

K-B**Model CG20**

General Description : Six-valve (including rectifier and tuning indicator), four-waveband superheterodyne radiogramophone with bandspread tuning on the 31- and 19-m. bands. Model CG20A is fitted with an automatic record changer; Model CG20S has a single record unit. Weight 94 lb. Released June 1948.

Power Supplies : A.C. mains, 100-130 and 200-250 volts (six adjustment positions), 50-60 c/s. Consumption: radio unit, 300 mA.; motor unit, 110 mA.

Wavebands : L.W. 750-2000 m. (420-140 kc/s.); M.W. 200-550 m. (1500-550 kc/s.); 31-m. band (30-31.8 m., 10-9.4 Mc/s.); 19-m. band (19.4-20.7 m., 15.4-14.5 Mc/s.).

Output : 5½ watts to a 10-in., high-flux, permanent-magnet, moving-coil loudspeaker with curvi-linear cone. Sockets are provided for an external loudspeaker of 2-4 ohms impedance. The internal loudspeaker may be disconnected by means of a screw switch.

Intermediate Frequency : 465 kc/s.

Valves : (V₁) 6K8GT; (V₂) 6B8GT; (V₃) Y63; (V₄) 6SL7GT; (V₅) 6L6GT; (V₆) 5Z4G.

Dial Lamp : 8 volts, 0.3 amp. M.E.S. type.

Chassis : It is unnecessary to remove knobs when withdrawing the chassis from the cabinet. Should the pick-up transformer be removed, it should always be replaced in its original position, otherwise hum may occur.

Alignment Procedure : Notes and procedure are identical with those given for Model CR20 (page 484).

The lay-out of the pre-set R.F. alignment controls, viewed from above the chassis, is as follows:

<i>Frame Aerial.</i>			
L ₉ -L ₁₀	L ₁₁ -L ₁₂	L ₂ -L ₃	L ₄ -L ₅
L ₁₄	L ₁₃	L ₆	—
T ₄	T ₃	T ₂	T ₁
		Gang	

Voltage Chart : The following readings were taken with the band switch in M.W. position and volume control set at minimum gain, the aerial and earth being disconnected. Mains voltage 225 volts and receiver adjusted to 225-volt tap. Volts across H.T. line: Unsmoothed 288 volts; smoothed 245 volts. Total H.T. current is 91 mA.

<i>Valve</i>	<i>Volts Measured between Socket and Chassis</i>							
	<i>Pin 1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
V ₁	E	E	219	100	—	84	6.3 *	3.2
V ₂	E	E	219	—	—	102	6.3 *	E
V ₃	—	6.3 *	42	222	—	—	E	E
V ₄	—	63	1.25	—	52	E	6.3 *	E
V ₅	E	E	266	243	—	288	6.3 *	13.4

* A.C. measurement.

