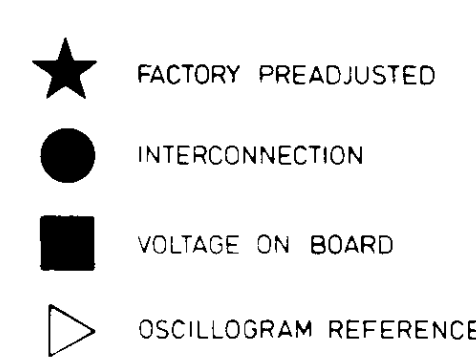



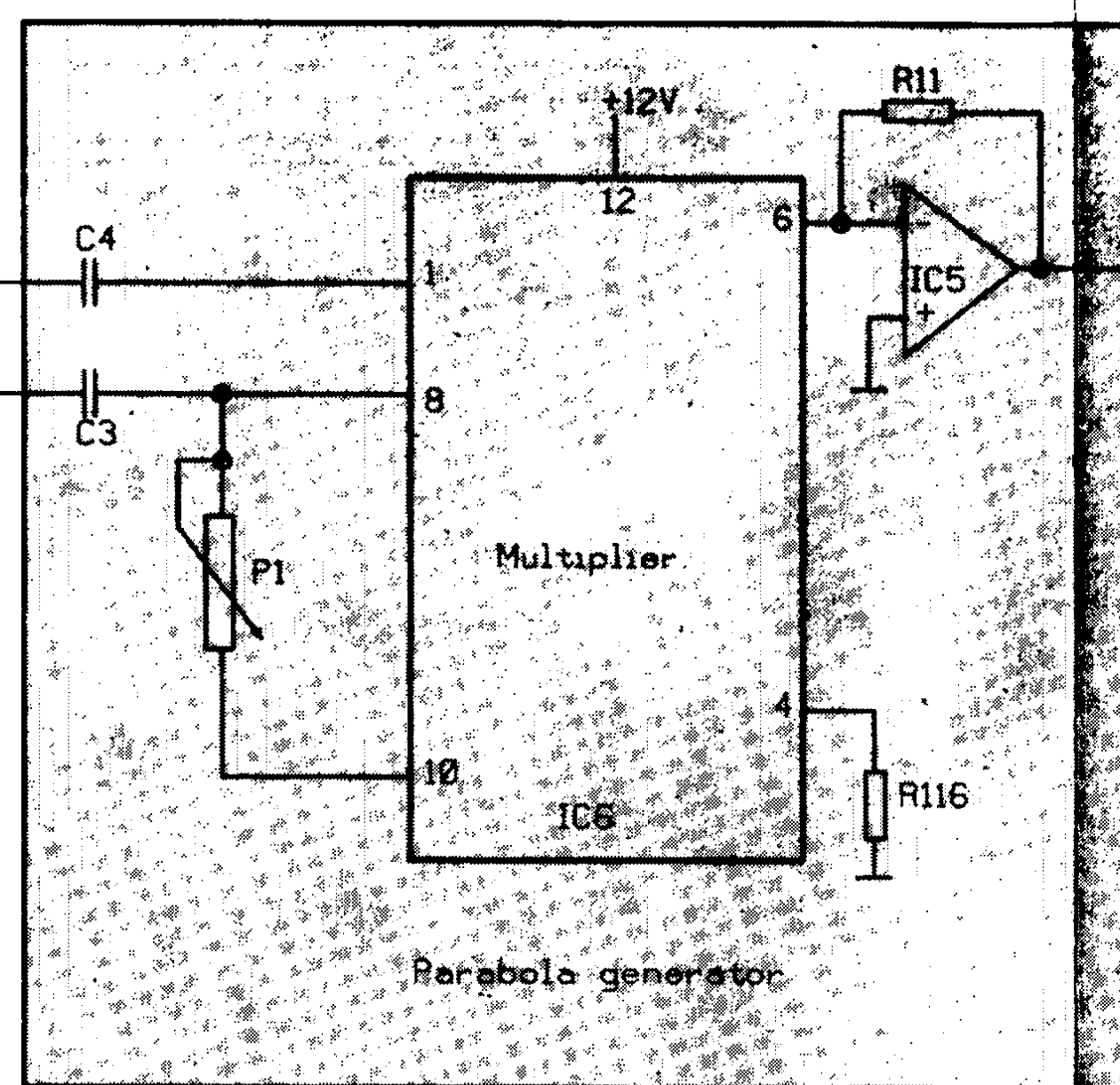
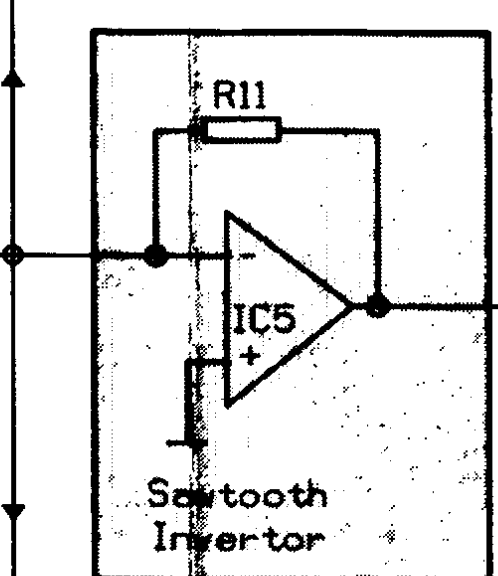
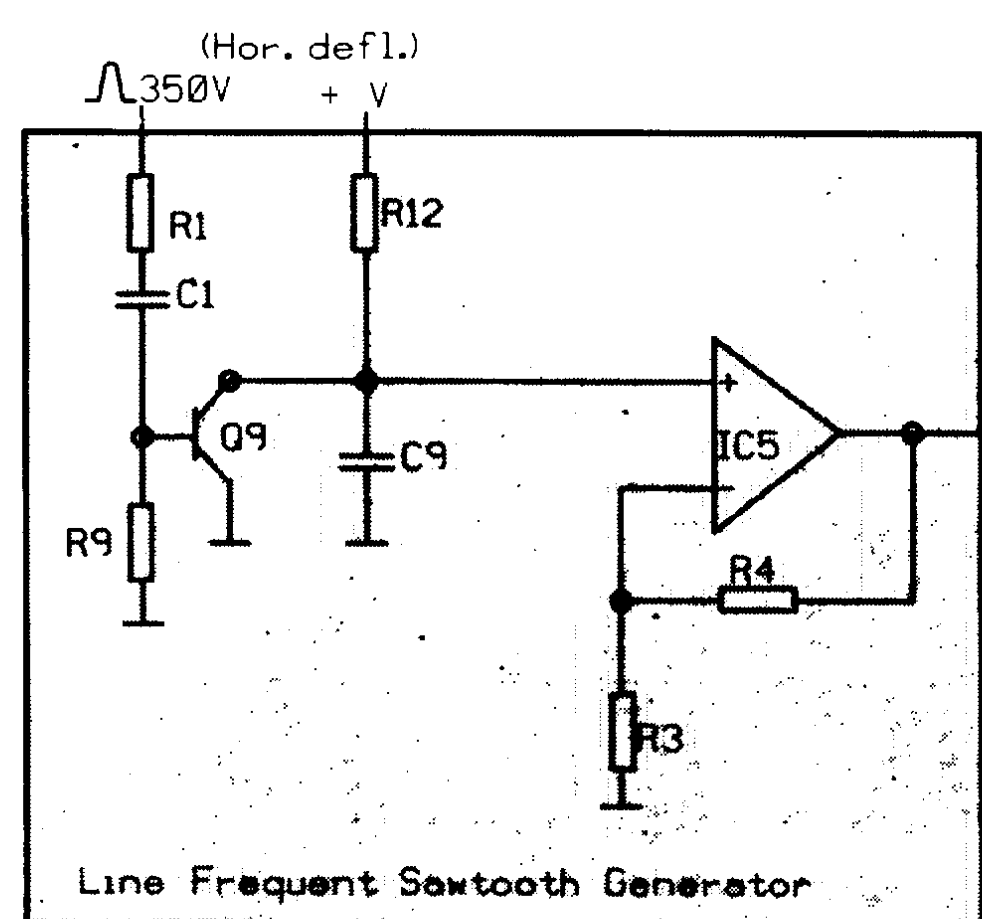
26  
POLARISATION



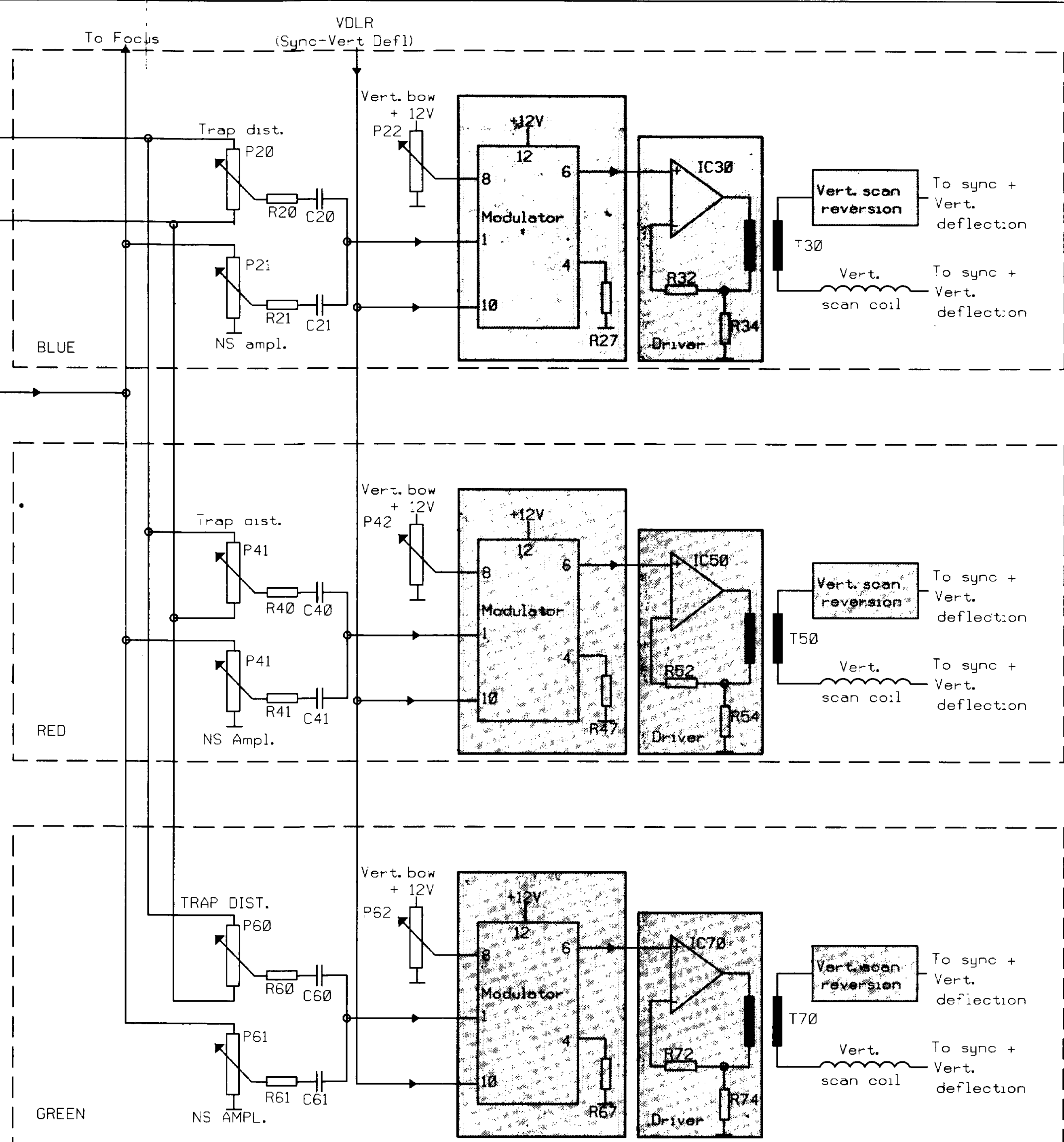
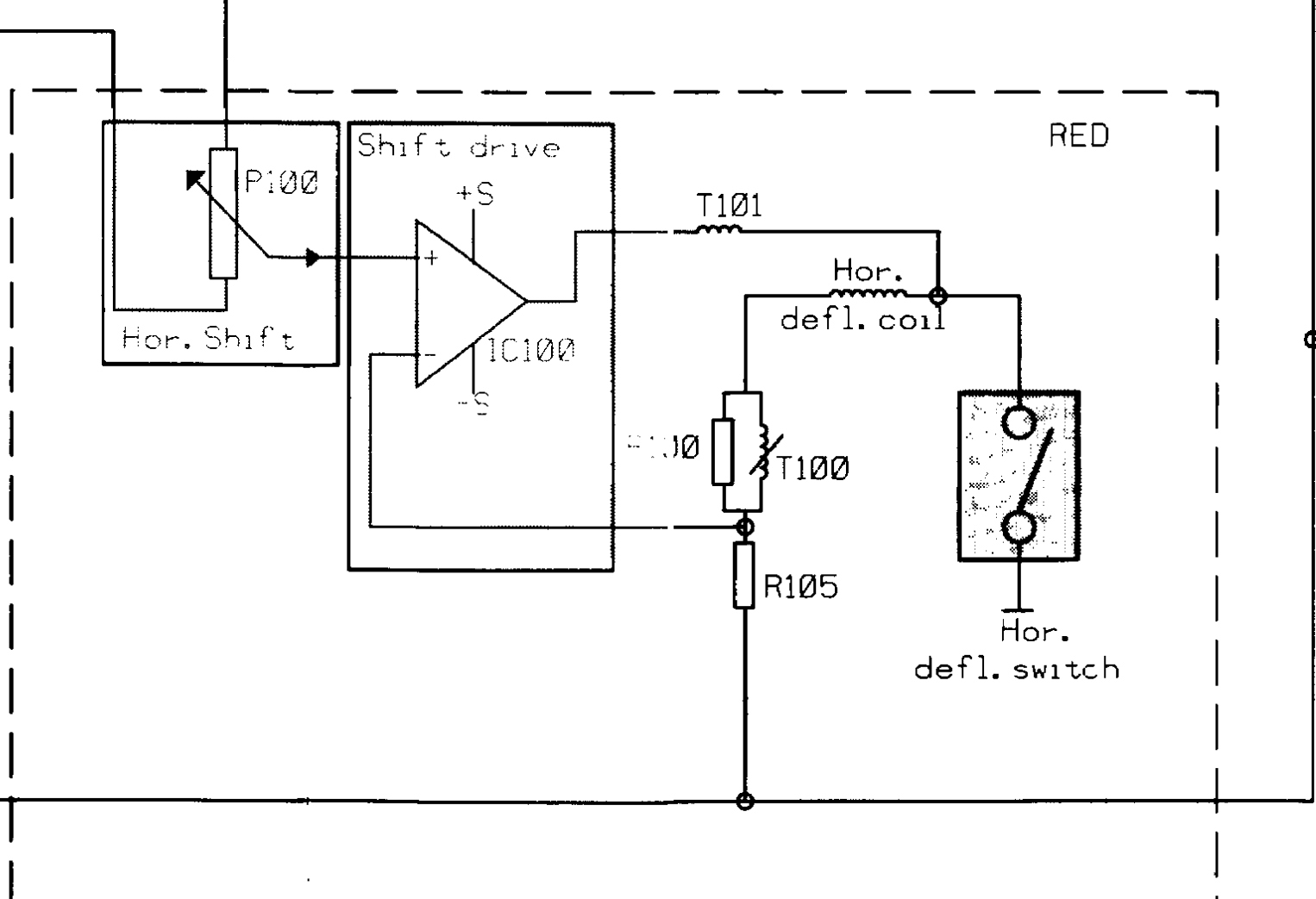
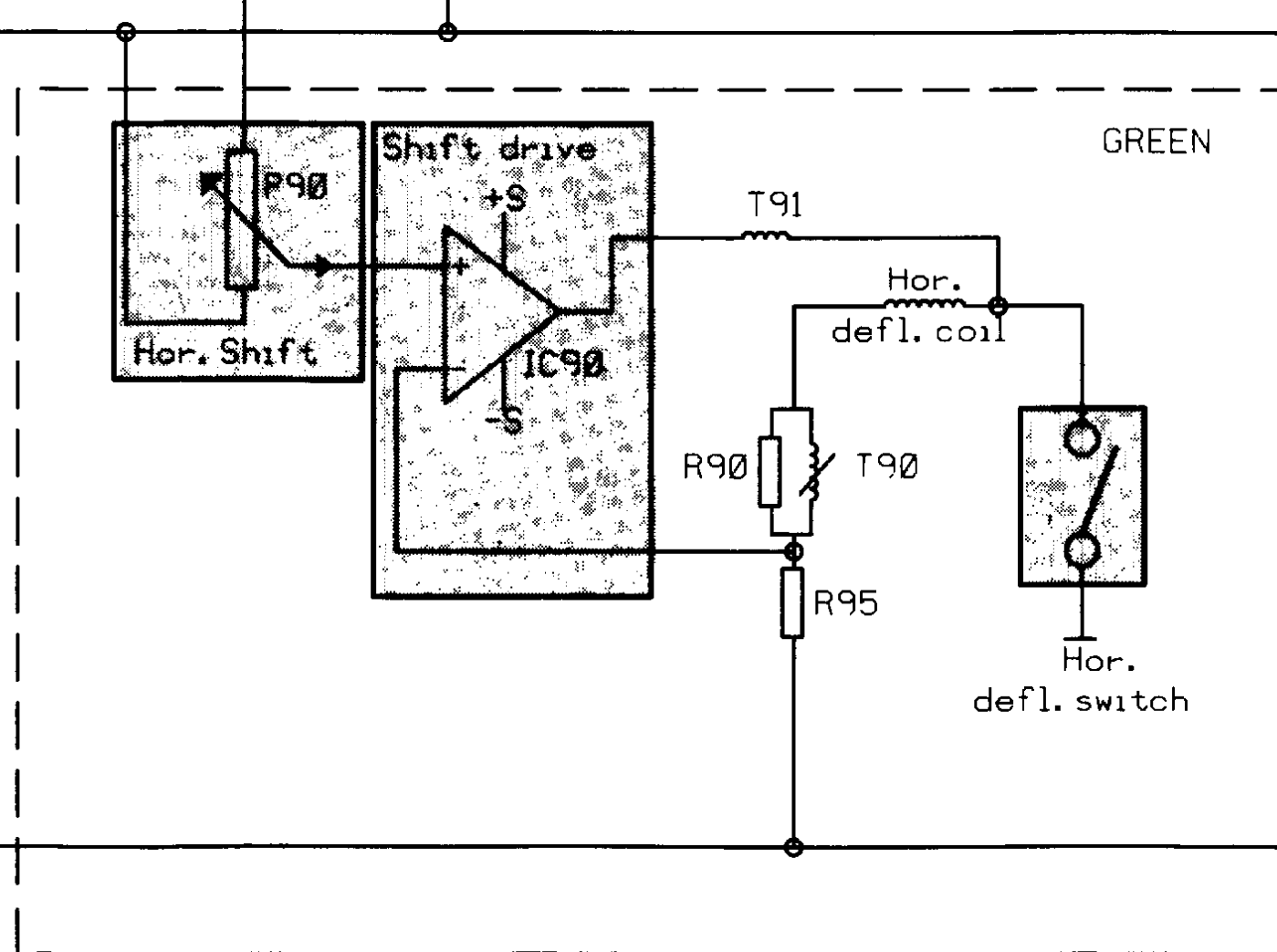
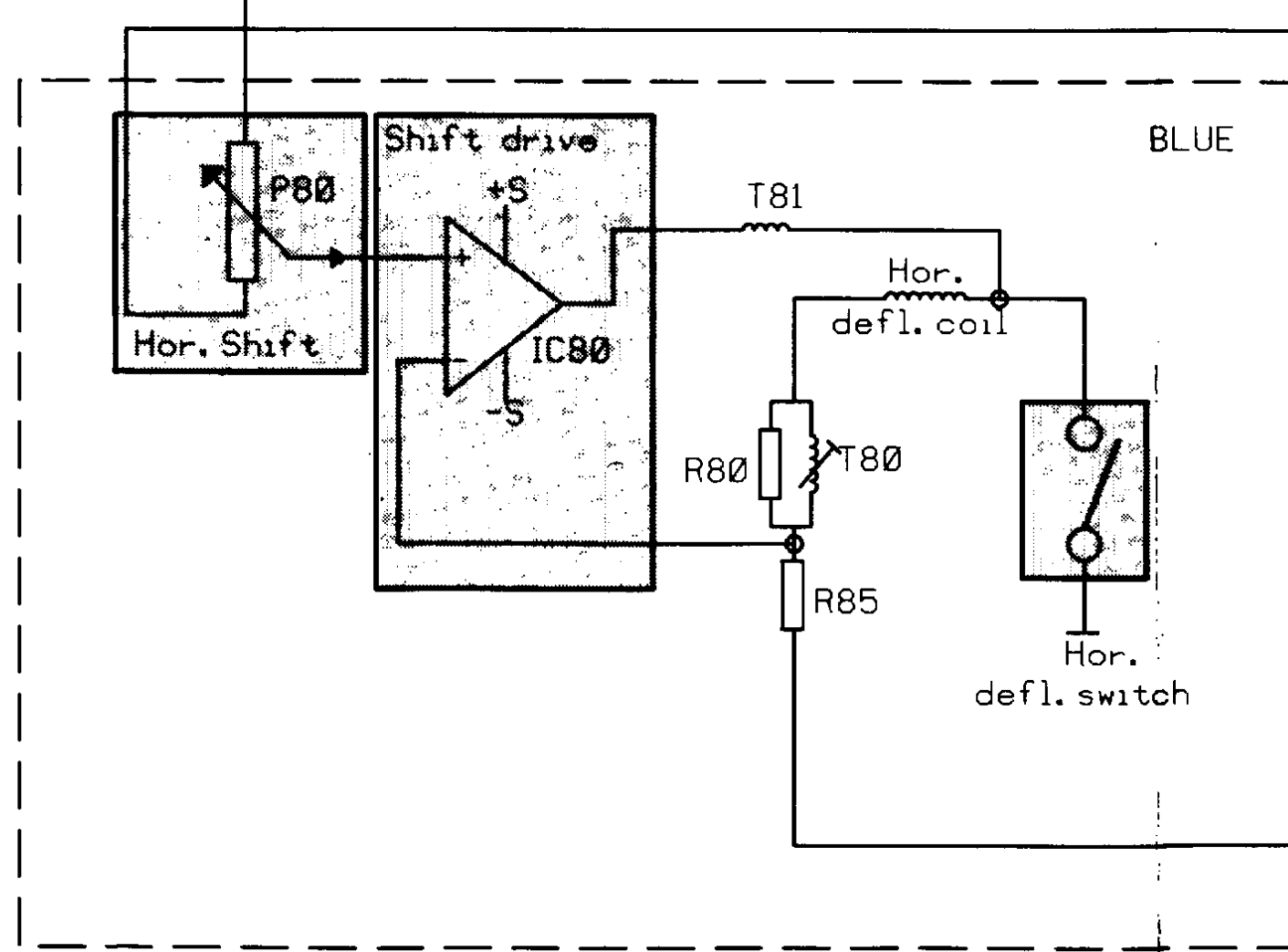
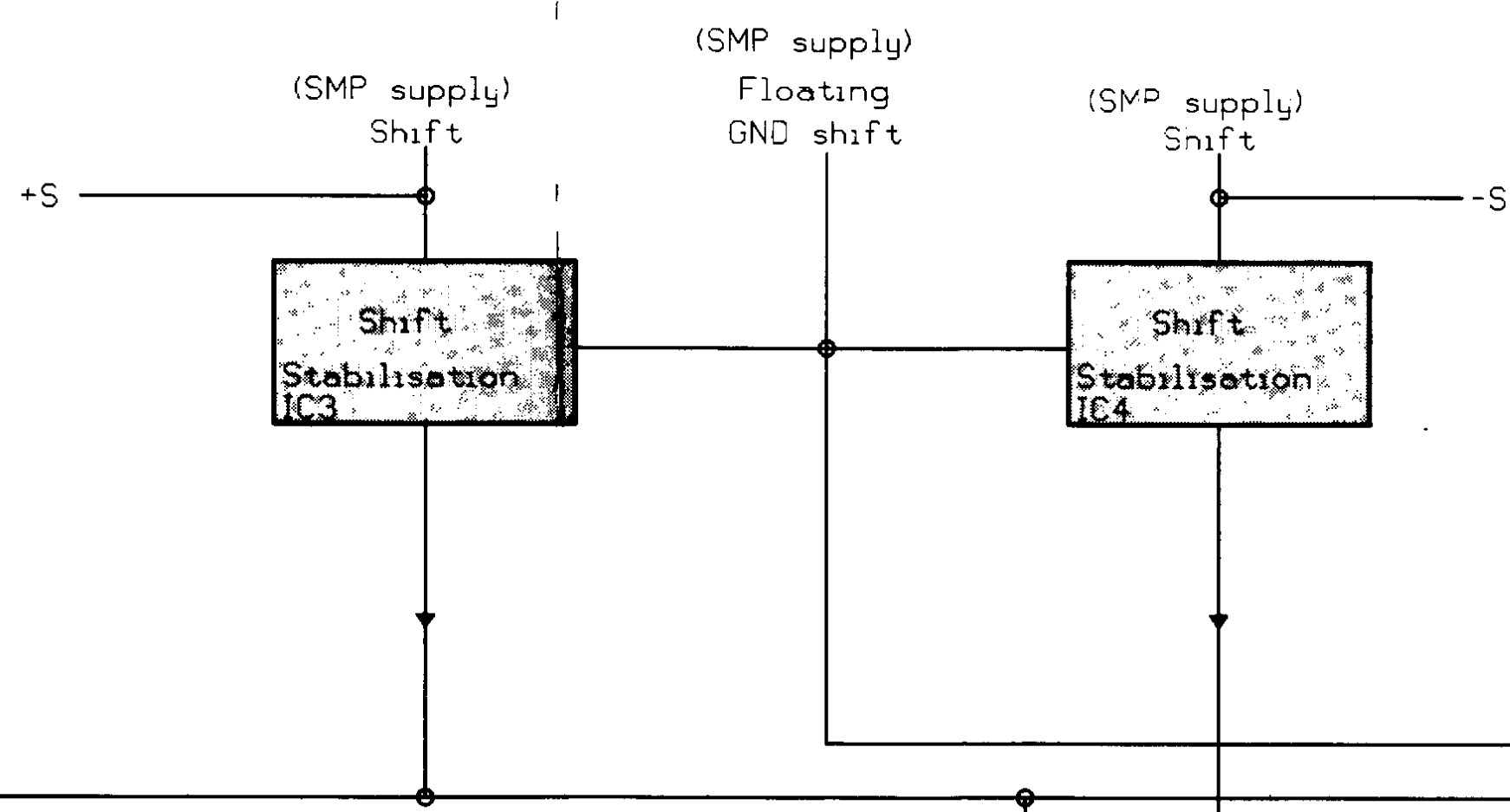


Name NS CORRECTION & HORIZONTAL SHIFT		Article no. 76 1269
Date 12/01/87	Drawn PG <i>[Signature]</i>	Checked CD <i>[Signature]</i>

**BARCO**  **Electronic**      Noordreef, 8  
8790 Kuesse - Belgium



BLOCK DIAGRAM  
NS CORRECTION  
+  
HORIZONTAL SHIFT



Name	NS COR.+ HOR SHIF	Article nr.	76 1269
Date	15/03/88	Drawn	CD
BARCO ELECTRONIC NV		checked	
		by	

\* Instelling P1 'Amplitude parabola' (In het bedrijf vooraf afgeregeld).

- Sluit een signaalbron aan op de standaard lijnfrekwentie.
- Sluit een oscilloscoop aan op het knooppunt van pin 14 IC5/R11.
- Regel P1 tot een parabool spanning van 10Vpp bekomen wordt.

\* Instellen spoelen T80, T90, T100 'Horizontale beeldbreedte'.

Doel : corrigeren van beeldbreedte verschillen tussen de verschillende kleurbeelden.

Werkwijze :

- Draai de kern van elke spoel volledig in.
- Meet de beeldbreedte van elk kleur afzonderlijk.
- Het kleurbeeld met de kleinste afmetingen zal als referentie genomen worden. (Draai niet meer aan deze spoelkern).
- Regel nu de twee andere spoelkernen tot een zelfde beeldbreedte bekomen wordt.

\* Le réglage P1 'Amplitude parabola' (Préaligné à l'usine).

- Brancher une source de signal à une fréquence de ligne standard.
- Brancher un oscilloscope à la jonction de la cosse 14 IC5/R11.
- Régler P1 jusqu'à ce que une tension parabolique de 10Vpp soit obtenue.

\* L'ajustage des bobines T80, T90, T100 'La largeur de l'image'

But : corriger la différence dans la largeur des trois images projetées.

Manière d'aligner :

- Tourner le noyau des trois bobines mentionnées entièrement dans la bobine.
- Mesurer la largeur des trois images projetées (faites-le pour chaque image couleur séparée).
- L'image couleur avec la largeur minimale doit être admise comme largeur de référence. Ne plus toucher le noyau de la bobine correspondante.
- Régler maintenant le noyau des deux autres bobines de sorte à obtenir la même largeur que la largeur de référence.



\* P1 adjustment 'Amplitude parabola' (Preadjusted at the factory).

- Connect a signal source with a standard line frequency.
- Connect an oscilloscope with the junction of pin 14 IC5/R11.
- Adjust P1 until a parabolic voltage of 10Vpp is obtained.

\* Adjustment of coils T80, T90, T100 'Horizontal picture width'.

Target : correcting the picture width differences between the three colours.

Proceed as follows :

- Turn the core of each coil fully inside the coil.
- Measure the picture width of each colour picture.
- The colour picture with the smallest width will be taken as reference.  
(Do not touch the corresponding coil)
- Adjust the two other coils in order to obtain the same picture width.

\* Einstellung von P1 'Amplitude parabola' (wird im voraus im Werk abgeglichen)

- schließen Sie eine Signalquelle auf eine Standardzeilenfrequenz an.
- verbinden Sie einen Oszillographen mit dem Knotenpunkt von Stift 14 IC5/R11.
- Regeln Sie mit P1 bis eine Parabolspannung von 10 Vss bekommen wird.

\* Einstellung von den Spulen T80, T90, T100 'Horizontalbildbreite'

Ziel : die Unterschiede in der Breite der verschiedenen Bilder korrigieren.

Abgleich :

- schrauben Sie den Kern jeder Spule vollkommen ein.
- die Bildbreite muß für jede Farbe separat gemessen werden.
- das Farbbild mit der minimale Breite wird als Referenz genommen. (Drehen Sie jetzt nicht mehr an den entsprechenden Kern).
- stellen Sie dann die zwei übrigen Kerne ein, damit die Bilder dieselbe Breite aufweisen.

\* 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	IC 5	IC 6	IC 20	IC 40	IC 60
1	8.6	- 0.01	- 0.01	- 0.01	- 0.01
2	8.6	- 0.7	- 0.7	- 0.7	- 0.7
3	8.6	- 0.7	- 0.7	- 0.7	- 0.7
4	12.10	- 0.01	- 0.01	- 0.02	- 0.02
5	0.7	-10.8	-11.1	-11.1	-11.1
6	0.7	8.6	8.7	8.7	8.6
7	2.2	0	0	0	0
8	- 2.2	6.0	6.0	6.0	6.0
9	10.0	0	0	0	0
10	0	6.0	6.0	6.0	6.0
11	-12.2	0	0	0	0
12	0	12.1	12.1	12.1	12.1
13	0	0	0	0	0
14	0	-12.2	-12.2	-12.2	-12.2

pin	IC 30	IC 50	IC 70
1	0	0	0
2	0	0	0
3	-17.7	-17.7	-17.7
4	- 0.03	- 0.03	- 0.03
5	16.8	16.8	16.8

pin	IC 80	IC 90	IC100
1	- 0.07	- 0.06	0.07
2	- 0.07	- 0.06	- 0.07
3	- 7.8	- 7.8	- 7.8
4	- 0.33	- 0.15	- 0.22
5	7.61	7.61	7.62

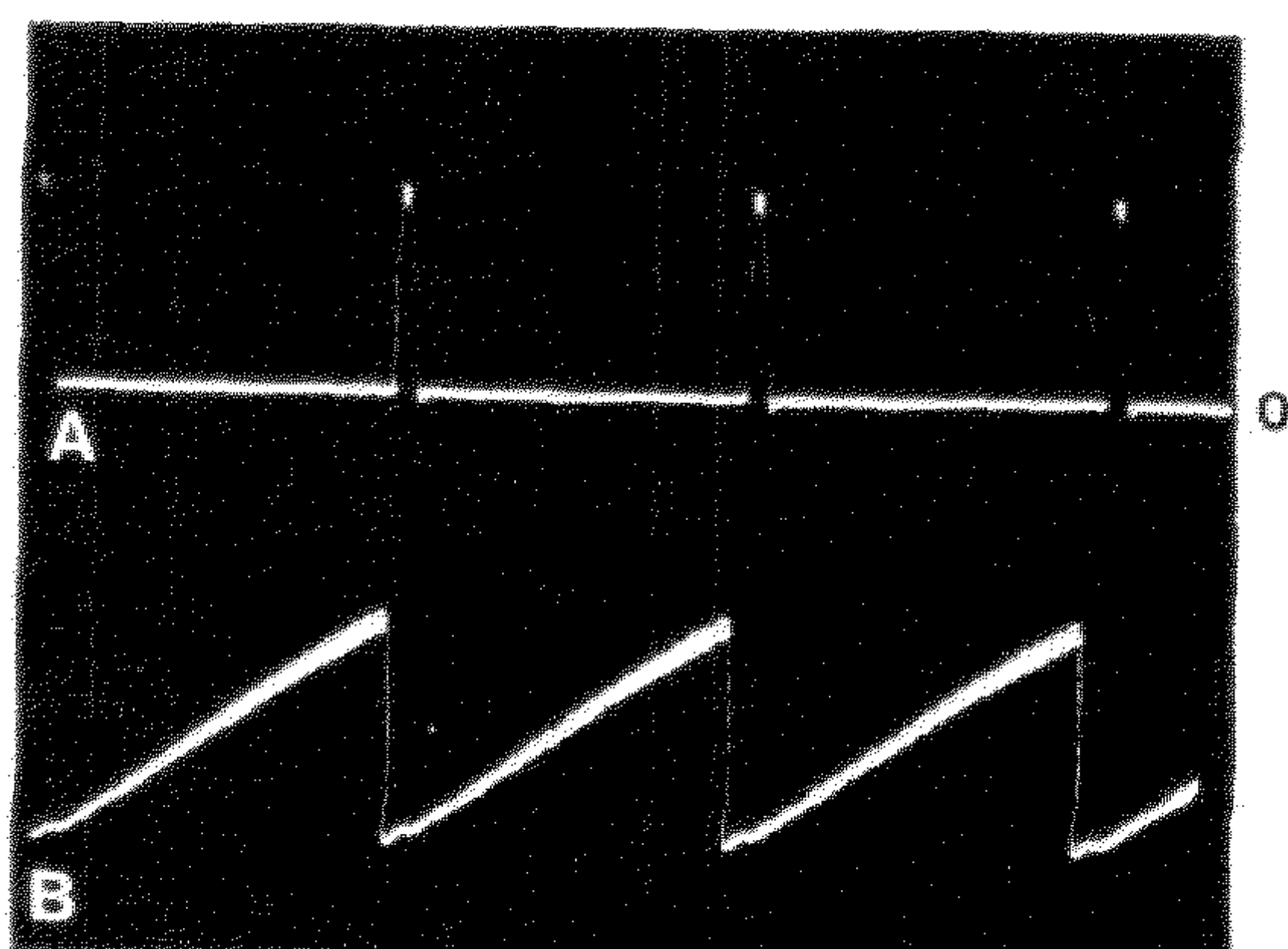
pin	IC 1	IC 2
IN	16.82	-17.72
OUT	12.09	-12.17

pin	IC 3	IC 4
1	- 1.28	1.25
2	- 2.56	2.5
3	- 7.73	7.62

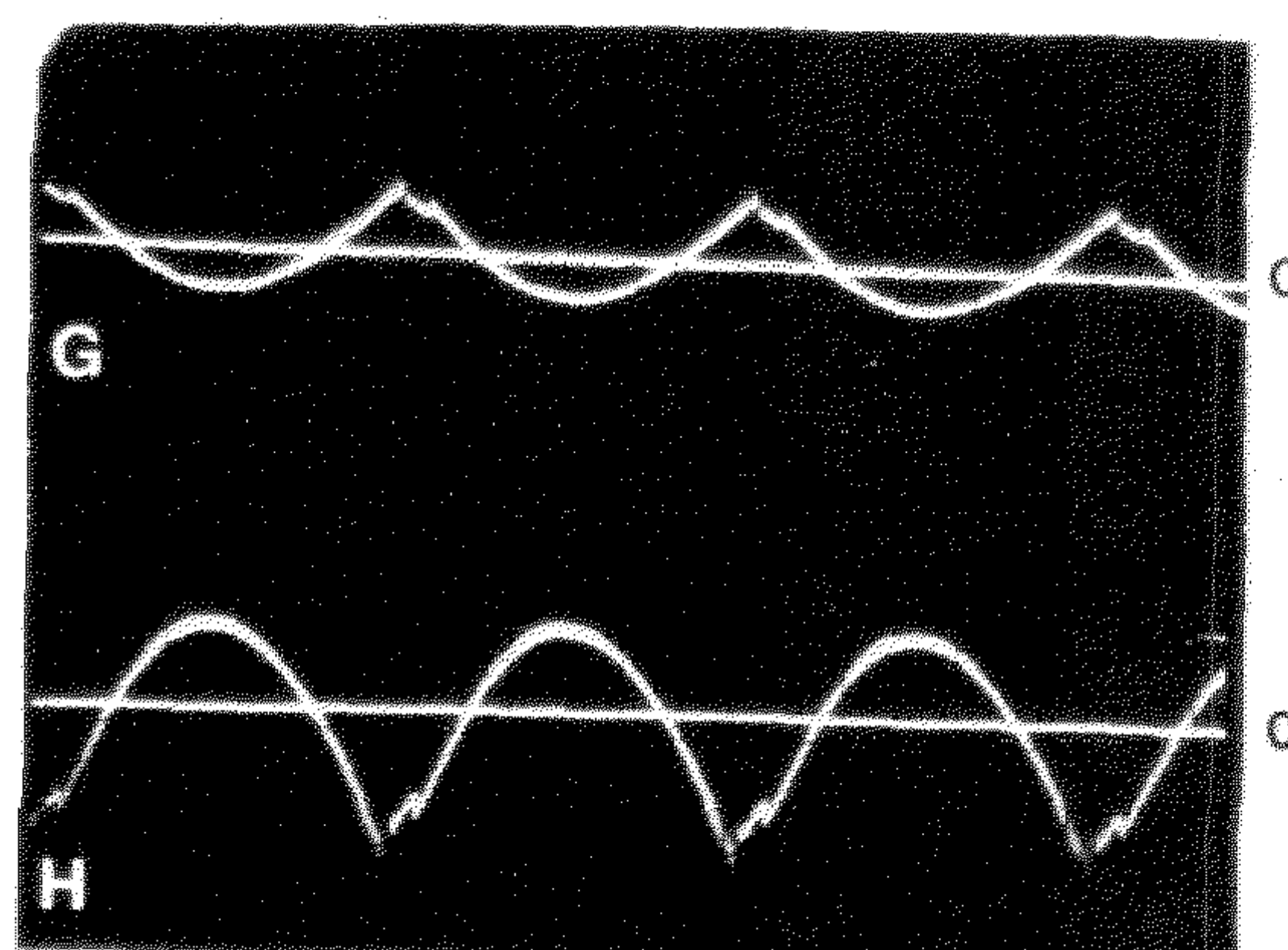
Q..	C	B	E
1	- 0.06	0.69	0
20	12.11	8.68	8.04
40	12.11	8.73	8.09
60	12.10	8.65	8.00

\* : ground must be taken at B32.31



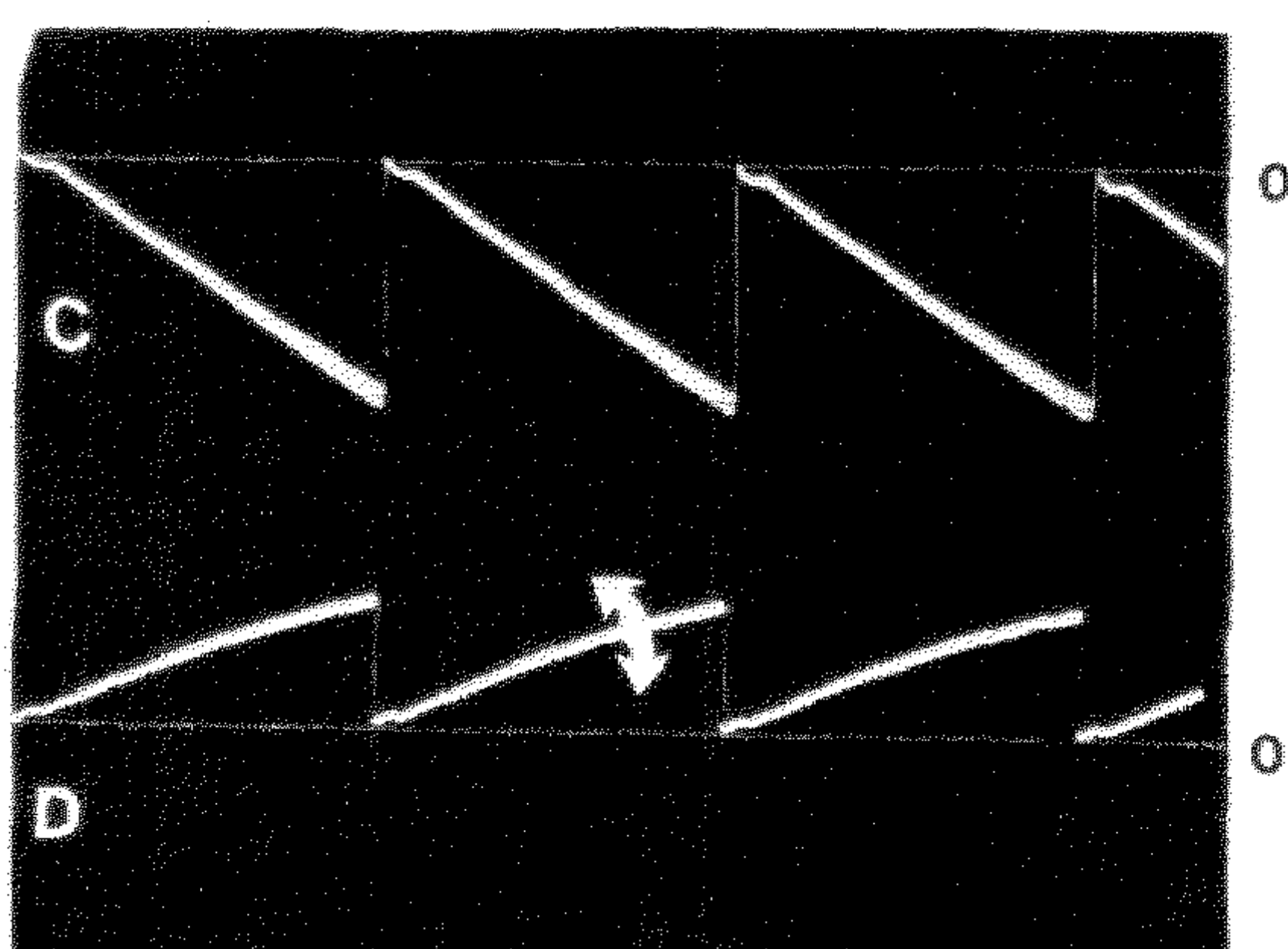


A. 380 Vpp (H)

B. 4 Vpp (H)  
DC level : 2V

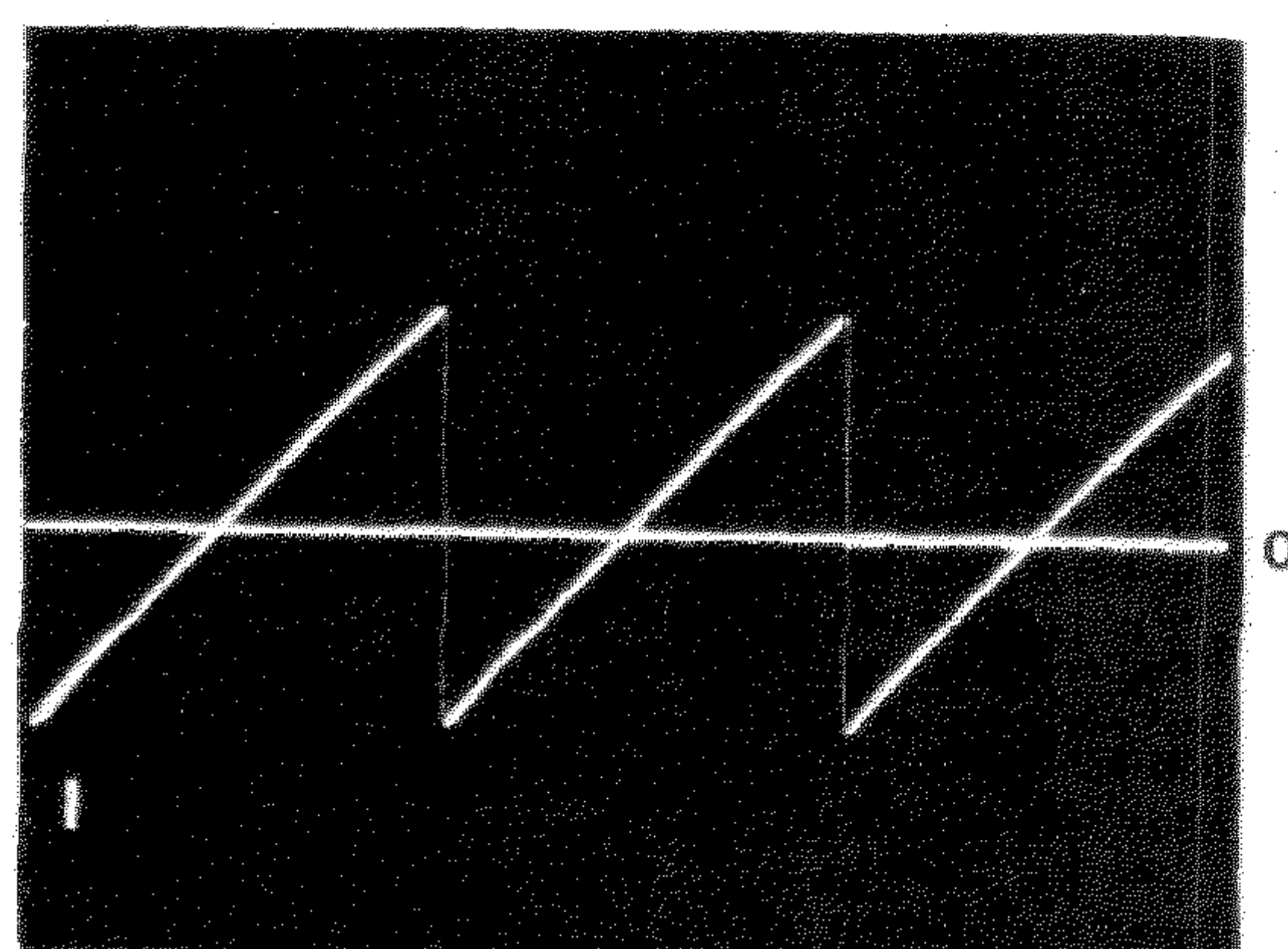
G. 2.25 Vpp (H)

H. 10 Vpp (H)

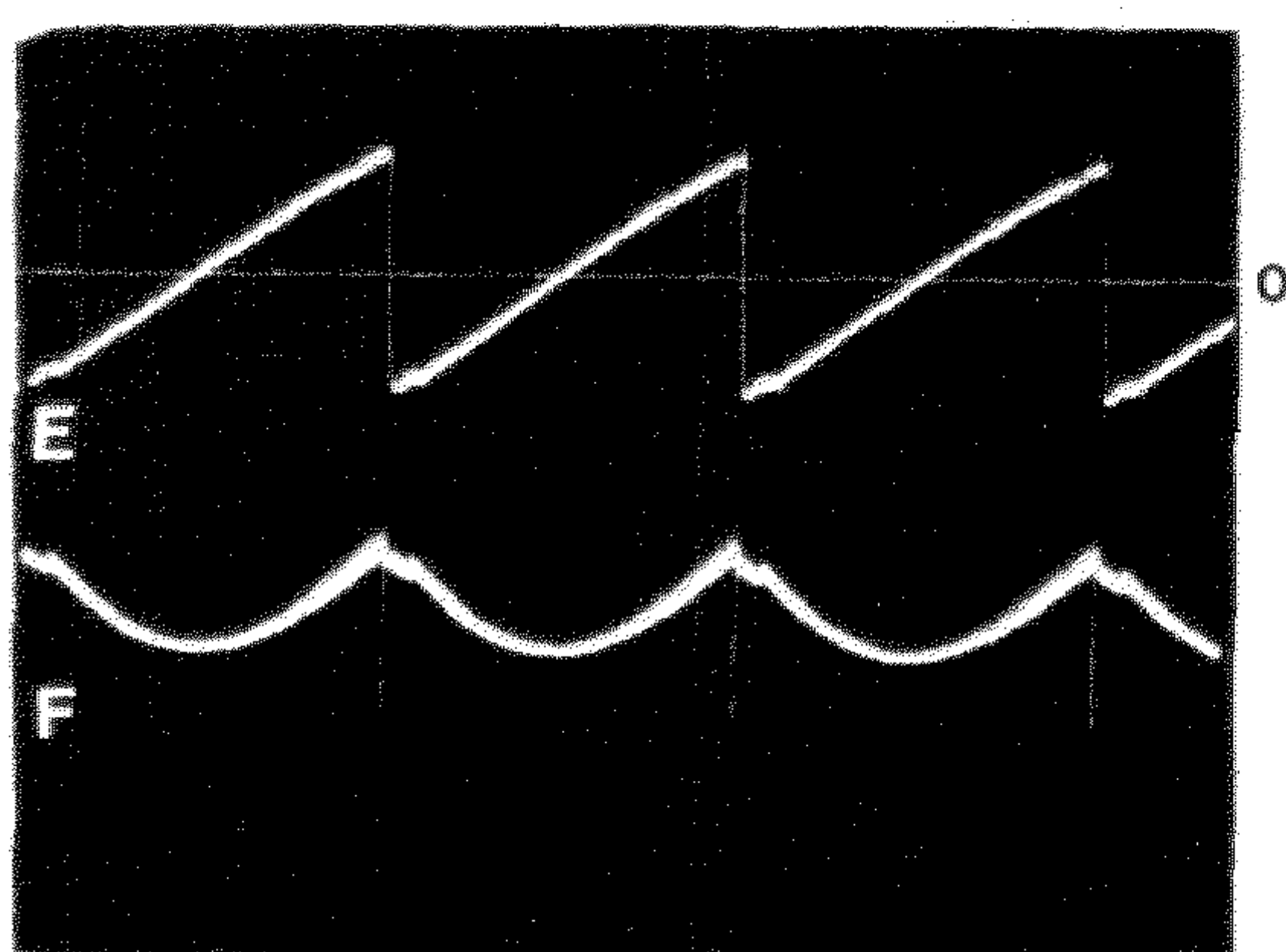


C. 4 Vpp (H)

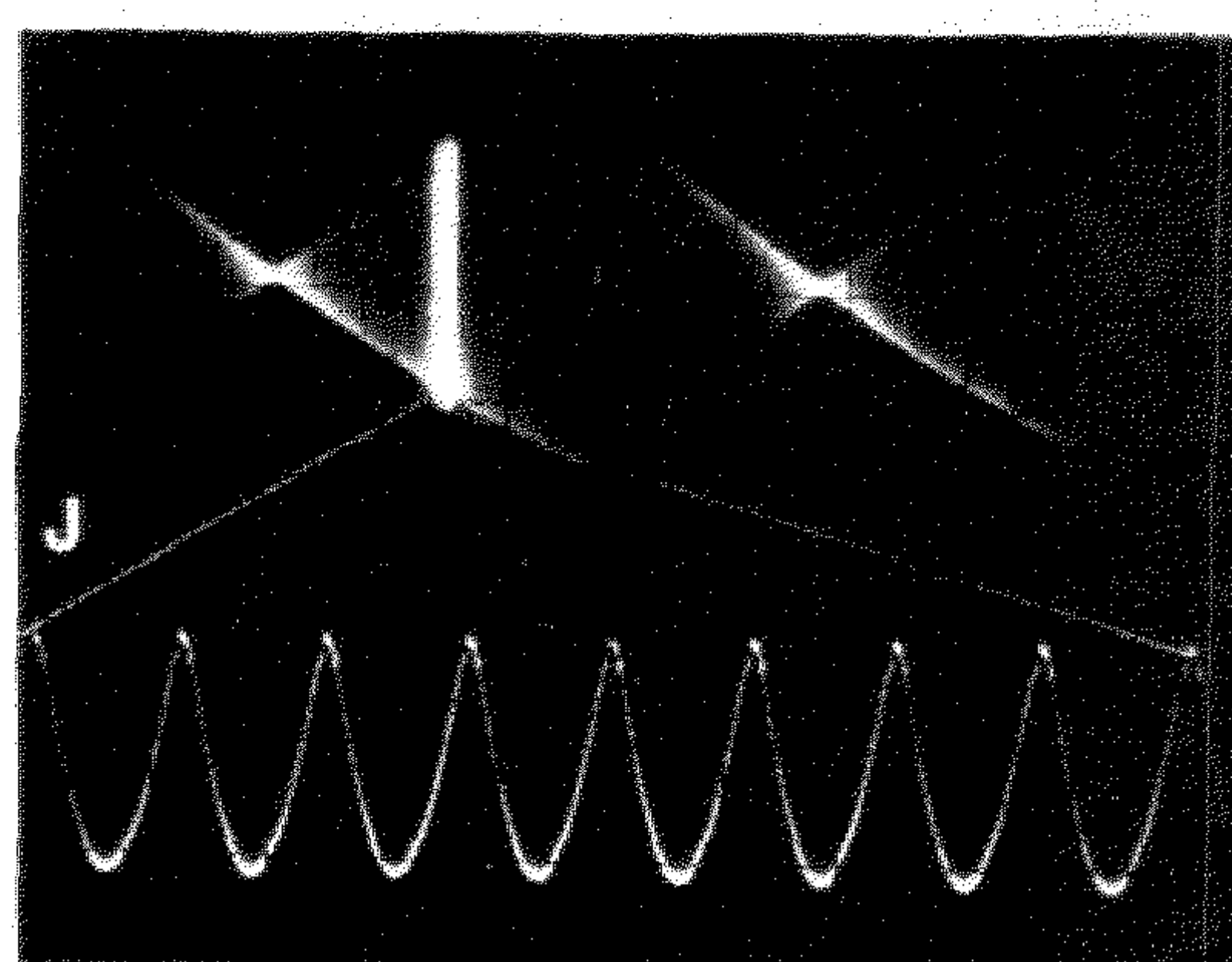
D. -4 Vpp to +4 Vpp (H)



I. 3.8 Vpp (V)

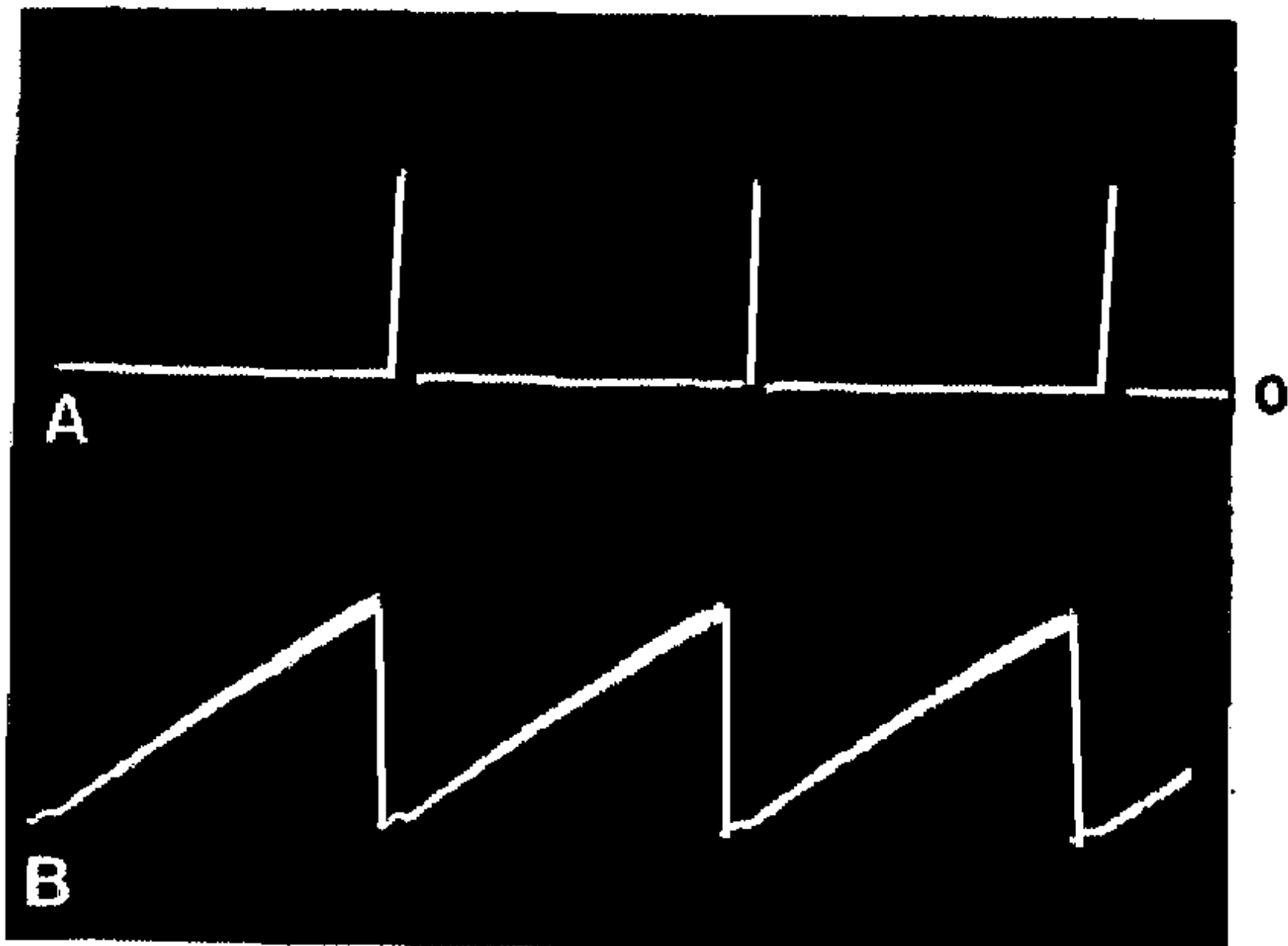


E. 4 Vpp (H)

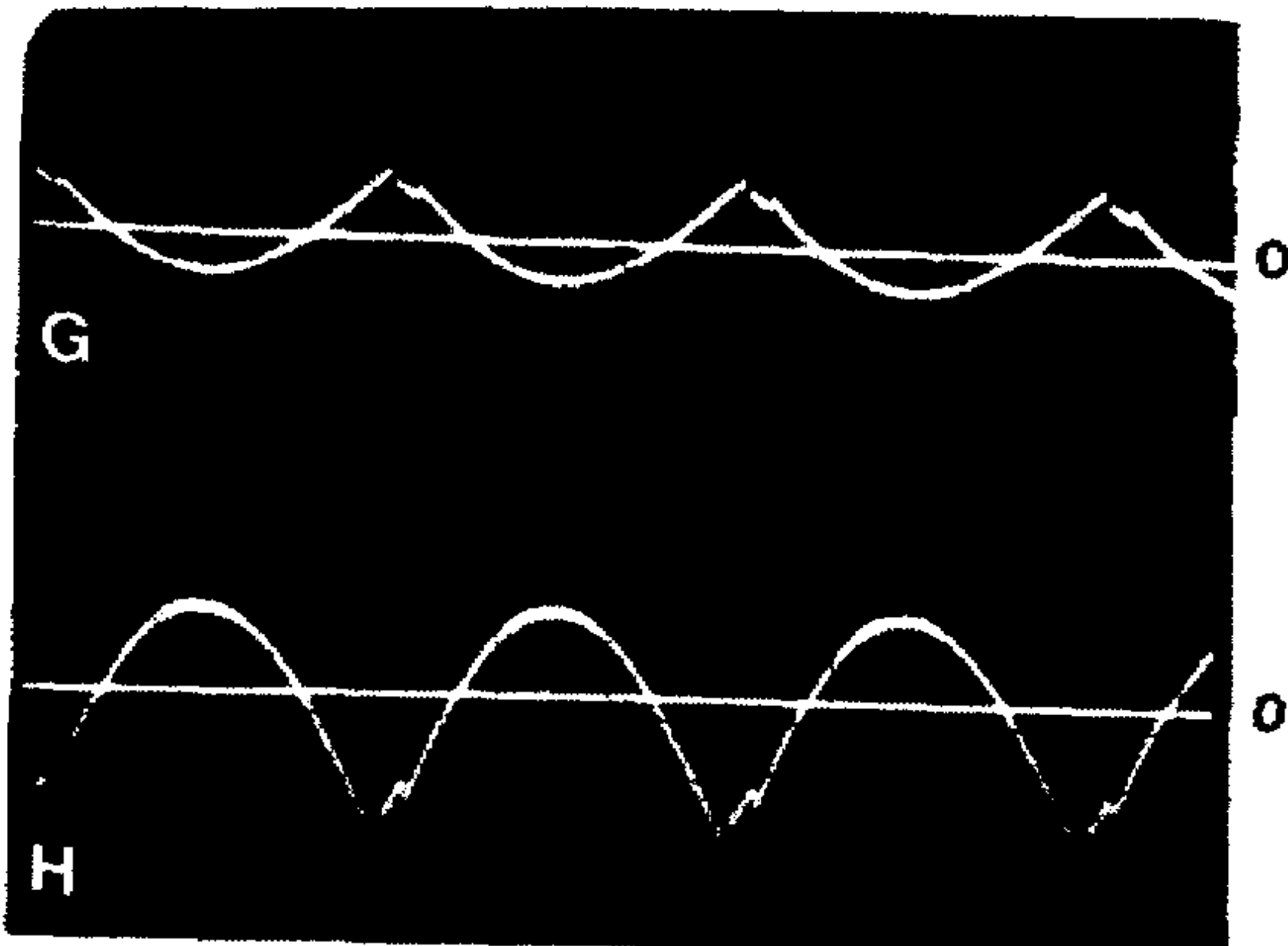
F. 2.25 Vpp (H)  
DC level : 10V

J. 40mVpp

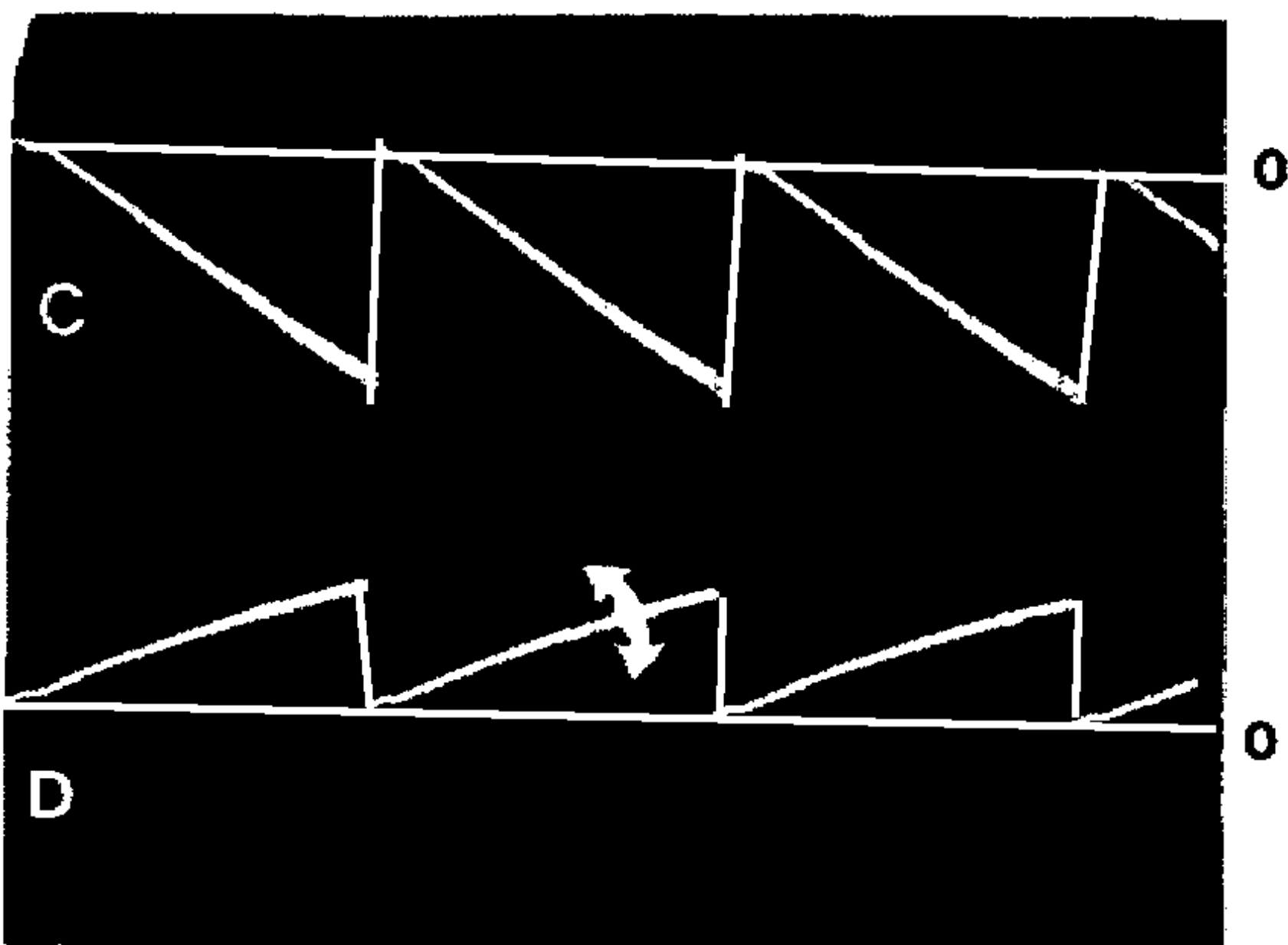




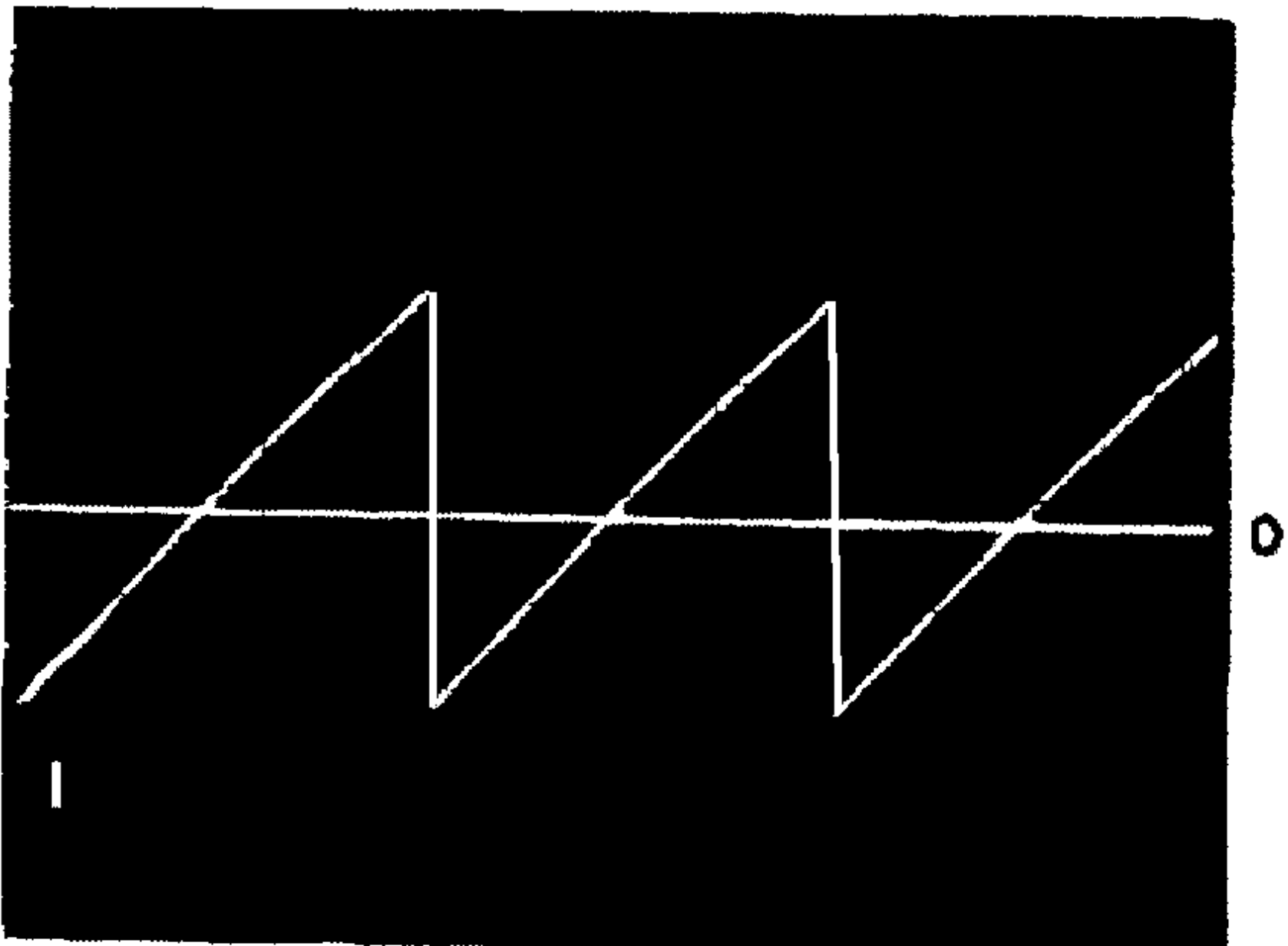
A. 380 Vpp (H) B. 4 Vpp (H)  
DC level : 2V



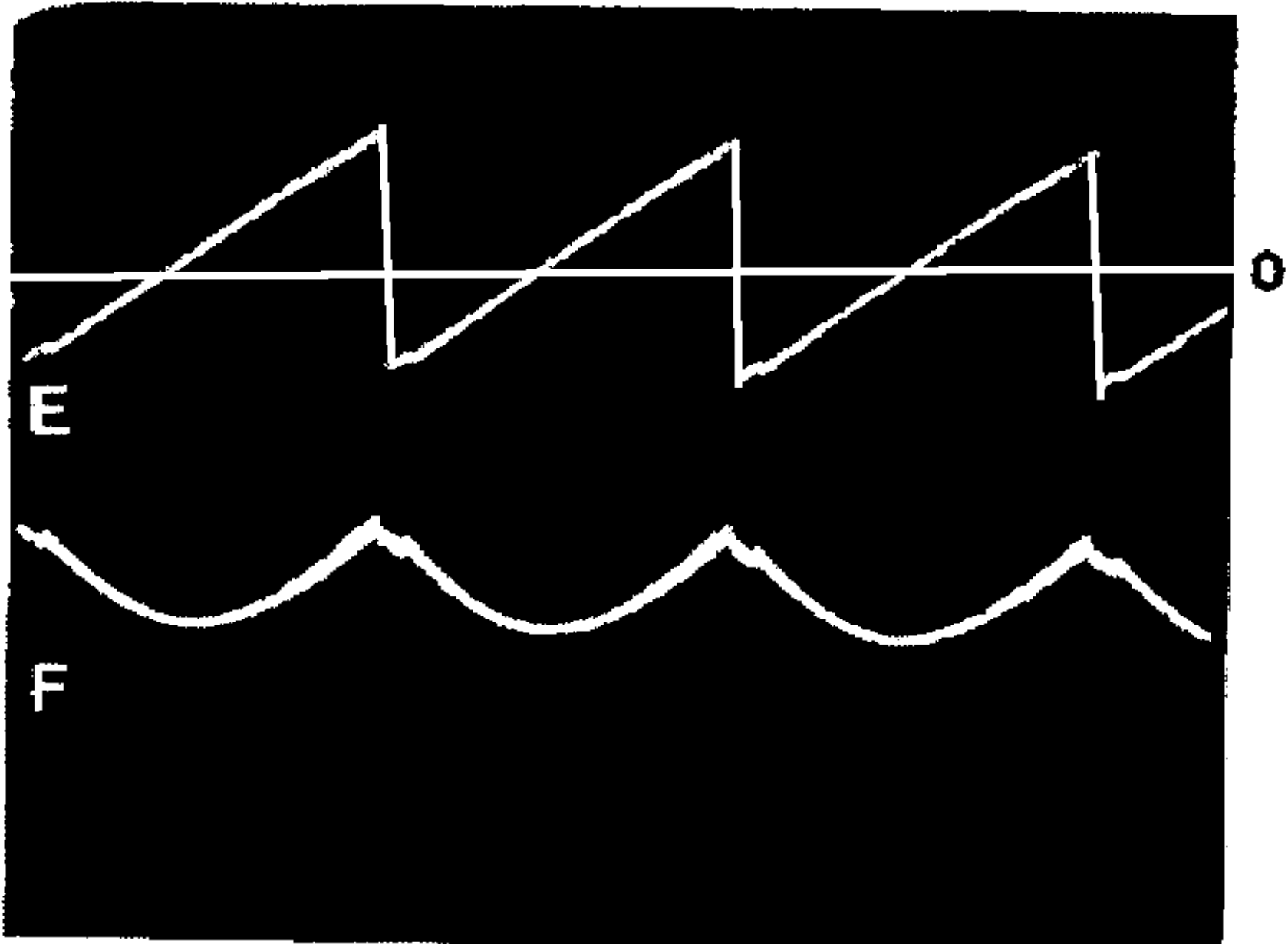
G. 2.25 Vpp (H) H. 10 Vpp (H)



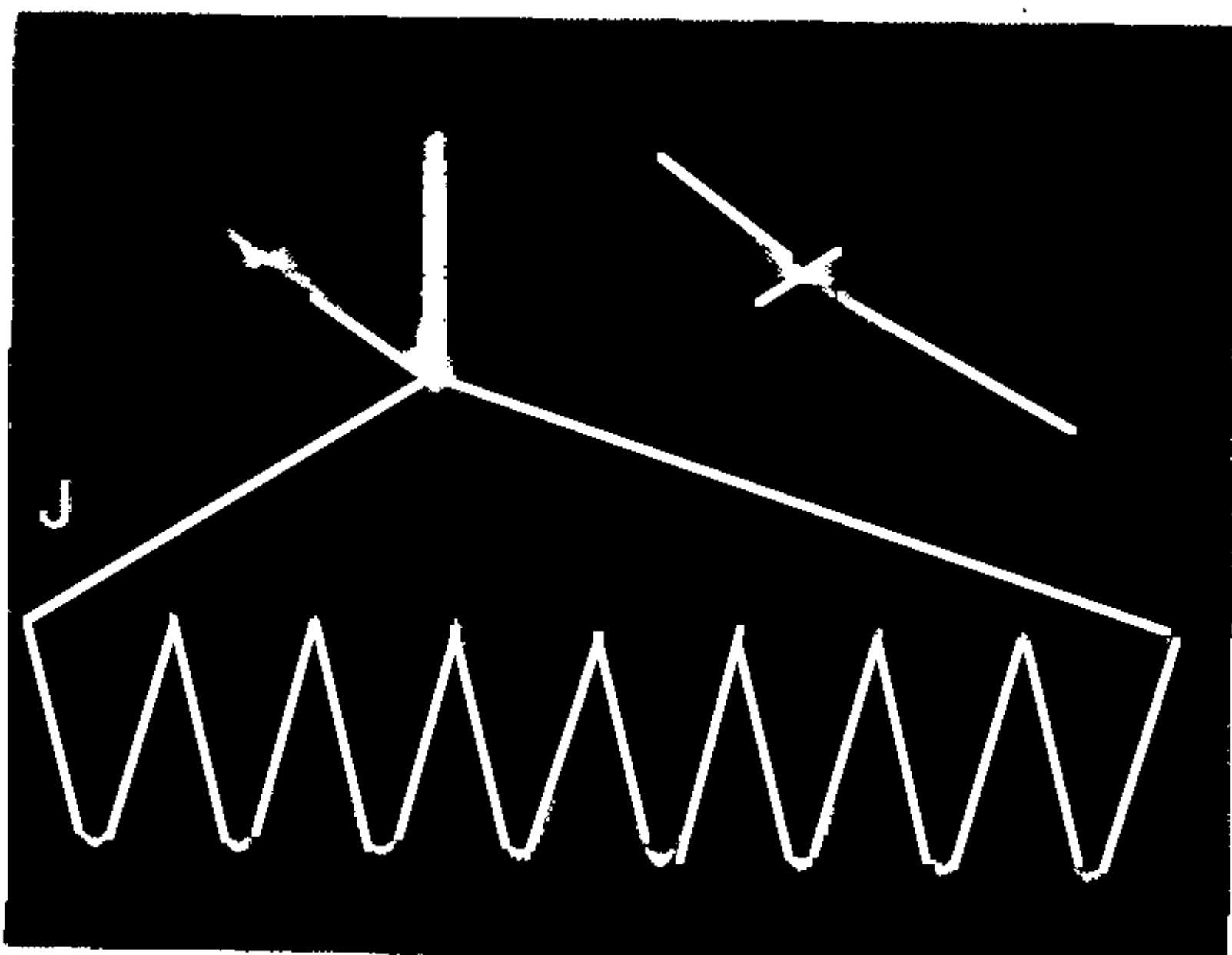
C. 4 Vpp (H) D. -4 Vpp to +4 Vpp (H)



I. 3.8 Vpp (V)



E. 4 Vpp (H) F. 2.25 Vpp (H)  
DC level : 10V



J. 40mVpp



ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
11 2681	C..1	CAPACITOR N750MI 15P G5 500	13 4016	I..2	INTEGRATED CIRCUIT 7912
11 11565	C..2	CAPACITOR ELAX 10M Z 25	13 4028	I..3	INTEGRATED CIRCUIT 317LZ
11 3732	C..3	CAPACITOR POME 470K K5 63	13 4029	I..4	INTEGRATED CIRCUIT 337LZ
11 3732	C..4	CAPACITOR POME 470K K5 63	13 4113	I..5	INTEGRATED CIRCUIT 084
11 1510	C..5	CAPACITOR ELPRMI 22M M5 25	13 2765	I..6	INTEGRATED CIRCUIT 1496P
11 1468	C..6	CAPACITOR ELPR 470M Z5 16	13 27655	I.20	INTEGRATED CIRCUIT 1496
11 1468	C..7	CAPACITOR ELPR 470M Z5 16	13 2751	I.30	INTEGRATED CIRCUIT 2030V TDA
11 1531	C..8	CAPACITOR ELPRMI 10M M5 35	13 27655	I.40	INTEGRATED CIRCUIT 1496
11 5928	C..9	CAPACITOR PP RA 3K3 J5 63	13 2751	I.50	INTEGRATED CIRCUIT 2030V TDA
11 2774	C.10	CAPACITOR CE MI 100K U5 63	13 27655	I.60	INTEGRATED CIRCUIT 1496
11 3732	C.11	CAPACITOR POME 470K K5 63	13 2751	I.70	INTEGRATED CIRCUIT 2030V TDA
11 2240	C.12	CAPACITOR NPO MI 68P J5 63	13 2751	I.80	INTEGRATED CIRCUIT 2030V TDA
11 2240	C.13	CAPACITOR NPO MI 68P J5 63	13 2751	I.90	INTEGRATED CIRCUIT 2030V TDA
11 3724	C.20	CAPACITOR POME 100K K5 63	13 2751	I100	INTEGRATED CIRCUIT 2030V TDA
11 3724	C.21	CAPACITOR POME 100K K5 63			
11 1548	C.22	CAPACITOR ELPRMI 2M2 M5 50	10 6725	P..1	TRIMPOT CEMH 500E K OW50
11 2747	C.23	CAPACITOR CE MI 4K7 K5 63	10 6829	P.20	TRIMPOT CEMV 10K K OW50
11 37161	C.30	CAPACITOR POME 22K K5 100	10 6829	P.21	TRIMPOT CEMV 10K K OW50
11 4079	C.32	CAPACITOR POMEPO 100K M5 63	10 6832	P.22	TRIMPOT CEMV 50K K OW50
11 4079	C.33	CAPACITOR POMEPO 100K M5 63	10 6829	P.40	TRIMPOT CEMV 10K K OW50
11 2774	C.34	CAPACITOR CE MI 100K U5 63	10 6829	P.41	TRIMPOT CEMV 10K K OW50
11 4124	C.50	CAPACITOR POMEFF 22K K 250	10 6832	P.42	TRIMPOT CEMV 50K K OW50
11 3724	C.40	CAPACITOR POME 100K K5 63	10 6829	P.60	TRIMPOT CEMV 10K K OW50
11 3724	C.41	CAPACITOR POME 100K K5 63	10 6829	P.61	TRIMPOT CEMV 10K K OW50
11 1548	C.42	CAPACITOR ELPRMI 2M2 M5 50	10 6832	P.62	TRIMPOT CEMV 50K K OW50
11 2747	C.43	CAPACITOR CE MI 4K7 K5 63	10 75271	P.80	MULTITURN CEM 10K K OW50
11 4079	C.52	CAPACITOR POMEPO 100K M5 63	10 75271	P.90	MULTITURN CEM 10K K OW50
11 4079	C.53	CAPACITOR POMEPO 100K M5 63	10 75271	P100	MULTITURN CEM 10K K OW50
11 2774	C.54	CAPACITOR CE MI 100K U5 63			
11 3724	C.60	CAPACITOR POME 100K K5 63	71 6301	PC..	PC DATA NS HR45
11 3724	C.61	CAPACITOR POME 100K K5 63			
11 1548	C.62	CAPACITOR ELPRMI 2M2 M5 50	13 1491	Q..1	TRANSISTOR BSX20,2N2369
11 2747	C.63	CAPACITOR CE MI 4K7 K5 63	13 1411	Q.20	TRANSISTOR BC549C,BC239C
11 4124	C.70	CAPACITOR POMEFF 22K K 250	13 1411	Q.40	TRANSISTOR BC549C,BC239C
11 4079	C.72	CAPACITOR POMEPO 100K M5 63	13 1411	Q.60	TRANSISTOR BC549C,BC239C
11 4079	C.73	CAPACITOR POMEPO 100K M5 63			
11 2774	C.74	CAPACITOR CE MI 100K U5 63	10 1152	R..1	RESISTOR CF 22K J OW25
11 3724	C.80	CAPACITOR POME 100K K5 63	10 1143	R..2	RESISTOR CF 3K9 J OW25
11 3724	C.82	CAPACITOR POME 100K K5 63	10 1144	R..3	RESISTOR CF 4K7 J OW25
11 3724	C.83	CAPACITOR POME 100K K5 63	10 1148	R..4	RESISTOR CF 10K J OW25
11 3724	C.90	CAPACITOR POME 100K K5 63	10 1148	R..5	RESISTOR CF 10K J OW25
11 3724	C.92	CAPACITOR POME 100K K5 63	10 1148	R..7	RESISTOR CF 10K J OW25
11 3724	C.93	CAPACITOR POME 100K K5 63	10 1148	R..8	RESISTOR CF 10K J OW25
11 3724	C100	CAPACITOR POME 100K K5 63	10 1136	R..9	RESISTOR CF 1K J OW25
11 3724	C102	CAPACITOR POME 100K K5 63	10 1139	R.10	RESISTOR CF 1K8 J OW25
11 3724	C103	CAPACITOR POME 100K K5 63	10 1148	R.11	RESISTOR CF 10K J OW25
11 1531	C105	CAPACITOR ELPRMI 10M M5 35	10 1268	R.12	RESISTOR CF 470K J OW50
11 1531	C106	CAPACITOR ELPRMI 10M M5 35	10 1151	R.13	RESISTOR CF 18K J OW25
11 3732	C107	CAPACITOR POME 470K K5 63	10 1138	R.14	RESISTOR CF 1K5 J OW25
11 3732	C108	CAPACITOR POME 470K K5 63	10 1132	R.15	RESISTOR CF 470E J OW25
11 3732	C109	CAPACITOR POME 470K K5 63	10 1132	R.16	RESISTOR CF 470E J OW25
			10 1149	R.20	RESISTOR CF 12K J OW25
13 1621	D..3	DIODE 1N4148 SWITCH	10 1148	R.21	RESISTOR CF 10K J OW25
13 1621	D..4	DIODE 1N4148 SWITCH	10 1136	R.22	RESISTOR CF 1K J OW25
13 1621	D..5	DIODE 1N4148 SWITCH	10 1152	R.23	RESISTOR CF 22K J OW25
13 1637	D.10	DIODE BA158 SWITCH	10 1142	R.24	RESISTOR CF 3K3 J OW25
13 1637	D.11	DIODE BA158 SWITCH	10 1150	R.25	RESISTOR CF 15K J OW25
13 1637	D.12	DIODE BA158 SWITCH	10 1134	R.26	RESISTOR CF 680E J OW25
13 1637	D.13	DIODE BA158 SWITCH	10 1142	R.27	RESISTOR CF 3K3 J OW25
13 1637	D.14	DIODE BA158 SWITCH	10 1176	R.28	RESISTOR CF 2M2 J OW25
13 1637	D.15	DIODE BA158 SWITCH	10 1152	R.29	RESISTOR CF 22K J OW25
13 1637	D.16	DIODE BA158 SWITCH	10 1148	R.30	RESISTOR CF 10K J OW25
13 1637	D.17	DIODE BA158 SWITCH	10 1141	R.31	RESISTOR CF 2K7 J OW25
13 1637	D.18	DIODE BA158 SWITCH	10 1144	R.32	RESISTOR CF 4K7 J OW25
13 1637	D.19	DIODE BA158 SWITCH	10 1108	R.33	RESISTOR CF 4E7 J OW25
13 1637	D.20	DIODE BA158 SWITCH	10 2808	R.34	RESISTOR MF 4E7 G OW70
13 1637	D.21	DIODE BA158 SWITCH	10 1234	R.35	RESISTOR CF 680E J OW50
			10 1144	R.36	RESISTOR CF 4K7 J OW25
13 4002	I..1	INTEGRATED CIRCUIT 7812	10 1149	R.40	RESISTOR CF 12K J OW25



ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
10 1148	R.41	RESISTOR CF 10K J 0W25	10 3660	R100	RESISTOR WW H 1K K 4W
10 1136	R.42	RESISTOR CF 1K J 0W25	10 1164	R101	RESISTOR CF 220K J 0W25
10 1152	R.43	RESISTOR CF 22K J 0W25	10 1148	R102	RESISTOR CF 10K J 0W25
10 1142	R.44	RESISTOR CF 3K3 J 0W25	10 1112	R103	RESISTOR CF 10E J 0W25
10 1150	R.45	RESISTOR CF 15K J 0W25	10 1148	R104	RESISTOR CF 10K J 0W25
10 1134	R.46	RESISTOR CF 680E J 0W25	10 3606	R105	RESISTOR WW H 0E33 K 4W
10 1142	R.47	RESISTOR CF 3K3 J 0W25	10 4682	R106	RESISTOR HV 15M J 0W50
10 1176	R.48	RESISTOR CF 2M2 J 0W25	10 1124	R107	RESISTOR CF 100E J 0W25
10 1152	R.49	RESISTOR CF 22K J 0W25	10 1124	R108	RESISTOR CF 100E J 0W25
10 1148	R.50	RESISTOR CF 10K J 0W25	10 1128	R109	RESISTOR CF 220E J 0W25
10 1141	R.51	RESISTOR CF 2K7 J 0W25	10 1128	R110	RESISTOR CF 220E J 0W25
10 1144	R.52	RESISTOR CF 4K7 J 0W25	10 1132	R112	RESISTOR CF 470E J 0W25
10 1108	R.53	RESISTOR CF 4E7 J 0W25	10 1132	R113	RESISTOR CF 470E J 0W25
10 2808	R.54	RESISTOR MF 4E7 G 0W70	10 1148	R114	RESISTOR CF 10K J 0W25
10 1234	R.55	RESISTOR CF 680E J 0W50	10 1148	R115	RESISTOR CF 10K J 0W25
10 1144	R.56	RESISTOR CF 4K7 J 0W25	10 1140	R116	RESISTOR CF 2K2 J 0W25
10 1149	R.60	RESISTOR CF 12K J 0W25	10 1142	R117	RESISTOR CF 3K3 J 0W25
10 1148	R.61	RESISTOR CF 10K J 0W25	10 1147	R118	RESISTOR CF 8K2 J 0W25
10 1136	R.62	RESISTOR CF 1K J 0W25	10 1139	R119	RESISTOR CF 1K8 J 0W25
10 1152	R.63	RESISTOR CF 22K J 0W25	10 1140	R120	RESISTOR CF 2K2 J 0W25
10 1142	R.64	RESISTOR CF 3K3 J 0W25	10 1136	R121	RESISTOR CF 1K J 0W25
10 1150	R.65	RESISTOR CF 15K J 0W25	10 4682	R126	RESISTOR HV 15M J 0W50
10 1134	R.66	RESISTOR CF 680E J 0W25	10 1136	R141	RESISTOR CF 1K J 0W25
10 1142	R.67	RESISTOR CF 3K3 J 0W25	10 1136	R161	RESISTOR CF 1K J 0W25
10 1176	R.68	RESISTOR CF 2M2 J 0W25	77 4102	T.30	TRANSFORMER N/S DATA 43
10 1152	R.69	RESISTOR CF 22K J 0W25	77 4102	T.50	TRANSFORMER N/S DATA 43
10 1148	R.70	RESISTOR CF 10K J 0W25	77 4102	T.70	TRANSFORMER N/S DATA 43
10 1141	R.71	RESISTOR CF 2K7 J 0W25	77 4151	T.80	COIL AMPLITUDE HOR DATA HR45
10 1144	R.72	RESISTOR CF 4K7 J 0W25	77 4152	T.81	COIL SHIFT HOR DATA HR45
10 1108	R.73	RESISTOR CF 4E7 J 0W25	77 4151	T.90	COIL AMPLITUDE HOR DATA HR45
10 2808	R.74	RESISTOR MF 4E7 G 0W70	77 4152	T.91	COIL SHIFT HOR DATA HR45
10 1234	R.75	RESISTOR CF 680E J 0W50	77 4151	T100	COIL AMPLITUDE HOR DATA HR45
10 1144	R.76	RESISTOR CF 4K7 J 0W25	77 4152	T101	COIL SHIFT HOR DATA HR45
10 3660	R.80	RESISTOR WW H 1K K 4W	31 3525	001.	CONNECTOR EURO MOBSE P64
10 1164	R.81	RESISTOR CF 220K J 0W25	31 3531	0010	CONNECTOR EURO MOBSE P64 KEY
10 1148	R.82	RESISTOR CF 10K J 0W25	36 7435	0011	RIVET AL AL AD34ABS D2,4
10 1112	R.83	RESISTOR CF 10E J 0W25	80 1288	003.	HEATSINK 45 NS
10 1148	R.84	RESISTOR CF 10K J 0W25	36 20276	0032	SCREW DIN84 M 3 X20 MP-
10 3606	R.85	RESISTOR WW H 0E33 K 4W	36 75256	0033	WASHER DIA 3,1 X 6,2 T0,6 J
10 4682	R.86	RESISTOR HV 15M J 0W50	36 61026	0034	NUT DIN934 M 3 HEXAGONAL
10 3660	R.90	RESISTOR WW H 1K K 4W	13 3029	0035	TRANSISTOR SET INSULAT TO-220
10 1164	R.91	RESISTOR CF 220K J 0W25	13 30292	0036	TRANSISTOR BUSH INSULAT TO-220
10 1148	R.92	RESISTOR CF 10K J 0W25	36 20226	0039	SCREW DIN84 M 3 X 8 MP-
10 1112	R.93	RESISTOR CF 10E J 0W25	31 5315		CONNECTOR RIVET MOBTE D2 L14
10 1148	R.94	RESISTOR CF 10K J 0W25			
10 3606	R.95	RESISTOR WW H 0E33 K 4W			
10 4682	R.96	RESISTOR HV 15M J 0W50			