

DECEMBER 5, 1941

TUBES AND FUNCTIONS:

12SA7GT Modulated Oscillator
35Z4GT or 35Z5GT Rectifier

POWER SUPPLY:

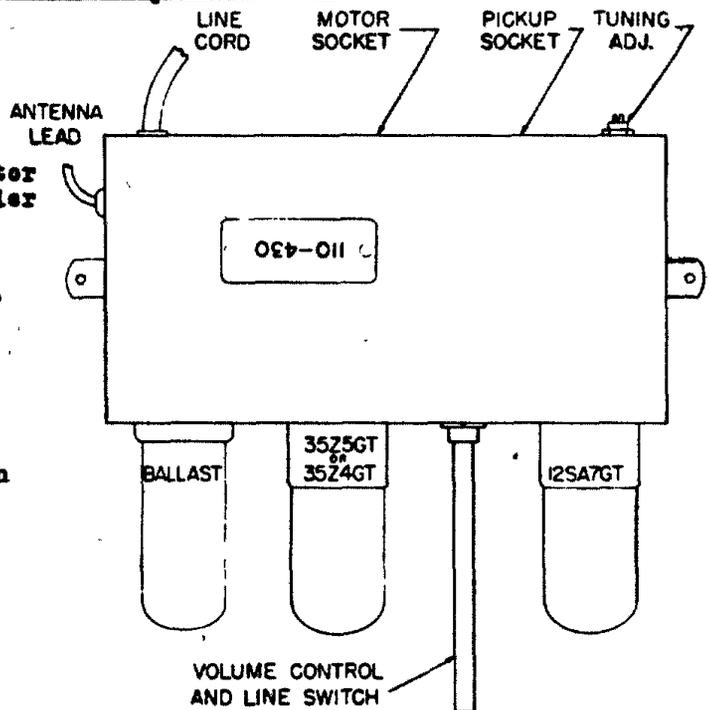
This unit uses 105-125 volts A. C. 75 watts.
The frequency (cycles) is specified on the
bottom of the cabinet.

FREQUENCY RANGE:

The carrier frequency may be adjusted between
the limits of 540 and 1100 kilocycles.

OPERATING CONTROL:

A single knob operates the power switch and
controls the modulation level.

**GENERAL INFORMATION AND SERVICE HINTS.**

This wireless record player uses a 12SA7GT tube in which the screen, cathode and oscillator grid are used in a Hartley oscillator circuit which may be tuned from 540 to 1100 K. C. by means of a trimmer. The output of this oscillator is electronically coupled to the plate circuit of the 12SA7GT which is loaded with a two millihenry choke. Amplitude modulation is effected by means of an audio signal impressed on the control grid. This signal serves to control the space current and the oscillator strength is not dependant upon modulation. Thus it may be seen that any energy radiated from the oscillator coil is not modulated. The modulated signal is radiated from an antenna capacitatively coupled to the plate of the 12SA7GT.

The signal from this wireless record player may be received by any broadcast receiver. The tone and volume should be controlled at the receiver as would be done when listening to a regular broadcast station.

For normal use the control on the wireless record player is advanced to the maximum clockwise position. If exceptionally loud recordings are used, the volume control may be retarded slightly to prevent distortion in the transmitter unit.

ADJUSTMENT PROCEDURE.

The radio receiver is tuned to a frequency between 540 and 1100 K. C. where there is as little interference as possible. With the record changer in operation, the adjusting screw found on the back of the chassis is turned until the wireless record player is heard through the receiver.

SPURIOUS RESPONSES.

Spurious responses may be obtained in some localities where broadcast signals are quite strong, if the wireless record player is placed too close to the receiver (e.g. on top of the cabinet). This manifests itself in the form of numerous signals in the receiver for a given setting of the wireless record player tuning adjustment, or numerous settings of the wireless record player tuning adjustment for a given receiver setting. This difficulty may be remedied by moving the wireless record player a little farther away from the radio during the set-up procedure.