

# SERVICE MANUAL

---

STEREO AV RECEIVER

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## SPECIFICATIONS

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          |                                           |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>FM tuner section</b>          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Outputs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AUDIO OUT (REC OUT): 200 mV (1 kohm)                                                     |                                           |
| <b>Tuning range</b>              | 87.5 MHz to 108 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VIDEO OUT (MONITOR): 1 Vp-p (75 ohms)                                                    |                                           |
| <b>Usable sensitivity (IHF)</b>  | 13.2 dBf                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SUB WOOFER: 1.2 V                                                                        |                                           |
| <b>Antenna terminals</b>         | 75 ohms (unbalanced)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FRONT SPEAKERS IMP: 8 ohms (front speakers A and B ): accepts speakers of 8 ohms or more |                                           |
| <b>AM tuner section</b>          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Muting</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SURROUND SPEAKERS IMP: 8 ohms (surround speakers): accepts speakers of 8 ohms or more    |                                           |
| <b>Tuning range</b>              | 531 kHz to 1602 kHz (9 kHz step)<br>530 kHz to 1710 kHz (10 kHz step)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CENTER SPEAKER IMP: 8 ohms accepts speaker of 8 ohms or more                             |                                           |
| <b>Usable sensitivity</b>        | 350 μV/m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PHONES (stereo jack): accepts headphones of 32 ohms or more                              |                                           |
| <b>Antenna</b>                   | Loop antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -20 dB                                                                                   |                                           |
| <b>Amplifier section</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>General</b>                                                                           |                                           |
| <b>Power output</b>              | <b>[Stereo Mode]</b><br><b>Front</b><br>Rated: 120 W + 120 W<br>(8 ohms, T.H.D. 1 %, 1 kHz)<br>Reference: 155 W + 155 W<br>(8 ohms, T.H.D. 10 %, 1 kHz)<br><b>[Dolby Pro Logic or 5.1 CH Mode]</b><br><b>Front</b><br>Rated: 90 W + 90 W<br>(8 ohms, T.H.D. 1 %, 1 kHz)<br>Reference: 100 W + 100 W<br>(8 ohms, T.H.D. 10 %, 1 kHz)<br><b>Rear (Surround)</b><br>Rated: 90 W + 90 W<br>(8 ohms, T.H.D. 1 %, 1 kHz)<br>Reference: 100 W + 100 W<br>(8 ohms, T.H.D. 10 %, 1 kHz)<br><b>Center</b><br>Rated: 90 W<br>(8 ohms, T.H.D. 1 %, 1 kHz)<br>Reference: 100 W<br>(8 ohms, T.H.D. 10 %, 1 kHz)<br>0.08 % (45 W, 1 kHz, 8 ohms, Front) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Power requirements</b>                                                                | 120/220-230/240 V AC, switchable 50/60 Hz |
| <b>Total harmonic distortion</b> | <b>Inputs</b><br>AUDIO IN<br>PHONO: 2.5 mV, adjustable (47 kohms)<br>CD, VIDEO 1/DVD/MD, VIDEO 2/LD/TV, VIDEO 3: 300 mV, adjustable (47 kohms)<br>TAPE MONITOR: 350 mV (47 kohms)<br>AUX: 250 mV, adjustable (47 kohms)<br>5.1 INPUT<br>FRONT, CENTER: 300 mV, adjustable (47 kohms)<br>SURROUND: 300mV, adjustable (47 kohms)<br>SUB-WOOFER: 300 mV, adjustable (47 kohms)<br>VIDEO IN: 1 Vp-p (75 ohms)                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Power consumption</b>                                                                 | 230 W                                     |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Power consumption in standby mode</b>                                                 | ECO OFF: 36 W<br>ECO ON: 1.2 W            |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Dimensions (W x H x D)</b>                                                            | 430 x 155 x 402 mm                        |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Weight</b>                                                                            | 11.3 kg                                   |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          |                                           |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"><li>• Design and specifications are subject to change without notice.</li><li>• Manufactured under license from Dolby Laboratories Licensing Corporation.<br/>“DOLBY”, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.</li><li>• The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.<br/>Under license from BBE Sound, Inc.</li></ul> |                                                                                          |                                           |

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## ACCESSORIES / PACKAGE LIST

| REF. NO.                                                                            | PART NO.       | KANRI NO.      | DESCRIPTION              |
|-------------------------------------------------------------------------------------|----------------|----------------|--------------------------|
| 1                                                                                   | 8A-AR3-911-010 |                | IB, H (EC-H) M           |
| 2                                                                                   | 87-006-225-010 |                | ANT, LOOP ANT NC2        |
| 3                                                                                   | 87-043-115-010 |                | FEEDER-ANT, FM           |
| 4                                                                                   | 8A-AR3-704-010 |                | RC UNIT, RC-AAR03        |
|  | 5              | 87-A91-017-010 | PLUG, CONVERSION JT-0476 |

# ELECTRICAL MAIN PARTS LIST

| REF. NO.   | PART NO.       | KANRI NO.                | DESCRIPTION | REF. NO.       | PART NO.       | KANRI NO. | DESCRIPTION                |
|------------|----------------|--------------------------|-------------|----------------|----------------|-----------|----------------------------|
| IC         |                |                          |             | 87-017-931-080 |                |           | ZENER,MTZJ5.6B             |
|            | 87-A21-419-040 | C-IC,NJM14558MD-TE2      |             | 87-A40-348-080 |                |           | ZENER,MTZJ3.3A             |
|            | 87-017-022-080 | C-IC,NJM2068M D(T1)      |             | 87-017-148-080 |                |           | ZENER,HZS6A1L              |
|            | 87-020-784-080 | C-IC,TC4053BF            |             | 87-A40-002-080 |                |           | ZENER,MTZJ5.1C             |
|            | 87-A20-056-010 | IC,BA3880S               |             | 87-A40-003-080 |                |           | ZENER,MTZJ4.3A             |
|            | 87-017-726-080 | C-IC,BU4052BCF           |             | MAIN C.B       |                |           |                            |
|            | 87-A21-202-040 | C-IC,M62445AFP           |             | C001           | 87-012-368-080 |           | C-CAP,S 0.1-50 ZF          |
|            | 87-A21-481-040 | C-IC,HD74HC4051FP        |             | C101           | 87-010-235-080 |           | CAP,E 470-16 M SME         |
|            | 8A-AR4-601-210 | C-IC,UPD780228GF-076-3BA |             | C102           | 87-010-235-080 |           | CAP,E 470-16 M SME         |
|            | 87-070-083-010 | IC,GP1U281X              |             | C103           | 87-010-384-080 |           | CAP,E 100-25 M 11L SME     |
|            | 87-A20-820-010 | IC,BA7625                |             | C104           | 87-010-382-080 |           | CAP,E 22-25 M 11L SME      |
|            | 87-017-917-080 | C-IC,BU4066BCF           |             | C105           | 87-010-247-080 |           | CAP,E 100-50 M SME         |
|            | 87-A20-913-010 | IC,LA1837NL              |             | C106           | 87-010-384-080 |           | CAP,E 100-25 M 11L SME     |
|            | 87-070-127-110 | IC,LC72131D              |             | C108           | 87-012-140-080 |           | C-CAP,S 470P-50 J CH       |
|            | 87-A20-437-010 | C-IC,M62431FP            |             | C109           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A20-561-040 | C-IC,M65847AFP           |             | C110           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A21-844-040 | C-IC,KIA4558F            |             | C111           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-070-417-010 | IC,NJM4558DD             |             | C112           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A21-097-040 | C-IC,M62463AFP           |             | C113           | 87-A12-300-010 |           | CAP,E 3900-35 LXZ          |
|            | 87-A21-015-040 | C-IC,M62491FP            |             | C114           | 87-A12-300-010 |           | CAP,E 3900-35 LXZ          |
|            |                |                          |             | C115           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
| TRANSISTOR |                |                          |             | C116           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A30-197-080 | TR,KTA1267GR             |             | C117           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-026-245-080 | TR,DTC114ES              |             | C118           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A30-198-080 | TR,KTC3199GR             |             | C119           | 87-A10-461-090 |           | CAP,E 6800-71 SMG VB       |
|            | 89-110-372-080 | C-TR,2SA1037K(R)         |             | C120           | 87-A10-461-090 |           | CAP,E 6800-71 SMG VB       |
|            | 87-A30-071-080 | C-TR,RT1N 144C           |             | C121           | 87-010-260-080 |           | CAP,E 47-25 M 11L SME      |
|            | 89-213-702-010 | TR,2SB1370E              |             | C122           | 87-010-403-080 |           | CAP,E 3.3-50 M 11L SME     |
|            | 87-A30-083-080 | TR,CSD1489B              |             | C123           | 87-010-384-080 |           | CAP,E 100-25 M 11L SME     |
|            | 87-A30-075-080 | C-TR,2SA1235F            |             | C124           | 87-010-384-080 |           | CAP,E 100-25 M 11L SME     |
|            | 87-A30-076-080 | C-TR,2SC3052F            |             | C125           | 87-A10-417-080 |           | CAP,E 47-63 M SME          |
|            | 87-A30-074-080 | C-TR,RT1P 141C           |             | C126           | 87-010-263-080 |           | CAP,E 100-10 M 11L SME     |
|            | 87-026-610-080 | TR,KTC3198GR             |             | C127           | 87-010-197-080 |           | C-CAP,S 0.01-25 K B C2012  |
|            | 87-A30-086-070 | C-TR,CSD1306E            |             | C131           | 87-010-378-080 |           | CAP,E 10-16 M 11L SME      |
|            | 87-026-609-080 | TR,KTA1266GR             |             | C133           | 87-010-378-080 |           | CAP,E 10-16 M 11L SME      |
|            | 87-A30-257-080 | C-TR,2SD1306E            |             | C135           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A30-107-070 | C-TR,CMBT5401            |             | C136           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A30-190-080 | TR,CC5551                |             | C143           | 87-A10-712-080 |           | C-CAP,S 0.22-50 Z F        |
|            | 87-A30-097-010 | TR,FN1016                |             | C144           | 87-A10-712-080 |           | C-CAP,S 0.22-50 Z F        |
|            | 87-A30-098-010 | TR,FP1016                |             | C203           | 87-010-176-080 |           | C-CAP,S 680P-50 J SL       |
|            | 87-A30-106-070 | C-TR,CMBT5551            |             | C204           | 87-010-176-080 |           | C-CAP,S 680P-50 J SL       |
|            | 87-A30-186-010 | FET,2SK3053              |             | C205           | 87-010-405-080 |           | CAP,E 10-50 M 11L SME      |
|            | 87-A30-072-080 | C-TR,RT1P 144C           |             | C206           | 87-010-405-080 |           | CAP,E 10-50 M 11L SME      |
|            | 87-026-232-080 | C-TR,DTA144WK            |             | C209           | 87-010-392-080 |           | CAP,E 33-35 M 11L SME      |
|            | 87-A30-087-080 | C-FET,2SK2158            |             | C210           | 87-010-392-080 |           | CAP,E 33-35 M 11L SME      |
|            | 89-327-143-080 | C-TR,2SC27140            |             | C211           | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   |
|            | 87-A30-196-080 | TR,2SC4115SRS            |             | C212           | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   |
|            | 87-A30-268-040 | C-TR,2SA1514K(S)         |             | C215           | 87-A10-897-080 |           | CAP,E 100-25 BP SME        |
|            | 87-A30-273-040 | C-TR,DTC124EKA           |             | C216           | 87-A10-897-080 |           | CAP,E 100-25 BP SME        |
|            | 87-026-462-080 | TR,2SC1740SRS            |             | C217           | 87-A10-516-080 |           | C-CAP,S 100P-200 J CH      |
|            | 87-A30-435-040 | C-TR,DTC144EKA           |             | C218           | 87-A10-516-080 |           | C-CAP,S 100P-200 J CH      |
| DIODE      |                |                          |             | C221           | 87-016-526-080 |           | C-CAP,S 0.47-16 BK         |
|            | 87-020-465-080 | DIODE,1SS133             |             | C222           | 87-016-526-080 |           | C-CAP,S 0.47-16 BK         |
|            | 87-A40-345-080 | ZENER,MTZJ10C            |             | C223           | 87-010-402-080 |           | CAP,E 2.2-50 M 11L SME     |
|            | 87-A40-269-080 | C-DIODE,MC2836           |             | C224           | 87-010-402-080 |           | CAP,E 2.2-50 M 11L SME     |
|            | 87-A40-115-060 | DIODE,RS603M             |             | C225           | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
|            | 87-A40-270-080 | C-DIODE,MC2838           |             | C226           | 87-016-251-080 |           | CAP,E 220-16 M SMG         |
|            | 87-A40-004-080 | ZENER,MTZJ16A            |             | C227           | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 |
|            | 87-A40-335-080 | ZENER,MTZJ11C T-72       |             | C228           | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 |
|            | 87-A40-224-010 | DIODE,GBU8DL             |             | C229           | 87-016-251-080 |           | CAP,E 220-16 M SMG         |
|            | 87-070-274-080 | DIODE,1N4003 SEM         |             | C230           | 87-A10-354-080 |           | C-CAP,S 0.047-50 K B       |
|            | 87-A40-435-080 | ZENER,MTZJ30D            |             | C231           | 87-A10-354-080 |           | C-CAP,S 0.047-50 K B       |
|            | 87-A40-646-010 | DIODE,FMB-G16L           |             | C285           | 87-010-186-080 |           | C-CAP,S 4700P-50 K B C2012 |
|            | 87-070-136-080 | ZENER,MTZJ5.1B           |             | C291           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A40-344-080 | ZENER,MTZJ6.2C           |             | C292           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A40-488-080 | DIODE,1SS244             |             | C293           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            | 87-A40-438-080 | ZENER,MTZJ4.7A           |             | C294           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
|            |                |                          |             | C295           | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION               |
|----------|----------------|-----------|----------------------------|----------|----------------|-----------|---------------------------|
| C296     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C547     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C297     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C548     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C298     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C549     | 87-016-081-080 |           | C-CAP,S 0.1-16 K R GRM    |
| C303     | 87-010-179-080 |           | C-CAP,S 1200P-50 K B GRM   | C550     | 87-016-081-080 |           | C-CAP,S 0.1-16 K R GRM    |
| C304     | 87-010-179-080 |           | C-CAP,S 1200P-50 K B GRM   | C554     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C305     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME      | C555     | 87-010-405-080 |           | CAP,E 10-50 M 11L SME     |
| C306     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME      | C556     | 87-010-248-080 |           | CAP,E 220-10 M 11L SME    |
| C308     | 87-016-299-080 |           | CAP,E 10-100 M SME         | C557     | 87-010-405-080 |           | CAP,E 10-50 M 11L SME     |
| C309     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME      | C558     | 87-010-992-080 |           | C-CAP,S 0.047-25 KB MK212 |
| C310     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME      | C559     | 87-010-181-080 |           | C-CAP,S 1800P-50 K B GRM  |
| C311     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   | C561     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH      |
| C312     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   | C562     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH      |
| C315     | 87-A10-897-080 |           | CAP,E 100-25 BP SME        | C565     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C316     | 87-A10-897-080 |           | CAP,E 100-25 BP SME        | C566     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C317     | 87-A10-516-080 |           | C-CAP,S 100P-200 J CH      | C601     | 87-010-378-080 |           | CAP,E 10-16 M 11L SME     |
| C318     | 87-A10-516-080 |           | C-CAP,S 100P-200 J CH      | C602     | 87-010-378-080 |           | CAP,E 10-16 M 11L SME     |
| C321     | 87-016-526-080 |           | C-CAP,S 0.47-16 BK         | C603     | 87-012-156-080 |           | C-CAP,S 220P-50 J CH      |
| C322     | 87-016-526-080 |           | C-CAP,S 0.47-16 BK         | C604     | 87-012-156-080 |           | C-CAP,S 220P-50 J CH      |
| C323     | 87-010-402-080 |           | CAP,E 2.2-50 M 11L SME     | C605     | 87-010-405-080 |           | CAP,E 10-50 M 11L SME     |
| C324     | 87-010-402-080 |           | CAP,E 2.2-50 M 11L SME     | C606     | 87-010-405-080 |           | CAP,E 10-50 M 11L SME     |
| C325     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C607     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH      |
| C327     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 | C608     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH      |
| C328     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 | C609     | 87-010-188-080 |           | C-CAP,S 6800P-50 KB C2012 |
| C330     | 87-A10-354-080 |           | C-CAP,S 0.047-50 K B       | C610     | 87-010-188-080 |           | C-CAP,S 6800P-50 KB C2012 |
| C331     | 87-A10-354-080 |           | C-CAP,S 0.047-50 K B       | C611     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB C2012  |
| C334     | 87-A10-918-080 |           | CAP,E 100-16 SMG           | C612     | 87-010-195-080 |           | C-CAP,S 0.068-25 ZF C2012 |
| C335     | 87-A10-918-080 |           | CAP,E 100-16 SMG           | C613     | 87-010-195-080 |           | C-CAP,S 0.068-25 ZF C2012 |
| C385     | 87-010-186-080 |           | C-CAP,S 4700P-50 K B C2012 | C614     | 87-010-197-080 |           | C-CAP,S 0.01-25 KB C2012  |
| C391     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C615     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C392     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C616     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C393     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C617     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C394     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C618     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C402     | 87-010-181-080 |           | C-CAP,S 1800P-50 K B GRM   | C619     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME    |
| C403     | 87-010-405-080 |           | CAP,E 10-50 M 11L SME      | C620     | 87-010-101-080 |           | CAP,E 220-16 M SME        |
| C405     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME      | C621     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME     |
| C406     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   | C701     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C408     | 87-A10-897-080 |           | CAP,E 100-25 BP SME        | C702     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C409     | 87-A10-516-080 |           | C-CAP,S 100P-200 J CH      | C723     | 87-010-401-080 |           | CAP,E 1-50 M 11L SME      |
| C411     | 87-016-526-080 |           | C-CAP,S 0.47-16 BK         | C726     | 87-010-401-080 |           | CAP,E 1-50 M 11L SME      |
| C412     | 87-010-402-080 |           | CAP,E 2.2-50 M 11L SME     | C745     | 87-010-190-080 |           | C-CAP,S 0.01-50 ZF C2012  |
| C413     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C746     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F        |
| C414     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 | C747     | 87-018-209-080 |           | CAP,TC-U 0.1-50 ZF        |
| C416     | 87-016-299-080 |           | CAP,E 10-100 M SME         | C750     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C420     | 87-A10-354-080 |           | C-CAP,S 0.047-50 K B       | C901     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME     |
| C485     | 87-010-186-080 |           | C-CAP,S 4700P-50 K B C2012 | C902     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME     |
| C491     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C903     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME     |
| C492     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         | C904     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME     |
| C501     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | C905     | 87-010-406-080 |           | CAP,E 22-50 M 11L SME     |
| C502     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | C906     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME     |
| C503     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   | C907     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C504     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   | C908     | 87-010-387-080 |           | CAP,E 470-2.3 M SME       |
| C511     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | C909     | 87-010-371-080 |           | CAP,E 470-6.3 M SME       |
| C512     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | C910     | 87-010-371-080 |           | CAP,E 470-6.3 M SME       |
| C513     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME      | C911     | 87-010-371-080 |           | CAP,E 470-6.3 M SME       |
| C514     | 87-010-260-080 |           | CAP,E 47-25 M 11L SME      | C912     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C515     | 87-010-370-080 |           | CAP,E 330-6.3 M SME        | C913     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C516     | 87-010-370-080 |           | CAP,E 330-6.3 M SME        | C914     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012  |
| C517     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C995     | 87-A12-314-080 |           | CAP,CER 47P-500           |
| C518     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C996     | 87-A12-314-080 |           | CAP,CER 47P-500           |
| C519     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C997     | 87-A12-314-080 |           | CAP,CER 47P-500           |
| C520     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   | C998     | 87-A12-314-080 |           | CAP,CER 47P-500           |
| C531     | 87-010-213-080 |           | C-CAP,S 0.015-25 K B GRM   | C999     | 87-A12-314-080 |           | CAP,CER 47P-500           |
| C532     | 87-010-992-080 |           | C-CAP,S 0.047-25 K B MK212 | CN110    | 87-A60-621-010 |           | CONN,4P V 2MM JMT         |
| C533     | 87-015-785-080 |           | C-CAP, 0.1-25 Z F C3216    | CN501    | 87-A60-039-010 |           | CONN,32P V 9604S-32C      |
| C535     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | CN502    | 87-A60-061-010 |           | CONN,06P V 9604S-06C      |
| C536     | 87-010-404-080 |           | CAP,E 4.7-50 M 11L SME     | CN503    | 87-A60-056-010 |           | CONN,12P V 9604S-12C      |
| C539     | 87-010-401-080 |           | CAP,E 1-50 M 11L SME       | CN504    | 87-099-567-010 |           | CONN,10P TUC-P10P-B1      |
| C540     | 87-010-401-080 |           | CAP,E 1-50 M 11L SME       | CN505    | 87-099-570-010 |           | CONN,13P V TUC-P13P-B1    |
| C541     | 87-010-185-080 |           | C-CAP,S 3900P-50 K B       | CN509    | 87-099-667-010 |           | CONN,8P H TUC-P08P-B1     |
| C542     | 87-010-185-080 |           | C-CAP,S 3900P-50 K B       | CN601    | 87-A60-627-010 |           | CONN,10P V 2MM JMT        |

| REF. NO.  | PART NO.       | KANRI NO. | DESCRIPTION                  | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                |
|-----------|----------------|-----------|------------------------------|----------|----------------|-----------|----------------------------|
| CN702     | 87-099-668-010 |           | CONN,9P TUC-P 9P-B1          | C711     | 87-010-263-040 |           | CAP,E 100-10 M 11L SME     |
| CN901     | 87-A60-619-010 |           | CONN,2P V 2MM JMT            | C712     | 87-010-382-040 |           | CAP,E 22-25 M 11L SME      |
| W003      | 8A-AR3-654-010 |           | CONN ASSY,9P VH              | C714     | 87-010-560-040 |           | CAP,E 10-50 M 5L MA        |
| CNA201    | 8Z-AR4-606-010 |           | CONN ASSY,8P VH              | C723     | 87-010-405-040 |           | CAP,E 10-50 M 11L SME      |
| CNA202    | 8Z-AR4-605-010 |           | CONN ASSY,6P VH              | C801     | 87-010-322-080 |           | C-CAP,S 100P-50 J CH GRM   |
| FFC502    | 8A-AR3-645-010 |           | FF-CABLE,6P 1.25 380MM       | C803     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| J501      | 87-A60-947-010 |           | JACK,PIN 4P W/R GLD          | C805     | 87-010-198-080 |           | C-CAP,S 0.022-25 K B C2012 |
| J502      | 87-A60-947-010 |           | JACK,PIN 4P W/R GLD          | C806     | 87-010-400-040 |           | CAP,E 0.47-50 M 11L SME    |
| J715      | 87-A61-059-010 |           | JACK,PIN 1P BLK W/O SW GOLD  | C807     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| J750      | 87-A61-304-010 |           | JACK,PIN 6P HSP-246V6-58     | C808     | 87-010-498-040 |           | CAP,E 10-16 M 5L SRE       |
| J901      | 87-A60-949-010 |           | JACK,PIN 3P R/W/Y V GLD      | C809     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| J902      | 87-A60-950-010 |           | JACK,PIN 3P R/W/Y W/E GLD    | C810     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| J903      | 87-A60-949-010 |           | JACK,PIN 3P R/W/Y V GLD      | C811     | 87-A10-189-040 |           | CAP,E 220-10 M 5L          |
| J904      | 87-A60-949-010 |           | JACK,PIN 3P R/W/Y V GLD      | C812     | 87-A10-189-040 |           | CAP,E 220-10 M 5L          |
| J905      | 87-A60-949-010 |           | JACK,PIN 3P R/W/Y V GLD      | C813     | 87-010-401-040 |           | CAP,E 1-50 M 11L           |
| L291      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C814     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 |
| L292      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C815     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| L293      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C816     | 87-010-312-080 |           | C-CAP,S 15P-50 J CH GRM    |
| L294      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C817     | 87-012-155-080 |           | C-CAP,S 180P-50 J CH GRM   |
| L391      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C818     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 |
| L392      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C819     | 87-012-156-080 |           | C-CAP,S 220P-50 J CH GRM   |
| L491      | 87-A50-610-010 |           | COIL,1UH K(MDEC)             | C820     | 87-012-156-080 |           | C-CAP,S 220P-50 J CH GRM   |
| L901      | 87-005-239-080 |           | COIL,100UH K LAL03           | C821     | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012 |
| △ PR101   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C822     | 87-010-182-080 |           | C-CAP,S 2200P-50 K B C2012 |
| △ PR104   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C823     | 87-010-182-080 |           | C-CAP,S 2200P-50 K B C2012 |
| △ PR107   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C824     | 87-010-182-080 |           | C-CAP,S 2200P-50 K B C2012 |
| △ PR108   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C825     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| △ PR201   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C826     | 87-010-405-040 |           | CAP,E 10-50 M 11L SME      |
| △ PR202   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C827     | 87-010-198-080 |           | C-CAP,S 0.022-25 K B C2012 |
| △ PR301   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C829     | 87-012-156-080 |           | C-CAP,S 220P-50 J CH GRM   |
| △ PR302   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C831     | 87-A10-189-040 |           | CAP,E 220-10 M 5L          |
| △ PR401   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C832     | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012   |
| △ PR402   | 87-026-682-080 |           | PROTECTOR,10A 491 SERIES 60V | C833     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
| R109      | 87-029-060-080 |           | RES,FUSE 33-1/4W J           | C834     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
| R211      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C835     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
| R212      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C836     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R231      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C837     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R232      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C838     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R233      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C839     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R234      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C840     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R281      | 87-A00-373-050 |           | RES,M/F 270-1W J VTP         | C841     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R282      | 87-A00-373-050 |           | RES,M/F 270-1W J VTP         | C842     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R283      | 87-A00-373-050 |           | RES,M/F 270-1W J VTP         | C843     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R284      | 87-A00-373-050 |           | RES,M/F 270-1W J VTP         | C844     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R331      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C845     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R332      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C846     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R333      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C847     | 87-015-699-040 |           | CAP,E 10-50 7L             |
| R334      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C848     | 87-010-405-040 |           | CAP,E 10-50 SME            |
| R416      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C849     | 87-012-368-080 |           | C-CAP,S 0.1-50 Z F         |
| R417      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C850     | 87-010-408-040 |           | CAP,E 47-50 M 11L SME      |
| R424      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C852     | 87-010-560-040 |           | CAP,E 10-50 M 5L SMA       |
| R587      | 87-A00-126-080 |           | RES,M/F 220-1W J VTP         | C863     | 87-010-178-080 |           | C-CAP,S 1000P-50 KB C2012  |
| R590      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C864     | 87-012-157-080 |           | C-CAP,S 330P-50 J CH GRM   |
| R611      | 87-A00-598-010 |           | RES,M/F 0.15-3W J-8.5MM      | C866     | 87-012-140-080 |           | C-CAP,S 470P-50 J CH       |
| R905      | 87-010-317-080 |           | C-CAP,S 39P-50 J CH          | C867     | 87-010-196-080 |           | C-CAP,S 0.1-25 ZF C2012    |
| S291      | 87-A90-174-010 |           | SW,PUSH 2-2-2 R2121382ES     | CN801    | 87-A60-079-010 |           | CONN,08P H 9604S-08F       |
| S292      | 87-A90-174-010 |           | SW,PUSH 2-2-2 R2121382ES     | CN802    | 87-A60-064-010 |           | CONN,32P H 9604S-32F       |
| TH201     | 87-A91-081-080 |           | C-THMS,100K-K 20P            | CN803    | 87-A60-081-010 |           | CONN,06P H 9604S-06F       |
| TH202     | 87-A91-081-080 |           | C-THMS,100K-K 20P            | CN805    | 87-099-757-010 |           | CONN,16P H 9604            |
| TH301     | 87-A91-081-080 |           | C-THMS,100K-K 20P            | FFC801   | 88-908-101-110 |           | FF-CABLE,8P 1.25 100MM     |
| TH302     | 87-A91-081-080 |           | C-THMS,100K-K 20P            | FFC802   | 8A-AR3-643-010 |           | FF-CABLE,32P 1.25 430      |
| TH401     | 87-A91-081-080 |           | C-THMS,100K-K 20P            | FFC805   | 88-916-101-110 |           | FF-CABLE,16P-1.25 100MM    |
| WH101     | 87-A90-510-010 |           | HLDR,WIRE 2.5-9P             | FL801    | 8A-AR1-602-010 |           | FL,BJ759GK                 |
|           |                |           |                              | L801     | 87-A50-434-010 |           | COIL,CLK 4.19M(TOKO)       |
|           |                |           |                              | LED703   | 87-A40-317-010 |           | LED,SLR-342VCT31 RED       |
| FRONT C.B |                |           |                              | LED704   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED       |
| C707      | 87-010-382-040 |           | CAP,E 22-25 M 11L SME        | LED705   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED       |
| C708      | 87-010-382-040 |           | CAP,E 22-25 M 11L SME        | LED706   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED       |
| C709      | 87-010-382-040 |           | CAP,E 22-25 M 11L SME        | LED707   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED       |
| C710      | 87-010-382-040 |           | CAP,E 22-25 M 11L SME        | LED708   | 87-A40-317-080 |           | LED,SLR-342VCT31 RED       |

| REF. NO.     | PART NO.       | KANRI NO. | DESCRIPTION                 | REF. NO.   | PART NO.       | KANRI NO. | DESCRIPTION                 |
|--------------|----------------|-----------|-----------------------------|------------|----------------|-----------|-----------------------------|
| LED709       | 87-A40-317-080 |           | LED,SLR-342VCT31 RED        | C849       | 87-012-393-080 |           | C-CAP,S 0.22-16 R K         |
| LED710       | 87-A40-317-080 |           | LED,SLR-342VCT31 RED        | C850       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| LED711       | 87-A40-317-080 |           | LED,SLR-342VCT31 RED        | C851       | 87-A10-802-080 |           | C-CAP,S 0.047-16 J B CM     |
| LED712       | 87-A40-317-080 |           | LED,SLR-342VCT31 RED        | C852       | 87-A10-802-080 |           | C-CAP,S 0.047-16 J B CM     |
| S801         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C853       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S802         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C854       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S803         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C855       | 87-A10-801-080 |           | C-CAP,S 0.022-16 J B CM     |
| S804         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C856       | 87-A10-801-080 |           | C-CAP,S 0.022-16 J B CM     |
| S805         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C857       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S806         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C861       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S807         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C862       | 87-010-263-080 |           | CAP, ELECT 100-10V          |
| S808         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C863       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S809         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C864       | 87-010-263-080 |           | CAP, ELECT 100-10V          |
| S810         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C865       | 87-016-083-080 |           | C-CAP,S 0.15-16 RK          |
| S811         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C867       | 87-A10-201-080 |           | C-CAP,S0.33-16 KB           |
| S812         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C868       | 87-A10-060-080 |           | C-CAP,S 0.18-16 K B         |
| S813         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C869       | 87-010-166-080 |           | C-CAP,S 100P-50 SL          |
| S814         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C870       | 87-010-166-080 |           | C-CAP,S 100P-50 SL          |
| S815         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C871       | 87-010-166-080 |           | C-CAP,S 100P-50 SL          |
| S816         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C872       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| S817         | 87-A90-095-080 |           | SW,TACT EVQ11G04M           | C873       | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           |
| SW801        | 87-A91-646-010 |           | SW,RTRY EC12E12204          | C878       | 87-010-401-080 |           | CAP, ELECT 1-50V            |
| SW802        | 87-A91-647-010 |           | SW,RTRY EC12E12504          | C891       | 87-010-404-080 |           | CAP, ELECT 4.7-50V          |
| PROLOGIC C.B |                |           |                             | C892       | 87-010-404-080 |           | CAP, ELECT 4.7-50V          |
| C801         | 87-010-176-080 |           | C-CAP,S 680P-50 SL          | CNA101     | 8A-AR4-655-010 |           | CONN ASSY,7P V130 MM        |
| C802         | 87-010-176-080 |           | C-CAP,S 680P-50 SL          | CN703      | 87-A60-060-010 |           | CONN,07P V 9604S-07C        |
| C803         | 87-010-949-080 |           | CHIP CAPACITOR,S 0.01-50 BJ | CN801      | 87-099-556-010 |           | CONN,10P TUC-P10X-B1        |
| C804         | 87-010-949-080 |           | CHIP CAPACITOR,S 0.01-50 BJ | CN802      | 87-099-559-010 |           | CONN,13P TUC-P13X-B1        |
| C805         | 87-010-949-080 |           | CHIP CAPACITOR,S 0.01-50 BJ | R832       | 87-016-552-080 |           | C-CAP,S 0.082-16 K B C2012  |
| C806         | 87-010-949-080 |           | CHIP CAPACITOR,S 0.01-50 BJ | R834       | 87-016-552-080 |           | C-CAP,S 0.082-16 K B C2012  |
| C807         | 87-010-405-080 |           | CAP, ELECT 10-50V           | VOLUME C.B |                |           |                             |
| C808         | 87-010-405-080 |           | CAP, ELECT 10-50V           | C601       | 87-010-195-080 |           | C-CAP,S 0.068-25 Z F C2012  |
| C809         | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           | C602       | 87-010-195-080 |           | C-CAP,S 0.068-25 Z F C2012  |
| C810         | 87-010-112-080 |           | CAP, ELECT 100-16V          | C603       | 87-010-195-080 |           | C-CAP,S 0.068-25 Z F C2012  |
| C811         | 87-010-402-080 |           | CAP, ELECT 2.2-50V          | C604       | 87-010-195-080 |           | C-CAP,S 0.068-25 Z F C2012  |
| C812         | 87-010-402-080 |           | CAP, ELECT 2.2-50V          | C605       | 87-010-195-080 |           | C-CAP,S 0.068-25 Z F C2012  |
| C813         | 87-010-400-080 |           | CAP, ELECT 0.47-50V         | C606       | 87-010-805-080 |           | C-CAP,S 1-16 Z F            |
| C814         | 87-010-401-080 |           | CAP, ELECT 1-50V            | C607       | 87-010-178-080 |           | C-CAP,S 1000P-50 K B C2012  |
| C815         | 87-010-546-080 |           | CAP, ELECT 0.33-50V         | C608       | 87-010-186-080 |           | C-CAP,S 4700P-50 K B C2012  |
| C816         | 87-010-546-080 |           | CAP, ELECT 0.33-50V         | C610       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C817         | 87-010-263-080 |           | CAP, ELECT 100-10V          | C611       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C818         | 87-010-367-080 |           | CAP,E 4.7-25 BP             | C612       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C819         | 87-010-188-080 |           | CAP,CHIP 6800P              | C613       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C820         | 87-010-374-080 |           | CAP, ELECT 47-10V           | C614       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C821         | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           | C615       | 87-010-196-080 |           | C-CAP,S 0.1-25 Z F C2012    |
| C822         | 87-016-083-080 |           | C-CAP,S 0.15-16 RK          | C634       | 87-010-374-080 |           | CAP,E 47-10 M 11L SME       |
| C823         | 87-010-263-080 |           | CAP, ELECT 100-10V          | CN601      | 87-099-757-010 |           | CONN,16P H 9604             |
| C824         | 87-010-374-080 |           | CAP, ELECT 47-10V           | CN602      | 87-009-371-010 |           | CONN,6P V BLK BTMK          |
| C825         | 87-016-081-080 |           | C-CAP,S 0.1-16 RK           | CN603      | 87-A60-080-010 |           | CONN,07P H 9604S-07F        |
| C826         | 87-010-166-080 |           | C-CAP,S 100P-50 SL          | FFC603     | 88-907-301-110 |           | FF-CABLE,7P 1.25            |
| C827         | 87-010-166-080 |           | C-CAP,S 100P-50 SL          | S601       | 87-A90-095-080 |           | SW,TACT EVQ11G04M           |
| C828         | 87-010-166-080 |           | C-CAP,S 100P-50 SL          | S602       | 87-A90-095-080 |           | SW,TACT EVQ11G04M           |
| C829         | 87-010-401-080 |           | CAP,ELECT 1-50V             | SW601      | 87-A91-645-010 |           | SW,RTRY EC12E24304NON-CLICK |
| C830         | 87-010-546-080 |           | CAP, ELECT 0.33-50V         | VIDEO C.B  |                |           |                             |
| C831         | 87-010-971-080 |           | C-CAP,S 4700P-50 B J        | C501       | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| C832         | 87-012-349-080 |           | C-CAP,S 1000P-50 CH         | C502       | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| C837         | 87-010-971-080 |           | C-CAP,S 4700P-50 B J        | C503       | 87-010-188-080 |           | C-CAP,S 6800P-50 K B C2012  |
| C838         | 87-012-349-080 |           | C-CAP,S 1000P-50 CH         | C504       | 87-010-188-080 |           | C-CAP,S 6800P-50 K B C2012  |
| C839         | 87-010-401-080 |           | CAP, ELECT 1-50V            | C507       | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| C840         | 87-010-401-080 |           | CAP, ELECT 1-50V            | CN604      | 87-099-201-010 |           | CONN,8P H BLK 6216          |
| C841         | 87-A10-799-080 |           | C-CAP,S 5600P-16 J B CM     | CNA605     | 8A-AR3-652-010 |           | CONN ASSY,2P -VIDEO 3       |
| C842         | 87-A10-802-080 |           | C-CAP,S 0.047-16 J B CM     | FB501      | 87-008-372-080 |           | FLTR,EMI BL01RN1            |
| C843         | 87-A10-229-080 |           | C-CAP,S 0.68-10 K W5        | FB602      | 87-008-372-080 |           | FLTR,EMI BL01RN1            |
| C844         | 87-012-393-080 |           | C-CAP,S 0.22-16 R K         | J501       | 87-A60-948-010 |           | JACK,PIN 3P R/W/Y GLD       |
| C845         | 87-012-393-080 |           | C-CAP,S 0.22-16 R K         | J603       | 87-A60-550-010 |           | JACK,DIA6.3 BLK ST W/SW KM  |
| C846         | 87-010-404-080 |           | CAP, ELECT 4.7-50V          |            |                |           |                             |
| C847         | 87-010-404-080 |           | CAP, ELECT 4.7-50V          |            |                |           |                             |
| C848         | 87-012-393-080 |           | C-CAP,S 0.22-16 R K         |            |                |           |                             |



| REF.NO.   | PART NO.       | KANRI NO. | DESCRIPTION            |
|-----------|----------------|-----------|------------------------|
| GEQ C.B   |                |           |                        |
| C758      | 87-010-404-080 |           | CAP, ELECT 4.7-50V     |
| C759      | 87-012-368-080 |           | C-CAP,S 0.1-50 F       |
| C761      | 87-010-198-080 |           | CAP, CHIP 0.022        |
| C762      | 87-010-197-080 |           | CAP, CHIP 0.01 DM      |
| C764      | 87-010-185-080 |           | C-CAP,S 3900P-50 B     |
| C765      | 87-010-194-080 |           | CAP, CHIP 0.047        |
| C766      | 87-010-181-080 |           | CAP,CHIP S 1800P       |
| C767      | 87-010-198-080 |           | CAP, CHIP 0.022        |
| C768      | 87-010-994-080 |           | C-CAP,S 680P-50        |
| C769      | 87-010-188-080 |           | CAP,CHIP 6800P         |
| C770      | 87-012-145-080 |           | CAP, CHIP S 270P CH    |
| C771      | 87-010-183-080 |           | C-CAP,S 2700P-50 B     |
| C772      | 87-012-145-080 |           | CAP, CHIP S 270P CH    |
| C773      | 87-010-188-080 |           | CAP,CHIP 6800P         |
| C774      | 87-010-994-080 |           | C-CAP,S 680P-50 CH     |
| C775      | 87-010-198-080 |           | CAP, CHIP 0.022        |
| C776      | 87-010-181-080 |           | CAP,CHIP S 1800P       |
| C777      | 87-010-194-080 |           | CAP, CHIP 0.047        |
| C778      | 87-010-185-080 |           | C-CAP,S 3900P-50 B     |
| C780      | 87-010-197-080 |           | CAP, CHIP 0.01 DM      |
| C782      | 87-010-183-080 |           | C-CAP,S 2700P-50 B     |
| C783      | 87-010-198-080 |           | CAP, CHIP 0.022        |
| C786      | 87-010-402-080 |           | CAP, ELECT 2.2-50V     |
| C787      | 87-010-402-080 |           | CAP, ELECT 2.2-50V     |
| C788      | 87-010-260-080 |           | CAP, ELECT 47-25V      |
| C789      | 87-010-260-080 |           | CAP, ELECT 47-25V      |
| C790      | 87-010-260-080 |           | CAP, ELECT 47-25V      |
| C791      | 87-010-405-080 |           | CAP, ELECT 10-50V      |
| C792      | 87-010-405-080 |           | CAP, ELECT 10-50V      |
| C793      | 87-012-368-080 |           | C-CAP,S 0.1-50 F       |
| C794      | 87-012-368-080 |           | C-CAP,S 0.1-50 F       |
| C797      | 87-010-322-080 |           | C-CAP,S 100P-50 CH     |
| C798      | 87-010-322-080 |           | C-CAP,S 100P-50 CH     |
| C799      | 87-010-322-080 |           | C-CAP,S 100P-50 CH     |
| CN701     | 87-099-670-010 |           | CONN,9P TUC-P9X-B1     |
| CN702     | 8A-AR3-653-010 |           | CONN ASSY,10P (GEQ)    |
| TUNER C.B |                |           |                        |
| C701      | 87-010-260-080 |           | CAP, ELECT 47-25V      |
| C702      | 87-010-404-080 |           | CAP, ELECT 4.7-50V     |
| C703      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C704      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C709      | 87-012-195-080 |           | C-CAP,U 100P-50CH      |
| C711      | 87-010-263-080 |           | CAP, ELECT 100-10V     |
| C712      | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25  |
| C713      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C714      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C717      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C719      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C721      | 87-012-176-080 |           | CAP 15P                |
| C722      | 87-012-176-080 |           | CAP 15P                |
| C723      | 87-012-274-080 |           | CHIP CAP,U 1000P-50B   |
| C725      | 87-012-274-080 |           | CHIP CAP,U 1000P-50B   |
| C727      | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25  |
| C728      | 87-010-248-080 |           | CAP, ELECT 220-10V     |
| C755      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C756      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C757      | 87-012-188-080 |           | C-CAP,U 47P-50 CH      |
| C758      | 87-012-167-080 |           | C-CAP,U 5P-50 CH       |
| C761      | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25  |
| C763      | 87-010-829-080 |           | CAP, U 0.047-16        |
| C764      | 87-012-337-080 |           | C-CAP,U 56P-50 CH      |
| C765      | 87-012-286-080 |           | CAP, U 0.01-25         |
| C769      | 87-010-408-080 |           | CAP, ELECT 47-50 M 11L |
| C770      | 87-010-829-080 |           | CAP, U 0.047-16        |
| C771      | 87-010-383-080 |           | CAP, ELECT 33-25 M 11L |
| C772      | 87-010-829-080 |           | CAP, U 0.047-16        |

| REF.NO. | PART NO.       | KANRI NO. | DESCRIPTION                 |
|---------|----------------|-----------|-----------------------------|
| C773    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C774    | 87-010-263-080 |           | CAP, ELECT 100-10V          |
| C775    | 87-010-404-080 |           | CAP, ELECT 4.7-50V          |
| C776    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C777    | 87-010-400-080 |           | CAP, ELECT 0.47-50V         |
| C778    | 87-010-401-080 |           | CAP, ELECT 1-50V            |
| C779    | 87-010-401-080 |           | CAP, ELECT 1-50V            |
| C780    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C781    | 87-010-405-080 |           | CAP, ELECT 10-50V           |
| C782    | 87-010-405-080 |           | CAP, ELECT 10-50V           |
| C783    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C784    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C785    | 87-010-805-080 |           | CAP, S 1-16                 |
| C786    | 87-010-805-080 |           | CAP, S 1-16                 |
| C787    | 87-012-280-080 |           | CAP, U 3300P-50             |
| C788    | 87-012-280-080 |           | CAP, U 3300P-50             |
| C789    | 87-012-275-080 |           | C-CAP,U 1200P-50 B          |
| C790    | 87-012-275-080 |           | C-CAP,U 1200P-50 B          |
| C791    | 87-010-405-080 |           | CAP, ELECT 10-50V           |
| C793    | 87-012-273-080 |           | C-CAP,U 820P-50 B           |
| C794    | 87-010-406-080 |           | CAP, ELECT 22-50            |
| C795    | 87-010-194-080 |           | C-CAP,S 0.047-25 ZF         |
| C796    | 87-010-403-080 |           | CAP, ELECT 3.3-50V          |
| C797    | 87-012-276-080 |           | CAP, U 1500P-50             |
| C798    | 87-012-276-080 |           | CAP, U 1500P-50             |
| C799    | 87-010-829-080 |           | CAP, U 0.047-16             |
| C812    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C813    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C814    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C819    | 87-010-197-080 |           | CAP, CHIP 0.01 DM           |
| C820    | 87-010-260-080 |           | CAP, ELECT 47-25V           |
| C821    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C822    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C823    | 87-012-286-080 |           | CAP, U 0.01-25              |
| C828    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C829    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C959    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C960    | 87-010-196-080 |           | CHIP CAPACITOR,0.1-25       |
| C961    | 87-012-170-080 |           | C-CAP,U 8P-50 CH            |
| CF801   | 87-008-261-010 |           | FILTER, SFE10.7MA5-A        |
| CF802   | 87-008-261-010 |           | FILTER, SFE10.7MA5-A        |
| CN601   | 87-099-028-010 |           | CONN,11P 6216 H             |
| FFC601  | 88-912-161-110 |           | FF-CABLE,12P 1.25 160       |
| FFE801  | A8-6ZA-191-130 |           | 6ZA-1 FEENM                 |
| J801    | 87-A60-657-010 |           | TERMINAL,4P HSP-154V5-02    |
| L771    | 87-A50-266-010 |           | COIL,FM DET-2N(TOK)         |
| L772    | 87-A90-733-010 |           | FLTR,PCFAZH-450             |
| L781    | 87-005-847-080 |           | COIL,2.2UH(CECS)            |
| L791    | 87-A50-027-010 |           | COIL,1 POLE MPX(TOK)        |
| L792    | 87-A50-027-010 |           | COIL,1 POLE MPX(TOK)        |
| L832    | 87-005-847-080 |           | COIL,2.2UH(CECS)            |
| L981    | 87-NF4-650-010 |           | COIL,AM PACK4N(TOK)         |
| X721    | 87-A70-061-010 |           | VIB,XTAL 4.500MHZ CSA-309   |
| PT C.B  |                |           |                             |
| C1      | 87-010-387-080 |           | CAP,E 470-25 M SME          |
| C2      | 87-010-403-080 |           | CAP,E 3.3-50 M 11L SME      |
| C3      | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| C4      | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| △ C7    | 87-A10-922-090 |           | CAP,CER 0.01-250 M F KH     |
| △ C8    | 87-A10-922-090 |           | CAP,CER 0.01-250 M F KH     |
| C13     | 87-A11-148-080 |           | CAP,TC U 0.1-50 Z F         |
| CN101   | 88-805-042-690 |           | CONN ASSY,4P                |
| CN103   | 87-A61-057-010 |           | CONN,9P V THL-P09P-A1       |
| △ PR105 | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V |
| △ PR106 | 87-026-682-080 |           | PROTECTOR,10A 491SERIES 60V |
| △ PT2   | 8Z-NF8-663-010 |           | PT,SUB ZNF-8(H)             |
| △ PT101 | 8A-AR3-606-010 |           | PT,AAR-3 (HC)               |
| △ RY1   | 87-A90-454-010 |           | RELAY,12V DJ12D2-O(M)       |

| REF. NO.    | PART NO.       | KANRI NO.     | DESCRIPTION     |
|-------------|----------------|---------------|-----------------|
| SPEAKER C.B |                |               |                 |
| C1          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C2          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C4          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C5          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C6          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C8          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C9          | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C12         | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C13         | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| C16         | 87-010-190-080 | C-CAP,S       | 0.01-50 ZF      |
| CN201       | 87-099-799-010 | CONN,8P V B   | 8P-VH           |
| CN202       | 87-009-663-010 | CONN,6P V     | VH              |
| J901        | 87-033-210-010 | TERMINAL,SPKR | 8P LTS0810-1002 |
| J902        | 87-A61-172-010 | TERMINAL,SPKR | 6P-LTS0610-1002 |

#### AC SW C.B

|         |                |               |         |
|---------|----------------|---------------|---------|
| △ F101  | 87-035-370-010 | FUSE,6.3A     | 250V T  |
| △ F102  | 87-035-370-010 | FUSE,6.3A     | 250V T  |
| △ FC101 | 87-033-147-010 | FUSE CLAMP,MT | 20      |
| △ FC102 | 87-033-147-010 | FUSE CLAMP,MT | 20      |
| △ FC103 | 87-033-147-010 | FUSE CLAMP,MT | 20      |
| △ FC104 | 87-033-147-010 | FUSE CLAMP,MT | 20      |
| △ SW101 | 87-A90-165-010 | SW,SL 1-2-3   | SWS2301 |
| △ T101  | 87-A60-317-010 | TERMINAL, 1P  | MSC     |
| △ T102  | 87-A60-317-010 | TERMINAL, 1P  | MSC     |

#### MIC C.B

|      |                |                 |              |
|------|----------------|-----------------|--------------|
| C601 | 87-010-196-080 | C-CAP,S         | 0.1-25 ZF    |
| C602 | 87-010-560-040 | CAP,E 10-50 M   | 5L MA        |
| C603 | 87-010-491-040 | CAP,E 0.22-50 M | 5L SRE       |
| C604 | 87-A10-189-040 | CAP,E 220-10 M  | 5L           |
| C605 | 87-010-322-080 | C-CAP,S         | 100P-50 J CH |
| C606 | 87-010-321-080 | C-CAP,S         | 82P-50 J CH  |
| C607 | 87-010-196-080 | C-CAP,S         | 0.1-25 ZF    |
| C608 | 87-010-186-080 | C-CAP,S         | 4700P-50 KB  |
| C609 | 87-010-188-080 | C-CAP,S         | 6800P-50 KB  |
| C610 | 87-010-560-040 | CAP,E 10-50 M   | 5L MA        |

| REF. NO. | PART NO.       | KANRI NO.     | DESCRIPTION       |
|----------|----------------|---------------|-------------------|
| C611     | 87-010-322-080 | C-CAP,S       | 100P-50 J CH      |
| C612     | 87-010-177-080 | C-CAP,S       | 820P-50 J SL      |
| C613     | 87-010-552-040 | CAP,E 22-16 M | 5L SRE            |
| C614     | 87-016-462-080 | C-CAP,S       | 1-16 ZF           |
| CN601    | 87-009-362-010 | CONN,6P H     | BLK BTMK          |
| J601     | 87-A60-188-010 | JACK,6.3      | BLK MONO W/SW MIC |
| J602     | 87-A60-188-010 | JACK,6.3      | BLK MONO W/SW MIC |

#### KEY CON C.B

|       |                |                |              |
|-------|----------------|----------------|--------------|
| C652  | 87-010-196-080 | C-CAP,S        | 0.1-25 Z F   |
| C653  | 87-012-154-080 | C-CAP,S        | 150P-50 J CH |
| C654  | 87-010-183-080 | C-CAP,S        | 2700P-50 KB  |
| C655  | 87-010-196-080 | C-CAP,S        | 0.1-25 ZF    |
| C656  | 87-012-154-080 | C-CAP,S        | 150P-50 J CH |
| C657  | 87-010-183-080 | C-CAP,S        | 2700P-50 KB  |
| C658  | 87-012-145-080 | C-CAP,S        | 270P-50 J CH |
| C659  | 87-010-177-080 | C-CAP,S        | 820P-50 K SL |
| C670  | 87-012-145-080 | C-CAP,S        | 270P-50 J CH |
| C671  | 87-010-177-080 | C-CAP,S        | 820P-50 K SL |
| C672  | 87-010-196-080 | C-CAP,S        | 0.1-25 ZF    |
| C674  | 87-010-196-080 | C-CAP,S        | 0.1-25 ZF    |
| C675  | 87-010-263-080 | CAP,E 100-10 M | 11L SME      |
| C676  | 87-010-374-080 | CAP,E 47-10 M  | 11L SME      |
| CN508 | 87-099-669-010 | CONN,8P H      | TUC-08PX-B1  |

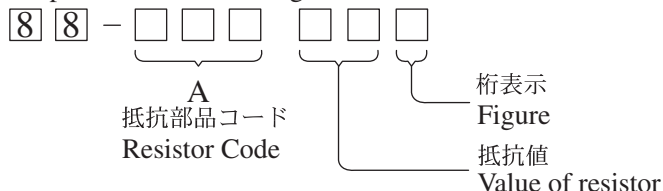
#### PROLOGIC SUB C.B

|       |                |                |         |
|-------|----------------|----------------|---------|
| C101  | 87-010-405-080 | CAP,E 10-50 M  | 11L SME |
| C102  | 87-010-260-080 | CAP,E 47-25 M  | 11L SME |
| C103  | 87-010-405-080 | CAP,E 10-50 M  | 11L SME |
| C104  | 87-010-404-080 | CAP,E 4.7-50 M | 11L SME |
| C105  | 87-010-402-080 | CAP,E 2.2-50 M | 11L SME |
| C106  | 87-010-402-080 | CAP,E 2.2-50 M | 11L SME |
| C107  | 87-010-404-080 | CAP,E 4.7-50 M | 11L SME |
| CN101 | 87-009-035-010 | CONN,7P V      | WHT PH  |

#### チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

#### Chip Resistor Part Coding



#### チップ抵抗 Chip resistor

| 容量<br>Wattage | 種類<br>Type | 許容誤差<br>Tolerance | 記号<br>Symbol | 寸法／Dimensions (mm)                                                                  |     |      |      | 抵抗コード : A<br>Resistor Code : A |
|---------------|------------|-------------------|--------------|-------------------------------------------------------------------------------------|-----|------|------|--------------------------------|
|               |            |                   |              | 外形／Form                                                                             | L   | W    | t    |                                |
| 1/16W         | 1005       | ± 5%              | CJ           |  | 1.0 | 0.5  | 0.35 | 104                            |
| 1/16W         | 1608       | ± 5%              | CJ           |                                                                                     | 1.6 | 0.8  | 0.45 | 108                            |
| 1/10W         | 2125       | ± 5%              | CJ           |                                                                                     | 2   | 1.25 | 0.45 | 118                            |
| 1/8W          | 3216       | ± 5%              | CJ           |                                                                                     | 3.2 | 1.6  | 0.55 | 128                            |

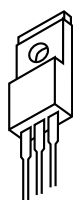


# TRANSISTOR ILLUSTRATION



E C B

CC5551  
KTA1266GR  
KTC3198GR



B C E

2SB1370E  
FN1016  
FP1016



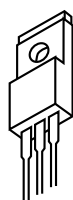
E C B

2SC1740SRS  
2SC4115SRS  
DTC114ES  
KTA1267GR  
KTC3199GR



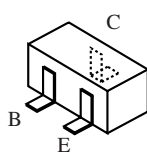
E C B

CSD1489B



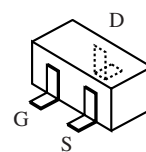
G D S

2SK3053



B E C

2SA1037K(R) CSD1306E  
2SA1235F DTA144WK  
2SA1514K(S) DTC124EKA  
2SC2714O DTC144EKA  
2SC3052F RT1N144C  
2SD1306E RT1P141C  
CMBT5401 RT1P144C  
CMBT5551



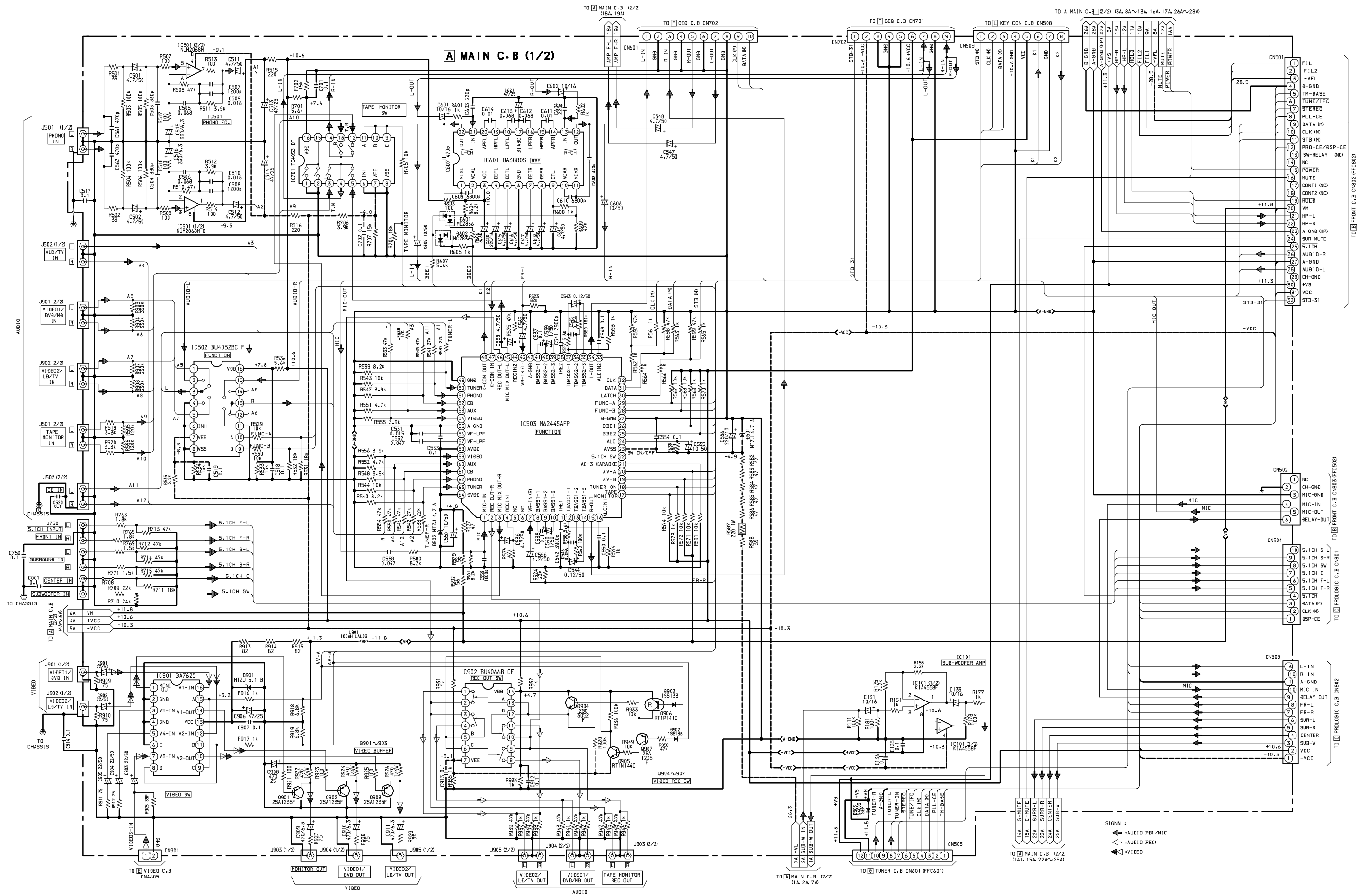
G S D

2SK2158

|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |  |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|--|
|  | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|--|

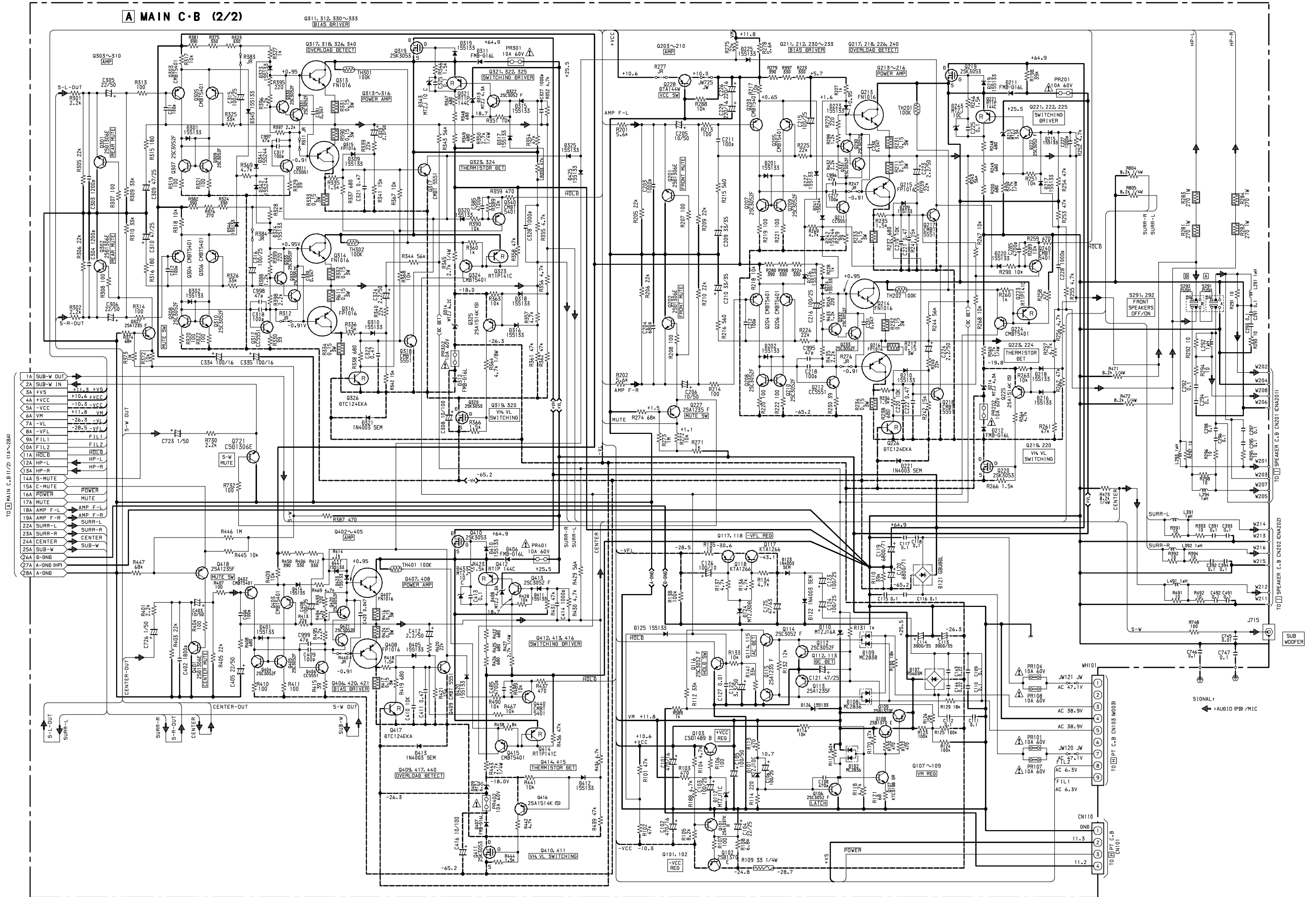


SCHEMATIC DIAGRAM – 1 (MAIN 1 / 2)

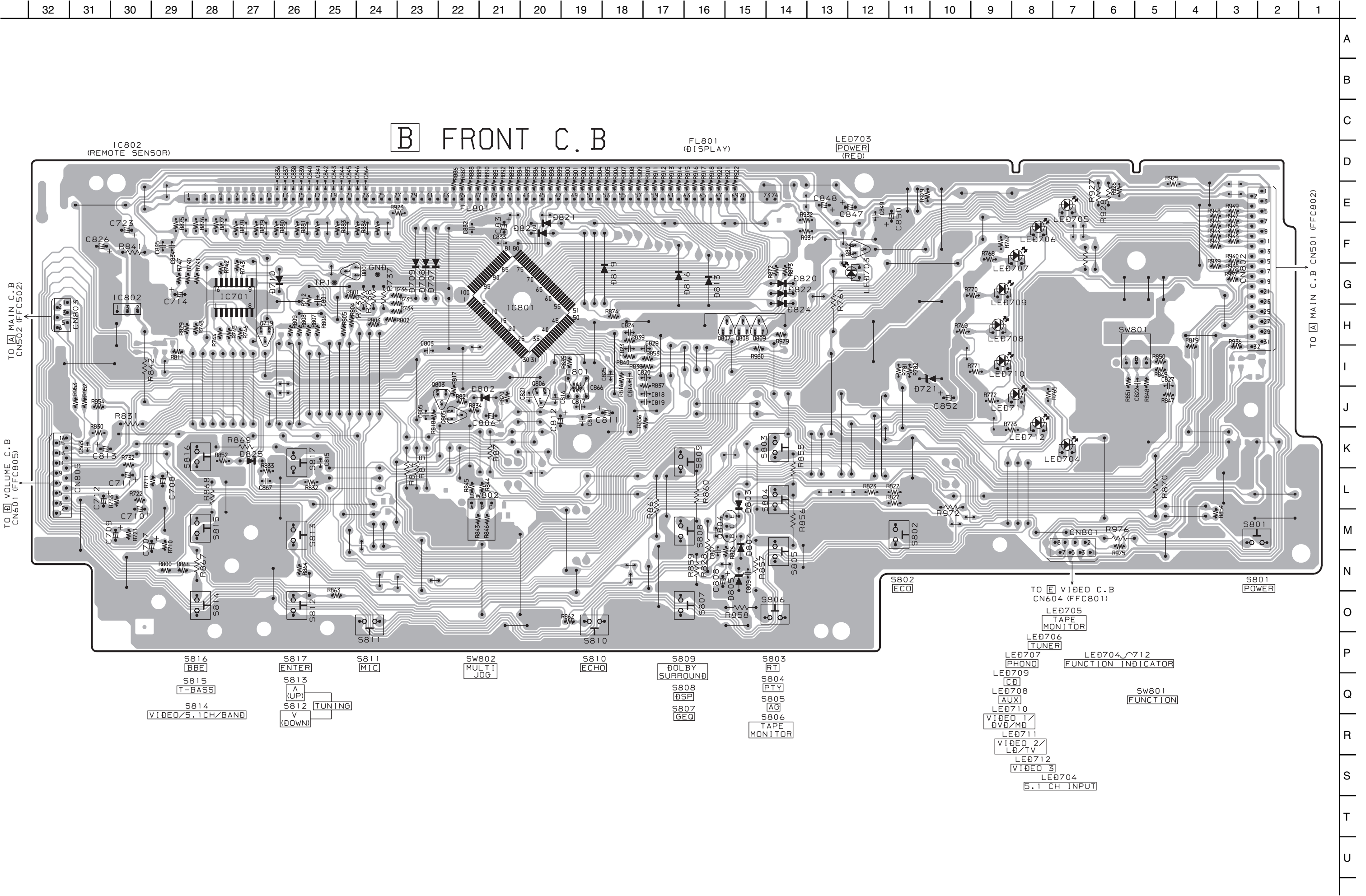




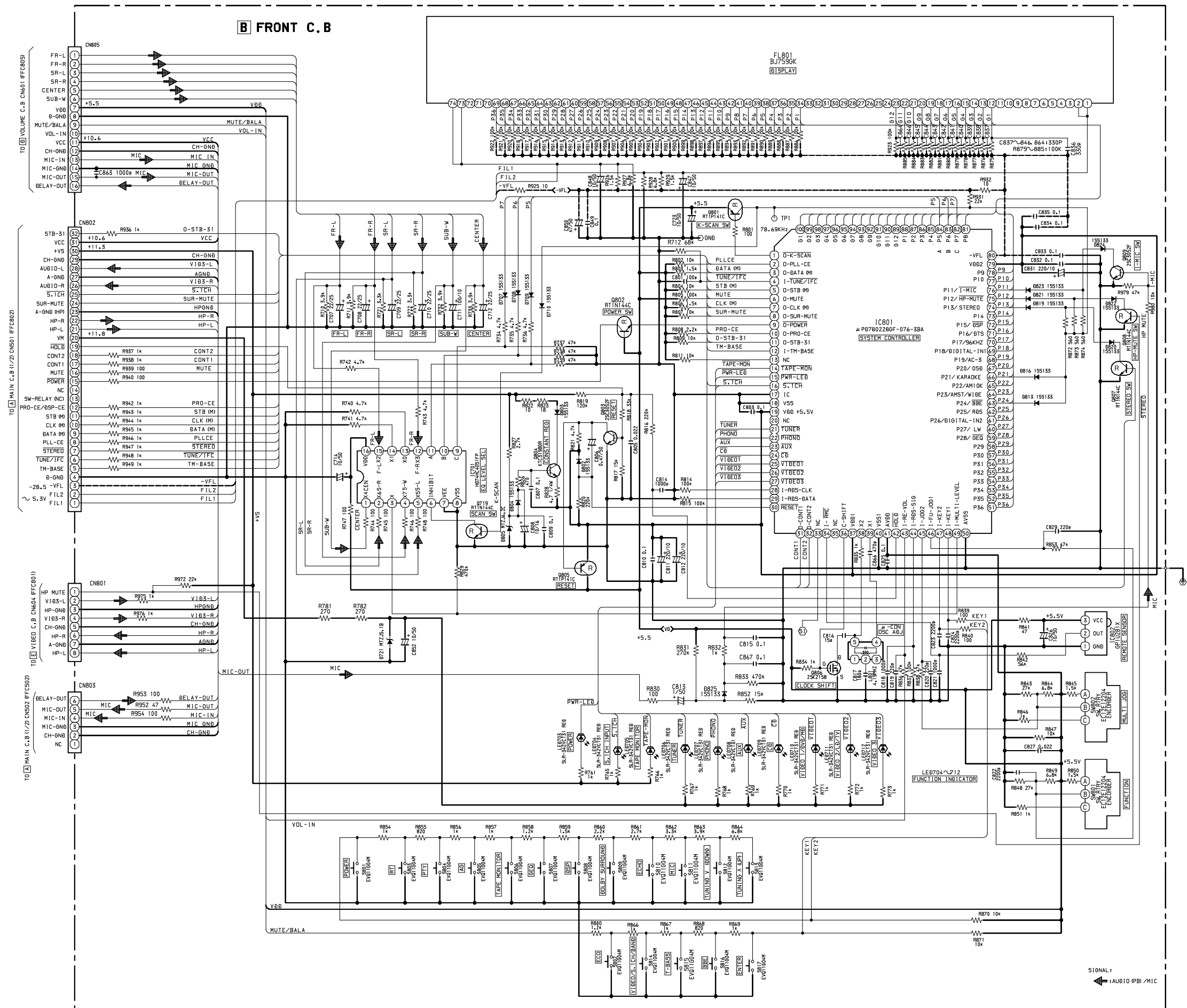
SCHEMATIC DIAGRAM-2 (MAIN 2 / 2)



WIRING – 2 (FRONT)



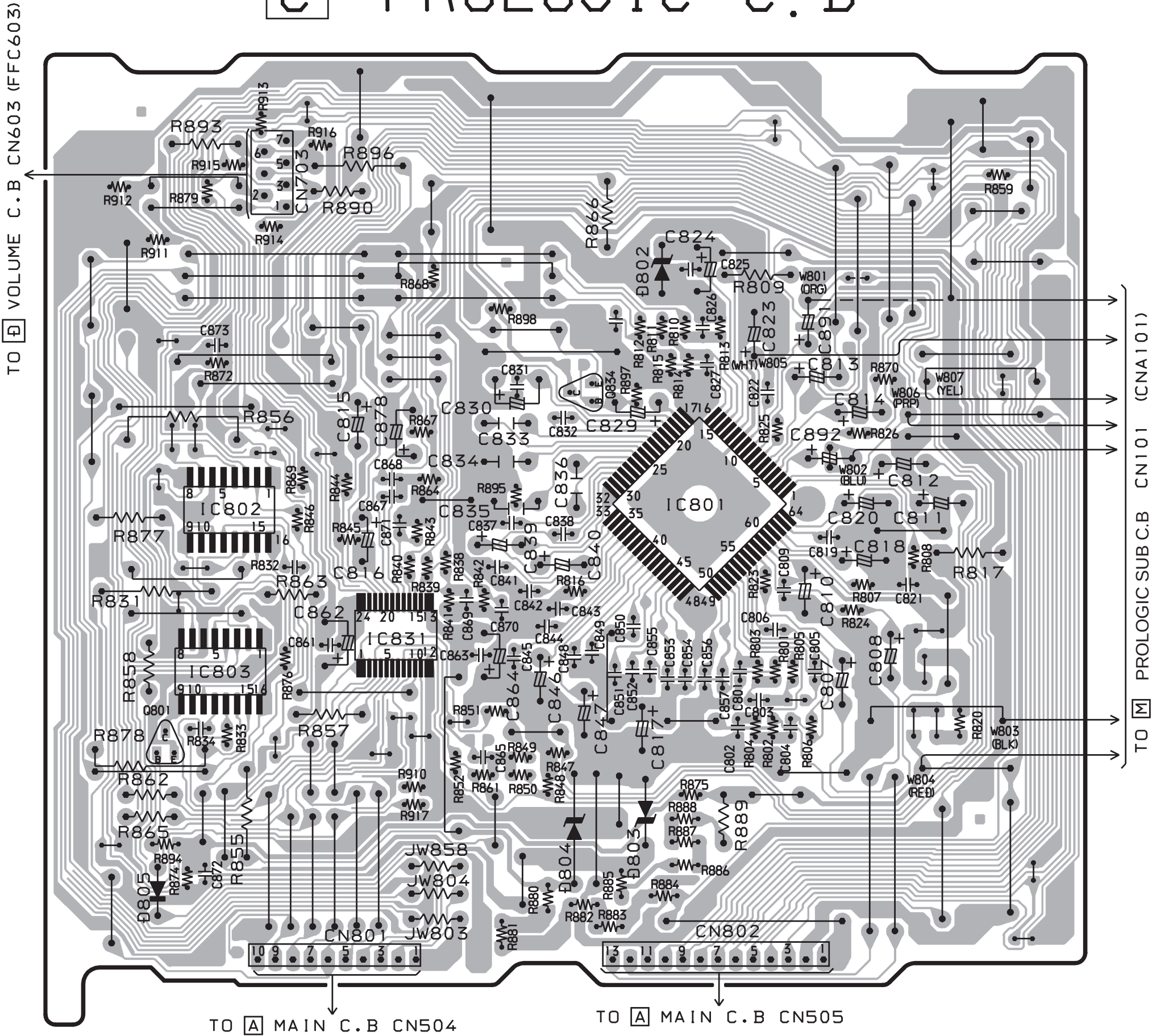
SCHEMATIC DIAGRAM – 3 (FRONT)





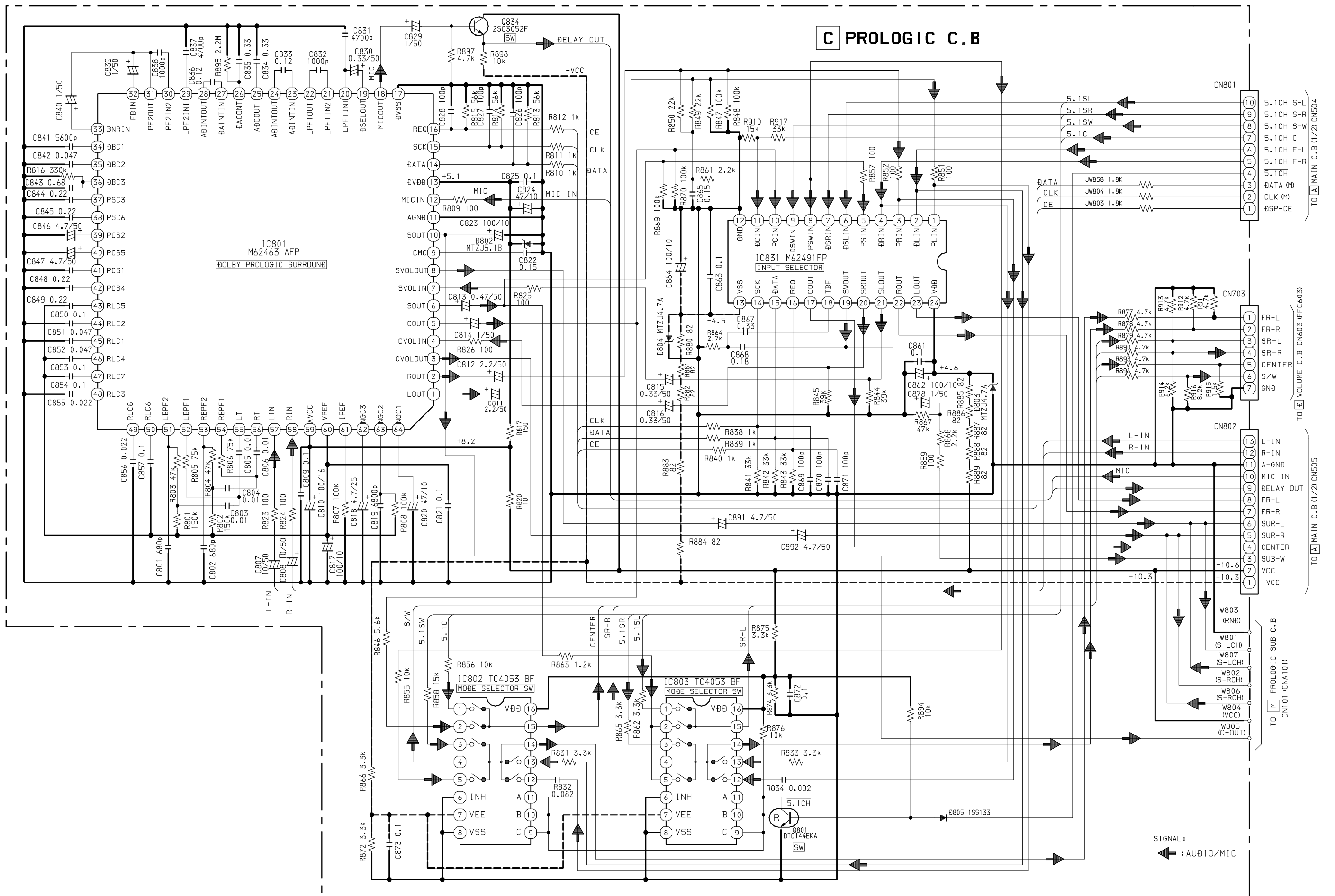
|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|
| 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|

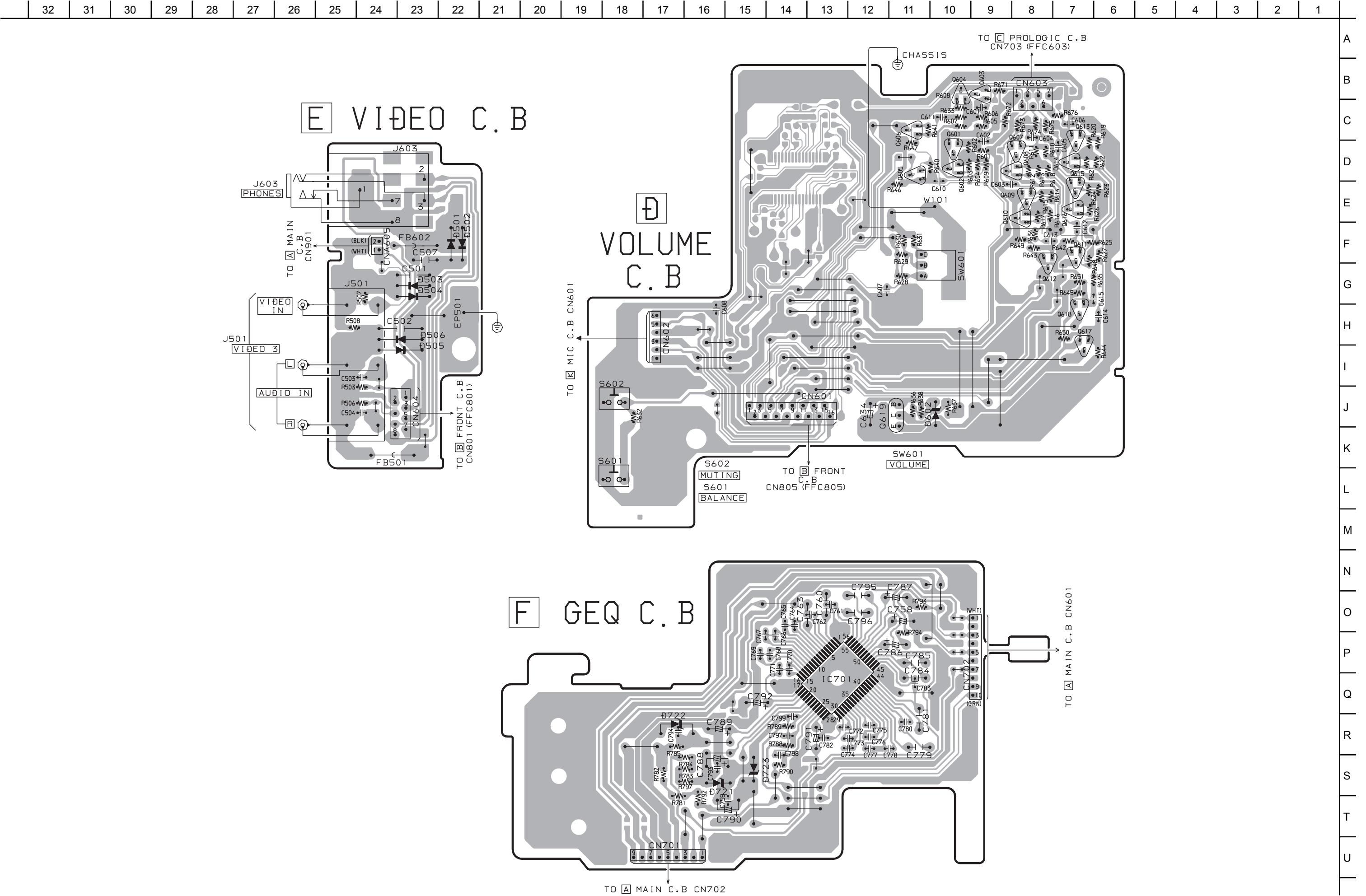
C PROLOGIC C.B



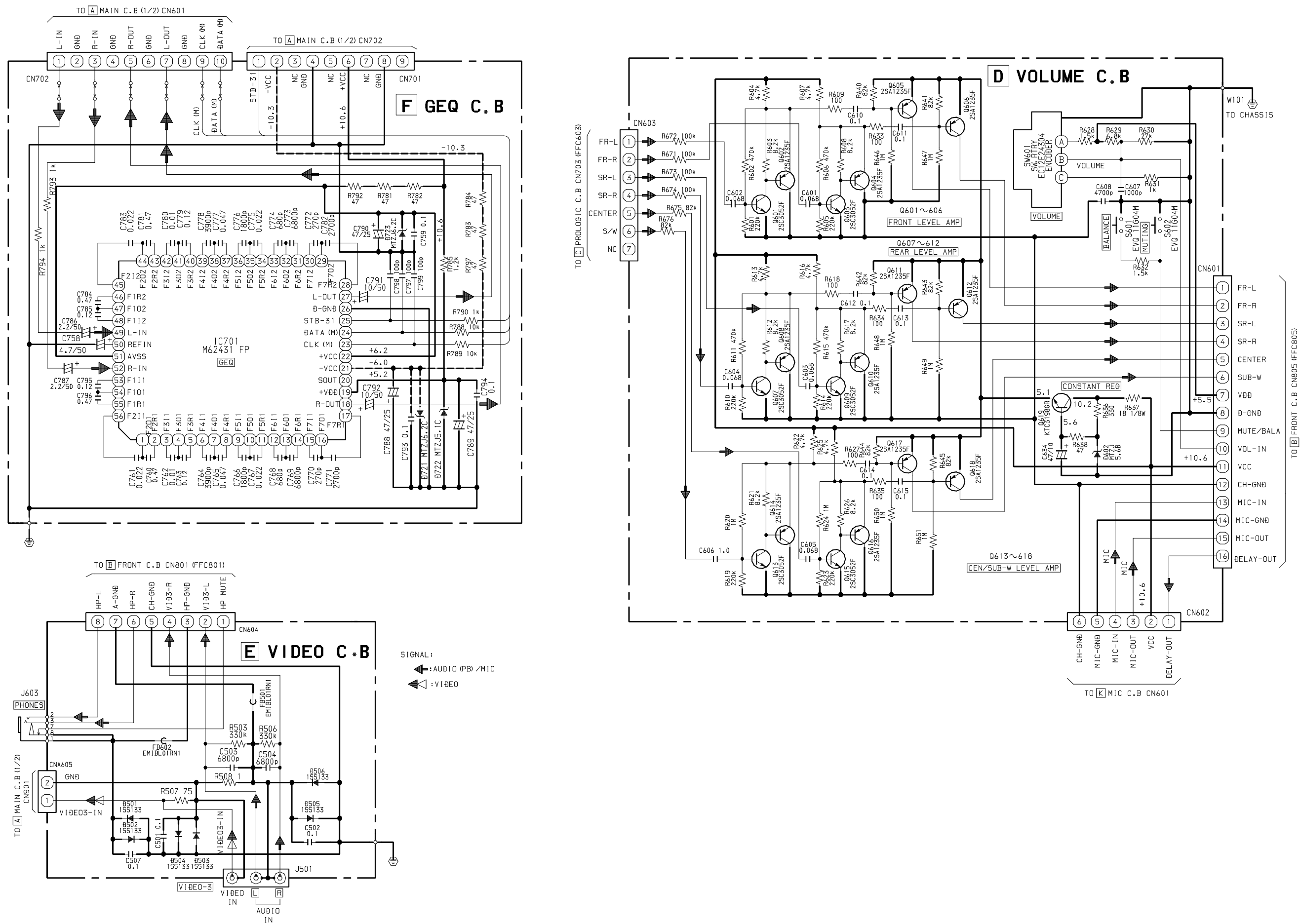
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U

### SCHEMATIC DIAGRAM – 4 (PROLOGIC)

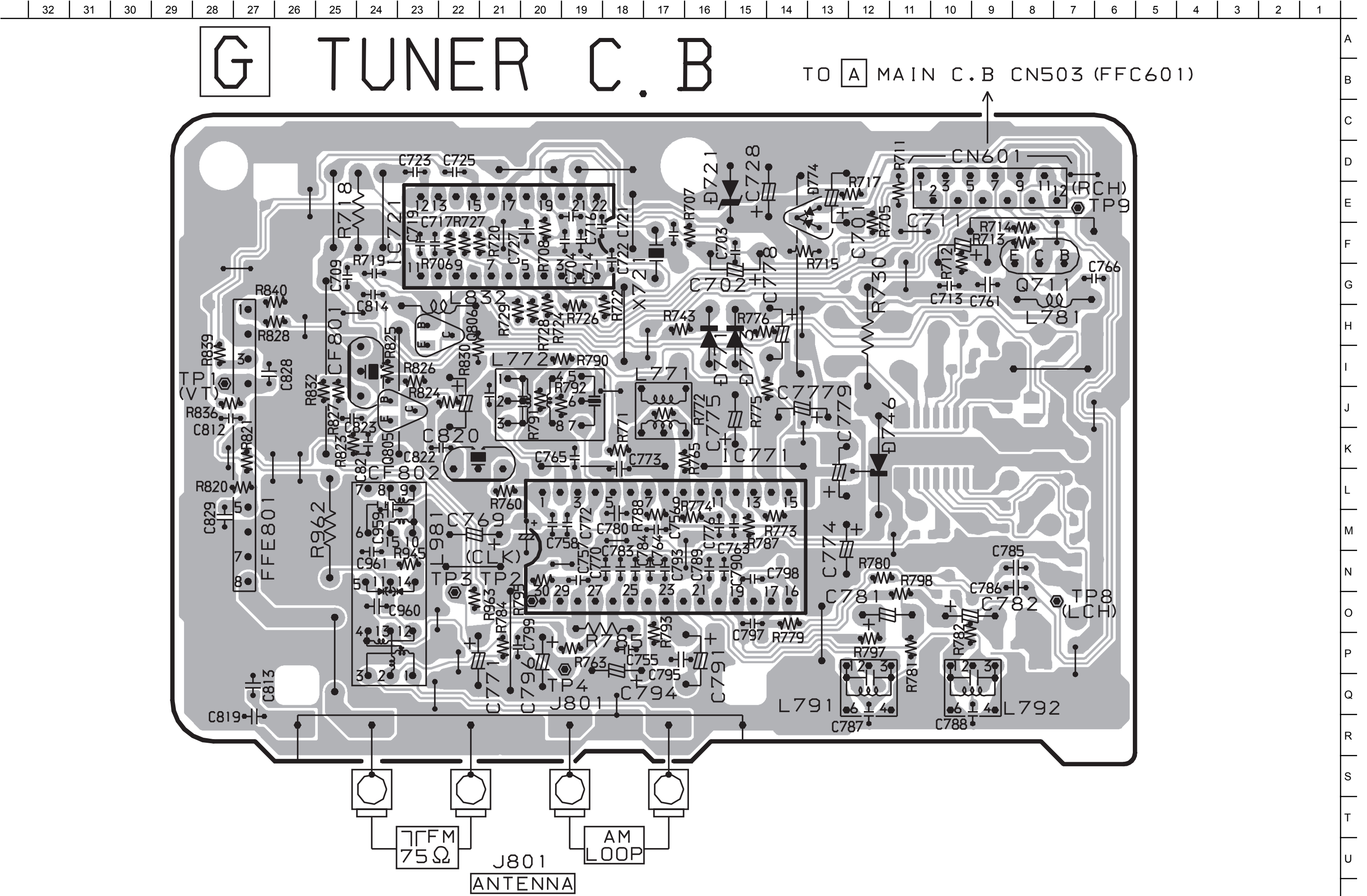




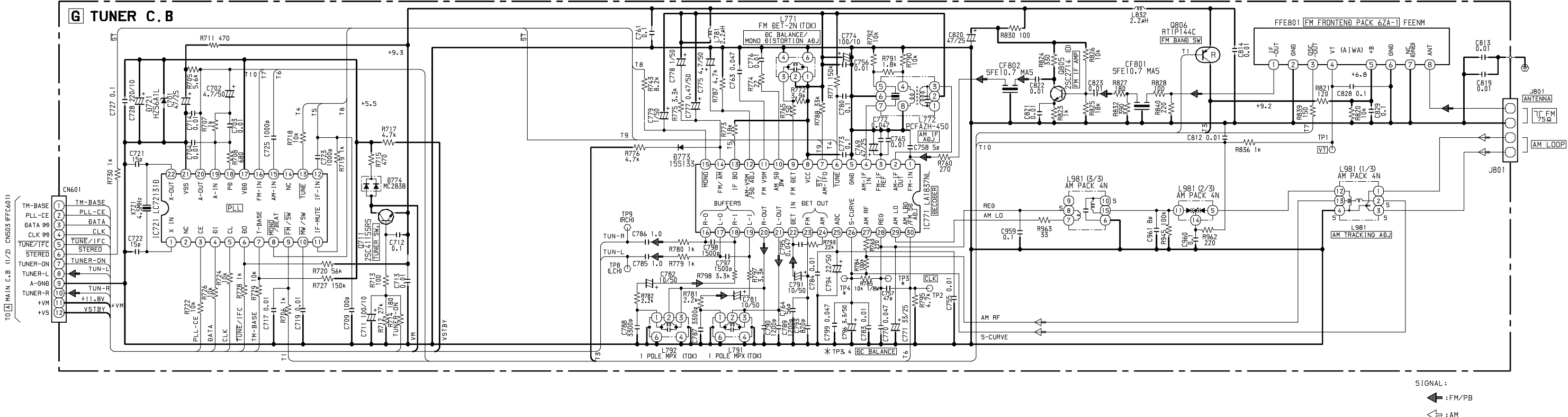
SCHEMATIC DIAGRAM – 5 (VOLUME / VIDEO / GEQ)

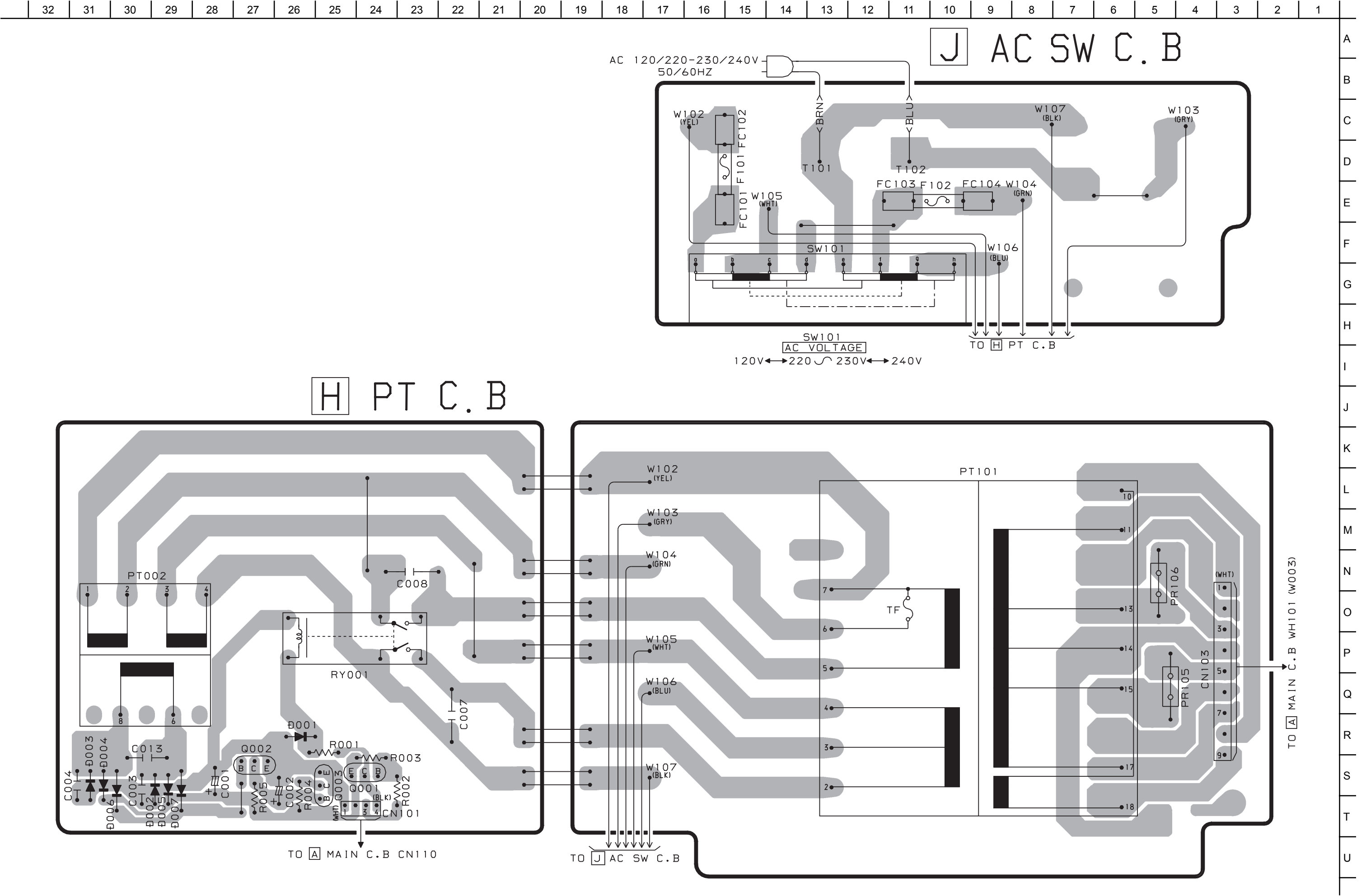




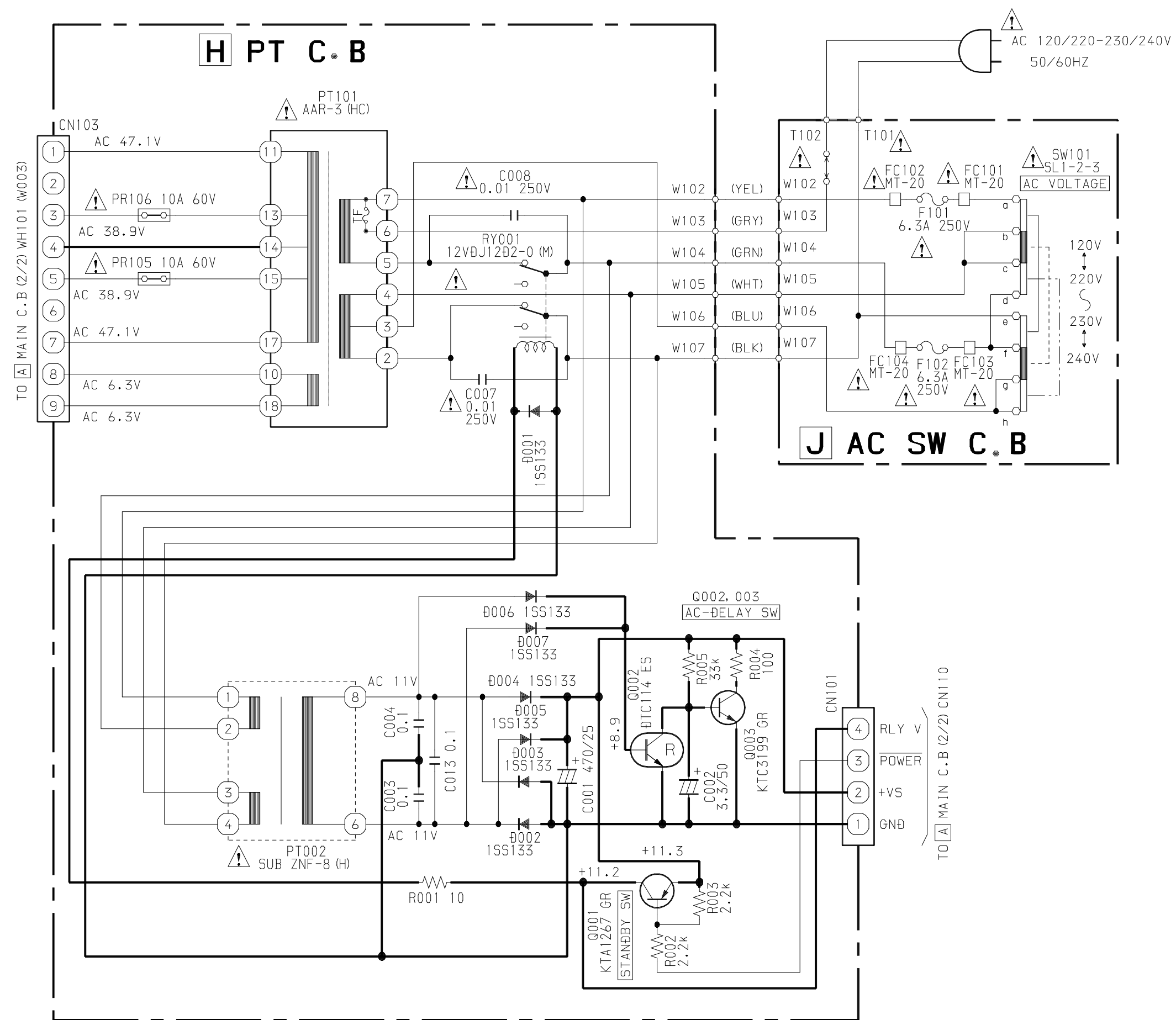


### SCHEMATIC DIAGRAM – 6 (TUNER)

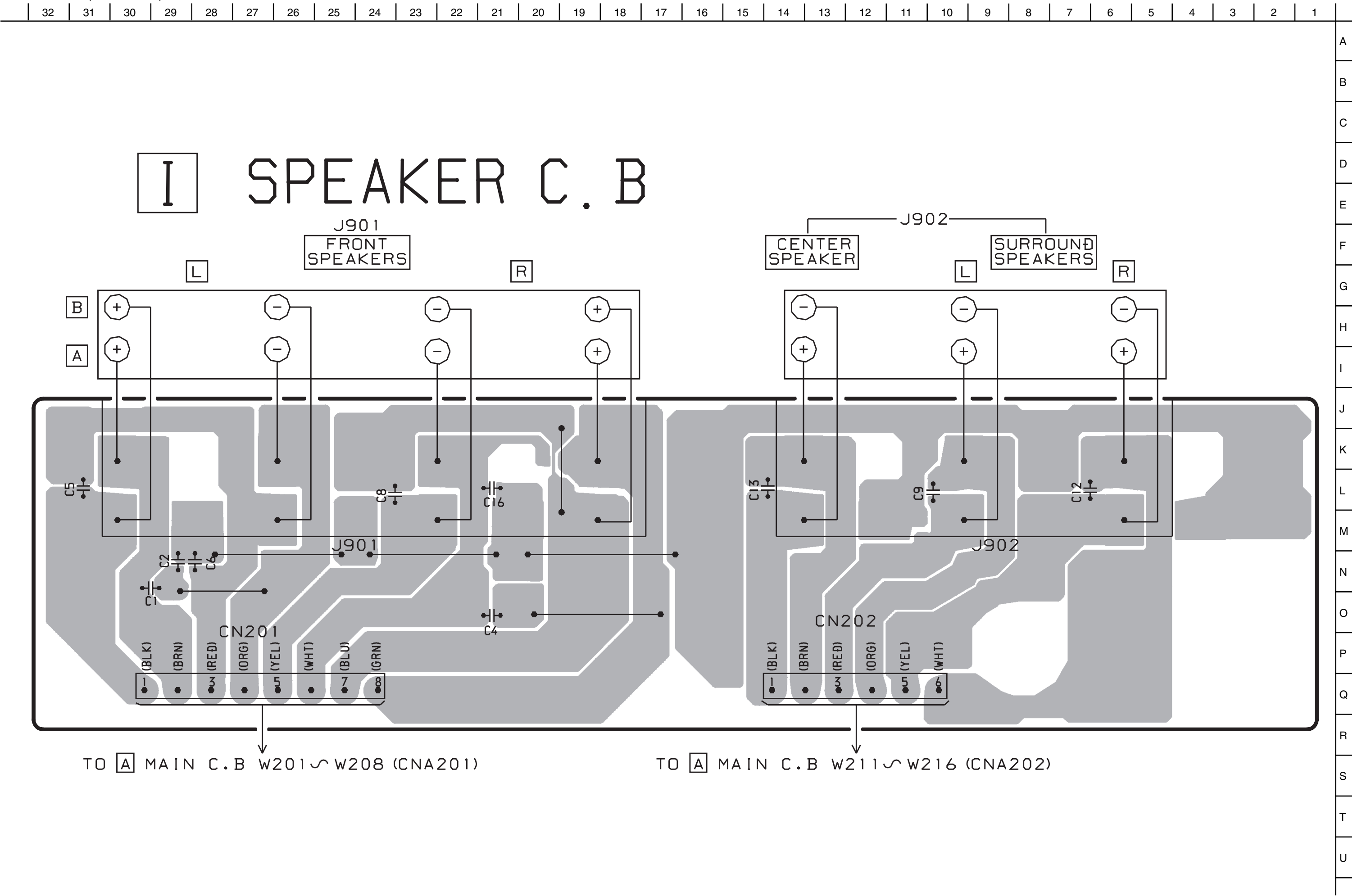




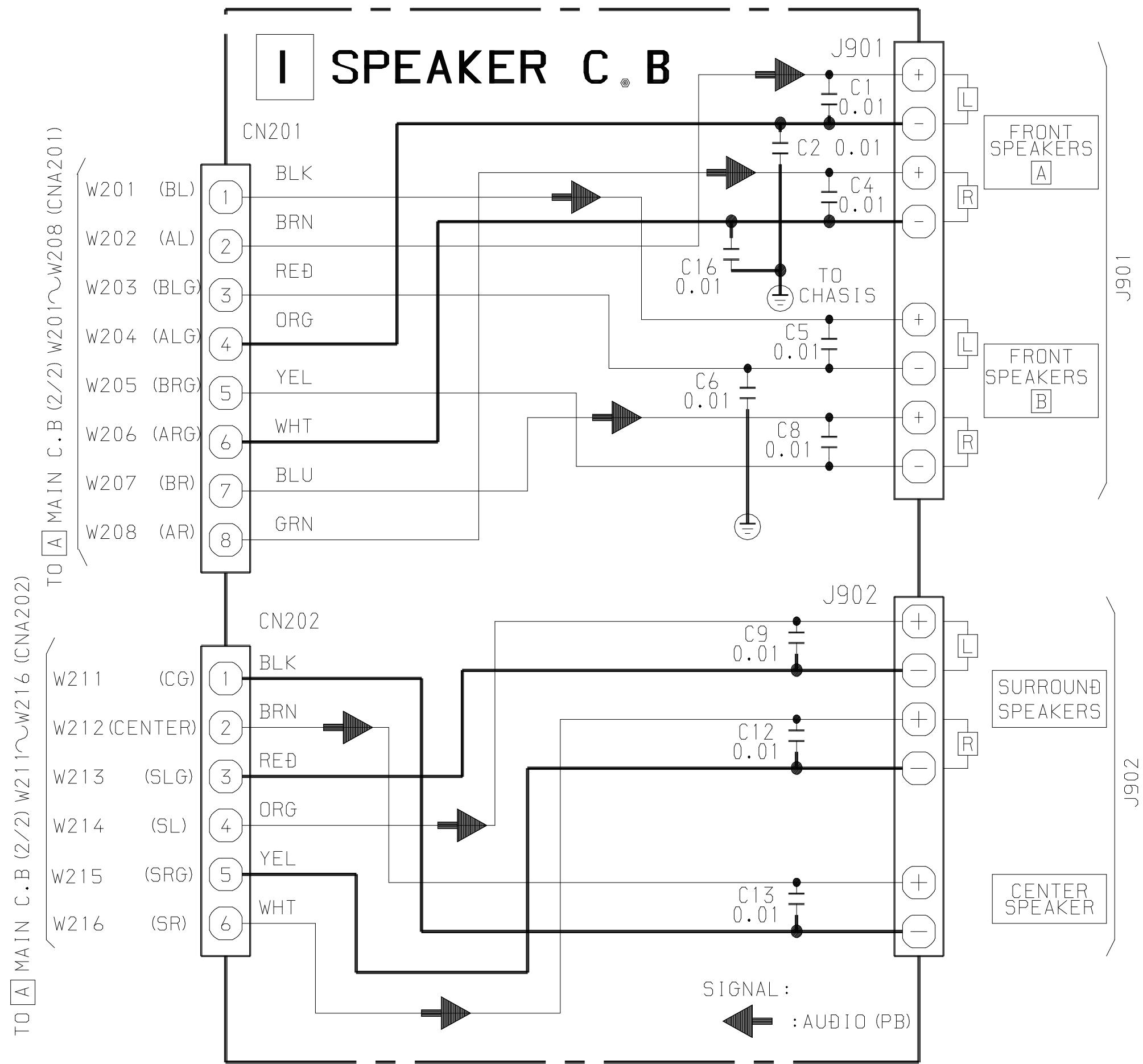
SCHEMATIC DIAGRAM – 7 (PT/AC SW)

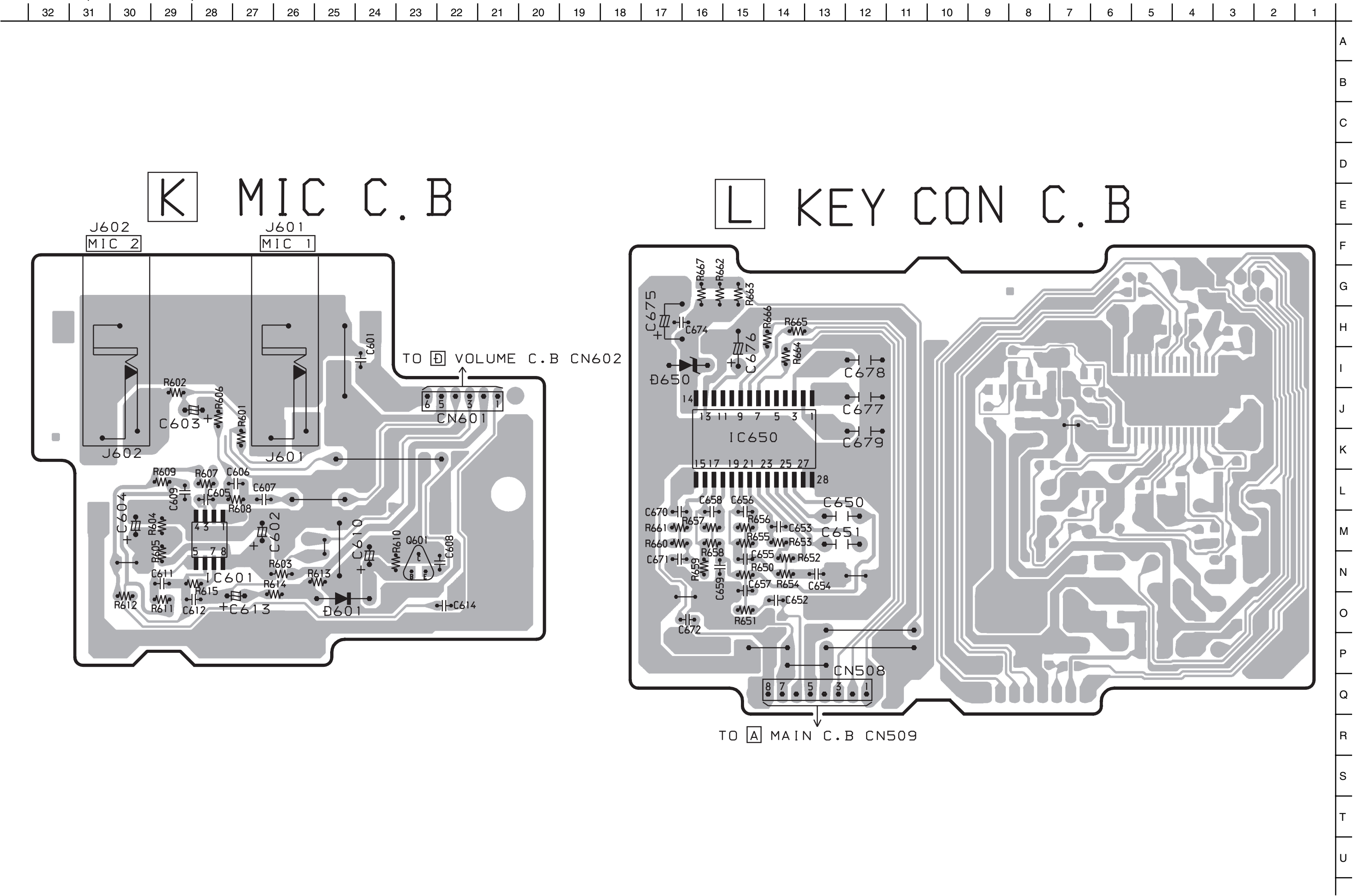




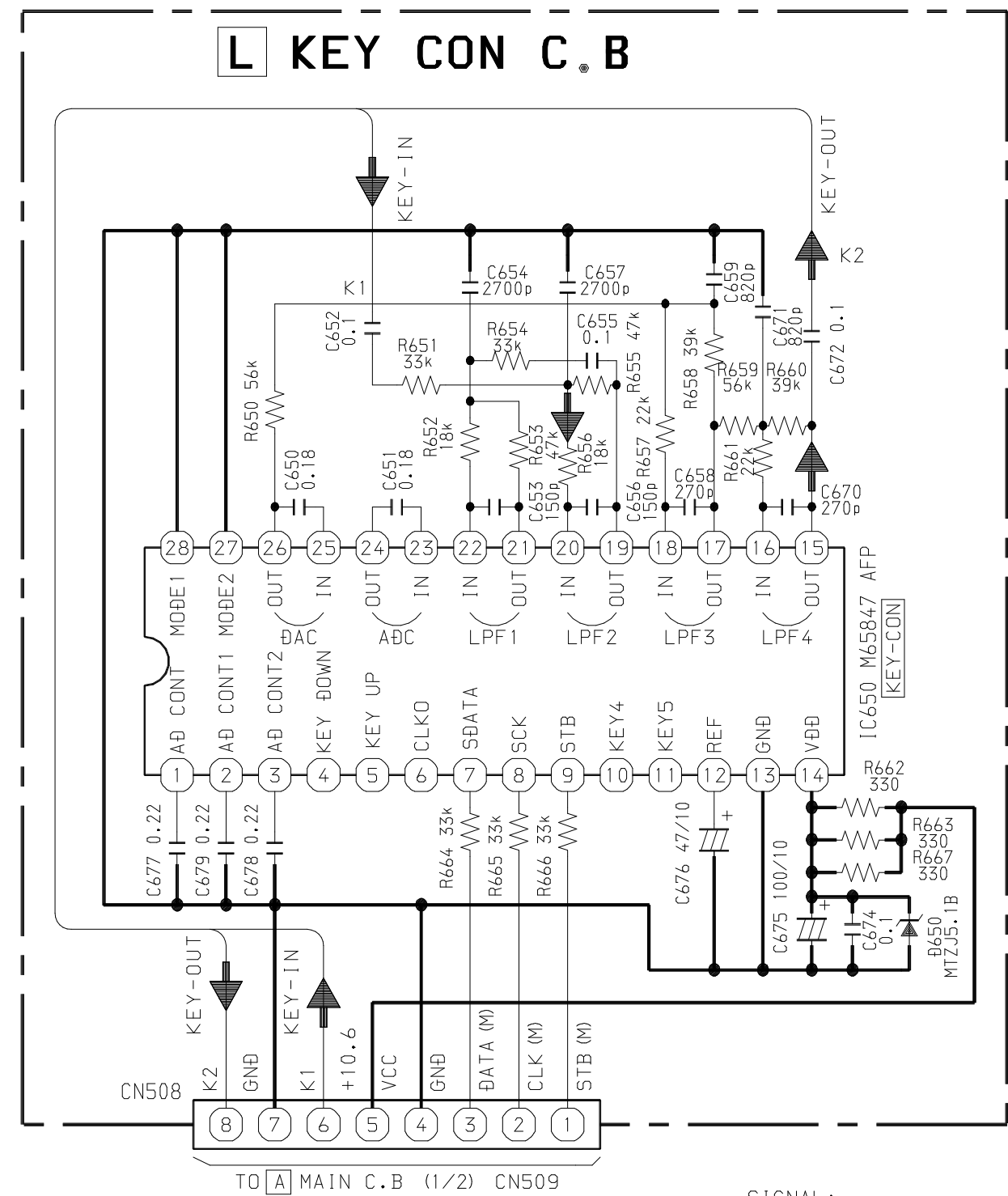
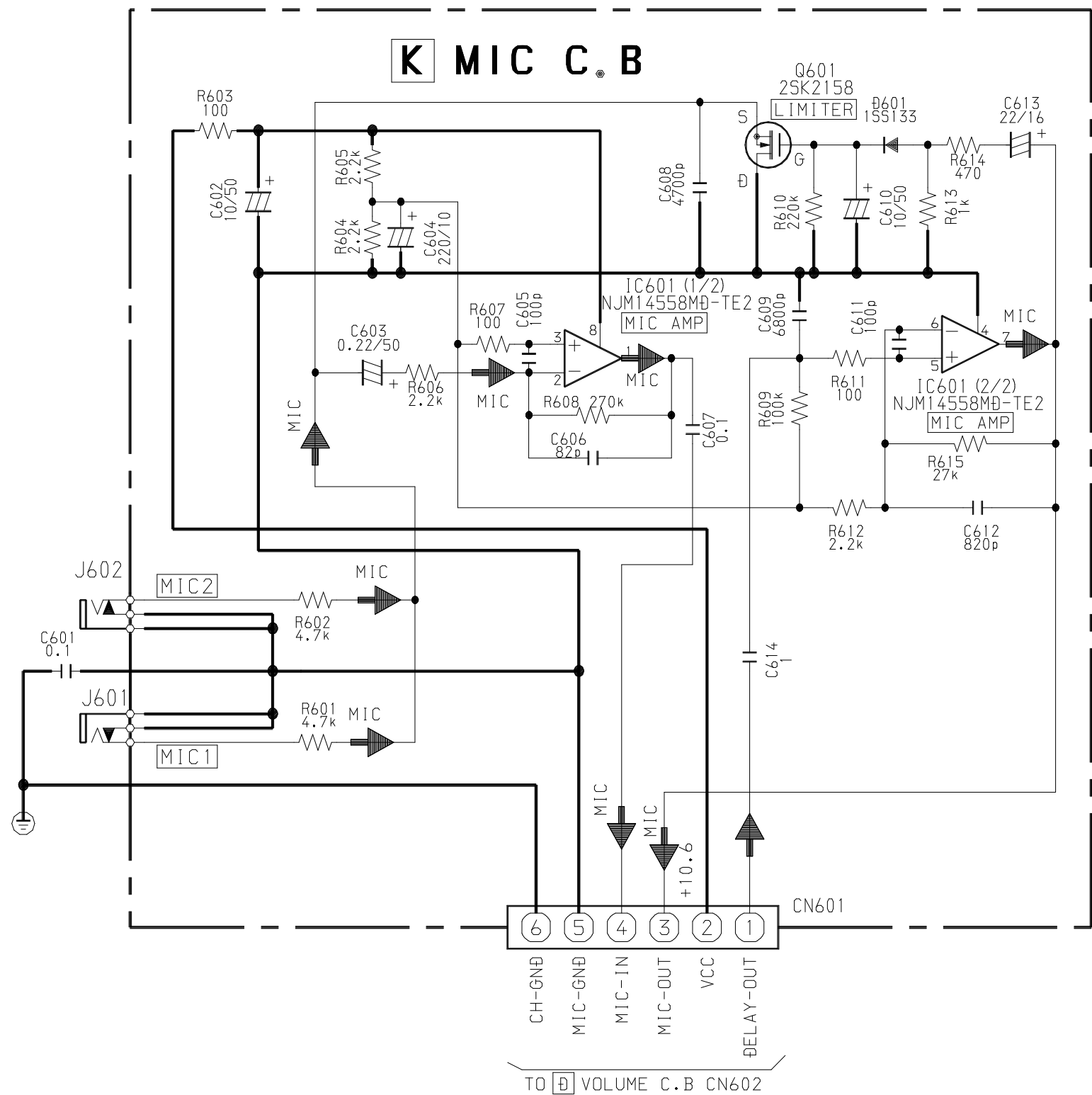


SCHEMATIC DIAGRAM – 8 (SPEAKER)

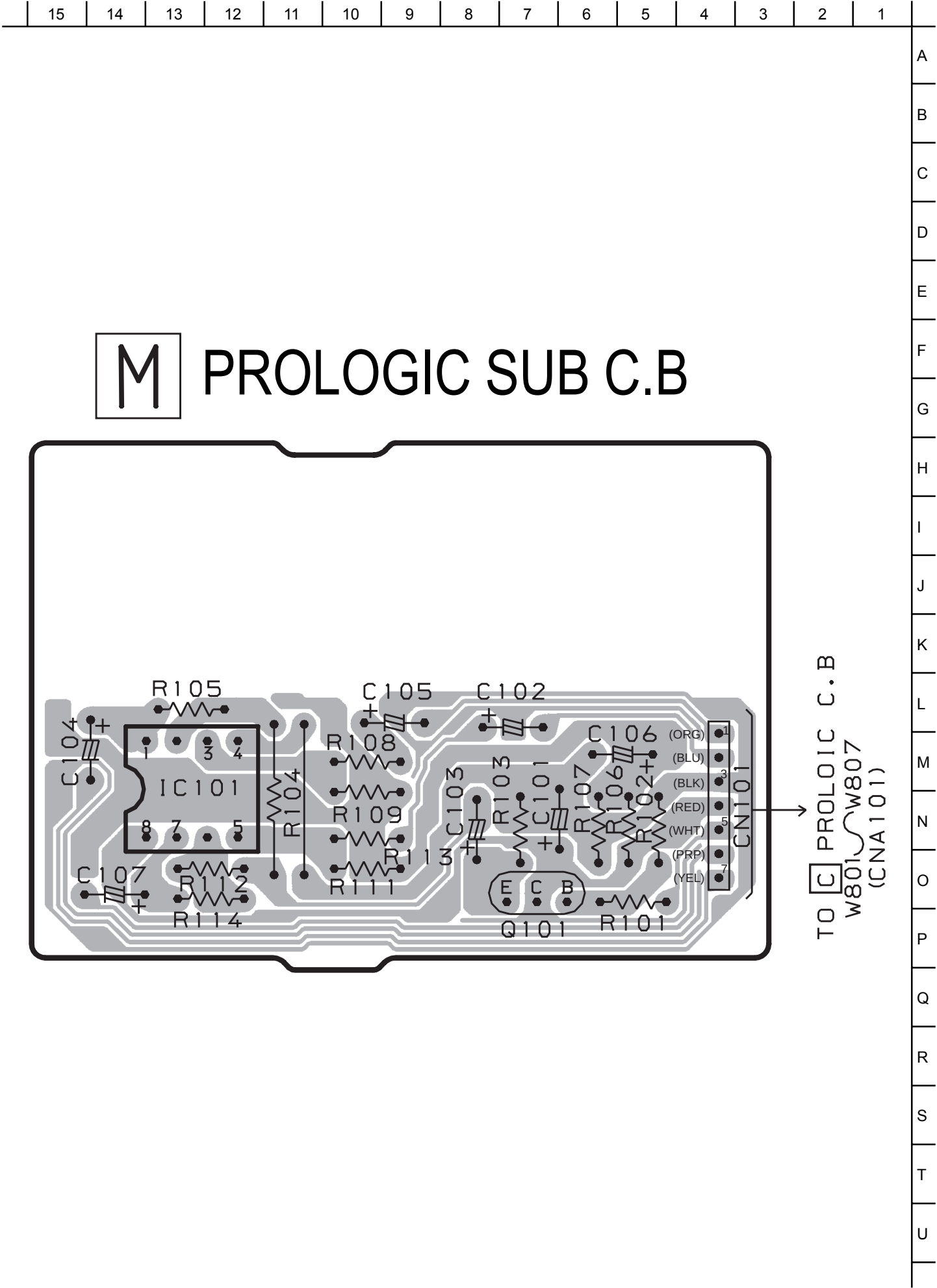




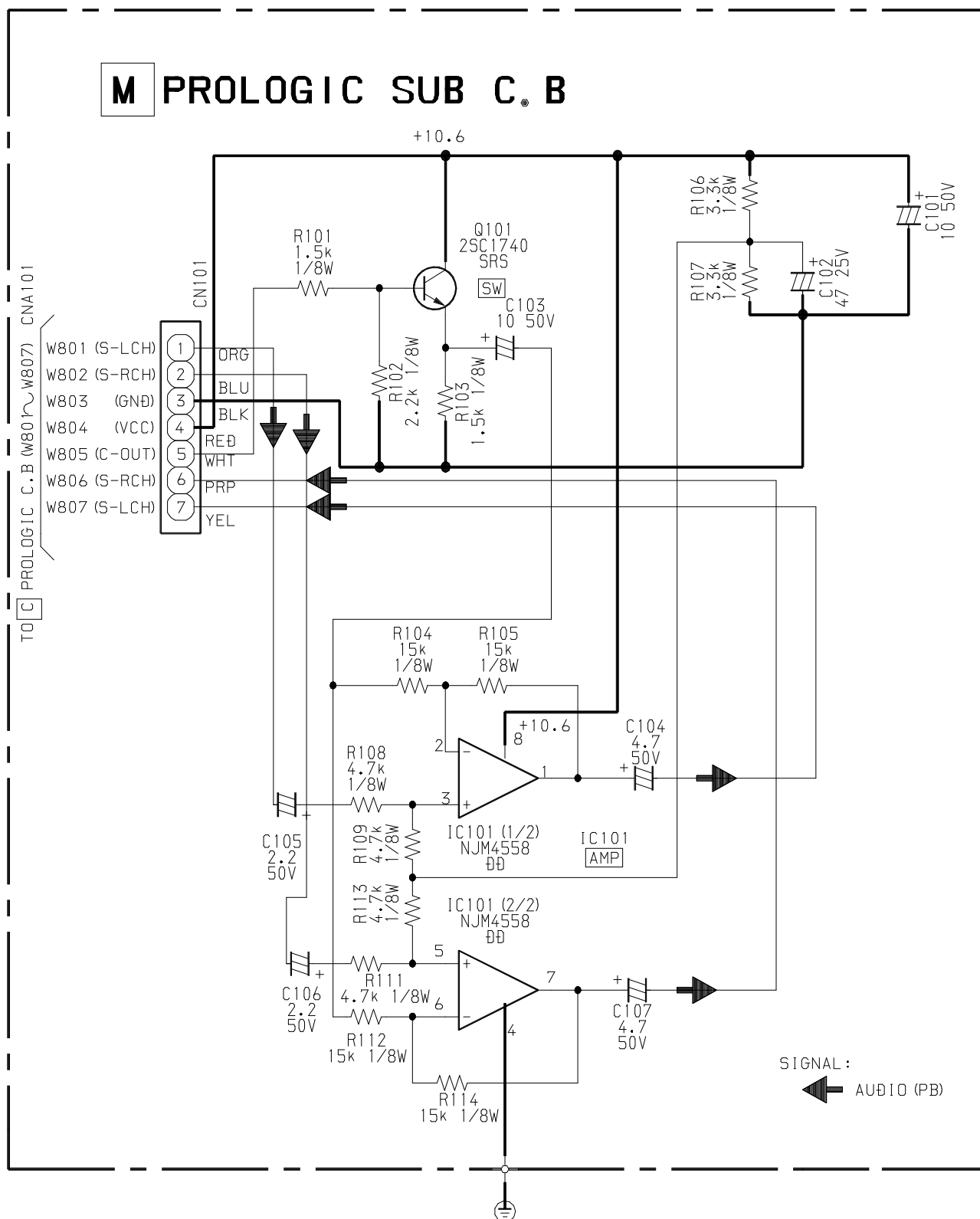
SCHEMATIC DIAGRAM – 9 (MIC / KEY CON)



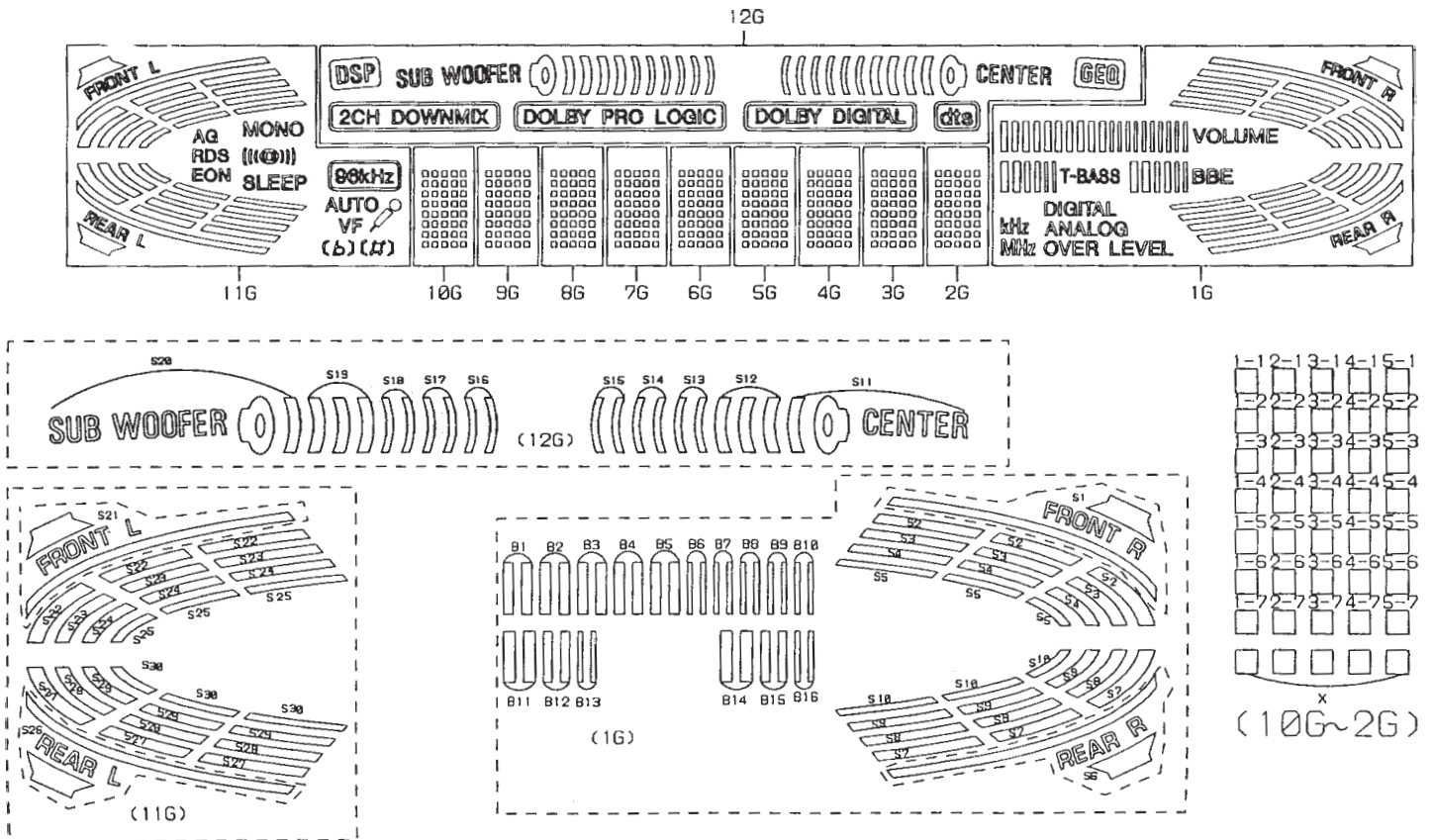
SIGNAL:  
AUDIO (PB) / MIC







## FL (BJ759GK) GRID ASSIGNMENT AND ANODE CONNECTION

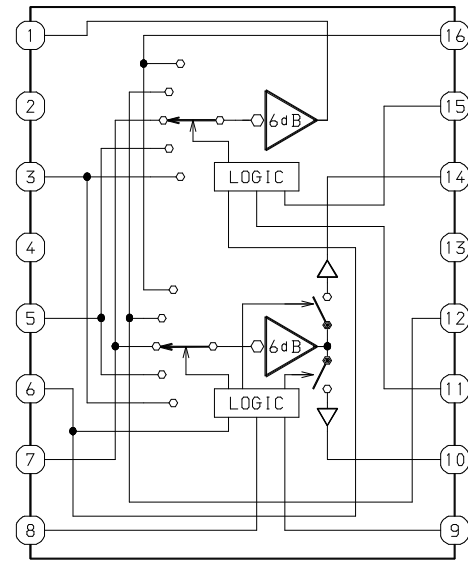


## ANODE CONNECTION

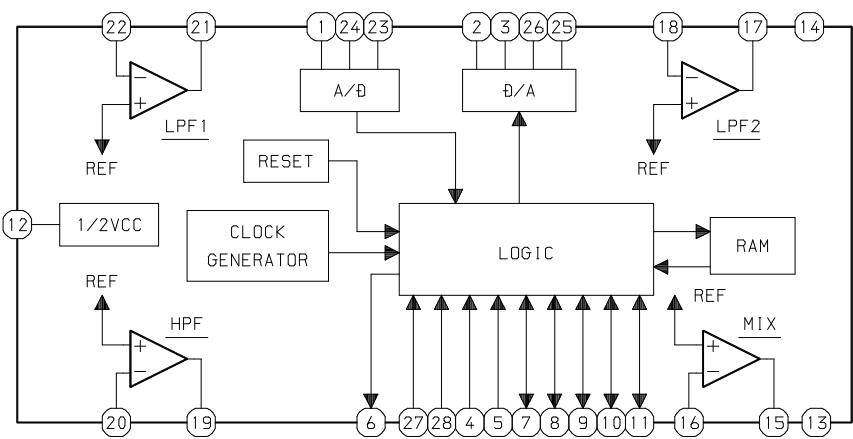
|     | 12G                                                                               | 11G                                                                                    | 10G~2G | 1G         |
|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------|------------|
| P1  |  | -                                                                                      | 1-1    | -          |
| P2  |  | -                                                                                      | 2-1    | B1         |
| P3  |  | -                                                                                      | 3-1    | B2         |
| P4  | S11                                                                               | -                                                                                      | 4-1    | B3         |
| P5  | S12                                                                               | -                                                                                      | 5-1    | B4         |
| P6  | S13                                                                               | -                                                                                      | 1-2    | B5         |
| P7  | S14                                                                               | -                                                                                      | 2-2    | B6         |
| P8  | S15                                                                               | -                                                                                      | 3-2    | B7         |
| P9  |  | -                                                                                      | 4-2    | B8         |
| P10 |  | -                                                                                      | 5-2    | B9         |
| P11 | S16                                                                               | -                                                                                      | 1-3    | B10        |
| P12 | S17                                                                               | -                                                                                      | 2-3    | VOLUME     |
| P13 | S18                                                                               | -                                                                                      | 3-3    | B11        |
| P14 | S19                                                                               | -                                                                                      | 4-3    | B12        |
| P15 | S20                                                                               | -                                                                                      | 5-3    | B13        |
| P16 |  | MONO                                                                                   | 1-4    | T-BASS     |
| P17 | -                                                                                 | AG                                                                                     | 2-4    | B14        |
| P18 | -                                                                                 |      | 3-4    | B15        |
| P19 | -                                                                                 | RDS                                                                                    | 4-4    | B16        |
| P20 | -                                                                                 | SLEEP                                                                                  | 5-4    | BBE        |
| P21 | -                                                                                 | EON                                                                                    | 1-5    | DIGITAL    |
| P22 | -                                                                                 |     | 2-5    | ANALOG     |
| P23 | -                                                                                 | AUTO                                                                                   | 3-5    | OVER LEVEL |
| P24 | -                                                                                 | VF  | 4-5    | kHz        |
| P25 | -                                                                                 |     | 5-5    | MHz        |
| P26 | -                                                                                 |     | 1-6    | -          |
| P27 | -                                                                                 | S25                                                                                    | 2-6    | S5         |
| P28 | -                                                                                 | S24                                                                                    | 3-6    | S4         |
| P29 | -                                                                                 | S23                                                                                    | 4-6    | S3         |
| P30 | -                                                                                 | S22                                                                                    | 5-6    | S2         |
| P31 | -                                                                                 | S21                                                                                    | 1-7    | S1         |
| P32 | -                                                                                 | S30                                                                                    | 2-7    | S10        |
| P33 | -                                                                                 | S29                                                                                    | 3-7    | S9         |
| P34 | -                                                                                 | S28                                                                                    | 4-7    | S8         |
| P35 | -                                                                                 | S27                                                                                    | 5-7    | S7         |
| P36 | -                                                                                 | S26                                                                                    | X      | S6         |

IC BLOCK DIAGRAM

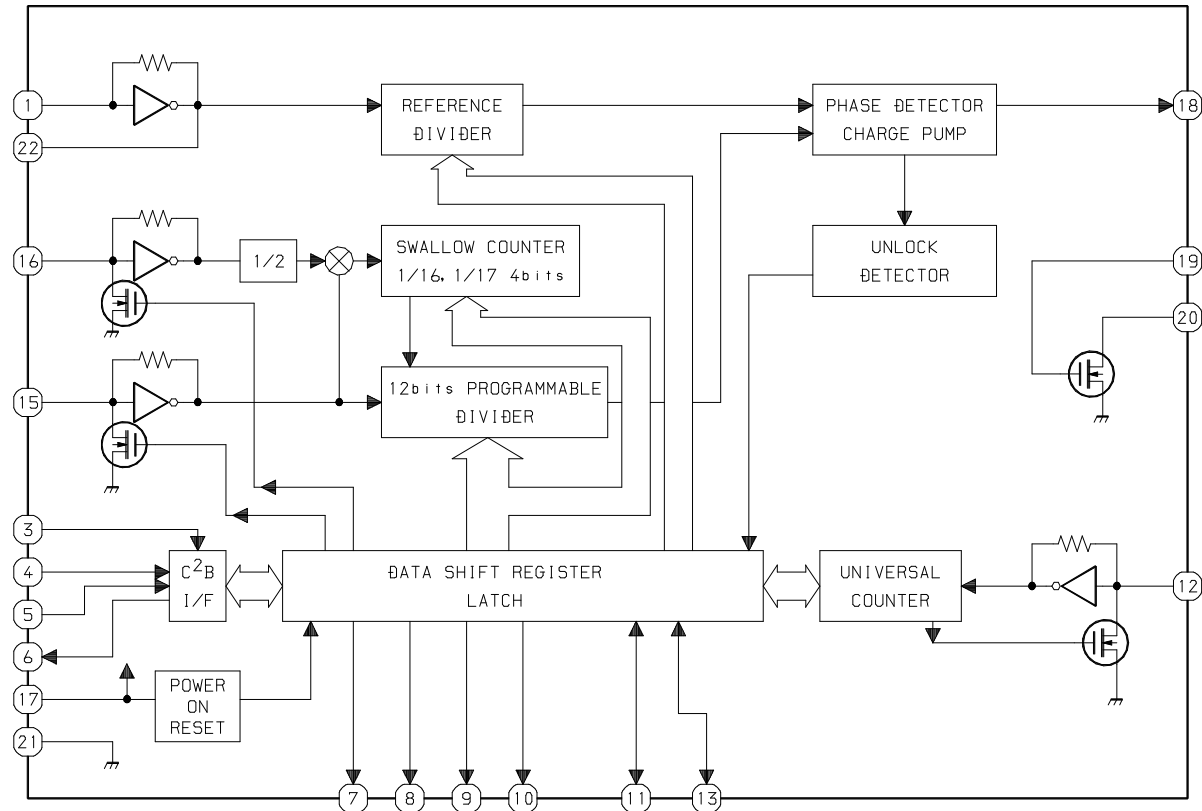
IC, BA7625



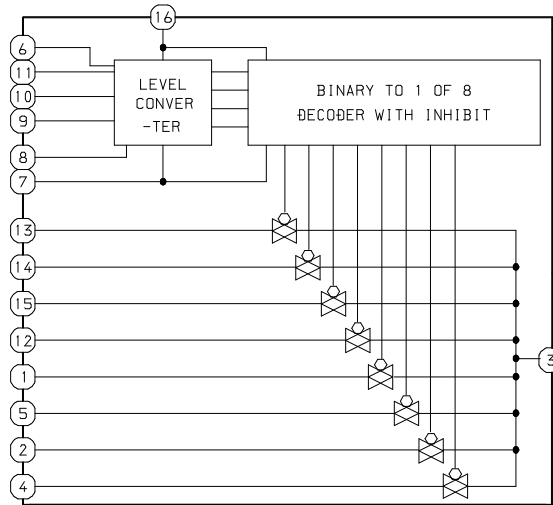
IC, M65847AFP



IC, LC72131D



IC, HB74HC4051FP

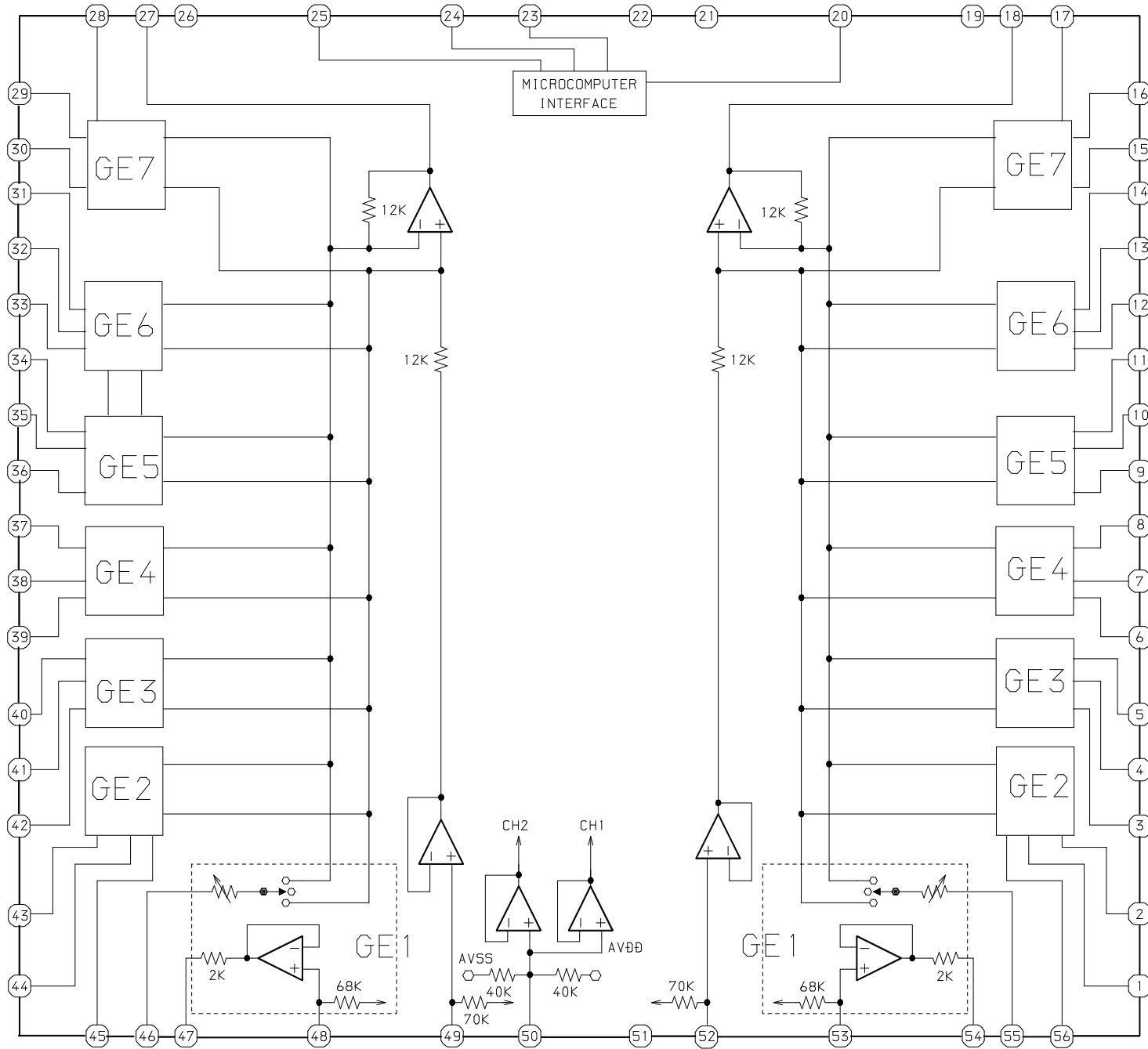


FUNCTION TABLE

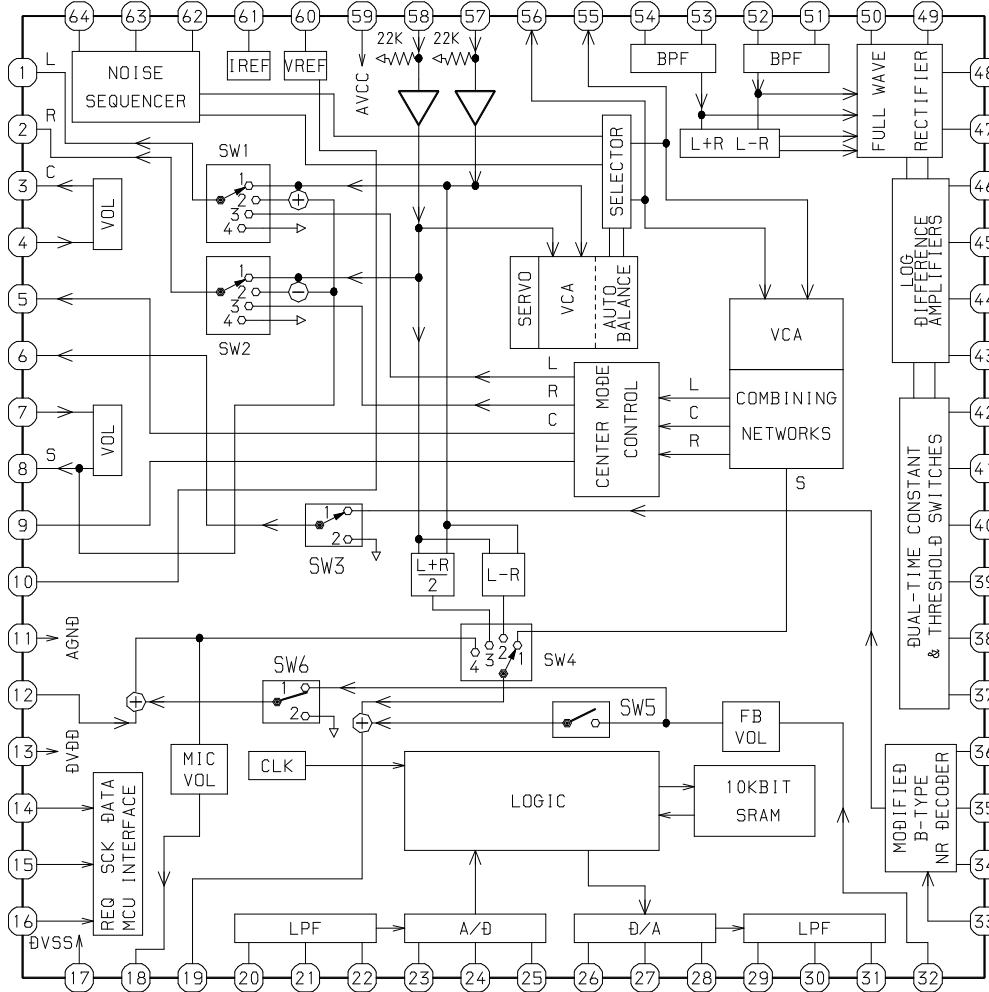
| INHIBIT | CONTROL INPUTS |   |   | ON SWITCH |
|---------|----------------|---|---|-----------|
|         | C              | B | A |           |
| L       | L              | L | L | X0        |
| L       | L              | L | H | X1        |
| L       | L              | H | L | X2        |
| L       | L              | H | H | X3        |
| L       | H              | L | L | X4        |
| L       | H              | L | H | X5        |
| L       | H              | H | L | X6        |
| L       | H              | H | H | X7        |
| H       | X              | X | X | —         |

H:HIGH VOLTAGE LEVEL  
L:LOW VOLTAGE LEVEL  
X:IMMATIAL

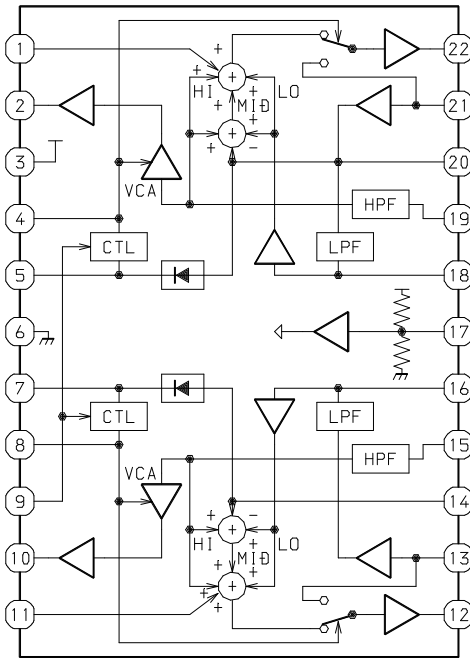
IC, M62431FP



IC, M62463AFP



IC, BA3880S



## IC DESCRIPTION

IC, UPD780228GF-076-3BA

| Pin No. | Pin Name                       | I/O | Description                                               |
|---------|--------------------------------|-----|-----------------------------------------------------------|
| 1       | $\overline{\text{O-K-SCAN}}$   | O   | Switch scan timing output.                                |
| 2       | O-PLL-CE                       | O   | PLL IC chip enable output.                                |
| 3       | O-DATA (M)                     | O   | Data output for sound.                                    |
| 4       | $\overline{\text{I-TUNE/IFC}}$ | I   | TUNE-IF count serial data input.                          |
| 5       | O-STB (M)                      | O   | Latch strobe output for sound CTRL.                       |
| 6       | O-MUTE                         | O   | System mute ON/OFF output.                                |
| 7       | O-CLK (M)                      | O   | Clock output.                                             |
| 8       | O-SUR-MUTE                     | O   | SURROUND amp mute ON/OFF output.                          |
| 9       | $\overline{\text{O-POWER}}$    | O   | System power supply ON/OFF output.                        |
| 10      | O-PRO-CE                       | O   | DOLBY PROLOGIC IC chip enable output.                     |
| 11      | O-STB-31                       | O   | GEQ IC chip enable output.                                |
| 12      | I-TM-BASE                      | I   | Reference clock input for timer watch.                    |
| 13      | NC                             | –   | Not connected.                                            |
| 14      | $\overline{\text{TAPE-MON}}$   | O   | Function LED of tape monitor ON/OFF output.               |
| 15      | $\overline{\text{PWR-LED}}$    | O   | Power LED ON/OFF output.                                  |
| 16      | $\overline{\text{5.1CH}}$      | O   | 5.1CH LED ON/OFF output.                                  |
| 17      | IC                             | –   | Connected to GND.                                         |
| 18      | VSS                            | –   | GND.                                                      |
| 19      | VDD                            | –   | Power supply input.                                       |
| 20      | NC                             | –   | Not connected.                                            |
| 21      | $\overline{\text{TUNER}}$      | O   | Function LED of TUNER ON/OFF output.                      |
| 22      | $\overline{\text{PHONO}}$      | O   | Function LED of PHONO ON/OFF output.                      |
| 23      | $\overline{\text{AUX}}$        | O   | Function LED of AUX ON/OFF output.                        |
| 24      | $\overline{\text{CD}}$         | O   | Function LED of CD ON/OFF output.                         |
| 25      | $\overline{\text{VIDEO1}}$     | O   | Function LED of VIDEO 1 ON/OFF output.                    |
| 26      | $\overline{\text{VIDEO2}}$     | O   | Function LED of VIDEO 2 ON/OFF output.                    |
| 27      | $\overline{\text{VIDEO3}}$     | O   | Function LED of VIDEO 3 ON/OFF output.                    |
| 28      | I-RDS-CLK                      | I   | RDS clock input (Not used).                               |
| 29      | I-RDS-DATA                     | I   | RDS serial data input (Not used).                         |
| 30      | $\overline{\text{RESET}}$      | I   | Reset input.                                              |
| 31      | O-CONT1                        | O   | Master VOL CTRL output for surround left & right.         |
| 32      | O-CONT2                        | O   | Master VOL CTRL output for center & sub woofer.           |
| 33      | NC                             | –   | Not connected.                                            |
| 34      | $\overline{\text{I-RMC}}$      | I   | System remote control signal input.                       |
| 35      | NC                             | –   | Not connected.                                            |
| 36      | C-SHIFT                        | O   | Micon clock shift output.                                 |
| 37      | VDD1                           | –   | Power supply input.                                       |
| 38, 39  | X2, X1                         | –   | 4.19 MHz oscillator circuit.                              |
| 40      | VSS1                           | –   | GND.                                                      |
| 41      | AVDD                           | –   | Power supply input.                                       |
| 42      | $\overline{\text{HOLD}}$       | I   | Power failure detected input "L" to stop and hold memory. |
| 43      | I-RE-VOL                       | I   | Rotary encoder signal input (Main vol L & R).             |



| Pin No. | Pin Name                         | I/O | Description                                                                                         |
|---------|----------------------------------|-----|-----------------------------------------------------------------------------------------------------|
| 44      | I-RDS-SIG                        | I   | RDS signal level input (Not used).                                                                  |
| 45      | I-JOG2                           | I   | Rotary encoder signal input (Multi jog).                                                            |
| 46      | I-FU-JOG1                        | I   | Rotary encoder signaal input (Func jog).                                                            |
| 47      | I-KEY2                           | I   | Key input (A/D).                                                                                    |
| 48      | I-KEY1                           | I   | Key input (A/D).                                                                                    |
| 49      | I-MULTI-LEVEL                    | I   | Multi Level meter input.                                                                            |
| 50      | AVSS                             | –   | GND.                                                                                                |
| 51~58   | P36~P29                          | O   | FL segement P36~P29 output.                                                                         |
| 59      | P28/ $\overline{\text{GEQ}}$     | O/I | FL segement P28 output / $\overline{\text{GEQ}}$ data input to diode (Not used).                    |
| 60      | P27/LW                           | O/I | FL segement P27 output / LW mode data input to diode (Not used).                                    |
| 61      | P26/DIGITAL-IN2                  | O/I | FL segement P26 output / Digital input data input to diode (VIDEO1, VIDEO2 only) (Not used).        |
| 62      | P25/RDS                          | O/I | FL segement P25 output / RDS data input to diode (Not used).                                        |
| 63      | P24/ $\overline{\text{BBE}}$     | O/I | FL segement P24 output / $\overline{\text{BBE}}$ data input to diode.                               |
| 64      | P23/AMST/WIDE                    | O/I | FL segement P23 output / AM stereo, wide band data input to diode (Not used).                       |
| 65      | P22/AM10K                        | O/I | FL segement P22 output / AM10kHz step data input to diode (Not used).                               |
| 66      | P21/KARAOKE                      | O/I | FL segement P21 output / KEY CON data input to diode.                                               |
| 67      | P20/OSD                          | O/I | FL segement P20 output / OSD data input to diode (Not used).                                        |
| 68      | P19/AC-3                         | O/I | FL segement P19 output / DOLBY DIGITAL data input to diode (Not used).                              |
| 69      | P18/DIGITAL-IN1                  | O/I | FL segement P18 output / Digital input data input to diode (VIDEO1, VIDEO2, VIDEO3, CD) (Not used). |
| 70      | P17/96kHz                        | O/I | FL segement P17 output / 96kHz data input to diode (Not used).                                      |
| 71      | P16/DTS                          | O/I | FL segement P16 output / DTS data input to diode (Not used).                                        |
| 72      | P15/ $\overline{\text{DSP}}$     | O/I | FL segement P15 output / $\overline{\text{DSP}}$ data input to diode (Not used).                    |
| 73      | P14                              | O   | FL segement P14 output.                                                                             |
| 74      | P13/STEREO                       | O/I | FL segement P13 output / Tuner stereo detected input.                                               |
| 75      | P12/ $\overline{\text{HP-MUTE}}$ | O/I | FL segement P12 output / $\overline{\text{Headphone}}$ mute detected.                               |
| 76      | P11/ $\overline{\text{I-MIC}}$   | O/I | FL segement P11 output / $\overline{\text{Mic}}$ input detected input.                              |
| 77,78   | P10,P9                           | O   | FL segement P10, P9 output.                                                                         |
| 79      | VDD2                             | –   | Power supply input.                                                                                 |
| 80      | -VFL                             | –   | Power supply input for FL display.                                                                  |
| 81      | P8                               | O   | FL segement P8 output.                                                                              |
| 82      | P7                               | O   | FL segement P7 output.                                                                              |
| 83      | P6                               | O   | FL segement P6 output.                                                                              |
| 84      | P5                               | O   | FL segement P5 output.                                                                              |
| 85~88   | P4~P1                            | O   | FL segement P4 ~ P1 output.                                                                         |
| 89~100  | G12~G1                           | O   | FL grid output G12 ~ G1.                                                                            |

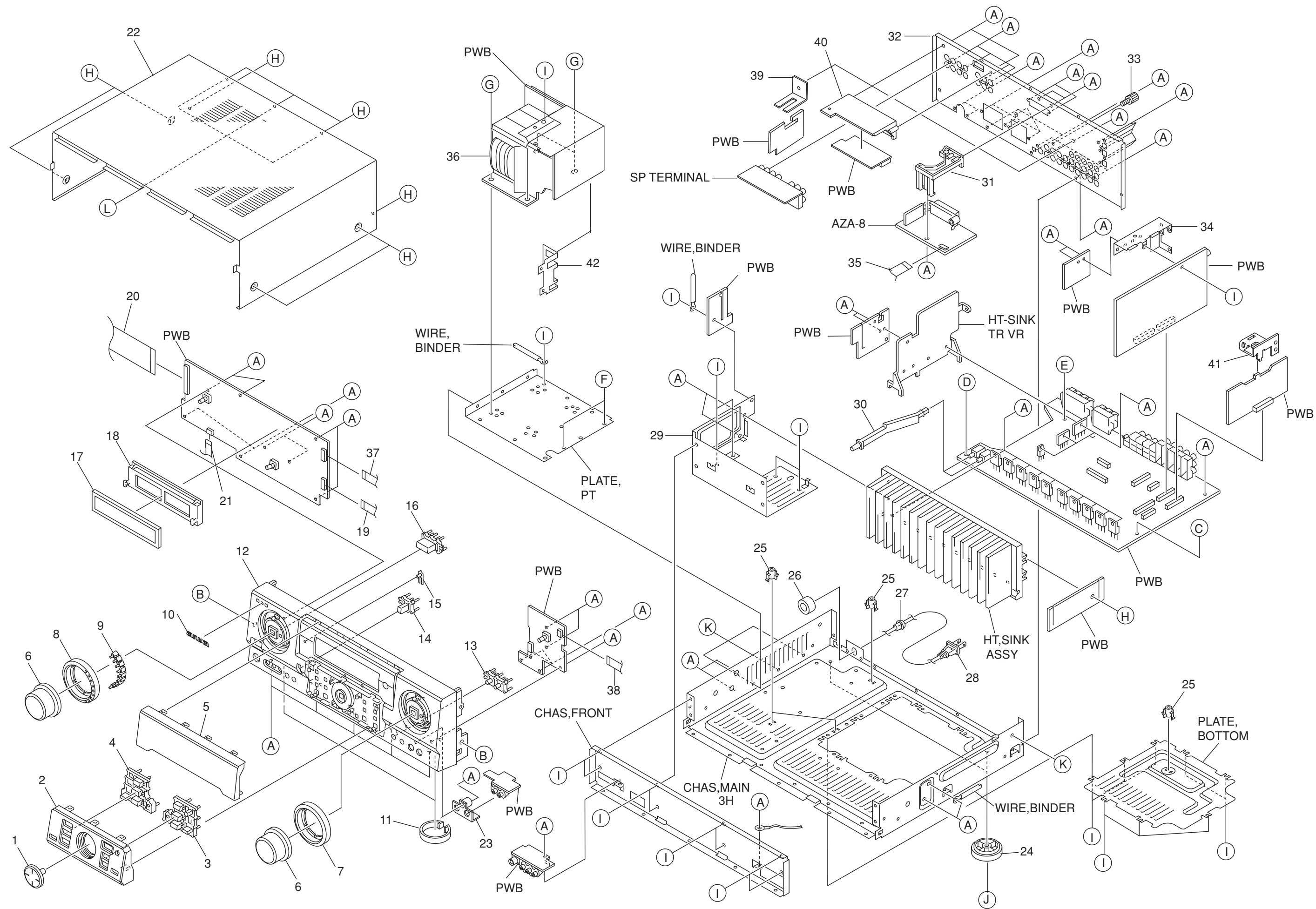
## ADJUSTMENT <TUNER / FRONT>

### < TUNER SECTION >

1. Clock Frequency Check  
Settings : • Test point : TP2(CLK)  
Method : Set to AM 1602kHz and check that the test point is  $2052\text{kHz} \pm 45\text{Hz}$ .
2. AM VT Check  
Settings : • Test point : TP1(VT)  
Method : Set to AM 1602kHz, AM 531kHz and check that the test point is less than 8.0V(1602kHz) and more than 0.6V(531kHz).
3. AM Tracking Adjustment  
Settings : • Test point : TP8(Lch), TP9(Rch)  
• Adjustment location : L981(1/3)  
Method : Set to AM 999kHz and adjust L981(1/3) so that the test point is maximum.
4. FM VT Check  
Settings : • Test point : TP1(VT)  
Method : Set to FM 108.0MHz and check that the test point is less than 8.0V.  
Then set to FM 87.5MHz and check that the test point is more than 0.5V.
5. FM Tracking Check  
Settings : • Test point : TP8(Lch), TP9(Rch)  
Method : • Set to FM 98.0MHz and check that the test point is less than 9.0dB $\mu$ V.
6. AM IF Adjustment  
Settings : • Test point : TP8(Lch), TP9(Rch)  
• Adjustment location :  
L772 ..... 450kHz
7. DC Balance / Mono Distortion Adjustment  
Settings : • Test point : TP3, TP4 (DC Balance)  
TP8(Lch), TP9(Rch) (Distortion)  
• Adjustment location : L771  
• Input level : 60dB $\mu$ V  
Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes  $0\text{V} \pm 0.04\text{V}$ .  
Next, check that the distortion is less than 1.3%.

### < FRONT SECTION >

8.  $\mu$ -CON OSC Adjustment  
Settings : • Test point : TP1 and GND  
• Adjustment location : L801  
Method : Insert AC plug while pressing ECO key and POWER key. Adjust L801 so that the frequency across the test point is  $78.40\text{Hz} \pm 0.08\text{Hz}$ .



## MECHANICAL PARTS LIST 1 / 1

| REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                | REF. NO. | PART NO.       | KANRI NO. | DESCRIPTION                  |
|----------|----------------|-----------|----------------------------|----------|----------------|-----------|------------------------------|
| 1        | 8A-AR3-054-010 |           | KNOB,RTRY JOG GLD          | 31       | 88-AR1-203-010 |           | HLDR,TU                      |
| 2        | 8A-AR3-032-010 |           | PANEL,FR H GLD             | 32       | 8A-AR3-035-010 |           | PANEL,REAR HTNM              |
| 3        | 8A-AR3-060-010 |           | KEY,ASSY ENTER H GLD       | 33       | 87-033-209-010 |           | TERMINAL, EARTH              |
| 4        | 8A-AR3-059-010 |           | KEY,ASSY DOLBY H GLD       | 34       | 8Z-AR1-219-110 |           | HLDR,PWB PRO                 |
| 5        | 8A-AR3-004-010 |           | WINDOW,DISP 5.1CH          | 35       | 88-912-161-110 |           | FF-CABLE,12P 1.25 160MM      |
| 6        | 8A-AR3-055-110 |           | KNOB,RTRY VOL GLD          | △ 36     | 8A-AR3-606-010 |           | PT,AAR-3 (HC)                |
| 7        | 8A-AR3-068-010 |           | RING,VOL GLD               | 37       | 8A-AR3-645-010 |           | FF-CABLE,6P 1.25 380MM       |
| 8        | 8A-AR3-069-010 |           | RING,FUN GLD               | 38       | 88-907-301-110 |           | FF-CABLE, 7P 1.25            |
| 9        | 8A-AR3-009-010 |           | REFLECTOR,FUN              | 39       | 8A-AR1-201-010 |           | HLDR,EQ PWB                  |
| 10       | 87-CE3-023-010 |           | BADGE,ATWA 30N SILV        | 40       | 88-AR1-211-110 |           | HLDR,AC SW                   |
| 11       | 8Z-AR1-020-110 |           | RING,FOOT SIL              | 41       | 88-AR2-205-110 |           | HLDR,PWB OSD                 |
| 12       | 8A-AR3-031-010 |           | CABI,FR H GLD              | 42       | 8A-AR4-202-010 |           | HLDR,PWB PT                  |
| 13       | 8A-AR3-052-010 |           | KEY,BAL GLD                | A        | 87-067-703-010 |           | TAPPING SCREW, BVT2+3-10     |
| 14       | 8A-AR3-051-010 |           | KEY,ECO GLD                | B        | 87-591-095-410 |           | TAPPING SCREW, QIT+3-8 (GLD) |
| 15       | 8A-AR3-010-010 |           | REFLECTOR,ECO              | C        | 87-067-633-010 |           | TAPPING SCREW, BVT2+3-8      |
| 16       | 8A-AR3-050-010 |           | KEY,POWER GLD              | D        | 87-067-581-010 |           | TAPPING SCREW, BVT2+3-15     |
| 17       | 8A-AR1-602-010 |           | FL,BJ759GK                 | E        | 87-067-632-010 |           | TAPPING SCREW, BVT2+3-15     |
| 18       | 8A-AR3-201-010 |           | GUIDE,FL                   | F        | 87-067-585-010 |           | TAPPING SCREW, BVTT+4-6      |
| 19       | 88-916-101-110 |           | FF-CABLE, 16P 1.25 100MM   | G        | 87-078-191-010 |           | S-SCREW,IT+4-10              |
| 20       | 8A-AR3-643-010 |           | FF-CABLE,32P 1.25 430MM    | H        | 87-067-641-010 |           | UTT2+3-8 (W/O SLOT) BL       |
| 21       | 88-908-101-110 |           | FF-CABLE, 8P 1.25 10MM     | I        | 87-067-584-010 |           | TAPPING SCREW, BVT2+3-6      |
| 22       | 8Z-AR1-050-110 |           | CABI,STEEL GLD             | J        | 87-067-689-010 |           | TAPPING SCREW, BVTT+3-8      |
| 23       | 8A-AR3-053-010 |           | COVER, MIC GLD             | K        | 87-721-095-410 |           | QT2+3-8GLD W/O SLOT          |
| 24       | 8Z-AR1-021-110 |           | FOOT,REAR                  | L        | 8A-AR2-211-010 |           | W3.5-8-1 W/ADH               |
| 25       | 88-AR1-218-010 |           | HLDR,PWB H8.9              |          |                |           |                              |
| 26       | 87-003-317-010 |           | F-BEAD,F0H2515-LG7         |          |                |           |                              |
| 27       | 87-085-185-010 |           | BUSHING, AC CORD (E)       |          |                |           |                              |
| △ 28     | 87-A80-092-010 |           | AC CORD ASSY,E BLK SUN FAI |          |                |           |                              |
| 29       | 8Z-AR1-205-010 |           | HLDR,HT-SINK               |          |                |           |                              |
| 30       | 8A-AR3-056-010 |           | BTN,SP GLD                 |          |                |           |                              |

## COLOR NAME TABLE

| Basic color symbol | Color             | Basic color symbol | Color              | Basic color symbol | Color              |
|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| B                  | Black             | C                  | Cream              | D                  | Orange             |
| G                  | Green             | H                  | Gray               | L                  | Blue               |
| LT                 | Transparent Blue  | N                  | Gold               | P                  | Pink               |
| R                  | Red               | S                  | Silver             | ST                 | Titan Silver       |
| T                  | Brown             | V                  | Violet             | W                  | White              |
| WT                 | Transparent White | Y                  | Yellow             | YT                 | Transparent Yellow |
| LM                 | Metallic Blue     | LL                 | Light Blue         | GT                 | Transparent Green  |
| LD                 | Dark Blue         | DT                 | Transparent Orange | GM                 | Metallic Green     |
| YM                 | Metallic Yellow   | DM                 | Metallic Orange    | PT                 | Transparent Pink   |
| LA                 | Aqua Blue         | GL                 | Light Green        |                    |                    |

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