

SERVICE MANUAL



KY 546 1B KY 547 1B

Dry battery receiver tropicalized



ERRES RADIO

I. GENERAL DATA

- a. Waveranges:
- | | | | |
|------|-------------|-------------|------|
| SW 1 | 11.5 - 24 m | 26.5 - 12.5 | Mc/s |
| SW 2 | 23.5 - 51 m | 12.7 - 5.9 | Mc/s |
| SW 3 | 51 - 175 m | 5.8 - 1.7 | Mc/s |
| MW | 175 - 585 m | 1.67 - 0.51 | Mc/s |
- b. Valves:
- | | | | | | |
|----|-----|----|----|-----|----|
| B1 | DK | 96 | B5 | DAF | 96 |
| B2 | DF | 96 | B6 | DL | 96 |
| B3 | DAF | 96 | B7 | DM | 71 |
| B4 | DL | 96 | | | |
- c. Circuits:
- Tuned HF circuits: 1 + 1
Tuned IF circuits: 2 + 2
- d. Intermediate frequency:
- Nominal 452 kc/s
- e. Sensitivity:
- MW better than 30 μ V
SW 1 - SW 2 - SW 3 better than 120 μ V
- f. Output:
- 0.35 W in position push-pull
0.15 W in "economy" position for 10%
distorsion measured at 100 c/s and nominal
dry battery voltage
- g. Selectivity:
- The IF bandwidth for a 10 fold signal is
11 kc/s
- h. Supply:
- Anode tension 90 V
Filament tension 1.4 V
- i. Controls:
- Volume control + dial illumination switch
Bass control
Push button switches for 4 waveranges,
gram. and mains
Treble control
Tuning
- In pulled out position bandsread on SW I
and SW II.

- j. Dimensions cabinet: 563 x 216 x 361 mm KY 5461B
560 x 219 x 363 mm KY 5471B
- k. Weight: Gross 10.9 kgs; Net 8 kgs KY 5461B
Gross 12.8 kgs; Net 10 kgs KY 5471B
- l. Consumption: Anode tension 12.5 mA, in economy
position 9 mA
Filament current 225 mA, in economy
position 150 mA

II. V O L T A G E S A N D C U R R E N T S

	DK 96	DF 96	DAF 96	DL 96	DAF 96	DM 71	
Va	83.5	83.5	14	83	26	83.5	V
Vg screen	63	64	20	81.5			V
Vg grid bias	-0.5	-0.5		-6.5		-0.5	V
Va triode	33						V
Ia	0.55	1.3	0.061	3.4	0.115	0.13	mA
Ig screen	0.14	0.4	0.021	0.55			mA
Ig	0.09						mA
Ig triode	1.8						

Voltages and currents measured with voltmeter 10.000 Ω/V in position 120 V.

Voltages measured with vacuumtubemeter.

Receiver in position "push-pull", MW, no aerial signal.

III. T R I M M I N G I N S T R U C T I O N S

- Signal generator: Modulate 30% with 400 c/s
- Pointer adjustment: Turn variable condenser fully out 0°
Set pointer at beginning of the stroke
- Adjusting points: Marks are indicated on the dial for:
0° - 60° - 62.5° - 65° - 92° - 325.5° - 380° -
470° - 482° turning in of the var.condenser.
- Final adjustment: Final adjusting coil in medium position (0°)
Volume control on maximum
Treble and bass controls on maximum

Range	Frequency	Position of cond.	Connection	Sequence of adjusting	
I.F.	452 kc/s	517.5° MW	via 22000 pF on $g_3 B_1$	S23-S22/S21-S20 Adjust damped	
I.F. filter	452 kc/s	517.5°	via artif. aerial	C2	
				osc. circ.	aer. circ.
SW I	15 Mc/s 24 Mc/s	325.5° 92°	via artif. aerial	S13 C19	S 2 C 3
SW II	6.5 Mc/s 12 Mc/s	380° 62.5°	"	S15 C20	S 4 C 4
SW III	1.8 Mc/s 5.5 Mc/s	482° 65°	"	S17 C21	S 6 C 5
MW	550 kc/s 1600 kc/s	470° 60°	"	S19 C22	S 8 C 6

C o n d e n s e r s

C 1	1000 pF	E 110 50/1K	C25	220 pF	E 360 02/220E
2	3-30 pF	7864/01	26	10000 pF	E 112 50/10K
3	3-30 pF	7864/01	27	10000 pF	E 112 50/10K
4	6-25 pF	82754/25E	28	4700 pF	E 201 10/4K7
5	6-25 pF	82754/25E	29	100 pF	E 360 02/100E
6	6-25 pF	82754/25E	30	220 pF	E 360 02/220E
7	10 pF	E 101 10/10E	31	2200 pF	E 201 10/2K2
8	47000 pF	E 220 10/47K	32	2200 pF	E 201 10/2K2
9	300 pF	E 360 02/300E	33	10000 pF	E 112 50/10K
10	10-490 pF	GK 21055	34	100 μF	GK 180 39
11	12-512 pF		35	100 pF	E 103 10/100E
12	220 pF	E 103 10/220E	36	10000 pF	E 112 50/10K
13	10000 pF	E 112 50/10K	37	100 pF	E 103 10/100E
14	47 pF	E 103 10/47E	38	47000 pF	E 201 10/47K
15	82 pF	E 103 10/82E	39	10000 pF	E 112 50/10K
16	10000 pF	E 112 50/10K	40	100 μF	GK 180 39
17	2000 pF	E 360 05/2K	41	10000 pF	E 112 50/10K
18	600 pF	E 302 01/600E	42	1000 pF	E 201 20/1K
19	1.5-12.5 pF	82754/12E5	43	25 μF	GK 180 38
20	6-25 pF	82754/25E	44	0.1 μF	E 201 10/100K
21	1.5-12.5 pF	82754/12E5	45	10000 pF	E 200 10/10K
22	10-50 pF	82754/50E	46	22000 pF	E 200 10/22K
23	300 pF	E 360 02/300E	47	1.5 pF	E 200 10/22K
24	100 pF	E 360 02/100E	48	1000 pF	E 201 20/1K

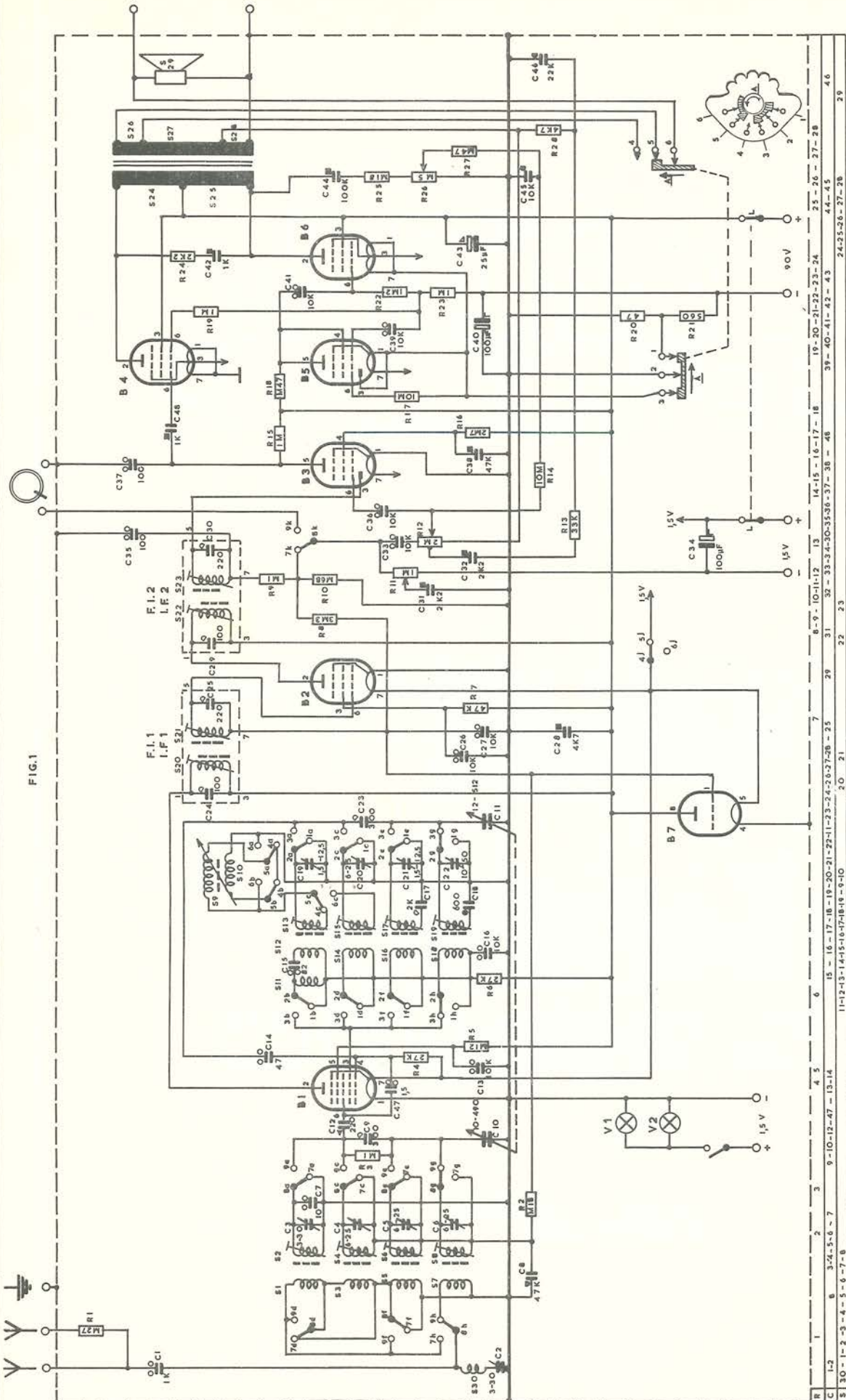
R e s i s t o r s

R 1	0.27 MΩ	GK 776 10/270K	R15	1 MΩ	GK 776 10/1M
2	0.18 MΩ	GK 776 10/180K	16	2.7 MΩ	GK 776 10/2M7
3	0.1 MΩ	GK 776 10/1M	17	10 MΩ	GK 776 10/10M
4	27000 Ω	GK 776 10/27K	18	0.47 MΩ	GK 776 10/470K
5	0.12 MΩ	GK 776 10/120K	19	1 MΩ	GK 776 10/1M
6	27000 Ω	GK 776 10/27K	20	47 Ω	GK 776 10/47E
7	47000 Ω	GK 776 10/47K	21	560 Ω	GK 776 10/560E
8	3.3 MΩ	GK 776 10/3M3	22	1.2 MΩ	GK 776 10/1M2
9	0.1 MΩ	GK 776 10/100K	23	1 MΩ	GK 776 10/1M
10	0.68 Ω	GK 776 10/680K	24	2200 Ω	GK 776 10/2K2
11	1 MΩ	GK 809 27	25	0.18 MΩ	GK 776 10/180K
12	0.2+1.8 MΩ	GK 809 47	26	0.5 Ω	GK 809 62
13	33000 Ω	GK 776 10/33K	27	0.47 MΩ	GK 776 10/470K
14	10 MΩ	GK 776 10/10M	28	4700 Ω	GK 776 10/4K7

C o i l s a n d T r a n s f o r m e r s

S 1	30 W	<1 Ω	aer.coil	S18	12 W	<1 Ω	osc.coil
2	9 W	<1 Ω	SW I	19	90 W	2.9 Ω	MW
			GK 568 07				GK 568 03
3	31 W	1.82 Ω	aer.coil	20	260 W	7.4 Ω	IF I transf.
4	20 W	<1 Ω	SW II	21	175 W	4.5 Ω	GK 567 95
			GK 568 09	22	260 W	7.4 Ω	IF II transf.
5	161.5 W	11 Ω	aer.coil	23	175 W	4.5 Ω	GK 567 95
6	38 W	<1 Ω	SW III	24	1900 W	340 Ω	output
			GK 568 10	25	1900 W	340 Ω	transf.
7	645.5 W	95 Ω	aer.coil	26	23 W	<1 Ω	GK 514 54
8	120 W	33 Ω	MW	27	27 W	<1 Ω	
			GK 567 44	28	2 W	<1 Ω	
9	4 W	<1 Ω	final	29	400per.	5 Ω	speaker
10	4 W	<1 Ω	adjust.				9770 Y
			coil	30	400 W		IF rejection
			GK 568 06				coil
11	20 W	<1 Ω	osc.coil				GK 565 94
12	6 W	<1 Ω	SW I				
13	6 W	<1 Ω	GK 568 86				
14	5 W	<1 Ω	osc.coil				
15	11 W	<1 Ω	SW II				
			GK 568 13				
16	8.75 W	<1 Ω	osc.coil				
17	30.5 W	<1 Ω	SW III				
			GK 567 60				
				V1	dial light 1.5V 0.15A/		
				V2	GK 922 48		
				A	switch GK 978 42		

FIG.1



CONDENSADORES

Electrolítico
Cerámico
Papel
Mica

12.5V
3.50V
500V
400V
100V

RESISTOR
RESISTENCIA

trimmer

B7 - DM 71

B1 - DK 96
B2 - DF 96
B3 - DAF 96
B4 - DL 96
B5 - DAF 96
B6 - DL 96

CONEXIONES DEL SOPORTE FL
CONNECTIONS IF TRANSFORMER

1 - 90V
2 - 40V
3 - 1.5V
4 - 1.5V

PL1
PL2

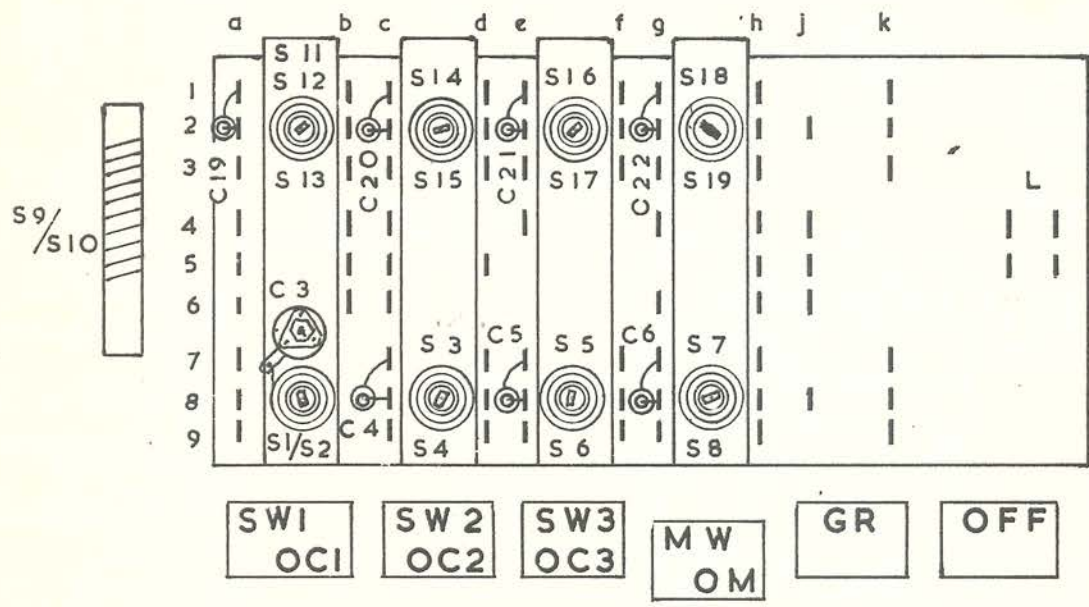
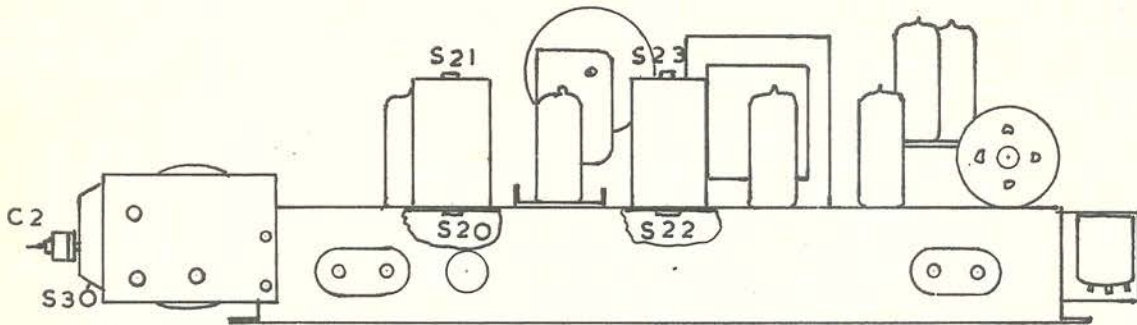
SW1 SW2 SW3 GR. OFF

1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

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FIG. 2



ADJUST DIAGRAM
AJUSTAR AQUI

FIG. 3

LARGO DE LAS CORREAS

A =	140mm =	5 1/2 "
B =	182mm =	7 3/16 "
C =	660mm =	2 6 "
D =	90mm =	3 1/2 "
E =	380mm =	15 "
F =	560mm =	22 "
G =	760mm =	30 "

Variable condenser in position of maximum capacity

2 Voudige condensator geheel ingedraad

