R. L. DRAKE

MODEL **L-4B**

LINEAR AMPLIFIER

$825.00
AMATEUR NET

- **2000 watts PEP SSB — 1000 watts DC input power on CW, AM, and RTTY.** Massive plate transformer, large heavy duty plate tank components and voluminous cooling system insure continuous operation at these ratings.
- **High-efficiency Class B Grounded Grid Circuit** uses the new Eimac 3-500Z zero bias triodes. These tubes have a total plate dissipation rating of 1000 watts and their rugged construction withstands abuse.
- **A broadband tuned input circuit** is employed on each band for minimum distortion, higher efficiency and a 50 ohm input impedance.
- **Vernier Drive** on the plate tuning control for easy plate tuning.
- **New Epoxy Finish** and eye-ease front panel.
- **The L-4B matches the TR-4 Transceiver and the T-4/T-4X/ T-4XB Transmitters in appearance** and drive requirements to run the maximum legal input power. Any exciter that can deliver 100 watts PEP SSB and 75 watts on CW will be able to drive the L4B to the maximum legal input power. An advantage of the grounded grid circuit is that most of the driving power adds to the output power.
- **Two Taut-band suspension meters** indicate plate current, grid current, plate voltage, forward and reflected R.F. power. The plate current meter time constant is consistant with FCC regulations.
- **A transmitting AGC circuit** controls the exciter gain to allow the highest average power without peak clipping. A front panel adjustment is provided to set the threshold level for optimum operation of different exciters.
- **A Standby Switch** on the L4B allows the L4B to remain "On" while operating with the exciter only.
- **RF Negative Feedback** decreases distortion to better than 35 dB and tends to equalize tube characteristics from tube to tube and from brand to brand.
- **Built-in RF directional wattmeter** calibrated 300 and 3000 watts forward and 300 watts reflected.
- **An internal changeover relay** feeds the antenna through when on "Receive", "Standby", or when power is off. A pair of relay contacts bias the output tubes to cutoff, eliminating unwanted heat and diode noise when receiving.
- **A Quiet, Internal Blower** - low velocity, high volume. Effectively cools tube base seals, envelopes, and plate seals.
- **The Solid State Power Supply** provides excellent dynamic and static voltage regulation. The power supply is separate to keep the weight off the operating desk and to make a more flexible installation.

*Price of Model L-4B includes Power Supply Model L-4PS.

MODEL L-4B SPECIFICATIONS

FREQUENCY COVERAGE – Ham bands 80 through 10 meters. All frequencies 3.5 to 30 MHz may be covered with some retuning of input coils.

PLATE INPUT – 2000 watts PEP – SSB, 1000 watts DC on CW, AM and RTTY.

DRIVE REQUIREMENTS – 100 watts PEP – SSB, 75 watts CW, AM and RTTY.

INPUT IMPEDANCE – 50 ohms.

OUTPUT IMPEDANCE – Adjustable pi-network matches 50 ohm line with SWR not to exceed 2:1.

WATTMETER ACCURACY – 300 watts forward and reflected, ± (5% of reading + 3 watts). 3000 watts forward, ± (5% of reading + 30 watts).

POWER REQUIREMENTS – 230 volts 50 – 60 cycles 15 amperes, or 115 volts 50 – 60 cycles 30 amperes.

DIMENSIONS – Amplifier 13–15/16"W x 7–7/8"H x 14–5/16"D; Power supply 6–3/4"W x 7–7/8"H x 11"D.

WEIGHT – Amplifier 32 lbs; Power Supply 43 lbs.

TUBE COMPLEMENT – Two 3-500Z (Two 8163 or Two 3-400Z can be used)

FRONT PANEL CONTROLS

ON-OFF – Rocker Switch

SSB-CW/TUNE – Rocker switch changes plate voltage for different modes of operation.

BAND – Switch selects desired ham bands (See Frequency Coverage).

PLATE AND LOAD – Tuning adjust pi-network capacitors in tank circuit for proper resonance and loading on all bands.

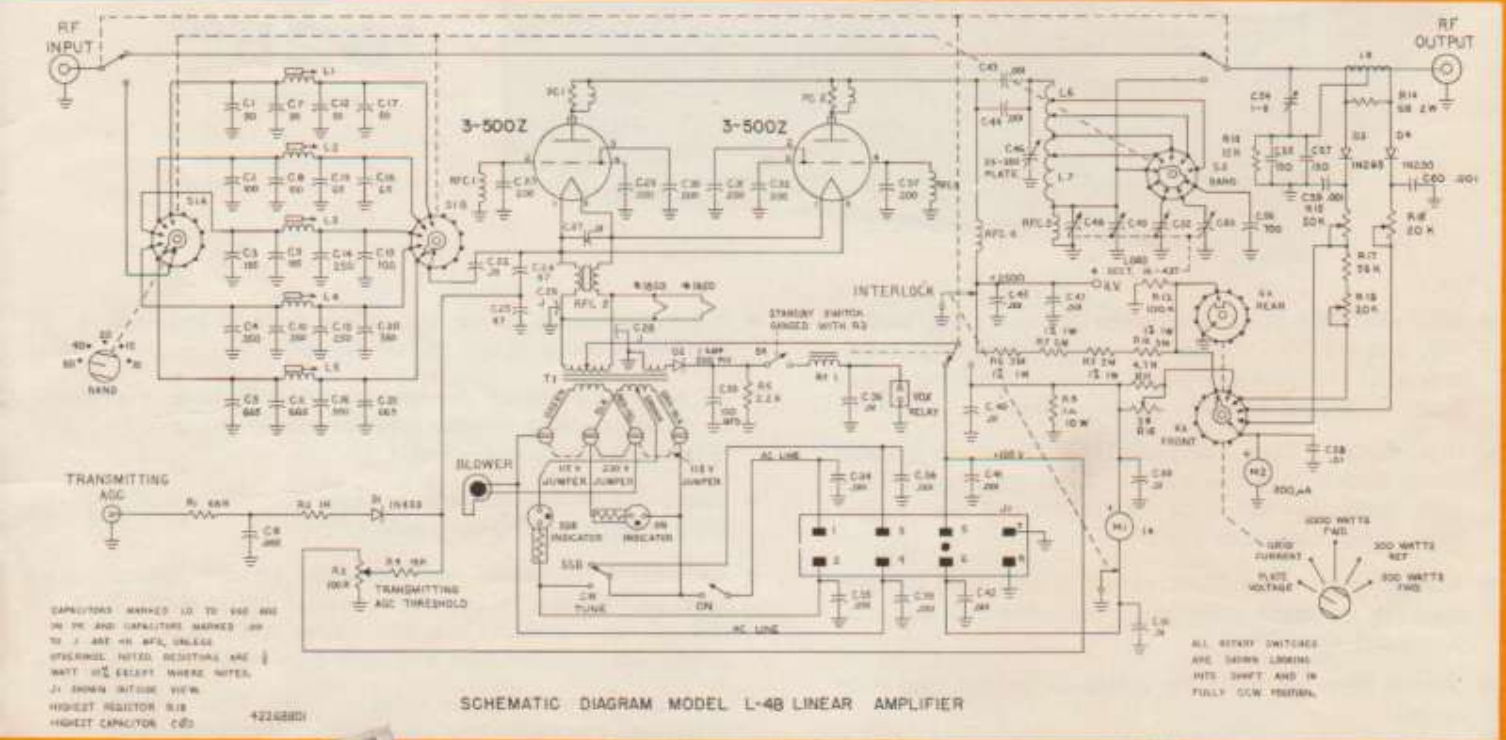
METER – Switch selects monitoring either grid current, plate voltage, forward or reflected RF power on the lower meter.

AGC/STANDBY PUSH – Transmitting AGC threshold adjustment and push-pull switch that allows the L-4B to remain on while operating with the exciter only.

REAR JACKS – Power (connects L-4B to power supply), high voltage, VOX (for turning on L-4B with exciter VOX contacts), transmitting AGC (for connecting transmitting AGC to exciter), RF input (for connecting to exciter RF output), RF output (for connecting L-4B to an antenna).

METERS – Plate Current, Grid Current/Plate Voltage/Forward Power/Reflected Power (switch selected).

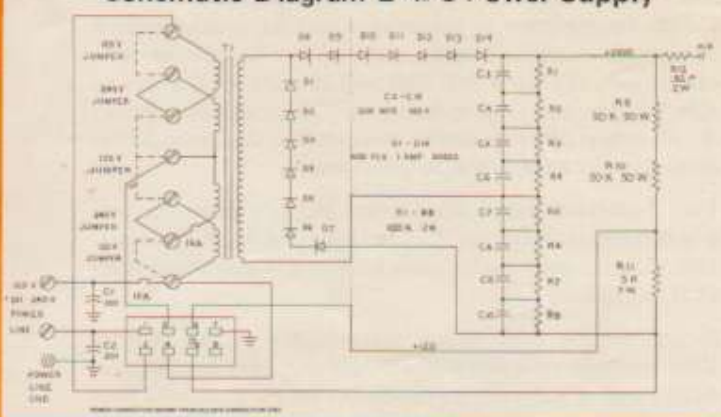
POWER SUPPLY CONTROLS – Two circuit breaker reset buttons.



SCHEMATIC DIAGRAM MODEL L-4B LINEAR AMPLIFIER

Model L-4B with cover removed.

Schematic Diagram L-4PS Power Supply



Ask your distributor about other Drake products, or write:

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