



## PRELIMINARY OPERATING INSTRUCTIONS FOR SWAN MODEL 508 FREQUENCY CONTROL UNIT

The Model 508 Frequency Control Unit is designed to serve as an external VFO to be used with the Swan 500C Transceiver. It may also be used with the Model 350C when the accessory socket is installed on back of the transceiver as described in the 350C technical manual.

The 508 plugs directly into the back of the transceiver after the jumper plug has been removed from the Swan 500C.

### OPERATION:

The position of the VFO selector switch on the front panel of the Model 508 will determine split-frequency operation, or transceiver operation on the Swan 500C VFO or the Model 508 VFO. Rotating the Selector Switch to "XCV 500C" will permit transceive operation with the frequency controlled by the internal VFO of the Model 500C.

The "TRANS 500C/REC 508" position will select split frequency operation. When in this position, the frequency of the transmitted signal will be controlled by the internal VFO of the Swan 500C. The frequency of the signal being received will be determined by the Model 508 VFO.

When rotating the Selector Switch to "XCV 508" the unit will be in transceive operation with the frequency determined by the setting of the VFO dial of the Model 508 VFO.

### DIAL CALIBRATION

The dial of the Model 508 is basically calibrated in 5KC increments on each range. The 80 meter band is calibrated for direct Read-out on the dial. Calibration for all other ranges is read on

the green portion of the dial. This dial is calibrated 0-500 and the reading of this scale would be additive to the megacycle range as selected by the VFO BandSwitch. For example: if the bandswitch is set for 7.0 megacycles, and the VFO dial is set for 250 on the green scale, the frequency is 7250 KC. When the bandswitch is rotated to 21 megacycles, VFO dial set on 350, the operating frequency would be 21350 KC, etc. The smaller white dial is a reference scale and is calibrated in approximately 1 KC increments.

### VFO ALIGNMENT

A trimmer condenser is mounted on each of the VFO coils.

Dial tracking has been set by pruning the coil, and will not ordinarily require further adjustment.

When dial calibration changes beyond the adjusting range of the front panel "dial set" control, calibration may be restored by carefully adjusting the trimmer for that range. The VFO coils and trimmers are accessible by removing the bottom cover of the unit.

### DIAL SET

A dial-set has been provided so that dial adjustment can be made at any 100 kc point of the dial. With calibrator on, set the dial to any 100 kc point closest to the frequency you wish to work. Now adjust dial-set control to zero-beat the VFO with the 100 kc Calibrator. This provides greater accuracy of dial read-out.

### POSITION:

The "X" position is provided for possible installation of an additional tuning range. For example: a coil can be installed for one of the W WV frequencies.

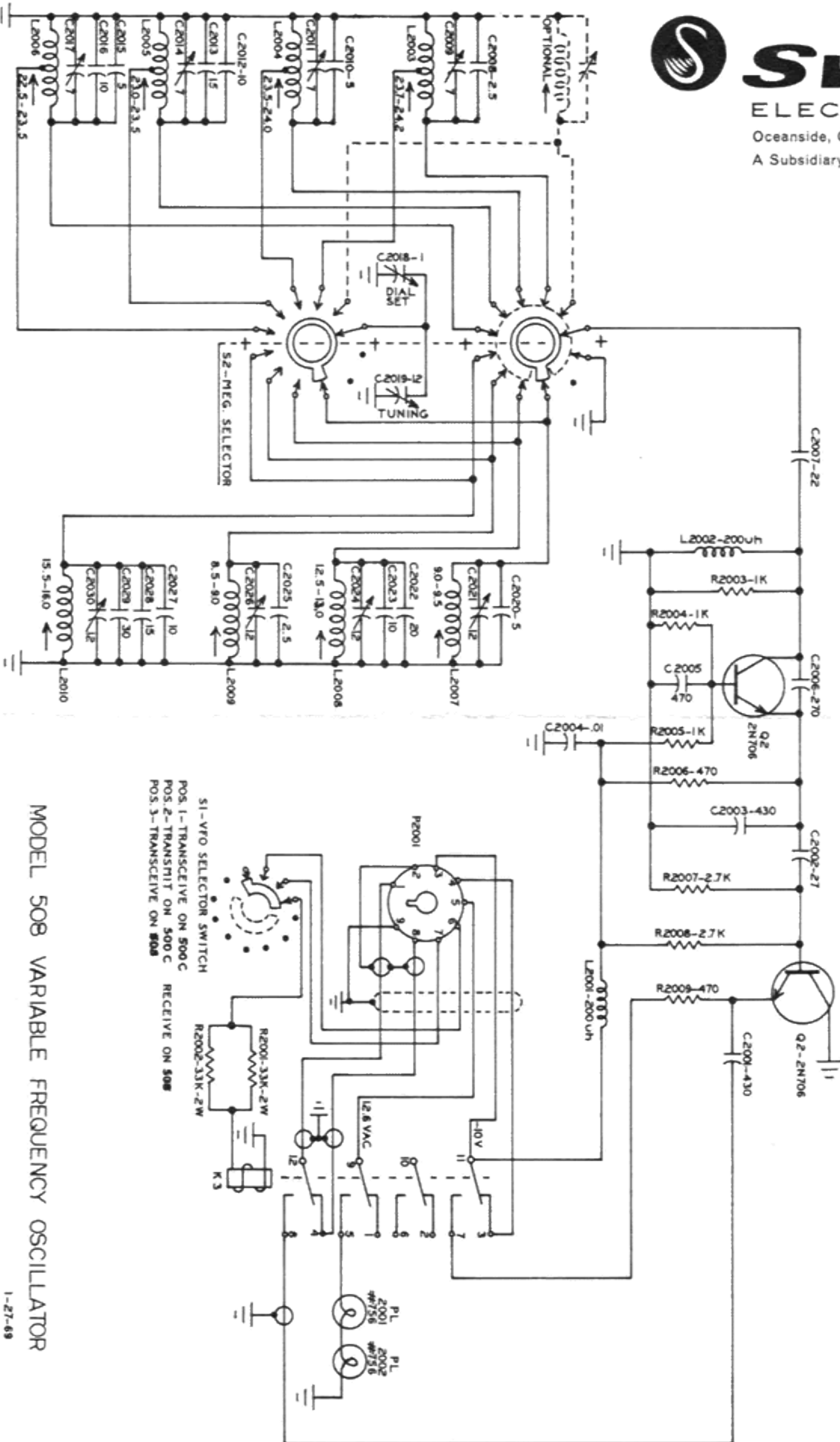


# SWAI

## ELECTRONICS

Oceanside, California

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MODEL 508 VARIABLE FREQUENCY OSCILLATOR