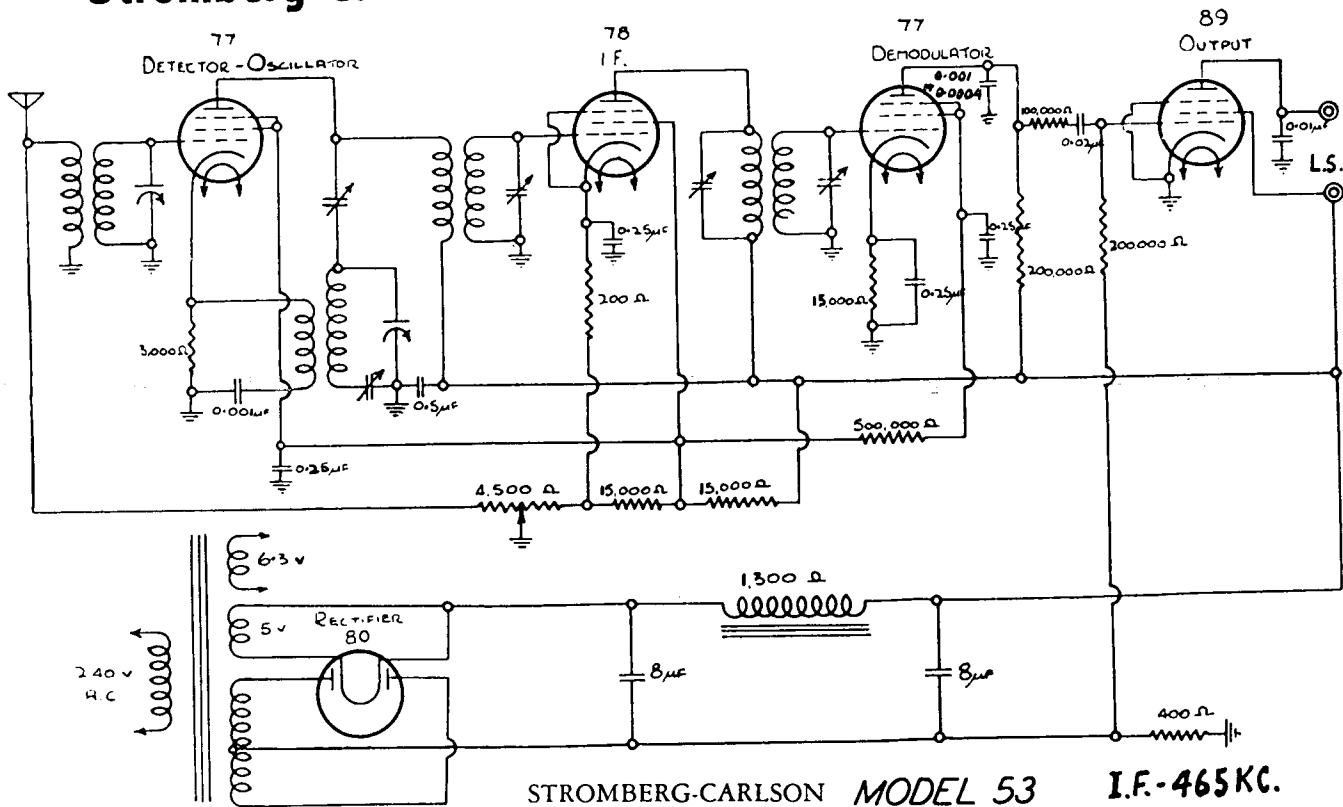


# "Stromberg-Carlson" A.C. Broadcast Mantel Model 53



Stromberg-Carlson model "53" is a five-valve receiver designed for broadcast coverage and operation from 200-260 v., A.C., supply. This receiver is of the mantel type and is fitted with two controls, these being for volume ("R.F." type) and tuning. The loudspeaker has a field-coil resistance of 1,300 ohms. This model was marketed during 1933.

## COMPONENT MOUNTING

To facilitate assembly, many of the smaller components in this receiver are mounted on a numbered terminal panel. The values of these components and their corresponding numbers, are as follow:—

1—0.001 mfd.; 2—3,000 ohms; 3—15,000 ohms; 4—15,000 ohms; 5—200 ohms; 6—15,000 ohms; 7—0.5 meg.; 8—0.0004 mfd.; 9—0.2 meg.; 10—0.1 meg.; 11—0.02 mfd.; 12—0.2 meg.; 13—400 ohms; 14—0.01 mfd.

In addition, five condensers are mounted in a single block, the leads to this being:— Red, 0.25 mfd.; Yellow, 0.5 mfd. Earth returns of all five condensers are through the metal can.

## OPERATING VOLTAGES

The following measurements were made with a "1,000 ohms per volt" meter between chassis and the socket contact indicated. Two sets of screen voltage readings are given for the converter, I.F. and second detector valves, the first being with the

volume control full on, and the second (in parenthesis) being with the volume control right off. Corresponding readings are given for the I.F. valve cathode voltage.

77, "Autodyne" Frequency Converter: Plate, 190 v.; screen, 85 v. (110 v.); cathode, 5 v.

78, 465 kc. I.F. Amplifier: Plate, 190 v.; screen, 85 v. (110 v.); cathode, 2 v. (45 v.).

77, "Anode-Bend" Second Detector: Plate, 100 v.; screen, 12 v. (15 v.); cathode, 4 v.

89, Output Pentode: Plate, 180 v.; screen, 190 v.; grid, -20 v. (from back-bias resistor). Note that this valve has a top grid connection and an external suppressor grid connection on the base (pin 4). Also note that both electros. are returned to negative side of back-bias resistor.