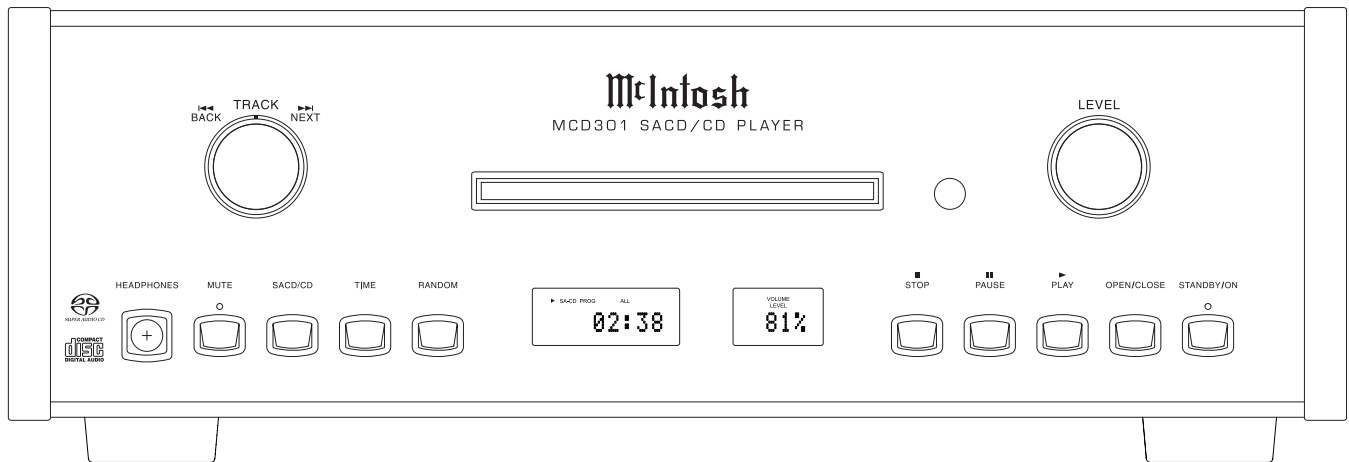




MCD301

SACD / CD PLAYER

SERIAL NO. YM1001 And Above



CONTENTS

| | | | |
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SERVICE MANUAL

PERFORMANCE SPECIFICATIONS

Audio Specifications

Fixed Output level

2.0Vrms Unbalanced
4.0Vrms Balanced

Variable Output level

0 - 6.0Vrms Unbalanced
0- 12.0Vrms Balanced

Output Impedance

600 ohms Unbalanced and Balanced

Frequency Response

4Hz to 40,000Hz, +0.5, -3dB (SACD)
4Hz to 20,000Hz, ±0.5dB (CD)

Signal to Noise Ratio

Better than 110dB (A-weighted)

Dynamic Range

Better than 100dB

Harmonic Distortion

0.002% @ 1000Hz (SACD)
0.003% @ 1000Hz (CD)

Channel Separation

Better than 98dB (1,000Hz)

General Specifications

Digital Output

Optical: - 15dbm to -21dbm (PCM)
Coaxial: 0.5V p-p/75 ohm (PCM)
Sampling Frequencies: 44.1kHz (PCM)

Transport

Laser Type: Twin Beam
Laser Beam Wavelength: 650nm (SACD)/790nm (CD)
Laser Power: CLASS IIa/CLASS I

Power Requirements

100 Volts, 50/60Hz at 35 watts
110 Volts, 50/60Hz at 35 watts
120 Volts, 50/60Hz at 35 watts
220 Volts, 50/60Hz at 35 watts
230 Volts, 50/60Hz at 35 watts
240 Volts, 50/60Hz at 35 watts

Standby: Less than 1 watt

Note: Refer to the rear panel of the MCD301 for the correct voltage.

Overall Dimensions

Width is 17-1/2 inches (44.45cm)

Height is 6 inches (15.24cm)

Depth is 16-1/2 inches (41.91cm)

Note: When the Disc Tray is opened, the panel clearance required in front of mounting panel is 6-3/4 inches (17.2cm).

Weight

28.2 pounds (12.8Kg) net, 44.6 pounds (20.2Kg) in shipping carton


Shipping Carton Dimensions

Width is 26-1/2 inches (67.3cm)

Depth is 24-1/4 inches (62.2cm)

Height is 11-3/4 inches (29.9cm)

NOTES

- The heavy notes on the schematic denote the primary signal path.
- Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
 - AC input at 120 volts, 50/60Hz.
 - All voltages are +/-10% with respect to ground. A high impedance (10 megaohm) voltmeter must be used.
- Unless otherwise specified:
 - Resistor values are in ohms.
 - Capacitor values are microfarads (uF).
 - Inductor values are in microhenries (uH).
- On PC board drawings, Square pad indicates:
 - Polarized Capacitors - Positive
 - Diodes - Cathode
 - Others - Pin 1
- WARNING**
Parts marked with the symbol  have critical characteristics. Use only replacement parts recommended by the manufacturer.
- Use McIntosh Remote Control Model HR056 with the MCD301.

SAFETY INFORMATION

CAUTION: Invisible Laser Radiation when open. DO NOT stare into the beam or view directly with optical instruments. Use of controls or adjustments or performance of procedures other than those specified in the Owners Manual may result in Hazardous Radiation Exposure.

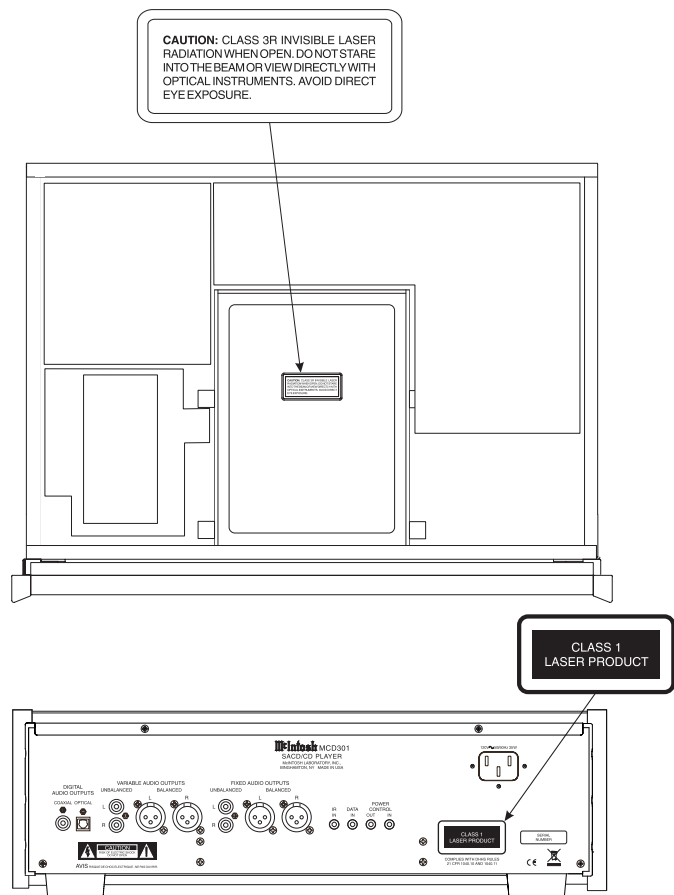
Servicing of laser mechanism is to be performed at the service facility at McIntosh Laboratory Inc.

This product incorporates an embedded Class 3R Laser (IEC60825-1).

LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT

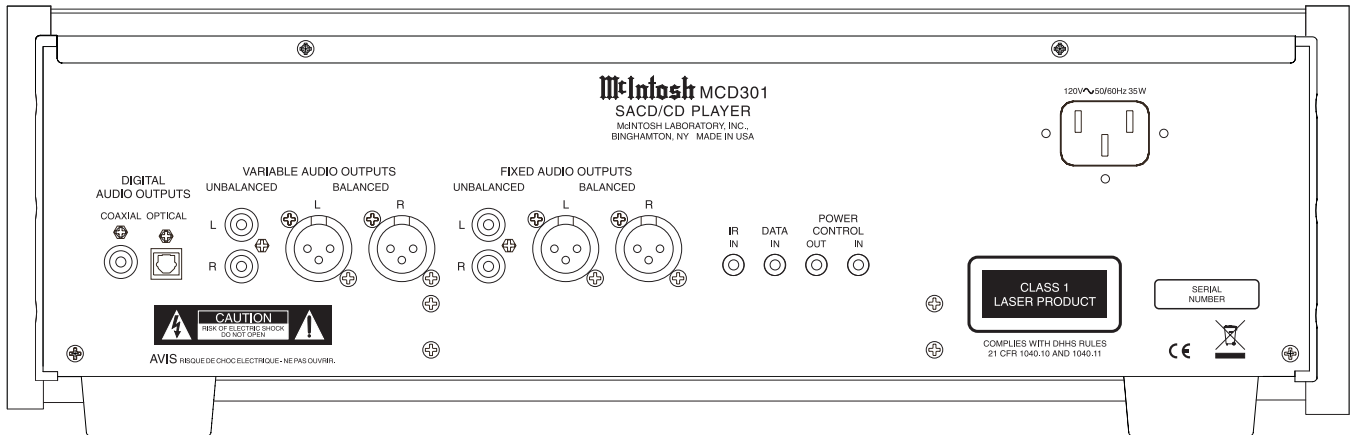
VAROITUS! Laitteen käyttäminen muulla kuin tassa käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING! Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.



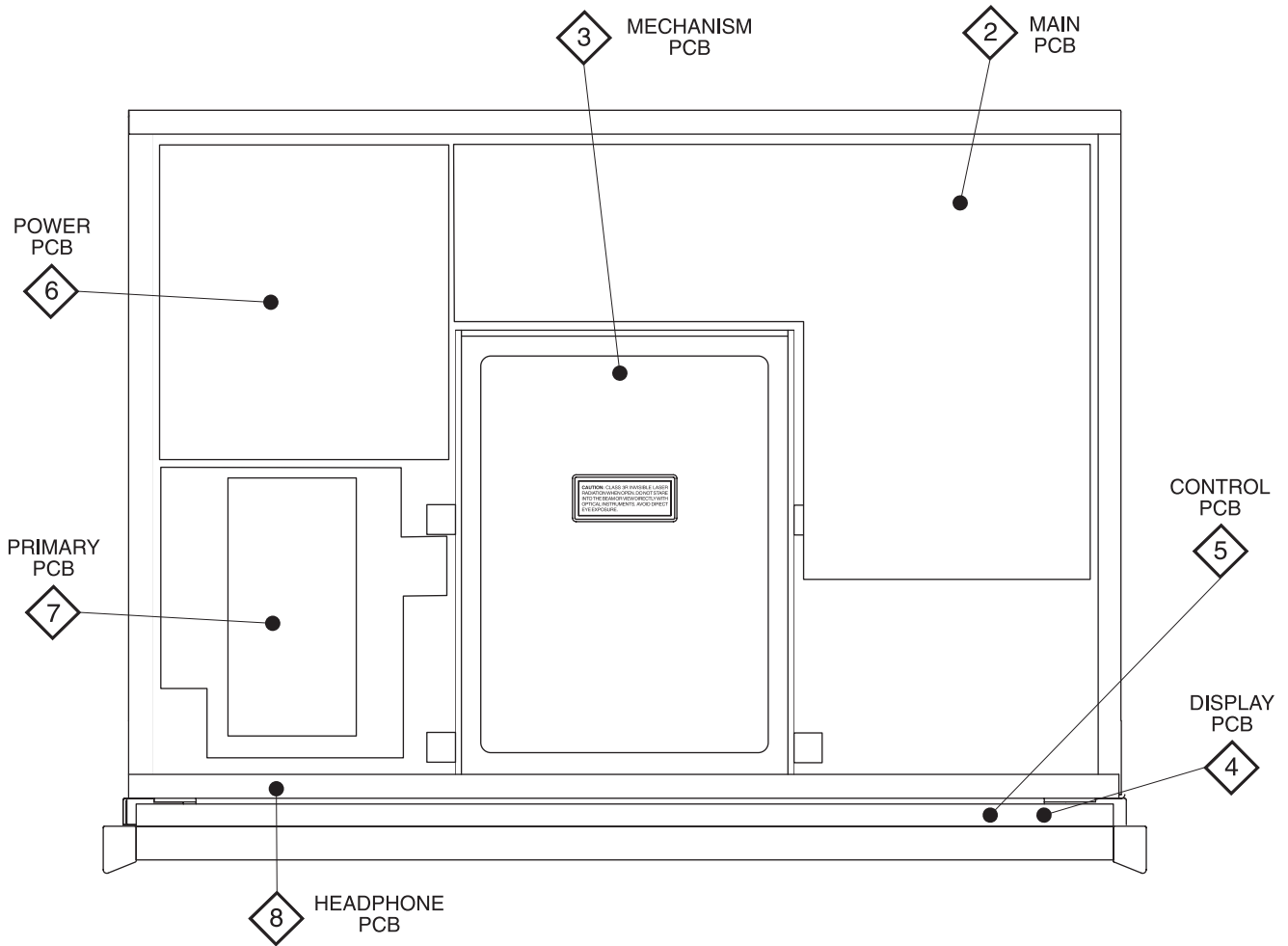
NOTES

REAR PANEL

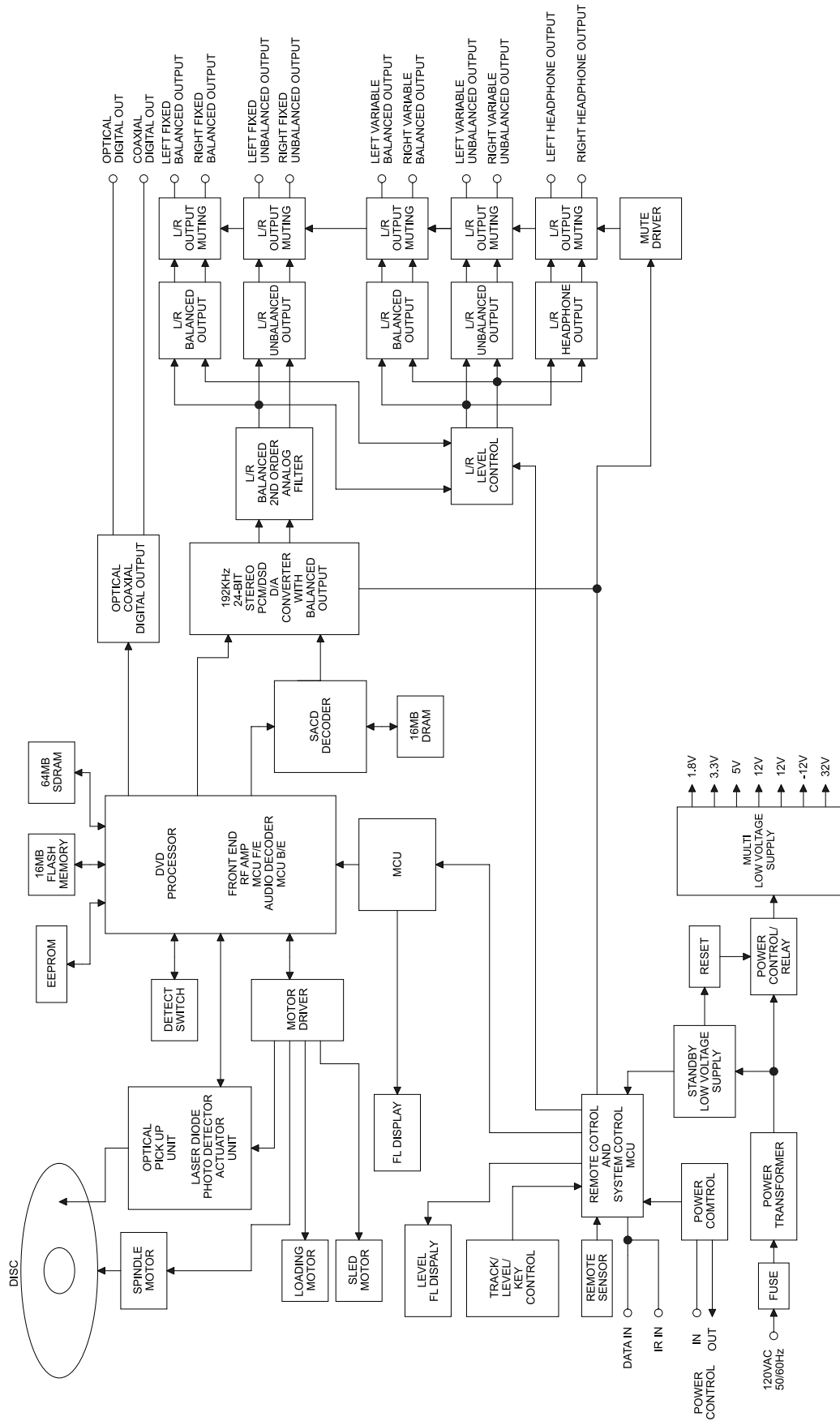


SECTION LOCATIONS

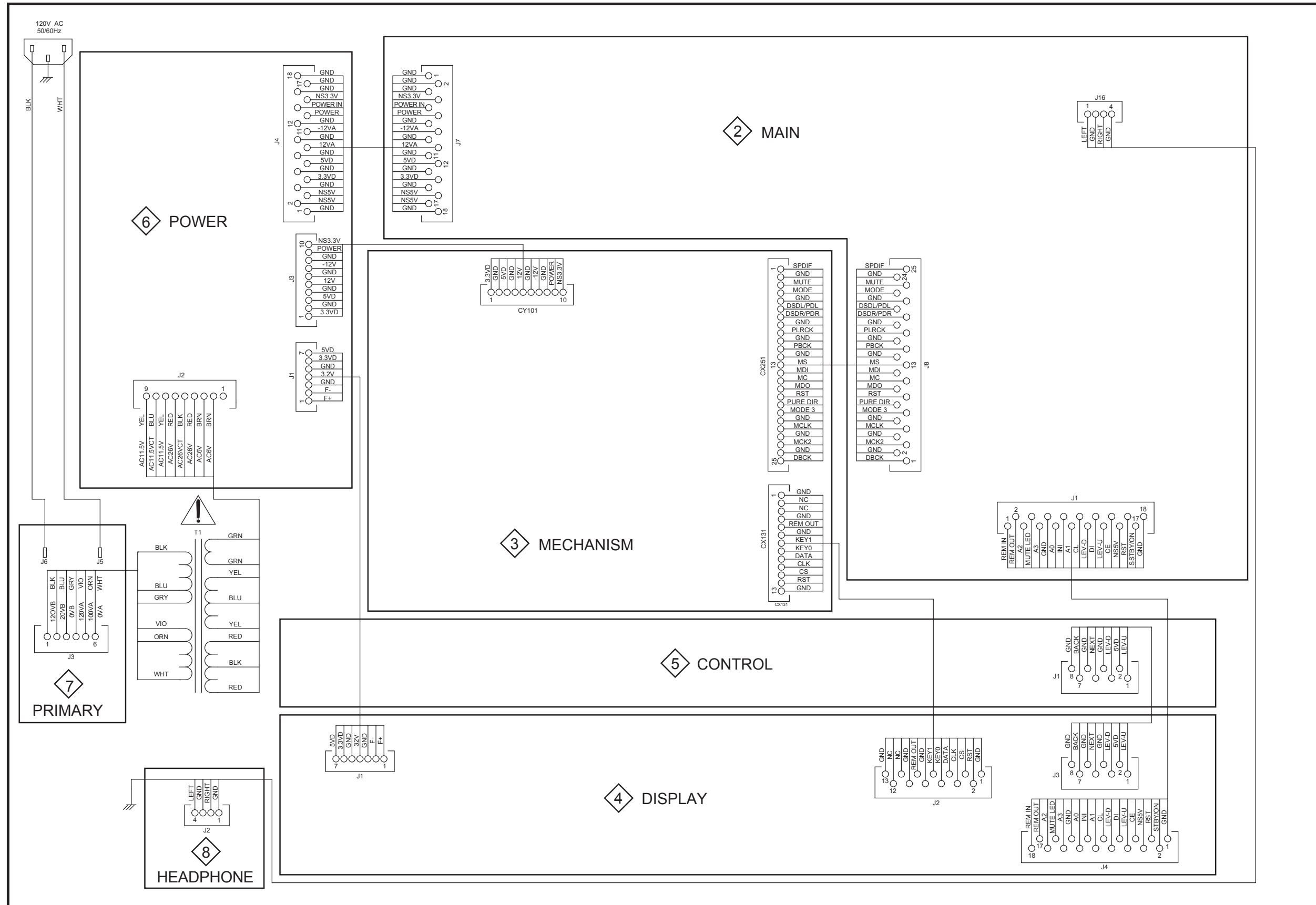
TOP VIEW WITH COVER REMOVED




BLOCK DIAGRAM

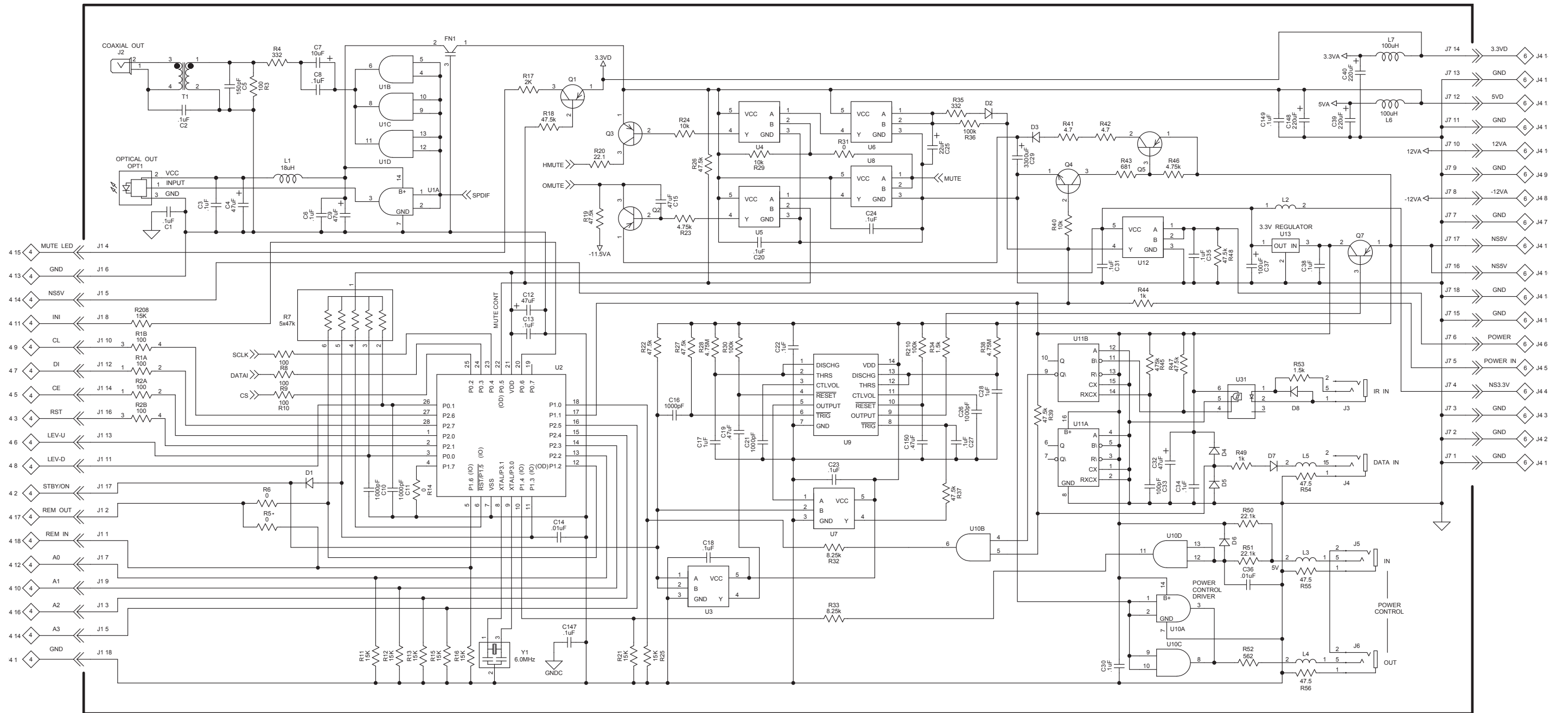


INTERCONNECT

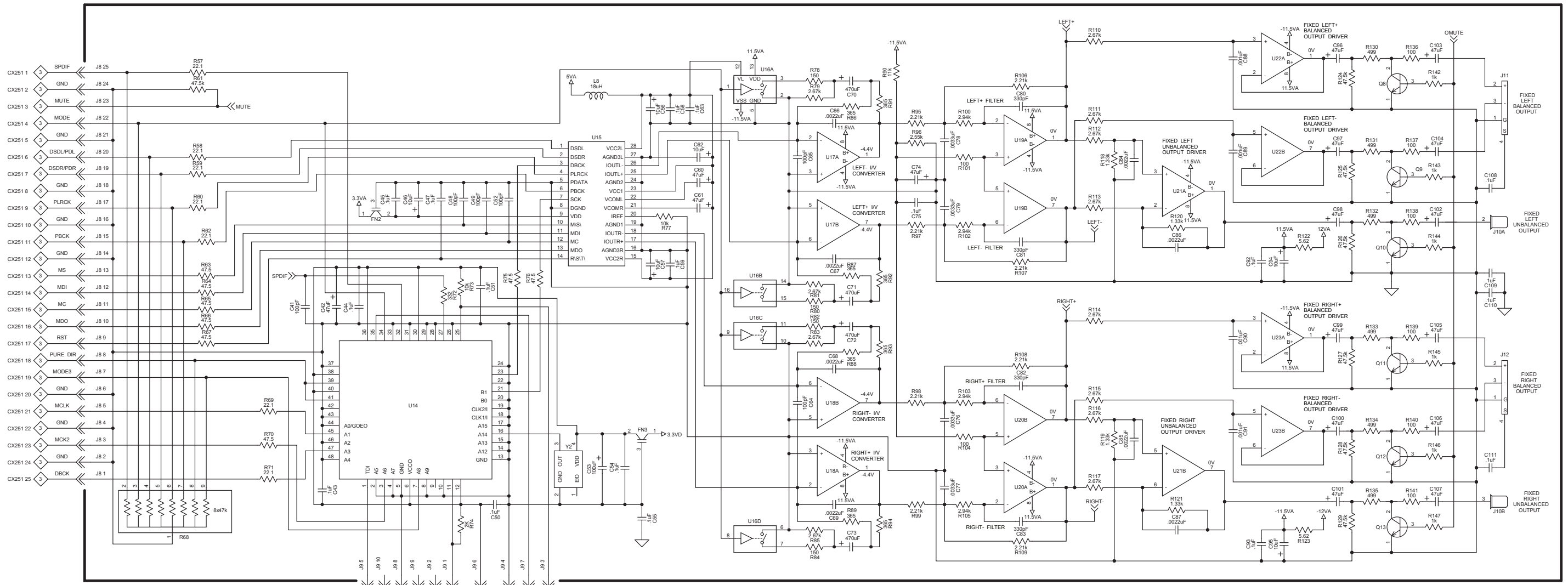


 WARNING Parts marked with a triangle and exclamation mark have critical characteristics. Use only replacement parts recommended by the manufacturer.

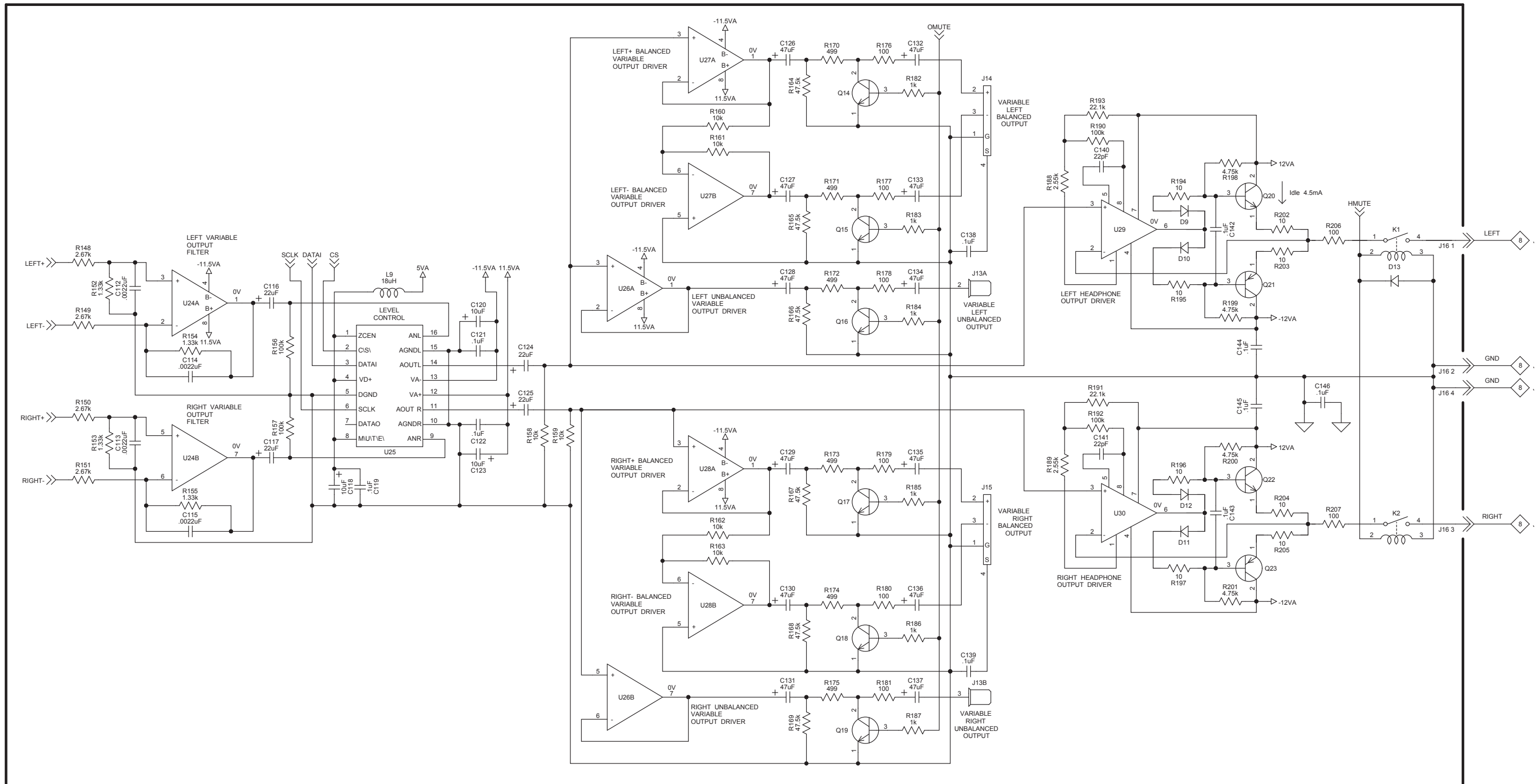
2 MAIN 750771 SCH 1 OF 3



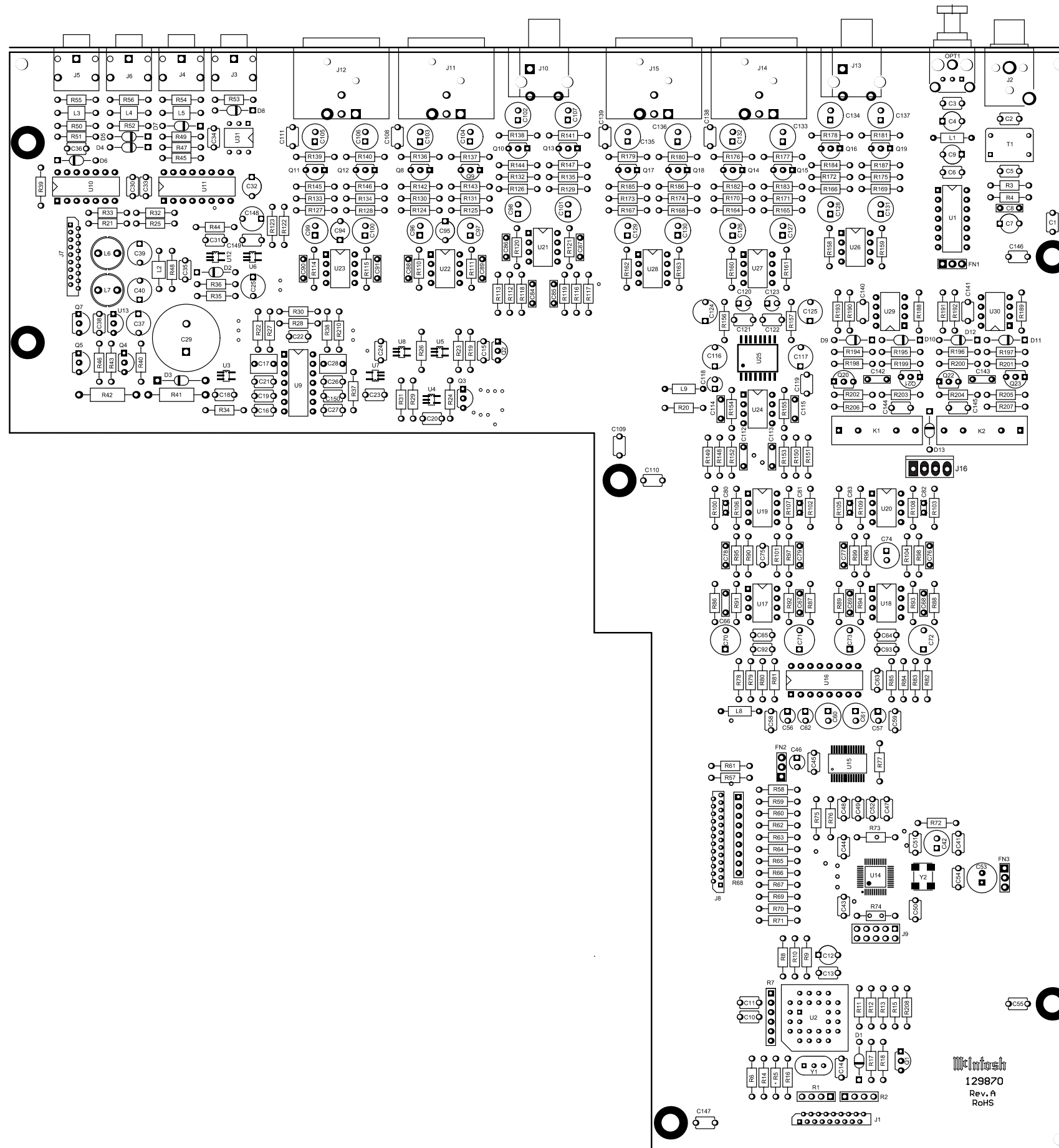
2 MAIN 750771 SCH 2 OF 3



2 MAIN 750771 SCH 3 OF 3

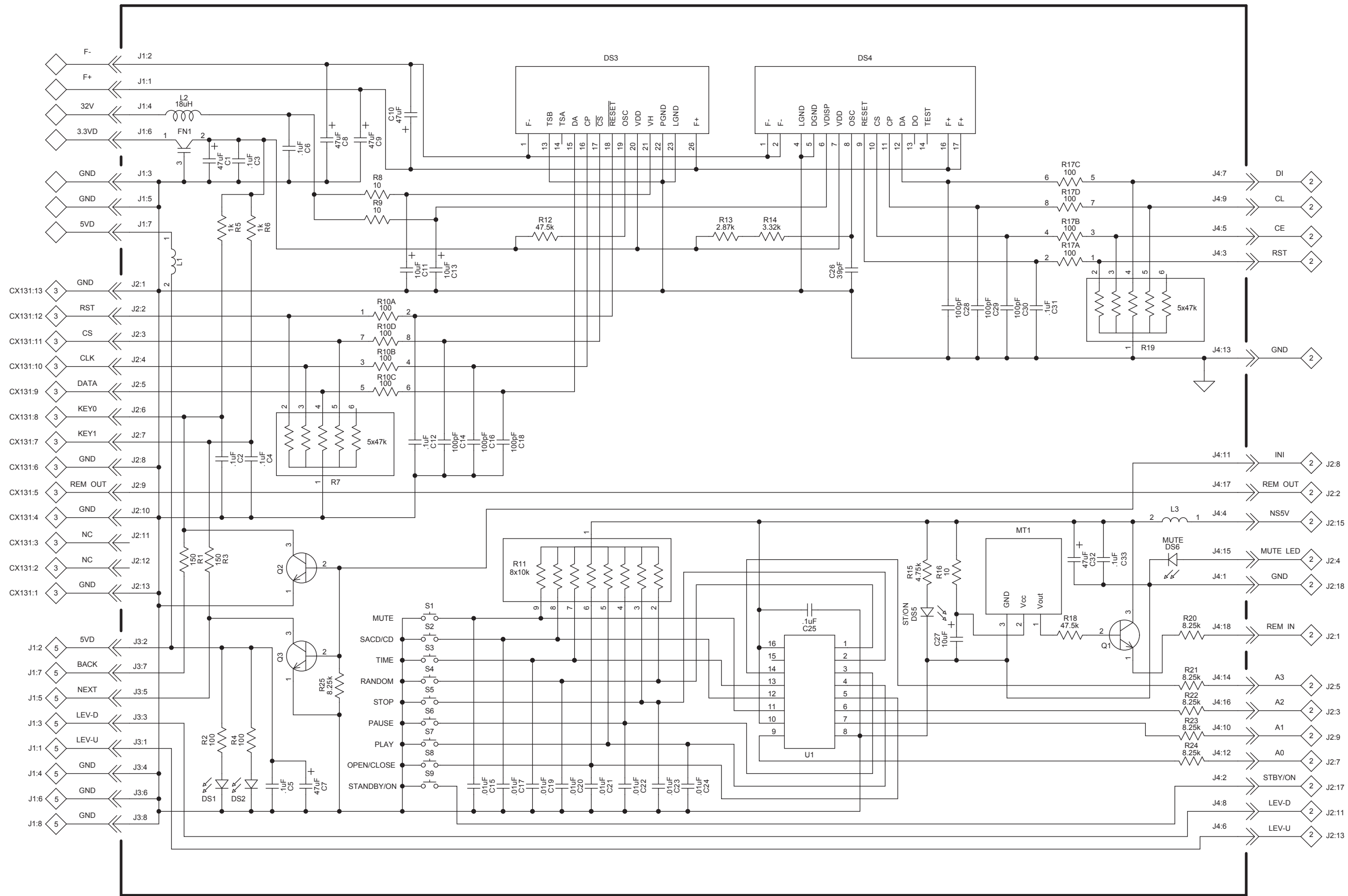


2 MAIN 750771 PCB

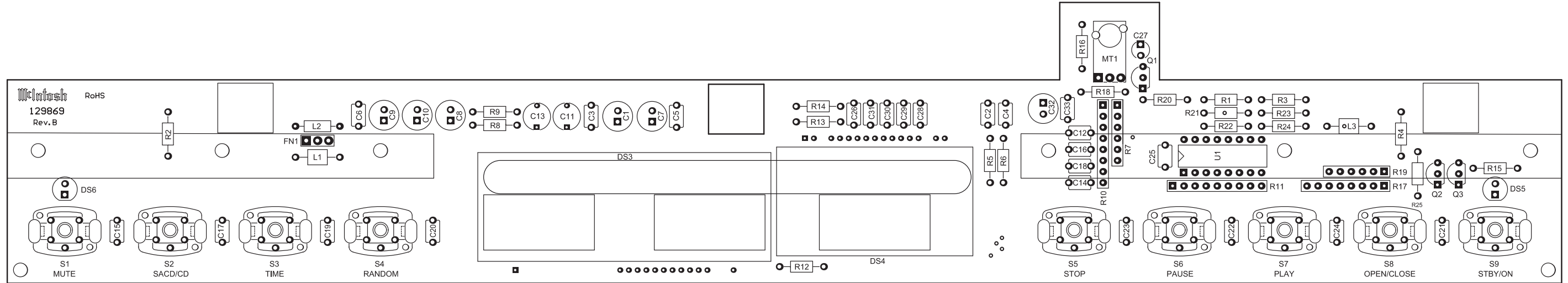


129870
Rev. A
RoHS

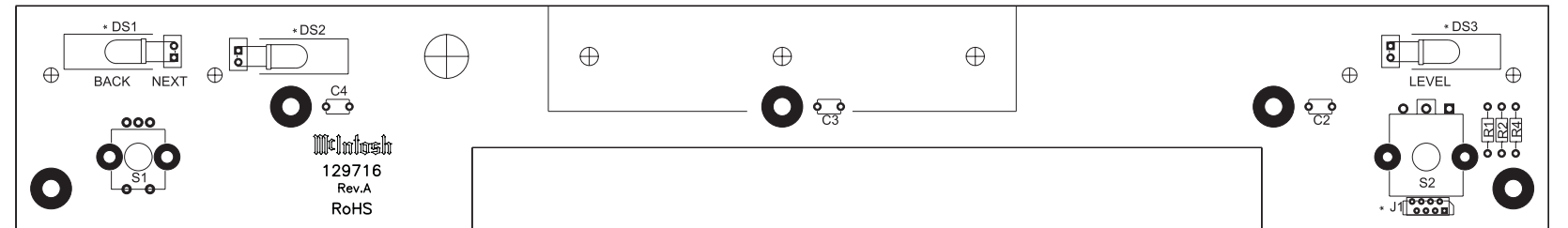
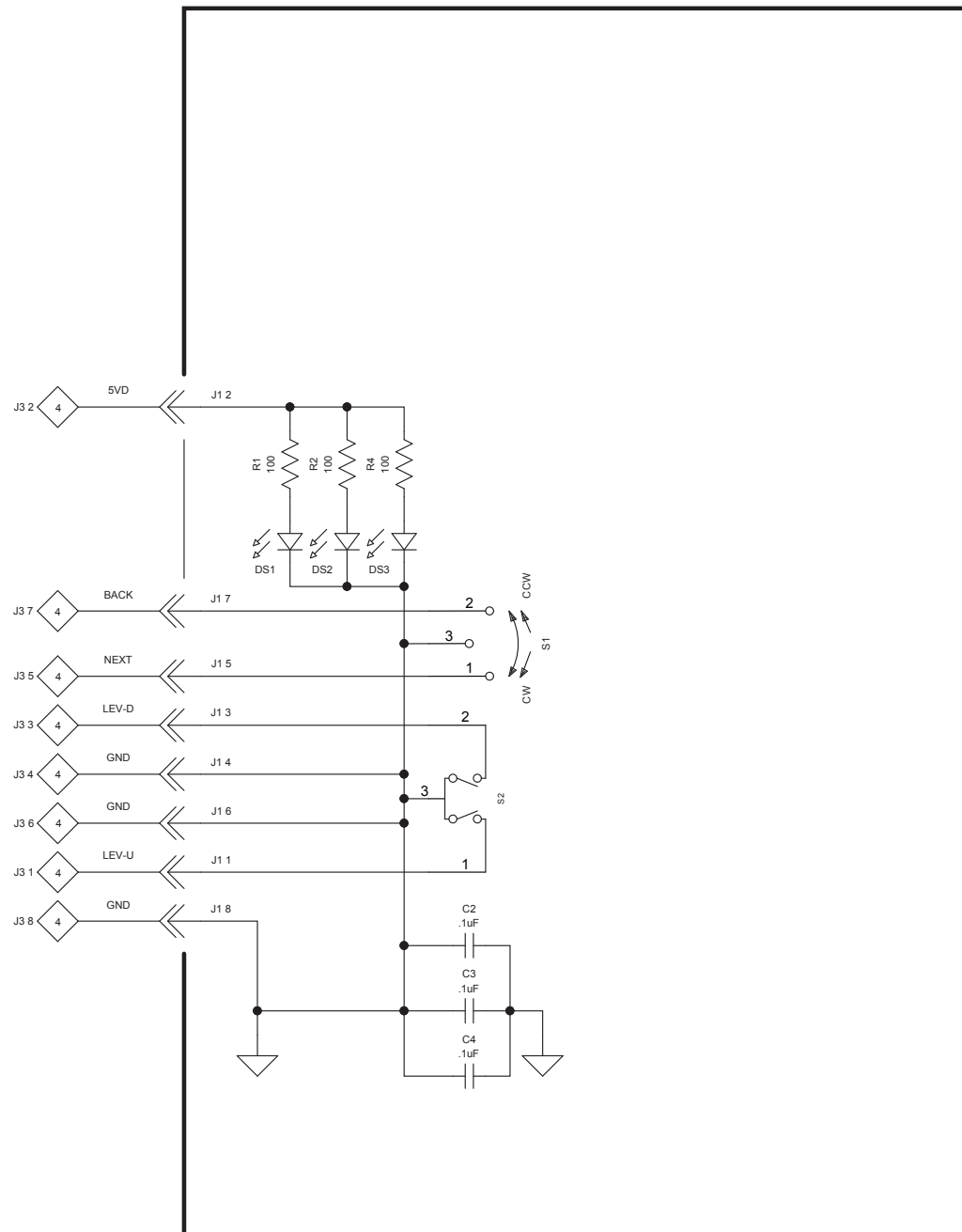
4 DISPLAY 750773 SCH



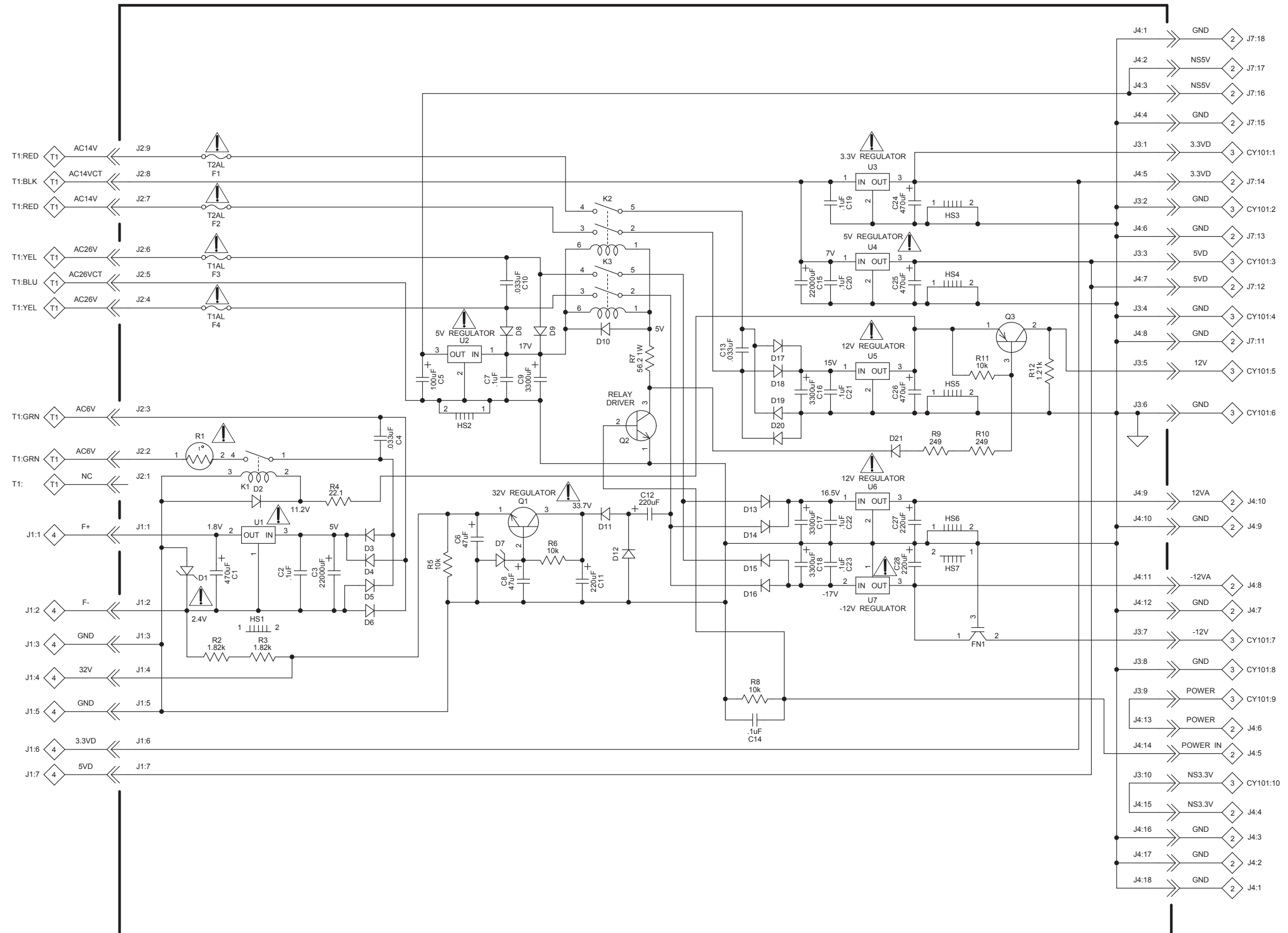
4 DISPLAY 750773 PCB



5 CONTROL 750295 SCH and PCB

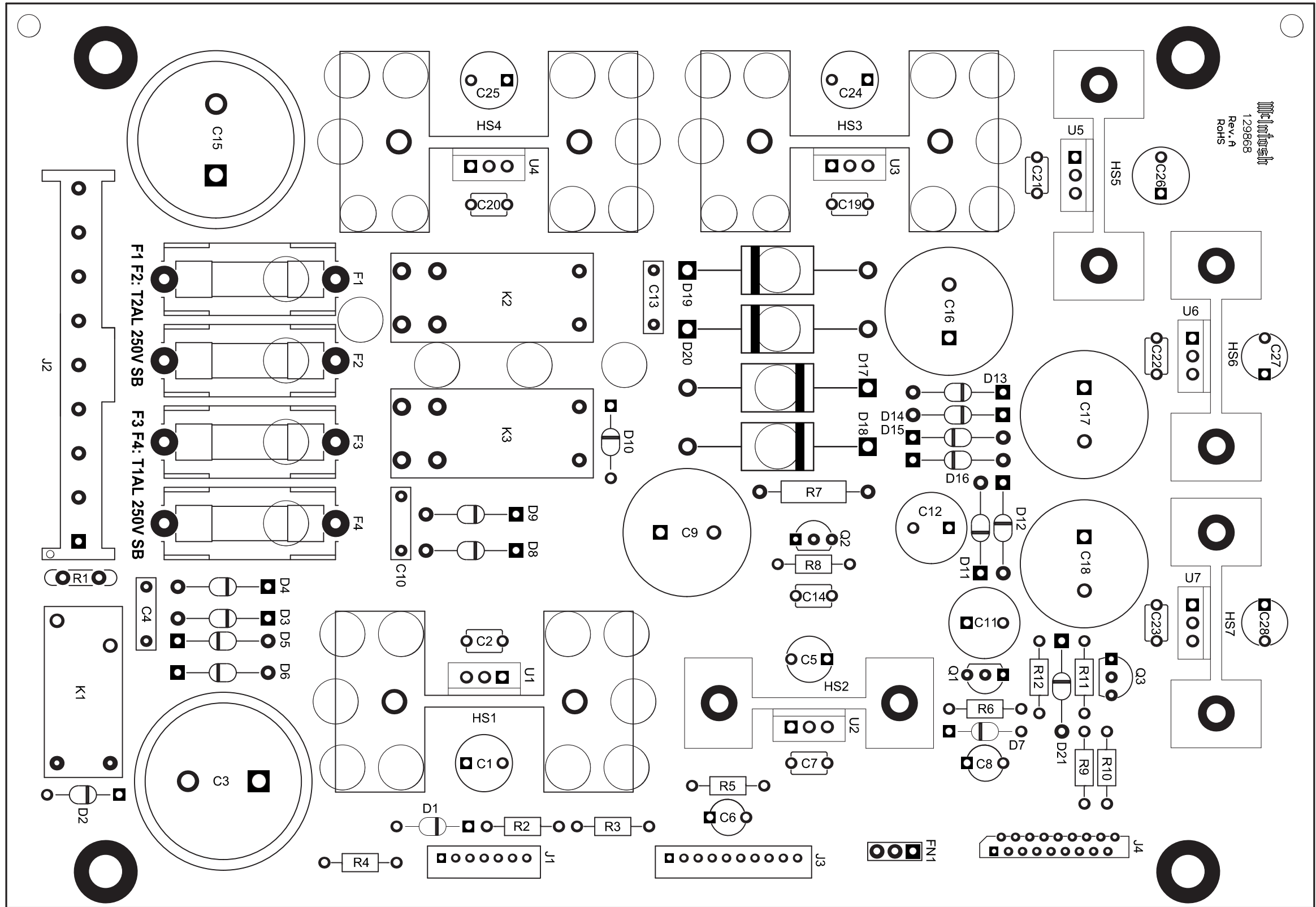


6 POWER 750772 SCH

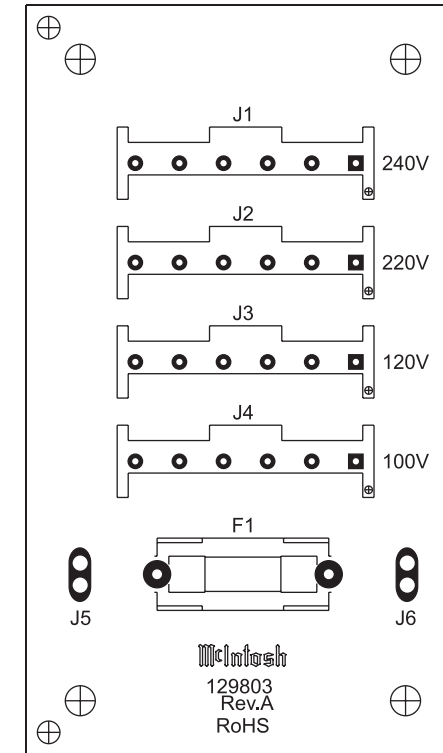
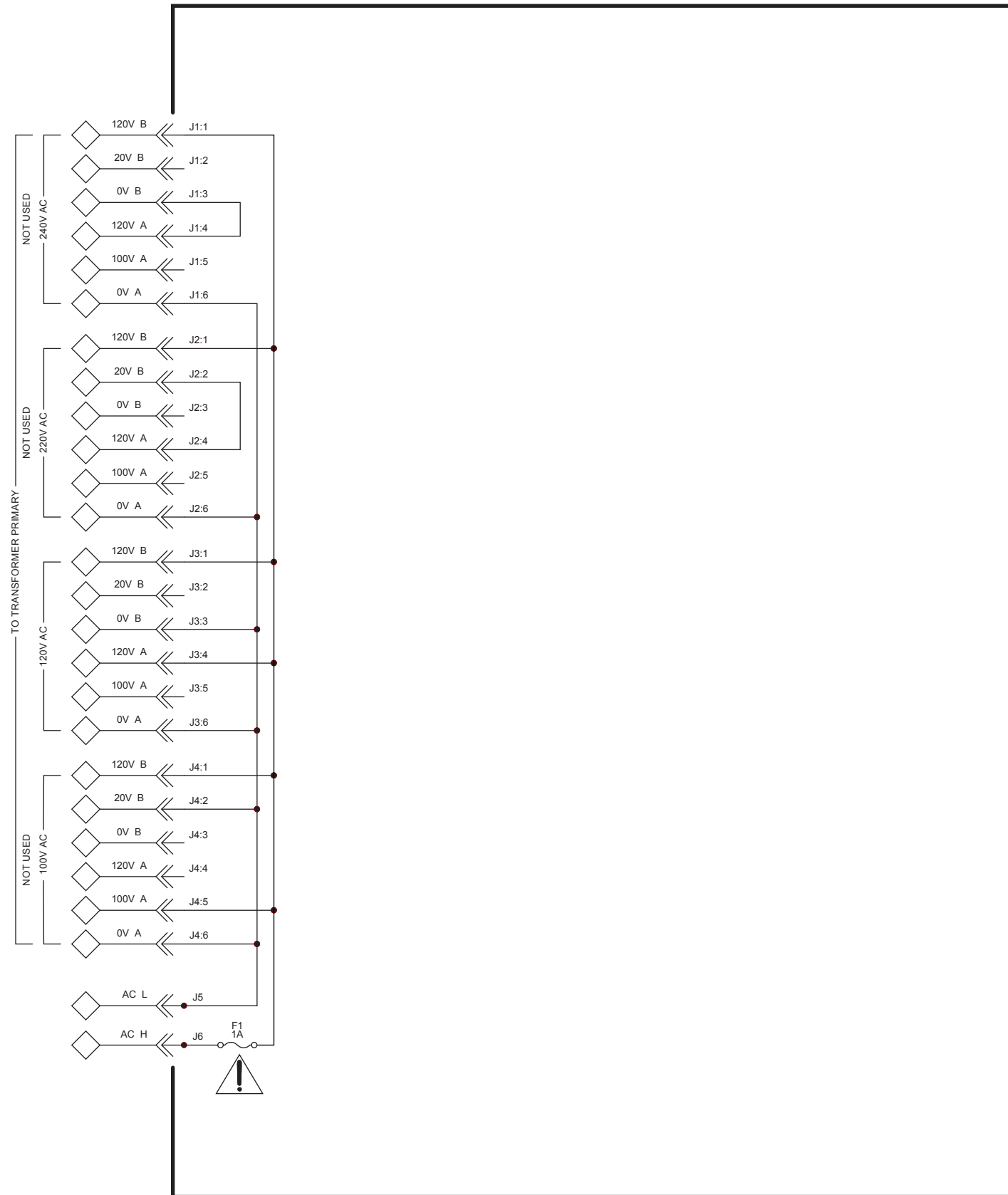



! WARNING Parts marked with a triangle and exclamation mark have critical characteristics. Use only replacement parts recommended by the manufacturer.

6 POWER 750772 PCB

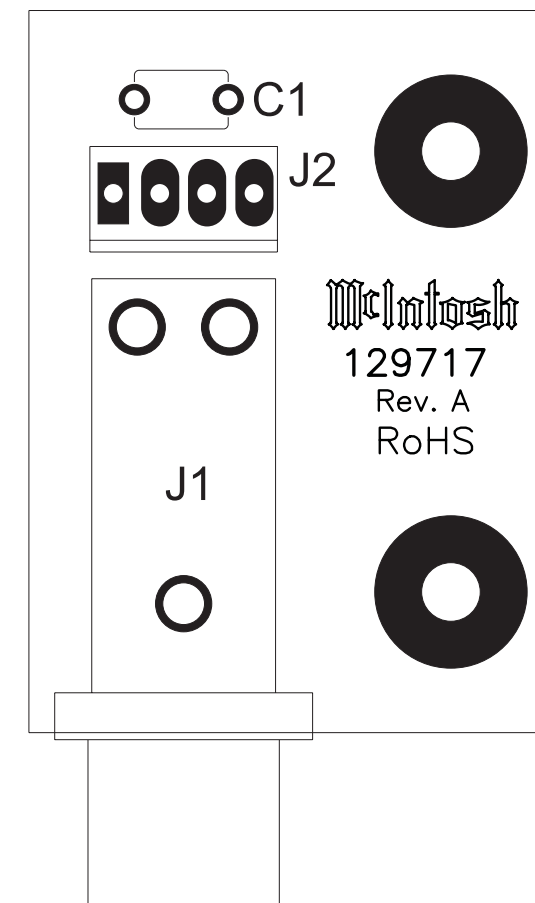
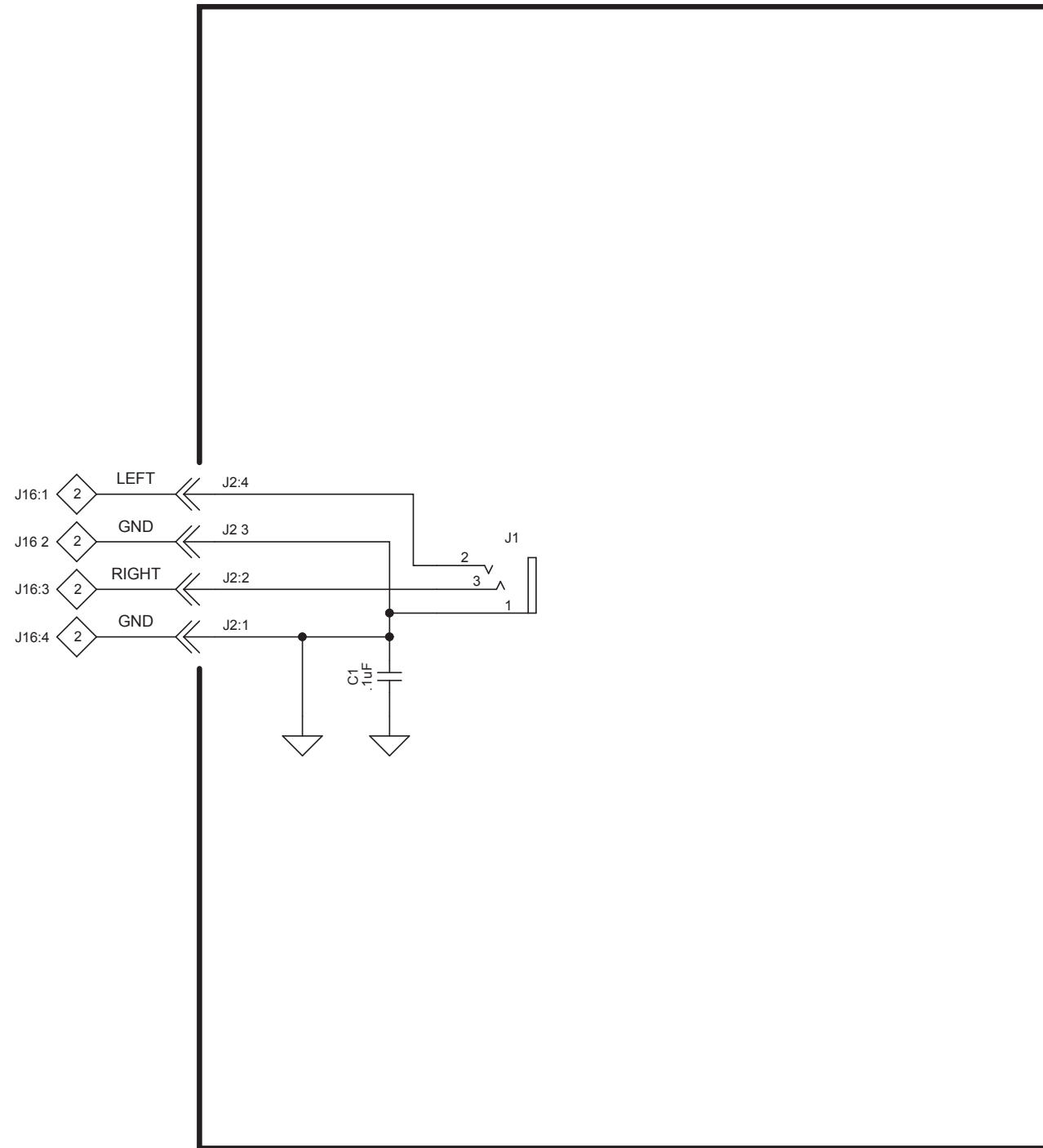


7 PRIMARY 750614 SCH and PCB



 **WARNING** Parts marked with a triangle and exclamation mark have critical characteristics. Use only replacement parts recommended by the manufacturer.

8 HEADPHONE 750296 SCH and PCB



PARTS LIST

2 MAIN PCB 750771

| Ref No. | Description | Part No. | Ref No. | Description | Part No. |
|---------|-----------------------------|----------|---------|-----------------------------|----------|
| C1 | CAP MONO .1UF 50V 20% Z5U | 061346 | C61 | CAP ELECT 47UF 16V | 066380 |
| C2 | CAP MONO .1UF 50V 20% Z5U | 061346 | C62 | CAP ELECT 10UF 16V | 066580 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 | C63 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP ELECT 47UF 35V | 066446 | C64 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C5 | CAP MONO 150pF 5% 200V | 061349 | C65 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C6 | CAP MONO .1UF 50V 20% Z5U | 061346 | C66 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C7 | CAP ELECT 10UF 50V | 066445 | C67 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C8 | CAP MPF 0.1UF 5% 63VDC | 064325 | C68 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C9 | CAP ELECT 47UF 35V | 066446 | C69 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C10 | CAP MONO 1000PF 50V 10% NPO | 061344 | C70 | CAP ELECT 470UF 16V | 066508 |
| C11 | CAP MONO 1000PF 50V 10% NPO | 061344 | C71 | CAP ELECT 470UF 16V | 066508 |
| C12 | CAP ELECT 47UF 35V | 066446 | C72 | CAP ELECT 470UF 16V | 066508 |
| C13 | CAP MONO .1UF 50V 20% Z5U | 061346 | C73 | CAP ELECT 470UF 16V | 066508 |
| C14 | CAP MONO .01UF 50V 20% | 061345 | C74 | CAP ELECT 47UF 16V | 066380 |
| C15 | CAP DISC MONO .47UF 50V | 061320 | C75 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C16 | CAP MONO 1000PF 50V 10% NPO | 061344 | C76 | CAP MPF 0.0033UF 5% 63VDC | 064455 |
| C17 | CAP MPF 1UF 5% 63VDC | 064337 | C77 | CAP MPF 0.0033UF 5% 63VDC | 064455 |
| C18 | CAP MONO .1UF 50V 20% Z5U | 061346 | C78 | CAP MPF 0.0033UF 5% 63VDC | 064455 |
| C19 | CAP DISC MONO .47UF 50V | 061320 | C79 | CAP MPF 0.0033UF 5% 63VDC | 064455 |
| C20 | CAP MONO .1UF 50V 20% Z5U | 061346 | C80 | CAP MONO 330PF | 061332 |
| C21 | CAP MONO 1000PF 50V 10% NPO | 061344 | C81 | CAP MONO 330PF | 061332 |
| C22 | CAP MONO .1UF 50V 20% Z5U | 061346 | C82 | CAP MONO 330PF | 061332 |
| C23 | CAP MONO .1UF 50V 20% Z5U | 061346 | C83 | CAP MONO 330PF | 061332 |
| C24 | CAP MONO .1UF 50V 20% Z5U | 061346 | C84 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C25 | CAP ELECT 22UF 100V | 066574 | C85 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C26 | CAP MONO 1000PF 50V 10% NPO | 061344 | C86 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C27 | CAP MONO .1UF 50V 20% Z5U | 061346 | C87 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C28 | CAP MPF 1UF 5% 63VDC | 064337 | C88 | CAP PF 0.001UF 5% 63VDC | 064453 |
| C29 | CAP ELECT 3300UF 35V | 066509 | C89 | CAP PF 0.001UF 5% 63VDC | 064453 |
| C30 | CAP MONO .1UF 50V 20% Z5U | 061346 | C90 | CAP PF 0.001UF 5% 63VDC | 064453 |
| C31 | CAP MONO .1UF 50V 20% Z5U | 061346 | C91 | CAP PF 0.001UF 5% 63VDC | 064453 |
| C32 | CAP ELECT 47UF 35V | 066446 | C92 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C33 | CAP MONO 100PF 100V 10% NPO | 061341 | C93 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C34 | CAP MONO .1UF 50V 20% Z5U | 061346 | C94 | CAP ELECT 10UF 50V | 066445 |
| C35 | CAP MONO .1UF 50V 20% Z5U | 061346 | C95 | CAP ELECT 10UF 50V | 066445 |
| C36 | CAP MONO .01UF 50V 20% | 061345 | C96 | CAP ELECT 47UF 16V | 066380 |
| C37 | CAP ELECT 100UF 25V | 066573 | C97 | CAP ELECT 47UF 16V | 066380 |
| C38 | CAP MONO .1UF 50V 20% Z5U | 061346 | C98 | CAP ELECT 47UF 16V | 066380 |
| C39 | CAP ELECT 220UF 25V | 066507 | C99 | CAP ELECT 47UF 16V | 066380 |
| C40 | CAP ELECT 220UF 25V | 066507 | C100 | CAP ELECT 47UF 16V | 066380 |
| C41 | CAP MONO 100PF 100V 10% NPO | 061341 | C101 | CAP ELECT 47UF 16V | 066380 |
| C42 | CAP ELECT 47UF 16V | 066380 | C102 | CAP ELECT 47UF 16V | 066380 |
| C43 | CAP MONO .1UF 50V 20% Z5U | 061346 | C103 | CAP ELECT 47UF 16V | 066380 |
| C44 | CAP MONO .1UF 50V 20% Z5U | 061346 | C104 | CAP ELECT 47UF 16V | 066380 |
| C45 | CAP MONO .1UF 50V 20% Z5U | 061346 | C105 | CAP ELECT 47UF 16V | 066380 |
| C46 | CAP ELECT 10UF 16V | 066580 | C106 | CAP ELECT 47UF 16V | 066380 |
| C47 | CAP MONO .1UF 50V 20% Z5U | 061346 | C107 | CAP ELECT 47UF 16V | 066380 |
| C48 | CAP MONO 100PF 100V 10% NPO | 061341 | C108 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C49 | CAP MONO 100PF 100V 10% NPO | 061341 | C109 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C50 | CAP MONO .1UF 50V 20% Z5U | 061346 | C110 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C51 | CAP MONO .1UF 50V 20% Z5U | 061346 | C111 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C52 | CAP MONO 100PF 100V 10% NPO | 061341 | C112 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C53 | CAP ELECT 100UF 16V 5MM | 066576 | C113 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C54 | CAP MONO .1UF 50V 20% Z5U | 061346 | C114 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C55 | CAP MONO .1UF 50V 20% Z5U | 061346 | C115 | CAP MPF 0.0022UF 5% 63VDC | 064454 |
| C56 | CAP ELECT 10UF 16V | 066580 | C116 | CAP ELECT 22UF 100V | 066574 |
| C57 | CAP ELECT 10UF 16V | 066580 | C117 | CAP ELECT 22UF 100V | 066574 |
| C58 | CAP MONO .1UF 50V 20% Z5U | 061346 | C118 | CAP ELECT 10UF 16V | 066580 |
| C59 | CAP MONO .1UF 50V 20% Z5U | 061346 | C119 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C60 | CAP ELECT 47UF 16V | 066380 | C120 | CAP ELECT 10UF 16V | 066580 |
| | | | C121 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| | | | C122 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| | | | C123 | CAP ELECT 10UF 16V | 066580 |
| | | | C124 | CAP ELECT 22UF 100V | 066574 |

PARTS LIST *con't*

MAIN PCB 750771 (cont'd)

| Ref No. | Description | Part No. |
|---------|--------------------------------|----------|
| C125 | CAP ELECT 22UF 100V | 066574 |
| C126 | CAP ELECT 47UF 16V | 066380 |
| C127 | CAP ELECT 47UF 16V | 066380 |
| C128 | CAP ELECT 47UF 16V | 066380 |
| C129 | CAP ELECT 47UF 16V | 066380 |
| C130 | CAP ELECT 47UF 16V | 066380 |
| C131 | CAP ELECT 47UF 16V | 066380 |
| C132 | CAP ELECT 47UF 16V | 066380 |
| C133 | CAP ELECT 47UF 16V | 066380 |
| C134 | CAP ELECT 47UF 16V | 066380 |
| C135 | CAP ELECT 47UF 16V | 066380 |
| C136 | CAP ELECT 47UF 16V | 066380 |
| C137 | CAP ELECT 47UF 16V | 066380 |
| C138 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C139 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C140 | CAP MONO 22PF 200V 10% NPO | 061339 |
| C141 | CAP MONO 22PF 200V 10% NPO | 061339 |
| C142 | CAP MPF 0.1UF 5% 63VDC | 064325 |
| C143 | CAP MPF 0.1UF 5% 63VDC | 064325 |
| C144 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C145 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C146 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C147 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C148 | CAP ELECT 220UF 25V | 066507 |
| C149 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C150 | CAP MONO .47UF 50V | 061320 |
| D1 | DIODE SILICON | 070174 |
| D2 | DIODE SILICON | 070174 |
| D3 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D4 | DIODE SILICON | 070174 |
| D5 | DIODE SILICON | 070174 |
| D6 | DIODE SILICON | 070174 |
| D7 | DIODE SILICON | 070174 |
| D8 | DIODE SILICON | 070174 |
| D9 | DIODE SILICON | 070174 |
| D10 | DIODE SILICON | 070174 |
| D11 | DIODE SILICON | 070174 |
| D12 | DIODE SILICON | 070174 |
| D13 | DIODE SILICON | 070174 |
| FN1 | FILTER EMI | 180057 |
| FN2 | FILTER EMI | 180057 |
| FN3 | FILTER EMI | 180057 |
| J1 | CONN FFC 18PIN | 117908 |
| J2 | JACK RCA ORANGE WITH GOLD | 117798 |
| J3 | JACK HEADPHONE STEREO 1/8IN | 117945 |
| J4 | JACK HEADPHONE STEREO 1/8IN | 117945 |
| J5 | JACK HEADPHONE STEREO 1/8IN | 117945 |
| J6 | JACK HEADPHONE STEREO 1/8IN | 117945 |
| J7 | CONN FFC 18PIN | 117908 |
| J8 | CONN 25 PIN FFC | 117974 |
| J9 | 10 PIN HEADER | 117829 |
| J16 | CONN 4 PIN | 117215 |
| J10 | JACK RCA 1X2 WHT/RED 14MM | 117788 |
| J11 | RECEPTACLE XLR MALE | 117686 |
| J12 | RECEPTACLE XLR MALE | 117686 |
| J13 | JACK RCA 1X2 WHT/RED 14MM | 117788 |
| J14 | RECEPTACLE XLR MALE | 117686 |
| J15 | RECEPTACLE XLR MALE | 117686 |
| K1 | RELAY REED FORM 1A 5V 500 OHMS | 087050 |
| K2 | RELAY REED FORM 1A 5V 500 OHMS | 087050 |

| Ref No. | Description | Part No. |
|---------|--------------------------------|----------|
| L1 | CHOKE 18UH 5%-10% | 122394 |
| L2 | BEADS FERRITE LEADED | 076023 |
| L3 | BEADS FERRITE LEADED | 076023 |
| L4 | BEADS FERRITE LEADED | 076023 |
| L5 | BEADS FERRITE LEADED | 076023 |
| L6 | INDUCTOR 100UH POWER | 122406 |
| L7 | INDUCTOR 100UH POWER | 122406 |
| L8 | CHOKE 18UH 5%-10% | 122394 |
| L9 | CHOKE 18UH 5%-10% | 122394 |
| OPT1 | TRANSMITTER FIBER OPTIC | 058180 |
| PCB1 | PC BD MAIN | 129870 |
| Q1 | TRANSISTOR PNP SILICON | 132304 |
| Q2 | TRANSISTOR PNP SILICON | 132304 |
| Q3 | TRANSISTOR PNP SILICON | 132304 |
| Q4 | TRANSISTOR NPN SILICON | 132317 |
| Q5 | TRANSISTOR PNP | 132263 |
| Q7 | TRANSISTOR PNP | 132263 |
| Q8 | TRANSISTOR NPN | 132257 |
| Q9 | TRANSISTOR NPN | 132257 |
| Q10 | TRANSISTOR NPN | 132257 |
| Q11 | TRANSISTOR NPN | 132257 |
| Q12 | TRANSISTOR NPN | 132257 |
| Q13 | TRANSISTOR NPN | 132257 |
| Q14 | TRANSISTOR NPN | 132257 |
| Q15 | TRANSISTOR NPN | 132257 |
| Q16 | TRANSISTOR NPN | 132257 |
| Q17 | TRANSISTOR NPN | 132257 |
| Q18 | TRANSISTOR NPN | 132257 |
| Q19 | TRANSISTOR NPN | 132257 |
| Q20 | TRANSISTOR NPN 2A 50V | 132302 |
| Q21 | TRANSISTOR PNP | 132263 |
| Q22 | TRANSISTOR NPN 2A 50V | 132302 |
| Q23 | TRANSISTOR PNP | 132263 |
| R1 | RES NETWORK 2X100 OHM ISOLATED | 144680 |
| R2 | RES NETWORK 2X100 OHM ISOLATED | 144680 |
| R3 | RES MF 100 OHM 1% 1/4W | 144568 |
| R4 | RES MF 332 OHM 1% 1/4W | 144646 |
| R5 | RES CF 0 OHM 5% 1/4W | 141554 |
| R6 | RES CF 0 OHM 5% 1/4W | 141554 |
| R7 | RES NETWORK 5X47K BUSSED | 144499 |
| R8 | RES MF 100 OHM 1% 1/4W | 144568 |
| R9 | RES MF 100 OHM 1% 1/4W | 144568 |
| R10 | RES MF 100 OHM 1% 1/4W | 144568 |
| R11 | RES MF 15K 1% 1/4W | 144623 |
| R12 | RES MF 15K 1% 1/4W | 144623 |
| R13 | RES MF 15K 1% 1/4W | 144623 |
| R14 | RES CF 0 OHM 5% 1/4W | 141554 |
| R15 | RES MF 15K 1% 1/4W | 144623 |
| R16 | RES MF 15K 1% 1/4W | 144623 |
| R17 | RES MF 2K 1% 1/4W | 144517 |
| R18 | RES MF 47.5K 1% 1/4W | 144526 |
| R19 | RES MF 47.5K 1% 1/4W | 144526 |
| R20 | RES MF 22.1 OHM 1% 1/4W | 144554 |
| R21 | RES MF 15K 1% 1/4W | 144623 |
| R22 | RES MF 47.5K 1% 1/4W | 144526 |
| R23 | RES MF 4.75K 1% 1/4W | 144520 |
| R24 | RES MF 10K 1% 1/4W | 144504 |
| R25 | RES MF 15K 1% 1/4W | 144623 |
| R26 | RES MF 47.5K 1% 1/4W | 144526 |
| R27 | RES MF 47.5K 1% 1/4W | 144526 |
| R28 | RES MF 4.75M 1% 1/4W | 144608 |
| R29 | RES MF 10K 1% 1/4W | 144504 |
| R30 | RES MF 100K 1% 1/4W | 144528 |
| R31 | RES CF 0 OHM 5% 1/4W | 141554 |

PARTS LIST *con't*

MAIN PCB 750771 (cont'd)

| Ref No. | Description | Part No. | Ref No. | Description | Part No. |
|---------|-------------------------|----------|---------|------------------------|----------|
| R32 | RES MF 8.25K 1% 1/4W | 144549 | R92 | RES MF 365 OHM 1% 1/4W | 144505 |
| R33 | RES MF 8.25K 1% 1/4W | 144549 | R93 | RES MF 365 OHM 1% 1/4W | 144505 |
| R34 | RES MF 1.5K 1% 1/4W | 144539 | R94 | RES MF 365 OHM 1% 1/4W | 144505 |
| R35 | RES MF 332 OHM 1% 1/4W | 144646 | R95 | RES MF 2.21K 1% 1/4W | 144584 |
| R36 | RES MF 100K 1% 1/4W | 144528 | R96 | RES MF 2.55K 1% 1/4W | 144734 |
| R37 | RES MF 47.5K 1% 1/4W | 144526 | R97 | RES MF 2.21K 1% 1/4W | 144584 |
| R38 | RES MF 4.75M 1% 1/4W | 144608 | R98 | RES MF 2.21K 1% 1/4W | 144584 |
| R39 | RES MF 47.5K 1% 1/4W | 144526 | R99 | RES MF 2.21K 1% 1/4W | 144584 |
| R40 | RES MF 10K 1% 1/4W | 144504 | R100 | RES MF 2.94K 1% 1/4W | 144667 |
| R41 | RES MO 4.7 OHM 5% 1W | 144656 | R101 | RES MF 100 OHM 1% 1/4W | 144568 |
| R42 | RES MO 4.7 OHM 5% 1W | 144656 | R102 | RES MF 2.94K 1% 1/4W | 144667 |
| R43 | RES MF 681 OHM 1% 1/4W | 144567 | R103 | RES MF 2.94K 1% 1/4W | 144667 |
| R44 | RES MF 1K 1% 1/4W | 144513 | R104 | RES MF 100 OHM 1% 1/4W | 144568 |
| R45 | RES MF 475K 1% 1/4W | 144604 | R105 | RES MF 2.94K 1% 1/4W | 144667 |
| R46 | RES MF 4.75K 1% 1/4W | 144520 | R106 | RES MF 2.21K 1% 1/4W | 144584 |
| R47 | RES MF 47.5K 1% 1/4W | 144526 | R107 | RES MF 2.21K 1% 1/4W | 144584 |
| R48 | RES MF 47.5K 1% 1/4W | 144526 | R108 | RES MF 2.21K 1% 1/4W | 144584 |
| R49 | RES MF 1K 1% 1/4W | 144513 | R109 | RES MF 2.21K 1% 1/4W | 144584 |
| R50 | RES MF 22.1K 1% 1/4W | 144564 | R110 | RES MF 2.67K 1% 1/4W | 144534 |
| R51 | RES MF 22.1K 1% 1/4W | 144564 | R111 | RES MF 2.67K 1% 1/4W | 144534 |
| R52 | RES MF 562 OHM 1% 1/4W | 144622 | R112 | RES MF 2.67K 1% 1/4W | 144534 |
| R53 | RES MF 1.5K 1% 1/4W | 144539 | R113 | RES MF 2.67K 1% 1/4W | 144534 |
| R54 | RES MF 47.5 OHM 1% 1/4W | 144642 | R114 | RES MF 2.67K 1% 1/4W | 144534 |
| R55 | RES MF 47.5 OHM 1% 1/4W | 144642 | R115 | RES MF 2.67K 1% 1/4W | 144534 |
| R56 | RES MF 47.5 OHM 1% 1/4W | 144642 | R116 | RES MF 2.67K 1% 1/4W | 144534 |
| R57 | RES MF 22.1 OHM 1% 1/4W | 144554 | R117 | RES MF 2.67K 1% 1/4W | 144534 |
| R58 | RES MF 22.1 OHM 1% 1/4W | 144554 | R118 | RES MF 1.33K 1% 1/4W | 144619 |
| R59 | RES MF 22.1 OHM 1% 1/4W | 144554 | R119 | RES MF 1.33K 1% 1/4W | 144619 |
| R60 | RES MF 22.1 OHM 1% 1/4W | 144554 | R120 | RES MF 1.33K 1% 1/4W | 144619 |
| R61 | RES MF 47.5K 1% 1/4W | 144526 | R121 | RES MF 1.33K 1% 1/4W | 144619 |
| R62 | RES MF 22.1 OHM 1% 1/4W | 144554 | R122 | RES MF 5.62OHM 1% 1/4W | 144556 |
| R63 | RES MF 47.5 OHM 1% 1/4W | 144642 | R123 | RES MF 5.62OHM 1% 1/4W | 144556 |
| R64 | RES MF 47.5 OHM 1% 1/4W | 144642 | R124 | RES MF 47.5K 1% 1/4W | 144526 |
| R65 | RES MF 47.5 OHM 1% 1/4W | 144642 | R125 | RES MF 47.5K 1% 1/4W | 144526 |
| R66 | RES MF 47.5 OHM 1% 1/4W | 144642 | R126 | RES MF 47.5K 1% 1/4W | 144526 |
| R67 | RES MF 47.5 OHM 1% 1/4W | 144642 | R127 | RES MF 47.5K 1% 1/4W | 144526 |
| R68 | RES NETWORK 9 X 47K BUS | 144673 | R128 | RES MF 47.5K 1% 1/4W | 144526 |
| R69 | RES MF 22.1 OHM 1% 1/4W | 144554 | R129 | RES MF 47.5K 1% 1/4W | 144526 |
| R70 | RES MF 47.5 OHM 1% 1/4W | 144642 | R130 | RES MF 499 OHM 1% 1/4W | 144510 |
| R71 | RES MF 22.1 OHM 1% 1/4W | 144554 | R131 | RES MF 499 OHM 1% 1/4W | 144510 |
| R72 | RES MF 332 OHM 1% 1/4W | 144646 | R132 | RES MF 499 OHM 1% 1/4W | 144510 |
| R73 | RES MF 10K 1% 1/4W | 144504 | R133 | RES MF 499 OHM 1% 1/4W | 144510 |
| R74 | RES MF 2K 1% 1/4W | 144517 | R134 | RES MF 499 OHM 1% 1/4W | 144510 |
| R75 | RES MF 47.5 OHM 1% 1/4W | 144642 | R135 | RES MF 499 OHM 1% 1/4W | 144510 |
| R76 | RES MF 47.5 OHM 1% 1/4W | 144642 | R136 | RES MF 100 OHM 1% 1/4W | 144568 |
| R77 | RES MF 10K 1% 1/4W | 144504 | R137 | RES MF 100 OHM 1% 1/4W | 144568 |
| R78 | RES MF 150 OHM 1% 1/4W | 144535 | R138 | RES MF 100 OHM 1% 1/4W | 144568 |
| R79 | RES MF 2.67K 1% 1/4W | 144534 | R139 | RES MF 100 OHM 1% 1/4W | 144568 |
| R80 | RES MF 150 OHM 1% 1/4W | 144535 | R140 | RES MF 100 OHM 1% 1/4W | 144568 |
| R81 | RES MF 2.67K 1% 1/4W | 144534 | R141 | RES MF 100 OHM 1% 1/4W | 144568 |
| R82 | RES MF 150 OHM 1% 1/4W | 144535 | R142 | RES MF 1K 1% 1/4W | 144513 |
| R83 | RES MF 2.67K 1% 1/4W | 144534 | R143 | RES MF 1K 1% 1/4W | 144513 |
| R84 | RES MF 150 OHM 1% 1/4W | 144535 | R144 | RES MF 1K 1% 1/4W | 144513 |
| R85 | RES MF 2.67K 1% 1/4W | 144534 | R145 | RES MF 1K 1% 1/4W | 144513 |
| R86 | RES MF 365 OHM 1% 1/4W | 144505 | R146 | RES MF 1K 1% 1/4W | 144513 |
| R87 | RES MF 365 OHM 1% 1/4W | 144505 | R147 | RES MF 1K 1% 1/4W | 144513 |
| R88 | RES MF 365 OHM 1% 1/4W | 144505 | R148 | RES MF 2.67K 1% 1/4W | 144534 |
| R89 | RES MF 365 OHM 1% 1/4W | 144505 | R149 | RES MF 2.67K 1% 1/4W | 144534 |
| R90 | RES MF 11K 1% 1/4W | 144523 | R150 | RES MF 2.67K 1% 1/4W | 144534 |
| R91 | RES MF 365 OHM 1% 1/4W | 144505 | R151 | RES MF 2.67K 1% 1/4W | 144534 |
| | | | R152 | RES MF 1.33K 1% 1/4W | 144619 |
| | | | R153 | RES MF 1.33K 1% 1/4W | 144619 |
| | | | R154 | RES MF 1.33K 1% 1/4W | 144619 |

PARTS LIST *con't*

MAIN PCB 750771 (cont'd)

| Ref No. | Description | Part No. |
|---------|-------------------------------|----------|
| R155 | RES MF 1.33K 1% 1/4W | 144619 |
| R156 | RES MF 100K 1% 1/4W | 144528 |
| R157 | RES MF 100K 1% 1/4W | 144528 |
| R158 | RES MF 10K 1% 1/4W | 144504 |
| R159 | RES MF 10K 1% 1/4W | 144504 |
| R160 | RES MF 10K 1% 1/4W | 144504 |
| R161 | RES MF 10K 1% 1/4W | 144504 |
| R162 | RES MF 10K 1% 1/4W | 144504 |
| R163 | RES MF 10K 1% 1/4W | 144504 |
| R164 | RES MF 47.5K 1% 1/4W | 144526 |
| R165 | RES MF 47.5K 1% 1/4W | 144526 |
| R166 | RES MF 47.5K 1% 1/4W | 144526 |
| R167 | RES MF 47.5K 1% 1/4W | 144526 |
| R168 | RES MF 47.5K 1% 1/4W | 144526 |
| R169 | RES MF 47.5K 1% 1/4W | 144526 |
| R170 | RES MF 499 OHM 1% 1/4W | 144510 |
| R171 | RES MF 499 OHM 1% 1/4W | 144510 |
| R172 | RES MF 499 OHM 1% 1/4W | 144510 |
| R173 | RES MF 499 OHM 1% 1/4W | 144510 |
| R174 | RES MF 499 OHM 1% 1/4W | 144510 |
| R175 | RES MF 499 OHM 1% 1/4W | 144510 |
| R176 | RES MF 100 OHM 1% 1/4W | 144568 |
| R177 | RES MF 100 OHM 1% 1/4W | 144568 |
| R178 | RES MF 100 OHM 1% 1/4W | 144568 |
| R179 | RES MF 100 OHM 1% 1/4W | 144568 |
| R180 | RES MF 100 OHM 1% 1/4W | 144568 |
| R181 | RES MF 100 OHM 1% 1/4W | 144568 |
| R182 | RES MF 1K 1% 1/4W | 144513 |
| R183 | RES MF 1K 1% 1/4W | 144513 |
| R184 | RES MF 1K 1% 1/4W | 144513 |
| R185 | RES MF 1K 1% 1/4W | 144513 |
| R186 | RES MF 1K 1% 1/4W | 144513 |
| R187 | RES MF 1K 1% 1/4W | 144513 |
| R188 | RES MF 2.55K 1% 1/4W | 144734 |
| R189 | RES MF 2.55K 1% 1/4W | 144734 |
| R190 | RES MF 100K 1% 1/4W | 144528 |
| R191 | RES MF 22.1K 1% 1/4W | 144564 |
| R192 | RES MF 100K 1% 1/4W | 144528 |
| R193 | RES MF 22.1K 1% 1/4W | 144564 |
| R194 | RES MF 10 OHM 1% 1/4W | 144553 |
| R195 | RES MF 10 OHM 1% 1/4W | 144553 |
| R196 | RES MF 10 OHM 1% 1/4W | 144553 |
| R197 | RES MF 10 OHM 1% 1/4W | 144553 |
| R198 | RES MF 4.75K 1% 1/4W | 144520 |
| R199 | RES MF 4.75K 1% 1/4W | 144520 |
| R200 | RES MF 4.75K 1% 1/4W | 144520 |
| R201 | RES MF 4.75K 1% 1/4W | 144520 |
| R202 | RES MF 10 OHM 1% 1/4W | 144553 |
| R203 | RES MF 10 OHM 1% 1/4W | 144553 |
| R204 | RES MF 10 OHM 1% 1/4W | 144553 |
| R205 | RES MF 10 OHM 1% 1/4W | 144553 |
| R206 | RES MF 100 OHM 1% 1/4W | 144568 |
| R207 | RES MF 100 OHM 1% 1/4W | 144568 |
| R208 | RES MF 4.75K 1% 1/4W | 144520 |
| R210 | RES MF 100K 1% 1/4W | 144528 |
| T1 | TRANSFORMER DIGITAL INTERFACE | 159351 |
| U1 | IC QUAD AND GATE | 133372 |
| U2 | PROGRAMMED VERSION OF 133495 | 133706 |
| (U2) | IC SOCKET 28 PIN PLCC | 178186 |
| U3 | SINGLE 2-INPUT NOR GATE | 133500 |

| Ref No. | Description | Part No. |
|---------|--------------------------------|----------|
| U4 | SINGLE 2-INPUT NAND GATE | 133501 |
| U5 | SINGLE 2-INPUT AND GATE | 133552 |
| U6 | SINGLE 2-INPUT AND GATE | 133552 |
| U7 | SINGLE 2-INPUT OR GATE | 133516 |
| U8 | SINGLE 2-INPUT AND GATE | 133552 |
| U9 | IC TIMER | 133612 |
| U10 | IC QUAD AND GATE | 133372 |
| U11 | IC MONOSTB MULTIVIB X 2 | 133593 |
| U12 | SINGLE 2-INPUT AND GATE | 133502 |
| U13 | IC 3.3V LOW DROP REGULATOR | 133464 |
| U14 | IC PROGRAMMABLE LOGIC DEVICE | 310370 |
| U15 | DSD1792DB | 133441 |
| U16 | IC SPST QUAD FET SWITCHES NO | 133580 |
| U17 | IC OP AMP DUAL FET INPUT | 133432 |
| U18 | IC OP AMP DUAL FET INPUT | 133432 |
| U19 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U20 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U21 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U22 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U23 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U24 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U25 | CONTROL VOLUME STEREO | 133638 |
| U26 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U27 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U28 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U29 | IC OPERATIONAL AMP LOW NOISE | 133565 |
| U30 | IC OPERATIONAL AMP LOW NOISE | 133565 |
| U31 | COUPLER OPTICAL SCHMITT OUTPUT | 131030 |
| Y1 | RESONATOR CERAMIC 6.0MHZ W/CAP | 180072 |
| Y2 | CRYSTAL OSCILLATOR 33.8688MHZ | 180083 |

4 DISPLAY PCB 750773

| | | |
|-----|-----------------------------|--------|
| C1 | CAP ELECT 47UF 16V | 066380 |
| C2 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C5 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C6 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C7 | CAP ELECT 47UF 16V | 066380 |
| C8 | CAP ELECT 47UF 16V | 066380 |
| C9 | CAP ELECT 47UF 16V | 066380 |
| C10 | CAP ELECT 47UF 16V | 066380 |
| C11 | CAP ELECT 10UF 50V LOW ESR | 066437 |
| C12 | CAP MONO .1UF 50V 20% | 061346 |
| C14 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C15 | CAP MONO .01UF 50V 20% | 061345 |
| C16 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C17 | CAP MONO .01UF 50V 20% | 061345 |
| C18 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C19 | CAP MONO .01UF 50V 20% | 061345 |
| C20 | CAP MONO .01UF 50V 20% | 061345 |
| C21 | CAP MONO .01UF 50V 20% | 061345 |
| C22 | CAP MONO .01UF 50V 20% | 061345 |
| C23 | CAP MONO .01UF 50V 20% | 061345 |
| C24 | CAP MONO .01UF 50V 20% | 061345 |
| C25 | CAP MONO .1UF 50V 20% | 061346 |
| C26 | CAP MONO 39PF 5% 200V | 061363 |
| C27 | CAP ELECT 10UF 16V | 066580 |
| C28 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C29 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C30 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C31 | CAP MONO .1UF 50V 20% | 061346 |
| C32 | CAP ELECT 47UF 16V | 066380 |
| C33 | CAP MONO .1UF 50V 20% | 061346 |

PARTS LIST *con't*

DISPLAY PCB 750773 (cont'd)

| Ref No. | Description | Part No. |
|---------|---------------------------------|----------|
| DS1 | LED GREEN 5MM HI-INT | 058165 |
| (DS1) | SPACER LED | 112108 |
| DS2 | LED GREEN 5MM HI-INT | 058165 |
| (DS2) | SPACER LED | 112108 |
| DS3 | FL TUBE 8BT258GINK | 310369 |
| DS4 | DISPLAY 4 DIGITS DOT MATRIX VFD | 058188 |
| DS5 | LED RED 5MM ROUND | 058187 |
| (DS5) | LED SPACER .220 LENGTH | 163001 |
| DS6 | LED RED 5MM ROUND | 058187 |
| (DS6) | LED SPACER .220 LENGTH | 163001 |
| FN1 | FILTER EMI | 180057 |
| J1 | 7 PIN SHROUDED HEADER | 117910 |
| J2 | CONN 13 PIN FFC | 117919 |
| J3 | CONNECTOR FFC 8 PIN | 117915 |
| J4 | CONN FFC 18PIN | 117908 |
| L1 | BEADS FERRITE LEADED | 076023 |
| L2 | CHOKER 18UH 5%-10% | 122394 |
| L3 | BEADS FERRITE LEADED | 076023 |
| | TAPE FOAM 3/16 THK 1 X 1/2 BLK | 094509 |
| | BUMPER DOT 1/2 DIA X 1/2 THK | 094510 |
| MT1 | SENSOR IR 38KHZ | 121046 |
| PCB1 | PC BD DISPLAY | 129869 |
| Q1 | TRANSISTOR NPN SILICON | 132317 |
| Q2 | TRANSISTOR NPN SILICON | 132317 |
| Q3 | TRANSISTOR NPN SILICON | 132317 |
| R1 | RES MF 150 OHM 1% 1/4W | 144535 |
| R2 | RES MF 100 OHM 1% 1/4W | 144568 |
| R3 | RES MF 150 OHM 1% 1/4W | 144535 |
| R4 | RES MF 100 OHM 1% 1/4W | 144568 |
| R5 | RES MF 1K 1% 1/4W | 144513 |
| R6 | RES MF 1K 1% 1/4W | 144513 |
| R7 | RES NETWORK 5X47K BUSSED | 144499 |
| R8 | RES MF 10 OHM 1% 1/4W | 144553 |
| R9 | RES MF 10 OHM 1% 1/4W | 144553 |
| R10 | RES NETWORK 4 X 100 ISO | 144676 |
| R11 | RES NET 10K X8 RES B | 144675 |
| R12 | RES MF 47.5K 1% 1/4W | 144526 |
| R13 | RES MF 2.87K 1% 1/4W | 144546 |
| R14 | RES MF 3.32K 1% 1/4W | 144518 |
| R15 | RES MF 4.75K 1% 1/4W | 144520 |
| R16 | RES MF 10 OHM 1% 1/4W | 144553 |
| R17 | RES NETWORK 4 X 100 ISO | 144676 |
| R18 | RES MF 47.5K 1% 1/4W | 144526 |
| R19 | RES NETWORK 5X47K BUSSED | 144499 |
| R20 | RES MF 8.25K 1% 1/4W | 144549 |
| R21 | RES MF 8.25K 1% 1/4W | 144549 |
| R22 | RES MF 8.25K 1% 1/4W | 144549 |
| R23 | RES MF 8.25K 1% 1/4W | 144549 |
| R24 | RES MF 8.25K 1% 1/4W | 144549 |
| R25 | RES MF 8.25K 1% 1/4W | 144549 |
| S1 | SWITCH PB TACT | 150058 |
| S2 | SWITCH PB TACT | 150058 |
| S3 | SWITCH PB TACT | 150058 |
| S4 | SWITCH PB TACT | 150058 |
| S5 | SWITCH PB TACT | 150058 |
| S6 | SWITCH PB TACT | 150058 |
| S7 | SWITCH PB TACT | 150058 |
| S8 | SWITCH PB TACT | 150058 |
| S9 | SWITCH PB TACT | 150058 |
| U1 | DECIMAL TO BCD ENCODER | 133454 |

Ref No. Description

Part No.

CONTROL PCB 750295

| | | |
|-------|-------------------------------|--------|
| C2 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| DS1 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS1) | SPACER LED | 112108 |
| DS2 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS2) | SPACER LED | 112108 |
| DS3 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS3) | SPACER LED | 112108 |
| J1 | CONN 8 PIN FFC | 117915 |
| PCB1 | PC BD CONTROL | 129716 |
| R1 | RES MF 100 OHM 1% 1/4W | 144568 |
| R2 | RES MF 100 OHM 1% 1/4W | 144568 |
| R4 | RES MF 100 OHM 1% 1/4W | 144568 |
| S2 | SWITCH ROT ENCODER NO DETENT | 146256 |
| S1 | ENCODER 11MM SELF-RETURN TYPE | 146257 |

POWER PCB 750772

| | | |
|-----|---------------------------|--------|
| C1 | CAP ELECT 470UF 16V | 066508 |
| C2 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C3 | CAP ELECT 22000UF 16V | 066579 |
| C4 | CAP MPF 0.033UF 100V 10% | 064427 |
| C5 | CAP ELECT 100UF 25V | 066573 |
| C6 | CAP ELECT 47UF 35V | 066446 |
| C7 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C8 | CAP ELECT 47UF 35V | 066446 |
| C9 | CAP ELECT 3300UF 35V | 066509 |
| C10 | CAP MPF 0.033UF 100V 10% | 064427 |
| C11 | CAP ELECT 220UF 50V 20% | 066254 |
| C12 | CAP ELECT 220UF 50V 20% | 066254 |
| C13 | CAP MPF 0.033UF 100V 10% | 064427 |
| C14 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C15 | CAP ELECT 22000UF 16V | 066579 |
| C16 | CAP ELECT 3300UF 35V | 066509 |
| C17 | CAP ELECT 3300UF 35V | 066509 |
| C18 | CAP ELECT 3300UF 35V | 066509 |
| C19 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C20 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C21 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C22 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C23 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C24 | CAP ELECT 470UF 16V | 066508 |
| C25 | CAP ELECT 470UF 16V | 066508 |
| C26 | CAP ELECT 470UF 16V | 066508 |
| C27 | CAP ELECT 220UF 25V | 066507 |
| C28 | CAP ELECT 220UF 25V | 066507 |
| D1 | DIODE ZENER 2.4V | 070195 |
| D2 | DIODE SILICON | 070174 |
| D3 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D4 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D5 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D6 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D7 | DIODE ZENER 33V 5% 1/2W | 070182 |
| D8 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D9 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D10 | DIODE SILICON | 070174 |
| D11 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D12 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D13 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D14 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D15 | DIODE SIL 400 PIV @ 1.5A | 070031 |

PARTS LIST *con't*

POWER PCB 750772 (cont'd)

| Ref No. | Description | Part No. |
|---------|--------------------------------|----------|
| D16 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| D17 | SCHOTTKY RECTIFIER 5A 100V | 070171 |
| D18 | SCHOTTKY RECTIFIER 5A 100V | 070171 |
| D19 | SCHOTTKY RECTIFIER 5A 100V | 070171 |
| D20 | SCHOTTKY RECTIFIER 5A 100V | 070171 |
| D21 | DIODE SIL 400 PIV @ 1.5A | 070031 |
| F1 | FUSE 2A 250V SLO-BLO 5X20 IEC | 089123 |
| (F1) | HOLDER FUSE 5X20MM PCB MOUNT | 178159 |
| F2 | FUSE 2A 250V SLO-BLO 5X20 IEC | 089123 |
| (F2) | HOLDER FUSE 5X20MM PCB MOUNT | 178159 |
| F3 | FUSE 1A 250V SB 5X20 ULCSA IEC | 089132 |
| (F3) | HOLDER FUSE 5X20MM PCB MOUNT | 178159 |
| F4 | FUSE 1A 250V SB 5X20 ULCSA IEC | 089132 |
| (F4) | HOLDER FUSE 5X20MM PCB MOUNT | 178159 |
| FN1 | FILTER EMI | 180057 |
| HS1 | HEATSINK TO-218 | 080020 |
| HS2 | HEATSINK TO220 | 080021 |
| HS3 | HEATSINK TO-220 | 080024 |
| HS4 | HEATSINK TO-218 | 080020 |
| HS5 | HEATSINK TO220 | 080021 |
| HS6 | HEATSINK TO220 | 080021 |
| HS7 | HEATSINK TO220 | 080021 |
| J1 | 7 PIN SHROUDED HEADER | 117910 |
| J2 | HEADER 9 CIRCUIT POST NATURAL | 117724 |
| J3 | 10 PIN SHROUDED HEADER 2MM | 117973 |
| J4 | CONN FFC 18PIN | 117908 |
| K1 | RELAY POWER TV5 12V | 087070 |
| K2 | RELAY DPST 12VDC | 087059 |
| K3 | RELAY DPST 12VDC | 087059 |
| | WASHER SHLDR #10 BLK NYLN INS | 104101 |
| PCB1 | PC BD POWER | 129868 |
| Q1 | TRANSISTOR NPN SILICON | 132317 |
| Q2 | TRANSISTOR NPN SILICON | 132317 |
| Q3 | TRANSISTOR PNP | 132263 |
| R1 | FUSE RESETTABLE 900mA | 144733 |
| R2 | RES MF 1.82K 1% 1/4W | 144582 |
| R3 | RES MF 1.82K 1% 1/4W | 144582 |
| R4 | RES MF 22.1 OHM 1% 1/4W | 144554 |
| R5 | RES MF 10K 1% 1/4W | 144504 |
| R6 | RES MF 10K 1% 1/4W | 144504 |
| R7 | RES MO 56.2 1% 1W | 144695 |

| Ref No. | Description | Part No. |
|---------|-------------------------------|----------|
| R8 | RES MF 10K 1% 1/4W | 144504 |
| R9 | RES MF 249 OHM 1% 1/4W | 144721 |
| R10 | RES MF 249 OHM 1% 1/4W | 144721 |
| R11 | RES MF 10K 1% 1/4W | 144504 |
| R12 | RES MF 1.21K 1% 1/4W | 144566 |
| U1 | IC REGULATOR 1.8V | 133673 |
| (U1) | SCR MS 4-40 X 3/8 PH PN BLK | 400178 |
| (U1) | INSULATOR ISOSTRATE TO 220 | 084133 |
| U2 | IC REGULATOR 5V | 133597 |
| (U2) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| (U2) | NUT KEP 4-40 CLR | 402001 |
| U3 | IC REGULATOR 3.3V 1.5A | 133674 |
| (U3) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| (U3) | NUT KEP 4-40 CLR | 402001 |
| U4 | IC REGULATOR 5V 1.5A LOW DROP | 133610 |
| (U4) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| U5 | IC 12V REGULATOR LOW DROP | 133611 |
| (U5) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| (U5) | NUT KEP 4-40 CLR | 402001 |
| U6 | IC REGULATOR 12V | 133590 |
| (U6) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| (U6) | NUT KEP 4-40 CLR | 402001 |
| U7 | IC REGULATOR -12V | 133574 |
| (U7) | INSULATOR ISOSTRATE TO 220 | 084133 |
| (U7) | SCR MS 4-40 X 1/4 PH PN BLK | 400121 |
| (U7) | NUT KEP 4-40 CLR | 402001 |

7 PRIMARY PCB 750614

| | | |
|------|------------------------------|--------|
| (F1) | HOLDER FUSE 5X20MM PCB MOUNT | 178159 |
| J1 | CONN PCB MOUNT POWER RED | 117719 |
| J2 | CONN PCB MOUNT POWER RED | 117719 |
| J3 | CONN PCB MOUNT POWER RED | 117719 |
| J4 | CONN PCB MOUNT POWER RED | 117719 |
| J5 | BLADE FASTON W/FEET | 117708 |
| J6 | BLADE FASTON W/FEET | 117708 |
| | PC BD PRIMARY | 129803 |

8 HEADPHONE PCB 750296

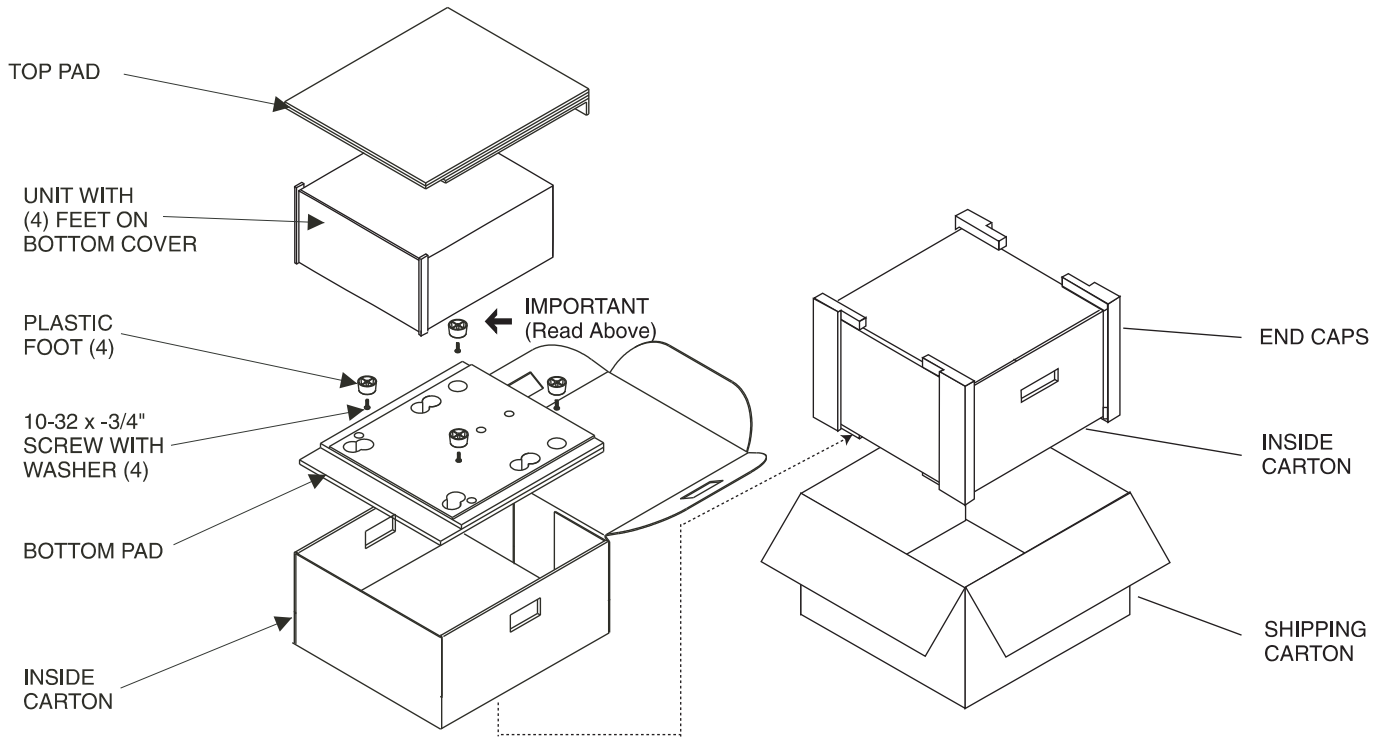
| | | |
|----|---------------------------|--------|
| C1 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| J1 | HEADPHONE JACK 1/4 | 117881 |
| J2 | CONN 4 PIN | 117215 |
| | PC BD HEADPHONE | 129717 |

REPACKING INSTRUCTIONS

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below. It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory. Refer to page 4. Please see the Part List for the correct part numbers.

| Quantity | Part Number | Description |
|----------|-------------|-----------------------|
| 1 | 033838 | Shipping carton only |
| 4 | 033837 | End cap |
| 1 | 033836 | Inside carton only |
| 1 | 033725 | Top pad |
| 1 | 034301 | Bottom pad |
| 4 | 017937 | Plastic foot |
| 4 | 400159 | #10-32 x 3/4" screw |
| 4 | 404080 | #10-7/16" Flat washer |



MCD301

SACD / CD PLAYER

SERVICE MANUAL

SERIAL NO. YM1001 And Above



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