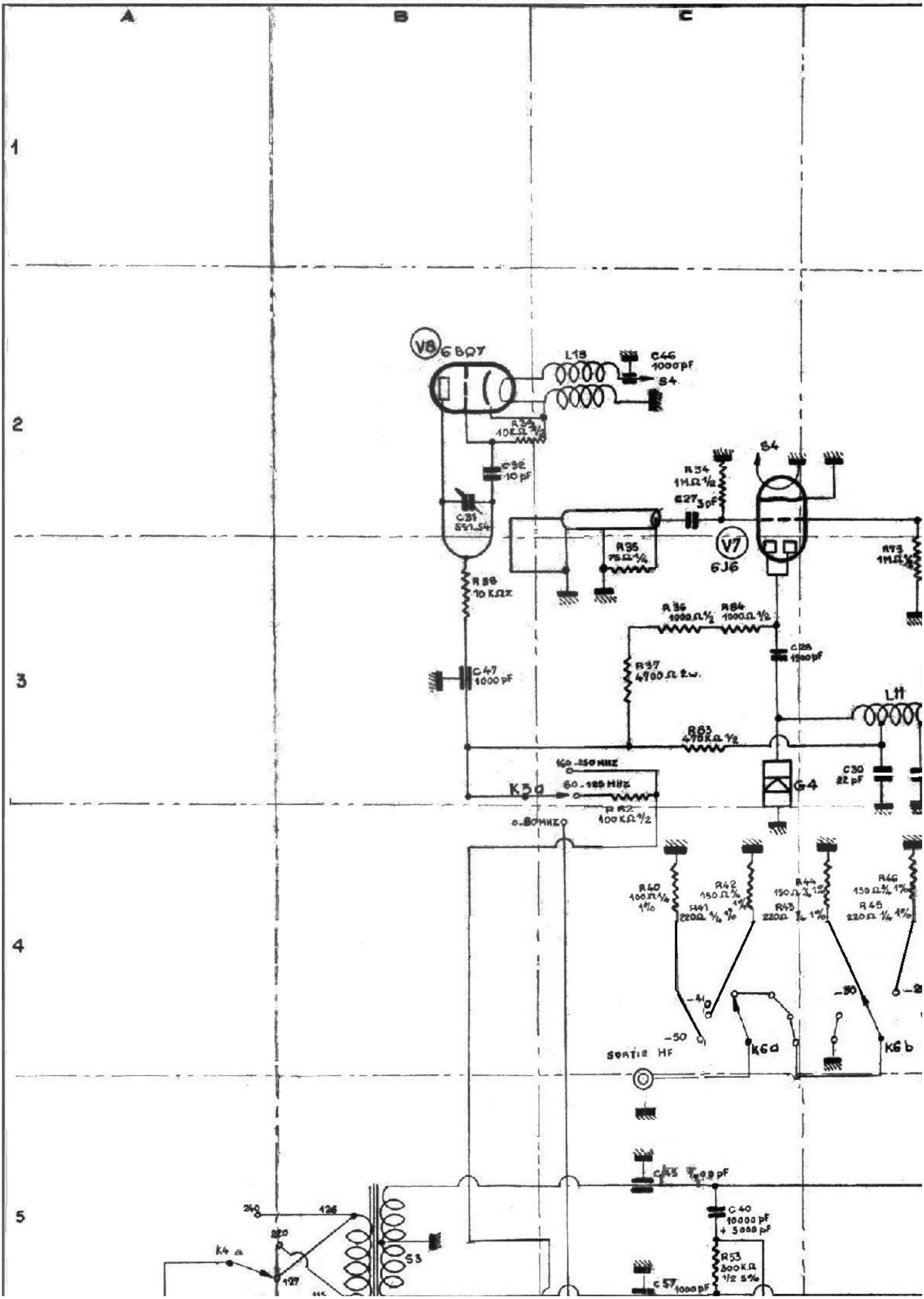
APPAREILS ELECTRONIQUES
DE MESURE ET DE CONTROLE

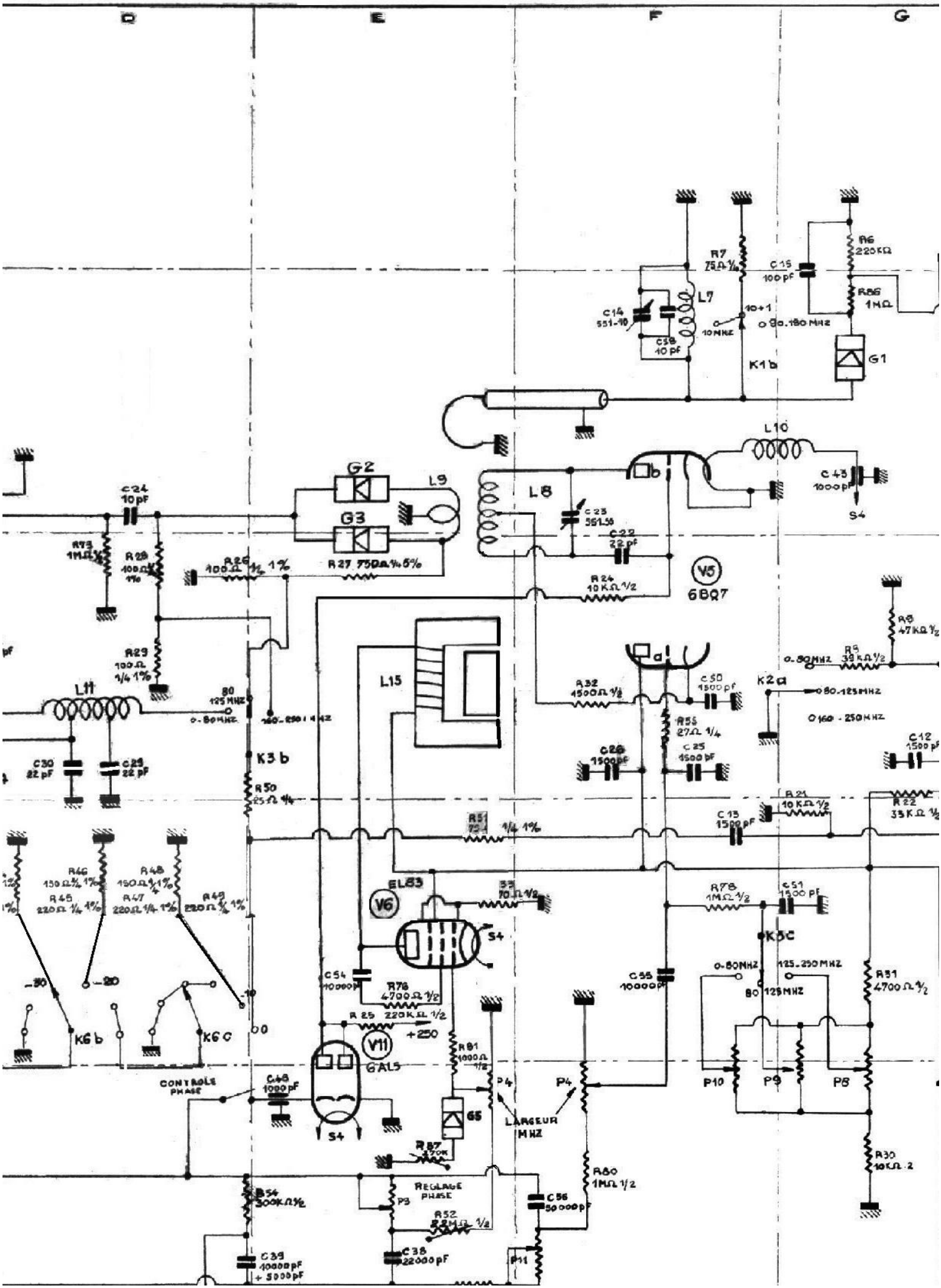
WOBULATEUR 410A

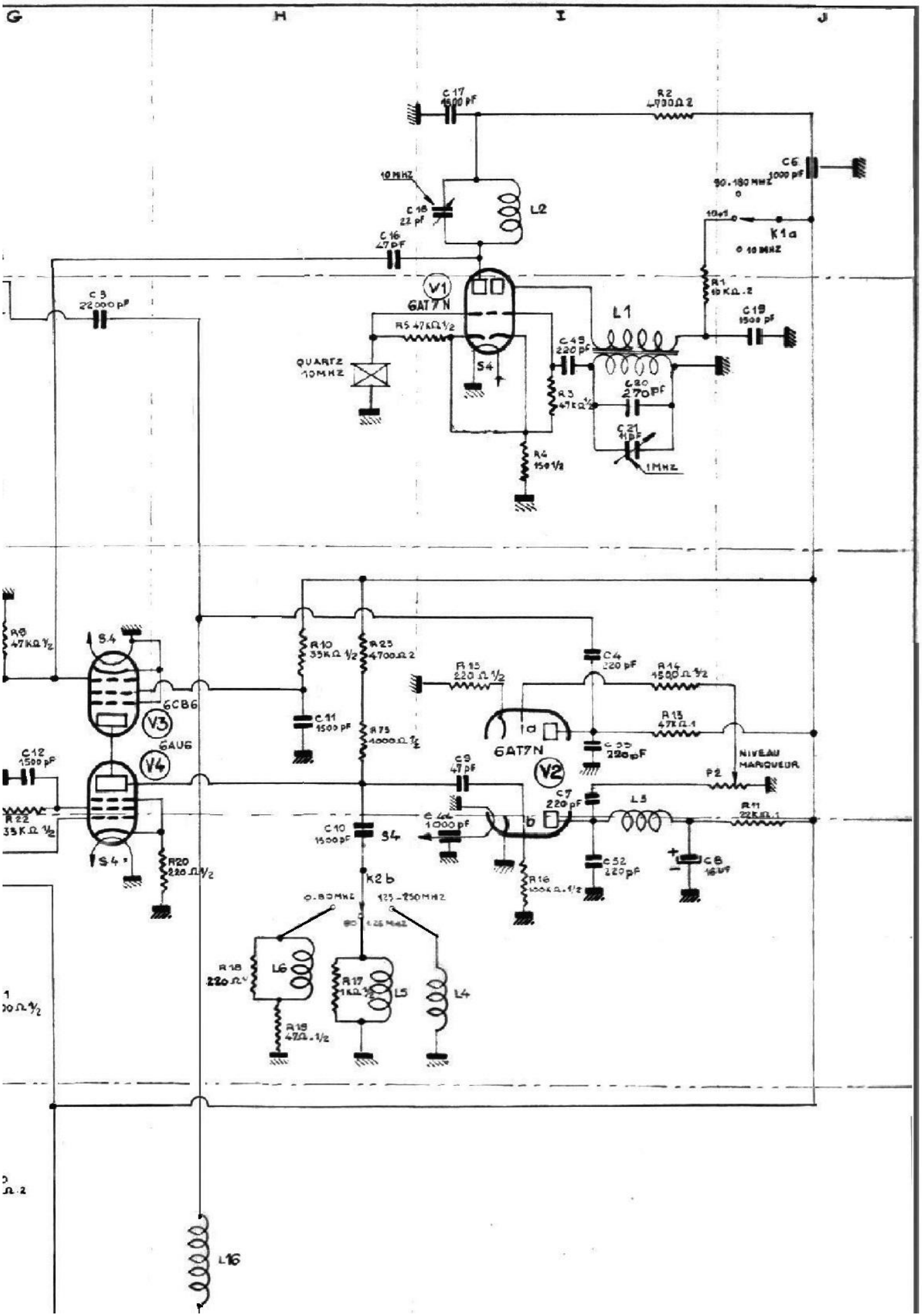
DOCUMENTATION
TECHNIQUE

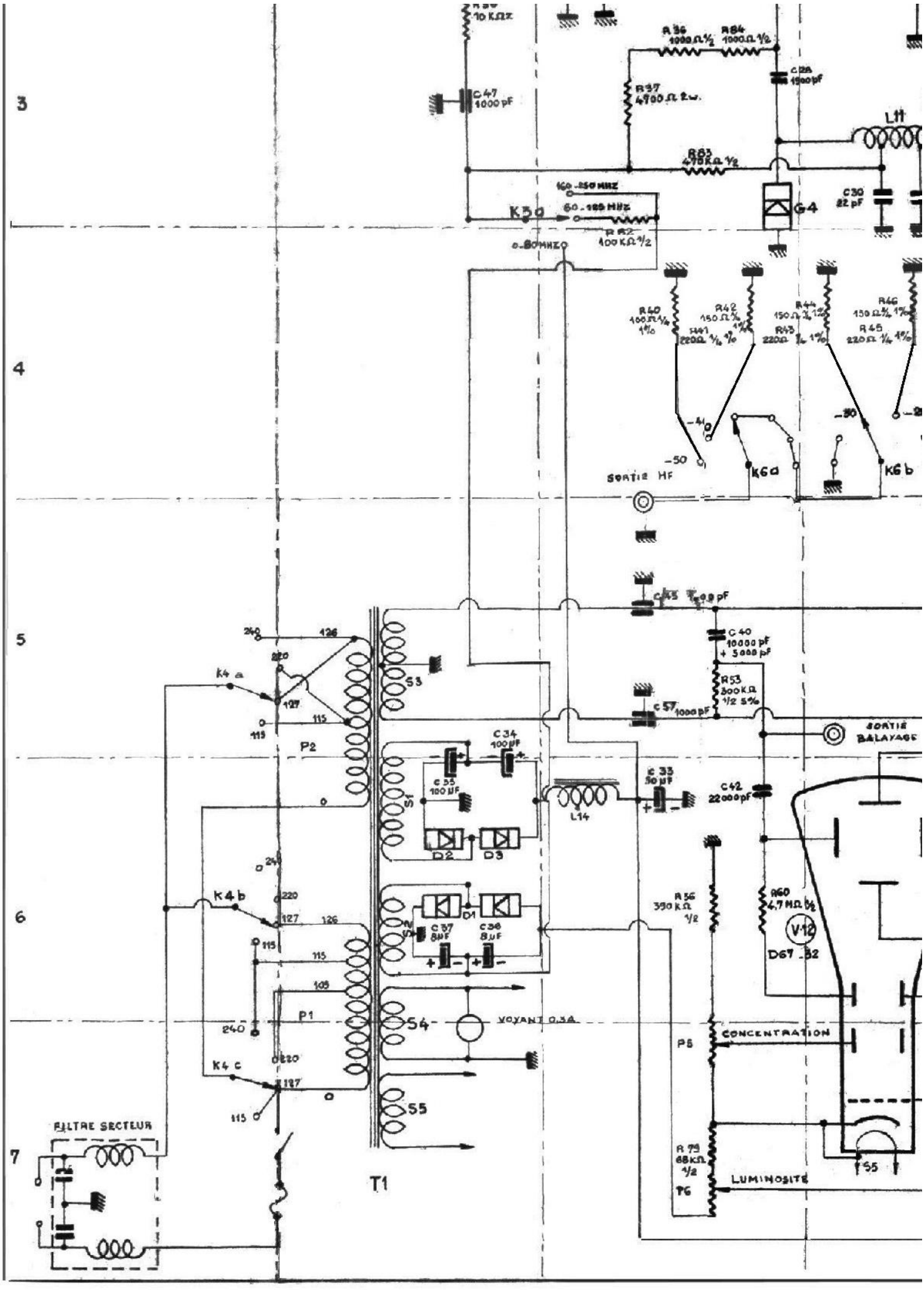
RIBET DESJARDINS

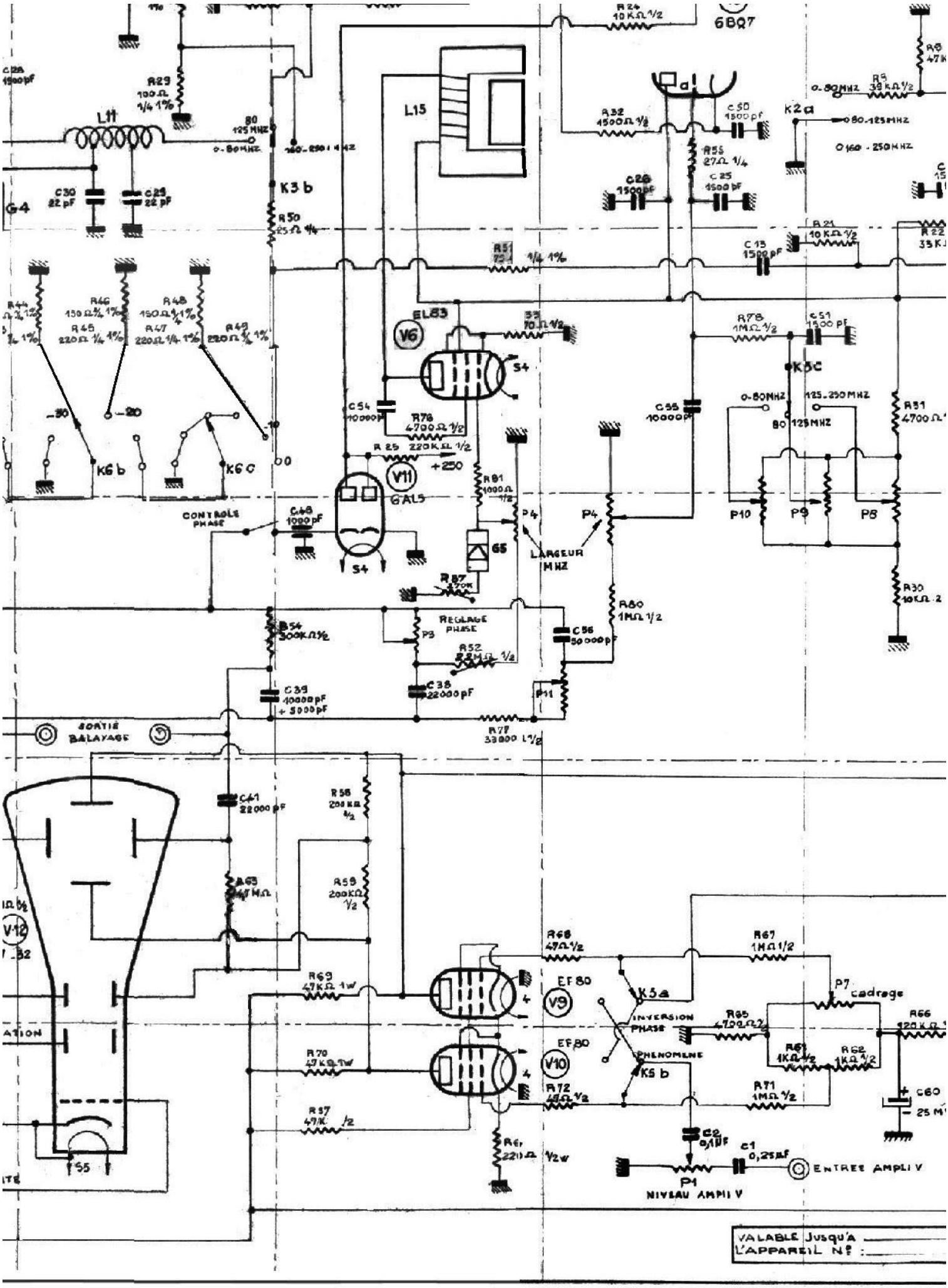
13, RUE PÉRIER, MONTROUGE (SEINE) - ALÉ. 24-40+

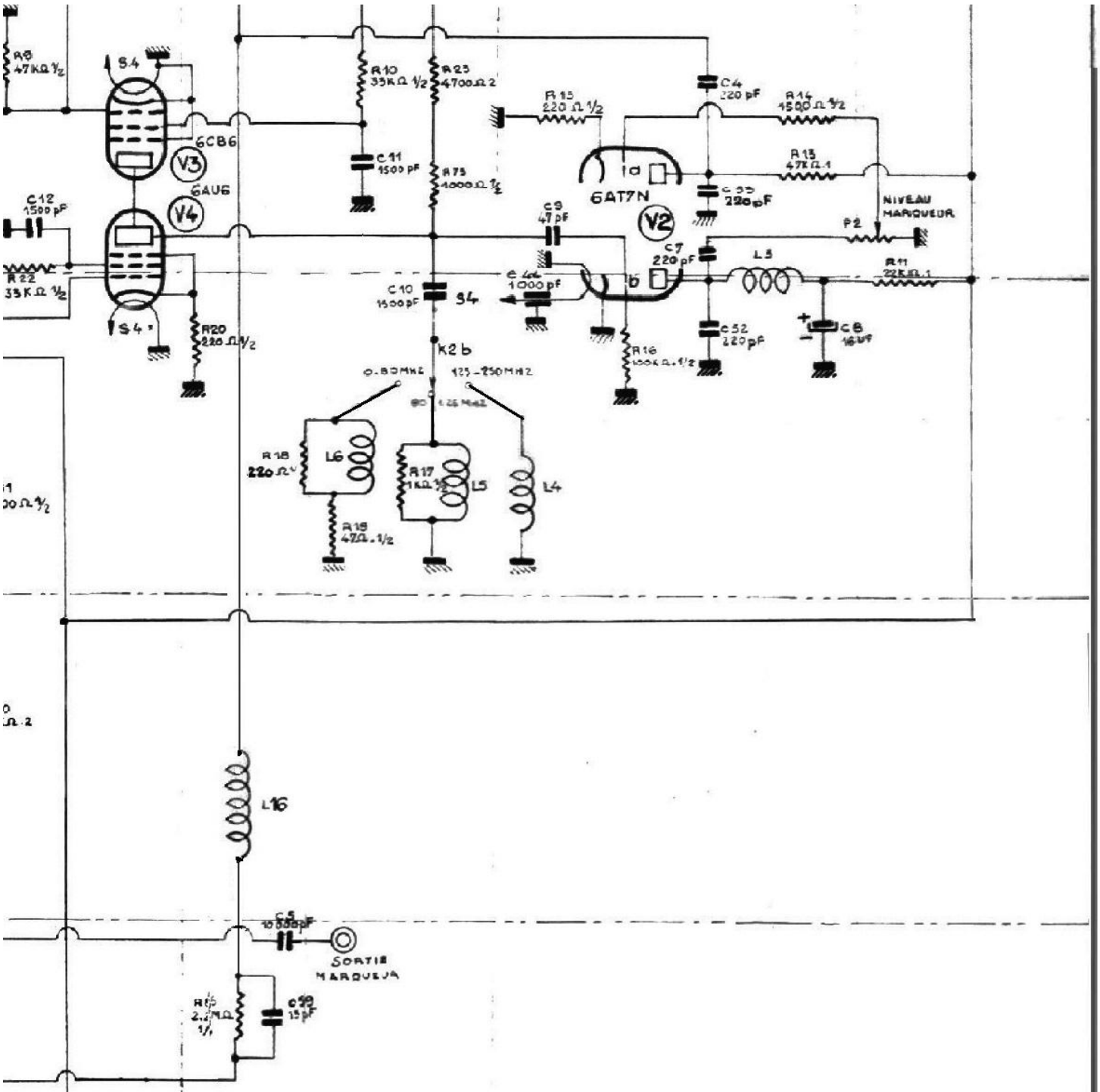

A
B
C
1
2
3
4
5
V8
6 BQ7
L13
C46
1000 pF
S4
R33
C32
10 pF
C31
R 34
1MΩ 1/2
C27
3 pF
V7
6J6
R35
75 Ω 1/4
R 38
10 KΩ 2
R 36
1000 Ω 1/2
R 84
1000 Ω 1/2
C 28
1500 pF
R 37
4700 Ω 2 w.
C 47
1000 pF
L11
R 83
470 KΩ 1/2
C 30
22 pF
G 4
160 - 250 MHZ
60 - 185 MHZ
K3 a
R 82
100 KΩ 1/2
0 - 80 MHZ
R 40
100 Ω 1/4
1%
R 42
150 Ω
R 41
220 Ω 1/4 1%
R 44
R 43
220 Ω 1/4 1%
R 46
R 45
220 Ω 1/4 1%
-40
-50
-30
K6 a
K6 b
SORTIE HF
C 40
10000 pF
+ 5000 pF
R 53
300 KΩ
1/2 5%
C 57
1000 pF
240
126
220
K4 a
127
115
S3


D
E
F
G
R7 75Ω 1/4
C15 100 pF
R6 220KΩ
R86 1MΩ
C14 551-10
L7
C38 10 pF
10+1
10MHZ
80..180 MHZ
K1b
G1
L10
C43 1000pF
S4
G2
G3
L9
L8
C23 551-35
C22 22 pF
V5
6BQ7
C24 10 pF
R73 1MΩ 1/2
R28 100Ω 1%
R26 100Ω 1/2 1%
R27 750Ω 1/4 5%
R24 10KΩ 1/2
R8 47KΩ 1/2
R9 39KΩ 1/2
0..80MHZ
L11
80 125 MHZ
0..80MHZ
160..250 KHZ
L15
R29 100Ω 1/4 1%
R32 1500Ω 1/2
C50 1500 pF
K2a
0 80..125MHZ
0 160..250KHZ
R55 27Ω 1/4
C26 1500pF
C25 1500 pF
C12 1500 pF
K3b
C30 82 pF
C29 22 pF
R50 25Ω 1/4
R51 75Ω 1/4 1%
R21 10KΩ 1/2
R22 35KΩ 1/2
C13 1500 pF
R46 150Ω 1/4 1%
R48 150Ω 1/4 1%
R45 220Ω 1/4 1%
R47 220Ω 1/4 1%
R49 220Ω 1/4 1%
EL83
V6
33 70Ω 1/2
R78 1MΩ 1/2
C51 1500 pF
K3C
S4
C54 10000pF
C55 10000pF
0..80MHZ
125..250MHZ
80 125MHZ
R31 4700Ω 1/2
R78 4700Ω 1/2
R25 220KΩ 1/2
+250
V11
GAL5
R91 1000Ω 1/2
P4
P4
P10
P9
P8
K6b
K6C
CONTROLE PHASE
C48 1000pF
S4
G5
LARGEUR MHZ
R87 470K
R30 10KΩ 2
R80 1MΩ 1/2
REGLAGE PHASE
P3
R54 500KΩ 1/2
R52 2.2MΩ 1/2
C56 50000pF
C38 22000pF
C39 10000pF + 5000pF
P11


G
H
I
J
C 17 1500 pF
R2 4700Ω 2
C6 1000 pF
90..180 MHZ
10MHZ
C 18 22 pF
L2
C 16 47 pF
10x1
K1a
0 10 MHZ
V1 6AT7N
R1 10 KΩ .2
C 3 22000 pF
L1
C19 1500 pF
R5 47kΩ½
C 45 220 pF
QUARTZ 10MHZ
S4
C20 270pF
R3 47kΩ½
C21 11pF
1MHZ
R4 150½
R8 47kΩ½
S4
R10 33kΩ ½
R23 4700Ω 2
C4 220 pF
R14 1500Ω ½
R15 220Ω ½
6CB6
V3
C11 1500 pF
R13 47kΩ.1
1a
6AT7N
V2
C 33 220pF
NIVEAU MARQUEUR
6AU6
V4
C12 1500 pF
C9 47 pF
P2
C7 220 pF
L3
R11 22kΩ.1
R22 33kΩ ½
C10 1500 pF
S4
1000 pF
b
C52 220pF
C8 16 µF
R16 100kΩ.1/2
S4
R20 220Ω½
K2b
0..80MHZ
125..250MHZ
R18 220Ω
L6
R17 1kΩ½
L5
L4
R19 47Ω.1/2
L16


3
4
5
6
7
R 36 1000Ω ½
R84 1000Ω ½
C28 1500pF
R37 4700Ω 2w.
L11
R63 470KΩ ½
C47 1000pF
160-250 MHz
60-120 MHz
K5a
R62 100KΩ ½
G4
C30 82pF
0-80MHZ
R40 100Ω ½ 1%
R42 150Ω ¾ 1%
R41 220Ω ¾ 1%
R44 150Ω ¾ 1%
R43 220Ω ¾ 1%
R46 150Ω ¾ 1%
R45 220Ω ¾ 1%
-40
-50
-30
K6a
K6b
SORTIE HF
C45 0,8 pF
C40 10000 pF + 5000 pF
R53 300KΩ 1/2 5%
C57 1000pF
SORTIE BALAYAGE
240
220
127
126
115
105
K4a
K4b
K4c
P2
P1
S3
S4
S5
C34 100µF
C35 100µF
C33 50µF
C42 22000pF
L14
D2
D3
D1
C37 8µF
C36 8µF
VOYANT 0,3A
R56 330KΩ ½
R60 4,7MΩ ½
V12
D67 ... 82
P5
CONCENTRATION
R75 68KΩ ½
P6
LUMINOSITE
T55
FILTRE SECTEUR
T1


6BQ7
L11
L15
K3 b
K6 b
K6 c
K5 c
K2 a
EL83
V6
GAL5
V11
EF80
V9
EF80
V10
V12
S4
S5
CONTROLE PHASE
REGLAGE PHASE
LARGEUR MHZ
SORTIE BALAYAGE
K5 a
INVERSION PHASE
PHENOMENE
K5 b
P1 NIVEAU AMPLI V
ENTREE AMPLI V
P7 cadrage
0-80MHZ
80-125MHZ
125-250MHZ
VALABLE JUSQU'A
L'APPAREIL N° :



MODIFICATIONS			
	L		
	K		
	J		
	I		
	H		
	G		
	F	26.11.56	Relier "Sortie marqueur" à la plaque de V3
	E	15.11.56	R52 ~~47 MΩ~~ 2,2 MΩ ajust. A1 R67 - A2 G5 .
	D	7-9-56	R27 devient 750 Ω 1/2 5% au lieu 330 Ω 1/2 W
	C	17-2-56.	R37 devient 4700 Ω 2 W au lieu de 4700 Ω 1 W.
	B	9.12.55	R18 ~~47 Ω~~ 220 Ω
	A	1.12.55	Schéma refait

DATE : 1.12.55	NOM : M.D	VERIFIE	VISA LABO :

RIBET_DESJARDINS
13 à 17 rue Périer Montrouge
Tel : Ale 24 40 41

WOBULATEUR 410A

N° 273

F E D C B A

REP		DESIGNATION	N°	REP		DESIGNATION	N°	REP		DESIGNATION	N°
R1	I2	10 KΩ 2 W	371	C1	F7	0,25 µF 5mn/1500V	365.15	V1	B2	6AT7N	352
R2	I1	4700 Ω 2 W	"	C2	F7	0,1 µF 630/1300V	365.16	V2	B3	6AT7N	"
R3	I2	47 KΩ 1/2 W	"	C3	G2	22000 pF 630/1500V	365.17	V3	B3	6CB6	"
R4	I4	150 Ω 1/2 W	"	C4	I3	220 pF céram	369	V4	B3	6AU6	"
R5	I2	47 KΩ 1/2 W	"	C5	H6	10000 pF 630/1500V	365.18	V5	B2	6BQ7	"
R6	G1	220 KΩ 1/2 W	"	C6	J1	1000 pF	369.1	V6	B4	EL83	"
R7	F1	75 Ω 1/4 W	373	C7	I3	220 pF céram	369	V7	B2	6J6	"
R8	G3	39 KΩ 1/2 W	371	C8	I4	16 µF 450/550V	363.16	V8	B2	6BQ7	"
R9	G3	47 KΩ 1/2 W	"	C9	I3	47 pF	369	V9	E6	EF80	"
R10	H3	33 KΩ 1/2 W	"	C10	H4	1500 pF céram	369	V10	E7	EF80	"
R11	J4	22 KΩ 1 W	"	C11	H3	1500 pF céram	"	V11	E5	6AL5	"
R12				C12	G3	1500 pF céram	"	V12	D6	DY87 32	354
R13	I3	47 KΩ 1 W	"	C13	F4	1500 pF céram	"				
R14	I3	1500 Ω 1/2 W	"	C14	F2	Cloche Philips	551.10				
R15	I3	220 Ω 1/2 W	"	C15	G1	100 pF	369				
R16	I4	100 KΩ 1/2 W	"	C16	H1	47 pF	"				
R17	H4	1 KΩ 1/2 W	"	C17	I1	1500 pF	"	L1		Self 564.113	
R18	H4	220 Ω 1/2 W	"	C18	I1	22 pF	551.35	L2		" 564.112	
R19	H4	47 Ω 1/2 W	"	C19	J2	1500 pF	369	L3		" 563.61	
R20	H4	220 Ω 1/2 W	"	C20	I2	270 pF	367A	L4		"	
R21	G4	10 KΩ 1/2 W	"	C21	I2	11 pF	551.17	L5		"	
R22	G3	33 KΩ 1/2 W	"	C22	F2	22 pF	369	L6		" 564.107	
R23	H3	4700 Ω 2 W	"	C23	F3		551.55	L7		" 564.109	
R24	F3	10 KΩ 1/2 W	"	C24	D2	10 pF	369	L8		" 564.108	
R25	E4	220 KΩ 1/2 W	"	C25	F3	1500 pF	"	L9		"	
R26	D3	100 Ω 1/4 W 1%	373	C26	F3	1500 pF	"	L10		" 564.111	
R27	E3	750 Ω 1/4 W 5%	373A	C27	C2	3 pF	"	L11		" 564.114	
R28	D3	100 Ω 1/4 W 1%	373	C28	C3	1500 pF	"	L12		"	
R29	D3	100 Ω 1/4 W 1%	"	C29	D5	22 pF	"	L13		" 564.110	
R30	G5	10 kΩ 2 W	371	C30	D5	22 pF	"	L14		" 564.21	
R31	G4	4700 Ω 1/2 W	"	C31	B2		551.54	L15		" 562.61	
R32	F3	1500 Ω 1/2 W	"	C32	B2	10 pF	369	L16		" 564.93	
R33	E4	470 KΩ 1/2 W	"	C33	C6	50 µF 350V	363.18				
R34	C2	180 1/2 W	"	C34	B5	100 µF 150/165V	363.37				
R35	C3	750 1/4 W	373	C35	B5	100 µF 150/165V	363.37	G1	B2	Germanium	359.4
R36	C3	1000 Ω 1/2 W	371	C36	B4	8 µF 450/550V	363.17	G2	E3	"	359.2
R37	C3	4700 Ω 2 W	"	C37	B6	8 µF 450/550V	363.17	G3	E3	"	359.3
R38	B3	18 KΩ 2 W	"	C38	E5	22000 pF 630/1500V	365.17	G4	C3	"	359.8
R39	B2	10 KΩ 1/2 W	"	C39	B5	10000 pF 630/1500V	365.18	G5	E5	"	359.5
R40	C4	100 Ω 1/4 W 1%	373			5000 pF	365.51				
R41	C4	220 Ω 1/4 W 1%	"	C40	D5	10000 pF 630/1500V	365.18	D1	B6	Redresseur	567.1
R42	C4	150 Ω 1/4 W 1%	"			5000 pF	365.51	D2	B6	"	567.1

R43	C4	220 Ω 1/4 W 1%	"	C41	D8	22 000 pF 63 volts	366.17	D3	BC	"	557.1
R44	D4	150 Ω 1/4 W 1%	"	C42	C6	22 000 pF 63 volts	366.17				
R45	D4	220 Ω 1/4 W 1%	"	C43	G2	1 000 pF	369.1	K1		3P. 3D. 1G	562.9
R46	D4	150 Ω 1/4 W 1%	"	C44	F4	1 000 pF	"	a	J1		
R47	D4	220 Ω 1/4 W 1%	"	C45	C5	1 000 pF	"	b	P2		
R48	D4	150 Ω 1/4 W 1%	"	C46	C2	1 000 pF	369.1				
R49	D4	220 Ω 1/4 W 1%	"	C47	B3	1 000 pF	369.1	K2		3P. 3D. 1G	562.9
R50	D3	250 1/4 W 1%	"	C48	E5	1000 pF	369.1	a	J3		
R51	E4	75 Ω 1/4 W 1%	"	C49	J2	200 pF	367A	b	P4		
R52	E5	2,2 MΩ ajust. 1/2 W	371	C50	E3	1500 pF ceram	369	K3		3P. 3D. 1G	562.9
R53	C5	300 kΩ 1/2 W 5%	373	C51	B6	1500 pF ceram	369	a			
R54	D5	300 kΩ 1/2 W	"	C52	E6	220 pF ceram	369	b	D3		
R55	F3	27 Ω 1/4 W	371	C53	J3	220 pF ceram	369	c	E4		
R56	C6	390 kΩ 1/2 W	"	C54	E6	10 000 pF	365.16	K4		4P. 3D. 2G	562.8
R57	E7	47 kΩ 1/2 W	"	C55	E4	10 000 pF	366.16	a	A5		
R58	E6	200 kΩ 1/2 W	"	C56	F5	50 000 pF	365.16	b	A6		
R59	E6	200 kΩ 1/2 W	"	C57	C5	1000 pF	369.1	c	A7		
R60	C6	4,7 MΩ 1/2 W	"	C58	F2	10 pF	369	K5			562.6
R61	E7	1 kΩ 1/2 W	"	C59	H6	15 pF	369	a	F6		
R62	G7	1 kΩ 1/2 W	"	C60	G7	25 MF 50 V	363.3	b	E7		
R63	D6	4,7 MΩ 1/2 W	"					K6		6P. 1D. 3G	562.8
R64	E7	2200 Ω 1/2 W	"					a	C4		
R65	E7	4700 Ω 1/2 W	"					b	D4		
R66	G7	120 kΩ 1/2 W	"					c	D6		
R67	F6	1 MΩ 1/2 W	"	P1	J7	500 kΩ	377.15				
R68	F6	47 Ω 1/2 W	"	P2	J3	500 kΩ	377.30				
R69	E6	47 kΩ 1 W	"	P3	E5	500 kΩ	377.36	T1		Transfo.	561.16
R70	E7	47 kΩ 1 W	"	P4	F3	2 x 500 kΩ	377.31				
R71	E7	1 MΩ 1/2 W	"	P5	C7	500 kΩ	377.36	H2		Quartz 10 MC	556.1
R72	E7	47 Ω 1/2 W	"	P6	C7	100 kΩ	377.40				
R73	D8	1 MΩ 1/2 W	"	P7	G6	100 kΩ	377.18	A7		Filtre secteur	559.5
R74				P8	G5	50 kΩ	377.25				
R75	N3	1000 Ω 1/2 W	"	P9	G5	50 kΩ	377.25				
R76	E4	4700 Ω 1/2 W	"	P10	F5	50 kΩ	377.25				
R77	F5	33000 Ω 1/2 W	"	P11	F5	50 kΩ	377.25				
R78	E4	1 MΩ 1/2 W	"								
R79	C7	68 kΩ 1/2 W	"								
R80	F3	1 MΩ 1/2 W	"								
R81	E4	1000 Ω 1/2 W	"								
R82	C3	100 kΩ 1/2 W	"								
R83	C3	470 kΩ 1/2 W	"								
R84	C3	1000 Ω 1/2 W	"								
R85	H6	2,2 MΩ 1/4 W	"								
R86	G2	1 MΩ 1/4 W	"								
R87	E5	270 K ajust 1/2 W	371								