

## 1. STANDARD CABLES

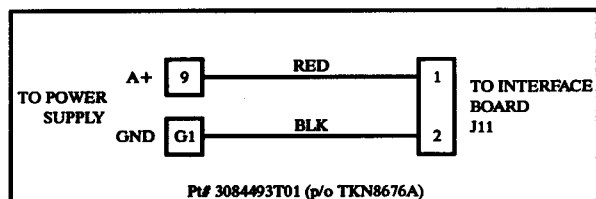


Figure 1. Power Cable

| Power Cable  |     |        |
|--------------|-----|--------|
| Pin Number   |     | Signal |
| Power Supply | J11 |        |
| 9            | 1   | A+     |
| G1           | 2   | GND    |

Table 1

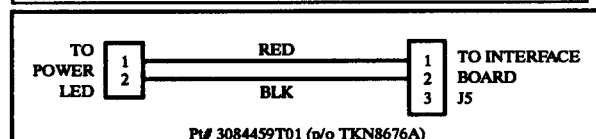


Figure 2. Power LED Cable

| Power LED Cable |    |           |
|-----------------|----|-----------|
| Pin Number      |    | Signal    |
| Power LED       | J5 |           |
| 1               | 1  | PWR_LED_A |
| 2               | 2  | PWR_LED_K |
|                 | 3  | NC        |

Table 2

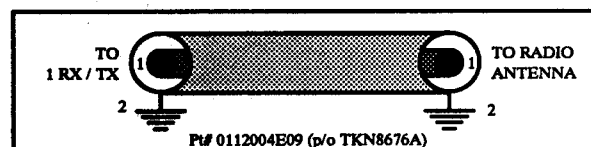


Figure 3. RF Cable

| RF Coaxial Cable |       |         |
|------------------|-------|---------|
| Pin Number       |       | Signal  |
| 1 RX             | Radio |         |
| 1                | 1     | RF      |
| 2                | 2     | ANA_GND |

Table 3

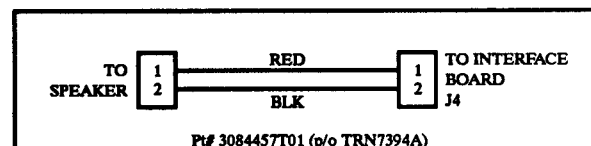


Figure 4. Speaker Cable

| Speaker Cable |    |         |
|---------------|----|---------|
| Pin Number    |    | Signal  |
| Speaker       | J4 |         |
| 1             | 1  | SPKR_HI |
| 2             | 2  | SPKR_LO |

Table 4

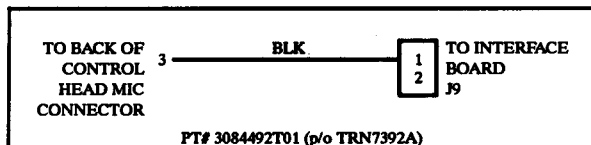


Figure 5. Monitor Cable

| Monitor Cable |    |        |
|---------------|----|--------|
| Pin Number    |    | Signal |
| Control Head  | J9 |        |
| 3             | 1  | HUB    |
|               | 2  | NC     |

Table 5

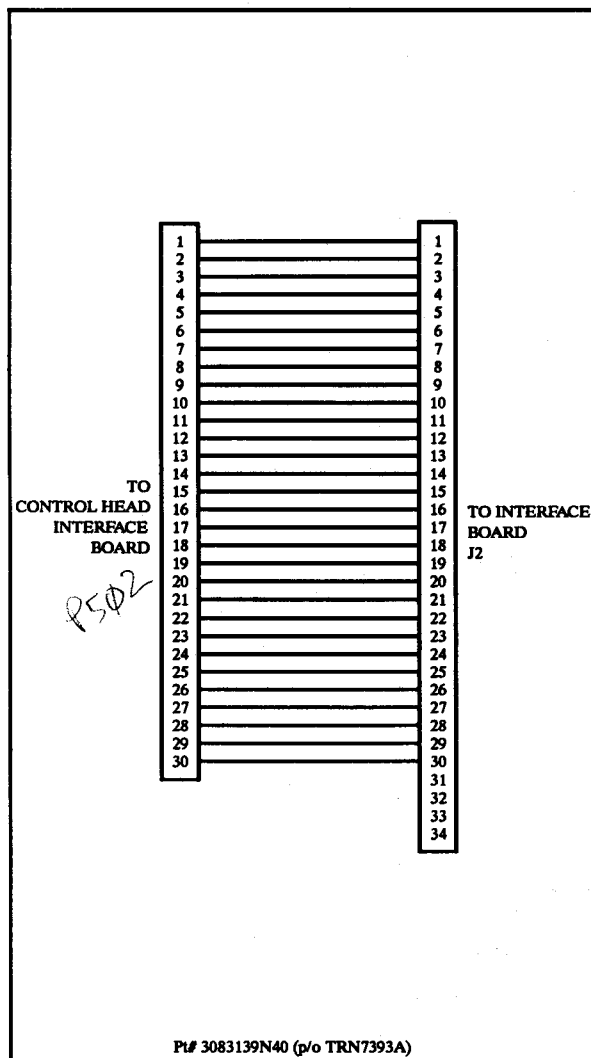


Figure 6. Control Head Cable

| Control Head Cable |    |                |
|--------------------|----|----------------|
| Pin Number         |    | Signal         |
| Control Head       | J2 |                |
| 1                  | 1  | VSENSE1        |
| 2                  | 2  | NC             |
| 3                  | 3  | NC             |
| 4                  | 4  | VSENSE2        |
| 5                  | 5  | ANA_GND        |
| 6                  | 6  | SPARE2         |
| 7                  | 7  | SPARE1         |
| 8                  | 8  | ANA_GND        |
| 9                  | 9  | BUS+           |
| 10                 | 10 | BUS-           |
| 11                 | 11 | A+             |
| 12                 | 12 | SWB +          |
| 13                 | 13 | BUSY           |
| 14                 | 14 | SWB +          |
| 15                 | 15 | IGN            |
| 16                 | 16 | RESET          |
| 17                 | 17 | VO3            |
| 18                 | 18 | VI3            |
| 19                 | 19 | <u>HUB</u>     |
| 20                 | 20 | VI1            |
| 21                 | 21 | VO1            |
| 22                 | 22 | VO2            |
| 23                 | 23 | SNET_KID       |
| 24                 | 24 | <u>SNET_WE</u> |
| 25                 | 25 | <u>PTT</u>     |
| 26                 | 26 | MIC_LO         |
| 27                 | 27 | SNET_KEY       |
| 28                 | 28 | HUB            |
| 29                 | 29 | NC             |
| 30                 | 30 | CTRL_HD_MIC    |
|                    | 31 | NC             |
|                    | 32 | NC             |
|                    | 33 | NC             |
|                    | 34 | NC             |

Table 6

Overbar denotes active low signal

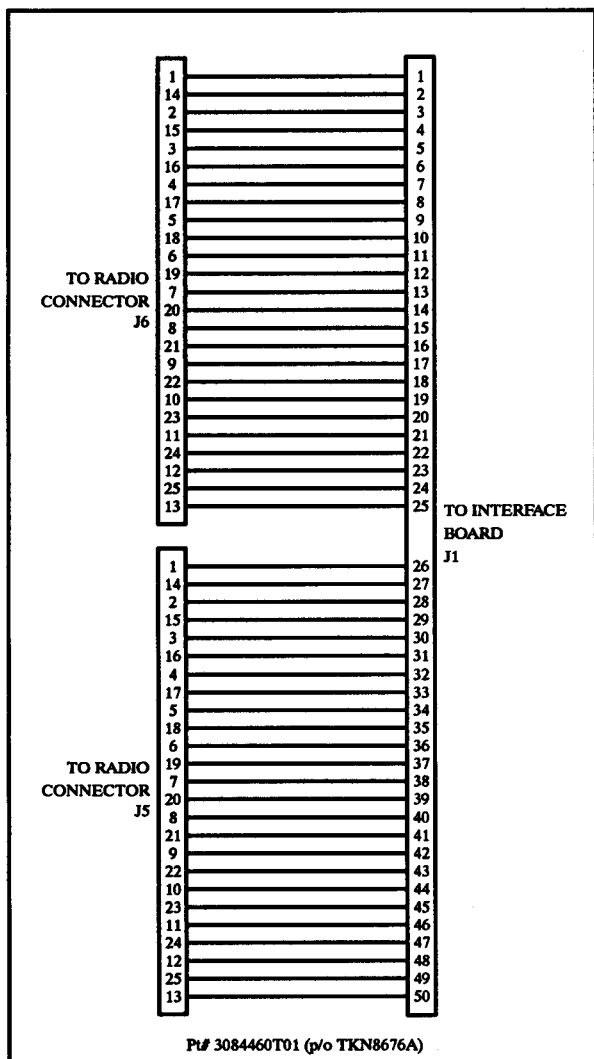


Figure 7. Radio Cable

| Radio Cable |    |    |               |
|-------------|----|----|---------------|
| Pin Number  |    |    | Signal        |
| Radio       |    | J1 |               |
| J6          | J5 |    |               |
| 1           |    | 1  | PTT           |
| 14          |    | 2  | NC            |
| 2           |    | 3  | NC            |
| 15          |    | 4  | RSSI          |
| 3           |    | 5  | NC            |
| 16          |    | 6  | SNET_WE       |
| 4           |    | 7  | SNET_KEY      |
| 17          |    | 8  | SNET_KID      |
| 5           |    | 9  | NC            |
| 18          |    | 10 | DIG_GND (NC)† |

|    |    |    |                   |
|----|----|----|-------------------|
| 6  |    | 11 | NC                |
| 19 |    | 12 | NC                |
| 7  |    | 13 | AUX_RX_AUD        |
| 20 |    | 14 | NC                |
| 8  |    | 15 | AUX_TX_AUD        |
| 21 |    | 16 | NC                |
| 9  |    | 17 | DET_AUD           |
| 22 |    | 18 | SWB +             |
| 10 |    | 19 | ANA_GND (NC)†     |
| 23 |    | 20 | CHAN_ACT          |
| 11 |    | 21 | MIC_LO (NC)†      |
| 24 |    | 22 | SKPR_LO           |
| 12 |    | 23 | RAD_MIC           |
| 25 |    | 24 | SPKR_HI           |
| 13 |    | 25 | NC                |
|    | 1  | 26 | NC                |
|    | 14 | 27 | BUS-              |
|    | 2  | 28 | FLT_AUD_SHL (NC)† |
|    | 15 | 29 | RSSI              |
|    | 3  | 30 | IGN               |
|    | 16 | 31 | VO1               |
|    | 4  | 32 | NC                |
|    | 17 | 33 | VO2               |
|    | 5  | 34 | BUS +             |
|    | 18 | 35 | DIG_GND (NC)†     |
|    | 6  | 36 | FILT_AUD          |
|    | 19 | 37 | RESET             |
|    | 7  | 38 | AUX_RX_AUD        |
|    | 20 | 39 | NC                |
|    | 8  | 40 | AUX_TX_AUD        |
|    | 21 | 41 | BUS_SHLD (NC)†    |
|    | 9  | 42 | DET_AUD           |
|    | 22 | 43 | SWB +             |
|    | 10 | 44 | ANA_GND (NC)†     |
|    | 23 | 45 | BUSY              |
|    | 11 | 46 | MIC_LO (NC)†      |
|    | 24 | 47 | SPKR_LO           |
|    | 12 | 48 | RAD_MIC           |
|    | 25 | 49 | SPKR_HI           |
|    | 13 | 50 | EMER              |

Table 7

Overbar denotes active low signal

† Denotes TRC signal name

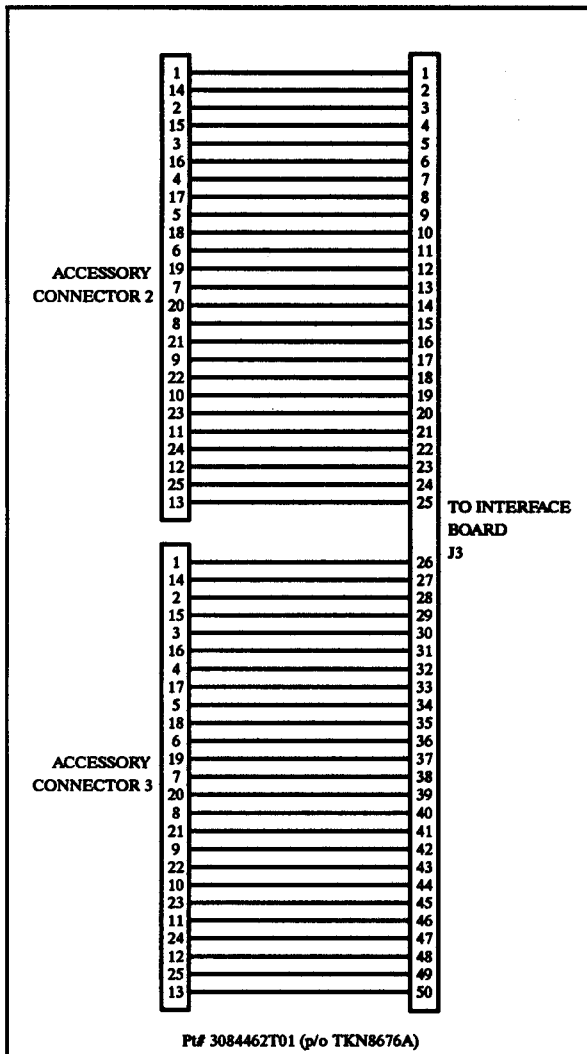


Figure 8. Accessory Cable

| Accessory Cable |   |    |                                |
|-----------------|---|----|--------------------------------|
| Pin Number      |   | J3 | Signal                         |
| Accessory       |   |    |                                |
| 2               | 3 |    |                                |
| 1               |   | 1  | RX+ (LINE1+) <sup>†</sup>      |
| 14              |   | 2  | DGT_RX+ (SPKR_HI) <sup>†</sup> |
| 2               |   | 3  | AUD_SHLD                       |
| 15              |   | 4  | DGT_RX- (SPKR_LO) <sup>†</sup> |
| 3               |   | 5  | TX+ (LINE2+) <sup>†</sup>      |
| 16              |   | 6  | RX- (LINE1-) <sup>†</sup>      |
| 4               |   | 7  | MRTI_RX_AUD                    |
| 17              |   | 8  | MRTI_TX_AUD                    |
| 5               |   | 9  | A+                             |

|    |    |    |                           |
|----|----|----|---------------------------|
| 18 |    | 10 | VO3                       |
| 6  |    | 11 | BUSY                      |
| 19 |    | 12 | BUS-                      |
| 7  |    | 13 | BUS+                      |
| 20 |    | 14 | RESET                     |
| 8  |    | 15 | MRTI_AUD_CTRL             |
| 21 |    | 16 | 5V                        |
| 9  |    | 17 | VO1                       |
| 22 |    | 18 | VI3                       |
| 10 |    | 19 | PTT                       |
| 23 |    | 20 | VO2                       |
| 11 |    | 21 | TX- (LINE2-) <sup>†</sup> |
| 24 |    | 22 | MONITOR                   |
| 12 |    | 23 | DIG_GND                   |
| 25 |    | 24 | NC                        |
| 13 |    | 25 | VII                       |
|    | 1  | 26 | PS_AUD_IN                 |
|    | 14 | 27 | NC                        |
|    | 2  | 28 | ANA_GND                   |
|    | 15 | 29 | NC                        |
|    | 3  | 30 | AUX_RX_AUD                |
|    | 16 | 31 | PS_AUD_OUT                |
|    | 4  | 32 | DET_AUD                   |
|    | 17 | 33 | AUX_TX_AUD                |
|    | 5  | 34 | A+                        |
|    | 18 | 35 | SWB+                      |
|    | 6  | 36 | BUSY                      |
|    | 19 | 37 | BUS-                      |
|    | 7  | 38 | BUS+                      |
|    | 20 | 39 | RESET                     |
|    | 8  | 40 | BUS_SHLD                  |
|    | 21 | 41 | NC                        |
|    | 9  | 42 | VSENSE1                   |
|    | 22 | 43 | SNET_LED                  |
|    | 10 | 44 | VSENSE1_SHLD              |
|    | 23 | 45 | VSENSE2                   |
|    | 11 | 46 | NC                        |
|    | 24 | 47 | VSENSE2_SHLD              |
|    | 12 | 48 | DIG_GND                   |
|    | 25 | 49 | NC                        |
|    | 13 | 50 | EMER                      |

Table 8

Overbar denotes active low signal  
<sup>†</sup> denotes TRC signal name

## 2. OPTIONAL CABLES

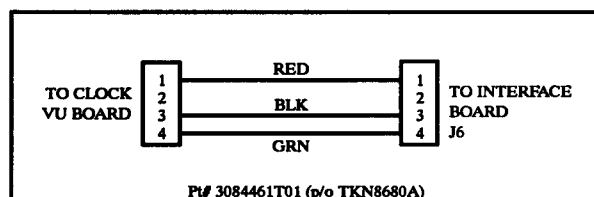


Figure 9. Clock/VU Cable

| Clock/VU Cable |    |         |
|----------------|----|---------|
| Pin Number     |    | Signal  |
| Clock/VU       | J6 |         |
| 1              | 1  | VU_AUD  |
| 2              | 2  | NC      |
| 3              | 3  | ANA_GND |
| 4              | 4  | A+      |

Table 9

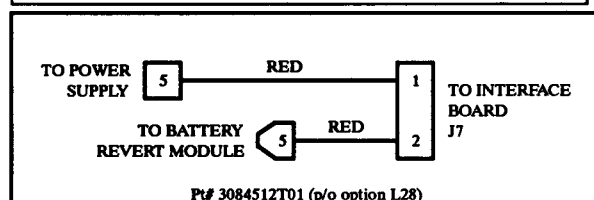


Figure 10. Battery Revert Cable

| Battery Revert Sense Cable |                |    |
|----------------------------|----------------|----|
| Pin Number                 |                |    |
| Power Supply               | Battery Revert | J7 |
| 5                          |                | 1  |
|                            | 5              | 2  |

Table 10

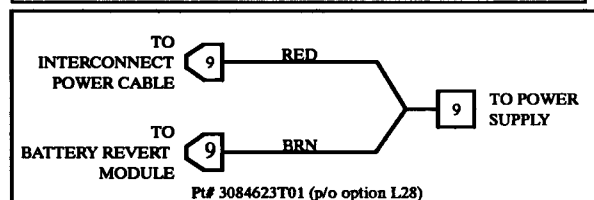


Figure 11. Battery Power Cable

| Battery Power Cable |                |                 |        |
|---------------------|----------------|-----------------|--------|
| Pin Number          |                |                 | Signal |
| Power Supply        | Battery Revert | Interface Power |        |
| 9                   | 9              | 9               | A+     |

Table 11

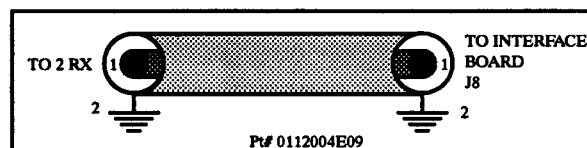


Figure 12. Discriminator Audio Cable

| Discriminator Coaxial Cable |    |         |
|-----------------------------|----|---------|
| Pin Number                  |    | Signal  |
| 2 RX                        | J8 |         |
| 1                           | 1  | DET_AUD |
| 2                           | 2  | ANA_GND |

Table 12

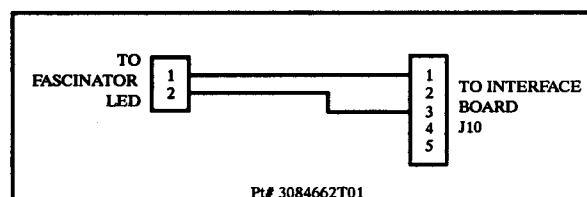


Figure 13. Fascinator LED Cable

| Fascinator LED Cable |     |            |
|----------------------|-----|------------|
| Pin Number           |     | Signal     |
| Fascinator           | J10 |            |
| 1                    | 1   | SNET_LED_A |
|                      | 2   | NC         |
| 2                    | 3   | DIG_GND    |
|                      | 4   | NC         |
|                      | 5   | NC         |

Table 13

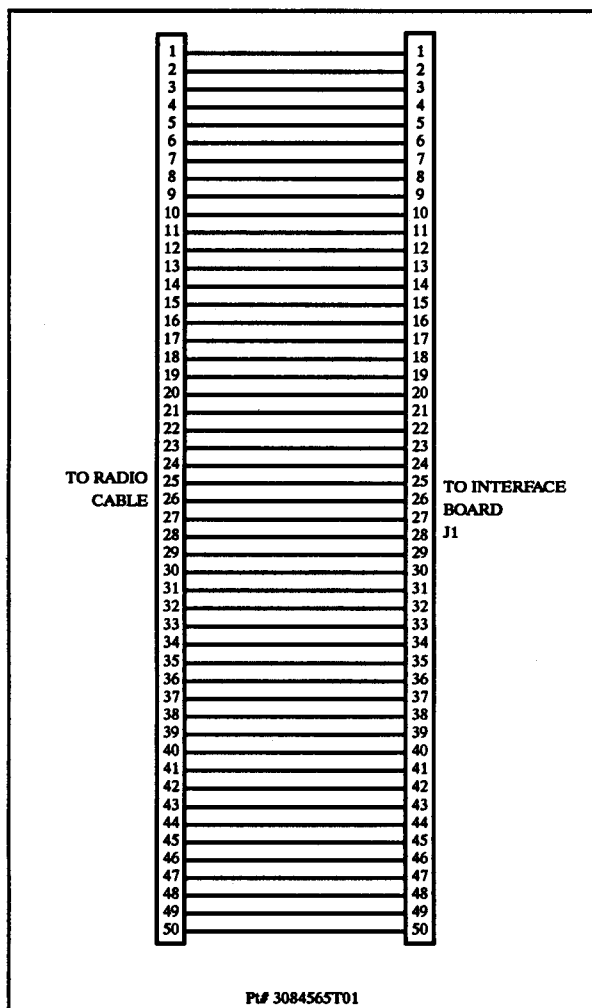


Figure 14. Service Cable

|    |    |                    |
|----|----|--------------------|
| 12 | 12 | NC                 |
| 13 | 13 | AUX_RX_AUD         |
| 14 | 14 | NC                 |
| 15 | 15 | AUX_TX_AUD         |
| 16 | 16 | NC                 |
| 17 | 17 | DET_AUD            |
| 18 | 18 | SWB +              |
| 19 | 19 | ANA_GND (NC)†      |
| 20 | 20 | CHAN_ACT           |
| 21 | 21 | MIC_LO (NC)†       |
| 22 | 22 | SKPR_LO            |
| 23 | 23 | RAD_MIC            |
| 24 | 24 | SPKR_HI            |
| 25 | 25 | NC                 |
| 26 | 26 | NC                 |
| 27 | 27 | BUS-               |
| 28 | 28 | FLT_AUD_SHLD (NC)† |
| 29 | 29 | RSSI               |
| 30 | 30 | IGN                |
| 31 | 31 | VO1                |
| 32 | 32 | NC                 |
| 33 | 33 | VO2                |
| 34 | 34 | BUS+               |
| 35 | 35 | DIG_GND (NC)†      |
| 36 | 36 | FILT_AUD           |
| 37 | 37 | RESET              |
| 38 | 38 | AUX_RX_AUD         |
| 39 | 39 | NC                 |
| 40 | 40 | AUX_TX_AUD         |
| 41 | 41 | BUS_SHLD (NC)†     |
| 42 | 42 | DET_AUD            |
| 43 | 43 | SWB +              |
| 44 | 44 | ANA_GND (NC)†      |
| 45 | 45 | BUSY               |
| 46 | 46 | MIC_LO (NC)†       |
| 47 | 47 | SPKR_LO            |
| 48 | 48 | RAD_MIC            |
| 49 | 49 | SPKR_HI            |
| 50 | 50 | EMER               |

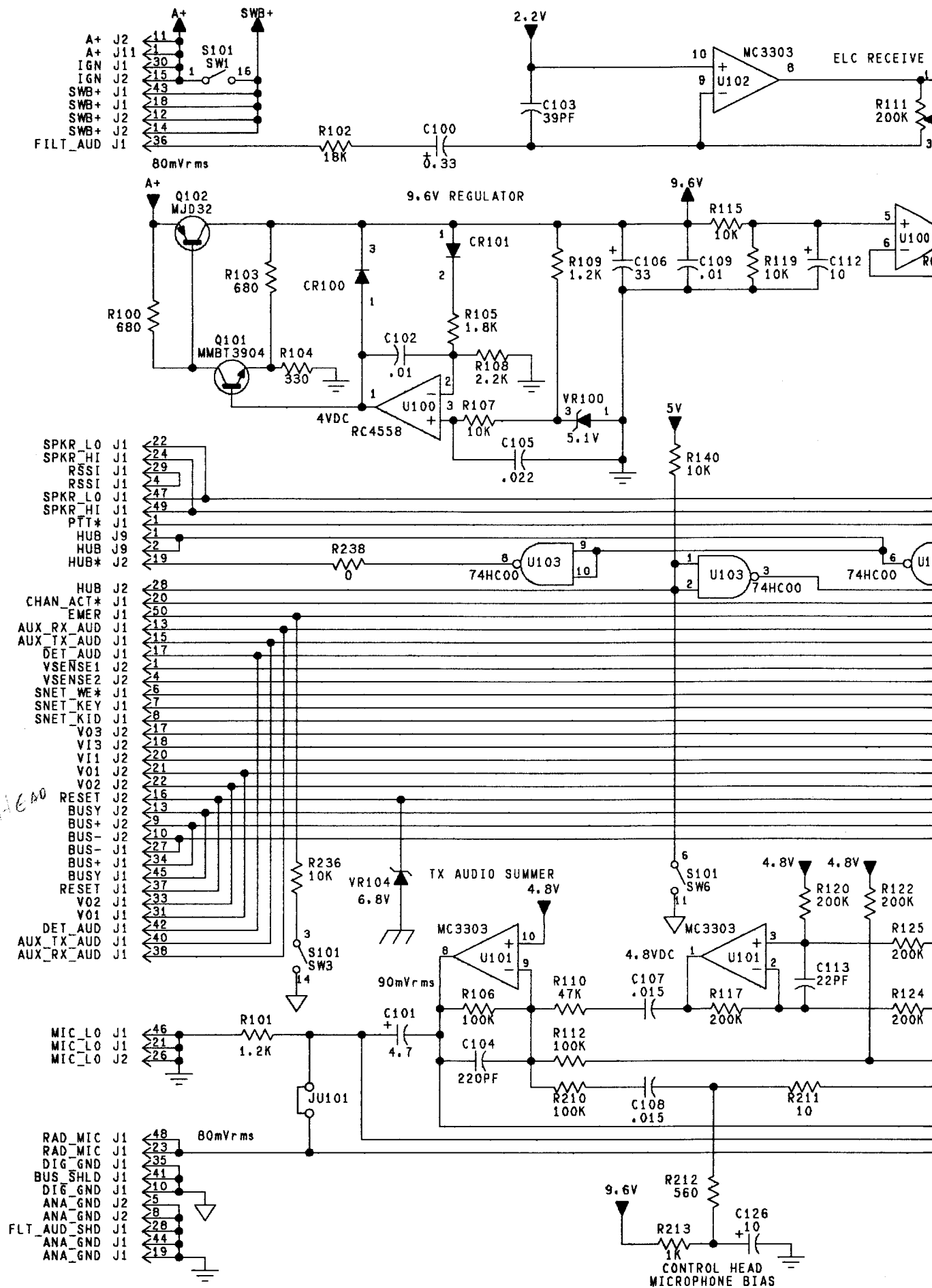
Table 14

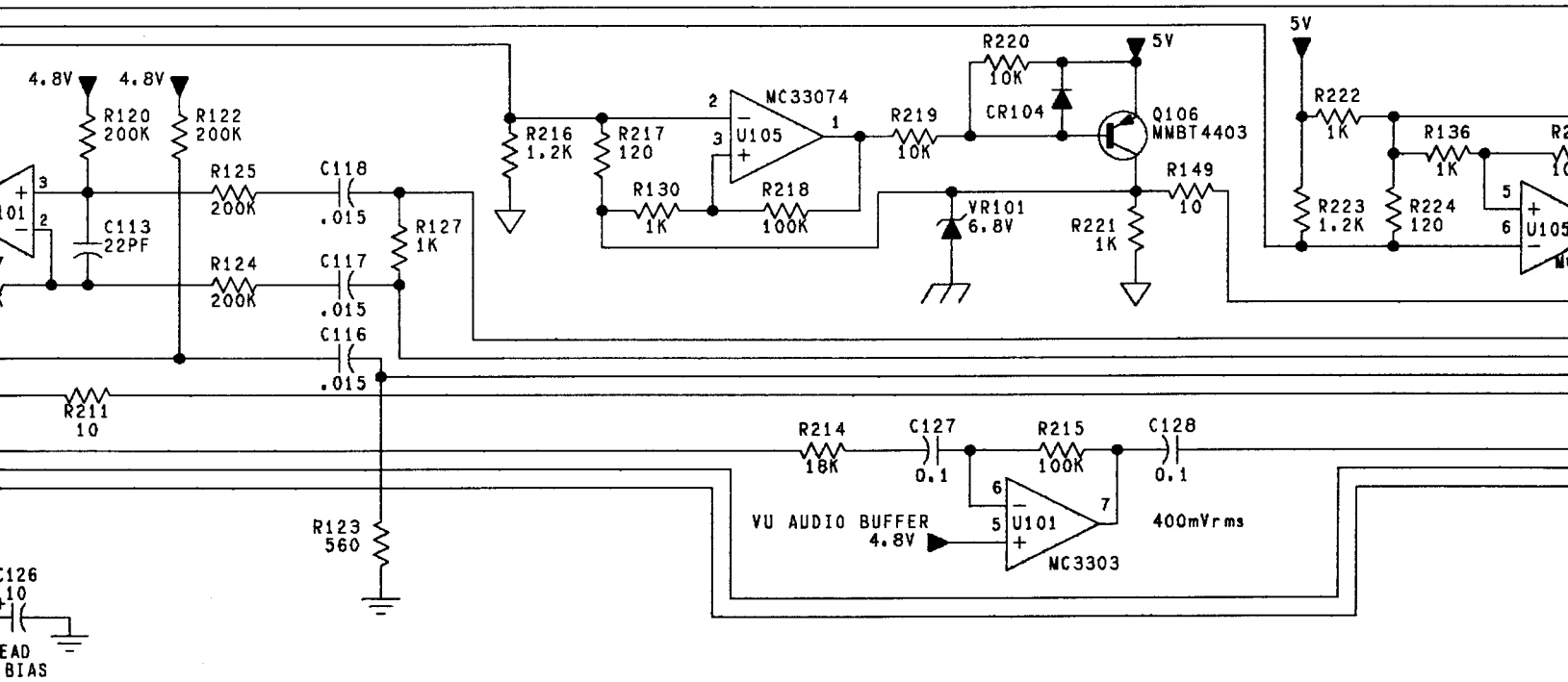
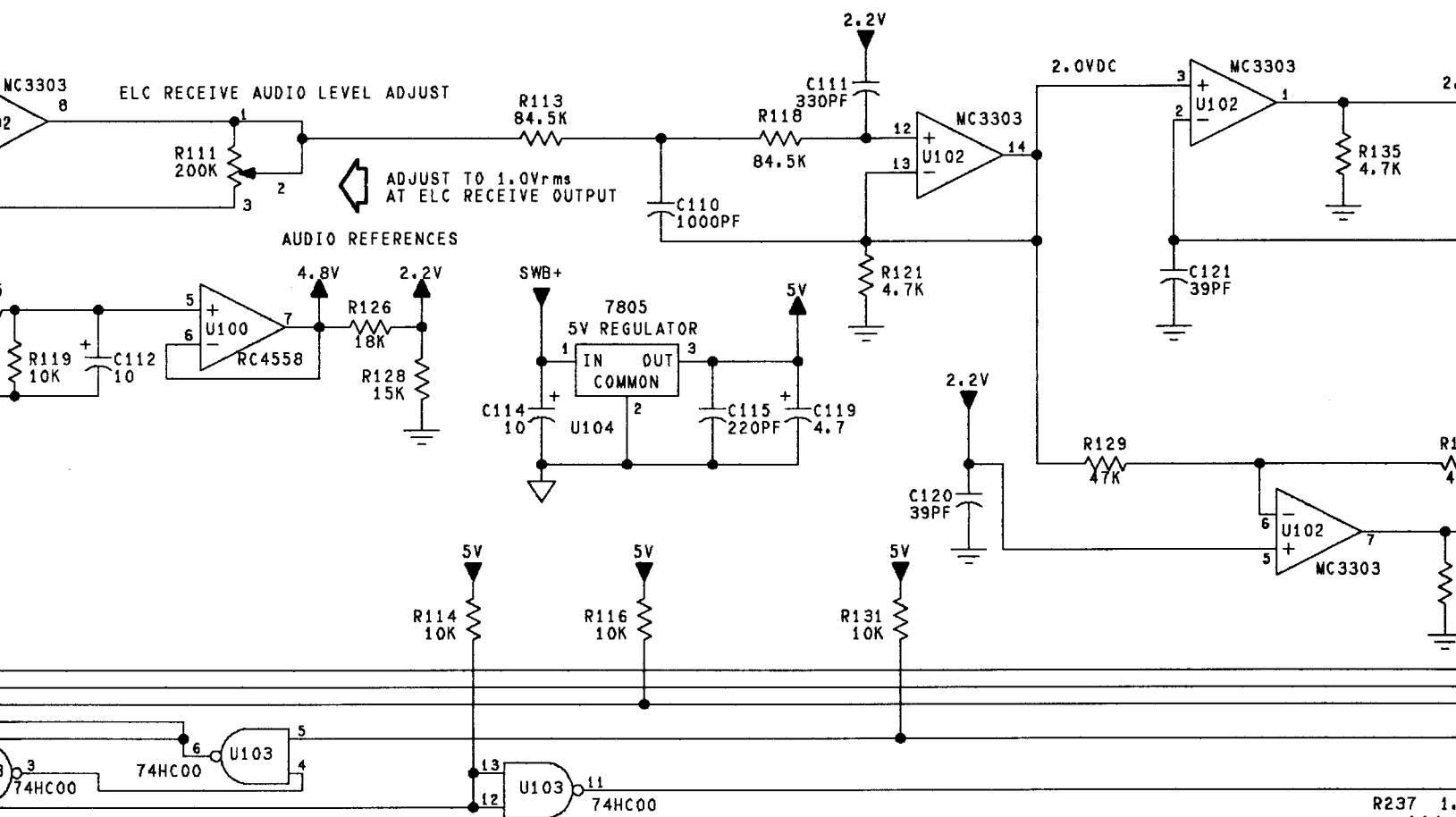
Overbar denotes active low signal  
† Denotes TRC signal

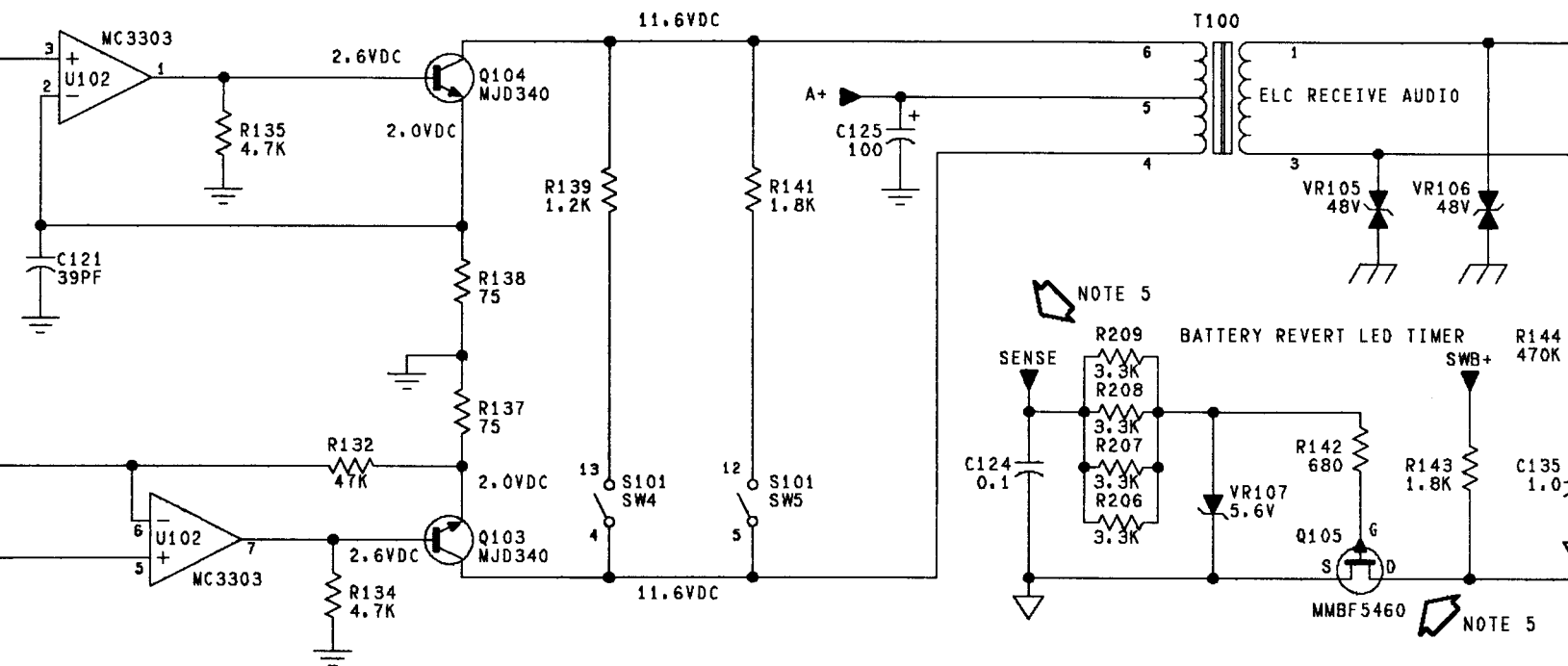
Service Cable

| Pin Number  |    | Signal        |
|-------------|----|---------------|
| Radio Cable | J1 |               |
| 1           | 1  | PTT           |
| 2           | 2  | NC            |
| 3           | 3  | NC            |
| 4           | 4  | RSSI          |
| 5           | 5  | NC            |
| 6           | 6  | SNET_WE       |
| 7           | 7  | SNET_KEY      |
| 8           | 8  | SNET_KID      |
| 9           | 9  | NC            |
| 10          | 10 | DIG_GND (NC)† |
| 11          | 11 | NC            |

Extends Radio Cable on pg 3



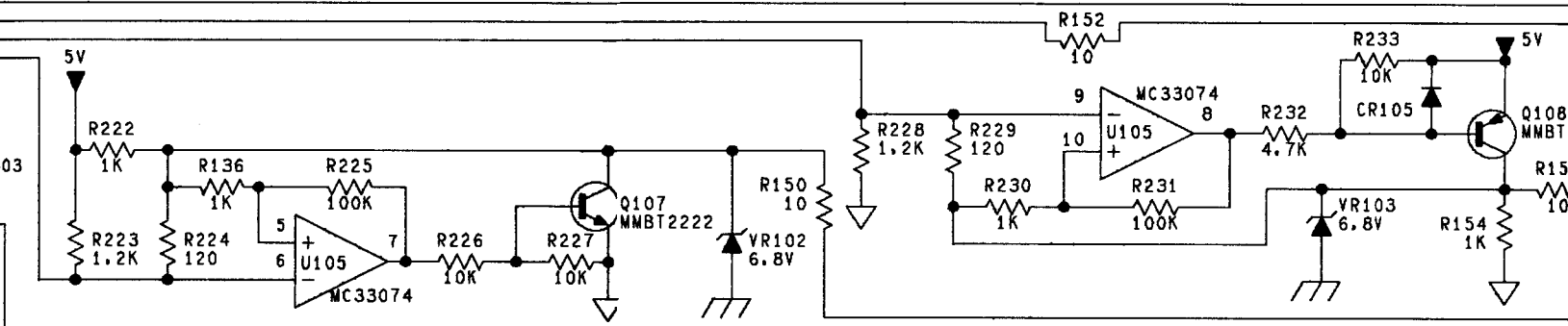


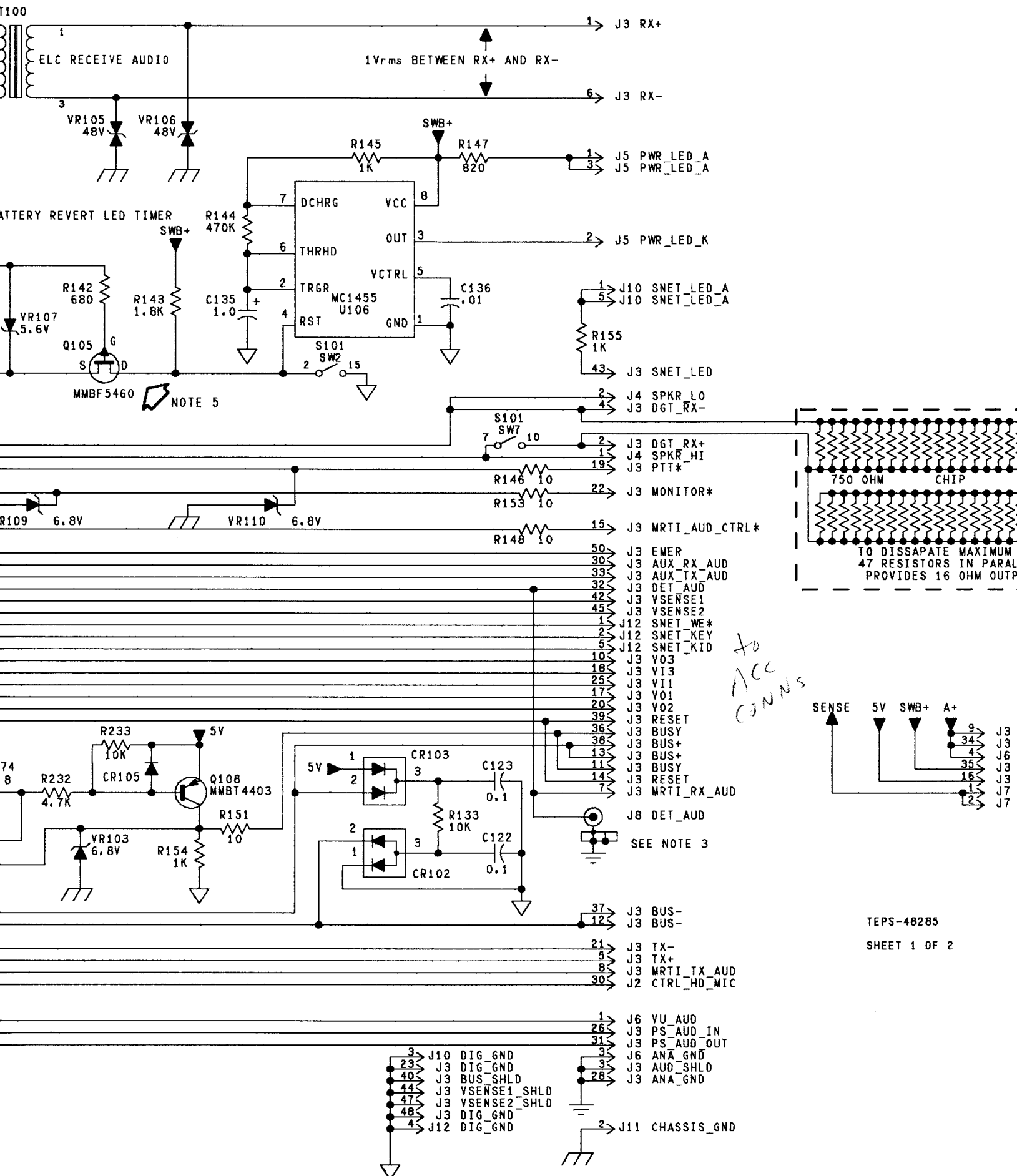


R237 1.8K

VR108 6.8V

VR109 6.8V





TEPS-48285

SHEET 1 OF 2

# AUDIO INTERFACE BOARD

MODEL TRN7391A

SCHEMATIC DIAGRAM, CIRCUIT BOARD DETAIL  
AND PARTS LIST

J3 RX+

J3 RX-

J5 PWR\_LED\_A  
J5 PWR\_LED\_A

J5 PWR\_LED\_K

J10 SNET\_LED\_A  
J10 SNET\_LED\_A

5

J3 SNET\_LED

J4 SPKR\_LO  
J3 DGT\_RX-

J3 DGT\_RX+  
J4 SPKR\_HI  
J3 PTT\*  
J3 MONITOR\*  
J3 MRTI\_AUD\_CTRL\*

J3 EMER  
J3 AUX\_RX\_AUD  
J3 AUX\_TX\_AUD  
J3 DET\_AUD  
J3 YSENSE1  
J3 YSENSE2  
J12 SNET\_WE\*  
J12 SNET\_KEY  
J12 SNET\_KID

J3 V03  
J3 VI3  
J3 VI1  
J3 V01  
J3 V02  
J3 RESET  
J3 BUSY  
J3 BUS+  
J3 BUS+  
J3 BUSY  
J3 RESET  
J3 MRTI\_RX\_AUD  
J8 DET\_AUD

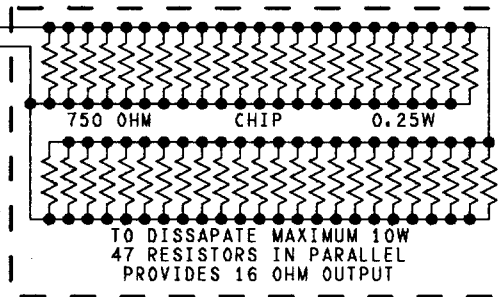
SEE NOTE 3

J3 BUS-  
J3 BUS-

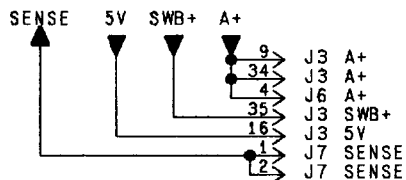
J3 TX-  
J3 TX+  
J3 MRTI\_TX\_AUD  
J2 CTRL\_HD\_MIC

J6 VU\_AUD  
J3 PS\_AUD\_IN  
J3 PS\_AUD\_OUT  
J6 ANA\_GND  
J3 AUD\_SHLD  
J3 ANA\_GND

J11 CHASSIS\_GND



to  
ACC  
CONN



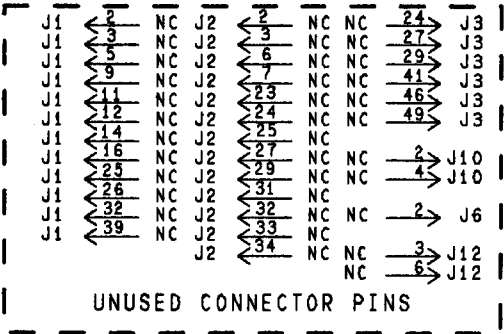
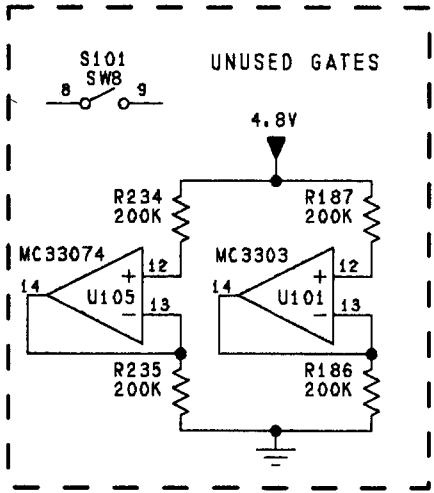
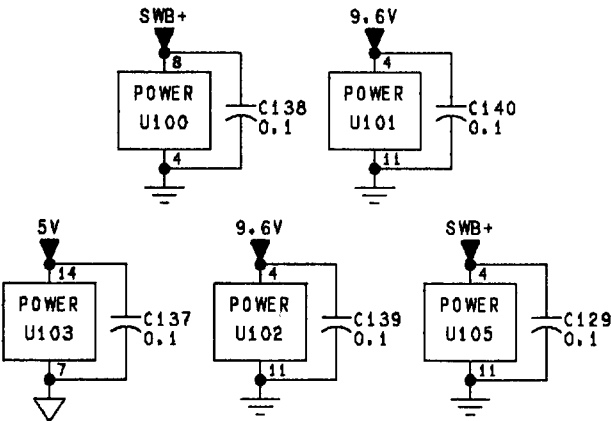
TEPS-48285

SHEET 1 OF 2

AUDIO INTERFACE BOARD  
MODEL TRN7391  
SCHEMATIC DIAGRAM, CIRCUIT BOARD DETAIL  
AND PARTS LIST

| SWITCH | ON (CLOSED)             |
|--------|-------------------------|
| SW1    | *FRONT PANEL PWR SWITCH |
| SW2    | *STANDARD               |
| SW3    | *EMERGENCY ACTIVE HIGH  |
| SW4    | *600 OHM IMPEDANCE      |
| SW5    | 900 OHM IMPEDANCE       |
| SW6    | OPTION L73              |
| SW7    | OPTION L791             |

SWITCH NOTES:  
1. AN ASTERISK [\*] INDICATES DEFA  
2. SWITCHE SWB IS UNUSED.  
3. SW1, SW6, AND SW7 MUST BE ON F



|       |
|-------|
| JUMPE |
| JU101 |
| JUMPE |
| 1. AN |
| FA    |

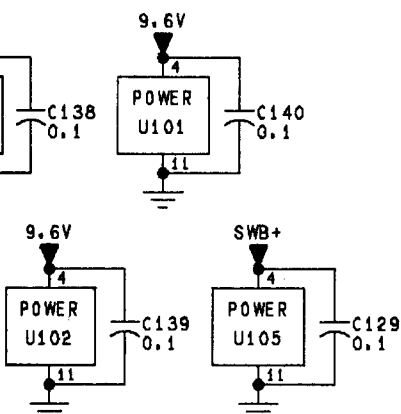
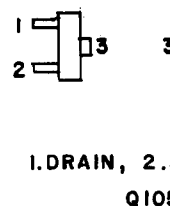
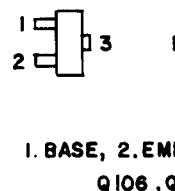
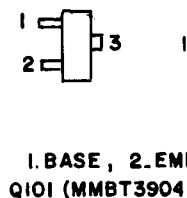
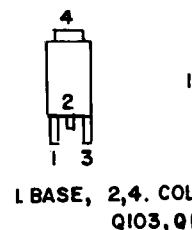
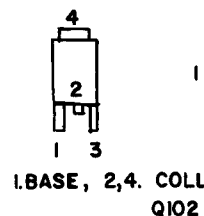
- SCHEMAT
1. UNL
  2. AN /
  3. CON
  4. ALL
  5. BAT

|   |
|---|
| P |
| S |
|   |
|   |

TEPS-482  
SHEET 2 (

| SWITCH | ON (CLOSED)                      | OFF (OPEN)                    |
|--------|----------------------------------|-------------------------------|
| SW1    | *FRONT PANEL PWR SWITCH INACTIVE | FRONT PANEL PWR SWITCH ACTIVE |
| SW2    | *STANDARD                        | OPTION L28                    |
| SW3    | *EMERGENCY ACTIVE HIGH           | EMERGENCY ACTIVE LOW          |
| SW4    | *600 OHM IMPEDANCE               | 900 OHM IMPEDANCE             |
| SW5    | 900 OHM IMPEDANCE                | *600 OHM IMPEDANCE            |
| SW6    | OPTION L73                       | *STANDARD                     |
| SW7    | OPTION L791                      | *STANDARD                     |

SWITCH NOTES:  
1. AN ASTERISK (\*) INDICATES DEFAULT FACTORY SETTING.  
2. SWITCHE SW8 IS UNUSED.  
3. SW1, SW6, AND SW7 MUST BE ON FOR OPTION L791.

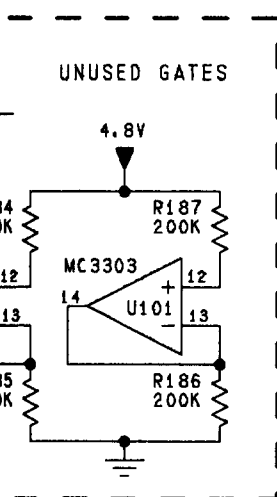


| JUMPER | IN        | OUT  |
|--------|-----------|------|
| JU101  | *STANDARD | L938 |

JUMPER NOTES:  
1. AN ASTERISK (\*) INDICATES DEFAULT FACTORY SETTING.

- SCHEMATIC NOTES:
1. UNLESS SPECIFIED OTHERWISE, ALL RESISTOR VALUES ARE IN OHMS AND ALL CAPACITOR VALUES ARE IN MICROFARADS.
  2. AN ASTERISK (\*) FOLLOWING A SIGNAL NAME INDICATES AN ACTIVE LOW SIGNAL.
  3. CONTINGENCY PART.
  4. ALL VOLTAGE MEASUREMENTS TAKEN USING 1kHz AT 60% FSD
  5. BATTERY REVERT LED TIMER VOLTAGES:

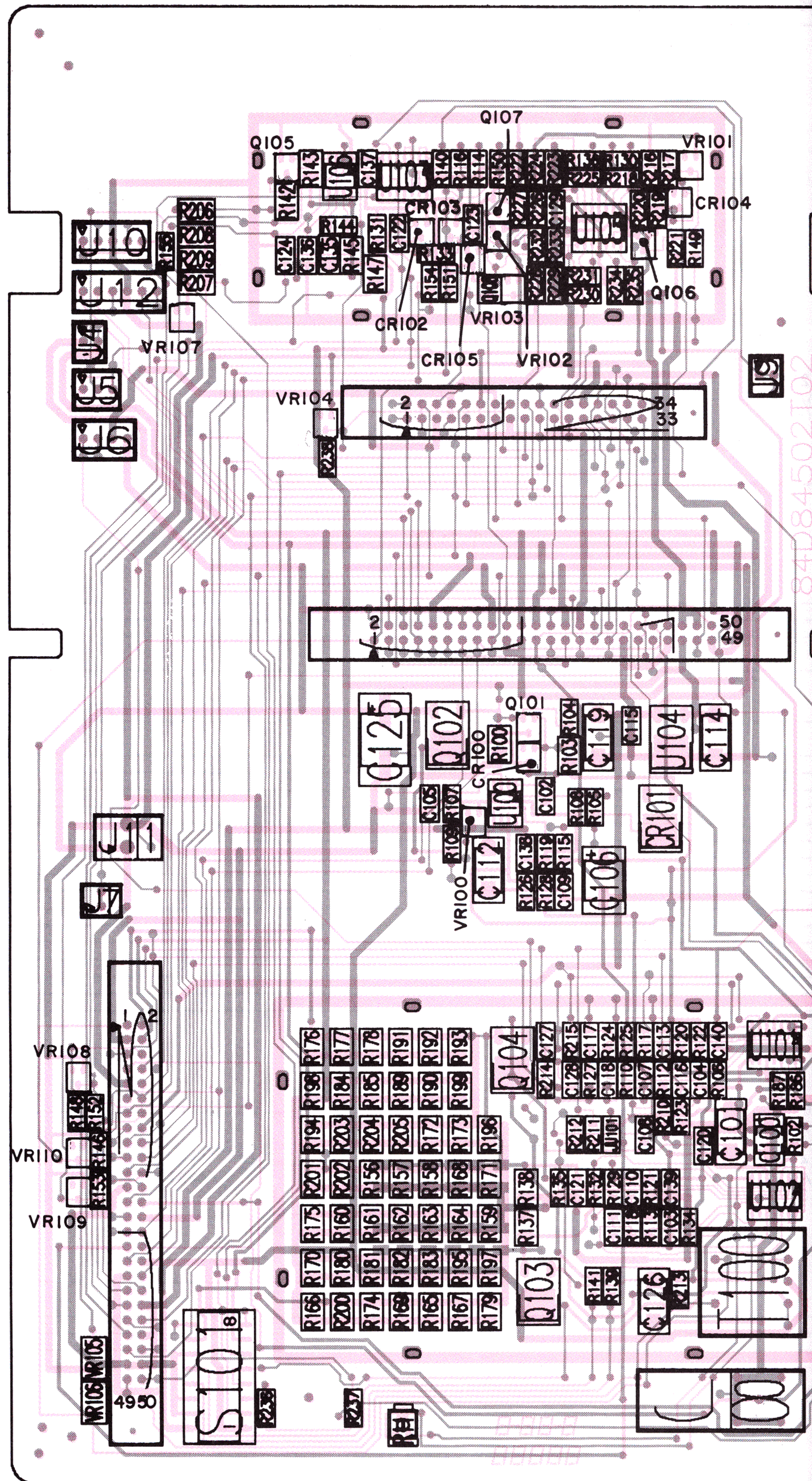
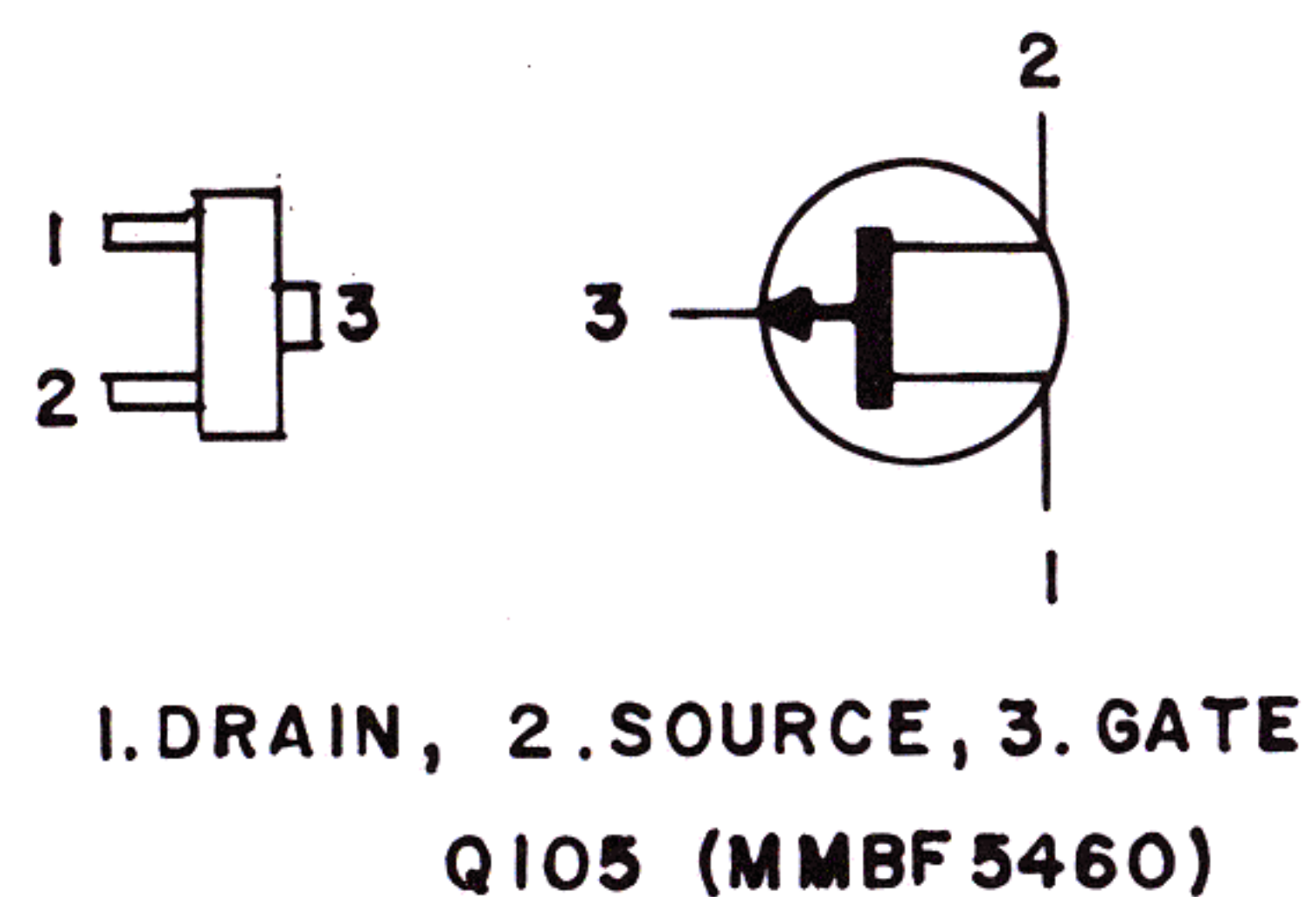
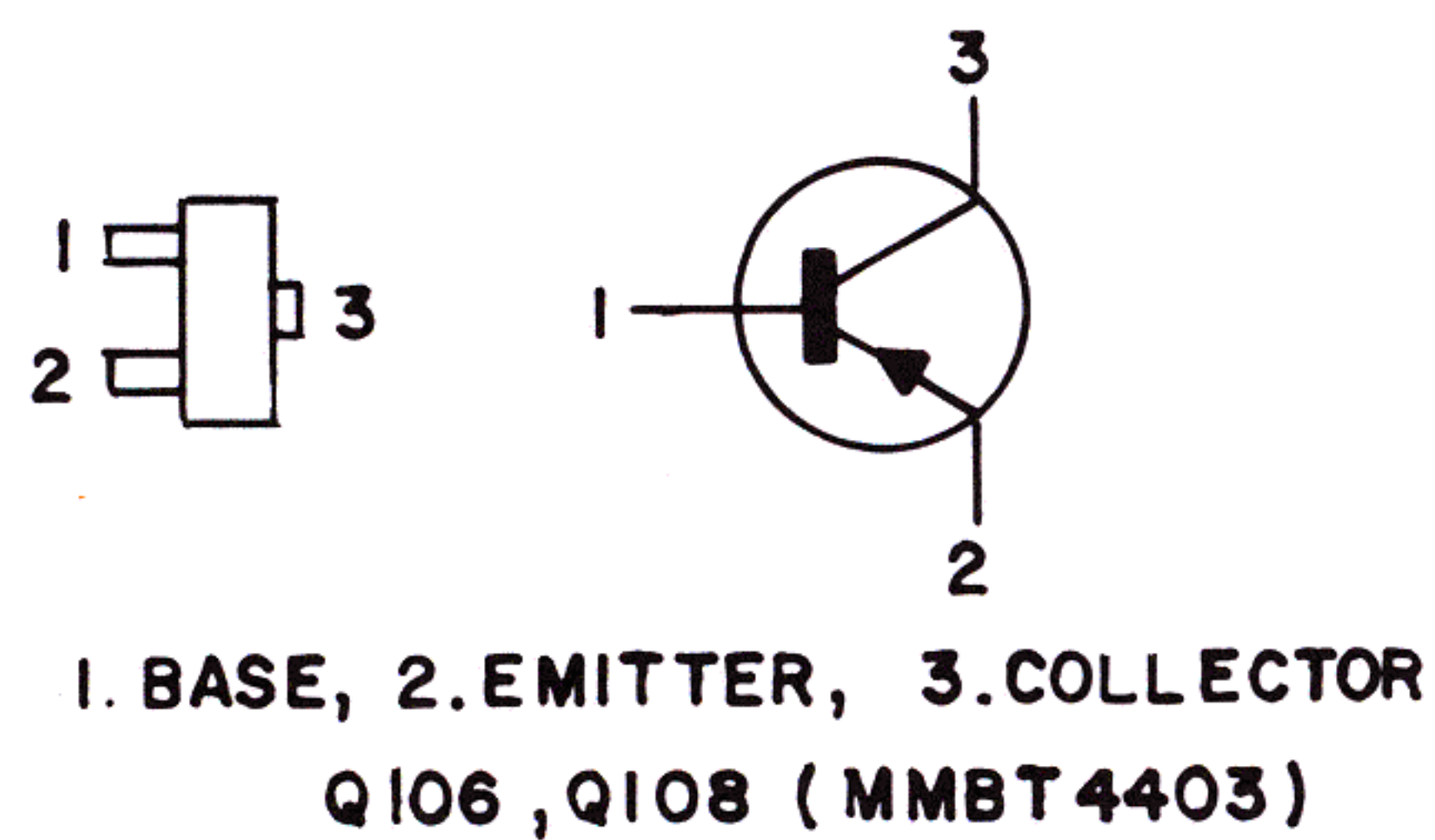
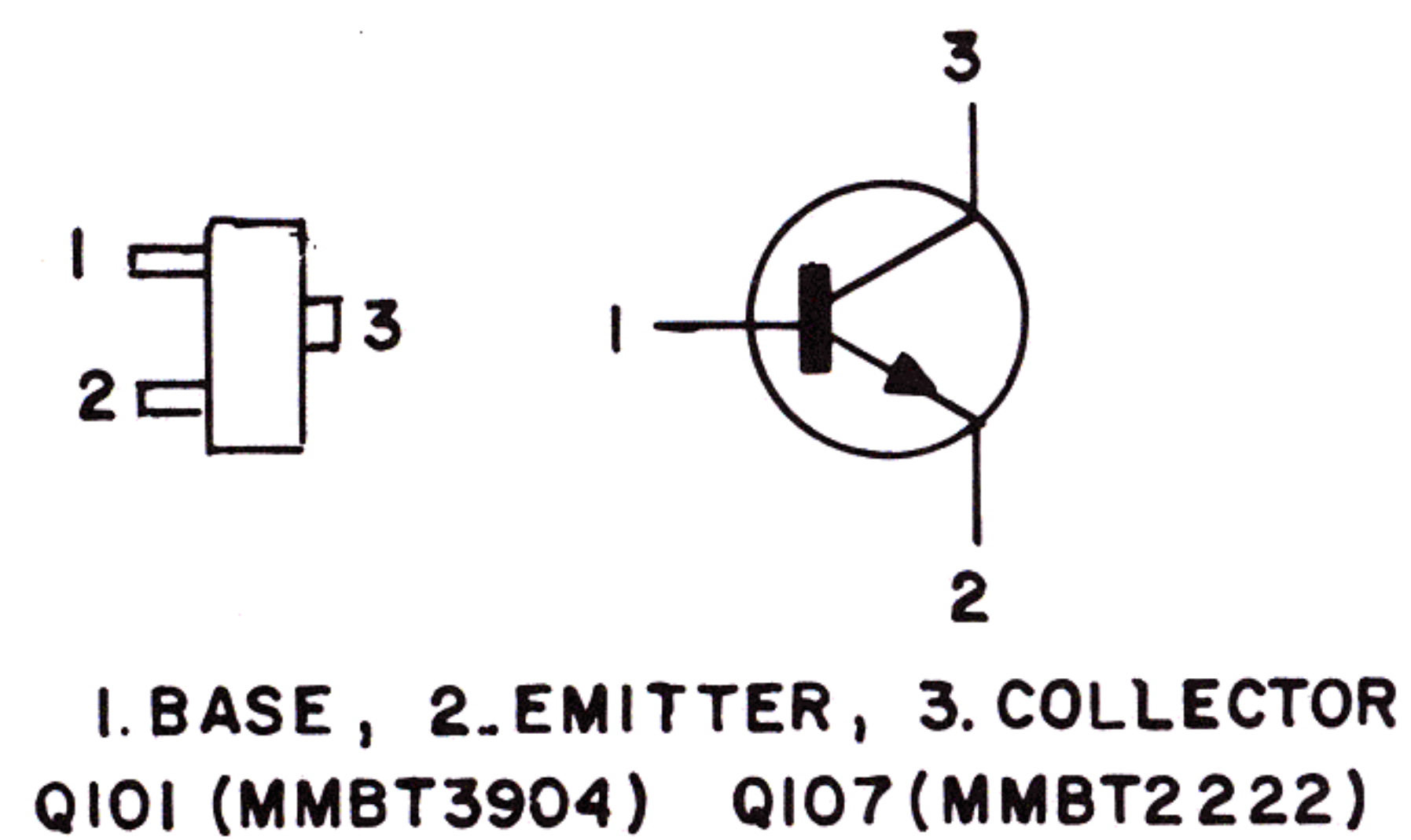
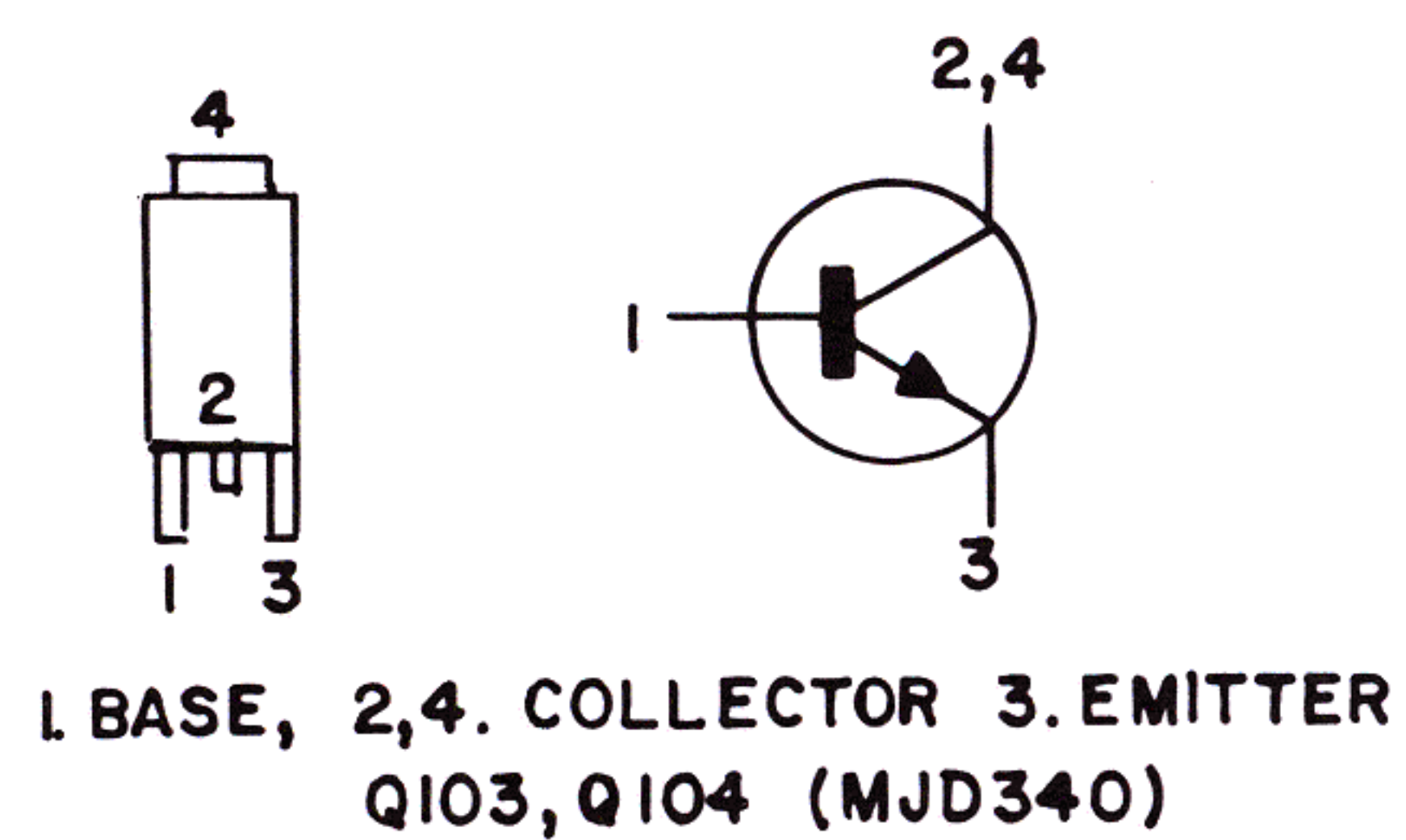
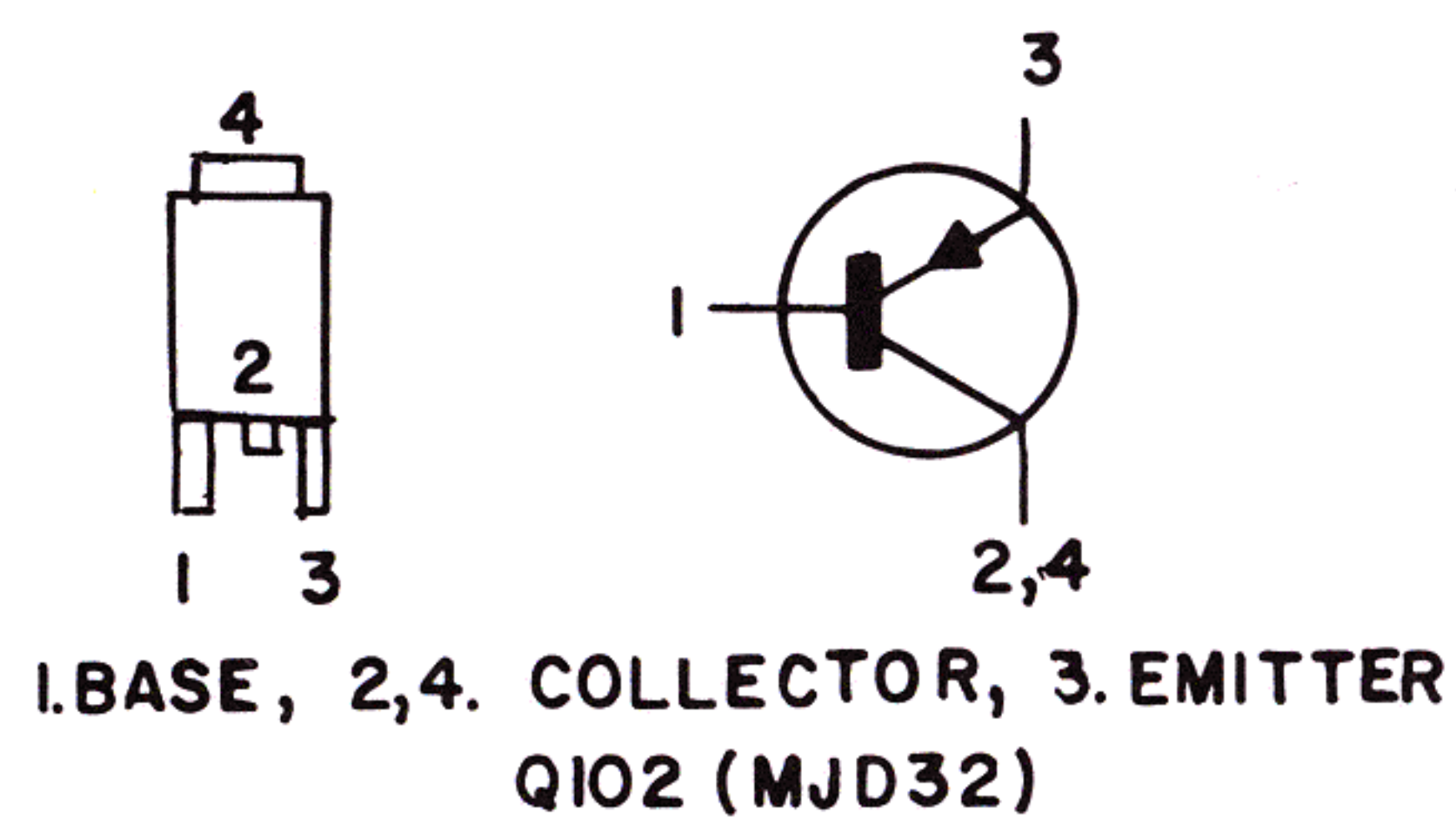
| POWER SOURCE | SENSE |      | Vd  |     |
|--------------|-------|------|-----|-----|
|              | MIN   | MAX  | MIN | MAX |
| AC           | -33.0 | -6.0 | 0.0 | 0.4 |
| DC           | 0.45  | 0.60 | 1.0 | 3.0 |



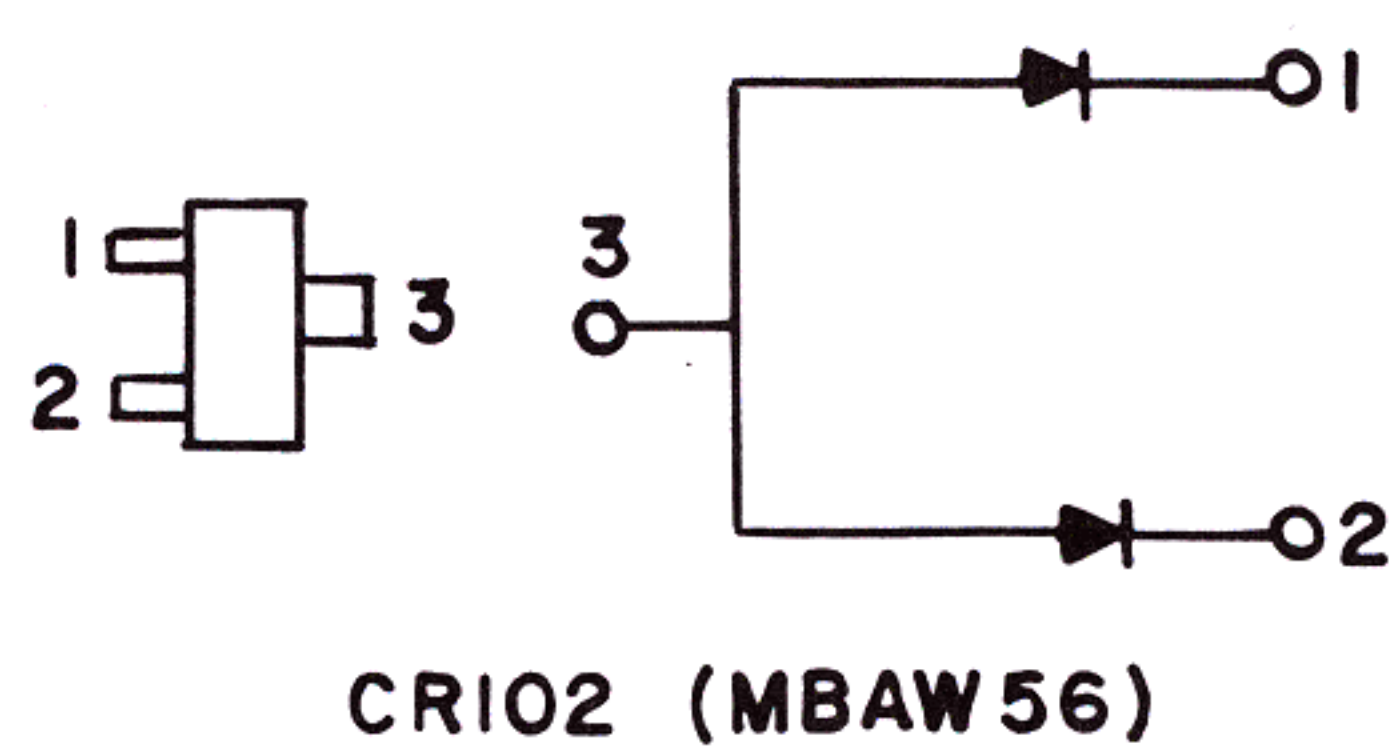
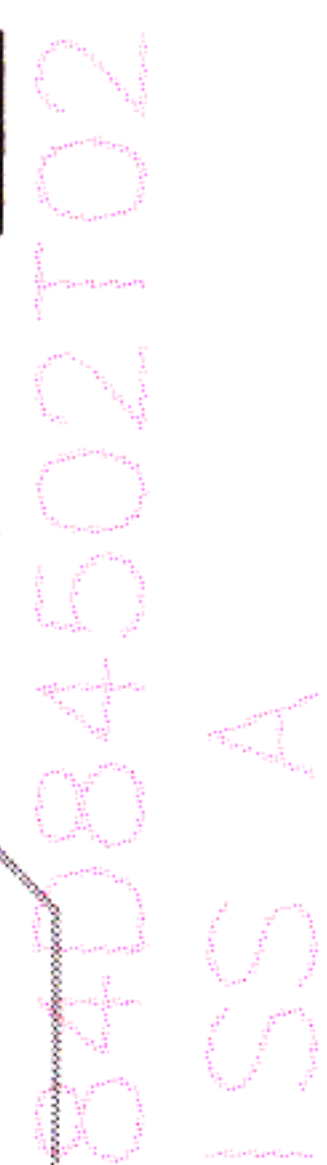
|    |    |    |    |    |     |
|----|----|----|----|----|-----|
| J2 | 2  | NC | NC | 24 | J3  |
| J2 | 3  | NC | NC | 27 | J3  |
| J2 | 6  | NC | NC | 29 | J3  |
| J2 | 7  | NC | NC | 41 | J3  |
| J2 | 23 | NC | NC | 46 | J3  |
| J2 | 24 | NC | NC | 49 | J3  |
| J2 | 25 | NC | NC |    |     |
| J2 | 27 | NC | NC | 2  | J10 |
| J2 | 29 | NC | NC | 4  | J10 |
| J2 | 31 | NC | NC |    |     |
| J2 | 32 | NC | NC | 2  | J6  |
| J2 | 33 | NC | NC |    |     |
| J2 | 34 | NC | NC | 3  | J12 |
|    |    |    |    | 6  | J12 |

TEPS-48285-0  
SHEET 2 OF 2

| LEGEND |                |
|--------|----------------|
|        | JUMPER IN      |
|        | JUMPER OUT     |
|        | COAX CONNECTOR |
|        | DIGITAL GROUND |
|        | ANALOG GROUND  |
|        | CHASSIS GROUND |



SOLDER SIDE ● CEPS-48298  
COMPONENT SIDE ● CEPS-48299  
OVERLAY ● CEPS-48300



SOLDER SIDE    ●    CEPS-48298-A  
COMPONENT SIDE    ●    CEPS-48299-A  
OVERLAY    CEPS-48300-A

| REF. SYMBOL   | PART NO.   | DESCRIPTION                                                     | REF. SYMBOL   | PART NO.   |
|---------------|------------|-----------------------------------------------------------------|---------------|------------|
|               |            | capacitor, fixed: pF $\pm 5\%$ ; 50V<br>unless otherwise stated |               |            |
| C100          | 2380090M15 | 0.33uF $\pm 20$                                                 | R103          | 0611072A45 |
| C101          | 2311049A08 | 1uF $\pm 10\%$ ; 35V                                            | R104          | 0611077A62 |
| C102          | 2113741B45 | 10000                                                           | R105          | 0611077A80 |
| C103          | 2113740B39 | 39                                                              | R106          | 0611077B23 |
| C104          | 2113740B67 | 560                                                             | R107          | 0611077A98 |
| C105          | 2113741B53 | 22000                                                           | R108          | 0611077A82 |
| C106          | 2380090M11 | 33 $\pm 20$ ; 25V                                               | R109          | 0611077A76 |
| C107,108      | 2113741B49 | 15000                                                           | R110          | 0611077B15 |
| C109          | 2113741B45 | 10000                                                           | R111          | 1884355T14 |
| C110          | 2113740B73 | 1000                                                            | R112          | 0611077B23 |
| C111          | 2113740B61 | 330                                                             | R113          | 0611077G81 |
| C112          | 2311049A45 | 10uF $\pm 10$ ; 35V                                             | R114thru 116  | 0611077A98 |
| C113          | 2113740B33 | 22                                                              | R117          | 0611077B30 |
| C114          | 2311049A45 | 10uF $\pm 10$ ; 35V                                             | R118          | 0611077G81 |
| C115          | 2113740B56 | 200                                                             | R119          | 0611077A98 |
| C116 thru 118 | 2113741B49 | 15000                                                           | R120          | 0611077B30 |
| C119          | 2311049A15 | 4.7uF $\pm 10\%$ ; 35V                                          | R121          | 0611077A90 |
| C120,121      | 2113740B39 | 39                                                              | R122 thru 125 | 0611077B30 |
| C122 thru 124 | 2113741B69 | 100000                                                          | R126          | 0611077B05 |
| C125          | 2380090M25 | 100uF; 25V                                                      | R127          | 0611077A74 |
| C135          | 2311049A08 | 1uF $\pm 10\%$ ; 35V                                            | R128          | 0611077B03 |
| C136          | 2113741B45 | 10000                                                           | R129          | 0611077B15 |
| C137 thru 140 | 2113741B69 | 0.1uF                                                           | R130          | 0611077A74 |
|               |            | diode: (see note)                                               | R131          | 0611077A98 |
| CR100         | 4813833C10 | .1A; 70V                                                        | R132          | 0611077B15 |
| CR101         | 4813833A03 | Schottky type                                                   | R133          | 0611077A98 |
| CR102         | 4813833C03 | dual 70V 'A1X' comm ano                                         | R134          | 0611077A90 |
| CR103         | 4813833C04 | dual 70V 'A4X' comm cath                                        | R135          | 0611077A90 |
|               |            | connector:                                                      | R136          | 0611077A74 |
| J1            | 2882505T15 | plug: 50-contact                                                | R137,138      | 0611072A22 |
| J2            | 2882505T04 | plug: 34-contact                                                | R139          | 0611077A76 |
| J3            | 2882505T15 | plug: 50-contact                                                | R140          | 0611077A68 |
| J4            | 2884324M07 | plug: 2-contact                                                 | R141          | 0611077A80 |
| J5            | 2884324M08 | plug: 3-contact                                                 | R142          | 0611072A45 |
| J6            | 2884324M09 | plug: 4-contact                                                 | R143          | 0611072A55 |
| J7            | 2884324M07 | plug: 2-contact                                                 | R144          | 0611077B39 |
| J8            | 0984393T01 | receptacle, uhf                                                 | R145          | 0611072A49 |
| J9            | 2884324M07 | plug: 2-contact                                                 | R146          | 0611077A66 |
| J10           | 2884324M10 | plug: 5-contact                                                 | R147          | 0611072A47 |
| J11           | 2880004T02 | plug: 2-contact                                                 | R148 thru 153 | 0611077A66 |
|               |            | jumper:                                                         | R155          | 0611077A74 |
| JU101,102     | 0611077A01 | resistor, 0 ohm                                                 | R156 thru 185 | 0611072A46 |
| JU104         | 0611077A01 | resistor, 0 ohm                                                 | R186,187      | 0611077B30 |
|               |            | transistor: (see note)                                          | R188          | 0611077A98 |
| Q101          | 4813824A10 | NPN                                                             | R189 thru 205 | 0611072A46 |
| Q102          | 4813822A09 | PNP                                                             | R206 thru 209 | 0611072A61 |
| Q103,104      | 4813822A07 | NPN                                                             |               |            |
| Q105          | 4813823A09 | FET                                                             | S101          | 4083706T01 |
|               |            | resistor, fixed: $\pm 5\%$ ; 1/8W<br>unless otherwise stated    | T100          | 2584422T01 |
| R100          | 0611072A45 | 680; 1/4W                                                       |               |            |
| R101          | 0611077A76 | 1200                                                            | U100          | 5113817A11 |
| R102          | 0611077B06 | 20K                                                             | U101,102      | 5113819A04 |
|               |            |                                                                 | U103          | 5113805A01 |
|               |            |                                                                 | U104          | 5113816G04 |

# AUDIO INTERFACE BOARD

## MODEL TRN7391A

### SCHEMATIC DIAGRAM, CIRCUIT BOARD DETAIL AND PARTS LIST

| DESCRIPTION                               | (PL-11756-O) |
|-------------------------------------------|--------------|
| resistor, fixed: $\pm 5\%$ ; 1/8W (cont.) |              |
| unless otherwise stated                   |              |
| 680; 1/4W                                 |              |
| 330                                       |              |
| 1800                                      |              |
| 100K                                      |              |
| 10K                                       |              |
| 2200                                      |              |
| 1200                                      |              |
| 47K                                       |              |
| variable: 200K                            |              |
| 100K                                      |              |
| 84.5K $\pm 1\%$                           |              |
| 10K                                       |              |
| 200K                                      |              |
| 84.5K $\pm 1\%$                           |              |
| 10K                                       |              |
| 200K                                      |              |
| 4700                                      |              |
| 200K                                      |              |
| 18K                                       |              |
| 1000                                      |              |
| 15K                                       |              |
| 47K                                       |              |
| 1000                                      |              |
| 10K                                       |              |
| 47K                                       |              |
| 10K                                       |              |
| 4700                                      |              |
| 4700                                      |              |
| 1000                                      |              |
| 75; 1/4W                                  |              |
| 1200                                      |              |
| 560                                       |              |
| 1800                                      |              |
| 680; 1/4W                                 |              |
| 1800; 1/4W                                |              |
| 470K                                      |              |
| 1000; 1/4W                                |              |
| 470                                       |              |
| 820; 1/4W                                 |              |
| 470                                       |              |
| 1000                                      |              |
| 750; 1/4W                                 |              |
| 200K                                      |              |
| 10K                                       |              |
| 750; 1/4W                                 |              |
| 3300; 1/4W                                |              |
| switch:                                   |              |
| surface mount dip                         |              |
| transformer:                              |              |
| line isolation                            |              |
| integrated circuit: (see note)            |              |
| RC4558                                    |              |
| MC3303DR2                                 |              |
| quad 2-input NAND                         |              |
| +5V regulator                             |              |

| REF. SYMBOL           | PART NO.   | DESCRIPTION                                     | (PL-11756-O) |
|-----------------------|------------|-------------------------------------------------|--------------|
| U108                  | 5113815G02 | integrated circuit: (see note) (cont.)<br>timer |              |
| VR100                 | 4813830A15 | voltage regulator: (see note)<br>5.6V           |              |
| VR101 thru<br>106     | 4884572T01 | 48V                                             |              |
| VR107                 | 4813830A15 | 5.6V                                            |              |
| non-referenced items: |            |                                                 |              |
|                       | 5483865R01 | LABEL, bar code; 1/4"                           |              |
|                       | 5484246T01 | LABEL. bar code                                 |              |

NOTE: For optimum performance, diodes, transistors and integrated circuits must be ordered by Motorola part numbers.