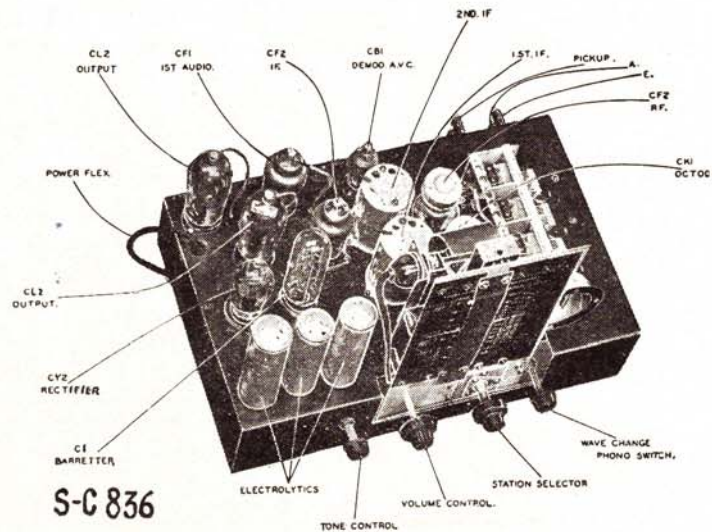


# "Stromberg-Carlson" A.C./D.C. Dual-Wave Model 836

**S**TROMBERG-Carlson Model 836 is an eight-valve receiver designed for dual-wave coverage and operation from A.C. or D.C. mains with potentials between 160 and 260 volts; regulation for the mains voltage variation being provided automatically by means of an iron-hydrogen barretter, type C1. This model is housed in a console type cabinet and employs an 8-inch diameter loudspeaker with a field coil resistance of 1,000 ohms. Four controls are fitted; these being for tone (continuous), volume, tuning (two-speed), and wave-change (with third position for gramo. switching). The dial is of the vertical straightline type and is illuminated by means of a 240 v., 15 w., bayonet base pilot lamp. A visual tuning indicator of the meter type (marked as "M" in the circuit diagram) is incorporated in the dial assembly.

Features of the "836" circuit arrangement are the use of a push-pull pentode output system in which out-of-phase excitation for one valve is obtained by means of a voltage divider network in the plate circuit of the other, and the use of a built-in line filter. Points to watch are the isolation of the aerial, earth and pick-up terminals by means of condensers, and the provision of a cabinet back with a two-pin isolating plug and socket. It is essential that the latter be replaced after servicing operations, otherwise the user runs the risk of severe shock.

A number of the components in this receiver are mounted on a panel under the chassis and, as these components may be difficult to identify, the following key to the terminal lugs and corresponding components is given:—1—0.01 mfd., 2,000 v. test; 2—0.01mfd., 2,000 v. test; 3—0.02 mfd.; 4—0.0001 mfd. A 100,000 ohms resistor is mounted between 3B and 4A; 5—100,000 ohms; 6—25 mfd., 25 v. electro; 7—3,000 ohms; 8—blank; 9—0.1 mfd.; 10—0.1 mfd.; 11—20,000 ohms; 12—200,000 ohms; 13—0.02 mfd. A 100,000 ohms resistor is mounted between 12A and 13B; 14—8,000 ohms; 15—500,000 ohms; 16—0.1 mfd.; 17—20,000 ohms.



### OPERATING VOLTAGES.

The following measurements were made between chassis and the socket contact indicated with a "1,000 ohms per volt" meter. The receiver was operated on 240 v. A.C., and tuned to a point where no signal was receivable.

**CF2, R.F. Amplifier.** Plate, 225 v.; screen, 85 v.; cathode, 3 v.

**CK1, Frequency Converter.** Plate, 225 v.; screen, 85 v.; cathode, 3 v.; oscillator anode, 100 v.

**CF2, 392 K.C. I.F. Amplifier.** Plate, 225 v.; screen, 85 v.; cathode, 2.5 v.

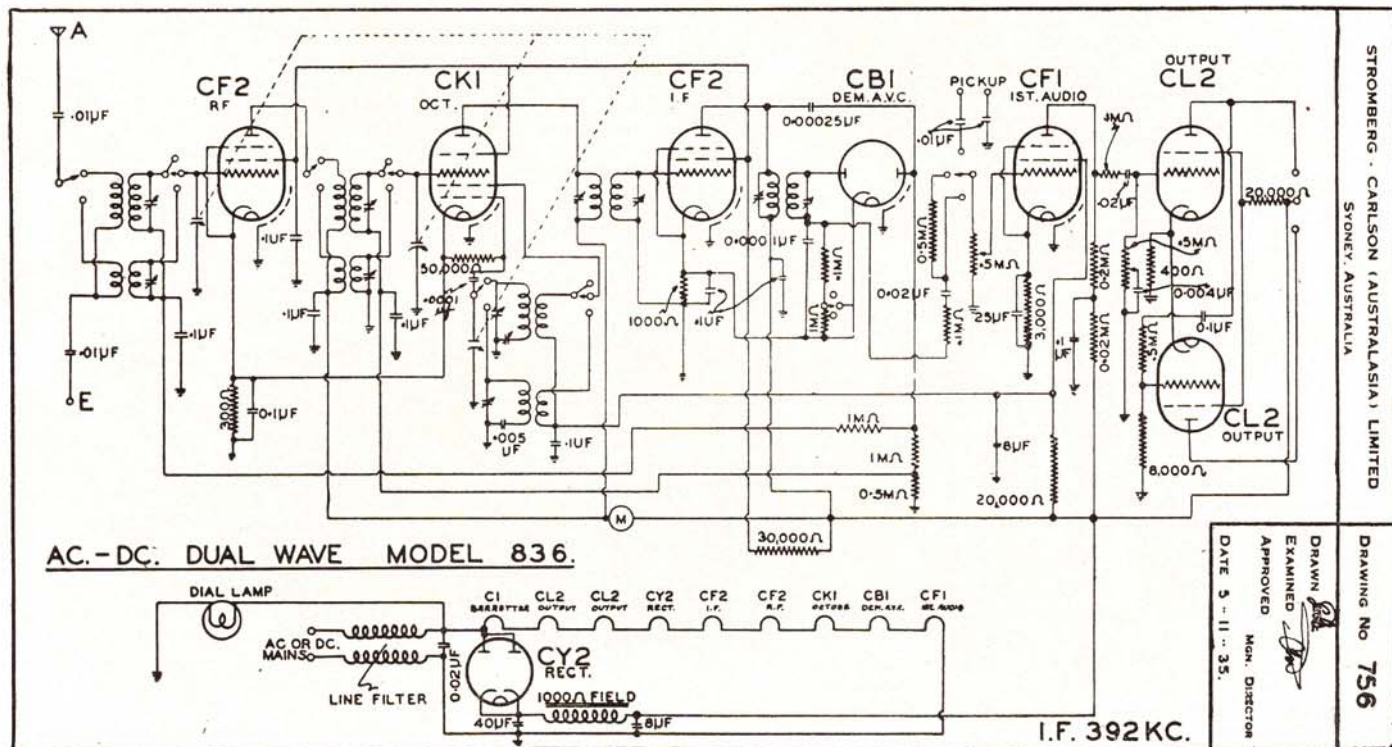
**CB1, Duo-Diode Detector and A.V.C. Rectifier.** Cathode is tied to cathode of CF2 I.F. amplifier, 2.5 v.

**CF1, Audio Amplifier.** Plate voltage is not accurately measurable with normal voltmeter, will show indication of about 25 v.; screen, 100 v.; cathode, 3 v.

**CL2, Push-pull Output Pentodes.** Plates, each, 220 v.; screens, each, 110 v.; cathodes, each, 20 v.

**CY2, Indirectly-heated Half-wave Rectifier.** Cathode to chassis (input to filter) 300 v.

**NOTE:** All of the above voltages will be somewhat lower when the receiver is being operated from D.C. mains.



WARNING LIVE CHASSIS HAZARD  
This radio has no power transformer and an incorrectly wired power cord could place full mains voltage on the chassis! Radio must only be used with an earthed power cord to chassis and an inline isolation transformer complying with Australian Wiring standards and tested to AS/NZS 3760 by a qualified person.

STROMBERG-CARLSON (AUSTRALASIA) LIMITED  
SYDNEY, AUSTRALIA  
DRAWING No 756  
DRAWN  
EXAMINED  
APPROVED  
DATE 5-11-35  
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