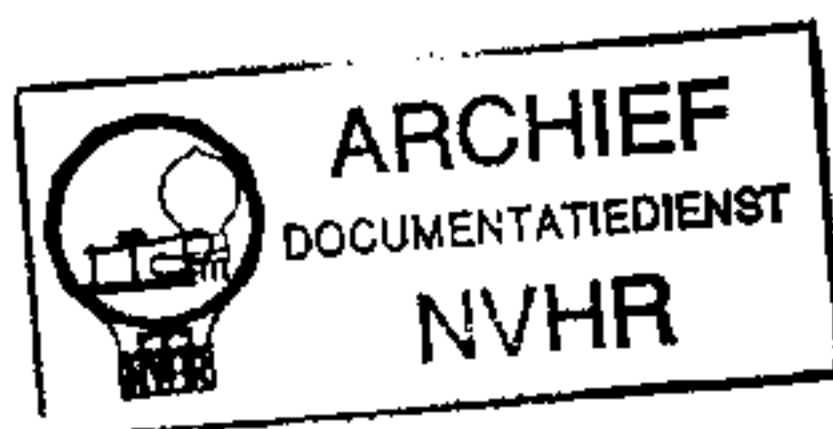


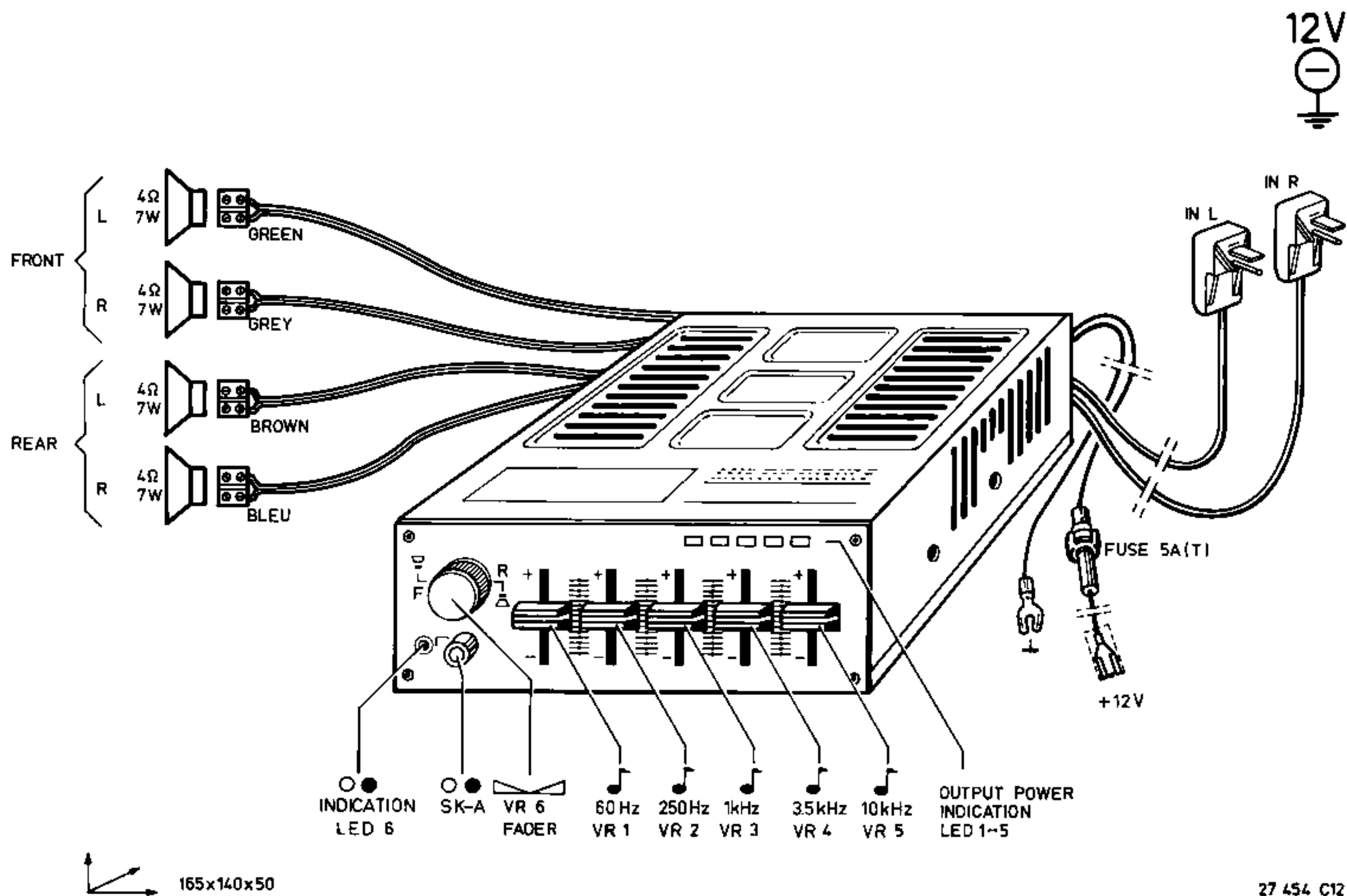
Met dank aan www.radiomuseum-hengelo.nl

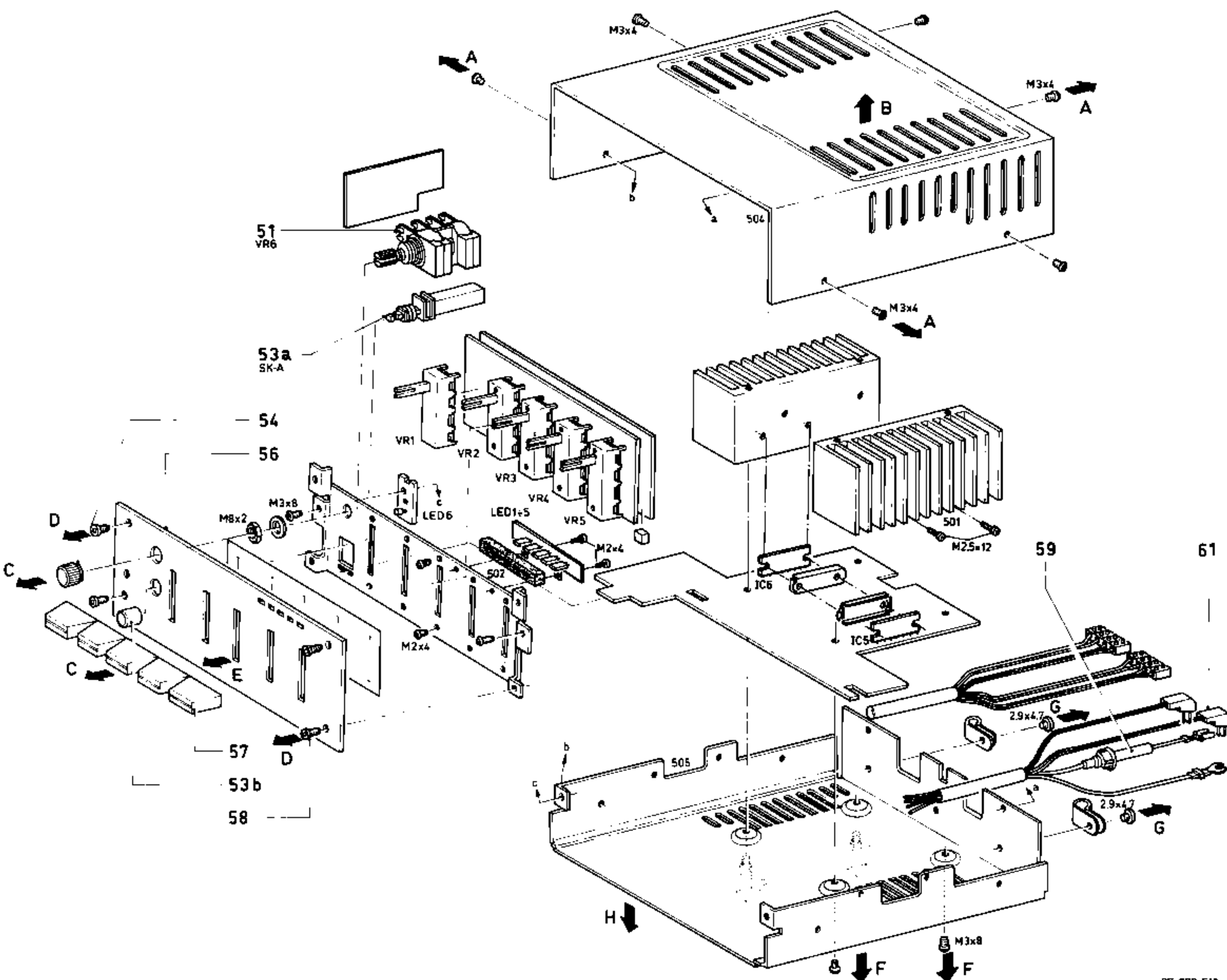
Service
Service
Service

Ned. Ver. v. Historie v/d Radio



Service Manual

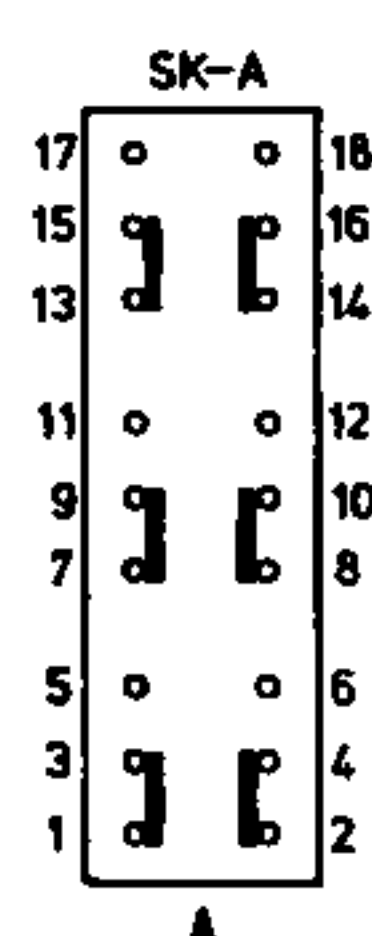
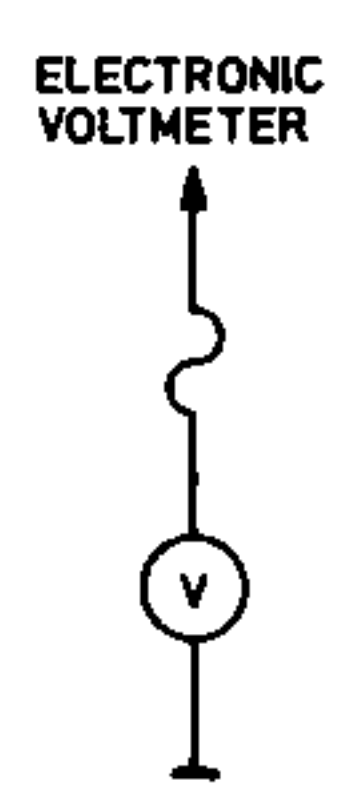
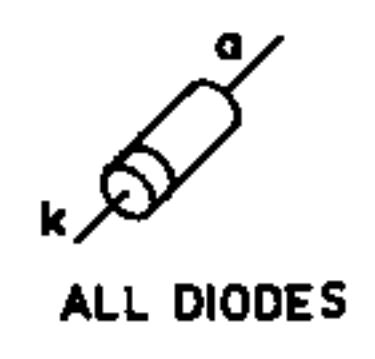
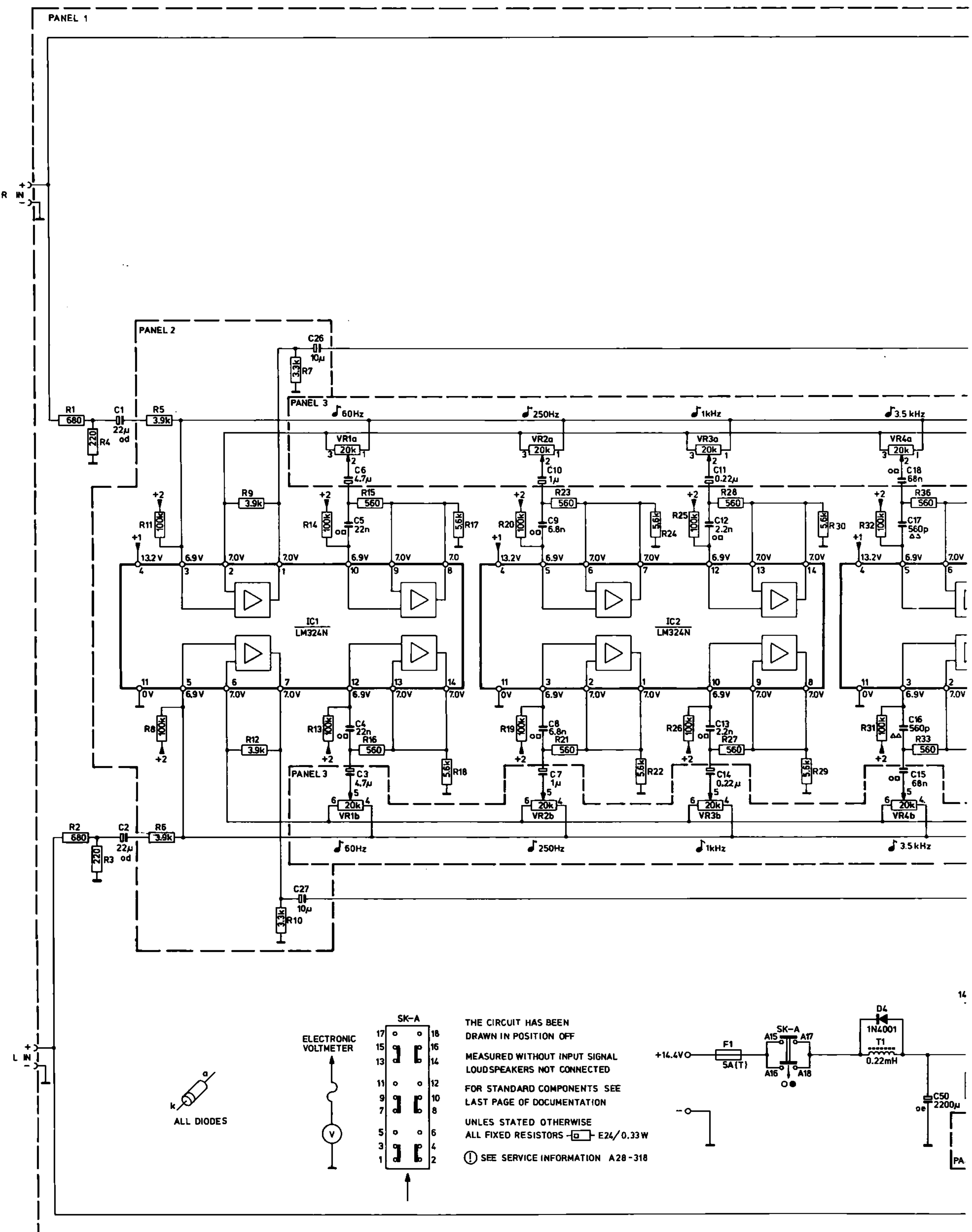




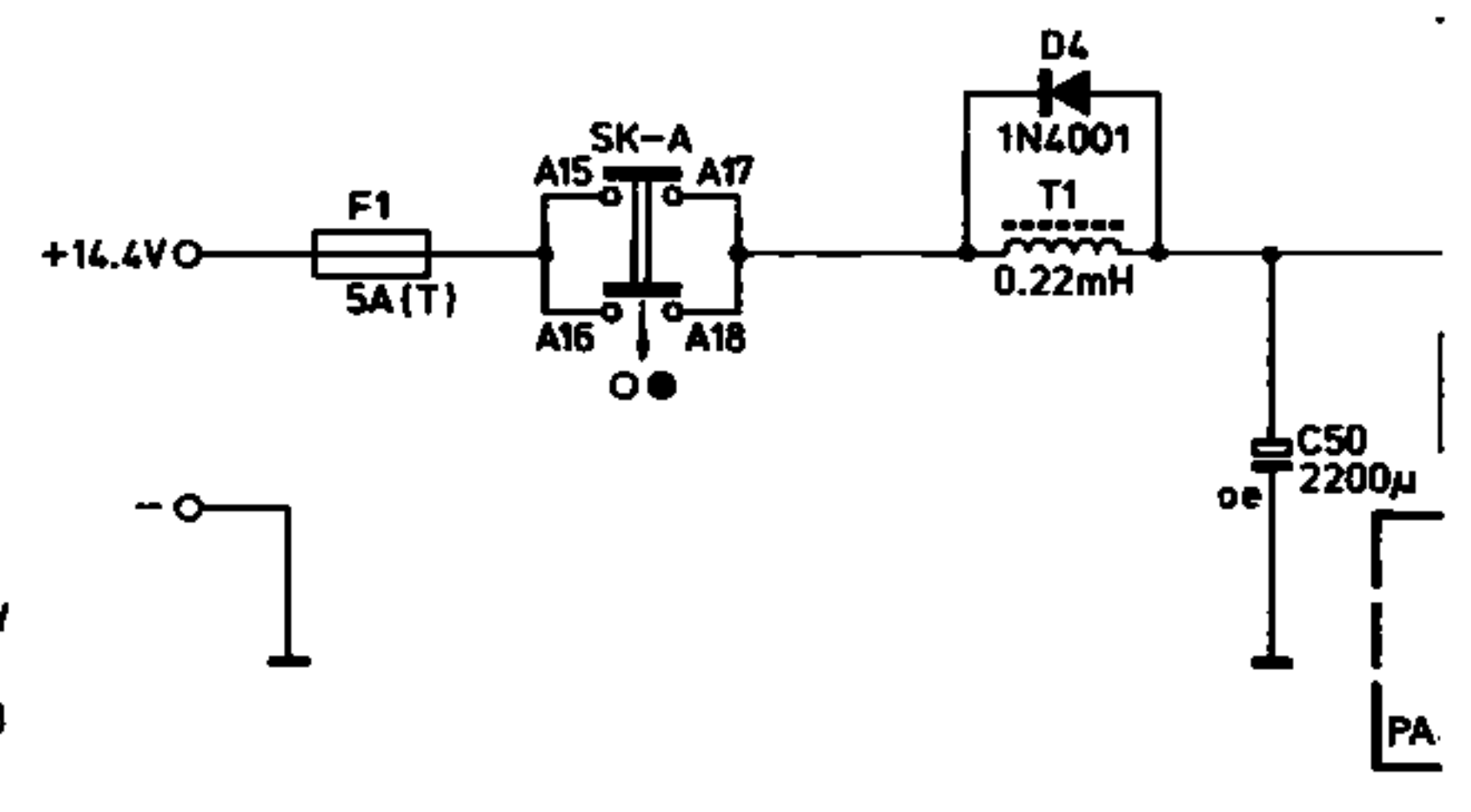
51	4822 102 50018
53a,b	4822 276 10783
54	4822 413 30871
56	4822 459 80158
57	4822 411 60811
58	4822 502 11568
59	4822 321 20334
61	4822 267 40235

27 372 E12

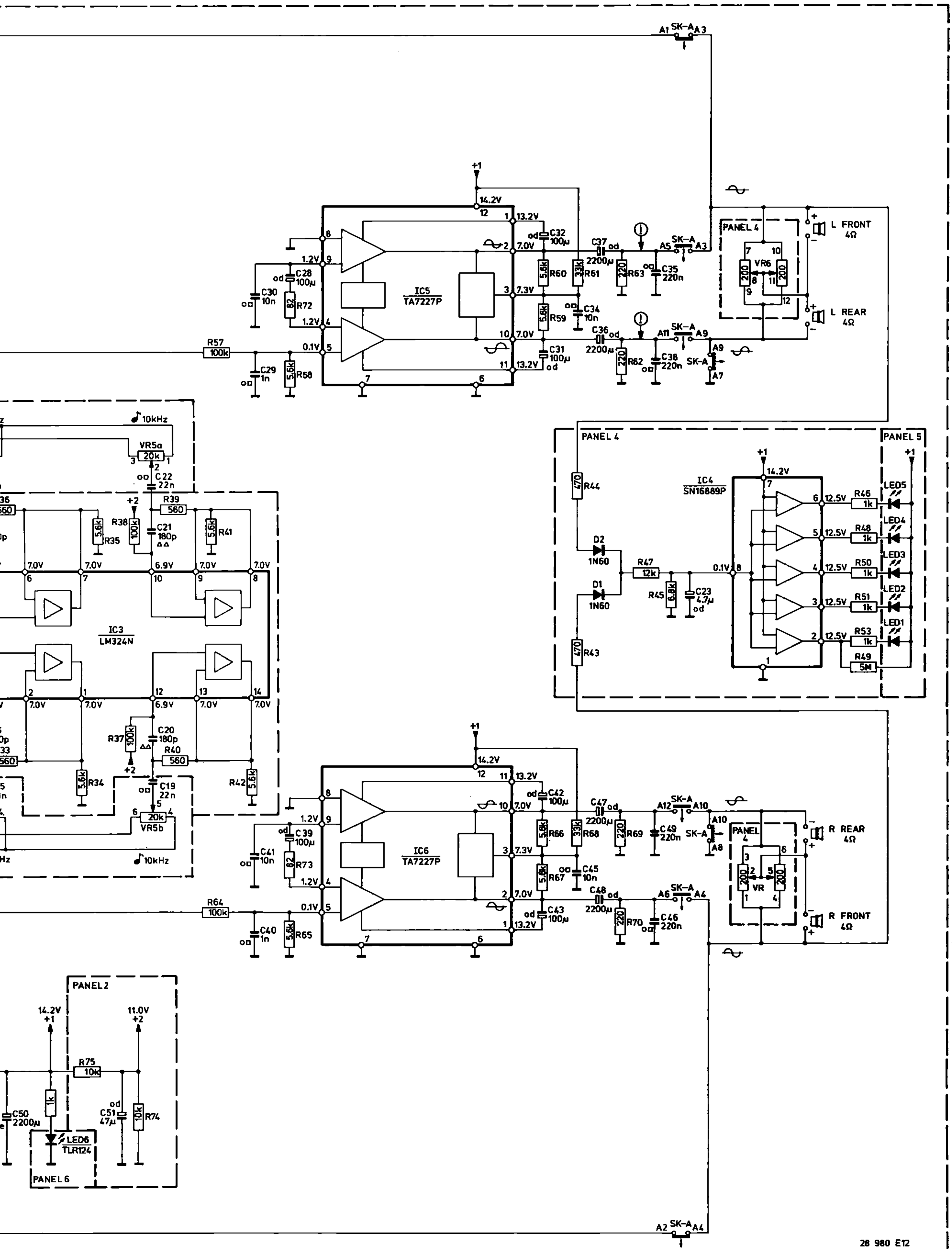
MISC		IC1	VR1a.b	VR2a.b	IC2	VR3a.b.F1	D4.T1.VR4a.b	LE
C	1.2	26.27	3+6	7+10	11+14	15+18	50	
R	1+4	5.11.8.6	12.9	10.7	13+16	18.17	19+21.23	22.24
								25+28
								30.29
								31+33.36



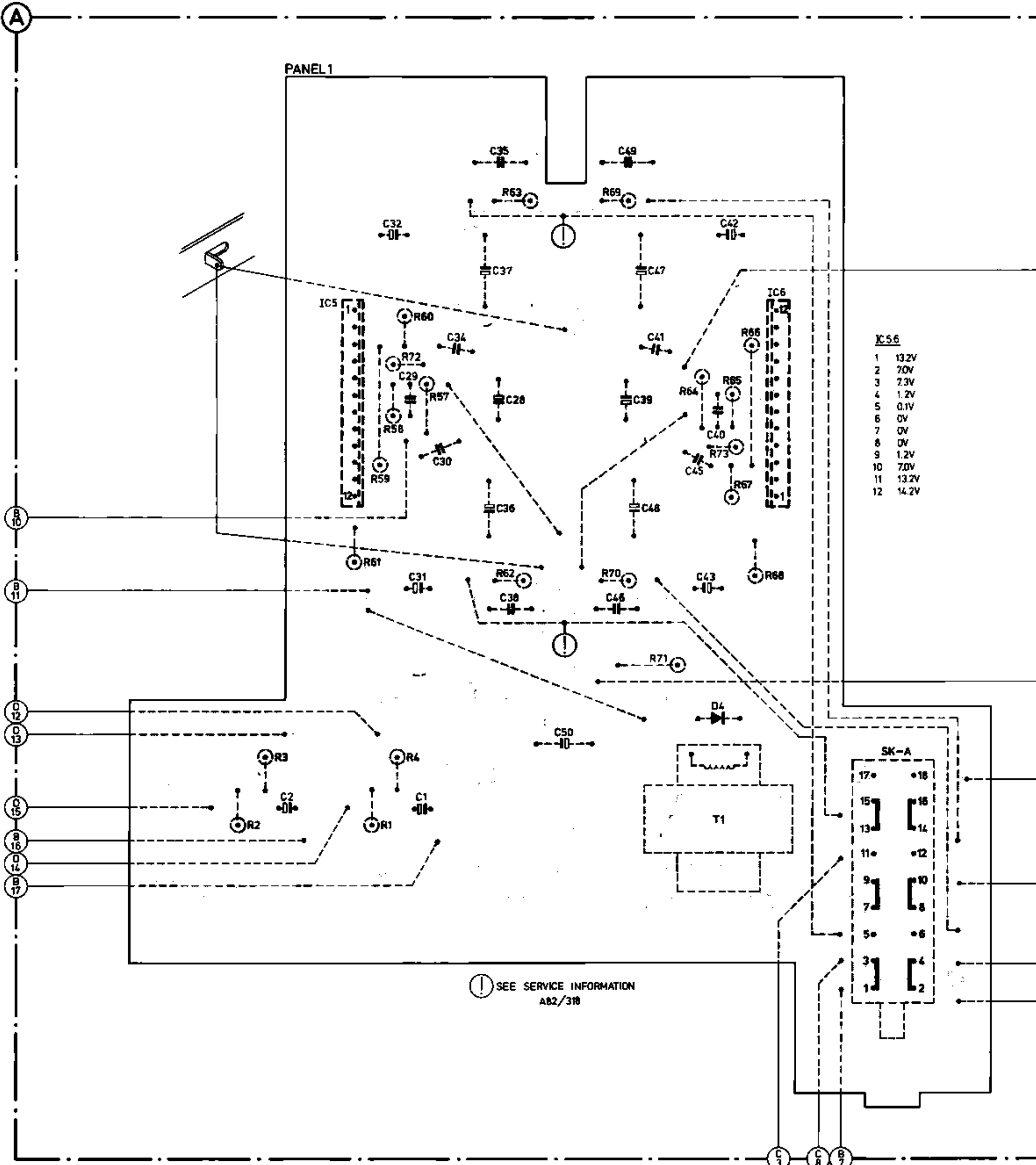
THE CIRCUIT HAS BEEN DRAWN IN POSITION OFF
 MEASURED WITHOUT INPUT SIGNAL
 LOUSPEAKERS NOT CONNECTED
 FOR STANDARD COMPONENTS SEE
 LAST PAGE OF DOCUMENTATION
 UNLESS STATED OTHERWISE
 ALL FIXED RESISTORS \square E24/0.33W
 Ⓛ SEE SERVICE INFORMATION A28-318



LED6	IC3	VR5a,b	IC5.6	D1.2	VR6. IC4	LED1-5	MISC
50	51	19+22	39+41.28+30	42.43.31.32	45+49.34+38	23	C
71.75.34.35	74.37+40	41.64.57.42	73.65.72.58	66+68.59+61.43.44.69.70.62.63.47.45		46.48+51.53	R

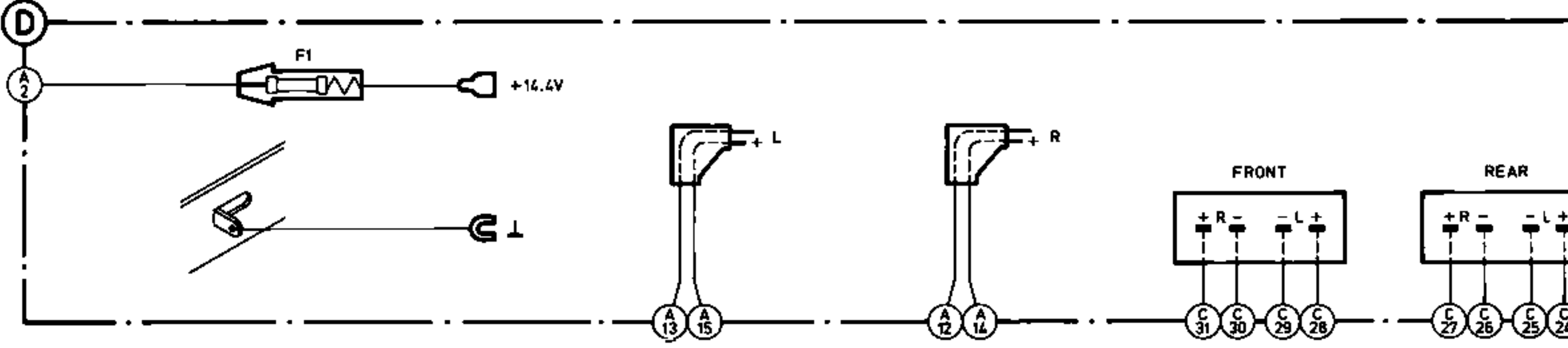


MISC	F1	IC5		D4, T1	IC6	SK-A	
C	2	2	29+32, 1, 34	35+38, 28	50	39, 46+49, 41	45, 43, 40, 42
R	2	3	1, 4, 72, 57+61	63, 62	69+71	73, 64+68	

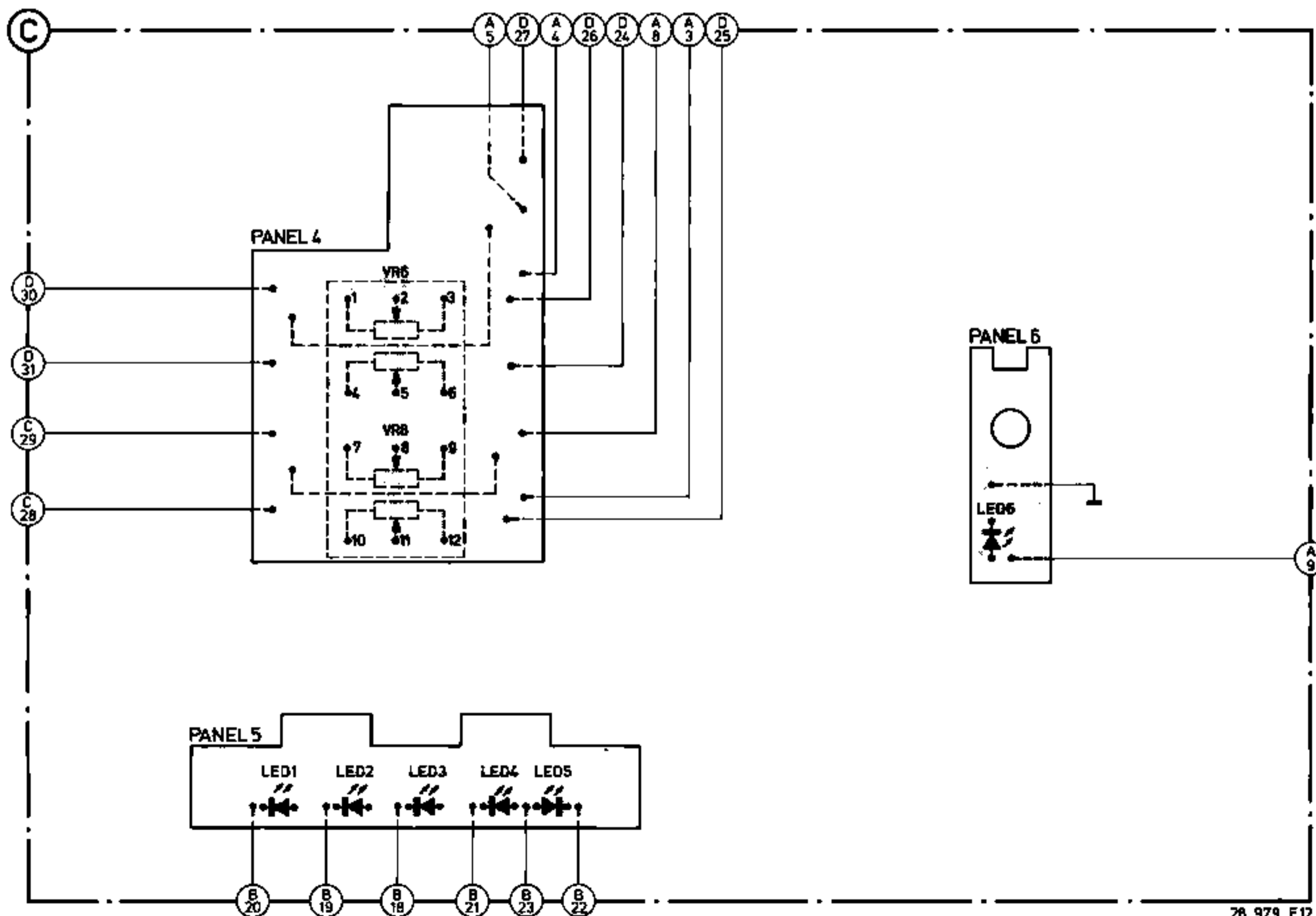
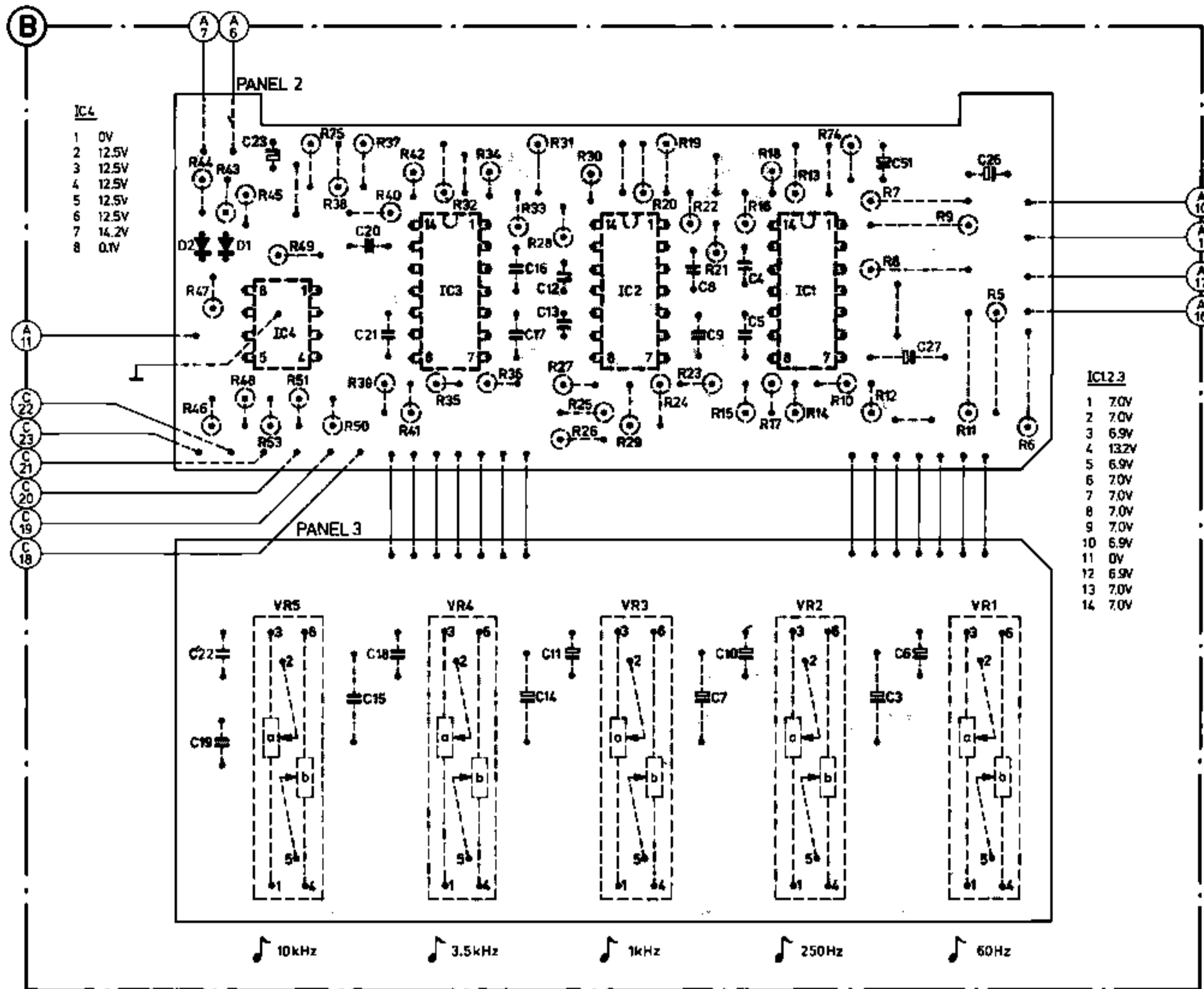


K5.6

1	13.2V
2	7.0V
3	7.3V
4	1.2V
5	0.1V
6	0V
7	0V
8	0V
9	1.2V
10	7.0V
11	13.2V
12	14.2V



D2.D1	IC4.VR5.6	LED1+5.VR4.IC3	IC2.VR3	IC1.VR2	LED6	VR1	MISC
22.19	23	15.20.21.18	16.17.11+14	7+10.4.5	3.51.27.6	26	C
43+51.53.75	37+42	32+36	25+31	19+24	13+18	74	7+12
						5	6
							R



	0.2 W (CR16)	$\leq 220 \text{ k}\Omega$ $> 270 \text{ k}\Omega$	5% 10%
	0.33 W (CR25)	$\leq 1 \text{ M}\Omega$ $> 1 \text{ M}\Omega$	5% 10%
	0.33 W (SFR25)		5%
	0.25 W (VR25)	$\leq 10 \text{ M}\Omega$ $> 10 \text{ M}\Omega$	5% 10%
	0.5 W (CR37)	$\leq 1 \text{ M}\Omega$ $> 1 \text{ M}\Omega$	5% 10%
	0.67 W (CR52)		5%
	1.15 W (CR68)		5%

	Ceramic plate
	Polyester flat foil
	Polyester mepolesco
	Mylar (Polyester flat foil small sized)
	Micropoco
	Tubular ceramic, (body colour pink or yellow/green)
	Miniature single elco
	Subminiature tantalum cap.


- *a = 2,5 V
- b = 4 V
- c = 6,3 V
- d = 10 V
- e = 16 V
- f = 25 V
- g = 40 V
- h = 63 V
- i = 100 V
- l = 125 V
- m = 150 V
- n = 160 V
- q = 200 V
- r = 250 V
- s = 300 V
- t = 350 V
- u = 400 V
- v = 500 V
- w = 630 V
- x = 1000 V
- A = 1,6 V
- B = 6 V
- C = 12 V
- D = 15 V
- E = 20 V
- F = 35 V
- G = 50 V
- H = 75 V
- I = 80 V

27037A/B

D1,2	1N60	4822 130 31012		C3,6	4.7 μF - 10 V	tantal	5322 124 14064
D4	1N4001	4822 130 31438		C4,5, } C19,20 }	22 nF	myler	4822 121 40513
LED1÷5	LT-3251Y	4822 130 31616		C7,10	1 μF - 10 V	tantal	5322 124 14021
LED6	LT-251Y	4822 130 31385		C8,9	6.8 nF	myler	4822 122 31264
				C11,14	0.22 μF - 10 V	tantal	4822 124 10312
IC1,2,3	LM324N	4822 209 80587		C12,13	2.2 nF	myler	4822 122 31263
IC4	SN16889P	4822 209 80557		C15,18	68 nF	myler	4822 121 41156
IC5,6	TA7227P	4822 209 80684		C26,27	10 μF - 10 V	tantal	5322 124 14108
				C29,40	1 nF	myler	4822 121 41274
VR1÷5	20 k Ω x 2	4822 105 10354		C30,34, } C41,45 }	10 nF	myler	4822 121 41474
VR6	200 Ω x 4 (FADER)	4822 102 50018		C35,38, } C46,49 }	220 nF	myler	4822 121 41523
R49	5 M Ω - 0.33 W	4822 110 72203		-Miscellaneous-			
				F1	Fuse 5A (T) 20 mm		4822 253 30029
				T1	0.22 μH		4822 152 20511

In production apparatus with serial number
22AP140/15 00001 up to 10001
22AP140/18 0001 up to 1001

the following changes should be applied:

- C30, 34, 41 and 45 (47 nF) to be changed to 10 nF mylar (4822 121 41474).
Reason of change:
To improve stability.
- The two red leads, labelled  in the circuit diagrams, should be interrupted and then connected crosswise.
After this, the leads should be insulated.
Reason of change:
The speaker signals are in phase opposition when the booster is switched on/off.