

Service  
Service  
**Service**



# Service Manual

|                                      |                  |
|--------------------------------------|------------------|
| Specifications                       |                  |
| Controls & Connections               |                  |
| Service Test Program                 |                  |
| Adjustments                          |                  |
| Microprocessor Data                  |                  |
| Surround and center Amplifier .....  | Circuit Diagram  |
|                                      | Component Layout |
| Function and main Amplifier .....    | Circuit Diagram  |
| Surround Mode and Decoder .....      | Circuit Diagram  |
|                                      | Component Layout |
| Tuner .....                          | Circuit Diagram  |
|                                      | Component Layout |
| Tone Amplifier .....                 | Circuit Diagram  |
|                                      | Component Layout |
| Microcomputer,FDT and Switches ..... | Circuit Diagram  |
|                                      | Component Layout |
| Video .....                          | Circuit Diagram  |
|                                      | Component Layout |
| Exploded view .....                  | Cabinet          |
| Mechanical Partslist                 |                  |
| Electrical Partslist                 |                  |



SPECIFICATIONS

| General:                        |  | Norminal value                                           | Typical value                                            |
|---------------------------------|--|----------------------------------------------------------|----------------------------------------------------------|
| AC voltage                      |  | :230V /00S 50Hz<br>:220V /13S 50/60Hz<br>:120V /17S 60Hz | :230V /00S 50Hz<br>:220V /13S 50/60Hz<br>:120V /17S 60Hz |
| Power consumption               |  | :460W                                                    | :460W                                                    |
| Dimensions(WxHxD)               |  | :435 x124x300 mm                                         | :435 x124x300 mm                                         |
| Weight                          |  | :9,4 kg                                                  | :9,4 kg                                                  |
| Tuner: FM section (at 75Ω)      |  |                                                          |                                                          |
| Tuning range                    |  | :87,5MHz to 108.0MHz                                     | :87,5MHz to 108.0MHz                                     |
| Antenna inputs                  |  | :75Ω coaxial                                             | :75Ω coaxial                                             |
| Sensitivity mono                |  | :2.5 μV (19.2dBf)                                        | :1.3 μV (13.5dBf)                                        |
| Selectivity                     |  | :3% Distortion (75kHz dev.)                              | :3% Distortion (75kHz dev.)                              |
| Frequency response 30Hz - 15kHz |  | :50dB at ±400kHz bandwidth                               | :60dB at ±400kHz bandwidth                               |
| Suppression IF-AM               |  | :+1.0, -4.0dB                                            | :+0.5, -2.0dB                                            |
| pilot tone                      |  | :65dB - 45dB                                             | :70dB - 55dB                                             |
| image frequency                 |  | :40dB                                                    | :50dB                                                    |
| Channel separation              |  | :40dB                                                    | :50dB                                                    |
| Distortion T.H.D. mono          |  | :30dB 1kHz                                               | :45dB 1kHz                                               |
| stereo                          |  | :0.5%                                                    | :0.2%                                                    |
| Signal/noise ratio mono         |  | :1.0%                                                    | :0.4%                                                    |
| stereo                          |  | :71dB                                                    | :76dB                                                    |
| Auto-stop theshold(Muting)      |  | :63dB                                                    | :68dB                                                    |
| Output                          |  | :23.3 - 32.0dBf(4 -11μV)                                 | :27.2dBf(6.3μV)                                          |
|                                 |  | :650 - 1300mV/2.0kΩ                                      |                                                          |

Tuner: AM section

|                                |  |                           |                           |
|--------------------------------|--|---------------------------|---------------------------|
| Wave ranges                    |  | :520kHz to 1710kHz        | :520kHz to 1710kHz        |
| Sensitivity (Loop antenna)     |  | :1000μV/m 10% Distortion  | :600μV/m 10% Distortion   |
| Selectivity (Loop antenna)     |  | :20dB at ±10kHz bandwidth | :30dB at ±10kHz bandwidth |
| Suppression IF (Loop antenna)  |  | :50dB                     | :60dB                     |
| image frequency (Loop antenna) |  | :35dB                     | :40dB                     |
| Output (Loop antenna)          |  | 130 -260mV                | :190mV                    |

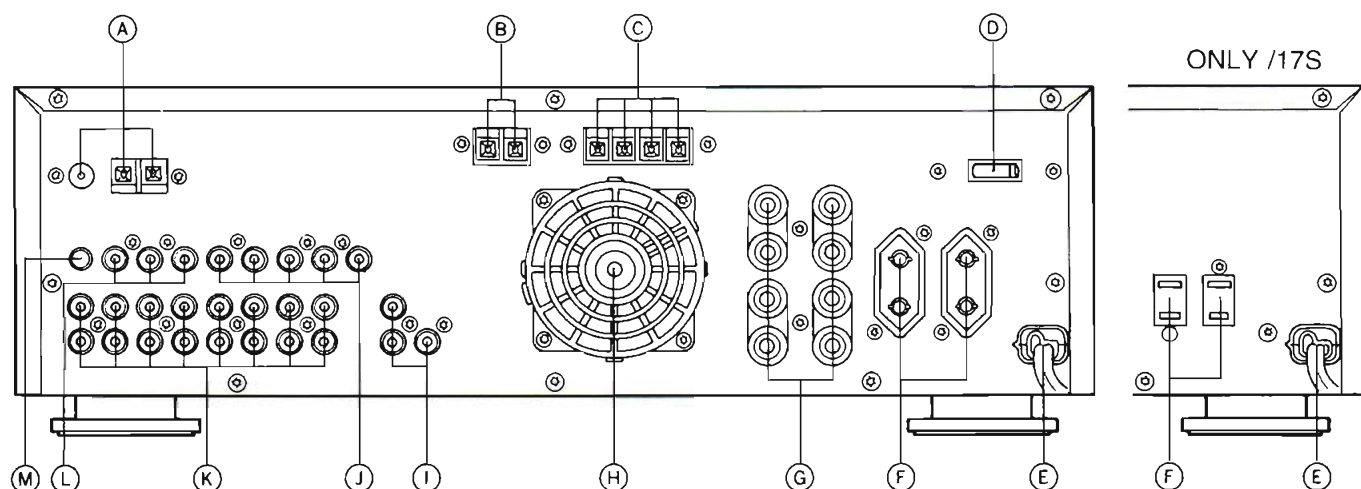
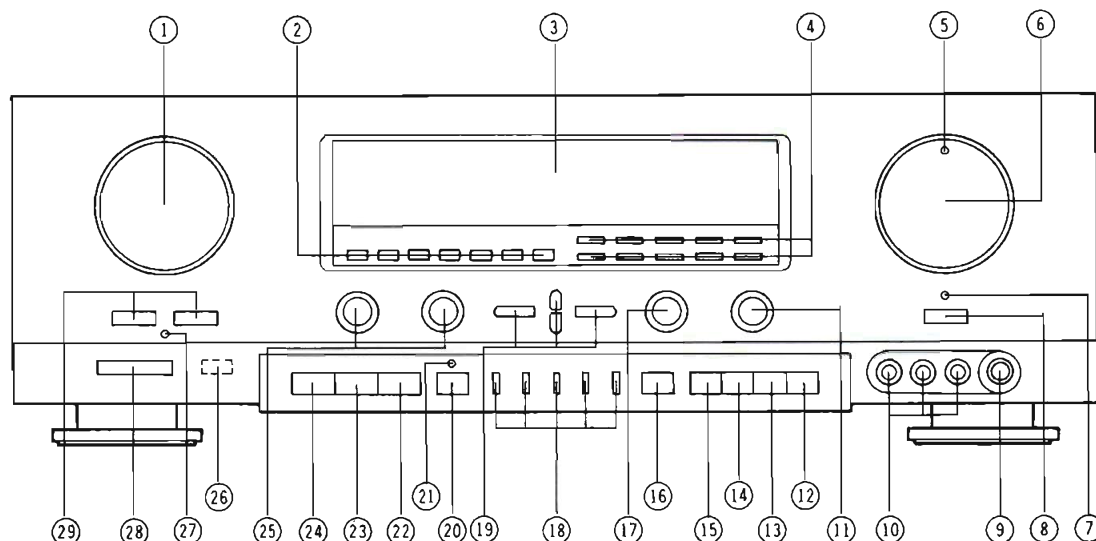
Note  
- Test methode : IHF

SPECIFICATIONS (Continued)

| Audio                                     | Norminal Value                                                  | Typical Value                                                   |
|-------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| Output power(Front/Rear/Center)           | :100W(8Ω)/20W(4+4Ω)/40W(40W(8Ω)                                 | :105W(8Ω)/22W(4+4Ω)/40W(42W(8Ω)                                 |
| Distortion                                |                                                                 |                                                                 |
| T.H.D.                    (Front)         | :≤0.7% at 20Hz - 20kHz /00S/13S<br>:≤0.09% at 20Hz - 20kHz /17S | :≤0.7% at 20Hz - 20kHz /00S/13S<br>:≤0.05% at 20Hz - 20kHz /17S |
| Intermodulation      (Front)              | :≤0.09% at 60/7000Hz 4:1                                        | :≤0.03% at 60/7000Hz 4:1                                        |
| Frequency characteristic                  |                                                                 |                                                                 |
| Phono input          I tone control       | :from 20Hz - 20kHz ±2dB(RIAA)                                   | :from 20Hz - 20kHz ±0.5dB(RIAA)                                 |
| Linear input         I neutral            | :from 20Hz - 20kHz ±2dB                                         | :from 10Hz - 30kHz ±2dB                                         |
| Bass control                              | :at 100Hz +10dB to -10dB ±2dB                                   | :at 100Hz +10dB to -10dB                                        |
| Treble control                            | :at 10kHz +10dB to -10dB ±2dB                                   | :at 10kHz +10dB to -10dB                                        |
| Acoustic bass boost<br>(80Hz/150Hz/250Hz) | :10dB/10dB/10dB ±2dB                                            | :10dB/10dB/10dB                                                 |
| Signal/noise ratio weighted(A-curve)      |                                                                 |                                                                 |
| Phono input                               | :for 1W output ≥70dB                                            | :for 1W output ≥75dB                                            |
| Linear inputs                             | :for 1W output ≥78dB                                            | :for 1W output ≥82dB                                            |
| Channel separation                        | :at 1000Hz ≥40dB<br>:at 100Hz -10kHz ≥30dB                      | :at 1000Hz ≥45dB<br>:at 100Hz -10kHz ≥35dB                      |
| Input sensitivity/Input impedance         |                                                                 |                                                                 |
| Audio                                     |                                                                 |                                                                 |
| Phono                                     | :3.6 - 5.6mV/47kΩ                                               | :4.5mV/47kΩ                                                     |
| CD/LD/TV                                  | :220 - 360mV/20kΩ                                               | :280mV/20kΩ                                                     |
| Tape/VCR                                  | :220 - 360mV/20kΩ                                               | :280mV/20kΩ                                                     |
| Video-AUX                                 | :220 - 360mV/20kΩ                                               | :280mV/20kΩ                                                     |
| Output level/Output impedance             |                                                                 |                                                                 |
| Tape(Audio)                               | :≥250mV/300 - 500Ω(Phone 5mV<br>1kHz input)                     | :≥300mV/400Ω(Phone 5mV<br>1kHz input)                           |
| Output level Center                       |                                                                 |                                                                 |
| Pre-output                                | :160mV ±20mV                                                    | :160mV ±20mV                                                    |
| Video                                     |                                                                 |                                                                 |
| Frequency characteristic:                 | :from 10Hz - 6MHz -5dB                                          | :from 10Hz - 10MHz -5dB                                         |
| Signal/noise ratio weighted(A-curve)      |                                                                 |                                                                 |
| Video inputs                              | :70dB                                                           | :75dB                                                           |
| Crosstalk                3.58MHz          | :35dB                                                           | :38dB                                                           |
| Input sensitivity                         |                                                                 |                                                                 |
| Video inputs                              | :1.8 - 2.2Vpp                                                   | :2.0Vpp                                                         |
| Output level/Output impedance             |                                                                 |                                                                 |
| Video outputs                             | :0.9 - 1.1Vpp/60-85Ω                                            | :1.0Vpp/75Ω                                                     |

Note  
- Test methode : IHF

## CONNECTIONS AND CONTROLS



|    |                         |             |    |                             |            |
|----|-------------------------|-------------|----|-----------------------------|------------|
| 1  | Source selector         | S437        | 25 | Tone control                | R519, R520 |
| 2  | Surround mode switches  | S401...S407 | 26 | I.R receiver                | Q406       |
| 3  | FTD display             | V401        | 27 | Standby indicator           | D404       |
| 4  | Tuner preset switches   | S408...S417 | 28 | Power switch (00S) (/17S)   | S321       |
| 5  | Volume indicator only   | D651        | 29 | Speaker switch              | S320       |
| 6  | Volume control          | R662        |    |                             | S251       |
| 7  | Mute indicator          | D405        |    |                             |            |
| 8  | Mute switch             | S418        |    |                             |            |
| 9  | Headphone socket        | J581        |    |                             |            |
| 10 | Video AUX input         | J582...J584 | A  | Antenna terminal            | J101       |
| 11 | Balance control         | R532        | B  | Center speaker terminal     | J309       |
| 12 | Memory switch           | S436        | C  | Surround speaker terminal   | J310       |
| 13 | FM mode switch          | S435        | D  | Voltage selector /13S only  | S222       |
| 14 | Display switch          | S434        | E  | Mains cord                  | W001       |
| 15 | FM/AM switch            | S433        | F  | Mains outlet /00S /13S /17S | J326, J327 |
| 16 | Frequency direct switch | S432        |    |                             | J021, J022 |
| 17 | Source direct switch    | S710        |    |                             | J320       |
| 18 | Cursor mode switches    | S423...S427 | G  | Front speaker terminal      | J300       |
| 19 | Cursor switches         | S426...S431 | H  | Fan motor                   | 910G       |
| 20 | Auto selector switch    | S422        | I  | System control jacks        | J553, J554 |
| 21 | Auto selector indicator | D406        | J  | Video input/output          | J570, J571 |
| 22 | Sleep switch            | S421        | K  | Analog audio input/output   | J551, J552 |
| 23 | Dubbing switch          | S420        | L  | Digital audio input/output  | J592       |
| 24 | Video switch            | S419        | M  | Ground terminal             | J053       |

Service Test Program

To enter the service test program, press the POWER switch while pressing and holding the MUTE and MEMORY switches simultaneously. The display will show the characters ".SERVICE.." for 2 seconds, then show "TUNER-OK" or "TUNER-NG" for 2 seconds.

TUNER-OK: The data communication between the PLL IC (Q150) and microprocessor (Q401) is normal.

TUNER-NG: The data communication between the PLL IC (Q150) and microprocessor (Q401) is abnormal. Check the data line between line.

In case of "TUNER-NG", the characters blink at a cycle of 1Hz. The blinking can be stopped with the FM/AM switch. Other switches are invalid during blinking.

After the "TUNER-OK" or "TUNER-NG" display, normal operation starts. However, the source indicator on the display keeps on blinking at 1Hz while the unit is in the service test program.

- Tracking point memory mode  
When the MUTE and MEMORY switches are pressed simultaneously while the unit is in the service test program, the tracking point frequencies as shown below are written in the memory.

- Tracking point frequencies

| Pre Set<br>Nbr.  | 1 - 3    | 4    | 5    | 6     | 7        | 8    | 9    | 10 - 20  | 21 - 31  |
|------------------|----------|------|------|-------|----------|------|------|----------|----------|
| /00S/01S<br>/13S | 87.5     | 90.0 | 98.0 | 106.0 | 603      | 999  | 1404 | 87.5     | 522      |
| BK01             |          |      |      |       | 600      | 1000 | 1400 | 87.5     | 530      |
|                  | FM (MHz) |      |      |       | AM (KHz) |      |      | FM (MHz) | AM (KHz) |

In the service test program, the RAM can be cleared by pressing the POWER switch to OFF while also pressing and holding the 0/+ and MEMORY switches simultaneously. To exit the service test program, press the Power switch to turn the unit OFF.

ADJUSTMENTS

Audio Section

Idling Current

| FUNCTION... SWITCH                                   |  |  |  |  |  |                                      |
|------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Power switch OFF (S321: /00S/01S) (S320: /13S, BK01) |                                                                                     |                                                                                     |                                                                                     | R263, R264 Preset in full C.C.W. position                                           |                                                                                     |                                                                                                                          |
| Power switch ON (S321: /00S/01S) (S320: /13S, BK01)  |                                                                                     |                                                                                     | Min.                                                                                | Lch R263<br>Rch R264                                                                |                                                                                     | Lch TP1 (+), TP3 (-) (Both side of R271) DC 7.2 mV (20 mA)<br>Rch TP2 (+), TP4 (-) (Both side of R272) DC 7.2 mV (20 mA) |

C.C.W.: Counterclockwise

Notes:

- After the power has been turned on, wait 5 minutes, and then adjust R263 & R264 to obtain the reading of 7.2mV.
- If the temperature of the heat-sink is higher than the room temperature, switch the power OFF, and leave the unit until the heat-sink falls to the room temperature before proceeding to the Idling Current Adjustment.

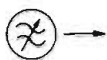
Tuner Section

- Inner adjustment of the FM front end pack (A101) of this unit is difficult. (IF, RF, OSC)
- Inductance of the AM OSC coil (L102) is preset. Therefore, please do not turn the core of this coil.
- Refer to "Tracking point memory mode" in the Service test program.

Notes:

- Clear the output waveform on J551 by turning R114, then adjust R114 slightly so that the waveform just reappears.
- Adjust R103 so that the "TUNED" indicator of the FDT (Flouresent Display Tube) lights up.

FM-Distortion

| FUNCTION... WAVE RANGE SWITCH |            |  | DISPLAY                                                                             | DETUNE | ADJUST                   |  |  |
|-------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| FM (S433)                     | 98 MHz Mod. 1 kHz<br>$\Delta f$ 75 kHz (Mono)<br>Output 500 $\mu$ V (65 dBf)                  |                                                                                     |                                                                                     |        | L105                     |                                                                                     | J551 (Tape out) Distortion Min.                                                     |
|                               | 98 MHz Mod. 1 kHz<br>$\Delta f$ L+R 67.5 kHz<br>Pilot 6.75 kHz<br>Output 500 $\mu$ V (65 dBf) | J101                                                                                |  |        | A101-IFT (Front end IFT) |                                                                                     |                                                                                     |

Stereo Separation

|           |                                                                                               |      |                                                                                       |  |      |  |                                 |
|-----------|-----------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|--|------|--|---------------------------------|
| FM (S433) | 98 MHz Mod. 1 kHz<br>$\Delta f$ L+R 67.5 kHz<br>Pilot 6.75 kHz<br>Output 500 $\mu$ V (65 dBf) | J101 |  |  | R119 |  | J551 (Tape out) Separation Max. |
|-----------|-----------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|--|------|--|---------------------------------|

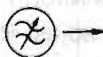
Muting Level

|                                                            |                                                                         |      |                                                                                       |  |      |  |                   |
|------------------------------------------------------------|-------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|--|------|--|-------------------|
| FM (S433)<br>FM mode switch (S435)<br>(Mono indicator OFF) | 98 MHz Mod. 1 kHz<br>$\Delta f$ 75 kHz<br>Output 6.3 $\mu$ V (27.2 dBf) | J101 |  |  | R114 |  | J551 (Tape out) 1 |
|------------------------------------------------------------|-------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|--|------|--|-------------------|

AM-IF

|           |                                                                  |           |                                                                                       |  |      |  |                             |
|-----------|------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|--|------|--|-----------------------------|
| AM (S433) | 1000 kHz (BK01)<br>Mod. 400 Hz 30%<br>Low Output (300 $\mu$ V/m) | Loop Ant. |  |  | L104 |  | J551 (Tape out) Output Max. |
|-----------|------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|--|------|--|-----------------------------|

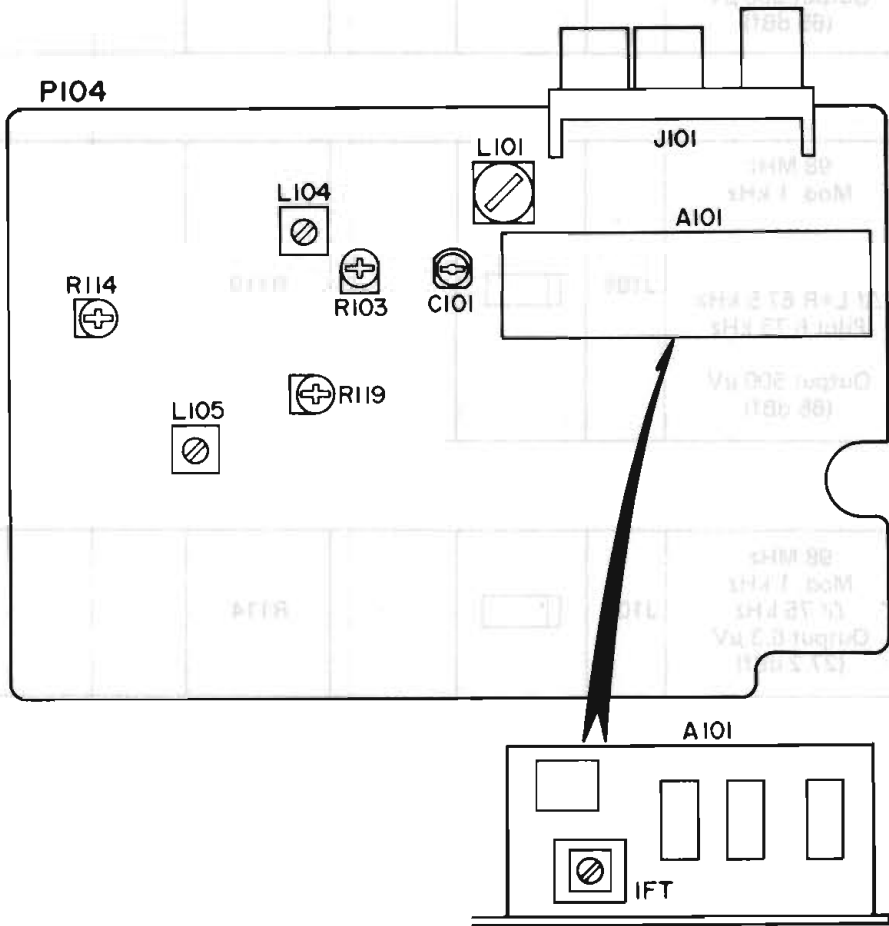
AM-RF

| FUNCTION...<br>WAVE RANGE<br>SWITCH |  SIGNAL |  TO | DISPLAY<br>TUNE IN                                                                | DETUNE |  ADJUST |  OSCILLOSCOPE |  INDICATOR |
|-------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| AM<br>(S433)                        | 1400 kHz                                                                                 | Loop<br>Ant.                                                                         |  |        | L101                                                                                     |                                                                                                  | J551<br>(Tape out)<br>Output<br>Max.                                                          |
|                                     | 600 kHz                                                                                  |                                                                                      |                                                                                   |        | C101                                                                                     |                                                                                                  |                                                                                               |

AM Auto Stop

|              |                                                            |              |                                                                                   |  |      |  |                         |
|--------------|------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------|--|------|--|-------------------------|
| AM<br>(S433) | 1000 kHz<br>Mod. 400 Hz<br>30%<br>Output<br>1000 $\mu$ V/m | Loop<br>Ant. |  |  | R103 |  | J551<br>(Tape out)<br>2 |
|--------------|------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------|--|------|--|-------------------------|

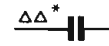
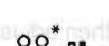
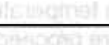
Tuner Adjustment Positions



$\mu$ -Processor Data  
Q401: TMP47C1670AN H054

| Pin Nbr. | Pin Name   | I/O | Act. | Function                            | Pin Nbr. | Pin Name        | I/O | Act. | Function                        |
|----------|------------|-----|------|-------------------------------------|----------|-----------------|-----|------|---------------------------------|
| 1        | VKK        | —   | —    | —35V                                | 33       | N.C.            | —   | —    | Not Used                        |
| 2        | S0         | O   | H    | FTD Segment Drive                   | 34       | AUTO SELECT IND | O   | L    | Auto Select Mode Indicator Out  |
| 3        | S1         | O   | H    |                                     | 35       | MUTE            | O   | L    | Audio Mute Output               |
| 4        | S2         | O   | H    |                                     | 36       | STANDBY IND     | O   | L    | Standby Indicator Output        |
| 5        | S3         | O   | H    |                                     | 37       | DATA IN         | I   | H    | Serial Data Input               |
| 6        | S4         | O   | H    |                                     | 38       | W.T. OUT        | O   | L    | Watchdog Reset Signal Output    |
| 7        | S5         | O   | H    |                                     | 39       | DIGITAL IND     | I   | L    | Detecting Digital Signal Out/In |
| 8        | S6         | O   | H    |                                     | 40       | 3/4 CH          | O   | H    | 3CH/4CH Switching Signal Output |
| 9        | S7         | O   | H    |                                     | 41       | RC-5 IN         | I   | L    | RC-5 Bus Signal Input           |
| 10       | S8         | O   | H    |                                     | 42       | SD IN           | I   | L    | Band Detecting Signal Input     |
| 11       | S9         | O   | H    |                                     | 43       | EASY LINK IN    | I   | L    | Easy Link Bus Signal Input      |
| 12       | S10        | O   | H    | Key Input                           | 44       | EASY LINK OUT   | O   | L    | Easy Link Bus Signal Output     |
| 13       | S11        | O   | H    |                                     | 45       | SPK RELAY       | O   | L    | Speaker Relay Control           |
| 14       | K0         | I   | H    |                                     | 46       | MUTE            | O   | L    | Front Channel Mute Signal Out   |
| 15       | K1         | I   | H    |                                     | 47       | V-AUX           | O   | L    | FTD Segment Drive               |
| 16       | K2         | I   | H    |                                     | 48       | G11             | O   | H    | FTD Grid Drive                  |
| 17       | K3         | I   | H    |                                     | 49       | G10             | O   | H    |                                 |
| 18       | TEST       | I   | —    | GND                                 | 50       | G9              | O   | H    |                                 |
| 19       | OSC        | I   | —    | Clock Input                         | 51       | G8              | O   | H    |                                 |
| 20       | OSC        | O   | —    | Clock Output                        | 52       | G7              | O   | H    |                                 |
| 21       | RESET      | I   | L    | Reset                               | 53       | G6              | O   | H    |                                 |
| 22       | HOLD       | I   | H    | Elect. Failure Sensing Signal Input | 54       | G5              | O   | H    |                                 |
| 23       | CE4        | O   | H    | Strobe Signal Output                | 55       | G4              | O   | H    |                                 |
| 24       | PULSE UP   | I   | L    | Function Selector Pulse Input       | 56       | G3              | O   | H    |                                 |
| 25       | PULSE DOWN | I   | L    |                                     | 57       | G2              | O   | H    |                                 |
| 26       | CE3        | O   | H    | Latch Signal Output                 | 58       | G1              | O   | H    |                                 |
| 27       | CE2        | O   | L    | "REQ" Signal Output                 | 59       | G0              | O   | H    | FTD Segment Drive               |
| 28       | CE1        | O   | H    | Chip Enable Signal Output           | 60       | S15             | O   | H    |                                 |
| 29       | CLK OUT    | O   | H    | Serial Data Control Clock Output    | 61       | S14             | O   | H    |                                 |
| 30       | DATA OUT1  | O   | H    | Data Output                         | 62       | S13             | O   | H    |                                 |
| 31       | DATA OUT2  | O   | H    | Data Signal Output                  | 63       | S12             | O   | H    |                                 |
| 32       | VSS        | —   | —    | GND                                 | 64       | VDD             | —   | —    | +5V                             |

|                                                                                       |             |                  |      |    |
|---------------------------------------------------------------------------------------|-------------|------------------|------|----|
|  | Carbon film | 0.125 W or 0.2 W | 70°C | 5% |
|  | Carbon film | 0.25 W or 0.33 W | 70°C | 5% |
|  | Metal film  | 0.25 W or 0.33 W | 70°C | 5% |
|  | Carbon film | 0.5 W            | 70°C | 5% |
|  | Carbon film | 0.67 W           | 70°C | 5% |
|  | Carbon film | 1 W or 1.15 W    | 70°C | 5% |

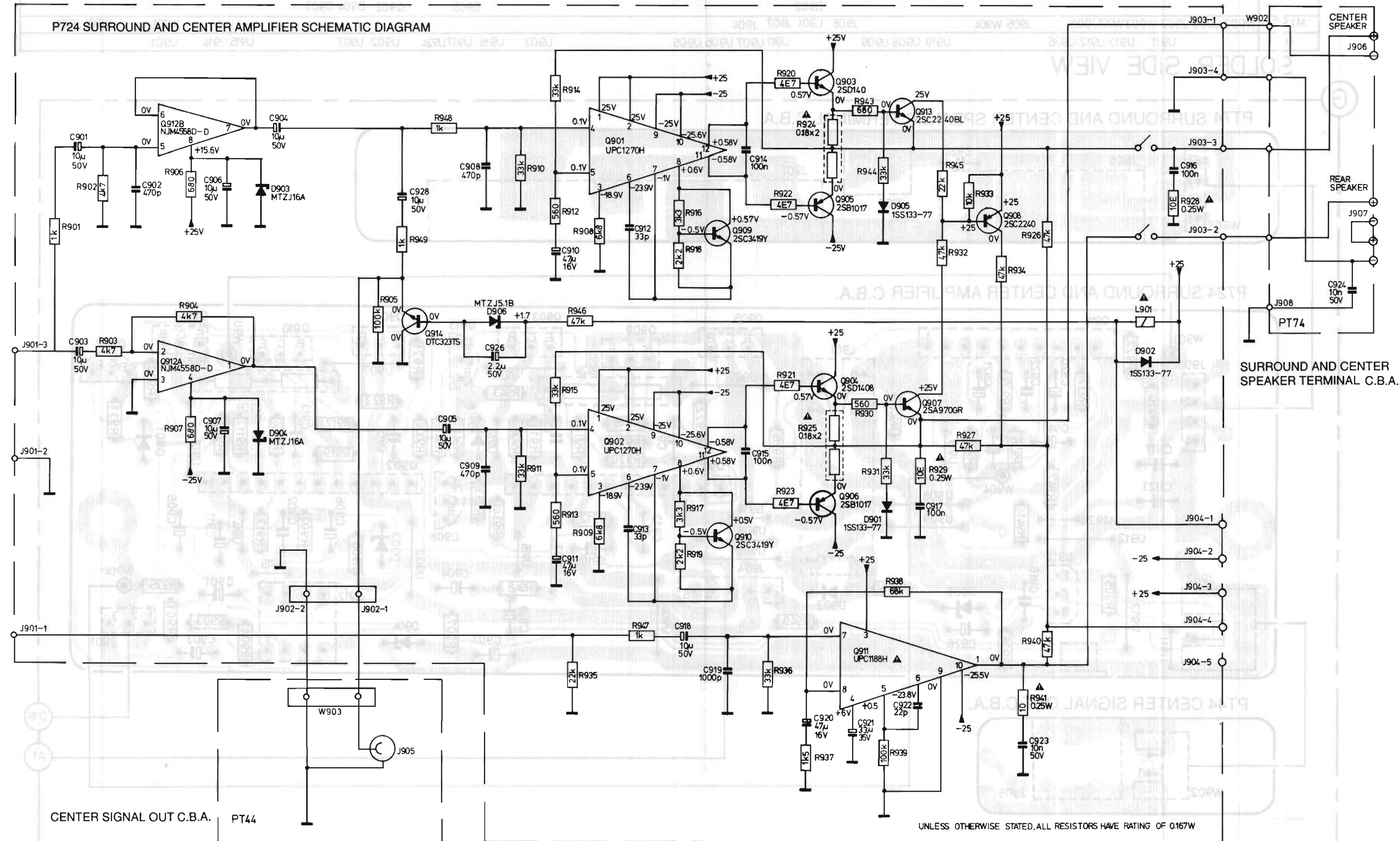
|                                                                                       |                                        |                           |            |
|---------------------------------------------------------------------------------------|----------------------------------------|---------------------------|------------|
|  | Ceramic plate                          | Tuning $\leq 120$ pF NP.0 | 2%         |
|                                                                                       | Others                                 |                           | -20/+80%   |
|  | Polyester flat foil                    |                           | 10%        |
|  | Metalized polyester flat film          |                           | 10%        |
|  | Polyester flat foil small size (Mylar) |                           | 10%        |
|  | Polysterene film/foil                  |                           | 1%         |
|  | Tubular ceramic                        |                           |            |
|  | Miniature single                       |                           |            |
|  | Subminiature tantalum                  |                           | $\pm 20\%$ |

\*a = 2.5 V  
b = 3.15 V  
or 4 V  
c = 6.3 V  
d = 10 V  
e = 16 V  
f = 25 V  
g = 40 V  
h = 63 V  
j = 100 V  
l = 125 V  
m = 150 V  
n = 160 V  
q = 200 V  
r = 250 V  
s = 300 V  
t = 350 V  
u = 400 V  
v = 500 V  
w = 630 V  
x = 1000 V  
A = 1.6 V  
B = 6 V  
C = 12 V  
D = 15 V  
E = 20 V  
F = 35 V  
G = 50 V  
H = 75 V  
I = 80 V

Ⓒ Chip component

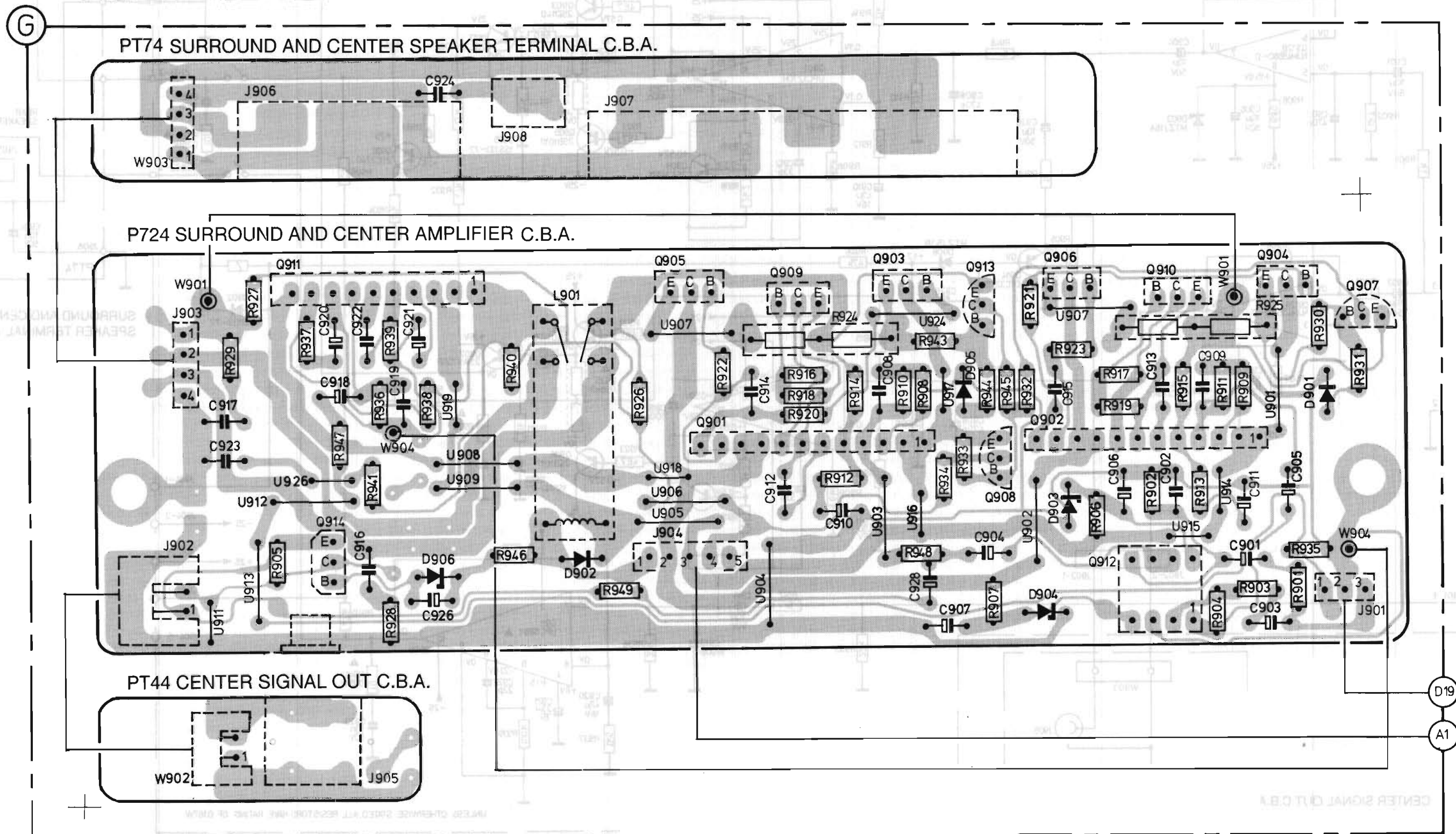
|      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| R    | R901 | R902 | R906  |      | R905 | R948 | R910 | R914 | R912 | R946 | R908 | R916 | R918 | R920 | R922 | R924 | R943 | R944 | R938 | R945 | R932 | R933 | R934 | R926 | R928 |      |      |      |      |      |      |
|      | R903 |      | R904  |      | R907 | R949 |      | R911 |      | R915 | R913 | R935 | R909 | R947 | R917 | R919 | R923 |      | R921 | R936 | R925 | R937 | R930 | R931 | R939 | R929 | R927 | R941 | R940 |      |      |
| C    | C901 |      | C906  | C904 |      | C928 | C905 | C908 | C926 | C910 |      | C912 |      | C914 |      |      | C917 |      |      |      |      |      |      |      |      | C916 | C924 |      |      |      |      |
|      | C903 | C902 | C907  |      |      |      | C909 |      |      | C911 |      | C913 | C918 | C919 | C915 |      | C920 | C921 | C922 |      |      |      | C923 |      |      |      |      |      |      |      |      |
| Q, D |      |      | Q912B | D903 |      | Q914 | D906 |      |      | Q901 |      | Q909 |      |      |      |      | Q905 | Q903 | D905 | Q913 |      | Q908 |      |      | D902 |      |      |      |      |      |      |
|      |      |      | Q912A | D904 |      |      |      |      |      | Q902 |      | Q910 |      |      |      |      | Q904 | Q905 | Q911 | D901 | Q907 |      |      |      |      |      |      |      |      |      |      |
| J, L | J901 |      | J902  |      | W903 | J905 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | L901 | J903 | J904 | W902 | J908 | J906 | J907 |

P724 SURROUND AND CENTER AMPLIFIER SCHEMATIC DIAGRAM



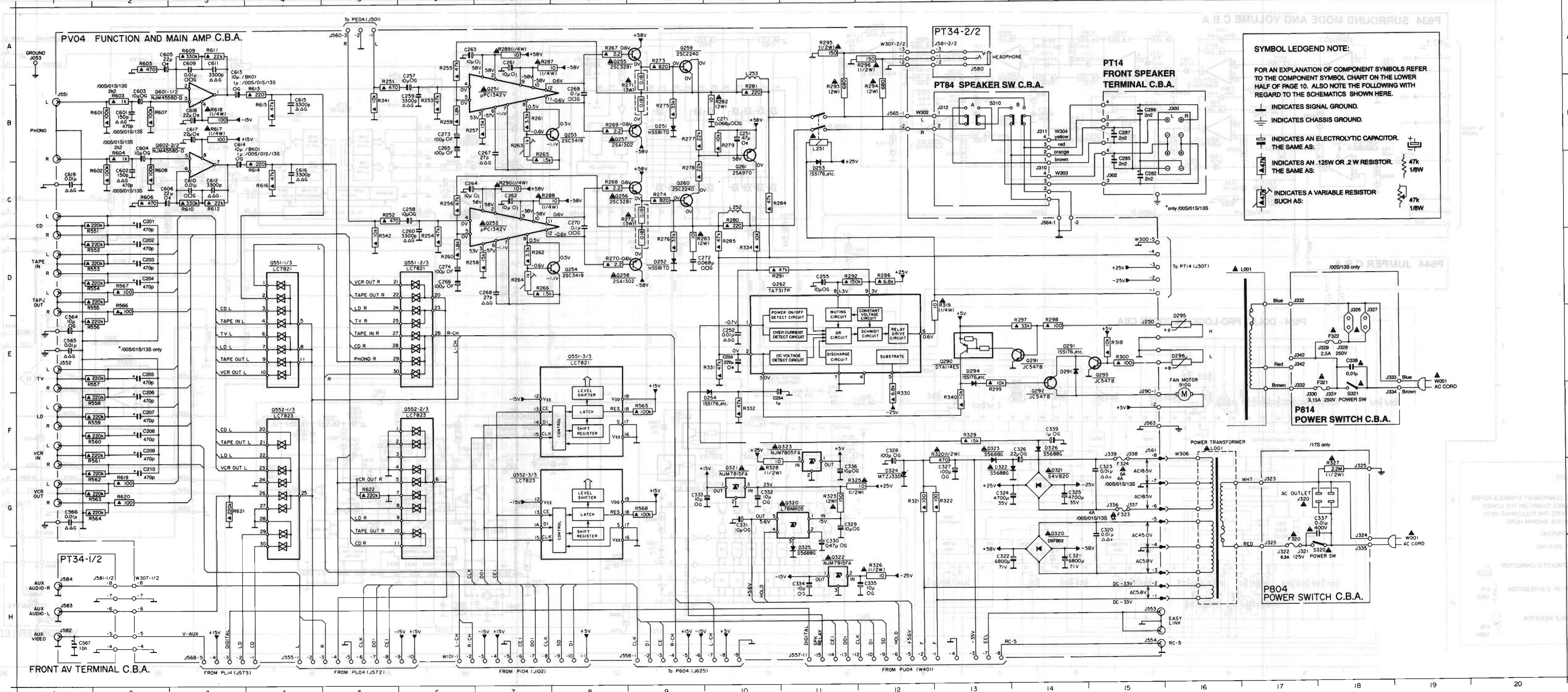
|       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| R     | R929 | R937 | R939 | R930 | R940 | R926 | R916 | R924 | R943 | R934 | R944 | R921 | R917 | R915 | R911 | R925 | R930 |      |      |      |      |
|       | R927 | R947 | R936 |      | R946 |      | R918 | R914 | R910 | R908 | R945 | R923 | R919 |      | R913 | R909 | R935 | R931 |      |      |      |
|       | R905 | R941 | R928 |      |      | R949 | R920 | R912 | R948 |      | R932 | R906 | R902 |      | R904 | R903 | R901 |      |      |      |      |
| C     | C917 | C920 | C922 | C921 | C924 |      | C914 | C908 | C928 | C904 | C915 |      | C913 | C909 | C911 | C905 |      |      |      |      |      |
|       | C923 | C918 | C916 | C919 | C926 |      | C912 | C910 | C907 |      | C906 | C902 | C901 | C903 |      |      |      |      |      |      |      |
| Q , D | Q911 | Q914 | D906 |      |      | Q905 | Q901 | Q909 | Q903 | Q913 | Q908 | Q906 | Q912 | Q910 | Q904 | D901 | Q907 |      |      |      |      |
|       |      |      |      |      | D902 |      |      |      |      | D905 | Q902 | D904 | D903 |      |      |      |      |      |      |      |      |
| MISC. | W902 | J903 | J902 | W903 | W901 | J906 | J905 | W904 | J908 | L901 | J907 | J904 |      |      |      | W901 | W904 | J901 |      |      |      |
| U     | U911 | U913 | U912 | U926 |      | U919 | U908 | U909 | U917 | U907 | U906 | U905 | U903 | U916 | U917 | U924 | U902 | U907 | U915 | U914 | U901 |

## SOLDER SIDE VIEW



D19

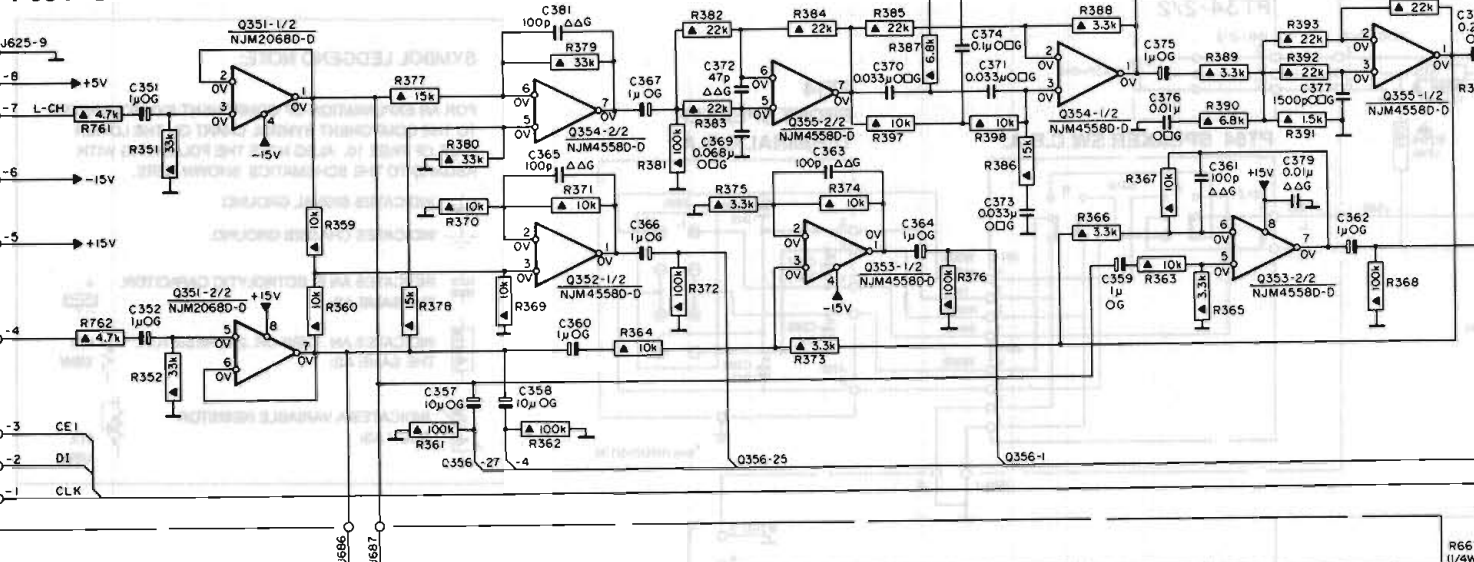
A1



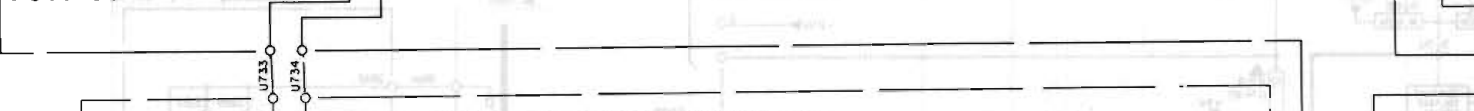
# SURROUND MODE AND DECODER SCHEMATIC DIAGRAM

|      |    |      |    |      |     |      |    |      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |    |      |     |      |    |      |    |      |    |      |    |      |    |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |
|------|----|------|----|------|-----|------|----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|----|------|----|------|----|------|----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| C351 | A2 | C365 | B4 | C377 | A8  | C628 | E5 | C638 | H4 | C649 | D11 | C659 | E6  | C669 | F15 | C680 | F9  | C757 | C17 | J629 | E20 | Q355 | A9 | O627 | H9  | R352 | C2 | R368 | B8 | R378 | B3 | R388 | A7 | R398 | A6 | R633 | H4  | R644 | F16 | R655 | F9  | R666 | G11 | R757 | C7  | U676 | G19 | U688 | D3  | U725 | E8  | U733 | D3  | U740 | H12 |
| C352 | C6 | C366 | B5 | C378 | A9  | C629 | E6 | C639 | H5 | C650 | F8  | C660 | E6  | C670 | F15 | C681 | H11 | C758 | C18 | J630 | G19 | Q356 | A9 | O628 | G11 | R359 | B3 | R369 | B4 | R379 | A4 | R389 | A8 | R399 | A5 | R634 | H4  | R645 | F16 | R656 | F9  | R667 | D9  | R758 | C13 | U677 | D17 | U689 | D9  | U726 | F19 | U734 | D3  | U741 | H12 |
| C353 | C4 | C367 | A5 | C379 | B8  | C630 | F5 | C640 | H4 | C651 | F7  | C661 | F11 | C671 | F15 | C682 | H12 | D625 | H12 | Q351 | A2  | Q356 | B9 | O629 | F1  | R360 | B3 | R370 | B4 | R380 | B4 | R390 | A8 | R635 | H4 | R646 | F15 | R657 | G9  | R668 | H12 | R759 | C14 | U678 | D14 | U690 | D9  | U727 | F19 | U735 | E8  | U742 | H12 |      |     |
| C358 | C4 | C369 | B5 | C381 | A4  | C631 | F5 | C641 | H5 | C652 | F8  | C662 | F11 | C673 | F14 | C683 | F19 | D626 | E19 | Q352 | A2  | Q357 | B9 | O630 | F1  | R361 | C3 | R371 | B5 | R381 | B5 | R391 | A8 | R636 | H4 | R647 | F16 | R658 | G9  | R669 | H13 | R760 | C14 | U679 | D17 | U691 | D9  | U728 | E18 | U736 | E8  | U743 | G18 |      |     |
| C359 | B7 | C370 | A6 | C382 | C10 | C632 | F4 | C642 | H6 | C653 | E8  | C663 | F13 | C674 | F14 | C684 | H6  | J502 | G2  | Q353 | B8  | Q358 | C5 | O631 | F1  | R362 | C3 | R372 | B6 | R382 | A5 | R392 | A8 | R637 | H6 | R648 | F16 | R659 | G9  | R670 | C14 | U680 | D14 | U692 | D9  | U729 | E13 | U737 | E8  | U744 | H12 |      |     |      |     |
| C360 | C4 | C371 | A6 | C383 | A12 | C633 | F4 | C643 | H8 | C654 | E8  | C664 | H14 | C675 | F13 | C685 | H8  | J503 | G2  | Q354 | B8  | Q359 | C5 | O632 | F1  | R363 | C3 | R373 | B5 | R383 | A5 | R393 | A8 | R638 | H6 | R649 | F16 | R660 | F10 | R761 | A2  | U681 | F19 | U693 | D9  | U730 | E11 | U738 | H14 | U745 | H12 |      |     |      |     |
| C361 | B7 | C372 | B6 | C384 | C12 | C634 | F4 | C644 | H8 | C655 | F8  | C665 | G16 | C676 | G13 | C686 | H8  | J504 | G2  | Q355 | B8  | Q360 | C5 | O633 | F1  | R364 | C4 | R374 | B6 | R384 | A6 | R394 | A8 | R639 | F8 | R650 | F13 | R661 | F10 | R762 | C14 | U682 | D10 | U694 | D9  | U731 | G18 | U739 | E17 | U746 | H12 |      |     |      |     |
| C362 | B8 | C373 | A6 | C385 | A12 | C635 | F4 | C645 | H8 | C656 | F8  | C666 | G16 | C677 | G13 | C687 | H8  | J505 | G2  | Q356 | B8  | Q361 | C5 | O634 | F1  | R365 | C4 | R375 | B6 | R385 | A6 | R395 | A8 | R640 | F8 | R651 | F13 | R662 | A17 | R763 | C13 | U683 | D10 | U695 | D10 | U732 | G18 | U740 | G18 | U747 | H12 |      |     |      |     |
| C363 | B8 | C374 | A6 | C386 | A12 | C636 | F4 | C646 | H8 | C657 | F8  | C667 | G16 | C678 | F13 | C688 | H8  | J506 | G2  | Q357 | B8  | Q362 | C5 | O635 | F1  | R366 | C4 | R376 | B6 | R386 | A6 | R396 | A8 | R641 | F8 | R652 | F16 | R663 | F20 | R764 | A11 | U684 | D10 | U696 | D10 | U733 | E10 | U741 | H12 | U748 | H12 |      |     |      |     |
| C364 | B6 | C375 | A7 | C387 | E6  | C637 | G4 | C647 | G8 | C658 | E6  | C668 | F15 | C679 | G4  | C759 | B18 | J625 | A11 | J626 | C20 | Q355 | A5 | O625 | G13 | R367 | B7 | R377 | A3 | R387 | A6 | R397 | A6 | R642 | E8 | R653 | F16 | R664 | C14 | R756 | B14 | U671 | E19 | U685 | D10 | U724 | G18 | U731 | G8  | U739 | E17 |      |     |      |     |

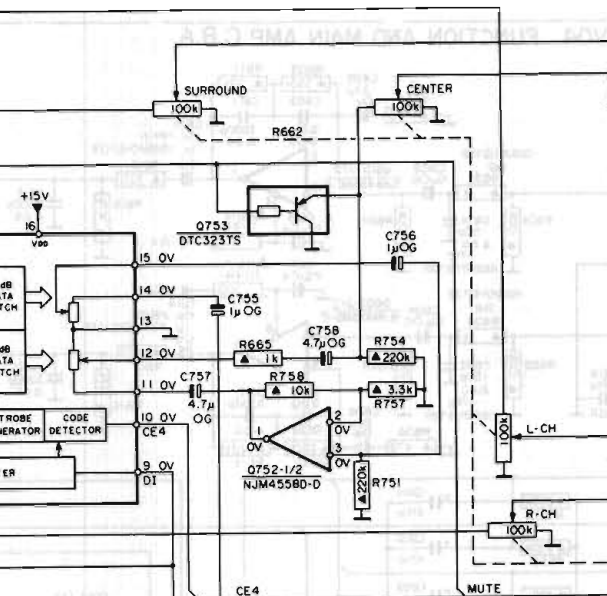
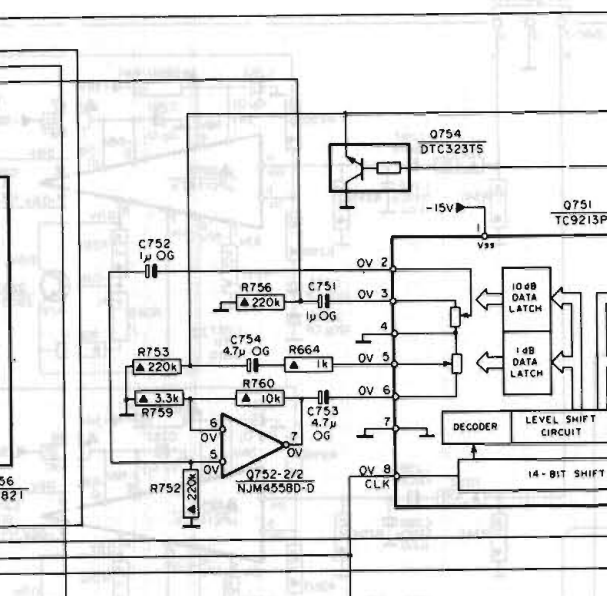
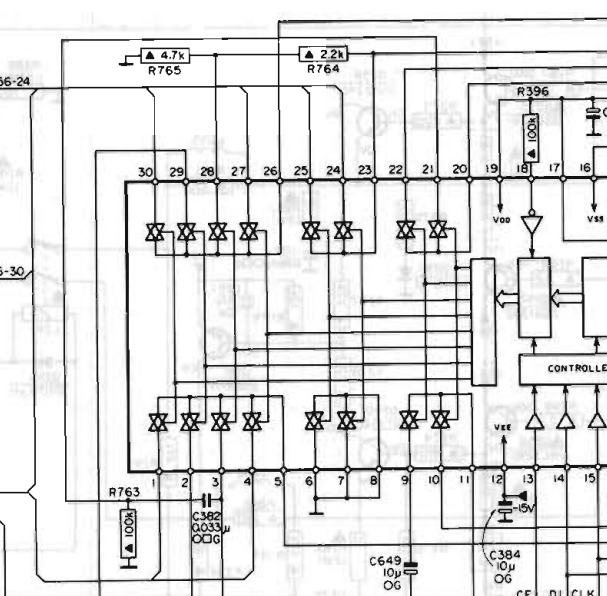
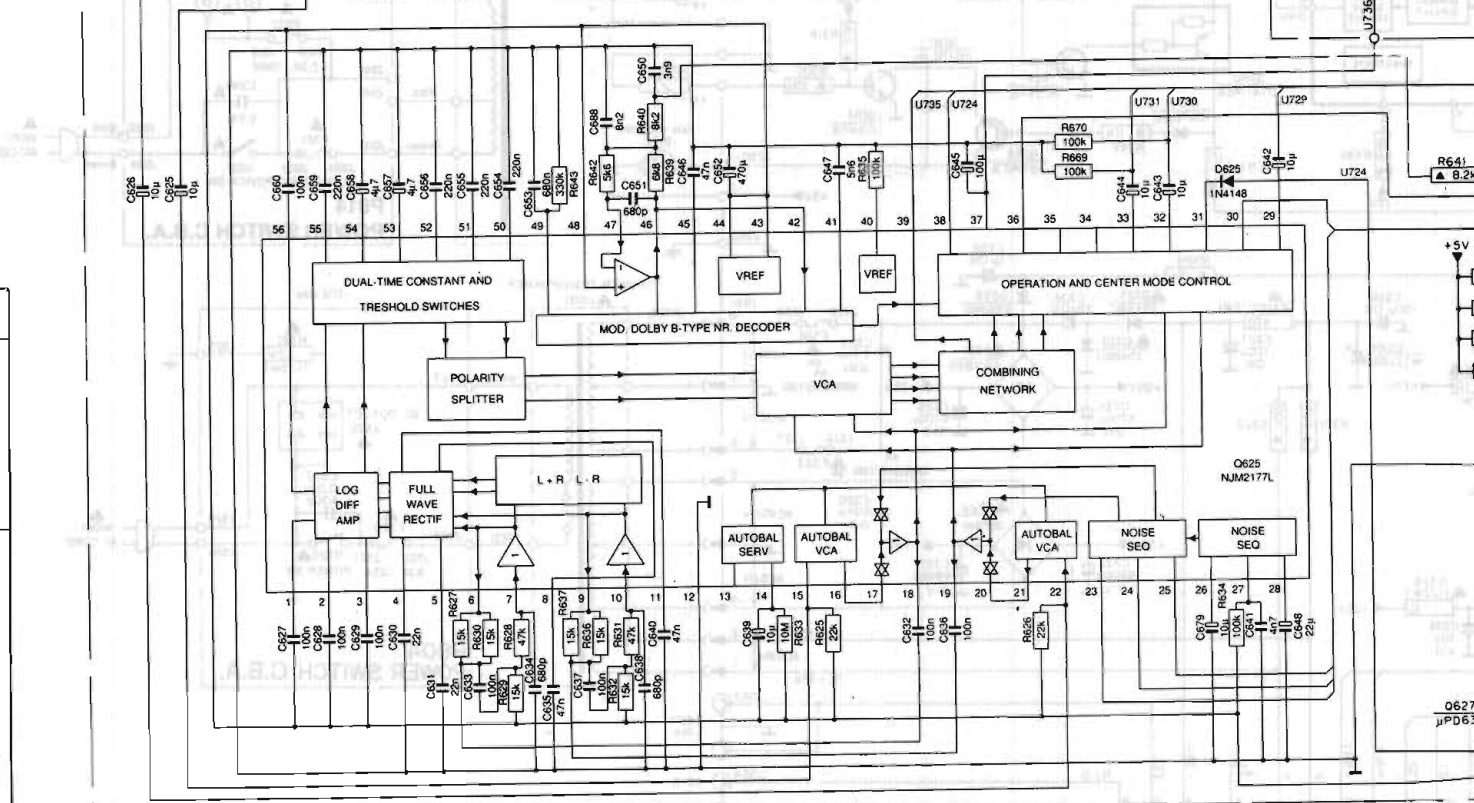
## P634 SURROUND MODE AND VOLUME C.B.A



## P644 JUMPER C.B.A



## P654 - DOLBY PRO-LOGIC DECODER C.B.A



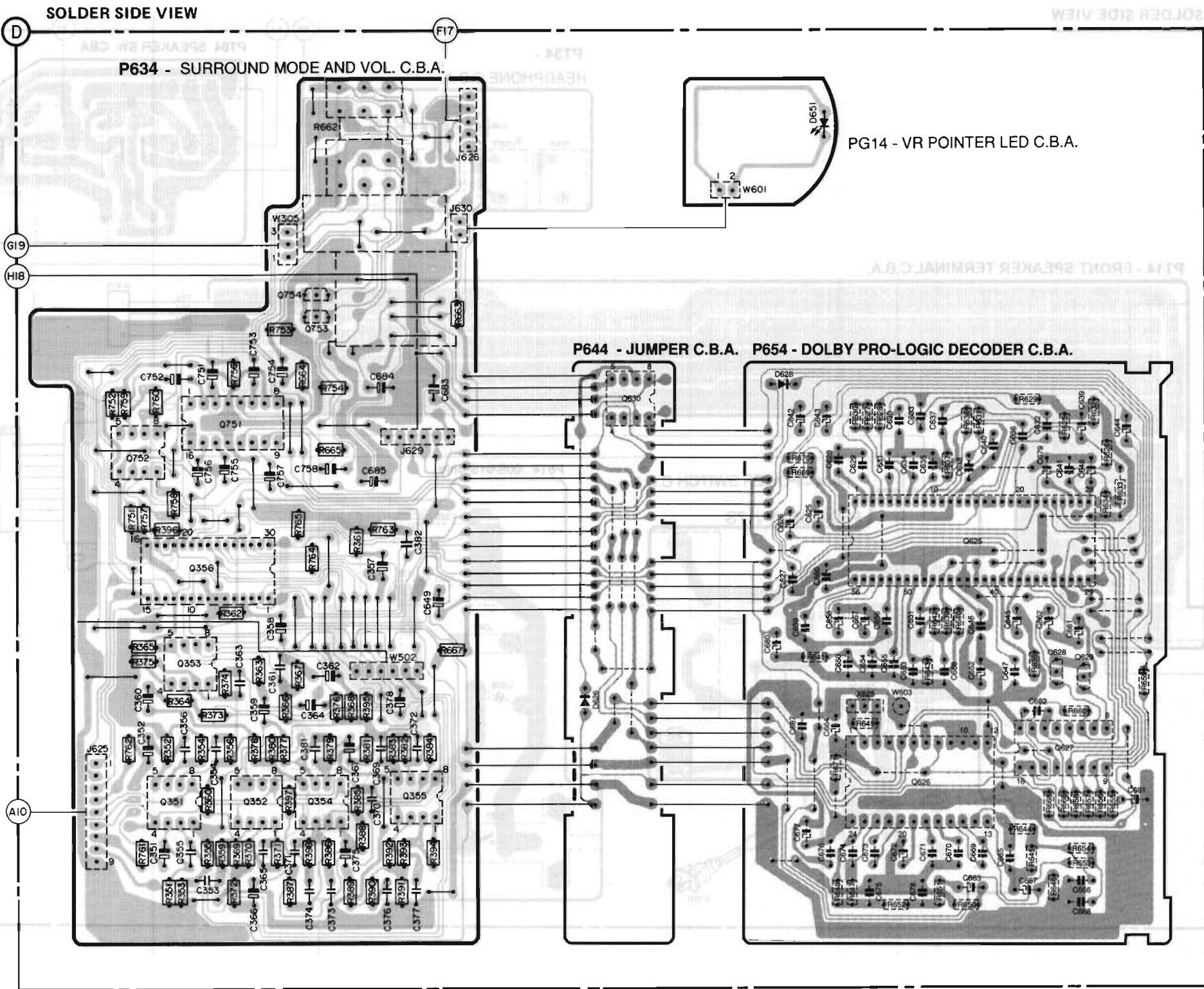
**MAIN C.B.A. SOLDER SIDE VIEW**

This diagram shows the solder side of the Main C.B.A. circuit board. Key components and labels include:

- 9106 FANMOTOR** and **PV04** at the top left.
- FR940 ONLY** and **FR930/005** component designations.
- EXCEPT FR930/005 ONLY** and **EXCEPT FR930/005 ONLY** labels for specific component areas.
- FR930 3P FR940 8P W307** at the bottom right.
- WI01** and **WI02** labels for wire connections.
- J501** through **J567** for various connectors.
- C201** through **C618** for capacitors.
- R201** through **R618** for resistors.
- Q201** through **Q618** for transistors.
- D201** through **D618** for diodes.
- F201** through **F618** for fuses.
- W500** and **W501** for waveforms.
- J501** through **J567** for various connectors.
- C201** through **C618** for capacitors.
- R201** through **R618** for resistors.
- Q201** through **Q618** for transistors.
- D201** through **D618** for diodes.
- F201** through **F618** for fuses.



|       |                                                                      |  |      |  |           |  |      |  |           |  |                                                                     |  |                                             |  |                  |  |           |  |                          |  |   |
|-------|----------------------------------------------------------------------|--|------|--|-----------|--|------|--|-----------|--|---------------------------------------------------------------------|--|---------------------------------------------|--|------------------|--|-----------|--|--------------------------|--|---|
| R     | R752 R751 R396 R756~R762 R753 R662R664 R665 R754 R763~R765 R667 R663 |  |      |  |           |  |      |  |           |  | R670 R669                                                           |  | R630 R627 R628                              |  | R637 R636 R631   |  | R629      |  | R625 R632 R634 R626 R633 |  | R |
|       | R351~R356 R359~R365 R369~R380 R366~R368 R397 R398 R381~R395          |  |      |  |           |  |      |  |           |  | R671 R647 ~ R652 R639 ~ R643 R644 ~ R646 R635 R668 R666 R653 ~ R660 |  |                                             |  |                  |  |           |  |                          |  |   |
| C     | C751~C758 C358 C359 C361~C367 C357 C382 C649                         |  |      |  |           |  |      |  |           |  | C642 C643 C625 ~ C631                                               |  | C650 ~ C660 C688                            |  | C632 ~ C641 C679 |  | C648 C644 |  | C                        |  |   |
|       | C351~C356                                                            |  | C381 |  | C369~C378 |  |      |  |           |  | C680 C687                                                           |  | C663 ~ C678 C645 ~ C647 C682 C662 C661 C681 |  |                  |  |           |  |                          |  |   |
| Q - D | Q752 Q351 Q353 Q356 Q751 Q352 Q754 Q753 Q354                         |  | Q355 |  | D626      |  | O630 |  | D625 D651 |  | O626                                                                |  | Q625                                        |  | Q627~Q629        |  | Q - D     |  |                          |  |   |
| X     | X625                                                                 |  |      |  |           |  |      |  |           |  |                                                                     |  |                                             |  |                  |  | X         |  |                          |  |   |



# WARNING

Critical components having special safety characteristics are identified with a ▲ by the Ref. No. in the parts list and enclosed within a broken line \* (where several critical components are grouped in one area) along with the safety symbol ▲ on the schematics or exploded views.

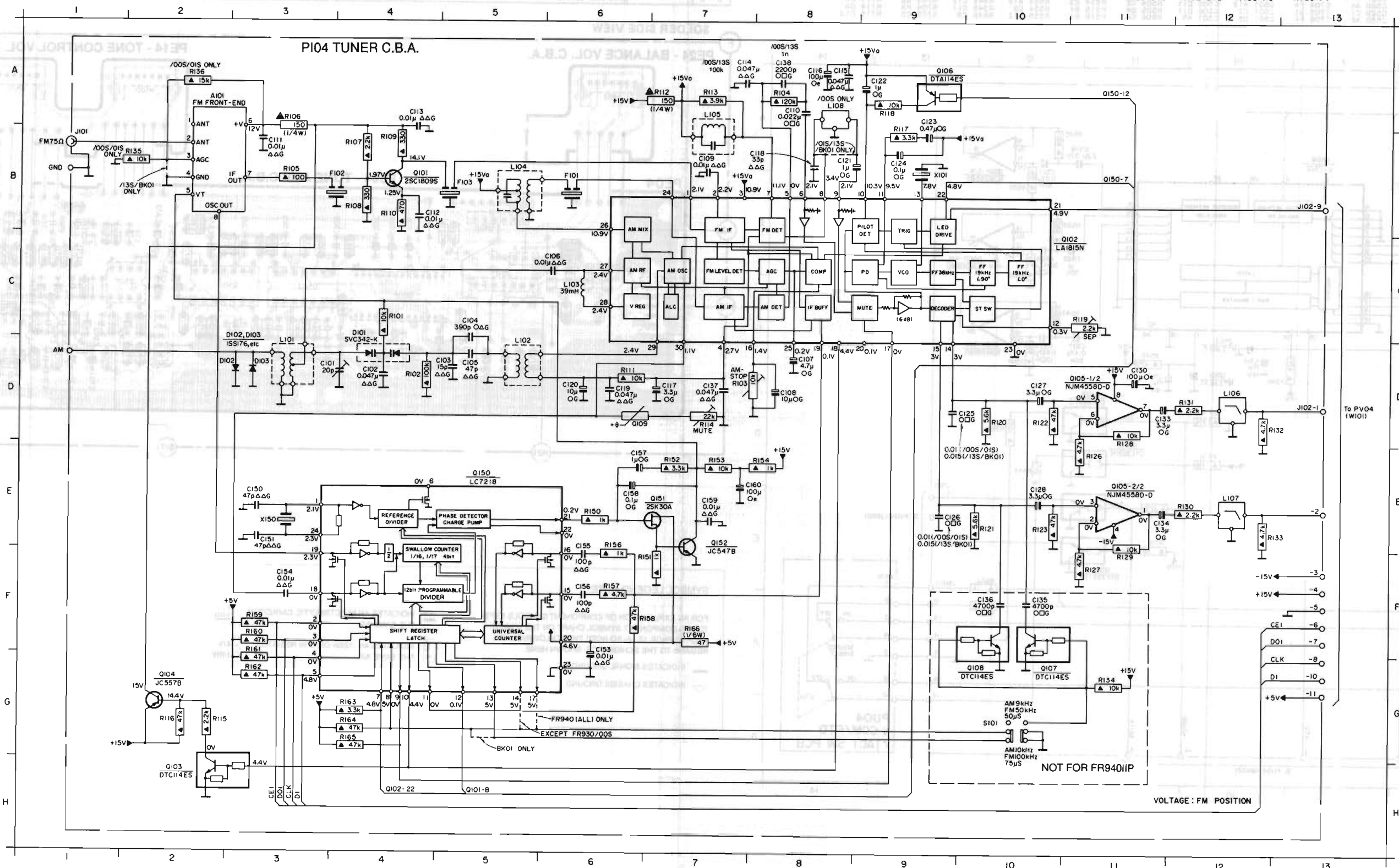
Under no circumstances should the original design be modified or altered without written permission from Philips Consumer Electronics Company. Philips assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

Use of substitute replacement parts which do not have the same specified safety characteristics may create shock, fire, or other hazards.

\* Broken Line:

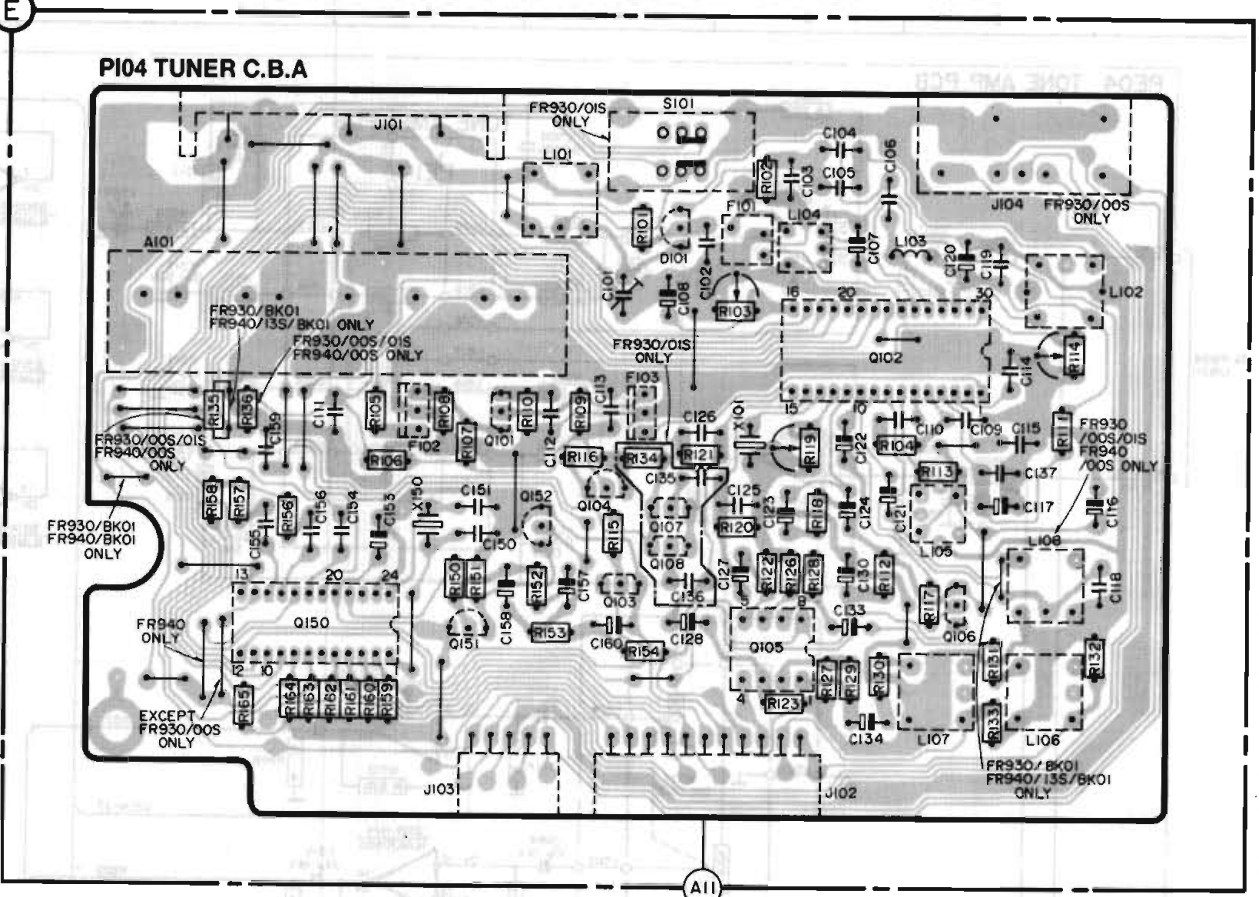
TUNER SCHEMATIC DIAGRAM

|      |    |      |    |      |     |      |     |      |    |      |    |      |     |      |     |      |    |      |     |      |     |      |     |      |    |      |    |
|------|----|------|----|------|-----|------|-----|------|----|------|----|------|-----|------|-----|------|----|------|-----|------|-----|------|-----|------|----|------|----|
| A101 | A2 | C110 | A6 | C120 | D6  | C133 | D11 | C154 | F3 | F101 | B6 | L105 | B7  | Q105 | E11 | R101 | C4 | R111 | D6  | R121 | E10 | R133 | E12 | R157 | F6 | X101 | B9 |
| C101 | D4 | C111 | B3 | C121 | B8  | C134 | E11 | C155 | F6 | F102 | B3 | L106 | D12 | Q106 | A9  | R102 | D4 | R112 | A7  | R122 | D10 | R134 | G11 | R158 | F6 | X150 | E3 |
| C103 | D5 | C113 | A4 | C123 | B9  | C135 | F10 | C156 | F6 | F103 | B5 | L107 | E12 | Q107 | F10 | R103 | D7 | R113 | A7  | R123 | E10 | R135 | B2  | R159 | F3 |      |    |
| C104 | C5 | C114 | A7 | C124 | B9  | C137 | D7  | C157 | E6 | F104 | B1 | Q101 | B4  | Q108 | F10 | R104 | A8 | R114 | D7  | R124 | E11 | R136 | A2  | R160 | F3 |      |    |
| C105 | D5 | C115 | A8 | C125 | D9  | C138 | A8  | C158 | E6 | F105 | B1 | Q101 | H5  | Q109 | D6  | R105 | B3 | R115 | G2  | R125 | F11 | R137 | E6  | R161 | G3 |      |    |
| C106 | C6 | C116 | A8 | C126 | E9  | C139 | E3  | C159 | E3 | F106 | B2 | Q102 | C11 | Q150 | A11 | R106 | A3 | R116 | G2  | R126 | D11 | R138 | B2  | R162 | G3 |      |    |
| C107 | D8 | C117 | D7 | C127 | D10 | C140 | E3  | C160 | E7 | F107 | B3 | Q103 | H4  | Q150 | B11 | R107 | B4 | R117 | B9  | R127 | E11 | R139 | E7  | R163 | G4 |      |    |
| C108 | D8 | C118 | B8 | C128 | E10 | C141 | D3  | C161 | E3 | F108 | B3 | Q104 | H2  | Q151 | E7  | R108 | B4 | R118 | A9  | R128 | E12 | R140 | E8  | R164 | G4 |      |    |
| C109 | B7 | C119 | D6 | C130 | D11 | C153 | G6  | C162 | D3 | F109 | B4 | Q105 | D11 | Q152 | E7  | R109 | B4 | R119 | C11 | R129 | D12 | R141 | E8  | R165 | G4 |      |    |



|       |           |           |           |      |      |      |           |           |           |      |      |      |      |      |       |
|-------|-----------|-----------|-----------|------|------|------|-----------|-----------|-----------|------|------|------|------|------|-------|
| R     | R135 R136 | R105~R108 | R110      | R109 | R101 | R134 | R103      | R102      | R119      | R118 | R104 | R113 | R111 | R114 | R     |
| C     | R156~R158 | R159~R165 | R150~R153 | R116 | R115 | R154 | R120~R122 | R126~R130 | R112      | R117 | R131 | R133 | R132 |      | C     |
| Q     | C159      | C111      | C151      | C112 | C113 | C101 | C108      | C102      | C103~C107 | C130 | C120 | C119 | C137 |      | Q     |
| D-S   |           |           |           |      |      |      |           |           |           |      |      |      |      |      | D-S   |
| F-L-X |           |           |           |      |      |      |           |           |           |      |      |      |      |      | F-L-X |

SOLDER SIDE VIEW



FR951 according to FR940

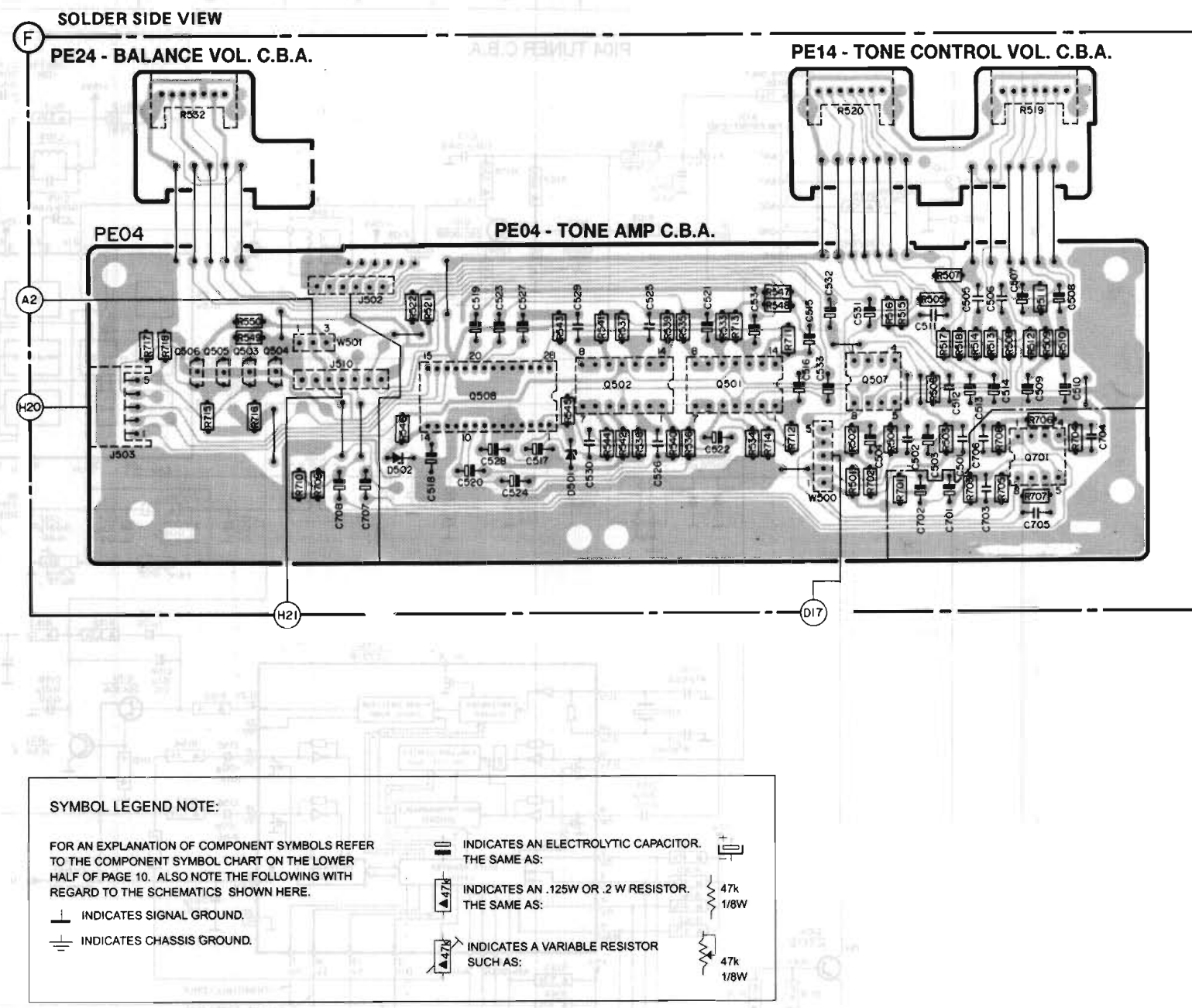
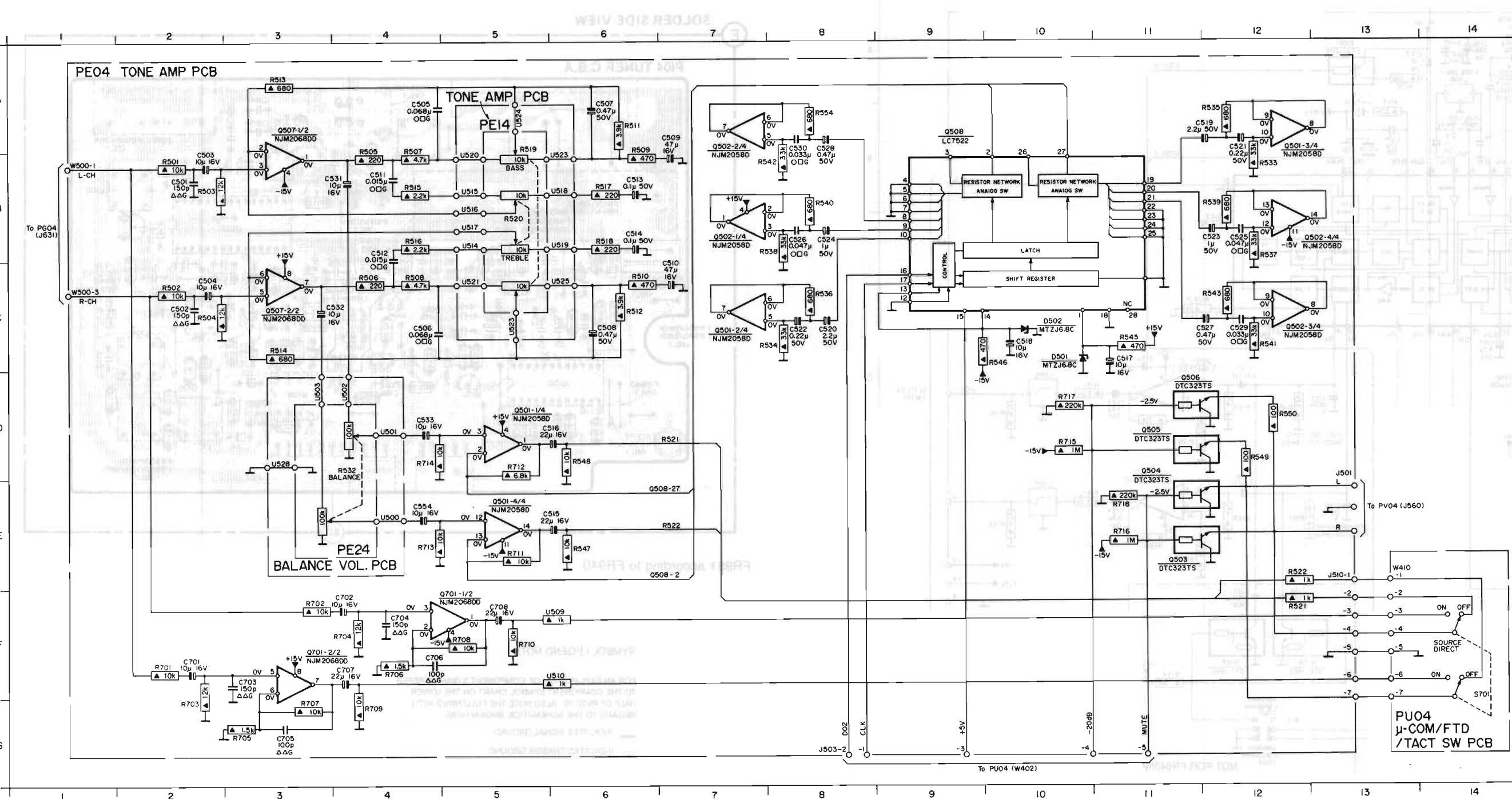
SYMBOL LEGEND NOTE:

FOR AN EXPLANATION OF COMPONENT SYMBOLS REFER TO THE COMPONENT SYMBOL CHART ON THE LOWER HALF OF PAGE 10. ALSO NOTE THE FOLLOWING WITH REGARD TO THE SCHEMATICS SHOWN HERE.

- INDICATES SIGNAL GROUND.
- INDICATES CHASSIS GROUND.
- INDICATES AN ELECTROLYTIC CAPACITOR. THE SAME AS:
- INDICATES AN .125W OR .2 W RESISTOR. THE SAME AS:
- INDICATES A VARIABLE RESISTOR SUCH AS:

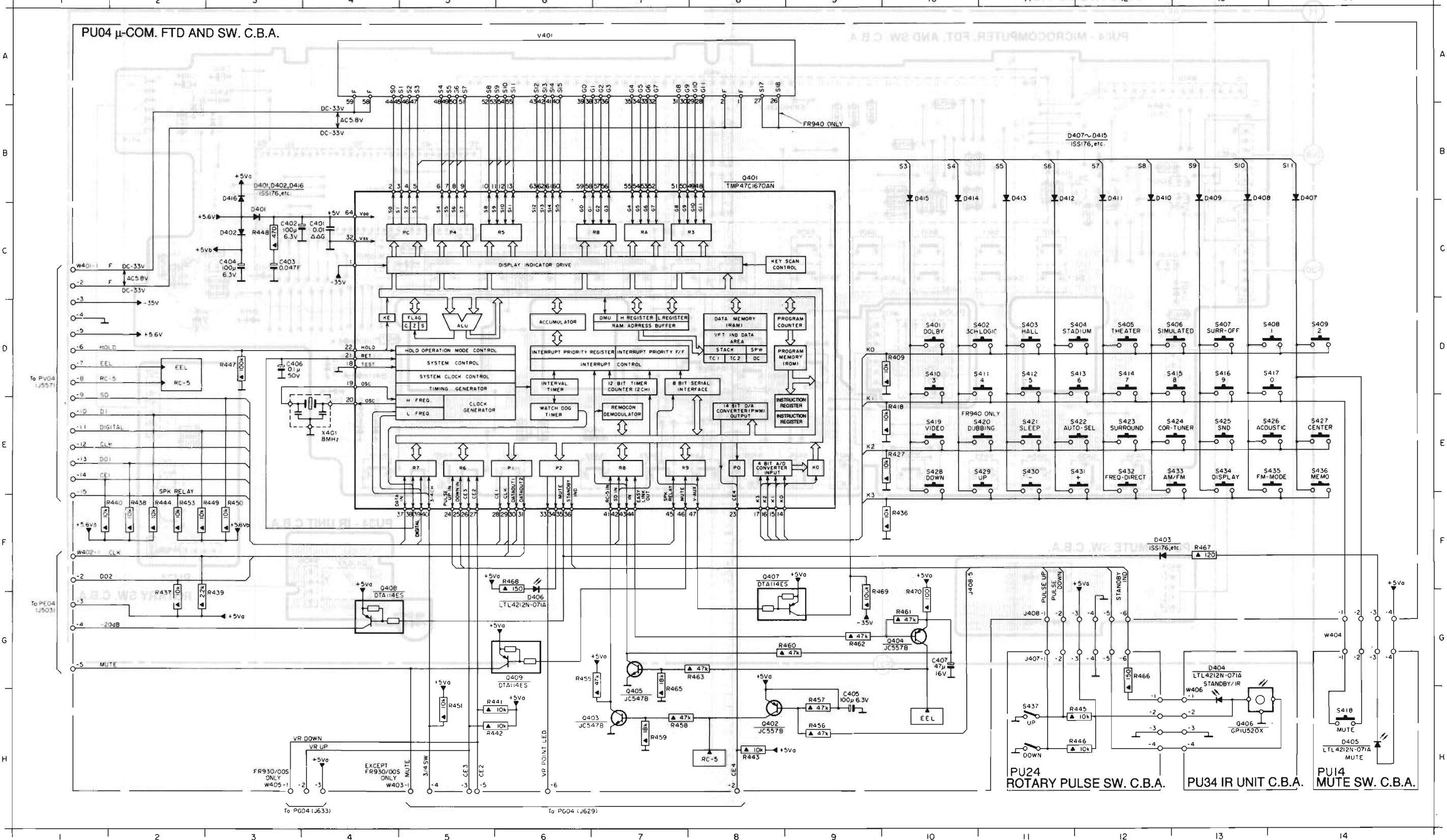
|      |    |      |     |      |     |      |    |      |     |      |     |      |    |      |    |      |     |      |     |      |     |      |     |      |     |
|------|----|------|-----|------|-----|------|----|------|-----|------|-----|------|----|------|----|------|-----|------|-----|------|-----|------|-----|------|-----|
| C501 | B2 | C511 | B4  | C521 | A12 | C531 | B4 | C707 | F4  | Q501 | E5  | Q507 | C3 | R507 | B4 | R517 | B6  | R536 | C8  | R547 | E6  | R706 | F4  | R716 | E11 |
| C502 | C2 | C512 | B4  | C522 | C8  | C532 | C3 | C708 | F5  | Q502 | A7  | Q508 | A9 | R508 | C4 | R518 | B6  | R537 | B12 | R548 | D6  | R707 | G3  | R717 | D10 |
| C503 | B2 | C513 | B6  | C523 | B12 | C533 | D4 | D501 | C10 | Q502 | B7  | Q701 | F3 | R509 | A6 | R519 | B5  | R538 | B6  | R549 | D12 | R708 | F5  | R718 | E11 |
| C504 | C2 | C514 | B6  | C524 | B8  | C534 | E4 | D502 | C10 | Q502 | B12 | Q701 | F4 | R510 | C6 | R520 | B5  | R539 | B12 | R550 | D12 | R709 | G4  | S701 | G14 |
| C505 | A4 | C515 | E6  | C525 | B12 | C701 | F2 | J501 | E13 | Q502 | C12 | R501 | E2 | R511 | A6 | R521 | F12 | R540 | B8  | R554 | A8  | R710 | F5  | U509 | F5  |
| C506 | C4 | C516 | D6  | C526 | B8  | C702 | F4 | J503 | B8  | Q503 | E11 | R502 | C2 | R512 | C6 | R522 | E12 | R541 | C12 | R701 | F2  | R711 | E5  | U510 | F5  |
| C507 | A6 | C517 | C11 | C527 | C12 | C703 | F3 | J510 | E13 | Q504 | E11 | R503 | B2 | R513 | A3 | R523 | D4  | R542 | B8  | R702 | F3  | R712 | D5  |      |     |
| C508 | C6 | C518 | C10 | C528 | A8  | C704 | F4 | Q501 | A12 | Q505 | D11 | R504 | C2 | R514 | C3 | R533 | A12 | R543 | C12 | R703 | G2  | R713 | E4  |      |     |
| C509 | A7 | C519 | A12 | C529 | C12 | C705 | G3 | Q501 | C7  | Q506 | D11 | R505 | B4 | R515 | B4 | R534 | C8  | R545 | C11 | R704 | F4  | R714 | D4  |      |     |
| C510 | C7 | C520 | C8  | C530 | A8  | C706 | F4 | Q501 | D5  | Q507 | A3  | R506 | C4 | R516 | B4 | R535 | A12 | R546 | C9  | R705 | G3  | R715 | D10 |      |     |

|       |                     |      |           |           |                                                   |                                         |                |           |           |   |
|-------|---------------------|------|-----------|-----------|---------------------------------------------------|-----------------------------------------|----------------|-----------|-----------|---|
| R     | R717 R718 R532      | R550 | R531      | R522 R521 | R543                                              | R541 R537 R539 R535 R533 R713 R547 R711 | R520 R516 R515 | R517~R519 | R505~R514 | R |
| C     | R715                | R716 | R710 R709 | R546      | R545 R544 R542 R538 R540 R536 R534 R714 R548 R712 | R501~R504                               | R701~R703      | R704~R708 | C         |   |
| D - Q | Q506 Q505 Q503 Q504 | D502 | Q508      | D501      | Q502                                              | Q501                                    | Q507           | Q701      | D - Q     |   |



# MICROCOMPUTER, FDT, AND SW. PCB SCHEMATIC DIAGRAM

|          |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| C401 C4  | D404 G13 | D414 B10 | Q401 B8  | R418 E10 | R444 F2  | R456 H9  | R467 F13 | S407 D13 | S417 D14 | S427 E14 | S437 H11 |
| C402 C3  | D405 H14 | D415 B10 | Q403 H7  | R427 E10 | R445 H12 | R457 H9  | R468 F6  | S408 D14 | S418 D14 | S428 E10 | V401 A6  |
| C403 C3  | D406 G6  | D416 B3  | Q404 G10 | R436 F10 | R446 H12 | R458 H7  | R469 G9  | S409 D10 | S419 E10 | S429 E11 | X401 E4  |
| C404 C3  | D407 B14 | J407 G11 | Q405 H7  | R437 G2  | R447 D3  | R459 H7  | R470 G10 | S410 D10 | S420 E11 | S430 E11 |          |
| C405 H9  | D408 B13 | J408 F10 | Q406 H13 | R438 F2  | R448 C3  | R460 G9  | S401 D10 | S411 D11 | S421 E11 | S431 E12 |          |
| C406 D3  | D409 B13 | J409 G11 | Q407 G8  | R439 G2  | R449 F2  | R461 G10 | S402 D11 | S412 D11 | S422 E12 | S432 E12 |          |
| C407 G10 | D410 B12 | J503 G1  | Q408 G4  | R440 F1  | R450 F3  | R462 G9  | S403 D11 | S413 D12 | S423 E12 | S433 E13 |          |
| D401 C3  | D411 B12 | J557 D1  | Q409 G6  | R441 H5  | R451 H5  | R463 G8  | S404 D12 | S414 D12 | S424 E13 | S434 E13 |          |
| D402 C3  | D412 B11 | J629 H6  | Q409 G6  | R442 H5  | R452 H5  | R464 F2  | S405 D12 | S415 D13 | S425 E13 | S435 E13 |          |
| D403 F12 | D413 B11 | J633 H4  | Q409 D10 | R443 H8  | R455 H7  | R466 G12 | S406 D13 | S416 D13 | S426 E14 | S436 E14 |          |



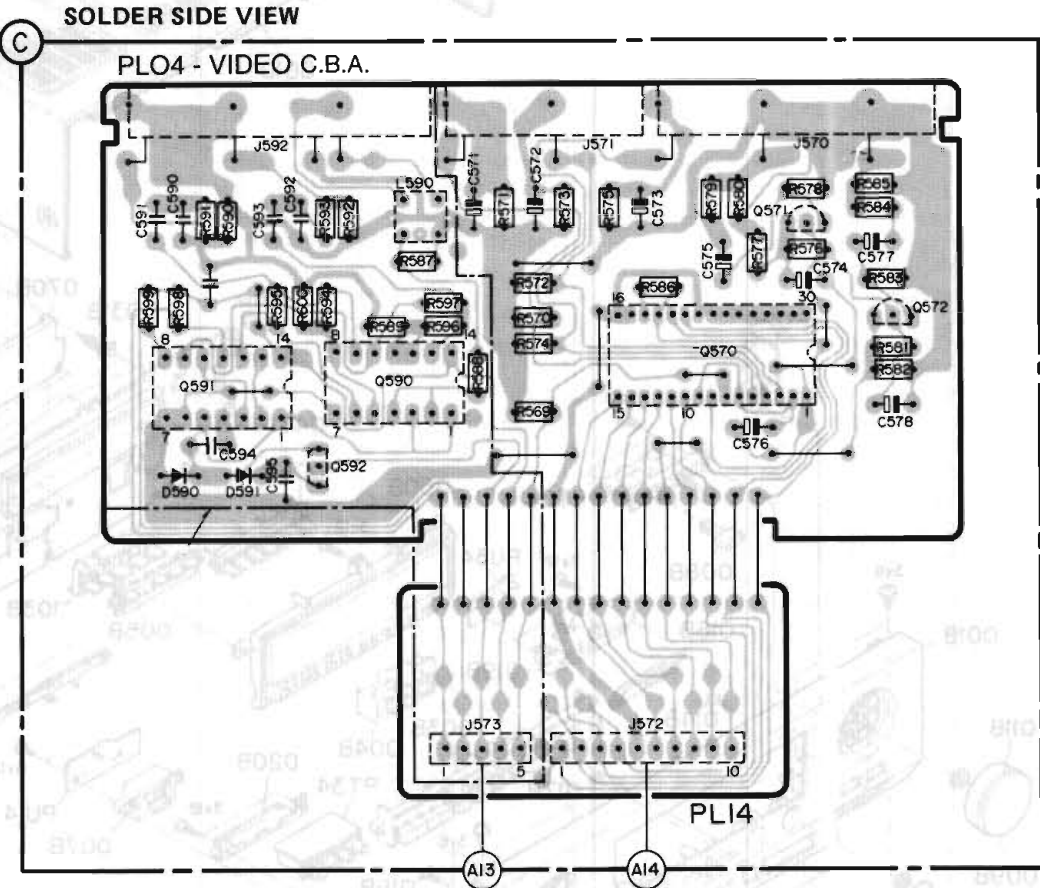
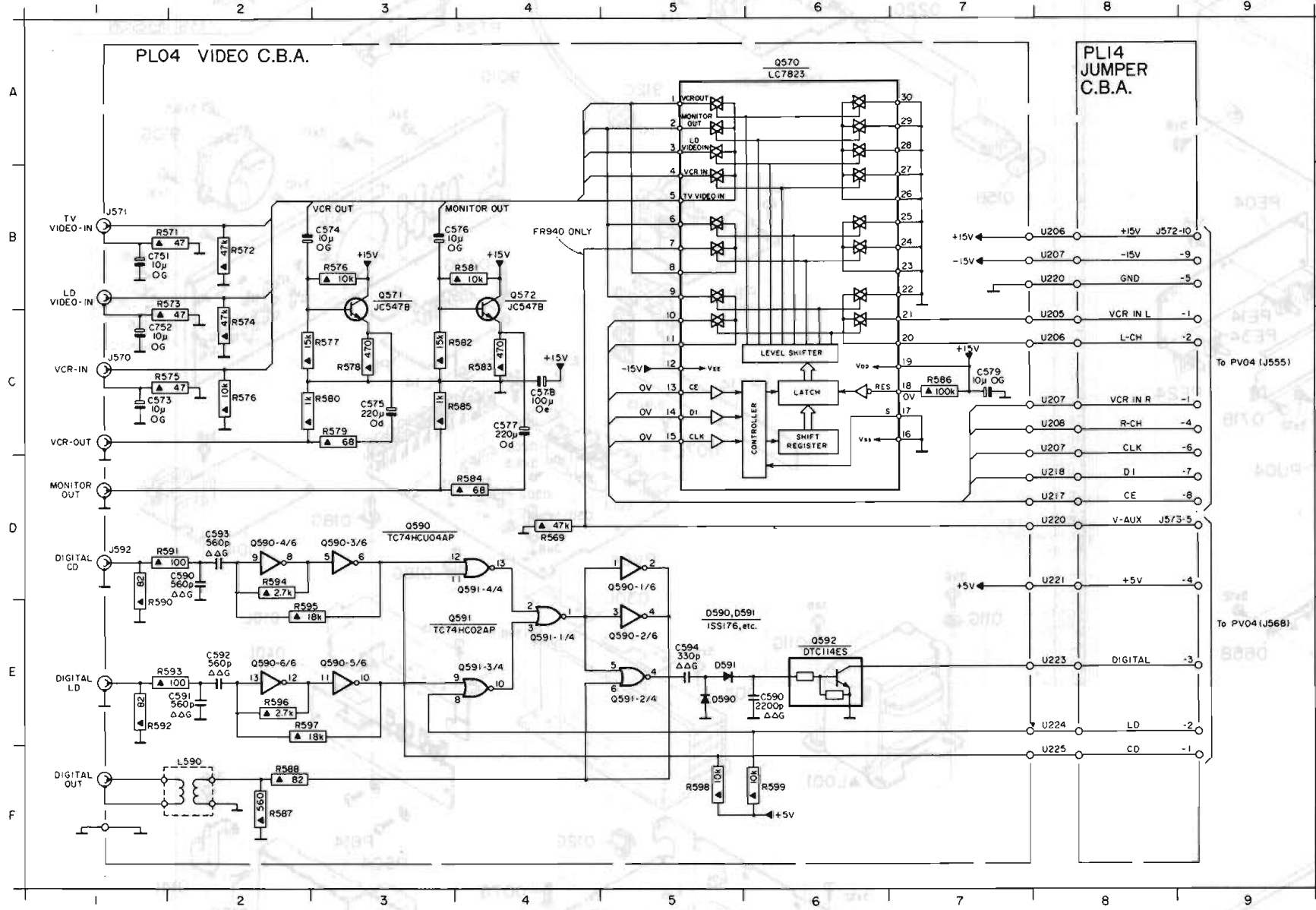


VIDEO SCHEMATIC DIAGRAM

EXPLODED VIEWS

|      |    |      |    |        |    |      |    |      |    |      |    |      |    |
|------|----|------|----|--------|----|------|----|------|----|------|----|------|----|
| C573 | C1 | C591 | E2 | J592   | D1 | Q590 | E5 | R575 | C1 | R585 | C3 | R596 | E2 |
| C574 | B3 | C592 | E2 | L590   | F2 | Q591 | D4 | R576 | B3 | R586 | C7 | R597 | E2 |
| C575 | C3 | C593 | D2 | Q570   | A6 | Q591 | E4 | R576 | C2 | R587 | F2 | R598 | F5 |
| C576 | B3 | C594 | E5 | Q571   | B3 | Q591 | E5 | R577 | C2 | R588 | F2 | R599 | F6 |
| C577 | C4 | C751 | B1 | Q572   | B4 | Q592 | E6 | R578 | C3 | R589 | D1 |      |    |
| C578 | C4 | C752 | C1 | Q590   | D2 | R579 | D4 | R579 | C3 | R591 | D1 |      |    |
| C579 | C7 | J570 | C1 | Q590   | D5 | R571 | B1 | R580 | C2 | R592 | E1 |      |    |
| C590 | D2 | J571 | B1 | Q590D5 |    | R571 | B2 | R582 | C3 | R593 | E1 |      |    |
| C590 | E5 | J572 | B9 | Q590   | E2 | R573 | B1 | R583 | C4 | R594 | D2 |      |    |
| C590 | E6 | J573 | D9 | Q590   | E3 | R574 | C2 | R584 | D4 | R595 | E2 |      |    |

|       |      |      |           |           |           |      |      |           |      |      |           |           |      |       |   |
|-------|------|------|-----------|-----------|-----------|------|------|-----------|------|------|-----------|-----------|------|-------|---|
| R     | R599 | R598 | R600      | R590~R595 | R587~R589 | R597 | R596 | R569~R575 | R586 | R580 | R576~R580 | R581~R585 | R    |       |   |
| C     | C591 | C590 | C592~C595 |           |           | C571 | C572 |           | C573 | C575 | C576      | C574      | C577 | C578  | C |
| Q-D-L | D590 | Q591 | D591      | Q592      | Q590      | L590 |      |           |      | Q570 | Q571      |           | Q572 | Q-D-L |   |



SYMBOL LEGEND NOTE:

FOR AN EXPLANATION OF COMPONENT SYMBOLS REFER TO THE COMPONENT SYMBOL CHART ON THE LOWER HALF OF PAGE 10. ALSO NOTE THE FOLLOWING WITH REGARD TO THE SCHEMATICS SHOWN HERE.

- INDICATES SIGNAL GROUND.
- INDICATES CHASSIS GROUND.

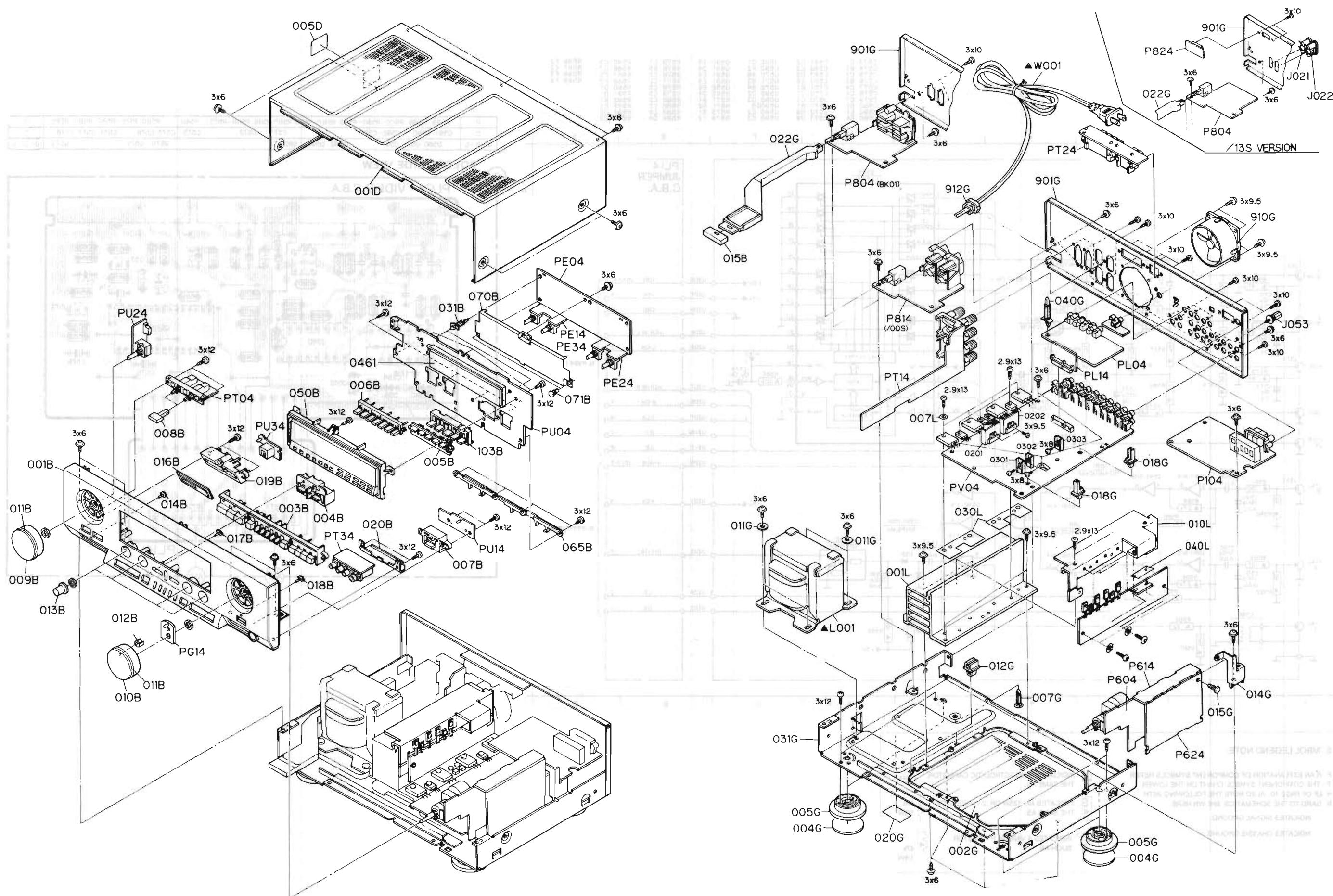
INDICATES AN ELECTROLYTIC CAPACITOR. THE SAME AS:

INDICATES AN .125W OR .2 W RESISTOR. THE SAME AS:

INDICATES A VARIABLE RESISTOR SUCH AS:



EXPLODED VIEWS



MECHANICAL PARTSLIST

|      |                |                      |
|------|----------------|----------------------|
| 001B | 4822 426 51735 | FRONT ASSY           |
| 001T | 4822 736 53839 | IFU FR951            |
| 001T | 4822 736 22125 | IFU ONLY/00S         |
| 003B | 4822 410 62061 | BUTTON, NOSE         |
| 004B | 4822 410 62068 | BUTTON,CURSOL        |
| 004G | 4822 462 41887 | RUBBER, LEG          |
| 005B | 4822 410 62063 | BUTTON, 10KEY UPPER  |
| 005G | 4822 462 41888 | LEG                  |
| 006B | 4822 410 62064 | BUTTON SURROUND MODE |
| 007B | 4822 410 62065 | BUTTON, μH TING      |
| 008B | 4822 410 62066 | BUTTON, SPEAKER      |
| 009B | 4822 413 31708 | KNOB, SELECTOR       |
| 010B | 4822 413 41733 | KNOB, VOLUME         |
| 011B | 4822 532 21449 | RUBBER, RING         |
| 012B | 4822 413 41733 | LENS, POINTER        |
| 013B | 4822 413 41704 | KNOB, BALANCE        |
| 014B | 4822 381 11311 | LENS, STANDBY        |
| 015B | 4822 462 71808 | POWER KNOB           |
| 016B | 4822 381 11347 | LENS, IR SENSOR      |
| 017B | 4822 381 11311 | LENS, AUTO SELECTOR  |
| 018B | 4822 381 11311 | LENS, μH TING        |
| 022G | 4822 404 21245 | LEVER, POWER         |
| 050B | 4822 454 12845 | ESCUT ASSY, WINDOW   |
| 103B | 4822 410 62069 | BUTTON, 10KEY LOWER  |
| 910G | 4822 361 10653 | FAN                  |
| 912G | 4822 532 60948 | BUSHING, AC CORD     |
| J053 | 4822 290 40297 | TERMINAL GND         |
| L001 | 4822 146 31269 | TRANSFORMER MAINS    |
| L001 | 4822 146 31392 | MAINS TRAFO ONLY/00S |
| W001 | 4822 321 10521 | MAINS CORD           |
| W001 | 4822 321 10781 | CORD SET ONLY/00S    |
| Z001 | 4822 218 10469 | REM CONRTOL RC6624   |
| Z003 | 4822 158 60622 | AM FRAME AERIAL      |
| Z004 | 4822 321 61668 | PIN CORD ASSY        |
| Z005 | 4822 303 30314 | FM ANTENNA WIRE      |
| Z005 | 4822 303 50055 | FM ANT. ONLY/00S     |
| Z006 | 4822 264 30265 | ANTENNA ADAPTOR      |

MISCELLANEOUS

|      |                |                      |
|------|----------------|----------------------|
| A101 | 4822 210 10397 | TUNER FE337-A05      |
| A101 | 4822 210 10609 | FE415-G09 ONLY/00S   |
| F320 | 4822 253 30399 | FUSE 6.3A 125V       |
| F321 | 4822 253 50145 | FUSE 3.15A ONLY/00S  |
| F322 | 4822 253 30383 | FUSE 2.5A ONLY/00S   |
| F323 | 4822 253 30411 | FUSE M5.0A 125V      |
| F323 | 4822 070 34002 | FUSE 4A ONLY/00S     |
| F324 | 4822 253 30411 | FUSE M5.0A 125V      |
| F324 | 4822 070 34002 | FUSE 4A ONLY/00S     |
| J101 | 4822 290 81537 | SOCKET-ANTENNA       |
| J101 | 4822 290 81672 | ANTENNA ONLY/00S     |
| J300 | 4822 290 40496 | SOCKET SPK 8P        |
| J320 | 4822 267 31286 | SOCKET-MAINS 15A 125 |
| J326 | 4822 265 20594 | AC OUTLET ONLY/00S   |
| J327 | 4822 265 20594 | AC OUTLET ONLY/00S   |
| J328 | 4822 256 30495 | CLIP FUSE            |
| J329 | 4822 256 30487 | CLIP FUSE            |
| J511 | 4822 290 40209 | TERMINAL-PCB GND     |
| J551 | 4822 267 31451 | PIN JACK 14/14 2L8P  |
| J552 | 4822 267 31451 | PIN JACK 14/14 2L8P  |
| J553 | 4822 265 20542 | PIN JACK 14/14 2L2P  |
| J554 | 4822 265 20543 | PIN JACK 14/14 1L1P  |
| J563 | 4822 290 40209 | TERMINAL-PCB GND     |
| J570 | 4822 265 41264 | SOCKET-PHONO 3P      |
| J571 | 4822 265 41263 | SOCKET-PHONO 2P      |
| J580 | 4822 265 20555 | JACKS H/PHONE        |
| J582 | 4822 290 81521 | SOCKET-PHONE 1P      |
| J583 | 4822 290 81522 | SOCKET-PHONE 1P      |
| J584 | 4822 290 81523 | SOCKET-PHONE 1P      |
| J592 | 4822 267 41157 | SOCKET 3P            |
| J905 | 4822 267 31457 | SOCKET CINCH         |
| J906 | 4822 290 81525 | SOCKET-SPK 2P        |
| J907 | 4822 290 81526 | SOCKET PUSH TERM     |
| 0461 | 4822 256 91966 | HOLDER FL            |
| V401 | 4822 130 91145 | DISPLAY 12-BT-69GK   |

CAPACITORS

|      |                |                 |
|------|----------------|-----------------|
| C101 | 4822 125 60185 | TRIMMER 20P 50V |
| C102 | 4822 122 40306 | 47nF 50V        |
| C103 | 4822 126 12301 | 15pF 5% 50V     |
| C104 | 5322 121 54128 | 390pF 1% 630V   |
| C105 | 4822 122 31205 | 47pF 2% 500V    |
| C106 | 4822 122 30043 | 10nF 80% 63V    |
| C107 | 4822 124 21844 | 4,7μF 50V       |
| C108 | 4822 124 41284 | 10μF 50V        |
| C109 | 4822 122 30043 | 10nF 80% 63V    |
| C110 | 4822 121 43144 | 22nF 10% 50V    |

|      |                |                  |
|------|----------------|------------------|
| C111 | 4822 122 30043 | 10nF 80% 63V     |
| C112 | 4822 122 30043 | 10nF 80% 63V     |
| C113 | 4822 122 30043 | 10nF 80% 63V     |
| C114 | 4822 122 40306 | 47nF 50V         |
| C115 | 4822 122 40306 | 47nF 50V         |
| C116 | 4822 124 41139 | 100μF 16V        |
| C117 | 4822 124 22284 | 3,3μF 50V        |
| C118 | 4822 122 31202 | 33pF 2% 500V     |
| C119 | 4822 122 40306 | 47nF 50V         |
| C120 | 4822 124 41284 | 10μF 50V         |
| C121 | 4822 124 21683 | 1μF 50V          |
| C122 | 4822 124 21683 | 1μF 50V          |
| C123 | 4822 124 21407 | 0,47μF 50V       |
| C124 | 5322 124 41473 | 0.1μF 20% 63V    |
| C125 | 4822 121 51305 | 15nF 10% 50V     |
| C125 | 4822 121 51304 | 10N 50V ONLY/00S |
| C126 | 4822 121 51305 | 15nF 10% 50V     |
| C126 | 4822 121 51304 | 10N 50V ONLY/00S |
| C127 | 4822 124 22284 | 3,3μF 50V        |
| C128 | 4822 124 22284 | 3,3μF 50V        |
| C130 | 4822 124 41139 | 100μF 16V        |
| C133 | 4822 124 22284 | 3,3μF 50V        |
| C134 | 4822 124 22284 | 3,3μF 50V        |
| C137 | 4822 122 40306 | 47nF 50V         |
| C138 | 4822 121 70099 | 15pF 5%          |
| C138 | 4822 121 51299 | 1N 50V ONLY/00S  |
| C150 | 4822 122 31205 | 47pF 2% 500V     |
| C151 | 4822 122 31205 | 47pF 2% 500V     |
| C153 | 4822 122 30043 | 10nF 80% 63V     |
| C154 | 4822 122 30043 | 10nF 80% 63V     |
| C157 | 4822 124 21683 | 1μF 50V          |
| C158 | 5322 124 41473 | 0.1μF 20% 63V    |
| C159 | 4822 122 30043 | 10nF 80% 63V     |
| C160 | 4822 124 41139 | 100μF 16V        |
| C161 | 4822 122 30043 | 10nF 80% 63V     |
| C162 | 4822 122 30043 | 10nF 80% 63V     |
| C201 | 5322 122 32311 | 470pF ONLY/00S   |
| C202 | 5322 122 32311 | 470pF ONLY/00S   |
| C203 | 5322 122 32311 | 470pF ONLY/00S   |
| C204 | 5322 122 32311 | 470pF ONLY/00S   |
| C205 | 5322 122 32311 | 470pF ONLY/00S   |
| C206 | 5322 122 32311 | 470pF ONLY/00S   |
| C207 | 5322 122 32311 | 470pF ONLY/00S   |
| C208 | 5322 122 32311 | 470pF ONLY/00S   |
| C209 | 5322 122 32311 | 470pF ONLY/00S   |
| C210 | 5322 122 32311 | 470pF ONLY/00S   |
| C211 | 4822 121 51096 | 1,5nF 50V        |
| C212 | 4822 121 51096 | 1,5nF 50V        |
| C251 | 4822 124 41287 | 47μF 16V         |
| C252 | 4822 122 30043 | 10nF 80% 63V     |
| C253 | 4822 124 40181 | 220μF 20% 10V    |
| C254 | 4822 124 21683 | 1μF 50V          |
| C255 | 4822 124 41284 | 10μF 50V         |

|      |                |                   |      |                |                |      |                |                  |      |                |                 |
|------|----------------|-------------------|------|----------------|----------------|------|----------------|------------------|------|----------------|-----------------|
| C257 | 4822 124 41284 | 10μF 50V          | C370 | 4822 121 43145 | 33nF 10% 50V   | C535 | 5322 122 32334 | 220pF 10% 100V   | C638 | 5322 122 32052 | 680pF 10% 100V  |
| C258 | 4822 124 41284 | 10μF 50V          | C371 | 4822 121 43145 | 33nF 10% 50V   | C536 | 5322 122 32334 | 220pF 10% 100V   | C639 | 4822 124 41402 | 10μF 20% 50V    |
| C259 | 4822 122 30099 | 3,3nF 10% 100V    | C372 | 4822 122 31205 | 47pF 2% 500V   | C537 | 4822 126 12808 | 2N2 50V ONLY/00S | C640 | 4822 121 43526 | 47nF 5% 250V    |
| C260 | 4822 122 30099 | 3,3nF 10% 100V    | C373 | 4822 121 43145 | 33nF 10% 50V   | C564 | 4822 124 41284 | 10μF 50V         | C641 | 4822 121 51303 | 4,7nF 10% 50V   |
| C261 | 5322 124 40641 | 10μF 20% 100V     | C374 | 5322 121 42386 | 100nF 5% 63V   | C565 | 4822 122 30043 | 10nF 80% 63V     | C642 | 4822 124 41402 | 10μF 20% 50V    |
| C262 | 5322 124 40641 | 10μF 20% 100V     | C375 | 4822 124 21683 | 1μF 50V        | C566 | 4822 122 30043 | 10nF 80% 63V     | C643 | 4822 124 41284 | 10μF 50V        |
| C263 | 5322 124 40641 | 10μF 20% 100V     | C376 | 4822 121 51304 | 10nF 10% 50V   | C567 | 4822 122 33307 | 10N 50V ONLY/00S | C644 | 4822 124 41402 | 10μF 20% 50V    |
| C264 | 5322 124 40641 | 10μF 20% 100V     | C377 | 4822 121 51096 | 1,5nF 50V      | C571 | 4822 124 41284 | 10μF 50V         | C645 | 4822 124 41643 | 100μF 20% 16V   |
| C265 | 4822 124 22262 | 100μF 35V         | C378 | 4822 124 40746 | 0,22μF 20% 63V | C572 | 4822 124 41284 | 10μF 50V         | C646 | 4822 121 43526 | 47nF 5% 250V    |
| C266 | 4822 124 22262 | 100μF 35V         | C382 | 4822 121 43145 | 33nF 10% 50V   | C573 | 4822 124 41284 | 10μF 50V         | C647 | 4822 121 70176 | 5,6nF 10% 50V   |
| C267 | 5322 122 32776 | 27pF 2% 500V      | C383 | 4822 124 41284 | 10μF 50V       | C574 | 4822 124 41284 | 10μF 50V         | C648 | 5322 124 41431 | 22μF 20% 35V    |
| C268 | 5322 122 32776 | 27pF 2% 500V      | C384 | 4822 124 41284 | 10μF 50V       | C575 | 4822 124 40181 | 220μF 20% 10V    | C649 | 4822 124 41284 | 10μF 50V        |
| C269 | 5322 121 42386 | 100nF 5% 63V      | C401 | 4822 122 30043 | 10nF 80% 63V   | C576 | 4822 124 41284 | 10μF 50V         | C650 | 4822 121 51302 | 3,9nF 10% 50V   |
| C270 | 5322 121 42386 | 100nF 5% 63V      | C402 | 4822 126 10935 | 100μF 10V      | C577 | 4822 124 40181 | 220μF 20% 10V    | C651 | 5322 122 32052 | 680pF 10% 100V  |
| C271 | 5322 121 42465 | 68nF 5% 63V       | C403 | 4822 124 23128 | 47000μF 5,5V   | C578 | 4822 124 41139 | 100μF 16V        | C652 | 4822 124 21852 | 470μF 16V       |
| C272 | 5322 121 42465 | 68nF 5% 63V       | C404 | 4822 126 10935 | 100μF 10V      | C579 | 4822 124 41284 | 10μF 50V         | C653 | 5322 121 42498 | 680nF 5% 63V    |
| C273 | 4822 124 22262 | 100μF 35V         | C405 | 4822 126 10935 | 100μF 10V      | C591 | 5322 122 32334 | 220pF 10% 100V   | C654 | 4822 121 42868 | 220nF 5% 50V    |
| C274 | 4822 124 22262 | 100μF 35V         | C406 | 4822 124 41604 | 0,1μF 50V      | C593 | 5322 122 32334 | 220pF 10% 100V   | C655 | 4822 121 42868 | 220nF 5% 50V    |
| C282 | 4822 126 12808 | 2N2 ONLY/00S      | C407 | 4822 124 23056 | 47μF 20% 16V   | C594 | 4822 126 12671 | 330pF 10% YB 50V | C656 | 4822 121 42868 | 220nF 5% 50V    |
| C285 | 4822 126 12808 | 2N2 ONLY/00S      | C408 | 4822 122 30043 | 10nF 80% 63V   | C595 | 4822 126 12808 | 2,2nF 10% YB 50V | C657 | 4822 124 40246 | 4,7μF 20% 63V   |
| C286 | 4822 126 12808 | 2N2 ONLY/00S      | C501 | 4822 122 33298 | 150pF 5% 50V   | C601 | 4822 122 33298 | 150pF 5% 50V     | C658 | 4822 124 40246 | 4,7μF 20% 63V   |
| C287 | 4822 126 12808 | 2N2 ONLY/00S      | C502 | 4822 122 33298 | 150pF 5% 50V   | C601 | 5322 122 32311 | 470pF ONLY/00S   | C659 | 4822 121 42868 | 220nF 5% 50V    |
| C290 | 4822 124 41284 | 10μF 50V          | C503 | 4822 124 21894 | 10μF 16V       | C602 | 4822 122 33298 | 150pF 5% 50V     | C660 | 5322 121 42386 | 100nF 5% 63V    |
| C320 | 4822 126 12453 | 0,01μF 500V       | C504 | 4822 124 21894 | 10μF 16V       | C602 | 5322 122 32311 | 470pF ONLY/00S   | C661 | 4822 124 40746 | 0,22μF 20% 63V  |
| C321 | 4822 124 80864 | 6800μF 20% 71V    | C505 | 5322 121 42662 | 68nF 5% 250V   | C603 | 4822 124 41284 | 10μF 50V         | C662 | 4822 124 41284 | 10μF 50V        |
| C322 | 4822 124 80864 | 6800μF 20% 71V    | C506 | 5322 121 42662 | 68nF 5% 250V   | C604 | 4822 124 41284 | 10μF 50V         | C663 | 4822 124 21683 | 1μF 50V         |
| C323 | 4822 126 12453 | 0,01μF 500V       | C507 | 4822 124 42202 | 0,47μF 20% 50V | C605 | 4822 124 21821 | 22μF 16V         | C664 | 4822 124 41284 | 10μF 50V        |
| C324 | 4822 124 80463 | 4700μF 20% 35V    | C508 | 4822 124 42202 | 0,47μF 20% 50V | C606 | 4822 124 21821 | 22μF 16V         | C665 | 5322 122 32335 | 330pF 10% 100V  |
| C325 | 4822 124 80463 | 4700μF 20% 35V    | C509 | 4822 124 23056 | 47μF 20% 16V   | C609 | 4822 121 51304 | 10nF 10% 50V     | C666 | 4822 121 70176 | 5,6nF 10% 50V   |
| C326 | 4822 124 41665 | 22μF 50V          | C510 | 4822 124 23056 | 47μF 20% 16V   | C610 | 4822 121 51304 | 10nF 10% 50V     | C667 | 4822 124 21683 | 1μF 50V         |
| C327 | 4822 124 22008 | 100μF 50V         | C511 | 4822 121 51305 | 15nF 10% 50V   | C611 | 4822 122 30099 | 3,3nF 10% 100V   | C668 | 4822 121 51303 | 4,7nF 10% 50V   |
| C328 | 4822 124 22008 | 100μF 50V         | C512 | 4822 121 51305 | 15nF 10% 50V   | C612 | 4822 122 30099 | 3,3nF 10% 100V   | C669 | 5322 121 42386 | 100nF 5% 63V    |
| C329 | 4822 124 41284 | 10μF 50V          | C513 | 4822 124 41604 | 0,1μF 50V      | C613 | 4822 124 41284 | 10μF 50V         | C670 | 4822 121 51252 | 470nF 5% 63V    |
| C330 | 4822 124 21407 | 0,47μF 50V        | C514 | 4822 124 41604 | 0,1μF 50V      | C613 | 4822 124 40242 | 1U 50V ONLY/00S  | C671 | 4822 121 51252 | 470nF 5% 63V    |
| C331 | 4822 124 41284 | 10μF 50V          | C515 | 4822 124 23055 | 22μF 20% 16V   | C614 | 4822 124 41284 | 10μF 50V         | C672 | 4822 124 41139 | 100μF 16V       |
| C332 | 4822 124 41284 | 10μF 50V          | C516 | 4822 124 23055 | 22μF 20% 16V   | C614 | 4822 124 40242 | 1U 50V ONLY/00S  | C673 | 5322 121 42386 | 100nF 5% 63V    |
| C333 | 4822 124 41284 | 10μF 50V          | C517 | 4822 124 21894 | 10μF 16V       | C615 | 4822 122 30099 | 3,3nF 10% 100V   | C674 | 5322 122 32311 | 470pF 10% 100V  |
| C334 | 4822 124 41284 | 10μF 50V          | C518 | 4822 124 21894 | 10μF 16V       | C616 | 4822 122 30099 | 3,3nF 10% 100V   | C675 | 4822 121 51348 | 6,8nF 10% 50V   |
| C335 | 4822 124 41284 | 10μF 50V          | C519 | 4822 124 40786 | 2,2μF 20% 63V  | C617 | 4822 124 21821 | 22μF 16V         | C676 | 4822 122 30043 | 10nF 80% 63V    |
| C336 | 4822 124 41284 | 10μF 50V          | C520 | 4822 124 40786 | 2,2μF 20% 63V  | C618 | 4822 124 21821 | 22μF 16V         | C677 | 4822 124 41139 | 100μF 16V       |
| C337 | 4822 122 33276 | 0,01μF 400V       | C521 | 4822 124 21895 | 0,22μF 50V     | C619 | 4822 122 30043 | 10nF 80% 63V     | C678 | 4822 121 51303 | 4,7nF 10% 50V   |
| C338 | 4822 126 13332 | 10N 400V ONLY/00S | C522 | 4822 124 21895 | 0,22μF 50V     | C625 | 4822 124 41284 | 10μF 50V         | C679 | 4822 124 41402 | 10μF 20% 50V    |
| C339 | 4822 124 21683 | 1μF 50V           | C523 | 4822 124 23053 | 1μF 20% 50V    | C626 | 4822 124 41284 | 10μF 50V         | C680 | 4822 124 21844 | 4,7μF 50V       |
| C351 | 4822 124 21683 | 1μF 50V           | C524 | 4822 124 23053 | 1μF 20% 50V    | C627 | 5322 121 42386 | 100nF 5% 63V     | C681 | 4822 124 21821 | 22μF 16V        |
| C352 | 4822 124 21683 | 1μF 50V           | C525 | 4822 121 43526 | 47nF 5% 250V   | C628 | 5322 121 42386 | 100nF 5% 63V     | C682 | 5322 122 32331 | 1nF 10% 100V    |
| C357 | 4822 124 41284 | 10μF 50V          | C526 | 4822 121 43526 | 47nF 5% 250V   | C629 | 5322 121 42386 | 100nF 5% 63V     | C683 | 4822 124 40728 | 1000μF 20% 6,3V |
| C358 | 4822 124 41284 | 10μF 50V          | C527 | 4822 124 42202 | 0,47μF 20% 50V | C630 | 4822 121 43144 | 22nF 10% 50V     | C687 | 5322 122 32331 | 1nF 10% 100V    |
| C359 | 4822 124 21683 | 1μF 50V           | C528 | 4822 124 42202 | 0,47μF 20% 50V | C631 | 4822 121 43144 | 22nF 10% 50V     | C688 | 4822 121 43898 | 8,2nF 5% 250V   |
| C360 | 4822 124 21683 | 1μF 50V           | C529 | 4822 121 43145 | 33nF 10% 50V   | C632 | 5322 121 42386 | 100nF 5% 63V     | C701 | 4822 124 22826 | 10μF 16V        |
| C362 | 4822 124 21683 | 1μF 50V           | C530 | 4822 121 43145 | 33nF 10% 50V   | C633 | 5322 121 42386 | 100nF 5% 63V     | C702 | 4822 124 22826 | 10μF 16V        |
| C364 | 4822 124 21683 | 1μF 50V           | C531 | 4822 124 21894 | 10μF 16V       | C634 | 5322 122 32052 | 680pF 10% 100V   | C703 | 4822 122 31072 | 47pF 2% 100V    |
| C366 | 4822 124 21683 | 1μF 50V           | C532 | 4822 124 21894 | 10μF 16V       | C635 | 4822 121 43526 | 47nF 5% 250V     | C704 | 4822 122 31072 | 47pF 2% 100V    |
| C367 | 4822 124 21683 | 1μF 50V           | C533 | 4822 124 21894 | 10μF 16V       | C636 | 5322 121 42386 | 100nF 5% 63V     | C707 | 4822 124 23055 | 22μF 20% 16V    |
| C369 | 5322 121 42465 | 68nF 5% 63V       | C534 | 4822 124 21894 | 10μF 16V       | C637 | 5322 121 42386 | 100nF 5% 63V     | C708 | 4822 124 23055 | 22μF 20% 16V    |

|        |                |                |       |                |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                |            |
|--------|----------------|----------------|-------|----------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|------------|
| C709   | 5322 122 32334 | 220pF 10% 100V | D324  | 4822 130 81729 | MTZJ33D              | TRANSISTORS & IC's                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Q507           | 4822 209 73064 | NJM2068D-D |
| C710   | 5322 122 32334 | 220pF 10% 100V | D325  | 4822 130 80839 | S5688G               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q508           | 4822 209 71783 | LC7522     |
| C751   | 4822 124 21683 | 1μF 50V        | D326  | 4822 130 80839 | S5688G               | Q101 4822 130 62294 2SC1809S(P)<br>Q102 4822 209 31001 LA1851N<br>Q103 4822 130 60588 DTC114ΩS<br>Q104 4822 130 62386 JC557B<br>Q105 4822 209 83631 NJM4558D-D<br><br>Q106 4822 130 60766 DTA114ΩS<br>Q109 4822 126 90002 ZPA21BB251B1UA<br>Q150 4822 209 30178 LC7218<br>Q151 4822 130 42121 2SK30A<br>Q152 4822 130 40959 JC547B<br><br>Q251 4822 209 31613 UPC1342V<br>Q252 4822 209 31613 UPC1342V<br>Q253 4822 130 60117 2SC3419Y<br>Q254 4822 130 60117 2SC3419Y<br>Q255 4822 130 63121 2SC3281(O)<br><br>Q256 4822 130 63121 2SC3281(O)<br>Q257 4822 130 63119 2SA1302(O)<br>Q258 4822 130 63119 2SA1302(O)<br>Q259 4822 130 41312 2SC2240BL<br>Q260 4822 130 41312 2SC2240BL<br><br>Q261 4822 130 42951 2SA970GR<br>Q262 4822 209 83312 TA7317P<br>Q290 4822 130 60766 DTA114ΩS<br>Q291 4822 130 40959 JC547B<br>Q293 4822 130 40959 JC547B<br><br>Q320 4822 209 70385 L78MR05<br>Q321 4822 209 83317 NJM7815FA<br>Q322 4822 209 31864 NJM7915FA<br>Q323 4822 209 31631 NJM7805FA<br>Q351 4822 209 73064 NJM2068D<br><br>Q352 4822 209 83631 NJM4558D-D<br>Q353 4822 209 83631 NJM4558D-D<br>Q354 4822 209 83631 NJM4558D-D<br>Q355 4822 209 83631 NJM4558D-D<br>Q356 4822 209 72748 LC7821<br><br>Q401 4822 209 32627 TMP47C1670AN-H056<br>Q402 4822 130 62386 JC557B<br>Q403 4822 130 40959 JC547B<br>Q404 4822 130 62386 JC557B<br>Q405 4822 130 40959 JC547B<br><br>Q406 4822 214 52009 RCR GP1U58XP<br>Q407 4822 130 60766 DTA114ΩS<br>Q408 4822 130 60766 DTA114ΩS<br>Q409 4822 130 60766 DTA114ΩS<br>Q501 4822 209 70044 NJM2058D<br><br>Q502 4822 209 70044 NJM2058D<br>Q503 4822 130 61723 DTC323TS<br>Q504 4822 130 61723 DTC323TS<br>Q505 4822 130 61723 DTC323TS<br>Q506 4822 130 61723 DTC323TS | Q551           | 4822 209 72748 | LC7821     |
| C752   | 4822 124 21683 | 1μF 50V        | D401  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q552           | 4822 209 73731 | LC7823     |
| C753   | 4822 124 21844 | 4,7μF 50V      | D402  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q570           | 4822 209 73731 | LC7823     |
| C754   | 4822 124 21844 | 4,7μF 50V      | D403  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q571           | 4822 130 40959 | JC547B     |
| C755   | 4822 124 21683 | 1μF 50V        | D404  | 4822 130 82978 | LTL-16kPE-P-071A RED |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q572           | 4822 130 40959 | JC547B     |
| C756   | 4822 124 21683 | 1μF 50V        | D405  | 4822 130 82978 | LTL-16kPE-P-071A RED |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q590           | 4822 209 72323 | TC74HCU04P |
| C757   | 4822 124 21844 | 4,7μF 50V      | D406  | 4822 130 82978 | LTL-16kPE-P-071A RED |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q591           | 4822 209 30116 | TC74HC02AP |
| C758   | 4822 124 21844 | 4,7μF 50V      | D407  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q592           | 4822 130 60588 | DTC114ΩS   |
| C759   | 4822 122 40306 | 47nF 50V       | D408  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q601           | 4822 209 83631 | NJM4558D-D |
| C901   | 4822 124 41284 | 10μF 50V       | D409  | 4822 130 33305 | 1SS133T-77           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Q625           | 4822 209 32693 | NJM2177L   |
| C902   | 5322 122 32311 | 470pF 10% 100V | D410  | 4822 130 33305 | 1SS133T-77           | Q626                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 31573 | M50198P        |            |
| C903   | 4822 124 41284 | 10μF 50V       | D411  | 4822 130 33305 | 1SS133T-77           | Q627                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 31574 | UPD6345C       |            |
| C904   | 4822 124 41284 | 10μF 50V       | D412  | 4822 130 33305 | 1SS133T-77           | Q628                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 60766 | DTA114ΩS       |            |
| C905   | 4822 124 41284 | 10μF 50V       | D413  | 4822 130 33305 | 1SS133T-77           | Q629                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 60766 | DTA114ΩS       |            |
| C906   | 4822 124 41284 | 10μF 50V       | D414  | 4822 130 33305 | 1SS133T-77           | Q630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 73287 | LB1630         |            |
| C907   | 4822 124 41284 | 10μF 50V       | D415  | 4822 130 33305 | 1SS133T-77           | Q701                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 73064 | NJM2068DD      |            |
| C908   | 5322 122 32311 | 470pF 10% 100V | D416  | 4822 130 33305 | 1SS133T-77           | Q751                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 31575 | T9213P         |            |
| C909   | 5322 122 32311 | 470pF 10% 100V | D501  | 4822 130 80318 | MTZJ6.8C             | Q752                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 83631 | NJM4558D-D     |            |
| C910   | 4822 124 41287 | 47μF 16V       | D502  | 4822 130 80318 | MTZJ6.8C             | Q753                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 61723 | DTC323TS       |            |
| C911   | 4822 124 41287 | 47μF 16V       | D590  | 4822 130 32362 | MA165                | Q754                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 61723 | DTC323TS       |            |
| C912   | 4822 122 31202 | 33pF 2% 500V   | D591  | 4822 130 32362 | MA165                | Q901                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 83779 | UPC1270H       |            |
| C913   | 4822 122 31202 | 33pF 2% 500V   | D625  | 4822 130 33305 | 1SS133T-77           | Q902                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 83779 | UPC1270H       |            |
| C914   | 5322 121 42386 | 100nF 5% 63V   | D626  | 4822 130 80839 | S5688G               | Q903                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 63411 | 2SD1408        |            |
| C915   | 5322 121 42386 | 100nF 5% 63V   | D651  | 4822 130 82978 | LTL-16kPE-P RD       | Q904                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 63411 | 2SD1408        |            |
| C916   | 5322 121 42386 | 100nF 5% 63V   | D901  | 4822 130 33305 | 1SS133T-77           | Q905                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 63412 | 2SB1017        |            |
| C917   | 5322 121 42386 | 100nF 5% 63V   | D902  | 4822 130 33305 | 1SS133T-77           | Q906                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 63412 | 2SB1017        |            |
| C918   | 4822 124 41284 | 10μF 50V       | D903  | 4822 130 80322 | MTZJ16A              | Q907                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 42951 | 2SA970GR       |            |
| C919   | 5322 122 32331 | 1nF 10% 100V   | D904  | 4822 130 80322 | MTZJ16A              | Q908                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 42949 | 2SA970         |            |
| C920   | 4822 124 41287 | 47μF 16V       | D905  | 4822 130 33305 | 1SS133T-77           | Q909                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 60117 | 2SC3419Y       |            |
| C921   | 4822 124 41509 | 33μF 20% 35V   | D906  | 4822 130 80318 | MTZ6.8C              | Q910                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 60117 | 2SC3419Y       |            |
| C922   | 4822 126 11948 | 22pF 5% 50V    | COILS |                |                      | Q911                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 73727 | UPC1188H       |            |
| C923   | 4822 121 51304 | 10nF 10% 50V   |       |                |                      | Q912                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 209 83631 | NJM4558D-D     |            |
| C924   | 4822 121 51304 | 10nF 10% 50V   | L101  | 4822 157 63084 | MW ANT COIL 280μH    | Q913                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 41312 | 2SC2240BL      |            |
| C928   | 4822 124 41402 | 10μF 20% 50V   | L102  | 4822 157 52716 | COIL-MW OSC RD       | Q914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 130 61723 | DTC323TS       |            |
| DIODES |                |                | L103  | 4822 157 53589 | COIL CHOKE 39mH      | RESISTORS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                |            |
| D101   | 4822 125 50416 | SVC342-K       | L104  | 4822 148 81095 | COIL-AM IFT BLK      | R101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52233 | 10k 5% 0,5W    |            |
| D102   | 4822 130 33305 | 1SS133T-77     | L105  | 4822 157 63904 | COIL DETECTION       | R102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52234 | 100Ω 5% 0,5W   |            |
| D103   | 4822 130 33305 | 1SS133T-77     | L106  | 4822 157 70021 | COIL MPX             | R103                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 100 11351 | PRESET 10k     |            |
| D251   | 4822 130 80837 | HSS81TD        | L107  | 4822 157 70021 | COIL MPX             | R104                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52239 | 120k 5% 0,5W   |            |
| D252   | 4822 130 80837 | HSS81TD        | L108  | 4822 157 71282 | COIL ONLY/00S        | R104                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52234 | 100k ONLY/00S  |            |
| D253   | 4822 130 33305 | 1SS133T-77     | L251  | 4822 280 70354 | RELAY VB24MBU        | R105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52175 | 100Ω 5% 0,5W   |            |
| D254   | 4822 130 33305 | 1SS133T-77     | L252  | 4822 157 70022 | COIL-SPEAKER CHOKE   | R106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 050 21501 | 150Ω 1% 0,6W   |            |
| D295   | 4822 130 42848 | PTH9M04BB222   | L253  | 4822 157 70022 | COIL-SPEAKER CHOKE   | R107                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52256 | 2k2 5% 0,5W    |            |
| D296   | 4822 130 43564 | PTH9 S16V330Ω  | L590  | 4822 148 80281 | COIL 100uH           | R108                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52219 | 330Ω 5% 0,5W   |            |
| D320   | 4822 130 33133 | D5FB204002L20  | L901  | 4822 280 70354 | RELAY VB24MBU        | R109                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4822 116 52219 | 330Ω 5% 0,5W   |            |
| D321   | 4822 130 31007 | S4VB-20        |       |                | R110                 | 4822 116 52219                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 330Ω 5% 0,5W   |                |            |
| D322   | 4822 130 80839 | S5688G         |       |                | R111                 | 4822 116 52233                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10k 5% 0,5W    |                |            |
| D323   | 4822 130 80839 | S5688G         |       |                | R112                 | 4822 050 21501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 150Ω 1% 0,6W   |                |            |

|      |                |              |      |                |               |      |                |              |      |                |                   |
|------|----------------|--------------|------|----------------|---------------|------|----------------|--------------|------|----------------|-------------------|
| R113 | 4822 116 52269 | 3k3 5% 0,5W  | R263 | 4822 100 11386 | PRESET 1k     | R342 | 4822 116 52233 | 10k 5% 0,5W  | R444 | 4822 116 52233 | 10k 5% 0,5W       |
| R114 | 4822 100 11352 | PRESET 22k   | R264 | 4822 100 11386 | PRESET 1k     | R351 | 4822 116 52271 | 33k 5% 0,5W  | R445 | 4822 116 52233 | 10k 5% 0,5W       |
| R115 | 4822 116 52256 | 2k2 5% 0,5W  | R265 | 4822 116 52243 | 1k5 5% 0,5W   | R352 | 4822 116 52271 | 33k 5% 0,5W  | R446 | 4822 116 52233 | 10k 5% 0,5W       |
| R116 | 4822 116 52284 | 47k 5% 0,5W  | R266 | 4822 116 52243 | 1k5 5% 0,5W   | R359 | 4822 116 52233 | 10k 5% 0,5W  | R447 | 4822 116 52234 | 100Ω 5% 0,5W      |
| R117 | 4822 116 52269 | 3k3 5% 0,5W  | R267 | 4822 116 81154 | 2Ω2 5% 0,5W   | R360 | 4822 116 52233 | 10k 5% 0,5W  | R448 | 4822 116 52224 | 470Ω 5% 0,5W      |
| R118 | 4822 116 52233 | 10k 5% 0,5W  | R268 | 4822 116 81154 | 2Ω2 5% 0,5W   | R361 | 4822 116 52234 | 100Ω 5% 0,5W | R449 | 4822 116 52233 | 10k 5% 0,5W       |
| R119 | 4822 100 20681 | PRESET 2k2   | R269 | 4822 116 81154 | 2Ω2 5% 0,5W   | R362 | 4822 116 52234 | 100Ω 5% 0,5W | R450 | 4822 116 52233 | 10k 5% 0,5W       |
| R120 | 4822 116 52289 | 5k6 5% 0,5W  | R270 | 4822 116 81154 | 2Ω2 5% 0,5W   | R363 | 4822 116 52233 | 10k 5% 0,5W  | R451 | 4822 116 52233 | 10k 5% 0,5W       |
| R121 | 4822 116 52289 | 5k6 5% 0,5W  | R271 | 4822 116 82049 | 2 X R18 3W    | R364 | 4822 116 52233 | 10k 5% 0,5W  | R452 | 4822 116 52233 | 10k 5% 0,5W       |
| R122 | 4822 116 52284 | 47k 5% 0,5W  | R272 | 4822 116 82049 | 2 X R18 3W    | R365 | 4822 116 52269 | 3k3 5% 0,5W  | R453 | 4822 116 52233 | 10k 5% 0,5W       |
| R123 | 4822 116 52284 | 47k 5% 0,5W  | R273 | 4822 116 52231 | 820Ω 5% 0,5W  | R366 | 4822 116 52269 | 3k3 5% 0,5W  | R455 | 4822 116 52284 | 47k 5% 0,5W       |
| R126 | 4822 116 52283 | 4k7 5% 0,5W  | R274 | 4822 116 52231 | 820Ω 5% 0,5W  | R367 | 4822 116 52233 | 10k 5% 0,5W  | R456 | 4822 116 52284 | 47k 5% 0,5W       |
| R127 | 4822 116 52283 | 4k7 5% 0,5W  | R275 | 4822 116 52271 | 33k 5% 0,5W   | R368 | 4822 116 52234 | 100Ω 5% 0,5W | R457 | 4822 116 52284 | 47k 5% 0,5W       |
| R128 | 4822 116 52233 | 10k 5% 0,5W  | R276 | 4822 116 52271 | 33k 5% 0,5W   | R369 | 4822 116 52233 | 10k 5% 0,5W  | R458 | 4822 116 52284 | 47k 5% 0,5W       |
| R129 | 4822 116 52233 | 10k 5% 0,5W  | R277 | 4822 116 52257 | 22k 5% 0,5W   | R370 | 4822 116 52233 | 10k 5% 0,5W  | R459 | 4822 116 52251 | 18k 5% 0,5W       |
| R130 | 4822 116 52256 | 2k2 5% 0,5W  | R278 | 4822 116 52257 | 22k 5% 0,5W   | R371 | 4822 116 52233 | 10k 5% 0,5W  | R460 | 4822 116 52284 | 47k 5% 0,5W       |
| R131 | 4822 116 52256 | 2k2 5% 0,5W  | R279 | 4822 116 52233 | 10k 5% 0,5W   | R372 | 4822 116 52234 | 100Ω 5% 0,5W | R461 | 4822 116 52284 | 47k 5% 0,5W       |
| R132 | 4822 116 52283 | 4k7 5% 0,5W  | R280 | 4822 117 10028 | 220Ω 5% 0,25W | R373 | 4822 116 52269 | 3k3 5% 0,5W  | R462 | 4822 116 52284 | 47k 5% 0,5W       |
| R133 | 4822 116 52283 | 4k7 5% 0,5W  | R281 | 4822 117 10028 | 220Ω 5% 0,25W | R374 | 4822 116 52233 | 10k 5% 0,5W  | R463 | 4822 116 52284 | 47k 5% 0,5W       |
| R135 | 4822 116 52233 | 10k ONLY/00S | R282 | 4822 053 11109 | 10Ω 5% 2W     | R375 | 4822 116 52269 | 3k3 5% 0,5W  | R465 | 4822 116 52251 | 18k 5% 0,5W       |
| R136 | 4822 116 52244 | 15k ONLY/00S | R283 | 4822 053 11109 | 10Ω 5% 2W     | R376 | 4822 116 52234 | 100Ω 5% 0,5W | R466 | 4822 116 52211 | 150Ω 5% 0,5W      |
| R137 | 4822 116 52234 | 100Ω 5% 0,5W | R284 | 4822 116 52284 | 47k 5% 0,5W   | R377 | 4822 116 52244 | 15k 5% 0,5W  | R467 | 4822 116 52206 | 120Ω 5% 0,5W      |
| R150 | 4822 050 11002 | 1k 1% 0,4W   | R285 | 4822 116 52284 | 47k 5% 0,5W   | R378 | 4822 116 52244 | 15k 5% 0,5W  | R468 | 4822 116 52211 | 150Ω 5% 0,5W      |
| R151 | 4822 050 11002 | 1k 1% 0,4W   | R286 | 4822 116 52296 | 6k8 5% 0,5W   | R379 | 4822 116 52271 | 33k 5% 0,5W  | R469 | 4822 116 52234 | 100Ω 5% 0,5W      |
| R152 | 4822 116 52269 | 3k3 5% 0,5W  | R287 | 4822 115 90166 | 10Ω 0,25W     | R380 | 4822 116 52271 | 33k 5% 0,5W  | R470 | 4822 116 52175 | 100Ω 5% 0,5W      |
| R153 | 4822 116 52233 | 10k 5% 0,5W  | R288 | 4822 115 90166 | 10Ω 0,25W     | R381 | 4822 116 52234 | 100Ω 5% 0,5W | R501 | 4822 050 11002 | 1k 1% 0,4W        |
| R154 | 4822 050 11002 | 1k 1% 0,4W   | R289 | 4822 115 90166 | 10Ω 0,25W     | R382 | 4822 116 52257 | 22k 5% 0,5W  | R502 | 4822 050 11002 | 1k 1% 0,4W        |
| R156 | 4822 050 11002 | 1k 1% 0,4W   | R290 | 4822 115 90166 | 10Ω 0,25W     | R383 | 4822 116 52257 | 22k 5% 0,5W  | R503 | 4822 116 52238 | 12k 5%            |
| R157 | 4822 116 52283 | 4k7 5% 0,5W  | R291 | 4822 116 52284 | 47k 5% 0,5W   | R384 | 4822 116 52257 | 22k 5% 0,5W  | R504 | 4822 116 52238 | 12k 5%            |
| R158 | 4822 116 52284 | 47k 5% 0,5W  | R292 | 4822 116 52245 | 150k 5% 0,5W  | R385 | 4822 116 52257 | 22k 5% 0,5W  | R505 | 4822 116 52215 | 220Ω 5% 0,5W      |
| R159 | 4822 116 52284 | 47k 5% 0,5W  | R293 | 4822 053 11681 | 680Ω 5% 2W    | R386 | 4822 116 52244 | 15k 5% 0,5W  | R506 | 4822 116 52215 | 220Ω 5% 0,5W      |
| R160 | 4822 116 52284 | 47k 5% 0,5W  | R294 | 4822 053 11681 | 680Ω 5% 2W    | R387 | 4822 116 52296 | 6k8 5% 0,5W  | R507 | 4822 116 52283 | 4k7 5% 0,5W       |
| R161 | 4822 116 52284 | 47k 5% 0,5W  | R295 | 4822 050 21501 | 150Ω 1% 0,6W  | R388 | 4822 116 52269 | 3k3 5% 0,5W  | R508 | 4822 116 52283 | 4k7 5% 0,5W       |
| R162 | 4822 116 52284 | 47k 5% 0,5W  | R296 | 4822 050 21501 | 150Ω 1% 0,6W  | R389 | 4822 116 52269 | 3k3 5% 0,5W  | R509 | 4822 116 52224 | 470Ω 5% 0,5W      |
| R163 | 4822 116 52269 | 3k3 5% 0,5W  | R297 | 4822 116 52271 | 33k 5% 0,5W   | R390 | 4822 116 52296 | 6k8 5% 0,5W  | R510 | 4822 116 52224 | 470Ω 5% 0,5W      |
| R164 | 4822 116 52284 | 47k 5% 0,5W  | R298 | 4822 116 52175 | 100Ω 5% 0,5W  | R391 | 4822 116 52243 | 1k5 5% 0,5W  | R511 | 4822 116 52276 | 3k9 5% 0,5W       |
| R165 | 4822 116 52284 | 47k 5% 0,5W  | R300 | 4822 116 52175 | 100Ω 5% 0,5W  | R392 | 4822 116 52257 | 22k 5% 0,5W  | R512 | 4822 116 52276 | 3k9 5% 0,5W       |
| R166 | 4822 052 10479 | 47Ω 5% 0,33W | R318 | 4822 116 52233 | 10k 5% 0,5W   | R393 | 4822 116 52257 | 22k 5% 0,5W  | R513 | 4822 116 52228 | 680Ω 5% 0,5W      |
| R251 | 4822 116 52224 | 470Ω 5% 0,5W | R319 | 4822 115 90166 | 10Ω 0,25W     | R394 | 4822 116 52257 | 22k 5% 0,5W  | R514 | 4822 116 52228 | 680Ω 5% 0,5W      |
| R252 | 4822 116 52224 | 470Ω 5% 0,5W | R320 | 4822 050 24701 | 470Ω 1% 0,6W  | R395 | 4822 116 52234 | 100Ω 5% 0,5W | R515 | 4822 116 52256 | 2k2 5% 0,5W       |
| R253 | 4822 116 52284 | 47k 5% 0,5W  | R321 | 4822 116 52175 | 100Ω 5% 0,5W  | R396 | 4822 116 52234 | 100Ω 5% 0,5W | R516 | 4822 116 52256 | 2k2 5% 0,5W       |
| R254 | 4822 116 52284 | 47k 5% 0,5W  | R322 | 4822 116 52175 | 100Ω 5% 0,5W  | R397 | 4822 116 52233 | 10k 5% 0,5W  | R517 | 4822 116 52215 | 220Ω 5% 0,5W      |
| R255 | 4822 116 52284 | 47k 5% 0,5W  | R323 | 4822 053 11151 | 150Ω 5% 2W    | R398 | 4822 116 52233 | 10k 5% 0,5W  | R518 | 4822 116 52215 | 220Ω 5% 0,5W      |
| R256 | 4822 116 52284 | 47k 5% 0,5W  | R326 | 4822 116 60313 | 10Ω 0,5W      | R409 | 4822 116 52233 | 10k 5% 0,5W  | R519 | 4822 101 30797 | POTM ROT 10k X 2  |
| R257 | 4822 116 52244 | 15k 5% 0,5W  | R327 | 4822 113 80322 | 2M2 0,5W      | R418 | 4822 116 52233 | 10k 5% 0,5W  | R520 | 4822 101 30797 | POTM ROT 10k X 2  |
| R258 | 4822 116 52244 | 15k 5% 0,5W  | R328 | 4822 116 60313 | 10Ω 0,5W      | R427 | 4822 116 52233 | 10k 5% 0,5W  | R521 | 4822 050 11002 | 1k 1% 0,4W        |
| R259 | 4822 116 52249 | 1k8 5% 0,5W  | R329 | 4822 116 52244 | 15k 5% 0,5W   | R436 | 4822 116 52233 | 10k 5% 0,5W  | R522 | 4822 050 11002 | 1k 1% 0,4W        |
| R260 | 4822 116 52249 | 1k8 5% 0,5W  | R330 | 4822 116 52296 | 6k8 5% 0,5W   | R437 | 4822 116 52233 | 10k 5% 0,5W  | R532 | 4822 101 30798 | POTM ROT 100k X 2 |
| R261 | 4822 116 52269 | 3k3 5% 0,5W  | R331 | 4822 116 52284 | 47k 5% 0,5W   | R438 | 4822 116 52233 | 10k 5% 0,5W  | R533 | 4822 116 52271 | 33k 5% 0,5W       |
| R262 | 4822 116 52269 | 3k3 5% 0,5W  | R332 | 4822 116 52284 | 47k 5% 0,5W   | R439 | 4822 116 52256 | 2k2 5% 0,5W  | R534 | 4822 116 52271 | 33k 5% 0,5W       |
| R333 | 4822 116 52176 | 10Ω 5% 0,5W  | R333 | 4822 116 52176 | 10Ω 5% 0,5W   | R440 | 4822 116 52233 | 10k 5% 0,5W  | R535 | 4822 116 52228 | 680Ω 5% 0,5W      |
| R334 | 4822 116 52233 | 10k 5% 0,5W  | R334 | 4822 116 52233 | 10k 5% 0,5W   | R441 | 4822 116 52233 | 10k 5% 0,5W  | R536 | 4822 116 52228 | 680Ω 5% 0,5W      |
| R340 | 4822 116 52233 | 10k 5% 0,5W  | R340 | 4822 116 52233 | 10k 5% 0,5W   | R442 | 4822 116 52233 | 10k 5% 0,5W  | R537 | 4822 116 52271 | 33k 5% 0,5W       |
| R341 | 4822 116 52233 | 10k 5% 0,5W  | R341 | 4822 116 52233 | 10k 5% 0,5W   | R443 | 4822 116 52233 | 10k 5% 0,5W  | R538 | 4822 116 52271 | 33k 5% 0,5W       |

|      |                |      |    |      |
|------|----------------|------|----|------|
| R539 | 4822 116 52228 | 680Ω | 5% | 0,5W |
| R540 | 4822 116 52228 | 680Ω | 5% | 0,5W |
| R541 | 4822 116 52271 | 33k  | 5% | 0,5W |
| R542 | 4822 116 52271 | 33k  | 5% | 0,5W |
| R543 | 4822 116 52228 | 680Ω | 5% | 0,5W |
| R544 | 4822 116 52228 | 680Ω | 5% | 0,5W |
| R545 | 4822 116 52224 | 470Ω | 5% | 0,5W |
| R546 | 4822 116 52224 | 470Ω | 5% | 0,5W |
| R547 | 4822 116 52233 | 10k  | 5% | 0,5W |
| R548 | 4822 116 52233 | 10k  | 5% | 0,5W |
| R549 | 4822 116 52175 | 100Ω | 5% | 0,5W |
| R550 | 4822 116 52175 | 100Ω | 5% | 0,5W |
| R551 | 4822 116 52258 | 220k | 5% | 0,5W |
| R552 | 4822 116 52258 | 220k | 5% | 0,5W |
| R553 | 4822 116 52258 | 220k | 5% | 0,5W |
| R554 | 4822 116 52258 | 220k | 5% | 0,5W |
| R555 | 4822 116 52258 | 220k | 5% | 0,5W |
| R556 | 4822 116 52258 | 220k | 5% | 0,5W |
| R557 | 4822 116 52258 | 220k | 5% | 0,5W |
| R558 | 4822 116 52258 | 220k | 5% | 0,5W |
| R559 | 4822 116 52258 | 220k | 5% | 0,5W |
| R560 | 4822 116 52258 | 220k | 5% | 0,5W |
| R561 | 4822 116 52258 | 220k | 5% | 0,5W |
| R562 | 4822 116 52258 | 220k | 5% | 0,5W |
| R563 | 4822 116 52258 | 220k | 5% | 0,5W |
| R564 | 4822 116 52258 | 220k | 5% | 0,5W |
| R565 | 4822 116 52234 | 100Ω | 5% | 0,5W |
| R566 | 4822 116 52175 | 100Ω | 5% | 0,5W |
| R567 | 4822 116 52175 | 100Ω | 5% | 0,5W |
| R568 | 4822 116 52234 | 100Ω | 5% | 0,5W |
| R569 | 4822 116 52284 | 47k  | 5% | 0,5W |
| R570 | 4822 116 52284 | 47k  | 5% | 0,5W |
| R571 | 4822 116 52195 | 47Ω  | 5% | 0,5W |
| R572 | 4822 116 52284 | 47k  | 5% | 0,5W |
| R573 | 4822 116 52195 | 47Ω  | 5% | 0,5W |
| R574 | 4822 116 52284 | 47k  | 5% | 0,5W |
| R575 | 4822 116 52195 | 47Ω  | 5% | 0,5W |
| R576 | 4822 116 52233 | 10k  | 5% | 0,5W |
| R577 | 4822 116 52244 | 15k  | 5% | 0,5W |
| R578 | 4822 116 52224 | 470Ω | 5% | 0,5W |
| R579 | 4822 116 52199 | 68Ω  | 5% | 0,5W |
| R580 | 4822 050 11002 | 1k   | 1% | 0,4W |
| R581 | 4822 116 52233 | 10k  | 5% | 0,5W |
| R582 | 4822 116 52244 | 15k  | 5% | 0,5W |
| R583 | 4822 116 52224 | 470Ω | 5% | 0,5W |
| R584 | 4822 116 52199 | 68Ω  | 5% | 0,5W |
| R585 | 4822 050 11002 | 1k   | 1% | 0,4W |
| R586 | 4822 116 52234 | 100Ω | 5% | 0,5W |
| R587 | 4822 116 52226 | 560Ω | 5% | 0,5W |
| R588 | 4822 116 52231 | 820Ω | 5% | 0,5W |
| R590 | 4822 116 52202 | 82Ω  | 5% | 0,5W |
| R591 | 4822 116 52175 | 100Ω | 5% | 0,5W |
| R592 | 4822 116 52202 | 82Ω  | 5% | 0,5W |
| R593 | 4822 116 52175 | 100Ω | 5% | 0,5W |

|      |                |      |          |      |
|------|----------------|------|----------|------|
| R594 | 4822 116 83863 | 1k   | 5%       | 0,5W |
| R595 | 4822 116 52269 | 3k3  | 5%       | 0,5W |
| R596 | 4822 116 83863 | 1k   | 5%       | 0,5W |
| R597 | 4822 116 52269 | 3k3  | 5%       | 0,5W |
| R598 | 4822 116 52233 | 10k  | 5%       | 0,5W |
| R599 | 4822 116 52233 | 10k  | 5%       | 0,5W |
| R601 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R602 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R603 | 4822 050 11002 | 1k   | 1%       | 0,4W |
| R603 | 4822 116 52256 | 2k2  | ONLY/00S |      |
| R604 | 4822 050 11002 | 1k   | 1%       | 0,4W |
| R604 | 4822 116 52256 | 2k2  | ONLY/00S |      |
| R605 | 4822 116 52224 | 470Ω | 5%       | 0,5W |
| R606 | 4822 116 52224 | 470Ω | 5%       | 0,5W |
| R607 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R608 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R609 | 4822 116 52272 | 330k | 5%       | 0,5W |
| R610 | 4822 116 52272 | 330k | 5%       | 0,5W |
| R611 | 4822 116 52257 | 22k  | 5%       | 0,5W |
| R612 | 4822 116 52257 | 22k  | 5%       | 0,5W |
| R613 | 4822 116 52215 | 220Ω | 5%       | 0,5W |
| R614 | 4822 116 52215 | 220Ω | 5%       | 0,5W |
| R615 | 4822 116 52284 | 47k  | 5%       | 0,5W |
| R616 | 4822 116 52284 | 47k  | 5%       | 0,5W |
| R617 | 4822 050 21001 | 100Ω | 1%       | 0,6W |
| R618 | 4822 050 21001 | 100Ω | 1%       | 0,6W |
| R619 | 4822 116 52175 | 100Ω | 5%       | 0,5W |
| R620 | 4822 116 52175 | 100Ω | 5%       | 0,5W |
| R621 | 4822 116 52258 | 220k | 5%       | 0,5W |
| R622 | 4822 116 52258 | 220k | 5%       | 0,5W |
| R625 | 4822 116 52257 | 22k  | 5%       | 0,5W |
| R626 | 4822 116 52257 | 22k  | 5%       | 0,5W |
| R627 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R628 | 4822 116 52284 | 47k  | 5%       | 0,5W |
| R629 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R630 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R631 | 4822 116 52284 | 47k  | 5%       | 0,5W |
| R632 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R633 | 4822 050 21006 | 10M  | 1%       | 0,6W |
| R634 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R635 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R636 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R637 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R639 | 4822 116 52296 | 6k8  | 5%       | 0,5W |
| R640 | 4822 116 52303 | 8k2  | 5%       | 0,5W |
| R641 | 4822 116 52233 | 10k  | 5%       | 0,5W |
| R642 | 4822 116 52289 | 5k6  | 5%       | 0,5W |
| R643 | 4822 116 52272 | 330k | 5%       | 0,5W |
| R644 | 4822 116 52289 | 5k6  | 5%       | 0,5W |
| R645 | 4822 116 52284 | 47k  | 5%       | 0,5W |
| R646 | 4822 116 52234 | 100Ω | 5%       | 0,5W |
| R647 | 4822 116 52289 | 5k6  | 5%       | 0,5W |
| R648 | 4822 116 52244 | 15k  | 5%       | 0,5W |
| R649 | 4822 116 52235 | 1M   | 5%       | 0,5W |

|      |                |                   |    |      |      |                |            |    |       |
|------|----------------|-------------------|----|------|------|----------------|------------|----|-------|
| R650 | 4822 116 52234 | 100Ω              | 5% | 0,5W | R757 | 4822 116 52269 | 3k3        | 5% | 0,5W  |
| R651 | 4822 116 52303 | 8k2               | 5% | 0,5W | R758 | 4822 116 52233 | 10k        | 5% | 0,5W  |
| R652 | 4822 116 52303 | 8k2               | 5% | 0,5W | R759 | 4822 116 52269 | 3k3        | 5% | 0,5W  |
| R653 | 4822 116 52303 | 8k2               | 5% | 0,5W | R760 | 4822 116 52233 | 10k        | 5% | 0,5W  |
| R654 | 4822 116 52303 | 8k2               | 5% | 0,5W | R761 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R655 | 4822 116 52233 | 10k               | 5% | 0,5W | R762 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R656 | 4822 116 52233 | 10k               | 5% | 0,5W | R763 | 4822 116 52234 | 100Ω       | 5% | 0,5W  |
| R657 | 4822 116 52233 | 10k               | 5% | 0,5W | R764 | 4822 116 52256 | 2k2        | 5% | 0,5W  |
| R658 | 4822 116 52233 | 10k               | 5% | 0,5W | R765 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R659 | 4822 116 52233 | 10k               | 5% | 0,5W | R901 | 4822 050 11002 | 1k         | 1% | 0,4W  |
| R660 | 4822 116 52233 | 10k               | 5% | 0,5W | R902 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R662 | 4822 101 30799 | POTM ROT 100k X 4 |    |      | R903 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R663 | 4822 116 52211 | 150Ω              | 5% | 0,5W | R904 | 4822 116 52283 | 4k7        | 5% | 0,5W  |
| R664 | 4822 050 11002 | 1k                | 1% | 0,4W | R905 | 4822 116 52234 | 100Ω       | 5% | 0,5W  |
| R665 | 4822 050 11002 | 1k                | 1% | 0,4W | R906 | 4822 116 52228 | 680Ω       | 5% | 0,5W  |
| R666 | 4822 116 52233 | 10k               | 5% | 0,5W | R907 | 4822 116 52228 | 680Ω       | 5% | 0,5W  |
| R667 | 4822 050 21001 | 100Ω              | 1% | 0,6W | R908 | 4822 116 52296 | 6k8        | 5% | 0,5W  |
| R668 | 4822 050 11002 | 1k                | 1% | 0,4W | R909 | 4822 116 52296 | 6k8        | 5% | 0,5W  |
| R669 | 4822 116 52234 | 100Ω              | 5% | 0,5W | R910 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R670 | 4822 116 52234 | 100Ω              | 5% | 0,5W | R911 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R671 | 4822 116 52176 | 10Ω               | 5% | 0,5W | R912 | 4822 116 52226 | 560Ω       | 5% | 0,5W  |
| R673 | 4822 116 52269 | 3k3               | 5% | 0,5W | R913 | 4822 116 52226 | 560Ω       | 5% | 0,5W  |
| R674 | 4822 116 52269 | 3k3               | 5% | 0,5W | R914 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R701 | 4822 116 52233 | 10k               | 5% |      | R915 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R702 | 4822 116 52233 | 10k               | 5% |      | R916 | 4822 116 52269 | 3k3        | 5% | 0,5W  |
| R703 | 4822 116 52238 | 12k               | 5% |      | R917 | 4822 116 52269 | 3k3        | 5% | 0,5W  |
| R704 | 4822 116 52238 | 12k               | 5% |      | R918 | 4822 116 52256 | 2k2        | 5% | 0,5W  |
| R705 | 4822 116 52207 | 1k2               | 5% | 0,5W | R919 | 4822 116 52256 | 2k2        | 5% | 0,5W  |
| R706 | 4822 116 52207 | 1k2               | 5% | 0,5W | R920 | 4822 116 81753 | 4Ω7        | 5% | 0,5W  |
| R707 | 4822 116 52233 | 10k               | 5% | 0,5W | R921 | 4822 116 81753 | 4Ω7        | 5% | 0,5W  |
| R708 | 4822 116 52233 | 10k               | 5% | 0,5W | R922 | 4822 116 81753 | 4Ω7        | 5% | 0,5W  |
| R709 | 4822 116 52233 | 10k               | 5% | 0,5W | R923 | 4822 116 81753 | 4Ω7        | 5% | 0,5W  |
| R710 | 4822 116 52233 | 10k               | 5% | 0,5W | R924 | 4822 116 82049 | 2 X R18 3W |    |       |
| R711 | 4822 116 52296 | 6k8               | 5% | 0,5W | R925 | 4822 116 82049 | 2 X R18 3W |    |       |
| R712 | 4822 116 52296 | 6k8               | 5% | 0,5W | R926 | 4822 116 52284 | 47k        | 5% | 0,5W  |
| R713 | 4822 116 52233 | 10k               | 5% | 0,5W | R927 | 4822 116 52284 | 47k        | 5% | 0,5W  |
| R714 | 4822 116 52233 | 10k               | 5% | 0,5W | R928 | 4822 111 31012 | 10Ω        | 5% | 0,25W |
| R715 | 4822 116 52235 | 1M                | 5% | 0,5W | R929 | 4822 111 31012 | 10Ω        | 5% | 0,25W |
| R716 | 4822 116 52235 | 1M                | 5% | 0,5W | R930 | 4822 116 52226 | 560Ω       | 5% | 0,5W  |
| R717 | 4822 116 52258 | 220k              | 5% | 0,5W | R931 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R718 | 4822 116 52258 | 220k              | 5% | 0,5W | R932 | 4822 116 52284 | 47k        | 5% | 0,5W  |
| R721 | 4822 116 52235 | 1M                | 5% | 0,5W | R933 | 4822 116 52233 | 10k        | 5% | 0,5W  |
| R722 | 4822 116 52235 | 1M                | 5% | 0,5W | R934 | 4822 116 52284 | 47k        | 5% | 0,5W  |
| R723 | 4822 116 52235 | 1M                | 5% | 0,5W | R935 | 4822 116 52257 | 22k        | 5% | 0,5W  |
| R724 | 4822 116 52235 | 1M                | 5% | 0,5W | R936 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R725 | 4822 116 52235 | 1M                | 5% | 0,5W | R937 | 4822 116 52243 | 1k5        | 5% | 0,5W  |
| R726 | 4822 116 52235 | 1M                | 5% | 0,5W | R938 | 4822 116 52297 | 68k        | 5% | 0,5W  |
| R727 | 4822 116 83863 | 1k                | 5% | 0,5W | R939 | 4822 116 52234 | 100Ω       | 5% | 0,5W  |
| R728 | 4822 116 83863 | 1k                | 5% | 0,5W | R940 | 4822 116 52284 | 47k        | 5% | 0,5W  |
| R751 | 4822 116 52258 | 220k              | 5% | 0,5W | R941 | 4822 052 10109 | 10Ω        | 5% | 0,33W |
| R752 | 4822 116 52258 | 220k              | 5% | 0,5W | R943 | 4822 116 52228 | 680Ω       | 5% | 0,5W  |
| R753 | 4822 116 52258 | 220k              | 5% | 0,5W | R944 | 4822 116 52271 | 33k        | 5% | 0,5W  |
| R754 | 4822 116 52258 | 220k              | 5% | 0,5W | R945 | 4822 116 52257 | 22k        | 5% | 0,5W  |
| R756 | 4822 116 52258 | 220k              | 5% | 0,5W | R946 | 4822 116 52284 | 47k        | 5% | 0,5W  |

|          |                |                    |    |      |            |                |                      |
|----------|----------------|--------------------|----|------|------------|----------------|----------------------|
| R947     | 4822 050 11002 | 1k                 | 1% | 0,4W | RESONATORS |                |                      |
| R948     | 4822 050 11002 | 1k                 | 1% | 0,4W |            |                |                      |
| R949     | 4822 116 83863 | 1k                 | 5% | 0,5W |            |                |                      |
| SWITCHES |                |                    |    |      | F101       | 4822 242 81262 | CERAM TER 450kHz     |
| S310     | 4822 276 13289 | SWITCH-PUSH        |    |      | F102       | 4822 242 70911 | CERAM TER 10.7MHz    |
| S320     | 4822 276 13285 | SW PUSH 1P 5/80A   |    |      | F102       | 4822 242 70665 | CST 10.7MHz ONLY/00S |
| S321     | 4822 276 13539 | SWITCH ONLY/00S    |    |      | F103       | 4822 242 70665 | CERAM TER 10.7MHz    |
| S401     | 4822 276 13288 | TACT SWITCH        |    |      | X101       | 4822 242 81248 | RESONATOR 19kHz      |
| S402     | 4822 276 13288 | TACT SWITCH        |    |      | X150       | 4822 242 72333 | X'TAL 7.2MHz         |
| S403     | 4822 276 13288 | TACT SWITCH        |    |      | X401       | 4822 242 72066 | RESONATOR 8.00MHz    |
| S404     | 4822 276 13288 | TACT SWITCH        |    |      | X625       | 4822 242 81271 | RESONATOR            |
| S405     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S406     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S407     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S408     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S409     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S410     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S411     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S412     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S413     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S414     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S415     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S416     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S417     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S418     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S419     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S420     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S421     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S422     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S423     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S424     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S425     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S426     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S427     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S428     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S429     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S430     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S431     | 4822 276 13288 | TACT SWITCH        |    |      |            |                |                      |
| S432     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S433     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S434     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S435     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S436     | 4822 276 13213 | TACT SWITCH        |    |      |            |                |                      |
| S437     | 4822 273 10249 | SOURCE SWITCH, ROT |    |      |            |                |                      |
| S701     | 4822 273 10251 | SWITCH-SLICE       |    |      |            |                |                      |