

253

SERVICE MANUAL

marantz

model 2100

Am/Fm Stereophonic Tuner

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INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2100 AM/FM Stereophonic Tuner.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operations in the receiver.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

1. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of Model 2100 consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Front End mounted on P.W. Board P100
2. Tuner mounted on P.W. Board P200
3. Power Supply mounted on P.W. Board P800
4. Dial Lamp mounted on P.W. Board PZ01
5. Function Indicator mounted on P.W. Board PY01

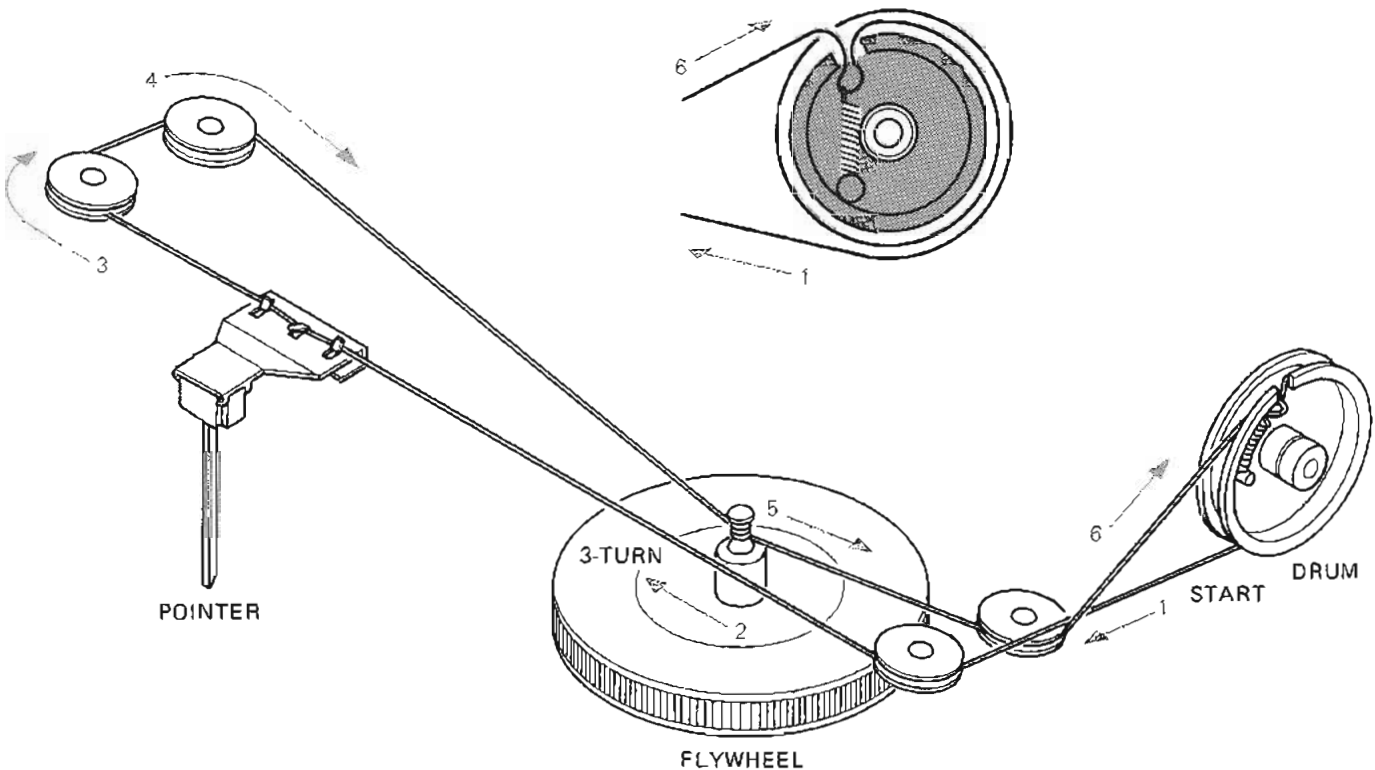


Figure 1. Dial Stringing

2. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model 2100 Tuner.

| Item | Manufacturer and Model No. | Use |
|--|--|---|
| AM Signal Generator | | Signal source for AM alignment |
| Test Loop | | Use with AM Signal Generator |
| FM Signal Generator MPX Signal Generator | Sound Technology Model 1000A | Signal source for FM alignment Stereo separation alignment and trouble shooting |
| Distortion Analyzer Audio Oscillator AC VTVM | Sound Technology Model 1700A | Distortion measurements Sinewave and squarewave signal source Voltage measurements (AC) |
| Oscilloscope | Tektronix Model T932 Philips Model 3232 | Waveform analysis and trouble shooting |
| Frequency Counter | Fluke Model 1900A | MPX Oscillator adjustment (VCO) |
| Circuit Tester | | Trouble shooting |
| DC VTVM | Fluke Model 8000 "Digital" Simpson Model 313, Triplet Model 801 | Voltage measurements (DC) |
| AC Wattmeter | Simpson Model 1379 | Monitors primary power to tuner |
| Line Voltmeter | Simpson Model 1359 | Monitors potential of primary power to tuner |
| Variable Autotransformer | Superior Electronic Co., Powerstat Model 116B-10A | Adjusts level of primary power to tuner |

3. AM ALIGNMENT PROCEDURES

3.1 AM IF ALIGNMENT

1. Connect a sweep generator to the L153 and an alignment scope to the J233 (T.P.).
2. Rotate each core of IF transformers L155 and L156 for the maximum height and flat top symmetrical response.

3.2 AM FREQUENCY RANGE AND TRACKING ALIGNMENT

1. Set AM signal generator to 515 kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end) and adjust the oscillator coil L154 for maximum audio output.
2. Set the signal generator to 1650 kHz. Place the tuning pointer in the high frequency end and adjust the oscillator trimmer on the oscillator tuning capacitor for maximum audio output.
3. Repeat steps 1 and 2 until no further adjustment is necessary.
4. Set the generator to 600 kHz, tune the tuner to the same frequency and adjust a slug core of AM ferrite-rod antenna L001 for maximum output.
5. Set the generator to 1400 kHz and tune the tuner to the same frequency and adjust the trimming capacitor on the antenna tuning capacitor for maximum output.
6. Repeat procedures 4 and 5 until no further adjustment is necessary.

NOTE: During tracking alignment reduce the signal generator output as necessary to avoid AGC action.

4. FM ALIGNMENT PROCEDURES

4.1 FM FREQUENCY RANGE AND TRACKING ALIGNMENT

1. Connect an FM signal generator to the FM antenna terminals and an oscilloscope and an audio distortion analyzer to the OUTPUT jacks on the rear panel.
2. Set the generator to 87.4 MHz and provide about 3 to 5 μ V. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the pitch of oscillator coil L107 to obtain maximum audio output.
3. Set the generator to 109 MHz and provide about 3 to 5 μ V. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor C121 for maximum output.
4. Repeat steps 2 and 3 until no further adjustment is necessary.
5. Set the generator to 90 MHz and tune the tuner to the same frequency. Decrease signal generator output until the audio output level decreases with the decreasing generator output. Adjust the pitch of antenna coil L102 and RF coil L104 for maximum output.
6. Set the generator to 106 MHz and tune the tuner to the same frequency. Decrease the signal generator output until the audio output level decreases with the decreasing generator output. Adjust the trimming capacitors of antenna and RF tuning circuits for maximum output.
7. Repeat steps 5 and 6 until no further adjustment is necessary.
8. Adjust the primary core (lower core) of discriminator transformer L202 so that the center tuning meter point-

er indicates its center at no signal applied. Set the FM signal generator to 98 MHz and increase its output level 1 μV and tune the tuner to the same frequency so that the center tuning meter pointer indicates its center. Adjust the secondary core (upper core) of L202 for minimum distortion.

4.2 STEREO SEPARATION ALIGNMENT

1. Set the FM signal generator to provide 1 μV at 98 MHz. Tune the tuner to the same frequency so that the center tuning meter pointer indicates its center. Then turn off the modulation of the generator, connect a frequency counter to test point J229 and adjust R301 so that the frequency counter may precisely read 76 kHz.
2. Modulate the generator with stereo composite signal consisting of only L or R channel (of course a pilot signal must be included).
3. Adjust the trimming resistor R317 for maximum and same separation in both channels.

4.3 MUTING THRESHOLD ADJUSTMENT

1. Set the FM signal generator output to provide 12.5 μV (IHF) at 98 MHz and tune tuner to the same frequency.

Adjust the trimming resistor R212 for the threshold level of 12.5 μV . (During this adjustment turn the FM MUTING pushswitch "on").

4.4 FM 25 μS OUTPUT LEVEL ADJUSTMENT

1. Set the FM signal generator to provide a 400 Hz, 50% modulated 98 MHz mono signal, at 1 μV output. Precisely tune the tuner to 98 MHz.
2. Depress the FM 25 μS pushswitch, and adjust R215 until the outputs of both channels are 580 mV.

5. VOLTAGE CONVERSION FOR EUROPEAN MODEL

The European version of the Model 2100 is equipped with a universal power transformer that may be adjusted to operate at 110 V, 120 V, 220 V, or 240 V AC at 50 to 60 Hz. To convert the unit to a different power source voltage, reposition conversion plug as shown in Figure 2.

CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.

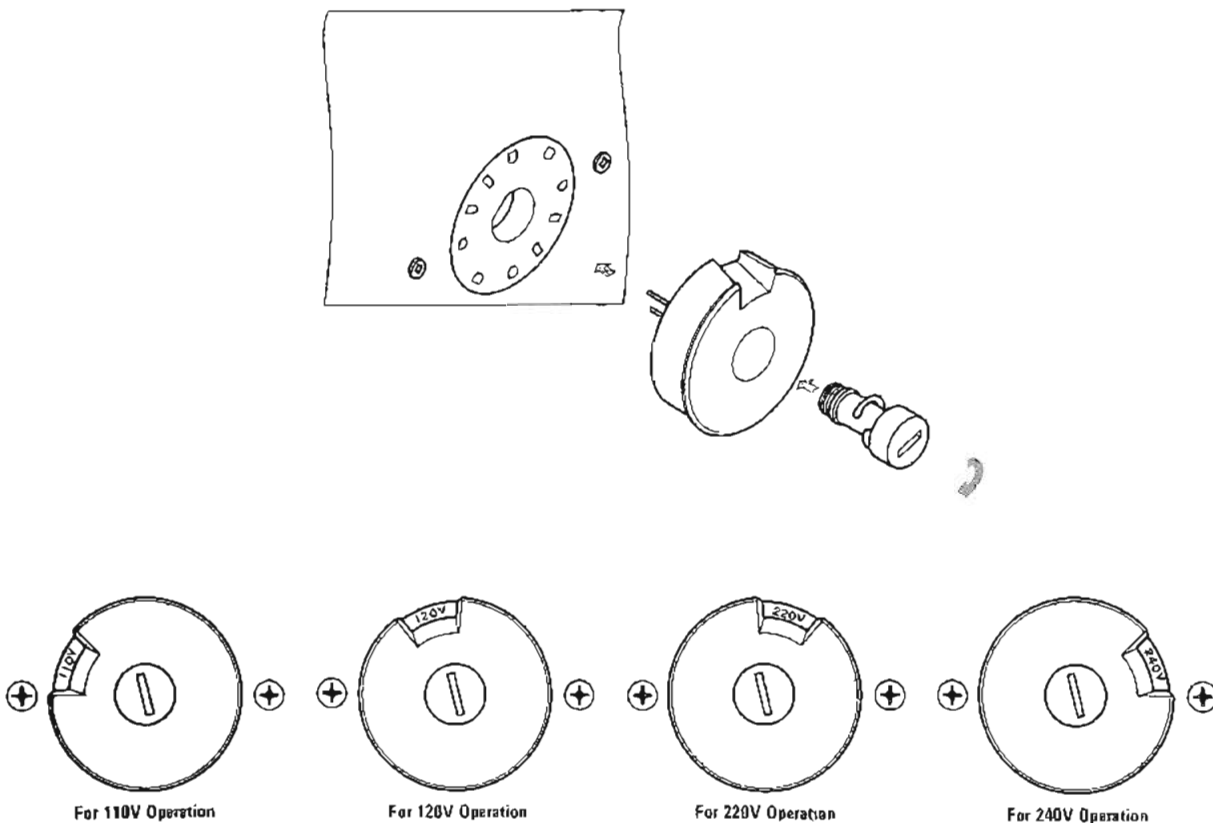


Figure 2. Voltage Conversion Chart

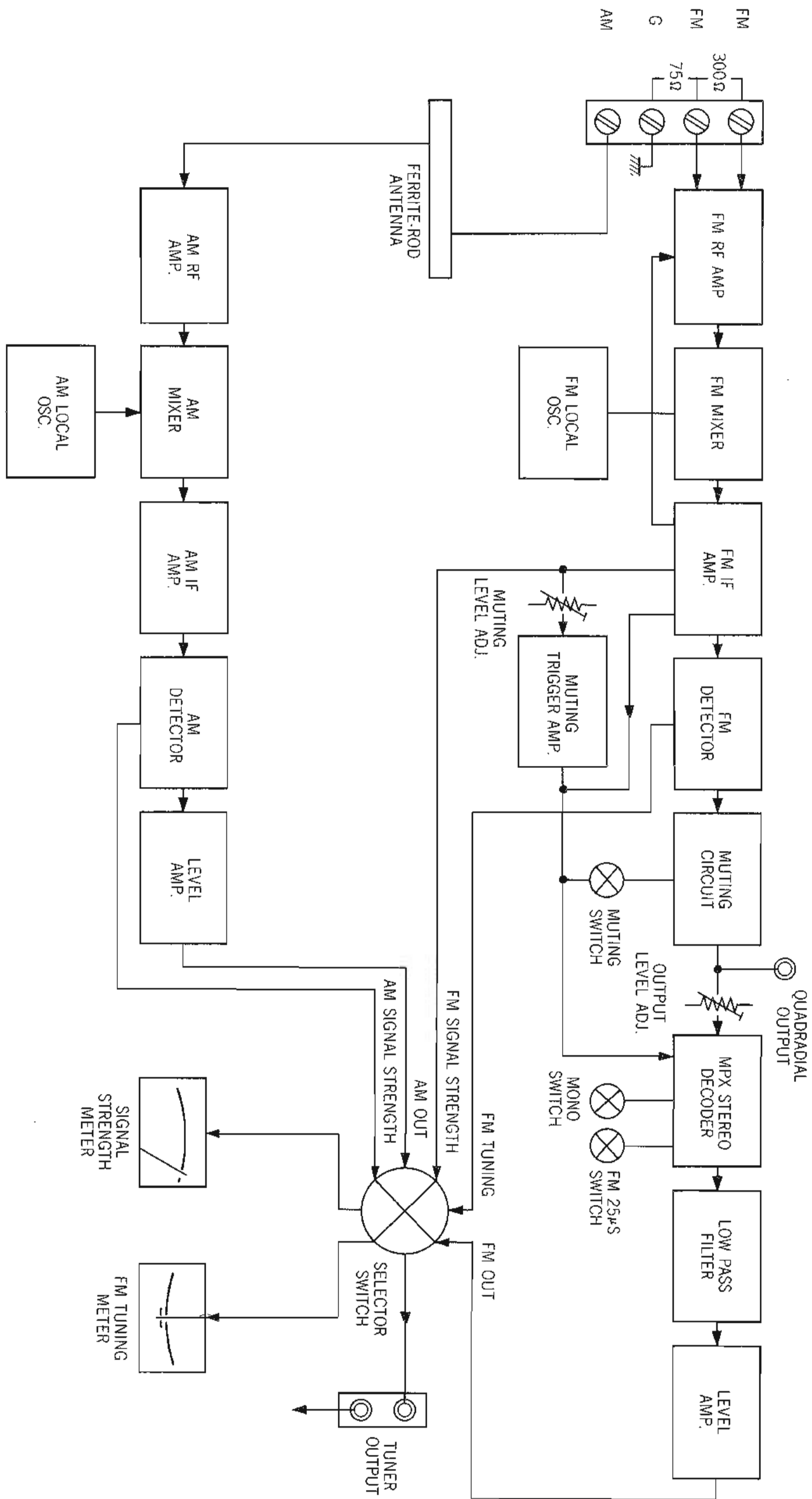
FTZ REGULATION

Instruction for the use in the range other than specified in FTZ codes.

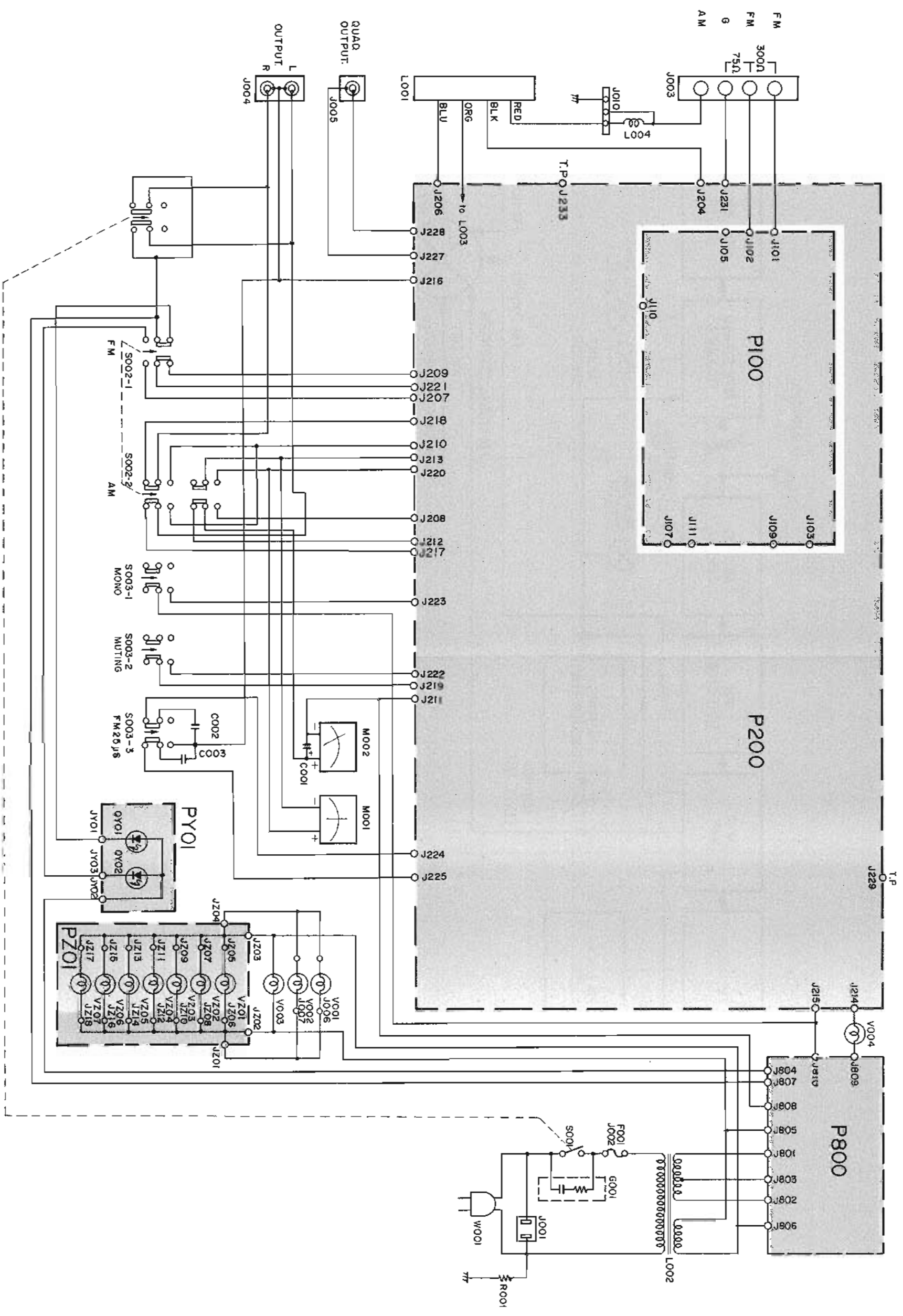
Achtung für die Leute, die in dem Gebiet wohnen, wo die FTZ-Bestimmungen vorherrschend sind.

Sollte das Gerät auch für Frequenzen ausserhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangbereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatospule (in der Abbildung mit "FTZ" gekennzeichnet) so zu korrigieren, dass er den Bestimmungen entspricht.

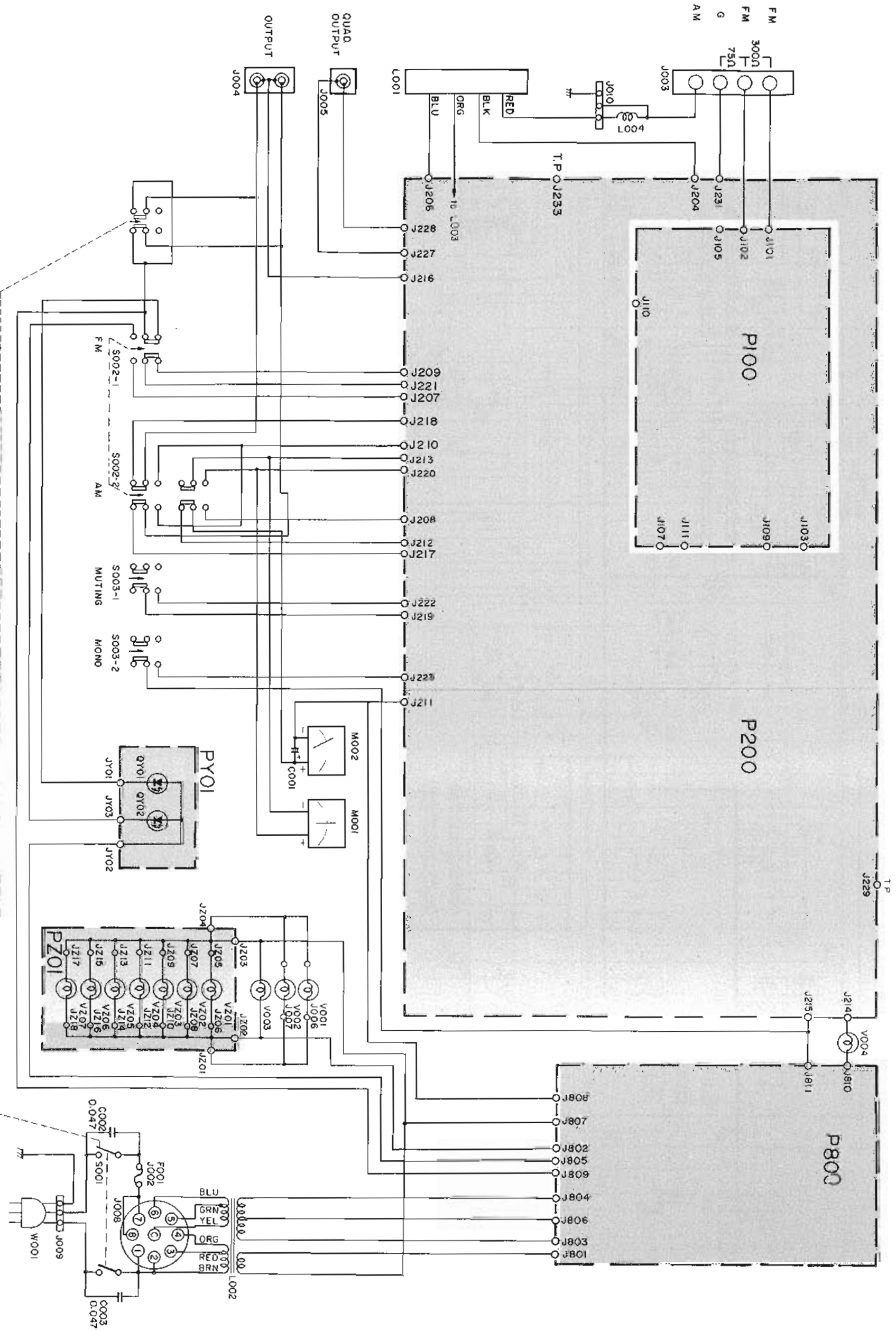
6. DIAGRAMS
6.1 BLOCK DIAGRAM

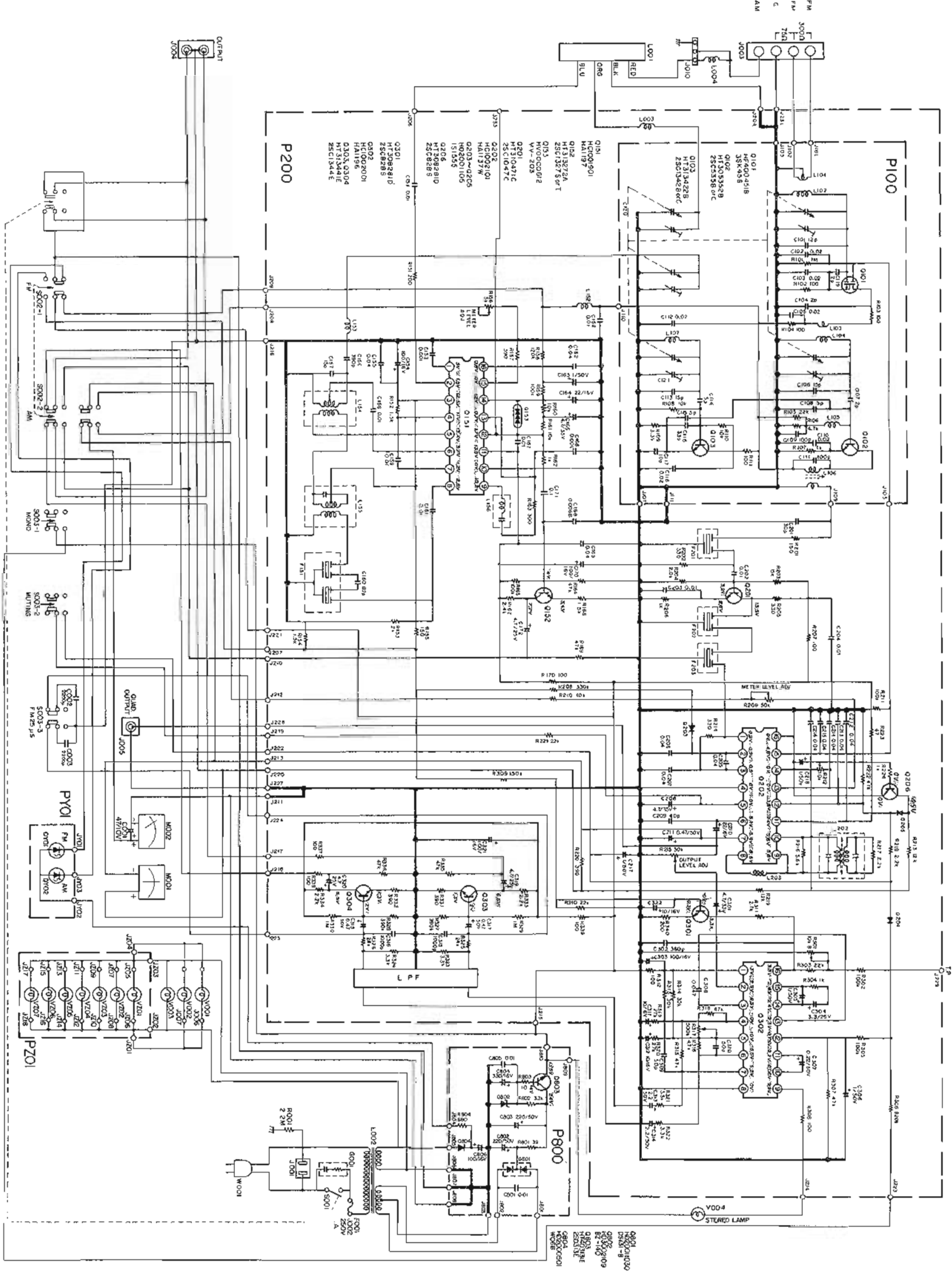


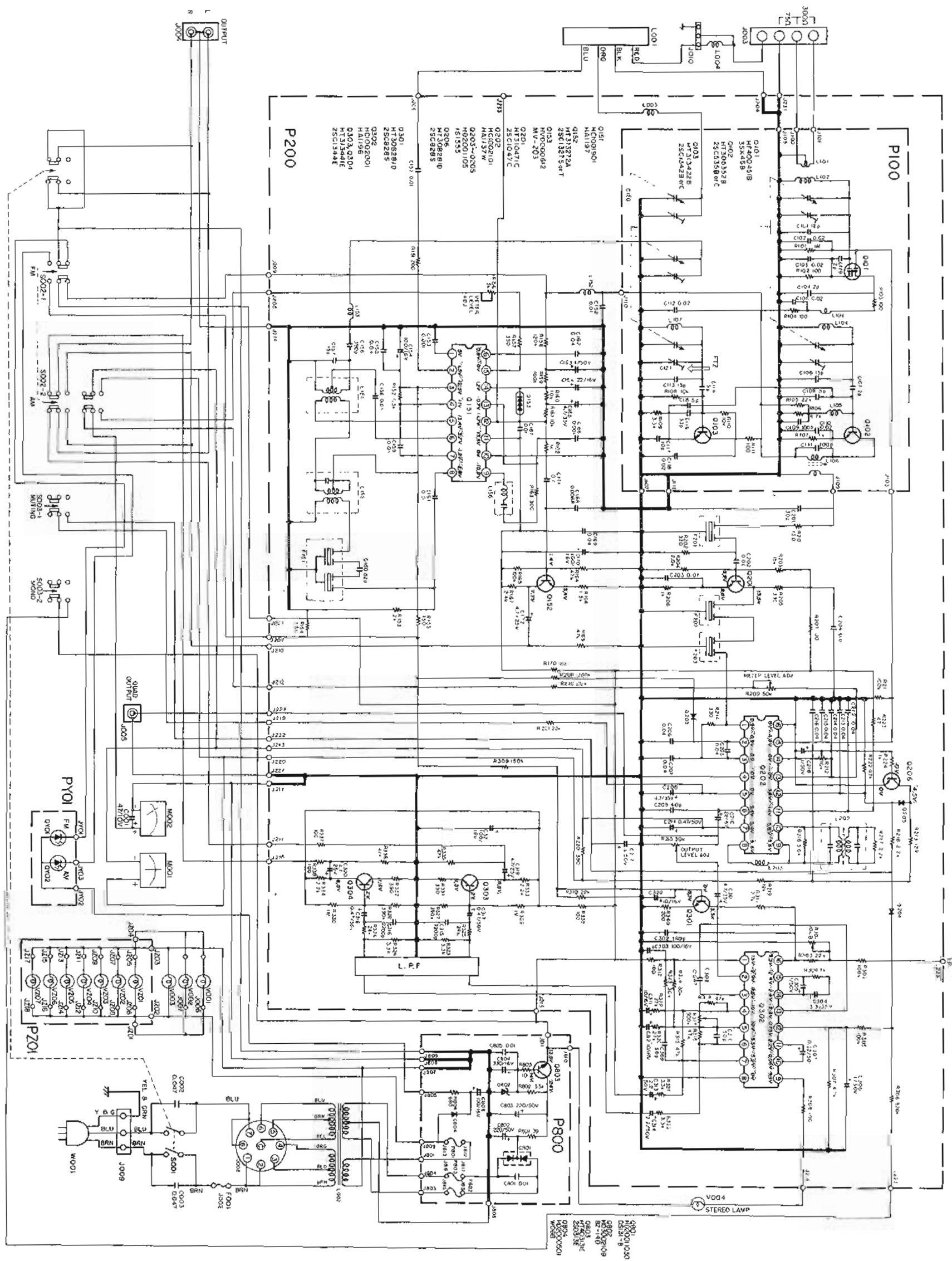
6.2 CONNECTION DIAGRAM - U.S.A. & CANADA



6.3 CONNECTION DIAGRAM - EUROPE

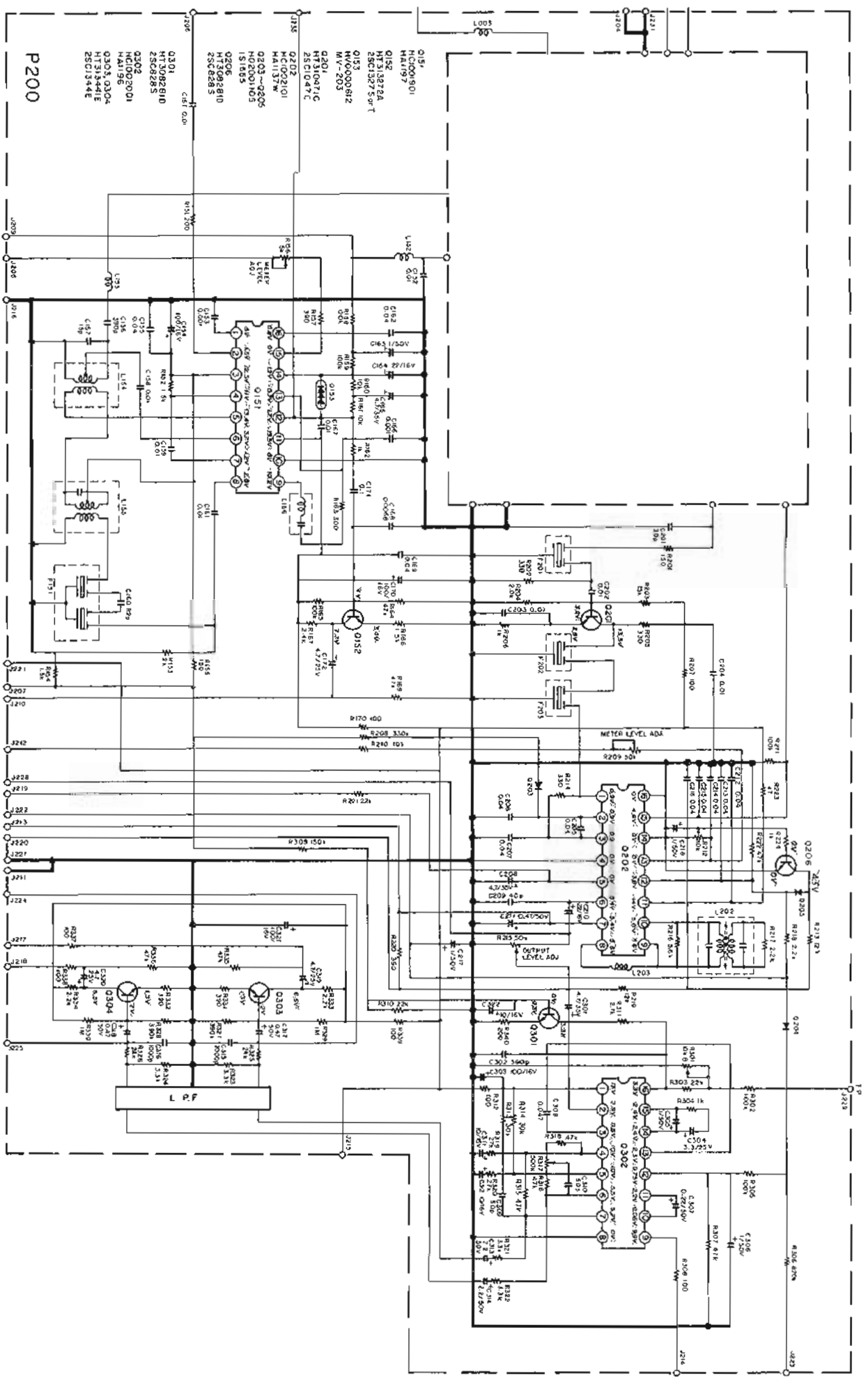


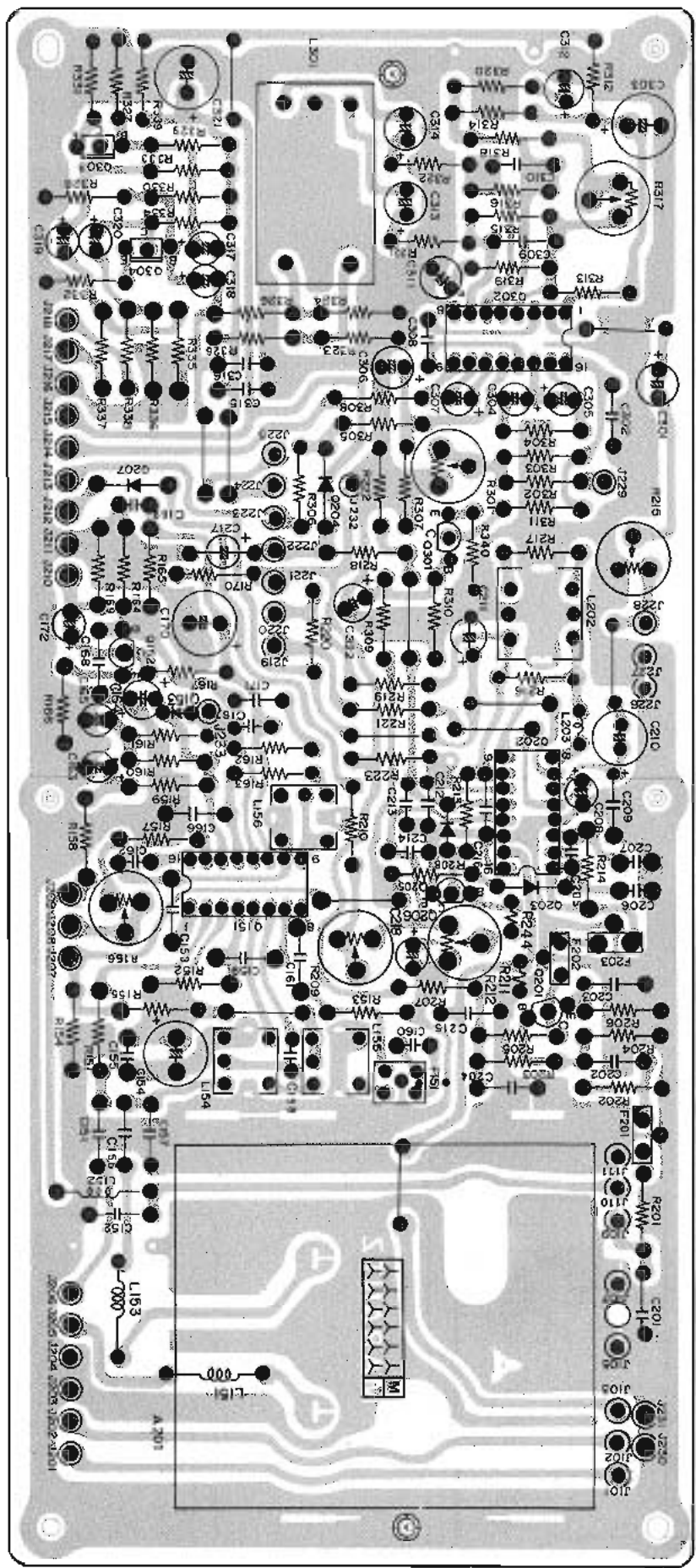




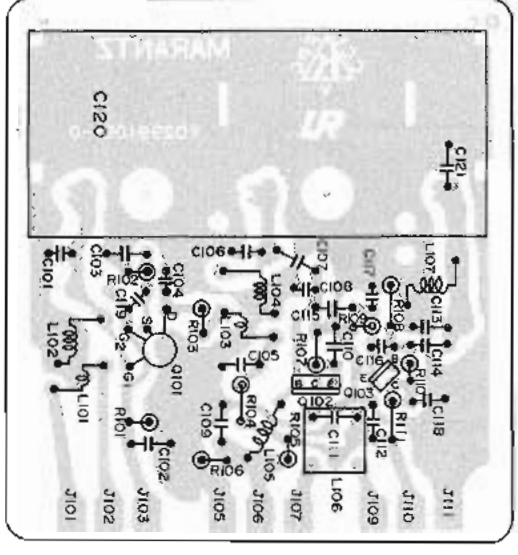
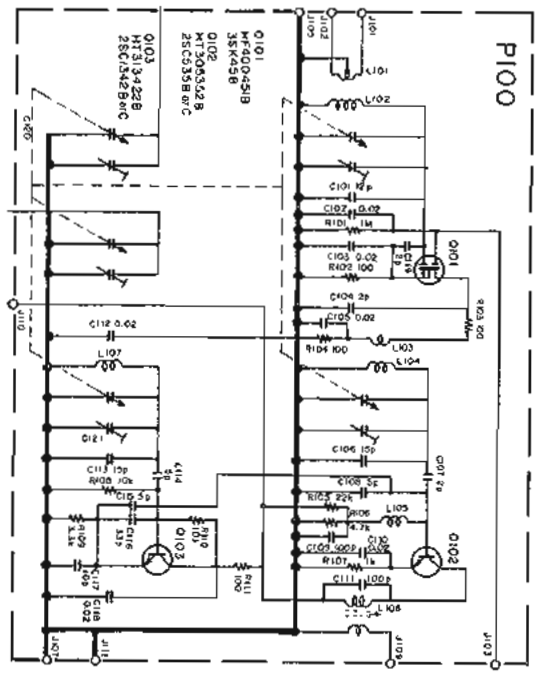


6.6 TUNER BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - P200

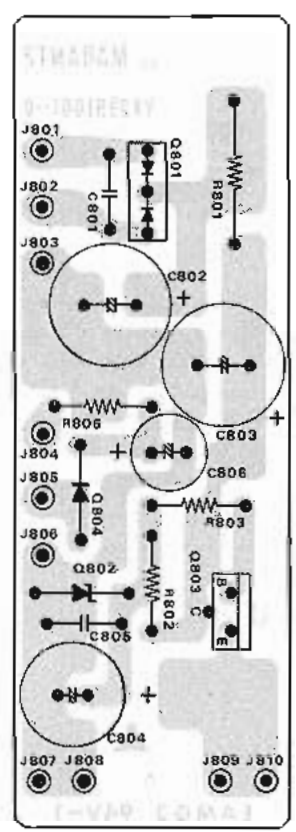
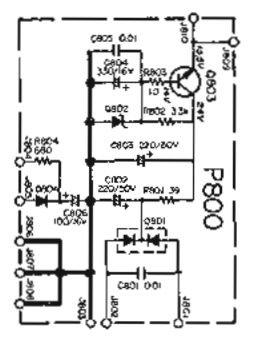




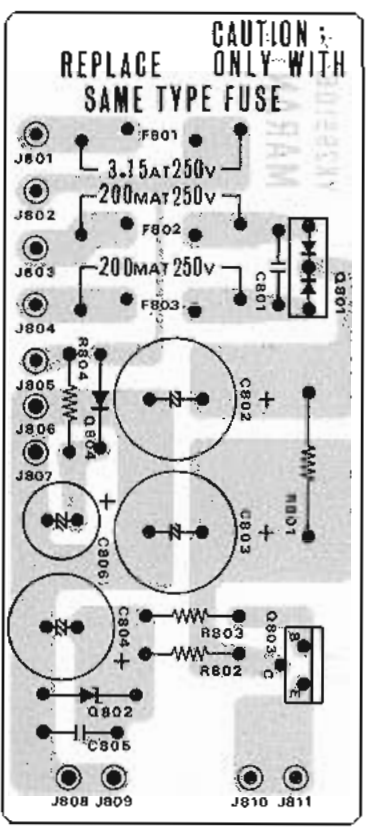
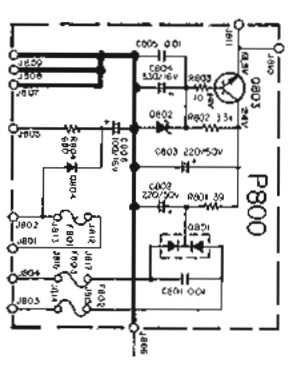
6.7 FRONT END BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - P100



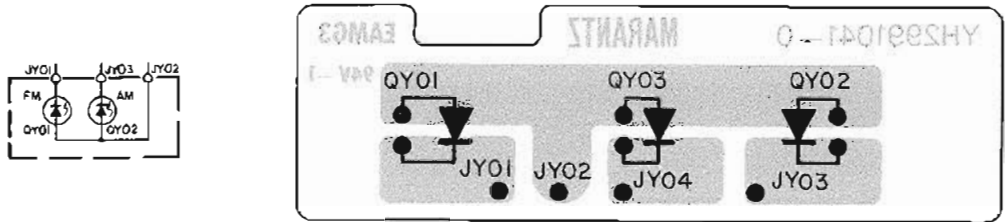
6.8 POWER SUPPLY BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - P800 - U.S.A. & CANADA



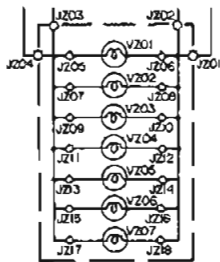
6.9 POWER SUPPLY BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - P800 - EUROPE



6.10 FUNCTION INDICATOR BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - PY01

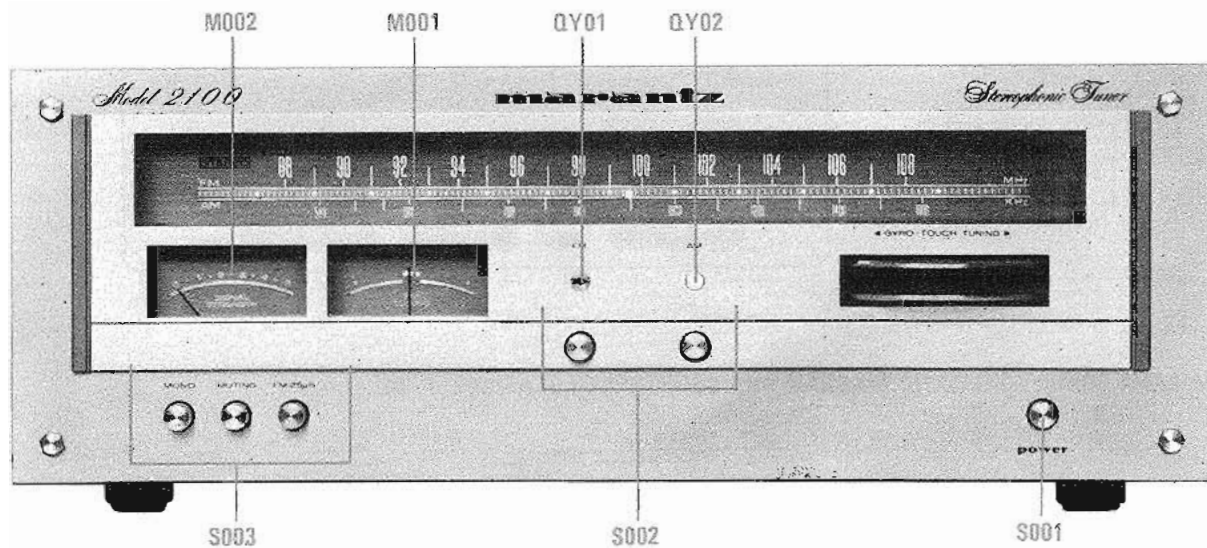


6.11 DIAL LAMP BOARD SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS - PZ01

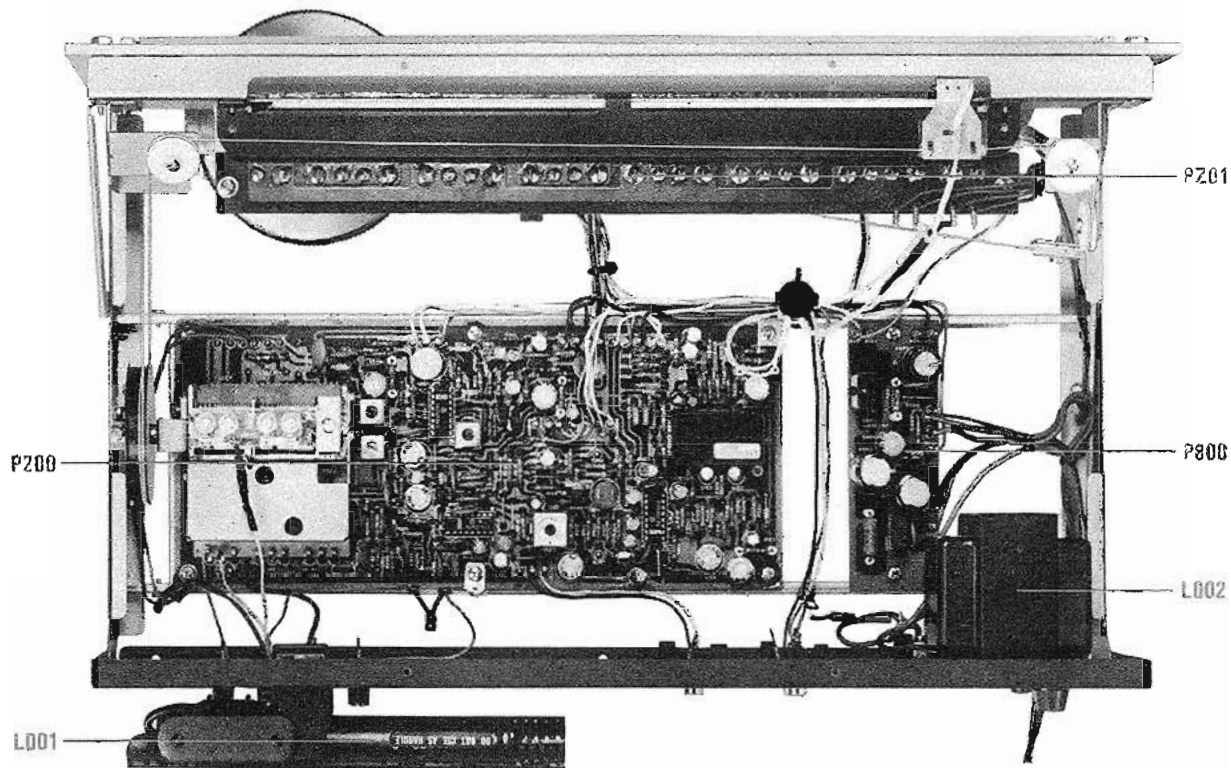


7. MAJOR COMPONENT LOCATIONS

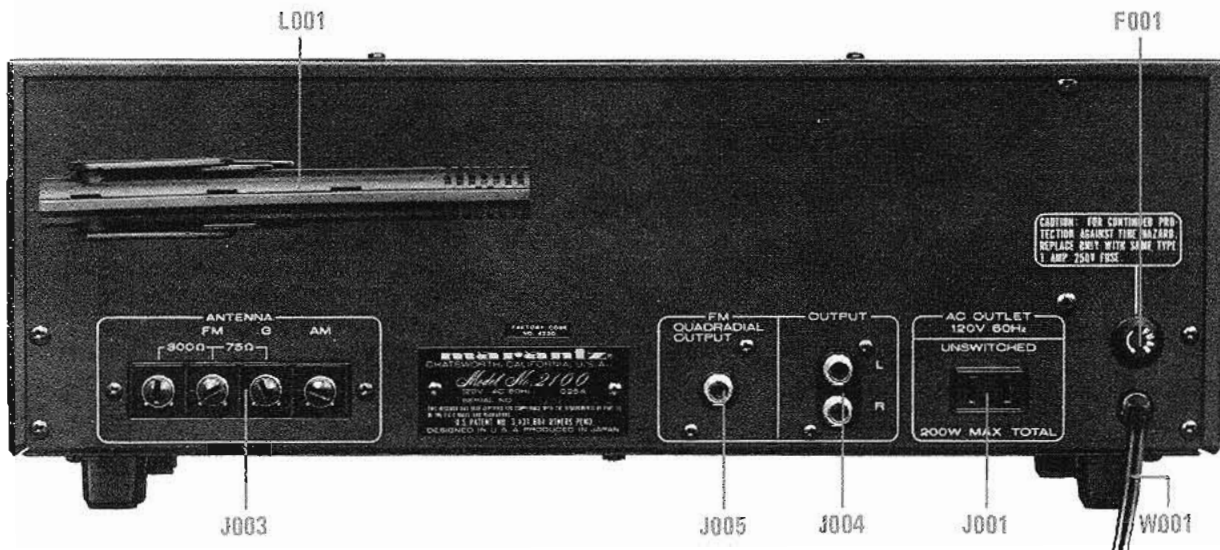
7.1 CABINET - FRONT VIEW - U.S.A. & CANADA



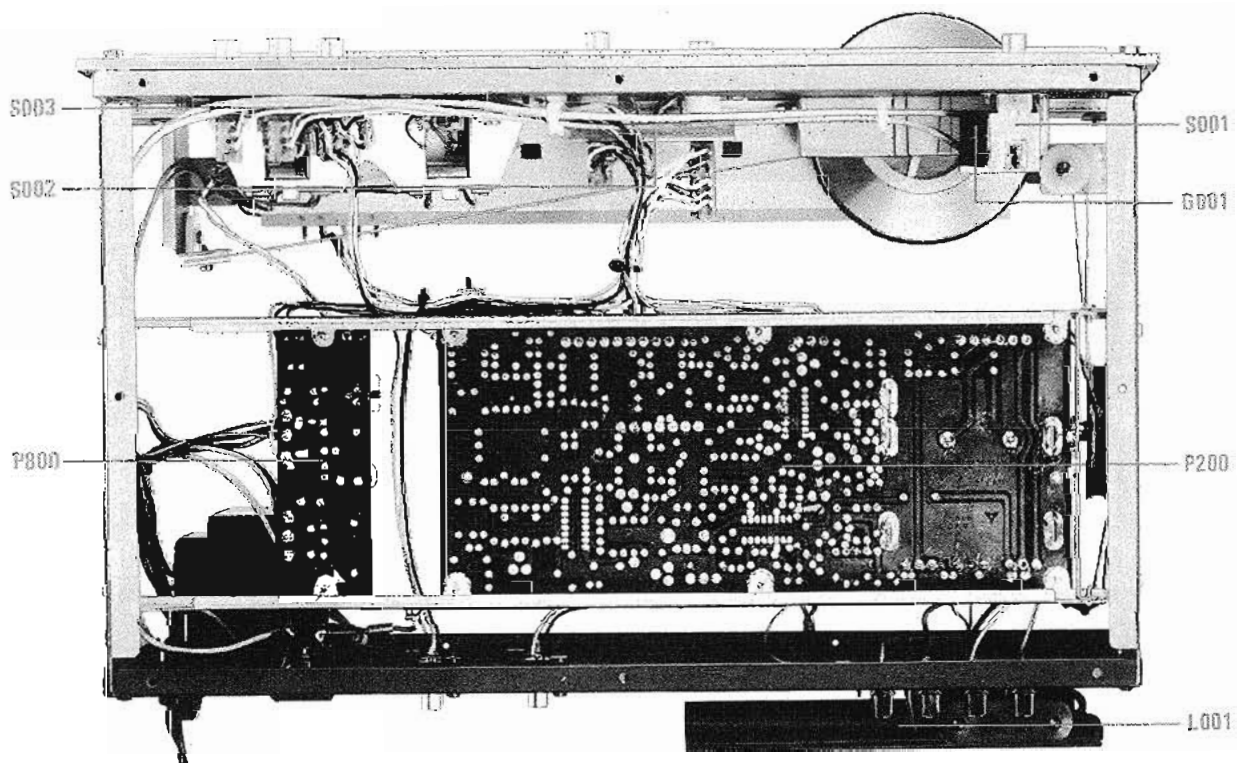
7.2 CHASSIS - TOP VIEW - U.S.A. & CANADA



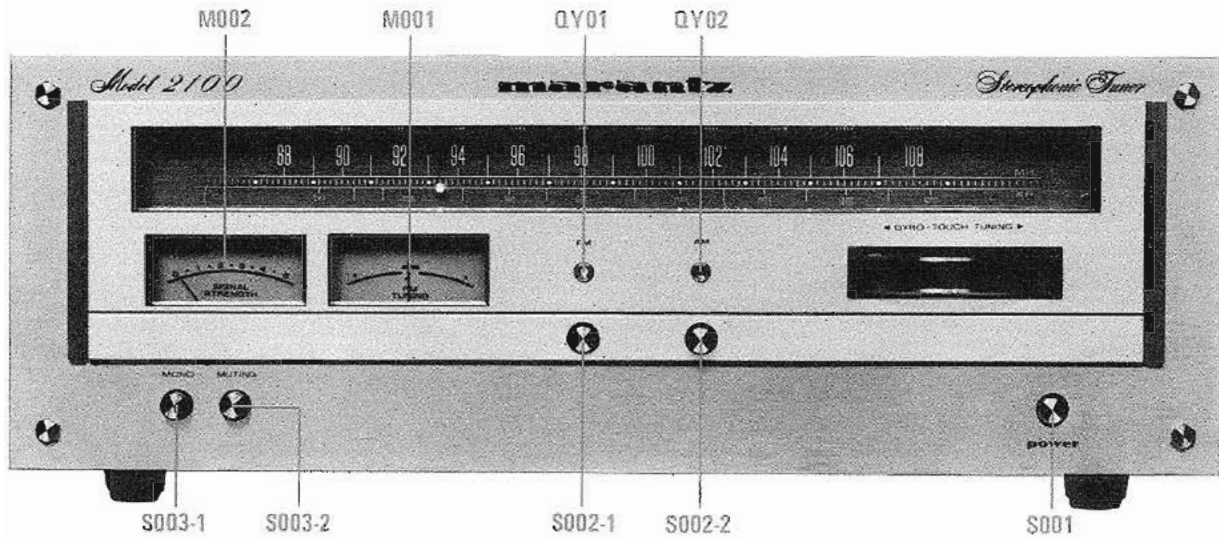
7.3 CABINET - REAR VIEW - U.S.A. & CANADA



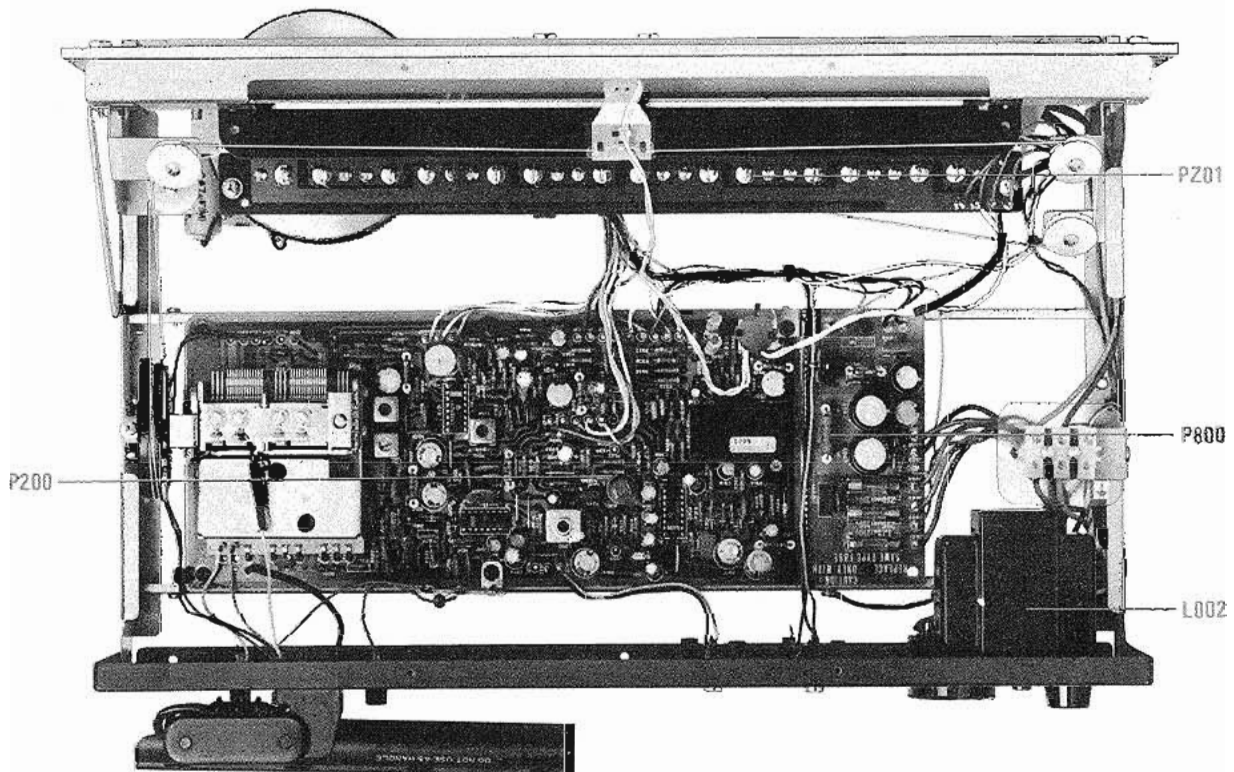
7.4 CHASSIS - BOTTOM VIEW - U.S.A. & CANADA



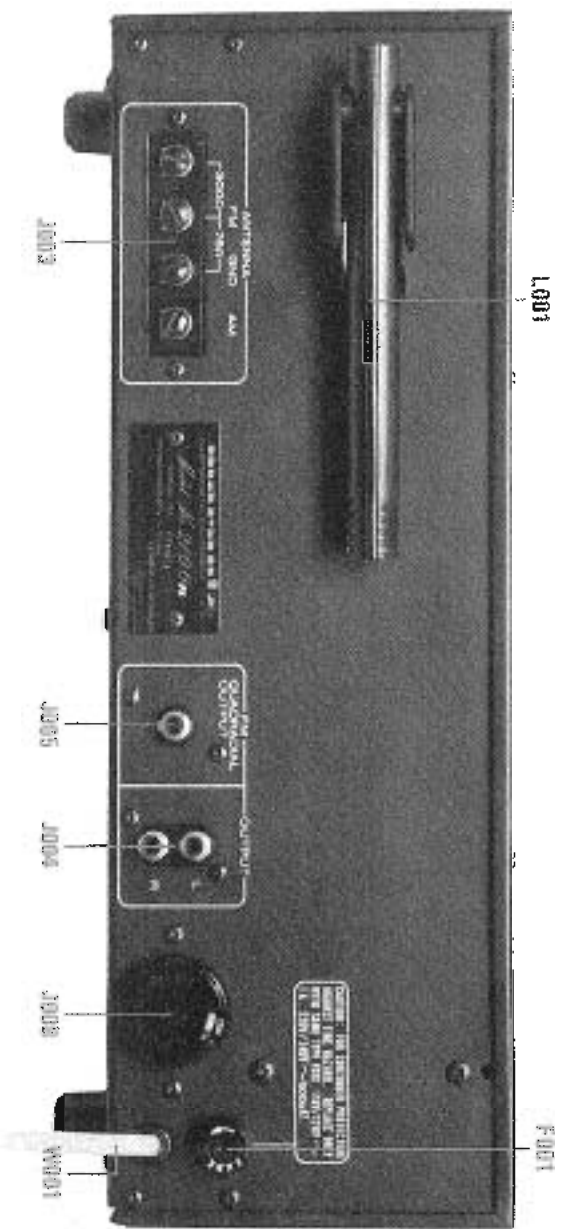
7.5 CABINET - FRONT VIEW - EUROPE



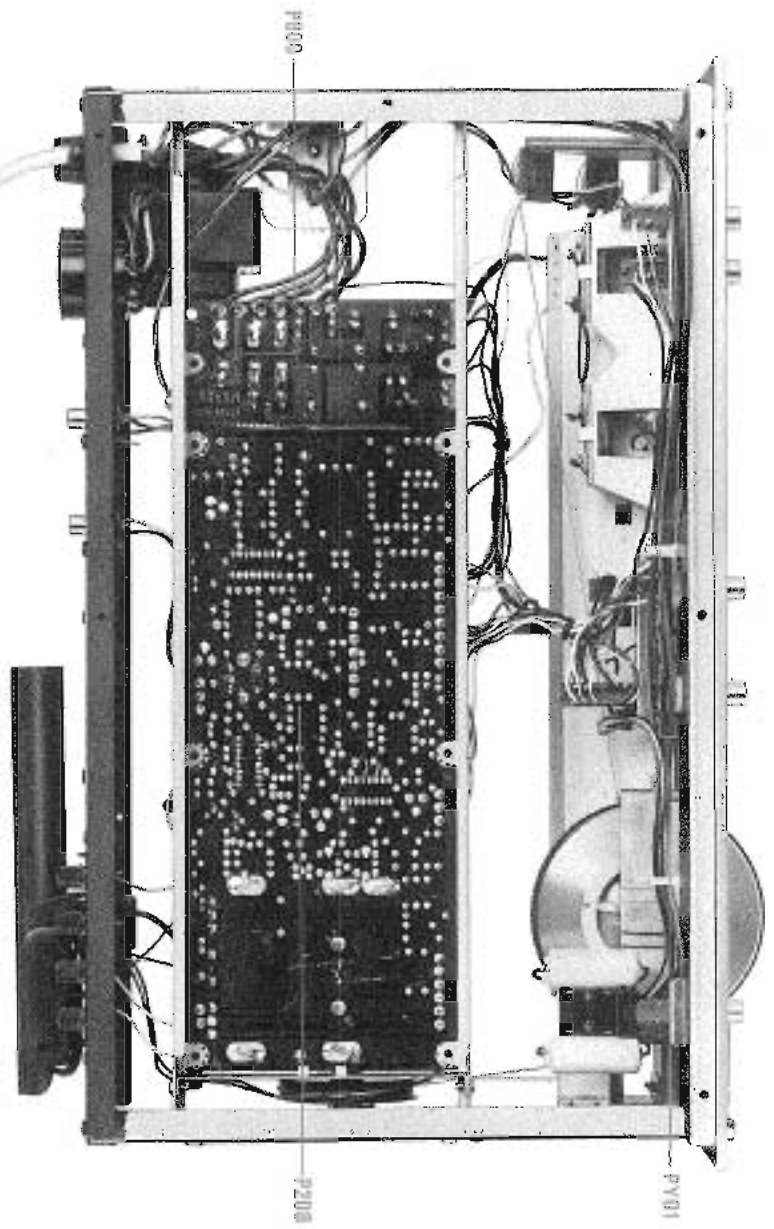
7.6 CHASSIS - TOP VIEW - EUROPE



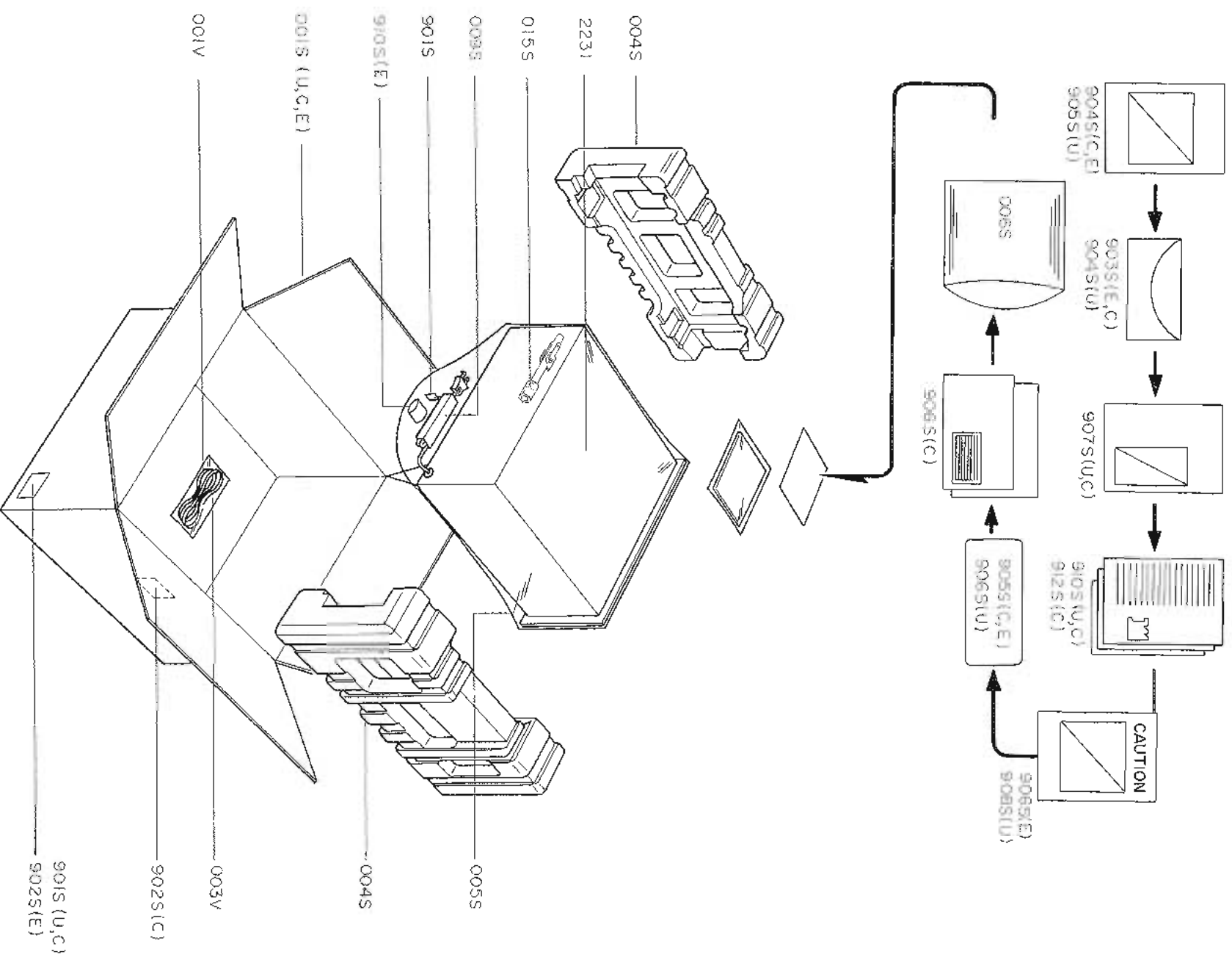
7.7 CABINET - REAR VIEW - EUROPE



7.8 CHASSIS - BOTTOM VIEW - EUROPE



8. EXPLODED VIEWS
8.1 PACKING MATERIAL EXPLODED VIEW



9. PARTS LIST

U : For U.S.A.
C : For Canada
E : For Europe

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|-------------------------|------|----|----|------------|----------------------------------|
| | U | C | E | | |
| A | 1 | 1 | | 2991063400 | Front Panel Assembly |
| A1 | | | 1 | 2991063410 | Front Panel Assembly |
| 003B | 1 | 1 | 1 | 2991063024 | Escutcheon |
| 004B | 1 | 1 | 1 | 2991158110 | Window |
| 005B | 1 | 1 | 1 | 2991158120 | Window |
| 006B | 2 | 2 | 2 | 2979259022 | Bushing |
| 009B | 2 | 2 | 2 | 2965063050 | Escutcheon |
| 011B | 9 | 9 | 9 | 51480306A9 | F. Washer Screw |
| 021B | 2 | 2 | 2 | 2979259012 | Bushing |
| 920B | | | 1 | 2991063013 | Escutcheon |
| 920B | 1 | 1 | | 2991063110 | Escutcheon |
| 921B | | | 1 | 2991053010 | Cover |
| 921B | 1 | 1 | | 2991053110 | Cover |
| 922B | 4 | 4 | 3 | 2978259010 | Bushing |
| B | 1 | 1 | 1 | 2219273400 | Flywheel Assembly |
| 0011 | 1 | 1 | 1 | 2219273010 | Flywheel |
| 0071 | 2 | 2 | 2 | 2219063030 | Escutcheon |
| 0101 | 1 | 1 | 1 | 2219353010 | Ring |
| 0121 | 1 | 1 | 1 | 51820206B0 | P.H.M. Screw, P2x6 |
| C | 1 | 1 | 1 | 2991159400 | Drum Assembly |
| 107F | 1 | 1 | 1 | 2991159010 | Drum |
| 108F | 2 | 2 | 2 | 51064019A0 | P.H.M. Screw, P4x19 |
| 109F | 1 | 1 | 1 | 71101569M0 | Spring |
| MECHANICAL PARTS | | | | | |
| P208 | 12 | 12 | 12 | 2933118020 | Spacer |
| P211 | 13 | 13 | 13 | 75061251P0 | Jumper Wire |
| P808 | 5 | 5 | 5 | 2933118020 | Spacer |
| 001F | 1 | 1 | 1 | 2991160015 | Bracket |
| 001S | 1 | 1 | 1 | 2991801010 | Packing Case |
| 001V | 1 | 1 | 1 | ZA02000070 | External Antenna, FM |
| 0021 | 1 | 1 | 1 | 2991104500 | Retainer |
| 002V | 1 | 1 | 1 | ZD00150160 | Connective Cord |
| 003F | 4 | 4 | 4 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 003V | 1 | 1 | 1 | 9013025010 | Polyethylene Bag, Accessories |
| 004S | 2 | 2 | 2 | 2970809010 | Cushion |
| 005B | 1 | 1 | 1 | 2991158120 | Window |
| 005F | 1 | 1 | 1 | 2991274013 | Reflector |
| 005S | 1 | 1 | 1 | 9014335330 | Polyethylene Bag, Set |
| 006F | 2 | 2 | 2 | 51480308A9 | F. Washer Screw |
| 006S | 1 | 1 | 1 | 9013025010 | Polyethylene Bag, Printed Matter |
| 007F | 2 | 2 | 2 | 53110303E9 | Hexagon Nut |
| 0081 | 1 | 1 | 1 | 2219112010 | Shaft |
| 009B | 2 | 2 | 2 | 2965063050 | Escutcheon |
| 009F | 1 | 1 | 1 | 2218274032 | Reflector |
| 009S | 1 | 1 | 1 | 2864804010 | Sleeve |
| 011F | 1 | 1 | 1 | 2991051012 | Guide |
| 012F | 2 | 2 | 2 | 51042608A0 | F.H.M. Screw, F2.6x8 |
| 0131 | 1 | 1 | 1 | 59031405G9 | Washer |
| 014B | 4 | 4 | 4 | 52017069J0 | H. Head Bolt |
| 015F | 6 | 6 | 6 | 51100306A9 | B.H.M. Screw, B3x6 |
| 015S | 1 | 1 | 1 | 2819056010 | Buffer |
| 016F | 2 | 2 | 2 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 0171 | 4 | 4 | 4 | 51470306A9 | L. Washer Screw |
| 021F | 1 | 1 | 1 | 2991107010 | Sheet |

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|-------------|------|---|---|------------|---------------------------|
| | U | C | E | | |
| 022B | 2 | 2 | 2 | 2979115012 | Spring |
| 031B | 4 | 4 | 4 | 2932057010 | Leg |
| 031F | 1 | 1 | 1 | 2991269015 | Protector |
| 032B | 4 | 4 | 4 | 51570410S9 | P. Tapped Screw, P4x10ST |
| 032F | 3 | 3 | 3 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 035B | 1 | 1 | 1 | 2970257012 | Lid |
| 035F | 1 | 1 | 1 | 2991160053 | Bracket |
| 036B | 4 | 4 | 4 | 51280306U0 | B.H. Tapped Screw, B3x6ST |
| 036F | 4 | 4 | 4 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 037B | 4 | 4 | 4 | 51480406S9 | F. Washer Screw |
| 038B | 6 | 6 | 6 | 2979259030 | Bushing |
| 039F | 1 | 1 | 1 | 2218274022 | Reflector |
| 040B | 1 | 1 | 1 | 2978257023 | Lid |
| 040F | 2 | 2 | 2 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 041B | 8 | 8 | 8 | 51280408U0 | B.H. Tapped Screw, B4x8ST |
| 041F | 1 | 1 | 1 | 2991107020 | Sheet |
| 042F | 1 | 1 | 1 | 2991107020 | Sheet |
| 047B | 4 | 4 | 4 | 51280308U0 | B.H. Tapped Screw, B3x8ST |
| 048B | 2 | 2 | 2 | 51280308U0 | B.H. Tapped Screw, B3x8ST |
| 048F | 1 | 1 | 1 | 2991262503 | Pulley |
| 049B | 2 | 2 | 2 | 51280306U0 | B.H. Tapped Screw, B3x6ST |
| 051B | 2 | 2 | 2 | 51100408S9 | B.H.M. Screw, B4x8 |
| 052B | 2 | 2 | 2 | 2922005010 | Clamper |
| 053F | 2 | 2 | 2 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 054B | 4 | 4 | 4 | 51280306U0 | B.H. Tapped Screw, B3x6ST |
| 061F | 1 | 1 | 1 | 2991262512 | Pulley |
| 065F | 2 | 2 | 2 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 069F | 1 | 1 | 1 | 2886005060 | Clamper |
| 070F | 1 | 1 | 1 | 2886005050 | Clamper |
| 072F | 1 | 1 | 1 | 2991005010 | Clamper |
| 073F | 1 | 1 | 1 | 2908259010 | Bushing |
| 077F | 1 | 1 | 1 | 2991126014 | Stay |
| 078F | 1 | 1 | 1 | 2991126024 | Stay |
| 079F | 1 | 1 | 1 | 2991126033 | Stay |
| 080F | 1 | 1 | 1 | 2991126043 | Stay |
| 081F | 1 | 1 | 1 | 2991126050 | Stay |
| 082F | 1 | 1 | 1 | 2991126060 | Stay |
| 083F | 8 | 8 | 8 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 091F | 6 | 6 | 6 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 093F | 2 | 2 | 2 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 096F | 1 | 1 | 1 | 1382005030 | Clamper |
| 099F | 1 | 1 | 1 | 2915267020 | Heatsink |
| 100F | 1 | 1 | 1 | 51100306A9 | B.H.M. Screw, B3x6 |
| 104F | 1 | 1 | 1 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 105F | 1 | 1 | 1 | 62030039W0 | Lug |
| 109F | 1 | 1 | 1 | 71101569M0 | Spring |
| 110F | 2 | 2 | 2 | 72071605A0 | String |
| 111F | 2 | 2 | 2 | 56382540G0 | Eyelet |
| 121F | 1 | 1 | 1 | 2991103500 | Pointer |
| 135F | 1 | 1 | 1 | 2991109010 | Shield |
| 136F | 1 | 1 | 1 | 2991053110 | Cover |
| 901B | 3 | 3 | 4 | 2970154032 | Knob |
| 901F | | | 1 | 2991160090 | Bracket |
| 901F | 1 | 1 | 1 | 2991302013 | Dial |
| 901S | 3 | | | 9522815010 | Serial No. Card |
| 901S | | 3 | | 9523015120 | Serial No. Card |
| 901S | | | 1 | 9560000042 | Hang Tag |
| 902B | 2 | 2 | 2 | 2979154022 | Knob |
| 902F | | | 1 | 51280306B0 | B.H. Tapped Screw, B3x6ST |
| 902S | 2 | | | 9510901020 | Label |
| 902S | | | 3 | 9523015110 | Serial No. Card |
| 903B | 1 | 1 | | 2963154030 | Knob |
| 903S | | | 1 | 2818813010 | Envelope |

U : For U.S.A.
 C : For Canada
 E : For Europe

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|------------------|------|---|---|------------|--------------------------------|
| | U | C | E | | |
| 903S | | 1 | | 2918813012 | Envelope |
| 904F | | | 1 | 4113120010 | Insulator |
| 904S | 1 | | | 2577813010 | Envelope |
| 904S | | 1 | 1 | 2818851120 | Instructions, Important |
| 905B | 1 | 1 | | 2991160213 | Bracket |
| 905B | | | 1 | 2991160223 | Bracket |
| 905F | | | 2 | 51280314B0 | B.H. Tapped Screw, B3x14ST |
| 905S | 1 | | | 2577851020 | Instructions, Important |
| 905S | | 1 | 1 | 9630000180 | Guarantee Card |
| 906S | 1 | | | 2577854012 | Guarantee Card |
| 906S | | | 1 | 2818851140 | Instructions, Caution |
| 906S | | 1 | | 9650000050 | Service Station Card |
| 907B | 1 | 1 | | 1455259030 | Bushing |
| 907S | 1 | | | 2818854023 | Guarantee Card |
| 907S | | | 1 | 2818854042 | Guarantee Card |
| 908S | 1 | | | 2818851040 | Instructions, Caution |
| 908S | | | 1 | 2818854140 | Guarantee Card |
| 908S | | | 1 | 2991851310 | Instructions, Set |
| 909B | | 1 | | 1455259050 | Bushing |
| 909B | 1 | | | 2991265010 | Indicator |
| 909B | | 1 | | 2991265020 | Indicator |
| 910S | | | 1 | 2731821010 | Silicagel |
| 910S | 1 | | | 2991851010 | Instructions, Set |
| 910S | | | 1 | 2991851310 | Instructions, Set |
| 911B | | | 1 | 2991265082 | Indicator |
| 912B | 1 | | | 2506265060 | Indicator |
| 912B | | | 1 | 2911861170 | Label |
| 912S | | | 1 | 2886851100 | Instructions, Set |
| 913B | 1 | | | 2578861010 | Label |
| 913B | | 1 | | 2911861110 | Label |
| 914B | | | 1 | 2911861140 | Label |
| 914B | 1 | | | 2932861010 | Label |
| 915B | | | 1 | 2506265060 | Indicator |
| 915B | | 1 | | 9510911010 | Label |
| 915B | 1 | | | 9510911020 | Label |
| 916B | | | 1 | 2578861010 | Label |
| 916B | 1 | | | 9511101030 | Label |
| 917B | | | 1 | 2911861190 | Label |
| 917B | | | 1 | 2932861010 | Label |
| 917B | 1 | | | 2991861010 | Label |
| 918B | | 1 | | 2911861290 | Label |
| 919B | | | 2 | 51100308S9 | B.H.M. Screw, B3x8 |
| 923B | | | 1 | 2882861020 | Label |
| ELECTRICAL PARTS | | | | | |
| JY01 | 1 | 1 | 1 | YP10001130 | Plug |
| JY02 | 1 | 1 | 1 | YP10001130 | Plug |
| JY03 | 1 | 1 | 1 | YP10001130 | Plug |
| PY01 | 1 | 1 | 1 | YH29910410 | P.W. Board, Function Indicator |
| | 1 | 1 | 1 | ZZ29910050 | P.W. Board Assembly |
| QY01 | 1 | 1 | 1 | HI10004030 | L.E.D., FM |
| QY02 | 1 | 1 | 1 | HI10004030 | L.E.D., AM |
| JZ01 | 1 | 1 | 1 | YP10001130 | Plug |
| JZ02 | 1 | 1 | 1 | YP10001130 | Plug |
| JZ03 | 1 | 1 | 1 | YP10001130 | Plug |
| JZ04 | 1 | 1 | 1 | YP10001130 | Plug |
| JZ05 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ06 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ07 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ08 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ09 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|-------------|------|---|---|------------|------------------------------|
| | U | C | E | | |
| JZ10 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ11 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ12 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ13 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ14 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ15 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ16 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ17 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| JZ18 | 1 | 1 | 1 | YJ08000170 | Jack, Lamp Holder |
| PZ01 | 1 | 1 | 1 | YF29910010 | P.W. Board, Dial Lamp |
| | 1 | 1 | 1 | ZZ29910040 | P.W. Board Assembly |
| VZ01 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ02 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ03 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ04 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ05 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ06 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| VZ07 | 1 | 1 | 1 | IN10080070 | Lamp, Dial, 8V 200mA |
| C001 | 1 | 1 | 1 | EA47601090 | Cap., Elect., 47μF, 10V |
| C002 | 1 | 1 | 1 | DF15222050 | Cap., Film, 2200pF |
| C002 | | | 1 | DO07473540 | Cap., Oil-Paper, 0.047μF |
| C003 | 1 | 1 | 1 | DF15222050 | Cap., Film, 2200pF |
| C003 | | | 1 | DO07473540 | Cap., Oil-Paper, 0.047μF |
| F001 | | | 1 | FS10050800 | Fuse, 250V 500mA, SEMKO |
| F001 | 1 | 1 | | FS10100080 | Fuse, 250V 1A, UL |
| G001 | 1 | | | BF10400040 | Printed Comp. |
| G001 | | | 1 | BF33300020 | Printed Comp. |
| J001 | 1 | 1 | | YJ04000560 | Jack, AC Outlet |
| J002 | 1 | 1 | | YJ08000120 | Jack, Fuse Holder |
| J002 | | | 1 | YJ08000220 | Jack, Fuse Holder |
| J003 | 1 | 1 | 1 | YT01040180 | Terminal, Antenna |
| J004 | 1 | 1 | 1 | YT02020140 | Terminal, Output |
| J005 | 1 | 1 | 1 | YT02010130 | Terminal, Quadradial Output |
| J006 | 1 | 1 | 1 | YJ08000190 | Jack, Meter Lamp Holder |
| J007 | 1 | 1 | 1 | YJ08000190 | Jack, Meter Lamp Holder |
| J008 | | | 1 | BY03110010 | Plug, Voltage Conversion |
| J009 | | | 1 | YL09030010 | Terminal, 3P |
| J010 | 1 | 1 | 1 | YL01030230 | Terminal, 3P Lug |
| L001 | 1 | 1 | 1 | LF11200520 | Antenna Coil, AM |
| L002 | 1 | 1 | 1 | TS16015050 | Power Transformer |
| L002 | | | 1 | TS16015060 | Power Transformer |
| L003 | 1 | 1 | 1 | LC13320020 | Choke Coil, 3.3μH |
| L004 | 1 | 1 | 1 | LC11540020 | Choke Coil, 150μH |
| M001 | 1 | 1 | 1 | IM11055010 | Meter, FM Tuning |
| M002 | 1 | 1 | 1 | IM11055020 | Meter, Signal Strength |
| R001 | 1 | 1 | 1 | GT05225120 | Res., Fixed, 2.2MΩ ±5%, 1/4W |
| S001 | 1 | 1 | | SP01010180 | Pushswitch, Power |
| S001 | | | 1 | SP04010250 | Pushswitch, Power |
| S002 | 1 | 1 | 1 | SP04020190 | Pushswitch, Selector |
| S003 | | | 1 | SP02020260 | Pushswitch, Mono/Muting |
| S003 | 1 | 1 | | SP02030070 | Pushswitch, Mono/Muting/FM |
| V001 | 1 | 1 | 1 | IN10080070 | Lamp, Meter, 8V 200mA |
| V002 | 1 | 1 | 1 | IN10080070 | Lamp, Meter, 8V 200mA |
| V003 | 1 | 1 | 1 | IN10080410 | Lamp, 8V 50mA |
| V004 | 1 | 1 | 1 | IN10080340 | Lamp, Stereo, 8V 60mA |
| W001 | | | 1 | YC01900030 | AC Power Cord |
| W001 | 1 | 1 | | YC02400220 | AC Power Cord |
| C101 | 1 | 1 | 1 | DD16120020 | Cap., Ceramic, 12pF |
| C102 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02μF |
| C103 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02μF |
| C104 | 1 | 1 | 1 | DD11020010 | Cap., Ceramic, 2pF |

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|-------------|------|---|---|------------|--------------------------------|
| | U | C | E | | |
| C105 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02 μ F |
| C106 | 1 | 1 | 1 | DD16150040 | Cap., Ceramic, 15pF |
| C107 | 1 | 1 | 1 | DD11020010 | Cap., Ceramic, 2pF |
| C108 | 1 | 1 | 1 | DD12050010 | Cap., Ceramic, 5pF |
| C109 | 1 | 1 | 1 | DD16101010 | Cap., Ceramic, 100pF |
| C110 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02 μ F |
| C111 | 1 | 1 | 1 | DD16101010 | Cap., Ceramic, 100pF |
| C112 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02 μ F |
| C113 | 1 | 1 | 1 | DD15150020 | Cap., Ceramic, 15pF |
| C114 | 1 | 1 | 1 | DD10050030 | Cap., Ceramic, 5pF |
| C115 | 1 | 1 | 1 | DD12050010 | Cap., Ceramic, 5pF |
| C116 | 1 | 1 | 1 | DD16330020 | Cap., Ceramic, 33pF |
| C117 | 1 | 1 | 1 | DD12100060 | Cap., Ceramic, 10pF |
| C118 | 1 | 1 | 1 | DK18203030 | Cap., Ceramic, 0.02 μ F |
| C119 | 1 | 1 | 1 | DD11020010 | Cap., Ceramic, 2pF |
| C120 | 1 | 1 | 1 | CA32400080 | Cap., Variable |
| C121 | 1 | 1 | 1 | CT14200010 | Cap., Trimmer |
| C151 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C152 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C153 | 1 | 1 | 1 | DK17102010 | Cap., Ceramic, 0.001 μ F |
| C154 | 1 | 1 | 1 | EA10701690 | Cap., Elect., 100 μ F, 16V |
| C155 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C156 | 1 | 1 | 1 | DF65391010 | Cap., Film, 390pF |
| C157 | 1 | 1 | 1 | DD16150010 | Cap., Ceramic, 15pF |
| C158 | 1 | 1 | 1 | DK18103010 | Cap., Ceramic, 0.01 μ F |
| C159 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C160 | 1 | 1 | 1 | DD16820010 | Cap., Ceramic, 82pF |
| C161 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C162 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C163 | 1 | 1 | 1 | EA10505090 | Cap., Elect., 1 μ F, 50V |
| C164 | 1 | 1 | 1 | EA22601690 | Cap., Elect., 22 μ F, 16V |
| C165 | 1 | 1 | 1 | EA47503590 | Cap., Elect., 4.7 μ F, 35V |
| C166 | 1 | 1 | 1 | DK17102010 | Cap., Ceramic, 0.001 μ F |
| C167 | 1 | 1 | 1 | DK18103010 | Cap., Ceramic, 0.01 μ F |
| C168 | 1 | 1 | 1 | DK16682010 | Cap., Ceramic, 0.0068 μ F |
| C169 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C170 | 1 | 1 | 1 | EA10701690 | Cap., Elect., 100 μ F, 16V |
| C171 | 1 | 1 | 1 | DF16104010 | Cap., Film, 0.1 μ F |
| C172 | 1 | 1 | 1 | EE47502510 | Cap., Elect., 4.7 μ F, 25V |
| F151 | 1 | 1 | 1 | FF10045160 | Ceramic Filter, AM, SFD455D |
| J101 | 1 | 1 | 1 | YP10001510 | Plug |
| J102 | 1 | 1 | 1 | YP10001510 | Plug |
| J103 | 1 | 1 | 1 | YP10001510 | Plug |
| J105 | 1 | 1 | 1 | YP10001510 | Plug |
| J107 | 1 | 1 | 1 | YP10001510 | Plug |
| J109 | 1 | 1 | 1 | YP10001510 | Plug |
| J110 | 1 | 1 | 1 | YP10001510 | Plug |
| J111 | 1 | 1 | 1 | YP10001510 | Plug |
| L105 | 1 | 1 | 1 | LC12220010 | Choke Coil |
| L106 | 1 | 1 | 1 | LI10239010 | IFT |
| L152 | 1 | 1 | 1 | LC13320020 | Choke Coil, 3.3 μ H |
| L153 | 1 | 1 | 1 | LC13320020 | Choke Coil, 3.3 μ H |
| L154 | 1 | 1 | 1 | LO10010480 | OSC Coil, AM |
| L155 | 1 | 1 | 1 | LI10015010 | IFT, AM |
| L156 | 1 | 1 | 1 | LI10015060 | IFT, AM |
| P100 | 1 | 1 | 1 | YD29910010 | P.W. Board, Front End |
| A201 | 1 | 1 | 1 | AV01202060 | Front End Assembly |
| Q101 | 1 | 1 | 1 | HF40045180 | FET, 3SK45 B |
| Q102 | 1 | 1 | 1 | HT305352B0 | Transistor, 2SC535 B or C |
| Q103 | 1 | 1 | 1 | HT313422B0 | Transistor, 2SC1342 B or C |
| Q151 | 1 | 1 | 1 | HC10019010 | IC, HA1197 |
| Q152 | 1 | 1 | 1 | HT313272A0 | Transistor, 2SC1327 S or T |
| Q153 | 1 | 1 | 1 | HV00006120 | Varistor, MV-203 |

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|-------------|------|----|----|------------|--|
| | U | C | E | | |
| R101 | 1 | 1 | 1 | GD05105140 | Res., Fixed, 1M Ω \pm 5%, $\frac{1}{4}$ W |
| R102 | 1 | 1 | 1 | GD05101140 | Res., Fixed, 100 Ω \pm 5%, $\frac{1}{4}$ W |
| R103 | 1 | 1 | 1 | GD05101140 | Res., Fixed, 100 Ω \pm 5%, $\frac{1}{4}$ W |
| R104 | 1 | 1 | 1 | GD05101140 | Res., Fixed, 100 Ω \pm 5%, $\frac{1}{4}$ W |
| R105 | 1 | 1 | 1 | GD05223140 | Res., Fixed, 22k Ω \pm 5%, $\frac{1}{4}$ W |
| R106 | 1 | 1 | 1 | GD05472140 | Res., Fixed, 4.7k Ω \pm 5%, $\frac{1}{4}$ W |
| R107 | 1 | 1 | 1 | GD05102140 | Res., Fixed, 1k Ω \pm 5%, $\frac{1}{4}$ W |
| R108 | 1 | 1 | 1 | GD05103140 | Res., Fixed, 10k Ω \pm 5%, $\frac{1}{4}$ W |
| R109 | 1 | 1 | 1 | GD05332140 | Res., Fixed, 3.3k Ω \pm 5%, $\frac{1}{4}$ W |
| R110 | 1 | 1 | 1 | GD05103140 | Res., Fixed, 10k Ω \pm 5%, $\frac{1}{4}$ W |
| R111 | 1 | 1 | 1 | GD05101140 | Res., Fixed, 100 Ω \pm 5%, $\frac{1}{4}$ W |
| R151 | 1 | 1 | 1 | RT05201140 | Res., Fixed, 200 Ω \pm 5%, $\frac{1}{4}$ W |
| R152 | 1 | 1 | 1 | RT05152140 | Res., Fixed, 1.5k Ω \pm 5%, $\frac{1}{4}$ W |
| R153 | 1 | 1 | 1 | RT05202140 | Res., Fixed, 2k Ω \pm 5%, $\frac{1}{4}$ W |
| R154 | 1 | 1 | 1 | RT05152140 | Res., Fixed, 1.5k Ω \pm 5%, $\frac{1}{4}$ W |
| R155 | 1 | 1 | 1 | RT05151140 | Res., Fixed, 150 Ω \pm 5%, $\frac{1}{4}$ W |
| R156 | 1 | 1 | 1 | RA05020200 | Res., Semifixed, 5k Ω |
| R157 | 1 | 1 | 1 | RT05391140 | Res., Fixed, 390 Ω \pm 5%, $\frac{1}{4}$ W |
| R158 | 1 | 1 | 1 | RT05124140 | Res., Fixed, 120k Ω \pm 5%, $\frac{1}{4}$ W |
| R159 | 1 | 1 | 1 | RT05104140 | Res., Fixed, 100k Ω \pm 5%, $\frac{1}{4}$ W |
| R160 | 1 | 1 | 1 | RT05103140 | Res., Fixed, 10k Ω \pm 5%, $\frac{1}{4}$ W |
| R161 | 1 | 1 | 1 | RT05103140 | Res., Fixed, 10k Ω \pm 5%, $\frac{1}{4}$ W |
| R162 | 1 | 1 | 1 | RT05102140 | Res., Fixed, 1k Ω \pm 5%, $\frac{1}{4}$ W |
| R163 | 1 | 1 | 1 | RT05301140 | Res., Fixed, 300 Ω \pm 5%, $\frac{1}{4}$ W |
| R164 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47k Ω \pm 5%, $\frac{1}{4}$ W |
| R165 | 1 | 1 | 1 | RT05104140 | Res., Fixed, 100k Ω \pm 5%, $\frac{1}{4}$ W |
| R166 | 1 | 1 | 1 | RT05152140 | Res., Fixed, 1.5k Ω \pm 5%, $\frac{1}{4}$ W |
| R167 | 1 | 1 | 1 | RT05242140 | Res., Fixed, 2.4k Ω \pm 5%, $\frac{1}{4}$ W |
| R169 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47k Ω \pm 5%, $\frac{1}{4}$ W |
| R170 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100 Ω \pm 5%, $\frac{1}{4}$ W |
| C201 | 1 | 1 | 1 | DD15300010 | Cap., Ceramic, 30pF |
| C202 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C203 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C204 | 1 | 1 | 1 | DK17103010 | Cap., Ceramic, 0.01 μ F |
| C205 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C206 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C207 | 1 | 1 | 1 | DK18403020 | Cap., Ceramic, 0.04 μ F |
| C208 | 1 | 1 | 1 | EA47503590 | Cap., Elect., 4.7 μ F, 35V |
| C209 | 1 | 1 | 1 | DD15400040 | Cap., Ceramic, 40pF |
| C210 | 1 | 1 | 1 | EA22601690 | Cap., Elect., 22 μ F, 16V |
| C211 | 1 | 1 | 1 | EA47405010 | Cap., Elect., 0.47 μ F, 50V |
| C212 | 1 | 1 | 1 | DK18403010 | Cap., Ceramic, 0.04 μ F |
| C213 | 1 | 1 | 1 | DK18403010 | Cap., Ceramic, 0.04 μ F |
| C214 | 1 | 1 | 1 | DK18403010 | Cap., Ceramic, 0.04 μ F |
| C215 | 1 | 1 | 1 | DK18403010 | Cap., Ceramic, 0.04 μ F |
| C216 | 1 | 1 | 1 | DK18403010 | Cap., Ceramic, 0.04 μ F |
| C217 | 1 | 1 | 1 | EA10505090 | Cap., Elect., 1 μ F, 50V |
| C218 | 1 | 1 | 1 | EA10505090 | Cap., Elect., 1 μ F, 50V |
| F201 | 1 | 1 | 1 | FF11070050 | Ceramic Filter, SFE10.7MD1 |
| F202 | 1 | 1 | 1 | FF11070050 | Ceramic Filter, SFE10.7MD1 |
| F203 | 1 | 1 | 1 | FF11070050 | Ceramic Filter, SFE10.7MD1 |
| J201 | ? | ? | ? | YP10001130 | Plug |
| J229 | 29 | 29 | 29 | YP10001130 | Plug |
| J231 | 1 | 1 | 1 | YP10001130 | Plug |
| L202 | 1 | 1 | 1 | LI14019010 | IFT, FM |
| L203 | 1 | 1 | 1 | LC11830010 | Choke Coil, 18 μ H |
| P200 | 1 | 1 | 1 | YD22042012 | P.W. Board, Tuner |
| | 1 | 1 | 1 | ZZ29912010 | P.W. Board Assembly |
| | | | 1 | ZZ29918010 | P.W. Board Assembly |
| Q201 | 1 | 1 | 1 | HT310471C0 | Transistor, 2SC1047 C |
| Q202 | 1 | 1 | 1 | HC10021010 | IC, HA1137W |

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|-------------|------|---|---|------------|----------------------------|
| | U | C | E | | |
| Q203 | 1 | 1 | 1 | HD20011050 | Diode, 1S1555 |
| Q204 | 1 | 1 | 1 | HD20011050 | Diode, 1S1555 |
| Q205 | 1 | 1 | 1 | HD20011050 | Diode 1S1555 |
| Q206 | 1 | 1 | 1 | HT308281D0 | Transistor, 2SC828 S |
| R201 | 1 | 1 | 1 | RT05151140 | Res., Fixed, 150Ω ±5%, ¼W |
| R202 | 1 | 1 | 1 | RT05331140 | Res., Fixed, 330Ω ±5%, ¼W |
| R203 | 1 | 1 | 1 | RT05153140 | Res., Fixed, 15kΩ ±5%, ¼W |
| R204 | 1 | 1 | 1 | RT05202140 | Res., Fixed, 2kΩ ±5%, ¼W |
| R205 | 1 | 1 | 1 | RT05331140 | Res., Fixed, 330Ω ±5%, ¼W |
| R206 | 1 | 1 | 1 | RT05102140 | Res., Fixed, 1kΩ ±5%, ¼W |
| R207 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R208 | 1 | 1 | 1 | RT05334140 | Res., Fixed, 330kΩ ±5%, ¼W |
| R209 | 1 | 1 | 1 | RA05030120 | Res., Semifixed, 50kΩ (B) |
| R210 | 1 | 1 | 1 | RT05103140 | Res., Fixed, 10kΩ ±5%, ¼W |
| R211 | 1 | 1 | 1 | RT05104140 | Res., Fixed, 100kΩ ±5%, ¼W |
| R212 | 1 | 1 | 1 | RA01030250 | Res., Semifixed, 10kΩ (B) |
| R213 | 1 | 1 | 1 | RT05123140 | Res., Fixed, 12kΩ ±5%, ¼W |
| R214 | 1 | 1 | 1 | RT05331140 | Res., Fixed, 330Ω ±5%, ¼W |
| R215 | 1 | 1 | 1 | RA05030120 | Res., Semifixed, 50kΩ (B) |
| R216 | 1 | 1 | 1 | RT05562140 | Res., Fixed, 5.6kΩ ±5%, ¼W |
| R217 | 1 | 1 | 1 | RT05222140 | Res., Fixed, 2.2kΩ ±5%, ¼W |
| R218 | 1 | 1 | 1 | RT05222140 | Res., Fixed, 2.2kΩ ±5%, ¼W |
| R219 | 1 | 1 | 1 | RT05123140 | Res., Fixed, 12kΩ ±5%, ¼W |
| R220 | 1 | 1 | 1 | RT05391140 | Res., Fixed, 390Ω ±5%, ¼W |
| R221 | 1 | 1 | 1 | RT05223140 | Res., Fixed, 22kΩ ±5%, ¼W |
| R222 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R223 | 1 | 1 | 1 | RT05470140 | Res., Fixed, 47Ω ±5%, ¼W |
| R224 | 1 | 1 | 1 | RT05102140 | Res., Fixed, 1kΩ ±5%, ¼W |
| C301 | 1 | 1 | 1 | EA47503590 | Cap., Elect., 4.7μF, 35V |
| C302 | 1 | 1 | 1 | DF65361500 | Cap., Film, 360pF |
| C303 | 1 | 1 | 1 | EA10701690 | Cap., Elect., 100μF, 16V |
| C304 | 1 | 1 | 1 | EE33502510 | Cap., Elect., 3.3μF, 25V |
| C305 | 1 | 1 | 1 | EE10505010 | Cap., Elect., 1μF, 50V |
| C306 | 1 | 1 | 1 | EA10505090 | Cap., Elect., 1μF, 50V |
| C307 | 1 | 1 | 1 | EQ22405010 | Cap., Elect., 0.22μF, 50V |
| C308 | 1 | 1 | 1 | DF17473010 | Cap., Film, 0.047μF |
| C309 | 1 | 1 | 1 | DD15500050 | Cap., Ceramic, 50pF |
| C310 | 1 | 1 | 1 | DD15500050 | Cap., Ceramic, 50pF |
| C311 | 1 | 1 | 1 | EA10601690 | Cap., Elect., 10μF, 16V |
| C312 | 1 | 1 | 1 | EA10601690 | Cap., Elect., 10μF, 16V |
| C313 | 1 | 1 | 1 | EA22505090 | Cap., Elect., 2.2μF, 50V |
| C314 | 1 | 1 | 1 | EA22505090 | Cap., Elect., 2.2μF, 50V |
| C315 | 1 | 1 | 1 | DF15102050 | Cap., Film, 1000pF |
| C315 | 1 | 1 | 1 | DF15222050 | Cap., Film, 2200pF |
| C316 | 1 | 1 | 1 | DF15102050 | Cap., Film, 1000pF |
| C316 | 1 | 1 | 1 | DF15222050 | Cap., Film, 2200pF |
| C317 | 1 | 1 | 1 | EA47405010 | Cap., Elect., 0.47μF, 50V |
| C318 | 1 | 1 | 1 | EA47405010 | Cap., Elect., 0.47μF, 50V |
| C319 | 1 | 1 | 1 | EE47502510 | Cap., Elect., 4.7μF, 25V |
| C320 | 1 | 1 | 1 | EE47502510 | Cap., Elect., 4.7μF, 25V |
| C321 | 1 | 1 | 1 | EA10701690 | Cap., Elect., 100μF, 16V |
| C322 | 1 | 1 | 1 | EE10601640 | Cap., Elect., 10μF, 16V |
| L301 | 1 | 1 | 1 | LS35025010 | MPX Coil |
| Q301 | 1 | 1 | 1 | HT308281D0 | Transistor, 2SC828 S |
| Q302 | 1 | 1 | 1 | HC10020010 | IC, HA1196 |
| Q303 | 1 | 1 | 1 | HT313441E0 | Transistor, 2SC1344 E |
| Q304 | 1 | 1 | 1 | HT313441E0 | Transistor, 2SC1344 E |
| R301 | 1 | 1 | 1 | RA01030310 | Res., Semifixed, 10kΩ (B) |
| R302 | 1 | 1 | 1 | RT05104140 | Res., Fixed, 100kΩ ±5%, ¼W |
| R303 | 1 | 1 | 1 | RT05223140 | Res., Fixed, 22kΩ ±5%, ¼W |
| R304 | 1 | 1 | 1 | RT05102140 | Res., Fixed, 1kΩ ±5%, ¼W |
| R305 | 1 | 1 | 1 | RT05104140 | Res., Fixed, 100kΩ ±5%, ¼W |
| R306 | 1 | 1 | 1 | RT05824140 | Res., Fixed, 820kΩ ±5%, ¼W |

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|-------------|------|---|---|------------|----------------------------|
| | U | C | E | | |
| R307 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R308 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R309 | 1 | 1 | 1 | RT05154140 | Res., Fixed, 150kΩ ±5%, ¼W |
| R310 | 1 | 1 | 1 | RT05223140 | Res., Fixed, 22kΩ ±5%, ¼W |
| R311 | 1 | 1 | 1 | RT05272140 | Res., Fixed, 2.7kΩ ±5%, ¼W |
| R312 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R313 | 1 | 1 | 1 | RT05303140 | Res., Fixed, 30kΩ ±5%, ¼W |
| R314 | 1 | 1 | 1 | RT05303140 | Res., Fixed, 30kΩ ±5%, ¼W |
| R315 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R316 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R317 | 1 | 1 | 1 | RA05040080 | Res., Semifixed, 500kΩ (B) |
| R318 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R319 | 1 | 1 | 1 | RT05273140 | Res., Fixed, 27kΩ ±5%, ¼W |
| R320 | 1 | 1 | 1 | RT05273140 | Res., Fixed, 27kΩ ±5%, ¼W |
| R321 | 1 | 1 | 1 | RT05332140 | Res., Fixed, 3.3kΩ ±5%, ¼W |
| R322 | 1 | 1 | 1 | RT05332140 | Res., Fixed, 3.3kΩ ±5%, ¼W |
| R323 | 1 | 1 | 1 | RT05332140 | Res., Fixed, 3.3kΩ ±5%, ¼W |
| R324 | 1 | 1 | 1 | RT05332140 | Res., Fixed, 3.3kΩ ±5%, ¼W |
| R325 | 1 | 1 | 1 | RT05243140 | Res., Fixed, 24kΩ ±5%, ¼W |
| R326 | 1 | 1 | 1 | RT05243140 | Res., Fixed, 24kΩ ±5%, ¼W |
| R327 | 1 | 1 | 1 | RT05394140 | Res., Fixed, 390kΩ ±5%, ¼W |
| R328 | 1 | 1 | 1 | RT05394140 | Res., Fixed, 390kΩ ±5%, ¼W |
| R329 | 1 | 1 | 1 | RT05105140 | Res., Fixed, 1MΩ ±5%, ¼W |
| R330 | 1 | 1 | 1 | RT05105140 | Res., Fixed, 1MΩ ±5%, ¼W |
| R331 | 1 | 1 | 1 | RT05391140 | Res., Fixed, 390Ω ±5%, ¼W |
| R332 | 1 | 1 | 1 | RT05391140 | Res., Fixed, 390Ω ±5%, ¼W |
| R333 | 1 | 1 | 1 | RT05222140 | Res., Fixed, 2.2kΩ ±5%, ¼W |
| R334 | 1 | 1 | 1 | RT05222140 | Res., Fixed, 2.2kΩ ±5%, ¼W |
| R335 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R336 | 1 | 1 | 1 | RT05473140 | Res., Fixed, 47kΩ ±5%, ¼W |
| R337 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R338 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R339 | 1 | 1 | 1 | RT05101140 | Res., Fixed, 100Ω ±5%, ¼W |
| R340 | 1 | 1 | 1 | RT05201140 | Res., Fixed, 200Ω ±5%, ¼W |
| C801 | 1 | 1 | 1 | DK18103510 | Cap., Ceramic, 0.01μF |
| C802 | 1 | 1 | 1 | EA22705090 | Cap., Elect., 220μF, 50V |
| C803 | 1 | 1 | 1 | EA22705090 | Cap., Elect., 220μF, 50V |
| C804 | 1 | 1 | 1 | EA33701690 | Cap., Elect., 330μF, 16V |
| C805 | 1 | 1 | 1 | DK18103510 | Cap., Ceramic, 0.01μF |
| C806 | 1 | 1 | 1 | EA10701690 | Cap., Elect., 100μF, 16V |
| F801 | 1 | 1 | 1 | FS10315800 | Fuse, 3.15AT, SEMKO |
| F802 | 1 | 1 | 1 | FS10020800 | Fuse, 200mA, SEMKO |
| F803 | 1 | 1 | 1 | FS10020800 | Fuse, 200mA, SEMKO |
| J801 | 1 | 1 | 1 | YP10001130 | Plug |
| J802 | 1 | 1 | 1 | YP10001130 | Plug |
| J803 | 1 | 1 | 1 | YP10001130 | Plug |
| J804 | 1 | 1 | 1 | YP10001130 | Plug |
| J805 | 1 | 1 | 1 | YP10001130 | Plug |
| J806 | 1 | 1 | 1 | YP10001130 | Plug |
| J807 | 1 | 1 | 1 | YP10001130 | Plug |
| J808 | 1 | 1 | 1 | YP10001130 | Plug |
| J809 | 1 | 1 | 1 | YP10001130 | Plug |
| J810 | 1 | 1 | 1 | YP10001130 | Plug |
| J811 | 1 | 1 | 1 | YP10001130 | Plug |
| J812 | 1 | 1 | 1 | YJ08000200 | Jack |
| J813 | 1 | 1 | 1 | YJ08000200 | Jack |
| J814 | 1 | 1 | 1 | YJ08000200 | Jack |
| J815 | 1 | 1 | 1 | YJ08000200 | Jack |
| J816 | 1 | 1 | 1 | YJ08000200 | Jack |
| J817 | 1 | 1 | 1 | YJ08000200 | Jack |
| P800 | 1 | 1 | 1 | YK29910610 | P.W. Board, Power Supply |
| P800 | 1 | 1 | 1 | ZZ29910020 | P.W. Board Assembly |
| P800 | 1 | 1 | 1 | YK29910620 | P.W. Board, Power Supply |

U : For U.S.A.
 C : For Canada
 E : For Europe

| REF. DESIG. | Q'TY | | | PART NO. | DESCRIPTION |
|----------------|------|---|---|------------|---|
| | U | C | E | | |
| | | | 1 | ZZ29918030 | P.W. Board Assembly |
| Q801 | 1 | 1 | 1 | HD20011030 | Diode, DS131-B |
| Q802 | 1 | 1 | 1 | HD30021090 | Zener, BZ-140 |
| Q803 | 1 | 1 | 1 | HT403131E0 | Transistor, 2SD313E |
| Q804 | 1 | 1 | 1 | HD20005010 | Diode, W06B |
| R801 | 1 | 1 | 1 | GJ05390020 | Res., Fixed, 39 Ω \pm 5%, 2W |
| R802 | 1 | 1 | 1 | RT05332140 | Res., Fixed, 3.3k Ω \pm 5%, 1/4W |
| R803 | 1 | 1 | 1 | RT05100140 | Res. Fixed, 10 Ω \pm 5%, 1/4W |
| R804 | 1 | 1 | 1 | RT05681140 | Res., Fixed, 680 Ω \pm 5%, 1/4W |

10. TECHNICAL SPECIFICATIONS

FM TUNER SECTION:

| | |
|---|------------------------|
| Sensitivity | |
| IHF Usable | 10.3 dBf (1.8 μ V) |
| IHF 50 dB Quieting (Mono) | 13.2 dBf (2.5 μ V) |
| (Stereo) | 37.3 dBf (40 μ V) |
| DIN Sensitivity (Mono, 26 dB S/N, 300 ohms input) | 1.6 μ V |
| (Stereo, 46 dB S/N, 300 ohms input) | 50 μ V |
| Quieting Slope (Mono) | |
| RF Input for 30 dB Quieting | 9.3 dBf (1.6 μ V) |
| Quieting at: | |
| 20 dBf (5.5 μ V) | 58 dB |
| 25 dBf (10 μ V) | 62 dB |
| 40 dBf (55 μ V) | 70 dB |
| 65 dBf (1000 μ V) | 74 dB |
| Quieting Slope (Stereo) | |
| Quieting at: | |
| 30 dBf (17 μ V) | 42 dB |
| 40 dBf (55 μ V) | 53 dB |
| 50 dBf (173 μ V) | 58 dB |
| 65 dBf (1000 μ V) | 65 dB |
| Distortion (Mono) at 65 dBf (1000 μ V) | |
| 100 Hz | 0.25% |
| 1000 Hz | 0.15% |
| 6000 Hz | 0.3% |
| Distortion (Stereo) at 65 dBf (1000 μ V) | |
| 100 Hz | 0.35% |
| 1000 Hz | 0.3% |
| 6000 Hz | 0.5% |
| Distortion (Mono and Stereo) | |
| at 50 dB Quieting, 1000 Hz | 0.6% |
| Hum and Noise | |
| at 65 dBf (1000 μ V) | |
| Mono | 72 dB |
| Frequency Response | |
| 30 Hz to 15 kHz | |
| Mono | +0.2, -1.5 dB |
| Stereo | +0.2, -1.5 dB |
| Capture Ratio | |
| at 45 dBf (100 μ V) | 1.5 dB |
| at 65 dBf (1000 μ V) | 1.0 dB |
| Alternate Channel Selectivity | 70 dB |
| Spurious Response Rejection | 90 dB |
| Image Response Rejection | 60 dB |
| I.F. Rejection (Balanced) | 80 dB |
| A.M. Suppression | 50 dB |
| Stereo Separation | |
| 100 Hz | 40 dB |
| 1000 Hz | 45 dB |
| 10 kHz | 40 dB |
| Subcarrier Rejection | 60 dB |

AM TUNER SECTION:

| | |
|----------------------------------|------------------|
| IHF Usable Sensitivity | 15 μ V |
| Distortion (THD), 30% Modulation | 0.5% |
| Signal-to-Noise Ratio | 50 dB |
| Frequency Response (\pm 3 dB) | 40 Hz to 2.3 kHz |

| | |
|-------------------------------|-------|
| Alternate Channel Selectivity | 46 dB |
| Image Rejection | 45 dB |
| Spurious Response Rejection | 60 dB |
| I.F. Rejection | 40 dB |

GENERAL:

| | |
|--------------------|--|
| Power Requirements | 120 V AC, 60 Hz (U.S.A. and Canadian Versions) 220 V AC, 50 Hz (European Version) |
| | (This unit can be converted by a qualified technician to operate on 110/120/240 V AC, 50/60 Hz.) |

| | |
|-------------------|------|
| Power Consumption | 23 W |
|-------------------|------|

Semiconductor Complement:

| | |
|---------------------|---|
| Integrated Circuits | 3 |
| Transistors | 9 |
| Diodes | 7 |
| Dual Gate MOSFET | 1 |

Dimensions:

| | |
|--------------|------------------------|
| Panel Width | 416 mm (16-3/8 inches) |
| Panel Height | 146 mm (5-3/4 inches) |
| Depth | 239 mm (9-3/8 inches) |

Weight:

| | |
|---------------------|-------------------|
| Unit alone | 6.0 kg (13.2 lbs) |
| Packed for shipment | 7.4 kg (16.3 lbs) |



marantz

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