

# GLOBE KING 500

## INSTRUCTION MANUAL

### SECTION I

#### GENERAL DESCRIPTION

##### 1-1. GENERAL.

1-2. The WRL Globe King Transmitter Model 500 is made by World Radio Laboratories of Council Bluffs, Iowa. This transmitter is rated at 500 Watts input power to the R.F. Power Amplifier, either Radio Telegraphy (CW), Radio Telephony (AM) operation or 430 watts Single Sideband.

##### 1-3. DESCRIPTION.

1-4. The Model 500 transmitter is completely self-contained in a metal relay rack cabinet. Dimensions are 31 inches high, 15 inches deep, and 22 inches wide. Weight is approximately 250 pounds. Ventilating louvers are provided in the cabinet to assure adequate ventilation and heat dissipation. Complete TVI precautions have been taken. The R.F. section of the transmitter is completely shielded, meter leads have been by-passed and all AC leads have been by-passed.

1-5. The components of the transmitter are so arranged that semi-unit construction is employed and are broken down into three units as follows;

- a. Exciter, Buffer and Power Amplifier
- b. Modulator with integral Power Supply
- c. Main Power Supply

Each unit may be removed from the cabinet independently for inspection and servicing. Power requirements are 115 volts, 50/60 cycles single phase alternating current. Tube complement is shown in Table I.

TABLE I. TUBE COMPLEMENT.

Quantity	Type	Function
1	<del>4-250A</del> 4-400A	RF Power Amplifier
1	<del>6X5</del> 6146	Buffer-Doubler
1	<del>6V6</del> 6AG7	Crystal Oscillator
1	6SJ7	Microphone Amplifier
2	6C5	Speech Amplifiers
1	6L6G	Audio Driver
2	<del>551A</del> 811-A	Modulators
1	6X5	Bias Rectifier
1	5Y3GT	P.A. Screen Grid Rectifier
2	816	Modulator High Voltage Rectifiers
1	5Y3GT	Modulator Low Voltage Rectifier
2	<del>866A</del> 3B28	P.A. High Voltage Rectifiers
1	5U4G	Exciter Voltage Rectifier