20 | R442,R443 | 3.3K       | 2.2K 3.3K   |
| OPT21 | J403,J404 | JUMPER     | JUMPER      |
| OPT22 | T404,T405 |            | LPF(MPX)    |
| OPT23 | R444,R445 | 8.2K       | 3.3K 8.2K   |
| OPT24 | R446,R447 | JUMPER     | 470 JUMPER  |

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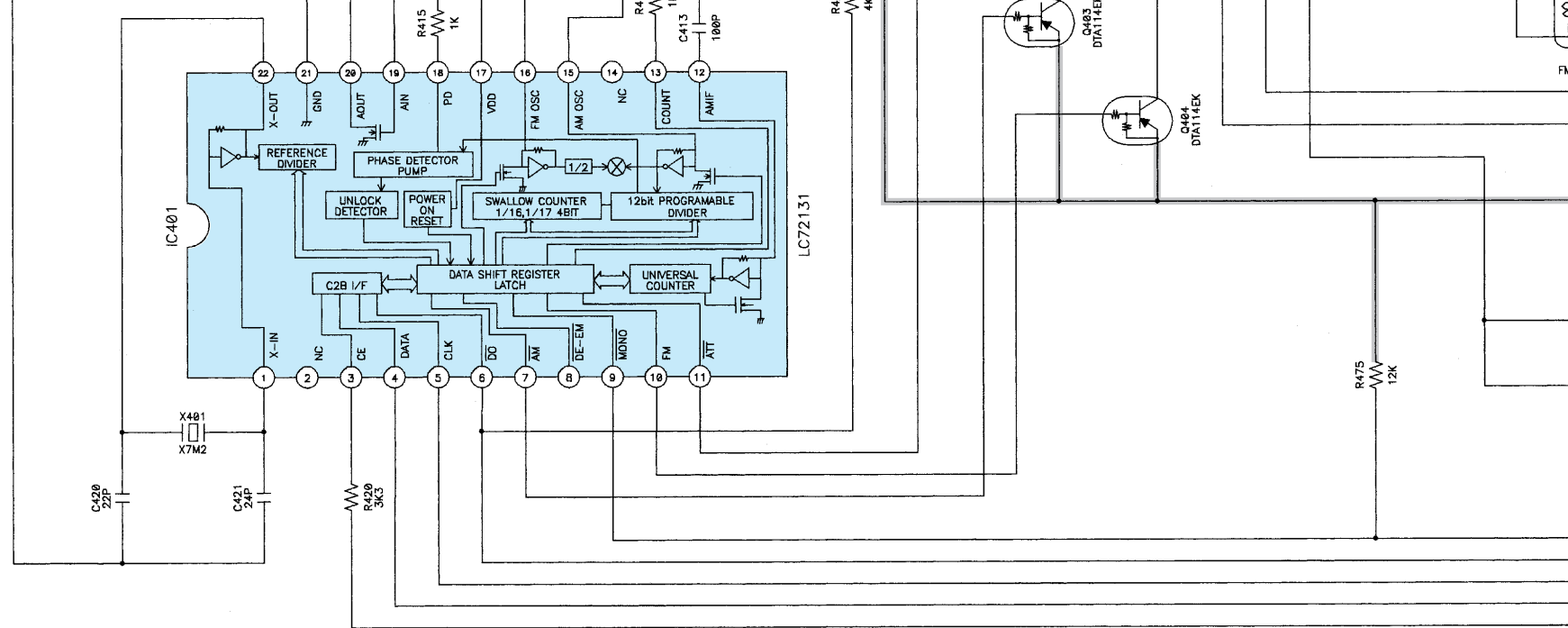
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**WARNING:**  
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 corrected.

SCHMATIC DIAGRAMS (8/8)  
 TUNER UNIT

± B LINE  
 SIGNAL LINE





FROM CPU BO

|      | R-NO.       | USA(E3)    | EUROPE(E2) | MULTI, C, K |
|------|-------------|------------|------------|-------------|
| OPT1 | CF401/CF402 | SFE10.7MA8 | SFE10.7MS3 | 10.7MA8/MS3 |
| OPT2 | R474        | -          | 180        | -           |
| OPT3 | R407/R408   | 470/1.2K   | 620/680    | 620/1.2K    |
| OPT4 | R471        | 18K        | 39K        | 39K         |
| OPT5 | VR402       | 50KB       | 100KB      | 50KB        |
| OPT6 | R428        | 3.3K       | 10K        | 6.8K        |
| OPT7 | C434        | 1/50       | 0.33/50    | 0.33/50     |
| OPT8 | R473        | -          | 2.4K       | -           |

|       | R-NO.     | USA(E3) | EUROPE(E2)  | MULTI, C, K |
|-------|-----------|---------|-------------|-------------|
| OPT9  | J442      | JUMPER  | -           | JUMPER      |
| OPT10 | T406      | -       | ANTI-BIRDIE | -           |
| OPT11 | C462      | -       | 470P        | -           |
| OPT12 | R472      | -       | 100         | -           |
| OPT13 | Q409      | -       | KTC3880     | -           |
| OPT14 | R449      | -       | 3.9K        | -           |
| OPT15 | R450      | -       | 1K          | -           |
| OPT16 | R438,R439 | 100K    | 150K        | 100K        |

**NOTICE:**

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**WARNING:**

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 corrected.

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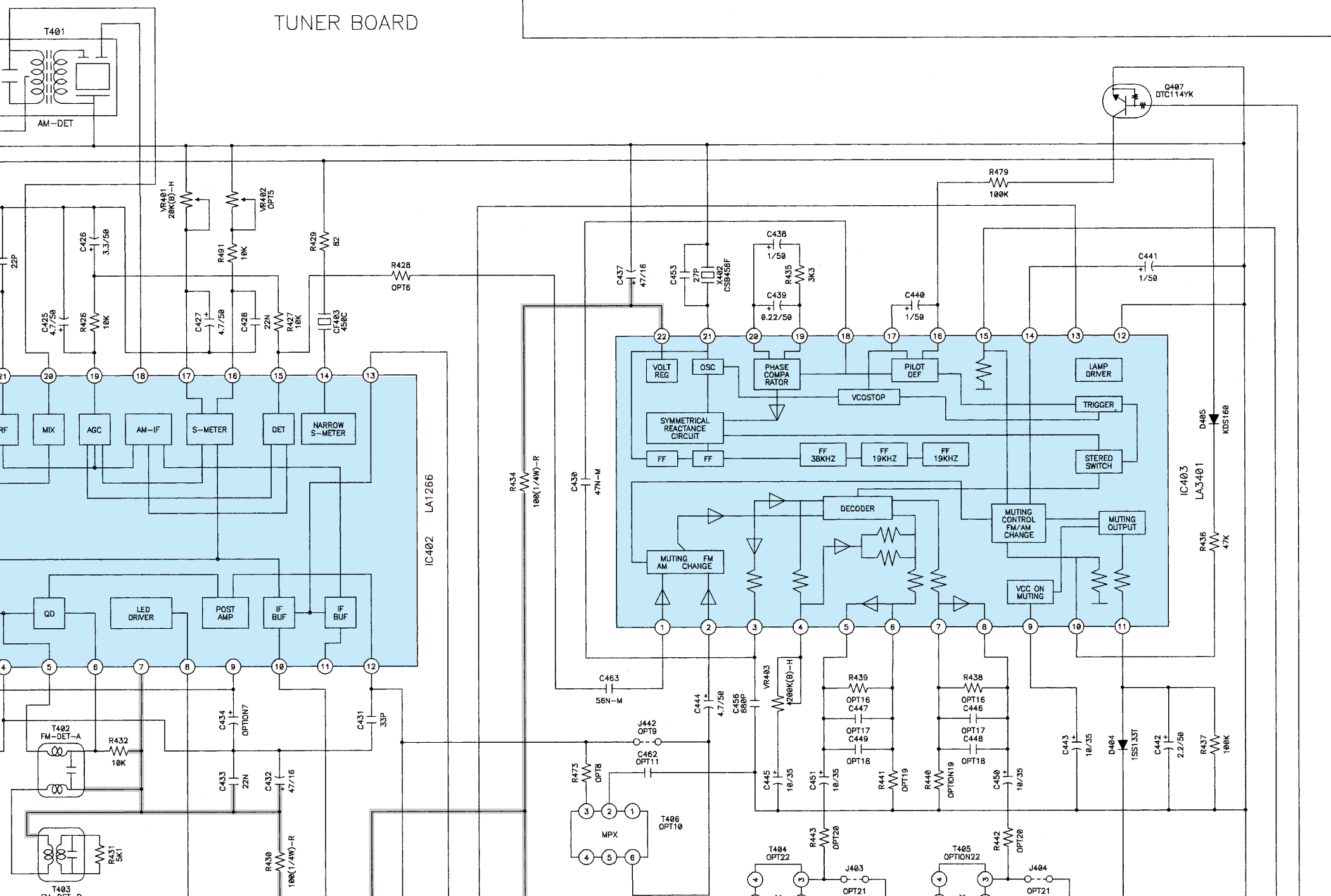
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TUNER BOARD

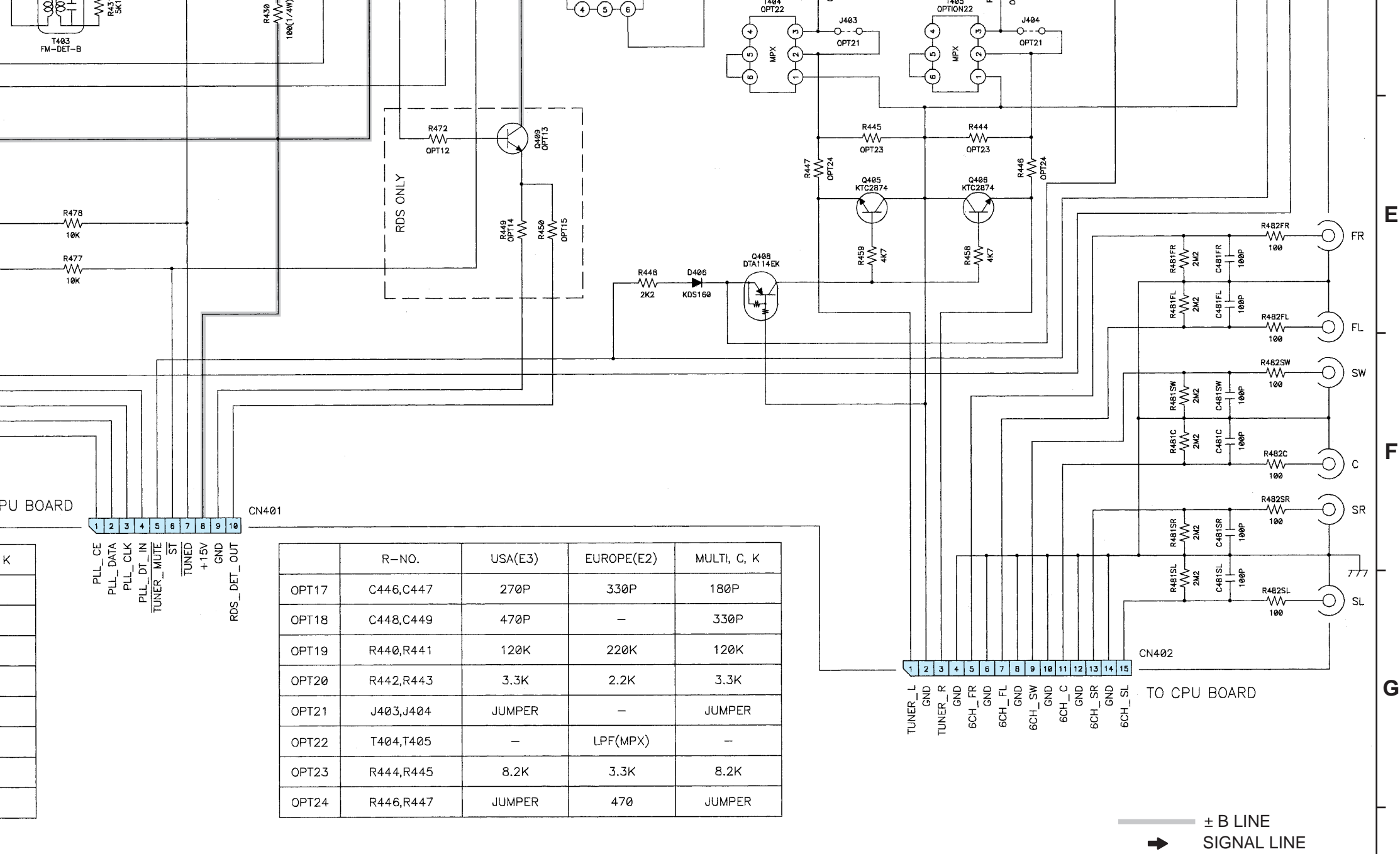


A

B

C

D



unit to the customer until the problem is located and

**SCHEMATIC DIAGRAMS (8/8)  
TUNER UNIT**