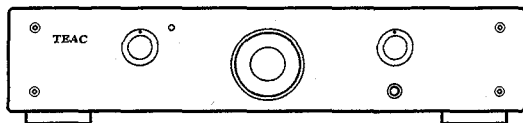


# TEAC



## SERVICE MANUAL

# A-BX10/PA-B10

Integrated Stereo Amplifier / Balanced MM/MC Preamplifier

### NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.  
[C]: CANADA [E]: EUROPE [UK]: U. K.  
A-BX10(N): Gold Version A-BX10(B): Black Version

## 1 SPECIFICATIONS

### Continuous Power Output (RMS):

100W+100W (20 – 20,000 Hz, 8 ohms)  
160W+160W (20 – 20,000 Hz, 4 ohms)

### Dynamic Power Output (EIA):

120W+120W (8 ohms)  
220W+220W (4 ohms)

### Total Harmonic Distortion:

(Continuous rated output power)  
0.04% (20 – 20,000 Hz, – 1 dB, 8 ohms)  
0.06% (20 – 20,000 Hz, – 1 dB, 4 ohms)

### Input Sensitivity/Impedance:

CD, TUNER, AUX, TAPE: 300 mV/20k ohms  
BALANCED (XLR): 1 V/20k ohms

### Output Level/Impedance:

TAPE 1, TAPE 2: 300 mV/100 ohms

### Signal-to-Noise Ratio (IHF A):

CD, TUNER, AUX, TAPE: 106 dB

### Frequency Response:

CD, TUNER, AUX, TAPE, BALANCED:  
20 – 40,000 Hz, – 1 dB

### Power Requirements/Power Consumption:

120 V AC, 60 Hz, 5 A  
(U.S.A./Canada/General Export Model)  
230 V AC, 50 Hz, 500 W  
(Europe/UK/General Export Model)

### Dimensions (W x H x D):

443 x 103 x 381mm

### Weight (net): 11.8 kg

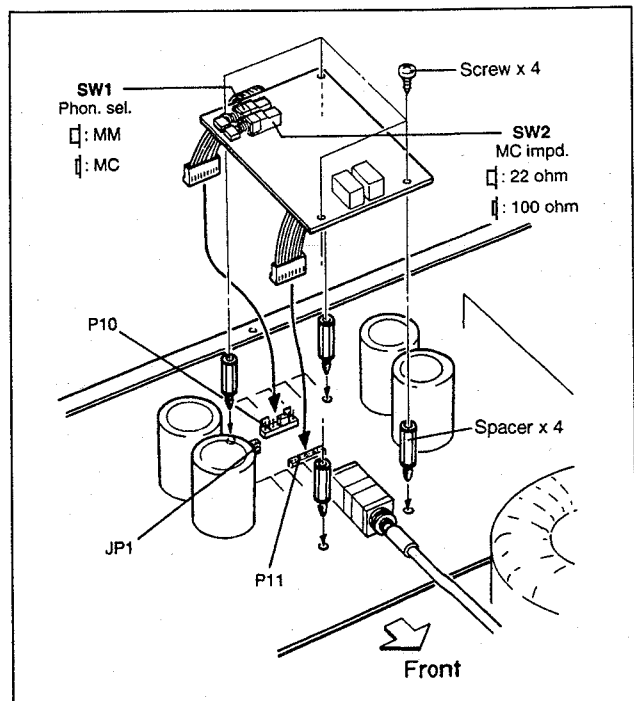
### Standard Accessories:

AC cord x 1, Owner's Manual x 1

- Improvements may result in specification or feature changes without notice.

## Installation procedure PA-B10

- Disconnect power line cord.
1. Using a hexagon-head tool, remove the top cover of **A-BX10**. Insert the four spacers into the holes in the main PCB.
  2. Remove the four jumpers on **P11**, one jumper **JP1** and the one jumper on **P10** (Pins 3 & 4) on the main PCB.
  3. Connect the long wires connector of **PA-B10** to **P11**, and the short wires connector to **P10** on the main PCB.
  4. Fix the **PA-B10** on the spacers using the four screws provided.
  5. Before fixing the top cover again, select the right position of **SW1** (MM or MC) and **SW2** (For MC cartridges, the impedance set to 22 Ω or 100 Ω) on **PA-B10**.
  6. Connect the turntable to the AUX terminals and GND terminal of **A-BX10**.



## 2 ADJUSTMENT

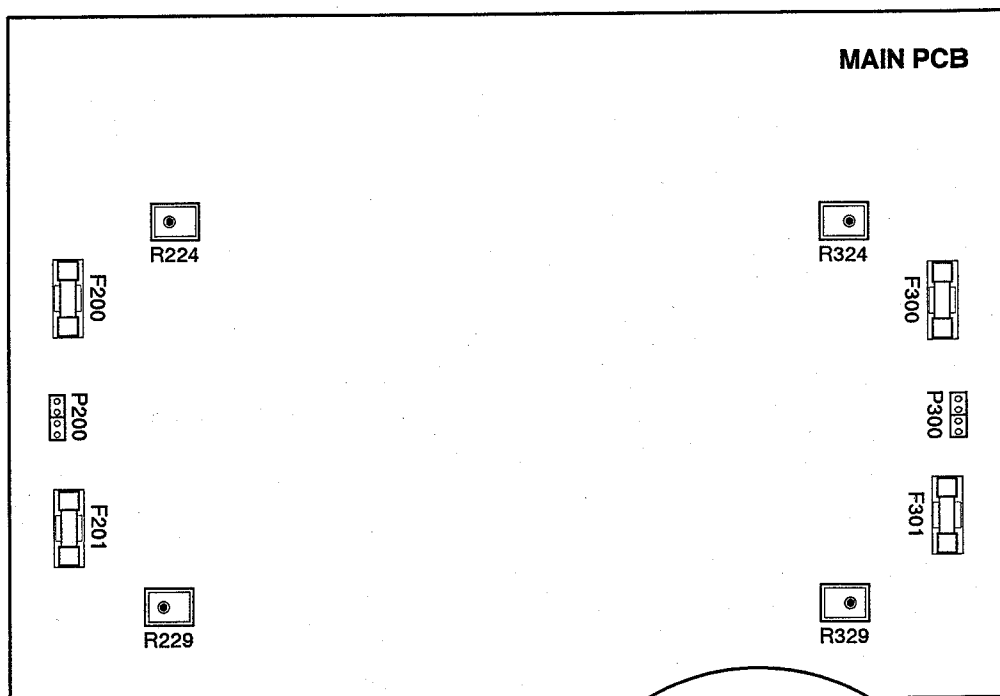
### Bias Current Adjustment

#### Europe/UK Model:

1. 2x2 Jumpers are removed from **P200** and **P300**.
2. 4 x Bias current is measured as voltage across 0.22 ohms resistor between 1&2 and 3&4 on **P200** and **P300**.
3. Adjust bias current to 4 x 18mV by turning **R224**, **R229**, **R324** and **R329** slowly.  
Clockwise turning increase bias current.
4. Then put on lid and wait 15 minutes, then take off lid and readjust to 4 x 20mV.
5. Place 2x2 jumpers on **P200** and **P300** again.

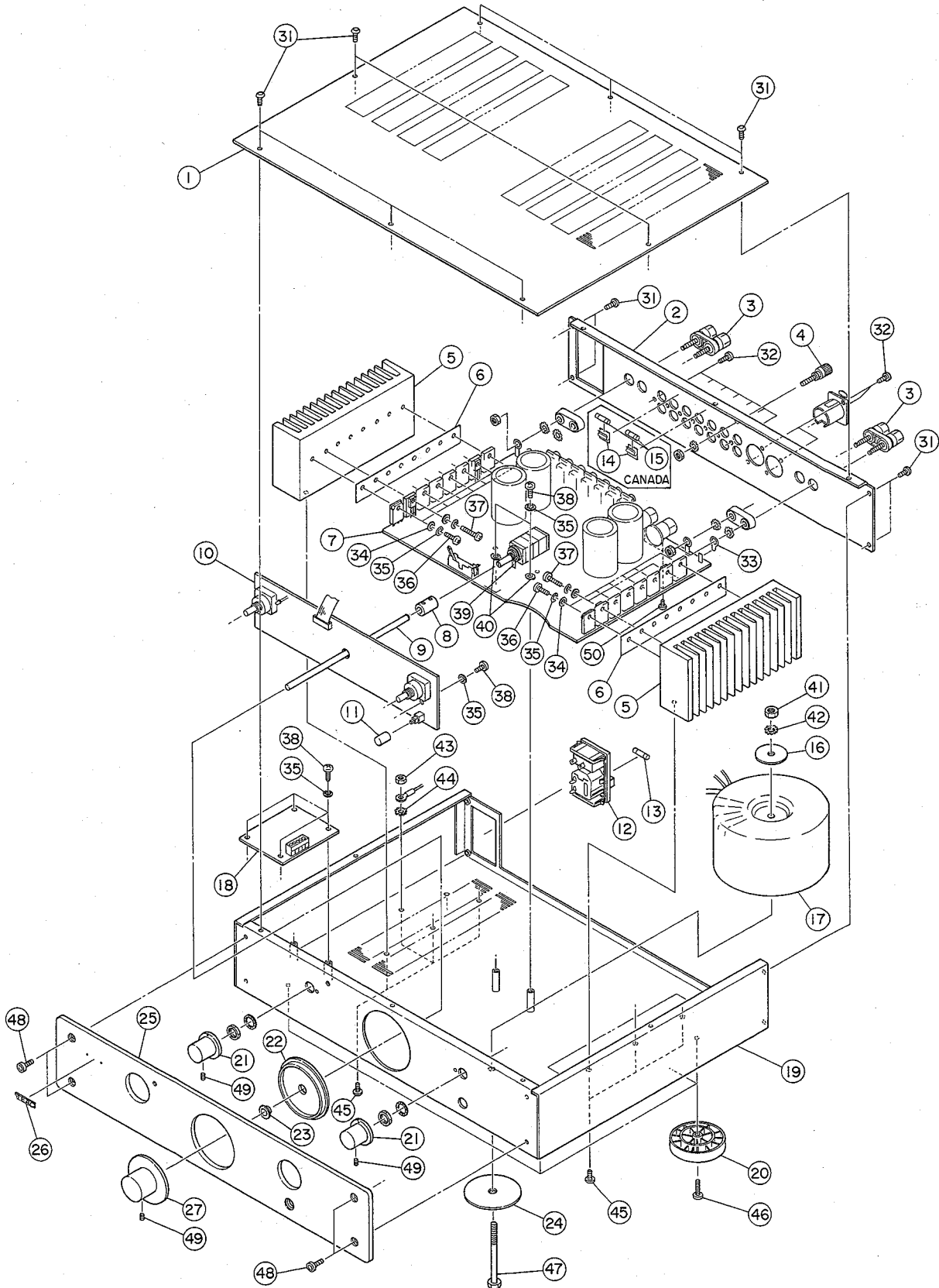
#### Canada Model:

1. 4 x Bias current is measured as current in **F200**, **F201**, **F300**, **F301** fuse holders (fuses must be removed).
2. Adjust bias current to 4 x 82mA by turning **R224**, **R229**, **R324** and **R329** slowly.  
Clockwise turning increase bias current.
3. Then put on lid and wait 15 minutes, then take off lid and readjust to 4 x 91mA.
4. Remember to place fuses again after adjustments.



### 3 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW-1



## EXPLODED VIEW-1

| REF. NO. | PARTS NO.    | DESCRIPTION                      | REMARKS    |
|----------|--------------|----------------------------------|------------|
| 1- 1     | 9A05214500   | LID, BLK .....                   | A-BX10 (B) |
|          | 9A05287400   | LID, GLD .....                   | A-BX10 (N) |
| 1- 2     | 9A05214600   | REAR PANEL, BLK .....            | A-BX10 (B) |
|          | 9A05287500   | REAR PANEL, GLD .....            | A-BX10 (N) |
| 1- 3     | 9A05213200   | BINDING POST, K207Z GOLD         |            |
| 1- 4     | 9A05213300   | BINDING POST, K213 BLACK         |            |
| 1- 5     | 9A05213000   | HEAT SINK, SK85/75MM/SA          |            |
| 1- 6     | 9A05213100   | ISOLATION, SILICONE 146*24       |            |
| 1- 7     | 9A05201000   | MAIN PCB ASSY [C]                |            |
|          | 9A05201020   | MAIN PCB ASSY [E, UK]            |            |
| 1- 8     | 9A05215900   | LINK, 06MM 12*20MM               |            |
| 1- 9     | 9A05215200   | VOLUME SHAFT, 6*173              |            |
| 1-10     | 9A05210900   | FRONT PANEL PCB ASSY             |            |
| 1-11     | 9A05215100   | KNOB, MONITOR BLK .....          | A-BX10 (B) |
|          | 9A05287900   | KNOB, MONITOR GLD .....          | A-BX10 (N) |
| 1-12     | △ 9A05212900 | INLET MODULE                     |            |
| 1-13     | △ 9A05287200 | FUSE, F6. 3AH/250V               |            |
| 1-14     | 9A05211400   | FUSE HOLDER, KKC3 [C]            |            |
| 1-15     | △ 9A05287100 | FUSE, F4A 125V [C]               |            |
| 1-16     | 9A05395800   | WASHER, 30*1. 6MM                |            |
| 1-17     | △ 9A05213700 | TRANSFORMER, 120V [C]            |            |
|          | △ 9A05213800 | TRANSFORMER, 230V [E, UK]        |            |
| 1-18     | 9A05211000   | MAIN CONNECTOR PCB ASSY          |            |
| 1-19     | 9A05214400   | CABINET, BASIS BLK .....         | A-BX10 (B) |
|          | 9A05287300   | CABINET, BASIS GLD .....         | A-BX10 (N) |
| 1-20     | 5801414900   | FOOT ASSY                        |            |
| 1-21     | 9A05214800   | KNOB, SELECTOR BLK .....         | A-BX10 (B) |
|          | 9A05287700   | KNOB, SELECTOR GLD .....         | A-BX10 (N) |
| 1-22     | 9A05215000   | DECORATION RING, GLD             |            |
| 1-23     | 9A05216200   | BEARING, 9*14MM                  |            |
| 1-24     | 9A05215600   | WASHER, M6 PLAIN                 |            |
| 1-25     | 9A05214700   | FRONT PANEL, BLK .....           | A-BX10 (B) |
|          | 9A05287600   | FRONT PANEL, GLD .....           | A-BX10 (N) |
| 1-26     | 5801413200   | NAME PLATE, TEAC .....           | A-BX10 (B) |
|          | 5801533700   | NAME PLATE, TEAC (GRY T) .....   | A-BX10 (N) |
| 1-27     | 9A05214900   | KNOB, VOL. BLK .....             | A-BX10 (B) |
|          | 9A05287800   | KNOB, VOL. GLD .....             | A-BX10 (N) |
| 1-31     | 9A05214200   | SCREW, ULS M3*6                  |            |
| 1-32     | 9A05215800   | SCREW, SELFTAP 2. 9*8 BLK        |            |
| 1-33     | 9A05212200   | SOLDER TAG, M5                   |            |
| 1-34     | 9A05212000   | WASHER, M3 PLAIN                 |            |
| 1-35     | 9A05211900   | WASHER, M3 INT. SHAKE-PROOF      |            |
| 1-36     | 9A05211700   | SUPADRIV, M3*12                  |            |
| 1-37     | 9A05211800   | SUPADRIV, M3*16                  |            |
| 1-38     | 9A05211600   | SUPADRIV, M3*8                   |            |
| 1-39     | 9A05212300   | SOLDER TAG, M10                  |            |
| 1-40     | 9A05212500   | RING TERMINAL, M4                |            |
| 1-41     | 9A05215400   | NUT, M6                          |            |
| 1-42     | 9A05215500   | WASHER, M6 VIB. PROOF            |            |
| 1-43     | 9A05395900   | NUT, M4                          |            |
| 1-44     | 9A05212100   | WASHER, M4 SHAKE-PROOF           |            |
| 1-45     | 9A05214300   | SCREW, ULS M4*8                  |            |
| 1-46     | 9A05396000   | SCREW, SELFTAPPING 3. 9*19       |            |
| 1-47     | 9A05215300   | SCREW, MACHINE M6*75             |            |
| 1-48     | 9A05396100   | SCREW, UNBRAKO M4*10 (BLK) ..... | A-BX10 (B) |
|          | 9A05396200   | SCREW, UNBRAKO M4*10 (GLD) ..... | A-BX10 (N) |
| 1-49     | 9A05214100   | SCREW, MSF FLAT M3*6             |            |
| 1-50     | 9A05215700   | SCREW, SELFTAP 2. 9*4. 5         |            |

**4 PC BOARDS AND PARTS LIST**

**MAIN PCB ASSY**

| REF. NO.  | PARTS NO.    | DESCRIPTION                |
|-----------|--------------|----------------------------|
|           | 9A05201000   | MAIN PCB ASSY [C]          |
|           | 9A05201020   | MAIN PCB ASSY [E, UK]      |
| C100-107  | △ 9A05205600 | C, ELYT 470UF 35V          |
| C110-113  | △ 9A05205700 | C, ELYT 10MF 63V           |
| C116, 117 | △ 9A05205600 | C, ELYT 470UF 35V          |
| D 10- 12  | 9A05204100   | DIODE, 1N4148              |
| D 14      | 9A05204100   | DIODE, 1N4148              |
| D100, 101 | △ 9A05204300 | DIODE, PBPC10 10A 100V     |
| D102-109  | △ 9A05204200 | DIODE, 1N4004              |
| D110, 111 | △ 9A05204300 | DIODE, PBPC10 10A 100V     |
| D112-115  | △ 9A05204200 | DIODE, 1N4004              |
| D116      | 9A05204100   | DIODE, 1N4148              |
| D200, 300 | 9A05204100   | DIODE, 1N4148              |
| D201, 301 | 9A05204100   | DIODE, 1N4148              |
| D400      | 9A05204100   | DIODE, 1N4148              |
| D401      | 9A05204200   | DIODE, 1N4004              |
| D402      | 9A05204100   | DIODE, 1N4148              |
| D900      | 9A05204100   | DIODE, 1N4148              |
| F100, 101 | △ 9A05207900 | FUSE, T6. 3A 250V [E, UK]  |
| F100, 101 | △ 9A05208000 | FUSE, 6. 3A 125V [C]       |
| F100, 101 | △ 9A05212400 | FUSE HOLDER                |
| F104, 105 | △ 9A05208100 | FUSE, T630MA 250V [E, UK]  |
| F104, 105 | △ 9A05208200 | FUSE, 630MA 125V [C]       |
| F104, 105 | △ 9A05212400 | FUSE HOLDER                |
| F200, 300 | △ 9A05287100 | FUSE, F4A 125V [C]         |
| F200, 300 | △ 9A05212400 | FUSE HOLDER [C]            |
| F201, 301 | △ 9A05287100 | FUSE, F4A 125V [C]         |
| F201, 301 | △ 9A05212400 | FUSE HOLDER [C]            |
| J 1- 7    | 9A05208600   | JACK, RCA PHONO 2P GOLD    |
| J 8, 9    | 9A05208700   | XLR FEMALE, NC3FDH-B GOLD  |
| JP 1      | 9A05306400   | CONNECTOR, SIL 2P          |
| K 1, 2    | 9A05208300   | RELAY, DPDT 24V M4-24H     |
| K 4- 7    | 9A05208300   | RELAY, DPDT 24V M4-24H     |
| K 10- 12  | 9A05208300   | RELAY, DPDT 24V M4-24H     |
| K100, 101 | 9A05208400   | RELAY, DPDT 24V/8A         |
| K400, 401 | 9A05208400   | RELAY, DPDT 24V/8A         |
| LEG1, 2   | △ 9A05207100 | V-REGULATOR, LM317T        |
| LEG3, 5   | △ 9A05207200 | V-REGULATOR, LM337T        |
| LEG4      | △ 9A05207100 | V-REGULATOR, LM317T        |
| P 1       | 9A05207500   | CONNECTOR, SIL 6P          |
| P 2       | 9A05208500   | IDC HEADER, 14P            |
| P 10, 11  | 9A05306500   | CONNECTOR, SIL 8P          |
| P100      | 9A05207800   | SCREW TERMINAL, 2X2P       |
| P200, 300 | 9A05306600   | CONNECTOR, SIL 4P+2 JUMPER |
| P400-403  | 9A05207600   | SOLDER TERMINAL            |
| Q 10, 11  | 9A05206700   | TR, BC337-40               |
| Q 13, 14  | 9A05206700   | TR, BC337-40               |
| Q100      | △ 9A05206600 | TR, BC327-40               |
| Q200, 300 | 9A05206800   | FET, 2SK170GR              |
| Q201, 301 | 9A05206800   | FET, 2SK170GR              |
| Q202, 302 | 9A05206400   | TR, BC550C                 |
| Q203, 303 | 9A05206600   | TR, BC327-40               |
| Q204, 304 | 9A05206600   | TR, BC327-40               |
| Q205, 305 | 9A05206700   | TR, BC337-40               |
| Q206, 306 | 9A05206600   | TR, BC327-40               |

**MAIN PCB ASSY**

| REF. NO.  | PARTS NO.    | DESCRIPTION              |
|-----------|--------------|--------------------------|
| Q207, 307 | 9A05206600   | TR, BC327-40             |
| Q208, 308 | 9A05206700   | TR, BC337-40             |
| Q209, 309 | 9A05207000   | TR, 2SC3420BL            |
| Q210, 310 | 9A05207000   | TR, 2SC3420BL            |
| Q211, 311 | 9A05207000   | TR, 2SC3420BL            |
| Q212, 312 | △ 9A05207400 | TR, 2SC39070             |
| Q213, 313 | 9A05206900   | TR, BUP40                |
| Q214, 314 | 9A05206700   | TR, BC337-40             |
| Q215, 315 | 9A05207000   | TR, 2SC3420BL            |
| Q216, 316 | △ 9A05207400 | TR, 2SC39070             |
| Q217, 317 | 9A05206900   | TR, BUP40                |
| Q218, 318 | 9A05206600   | TR, BC327-40             |
| Q219, 319 | 9A05206400   | TR, BC550C               |
| Q220, 320 | 9A05206700   | TR, BC337-40             |
| Q221, 321 | 9A05206700   | TR, BC337-40             |
| Q222, 322 | △ 9A05207400 | TR, 2SC39070             |
| Q223, 323 | △ 9A05207300 | TR, 2SA15160             |
| Q224, 324 | △ 9A05207300 | TR, 2SA15160             |
| Q225, 325 | △ 9A05207400 | TR, 2SC39070             |
| Q226, 326 | △ 9A05207300 | TR, 2SA15160             |
| Q227, 327 | △ 9A05207300 | TR, 2SA15160             |
| Q228, 328 | 9A05206600   | TR, BC327-40             |
| Q229, 329 | 9A05206500   | TR, BC560C               |
| Q230, 330 | 9A05206400   | TR, BC550C               |
| Q231, 331 | 9A05206400   | TR, BC550C               |
| Q232, 332 | 9A05206500   | TR, BC560C               |
| Q233, 333 | 9A05206700   | TR, BC337-40             |
| Q400      | 9A05206600   | TR, BC327-40             |
| Q401, 402 | 9A05206700   | TR, BC337-40             |
| Q900      | 9A05206700   | TR, BC337-40             |
| R 1       | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 2       | 9A05203600   | R-NETWORK, SIL 7*10K, 8P |
| R 4, 5    | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 7- 9    | 9A05202200   | R, MRS25 0. 33W 3K3 F    |
| R 10      | 9A05201200   | R, MRS25 0. 33W 22R F    |
| R 11      | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 12      | 9A05202700   | R, MRS25 0. 33W 20K F    |
| R 13      | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 14      | 9A05202400   | R, MRS25 0. 33W 5K1 F    |
| R 15      | 9A05201200   | R, MRS25 0. 33W 22R F    |
| R 16      | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 17      | 9A05202700   | R, MRS25 0. 33W 20K F    |
| R 18      | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 19      | 9A05202400   | R, MRS25 0. 33W 5K1 F    |
| R 20      | 9A05208800   | R, POTMETER 4*20K        |
| R 21- 27  | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 29      | 9A05202600   | R, MRS25 0. 33W 10K F    |
| R 30, 31  | △ 9A05203400 | R, PR02 2W 2K2 J         |
| R 32      | 9A05202700   | R, MRS25 0. 33W 20K F    |
| R 33, 34  | 9A05202200   | R, MRS25 0. 33W 3K3 F    |
| R 35      | 9A05202700   | R, MRS25 0. 33W 20K F    |
| R 36- 38  | 9A05202200   | R, MRS25 0. 33W 3K3 F    |
| R100, 101 | △ 9A05203400 | R, PR02 2W 2K2 J         |
| R102      | △ 9A05203300 | R, PR02 2W 56R J         |
| R103      | △ 9A05203400 | R, PR02 2W 2K2 J         |

## MAIN PCB ASSY

| REF. NO.  | PARTS NO.    | DESCRIPTION             |
|-----------|--------------|-------------------------|
| R104      | △ 9A05203300 | R, PR02 2W 56R J        |
| R105      | 9A05201600   | R, MRS25 0.33W 220R F   |
| R106, 107 | 9A05202300   | R, MRS25 0.33W 4K3 F    |
| R108, 109 | 9A05201600   | R, MRS25 0.33W 220R F   |
| R110      | 9A05202100   | R, MRS25 0.33W 2K2 F    |
| R111      | 9A05202600   | R, MRS25 0.33W 10K F    |
| R112      | 9A05202900   | R, MRS25 0.33W 100K F   |
| R113, 114 | △ 9A05203300 | R, PR02 2W 56R J        |
| R115      | 9A05201600   | R, MRS25 0.33W 220R F   |
| R116, 117 | 9A05202200   | R, MRS25 0.33W 3K3 F    |
| R118      | 9A05201600   | R, MRS25 0.33W 220R F   |
| R119      | 9A05201700   | R, MRS25 0.33W 330R F   |
| R120      | △ 9A05203400 | R, PR02 2W 2K2 J        |
| R121, 122 | △ 9A05203300 | R, PR02 2W 56R J        |
| R123      | △ 9A05203400 | R, PR02 2W 2K2 J        |
| R200, 300 | 9A05202900   | R, MRS25 0.33W 100K F   |
| R201, 301 | 9A05202900   | R, MRS25 0.33W 100K F   |
| R202, 302 | 9A05201800   | R, MRS25 0.33W 390R F   |
| R203, 303 | 9A05201800   | R, MRS25 0.33W 390R F   |
| R204, 304 | 9A05202500   | R, MRS25 0.33W 6K8 F    |
| R205, 305 | 9A05202500   | R, MRS25 0.33W 6K8 F    |
| R206, 306 | 9A05201400   | R, MRS25 0.33W 100R F   |
| R207, 307 | 9A05201400   | R, MRS25 0.33W 100R F   |
| R208, 308 | 9A05201400   | R, MRS25 0.33W 100R F   |
| R209, 309 | 9A05201300   | R, MRS25 0.33W 68R F    |
| R210, 310 | 9A05202100   | R, MRS25 0.33W 2K2 F    |
| R211, 311 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R212, 312 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R213, 313 | 9A05202700   | R, MRS25 0.33W 20K F    |
| R214, 314 | 9A05202700   | R, MRS25 0.33W 20K F    |
| R215, 315 | 9A05201300   | R, MRS25 0.33W 68R F    |
| R216, 316 | 9A05202800   | R, MRS25 0.33W 47K F    |
| R217, 317 | 9A05201300   | R, MRS25 0.33W 68R F    |
| R218, 318 | 9A05202100   | R, MRS25 0.33W 2K2 F    |
| R219, 319 | 9A05201300   | R, MRS25 0.33W 68R F    |
| R220, 320 | 9A05202600   | R, MRS25 0.33W 10K F    |
| R221, 321 | 9A05201300   | R, MRS25 0.33W 68R F    |
| R222, 322 | 9A05202800   | R, MRS25 0.33W 47K F    |
| R223, 323 | 9A05202100   | R, MRS25 0.33W 2K2 F    |
| R224, 324 | 9A05204000   | R, VARIABLE ECP-10 100R |
| R225, 325 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R226, 326 | 9A05202600   | R, MRS25 0.33W 10K F    |
| R227, 327 | 9A05202000   | R, MRS25 0.33W 1K5 F    |
| R228, 328 | 9A05202100   | R, MRS25 0.33W 2K2 F    |
| R229, 329 | 9A05204000   | R, VARIABLE ECP-10 100R |
| R230, 330 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R231, 331 | 9A05202600   | R, MRS25 0.33W 10K F    |
| R232, 332 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R233, 333 | 9A05201500   | R, MRS25 0.33W 150R F   |
| R234, 334 | 9A05201500   | R, MRS25 0.33W 150R F   |
| R235, 335 | 9A05201500   | R, MRS25 0.33W 150R F   |
| R236, 336 | 9A05201500   | R, MRS25 0.33W 150R F   |
| R237, 337 | 9A05201700   | R, MRS25 0.33W 330R F   |
| R238, 338 | 9A05202000   | R, MRS25 0.33W 1K5 F    |
| R239, 339 | △ 9A05203200 | R, PR02 2W 4R7 J        |

## MAIN PCB ASSY

| REF. NO.   | PARTS NO.    | DESCRIPTION                     |
|------------|--------------|---------------------------------|
| R240, 340  | 9A05203000   | R, MRS25 0.33W 330K F           |
| R241, 341  | 9A05203000   | R, MRS25 0.33W 330K F           |
| R242, 342  | 9A05203000   | R, MRS25 0.33W 330K F           |
| R243, 343  | 9A05203000   | R, MRS25 0.33W 330K F           |
| R244, 344  | 9A05202600   | R, MRS25 0.33W 10K F            |
| R245, 345  | 9A05202600   | R, MRS25 0.33W 10K F            |
| R246, 346  | 9A05201900   | R, MRS25 0.33W 1K F             |
| R247, 347  | 9A05201900   | R, MRS25 0.33W 1K F             |
| R248, 348  | 9A05201200   | R, MRS25 0.33W 22R F            |
| R249, 349  | 9A05201200   | R, MRS25 0.33W 22R F            |
| R250, 350  | 9A05201300   | R, MRS25 0.33W 68R F            |
| R251-257   | 9A05202600   | R, MRS25 0.33W 10K F            |
| R351-357   | 9A05202600   | R, MRS25 0.33W 10K F            |
| R258, 358  | 9A05201800   | R, MRS25 0.33W 390R F           |
| R259, 359  | 9A05201800   | R, MRS25 0.33W 390R F           |
| R260, 360  | 9A05202700   | R, MRS25 0.33W 20K F            |
| R261, 361  | △ 9A05203500 | R, PR02 2W OR22 J [E, UK]       |
| R262, 362  | △ 9A05203500 | R, PR02 2W OR22 J [E, UK]       |
| R400-403   | 9A05203100   | R, MRS25 0.33W 1M F             |
| R404       | 9A05203700   | R-NETWORK, DIL 8*100K, 16P      |
| R405-408   | 9A05202200   | R, MRS25 0.33W 3K3 F            |
| R409, 410  | 9A05202900   | R, MRS25 0.33W 100K F           |
| R411       | 9A05202600   | R, MRS25 0.33W 10K F            |
| R412       | 9A05202900   | R, MRS25 0.33W 100K F           |
| R413-416   | 9A05201200   | R, MRS25 0.33W 22R F            |
| R417       | 9A05202800   | R, MRS25 0.33W 47K F            |
| R418       | 9A05202400   | R, MRS25 0.33W 5K1 F            |
| R502       | 9A05203000   | R, MRS25 0.33W 330K F           |
| R503       | 9A05202500   | R, MRS25 0.33W 6K8 F            |
| R504       | 9A05202300   | R, MRS25 0.33W 4K3 F            |
| R505       | 9A05202500   | R, MRS25 0.33W 6K8 F            |
| R506       | 9A05203800   | R, NTC 22K J                    |
| R507       | 9A05202200   | R, MRS25 0.33W 3K3 F            |
| R508       | 9A05202500   | R, MRS25 0.33W 6K8 F            |
| R509       | 9A05203000   | R, MRS25 0.33W 330K F           |
| R702       | 9A05201100   | R, MRS25 0.33W 0R F             |
| R900       | 9A05202700   | R, MRS25 0.33W 20K F            |
| R901, 902  | 9A05202200   | R, MRS25 0.33W 3K3 F            |
| R903       | 9A05202700   | R, MRS25 0.33W 20K F            |
| R904, 905  | 9A05202200   | R, MRS25 0.33W 3K3 F            |
| S 1, 2     | 9A05207700   | PCB WASHER, M3.5                |
| U 1- 4     | 9A05206100   | IC, HEF4073                     |
| U 5, 6     | 9A05206000   | IC, HEF4044                     |
| U 10- 12   | 9A05205900   | IC, OP275                       |
| U 80, 81   | 9A05205900   | IC, OP275                       |
| U200, 300  | 9A05205800   | IC, MC1458                      |
| U400       | 9A05206300   | IC, HEF4093                     |
| U401       | 9A05206200   | IC, HEF4075                     |
| U500       | 9A05205800   | IC, MC1458                      |
| VR200, 300 | △ 9A05203900 | RESET FUSE, T3A MF-R300 [E, UK] |
| VR201, 301 | △ 9A05203900 | RESET FUSE, T3A MF-R300 [E, UK] |
| Z 1        | 9A05204600   | ZENER DIODE, 0.33W 12V          |
| Z100       | 9A05204600   | ZENER DIODE, 0.33W 12V          |
| Z200, 300  | 9A05204500   | ZENER DIODE, 0.33W 5V6          |
| Z201, 301  | 9A05204500   | ZENER DIODE, 0.33W 5V6          |

# A-BX10/PA-B10

## MAIN PCB ASSY

| REF. NO.  | PARTS NO.  | DESCRIPTION            |
|-----------|------------|------------------------|
| Z400, 401 | 9A05204600 | ZENER DIODE, 0.33W 12V |
| Z402      | 9A05204400 | ZENER DIODE, 0.33W 2V7 |
| Z403, 404 | 9A05204500 | ZENER DIODE, 0.33W 5V6 |
| Z405      | 9A05204400 | ZENER DIODE, 0.33W 2V7 |
| Z406, 407 | 9A05204500 | ZENER DIODE, 0.33W 5V6 |

## FRONT PANEL PCB ASSY

| REF. NO. | PARTS NO.  | DESCRIPTION          |
|----------|------------|----------------------|
|          | 9A05210900 | FRONT PANEL PCB ASSY |
| D1       | 9A05209000 | LED, RED/GREEN       |
| JP1      | 9A05209100 | DIP CONNECTOR, 14P   |
| SW1, 2   | 9A05208900 | SW, SELECTOR 1*12    |
| SW3      | 9A05209200 | SW, PUSH B170G       |

## MAIN CONNECTOR PCB ASSY

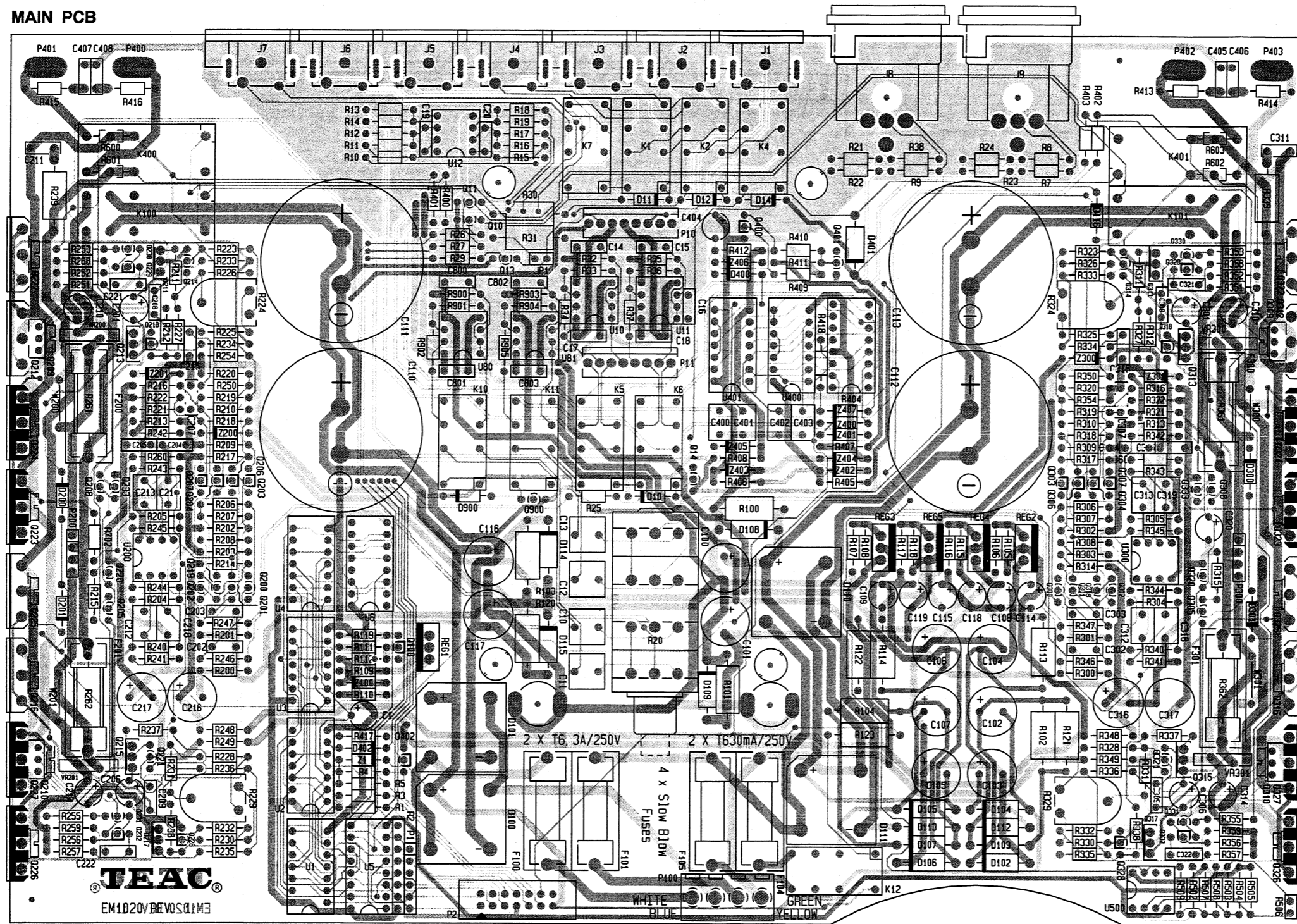
| REF. NO. | PARTS NO.    | DESCRIPTION             |
|----------|--------------|-------------------------|
|          | 9A05211000   | MAIN CONNECTOR PCB ASSY |
| C2       | △ 9A05209800 | C, ELYT 3300UF 6V3      |
| D1, 2    | △ 9A05209600 | DIODE, 1N5400           |
| P1       | 9A05209700   | SCREW TERMINAL, 2P      |
| P2       | 9A05207800   | SCREW TERMINAL, 2X2P    |
| R1       | △ 9A05209500 | R, VDR 275VAC           |
| R2       | △ 9A05306700 | R, MRS25 0.33W 470K F   |
| R3       | △ 9A05209400 | R, NTC 10 OHM/7A        |

## BAL RIAA MM/MC PCB ASSY

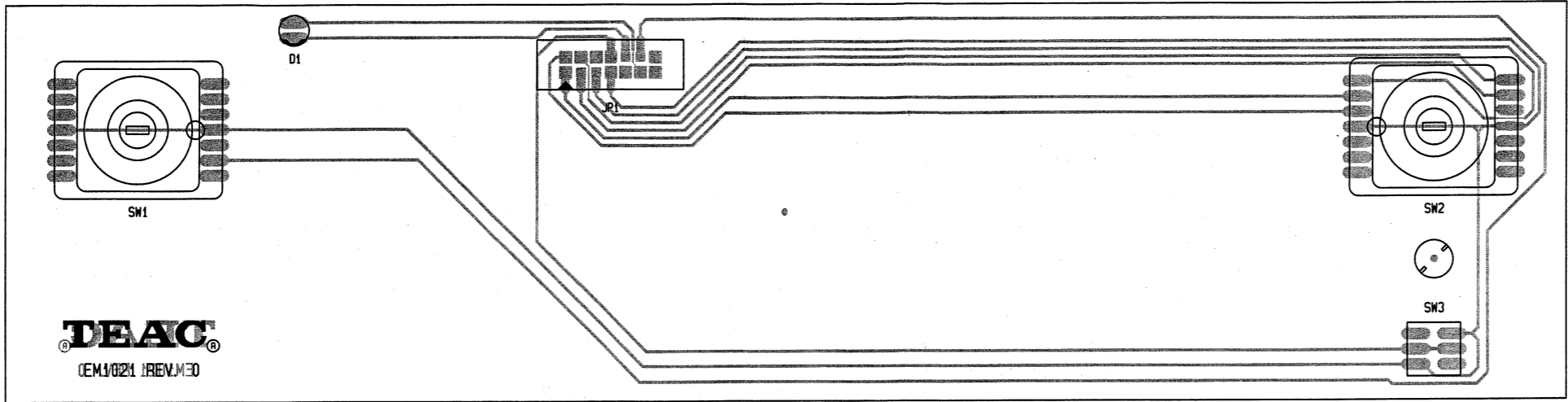
| REF. NO.  | PARTS NO.  | DESCRIPTION             |
|-----------|------------|-------------------------|
|           | 9A05272300 | BAL RIAA MM/MC PCB ASSY |
| D 1       | 9A05204100 | DIODE, 1N4148           |
| K 1, 101  | 9A05208300 | RELAY, DPDT 24V M4-24H  |
| P 1       | 9A05274000 | CONNECTOR ASSY, 8P 40MM |
| P 2       | 9A05274100 | CONNECTOR ASSY, 8P 80MM |
| Q 1, 101  | 9A05273800 | TR, 2SC3329BL           |
| Q 2, 102  | 9A05273800 | TR, 2SC3329BL           |
| Q 3, 103  | 9A05273800 | TR, 2SC3329BL           |
| Q 4, 104  | 9A05273800 | TR, 2SC3329BL           |
| Q 5, 105  | 9A05206400 | TR, BC550C              |
| Q 6, 106  | 9A05206400 | TR, BC550C              |
| Q 7, 107  | 9A05206400 | TR, BC550C              |
| Q 8, 108  | 9A05206500 | TR, BC560C              |
| R 1, 101  | 9A05272500 | R, MRS25 0.33W 33R F    |
| R 2, 102  | 9A05201400 | R, MRS25 0.33W 100R F   |
| R 3, 103  | 9A05272400 | R, MRS25 0.33W 15R F    |
| R 4, 104  | 9A05202800 | R, MRS25 0.33W 47K F    |
| R 5, 105  | 9A05273000 | R, MRS25 0.33W 2.2M F   |
| R 6, 106  | 9A05272800 | R, MRS25 0.33W 7K5 F    |
| R 7, 107  | 9A05202000 | R, MRS25 0.33W 1K5 F    |
| R 8, 108  | 9A05202000 | R, MRS25 0.33W 1K5 F    |
| R 9, 109  | 9A05201800 | R, MRS25 0.33W 390R F   |
| R 10, 110 | 9A05272600 | R, MRS25 0.33W 47R F    |
| R 11, 111 | 9A05272600 | R, MRS25 0.33W 47R F    |
| R 12, 112 | 9A05272700 | R, MRS25 0.33W 2K0 F    |
| R 13, 113 | 9A05272900 | R, MRS25 0.33W 22K F    |
| R 14, 114 | 9A05272900 | R, MRS25 0.33W 22K F    |
| R 15, 115 | 9A05201800 | R, MRS25 0.33W 390R F   |
| R 16, 116 | 9A05201800 | R, MRS25 0.33W 390R F   |
| R 17, 117 | 9A05273200 | R, MRS25 0.33W 56K2 F   |
| R 18, 118 | 9A05209300 | R, MRS25 0.33W 12K4 F   |
| R 19, 119 | 9A05273200 | R, MRS25 0.33W 56K2 F   |
| R 20, 120 | 9A05203100 | R, MRS25 0.33W 1M F     |
| R 21, 121 | 9A05203100 | R, MRS25 0.33W 1M F     |
| R 22, 122 | 9A05203100 | R, MRS25 0.33W 1M F     |
| R 23, 123 | 9A05203100 | R, MRS25 0.33W 1M F     |
| R 24, 124 | 9A05273100 | R, MRS25 0.33W 9K76 F   |
| R 25, 125 | 9A05273100 | R, MRS25 0.33W 9K76 F   |
| R 26, 126 | 9A05201800 | R, MRS25 0.33W 390R F   |
| R 27, 127 | 9A05201800 | R, MRS25 0.33W 390R F   |
| R 28, 128 | 9A05272900 | R, MRS25 0.33W 22K F    |
| R 29, 129 | 9A05202000 | R, MRS25 0.33W 1K5 F    |
| R 30, 130 | 9A05202000 | R, MRS25 0.33W 1K5 F    |
| SW 1, 2   | 9A05274200 | SW, 4WAY+KNOB           |
| U 1, 101  | 9A05205900 | IC, OP275               |
| U 2, 102  | 9A05205900 | IC, OP275               |
| U 3, 103  | 9A05273900 | IC, LM358N              |



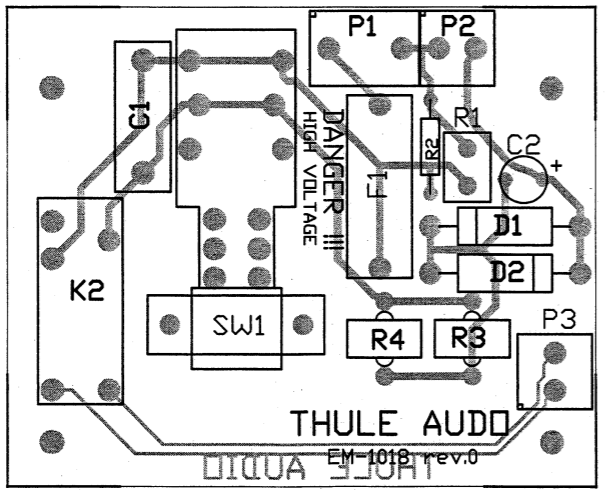
MAIN PCB



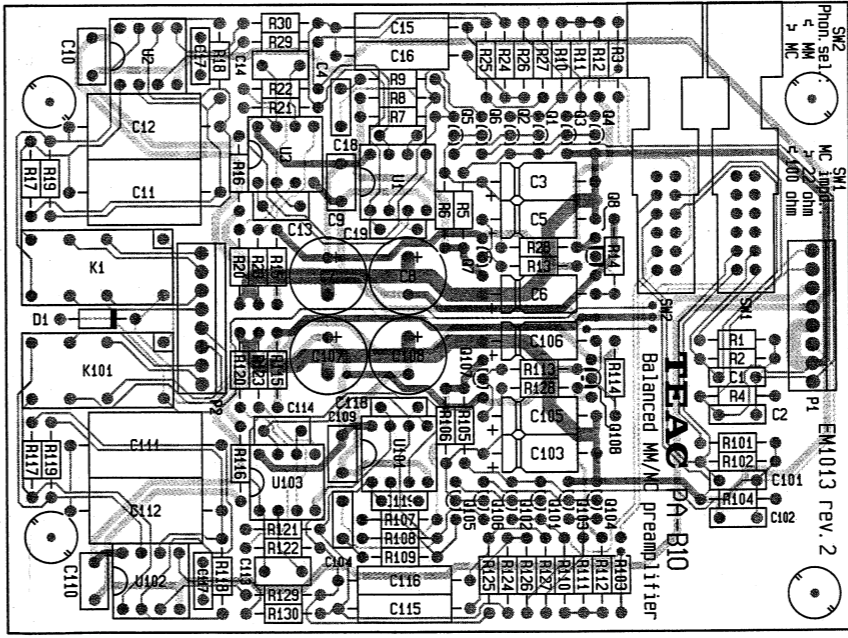
FRONT PANEL PCB



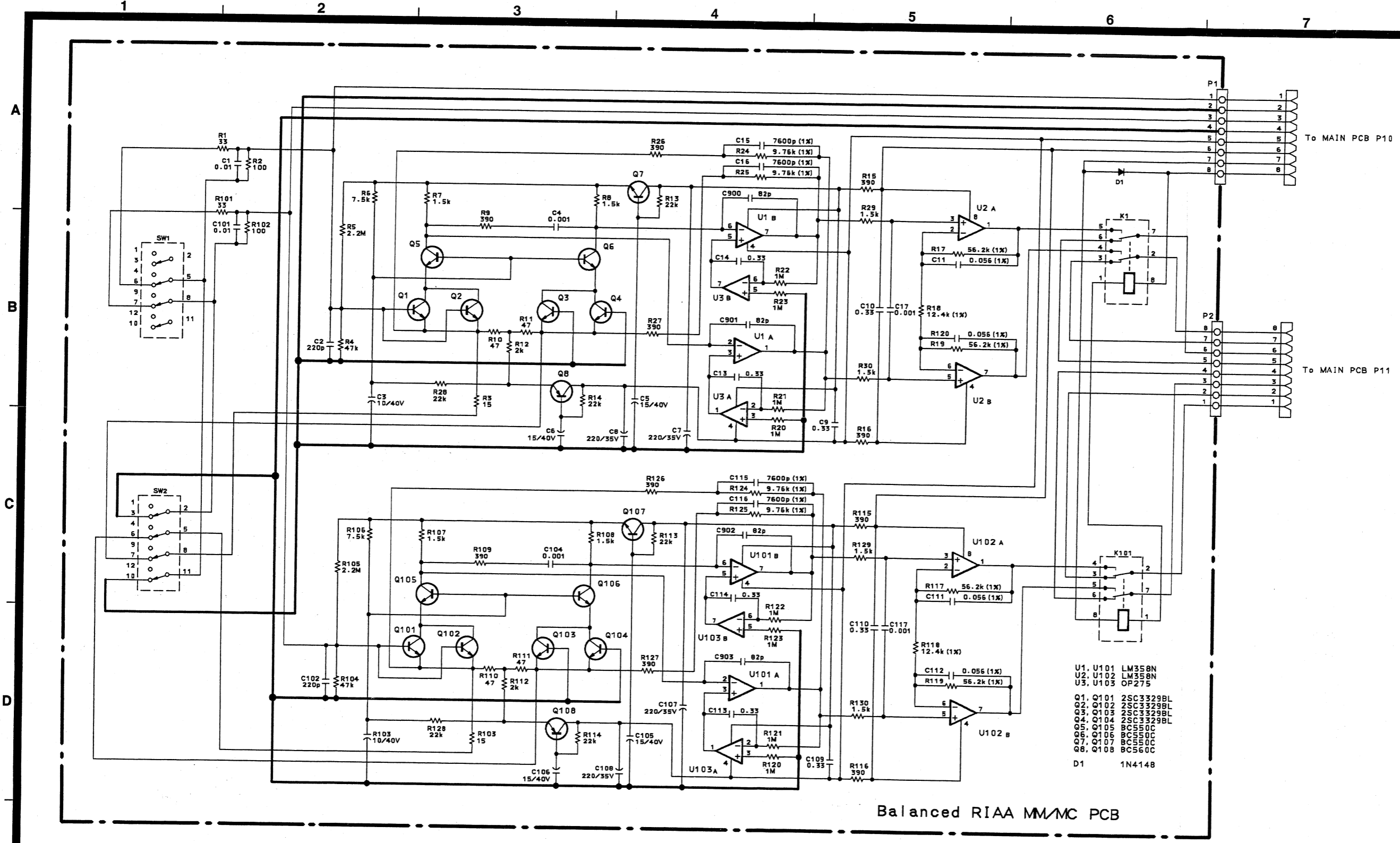
MAIN CONNECTOR PCB



BALANCED RIAA MM/MC PCB



# TEAC SCHEMATIC DIAGRAM PA-B10



- U1, U101 LM358N
- U2, U102 LM358N
- U3, U103 OP275
- Q1, Q101 2SC3329BL
- Q2, Q102 2SC3329BL
- Q3, Q103 2SC3329BL
- Q4, Q104 2SC3329BL
- Q5, Q105 BC550C
- Q6, Q106 BC550C
- Q7, Q107 BC550C
- Q8, Q108 BC550C
- D1 1N4148

**INSTRUCTIONS FOR SERVICE PERSONNEL**  
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**NOTES:**  
 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).  
 2. Capacitor values are in microfarads (p=picofarads).  
 3. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components—refer to the appropriate parts list and ensure exact replacement.

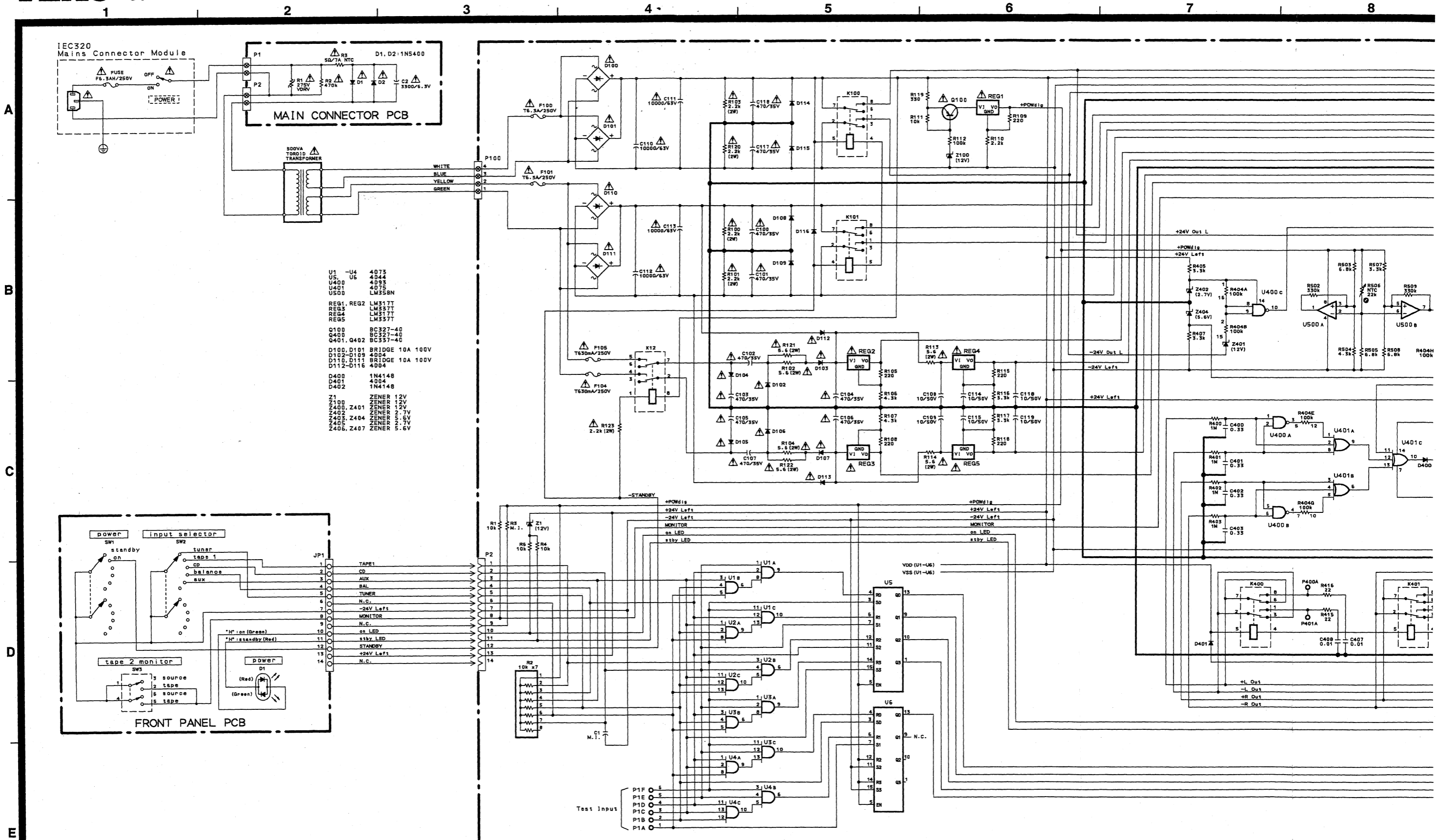
# PA-B10

## Balanced MM/MC Preamplifier

1st Issue; April 1995



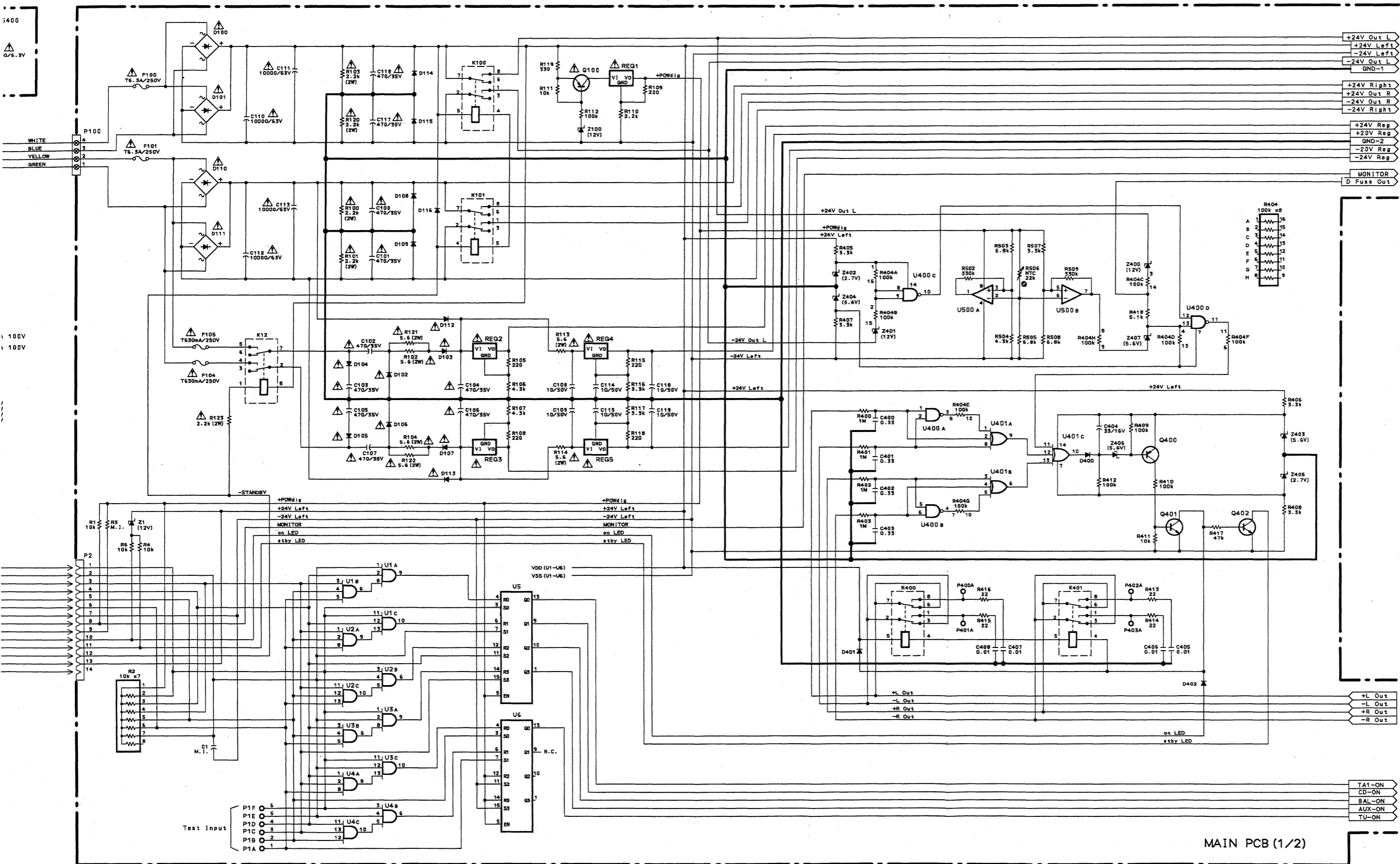
# TEAC SCHEMATIC DIAGRAM A-BX10



|            |                 |
|------------|-----------------|
| U1 -U4     | 4073            |
| U5, U6     | 4044            |
| U400       | 4093            |
| U401       | 4075            |
| U500       | LM358N          |
| REG1, REG2 | LM317T          |
| REG3       | LM337T          |
| REG4       | LM317T          |
| REG5       | LM337T          |
| Q100       | BC327-40        |
| Q400       | BC327-40        |
| Q401, Q402 | BC337-40        |
| D100, D101 | BRIDGE 10A 100V |
| D102-D109  | 4004            |
| D110, D111 | BRIDGE 10A 100V |
| D112-D116  | 4004            |
| D400       | 1N4148          |
| D401       | 4004            |
| D402       | 1N4148          |
| Z1         | ZENER 12V       |
| Z100       | ZENER 12V       |
| Z400, Z401 | ZENER 12V       |
| Z402       | ZENER 2.7V      |
| Z403, Z404 | ZENER 5.6V      |
| Z405       | ZENER 2.9V      |
| Z406, Z407 | ZENER 5.6V      |

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MAIN PCB (1/2)

# A-BX10

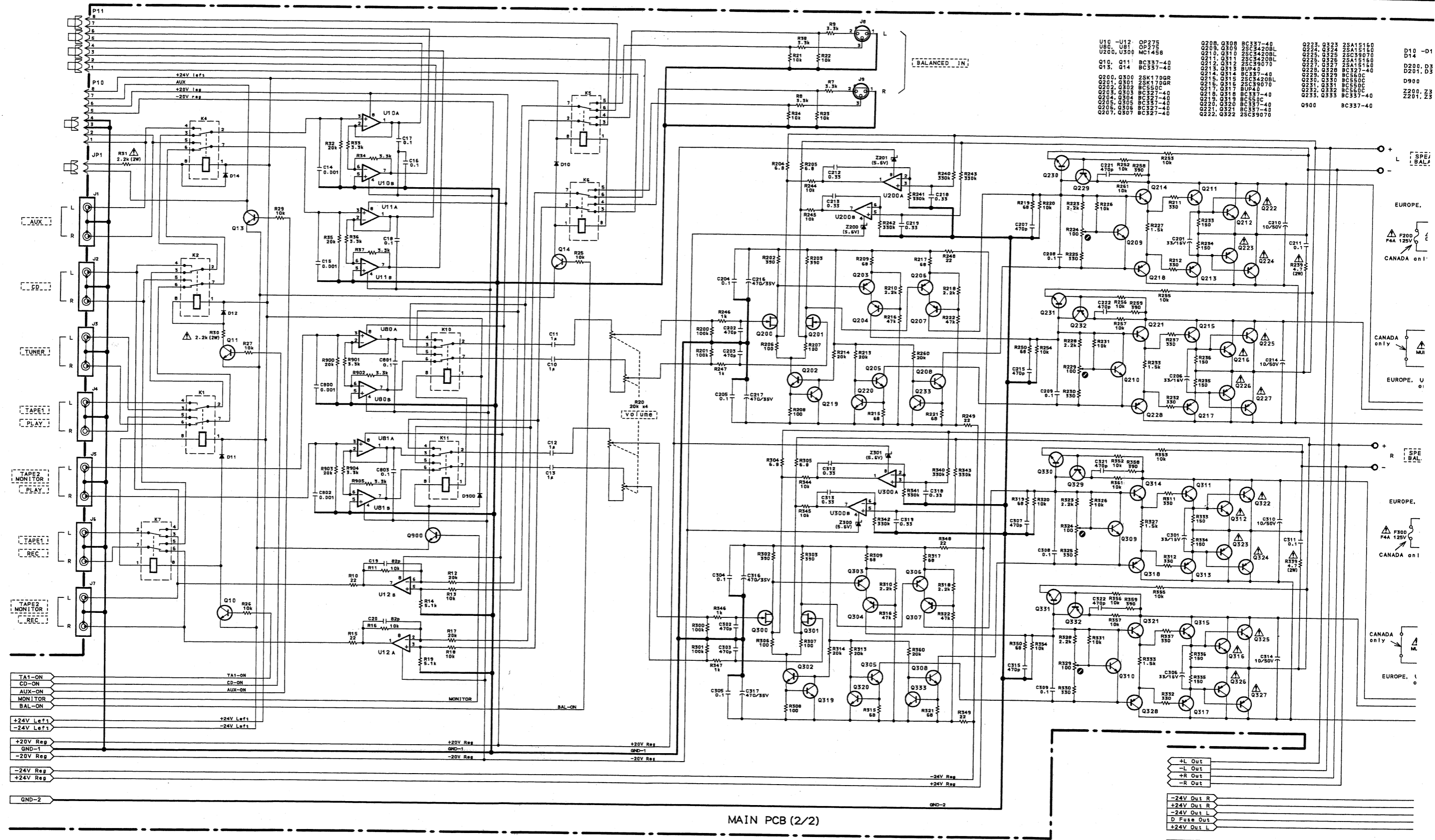
## Integrated Stereo Amplifier

1st Issue; April 1995

# TEAC SCHEMATIC DIAGRAM A-BX10

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E

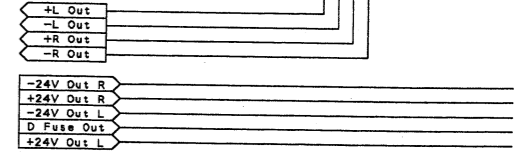


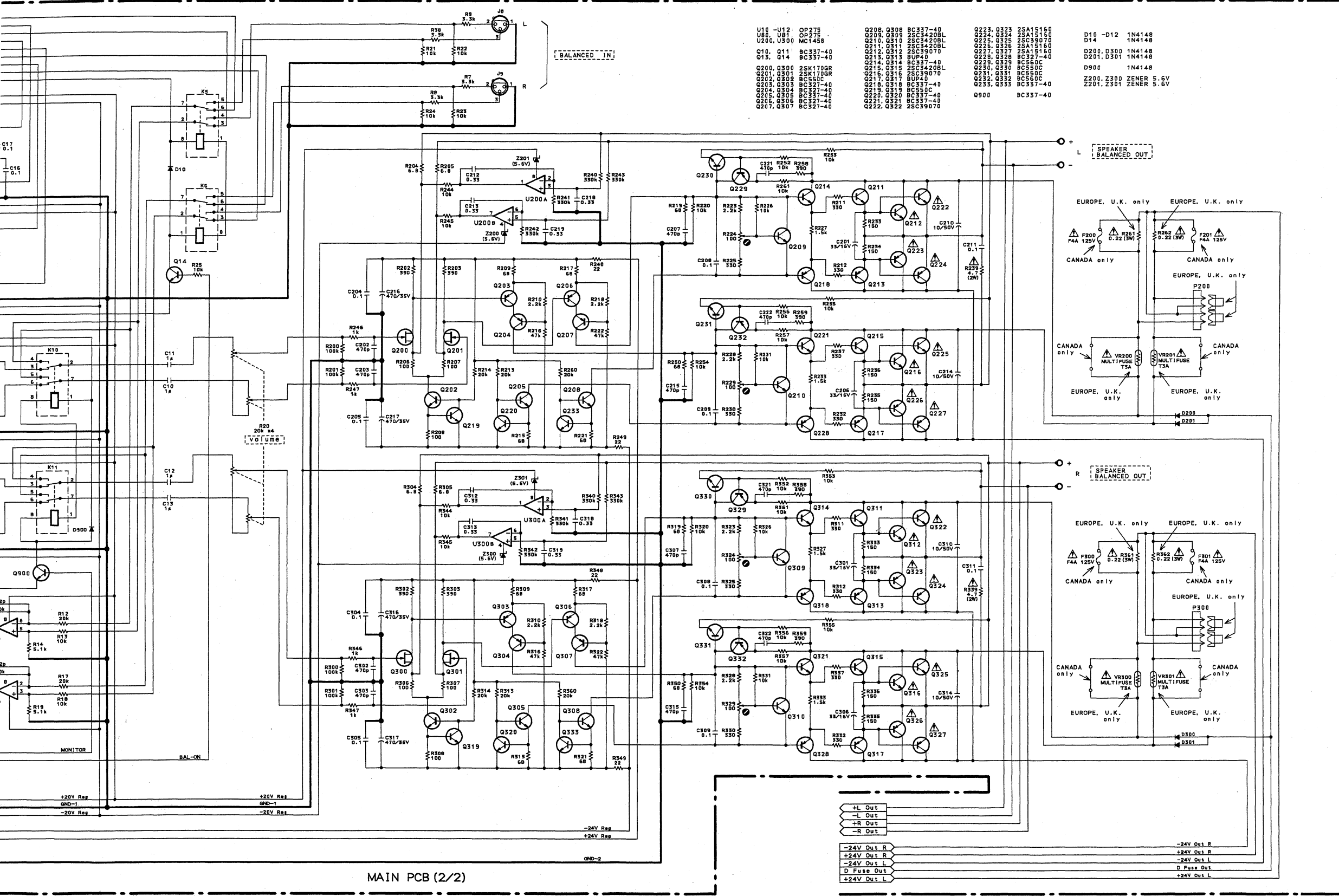
|            |          |            |           |            |          |          |
|------------|----------|------------|-----------|------------|----------|----------|
| U10 -U12   | OP275    | Q208, Q308 | BC337-40  | Q223, Q323 | 2SA1516  | D10 -D1  |
| U80, U81   | OP275    | Q219, Q319 | 2SC3420BL | Q224, Q324 | 2SA1516  | D14      |
| U200, U300 | MC1458   | Q210, Q310 | 2SC3420BL | Q225, Q325 | 2SC39070 | D200, D3 |
| Q10, Q11   | BC337-40 | Q211, Q311 | 2SC3420BL | Q226, Q326 | 2SA1516  | D201, D3 |
| Q13, Q14   | BC337-40 | Q212, Q312 | 2SC39070  | Q227, Q327 | 2SA1516  | D900     |
| Q200, Q300 | 2SK170GR | Q213, Q313 | 8UP40     | Q228, Q328 | BC337-40 | Z200, Z3 |
| Q201, Q301 | 2SK170GR | Q214, Q314 | BC337-40  | Q229, Q329 | BC550C   | Z201, Z3 |
| Q202, Q302 | BC550C   | Q215, Q315 | 2SC39070  | Q230, Q330 | BC550C   |          |
| Q203, Q303 | BC337-40 | Q216, Q316 | 2SC39070  | Q231, Q331 | BC550C   |          |
| Q204, Q304 | BC337-40 | Q217, Q317 | 8UP40     | Q232, Q332 | BC550C   |          |
| Q205, Q305 | BC337-40 | Q218, Q318 | BC337-40  | Q233, Q333 | BC337-40 |          |
| Q206, Q306 | BC337-40 | Q219, Q319 | BC337-40  | Q234, Q334 | BC337-40 |          |
| Q207, Q307 | BC337-40 | Q220, Q320 | BC550C    | Q235, Q335 | BC337-40 |          |
|            |          | Q221, Q321 | BC337-40  | Q236, Q336 | BC337-40 |          |
|            |          | Q222, Q322 | 2SC39070  | Q237, Q337 | BC337-40 |          |
|            |          | Q223, Q323 | 2SC39070  | Q238, Q338 | BC337-40 |          |
|            |          | Q224, Q324 | 2SC39070  | Q239, Q339 | BC337-40 |          |
|            |          | Q225, Q325 | 2SC39070  | Q240, Q340 | BC337-40 |          |
|            |          | Q226, Q326 | 2SC39070  | Q241, Q341 | BC337-40 |          |
|            |          | Q227, Q327 | 2SC39070  | Q242, Q342 | BC337-40 |          |
|            |          | Q228, Q328 | 2SC39070  | Q243, Q343 | BC337-40 |          |
|            |          | Q229, Q329 | 2SC39070  | Q244, Q344 | BC337-40 |          |
|            |          | Q230, Q330 | 2SC39070  | Q245, Q345 | BC337-40 |          |
|            |          | Q231, Q331 | 2SC39070  | Q246, Q346 | BC337-40 |          |
|            |          | Q232, Q332 | 2SC39070  | Q247, Q347 | BC337-40 |          |
|            |          | Q233, Q333 | 2SC39070  | Q248, Q348 | BC337-40 |          |
|            |          | Q234, Q334 | 2SC39070  | Q249, Q349 | BC337-40 |          |
|            |          | Q235, Q335 | 2SC39070  | Q250, Q350 | BC337-40 |          |
|            |          | Q236, Q336 | 2SC39070  | Q251, Q351 | BC337-40 |          |
|            |          | Q237, Q337 | 2SC39070  | Q252, Q352 | BC337-40 |          |
|            |          | Q238, Q338 | 2SC39070  | Q253, Q353 | BC337-40 |          |
|            |          | Q239, Q339 | 2SC39070  | Q254, Q354 | BC337-40 |          |
|            |          | Q240, Q340 | 2SC39070  | Q255, Q355 | BC337-40 |          |
|            |          | Q241, Q341 | 2SC39070  | Q256, Q356 | BC337-40 |          |
|            |          | Q242, Q342 | 2SC39070  | Q257, Q357 | BC337-40 |          |
|            |          | Q243, Q343 | 2SC39070  | Q258, Q358 | BC337-40 |          |
|            |          | Q244, Q344 | 2SC39070  | Q259, Q359 | BC337-40 |          |
|            |          | Q245, Q345 | 2SC39070  | Q260, Q360 | BC337-40 |          |
|            |          | Q246, Q346 | 2SC39070  | Q261, Q361 | BC337-40 |          |
|            |          | Q247, Q347 | 2SC39070  | Q262, Q362 | BC337-40 |          |
|            |          | Q248, Q348 | 2SC39070  | Q263, Q363 | BC337-40 |          |
|            |          | Q249, Q349 | 2SC39070  | Q264, Q364 | BC337-40 |          |
|            |          | Q250, Q350 | 2SC39070  | Q265, Q365 | BC337-40 |          |
|            |          | Q251, Q351 | 2SC39070  | Q266, Q366 | BC337-40 |          |
|            |          | Q252, Q352 | 2SC39070  | Q267, Q367 | BC337-40 |          |
|            |          | Q253, Q353 | 2SC39070  | Q268, Q368 | BC337-40 |          |
|            |          | Q254, Q354 | 2SC39070  | Q269, Q369 | BC337-40 |          |
|            |          | Q255, Q355 | 2SC39070  | Q270, Q370 | BC337-40 |          |

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MAIN PCB (2/2)





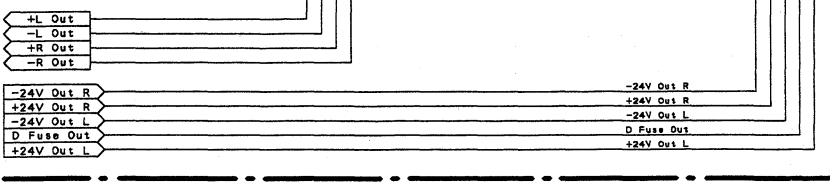
|            |          |            |           |            |          |            |            |
|------------|----------|------------|-----------|------------|----------|------------|------------|
| U10 -U12   | OP275    | Q208, Q308 | BC337-40  | Q223, Q323 | 2SA15160 | D10 -D12   | 1N4148     |
| U80, U81   | OP275    | Q209, Q309 | 2SC4208L  | Q224, Q324 | 2SA15170 | D14        | 1N4148     |
| U10, U500  | MC1458   | Q210, Q310 | 2SC14208L | Q225, Q325 | 2SA15170 | D200, D300 | 1N4148     |
| Q10, Q11   | BC337-40 | Q211, Q311 | 2SC14208L | Q226, Q326 | 2SA15180 | D201, D301 | 1N4148     |
| Q13, Q14   | BC337-40 | Q212, Q312 | 2SC14208L | Q227, Q327 | 2SA15180 | D900       | 1N4148     |
| Q200, Q300 | 2SK1708R | Q213, Q313 | 2SC14208L | Q228, Q328 | BC337-40 | Z200, Z300 | ZENER 5.6V |
| Q201, Q301 | 2SK1708R | Q214, Q314 | BC337-40  | Q229, Q329 | BC560C   | Z201, Z301 | ZENER 5.6V |
| Q202, Q302 | BC550C   | Q215, Q315 | 2SC14208L | Q230, Q330 | BC550C   |            |            |
| Q203, Q303 | BC327-40 | Q216, Q316 | 2SC39070  | Q231, Q331 | BC550C   |            |            |
| Q204, Q304 | BC327-40 | Q217, Q317 | 80P-0     | Q232, Q332 | BC550C   |            |            |
| Q205, Q305 | BC327-40 | Q218, Q318 | BC337-40  | Q233, Q333 | BC337-40 |            |            |
| Q206, Q306 | BC327-40 | Q219, Q319 | BC337-40  | Q900       | BC337-40 |            |            |
| Q207, Q307 | BC327-40 | Q220, Q320 | BC337-40  |            |          |            |            |
|            |          | Q221, Q321 | BC337-40  |            |          |            |            |
|            |          | Q222, Q322 | 2SC39070  |            |          |            |            |

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# A-BX10

## Integrated Stereo Amplifier

1st Issue; April 1995





**5 INCLUDED ACCESSORIES**

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| REF. NO. | PARTS NO.    | DESCRIPTION              | REMARKS |
|----------|--------------|--------------------------|---------|
|          | △ 9A05211100 | POWER CORD [E]           |         |
|          | △ 9A05211200 | POWER CORD [C]           |         |
|          | △ 9A05211300 | POWER CORD [UK]          |         |
|          | 9A05038600   | OWNER'S MANUAL, 6M ..... | A-BX10  |
|          | 9A05066300   | OWNER'S MANUAL, 6M ..... | PA-B10  |