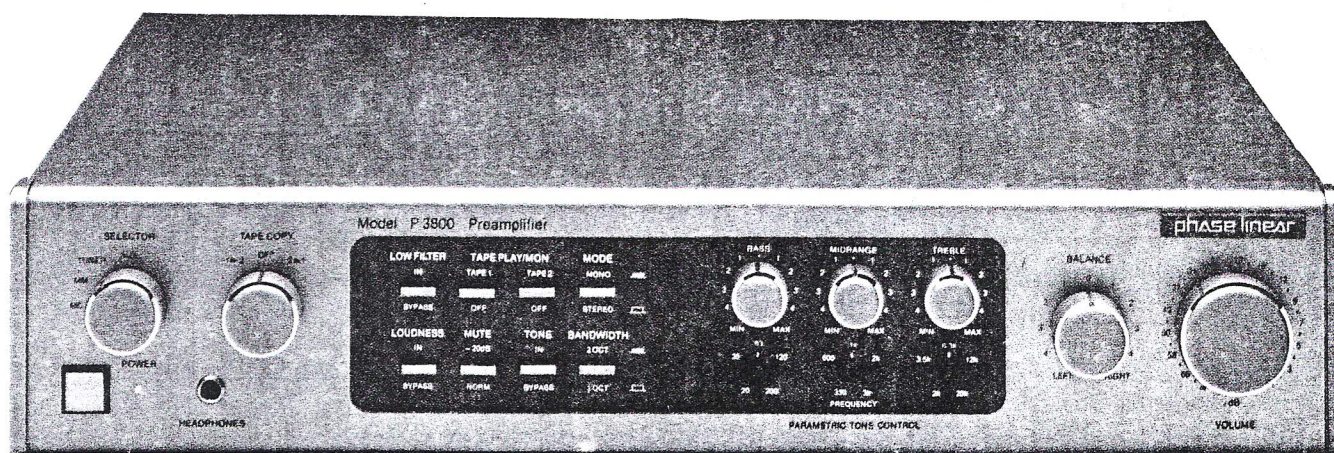


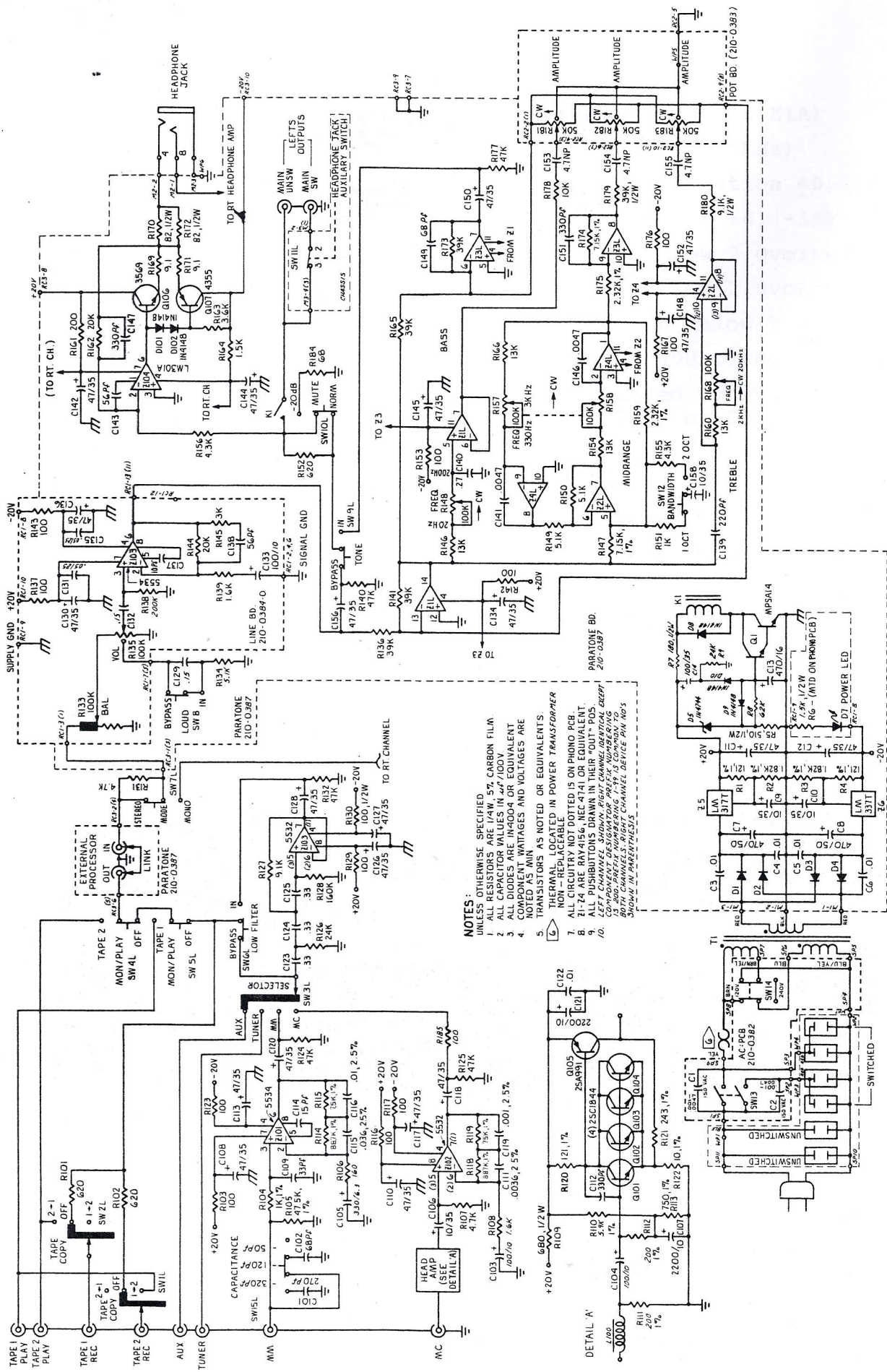
SERVICE MANUAL

MODEL P3800

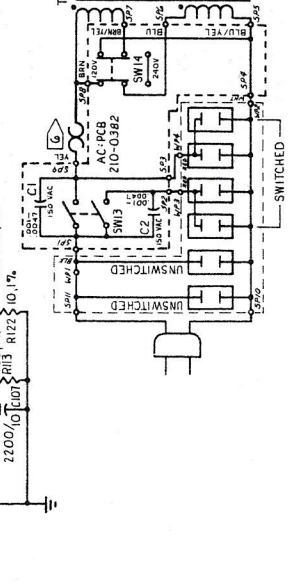
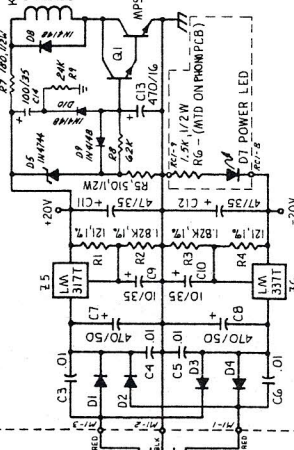
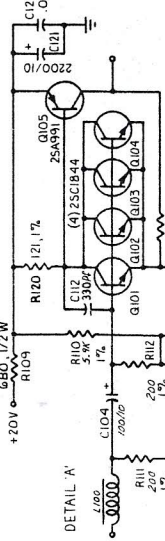


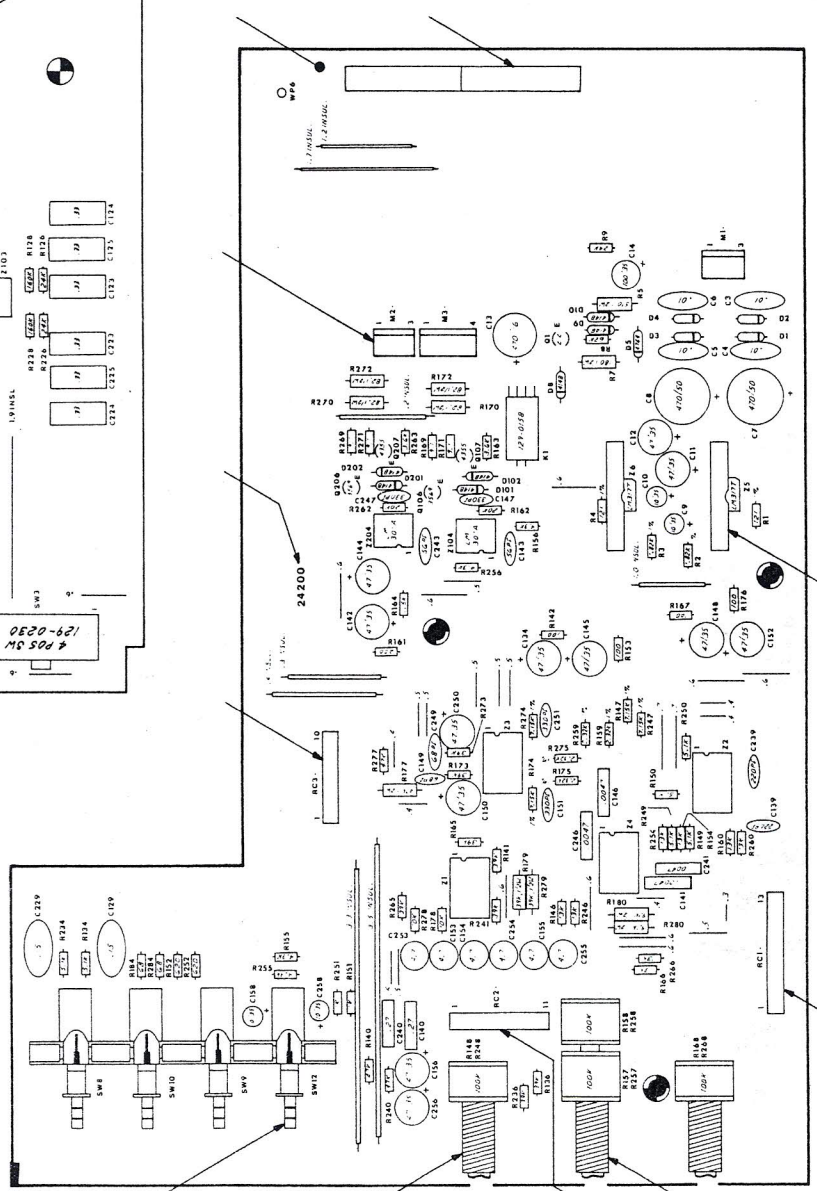
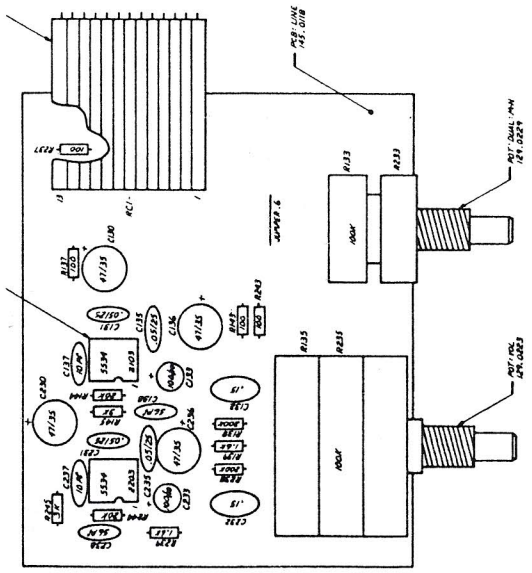
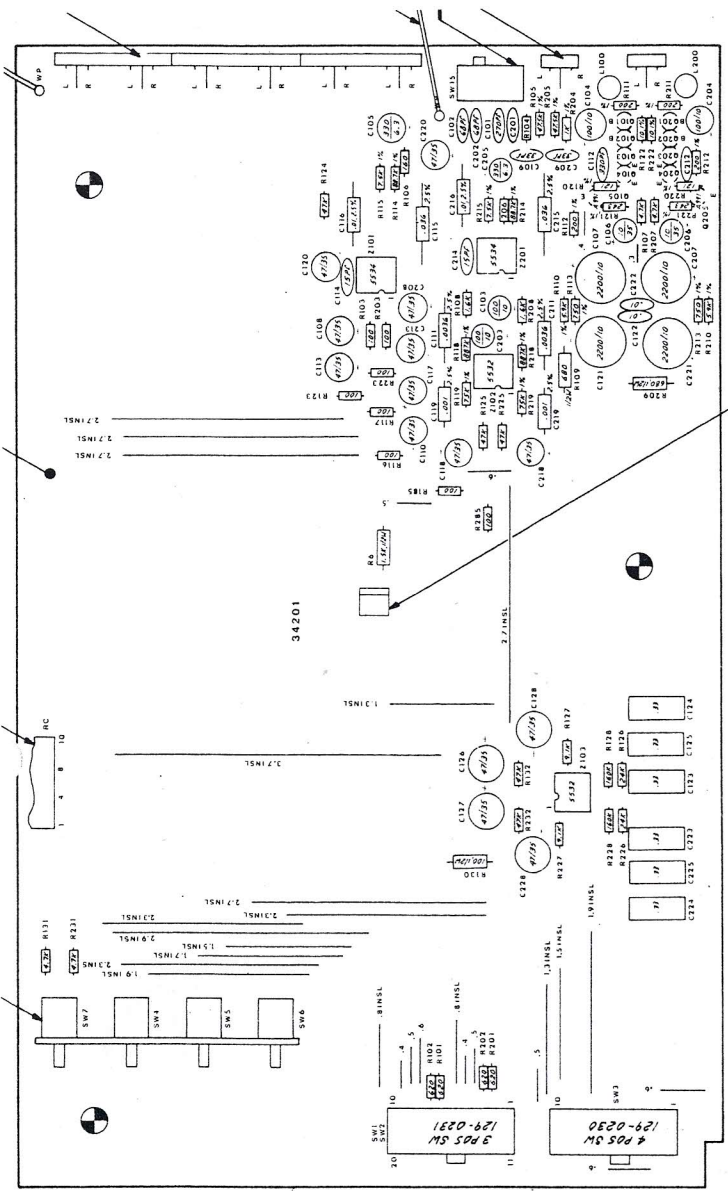
phase linear™

Division of International Jensen Incorporated / an **ESMARK** Company



- NOTES:**
 UNLESS OTHERWISE SPECIFIED
 1 ALL RESISTORS ARE 1/4W, 5% CARBON FILM
 2 ALL CAPACITOR VALUES IN μ F 700V EQUIVALENT
 3 ALL CAPACITORS ARE POLARIZED UNLESS OTHERWISE NOTED AS 'MIN'
 4 COMPONENT DESIGNATOR PREFIX NUMBERING SYSTEM IS USED
 5 TRANSISTORS AS NOTED OR EQUIVALENTS
 6 THERMAL LOCATED IN POWER TRANSFORMER NON-REPLACABLE
 7 ALL CIRCUITRY NOT DOTTED IS ON PHONO PCB
 8 R1-74 ARE RAY4156, NEC 4141 OR EQUIVALENT
 9 R1-74 ARE RAY4156, NEC 4141 OR EQUIVALENT
 10 LEFT CHANNEL DESIGNATOR PREFIX NUMBERING SYSTEM IS USED
 BOTH CHANNELS RIGHT CHANNEL DEVICE PIN 10'S SHOWN IN PARENTHESES





SPECIFICATIONS:

Rated Output Voltage: 2.0 volts RMS (0.5 volts EIA)
THD @ Rated Output: Less than 0.003% (20Hz-20KHz)
Frequency Response: Phono MM & MC RIAA Deviation ± 0.1 dB
High Level: 10Hz-100KHz +0, -3dB
Signal TO Noise Ratio: Phono MM: 97dB below 2.0volts
(A-weighted) Phono MC: 94dB below 2.0volts
High Level: 100dB below 2.0volts
IM Distortion: Less than 0.002% (SMPTE 60Hz,7KHz @ 4:1)
Input Impedance: Phono MM: 47Kohm shunted by switch
selectable 50pF, 120pF, or 320pF
Phono MC: 100 ohm
High Level: 20Kohm
Input Sensitivity For Rated Output: Phono MM: 2.5mV
Phono MC: 100uV
High Level 150 mV
Max. Output At Clipping: Better than 10volts into 10Kohm
Phono Overload Level (1KHz): MM: 200mV MC: 9mV
Volume Control Tracking: ± 0.25 dB
Slew Rate: 10 volts/microsecond
Channel Separation: 70dB @ 1KHz 40dB @ 20KHz
Tone Controls: Type; Parametric bandpass and shelving
Amplitude adjustment range;
bass and treble ± 12 dB
midrange ± 6 dB
Freq. adjustment range;
bass 20Hz-200Hz
midrange 330Hz-3KHz
treble 2KHz-20KHz
Midrange bandwidth; 1 or 2 octaves
Headphone Amplifier: Rated output power; 100mW into 8ohms
with less than 0.05% THD from 20Hz-20KHz
both channels driven
S/N; greater than 90dB at 100mW output
Low Filter: -18dB per octave slope at 15Hz corner freq.
Power Requirements: 120 VAC @ 60Hz
220/240 VAC @ 50/60Hz
power consumption; 12 Watts