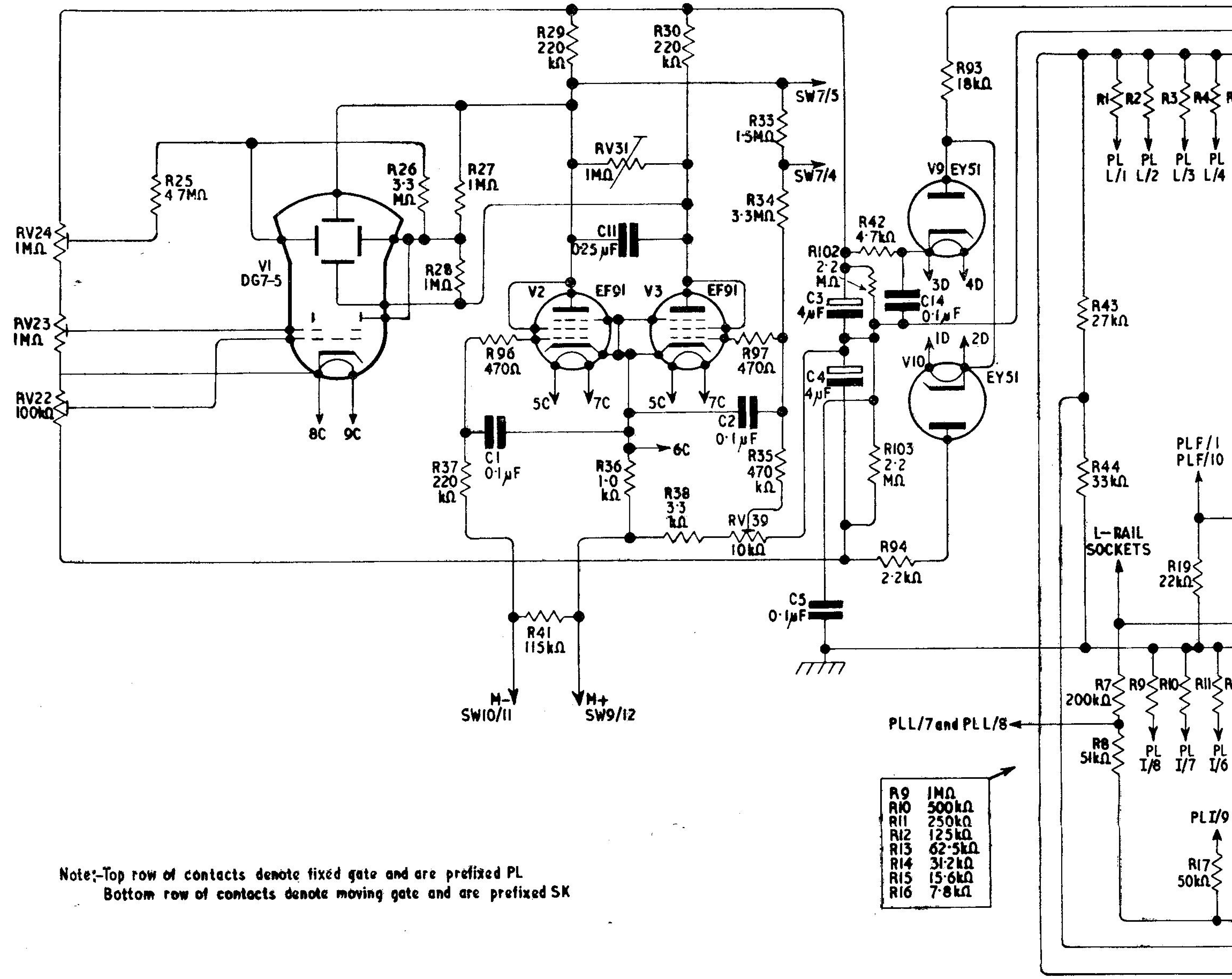
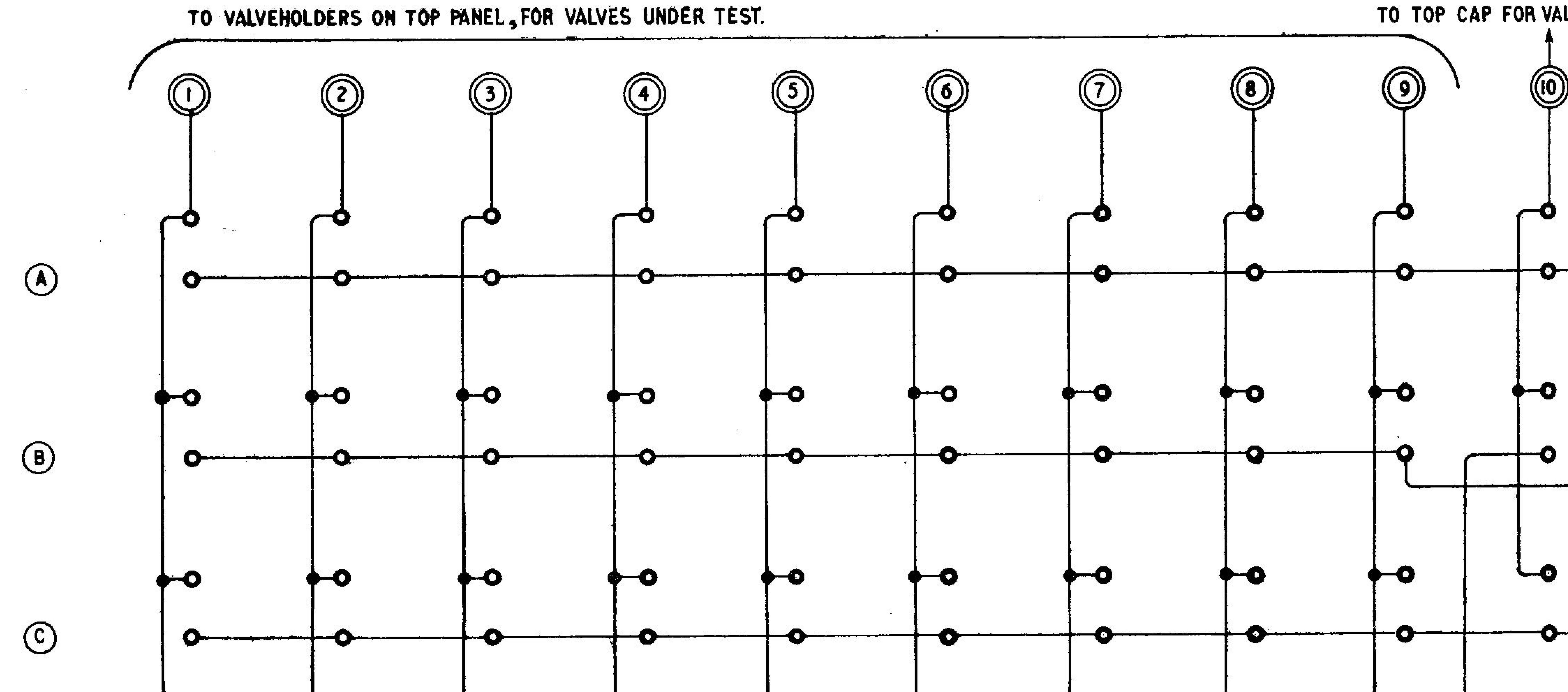


Note:-Top row of contacts denote fixed gate and are prefixed PL
Bottom row of contacts denote moving gate and are prefixed SK



R1 4MΩ
R2 2MΩ
R3 1MΩ
R4 500kΩ
R5 250kΩ
R6 125kΩ
TR1
20V 18V 16V 14V 12V 10V 8V 6V 4V 2V 0V
SW12/12 SW12/11 SW12/10 SW12/9 SW12/8 SW12/7 SW12/6 SW12/5 SW12/4 SW12/3 SW12/2
S9 S8 S7 S6 S5 S4 S3 S2 S1
SW12
SW11
TR2 PRI
LP1
PL H/10
V5 EL37
V6 GZ33
PLM/4
PLM/8
R49 100Ω
R46 100Ω
R45 10kΩ
R43 27kΩ
R44 33kΩ
SKI/10
R48 1MΩ
R47 560 kΩ
PLF/1 PLF/10
V4 EF50
C6 16 µF
C12 16 µF
R87 150 kΩ
R88 150 kΩ
L-RAIL SOCKETS
R19 22kΩ
R20 10kΩ
PL L/1 PL L/2 PL L/3 PL L/4 PL L/5 PL L/6
RLA1
SK K/1-8
180V 200V 220V 240V
R98 R99 R101 R100
R98 600Ω
R99 400Ω
R100 600Ω
R101 400Ω
SW14
FS1
SW13
L N
Live.
Neutral.
Earth.
E
MAINS TERMINAL BLOCK
R7 100kΩ
R8 51kΩ
R9 R10 R11 R12 R13 R14 R15 R16
PL I/8 PL I/7 PL I/6 PL I/5 PL I/4 PL I/3 PL I/2 PL I/1
V8 85A2
C7 0·5 µF
R50 75 kΩ
C8 16 µF
C9 16 µF
RV52 50kΩ
R51 560kΩ
R53 180 kΩ
SKF/4
PL I/9
I-RAIL SOCKETS
PLF/2
R21 24kΩ
R17 50kΩ
R18 1·5MΩ
V7 EZ90
1B 2B
-85V
R54 8·2kΩ
R55 6·8kΩ
R56 4·7kΩ
R86 1·5kΩ
-200V
TO TOP CAP FOR VALVE UNDER TEST
9 10
R89 100Ω
R90 100Ω
PB1 PB2 PB3
SW2 SW1
SW4 SW3
M+
R57


A
B
C
D
E
F
G
H
I
J
K
L
M
CATHODE V4
R21
SW6/5
SW10/7
SW9/4 C7
R51
R66 20Ω
R67 20Ω
R69 8·2kΩ
R70 4·3kΩ
R71 2·2kΩ
R72 1·1kΩ
R73 560Ω
R74 300Ω
R75 160Ω
R76 82Ω
R77 43Ω
R78 22Ω
R79 11Ω
R16
R15
R14
R13
R12
R11
R10
R9
R17
R18
TR2-11
TR2-12
TR2-13
TR2-14
TR2-15
TR2-16
TR2-17
TR2-18
TR2-19
TR2-1
TR2-2
TR2-3
TR2-4
TR2-5
TR2-6
TR2-7
TR2-8
TR1 PRI 200V
R1
R2
R3
R4
R5
R6
R7
6B
4B
3B
V6,a1
8B
9B
10B
V6,a2

CIRCUIT

The wafer switches are viewed from the front, and have been drawn as if they are transparent in order to show the front and rear connections.

CIRCUIT DIAGRAM

PARTS LIST

In order to avoid undue delay when ordering replacements, the code number shown against each part should be quoted together with the description of the part or parts required.

Resistors

Circuit Ref.	Value (Ω)	Tolerance (+%)	Description	Make	Code No.	Type No.
R1	4 M	1	High Stability	Welwyn	GH 553 01/4M/WS	SA 3634
R2	2 M	1	High Stability	Erie	GH 552 01/2M/E	100
R3	1 M	1	High Stability	Erie	GH 550 01/1M/E	108
R4	500 k	1	High Stability	Erie	GH 550 01/500K/E	108
R5	250 k	1	High Stability	Erie	GH 550 01/250K/E	108
R6	125 k	1	High Stability	Erie	GH 550 01/125K/E	108
R7	200 k	1	High Stability	Erie	GH 551 01/200K/E	109
R8	51 k	1	High Stability	Erie	GH 551 01/51K/E	109
R9	1 M	1	High Stability	Erie	GH 550 01/1M/E	108
R10	500 k	1	High Stability	Erie	GH 551 01/500K/E	109
R11	250 k	1	High Stability	Erie	GH 551 01/250K/E	109
R12	125 k	1	High Stability	Erie	GH 551 01/125K/E	109
R13	62·5 k	1	High Stability	Erie	GH 550 01/62K5/E	109
R14	31·2 k	1	High Stability	Erie	GH 551 01/31K2/E	109
R15	15·6 k	1	High Stability	Erie	GH 551 01/15K6/E	109
R16	7·8 k	1	High Stability	Erie	GH 551 01/7K8/E	109
R17	50 k	1	High Stability	Erie	GH 551 01/50K/E	109
R18	1·5 M	1	High Stability	Erie	GH 552 01/1M5/E	100
R19	22 k	10	Carbon	Erie	GH 422 10/22K/E	9
R20	10 k	5	Carbon	Erie	GH 422 05/10K/E	9
R21	24 k	1	High Stability	Erie	GH 552 01/24K/E	100
RV22	100 k	—	Carbon Variable	Welwyn	MD 790 12	—
RV23	1 M	—	Carbon Variable	Welwyn	MD 790 12	—
RV24	1 M	—	Carbon Variable	Welwyn	MD 790 12	—
R25	4·7 M	10	Carbon	Erie	GH 422 10/4M7/E	9
R26	3·3 M	10	Carbon	Erie	GH 422 10/3M3/E	9
R27	1 M	10	Carbon	Erie	GH 422 10/1M/E	9
R28	1 M	10	Carbon	Erie	GH 422 10/1M/E	9
R29	220 k	5	Carbon	Erie	GH 425 05/220K	8
R30	220 k	5	Carbon	Erie	GH 425 05/220K	8
RV31	1 M	—	Carbon Variable	Welwyn	MD 790 12	
R33	1·5 M	5	Carbon	Erie	GH 422 05/1M5/E	9
R34	3·3 M	5	Carbon	Erie	GH 422 05/3M3/E	9
R35	470 k	5	Carbon	Erie	GH 422 05/470K/E	9
R36	1 k	5	Carbon	Erie	GH 422 05/1K/E	9
R37	220 k	10	Carbon	Erie	GH 422 10/220K/E	9
R38	3·3 k	10	Carbon	Erie	GH 422 10/3K3/E	9
RV39	10 k	—	Wirewound Variable	Welwyn	MD 790 12	—
R41	115 k	1	Carbon High Stability	Erie	GH 552 01/115K/E	100
R42	4·7 k	10	Carbon	Erie	GH 425 10/4K7	8
R43	27 k	5	Carbon	Erie	GH 426 05/27K	1
R44	33 k	5	Carbon	Erie	GH 426 05/33K	1
R45	10 k	10	Carbon	Erie	GH 422 10/10K/E	9
R46	100 k	10	Carbon	Erie	GH 422 10/100E/E	9
R47	560 k	10	Carbon	Erie	GH 423 50/560K	2
R48	1 M	10	Carbon	Erie	GH 422 10/1M/E	9

Circuit Ref.	Value (Ω)	Tolerance (±%)	Description	Make	Code No.	Type No.
R49	100	10	Carbon	Erie	GH 422 10/100E/E	9
R50	75 k	5	High Stability	Erie	GH 550 05/75K/E	108
R51	560 k	5	High Stability	Erie	GH 550 05/560K	108
RV52	50 k	—	Carbon Variable	Welwyn	MB 790 12	—
R53	180 k	5	High Stability	Erie	GH 550 05/180K/E	108
R54	8·2 k	10	Carbon	Erie	GH 423 50/8K2	2
R55	6·8 k	10	Carbon	Erie	GH 423 50/6K8	2
R56	4·7 k	10	Carbon	Erie	GH 423 50/4K7	2
R57	12 k	5	Carbon	Erie	GH 423 45/12K	2
R58	68	1	High Stability	Erie	GH 550 01/68E/E	108
R59	100 k	10	Carbon	Erie	GH 425 10/100K	8
R60	680	2	Wirewound	Welwyn	GH 031 52/680E	AW 3112
R61	680	2	Wirewound	Welwyn	GH 031 52/680E	AW 3112
R62	10 M	5	Carbon	Erie	GH 422 05/10M/E	9
R64	10 M	5	Carbon	Erie	GH 422 05/10M/E	9
R65	6·8 M	5	Carbon	Erie	GH 422 05/6M8/E	9
R66	20	5	Wirewound	Welwyn	GH 031 25/20E	AW 3111
R67	20	5	Wirewound	Welwyn	GH 031 25/20E	AW 3111
R68	120	2	High Stability	Welwyn	GH 554 02/120E/WS	SA 3635
R69	8·2 k	1	High Stability	Erie	GH 551 01/8K2/E	109
R70	4·3 k	1	High Stability	Erie	GH 551 01/4K3/E	109
R71	2·2 k	1	High Stability	Erie	GH 551 01/2K2/E	109
R72	1·1 k	1	High Stability	Erie	GH 551 01/1K1/E	109
R73	560	1	High Stability	Erie	GH 551 01/560E/E	109
R74	300	1	High Stability	Erie	GH 551 01/300E/E	109
R75	160	1	High Stability	Erie	GH 551 01/160E/E	109
R76	82	1	High Stability	Erie	GH 550 01/82E/E	108
R77	43	1	High Stability	Erie	GH 550 01/43E/E	108
R78	22	1	Wirewound	A. Thomas	GH 435 01/22E	PW 12
R79	11	1	Wirewound	A. Thomas	GH 435 01/11E	AW 12
R80	470 k	5	Carbon	Erie	GH 422 05/470K/E	9
R82	1·2 M	5	Carbon	Erie	GH 422 05/1M2/E	9
R83	3·6 M	5	Carbon	Erie	GH 422 05/3M6/E	9
R84	2·7 M	5	Carbon	Erie	GH 422 05/2M7/E	9
R85	39 k	5	Carbon	Erie	GH 422 05/39K/E	9
R86	1·5 k	10	Carbon	Erie	GH 425 10/1K5	8
R87	150 k	20	Carbon	Erie	GH 425 20/150K	8
R88	150 k	20	Carbon	Erie	GH 425 20/150K	8
R89	100	5	Carbon High Stability	Erie	GH 423 45/100E	2
R90	100	2	High Stability	Welwyn	GH 553 02/100E/WS	SA 3634
R93	18 k	10	Carbon	Erie	GH 425 10/18K	8
R94	2·2 k	10	Carbon	Erie	GH 425 10/2K2	8
R96	470	10	Carbon	Erie	GH 422 10/470E/E	9
R97	470	10	Carbon	Erie	GH 422 10/470E/E	9
R98	600	5	Wirewound	Welwyn	GH 032 05/600E	AW 3192
R99	400	5	Wirewound	Welwyn	GH 032 05/400E	AW 3192
R100	600	5	Wirewound	Welwyn	GH 032 05/600E	AW 3192
R101	400	5	Wirewound	Welwyn	GH 032 05/400E	AW 3192
R102	2·2 M	20	Carbon	Erie	GH 425 20/2M2/E	8
R103	2·2 M	20	Carbon	Erie	GH 425 20/2M2/E	8

Capacitors

Circuit Ref.	Value (μF)	Rating (V d.c.wkng.)	Description	Make	Code No.	Type No.
C1	0·1	500	Paper Tubular	T.C.C.	GH 382 16/100K	543
C2	0·1	500	Paper Tubular	T.C.C.	GH 382 16/100K	543
C3	4	475	Electrolytic	Daly	GB 204 00	G3/15 R.C.S.
C4	4	475	Electrolytic	Daly	GB 204 00	G3/15 R.C.S.
C5	0·1	500	Paper Tubular	T.C.C.	GH 382 16/100K	543
C6	16	350	Electrolytic	T.C.C.	GH 351 58	CE11 LE
C7	0·5	350	Paper Tubular	T.C.C.	GH 382 16/500K	343
C8	16	350	Electrolytic	T.C.C.	GH 351 58	CE11 LE
C9	16	350	Electrolytic	T.C.C.	GH 351 58	CE11 LE
C10	0·1	500	Paper Tubular	T.C.C.	GH 382 16/100K	543
C11	0·25	350	Paper Tubular	T.C.C.	GH 382 16/250K	343
C12	16	350	Electrolytic	T.C.C.	GH 351 58	CE11 LE
C14	0·1	500	Paper Tubular	T.C.C.	GH 382 16/100K	543

Switches

Circuit Ref.	Description	Make	Code No.	Type No.
SW1–10	Rotary 4-Wafer 6-Way	Oak (N.S.F.)	MD 883 36	H
SW11	On gate assembly	—	MD 885 00	—
SW12	Rotary 11-Way S.P.	Oak (N.S.F.)	MD 883 33	H
SW13	On/Off	Bulgin	GB 201 43	S277
SW14	Micro Switch	Burgess	GB 305 07	BRL2
PB1–4	4-Pole Push Button Unit	Oak (N.S.F.)	MD 930 44	80

Valves

Circuit Ref.	Make	Type No.
V1	Mullard	DG7-5 (CRT)
V2	Mullard	EF91
V3	Mullard	EF91
V4	Mullard	EF50
V5	Mullard	EL37
V6	Mullard	GZ33
V7	Mullard	EZ90
V8	Mullard	85A2
V9	Mullard	EY51
V10	Mullard	EY51

Miscellaneous

Circuit Ref.	Description	Make	Code No.
TR1	High Tension	M.E.L.	MD 510 30
TR2	Heater	M.E.L.	MD 510 28
FS1	2-amp. Cartridge Fuse	Bulgin	MR 079 16
RL1	Cut-out Relay	M.E.L.	MD 881 62
LP1	Pilot Lamp (Round)	Philips	GH 900 08