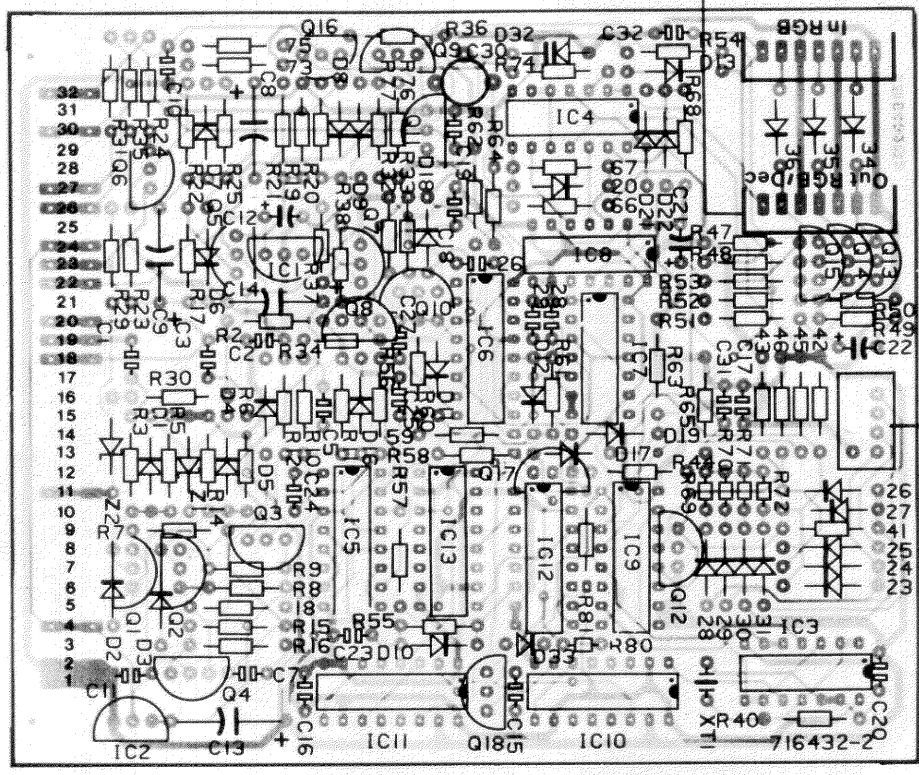


- 1 : Ground
- 2 : Red
- 3 : Ground
- 4 : Green
- 5 : Ground
- 6 : Blue
- 7 : Insertion



C

a

- 1 : 15.6 kHz
- 2 : 31.2 kHz
- 3 : 41.6 kHz
- 4 : 21.8 kHz

C

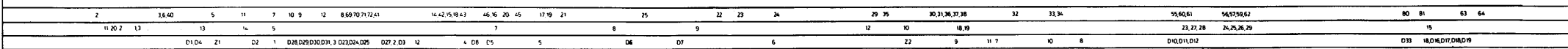
To RGB 30 MHz or
Quad decoder board

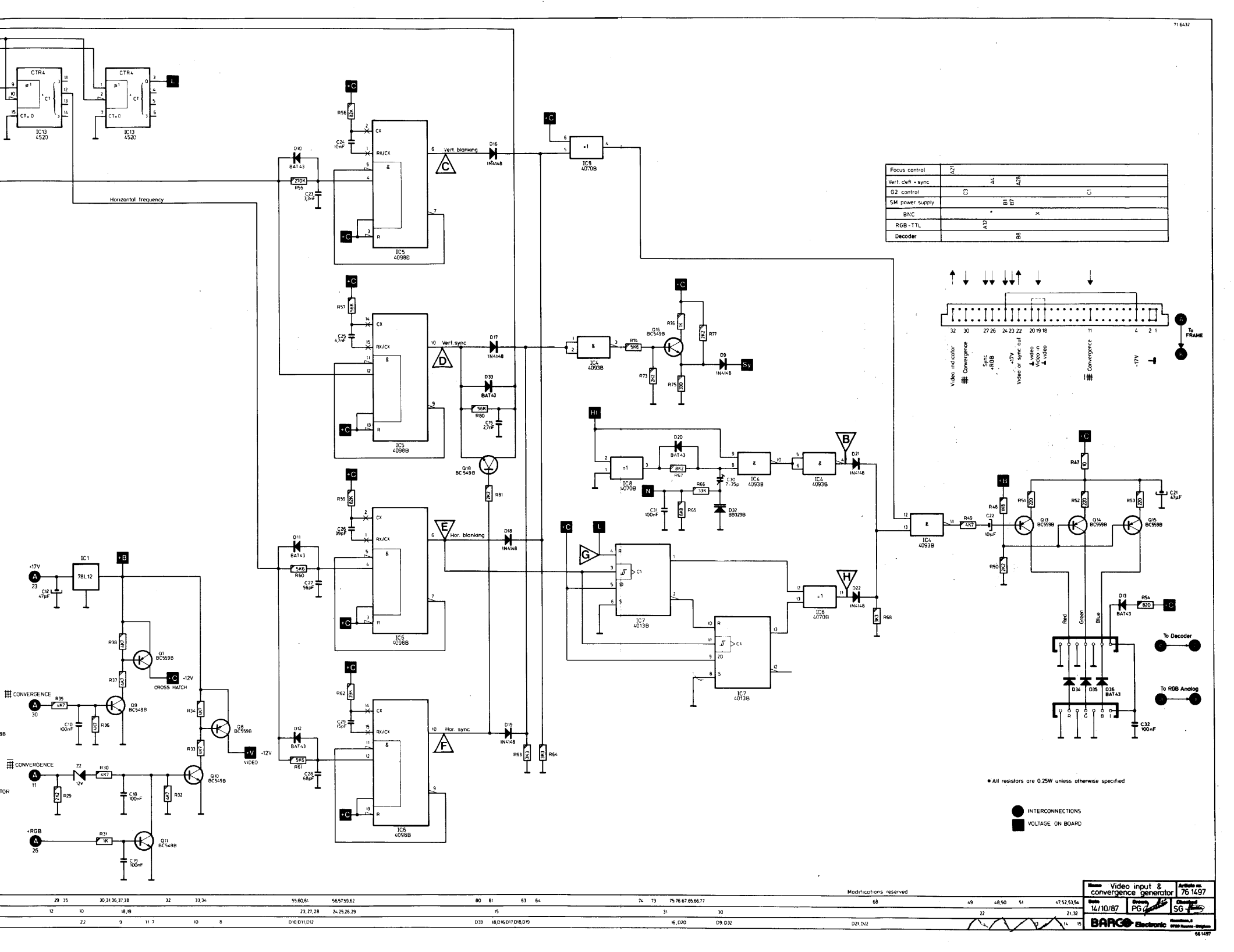
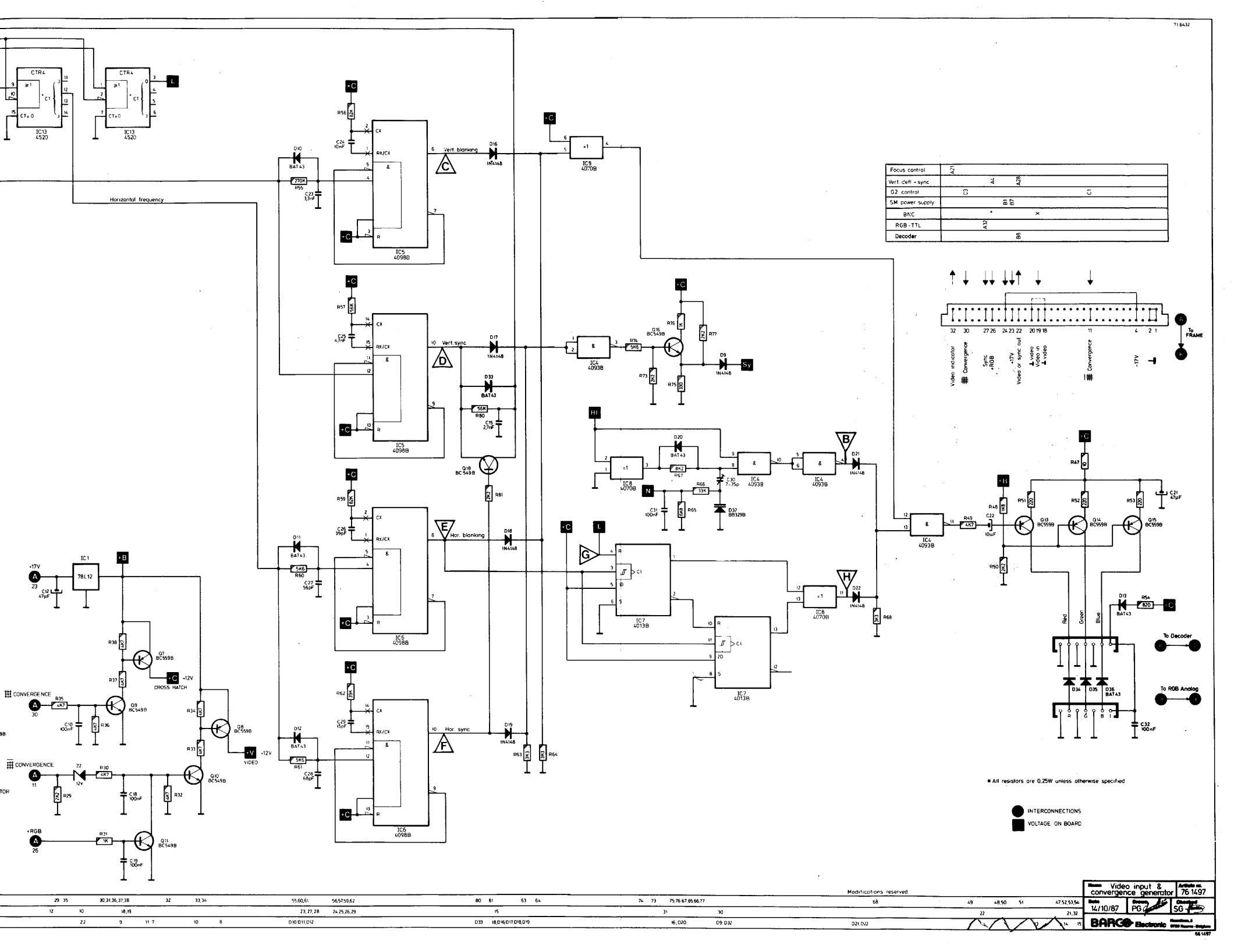
C

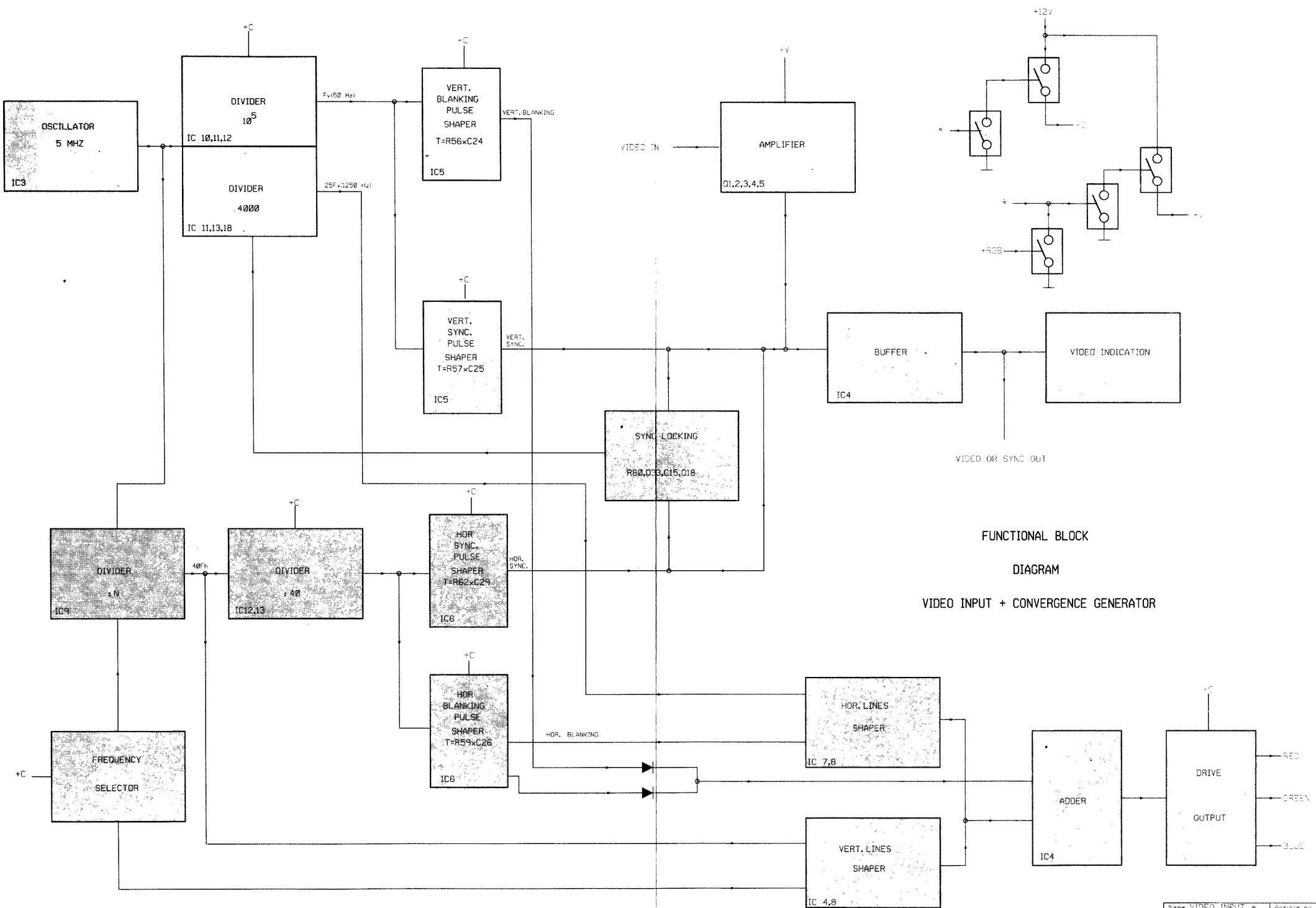
a

To RGB analog board

a



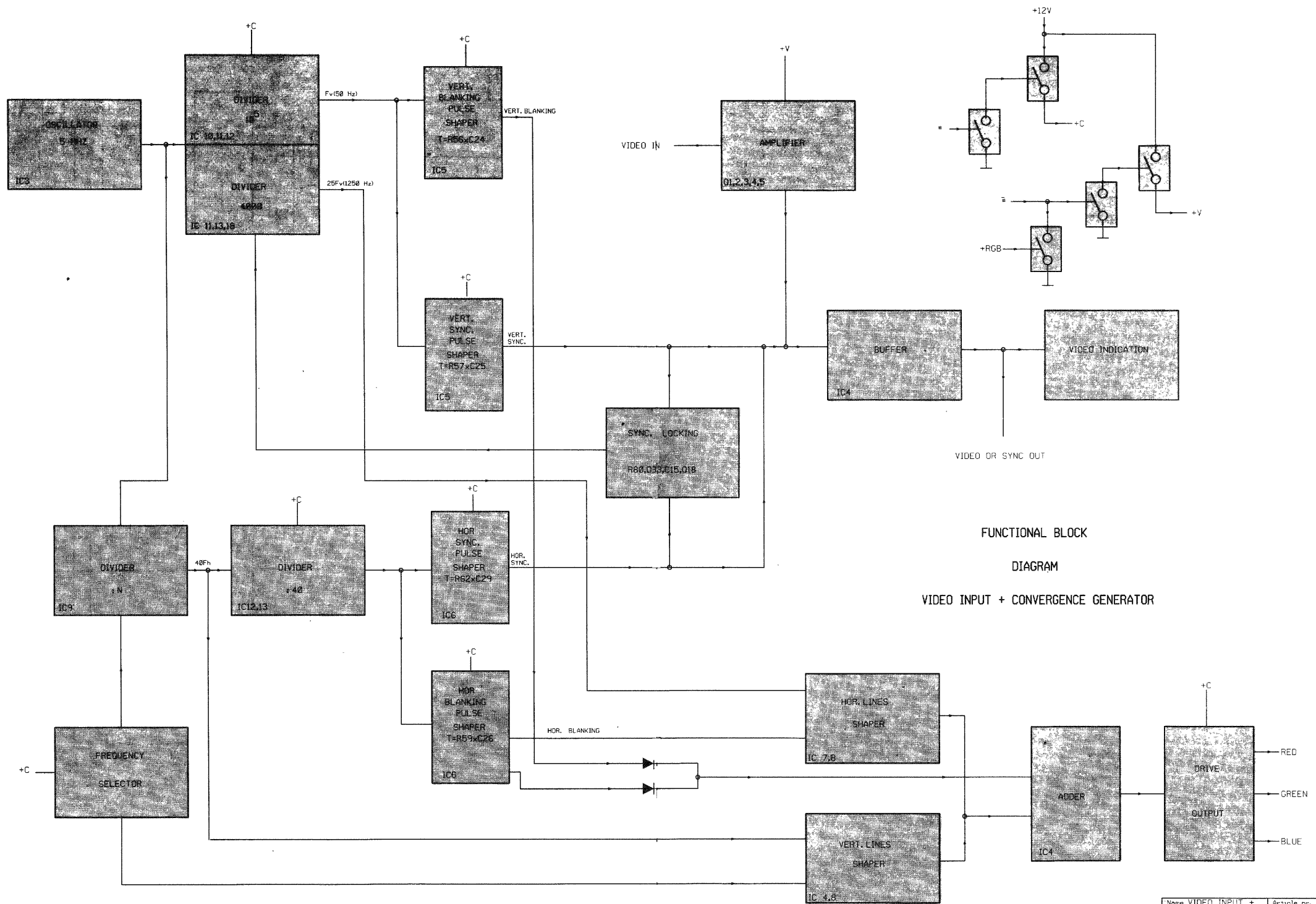
[illegible][illegible][illegible]



FUNCTIONAL BLOCK
DIAGRAM
VIDEO INPUT + CONVERGENCE GENERATOR

Name VIDEO INPUT + CONV. PAT. GENER.	Article no. 76 1497
Date 16/03/68	Drawn Jvh
	Checked SSG
	Version 8
BARCO ELECTRONIC NV	6720 Avenue - Belgium

MODIFICATIONS RESERVED



FUNCTIONAL BLOCK
DIAGRAM
VIDEO INPUT + CONVERGENCE GENERATOR

1. IC

--

* Voor de meting is gebruik gemaakt van de inwendige convergentiegenerator werkende op 15kHz.

Gebruikte meettoestel : HANDYKIT Type MK-601

ALLE SPANNINGEN ZIJN UITGEDRUKT IN VOLT (DC)

* Pour les mesurages, la mire quadrillée interne est utilisée à 15 kHz.

Appareil de mesure utilisé : HANDYKIT Type MK-601

TOUTES LES VALEURS MESUREES SONT EXPRIMEES EN VOLT (DC)

* The measurements are taken with the internal convergence generator selected on 15 kHz.

Employed meter : HANDYKIT Type MK-601

ALL MEASURED VALUES ARE EXPRESSED IN VOLT (DC)

* Für die Messungen wurde das innere Konvergenzsignal angewandt auf 15 kHz.

Verwandtes Meßgerät : HANDYKIT Type MK-601

ALLE MESSWERTE SIND AUSGEDRÜCKT IN VOLT (DC)

pin	IC1	IC2	IC3	IC4	IC5	IC6	IC7
1	12.0	0.0	5.9	0.4	0.0	0.0	5.3
2	0.0	-17.0	5.9	0.4	11.7	10.6	6.6
3	17.0	-12.0	6.6	11.1	1.9	11.8	1.0
4	-	-	1.2	0.4	1.9	5.8	5.9
5	-	-	10.7	11.4	11.6	10.8	11.8
6	-	-	10.7	11.4	0.2	1.0	0.0
7	-	-	0.0	0.0	11.6	10.8	0.0
8	-	-	6.6	0.3	0.0	0.0	0.0
9	-	-	6.6	1.2	11.7	11.5	11.8
10	-	-	6.1	11.4	0.1	0.3	6.6
11	-	-	5.9	10.6	11.7	11.5	1.0
12	-	-	5.8	10.6	1.9	5.8	7.5
13	-	-	5.8	0.0	1.8	11.8	4.3
14	-	-	11.8	11.8	11.8	11.4	11.8
15	-	-	-	-	0.0	0.0	-
16	-	-	-	-	11.8	11.8	-

pin	IC8	IC9	IC10	IC11	IC12	IC13
1	0.0	1.2	6.1	0.0	0.0	6.0
2	1.2	0.0	11.8	2.3	2.4	11.8
3	1.0	0.0	5.7	6.0	5.9	6.0
4	10.6	11.3	4.6	4.7	4.7	5.9
5	1.2	0.0	4.6	4.7	4.7	5.9
6	11.8	6.2	2.3	2.4	2.4	5.9
7	0.0	10.7	0.1	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	2.3	2.4	1.2	2.4
10	0.0	0.0	11.8	11.8	11.8	11.8
11	0.9	6.3	5.9	6.0	5.9	5.9
12	5.3	11.6	4.7	4.8	4.7	5.9
13	4.3	11.3	4.8	4.7	4.7	5.9
14	11.8	6.4	2.3	2.4	2.4	5.9
15	-	6.4	0.0	0.0	0.0	0.0
16	-	11.8	11.8	11.8	11.8	11.8

- : Pin wordt niet gebruikt of is onbestaande

- : La cosse n'est pas utilisé ou n'existe pas

- : Pin is not used or does not exist

- : Dieser Anschluss ist nicht verwendet oder besteht nicht.

2. Transistors

* Gebruikt signaal (zie tabel met meetwaarden) :

- a) extern videosignaal
- b) inwendig convergentieraster
- c) extern RGB-sigitaal (RGsB of RGB/s)

* Le signal utilisé (voir au tableau des mesures) :

- a) le signal vidéo externe
- b) la mire de convergence interne
- c) le signal RGB externe (RGsB ou RGB/s)

* Used signal (see table of measurements) :

- a) external video signal
- b) internal convergence pattern
- c) external RGB signal (RGsB ou RGB/s)

* Verwendetes Signal (Siehe Tabelle mit Messwerten) :

- a) ein externes Videosignal
- b) das innere Konvergenzsignal
- c) ein externes RGB-Signal (RGsB oder RGBs)

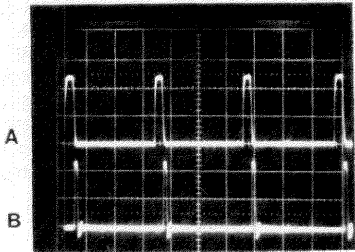
Q..	c	b	e	signal
Q1	9.7	-0.6	-1.2	(a)
Q2	12.1	-0.6	1.3	(a)
Q3	-2.3	-10.1	-10.8	(a)
Q4	5.1	9.7	10.4	(a)
Q5	16.9	4.5	3.9	(a)
Q6	17.5	16.9	17.6	(a)
Q7	0.0	12.1	12.2	(a)
	11.9	11.3	12.2	(b)
Q8	12.1	11.4	12.2	(a)
	11.4	12.2	12.2	(b)
Q9	12.2	0.0	0.0	(a)
	0.0	0.7	0.8	(b)
Q10	0.0	0.7	0.0	(a)
	12.2	0.0	0.0	(b)
Q11	0.7	0.0	0.0	(a)
	0.0	0.0	0.0	(b)
	0.0	0.7	0.0	(c)
Q12	0.0	0.7	0.0	(1)
Q13	1.3	6.8	7.5	(b)
Q14	1.3	6.8	7.5	(b)
Q15	1.3	6.8	7.5	(b)
Q16	7.8	3.0	2.5	(b)
Q18	0.1	0.1	0.1	(b)

(1) : Q12 geleidt enkel als het inwendig convergentieraster op 22 kHz geselecteerd is.

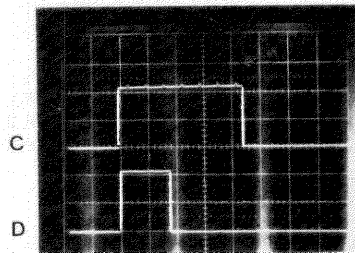
: Q12 conducts seulement si la mire de convergence est sélectionnée à 22 kHz.

: Q12 conducts only when the convergence generator is selected on 22 kHz.

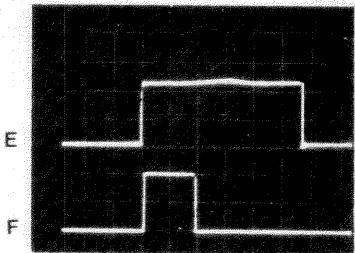
: Q12 leitet nur als den Konvergenzgenerator gewählt wird auf 22 kHz.



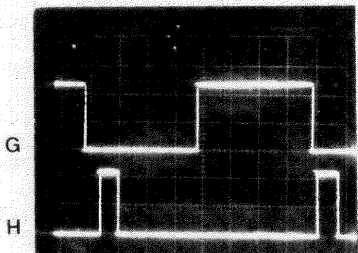
A. 12 Vpp (600 kHz)
B. 12 Vpp (600 kHz)



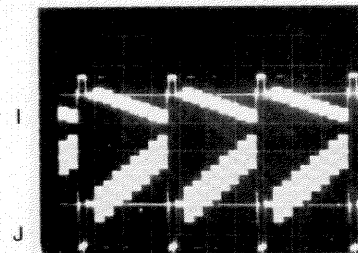
C. 12 Vpp (Vf)
D. 12 Vpp (Vf)



E. 12 Vpp (Hf)
F. 12 Vpp (Hf)



G. 12 Vpp (125 Hz)
H. 12 Vpp (125 Hz)



I. video
J. video

ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
11 1680	C..1	CAPACITOR ELRABI 10M V 40	13 73945	I..4	INTEGRATED CIRCUIT 4093B HEF
11 3722	C..2	CAPACITOR POME 68K K5 63	13 7378	I..5	INTEGRATED CIRCUIT 4538B
11 1680	C..3	CAPACITOR ELRABI 10M V 40	13 7332	I..6	INTEGRATED CIRCUIT 4098B
11 2774	C..5	CAPACITOR CE MI 100K U5 63	13 7397	I..7	INTEGRATED CIRCUIT 4013B
11 2240	C..7	CAPACITOR NPO MI 68P J5 63	13 7392	I..8	INTEGRATED CIRCUIT 4070B
11 11565	C..8	CAPACITOR ELAX 10M Z 25	13 7626	I..9	INTEGRATED CIRCUIT 4516
11 11565	C..9	CAPACITOR ELAX 10M Z 25	13 7627	I.10	INTEGRATED CIRCUIT 4518
11 2774	C.10	CAPACITOR CE MI 100K U5 63	13 7627	I.11	INTEGRATED CIRCUIT 4518
11 2774	C.11	CAPACITOR CE MI 100K U5 63	13 7627	I.12	INTEGRATED CIRCUIT 4518
11 1476	C.12	CAPACITOR ELPR 47M Z5 25	13 7377	I.13	INTEGRATED CIRCUIT 4520
11 11565	C.13	CAPACITOR ELAX 10M Z 25	71 6432	PC..	PC GRAPHICS VID CON 761470
11 11565	C.14	CAPACITOR ELAX 10M Z 25			
11 5928	C.15	CAPACITOR PP RA 3K3 J5 63	13 14295	Q..1	TRANSISTOR BC549B,
11 2774	C.16	CAPACITOR CE MI 100K U5 63	13 14295	Q..2	TRANSISTOR BC549B,
11 2774	C.17	CAPACITOR CE MI 100K U5 63	13 14295	Q..3	TRANSISTOR BC549B,
11 2774	C.18	CAPACITOR CE MI 100K U5 63	13 14181	Q..4	TRANSISTOR BC559B,BC309B
11 2774	C.19	CAPACITOR CE MI 100K U5 63	13 14295	Q..5	TRANSISTOR BC549B,
11 2235	C.20	CAPACITOR NPO MI 27P G5 63	13 14181	Q..6	TRANSISTOR BC559B,BC309B
11 1476	C.21	CAPACITOR ELPR 47M Z5 25	13 14181	Q..7	TRANSISTOR BC559B,BC309B
11 1531	C.22	CAPACITOR ELPRMI 10M M5 35	13 14181	Q..8	TRANSISTOR BC559B,BC309B
11 5928	C.23	CAPACITOR PP RA 3K3 J5 63	13 14295	Q..9	TRANSISTOR BC549B,
11 37121	C.24	CAPACITOR POME 10K K5 100	13 14295	Q.10	TRANSISTOR BC549B,
11 5932	C.25	CAPACITOR PP RA 4K7 J5 63	13 14295	Q.11	TRANSISTOR BC549B,
11 2237	C.26	CAPACITOR NPO MI 39P G5 63	13 14295	Q.12	TRANSISTOR BC549B,
11 22395	C.27	CAPACITOR NPO MI 56P G5 63	13 14181	Q.13	TRANSISTOR BC559B,BC309B
11 2240	C.28	CAPACITOR NPO MI 68P J5 63	13 14181	Q.14	TRANSISTOR BC559B,BC309B
11 2232	C.29	CAPACITOR NPO MI 15P G5 63	13 14181	Q.15	TRANSISTOR BC559B,BC309B
11 7001	C.30	CAPACITOR TRIM 7 -35P 160	13 14295	Q.16	TRANSISTOR BC549B,
11 2774	C.31	CAPACITOR CE MI 100K U5 63	13 14295	Q.18	TRANSISTOR BC549B,
11 2774	C.32	CAPACITOR CE MI 100K U5 63			
13 1621	D..1	DIODE 1N4148 SWITCH	10 1141	R..2	RESISTOR CF 2K7 J OW25
13 1621	D..2	DIODE 1N4148 SWITCH	10 1124	R..3	RESISTOR CF 100E J OW25
13 1621	D..3	DIODE 1N4148 SWITCH	10 1155	R..5	RESISTOR CF 39K J OW25
13 1621	D..4	DIODE 1N4148 SWITCH	10 1124	R..6	RESISTOR CF 100E J OW25
13 1621	D..5	DIODE 1N4148 SWITCH	10 1132	R..7	RESISTOR CF 470E J OW25
13 1621	D..6	DIODE 1N4148 SWITCH	10 1128	R..8	RESISTOR CF 220E J OW25
13 1621	D..7	DIODE 1N4148 SWITCH	10 1128	R..9	RESISTOR CF 220E J OW25
13 1621	D..8	DIODE 1N4148 SWITCH	10 1138	R.10	RESISTOR CF 1K5 J OW25
13 1621	D..9	DIODE 1N4148 SWITCH	10 1146	R.11	RESISTOR CF 6K8 J OW25
13 1636	D.10	DIODE BAT43 SD101 SCHOTTKY	10 1126	R.12	RESISTOR CF 150E J OW25
13 1636	D.11	DIODE BAT43 SD101 SCHOTTKY	10 1155	R.14	RESISTOR CF 39K J OW25
13 1636	D.12	DIODE BAT43 SD101 SCHOTTKY	10 1133	R.15	RESISTOR CF 560E J OW25
13 1636	D.13	DIODE BAT43 SD101 SCHOTTKY	10 1136	R.16	RESISTOR CF 1K J OW25
13 1621	D.16	DIODE 1N4148 SWITCH	10 1124	R.17	RESISTOR CF 100E J OW25
13 1621	D.17	DIODE 1N4148 SWITCH	10 1144	R.18	RESISTOR CF 4K7 J OW25
13 1621	D.18	DIODE 1N4148 SWITCH	10 1133	R.19	RESISTOR CF 560E J OW25
13 1621	D.19	DIODE 1N4148 SWITCH	10 1140	R.20	RESISTOR CF 2K2 J OW25
13 1636	D.20	DIODE BAT43 SD101 SCHOTTKY	10 1112	R.21	RESISTOR CF 10E J OW25
13 1621	D.21	DIODE 1N4148 SWITCH	10 1148	R.22	RESISTOR CF 10K J OW25
13 1621	D.22	DIODE 1N4148 SWITCH	10 1160	R.23	RESISTOR CF 100K J OW25
13 1621	D.23	DIODE 1N4148 SWITCH	10 1141	R.24	RESISTOR CF 2K7 J OW25
13 1621	D.24	DIODE 1N4148 SWITCH	10 1133	R.25	RESISTOR CF 560E J OW25
13 1621	D.25	DIODE 1N4148 SWITCH	10 1140	R.29	RESISTOR CF 2K2 J OW25
13 1621	D.26	DIODE 1N4148 SWITCH	10 1144	R.30	RESISTOR CF 4K7 J OW25
13 1621	D.27	DIODE 1N4148 SWITCH	10 1136	R.31	RESISTOR CF 1K J OW25
13 1636	D.28	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.32	RESISTOR CF 4K7 J OW25
13 1636	D.29	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.33	RESISTOR CF 4K7 J OW25
13 1636	D.30	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.34	RESISTOR CF 4K7 J OW25
13 1636	D.31	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.35	RESISTOR CF 4K7 J OW25
13 1827	D.32	DIODE BB329B VARICAP	10 1144	R.36	RESISTOR CF 4K7 J OW25
13 1636	D.33	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.37	RESISTOR CF 4K7 J OW25
13 1636	D.34	DIODE BAT43 SD101 SCHOTTKY	10 1144	R.38	RESISTOR CF 4K7 J OW25
13 1636	D.35	DIODE BAT43 SD101 SCHOTTKY	10 1183	R.40	RESISTOR CF 8M2 J OW25
13 1636	D.36	DIODE BAT43 SD101 SCHOTTKY	10 1140	R.41	RESISTOR CF 2K2 J OW25
13 4033	I..1	INTEGRATED CIRCUIT 78L12	10 1154	R.42	RESISTOR CF 33K J OW25
13 4034	I..2	INTEGRATED CIRCUIT 79L12	10 1144	R.43	RESISTOR CF 4K7 J OW25
13 7302	I..3	INTEGRATED CIRCUIT 4011B	10 1154	R.45	RESISTOR CF 33K J OW25
			10 1154	R.46	RESISTOR CF 33K J OW25

ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
10 1112	R.47	RESISTOR CF 10E J OW25	10 1144	R.70	RESISTOR CF 4K7 J OW25
10 1139	R.48	RESISTOR CF 1K8 J OW25	10 1153	R.71	RESISTOR CF 27K J OW25
10 1144	R.49	RESISTOR CF 4K7 J OW25	10 1147	R.72	RESISTOR CF 8K2 J OW25
10 1140	R.50	RESISTOR CF 2K2 J OW25	10 1140	R.73	RESISTOR CF 2K2 J OW25
10 1128	R.51	RESISTOR CF 220E J OW25	10 1145	R.74	RESISTOR CF 5K6 J OW25
10 1128	R.52	RESISTOR CF 220E J OW25	10 1130	R.75	RESISTOR CF 330E J OW25
10 1128	R.53	RESISTOR CF 220E J OW25	10 1136	R.76	RESISTOR CF 1K J OW25
10 1135	R.54	RESISTOR CF 820E J OW25	10 1140	R.77	RESISTOR CF 2K2 J OW25
10 1165	R.55	RESISTOR CF 270K J OW25	10 1157	R.80	RESISTOR CF 56K J OW25
10 1155	R.56	RESISTOR CF 39K J OW25	10 1140	R.81	RESISTOR CF 2K2 J OW25
10 1153	R.57	RESISTOR CF 27K J OW25			
10 1159	R.59	RESISTOR CF 82K J OW25	30 6855	XTAL	X-TAL 5.000 000 MHZ
10 1145	R.60	RESISTOR CF 5K6 J OW25			
10 1145	R.61	RESISTOR CF 5K6 J OW25	13 1751	Z..1	DIODE ZENER 9V1 OW5 C
10 1155	R.62	RESISTOR CF 39K J OW25	13 1740	Z..2	DIODE ZENER 12V OW5 C
10 1142	R.63	RESISTOR CF 3K3 J OW25			
10 1142	R.64	RESISTOR CF 3K3 J OW25	31 3531	001.	CONNECTOR EURO MOBSE P64 KEY
10 1146	R.65	RESISTOR CF 6K8 J OW25	36 7435	0011	RIVET AL AL AD34ABS D2,4
10 1154	R.66	RESISTOR CF 33K J OW25	32 4127	002.	SWITCH SLIDE 4A
10 1147	R.67	RESISTOR CF 8K2 J OW25	31 3586	003.	CONNECTOR MT MOBTE P 7 2,5
10 1142	R.68	RESISTOR CF 3K3 J OW25	31 35866	004.	CONNECTOR MT MOBTE P 7 2,5
10 1112	R.69	RESISTOR CF 10E J OW25			

