

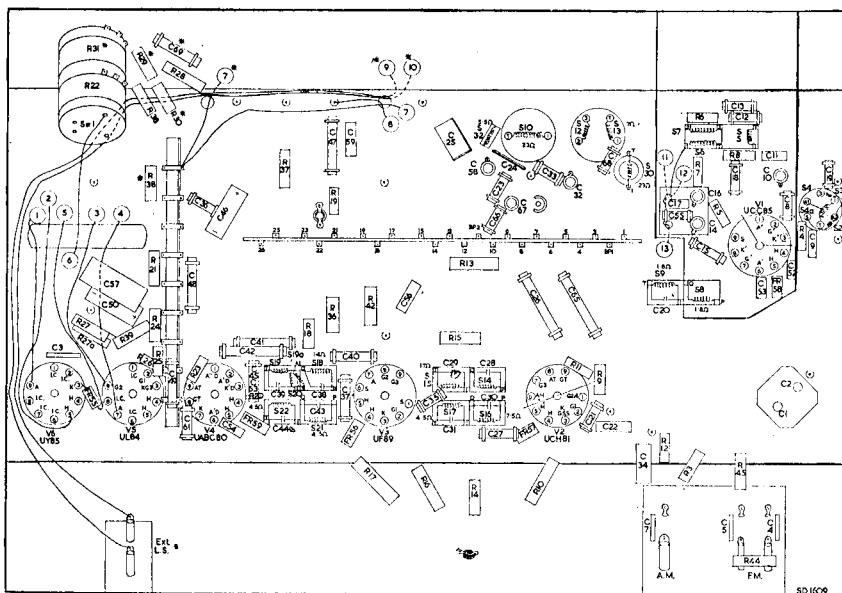
PHILIPS

Models B3G99U, B4G01U

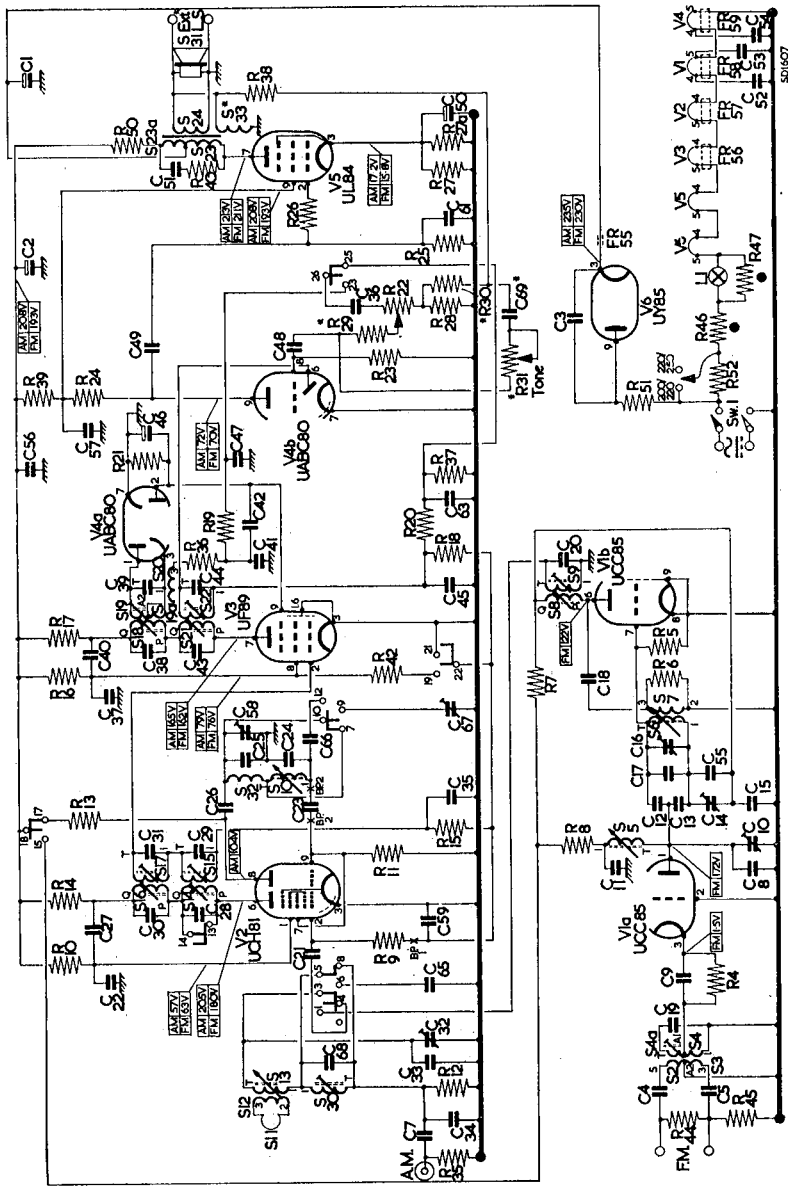
General Description: Six-valve (including rectifier), three-waveband, A.M./F.M. table models. Also known as Models 399U, 401U.

Power Supply: A.C./D.C. mains, 200–250 volts, about 60 watts. The flying lead which plugs on to the mains dropper is initially set to 240-volt position (extreme right-hand tag viewed from rear of chassis). Tag immediately to left is 210-volt connection.

Wavebands: M.W. 187–569 m.; L.W. 1090–2000 m.; V.H.F. 87.5–100 Mc/s.



<i>Capacitors.</i>			
C1	50 (275 v.)	C21	100 pF.
C2	100 (275 v.)	C22	1,200 pF.
C3	4,700 pF.	C23	56 pF.
C4	470 pF.	C24	290 pF. (1%)
C5	470 pF.	C25	120 pF. (1%)
C6	1,800 pF.	C26	470 pF.
C7	4.7 pF.	C27	4,700 pF.
C8	1,000 pF.	C28	15 pF.
C9	2–5 pF.	C29	15 pF.
C10	1,000 pF.	C30	110 pF.
C11	1,000 pF.	C31	195 pF.
C12	8.2 pF. (±0.5 pF.)	C32	18 pF.
C13	8.2 pF.	C33	33 pF.
C14	2–10 pF.	C34	3,000 pF. (5%)
C15	130 pF.	C35	100 pF.
C16	2–10 pF.	C36	4,700 pF.
C17	15 pF.	C37	4,700 pF.
C18	33 pF.	C38	22 pF.
C19	0.8 pF. (±0.5 pF.)	C39	47 pF.
C20	15 pF.	C40	4,700 pF.
		C41	330 pF.
		C42	330 pF.
		C43	195 pF.
		C44	195 pF.
		C45	100 pF.
		C46	2 (50 v.)
		C47	330 pF.
		C48	10,000 pF.
		C49	10,000 pF.
		C50	25 (25 v.)
		C51	1,000 pF. (1300 v.)
		C52	1,000 pF.
		C53	1,000 pF.
		C54	1,000 pF.
		C55	5.6 pF.
		C56	1,000 pF.
		C57	0.22
		C58	18 pF.
		C59	22,000 pF.
		C60	1,500 pF.
		C63	100 pF.
		C65	742 pF. (1%)
		C66	15 pF.
		C67	50 pF.
		C68	56 pF.
		C69	(B4G01U) 390 pF.
		<i>Resistors.</i>	
		R4	180
		R5	0.1M
		R6	2.2k
		R7	10k
		R8	2.2k
		R9	1M
		R10	39k (r W.)
		R11	47k
		R12	33k
		R13	33k (r W.)
		R14	2.2k
		R15	1M
		R16	33k (r W.)
		R17	4.7k (r W.)
		R18	1.2M



- R19 47k
- R20 47k
- R21 27k
- R22 2M (log.)
- R22/R31 (B4GorU) 2M +
- R23 10M
- R24 0.22M

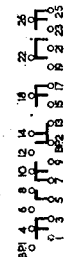
- R25 0.47M
- R26 1k
- R27 560 (x W.)
- R27a 560 (x W.)
- R28 68
- R29 (B4GorU) 68k
- R30 (B4GorU) 470
- R35 4.7M (20%)

- R36 120
- R37 0.22M (20%)
- R38 3.3k
- R38 (B4GorU) 2.7k
- R39 0.1M
- R40 27k (x W.)
- R42 47k
- R44 10k (20%)

- R45 4.7M (½ W., 20%)
 - R46 Varite
 - R47 Varite
 - R50 1k (x.5 W., 5%)
 - R51 140 (5 W., 5%)
 - R52 235 (2.5 W., 5%)
- Resistors ½ W., 20% unless otherwise indicated.

Circuit drawn in the M.W. position

EM ← M.W. → LW.



All voltages to chassis using a 200000V voltmeter.

* B4GorU only R38 is connected to S33 and not to S24. S31 is NOT connected to chassis.

ADDENDUM:

In later Receivers a 1000pF Capacitor has been connected between pins 1 and 4 of V3 valve holder.

CIRCUIT DIAGRAM—PHILIPS MODELS B3G99U, B4GorU

Valves: (V₁) UCC85; (V₂) UCH81; (V₃) UF89; (V₄) UABC80; (V₅) UL84; (V₆) UY85.

Pilot Lamp: 19 volts, 0.1 amp. (Type 8097D).

Alignment Frequencies: A.M. I.F. 470 kc/s. M.W. 1620 kc/s., L.W. 190 kc/s. F.M. I.F. 10.7 Mc/s. R.F. 87.5, 94 and 100 Mc/s.

Dismantling: Remove two chassis-fixing screws located at bottom of front edge of chassis, also two screws at rear of bottom of cabinet. Withdraw chassis and unsolder speaker leads.

Associated Models: Models **B4G12U**, **B3G10U**, also known as **412U** and **310U**. C8 connected across S₅ and not in parallel with C10.

Radiogram Model **F4G10A**, also known as **410A**, incorporates a radio/gram switch, one section of which disconnects H.T. from triode anode of V₂ and screen of V₃ on "gram". The other section switches either P.U. or detector to top of R₂₂. Record unit AG1014. Motor windings are series connected, these in turn are connected in series with two resistors in parallel across set side of mains switch SW₁. R₁ (1.2k) and R_{1A} (1.5k) are short-circuited by the voltage selector in the 200-220 v. tap.