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SERVICE MANUAL
PERFORMANCE SPECIFICATIONS

Power Output Stereo
Minimum sine wave continuous average power output is:
- 500 watts into 2 ohm load
- 500 watts into 4 ohm load
- 500 watts into 8 ohm load

Output Load Impedance
2, 4 or 8 ohms

Rated Power Band
20Hz to 20,000Hz

Total Harmonic Distortion
Maximum Total Harmonic Distortion at any power level from 250 milliwatts to rated power output is 0.005%

Intermodulation Distortion
Maximum Intermodulation Distortion if instantaneous peak output per channel does not exceed twice the rated output, for any combination of frequencies from 20Hz to 20,000Hz, with all channels operating is 0.005%

Dynamic Headroom
1.8dB

Frequency Response
+0, -0.25dB from 20Hz to 20,000Hz
+0, -3dB from 10Hz to 100,000Hz

Sensitivity
2.1 Volts Unbalanced Input
4.2 Volts Balanced Input

A-Weighted Signal To Noise Ratio
97dB (124dB below rated output)

Input Impedance
10,000 ohms Unbalanced Inputs
20,000 ohms Balanced Inputs

Wide Band Damping Factor
100 (8 ohm wideband)

Power Requirements
- 100 Volts, 50/60Hz at 8 amps
- 110 Volts, 50/60Hz at 7.2 amps
- 120 Volts, 50/60Hz at 6.6 amps
- 220 Volts, 50/60Hz at 3.3 amps
- 230 Volts, 50/60Hz at 3.3 amps
- 240 Volts, 50/60Hz at 3.3 amps

Note: Refer to the rear panel of the MC501 for the correct voltage.

Overall Dimensions
- 17-1/2 inches (44.45cm) W, 9-7/16 inches (23.97cm) H, 14-3/4 inches (37.5cm) D, including clearance for connectors

Weight
- 91.5 pounds (41.6kg) net, 105.5 pounds (48kg) in shipping carton

NOTES

1. The heavy notes on the schematic denote the primary signal path.

2. Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
   a. AC input at 120 volts, 50/60Hz.
   b. All voltages are +/-10% with respect to ground. A high impedance (10 megaohm) voltmeter must be used.

3. Unless otherwise specified:
   a. Resistor values are in ohms.
   b. Capacitor values are microfarads (uF).
   c. Inductor values are in microhenries (uH).

4. On PC board drawings, Square pad indicates:
   a. Polarized Capacitors - Positive
   b. Diodes - Cathode
   c. Others - Pin 1

5. WARNING
   Parts marked with the symbol ▲ have critical characteristics. Use only replacement parts recommended by the manufacturer.
TOP and REAR PANEL

TOP VIEW

REAR VIEW
* DENOTES COMPONENTS ON BACKSIDE OR NARROW SIDE OF PCB BOARD.
WARNING: Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

* DENOTES COMPONENTS ON BACKSIDE OF PCB
<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>016492</td>
<td>CENTER GLASS PLATE</td>
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<tr>
<td>2</td>
<td>016491</td>
<td>GLASS PANEL W/HOLE</td>
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<tr>
<td>3</td>
<td>018717</td>
<td>END CAP</td>
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<td>4</td>
<td>018715</td>
<td>TOP/BOTTOM END CAP</td>
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<td>5</td>
<td>018711</td>
<td>CENTER EXTRUSION</td>
</tr>
<tr>
<td>6</td>
<td>094042</td>
<td>TAPE VINYL FOAM 1/16 X 1/4</td>
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<tr>
<td>7</td>
<td>049321</td>
<td>ASSY KNOB</td>
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<tr>
<td>8</td>
<td>104017</td>
<td>WASHER FUT BLK 1 X 1/4 X 1/16</td>
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<td>9</td>
<td>100342</td>
<td>SCREW M-32 X 3/8 FILLISTER HD</td>
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<tr>
<td>10</td>
<td>092418</td>
<td>FILTER BLUE DISPLAY</td>
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<tr>
<td>11</td>
<td>005309</td>
<td>GLASS PANEL PLATE</td>
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<tr>
<td>12</td>
<td>005311</td>
<td>GAP PLATE</td>
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<td>13</td>
<td>100276</td>
<td>SCREW MACH SEM 6-32 X 5/16 PH PN</td>
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<tr>
<td>14</td>
<td>101074</td>
<td>SCREW TAPPING 4-40 X 1/4 PH PN</td>
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<td>15</td>
<td>005310</td>
<td>METAL CLAMP</td>
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<td>16</td>
<td>017913</td>
<td>LOGO BACKLIGHT</td>
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<td>17</td>
<td>094430</td>
<td>FOAM TAPE 1/8&quot; THK</td>
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<td>18</td>
<td>124086</td>
<td>METER</td>
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<td>19</td>
<td>017901</td>
<td>LOGO PUSHBUTTON BACKLIGHT</td>
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<td>20</td>
<td>094274</td>
<td>TAPE ADHESIVE</td>
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<td>21</td>
<td>017923</td>
<td>BACKLIGHT METER 6&quot;</td>
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<td>22</td>
<td>005306</td>
<td>SUBPANEL</td>
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<tr>
<td>23</td>
<td>146243</td>
<td>SWITCH POWER</td>
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### Exploded View Continuation and Parts List

- **Part No.**
- **Comment**

24 021159  BUSHING SWITCH
25 104438  WASHER FIBER 150ID X 312OD
26 102045  KEP NUT 6-32 SPECIAL
27 021030  SPACER 6 X 1/4
28 049850  ASSY METER PCB
29 101054  SCREW TAPITTE 6-32 X 1/4 PH PN BLK
30 101172  SCREW TC 6-32 X 1/4 PH FL UNC
31 005291  DUST COVER
32 100200  SCREW MACH 10-32 X 1/2 TRUSS HD
33 126937  DEICAL TOP COVER
34 101059  SCREW SM 6 X 5/8 PH PN TYPE A
35 049466  POTTED TRANSFORMER POWER
36 049467  POTTED TRANSFORMER OUTPUT
37 126913  DEICAL POWER TRANSFORMER
38 126914  DEICAL OUTPUT TRANSFORMER
39 005505  CHASSIS
40 049829  ASSY INPUT PCB
41 101197  SCREW HILO 4-24 X 3/8 PH HD BLK
42 100250  SCREW MACH SEMI 6-32 X 1/4 PH PN
43 117741  POST BINDING BLACK
44 117740  POST BINDING RED
45 178161  HOLDER FUSE
46 018690  HEAT Sink
47 049828  ASSY DRIVER HEAT Sink PCB
48 094206  ISO S TRATE
49 112087  SPACER PCB 1/4
50 114141  CLIP RIGHT ANGLE
51 049931  ASSY POWER SUPPLY PCB
52 005507  SUPPORT BRACKET
53 102006  NUT MACH 10-32 W/LOCK
54 005508  CAPA TIOR STRAP
55 094391  TAPE FOAM 1/8 X 3/4
56 074991  TERMINAL BLOCK AC
57 104001  WASHER FLAT STEEL 3 X 9/32 X .025
58 104142  WASHER LOCK 2.5mm INT STAR ZINC
59 102022  NUT MACH 4-40 X 3/16 X 1/6
60 005240  HEAT Sink VENT
61 101176  SCREW TC 6-32 X 1/2 PH PN TYPE F
62 104805  WASHER FLAT STEEL 6 X 3/8 X .032
63 1070139  DISC R E C T IFER
64 084135  PAD THERMAL
65 102005  NUT MACH 8-32 W/LOCK
66 017452  KLIP WIRE
67 102020  NUT 6-32 SELF LOCK
68 101078  SCREW TAP 8-32 X 5/16 PH PN BLK
69 102052  NUT GOLD SUPPLIED W/117578
70 104162  WASHER LOCK INTERNAL TOOTH
71 102015  NUT HEX M9 X 75 GOLD PLATED
72 005235  HEAT Sink COVER
73 104016  WASHER INT STAR 5 X 630 X .022
74 005242  BOTTOM COVER
75 106007  SPRING CLIP LATCH TYPE
76 017218  FOOT PLASTIC BLACK
77 104033  WASHER FLAT #10 CLEAR ZINC
78 100159  NUT MACH 10-32 X 3/4 PH PN BLK
REPACKING INSTRUCTIONS

In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

**IMPORTANT** - The four plastic feet must be attached to the bottom of the unit so they will locate in the four holes of the bottom pad. Two #10 x 2-1/4" screws and washers must be used to fasten the unit securely to the bottom pad and wood skid. Failure to do this will result in shipping damage.

If a shipping carton or any of the interior parts is needed, please call or write the Customer Service Department of McIntosh Laboratory. Order parts from the accompanying list by part number.

Use the original shipping carton and interior parts only if they are in good serviceable condition.

<table>
<thead>
<tr>
<th>Qty</th>
<th>Part No.</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>034198</td>
<td>Inner carton top</td>
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<tr>
<td>1</td>
<td>034188</td>
<td>Inner carton foam pad</td>
</tr>
<tr>
<td>4</td>
<td>017218</td>
<td>Plastic foot (unit)</td>
</tr>
<tr>
<td>1</td>
<td>033739</td>
<td>Poly bag</td>
</tr>
<tr>
<td>4</td>
<td>100159</td>
<td>#10-32 x 3/4&quot; Machine screw</td>
</tr>
<tr>
<td>4</td>
<td>104083</td>
<td>#10 x 7/16&quot; Flat washer</td>
</tr>
<tr>
<td>1</td>
<td>034194</td>
<td>Bottom pad</td>
</tr>
<tr>
<td>3</td>
<td>017218</td>
<td>Plastic foot (spacer)</td>
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<tr>
<td>1</td>
<td>033699</td>
<td>Shipping skid</td>
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<tr>
<td>3</td>
<td>101204</td>
<td>#10 x 2-1/2&quot; Wood screw</td>
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<tr>
<td>3</td>
<td>104033</td>
<td>#10 x 1-3/4&quot; Flat washer</td>
</tr>
<tr>
<td>2</td>
<td>034159</td>
<td>Foam end caps</td>
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<tr>
<td>1</td>
<td>034158</td>
<td>Shipping carton</td>
</tr>
<tr>
<td>1</td>
<td>034199</td>
<td>Inner carton bottom</td>
</tr>
</tbody>
</table>

INNER CARTON TOP

FOAM PAD

POLY BAG WITH UNIT INSIDE

PLASTIC FOOT (4)

#10-32 x 3/4" SCREW w/ WASHER (4)

BOTTOM PAD

PLASTIC FOOT (3)

SHIPPING SKID

#10 x 2-1/2 SCREW w/ WASHER (3)

FOAM END CAP (2)

INNER CARTON BOTTOM

IMPORTANT (Read Above)

SHIPPING CARTON
The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated, who reserve the right to improve design without notice. Because of the constant upgrading of McIntosh products’ circuitry and components, the Company cannot insure, and does not warrant, the accuracy of the within schematic material, which is intended for information only.