

Variarm Crystal Replacer

The No. 90700 and the 90701 electronic coupled oscillator units, as designed by Henry Rice, Jr., were originally described in detail in QST. The Millen commercial versions are constructed so as to take full advantage of the design. They are outstanding in performance, compact and inexpensive. The units are designed with high impedance output and plug in directly in place of the crystal for instance fingertip control of carrier frequency. No separate matching network is required. High capacity grid circuit and temperature compensation result in extremely low drift. Chirpless keying. Vibration immune. No hand capacity. Big band spread with band spread vernier. Accurate calibration. Easy to read curve. Built-in power supply, which operates at constant load under keying. Ideal for use with the 90800 Millen 50 watt transmitterexciter unit. Use a 6K7 as the oscillator, a 25L6GT as the amplifier-buffer and a 25Z6GT as the rectifier.

A GOOD ECO AT A LOW PRICE

LOW DRIFT — Less than 0.06% from cold start. Most drift in first 10 minutes.

VIBRATION IMMUNE — Shock mounted oscillator section; sturdy construction.

NO HAND CAPACITY

CHIRPLESS KEYING — Constant load on power supply.

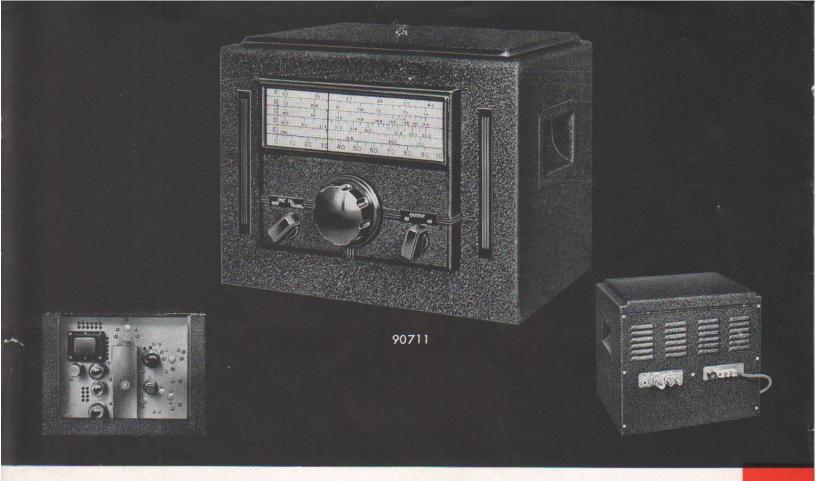
GOOD BAND SPREAD — 100 dial divisions from 3500 to 3650 kc. "Variarm" vernier tuning.

COMPLETE — Vibrationless power supply, three tubes, output coupling units.

No. 90700 has fundamental oscillator frequency range of from 3500 to 3650 kc. "Convenient-to-change" taps on amplifier and link coils provide for output on 80 or 40. Complete with G.E. tubes, ready to use. Net Price

No. 90701 is the same as No. 90700 except fundamental oscillator frequency range of from 1750 to 2000 kc., providing for output on 160 or 80. Complete with G.E. tubes, ready to use.





90711 —Variable Frequency Oscillator

The 90711 is a complete transmitter control unit with a stable gang-tuned electron-coupled oscillator and amplifier, a voltage-regulated power supply operating from 105–125 volt 50–60 cycles power line, high or low impedance output with enough power to drive any tube up to an 807, output on 80 or 40 meters, an accurately calibrated full-vision bandspread dial with calibrations for the 10, 15, 20 and 80 meter amateur bands, and provisions for controlling the complete transmitter from the oscillator panel.

This unit is unusually stable and drift-free because of its sturdy construction, high-capacitance oscillator grid circuit, untuned oscillator plate circuit, large temperature-compensated oscillator grid coil, temperature-compensated capacitors, regulated plate and screen voltages for the oscillator, and its adequate ventilation and carefully designed lay-out.

Convenience is another feature of the 90711. Good electrical bandspread is provided for each amateur band, not one band only! The dial is a Millen No. 10035 panel dial with a drive ratio of 13 to 1. The output may be coupled to a low impedance coupling link; or, by means of the plug-in adaptor for conversion to high impedance at the end of a low-impedance connecting cable, the output may be plugged into a transmitter crystal socket or connected directly to a grid. The output may be taken from a Millen No. 37212 type connector or from a coaxial connector. Band change, including bandspread change, is accomplished by turning a switch on the oscillator panel. (No plug-in coils!)

The keying is clean and free from all annoying chirp, quick drift, jump, and similar difficulties often encountered in keying variable frequency oscillators.

Tubes:

6SK7	Oscillator
6L6	Amplifier
5V3-GT	Rectifier
VR-150	Voltage Regulator
VR-75	Voltage Regulator

Transmitter Output Band

tter Output Band	90711 Output Bar
80 meters	80 meters
40 meters	80 meters
20 meters	40 meters
15 meters	40 meters
10 meters	40 meters

Power Supply 105-125 volts 50-60 cycles 60 watts

Size 123/4 inches wide x 12 inches deep overall x 11

inches high

Weight 28 pounds

No. 90711 Variable Frequency Oscillator

Complete with tubes and impedance adaptor \$....

