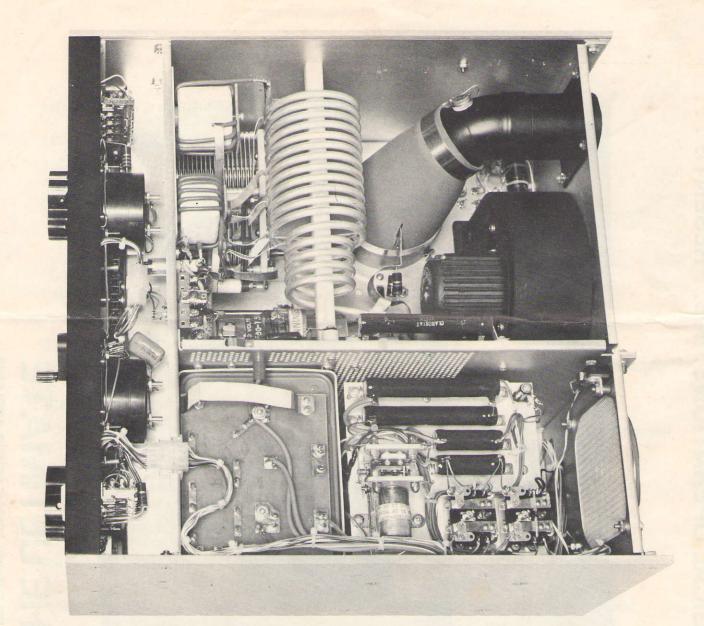


HIGH FREQUENCY LINEAR POWER AMPLIFIER



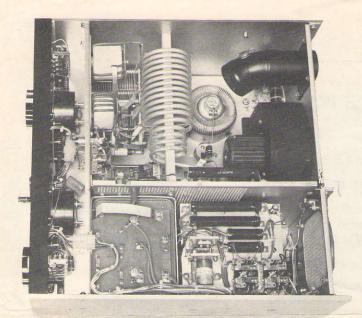
THE ALPHA 77 IS a no-compromise powerhouse— designed and rated for continuous, heavy-duty operation — compatible with all modern exciters and transceivers.

THE ALPHA 77 IS ...

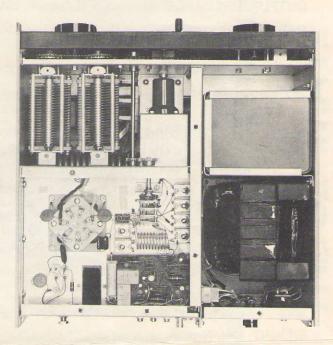
- * Up-to-the-minute engineering design
- * Rugged, conservatively-rated components
- * Cool, whisper-quiet operation
- * Extreme versatility and ease of operation
- * A whole rack full of dependable POWER in just 2 cubic feet!

THE ALPHA 77 STORY is only partly told by the pictures and specifications ... they can't adequately describe the lack of groan, hum, rattle and clank that makes the "77" a good neighbor in the station ... the convenience of precisely-resettable controls that make band-changing an easy six-second task ... the smoothness of all-electronic CW break-in ... in short, the FEEL of a fine instrument which must be USED to be fully appreciated.

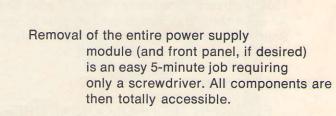
THE ALPHA 77 ADDS UP . . . TO THE FINEST LINEAR AMPLIFIER EVER OFFERED IN ITS POWER CLASS



Top view of the ALPHA 77 with hot-air exhaust hood removed to show 8877 tube in place.



Bottom view of the ALPHA 77. Circuit board at bottom, center contains solid state timing and control, electronic bias and T/R switching circuitry.



MODEL PA-77 HIGH FREQUENCY LINEAR POWER AMPLIFIER

TECHNICAL SPECIFICATIONS

FREQUENCY COVERAGE: 3-30 MHz in six bands; 1.8-3.0 MHz special order.

EMISSION: SSB, CW, FSK/RTTY, SSTV continuous duty.

PLATE POWER INPUT: Maximum Limits – 4 kilowatts PEP and 1.5 kilowatts continuous key-down or average over any 5 minute period. Typical, Continuous Operation – 3 kilowatts PEP SSB voice, 2.5 kilowatts keyed CW, 1.5 kilowatts carrier (RTTY, SSTV, etc.)

RF OUTPUT: 2 kilowatts PEP SSB, 1 kilowatt average or continuous, nominal.

EXCITATION REQUIREMENTS: 100 watts nominal for 3 kilowatts PEP input.

INPUT IMPEDANCE: 50 ohms unbalanced.

OUTPUT IMPEDANCE: 52 ohms unbalanced, SWR not to exceed 2:1.

HARMONIC AND SPURIOUS OUTPUTS: Second harmonic -50 db or better; 3rd order intermodulation products -35 db at 3 KW PEP input.

TUBE COMPLEMENT: One Eimac 8877/3CX1500A7 ceramic-metal triode.

- COOLING SYSTEM: Large capacity, ball bearing, computer grade blower with the thermostatic speed control; continuous cool-air cabinet flush, hot air exhaust ducted outside to rear.
- PLATE OUTPUT TUNING: Pi-L network; 7500 volt vacuum variable tuning capacitor, 6000 volt/20 ampere bandswitch, silver-soldered and plated main pi tank coil, toroidal lowfrequency and main L network inductors.
- METERING: Two 3½ inch taut-band illuminated meters; PLATE CURRENT and MULTIMETER switchable to indicate high voltage, grid current, forward and reflected RF power.
- PROTECTIVE CIRCUITS: Primary fuses and cover interlock, plate and grid overcurrent relays, HV cover crowbar.
- PRIMARY POWER REQUIREMENTS: 120/240 volts, 50-60 Hz, single phase, 3-wire, 20 amperes. Contact factory for operation on 240 volt, 2-wire, or 120/208 volt, 3 phase sources.

SIZE: Self-contained desk-top cabinet 91/2" high x 17" wide x 18" deep.

WEIGHT: Net, 75 pounds; shipping, 90 pounds.

OTHER SPECIAL FEATURES:

- * All solid state HV and LV rectifiers.
- * 25 mfd oil-filled filter capacitor.
- * Automatic power-on step-start to limit initial surge.
- * Fully modular construction for fast, easy maintenance access.
- * 1500 watt continuous-duty Hipersil[®] core power transformer.
- * All solid-state bias switch cuts off tube in absence of excitation.
- * Solid state control and timing; MOSFET electronic T/R switch.
- * Vacuum antenna changeover relays.

MANUFACTURED BY:

EHRHORN TECHNOLOGICAL OPERATIONS, INC. Brooksville, Florida 33512 Telephone (904) 596-3711