

**EKCO****Models A104, A144, U109, U143**

**General Description :** Five-valve (including rectifier), three wave-band superheterodyne receiver.

**Power Supplies :**

*Models A104, A144 :* A.C. mains, 200-250 volts, 40-100 c/s.

*Models U109, U143 :* A.C./D.C. mains, 200-250 volts.

**Wavebands :** S.W. 16-51 m.; M.W. 185-570 m.; L.W. 950-2150 m.

**Intermediate Frequency :** 460 kc/s.

**Valve Analysis :**

*Model A104 :* 225 volts input. Set tuned 1 Mc/s., no-signal conditions.

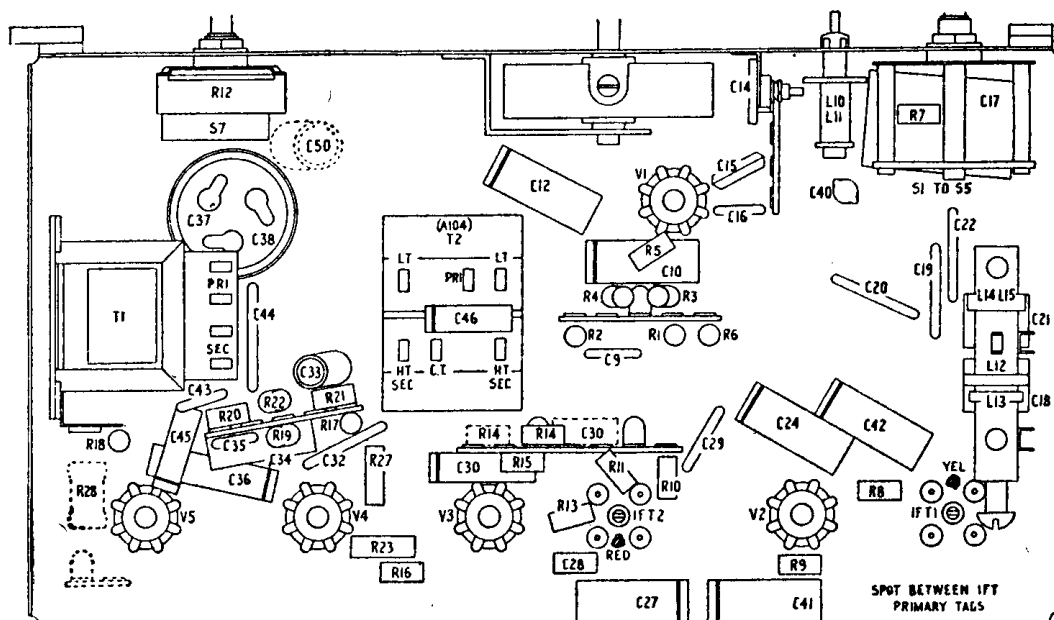
		$V_a$	$I_a$	$V_{g2}$	$I_{g2}$	$V_k$	$I_k$
V <sub>1</sub>	UCH <sub>42</sub>	208	1.7	85	2.4	2.6	7.4
V <sub>1</sub>	(osc.)	93	3.3	—	—	—	—
V <sub>2</sub>	UF <sub>41</sub>	193	5.2	97	1.6	2.2	6.8
V <sub>3</sub>	UBC <sub>41</sub>	121	0.4	—	—	2.2	0.4
V <sub>4</sub>	UL <sub>41</sub>	187	49.5	106	7.0	4.6	56.5
V <sub>5</sub>	UY <sub>41</sub>	235 A.C.	—	—	—	234	73.5

**Notes :** Pilot lamps on "A" models are rated 6.5 volts, 0.3 amp. and on "U" models 6.2 volts, 0.3 amp. Output on "A" models 2.5 watts, on "U" models 2 watts. External loudspeaker impedance 3 ohms at 400 c/s.

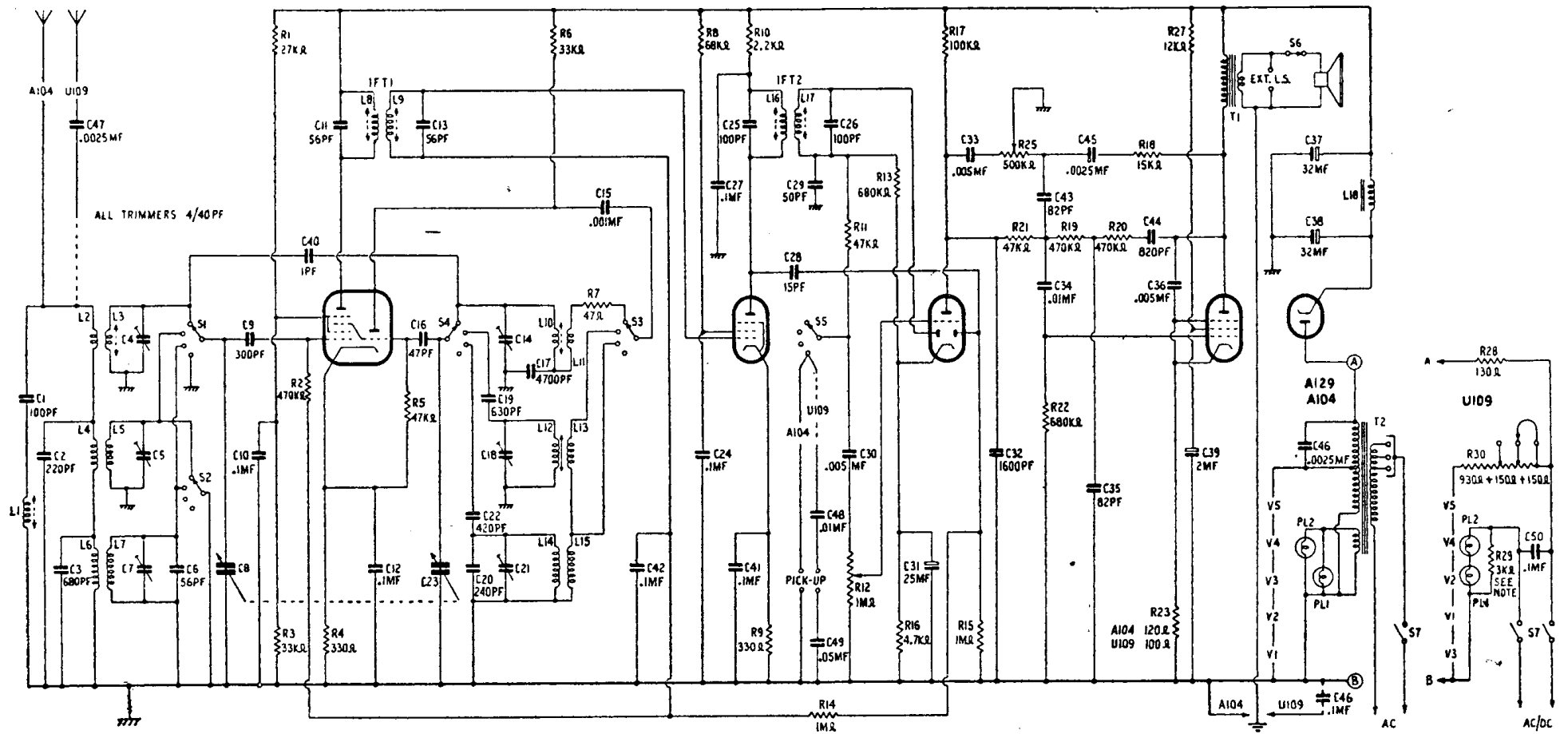
**Alignment Summary :** With gang fully closed, pointer should coincide with L.F. end of scale. Use conventional procedure, adjusting I.F. filter (L<sub>1</sub>) for minimum output. Alignment points are as follows :

	<i>Trimming Adjustments</i>		<i>Padding Adjustments</i>	
M.W.	1300 kc/s.	C18, C5	800 kc/s.	L12
L.W.	250 kc/s.	C21, C7	150 kc/s.	Check calib.
S.W.	15 Mc/s.	C14, C4	6.5 Mc/s.	L10, L3

UNDER-  
CHASSIS  
VIEW



C	1, 2, 3, 4, 7	4, 5, 6, 7	8, 9, 10	40	41	12	13, 16, 23	22, 20, 19, 14, 18, 21, 17	15	42	24, 27, 41, 25	28, 29, 48, 49, 26, 30	31	33	32	43, 34	45, 35	44	36, 39	37, 38, 46	50	C	
R	1, 2	3, 4	5	6	7	8	10, 9	14, 11, 12	13, 16	17	15	25, 21, 22	19	20	18	23, 27	28, 29, 30						R



CIRCUIT DIAGRAM—EKCO MODELS A104, U109

The valve heaters are wired in series on all models. On the "U" models, the chassis may be "live". R29 is a thermistor. C14 is not fitted on early U109s.

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