

1.2. VACUUM TUBE TABLE.

The following table lists the tubes employed in the circuits just described.

SYMBOL DESIGNATION	TUBE TYPE	FUNCTION
V101	6AK5	Radio-frequency amplifier
V102	6BE6	First mixer
V103	6BE6	Band 1 mixer
V104	6BA6	Calibration oscillator
V105	6AK5	High-frequency crystal oscillator
V106	6BE6	Second mixer
V301	6BA6	First 500 kc i-f amplifier
V302	6BA6	Second 500 kc i-f amplifier
V108	6BA6	Third 500 kc i-f amplifier
V109	6BA6	Fourth 500 kc i-f amplifier
V110	12AX7	Detector and AVC rectifier
V111	12AU7	AVC amplifier and i-f output cathode follower
V112	12AX7	Noise limiter and first audio amplifier
V113	6AQ5	Audio power amplifier
V114	6BA6	Beat-frequency oscillator
V115	5V4	Power rectifier
V116	0A2	Voltage regulator
V001	6BA6	Variable-frequency oscillator
V002	6BA6	Oscillator isolation amplifier

1.3. REFERENCE DATA.

OPERATING RANGE: 540 kc to 30.5 mc

TYPE OF RECEPTION: AM, CW or MCW

CALIBRATION: Direct reading in megacycles and kilocycles

TUNING: Linear tuning with uniform bandspread

FREQUENCY STABILITY: Dial calibration at room temperature is within 300 cps if the nearest 100 kc calibration point is used to adjust the fiducial.

TEMPERATURE RANGE: -20°C to +60°C

SENSITIVITY: Band 1 - Less than 15 uv gives 10 db s/n

Bands 2 to 30 - Less than 5 uv gives 10 db s/n

SELECTIVITY: A complete chart of selectivity characteristics is given in paragraph 5.3.7. of this book.

SPURIOUS FREQUENCY RESPONSE: Down at least 40 db

AUTOMATIC VOLUME CONTROL: Less than 8 db increase in audio power output with an increase in r-f signal from 5 to 500,000 uv

S-METER: Meter calibrated in 20, 40, 60 db above AVC threshold and -10 to +6 db audio level with 6 mw as reference

NOISE LIMITER: Series type ahead of the first audio stage

AUDIO POWER OUTPUT: Band 1 - at least 0.5 watt for 15 uv signal

Bands 2 to 30 - at least 0.5 watt for 5 uv signal

AUDIO FREQUENCY RESPONSE (Overall): ± 3 db from 200 to 2500 cps when 6 kc filter is used

AUDIO DISTORTION: Less than 10 percent at 0.5 watt output

AUDIO OUTPUT IMPEDANCE: 4 and 600 ohms

I-F OUTPUT IMPEDANCE: 50 ohms

R-F INPUT IMPEDANCE: Designed to operate into a high impedance whip or single-ended antenna

POWER REQUIREMENTS: 85 watts at 115 volts 45/70 cps. Same power required when reconnected for 230 volt 45/70 cps operation

DIMENSIONS: Panel - 10-1/2 inches high, 19 inches wide, notches for standard rack mounting

WEIGHT: 43 pounds