HP 200CD - Wide Range Oscillator



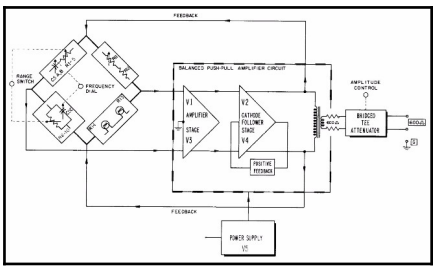
Wide range low-frequency oscillator, covering from 5 Hz to 600 KHz in five ranges:

- X1	5 Hz	to	60 Hz
- X10	50 Hz	to	600 Hz
- X100	500 Hz	to	6 kHz
- X1,000	5 kHz	to	60 kHz
- X10,000	50 kHz	to	600 kHz

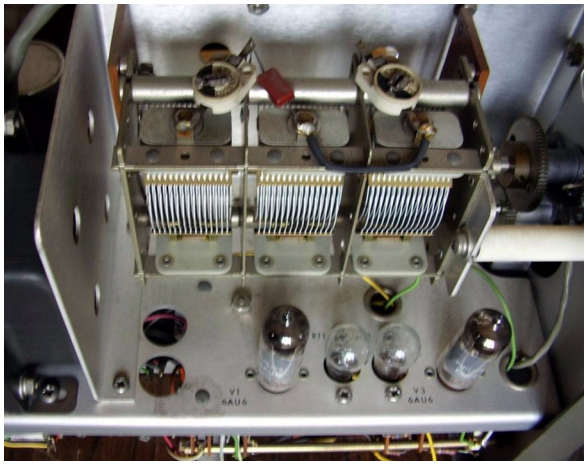
Dial calibrated to 2%.

Output 160 mW (10 volts) into 600 ohm load, 20 volts open circuit. Distorsion less than 1%.

The circuit is based upon a balanced push-pull amplifier and a balanced frequency and amplitude controlling bridge. The frequency is controlled by two arms of the bridge, with series and parallel RC resonating networks. Tuning is accomplished by a triple gang variable capacitor, two sections of which are parallel connected, and fixed resistors selected by the range rotary switch. The opposite arms form a voltage divider, with lamps R13 and R14 used as thermal-dependant resistors, to stabilize the amplitude of oscillations. The block diagram is given below (click to enlarge).



Early series of this generator still used octal tubes, 6SH7 and 6AU5GT, and the vacuum rectifier, 5AR4. The set in the collection, S/N 0960A83252, uses silicon rectifier diodes and miniature tubes, 6AU6 and EL86/6CW6.



The revision is documented below.

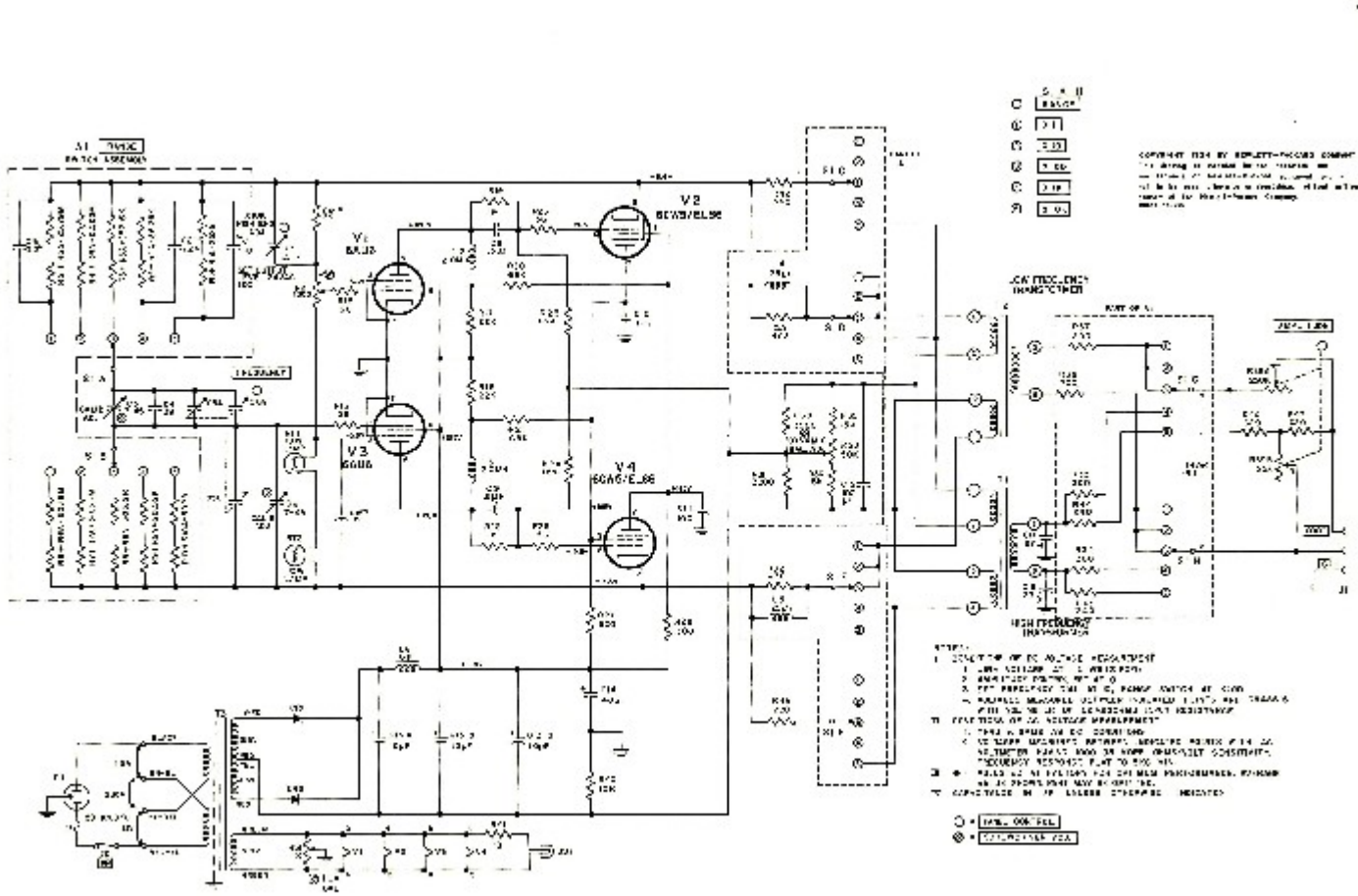


Figure 5-9. Model 200CD Schematic Diagram

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