

15/09/80

RSF

RSF

19, rue Claire Cazelles

31200 - TOULOUSE

31410 St-SULPICE/LÈZE

D. 622

Tél. (61) 87 56 08

EXPANDER KOBOL

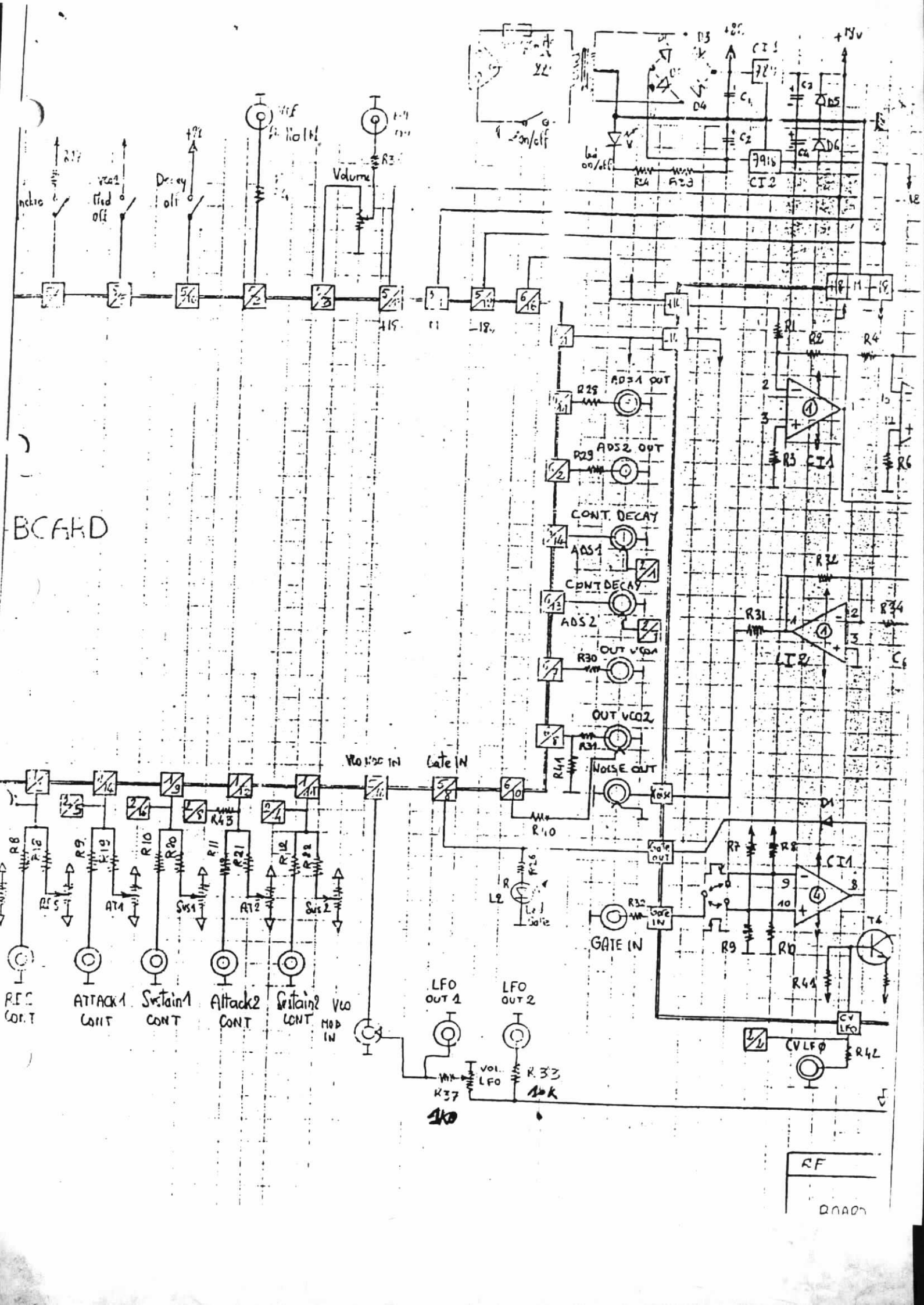
SCHEMAS

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

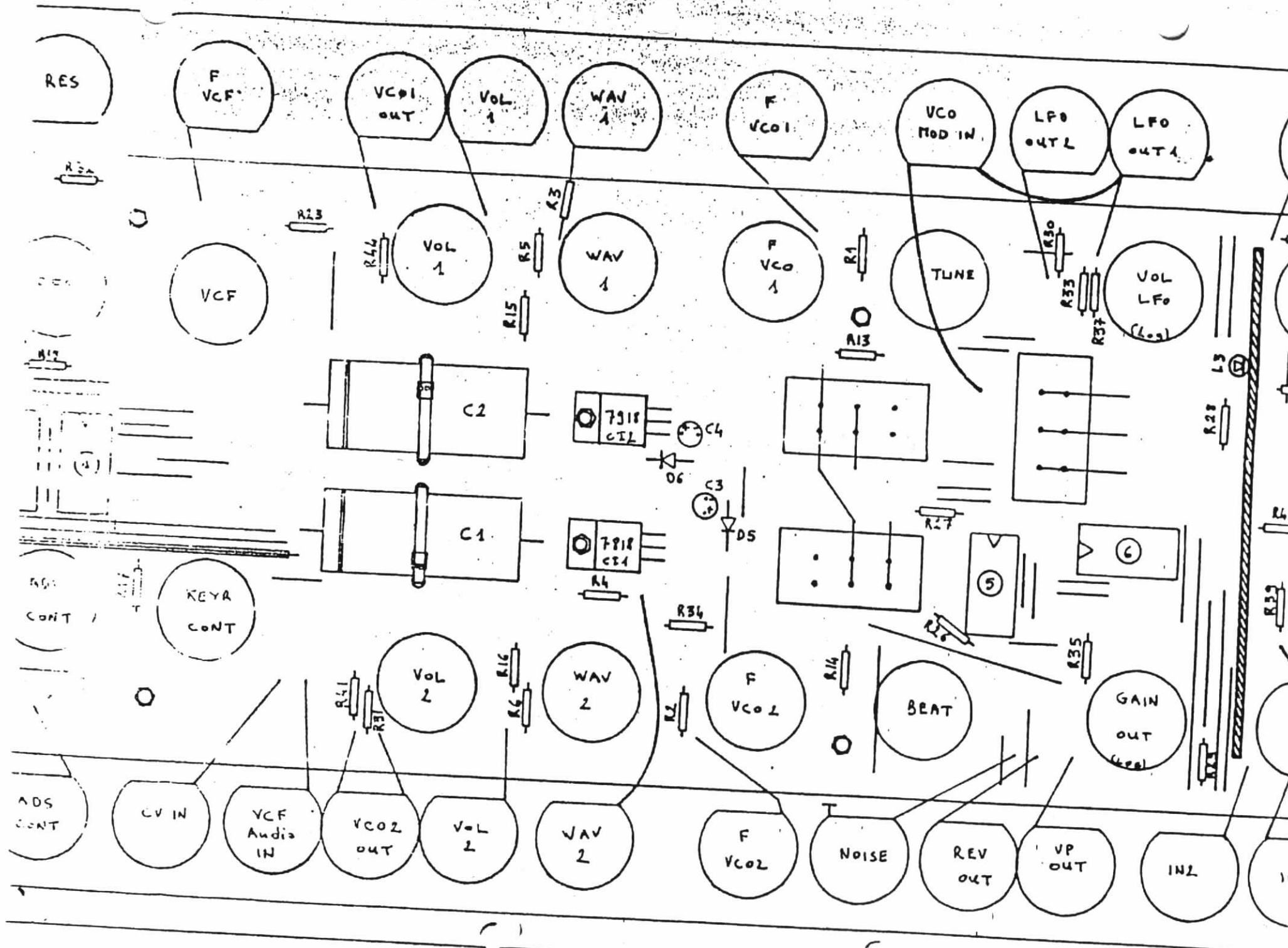
R 17, R 45, R 50, R 59, R 72, R 77, R 84,
R 157, R 162, R 225 = 0Ω

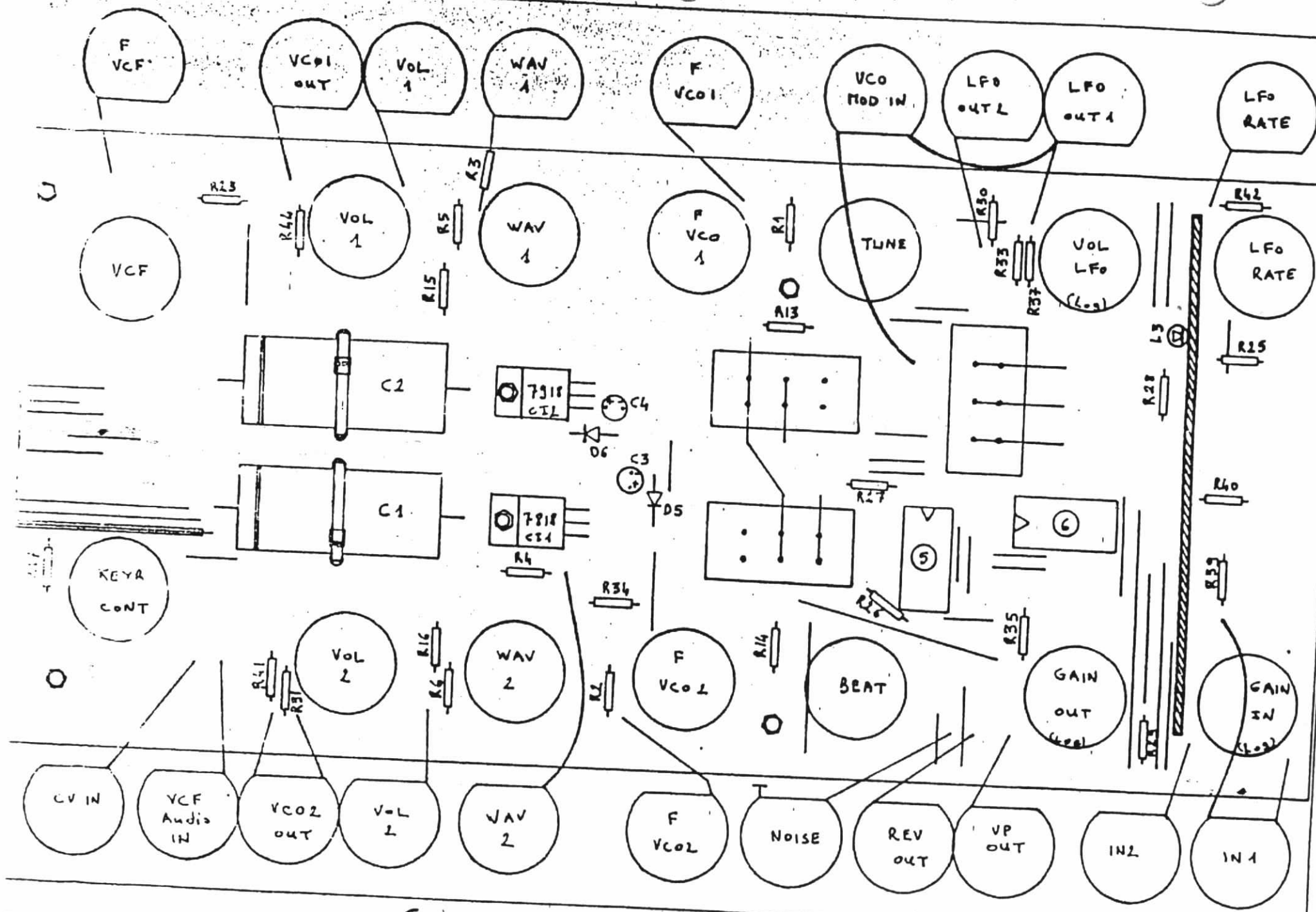
(Resistors modiflicated on EXPANDER BOARD)

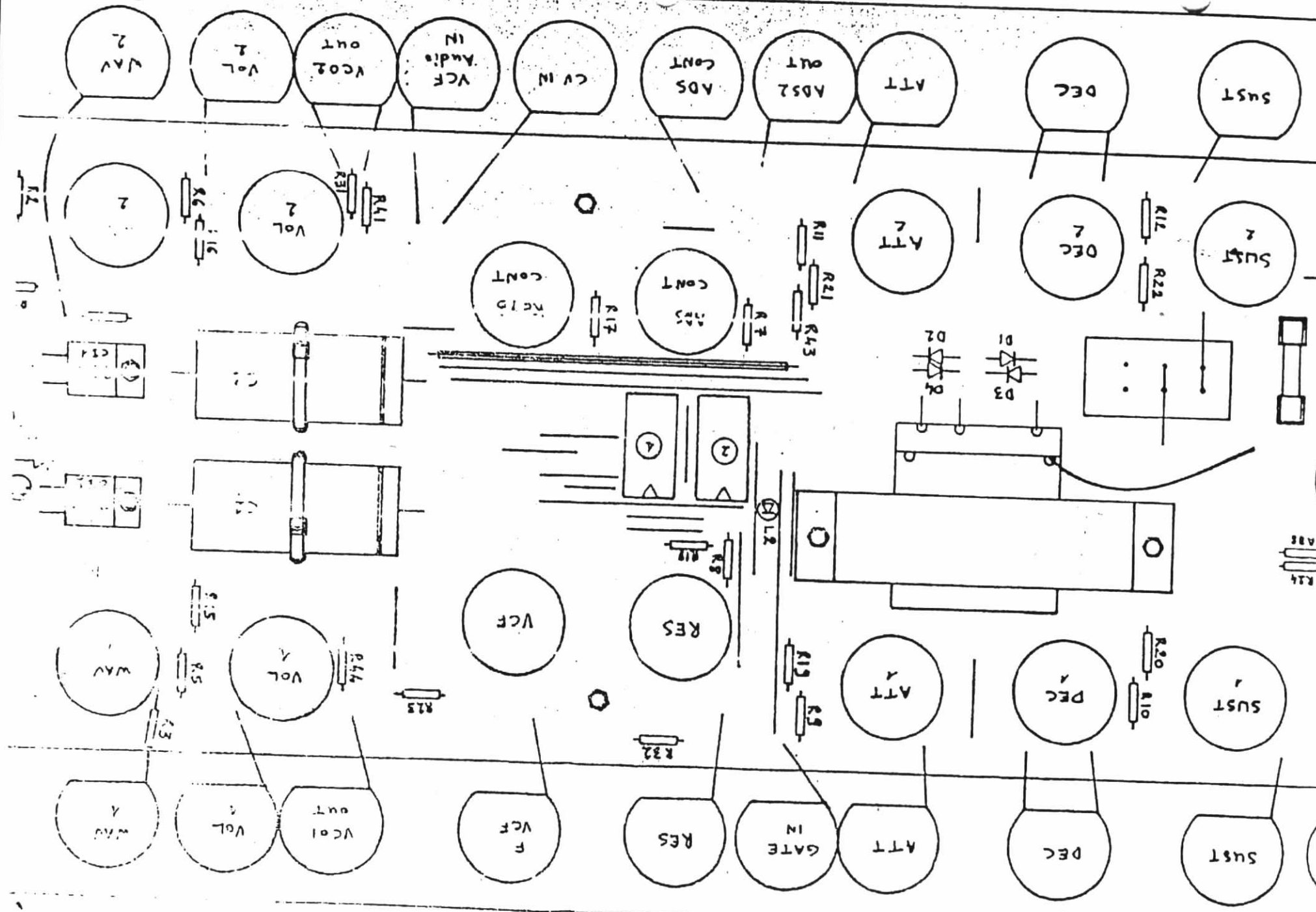
BCARD

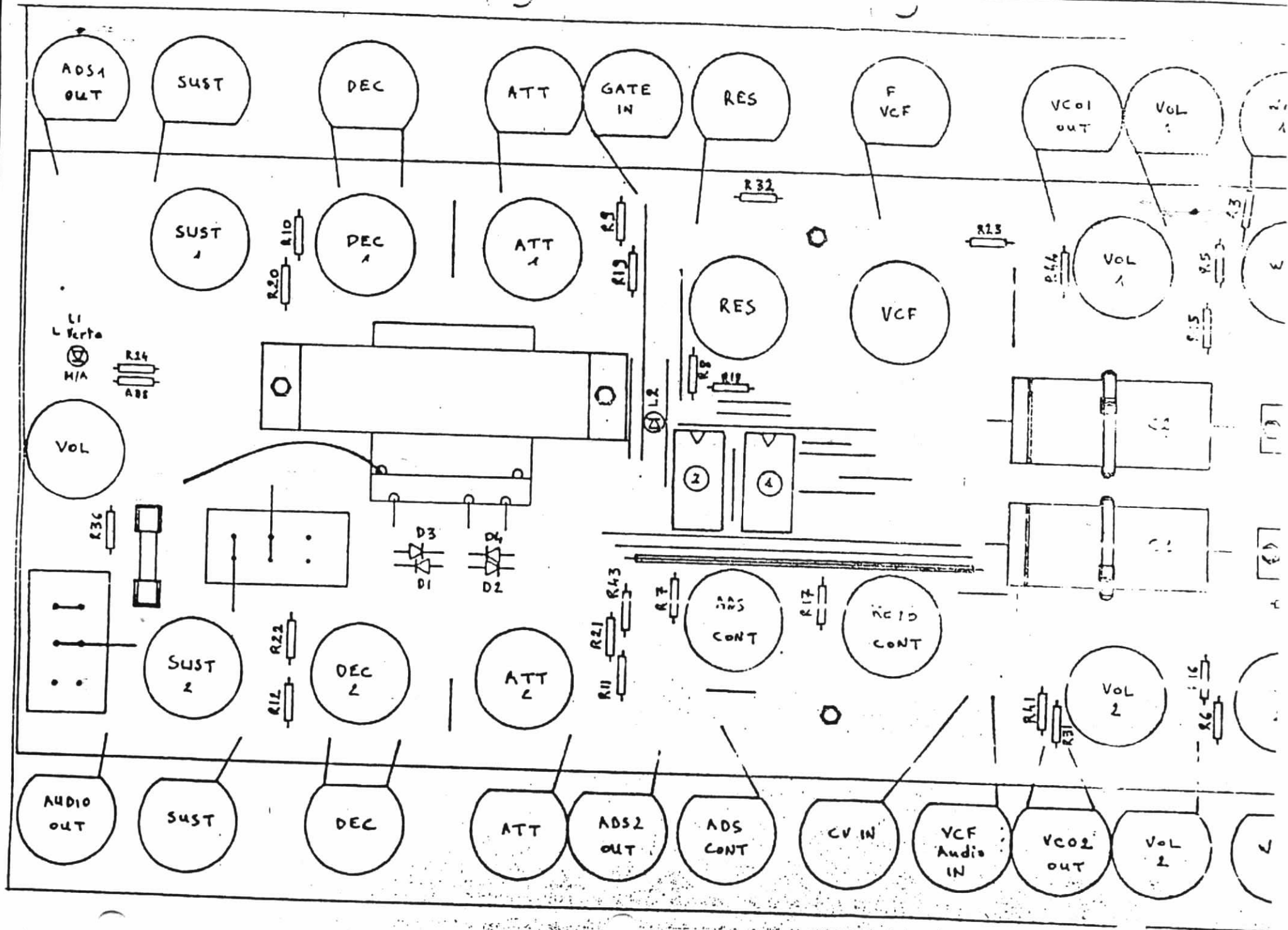


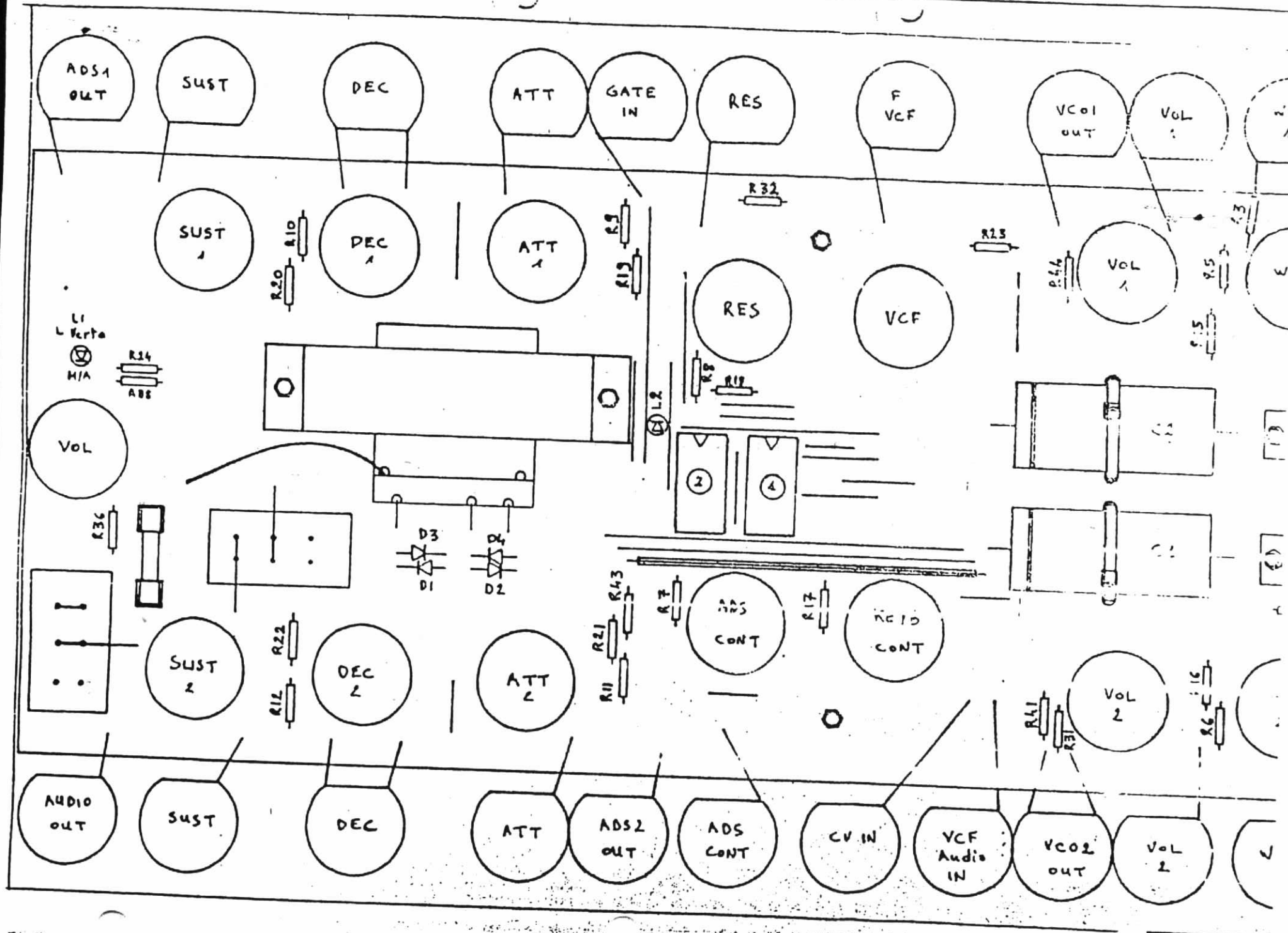
RF
DRAAD

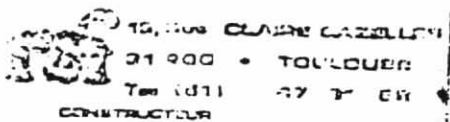












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BARIL au capital de 20 000 000
RC. Tins 702 289
CCR Tins 778 40A

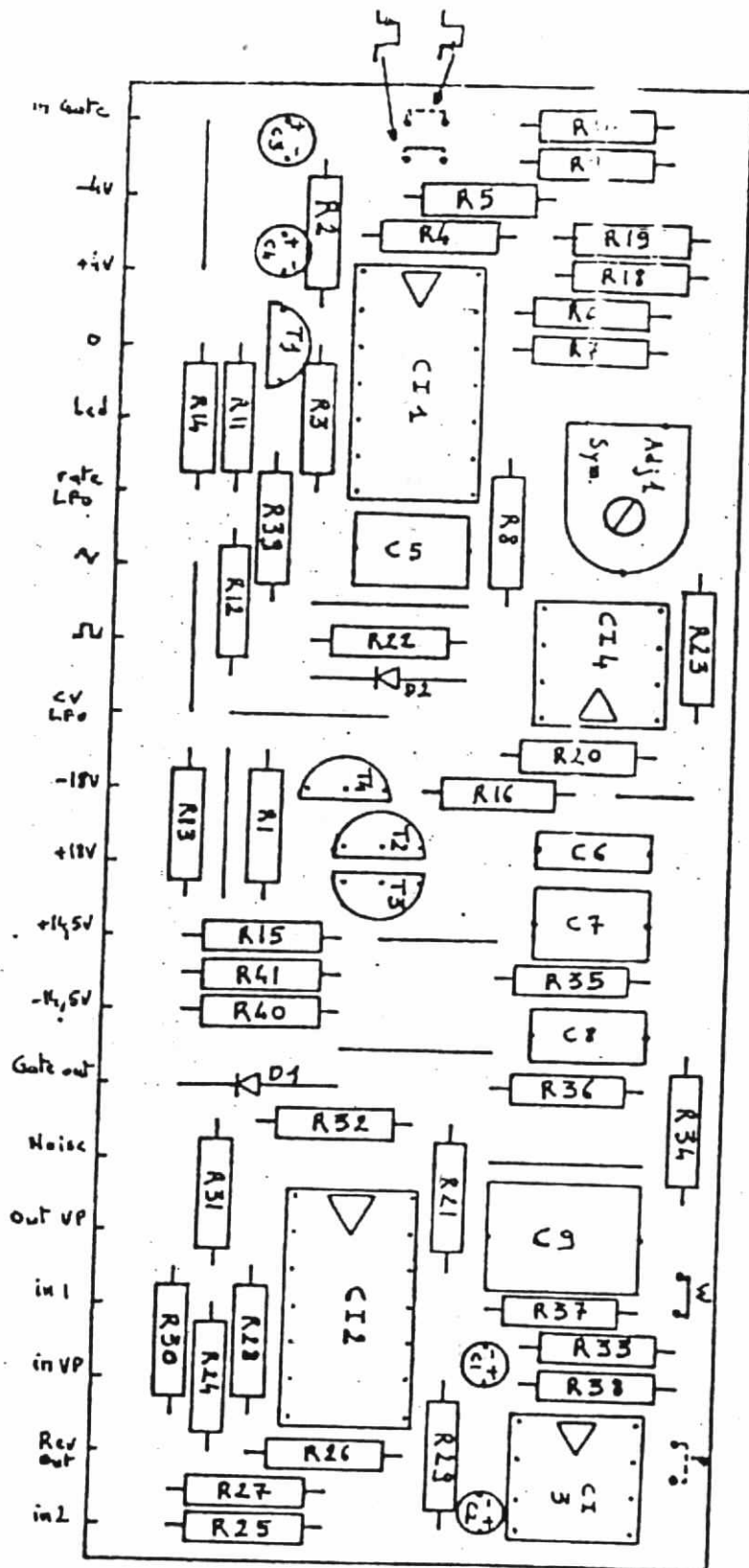
NOMENCLATURE :

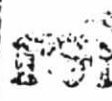
EMBASE EXPANDER

DATE: 30/7/80

MODIFS:

Ref schéma	Ref stock rsf	DESCRIPTION	Ref schéma	Ref stock rsf	DESCRIPTION
CI1	CI7818		D1	DAN4000	
CI2	CI7918		D2	DAN4000	
			D3	DAN4000	
			D4	DAN4000	
R1	R100K1P1		D5	DAN4000	
R2	R100K1P1		D6	DAN4000	
R3	R100K				
R4	R100K				
R5	R33K				
R6	R33K				
R7	R33K		C1	C2200MF	
R8	R12K		C2	C2200MF	
R9	R82K		C3	C4,7MFA	
R10	R82K		C4	C4,7MFA	
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				




 EARL M. CAPITAN
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 RC Time 733 510
 CCA Time 771 614

NUMEROUS TO

Board Sous-titre EXAMEN

DATE: 0/7/80

MODIFS:

Ref schéma	Ref stock vsf	DESCRIPTION	Ref schéma	Ref stock vsf	DESCRIPTION
CI1	CI 084		R1	R100K1P	
CI2	CI 324		R2	R27,6K1P	
CI3	CI 5837		R3	R22K	
CI4	CI 3080		R4	R100K1PM	
			R5	R100K1PM	
T1	T3904		R6	R47K	
T2	T3904		R7	R100K	
T3	T3906		R8	R100K	
T4	T3904		R9	R15K	
			R10	R10K	
			R11	R1K	
D1	D1N4148		R12	R100K	
D2	D1N4148		R13	R150K	
			R14	R1K	
			R15	R330K	
C1	C4, 7MFTA		R16	R15K	
C2	C4, 7MFTA		R17	Supprimée	
C3	C4, 7MFTA		R18	R220	
C4	C4, 7MFTA		R19	R220	
C5	C47MFSIE		R20	R100K	
C6	C33MFSIE		R21	R100K	
C7	C0, 1MFSI		R22	R68K	
C8	C0, 22MFS	ou 0,22µF	R23	R330K	
C9	C1MFSIE		R24	R100K	
			R25	R100K	
			R26	R200K1P	
ADJ11	ADJ11010K		R27	R1K	
			R28	R100K	
			R29	R100K1P	
			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	

True a ion-ou
 True a son-ou



18, Rue CLARE CAZELLES
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 CONTRÔLEUR

Représentant S.A.R.L. au capital de 20 000 000
 R.C. N° 755 888
 C.C.R. N° 778 40A

ORIGINAL

NOMENCLATURE
 RESISTANCES

SCH1 -
 CI: 7909 C CH1 EXP


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 R51	R100K	
R2	R15K		25 R52	R100K	
R3	R28,7KIP		1 R53	R330K	
R4	R3,6k5P		23 R54	R330K	
R5	R28,7KIP		24 R55	R1M	
R6	R200K2PH	Matched	44 R56	R1M	
R7	R200K2PH	Matched	15 R57	R1K	
R8	R100K		35 R58	R1K	
R9	R1M		39 R59	R68K	
R10	R680K		2 R60	R100K	
R11	R39K		55 R61	R100K	
R12	R220		64 R62	R330K	
R13	R27K		55 R63	R330K	
R14	R100K		63 R64	R1M	
R15	R82K		98 R65	R1M	
R16	R220		94 R66	R47K	
R17	R27K		33 R67	R100K	
R18	R100K		71 R68	R10K	
R19	R68K		70 R69	R100K	
R20	R100KIP		51 R70	R100K	
R21	R10K		46 R71	R22K	
R22	R62K		36 R72	R68K	
R23	R1K		51 R73	R270K	
R24	R100K		52 R74	R10K	
R25	R10K		59 R75	R10K	
R26	R220		52 R76	R100K	
R27	R10K		50 R77	R68K	
R28	R10K		29 R78	R270K	
R29	R220		28 R79	R10K	
R30	R10K		24 R80	R22K	
R31	R10K		34 R81	R200KIP	
R32	R220		33 R82	R100K	
R33	R10K		69 R83	R100K1PM	Matched
R34	R10K		68 R84	R200K1PM	Matched
R35	R220		67 R85	R4,7MM	Matched
R36	R10K		66 R86	R1M	
R37	R4,7K		65 R87	295,3KIP	
R38	R220		64 R88	R22K	
R39	R10K		63 R89	R47,5KIP	
R40	R220		62 R90	R1KIP	103
R41	R220		61 R91	218,2KIP	71
R42	R11		60 R92	218,2KIP	
R43	R100K		59 R93	R332KIP	
R44	R1K		58 R94	R200KIP	
R45	R10K		57 R95	R100K	

Ref schema		Ref stock rsf		DESCRIPTION	Ref schema	Ref stock rsf		DESCRIPTION
R1		R 4, 7	X					
R2		R 15K			43	R 51	R 100K	
R3		R 28, 7KIP			25	R 52	R 100K	
R4		R 3, 6KSP			1	R 53	R 330K	
R5		R 28, 7KIP			23	R 54	R 330K	
R6		R 200K 2PH	Matched		21	R 55	R 1M	
R7		R 200K 2PH	Matched		44	R 56	R 1M	
R8		R 100K			15	R 57	R 1K	
R9		R 1M			35	R 58	R 1K	
R10		R 680K			39	R 59	R 68K	
R11		R 39K			2	R 60	R 100K	
R12		R 220			55	R 61	R 100K	
R13		R 27K			64	R 62	R 330K	
R14		R 100K			55	R 63	R 330K	
R15		R 82K			63	R 64	R 1M	
R16		R 220			98	R 65	R 1M	
R17		R 27K			51	R 66	R 47K	
R18		R 100K			73	R 67	R 100K	
R19		R 68K			71	R 68	R 10K	
R20		R 100KIP			70	R 69	R 100K	
R21		R 10K			51	R 70	R 100K	
R22		R 62K			40	R 71	R 22K	
R23		R 1K			36	R 72	R 168K	
R24		R 100K			51	R 73	R 270K	
R25		R 10K			52	R 74	R 10K	
R26		R 220			59	R 75	R 10K	
R27		R 10K			52	R 76	R 100K	
R28		R 10K			50	R 77	R 68K	
R29		R 220			49	R 78	R 270K	
R30		R 10K			28	R 79	R 10K	
R31		R 10K			11	R 80	R 22K	
R32		R 220			37	R 81	R 200KIP	
R33		R 10K			33	R 82	R 100K	
R34		R 10K			69	R 83	R 100K 1PM	Matched
R35		R 220			68	R 84	R 200KIP 1M	Matched
R36		R 10K			67	R 85	R 4, 7MM	Matched
R37		R 4, 7X			66	R 86	R 1M	
R38		R 220			65	R 87	R 95, 3KIP	
R39		R 10K			64	R 88	R 22K	
R40		R 220			63	R 89	R 47, 5KIP	
R41		R 220			62	R 90	R 1KIP	103
R42		R 1M			61	R 91	R 18, 2KIP	7
R43		R 100K				R 92	R 18, 2K 1P	
R44		R 1K			54	R 93	R 732KIP	
R45		R 10K			53	R 94	R 200KIP	
R46		R 47K			72	R 95	R 18, 2KIP	
R47		R 22K				R 96	R 1KIP	
R48		R 1K				R 97	R 28, 7KIP	
R49		R 1K				R 98	R 62K 5P	SORCOR
R50						R 99		
						R 100		


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ORIGINAL
 NO RENGLATI RI
 RESISTANES

SCHA
 CI: 7909C CH1 EXP

Expander Koboi

DATE: 20/11/79

MODIFS: R117/120
 e optional R 3 star

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R1101	R470		R1151	R220	
R1102	R4,7K		R1152	R156K	
R1103	R10K		R1153	R680K	
R1104	R2,2K		R1154	R220	
R1105	R100K		R1155	R68K	
R1106	R10K		R1156	R220	
R1107	R820K		R1157	R27K	
R1108	R6,2KSP		R1158	R100K	
R1109	R2,2K		R1159	R27K	
R1110	R10K		R1160	R100KIPM	Matched
R1111	R4,7K		R1161	R100KIPM	Matched
R1112	R732KIP		R1162	R200KIPM	Matched
R1113	R220K		R1163	R4,7MM	Matched
R1114	R10K		R1164	R22K	
R1115	R10K		R1165	R1M	
R1116	R100K		R1166	R95,3KIP	
		Annuler	R1167	R47,5KIP	
R1118	R100KIPM	Matched	R1168	R1KIP	
R1119	R100K		R1169	R18,2KIP	
R1120	R100K		R1170	R18,2KIP	
R1121	R39K		R1171	R732KIP	
R1122	R270K		R1172	R200KIP	
R1123	R220K		R1173	R18,2KIP	
R1124	R330K		R1174	R16KIP	
R1125	R62K5P		R1175	R28,7KIP	
R1126	R27K		R1176	R62K5P	
R1127	R100K		R1177	R10K	
R1128	R17		R1178	R470	
R1129	R180K		R1179	R1K	
R1130	R47K		R1180	R820K	
R1131	R100K		R1181	R6,2K5P	
R1132	R47,5KIP		R1182	R2,2K	
R1133	R16,2KIP		R1183	R10K	
R1134	R220K		R1184	R732KIP	
R1135	R150K		R1185		
R1136	R82K		R1186	R4,7M	Annuler
R1137	R1M		R1187	R100K	
R1138	R56K		R1188	R100K	
R1139	R220		R1189	R220K	
R1140	R180K		R1190	R270K	
R1141	R220K		R1181	R39K	
R1142	R15K		R1192	R330K	
R1143	R56K		R1193	R62K5P	
R1144	R100K		R1194	R100K	
R1145	R10K				

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R1101	R470		R1151	R220	
R1102	R47K		R1152	R56K	
R1103	R10K		R1153	R680K	
R1104	R2,2K		R1154	R220	
R1105	R100K		R1155	R68K	
R1106	R10K		R1156	R220	
R1107	R820K		R1157	R27K	
R1108	R6,2KSP		R1158	R100K	
R1109	R2,2K		R1159	R27K	
R1110	R10K		R1160	R100KIPM	Matched
R1111	R4,7M		R1161	R100KIPM	Matched
R1112	R732KIP		R1162	R200KIPM	Matched
R1113	R220K		R1163	R4,7MM	Matched
R1114	R10K		R1164	R22K	Matched
R1115	R10K		R1165	R1M	
R1116	R100K		R1166	R95,3KIP	
R1117		Annulé	R1167	R47,5KIP	
R1118	R100KIPM	Matched	R1168	R1KIP	
R1119	R100K		R1169	R18,2KIP	
R1120	R100K		R1170	R18,2KIP	
R1121	R39K		R1171	R732KIP	
R1122	R270K		R1172	R200KIP	
R1123	R220K		R1173	R18,2KIP	
R1124	R330K		R1174	R16KIP	
R1125	R62K5P		R1175	R28,7KIP	
R1126	R27K		R1176	R62K5P	
R1127	R100K		R1177	R10K	
R1128	R17		R1178	R470	
R1129	R180K		R1179	R1K	
R1130	R47K		R1180	R820K	
R1131	R100K		R1181	R6,2K5P	
R1132	R47,5KIP		R1182	R2,2K	
R1133	R16,2KIP		R1183	R10K	
R1134	R220K		R1184	R732KIP	
R1135	R150K		R1185		
R1136	R82K		R1186	R4,7M	Annulé
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	R16K		R1193	R62K5P	
R1144	R100K		R1194	R100K	
R1145	R10K		R1195	R27K	
R1146	R100K		R1196	R1M	
R1147	R100K		R1197	R180K	
R1148	R200KIP		R1198	R47K	
R1149	R100K				



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CCP Tlse 778 40 A

ORIGINAL

NOMENCLATURE
RESISTANCES, CAPACITES

SCHEM
CI: 7909C CH1 EXA

Expander Kcabol


DATE: 20/11/79
MODIFS: 08/09 C. Mont S.

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R201	R220K		C11	C100PF	
R202	R16,2K1P		C12	C1NF3IE	
R203	R56K		C13	C1NF3IE	
R204	R220		C14	C1NF3IE	
R205	R180K	109	C15	C1NF3IE	
R206	R1M		C16	C4,7MFTA	4,7µF Tantale
R207	R150K		C17	C4,7MFTA	"
R208	R82K		C18	C1NF3IE	C10NF3ie
R209	R56K		C19	C1NF3IE	C10NF3ie
R210	R100K		C110	C0,1MFI81	
R211	R10K	PPie 3PAS	C111	C0,1MFI81	
R212	R15K		C112	C1NFICERF	1nf 10% 50pp
R213	R220K		C13	C100PF	
R214	R100K		C14	C1NFICERF	1nf 10% 50pp
R215	R100K		C15	C100PF	
R216	R200K1P	*	C16	C4,7MFTA	4,7µF 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 carnet			
ADJ2		100K			
ADJ3		10k			
ADJ4		10k			
ADJ5		100K Carnet			
ADJ6		10k 20THRS			
ADJ7		10k			
ADJ8		100K			
ADJ9		100K			
ADJ10		100K Carnet			

Expander Kcbo1

DATE: 20/11/79
MODIFS: C8/C9 C10ntS

Ref schema	Ref stock rsf	DESCRIPTION	Ref schema	Ref stock rsf	DESCRIPTION
R2011	R220K		C11	C100PF	
R2012	R16, 2K1P		C12	C1NF8IE	
R203	R56W		C13	C1NF8IE	
R204	R220		C14	C1NF8IE	
R205	R180K		104 C15	C1NF8IE	
R206	R1M		C16	C4, 7MFTA	4.7µF Tantale
R207	R150K		C17	C4, 7MFTA	"
R208	R82K		C18	C1NF8IE	C10NF8ie
R209	R56K		C19	C1NF8IE	C10NF8ie
R210	R100K		C110	C0, 1MFI81	
R211	R10K	PPue 3PAS	C111	C0, 1MFI81	
R212	R15K		C112	C1NFICERF	1nf 10% 50ppm
R213	R220K		C113	C100PF	1nf 10% 50ppm
R214	R100K		C114	C1NFICERF	1nf 10% 50ppm
R215	R100K		C115	C100PF	
R216	R200K 1P		* C116	C4, 7MFTA	4.7µF 20V Tant
R217	R100K		C117	"	
R218	R270K		C118	"	
R219	R220		C119	"	
R220	R56K		C120	"	
R221	R680K		C121	"	
R222	R220		C122	"	
R223	R68K		C123	"	
R224	R220		C124	"	
R225	R27K		C125	"	
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 Turns			
ADJ7		10K			
ADJ8		100K			
ADJ9		100K			
ADJ10		100K Cement			
ADJ11		10K 20 Turns			
ADJ12		10K			
ADJ13		100K			
ADJ14		100K			


 THE CLASSIC...
 31 200 - 700 0000
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 CENTRAL...
 0011 20 Capital...
 AC Tce 700 000
 CCA Tce 770 000

ORIGINAL
 REGISTRATION
 CERTIFICATE

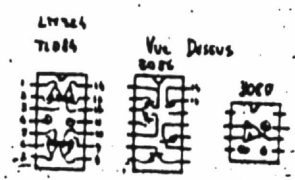
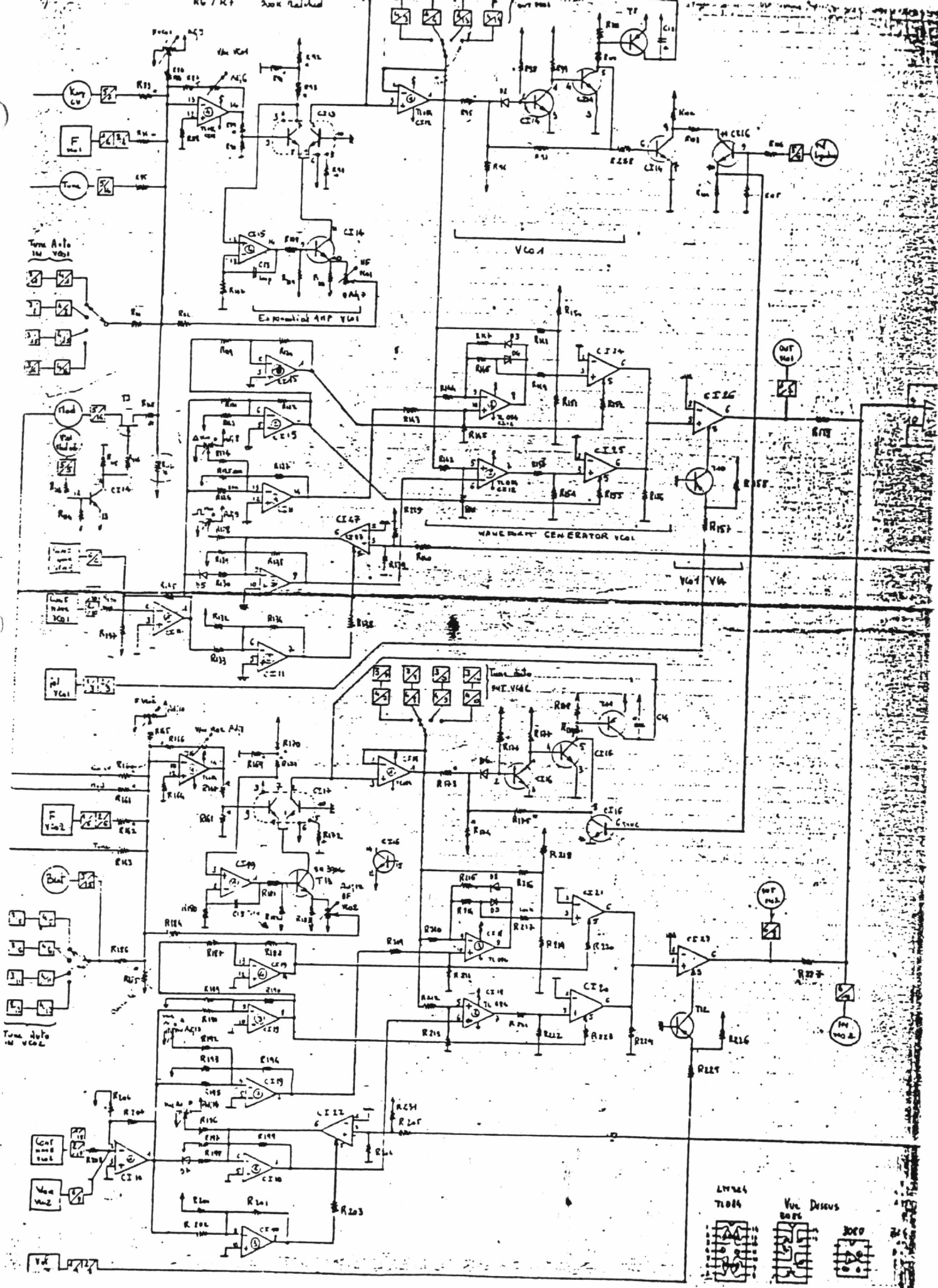
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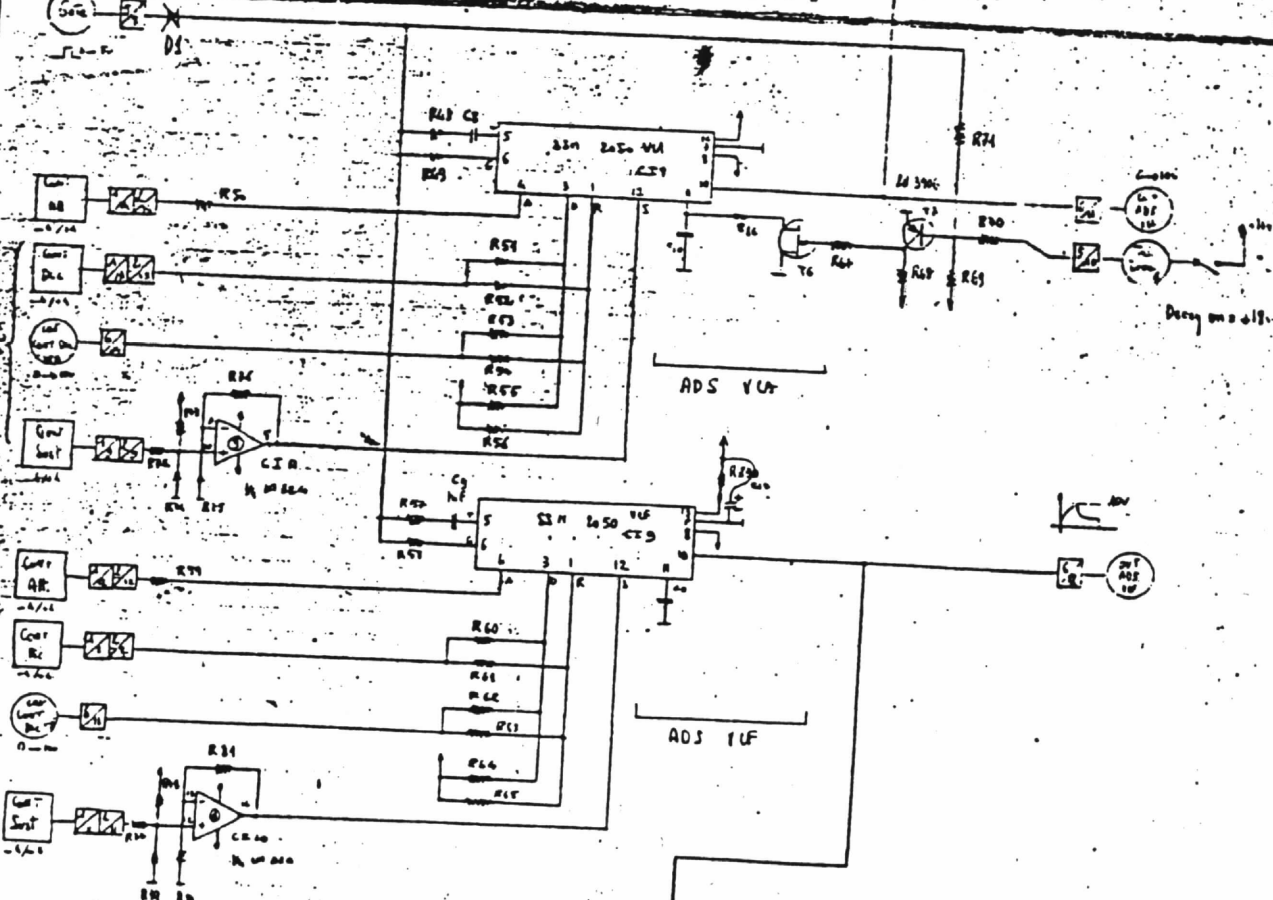
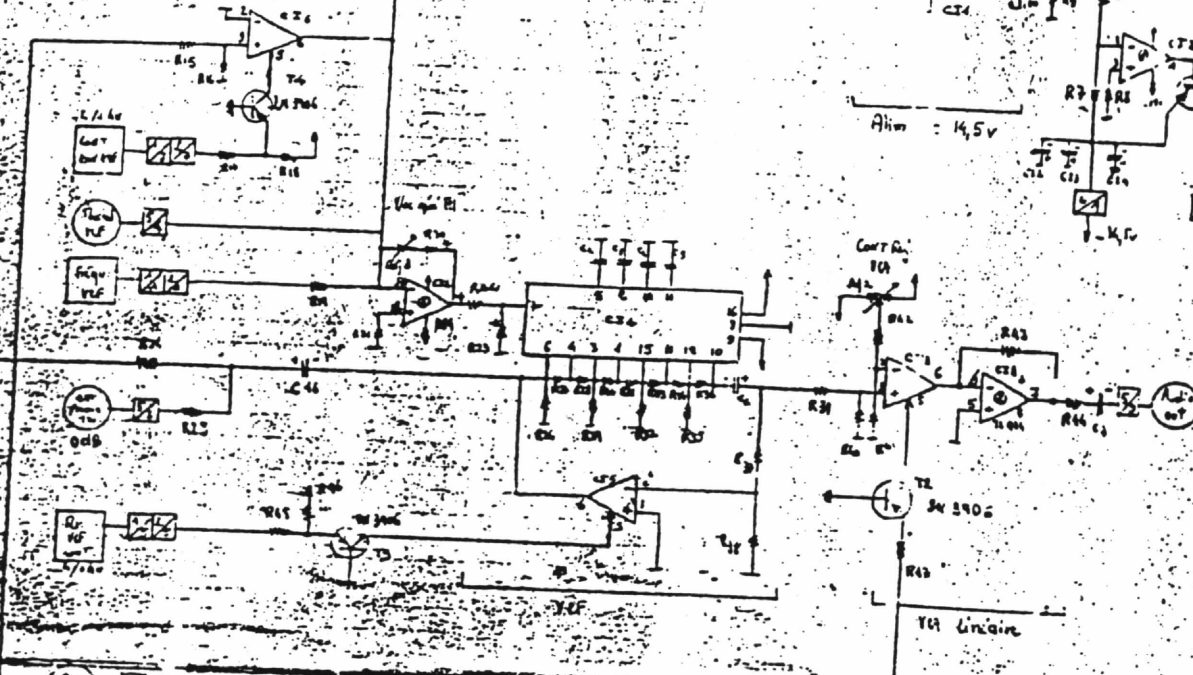
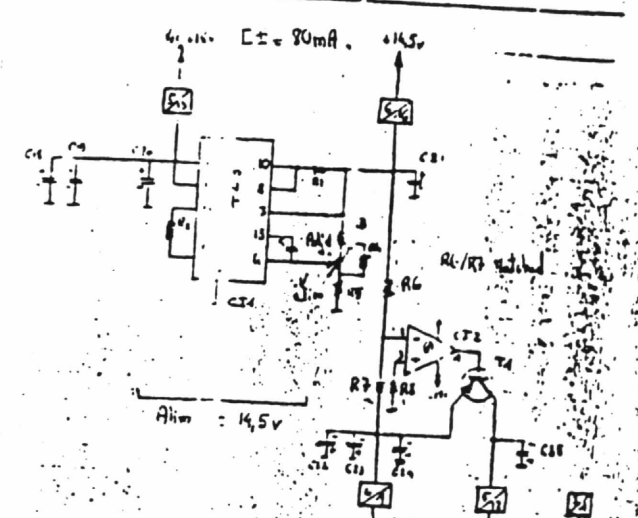
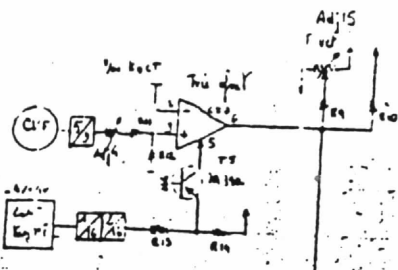
Expander Kabel

DATE: 20/11/79

NO: 51

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CI 3		3 280	T 3		2N 3906
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CI 7		" " " " " "	T 7		2N 3819
CI 8		S 17 2050	T 8		2N 3906
CI 9		" " " " " "	T 9		2N 3906
CI 10		L 17 324	T 10		2N 3819
CI 11		L 17 324	T 11		2N 3906
CI 12		TL 084	T 12		2N 3906
CI 13		MA 726	T 13		2N 3906
CI 14		CA 3086 tri... " " " " " "			2N 3906
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CI 19		L 17 324			
CI 20		CA 3080			
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D 2		" " " " " "			
D 3		" " " " " "			
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D 5		" " " " " "			
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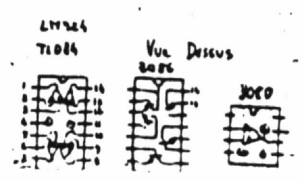
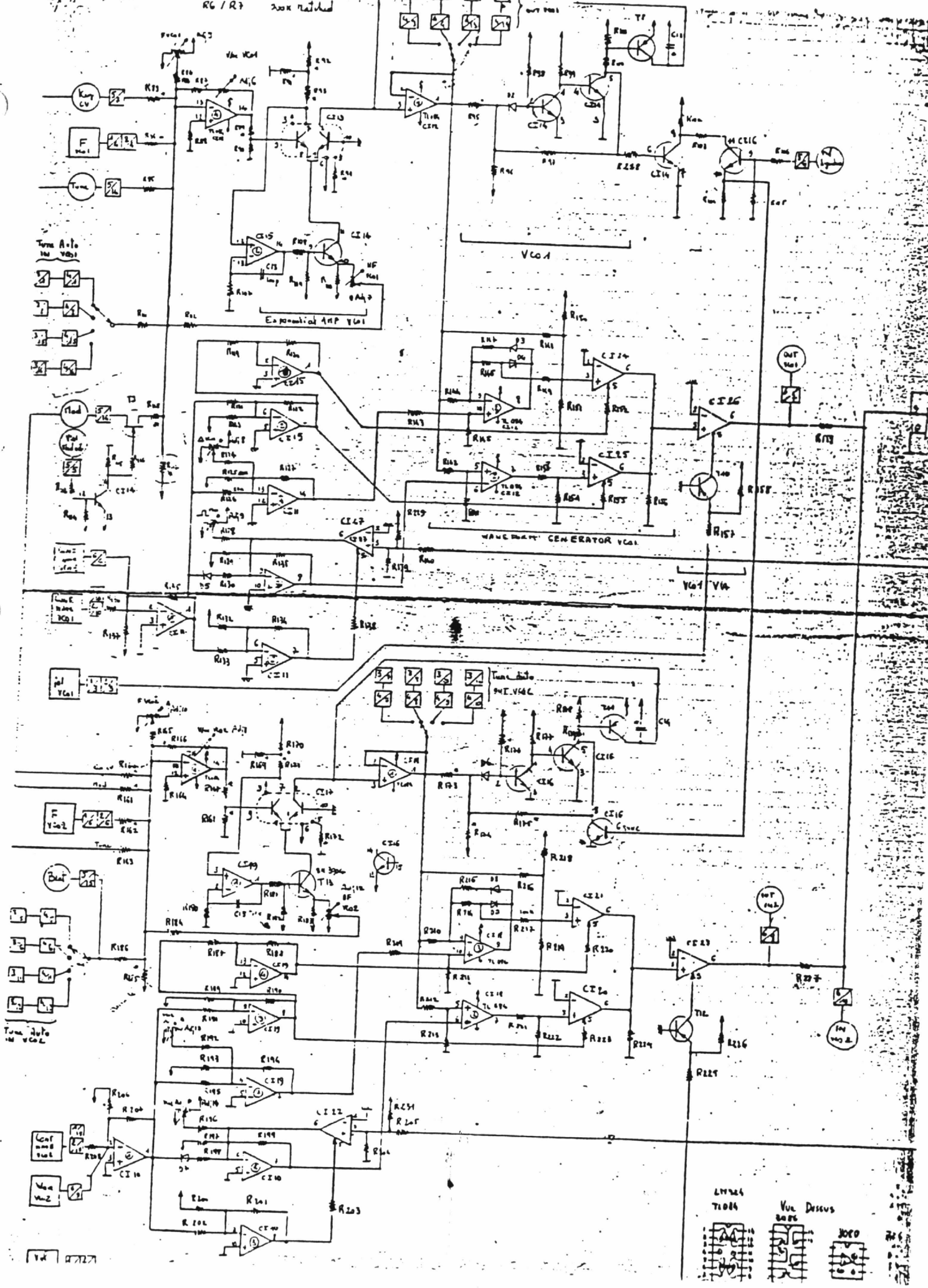


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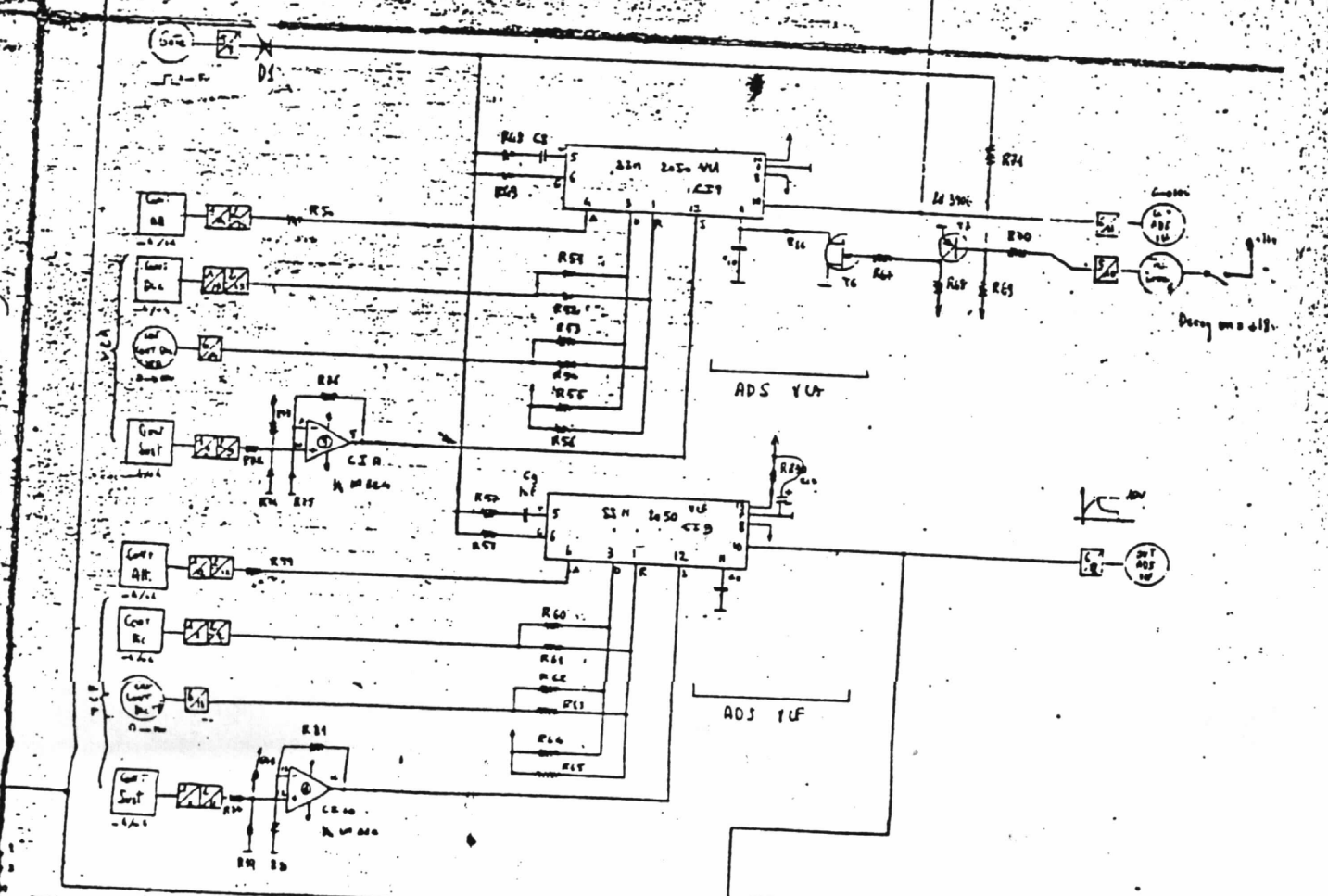
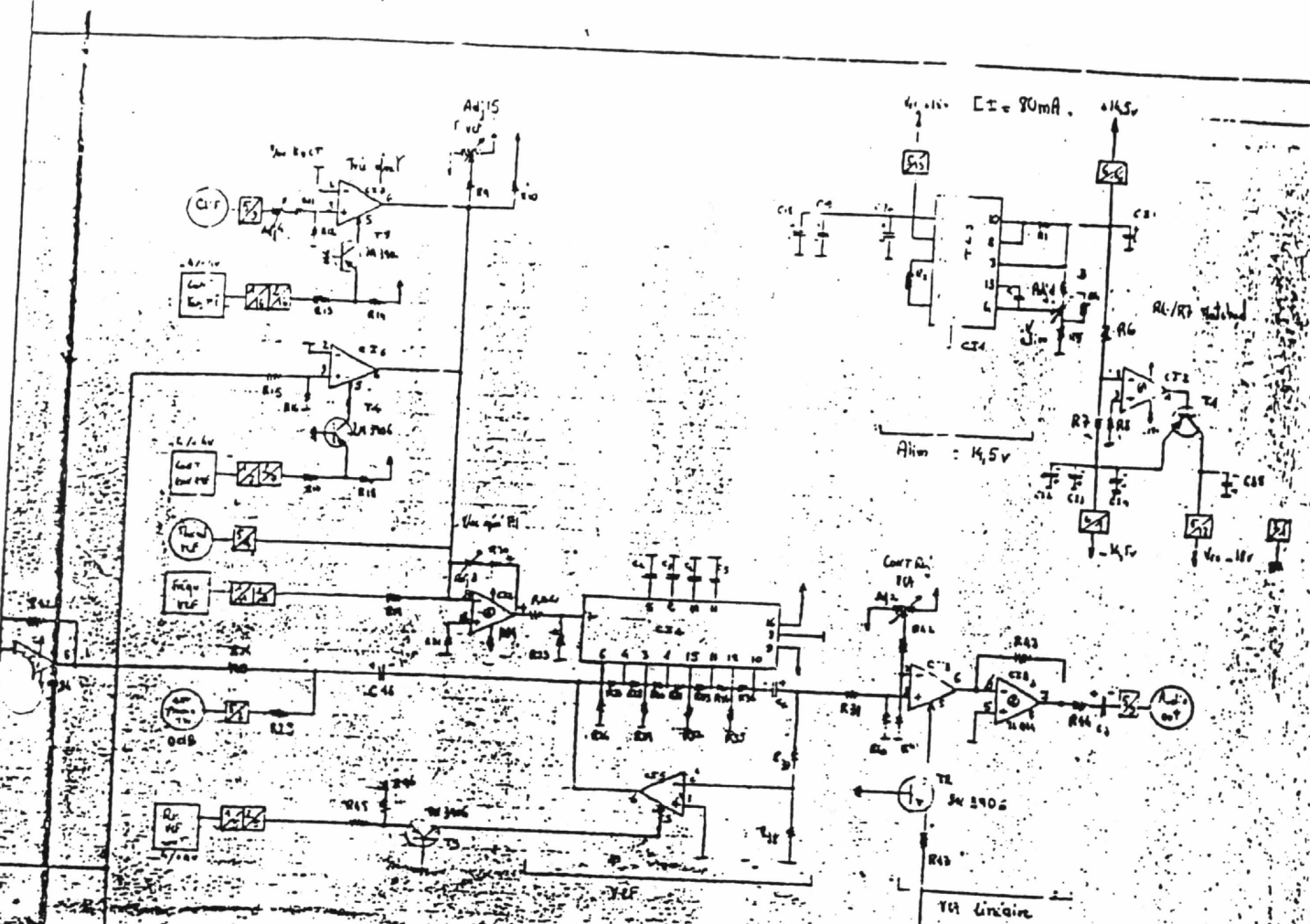
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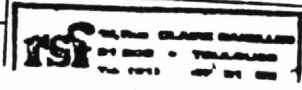
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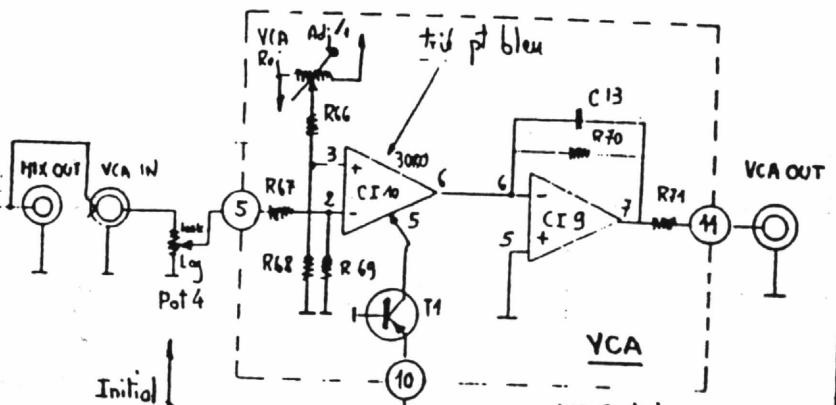
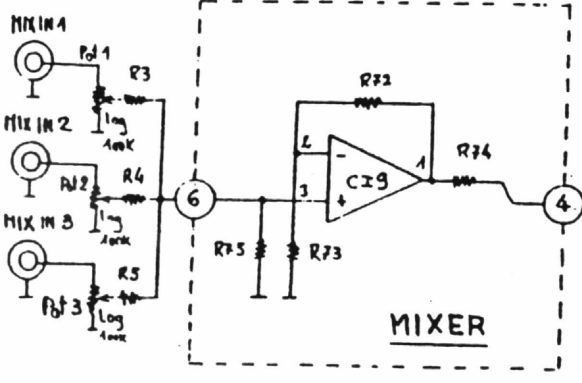
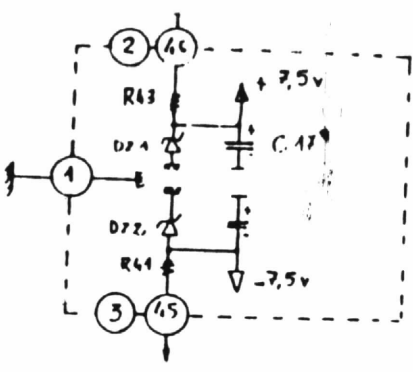
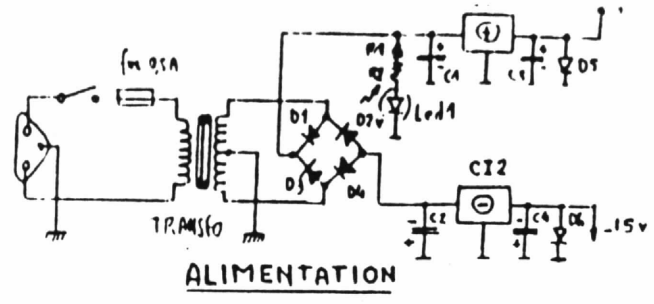
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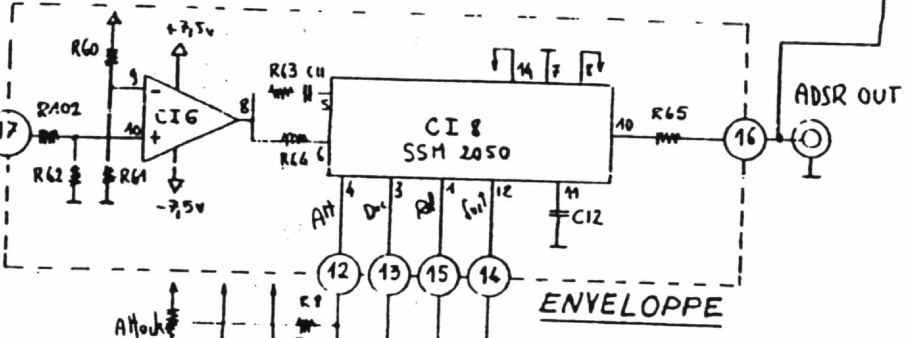
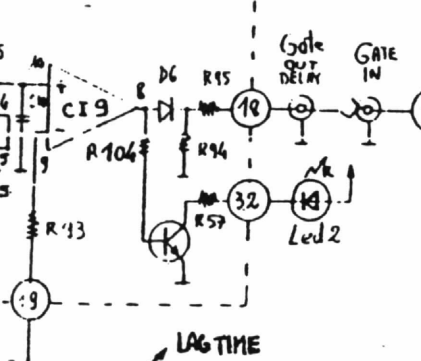
15/6/79 KF
Board



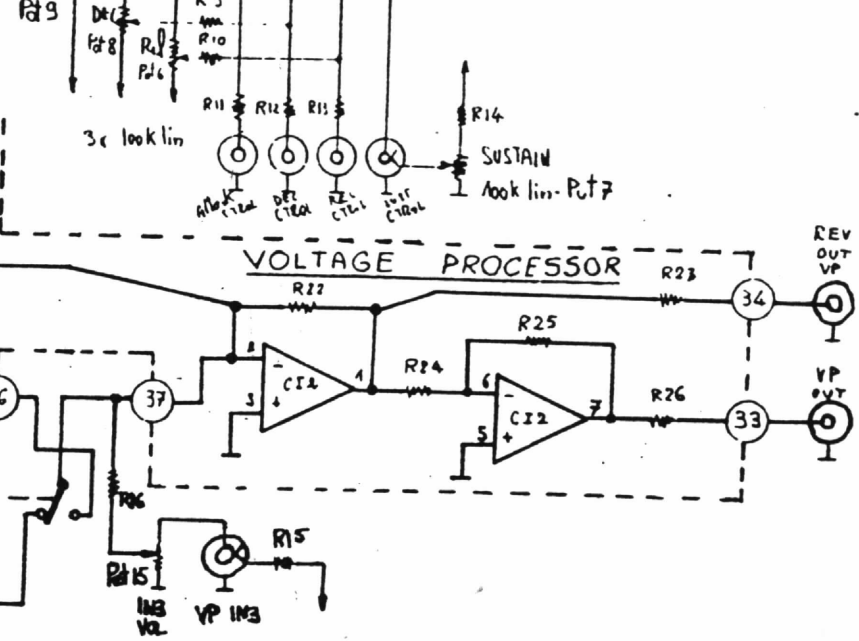
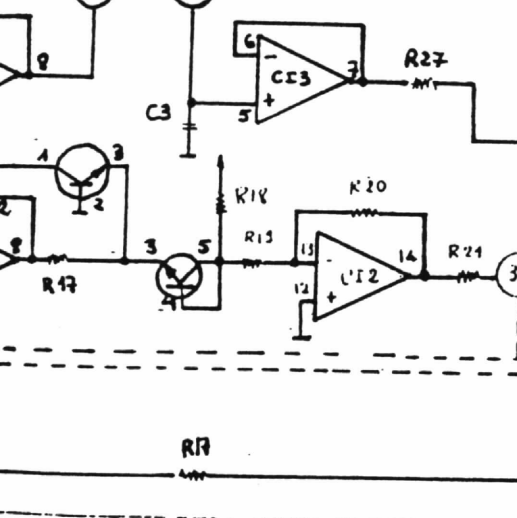
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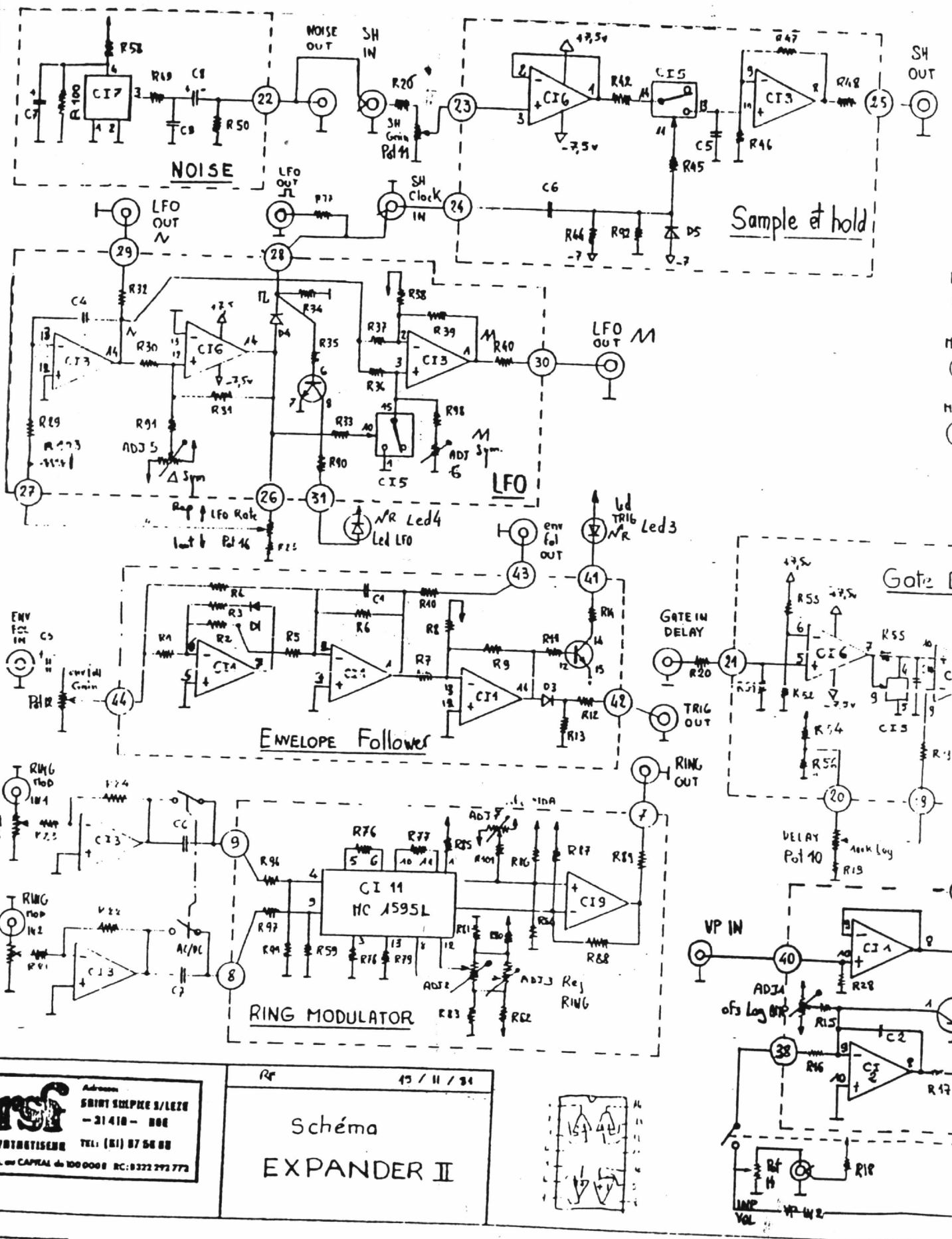


Gate DELAY



LAG TIME





rsf
 Adresse:
 SAINT SIMEON 8/LEZE
 - 31410 - 808
 SYNTHESEUR TEL: (81) 87 54 00
 S.A. au CAPITAL de 100 000 F. RC: 8322 272 772

45 / 11 / 84
 Schéma
 EXPANDER II

