

15/09/80

**RSF**

RSF

19, rue Claire Gazelles

31200 - TOULOUSE

31410 St-SULPICE/LÈZE

D. 622

Tél. (61) 87 56 08

**EXPANDER KOBOL**

SCHEMAS

La carte EXPANDER est la même que celle du KOBOL, hormis les résistances ci-dessous dont la valeur a été modifiée :

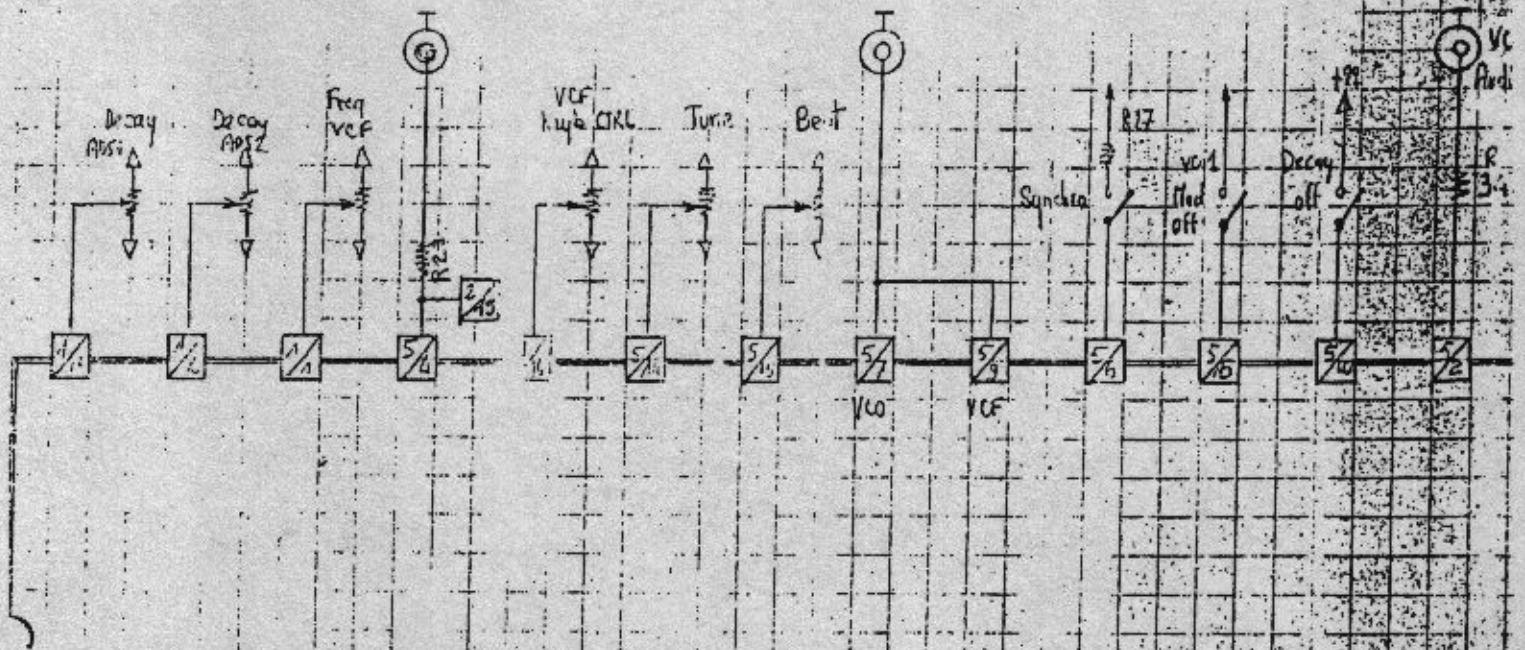
R 17, R 45, R 50, R 59, R 72, R 77, R 84,

R 157, R 162, R 225 = 0Ω

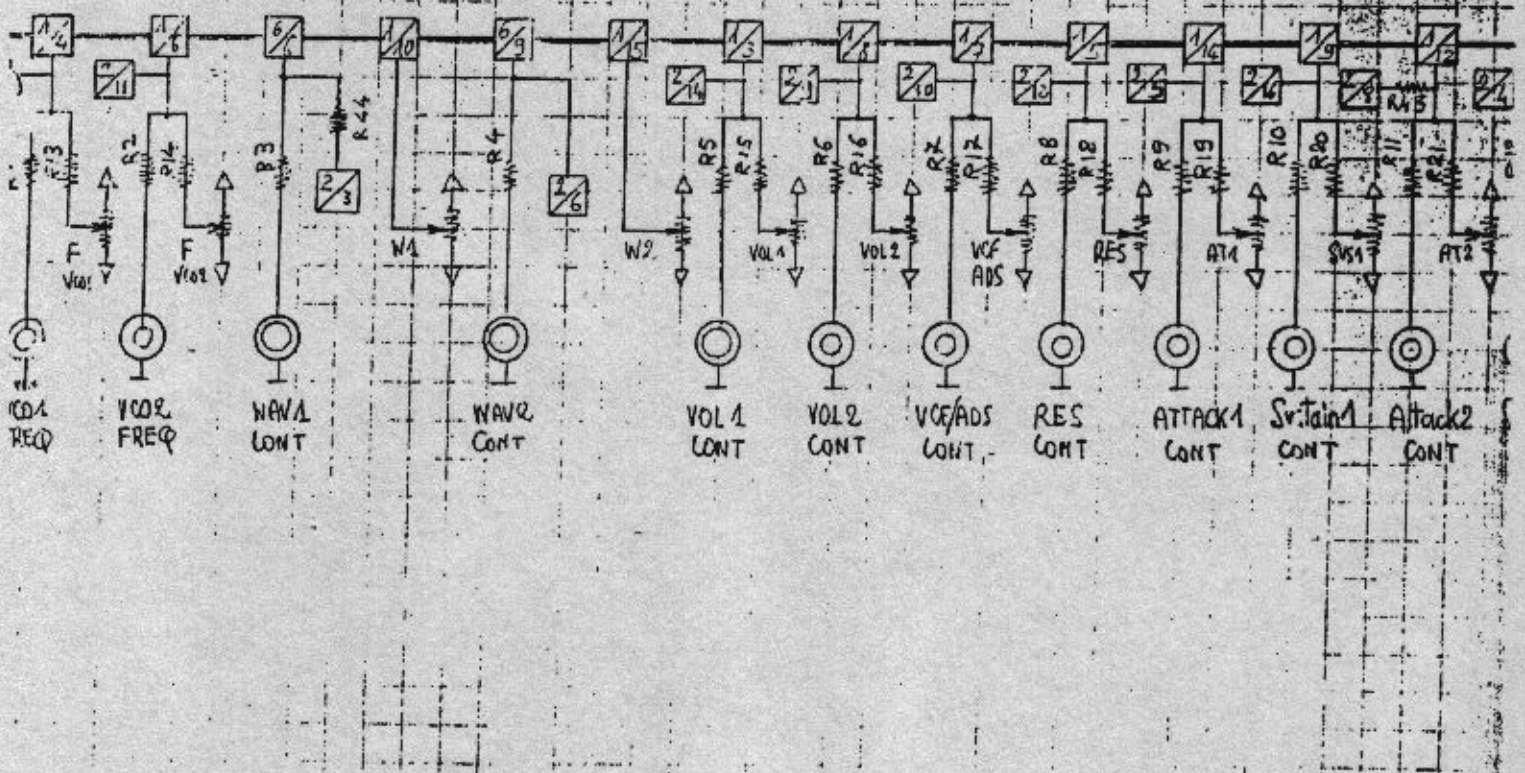
( Resistors modiflicated on EXPANDER BOARD)

Cont Freq

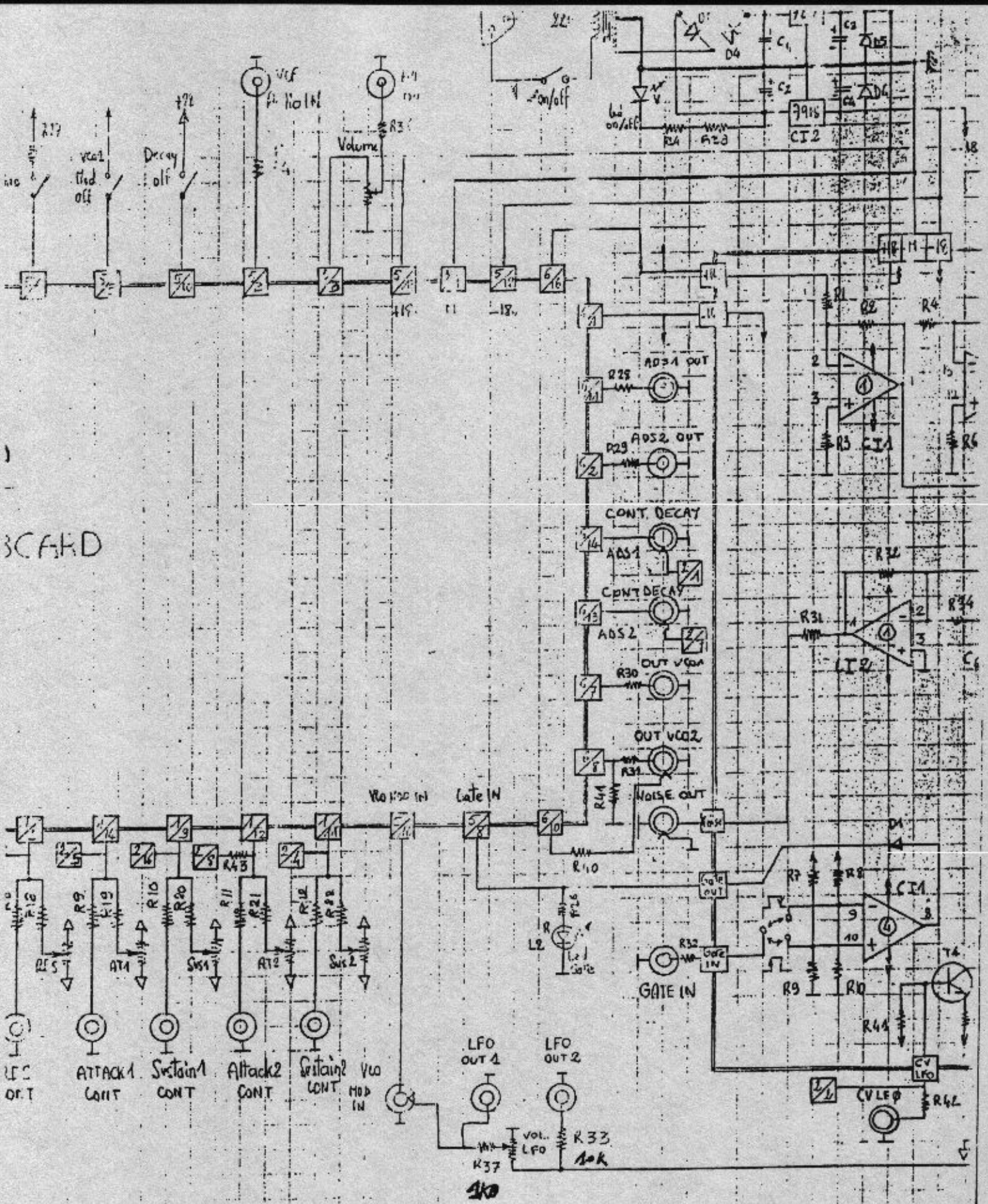
C.V IN 1V/c



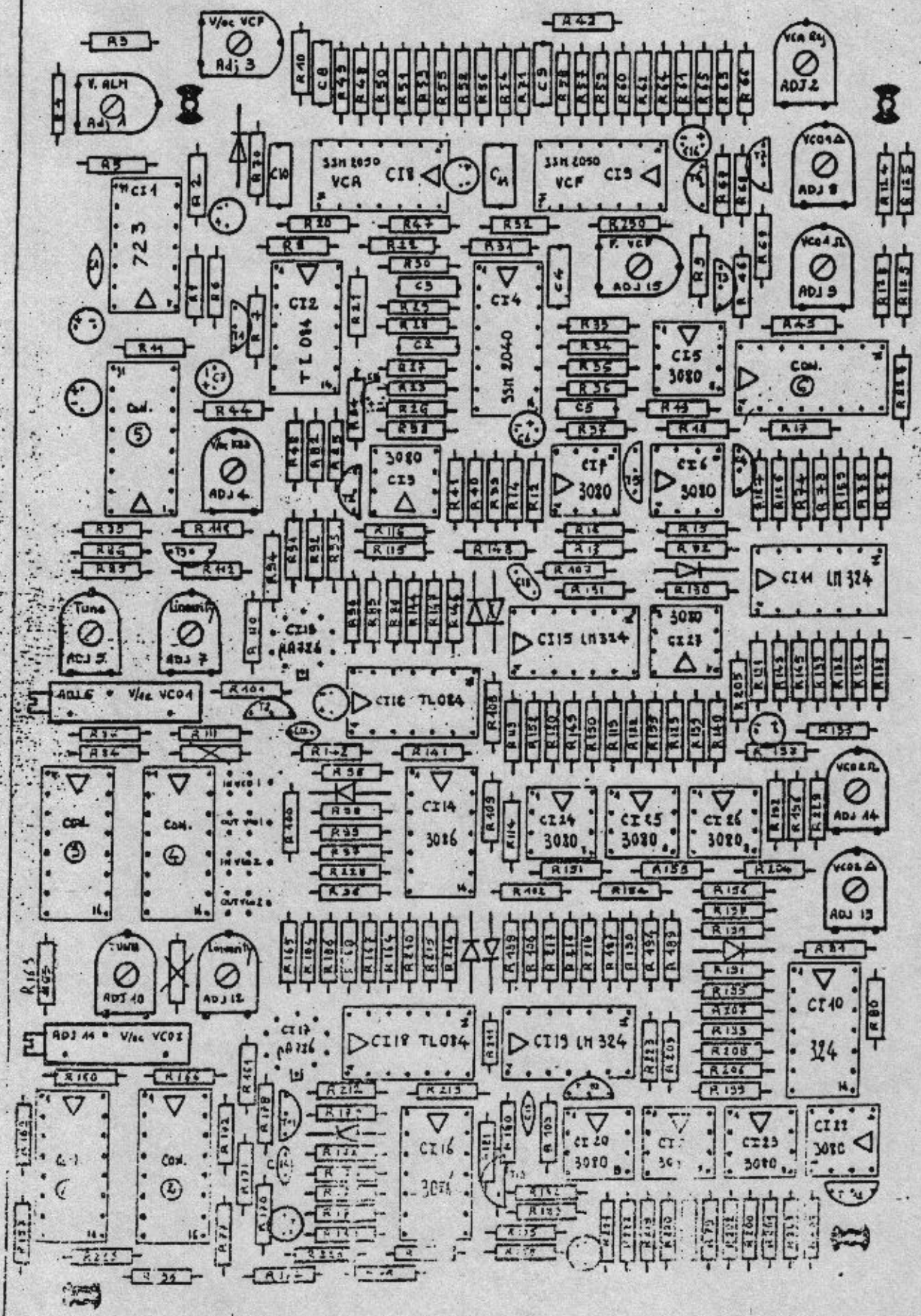
# EXPANDER KODOL BOARD

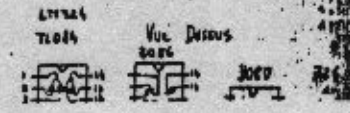
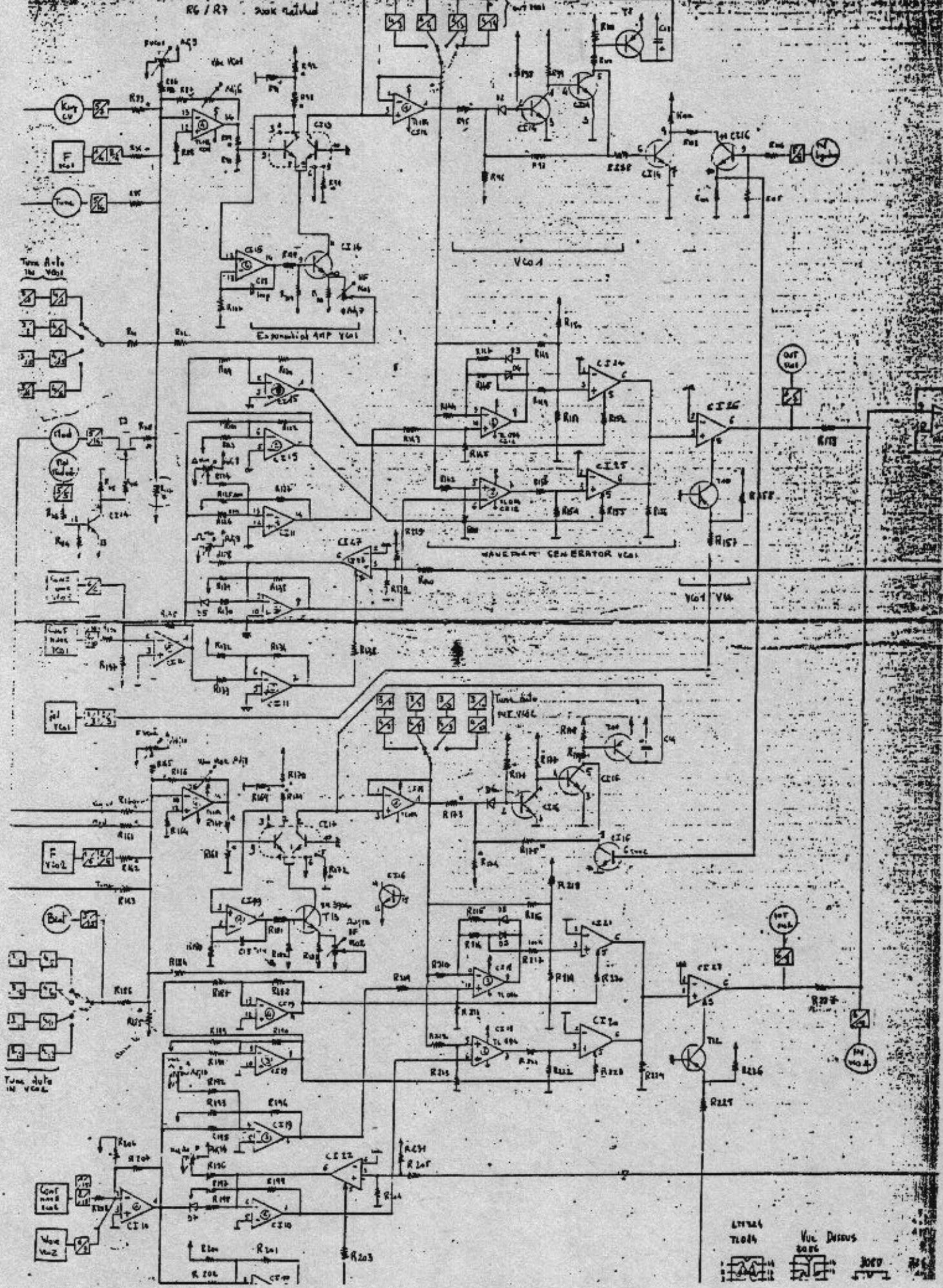


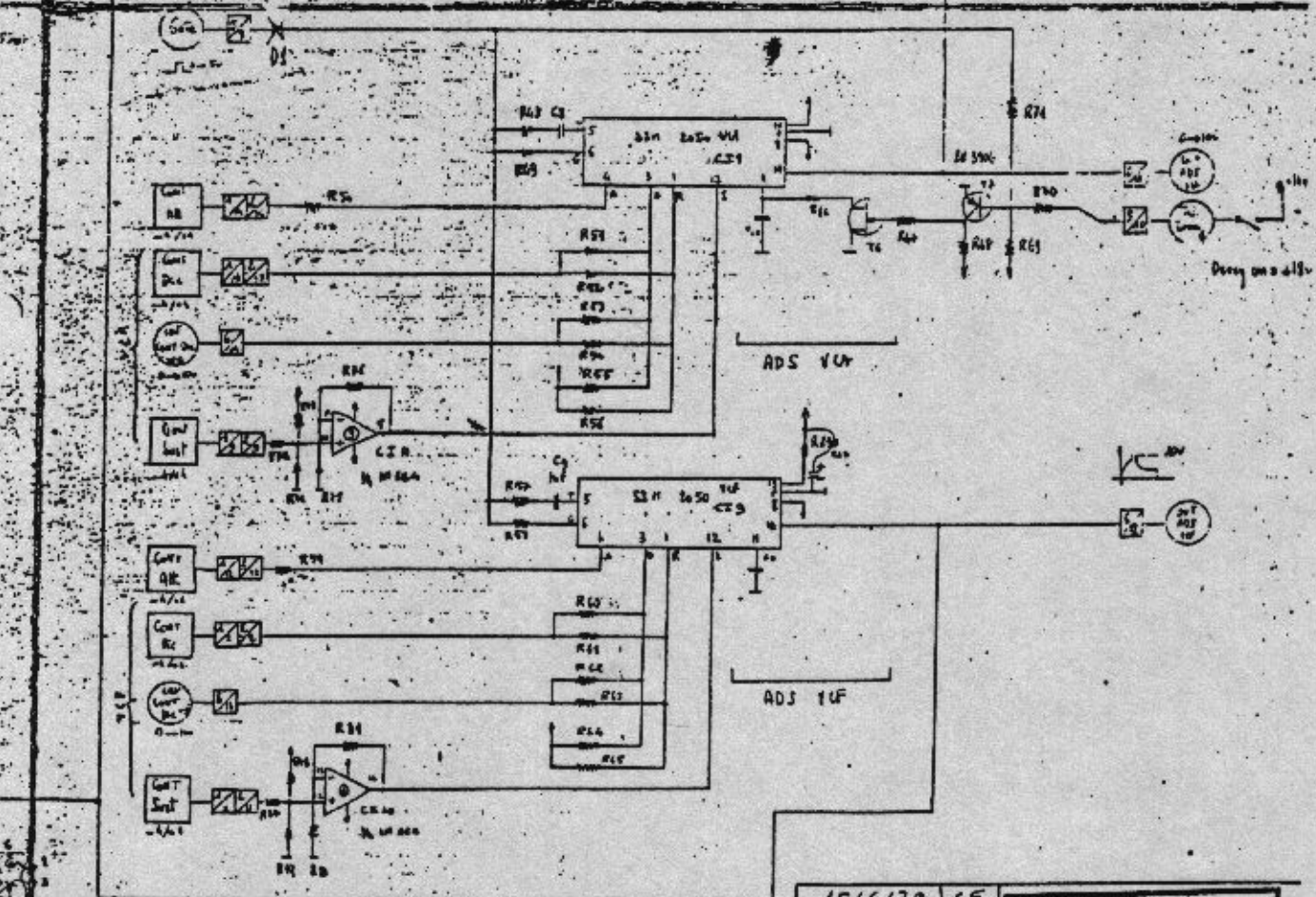
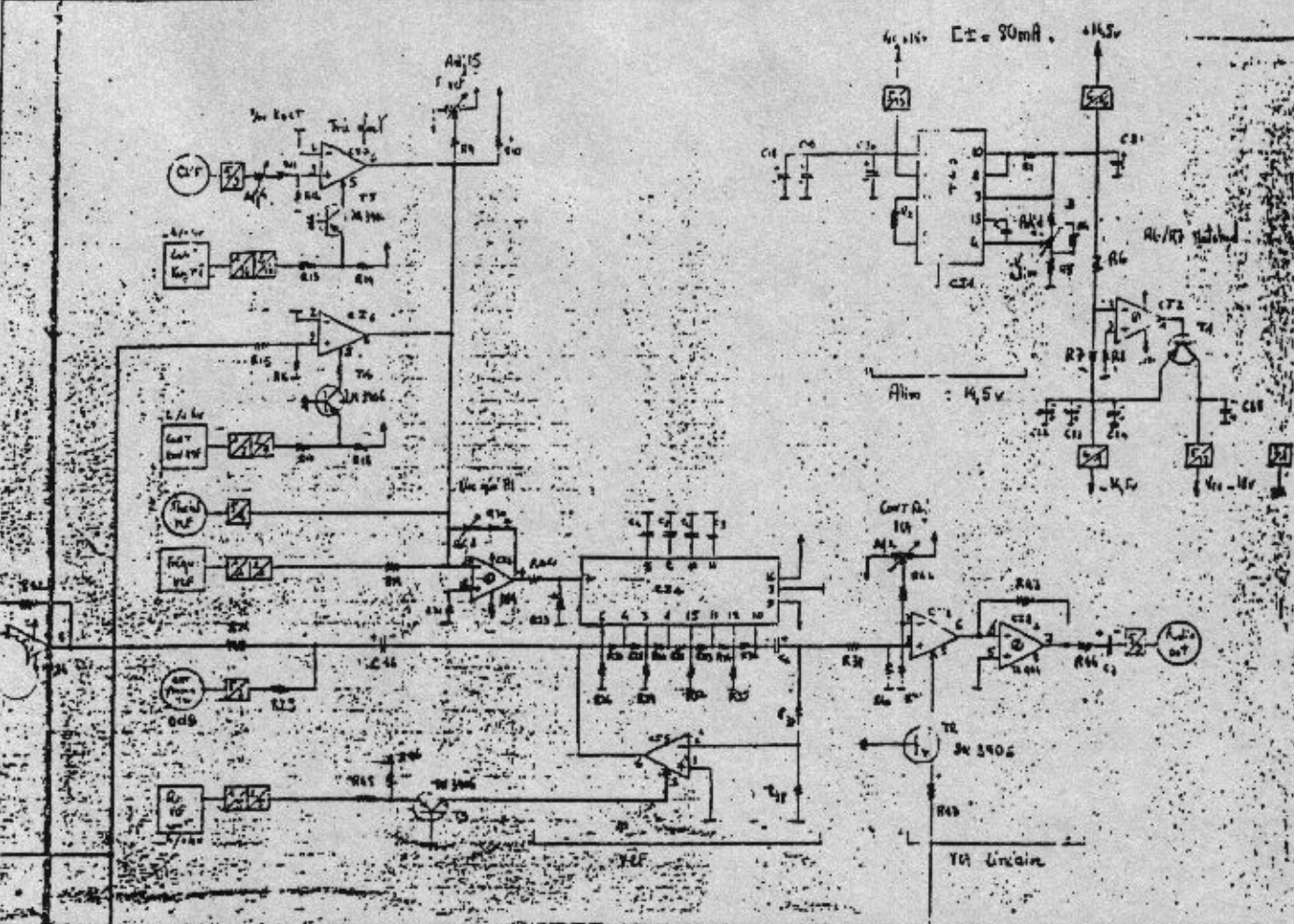
3CARD



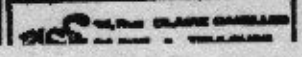
RF  
BOARD



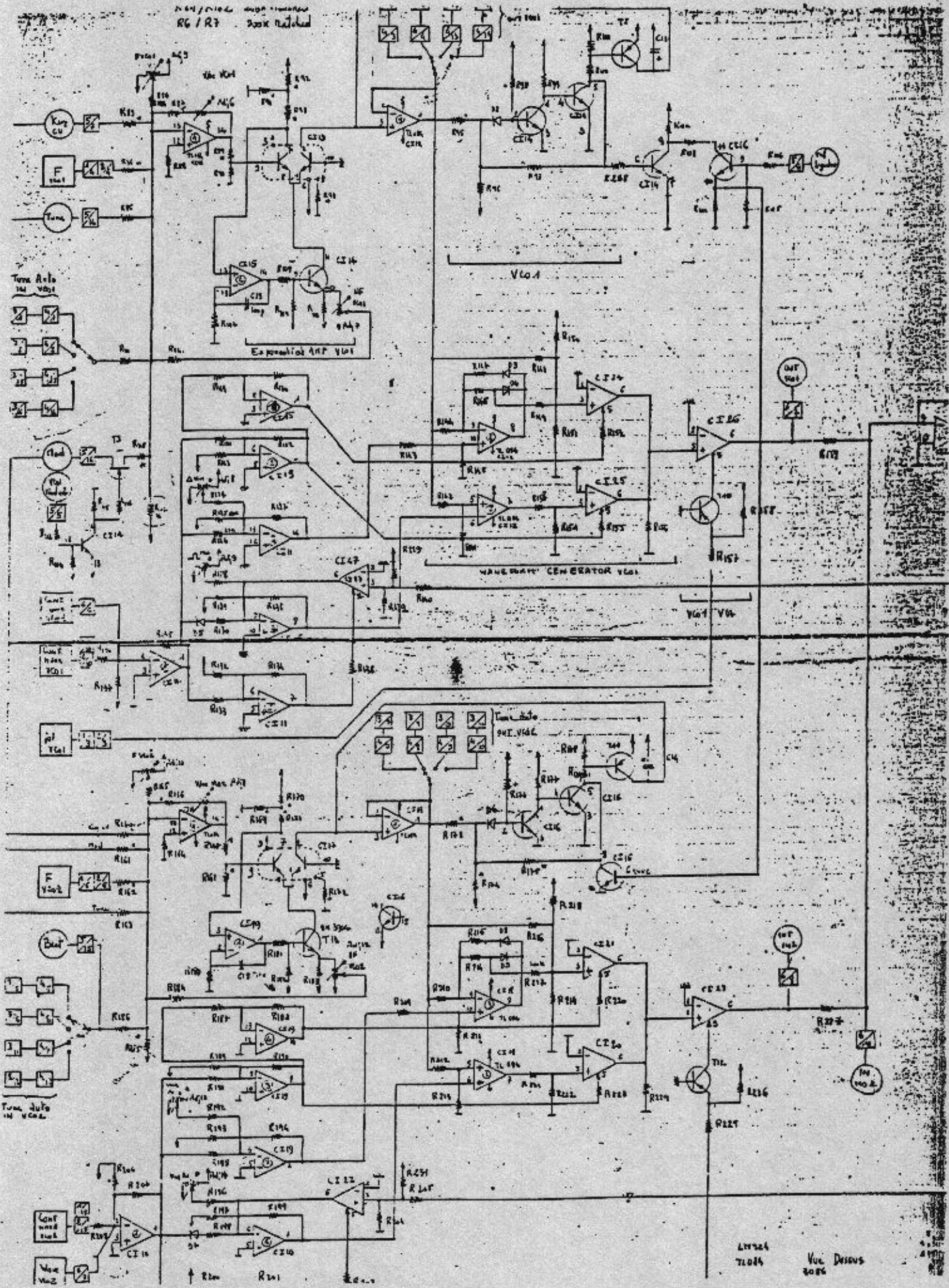




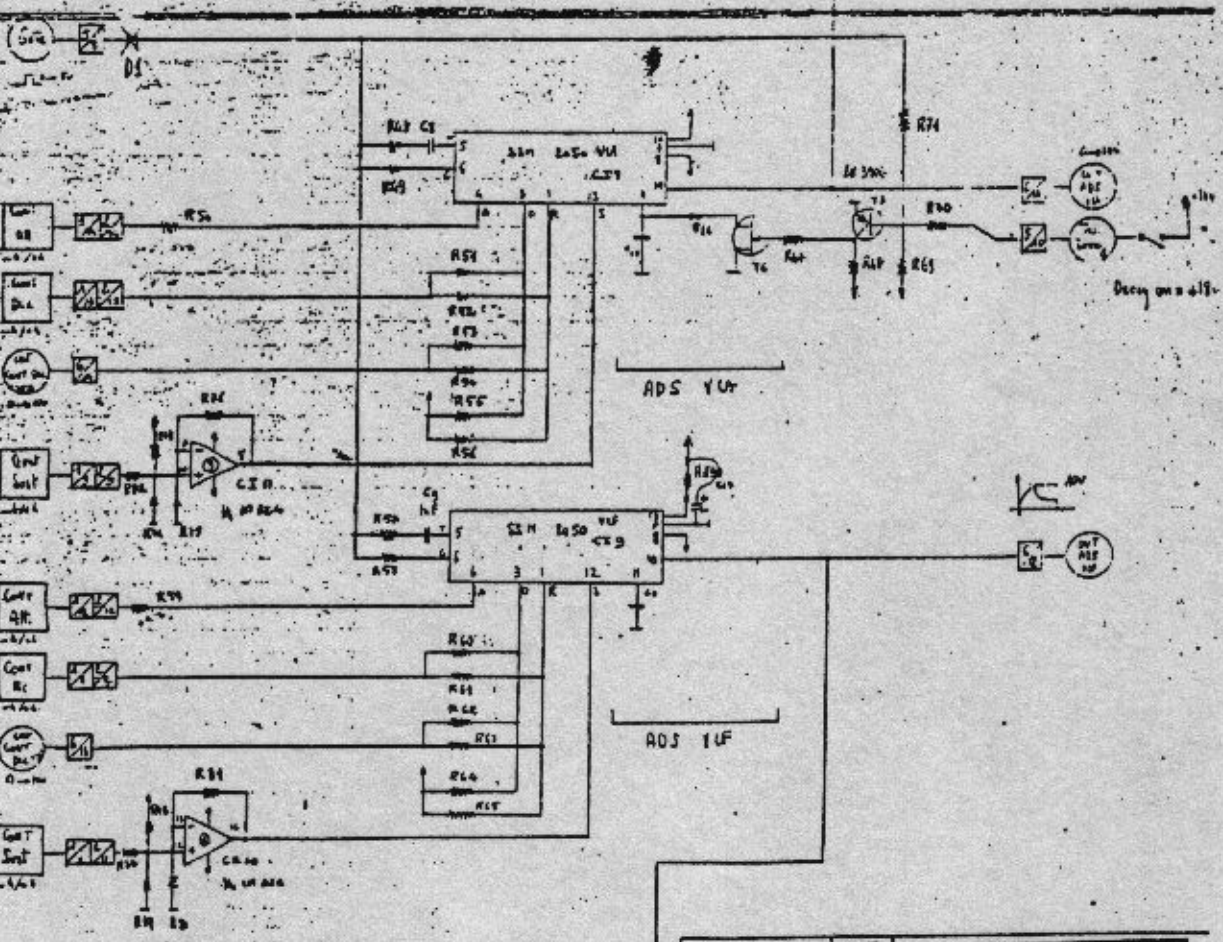
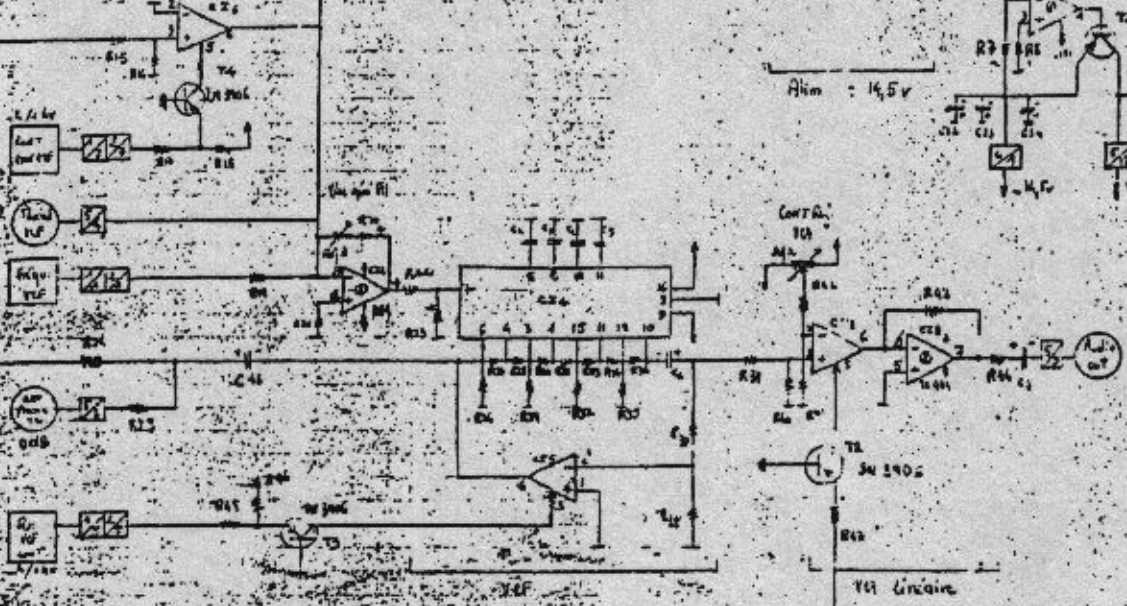
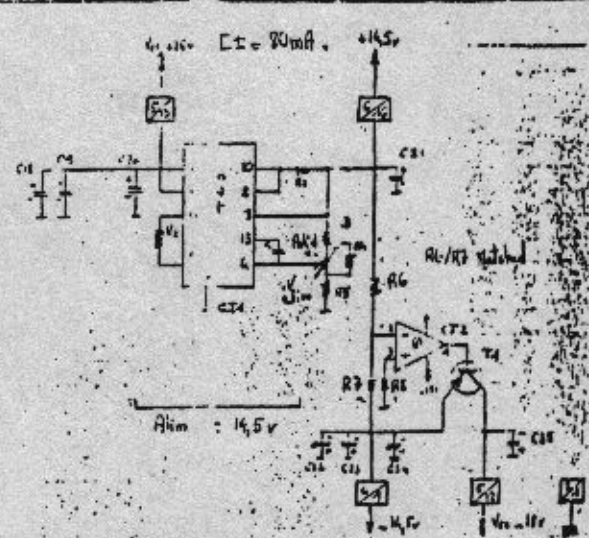
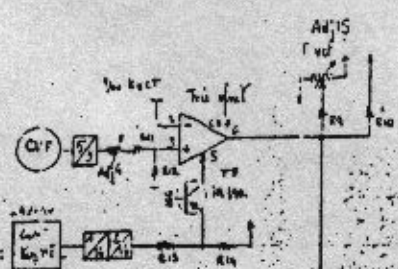
15/6/79 LF  
 Board



RG/R7 Dark Switch

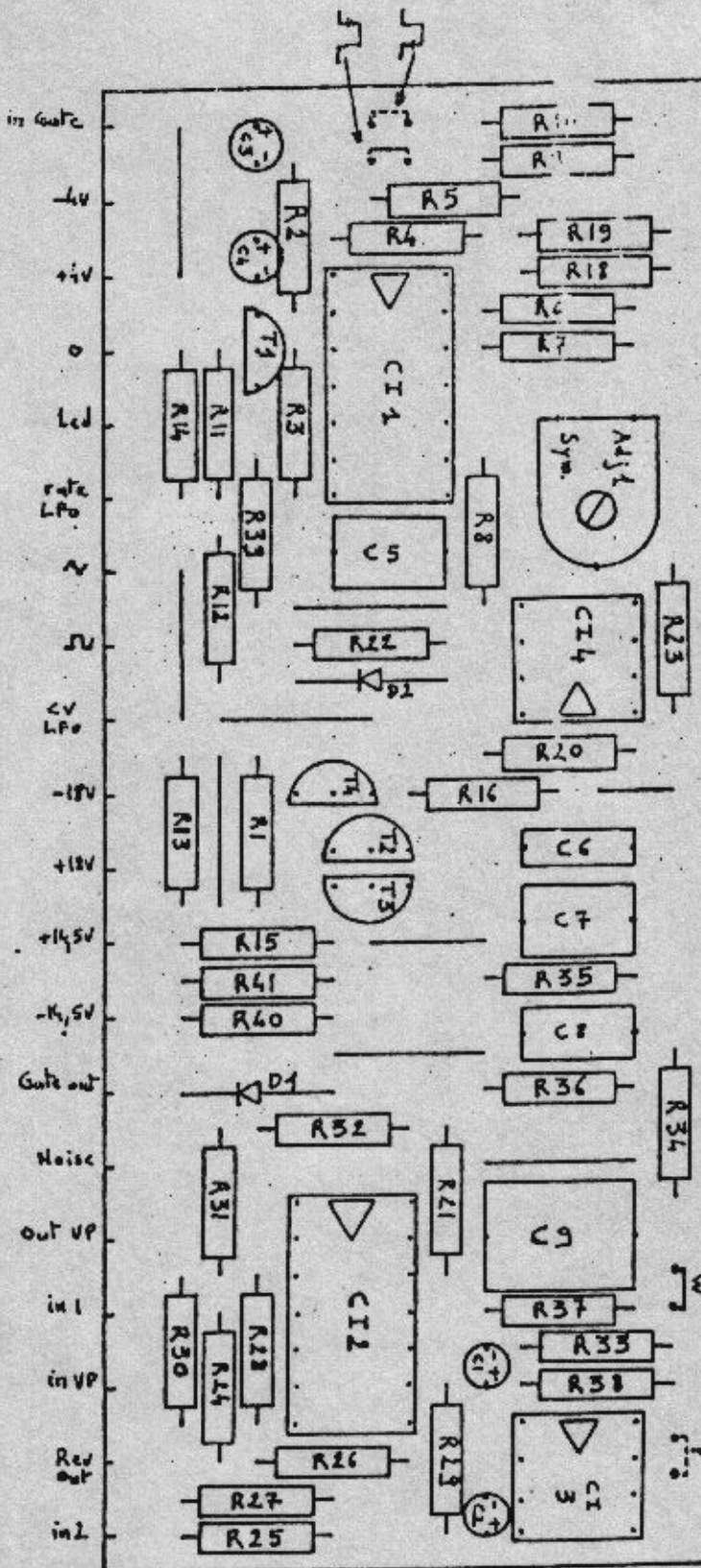


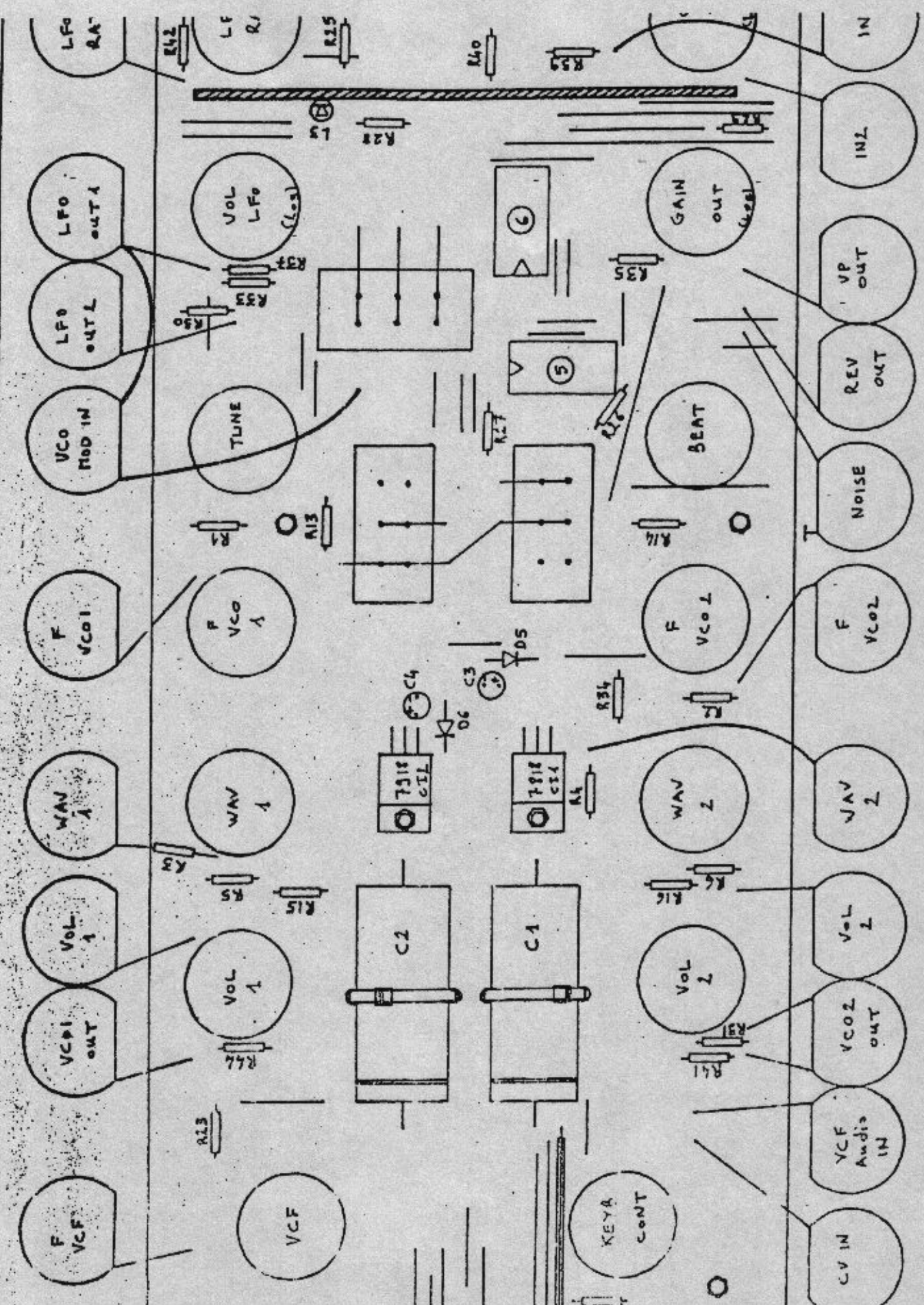
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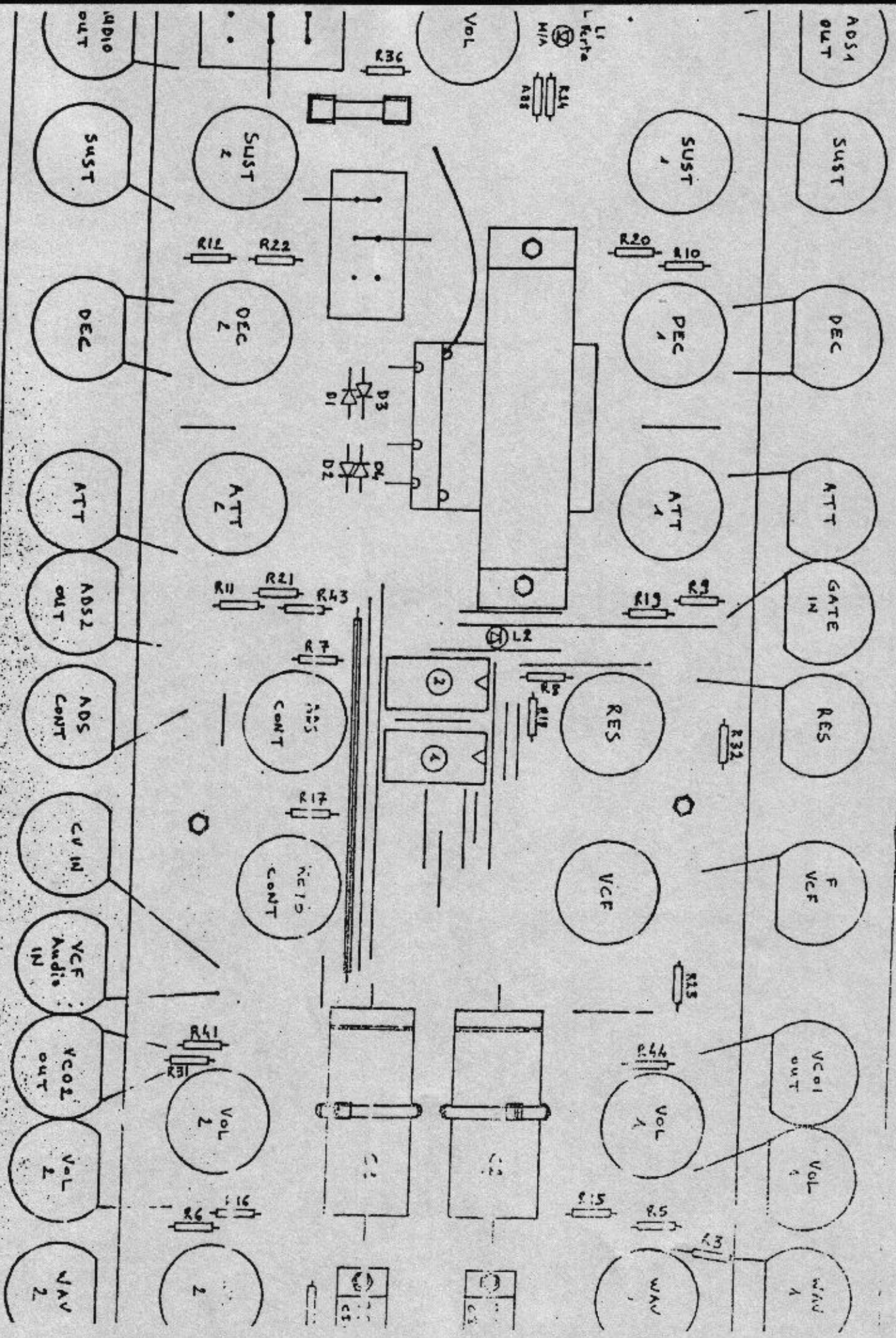



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 01 000  
 Tel (87) 47 5  
 CONSTRUCTION  
 SARL au capital de 1000  
 RC Tisa 793 530  
 DCA Tisa 773 404

Board Sous-module EXPANDER

DATE: 01/7/80

MODIFI:

Ref sch ma	Ref stock vsf	DESCRIPTION	Ref sch ma	Ref stock vsf	DESCRIPTION
CI1	CI 084		R1	R100K 1P	
CI2	CI 324		R2	R27,6K 1P	
CI3	CI 5837		R3	R22K	
CI4	CI 3080		R4	R100K 1PM	Trie a son-ou Trie a son-ou
			R5	R100K 1PM	
			R6	R47K	
T1	T3904		R7	R100K	
T2	T3904		R8	R100K	
T3	T3906		R9	R15K	
T4	T3904		R10	R10K	
			R11	R1K	
			R12	R100K	
D1	D1N4148		R13	R150K	
D2	D1N4148		R14	R1K	
			R15	R330K	
			R16	R15K	
C1	C4, 7MFTA		R17	Supprimee	
C2	C6, 7MFTA		R18	R220	
C3	C4, 7MFTA		R19	R220	
C4	C4, 7MFTA		R20	R100K	
C5	C4, 7MFTA		R21	R100K	
C6	C33MFSIE		R22	R68K	
C7	C0, 1MFSI		R23	R330K	
C8	C0, 27MFS	ou 0,22µF	R24	R100K	
C9	C1MFSIE		R25	R100K	
			R26	R200K 1P	
			R27	R1K	
ADJ1	ADJ11010K		R28	R100K	
			R29	R100K 1P	
			R30	R1K	
			R31	R1K	
			R32	R100K	
			R33	R150K	
			R34	R10K	
			R35	R330	
			R36	R1K	
			R37	R2,7K	
			R38	R6,8K	
			R39	R10K	
			R40	R1,5K	
			R42	R3,9K	



01 200 - TOULOUSE  
 Tél (071) 47 71 68  
 CONSTRUCTEUR

BARL au capital de 200.000 F  
 RC Tlse 792 289  
 CCR Tlse 778 40A

# EMBASE EXPANDER

DATE: 30/7/80

MODIFS:

Ref schém	Ref stock rsf	DESCRIPTION	Ref schém	Ref stock rsf	DESCRIPTION
CI1	CI7818		D1	DAN4000	
CI2	CI7918		D2	DAN4000	
			D3	DAN4000	
			D4	DAN4000	
R1	R100K1PM		D5	DAN4000	
R2	R100K1PM		D6	DAN4000	
R3	R100K1				
R4	R100K1				
R5	R33K				
R6	R33K		C1	C2200NF	
R7	R33K		C2	C2200NF	
R8	R12K		C3	C4,7MFA	
R9	R82K		C4	C4,7MFA	
R10	R82K				
R11	R82K				
R12	R82K				
R13	R180,6K1P				
R14	R180,6K1P				
R15	R27K				
R16	R27K				
R17	R27K				
R18	R10K				
R19	R68K				
R20	R68K				
R21	R68K				
R22	R68K				
R23	R100K				
R24	R1,8K1/2w	ou 2x R1K en série			
R25	R27K				
R26	R1K				
R27	R10K				
R28	R1K				
R29	R1K				
R30	R1K				
R31	R1K				
R32	R10K				
R33	R1K				
R34	R100K				
R35	R1K				
R36	R1K				
R37	R1K				

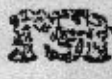
RESISTANCES

Expander Kobol

DATE: 20/11/79

MODIFS:

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R1	R 4,7	X	43 R 51	R100K	
R2	R15K		25 R 52	R100K	
R3	R28,7KIP		1 R 53	R330K	
R4	R3,6k5P		23 R 54	R330K	
R5	R28,7KIP		21 R 55	R1M	
R6	R200k2PM	Matched	44 R 56	R1M	
R7	R200k2PM	Matched	45 R 57	R1K	
R8	R100K		35 R 58	R1K	
R9	R1M		39 R 59	R168K	
R10	R690K		2 R 60	R100K	
R11	R39K		55 R 61	R100K	
R12	R220		64 R 62	R330K	
R13	R27K		55 R 63	R330K	
R14	R100k		63 R 64	R1M	
R15	R82K		98 R 65	R1M	
R16	R220		94 R 66	R47K	
R17	R27K		33 R 67	R100K	
R18	R100K		71 R 68	R10K	
R19	R68K		70 R 69	R100K	
R20	R100KIP		51 R 70	R100K	
R21	R10K		46 R 71	R22K	
R22	R62K		36 R 72	R168K	
R23	R1K		51 R 73	R270K	
R24	R100K		52 R 74	R10K	
R25	R10K		59 R 75	R10K	
R26	R220		52 R 76	R100K	
R27	R10K		50 R 77	R68K	
R28	R10K		49 R 78	R270K	
R29	R220		28 R 79	R10K	
R30	R10K		44 R 80	R22K	
R31	R10K		34 R 81	R200kIP	
R32	R220		35 R 82	R100K	
R33	R10K		69 R 83	R100kIPM	Matched
R34	R10K		68 R 84	R200kIPM	Matched
R35	R220		67 R 85	R4,7MM	Matched
R36	R10K		66 R 86	R1M	
R37	R4,7K		65 R 87	R95,3kIP	
R38	R220		1 R 88	R22K	
R39	R10K		6 R 89	R47,5kIP	103
R40	R220		62 R 90	R1KIP	7
R41	R220		61 R 91	R18,2kIP	
R42	R1M		5 R 92	R18,2kIP	
R43	R100K		54 R 93	R332kIP	
R44	R1K		30 R 94	R200kIP	
R45	R10K		72 R 95	R18,2kIP	
R46	R47K		1 R 96	R1,7kIP	



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 CONSTRUCTION  
 EARL, Inc. Capital of 100,000,000  
 P.O. Box 738 860  
 CCR Twp 778 80A

RESISTANCES

CI: 7509C CH1 EXH

Expander Kobol

DATE: 20/11/79

MODIFS: R17/175 for optional R-315/175

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R1101	R470		R1151	R220	
R1102	R4,7K		R1152	R56K	
R1103	R10K		R1153	R680K	
R1104	R2,2K		R1154	R220	
R1105	R100K		R1155	R68K	
R1106	R10K		R1156	R220	
R1107	R820K		R1157	R27K	
R1108	R6,2K5P		R1158	R100K	
R1109	R2,2K		R1159	R27K	
R1110	R10K		R1160	R100K1PM	Matched
R1111	R4,7K		R1161	R100K1PM	Matched
R1112	R732K1P		R1162	R200K1PM	Matched
R1113	R220K		R1163	R4,7MM	Matched
R1114	R10K		R1164	R22K	
R1115	R10K		R1165	R1M	
R1116	R100K		R1166	R95,3K1P	
		Annuler	R1167	R47,5K1P	
R1118	R100K1PM	Matched	R1169	R1K1P	
R1119	R100K		R1169	R18,2K1P	
R1120	R100K		R1170	R18,2K1P	
R1121	R39K		R1171	R732K1P	
R1122	R270K		R1172	R200K1P	
R1123	R220K		R1173	R18,2K1P	
R1124	R330K		R1174	R16K1P	
R1125	R62K5P		R1175	R28,7K1P	
R1126	R27K		R1176	R62K5P	
R1127	R100K		R1177	R10K	
R1128	R1M		R1178	R470	
R1129	R180K		R1179	R1K	
R1130	R47K		R1180	R820K	
R1131	R100K		R1181	R6,2K5P	
R1132	R47,5K1P		R1182	R2,2K	
R1133	R16,2K1P		R1183	R10K	
R1134	R220K		R1184	R732K1P	
R1135	R150K		R1185		Annuler
R1136	R82K		R1186	R4,7M	
R1137	R1M		R1187	R100K	
R1138	R56K		R1188	R100K	
R1139	R220		R1189	R220K	
R1140	R180K		R1190	R270K	
R1141	R220K		R1191	R39K	
R1142	R15K		R1192	R330K	
R1143	R176K		R1193	R62K5P	
R1144	R100K		R1194	R100K	
R1145	R10K		R1195	R27K	
R1146	R100K				

Expander Kcbol

DATE: 20/11/79

MODIFS: 08/09 C. Mont S.

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R201	R220K		C1	C100PF	
R202	R16, 2K1P		C2	C1NF31E	
R203	R56K		C3	C1NF31E	
R204	R220		C4	C1NF31E	
R205	R180K	109	C5	C1NF31E	
R206	R1M		C6	C4, 2MFTA	4,7 pF Tantale
R207	R150K		C7	C4, 17MFTA	" "
R208	R82K		C8	<del>C1NF31E</del>	C10NF31E
R209	R56K		C9	<del>C1NF31E</del>	C10NF31E
R210	R100K		C10	C0, 1NF31E	
R211	R10K	PPuc 3PAS	C11	C0, 1NF31E	
R212	R15K		C12	C1NF31E	10F 10% 50pp
R213	R220K		C13	C100PF	
R214	R100K		C14	C1NF31E	10F 10% 50pp
R215	R100K		C15	C100PF	
R216	R200K1P		C16	C4, 2MFTA	4,7 pF 20V Tant
R217	R100K		C17	"	
R218	R270K		C18	"	
R219	R220		C19	"	
R220	R56K		C20	"	
R221	R680K		C21	"	
R222	R220		C22	"	
R223	R68K		C23	"	
R224	R220		C24	"	
R225	R27K		C25	"	
R226	R100K				
R227	R27K	1h			
R228	R100K				
R229	R330K				
R230	R100K	3h			
R231	R330K				
ADJ1		10K cement			
ADJ2		100K			
ADJ3		10K			
ADJ4		10K			
ADJ5		100K cement			
ADJ6		10K 20 Tours			
ADJ7		10K			
ADJ8		100K			
ADJ9		100K			
ADJ10		100K cement			
ADJ11		10K 20 Tours			
ADJ12		10K			





15, rue CLAUDE LUTJES  
 21 200 - TEL. 03 80 18  
 Tel 107 47 18 02  
 CONTINENTAL

SAFILL au capital de 10 000 000  
 RC Tice 734 889  
 CCR Tice 778 10A

ORIGINAL  
 NOMENCLATURE  
 COMPOSANTS ACTIFS

SCH. 4  
 I 7409C CHIEP

Expander Kabel

DATE: 20/11/79

MODIFS:

Ref schema	Ref stock vsf	DESCRIPTION	Ref schema	Ref stock vsf	DESCRIPTION
CI1		Z23	TI1		2N 3906
CI2		T 084	TI2		2N 3906
CI3		S 120	TI3		2N 3906
CI4		SMT 2040	TI4		2N 3906
CI5		CA 3080 tri d'ent	TI5		2N 3906
CI6		"	TI6		2N 3819
CI7		" tri d'ent	TI7		2N 3906
CI8		SMT 2050	TI8		2N 3906
CI9		"	TI9		2N 3819
CI10		LM 324	TI10		2N 3906
CI11		LM 324	TI11		2N 3906
CI12		TL 084	TI12		2N 3906
CI13		MA 726	TI13		2N 3906
CI14		CA 3086 tri d'ent			
CI15		LM 324			
CI16		CA 3086 tri d'ent			
CI17		MA 726			
CI18		TL 084			
CI19		LM 324			
CI20		IA3080			
CI21		CA 3080			
CI22		CA 3080 tri d'ent			
CI23		CA 3080			
CI24		CA 3080			
CI25		CA 3080			
CI26		CA 3080			
CI27		CA 3080 tri d'ent			
D1		2N 9148			
D2		"			
D3		"			
D4		"			
D5		"			
D6		"			
D7		"			
D8		"			
D9		"			