

G.E.C.

Model BC5445

General Description : Five-valve (including rectifier), three-waveband transportable receiver with high-impedance pick-up terminals and plastic cabinet.

Power Supply : A.C. mains, 200/230/250 volts, 40-100 c/s. Consumption approximately 45 watts.

Wavebands : S.W. 13-50 m. (23.1-6.0 Mc/s.); M.W. 187-572 m. (1.61-0.52 Mc/s.); L.W. 1100-1900 m. (273-158 kc/s.).

Intermediate Frequency : 470 kc/s.

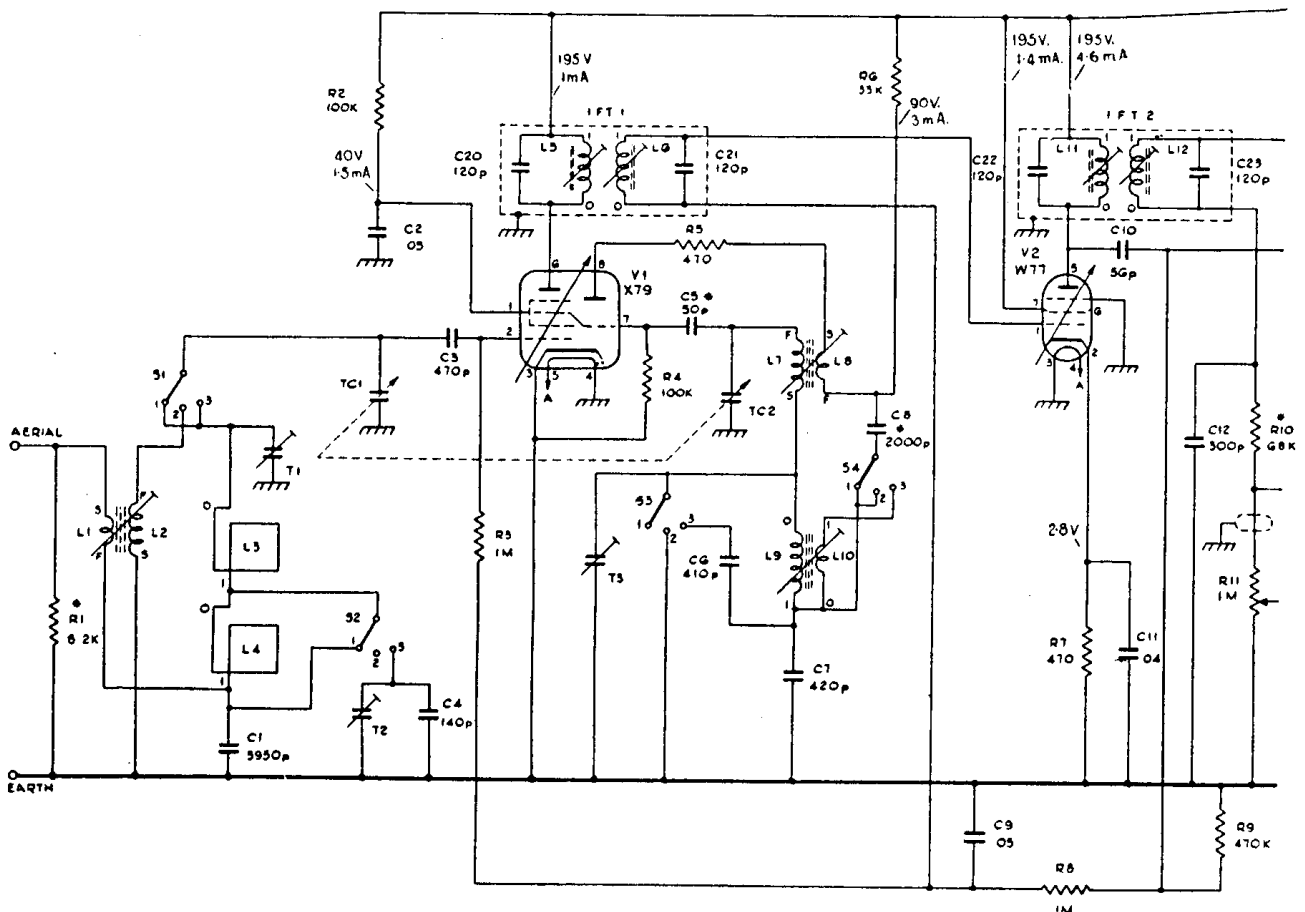
Valves : Osram. (V1) X79; (V2) W77; (V3) DH77; (V4) N78; (V5) U78.

Dial Lamps : Two 6.5 volts, 0.3 amp. Osram type OS75.

Loudspeaker : 6½ in. diameter, permanent magnet. Speech-coil impedance, 3 ohms at 400 c/s. External loudspeaker impedance 2-4 ohms.

Alignment Procedure :

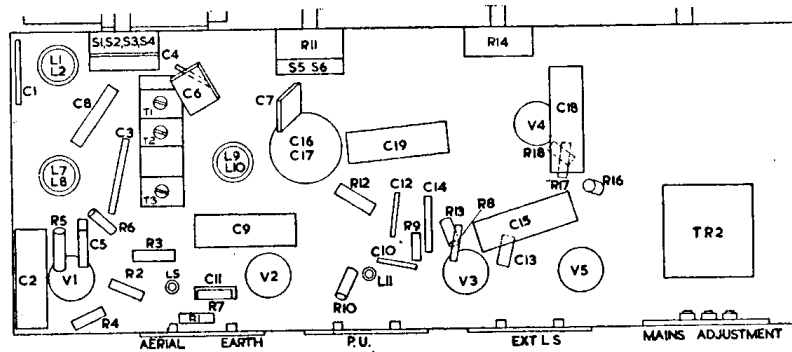
Circuit	Frequency, Mc/s.	0-90° Scale Setting	Order of Adjustment of Trimmers or Cores	Notes
I.F.	0.47	90	L12, L11, L6, L5	Switch to L.W. Frame aerials should be in their correct positions before alignment is commenced
S.W.	6.0	86	L7, L2	
M.W.	0.6	73.5	L9 Repeat { L9	
L.W.	1.5	21.5	T3, T1 { T3, T1	
	0.23	40	T2	



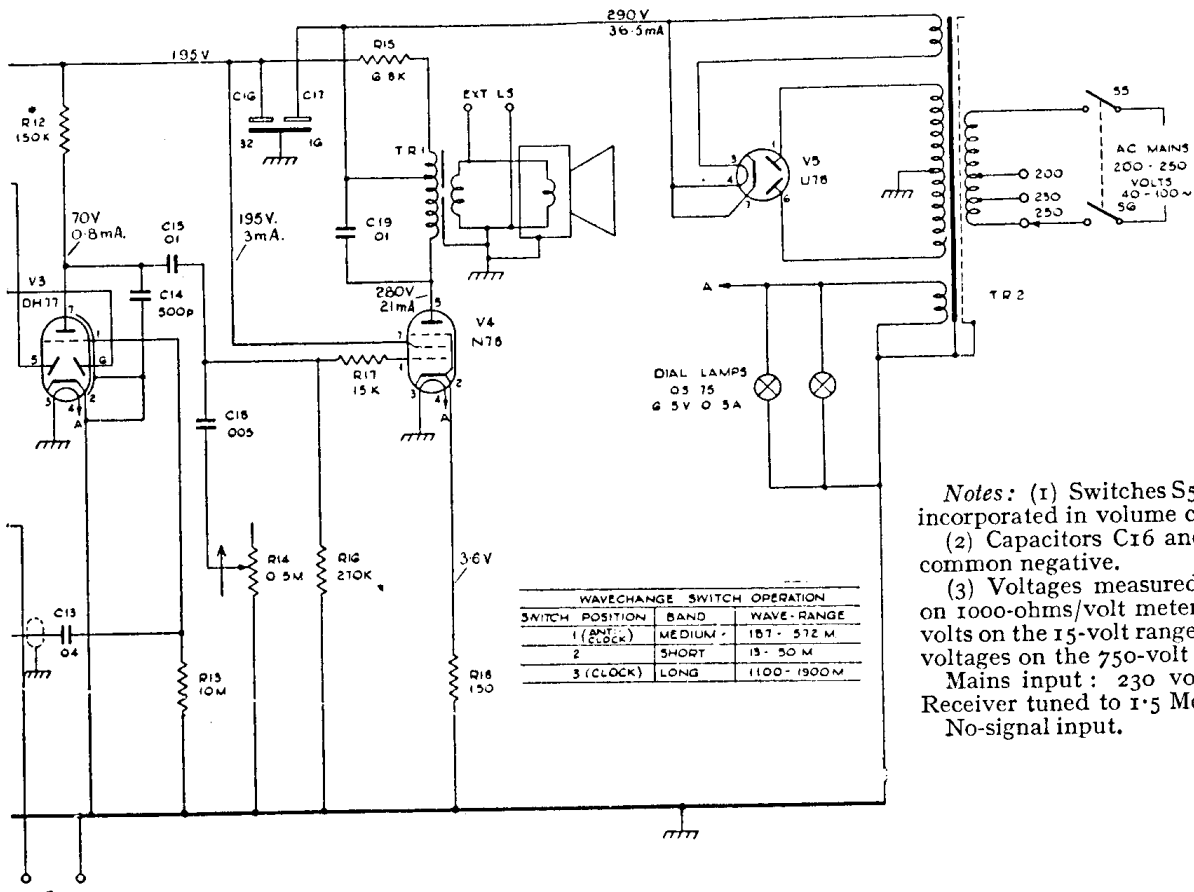
CIRCUIT DIAGRAM—

Coil and Transformer Data :

	D.C. Resistance, Ohms	Inductance, $\mu H.$		D.C. Resistance, Ohms
L5, L6	8.0	700-1150	Mains transformer : Primary— 0-200 v. 0-230 v. 0-250 v. Secondary— Total H.T. Rectifier filament Heater Output transformer : Primary (total) Secondary	37.5 43.0 47.0 804 0.72 0.41 460 0.68
L11, L12.	8.0	700-1150		
L1	0.23	3 $\frac{2}{3}$ turns		
L2	0.25	0.94		
L3	0.91	—		
L4	14.90	—		
L7	0.04	0.88		
L8	0.28	4 $\frac{2}{3}$ turns		
L9	3.1	—		
L10	1.2	—		



UNDER CHASSIS LAY-OUT



WAVECHANGE SWITCH OPERATION		
SWITCH POSITION	BAND	WAVE-RANGE
1 (ANT. CLOCK)	MEDIUM	157 - 512 M
2	SHORT	15 - 50 M
3 (CLOCK)	LONG	1100 - 1900 M

Notes : (1) Switches S5 and S6 are incorporated in volume control R11.
 (2) Capacitors C16 and C17 have common negative.
 (3) Voltages measured to chassis on 1000-ohms/volt meter. Cathode volts on the 15-volt range. All other voltages on the 750-volt range.
 Mains input : 230 volts, 50 c/s.
 Receiver tuned to 1.5 Mc/s.
 No-signal input.