

TRAYNOR

PM-100

OPERATING INSTRUCTIONS

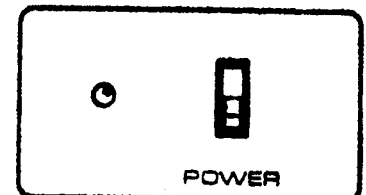
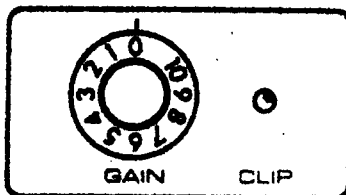
The PM-100 Power Amplifier is a solid state amplifier capable of driving P.A. speaker systems, stage monitors and components in large P.A. systems. In applications where more power is required this unit can be interconnected with additional power amplifiers. The unit can be driven from most mixers, preamplifiers and "Effect Boxes". The amplifier heat sink is thermally joined to the chassis, utilizing the entire unit for heat dissipations, thus, allowing safe operation in any position. The unit can also be mounted in standard 19" racks.

FRONT PANEL

Gain Control Sets the operating level of the amplifier by controlling the level of the input signal.

'Clip Indicator' Lights whenever the amplifier is driven into clipping (ie. distortion).

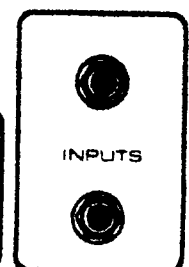
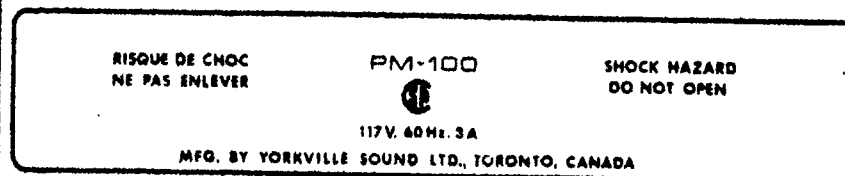
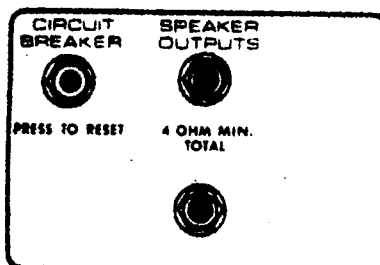
Power Switch Switches A.C. power line. Red LED will indicate amplifier being in "ON" position.



BACK PANEL

Inputs Both inputs are wired in parallel, allowing interconnection of more power amplifiers without the use of "Y" jacks.

Outputs To be connected to separate speaker cabinets.



PROTECTION CIRCUITS

A.C. Circuit Breaker Protects circuitry from A.C. line overloads. Turn power switch "OFF", press to reset, then resume normal operation.

Thermal Circuit Breaker Should your PM-100 overheat for any reason, (e.g. poor ventilation, short circuits, or low overall speaker impedance) the internal thermal breaker will shut the amplifier down (pilot L.E.D. goes out) until the unit cools to a safe operating temperature. Turn power switch to "OFF", check ventilation, speaker lines, etc. and resume normal operation.

Short Circuit Clamp The 'Clamp' circuitry in your PM-100 protects the output stage from 'blowing' if the amplifier is subjected to short circuit conditions (e.g. shorted speaker lines). This provides excellent protection and eliminates the need for annoying fuses and/or amplifier failure. If your amplifier doesn't seem to work and the pilot lamp lights, check all speakers and cables before continuing use.

SPECIFICATIONS

Power Output 100 watts R.M.S. minimum into 4 ohms
75 watts R.M.S. minimum into 8 ohms

T.H.D. (Total Harmonic Distortion) Less than 0.5 at full power output.

Frequency Response 10Hz. - 35kHz. \pm 1.5 d.b. at full output.

Input Sensitivity 0.775 volts R.M.S. for rated output.

Input Impedance 32K ohms : Gain at '10'
to 100K ohms : Gain at '0'

Output Impedance 4 - 8 ohms (recommended).

Signal-to-Noise 86 d.b.

Power Requirements 110 to 120 V.A.C./ 60 Hz., 3 Amps. Max.

Connectors Input 2 standard 1/4" phone jacks, paralleled
Output 2 standard 1/4" phone jacks, paralleled

Dimensions 21" W. x 10 1/4" D. x 5 3/4" H.

Weight 10 Lbs.

INSTALLATION

Place the unit in a location which permits convenient access to operating controls and plenty of ventilation. If rack mounting your PM-100, be sure the amplifier is secure and has adequate ventilation.

1. Connect speaker cabinet(s) to output jack(s) using cables constructed from #18 gauge wire or heavier. Make sure overall impedance is 4 ohms or more (e.g. 2-8 ohm or up to 4-16 ohm cabinets). Two ohm operation is not recommended as overheating may occur and cause thermal shut-down (see the section on protective circuits).
2. Connect output from source (pre-amp, mixer, etc.) to the input on the PM-100 using shielded cable only. The second input can be used for connecting to additional power amplifiers, tape recorder, etc.
3. Turn gain control to zero (fully counter-clockwise).
4. Connect A.C. power to grounded outlet. Do not break off ground pin or plug, as it may create a shock hazard.
5. Turn on source (pre-amp, mixer, etc.) and allow a few seconds for it to stabilize. This eliminates a 'thump' when turning on the power amplifier.
6. Turn power switch "ON". If pilot lamp does not light, check A.C. cord connection and A.C. circuit breaker.
7. It is recommended that your PM-100 be operated with its gain control at '10' and the system level controlled at the source (mixer, etc.). This eliminates the problem of overdriving the mixer and causing unnecessary distortion. Before turning the gain up to '10' make sure the master output volume of the source is at '0', or feedback may result and damage your speakers.
8. Relax, and enjoy years of trouble-free service from your PM-100 Power Amplifier.

PM-100

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FEATURES

Gain Control: Sets the operating level of the amplifier by controlling the level of the input signal.

'Clip Indicator': Lights whenever the amplifier is driven into clipping (ie. distortion).

Power Switch: Switches A.C. power line. Red LED will indicate amplifier being in "ON" position.

Inputs: Both inputs are wired in parallel, allowing inter-connection of more power amplifiers without the use of "Y" jacks.

Outputs: To be connected to separate speaker cabinets.

Ground Lift Switch: Helps eliminate ground loops when inter-connecting multiple units. Normally used in lower position.

PROTECTION CIRCUITS

A.C. Circuit Breaker: Protects circuitry from A.C. line overloads. Turn power switch "OFF", press to reset, then resume normal operation.

Thermal Circuit Breaker: Should your PM-100 overheat for any reason (e.g. poor ventilation, short circuits, or low overall speaker impedance) the internal thermal breaker will shut the amplifier down (pilot L.E.D. goes out) until the unit cools to a safe operating temperature. Turn power switch to "OFF", check ventilation, speaker lines, etc. and resume normal operation.

PROTECTION CIRCUITS (Cont'd.)

Short Circuit Clamp: The 'Clamp' circuitry in your PM-100 protects the output stage from 'blowing' if the amplifier is subjected to short circuit conditions (e.g. shorted speaker lines). This provides excellent protection and eliminates the need for annoying fuses and/or amplifier failure. If your amplifier doesn't seem to work, and the pilot lamp lights, check all speakers and cables before continuing use.

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Input Sensitivity: 0.775 volts R.M.S. for rated output

Input Impedance: 32K ohms : Gain at '10'
to 100K ohms : Gain at '0'

Output Impedance: 4 - 8 ohms (recommended)

Signal-to-Noise: 86 d.b.

Power Requirements: 110 to 120 V.A.C. / 60 Hz., 3 Amps. Max.

Connectors: Input 2 standard 1/4" phone jacks, paralalled
Output 2 standard 1/4" phone jacks, paralalled

Dimensions: 21"W x 10 1/4"D x 5 3/4"H

Weight: 10 Lbs.

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DESCRIPTION

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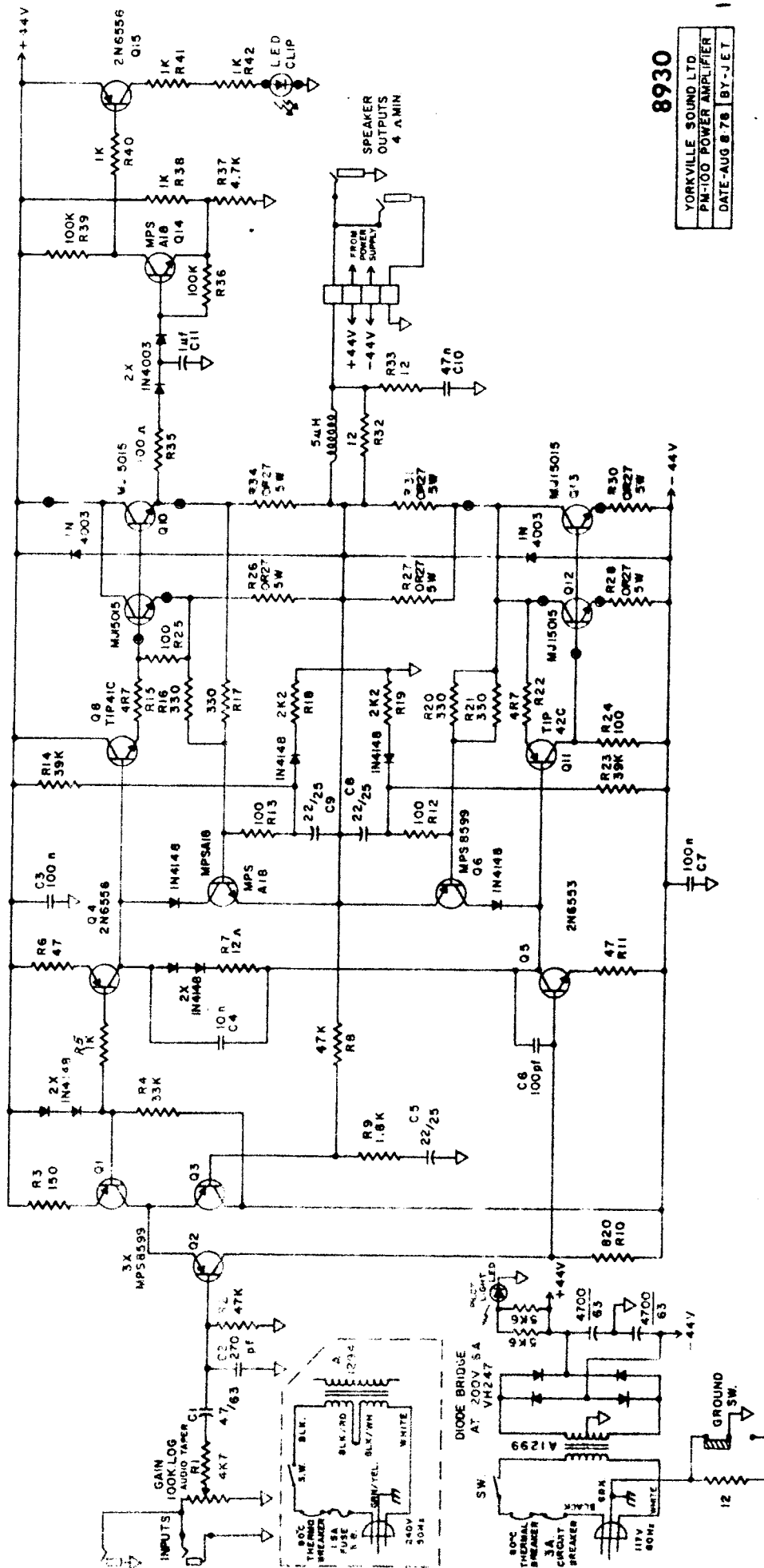
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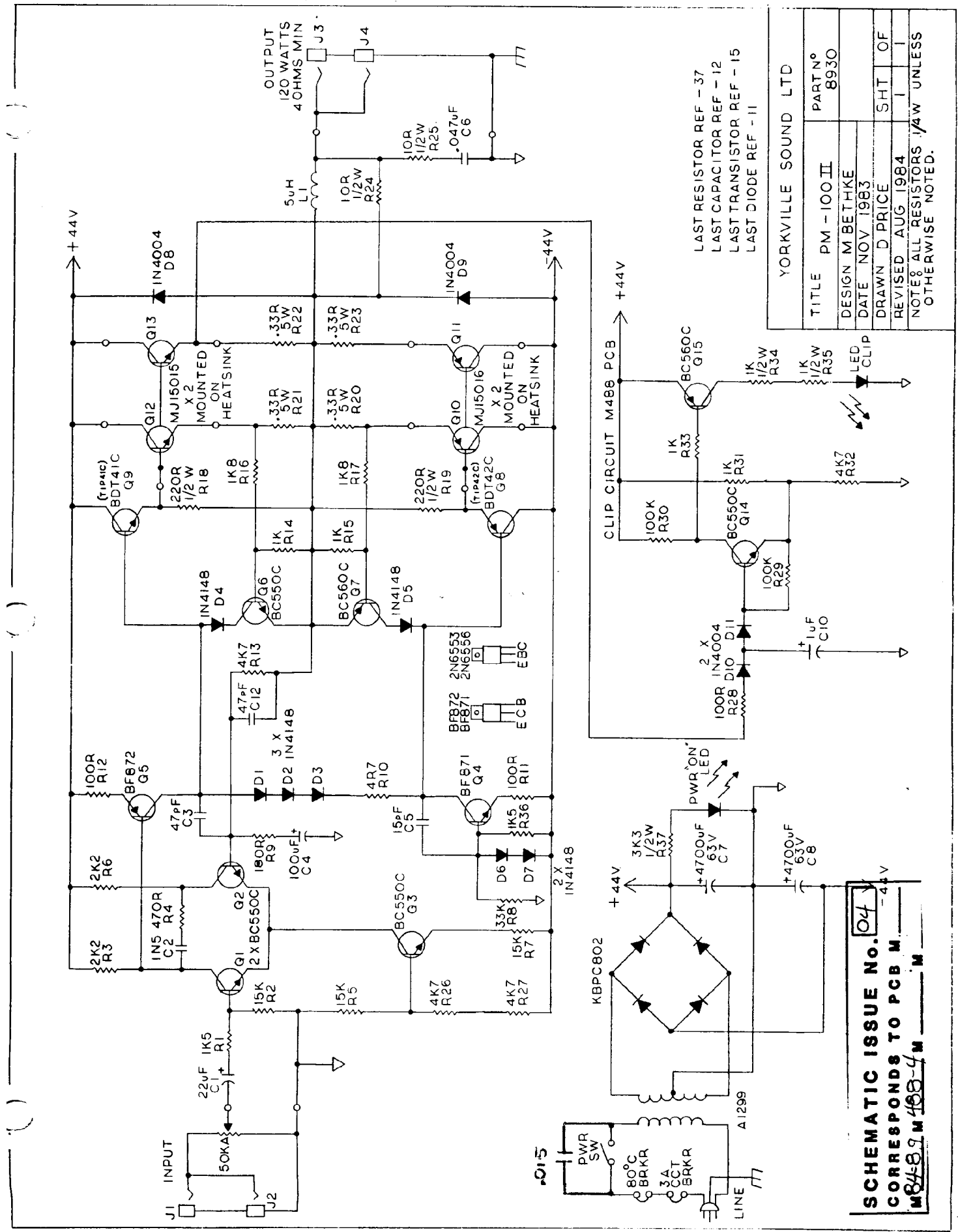
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YORKVILLE SOUND LTD
PM-100 POWER AMPLIFIER
DATE-AUG 8 78 BY-J-ET



LAST RESISTOR REF - 37
 LAST CAPACITOR REF - 12
 LAST TRANSISTOR REF - 15
 LAST DIODE REF - 11

YORKVILLE SOUND LTD	
TITLE	PM - 100 II
DESIGN	M BETHKE
DATE	NOV 1983
DRAWN	D PRICE
REVISED	AUG 1984
NOTE	ALL RESISTORS 1/4W UNLESS OTHERWISE NOTED.
PART NO	8930
SHT	OF
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SCHEMATIC ISSUE No. 04
CORRESPONDS TO PCB M
M8489M488-4M