

600 watts CW
 500 watts phone
 500 watts SSB*

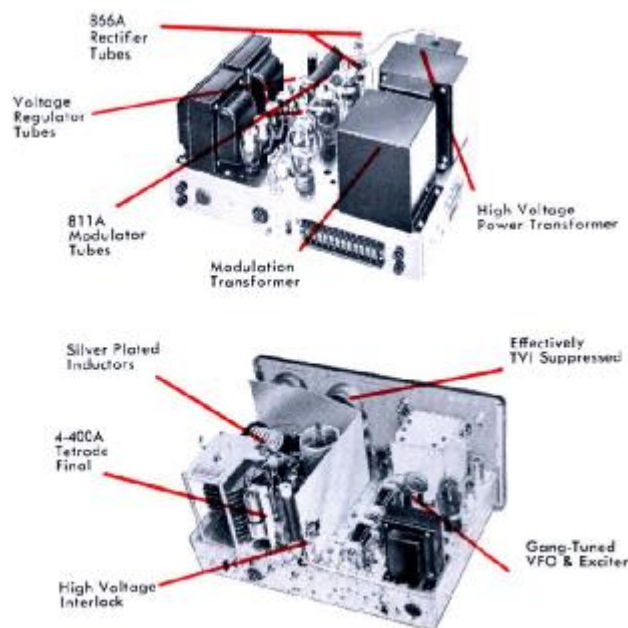
* with an auxiliary SSB exciter

Viking "Five Hundred"

The Viking "Five Hundred" is a complete 500 to 600 watt transmitter for the 80 through 10 meter bands. All exciter stages are ganged to the VFO tuning . . . unit is designed throughout for outstanding operating convenience and flexibility. The "Five Hundred" consists of two compact units: an RF unit small enough to place on your operating desk beside your receiver; and a power supply/modulator unit so compact it may be placed in most any convenient location. All operating controls are located on the front panel of the RF unit within easy reach of the operator.

The Viking "Five Hundred" has been designed for either crystal or VFO control. Instant bandswitching, the "Five Hundred" is effectively TVI suppressed and filtered . . . contains a Pi-L network output circuit, with silver plated final tank coil, for loading virtually any antenna system. Safety and protective features include: a tamperproof, key-operated main switch; cabinet interlocks; excitation and bias failure protection; fused filament and plate supplies; and high voltage time delay.

FREQUENCY CONTROL — The "Five Hundred" may be operated by built-in VFO or crystal control. The VFO is temperature compensated and extremely stable . . . covered crystal socket accommodates two type FT243 quartz crystals. Each band on the VFO dial has separate bandspread calibration, and a 6 to 1 planetary drive mechanism permits exceptional tuning accuracy and extremely smooth control. Plexiglas dial is edge-lighted, Plexiglas pointer is positioned to insure a minimum of parallax. Each band is divided into precise 10 kc increments for accurate dial readings and interpolation.



TUNING — All exciter stages are ganged to the VFO tuning, eliminating the need to tune intermediate stages between the VFO and final. The broad range of the VFO permits coverage of an entire band and VFO is easy to tune . . . may be zeroed to any receiver.

OPERATING CONTROLS — All operating controls for the "Five Hundred" are located on the front panel of the RF unit within easy reach of the operator.

OUTPUT CIRCUIT — The final amplifier uses a type 4-400A high efficiency tetrode with low driving power requirements working into an efficient Pi-L network. Final tank coil is silver plated . . . network will handle unbalanced 52 ohm loads with standing wave ratios up to 3:1; or unbalanced resistive loads of 15-200 ohms. The pi-section provides excellent reduction of harmonics of the carrier frequency — the "L" section provides from 15 to 20 db additional attenuation of second harmonic energy and reduces higher order harmonic energy by an even greater amount.

AUDIO SYSTEM — The "Five Hundred" has a high gain audio circuit which provides reserve gain for use with high impedance crystal or dynamic microphones and features push-to-talk control. A 600 ohm phone patch input is independent of audio gain control — speech filter restricts frequency response to 200-3500 CPS for maximum communication effectiveness, with minimum bandwidth. Low level audio clipping prevents overmodulation and increases average modulation level and intelligibility.

TIMED SEQUENCE KEYING — This highly flexible keying system applies wave shaping to the keyed amplifier stages for perfect "make" and "break" on your keyed signal. Signal clicks and chirps are eliminated, yet the "break-in" advantages of a keyed VFO are retained. The system operates so fast that a breaking station may be heard between transmitted dots! Electronically operated, this timed sequence keying system uses no relays and only one dual triode plus a rectifier tube for the grid block bias.

TVI SUPPRESSION — In addition to complete shielding and the use of double "L" section filters in every lead, the amplifier is electrically sealed with flexible metal braid — cup-type shields seal the meters. Interior harness leads and filaments are by-passed. Careful by-passing of the final and special circuit techniques minimize harmonics in the output circuit.

POWER SUPPLIES — Power supplies are located in a separate cabinet which is connected to the RF unit by plug-in cables. (This cabinet also contains the push-pull modulator tubes and the modulation transformer.) Four VR150 and one VR105 voltage regulators are used to regulate the final amplifier screen voltage during SSB operation. VFO screen voltage is regulated by an OA2 voltage regulator.

SPECIFICATIONS

FREQUENCY RANGE:

80, 40, 20, 15, and 10 meters

POWER REQUIREMENTS:

115V AC, 2 wire or 230 V AC, 3 wire, 50-60 cycles, single phase. 1500 watts maximum.

FUSE PROTECTION:

The following fuses are located in the power supply: RF Filament Supply Fuse; Low Voltage Supply Fuse; and Two High Voltage Supply Fuses.

POWER INPUT:

600 Watts Continuous Wave
500 Watts Amplitude Modulated
Phone
500 Watts Single Sideband (F.E.P. using accessory SSB exciter delivering 3 watts across 52 ohms)

TUBE COMPLEMENT

6AU6—Variable Frequency Oscillator	6AU6—3rd Audio Amplifier
0A2—Voltage Regulator for VFO	6AL5—Audio Peak Clipper
6CL6—Buffer	6B4G—Audio Driver
6CL6—Multiplier	811A—Modulator (2)
5763—RF Driver	6AX5GT—Bias Rectifier
4-400A—Power Amplifier	5U4G—Low Voltage Rectifier
12AU7—Keyer	866/865A—High Voltage Rectifier (2)
807—Clamper	VR105—Voltage Regulator
12AX7—1st & 2nd Audio Amplifier	VR150—Voltage Regulators (4)

The Viking "Five Hundred" is available completely wired and tested or as an easy to assemble kit. The RF unit is housed in an 18 gauge steel cabinet, finished in attractive maroon and grey, with green nomenclature. The power supply cabinet is finished in maroon enamel. Dimensions: RF Unit — 21" wide x 11 1/2" high x 16 1/2" deep. Power Supply — 20 1/2" wide x 15 1/4" high x 10 3/4" deep. Total Net Weight: 173 lbs. Shipping Weight: 200 lbs.



Cat. No. 240-500-1 Viking "Five Hundred" Kit complete with tubes, less crystals, key and microphone

AMATEUR NET **\$749.50**

Cat. No. 240-500-2 Viking "Five Hundred" wired and tested with tubes, less crystals, key and microphone. **\$949.50 Amateur Net**



For information concerning Civil Defense Certification — See inside back cover.

