

E R T SERVICE CHART 1684 EKCO A401, FERRANTI 5701

TRANSISTORISED mains operated table radio in two versions. Ekco A401 has dark tuning scale and light trim to control panel, Ferranti 5701 has light tuning scale and dark trim to control panel.

Mains. 200/250V 50/60c/s AC.

Transistors. TR1 FM RF amplifier BF194, TR2 FM mixer BF195, TR3 AF amplifier OC71, TR4 AF amplifier OC75, TR5 driver AC128, TR6 output AC128, TR7 output AC176.

Rectifier. MR1 Westinghouse H029PE01B.

Thermistor. R26 VA1077.

Wavebands. LW 2000-1150m (150-260kc/s), MW 566-185m (530-1620kc/s), FM 87-108mc/s.

Aerial. Ferrite rod aerial for AM.

Pilot lamp. LP1 24V 2.8W.

Fuse. FS1 250mA surge-proof.

Speaker. 5in. 15ohm impedance.

Manufacturer. Pye Group (Radio and Television) Ltd.

Service departments. Spares orders to: Combined Electronic Services Ltd, PO Box 11, Cambridge. Tel: Cambridge 59761 or 59101. Night answering service: Cambridge 59101. Main service depot: Combined Electronic Services Ltd, Somerton Works, Arterial Road, Westcliff-on-Sea, Essex. Tel: Southend 42296.

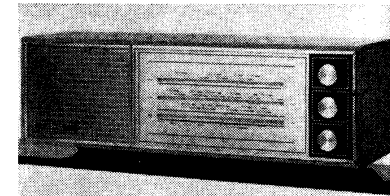
SERVICE NOTES

The IF circuits are contained in Mullard module LP1165. Realignment or repair of this module should not be attempted, suspect units should be returned to set manufacturers.

To facilitate alignment when chassis is removed from cabinet, datum holes are provided in scale backplate. Large holes are for FM and small holes for AM and zero (pointer setting with gang fully closed).

Continued overleaf

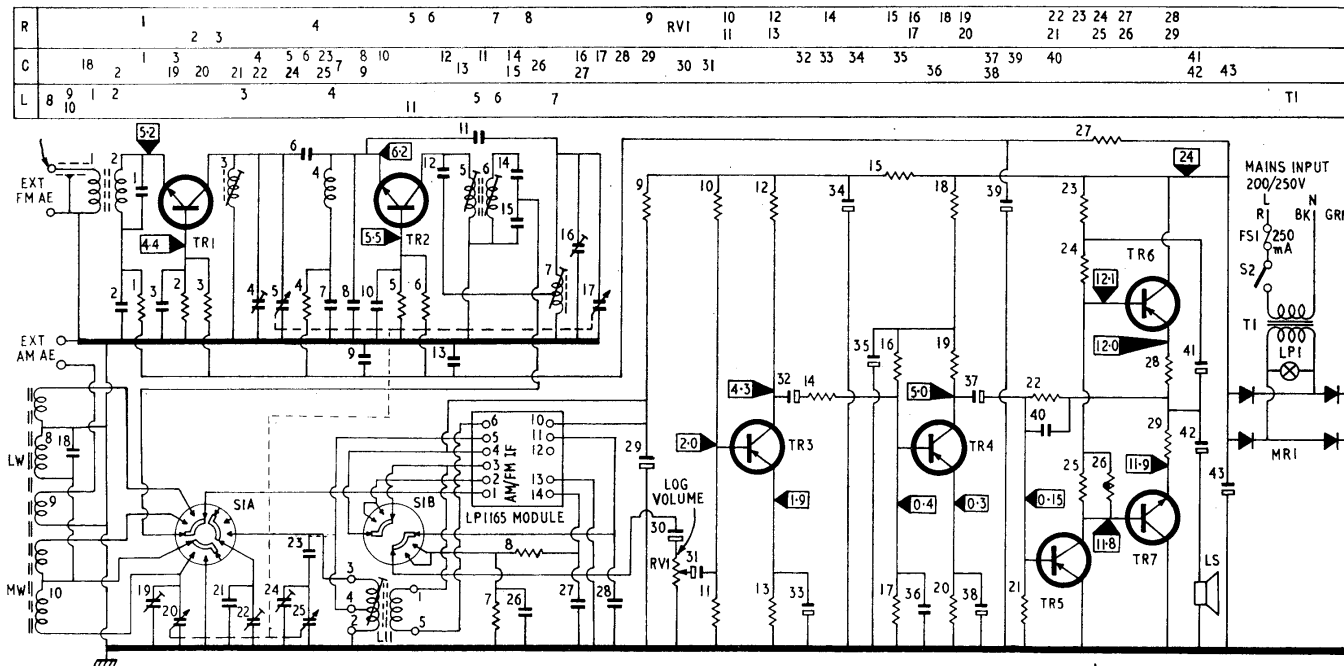
RESISTORS			CAPACITORS					
R1	2K7	—	R25	27	B	C19	—	—
R2	12K	—	R26	Thermistor	B	C20	gang	—
R3	6K8	—	R27	5K6	B	C21	150pF	A
R4	1K	—	R28	2.2	B	C22	10-80pF	A
R5	6K8	—	R29	2.2	B	C23	215pF	A
R6	2K2	—	CAPACITORS			C24	—	—
R7	470	A	C1	15pF	—	C25	gang	—
R8	4K7	A	C2	2KpF	—	C26	5KpF	A
R9	560	A	C3	1KpF	—	C27	5KpF	A
R10	47K	A	C4	—	—	C28	20KpF	A
R11	15K	A	C5	gang	—	C29	200mF	A
R12	3K3	A	C6	4.7pF	—	C30	6.4mF	A
R13	1K	A	C7	320pF	—	C31	6.4mF	B
R14	8K2	B	C8	33pF	—	C32	6.4mF	A
R15	2K2	B	C9	20KpF	—	C33	125mF	A
R16	33K	B	C10	1KpF	—	C34	125mF	A
R17	1K8	B	C11	5.6pF	—	C35	125mF	B
R18	4K7	B	C12	68pF	—	C36	10KpF	B
R19	2K2	B	C13	20KpF	—	C37	6.4mF	B
R20	150	B	C14	220pF	—	C38	125mF	B
R21	270	B	C15	1KpF	—	C39	125mF	B
R22	18K	B	C16	—	—	C40	1KpF	B
R23	180	B	C17	gang	—	C41	40mF	B
R24	470	B	C18	39pF	—	C42	250mF	B
						C43	2000mF	—

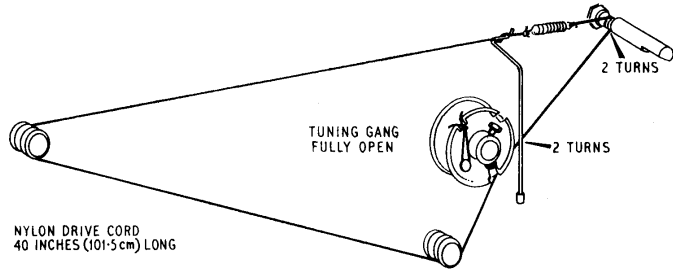


Ferranti version of table radio which has seven transistors in addition to those in IF module. Ekco version has dark scale and light trim to control panel

TRANSISTOR VOLTAGES

No.	Function	E	B	C
TR1	FM RF amplifier	5.2	4.4	—
TR2	FM mixer	6.2	5.5	—
TR3	AF amplifier	1.9	2.0	4.3
TR4	AF amplifier	0.3	0.4	5.0
TR5	driver	0.0	0.15	11.8
TR6	output	12.0	12.1	24.0
TR7	output	11.9	11.8	0.0





Drive cord lacing. Tie braided nylon cord 40in. long including loops. Loop ends to tension spring, take two turns over and round drive spindle. Set tuning gang fully open, take two turns under and round drive drum making loop and slipping this over peg inside drum, as shown. Continue half turn off drum to lower pulley. Slip cord over remaining pulley and attach pointer as shown

ALIGNMENT

Equipment required. Signal generator covering 10.7-102mc/s $\pm 22\frac{1}{2}$ kc/s deviation, 214-1500kc/s 30 per cent modulation; dummy aerial; 75ohm resistor; polystyrene cement; trimming tools.

FM alignment. Apply a 10.7mc/s signal $\pm 22\frac{1}{2}$ kc/s deviation to FM external aerial sockets, input terminated by 75ohms. Set receiver to FM band. Fully close tuning gang and turn volume to maximum. Adjust in turn cores of L5 and L6 to get maximum output.

Tune receiver and signal generator to 92mc/s and adjust in turn cores of L7 and L3 to get maximum output. Tune receiver and signal generator to 102mc/s and adjust in turn trimmers C16 and C4 for maximum output. Repeat adjustments at 92mc/s and 102mc/s until tracking and calibration are correct.

AM alignment. Apply 30 per cent modulated 600kc/s signal to AM aerial sockets using dummy aerial. Set receiver to MW band and tune to 500m. Adjust in turn core of L11 and position of L10 on ferrite rod to get maximum output.

Inject 1500kc/s signal and tune receiver to 200m. Adjust in turn trimmers C24 and C19 for maximum output. Repeat adjustments at 600kc/s and 1500kc/s until tracking and calibration are correct.

Tune signal generator to 214kc/s and receiver to 1400m. Adjust in turn trimmer C22 and position of L8 on ferrite rod to get maximum output. Seal L8 and L10 in position on ferrite rod. Seal also trimmers C19, C22 and C24.

IF alignment. It is not intended that any attempt should be made to realign the IF module.

Layout of components on printed circuit board. No attempt should be made to service IF module

