SECTION 12 4705 COMPONENT LISTS

Front Assembly 400558
Digital Assembly 400559
Analog Interface Assembly 400648
Reference Divider Assembly 400652
Reference Assembly 400452
DC Assembly 400536
Sine Source Assembly 400446
AC Assembly 400663
Current / Ohms Assembly 400614
Power Amplifier Assembly 400618
Out-guard Power Supply Assembly 400561
In-guard Power Supply Assembly 400554
±38V Power Supply Assembly 400653
Power Amplifier Positive Heatsink Assembly 400637
Power Amplifier Negative Heatsink Assembly 400539
Power Supply / Current Heatsink Assembly 400540
High Voltage Assembly 400537
Constant Current Source Assembly 400563
Mains (Line) Transformer Assembly 400541
L.F. Transformer Assembly 400651
H.F. Transformer Assembly 400578
Mother Assembly 400604
Interconnection Assembly 400439
Terminal Board Assembly 400640
Main Assembly 400556
Chassis Assembly 400557
Option Fitting Instructions 400603
Rear Panel Assembly 400636
4705 Instrument Assembly 400716

DRAWING No.	CHK'D			
400558	DATE	26.2.86	13.8.86	
	ECO	2162	2361	2384
	REVISION	1·0	1·1	1·2
	ISSUE			

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION		
COMPONENT LAYOUT	480558	1	1·0		
SCHEMATIC	430558	1	1·0	1·1	
SCHEMATIC	430558	2	1·0		
FUNCTIONAL TEST PROC.	460558/FT	1-3	1·0		
FUNCT. TEST TICK LIST	470558/FT	1	1·0		
PCB	410144		10·0		

NOTES

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DRN	CHK'D.	APPD
DATE 14.8.85	DATE 3/3/86	DATE 3.3.86

TITLE 4700 FRONT PCB ASSY.

DRAWING No. 400558 SHEET 1 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000334	330k 5% ¼W CARBON	MULLARD	CR25	22
R2	000334	" " " "	"	"	—
R3	000334	" " " "	"	"	—
R4	000334	" " " "	"	"	—
R5	000334	" " " "	"	"	—
R6	000334	" " " "	"	"	—
R7	000334	" " " "	"	"	—
R8	000334	" " " "	"	"	—
R9	000334	" " " "	"	"	—
R10	000334	" " " "	"	"	—
R11	000334	" " " "	"	"	—
R12	000334	" " " "	"	"	—
R13	000334	" " " "	"	"	—
R14	000334	" " " "	"	"	—
R15	000334	" " " "	"	"	—
R16	000334	" " " "	"	"	—
R17	000334	" " " "	"	"	—
R18	000334	" " " "	"	"	—
R19	000334	" " " "	"	"	—
R20	000334	" " " "	"	"	—
R21	000334	" " " "	"	"	—
R22	000334	" " " "	"	"	—
R23	000102	1k " " "	"	"	11

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

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CHKD												

DATE 7.6.85
DRAWN
CHECKED
APPROVED R.K. COGGAN
DATE 18/6/85

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558 SHEET 2 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R25	000102	1k " " "	"	"	–
R26	000104	100k " " "	"	"	4
R27	000102	1k " " "	"	"	–
R28	000102	1k " " "	"	"	–
R29	000102	1k " " "	"	"	–
R30	000102	1k " " "	"	"	–
R31	000102	1k " " "	"	"	–
R32	000102	1k " " "	"	"	–
R33	000102	1k " " "	"	"	–
R34	000102	1k " " "	"	"	–
R35	000103	10k " " "	"	"	5
R36	000103	10k " " "	"	"	–
R37	000103	10k " " "	"	"	–
R38	000103	10k " " "	"	"	–
R39	000472	4k7 " " "	"	"	6
R40	000680	68R " " "	"	"	8
R41	000680	68R " " "	"	"	–
R42	000680	68R " " "	"	"	–
R43	000272	2k7 " " "	"	"	18
R44	000272	2k7 " " "	"	"	–
R45	000472	4k7 " " "	"	"	–
R46	000272	2k7 " " "	"	"	–

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558

SHEET 3 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000182	1k8 5% 1/3W CARBON	MULLARD	CR25	2
R48	000272	2k7 " " "	"	"	–
R49	000272	2k7 " " "	"	"	–
R50	000222	2k2 " " "	"	"	2
R51	000222	2k2 " " "	"	"	–
R52	000272	2k7 " " "	"	"	–
R53	000272	2k7 " " "	"	"	–
R54	000472	4k7 " " "	"	"	–
R55	000272	2k7 " " "	"	"	–
R56	000272	2k7 " " "	"	"	–
R57	000272	2k7 " " "	"	"	–
R58	000182	1k8 " " "	"	"	–
R59	000272	2k7 " " "	"	"	–
R60	000272	2k7 " " "	"	"	–
R61	000272	2k7 " " "	"	"	–
R62	000272	2k7 " " "	"	"	–
R63	000272	2k7 " " "	"	"	–
R64	000272	2k7 " " "	"	"	–
R65	000272	2k7 " " "	"	"	–
R66	000272	2k7 " " "	"	"	–
R67	000680	68R " " "	"	"	–
R68	000680	68R " " "	"	"	–
R69	000680	68R " " "	"	"	–

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TITLE 4700 FRONT PCB. ASSY

DRAWING NUMBER 400558

SHEET 4 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	000680	68R 5% 1/3W CARBON	MULLARD	CR25	—
R71	000680	68R " " "	"	"	—
R72	000563	56k " " "	"	"	1
R73, R74, R75	000472	4k7 " " "	"	"	—
R76	000103	10k " " "	"	"	—
R77, R78, R79	000104	100k " " "	"	"	—
AN1. AN2	090017	100k x 7 2% NETWORK	BECKMAN	L08-1-R100k	2
AN3. AN4	090041	4k7 x 7 2% NETWORK	BECKMAN	L08-1-R4k7	2
AN5. AN6	090121	100k x 8 2% NETWORK	BECKMAN	L09-1-R100k	2
C1	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	2
C2	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	3
C3	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	—
C4	150001	22µF 20% 16V DIP TANT	UNION CARBIDE	K22E16	1
C5	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	—
C6		NOT USED			—
C7		NOT USED			—
C8	110013	100nF 20% 250V POLYESTER	MULLARD	C280AEP100k	19
C9	110013	" " " "	"	"	—
C10	110013	" " " "	"	"	—
C11	110013	" " " "	"	"	—
C12	110013	" " " "	"	"	—

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TITLE 4700 FRONT PCB ASSY

DRAWING NUMBER 400558 SHEET 5 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C13	110013	100nF 20% 250V POLYESTER	MULLARD	C280AEP100k	—
C14	110013	" " " "	"	"	—
C15	110013	" " " "	"	"	—
C16	110013	" " " "	"	"	—
C17	110013	" " " "	"	"	—
C18	110013	" " " "	"	"	—
C19	110013	" " " "	"	"	—
C20	110013	" " " "	"	"	—
C21	110013	" " " "	"	"	—
C22	110013	" " " "	"	"	—
C23	110013	" " " "	"	"	—
C24	110013	" " " "	"	"	—
C25	110013	" " " "	"	"	—
C26	110013	" " " "	"	"	—
C27	150002	10µF 20% 16V DIP. TANT	UNION CARBIDE	K10E16	—
C28	150016	1µF 20% 35V DIP. TANT	UNION CARBIDE	K1R035	1
D1	200001	75mA 75V GP. Si DIODE	FAIRCHILD	1N4148	18
D2	200001	" " " " "	"	"	—
D3	200001	" " " " "	"	"	—
D4	200001	" " " " "	"	"	—
D5	200001	" " " " "	"	"	—
D6	200001	" " " " "	"	"	—
D7	200001	" " " " "	"	"	—

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558 SHEET 6 OF 11

DESIGNATOR	DATRON PART No	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D8	200001	75mA 75V GP. Si. DIODE	FAIRCHILD	IN4148	—
D9	200001	" " " " "	"	"	—
D10	200001	" " " " "	"	"	—
D11	200001	" " " " "	"	"	—
D12	200001	" " " " "	"	"	—
D13	200001	" " " " "	"	"	—
D14	200001	" " " " "	"	"	—
D15	200001	" " " " "	"	"	—
D16	200001	" " " " "	"	"	—
D17	213005	75V 1/2W ZENER	MOTOROLA	BZX79C75	1
D18	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D19	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D20	213006	5V1 5W ZENER	UNITRODE	TVS 505	1
Q1		NOT USED			—
Q2	240009	Si NPN TRANSISTOR	NATIONAL	MPSL01/TO18	18
Q3	240009	" " "	"	"	—
Q4	240009	" " "	"	"	—
Q5	240009	" " "	"	"	—
Q6	240009	" " "	"	"	—
Q7	240009	" " "	"	"	—
Q8	240009	" " "	"	"	—

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TITLE 4700 FRONT PCB ASSY

DRAWING NUMBER 400558 SHEET 7 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q9	240009	Si NPN TRANSISTOR	NATIONAL	MPSL01/TO18	—
Q10	250009	Si. PNP TRANSISTOR	NATIONAL	2N5401/TO18	11
Q11	250009	" " "	"	"	—
Q12	250009	" " "	"	"	—
Q13	250009	" " "	"	"	—
Q14	250009	" " "	"	"	—
Q15	250009	" " "	"	"	—
Q16	250009	" " "	"	"	—
Q17	250009	" " "	"	"	—
Q18	250009	" " "	"	"	—
Q19	250009	" " "	"	"	—
Q20	250009	" " "	"	"	—
Q21	240025	Si NPN TRANSISTOR	"	MPSA13	4
Q22	240025	" " "	"	"	—
Q23	240025	" " "	"	"	—
Q24	240025	" " "	"	"	—
Q25	250011	Si PNP TRANSISTOR	"	BC327/TO18	8
Q26	250011	" " "	"	"	—
Q27	250011	" " "	"	"	—
Q28	250011	" " "	"	"	—
Q29	250011	" " "	"	"	—
Q30	250011	" " "	"	"	—
Q31	250011	" " "	"	"	—

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558 SHEET 8 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q32	250011	Si PNP TRANSISTOR	NATIONAL	BC327/TO18	—
Q33	240009	Si NPN TRANSISTOR	"	MPSL01/TO18	—
Q34	240009	" " "	"	"	—
Q35	240009	" " "	"	"	—
Q36	240009	" " "	"	"	—
Q37	240009	" " "	"	"	—
Q38	240009	" " "	"	"	—
Q39	240009	" " "	"	"	—
Q40	240009	" " "	"	"	—
Q41	240009	" " "	"	"	—
Q42	240009	" " "	"	"	—
M1	280023	QUAD 2-I/P NOR GATE	MOTOROLA	MC14001 BCP	1
M2	260005	5V 1A REGULATOR	MOTOROLA	MC7805CP	1
M3	280043	4 BIT LATCH/4 TO 16 LINE DECODER	MOTOROLA	MC14515 BCP	1
M4	280090	DUAL BINARY 1 OF 4 DECODER	MOTOROLA	MC14555BCP.	1
M5	270071	DUAL 1 OF 4 DECODER LS	NATIONAL	DM74LS156N	1
M6	280103	PROGRAMMABLE KEYBOARD/DISP	INTEL	8279-5	1

NOTES.

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558 — SHEET 9 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
S1-S27	700079	KEYBOARD x½ SWITCH. BLACK	NSF	K12/HALF KEY. BLACK	28
S29-S43	700061	KEYBOARD SWITCH. RED LED.	SCHADOW	SRL-RED LED	25
S28, S44, S45	700062	KEYBOARD SWITCH GREEN. LED.	SCHADOW	SRL-GREEN LED.	3
S46-S55	700061	KEYBOARD SWITCH. RED LED	SCHADOW	SRL-RED LED	—
S56	700079	KEYBOARD x½ SWITCH. BLACK	NSF	K12/HALF KEY. BLACK	—
	410144-10	PCB			1
J1	604060	24+24 WAY ·1" PCB. PLUG GOLD	AMP	2-825440-4	3
	605098	40 PIN DIL. LOW PROFILE SKT	CAMBION	703-4340-01-06-00	1
	605060	14 WAY DIL. " " "			1
	605061	16 WAY DIL. " " "			2
	605097	24 WAY DIL. " " "	CAMBION	703-4324-01-06-00	1
	612023	STANDOFF M2·5x4 LG. BRASS ⅛" PCB	CAMBION	350-5181-22-07	2
	800017-3	8½ DIGIT DISPLAY WITH LEGEND	DALE	SEE DRG	2
	920096	BUZZER PIEZOELECTRIC	TOKO	PB 2720	1
	620003	SOLDER PCB TERMINAL LUG	HARWIN	H.210SA	2

NOTES.

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TITLE 4700 FRONT PCB. ASSY.

DRAWING NUMBER 400558 — SHEET 10 OF 11

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	611054	M2x6mm SLOT CSK STEEL	ZN PL		2
	611076	M3x6mm SLOT PAN HEAD.	ZN PL.		1
	613005	M3 INT. SHAKEPROOF			1
	613026	M2 WASHER STEEL ZN PL			2
	613027	M2 INT SHAKEPROOF			2
	615002	M3 FULL NUT STEEL ZN PL			1
	615016	M2 FULL NUT STEEL ZN PL			2
	620007	TEST POINT TERMINAL	MICROVAR	C30	9
	630029	TAPE DOUBLE SIDED 1/4" x 1/32"	3M	4032	150mm

NOTES.

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DATE	datron ELECTRONICS LTD
DRAWN	TITLE 4700 FRONT PCB ASSY
CHECKED	
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DATE	DRAWING NUMBER 400558 — SHEET 11 OF 11

DRAWING No. 400559										
		CHK'D	Rkc	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
		DATE	28.2.86	29.5.86	29.5.86	10.7.86	11.8.86	14.11.86	19.11.86	19.11.86
		ECO	2162	2249	2258	2322	2346	2466	2386	2465
		REVISION / ISSUE	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION							
COMPONENT LAYOUT	480559	1	1.0	1.1		1.2			1.3	
SCHEMATIC	430559	1	1.0							
SCHEMATIC	430559	2	1.0							
SCHEMATIC	430559	3	1.0							
SCHEMATIC	430559	4	1.0							
SCHEMATIC	430559	5	1.0							
FUNCTIONAL TEST PROC.	460559/FT	1-7	1.0							
FUNCT. TEST TICK LIST	470559/FT	1	1.0							
PCB	410248	–	1A							

NOTES

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DRN	CHK'D	APP'D	TITLE	DRAWING No.
IL	R.K.COGGAN	[illegible]	4700 DIGITAL PCB. ASSY.	400559
DATE 14.8.85	DATE 4/3/86	DATE 4.3.86		SHEET 1 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000332	3k3 5% 1/4W CARBON	MULLARD	CR25	3
R2	000472	4k7 " " "	"	"	11
R3	000472	4k7 " " "	"	"	–
R4	000472	4k7 " " "	"	"	–
R5	000472	4k7 " " "	"	"	–
R6	000103	10k " " "	"	"	5
R7	000104	100k " " "	"	"	9
R8	000122	1k2 " " "	"	"	2
R9	000104	100k " " "	"	"	–
R10	000104	100k " " "	"	"	–
R11	000103	10k " " "	"	"	–
R12	000472	4k7 " " "	"	"	–
R13	000472	4k7 " " "	"	"	–
R14	000561	560R " " "	"	"	2
R15	000104	100k " " "	"	"	–
R16	000182	1k8 " " "	"	"	1
R17	014751	4k75 1% 1/8W 50ppm MF	HOLCO	H8C	1
R18	000122	1k2 5% 1/4W CARBON	MULLARD	CR25	–
R19	012491	2k49 1% 1/8W 50ppm MF	HOLCO	H8C	1
R20	000102	1k 5% 1/4W CARBON	MULLARD	CR25	21
R21	000472	4k7 " " "	"	"	–
R22	000223	22k " " "	"	"	1
R23	000103	10k " " "	"	"	–

NOTES.

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ISS.	A
E.C.O.	
DATE	11/6/85
CHKD.	R.K.COGGAN

DATE 7.6.85	datron ELECTRONICS LTD
DRAWN IL	TITLE 4700 DIGITAL PCB. ASSY.
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APPROVED R.K. COGGAN DATE 11/6/85	DRAWING NUMBER 400559 SHEET 2 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000332	3k3 5% 1/4W CARBON	MULLARD	CR25	—
R25	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	2
R26	000104	100k 5% 1/4W CARBON	MULLARD	CR25	—
R27	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R28	000471	470R 5% 1/4W CARBON	MULLARD	CR25	3
R29	000104	100k " " "	"	"	—
R30	000472	4k7 " " "	"	"	—
R31	000102	1k " " "	"	"	—
R32	000104	100k " " "	"	"	—
R33	000102	1k " " "	"	"	—
R34	000102	1k " " "	"	"	—
R35	000102	1k " " "	"	"	—
R36	000102	1k " " "	"	"	—
R37	000102	1k " " "	"	"	—
R38	000102	1k " " "	"	"	—
R39	000102	1k " " "	"	"	—
R40	000102	1k " " "	"	"	—
R41	000102	1k " " "	"	"	—
R42	000103	10k " " "	"	"	—
R43	000102	1k " " "	"	"	—
R44	000102	1k " " "	"	"	—
R45	000102	1k " " "	"	"	—
R46	000102	1k " " "	"	"	—

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TITLE 4700. DIGITAL PCB. ASSY.

DRAWING NUMBER 400559

SHEET 3 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R48	000102	1k " " "	"	"	—
R49	000102	1k " " "	"	"	—
R50	000102	1k " " "	"	"	—
R51	000102	1k " " "	"	"	—
R52	000472	4k7 " " "	"	"	—
R53	000104	100k " " "	"	"	—
R54	000104	100k " " "	"	"	—
R55	000103	10k " " "	"	"	—
R56	000471	470R " " "	"	"	—
R57	000471	470R " " "	"	"	—
R58	000102	1k " " "	"	"	—
R59	000391	390R " " "	"	"	1
R60	000472	4k7 " " "	"	"	—
R61	000472	4k7 " " "	"	"	—
R62	000561	560R " " "	"	"	—
R63		NOT USED			—
R64	000332	3k3 " " "	"	"	—

NOTES.

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TITLE 4700 DIGITAL PCB. ASSY.

DRAWING NUMBER 400559

SHEET 4 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN1	090050	3k3 x7 2% NETWORK	BECKMAN	764-1-R3k3	1
AN2	090017	100k x7 2% NETWORK	BECKMAN	764-1-R100k	1
AN3	090046	10k x7 2% NETWORK	BECKMAN	764-1-R10k	2
AN4	090046	10k x7 2% NETWORK	BECKMAN	764-1-R10k	—
AN5	090085	12k x8 2% NETWORK	AB	761-3-12k	1
C1	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	11
C2	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	—

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TITLE 4700 DIGITAL PCB ASSY

DRAWING NUMBER 400559 SHEET 5 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C3	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	14
C4	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C5	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C6	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C7	102681	680pF 10% 500V CER DISC	ITT	CD10	1
C8	150016	1µF 20% 35V DIP. TANT.	UNION CARBIDE	K1R035	3
C9	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C10	150002	10µF 20% 16V DIP. TANT.	UNION CARBIDE	K10E16	—
C11	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C12	150002	10µF 20% 16V DIP. TANT.	UNION CARBIDE	K10E16	—
C13	150002	10µF 20% 16V DIP. TANT.	UNION CARBIDE	K10E16	—
C14	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C15	150002	10µF 20% 16V DIP. TANT.	UNION CARBIDE	K10E16	—
C16	102102	1nF 10% 500V CER DISC	ITT	CD10	1
C17	150002	10µF 20% 16V DIP. TANT	UNION CARBIDE	K10E16	—
C18	150016	1µF 20% 35V DIP. TANT	UNION CARBIDE	K1R035	—
C19	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C20	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C21	150002	10µF 20% 16V DIP. TANT.	UNION CARBIDE	K10E16	—
C22	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C23	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C24	150002	10µF 20% 16V DIP. TANT	UNION CARBIDE	K10E16	—
C25	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—

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TITLE 4700. DIGITAL PCB.ASSY.

DRAWING NUMBER 400559 SHEET 6 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C26	101103	10nF 25% 250V CER DISC	ITT	CD10	2
C27	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	—
C28	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	1
C29	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R035	—
C30	150024	47µF 20% 16V DIP TANT	UNION CARBIDE	K47E16	1
C31	101103	10nF 25% 250V CER DISC	ITT	CD10	—
C32	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	—
C33	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	—
C34	150002	10µF 20% 16V DIP. TANT	UNION CARBIDE	K10E16	—
D1	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	6
D2	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D3	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D4	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D5	210047	4V7 400mW ZENER	MULLARD	BZY88C4V7	1
D6	214012	2V45 30ppm ZENER	FERRANTI	ZN458	1
D7	220010	Si HOT CARRIER DIODE	H.P.	HSCH1001/IN6263	1
D8	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D9	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—

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DRAWING NUMBER 400559 SHEET 7 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D10	213006	5V 5W ZENER	UNITRODE	TVS505	1
Q1	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	2
Q2	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	—
Q3	230031	N-CHAN DUAL JFET	TELEDYNE	SU2656M	1

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TITLE 4700 DIGITAL PCB ASSY

DRAWING NUMBER 400559 SHEET 8 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M1	280024	TRI-STATE HEX. NON-INV. BUFFER	MOTOROLA	MC14503 BCP	4
M2	280024	TRI-STATE HEX. NON-INV. BUFFER	MOTOROLA	MC14503 BCP	—
M3	290122-1	74S188 PROM PROGRAMMED	DATRON (SEE DRG)	SN74S188N (BLUE)	1
M4	270056	8 I/P NAND LS	NATIONAL	DM74LS30N	1
M5	270048	QUAD 2 I/P NAND LS	NATIONAL	DM74LS00N	4
M6	270050	HEX. INVERTER	NATIONAL	74LS04	2
M7	280008	QUAD 2 I/P 'NAND' GATE	MOTOROLA	MC14011 BCP	2
M8	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013BCP	1
M9	280102	14 BIT BINARY COUNTER	MULLARD	HEF 4020 BP	1
M10	280091	UN-BUFFERED TRIPLE 3 I/P NAND	MOTOROLA	MC14023UBCP	1
M11	220015	5kV OPTO ISOLATOR	MOTOROLA	MOC1005	2
M12	280077	HEX. INVERTER	MOTOROLA	MC14572 BCP	1
M13	280033	8-CHAN DATA SELECTOR	MOTOROLA	MC14512 BCP	1
M14	280015	QUAD LATCH	MOTOROLA	MC14076 BCP	2
M15	280015	QUAD LATCH	MOTOROLA	MC14076 BCP	—
M16	280062	8-BIT STATIC RAM	MOTOROLA	MC6810A	1
M17	270048	QUAD 2 I/P NAND GATE	NATIONAL	74LS00	—
M18	———	FITTED AT INSTRUMENT	ASSY.		
M19	———	FITTED AT INSTRUMENT	ASSY.		
M20	———	FITTED AT INSTRUMENT	ASSY.		
M21	———	FITTED AT INSTRUMENT	ASSY.		
M22	280107	2k x 8 STATIC RAM	HITACHI	HM6116P-4	1
M23	280117	2k x 8 STATIC RAM LP	FUJITSU	MB8417-25	1

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APPROVED	DRAWING NUMBER 400559	SHEET 9 OF 12
DATE		

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No USED Per Assy.
M24	270058	DUAL 2 TO 4 LINE DEMUX LS	NATIONAL	DM74LS155N	3
M25	270075	DUAL D FLIP-FLOP LS	NATIONAL	DM74LS74N	1
M26		NOT FITTED			—
M27		NOT USED			—
M28	260043	358 DUAL OP. AMP	NATIONAL	LM358N	1
M29	280064	IEEE 488 INTERFACE CHIP	MOTOROLA	MC68488P	1
M30	280005	TRIPLE GATE	MOTOROLA	MC14501 BCP	1
M31	270045	QUAD 2 TO 1 LINE MUX LS	NATIONAL	DM74LS157N	1
M32	280092	DUAL 4-BIT LATCH	MOTOROLA	MC14508 BCP	1
M33	270048	QUAD 2 I/P NAND LS	NATIONAL	DM74LS00N	—
M34	280144	MICRO-PROCESSOR CHIP	MOTOROLA	MC68025	1
M35	270057	DUAL J-K FLIP-FLOP LS	NATIONAL	DM74LS76N	1
M36	280024	TRI-STATE HEX. NON-INV. BUFFER	MOTOROLA	MC14503 BCP	—
M37	270077	TRI-STATE HEX. BUFFER LS	NATIONAL	DM74LS367	1
M38		NOT USED			—
M39	220015	5kV OPTO ISOLATOR	MOTOROLA	MOC1005	—
M40	280086	BI-DIRECTIONAL BUS TRANSCEIVER	MOTOROLA	MC3447	2
M41	280059	DUAL BINARY UP COUNTER	MOTOROLA	MC14520 BCP	1
M42	280085	QUAD 2 I/P 'AND' GATE	MOTOROLA	MC14081 BCP	4
M43	280085	QUAD 2 I/P 'AND' GATE	MOTOROLA	MC14081 BCP	—
M44	280008	QUAD 2 I/P 'NAND' GATE	MOTOROLA	MC14011 BCP	—
M45	280085	QUAD 2 I/P 'AND' GATE	MOTOROLA	MC14081 BCP	—
M46	280085	QUAD 2 I/P 'AND' GATE	MOTOROLA	MC14081 BCP	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M47	280024	TRI-STATE HEX NON-INV BUFFER	MOTOROLA	MC14503 BCP	—
M48	280086	BI-DIRECTIONAL BUS TRANSCEIVER	MOTOROLA	MC3447	—
M49	270048	QUAD 2 I/P NAND LS	NATIONAL	DM74LS00N	—
M50	270050	HEX. INVERTER	NATIONAL	74LS04	—
M51	270058	DUAL 2 TO 4 LINE DEMUX. LS	NATIONAL	DM74LS155N	—
M52	270058	DUAL 2 TO 4 LINE DE MUX. LS	NATIONAL	DM74LS155N	—
M53	280068	DUAL PRECISION MONOSTABLE	MOTOROLA	MC14538 BCP	1
	605059	8 WAY DIL SOCKET			1
	410248-1A	PCB			1
TP's	540002	22 SWG BTC WIRE			A/R
JL1	604037	PROGRAMMING CLASS 160 PLUG	AUGAT	8136-475G-8	1
	605050	40 WAY DIL LOW PROFILE SKT.			2
	605060	14 WAY DIL SOCKET			16
	605061	16 WAY DIL SOCKET			20
	605064	24 WAY DIL. SOCKET			7
	605066	6 WAY DIL SOCKET			2
	620003	SOLDER PCB. TERMINAL LUG	HARWIN	H210SA	1
	630098	COMPONENT CLIP	RICHCO	KKU-8	1
	630112	CIRCUIT BOARD EJECTOR	RICHCO	CBE BLACK	2
S1	700065	KEYSWITCH 1PIW MOMENT.	LIPA + ISOSTAT	DG	1
	620007	TEST POINT TERMINAL	MICROVAR	C30	21

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DATE	DRAWING NUMBER 400559 — SHEET 11 OF 12

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	618004	MOUNTING PAD TO18	JERMYN	TO18-008D	1
	590004	SLEEVE. PTFE	HELLERMAN ELECTRIC	FE10	A/R
	605065	28 WAY DIL SOCKET			3
	630243	GLASS BEAD 2·4 o/d x 0·8 I/d x 1·8	MANSOL (PREFORMS) LTD	M5363B/3	28
	512999	7/·2 PTFE WIRE WHITE			A/R
	900004	SILICONE RUBBER	RS	555.588	A/R
	602018	EYELET Ø1·6	PACE INC.	1347-0042	2

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DATE	DRAWING NUMBER 400559 — SHEET 12 OF 12

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400648	RCS	4.3.86	2162	1·0	1·0
		8.4.86	2195	1·1	1·1
		21.4.86	2212	1·2	1·2
		13.6.86	2265	1·3	1·3
			2386	1·4	1·4

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION			
COMP. LAYOUT.	480648	1	1·0	1·1	1·1	1·3
SCHEMATIC	430648	1	1·0			
SCHEMATIC	430648	2	1·0	1·1		
SCHEMATIC	430648	3	1·0	1·1		
SCHEMATIC	430648	4	1·0	1·1	1·2	
FUNCTIONAL TEST PROC.	460648/FT		1·0			
FUNCT. TEST TICK LIST	470648/FT	1	1·0			
PCB	410264	1		1·0		

NOTES

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DRN	CHK'D	APPD	TITLE	DRAWING No.
B. JACKSON	R.A. COGGAN		4700	400648
DATE 9/1/86	DATE 10/3/86	DATE 11.7.86	ANALOG. INTERFACE ASSY	SHEET 1 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	008031	100R 5% 1·6 W MF	MULLARD	PR37	2
R2	000472	4k7 5% ¼W CARBON	MULLARD	CR25	8
R3	000472	4k7 5% ¼W CARBON	MULLARD	CR25	—
R4	000472	4k7 5% ¼W CARBON	MULLARD	CR25	—
R5	000472	4k7 5% ¼W CARBON	MULLARD	CR25	—
R6	000472	4k7 5% ¼W CARBON	MULLARD	CR25	—
R7	000474	470k 5% ¼W CARBON	MULLARD	CR25	2
R8	000472	4k7 5% ¼W CARBON	MULLARD	CR25	—
R9	000273	27k 5% ¼W CARBON	MULLARD	CR25	1
R10	000474	470k 5% ¼W CARBON	MULLARD	CR25	—
R11	011212	12k1 1% ⅛W 50ppm MF	HOLCO	H8C	1
R12	012492	24k9 1% ⅛W 50ppm MF	HOLCO	H8C	1
R13	000153	15k 5% ¼W CARBON	MULLARD	CR25	1
R14	000471	470R 5% ¼W CARBON	MULLARD	CR25	8
R15	008031	100R 5% 1·6W MF	MULLARD	PR37	—
R16	000104	100k 5% ¼W CARBON	MULLARD	CR25	1
R17		NOT USED			—
R18		NOT USED			—
R19	000821	820R 5% ¼W CARBON	MULLARD	CR25	1
R20	000471	470R 5% ¼W CARBON	MULLARD	CR25	—
R21	000471	470R 5% ¼W CARBON	MULLARD	CR25	—
R22	000471	470R 5% ¼W CARBON	MULLARD	CR25	—
R23	000471	470R 5% ¼W CARBON	MULLARD	CR25	—

NOTES.

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TITLE 4700. ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 2 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000471	470R 5% 1/4W CARBON	MULLARD	CR25	—
R25	000331	330R 5% 1/4W CARBON	MULLARD	CR25	1
R26	000471	470R 5% 1/4W CARBON	MULLARD	CR25	—
R27	000102	1k 5% 1/4W CARBON	MULLARD	CR25	2
R28	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R29	000561	560R 5% 1/4W CARBON	MULLARD	CR25	4
R30	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R31	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R32	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R33	000103	10k 5% 1/4W CARBON	MULLARD	CR25	1
R34	000154	150k 5% 1/4W CARBON	MULLARD	CR25	1
R35	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
R36	000471	470R 5% 1/4W CARBON	MULLARD	CR25	—
R37	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
AN1	090079	5k6 x 8 2% NETWORK	AB	850-91-5k6	2
AN2	090079	5k6 x 8 2% NETWORK	AB	850-91-5k6	—

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TITLE 4700 ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 3 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	104026	47nF +50/-20 % 50V CER·DISC	SIEMENS	B37449	46
C2	104026	47nF " " " "	"	"	—
C3	104026	47nF " " " "	"	"	—
C4	104026	47nF " " " "	"	"	—
C5	104026	47nF " " " "	"	"	—
C6	104026	47nF " " " "	"	"	—
C7	104026	47nF " " " "	"	"	—
C8	104026	47nF " " " "	"	"	—
C9	100221	220pF 2% 100V CER PLATE	MULLARD	2222 683 221	1
C10	100272	2n7F 10% 100V CER PLATE	MULLARD	2222 630 19272	1
C11	104026	47nF +50/-20 % 50V CER DISC	SIEMENS	B37449	—
C12	104026	47nF " " " "	"	"	—
C13	104026	47nF " " " "	"	"	—
C14	104026	47nF " " " "	"	"	—
C15	104026	47nF " " " "	"	"	—
C16	104026	47nF " " " "	"	"	—
C17	104026	47nF " " " "	"	"	—
C18	104026	47nF " " " "	"	"	—
C19	104026	47nF " " " "	"	"	—
C20	104026	47nF " " " "	"	"	—
C21	104026	47nF " " " "	"	"	—
C22	104026	47nF " " " "	"	"	—
C23	104026	47nF " " " "	"	"	—

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TITLE 4700. ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 4 OF 9

DESIGNATOR	DATRON PART No	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No	No USED Per Assy
C24	104026	47nF +50% -20% 50V CER. DISC	SIEMENS	B37449	–
C25	104026	" " " " "	"	"	–
C26	104026	" " " " "	"	"	–
C27	104026	" " " " "	"	"	–
C28	104026	" " " " "	"	"	–
C29	150016	1µF 20% 35v DIP. TANT	UNION CARBIDE	KIROE35	2
C30	100182	1n8F 10% 100V CER PLATE	MULLARD	2222 630 19182	1
C31	100331	330pF 2% 100V CER PLATE	MULLARD	2222 681 331	2
C32	150012	100nF 20% 35V DIP. TANT	UNION CARBIDE	KR10E35	1
C33	104026	47nF +50% -20% 50V CER. DISC	SIEMENS	B37449	–
C34	104026	" " " " "	"	"	–
C35	104026	" " " " "	"	"	–
C36	104026	" " " " "	"	"	–
C37	104026	" " " " "	"	"	–
C38	104026	" " " " "	"	"	–
C39	102220	22pF 5% 500V CER. DISC	ITT	CD10	1
C40	102330	33pF 5% 500V CER DISC	ITT	CD10	1
C41	104026	47nF +50% -20% 50V CER. DISC	SIEMENS	B37449	–
C42	104026	" " " " "	"	"	–
C43	104026	" " " " "	"	"	–
C44	104026	" " " " "	"	"	–
C45	104026	" " " " "	"	"	–
C46	104026	" " " " "	"	"	–

NOTES

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TITLE 4700. ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 5 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	150024	47µF 20% 16V DIP. TANT	UNION CARBIDE	K47E16	1
C48, 51	104026	47nF +50% -20% 50V CER. DISC	SIEMENS	B37449	–
C49, 52-55, 61	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	–
C50	100331	330pF 2% 100V CER PLATE	MULLARD	2222 681 331	–
C59	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	1
C60	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	KIROE35	–
C62	104041	10nF 25% 250V CER DISC	STC	CD10	1
D1	200001	75mA 75v GP Si DIODE	FAIRCHILD	IN4148	2
D2	200001	75mA 75v GP Si DIODE	FAIRCHILD	IN4148	–
Q1	240014	Si NPN TRANSISTOR	NATIONAL	BC337	1
M1	270050	HEX INVERTER LS	NATIONAL	DM74LS04N	1
M2	280008	QUAD 2 I/P 'NAND' GATE	MOTOROLA	MC14011BCP	1
M3	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013BCP	2
M4	280059	DUAL BINARY UP COUNTER	MOTOROLA	MC14520BCP	1
M5	280037	HEX BUFFER	MOTOROLA	MC14050BCP	1
M6	270048	QUAD 2 I/P 'NAND' LS	NATIONAL	DM74LS00N	2
M7	270072	QUAD 2 I/P 'NOR' LS	NATIONAL	DM74LS02N	2
M8	270002	QUAD 2 I/P O/C NAND	NATIONAL	DM7401N	2
M9	270094	DUAL LINE RECEIVER	TEXAS	SN75182N	1
M10	270076	DUAL MONOSTABLE LS	NATIONAL	DM74LS123N	1
M11	270095	DUAL DECADE COUNTER	NATIONAL	DM74LS390N	2

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TITLE 4700. ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 6 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M12	270072	QUAD 2 I/P 'NOR' LS	NATIONAL	DM74LS02N	—
M13	270055	DUAL 4 I/P 'NAND' LS	NATIONAL	DM74LS20N	1
M14	270075	DUAL D FLIP-FLOP LS	NATIONAL	DM74LS74N	1
M15	280095	4BIT SYNC. BINARY COUNTER	MULLARD	HEF40163BP	3
M16	280095	4BIT SYNC. BINARY COUNTER	MULLARD	HEF40163BP	—
M17	280095	4BIT SYNC. BINARY COUNTER	MULLARD	HEF40163BP	—
M18	270096	DUAL 4 TO 1 MULTIPLEXER	NATIONAL	DM74LS153N	1
M19	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	6
M20	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	—
M21	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	—
M22	270074	TRIPLE 3 I/P 'NOR' LS	NATIONAL	DM74LS27N	3
M23	270074	TRIPLE 3 I/P 'NOR' LS	NATIONAL	DM74LS27N	—
M24	270074	TRIPLE 3 I/P 'NOR' LS	NATIONAL	DM74LS27N	—
M25	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	—
M26	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	—
M27	280093	QUAD EXCLUSIVE-OR GATE	MOTOROLA	MC14070BCP	—
M28	270095	DUAL DECADE COUNTER	NATIONAL	DM74LS390N	—
M29	280068	DUAL PRECISION MONOSTABLE	MOTOROLA	MC14538BCP	1
M30	280145	PHASE LOCKED LOOP	MOTOROLA	MC14046BCP	1
M31	280015	QUAD LATCH	MOTOROLA	MC14076BCP	7
M32	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—
M33	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—
M34	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—

NOTES.

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TITLE 4700. ANALOG INTERFACE PCB. ASSY.

DRAWING NUMBER 400648 SHEET 7 OF 9

DESIGNATOR	DATRON PART No	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No	No. USED Per Assy
M35	270073	QUAD 2 I/P O/C 'AND' LS	NATIONAL	DM74LS09N	2
M36	270073	QUAD 2 I/P O/C 'AND' LS	NATIONAL	DM74LS09N	—
M37	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—
M38	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—
M39	280015	QUAD LATCH	MOTOROLA	MC14076BCP	—
M40	270036	MONOSTABLE	NATIONAL	DM74121N	1
M41	270057	DUAL JK FLIP-FLOP LS	NATIONAL	DM74LS76N	2
M42	270057	DUAL JK FLIP-FLOP LS	NATIONAL	DM74LS76N	—
M43	270048	QUAD 2 I/P NAND LS	NATIONAL	DM74LS00N	—
M44	280094	SYNC^R SERIAL DATA ADAPTOR	MOTOROLA	MC6852P	1
M45	280024	TRI-STATE HEX. NON-INV. BUFFER	MOTOROLA	MC14503BCP	1
M46	270002	QUAD 2 I/P O/C NAND	NATIONAL	DM7401N	—
M47	280038	HEX D FLIP-FLOP	MOTOROLA	MC14174BCP	4
M48	280038	HEX D FLIP-FLOP	MOTOROLA	MC14174BCP	—
M49	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013BCP	—
M50	280105	8 I/P NAND	MOTOROLA	MC14068BCP	1
M51	280038	HEX D FLIP-FLOP	MOTOROLA	MC14174BCP	—
M52	280038	HEX D FLIP-FLOP	MOTOROLA	MC14174BCP	—
M53	270086	4-BIT BINARY COUNTER	NATIONAL	DM74LS93N	1
M54	280023	QUAD 2 I/P NOR GATE	MOTOROLA	MC14001UBCP	1
M55	290149	GEN. PURPOSE TIMER	INTERSIL	ICM7555IPA	1

NOTES

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DRAWING NUMBER 400648 SHEET 8 OF 9

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	410264-1	PCB			1
	605060	14 WAY DIL SOCKET	JERMYN	J23-18014	28
	605061	16 WAY DIL SOCKET	JERMYN	J23-18016	25
	605064	24 WAY DIL SOCKET	JERMYN	J23-18024	1
	630117	CIRCUIT BD EJECTOR	RICHCO	CBE BROWN	2
X1	800029	CRYSTAL OSCILATOR	4·096 MHz IQD	IQXO-100	1
	620007	TEST POINT TERMINAL	MICROVAR	C 30	27
	540002	22 SWG TINNED CU WIRE	RS		A/R
T1	310003	PULSE TRANSFORMER	NEWPORT	76610/1	1
	605059	8 WAY DIL SOCKET			1
	900004	SILICONE RUBBER COMPOUND	RS	555-588	A/R

NOTES.

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TITLE 4700 ANALOG INTERFACE PCB ASSY

DRAWING NUMBER 400648 SHEET 9 OF 9

DRAWING No.	CHK'D	DATE	ECO	REVISION / ISSUE
400652		6.3.86	2162	1·0
		13.6.86	2287	1·1
		12.8.86	2360	2.0
		10.9.86	2386	2.0
		10.9.86	2379	2.1
		4.11.86	2403	2.1

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION					
COMP. LAYOUT.	480652	1	1·0	1·1	2.0	2.0	2.1	
SCHEMATIC	430652	1	1·0	1·1	2.0			
SCHEMATIC	430652	2	1·0		2.0			
SCHEMATIC	430652	3	1·0		2.0			
SCHEMATIC	430652	4	1·0		2.0			
SCHEMATIC	430652	5	1·0		2.0			
SCHEMATIC	430652	6	1·0		2.0			
FUNCTIONAL TEST . PROC.	460652/FT	1-14	1·0		2.0		2.1	
FUNCT- TEST TICK LIST	470652/FT	1-2	1·0		2.0			
PCB	410257		4.0		4.0			

NOTES

☐ INDICATES NO CHANGE TO DOC AT ISSUE LEVEL CHANGE.

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DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	R.K. COGGAN	DT.	4700 REF. DIVIDER PCB ASSY	400652
DATE 12.2.86	DATE 7.3.86	DATE 7.3.86		SHEET 1 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	6
R2	000561	560R 5% 1/4W CARBON	MULLARD	CR25	8
R3	000622	6k2 5% 1/4W CARBON	MULLARD	CR25	4
R4	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R5	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
R6	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
R7	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R8	000272	2k7 5% 1/4W CARBON	MULLARD	CR25	2
R9	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R10	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
R11	000103	10k 5% 1/4W CARBON	MULLARD	CR25	9
R12	000102	1k 5% 1/4W CARBON	MULLARD	CR25	5
R13	000622	6k2 5% 1/4W CARBON	MULLARD	CR25	—
R14	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R15	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R16	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	4
R17	000101	100R 5% 1/4W CARBON	MULLARD	CR25	12
R18 (FSV)	014750	475R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R19	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	—
R20	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R21	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	—
R22	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R23 (FSV)	012261	2k26 1% 1/8W 50ppm MF	HOLCO	H8C	1

NOTES.

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ISS.	2	3	4	5
ECO	1577	1603	1685	1707
DATE	7.2.84	5.4.84	1·8·84	21.9.84
CHKD	MD	MD	MD	MD

DATE	datron ELECTRONICS LTD
12.2.86	
DRAWN IL.	TITLE 4700 REF DIVIDER PCB. ASSY.
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APPROVED	
DATE	DRAWING NUMBER 400652 — SHEET 2 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	—
R25	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R26	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R27	000431	430R 5% 1/4W CARBON	MULLARD	CR25	2
R28	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R29 (FSV)	019538	95R3 1% 1/8W 50ppm MF	HOLCO	H8C	4
R30	000431	430R 5% 1/4W CARBON	MULLARD	CR25	—
R31	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R32	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R33 (FSV)	019538	95R3 1% 1/8W 50ppm MF	HOLCO	H8C	—
R34	000562	5k6 5% 1/4W CARBON	MULLARD	CR25	4
R35	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R36	000622	6k2 5% 1/4W CARBON	MULLARD	CR25	—
R37	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R38	000562	5k6 5% 1/4W CARBON	MULLARD	CR25	—
R39	000562	5k6 5% 1/4W CARBON	MULLARD	CR25	—
R40	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R41	000622	6k2 5% 1/4W CARBON	MULLARD	CR25	—
R42	000561	560R 5% 1/4W CARBON	MULLARD	CR25	—
R43	000562	5k6 5% 1/4W CARBON	MULLARD	CR25	—
R44	000202	2k0 5% 1/4W CARBON	MULLARD	CR25	2
R45	000222	2k2 5% 1/4W CARBON	MULLARD	CR25	3
R46	014320	432R 1% 1/8W 50ppm MF	HOLCO	H8C	4

NOTES.

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ISS												
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TITLE 4700 REF. DIVIDER PCB. ASSY.

DRAWING NUMBER 400652 SHEET 3 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R48 (FSV)	019538	95R3 1% 1/8W 50ppm MF	HOLCO	H8C	—
R49	014320	432R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R50	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R51	014320	432R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R52	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R53 (FSV)	019538	95R3 1% 1/8W 50ppm MF	HOLCO	H8C	—
R54	014320	432R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R55	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R56	000474	470k 5% 1/4W CARBON	MULLARD	CR25	1
R57	000184	180k 5% 1/4W CARBON	MULLARD	CR25	1
R58	013742	37k4 1% 1/8W 50ppm MF	HOLCO	H8C	1
R59	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R60	000338	3R3 5% 1/4W CARBON	MULLARD	CR25	1
R61	000104	100k 5% 1/4W CARBON	MULLARD	CR25	2
R62	018872	88k7 1% 1/8W 50ppm MF	HOLCO	H8C	1
R63	017872	78k7 1% 1/8W 50ppm MF	HOLCO	H8C	2
R64	070144	36k0 ·01% 5ppm WW	MANN	MX125B	1
R65	070142	12k0 ·01% 5ppm WW	MANN	MX125B	2
R66	017872	78k7 1% 1/8W 50ppm MF	HOLCO	H8C	—
R67	000912	9k1 5% 1/4W CARBON	MULLARD	CR25	1
R68		NOT USED			—
R69		NOT USED			—

NOTES.

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DRAWING NUMBER 400652 SHEET 4 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70		NOT USED			—
R71		NOT USED			—
R72	000682	6k8 5% 1/4W CARBON	MULLARD	CR25	1
R73	000272	2k7 5% 1/4W CARBON	MULLARD	CR25	—
R74	000470	47R 5% 1/4W CARBON	MULLARD	CR25	3
R75	011183	118k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R76	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	4
R77	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	—
R78	012672	26k7 1% 1/8W 50ppm MF	HOLCO	H8C	1
R79	080032	78k7 ·1% 1W 10ppm MF	VISHAY	VS3C5	1
R80	070143	16k0 ·01% 5ppm WW	MANN	MX125B	1
R81	070142	12k0 ·01% 5ppm WW	MANN	MX125B	—
R82		NOT USED			—
R83		NOT USED			—
R84	012212	22k1 1% 1/8W 50ppm MF	HOLCO	H8C	2
R85 (FSV)	013162	31k6 1% 1/8W 50ppm MF	HOLCO	H8C	1
R86	000102	1k 5% 1/4W CARBON	MULLARD	CR25	—
R87		NOT USED			—
R88		NOT USED			—
R89		NOT USED			—
R90	000104	100k 5% 1/4W CARBON	MULLARD	CR25	—
R91	011182	11k8 1% 1/8W 50ppm MF	HOLCO	H8C	1
R92	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	—

NOTES.

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TITLE 4700 REF. DIVIDER PCB. ASSY.

DRAWING NUMBER 400652 SHEET 5 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R93	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	—
R94	014532	45k3 1% 1/8W 50ppm MF	HOLCO	H8C	1
R95	011402	14k0 1% 1/8W 50ppm MF	HOLCO	H8C	1
R96	019531	9k53 1% 1/8W 50ppm MF	HOLCO	H8C	1
R97		NOT USED			—
R98	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	4
R99	070156	555k41 ·01% 5ppm WW	MANN	AX175B	1
R100	070145	475R ·01% 5ppm WW	MANN	AX175B	1
R101	012212	22k1 1% 1/8W 50ppm MF	HOLCO	H8C	—
R102	000473	47k 5% 1/4W CARBON	MULLARD	CR25	4
R103	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R104	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R105	000472	4k7 5% 1/4W CARBON	MULLARD	CR25	—
R106	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R107	000393	39k 5% 1/4W CARBON	MULLARD	CR25	4
R108	012001	2k00 1% 1/8W 50ppm MF	HOLCO	H8C	4
R109	011302	13k0 1% 1/8W 50ppm MF	HOLCO	H8C	4
R110	012001	2k00 1% 1/8W 50ppm MF	HOLCO	H8C	—
R111	000393	39k 5% 1/4W CARBON	MULLARD	CR25	—
R112	011302	13k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R113	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R114	000101	100R 5% 1/4W CARBON	MULLARD	CR25	—
R115	000470	47R 5% 1/4W CARBON	MULLARD	CR25	—

NOTES.

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TITLE 4700 REF DIVIDER PCB. ASSY.

DRAWING NUMBER 400652 SHEET 6 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C48	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C49	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C50	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C51	140051 *	10nF 20% 400V POLYPROP	WIMA	MKP10	1
C52	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	2
C53	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C54	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	4
C55	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C56	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	3
C57	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	—
C58	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	—
C59	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C60		NOT USED			—
C61	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C62	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C63	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E35	—
C64	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E35	—
C65	102221	220pF 10% 500V CER DISC	ITT	CD10	2
C66	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C67	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C68	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	—
C69	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	—

NOTES. * ALTERNATIVE 140044 STEATITE MKP1841.

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C70	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	—
C71	110030	1nF 20% 100V POLYESTER	WIMA	FKS2	—
C72	110030	1nF 20% 100V POLYESTER	WIMA	FKS2	—
C73	102221	220pF 10% 500V CER DISC	ITT	CD10	—
C74	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C75	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	—
C76	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—

NOTES.

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	210027	2V7 400mW ZENER	MULLARD	BZY88C2V7	4
D2	210120	12V 400mW ZENER	MULLARD	BZY88C12	1
D3	210027	2V7 400mW ZENER	MULLARD	BZY88C2V7	—
D4	210043	4V3 400mW ZENER	MULLARD	BZY88C4V3	1
D5	210027	2V7 400mW ZENER	MULLARD	BZY88C2V7	—
D6	210027	2V7 400mW ZENER	MULLARD	BZY88C2V7	—
D7	213009	15V 5W ZENER	UNITRODE	TVS515	5
D8	213009	15V 5W ZENER	UNITRODE	TVS515	—
D9	213009	15V 5W ZENER	UNITRODE	TVS515	—
D10	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	1
D11	213009	15V 5W ZENER	UNITRODE	TVS515	—
D12		NOT USED			—
D13		NOT USED			—
D14	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	2
D15	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	—
D16		NOT USED			—
D17		NOT USED			—
D18	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	9
D19	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D20	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D21	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D22	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D23	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D24	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	—
D25	213006	5V 5W ZENER	UNITRODE	TVS505	1
D26	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D27	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D28	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D29	213009	15V 5W ZENER	UNITRODE	TVS515	—
D30	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R116	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	—
R117		NOT USED			—
R118	006132	1k30 2% 1W MET-OX	ELECTROSIL	FP1	2
R119	006132	1k30 2% 1W MET-OX	ELECTROSIL	FP1	—
R120	000103	10k 5% 1/4W CARBON	MULLARD	CR25	—
R121	000473	47k 5% 1/4W CARBON	MULLARD	CR25	—
R122	000823	82k 5% 1/4W CARBON	MULLARD	CR25	1
R123	000473	47k 5% 1/4W CARBON	MULLARD	CR25	—
R124	000152	1K5 5% 1/4W CARBON	MULLARD	CR25	2
R125	011002	10KO 1% 1/8W 50ppm MF	HOLCO	H8C	—
R126	011002	10KO 1% 1/8W 50ppm MF	HOLCO	H8C	—
R127	011002	10KO 1% 1/8W 50ppm MF	HOLCO	H8C	—
R128	012001	2k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R129	011302	13k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R130	012001	2k 1% 1/8W 50ppm. MF	HOLCO	H8C	—
R131	011302	13k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R132	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R133	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	—
R134	000821	820R 5% 1/3W CARBON	MULLARD	CR25	2
R135	000821	820R 5% 1/3W CARBON	MULLARD	CR25	—
R136	000393	39k 5% 1/3W CARBON	MULLARD	CR25	—
R137	000393	39k 5% 1/3W CARBON	MULLARD	CR25	—
R138	000220	22R. 5% 1/3W CARBON	MULLARD	CR25	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R139	000220	22R 5% 1/3W CARBON	MULLARD	CR25	—
R140	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	—
R141	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R142	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R143	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R144	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R145	000202	2k 5% 1/3W CARBON	MULLARD	CR25	—
R146	000303	30k 5% 1/3W CARBON	MULLARD	CR25	1
R147	000155	1M5 5% 1/3W CARBON	MULLARD	CR25	1
R148	000273	27K 5% 1/3W CARBON	MULLARD	CR25	1
AN1	090031	1k x7 2% NETWORK	BECKMAN	L08-1-R1k	1
AN2	090096	1M x8 2% NETWORK	BECKMAN	L09-1-R1M	2
AN3	090096	1M x8 2% NETWORK	BECKMAN	L09-1-R1M	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	23
C2	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C3	150003	47µF 20% 6V3 DIP TANT	UNION CARBIDE	K47E6V3	1
C4	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	1
C5		NOT USED			—
C6	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C7	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	4
C8	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C9	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C10	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C11	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C12	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C13	102101	100pF 10% 500V CER DISC	ITT	CD10	1
C14	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C15	110013	100nF 20% 250V POLYESTER	MULLARD	C280AE P100k	2
C16	110013	100nF 20% 250V POLYESTER	MULLARD	C280AE P100k	—
C17	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C18	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C19	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C20	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C21	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C22	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C23	140016	470nF 10% 250V POLYPROP	RIFA	PHE402 HFK	10

NOTES.

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C24	102470	47pF 5% 500V CER DISC	ITT	CD10	3
C25	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C26	102470	47pF 5% 500V CER DISC	ITT	CD10	—
C27	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C28		NOT USED			—
C29	140016	470nF 10% 250V POLYPROP	RIFA	PHE402HFK	—
C30	102470	47pF 5% 500V CER DISC	ITT	CD10	—
C31	140016	470nF 10% 250V POLYPROP	RIFA	PHE402HFK	—
C32	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C33	150020	10µF 20% 25V DIP. TANT.	UNION CARBIDE	K10E25	8
C34	180015	470µF 25V AL. ELECT.	MULLARD	017-16471	1
C35	150020	10µF 20% 25V DIP. TANT.	UNION CARBIDE	K10E25	—
C36		NOT USED			—
C37		NOT USED			—
C38	110030	1nF 20% 100V POLYESTER	WIMA	FKS2	3
C39	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C40	102270	27pF 5% 500V CER DISC	ITT	CD10	2
C41	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C42	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C43	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C44	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—
C45	102270	27pF 5% 500V CER DISC	ITT	CD10	—
C46	140016	470nF 10% 250V POLYPROP	RIFA	PHE 402 HFK	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q1	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	13
Q2	240006	Si NPN "	NATIONAL	2N3904/TO18	14
Q3	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q4	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q5	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q6	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q7	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q8	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q9	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q10	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q11	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q12	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q13		NOT USED			—
Q14		NOT USED			—
Q15		NOT USED			—
Q16		NOT USED			—
Q17		NOT USED			—
Q18		NOT USED			—
Q19	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q20	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q21	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q22	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q23	250004	Si PNP "	NATIONAL	2N3906/TO18	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q24	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q25	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q26	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q27	240006	Si NPN "	NATIONAL	2N3904/TO18	—
Q28	250004	Si PNP "	NATIONAL	2N3906/TO18	—
Q29	230039	P-CHAN JFET	SILICONIX	J175	2
Q30	230039	P-CHAN JFET	SILICONIX	J175	—
Q31	230038	N-CHAN JFET	SILICONIX	J112	1
Q32 *	239037-1	N-CHAN JFET SEL SET	DATRON (SEE DRG)	J108 (COLOUR)	1 SET OF 4
Q33	230048	P-CHAN JFET	TELEDYNE	J174	2
Q34 *	239037-1	N-CHAN JFET SEL SET	DATRON (SEE DRG)	J108 (COLOUR)	—
Q35 *	239037-1	N-CHAN JFET SEL SET	DATRON (SEE DRG)	J108 (COLOUR)	—
Q36	230048	P-CHAN JFET	TELEDYNE	J174	—
Q37 *	239037-1	N-CHAN JFET SEL SET	DATRON (SEE DRG)	J108 (COLOUR)	—
Q38		NOT USED			—
Q39		NOT USED			—
Q40	250004	Si PNP	NATIONAL	2N3906/TO18	—
Q41	230031	N-CHAN DUAL JFET	TELEDYNE	SU2656M	4
Q42	230031	N-CHAN DUAL JFET	TELEDYNE	SU2656M	—
Q43	250004	Si PNP	NATIONAL	2N3906/TO18	—
Q44	230031	N-CHAN DUAL JFET	TELEDYNE	SU2656M	—
Q45	240006	Si NPN	NATIONAL	2N3904/TO18	—
Q46	230042	N-CHAN CURRENT LIM. 3mA	TELEDYNE	TCR 510	2

NOTES. * THESE 4 FETS MUST HAVE THE SAME COLOUR CODING

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SIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
47	230042	N-CHAN CURRENT LIM 3mA	TELEDYNE	TCR510	—
48	250021	Si PNP TRANSISTOR	MOTOROLA	BD140	1
49	240031	Si NPN TRANSISTOR	MOTOROLA	BD139	1
50		NOT USED			—
51	230031	N-CHAN DUAL JFET	TELEDYNE	SU2656M	—
52	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
53	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M1	220027	HIGH CMR OPTO ISOL.	HP	HCPL-2601 (5082-4361)	7
M2		NOT USED			—
M3	220027	HIGH CMR OPTO ISOL	HP	HCPL-2601 (5082-4361)	—
M4	220017	2k5V DUAL OPTO ISOLATOR	FAIRCHILD	FCD 880	1
M5		NOT USED			—
M6	220027	HIGH CMR OPTO ISOL.	HP	HCPL-2601 (5082-4361)	—
M7	220027	HIGH CMR OPTO ISOL.	HP	HCPL-2601 (5082-4361)	—
M8	220027	HIGH CMR OPTO ISOL.	HP	HCPL-2601 (5082-4361)	—
M9	220027	HIGH CMR OPTO ISOL	HP	HCPL-2601 (5082-4361)	—
M10	280068	DUAL PRECISION MONOSTABLE	MOTOROLA	MC14538 BCP	1
M11	280037	HEX BUFFER	MOTOROLA	MC14050BCP	1
M12	260025	101 OP AMP	NATIONAL	LM101AH	3
M13	280011	DUAL-D FLIP FLOP	MOTOROLA	MC14013BCP	2
M14	280009	HEX INVERTER/BUFFER	MOTOROLA	MC14049BCP	1
M15	280089	8 BIT SHIFT REGISTER	MOTOROLA	MC14094BCP	6
M16	260025	101 OP AMP	NATIONAL	LM101AH	—
M17		NOT USED			—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M18	280088	8BIT STATIC SHIFT REGISTER	MOTOROLA	MC14021BCP	2
M19	280089	8 BIT STATIC SHIFT REGISTER	MOTOROLA	MC14094BCP	—
M20	260025	101 OP AMP	NATIONAL	LM101AH	—
M21		NOT USED			—
M22	280088	8BIT STATIC SHIFT REGISTER	MOTOROLA	MC14021 BCP	—
M23	260027	714 OP AMP	FAIRCHILD	μA714HC	5
M24	280023	QUAD 2I/P NOR GATE	MOTOROLA	MC14001 BCP	1
M25	280089	8BIT STATIC SHIFT REGISTER	MOTOROLA	MC14094 BCP	—
M26	260057	5534 OP AMP	SIGNETICS	NE5534N	2
M27	280089	8BIT STATIC SHIFT REGISTER	MOTOROLA	MC14094 BCP	—
M28	260057	5534 OP AMP	SIGNETICS	NE5534N	—
M29	290090	7X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2002A/XR2202CP	1
M30	280089	8 BIT STATIC SHIFT REGISTER	MOTOROLA	MC14094 BCP	—
M31	280089	8BIT STATIC SHIFT REGISTER	MOTOROLA	MC14094 BCP	—
M32	260027	714 OP AMP	FAIRCHILD	μA714HC	—
M33	260053	7650 OP AMP	INTERSIL	ICL7650CPD	2
M34	260027	714 OP AMP	FAIRCHILD	μA714HC	—
M35	260027	714 OP AMP	FAIRCHILD	μA714HC	—
M36	280106	HEX LEVEL SHIFTER	MOTOROLA	MC14504BCP	1
M37	280011	DUAL D FLIP FLOP	MOTOROLA	MC14013BCP	—
M38	260053	7650 OP AMP	INTERSIL	ICL7650CPD	—
M39	260027	714 OP AMP	FAIRCHILD	μA714HC	—
M40	220027	HIGH CMR OPTO ISOL.	HP	HCPL-2601 (5082-4361)	—
M41	290149	CMOS 555 TIMER	INTERSIL	ICM7555 IPA	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
RL1	330030	RELAY 4P N/O	SDS	S4 24V	2
RL2	330030	RELAY 4P N/O	SDS	S4 24V	—
RL3		NOT USED			—
L1-L9	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	9
T1-T5	310002-2	PULSE Tx	NEWPORT	76616/4HV	5
S1	700070	SLIDE SWITCH. EXTRA HI. LEVER	APR	25446A H6	1
	400452A-7	REF PCB ASSY			1
	410257-4	PCB			1
	540002	22SWG BTC WIRE			A/R
	590004	Ø1·0 PTFE SLEEVE			A/R
	602001	FSV TERMINAL	MOLEX	02-04-5114	14
	605059	8WAY DIL. SOCKET			11
	605060	14WAY DIL. SOCKET			5
	605061	16 WAY DIL. SOCKET			13
	611016	SCREW M3x8mm STEEL POZI-PAN ZINC PLATED	GKN		2
	604053	4 WAY ·1" PCB PLUG GD. PL.	MOLEX	4030-04AG (·825" PINS)	2
	612025-1	STANDOFF M3x5mm BRASS	DATRON	SEE DRAWING.	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
ECO													
DATE													
CHKD.													

DATE 12.2.86
DRAWN
CHECKED
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DATE

datron ELECTRONICS LTD

TITLE 4 00 REF. DIVIDER PCB. ASSY.

DRAWING NUMBER 400652 SHEET 20 OF 21

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	613029	M3 CRINKLE WASHER SS.			2
	630024	STANDARD STEATITE INS. BEAD	PARK ROYAL PORCELAIN CO	TYPE No2 (16SWG)	16
	630118	CIRCUIT BOARD EJECTOR	RICHCO	CBE RED	2
	620007	TEST POINT TERMINAL	MICROVAR	C30	32
	630243	GLASS BEAD 2.4%D x 0.8%	MANSOL (PREFORMS) LTD.	M5363B/3	46
	900004	SILICONE RUBBER COMPOUND.	RS.	555-588	A/R.

NOTES.

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ISS.													
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DATE													
CHKD													

DATE 12.2.86	datron ELECTRONICS LTD
DRAWN	TITLE 4700 REF. DIVIDER PCB. ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400652 — SHEET 21 OF 21

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400452 400452A	MD	21.8.85	1988 2326	7.0 7.1	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION
COMPONENT LAYOUT	480452 480452A	1	7.0
SCHEMATIC	430452 430452A	1	7.0.
FUNCTIONAL TEST PROC.	460452/FT	1-4	7.0
FUNCTIONAL TEST PROC	460452A/FT	1-4	7.0
FUNCT. TEST TICK LIST	470452/FT	1	7.0
FUNCT. TEST TICK LIST	470452A/FT	1	7.0

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No
IL.	MD		4000/4000A REF. PCB. ASSY	400452 400452A
DATE 21.8.85	DATE 11.9.85	DATE		SHEET 1 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	090014-2	50K ·02%R 2ppmR W.W.	MANN	AX175B	1 SET
R2	090014-2	9K995 ·02%R 2ppmR W.W	MANN	AX175B	
R3		PART OF KIT DI-4 D6-9	MANN	AX175B	-
R4		PART OF KIT DI-4 D6-9	MANN	AX175B	-
R5	018251	8K25 1% 1/8W 50ppm MF	HOLCO	HBC	1
R6	000470	47R 5% 1/4W CARBON	MULLARD	CR25	2
R7	070152	68R ·1% 10ppm W.W	MANN	MX125	2
R8	070152	68R ·1% 10ppm W.W	MANN	MX125	-
R9	070153	34R ·1% 10ppm W.W.	MANN	MX125	2
R10	070153	34R ·1% 10ppm W.W.	MANN	MX125	-
R11	011698	16R9 1% 1/8W 50ppm MF	HOLCO	HBC	2
R12	011698	16R9 1% 1/8W 50ppm MF	HOLCO	HBC	-
R13	050056	10R ·25% 1/8W 50ppm MF	HOLCO	HBC	2
R14	050056	10R ·25% 1/8W 50ppm MF	HOLCO	HBC	-
R15	000438	4R3 5% 1/4W CARBON	MULLARD	CR25	2
R16	000438	4R3 5% 1/4W CARBON	MULLARD	CR25	-
R17	018459	8R45 1% 1/8W 50ppm MF	HOLCO	HBC	2
R18	018459	8R45 1% 1/8W 50ppm MF	HOLCO	HBC	-
R19	090081	2K NTC THERMISTOR	RHOPOINT	MSB 202K	1
R20	006751	750R 2% 1W MET·OX	ELECTROSIL	FPI	1
R21	000470	47R 5% 1/4W CARBON	MULLARD	CR25	-
R22	000222	2K2 5% 1/4W CARBON	MULLARD	CR25	1
R23	015231	5K23 1% 1/8W 50ppm MF	HOLCO	HBC	2

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4	5	6	7
E.C.O.	RELEASED	1367	1432	1445	1492	1685	1760
DATE	22.9.82	23.8.82	15.12.82	15.2.83	7.6.83	1.8.84	15.11.84
CHKD.	MJD.	MJD.	MJD.	MD	MD	MD	MD

DATE	datron ELECTRONICS LTD	
15th FEB 83		
DRAWN B JACKSON	TITLE 4000/4000A REFERENCE PCB ASSY	
CHECKED MD		
APPROVED	DRAWING NUMBER 400452 400452A	SHEET 2 OF 5
DATE 21.2.83.		

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	090099-3	25K			
R25	090099-3	10K ATTEN SET	MANN	SEE DRG A4	1 SET
R26	090099-3	10K			
R27	000125	1M2 5% 1/4W CARBON	MULLARD	CR25	1
R28	012263	226K 1% 1/8W 50ppm MF	HOLCO	H8C	2
R29	063104	100K POT 3/8" SQ CERMET	BECKMAN	72P	1
R30	012003	200K 1% 1/8W 50ppm MF	HOLCO	H8C	1
R31	015231	5K23 1% 1/8W 50ppm MF	HOLCO	H8C	–
R32	012263	226K 1% 1/8W 50ppm MF	HOLCO	H8C	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 15th FEB 83	datron ELECTRONICS LTD
DRAWN B. JACKSON	TITLE 4000/4000A REFERENCE PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400452 400452A — SHEET 3 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	102470	47pF 5% 500V CER DISC	ITT	CD10	1
C2	102221	220pF 10% 500V CER DISC	ITT	CD10	1
C3	104026	47nF +50% -20% 500V CER DISC	SIEMENS	B37449	1
D1,2,3,4,6,7,8,9.	219015-4	6V2 X 8 ZENER + RESISTOR X2	DATRON	INB29AX8 + AX1758X2.	1 KIT
D5	200008	200mA 125V LL Si DIODE	FAIRCHILD	1N458A	1
Q1	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO18	2
Q2	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO18	–
M1	260025	101 OP AMP	NATIONAL	LM101AH	1
M2	260027	714 OP AMP	FAIRCHILD	μA714HC	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
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CHKD.													

DATE 18 MAR 82	datron ELECTRONICS LTD
DRAWN B. JACKSON	TITLE 4000/4000A REFERENCE PCB ASSY.
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400452 400452A — SHEET 4 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
TP1-4	604056	4 WAY ·1" PCB PLUG GD PL	MOLEX	22-10-2041	1
J1	605085	4 WAY PCB SOCKET	MOLEX	22-17-2042	2
J2	605085	4 WAY PCB SOCKET	MOLEX	22-17-2042	–
	410162-6	PRINTED CIRCUIT BOARD			1
	450372-3	HEATSINK BLOCK			1
	450373-3	HEATSINK PLATE			1
	540002	22 SWG TINNED COPPER WIRE			A/R
	611004	M3X6mm POZIPAN STEEL	ZN PL		2
	611007	M3X6mm POZI-CSK STEEL	ZN PL		2
	611037	M3X8mm HEX NYLON SCREW			1
	613029	M3 CRINKLE WASHER SS			2
	900003	HEATSINK COMPOUND	RS	554-311	A/R

NOTES.

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ISS													
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DATE 18th MAR 82	datron ELECTRONICS LTD
DRAWN B. JACKSON	TITLE 4000/4000A REFERENCE PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400452 400452A — SHEET 5 OF 5

DRAWING No. 400536

		CHK'D	RKC															
		DATE	17.3.86	10.4.86	15.4.86	17.4.86	18.4.86	18.4.86	18.4.86	1.5.86	16.5.86	3.6.86	23.6.86	25.6.86	8.8.86	13.8.86	20.8.86	
		ECO	2162	2180	2208	2216	2221	2222	2223	2239	2229	2275	2303	2256	2355	2307	2244	2386
		REVISION / ISSUE	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	2.0	2.1	2.2	2.3	3.0	3.1
DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION															
COMPONENT LAYOUT	480536	1	1.0		1.1		1.2	1.3	1.4	1.5	1.6	1.7	2.0		2.1		3.0	
SCHEMATIC	430536	1	1.0 1.0				1.1			1.2			2.0 2.0		2.1		3.0	
SCHEMATIC	430536	2	1.0 1.0		1.1								2.0 2.0		2.1		3.0 3.0	
SCHEMATIC	430536	3	1.0 1.0										2.0 2.0				3.0 3.0	
SCHEMATIC	430536	4	1.0 1.0				1.1						2.0 2.0				3.0 3.0	
FUNCTIONAL TEST PROC.	460536/FT	ALL	1.0										2.0				3.0	
FUNC. TEST TICK LIST	470536/FT	ALL	1.0										2.0				3.0	
P.C.B.	410258	1	1.0										1.0				2.0	

NOTES

☐ INDICATES NO CHANGE TO DOC AT ISSUE LEVEL CHANGE.

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
IL	R.K. COGGAN		4700 DC. PCB. ASSY.	400536
DATE 6.3.86	DATE 18/3/86	DATE 18.3.86		SHEET 1 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000274	270k 5% 1/3W CARBON			2
R2	000472	4k7 5% 1/3W CARBON			3
R3	000274	270k 5% 1/3W CARBON			—
R4	019091	9k09 1% 1/8W 50ppm MF	HOLCO	H8C	3
R5	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	3
R6	000472	4k7 5% 1/3W CARBON			—
R7	014992	49k9 1% 1/8W 50ppm MF	HOLCO	H8C	1
R8	012212	22k1 1% 1/8W 50ppm MF	HOLCO	H8C	1
R9	014322	43k2 1% 1/8W 50ppm MF	HOLCO	H8C	1
R10	012742	27k4 1% 1/8W 50ppm MF	HOLCO	H8C	3
R11	012742	27k4 1% 1/8W 50ppm MF	HOLCO	H8C	—
R12	000133	13k 5% 1/3W CARBON			2
R13	012742	27k4 1% 1/8W 50ppm MF	HOLCO	H8C	—
R14	000105	1M 5% 1/3W CARBON			2
R15	041005	10M0 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	10
R16	041005	10M0 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	—
R17	090157-1	6M ATTEN. SET		SEE DRG	1
R18	000105	1M 5% 1/3W CARBON			—
R19	000244	240k 5% 1/3W CARBON			1
R20	000104	100k 5% 1/3W CARBON			4
R21	000103	10k 5% 1/3W CARBON			5
R22	000164	160k 5% 1/3W CARBON			1
R23	000104	100k 5% 1/3W CARBON			—

NOTES.

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DATE 27.2.86	datron ELECTRONICS LTD
DRAWN IL.	TITLE 4700 DC.PCB. ASSY.
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400536 — SHEET 2 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000104	100k 5% 1/3W CARBON			—
R25	041005	10M0 1% 1/8W 100ppm CF	ALLEN BRADLEY	CC	—
R26	041005	10M0 1% 1/8W 100ppm CF	ALLEN BRADLEY	CC	—
R27	090157-1	6M ATTEN. SET		SEE DRG.	—
R28	090159-1	1k/111R11 ATTEN SET		SEE DRG.	1
R29		NOT USED			—
R30	045623	562k 1% 1/8W 50ppm MF	ALLEN BRADLEY	CC	2
R31	017500	750R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R32	045623	562k 1% 1/8W 50ppm MF	ALLEN BRADLEY	CC	—
R33	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	2
R34	000153	15k 5% 1/3W CARBON			2
R35	000153	15k 5% 1/3W CARBON			—
R36	000472	4k7 5% 1/3W CARBON			—
R37	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	2
R38	011001	1k00 1% 1/8W 50ppm MF	HOLCO	H8C	—
R39	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	—
R40	000272	2k7 5% 1/3W CARBON			1
R41	000273	27k 5% 1/3W CARBON			1
R42	000155	1M5 5% 1/3W CARBON			1
R43	041005	10M0 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	—
R44	041005	10M0 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	—
R45	090157-1	6M ATTEN. SET		SEE DRG.	—
R46	000103	10k 5% 1/3W CARBON			—

NOTES.

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DATE 25.2.86
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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 3 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000202	2k0 5% 1/3W CARBON			2
R48	000183	18k 5% 1/3W CARBON			1
R49	011651	1k65 1% 1/8W 50ppm MF	HOLCO	H8C	1
R50	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R51	018450	845R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R52	012002	20k 1% 1/8W 50ppm MF	HOLCO	H4C	1
R53	012491	2k49 1% 1/8W 50ppm MF	HOLCO	H8C	1
R54	000202	2k0 5% 1/3W CARBON			—
R55	012611	2k61 1% 1/8W 50ppm MF	HOLCO	H8C	1
R56	011008	10R0 1% 1/8W 50ppm MF	HOLCO	H8C	1
R57	000104	100k 5% 1/3W CARBON			—
R58	000102	1k 5% 1/3W CARBON			2
R59	012261	2k26 1% 1/8W 50ppm MF	HOLCO	H8C	2
R60	012261	2k26 1% 1/8W 50ppm MF	HOLCO	H8C	—
R61	017501	7k50 1% 1/8W 50ppm MF	HOLCO	H8C	1
R62	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R63	018251	8k25 1% 1/8W 50ppm MF	HOLCO	H8C	1
R64	046813	681k 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	2
R65	012211	2k21 1% 1/8W 50ppm MF	HOLCO	H8C	2
R66	000683	68k 5% 1/3W CARBON			2
R67	008067	100R 5% 1W MF	VISHAY	S105K	1
R68	017321	7k32 1% 1/8W 50ppm MF	HOLCO	H8C	1
R69	012211	2k21 1% 1/8W 50ppm MF	HOLCO	H8C	—

NOTES.

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 4 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	046813	681k 1% ½W 100ppm CF	ALLEN BRADLEY	CC	—
R71	000683	68k 5% ⅓W CARBON			—
R72	000470	47R 5% ⅓W CARBON			2
R73	000330	33R 5% ⅓W CARBON			1
R74	041005	10M0 1% ½W 100ppm CF	ALLEN BRADLEY	CC	—
R75	041005	10M0 1% ½W 100ppm CF			—
R76	090157-1	6M ATTEN. SET		SEE DRG	—
R77	019091	9k09 1% ⅛W 50ppm MF	HOLCO	H8C	—
R78	000470	47R 5% ⅓W CARBON			—
R79	000562	5k6 5% ⅓W CARBON			1
R80	000391	390R 5% ⅓W CARBON			1
R81	000222	2k2 5% ⅓W CARBON			1
R82	000133	13k 5% ⅓W CARBON			—
R83	050059	1M5 1% 2W 100ppm MF	HOLCO	HB03RE	1
R84	013011	3k01 1% ⅛W 50ppm MF	HOLCO	H8C	1
R85	090157-1	1M MATCHED SET		SEE DRG	—
R86	041005	10M0 1% ½W 100ppm CF	ALLEN BRADLEY	CC	—
R87	000913	91k 5% ⅓W CARBON			1
R88	000912	9k1 5% ⅓W CARBON			1
R89	000102	1k 5% ⅓W CARBON			—
R90	041005	10M 1% ½W 100ppm CF	ALLEN BRADLEY	CC	—
R91	012001	2k00 1% ⅛W 50ppm MF	HOLCO	H8C	2
R92	000393	39k 5% ⅓W CARBON			2

NOTES.

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 5 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R93	000152	1k5 5% ⅓W CARBON			1
R94	011302	13k0 1% ⅛W 50ppm MF	HOLCO	H8C	2
R95	000103	10k 5% ⅓W CARBON			—
R96	000103	10k 5% ⅓W CARBON			—
R97	090001	PTC THERMISTOR	MULLARD	VA8650	1
R98	012008	20R0 1% ⅛W 50ppm MF	HOLCO	H8C	1
R99	041825	18M2 1% ½W 100ppm MF	ALLEN BRADLEY	CC	1
R100	041824	1M82 1% ½W 100ppm MF	ALLEN BRADLEY	CC	1
R101	090157-1	6M ATTEN SET (900k) (100k)		SEE DRG	—
R102	012001	2k00 1% ⅛W 50ppm MF	HOLCO	H8C	—
R103	011302	13k0 1% ⅛W 50ppm MF	HOLCO	H8C	—
R104	000393	39k 5% ⅓W CARBON			—
R105	000473	47k 5% ⅓W CARBON			2
R106	000473	47k 5% ⅓W CARBON			—
R107	050062	51R0 1% 1W 250ppm M.O.	WELWYN	MRG	1
R108	021820	182R 1% ¼W 50ppm MF	HOLCO	H4C	1
R109	000512	5k1 5% ⅓W CARBON			2
R110	000512	5k1 5% ⅓W CARBON			—
R111	011000	100R 1% ⅛W 50ppm MF	HOLCO	H8C	2
R112	011000	100R 1% ⅛W 50ppm MF	HOLCO	H8C	—
R113	019091	9k09 1% ⅛W 50ppm MF	HOLCO	H8C	—
R114	011002	10k0 1% ⅛W 50ppm MF	HOLCO	H8C	—
R115	019092	90k9 1% ⅛W 50ppm MF	HOLCO	H8C	1

NOTES.

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 6 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R116	000103	10k 5% 1/3W CARBON			–
R117	000681	680R 5% 1/3W CARBON			2
R118	001121	120R 5% 1/2W CARBON			2
R119	000681	680R 5% 1/3W CARBON			–
R120	001121	120R 5% 1/2W CARBON			–
R121	000221	220R 5% 1/3W CARBON			1
R122	090158-1	90k/10k ATTEN SET			1
R123	000474	470k 5% 1/3W CARBON			1
AN1	090096	1M x8 2% NETWORK	BECKMAN	L09-1-R1M	2
AN2	090096	1M x8 2% NETWORK	BECKMAN	L09-1-R1M	–
AN3	090142	10k x4 0.5% DIL NETWORK	BECKMAN	694-3-R10k	1
AN4	090105	100R x4 2% NETWORK	BECKMAN	L08-3-R100	1

NOTES.

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 7 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	5
C2	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C3	100330	33pF 2% 100V CER PLATE	MULLARD	2222 683 34339	2
C4	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	17
C5	100330	33pF 2% 100V CER PLATE	MULLARD	2222 683 34339	–
C6	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C7	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C8	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C9	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C10	180021	3µ3F 63V AL. ELEC.	MULLARD	015-18338	2
C11	180021	3µ3F 63V AL. ELEC.	MULLARD	015-18338	–
C12	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C13	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C14	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	KIRE35	2
C15	100101	100pF 2% 100V CER PLATE	MULLARD	2222-683-34101	2
C16	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C17	110050	22nF 10% 63V POLYESTER	WIMA	MKS2	1
C18	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C19	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C20	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C21	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	3
C22	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C23	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	4

NOTES.

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 8 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C24	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C25	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	—
C26	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	2
C27	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C28	110055	68nF 10% 100V POLYESTER	WIMA	MKS4	1
C29	100390	39pF 2% 100V CER PLATE	MULLARD	2222 683 34339	1
C30	120014	2µ2F 20% 63V POLYCARB	ASHCROFT	A2B	1
C31	100560	56pF 2% 100V CER PLATE	MULLARD	2222 683 34569	1
C32	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C33	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	—
C34	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C35	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	—
C36	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C37	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C38	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C39	101103	10nF 25% 250V CER DISC	ITT	CD10	1
C40	110049	68nF 10% 630V POLYESTER	WIMA	MKS4	1
C41	100101	100pF 2% 100V CER PLATE	MULLARD	2222-683-34101	—
C42	110051	470nF 10% 63V POLYESTER	WIMA	MKS2	1
C43	100391	390pF 10% 100V CER PLATE	MULLARD	2222-630-19391	1
C44	100221	220pF 2% 100V CER PLATE	MULLARD	2222-683-58221	1
C45	100471	470pF 10% 100V CER PLATE	MULLARD	222-630-19471	1
C46	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—

NOTES.

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	—
C48	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	—
C49	130086	30nF 1% 63V POLYSTYRENE	MULLARD	424 43003	1
C50	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1RE35	—
C51	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C52	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	4
C53	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	—
C54	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	—
C55	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	—
C56	120036	470pF 20% 160V POLYCARB	WIMA	FKC3	1
C57	100220	22pF 2% 100V CER PLATE	MULLARD	2222-683-34229	1
C58	150001	22µF 20% 16V DIP TANT	UNION CARBIDE	K22E16	2
C59	150001	22µF 20% 16V DIP TANT	UNION CARBIDE	K22E16	—
C60	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	2
C61	150002	10µF 20% 16V DIP TANT	UNION CARBIDE	K10E16	—
C62	104032	220pF 10% 2kV CER DISC	ITT	HD09	1
C63	110026	6n8F 20% 100V POLYESTER	WIMA	FKS2	1
C64	102472	4n7F 25% 500V CER DISC	ITT	CD10	1
C65	104045	1µF -20% +80% 50V CER PLATE	MULLARD	CZ30C 105Z	2
C66	104045	1µF -20% +80% 50V CER PLATE	MULLARD	CZ30C 105Z	—
C67	100270	27pF 2% 100V CER PLATE	MULLARD	2222-683-34279	1

NOTES.

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DRAWING NUMBER 400536 SHEET 10 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	213009	15V 5W ZENER	UNITRODE	TVS515	3
D2	213009	15V 5W ZENER	UNITRODE	TVS515	—
D3	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	10
D4	213006	5V 5W ZENER	UNITRODE	TVS505	4
D5	213006	5V 5W ZENER	UNITRODE	TVS505	—
D6	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D7	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D8	213009	15V 5W ZENER	UNITRODE	TVS515	—
D9	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D10	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D11	213006	5V 5W ZENER	UNITRODE	TVS505	—
D12	213006	5V 5W ZENER	UNITRODE	TVS505	—
D13	213025	3V3 5W ZENER	SIEMENS	IN5333B	2
D14	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	3
D15	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D16	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D17	214014	1V22 100ppm ZENER	TELEDYNE	9491 BJ	6
D18	214014	1V22 100ppm ZENER	TELEDYNE	9491 BJ	—
D19	213008	24V 5W ZENER	UNITRODE	TVS524	2
D20	213008	24V 5W ZENER	UNITRODE	TVS524	—
D21	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	12
D22	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D23	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—

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DRAWING NUMBER 400536

SHEET 11 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D24	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D25	213025	3V3 5W ZENER	SIEMENS	IN5333B	—
D26	214014	1V22 100ppm ZENER	TELEDYNE	9491 BJ	—
D27	214014	1V22 100ppm ZENER	TELEDYNE	9491 BJ	—
D28	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D29	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D30	213011	1V5 250mW ZENER	MULLARD	BZV46-1V5	1
D31	213001	10V 5W ZENER	MOTOROLA	IN5347B	1
D32	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D33	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D34	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D35	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D36	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	—
D37	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	—
D38	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	2
D39	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D40	214014	1V22 100ppm ZENER	TELEDYNE	9491BJ	—
D41	214014	1V22 100ppm ZENER	TELEDYNE	9491BJ	—
D42	220020	FET DIODE 100pA I_R	TELEDYNE	PAD100	2
D43	220020	FET DIODE 100pA I_R	TELEDYNE	PAD100	—
D44	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D45	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—
D46	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	—

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SHEET 12 OF 18

ESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
)47	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
)48	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	2
)49	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	–
)50	210047	4V7 400mW ZENER	MULLARD	BZY88C4V7	2
)51	210047	4V7 400mW ZENER	MULLARD	BZY88C4V7	–
)52	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
Q1	2300368	N-CHAN JFET	SILICONIX	J108	1
Q2	230042	N-CHAN I LIM 3.0mA	SILICONIX	J509	2
Q3	230042	N-CHAN I LIM 3.0mA	SILICONIX	J509	–
Q4	240001	Si NPN TRANSISTOR	NATIONAL	BC184/T018	1
Q5	230031	N-CHAN DUAL JFET	TELEDYNE	U404	2
Q6	240018	Si NPN TRANSISTOR	MOTOROLA	MJE340	1
Q7	250025	Si PNP TRANSISTOR	MOTOROLA	MJE350	1

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DRAWING NUMBER 400536 SHEET 13 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q8	230001	N-CHAN I LIM 1.4mA	SILICONIX	J506	2
Q9	230001	N-CHAN I LIM 1.4mA	SILICONIX	J506	–
Q10	230031	N-CHAN DUAL JFET	SILICONIX	U404	–
M1	260086	DUAL 2W AUDIO AMP	NATIONAL	LM1877N	1
M2	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	3
M3	280023	QUAD 2 I/P OR	MOTOROLA	MC14001UBCP	1
M4	280045	TRIPLE 3 I/P NOR	MOTOROLA	MC14025BCP	1
M5	280079	QUAD 2 I/P OR	MOTOROLA	MC14071BCP	2
M6	280035	BCD/DECIMAL DECODER	MOTOROLA	MC14028BCP	1
M7		NOT USED			–
M8		NOT USED			–
M9		NOT USED			–
M10	280079	QUAD 2 I/P OR	MOTOROLA	MC14071BCP	–
M11	280009	HEX INVERTER	MOTOROLA	MC14049UBCP	1
M12	280034	DUAL MONOSTABLE	MOTOROLA	MC14528BCP	1
M13	260075	2903 DUAL COMPARATOR	NATIONAL	LM2903N	1
M14	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	–
M15	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	–
M16	260073	411 OP AMP	NATIONAL	LF411CN	1
M17	260049	319 DUAL COMPARATOR	NATIONAL	LM319N	1

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DRAWING NUMBER 400536 SHEET 14 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M18	260080	311 COMPARATOR	NATIONAL	LM311N	1
M19	220027	HIGH CMR OPTO ISOLATOR	HP	HCPL-2601 (5082-4361)	1
M20	260027	714 OP AMP.	FAIRCHILD	μA 714 HC	1
M21	260082	1052 OP. AMP.	LINEAR TECH.	LTC 1052 CN8	1
M22	260081	5534A OP. AMP.	SIGNETICS	NE5534AN	1
M23	260059	0002 BUFFER AMP	NATIONAL	LH0002CH	1
RL1	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	5
RL2	330039	RELAY 4P N/O	SDS	S4-L-6V	6
RL3	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	—
RL4	330039	RELAY 4P N/O	SDS	S4-L-6V	—
RL5	330041	RELAY 2P 2W	SDS	DS2E-SL-6V	2
RL6	330041	RELAY 2P 2W	SDS	DS2E-SL-6V	—
RL7	330039	RELAY 4P N/O	SDS	S4-L-6V	—
RL8	330042-2	RELAY 3P N/O ; 1P N/C		SEE DRG	1
RL9	330038	RELAY 2P N/O	SDS	S2-L-6V	3
RL10	330039	RELAY 4P N/O	SDS	S4-L-6V	—
RL11	330039	RELAY 4P N/O	SDS	S4-L-6V	—
RL12	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	—

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TITLE 4700 DC. PCB. ASSY.

DRAWING NUMBER 400536 SHEET 15 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
RL13	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	—
RL14	330038	RELAY 2P N/O	SDS	S2-L-6V	—
RL15	330030	RELAY 4P N/O	SDS	S4-24V	1
RL16	330038	RELAY 2P N/O	SDS	S2-L-6V	—
RL17	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	—
RL18	330039	RELAY 4P N/O	SDS	S4-L-6V	—
L1	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	7
L2	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L3	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L4	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L5	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L6	370012	470μH 0.1 Ω RF CHOKE	SIGMA	SC10	1
L7	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L8	370001	10μH 0.85 Ω RF CHOKE	PLESSEY	58/10/0011/10	—
W1	209003	1A5 100V BRIDGE RECT.	MICRO-ELECTRONICS	W001	1

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DRAWING NUMBER 400536 SHEET 16 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
F1	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275-001	5
F2	920190	250mA PIGTAIL FUSE	BESWICK	TDC 483	1
F3	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275-001	-
F4	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275-001	-
F5	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275-001	-
F6	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275-001	-
	400668-1	CLAMP PCB ASSY	DATRON		1
	410258-2	PCB			1
	540002	22 SWG BTC WIRE			A/R
	604046	3 WAY ·1" PCB PLUG GD PL	MOLEX	22-10-2031	6
	605059	8 WAY DIL SOCKET	JERMYN	J23-18008	9
	605060	14 WAY DIL SOCKET	JERMYN	J23-18014	6
	605061	16 WAY DIL SOCKET	JERMYN	J23-18016	3
	605127	2 WAY ·1" SHORTING SKT	ASSMANN	AKSPL-G	6
	602001	FSV TERMINAL	MOLEX	02-04-5114	2
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	21
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº2 LARGE	68
	630036	STEATITE BEAD 18 SWG	PARK ROYAL PORCELAIN	Nº1 SMALL	26
	630119	PCB EJECTOR ORANGE	RICHCO	CBE	2
	605070	20 WAY DIL SOCKET	JERMYN	J23-18020	3
	620006	SOLDER TURRET	HARWIN	H9001-01	10

NOTES.

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DRAWING NUMBER 400536 SHEET 17 OF 18

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	512999	7/.2 PTFE INS. WIRE WHI			A/R
	590007	LACING CORD		MW/062 BLACK	A/R
	618004	MOUNTING PAD TO18	JERMYN	TO18-008D	2
	900004	SILICONE RUBBER COMP.	RS	555-588	A/R

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TITLE 4700 DC.PCB. ASSY.

DRAWING NUMBER 400536 SHEET 18 OF 18

DRAWING No.	CHK'D					
400446	DATE	5.7.85	29.10.85	20.3.86	15.6.86	
	ECO	1958	2045	2168	2283	2326
	REVISION	8·0	8.1	9.0	9.1	9·2
	ISSUE					

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION				
COMPONENT LAYOUT	480446	1	8·0		9.0		
SCHEMATIC	430446	1	8·0		9.0		
SCHEMATIC	430446	2	8·0	8·0	9.0	9.0	
SCHEMATIC	430446	3	8·0	8·0	8.1	9.0	9.1
SCHEMATIC	430446	4	8·0	8·0	9.0	9.0	
SCHEMATIC	430446	5	8·0	8·0	9.0	9.0	
FUNCTIONAL TEST PROC.	460446/FT	1-7	8·0		9.0	9.1	
FUNC. TEST TICK LIST	470446/FT	1	8·0		9.0		

NOTES

INDICATES NO CHANGE TO DOCS AT ISSUE LEVEL CHANGE

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD
IL	MJD	
DATE 5.7.85	DATE 10.7.85	DATE 23.7.85

TITLE 4200 SINE SOURCE PCB ASSY.

DRAWING No. 400446 SHEET 1 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	019091	9k09 1% 1/8W 50ppm MF	HOLCO	H8C	1
R2	011821	1k82 1% 1/8W 50ppm MF	HOLCO	H8C	1
R3	012151	2k15 1% 1/8W 50ppm MF	HOLCO	H8C	1
R4	012611	2k61 1% 1/8W 50ppm MF	HOLCO	H8C	1
R5	000223	22k 5% 1/3W CARBON	MULLARD	CR25	1
R6	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	1
R7	011502	15k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R8	014321	4k32 1% 1/8W 50ppm MF	HOLCO	H8C	2
R9	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	7
R10	000100	10R 5% 1/3W CARBON	MULLARD	CR25	6
R11	000101	100R 5% 1/3W CARBON	MULLARD	CR25	10
R12	000470	47R 5% 1/3W CARBON	MULLARD	CR25	9
R13	013012	30k1 1% 1/8W 50ppm MF	HOLCO	H8C	1
R14	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	2
R15	000103	10k 5% 1/3W CARBON	MULLARD	CR25	8
R16	000228	2R2 5% 1/3W CARBON	MULLARD	CR25	1
R17	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R18	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	4
R19	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	4
R20	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R21	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R22	000123	12k 5% 1/3W CARBON	MULLARD	CR25	1
R23	000122	1k2 5% 1/3W CARBON	MULLARD	CR25	2

NOTES.

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E.C.O.	—	1725	1742	1770	1780	1801	1827.1839.1849	1885	1905
DATE	26.9.84	10.10.84	31.10.84	22.11.84	4-12-84	2.1.85	13.2.85	9.4.85	1-5-85
CHKD.		MD	MD	MD	MD	IR.	MD.	R	MD

DATE 24.7.84

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TITLE 4200 SINE SOURCE PCB ASSY

DRAWING NUMBER 400446

SHEET 2 OF 27

ESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
24	000332	3k3 5% 1/3W CARBON	MULLARD	CR25	1
25	000102	1k 5% 1/3W CARBON	MULLARD	CR25	5
26	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	–
27	011001	1k 1% 1/8W 50ppm MF	HOLCO	H8C	2
28	012001	2k 1% 1/8W 50ppm MF	HOLCO	H8C	1
29	011001	1k 1% 1/8W 50ppm MF	HOLCO	H8C	–
30	047153	715k 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	2
31	013573	357k 1% 1/8W 50ppm MF	HOLCO	H8C	2
32	011783	178k 1% 1/8W 50ppm MF	HOLCO	H8C	2
R33	018872	88k7 1% 1/8W 50ppm MF	HOLCO	H8C	2
R34	014422	44k2 1% 1/8W 50ppm MF	HOLCO	H8C	2
R35	012262	22k6 1% 1/8W 50ppm MF	HOLCO	H8C	2
R36	011132	11k3 1% 1/8W 50ppm MF	HOLCO	H8C	2
R37	015621	5k62 1% 1/8W 50ppm MF	HOLCO	H8C	2
R38	012801	2k8 1% 1/8W 50ppm MF	HOLCO	H8C	2
R39	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	–
R40	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	–
R41		FSV (PART OF KIT WITH Q29)			–
R42	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R43	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R44	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R45	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R46	000331	330R 5% 1/3W CARBON	MULLARD	CR25	2

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DRAWING NUMBER 400446 SHEET 3 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	2
R48	011823	182k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R49	067503	50k POT 20 TURN CERMET	BECKMAN	68X	2
R50	067503	50k POT 20 TURN CERMET	BECKMAN	68X	–
R51	014990	499R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R52	063100	10R POT 3/8 SQ CERMET	BECKMAN	72P	1
R53	014751	4k75 1% 1/8W 50ppm MF	HOLCO	H8C	3
R54	012218	22R1 1% 1/8W 50ppm MF	HOLCO	H8C	1
R55	047153	715k 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	–
R56	013573	357k 1% 1/8W 50ppm MF	HOLCO	H8C	–
R57	011783	178k 1% 1/8W 50ppm MF	HOLCO	H8C	–
R58	018872	88k7 1% 1/8W 50ppm MF	HOLCO	H8C	–
R59	014422	44k2 1% 1/8W 50ppm MF	HOLCO	H8C	–
R60	012262	22k6 1% 1/8W 50ppm MF	HOLCO	H8C	–
R61	011132	11k3 1% 1/8W 50ppm MF	HOLCO	H8C	–
R62	015621	5k62 1% 1/8W 50ppm MF	HOLCO	H8C	–
R63	012801	2k8 1% 1/8W 50ppm MF	HOLCO	H8C	–
R64	013321	3k32 1% 1/8W 50ppm MF	HOLCO	H8C	2
R65	013321	3k32 1% 1/8W 50ppm MF	HOLCO	H8C	–
R66	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R67	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R68	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	–
R69	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	–

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DRAWING NUMBER 400446 SHEET 4 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	011501	1k5 1% 1/8W 50ppm MF	HOLCO	H8C	2
R71	011501	1k5 1% 1/8W 50ppm MF	HOLCO	H8C	—
R72	000102	1k 5% 1/3W CARBON	MULLARD	CR25	—
R73	000102	1k 5% 1/3W CARBON	MULLARD	CR25	—
R74	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R75	014990	499R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R76	000331	330R 5% 1/3W CARBON	MULLARD	CR25	—
R77	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	—
R78	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R79	000512	5k1 5% 1/3W CARBON	MULLARD	CR25	2
R80	000512	5k1 5% 1/3W CARBON	MULLARD	CR25	—
R81	000822	8k2 5% 1/3W CARBON	MULLARD	CR25	5
R82	000822	8k2 5% 1/3W CARBON	MULLARD	CR25	—
R83	000822	8k2 5% 1/3W CARBON	MULLARD	CR25	—
R84	000822	8k2 5% 1/3W CARBON	MULLARD	CR25	—
R85	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	—
R86	000433	43k 5% 1/3W CARBON	MULLARD	CR25	1
R87	000822	8k2 5% 1/3W CARBON	MULLARD	CR25	—
R88	000471	470R 5% 1/3W CARBON	MULLARD	CR25	4
R89	000362	3k6 5% 1/3W CARBON	MULLARD	CR25	2
R90	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R91	013161	FSV (3k16 1% NOM)	HOLCO	H8C	2
R92	000122	1k2 5% 1/3W CARBON	MULLARD	CR25	—

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SHEET 5 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R93	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R94	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R95	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R96	011872	18k7 1% 1/8W 50ppm MF	HOLCO	H8C	2
R97	000104	100k 5% 1/3W CARBON	MULLARD	CR25	2
R98	011378	13R7 1% 1/8W 50ppm MF	HOLCO	H8C	2
R99	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R100	011872	18k7 1% 1/8W 50ppm MF	HOLCO	H8C	—
R101	011378	13R7 1% 1/8W 50ppm MF	HOLCO	H8C	—
R102	000471	470R 5% 1/3W CARBON	MULLARD	CR25	—
R103	013091	3k09 1% 1/8W 50ppm MF	HOLCO	H8C	2
R104	011541	1k54 1% 1/8W 50ppm MF	HOLCO	H8C	2
R105	011541	1k54 1% 1/8W 50ppm MF	HOLCO	H8C	—
R106	013091	3k09 1% 1/8W 50ppm MF	HOLCO	H8C	—
R107	000470	47R 5% 1/3W CARBON	MULLARD	CR25	4
R108	017871	7k87 1% 1/8W 50ppm MF	HOLCO	H8C	1
R109	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R110	000225	2M2 10% 1/3W CARBON	MULLARD	CR25	1
R111		NOT USED			—
R112	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R113	000362	3k6 5% 1/3W CARBON	MULLARD	CR25	—
R114	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R115	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—

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SHEET 6 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R116	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R117	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R118	012432	24k3 1% 1/8W 50ppm MF	HOLCO	H8C	2
R119	012432	24k3 1% 1/8W 50ppm MF	HOLCO	H8C	—
R120	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R121	017501	7k5 1% 1/8W 50ppm MF	HOLCO	H8C	1
R122	011002	FSV (10k 1% NOM)	HOLCO	H8C	—
R123	066103	10k POT 3/8 SQ. VERT CERMET	BECKMAN	72XW	1
R124	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R125	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R126	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	2
R127	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R128	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R129	011211	1k21 1% 1/8W 50ppm MF	HOLCO	H8C	1
R130	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R131	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R132	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R133	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	—
R134	014321	4k32 1% 1/8W 50ppm MF	HOLCO	H8C	—
R135	012491	2k49 1% 1/8W 50ppm MF	HOLCO	H8C	2
R136	090063	PTC THERMISTOR	TEXAS	TSP102k	2
R137	090063	PTC THERMISTOR	TEXAS	TSP102K	—
R138	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—

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TITLE 4200 SINE SOURCE PCB ASSY

DRAWING NUMBER 400446 SHEET 7 OF 26

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R139	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R140	000202	2k 5% 1/3W CARBON	MULLARD	CR25	1
R141	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R142	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R143	012491	2k49 1% 1/8W 50ppm MF	HOLCO	H8C	—
R144	011008	10R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R145	000221	220R 5% 1/3W CARBON	MULLARD	CR25	2
R146	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R147	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R148	000278	2R7 5% 1/3W CARBON	MULLARD	CR25	1
R149	013161	FSV (3k16 1% NOM)	HOLCO	H8C	—
R150	000471	470R 5% 1/3W CARBON	MULLARD	CR25	—
R151	014751	4k75 1% 1/8W 50ppm MF	HOLCO	H8C	—
R152	015230	523R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R153	014320	432R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R154	014751	4k75 1% 1/8W 50ppm MF	HOLCO	H8C	—
R155	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R156	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R157	000471	470R 5% 1/3W CARBON	MULLARD	CR25	—
R158	000220	22R 5% 1/3W CARBON	MULLARD	CR25	1
R159	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R160		NOT FITTED			—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN1	090017	100k x7 2% NETWORK	BECKMAN	L08-1-R100k	1
AN2	090139	2k2 x4 2% SIL. NETWORK	BECKMAN	L08-3-R2k2	1
AN3	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	6
AN4	090132	4k7 x4 2% SIL. NETWORK	BECKMAN	L08-3-R4k7	1
AN5	090140	22k x9 2% SIL. NETWORK	BECKMAN	L10-1-R22k	2
AN6	090141	1M x9 2% SIL. NETWORK	BECKMAN	L10-1-R1M	2
AN7	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	–
AN8	090140	22k x9 2% SIL. NETWORK	BECKMAN	L10-1-R22k	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN9	090141	1M x 9 2% SIL. NETWORK	BECKMAN	L10-1-R1M	–
AN10	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	–
AN11	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	–
AN12	090086	100k x8 2% NETWORK	AB	761-3-100k	1
AN13	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	–
AN14	090142	10k x4 0·5% DIL NETWORK	BECKMAN	694-3-R10kD	1
AN15	090136	2k x8 0·5% DIL NETWORK	BECKMAN	698-3-R2kD	3
AN16	090136	2k x8 0·5% DIL NETWORK	BECKMAN	698-3-R2kD	–
AN17	090131	10k x4 2% SIL. NETWORK	BECKMAN	L08-3-R10k	–
AN18	090136	2k x8 0·5% DIL. NETWORK	BECKMAN	698-3-R2kD	–
AN19	090143	500R x4 0·5% DIL. NETWORK	BECKMAN	694-3-R500D	1
C1	102100	10pF 5% 500V CER DISC	ITT	CD10	4
C2	102470	47pF 5% 500V CER DISC	ITT	CD10	2
C3	102470	47pF 5% 500V CER DISC	ITT	CD10	–
C4	102221	220pF 10% 500V CER DISC	ITT	CD10	3
C5	102471	470pF 10% 500V CER DISC	ITT	CD10	2

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DRAWING NUMBER 400446 SHEET 10 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C6	102102	1nF 10% 500V CER DISC	ITT	CD10	15
C7	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	4
C8	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	–
C9	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	10
C10	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	30
C11	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C12	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C13	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C14	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	–
C15	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C16	110040	33nF 20% 63V POLYESTER	WIMA	MKS2	1
C17	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	2
C18	110039	470nF 20% 63V POLYESTER	WIMA	MKS2	1
C19	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C20	102471	470pF 10% 500V CER DISC	ITT	CD10	–
C21	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C22	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C23	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C24	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C25	120034	220nF 1% 63V POLYCARB	ASHCROFT	A2B22201E	2
C26	102100	10pF 5% 500V CER DISC	ITT	CD10	–
C27	102100	10pF 5% 500V CER DISC	ITT	CD10	–
C28	120035	22nF 1% 400V POLYCARB	ASHCROFT	A2B22004E	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C29	102220	22pF 5% 500V CER DISC	ITT	CD10	3
C30	104017	0p56F ±0·1pF 500V CER DISC	ITT	CD08AG0P56BS	2
C31	102108	1pF ±·5pF 500V CER DISC	ITT	CD06	2
C32	102188	1p8F ±·5pF 500V CER DISC	ITT	CD06	2
C33	102398	3p9F ±·5pF 500V CER DISC	ITT	CD08	2
C34	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C35	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C36	130083	2nF 1% 160V POLYSTYRENE	MULLARD	425	2
C37	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	7
C38	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	9
C39	102101	100pF 10% 500V CER DISC	ITT	CD10	3
C40	102278	2p7F ±·5pF 500V CER DISC	ITT	CD08	2
C41	130084	110pF 1% 630V POLYSTYRENE	MULLARD	427	2
C42	130042	100pF 1% 630V POLYSTYRENE	SUFLEX	HS	2
C43	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	–
C44	102338	3p3F ±·5pF 500V CER DISC	ITT	CD08	3
C45	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C46	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C47	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C48	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C49	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	–
C50	120034	220nF 1% 63V POLYCARB	ASHCROFT	A2B22101E	–
C51	120035	22nF 1% 400V POLYCARB	ASHCROFT	A2B22004E	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C52	104017	0p56F ±0·1pF 500V CER DISC	ITT	GD08AG0P56BS	—
C53	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C54	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	—
C55	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C56	102108	1pF ±·5pF 500V CER DISC	ITT	CD06	—
C57	102188	1p8F ±·5pF 500V CER DISC	ITT	CD06	—
C58	102398	3p9F ±·5pF 500V CER DISC	ITT	CD08	—
C59	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C60	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C61	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	—
C62	130083	2nF 1% 160V POLYSTYRENE	MULLARD	425	—
C63	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C64	102101	100pF 10% 500V CER DISC	ITT	CD10	—
C65	102278	2p7F ±·5pF 500V CER DISC	ITT	CD08	—
C66	130084	110pF 1% 630V POLYSTYRENE	MULLARD	427	—
C67	130042	100pF 1% 630V POLYSTYRENE	SUFLEX	HS	—
C68	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	—
C69	102338	3p3F ±·5pF 500V CER DISC	ITT	CD08	—
C70	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C71	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C72	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C73	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	—
C74	102220	22pF 5% 500V CER DISC	ITT	CD10	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C75	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C76	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	3
C77	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C78	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	—
C79	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C80	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C81	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C82	102182	1n8F 20% 500V CER DISC	ITT	CD10	1
C83	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C84	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C85	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C86	102221	220pF 10% 500V CER DISC	ITT	CD10	—
C87	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C88	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C89	110046	1µF 20% 50V POLYESTER	WIMA	MKS2	1
C90	104026	47nF ±50% 20% 50V CER DISC	SIEMENS	B37449	—
C91	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	—
C92	102331	330pF 10% 500V CER DISC	ITT	CD10	1
C93	104026	47nF ±50% 20% 50V CER DISC	ITT	B37449	—
C94	104026	47nF +50% -20% 50V CER DISC	ITT	B37449	—
C95	101103	10nF 25% 250V CER DISC	ITT	CD10	1
C96	150010	330nF 20% 35V DIP TANT	UNION CARBIDE	KR33E35	1
C97	102101	100pF 10% 500V CER DISC	ITT	CD10	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C98	110042	100nF 20% 63V POLYESTER	WIMA	CD10	—
C99	110042	100nF 20% 63V POLYESTER	WIMA	CD10	—
C100	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C101	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C102	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C103	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C104	102478	4p7F ±·5pF 500V CER DISC	ITT	CD08	—
C105	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C106	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C107	110042	100nF 20% 63V POLYESTER	WIMA	CD10	—
C108	110015	15nF 20% 63V POLYESTER	WIMA	MKS2	1
C109	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	—
C110	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C111	110042	100nF 20% 63V POLYESTER	WIMA	CD10	—
C112	102221	220pF 10% 500V CER DISC	ITT	CD10	—
C113, C114	104026	47nF +50 -20% 50V CER DISC	ITT	B37449	—
C115	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	—
C116	102478	4p7F ±·5% 500V CER DISC	ITT	CD08	—
C117	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C118	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C119	102338	3p3F ±·5pF 500V CER DISC	ITT	CD08	—
C120	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C121	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	3

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C122	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	—
C123	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C124	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C125	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C126	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	—
C127	102220	22pF 5% 500V CER DISC	ITT	CD10	—
C128	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C129	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	—
C130	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	—
C131	102102	1nF 10% 500V CER DISC	ITT	CD10	—
C132		NOT FITTED			—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	4
D2	210091	9V1 400mW ZENER	MULLARD	BZY88C9V1	3
D3	210150	15V 400mW ZENER	MULLARD	BZY88C15	1
D4	210091	9V1 400mW ZENER	MULLARD	BZY88C9V1	–
D5	213009	15V 5W ZENER	UNITRODE	TVS515	4
D6	213009	15V 5W ZENER	UNITRODE	TVS515	–
D7	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	14
D8	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D9	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D10	210043	4V3 400mW ZENER	MULLARD	BZY88C4V3	4
D11	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D12	210043	4V3 400mW ZENER	MULLARD	BZY88C4V3	–
D13	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D14	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D15	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D16	210043	4V3 400mW ZENER	MULLARD	BZY88C4V3	–
D17	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D18	210043	4V3 400mW ZENER	MULLARD	BZY88C4V3	–
D19	210091	9V1 400mW ZENER	MULLARD	BZY88C9V1	–
D20	213011	1V5 250mW ZENER	MULLARD	BZV46-1V5	2
D21	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D22	213011	1V5 250mW ZENER	MULLARD	BZV46-1V5	–
D23	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D24	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	2
D25	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	–
D26	213023	6V4 100ppm ZENER	MOTOROLA	IN4575	2
D27	213009	15V 5W ZENER	UNITRODE	TVS515	–
D28	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	–
D29	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	–
D30	213023	6V4 100ppm ZENER	MOTOROLA	IN4575	–
D31	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D32	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D33	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D34	213009	15V 5W ZENER	UNITRODE	TVS515	–
D35	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D36	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	2
D37	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D38	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	–
D39	213012	2V0 250mW ZENER	MULLARD	BZV46-2V0	2
D40	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	2
D41	210062	6V2 400mW ZENER	MULLARD	BZY88C6V2	–
D42	213012	2V0 250mW ZENER	MULLARD	BZV46-2V0	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q1	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	4
Q2	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	6
Q3	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q4	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	12
Q5	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q6	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	—
Q7	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q8	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	5
Q9	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	—
Q10		NOT USED			—
Q11	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	5
Q12	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q13	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	—
Q14	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q15	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q16	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q17	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q18	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q19	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	3
Q20	230035	N-CHAN JFET	TELEDYNE	U1897JF	28
Q21	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q22	230035	N-CHAN JFET	TELEDYNE	U1897 JF	—
Q23	230035	N-CHAN JFET	TELEDYNE	U1897 JF	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q24	230035	N-CHAN JFET	TELEDYNE	U1897 JF	—
Q25	230035	N-CHAN JFET	TELEDYNE	U1897 JF	—
Q26	230035	N-CHAN JFET	TELEDYNE	U1897 JF	—
Q27	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q28	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q29	239060-1	N-CHAN DUAL JFET + R41	DATRON	VCR11 (COLOUR) + H8	1
Q30	260060	334 CURRENT SOURCE	NATIONAL	LM334H	1
Q31	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q32	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q33	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q34	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q35	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q36	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q37	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q38	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q39	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q40	230035	N-CHAN JFET	TELEDYNE	U1897JF	—
Q41	230046-1	N-CHAN DUAL JFET		SEE DRG	1
Q42	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	—
Q43	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	—
Q44	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q45	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	3
Q46	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q47	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q48	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q49	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q50	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q51	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q52	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q53	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q54	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	–
Q55	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	6
Q56	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	–
Q57	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	–
Q58	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	–
Q59	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	–
Q60	240017	Si NPN DUAL TRANSISTOR	NATIONAL	LM394	–
Q61	230050	N-CHAN I LIM 2·4mA	SILICONIX	J508	1
Q62	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	–
Q63	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	–
Q64	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	–
Q65	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	–
Q66	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	6
Q67	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q68	230035	N-CHAN JFET	TELEDYNE	U1897JF	–
Q69	230035	N-CHAN JFET	TELEDYNE	U1897JF	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q70	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	–
Q71	250008	Si PNP TRANSISTOR	NATIONAL	BC214C/TO18	3
Q72	250008	Si PNP TRANSISTOR	NATIONAL	BC214C/TO18	–
Q73	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	–
Q74	230003	N-CHAN JFET	TELEDYNE	U1899JF	1
Q75	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	–
Q76	239059-1	N-CHAN DUAL JFET KIT	DATRON	VCR11 } SAME COLOUR	1 KIT
Q77	239059-1	N-CHAN DUAL JFET KIT	DATRON	VCR11 }	–
Q78	240032	Si NPN TRANSISTOR	MOTOROLA	BF 393/TO18	–
Q79	240032	Si NPN TRANSISTOR	MOTOROLA	BF 393/TO18	–
Q80	240032	Si NPN TRANSISTOR	MOTOROLA	BF 393/TO18	–
Q81	240032	Si NPN TRANSISTOR	MOTOROLA	BF 393/TO18	–
Q82	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	–
Q83	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	2
Q84	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	–
Q85	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	–
Q86	240031	Si NPN TRANSISTOR	MOTOROLA	BD139	2
Q87	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	–
Q88	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	–
Q89	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	–
Q90	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	–
Q91	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	–
Q92	250008	Si PNP TRANSISTOR	NATIONAL	BC214C/TO18	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q93	240031	Si NPN TRANSISTOR	MOTOROLA	BD139	—
Q94	250021	Si PNP TRANSISTOR	MOTOROLA	BD140	1
M1	280101	DUAL BCD/BINARY COUNTER	MOTOROLA	MC14569BCP	3
M2	280057	BCD UP/DOWN COUNTER	MOTOROLA	MC14510BCP	1
M3	280008	QUAD 2 I/P NAND	MOTOROLA	MC14011 BCP	1
M4	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013BCP	2
M5	280101	DUAL BCD/BINARY COUNTER	MOTOROLA	MC14569BCP	—
M6	280076	8 CHANNEL AN MUX	MOTOROLA	MC14051 BCL	2
M7	280079	QUAD 2 I/P OR	MOTOROLA	MC14071 BCP	1
M8	280076	8 CHANNEL AN MUX	MOTOROLA	MC14051 BCL	—
M9	280101	DUAL BCD/BINARY COUNTER	MOTOROLA	MC14569BCP	—
M10	280025	QUAD ANALOG SWITCH	MOTOROLA	MC14066 BCP	1
M11	260073	411 OP AMP	NATIONAL	LF411CN	1
M12	280125	PHASE DETECTOR	NATIONAL	MM74C932N	1
M13	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013 BCP	—
M14	280080	HEX SCHMITT TRIGGER	NATIONAL	MM74C14N	2
M15	260074	LH0032C FAST FET OP AMP	NATIONAL	LH0032CG	1

NOTES.

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TITLE 4200 SINE SOURCE PCB ASSY

DRAWING NUMBER 400446

SHEET 23 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M16	260076	CURRENT MIRROR 1:1	TEXAS	TL011CLP	2
M17	290090	7x DARLINGTON DRIVER	SPRAGUE / EXAR	ULN2002A/XR2202CP	4
M18	260076	CURRENT MIRROR 1:1	TEXAS	TL011CLP	—
M19	260046	2525 OP AMP	HARRIS	HA32527-5	11
M20	290090	7x DARLINGTON DRIVER	SPRAGUE / EXAR	ULN2002A/XR2202CP	—
M21	280080	HEX SCHMITT TRIGGER	NATIONAL	MM74C14N	—
M22	260046	2525 OP AMP	HARRIS	HA32527-5	—
M23	260046	2525 OP AMP	HARRIS	HA32527-5	—
M24	260046	2525 OP AMP	HARRIS	HA32527-5	—
M25	260046	2525 OP AMP	HARRIS	HA32527-5	—
M26	260077	CURRENT MIRROR 2:1	TEXAS	TL012CLP	3
M27	260077	CURRENT MIRROR 2:1	TEXAS	TL012CLP	—
M28	290090	7x DARLINGTON DRIVER	SPRAGUE / EXAR	ULN2002A/XR2202CP	—
M29	280035	BCD/DECIMAL DECODER	MOTOROLA	MC14028BCP	1
M30	260046	2525 OP AMP	HARRIS	HA32527-5	—
M31	260046	2525 OP AMP	HARRIS	HA32527-5	—
M32	260057	5534 OP AMP	SIGNETICS	NE5534N	1
M33	290090	7x DARLINGTON DRIVER	SPRAGUE / EXAR	ULN2002A/XR2202CP	—
M34	290000	NPN TRANSISTOR ARRAY	RCA	CA3083F	2
M35	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	2
M36	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	1
M37	260078	DUAL COMPARATOR	NATIONAL	LM393AN	1
M38	280126	D/A CONVERTER	ANALOG DEVICES	AD7527KN	1

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SHEET 24 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M39	260033	5V 1/10A REGULATOR	MOTOROLA	MC78L05ACP	1
M40	290000	NPN TRANSISTOR ARRAY	RCA	CA3083F	—
M41	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	—
M42	280127	10-BIT MULTIPLYING DAC	ANALOG DEVICES	AD7533JN	2
M43	280127	10-BIT MULTIPLYING DAC	ANALOG DEVICES	AD7533JN	—
M44	260046	2525 OP AMP	HARRIS	HA32527-5	—
M45	260027	714 OP AMP	FAIRCHILD	μA714HC	1
M46	260046	2525 OP AMP	HARRIS	HA32527-5	—
M47	260046	2525 OP AMP	HARRIS	HA32527-5	—
M48	260046	2525 OP AMP	HARRIS	HA32527-5	—
M49	260049	319 DUAL COMPARATOR	NATIONAL	LM319N	1
M50	260077	CURRENT MIRROR 2:1	TEXAS	TL012CLP	—
RL1	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	8
RL2	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
RL3	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
RL4	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
RL5	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
RL6	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—

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SHEET 25 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
RL7	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
RL8	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	—
L1	370003	1mH 40Ω RF CHOKE	SIGMA	SC10	2
L2	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	6
L3	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L4	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L5	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L6	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L7	370026	1μH 880mA CHOKE	SIGMA	SC10	1
L8	370003	1mH 40Ω RF CHOKE	SIGMA	SC10	—
L9	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
	410171-8	PCB			1
	450450-1	HEATSINK			1
	540002	22SWG BTC WIRE			A/R
	512999	7/·2 PTFE WIRE			A/R
	602001	FSV TERMINAL	MOLEX	02-04-5114	6
	605059	8WAY DIL SOCKET	JERMYN	J23-18008	17
	605060	14 WAY DIL SOCKET	JERMYN	J23-18014	9
	605061	16 WAY DIL SOCKET	JERMYN	J23-18016	15

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SHEET 26 OF 27

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	605065	28 WAY DIL SOCKET	JERMYN	J23-18028	1
	604046	3-WAY ·1" PCB PLUG GD.A.	MOLEX	22-10-2031	2
	611016	M3x8mm POZIPAN STEEL	ZN PL		2
	611025	M3x16mm POZICSK STEEL	ZN PL		1
	612026-1	M3 X 6mm STANDOFF	DATRON	SEE DRG	1
	613005	M3 INT SHAKEPROOF			2
	615002	M3 FULL NUT STEEL ZN.PL.			2
	620003	SOLDER PIN	HARWIN	H2105 A01	3
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	32
	630024	STEATITE BEAD 16SWG	PARK ROYAL PORCELAIN	Nº2	8
	630107	BRASS STRIP 15·5 x ·38mm	RIGHTON	CZ108 1/2H	A/R
	630120	PCB EJECTOR (YELLOW)	RICHCO	CBE	2
	900003	HEATSINK COMPOUND	RS	554-311	A/R
	920089-1	HEATSINK TO-220		SEE DRG	2
	920149	HEATSINK T08	SOURIAU	TXBF 2-050-033B	1
	605124	10 WAY SOCKET STRIP	AUGAT	510-AG91D	1 1/3
	605127	2 WAY ·1" SHORTING SKT	ASSMANN	AKSPL-G	2
	590001	20mm RUBBER SLEEVE.	HELLERMANN.	H15 X 20.	1
	540006	1/0.4 PTFE BLACK WIRE		BSG210 TYPE A	A/R

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DATE	DRAWING NUMBER 400446 — SHEET 27 OF 27

DRAWING No. 400663

CHK'D														
DATE	20.3.86	15.5.86	4.6.86	13.6.86	27.6.86	11.8.86	2.9.86	15.10.86	15.10.86	15.10.86				
ECO	2162	2242	2281	2282	2295	2350	2372	2427	2309	2428				
REVISION	1.0	2.0	2.1	2.2	2.3	2.4	3.0	3.1	3.2	4.0				
ISSUE														

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	1.0	2.0	2.1	2.2		2.3	3.0	3.1	3.2	4.0
COMPONENT LAYOUT	480663	1	1.0	2.0	2.1	2.2		2.3	3.0	3.1	3.2	4.0
SCHEMATIC	430663	1	1.0	2.0			2.1	2.2	3.0	3.1		4.0
SCHEMATIC	430663	2	1.0	2.0		2.1			3.0			4.0
SCHEMATIC	430663	3	1.0	2.0					3.0			4.0
SCHEMATIC	430663	4	1.0	2.0		2.1			3.0			4.0
SCHEMATIC	430663	5	1.0	2.0					3.0	3.1		4.0
SCHEMATIC	430663	6	1.0	2.0					3.0	3.1		4.0
FUNCTIONAL TEST PROG.	460663	1-5	1.0	2.0					3.0			4.0
FUNC. TEST TICK LIST	470663	1	1.0	2.0					3.0			4.0
PCB	410172	-	11.0	11.0								11.0

ISSUE . REVISION

NOTES

☐ DENOTES NO CHANGE TO DOC. AT ISSUE LEVEL CHANGE.

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DRN	CHK'D	APPD	TITLE	DRAWING No.
JR	R.K.COGGAN		4700 A.C. PCB ASSY	400663
DATE 20.3.86	DATE 21/3/86	DATE 21.3.86		SHEET 1 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000105	1M 5% 1/3W CARBON	MULLARD	CR25	5
R2	000332	3k3 5% 1/3W CARBON	MULLARD	CR25	2
R3	000101	100R 5% 1/3W CARBON	MULLARD	CR25	17
R4	011001	1k 1% 1/8W 50ppm MF	HOLCO	H8C	4
R5	011003	100k 1% 1/8W 50ppm MF	HOLCO	H8C	4
R6	014021	4k02 1% 1/8W 50ppm MF	HOLCO	H8C	3
R7		NOT USED			—
R8		NOT USED			—
R9	014021	4k02 1% 1/8W 50ppm MF	HOLCO	H8C	—
R10	000104	100k 5% 1/3W CARBON	MULLARD	CR25	7
R11	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R12	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R13	011003	100k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R14	011003	100k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R15	090138-1	10k MATCHED PAIR	VISHAY	SEE DRG-	1
R16	000100	10R 5% 1/3W CARBON	MULLARD	CR25	2
R17	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R18	080071	178R1 ·1% 3ppm M.FOIL	VISHAY	S102C	2
R19	080071	178R1 ·1% 3ppm M. FOIL	VISHAY	S102C	—
R20	080072	312R8 ·1% 3ppm M. FOIL	VISHAY	S102C	2
R21	080073	100R ·1% 3ppm M. FOIL	VISHAY	S102C	2
R22	080072	312R8 ·1% 3ppm M. FOIL	VISHAY	S102C	—
R23	080073	100R ·1% 3ppm M. FOIL	VISHAY	S102C	—

ISS	9	10	11	12
E.C.O	1859	1850	1894	1906
DATE	4.3.85	12.3.85	18.4.85	5.6.85
CHKD	AP	AP	AP	AP

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ISS.	1	2	3	4	5	6	7	7	8
E.C.O.	RELEASE	1697	1715.1719.1722.1723.1735	1738	1768	1761	1784.1787	1801	1811
DATE	29.8.84	17.9.84	12.10.84	22.10.84	7.11.84	15.11.84	4.12.84	3.1.85	14.1.85
CHKD	AP	MD	MD	MD	MD	MD	MD	MD	MD

DATE 2.7.84

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DATE 19.7.84

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TITLE 4700 A.C. PCB ASSY

DRAWING NUMBER 400663

SHEET 2 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000121	120R 5% 1/3W CARBON	MULLARD	CR25	2
R25	000390	39R 5% 1/3W CARBON	MULLARD	CR25	2
R26	000121	120R 5% 1/3W CARBON	MULLARD	CR25	—
R27	000103	10k 5% 1/3W CARBON	MULLARD	CR25	7
R28	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R29	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R30	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R31	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	3
R32	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R33	000390	39R 5% 1/3W CARBON	MULLARD	CR25	—
R34	000101	100R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R35	013920	392R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R36	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R37	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R38	011002	10k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R39	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R40	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R41	000105	1M 5% 1/3W CARBON	MULLARD	CR25	—
R42	000105	1M 5% 1/3W CARBON	MULLARD	CR25	—
R43	016190	619R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R44	016190	619R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R45	012670	267R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R46	012670	267R 1% 1/8W 50ppm MF	HOLCO	H8C	—

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TITLE 4700 A.C. PCB ASSY

DRAWING NUMBER 400663 SHEET 3 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	011001	1k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R48	000220	22R 5% 1/3W CARBON	MULLARD	CR25	1
R49	011001	1k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R50	011301	1k3 1% 1/8W 50ppm MF	HOLCO	H8C	1
R51	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R52	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R53	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	5
R54	011001	1k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R55		NOT USED			—
R56	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R57	000682	6k8 5% 1/3W CARBON	MULLARD	CR25	1
R58	000470	47R 5% 1/3W CARBON	MULLARD	CR25	3
R59	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R60	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R61	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R62	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R63	000105	1M 5% 1/3W CARBON	MULLARD	CR25	—
R64	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R65	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R66	000102	1k 5% 1/3W CARBON	MULLARD	CR25	2
R67	000392	3k9 5% 1/3W CARBON	MULLARD	CR25	1
R68	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R69	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 4 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R71		NOT USED			—
R72	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	1
R73	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R74	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R75	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R76	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R77	000221	220R 5% 1/3W CARBON	MULLARD	CR25	5
R78	000102	1K 5% 1/3W CARBON	MULLARD	CR25	—
R79	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R80	000821	820R 5% 1/3W CARBON	MULLARD	CR25	2
R81	000223	22k 5% 1/3W CARBON	MULLARD	CR25	3
R82	000223	22k 5% 1/3W CARBON	MULLARD	CR25	—
R83		NOT USED			—
R84	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R85	000153	15k 5% 1/3W CARBON	MULLARD	CR25	1
R86	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R87	000332	3k3 5% 1/3W CARBON	MULLARD	CR25	—
R88	000223	22k 5% 1/3W CARBON	MULLARD	CR25	—
R89	000473	47k 5% 1/3W CARBON	MULLARD	CR25	3
R90	000821	820R 5% 1/3W CARBON	MULLARD	CR25	—
R91	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R92	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R93	000273	27K 5% 1/3W CARBON	MULLARD	CR25	1
R94	000432	4k3 5% 1/3W CARBON	MULLARD	CR25	1
R95	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R96	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R97	013321	3k32 1% 1/8W 50ppm MF	HOLCO	H8C	2
R98	011003	100k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R99	013321	3k32 1% 1/8W 50ppm MF	HOLCO	H8C	—
R100	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R101	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R102	011690	169R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R103	011690	169R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R104	000680	68R 5% 1/3W CARBON	MULLARD	CR25	1
R105	014641	4k64 1% 1/8W 50ppm MF	HOLCO	H8C	1
R106	012371	2k37 1% 1/8W 50ppm MF	HOLCO	H8C	1
R107	066104	100k POT 3/8 SQ VERT CERMET	BECKMAN	72XW	1
R108	014640	464R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R109	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R110	080074	111R11 ·1% 3ppm M.FOIL	VISHAY	S102C	1
R111		NOT USED			—
R112	090129-3	12R346/100R	VISHAY	SEE DRG	1
R113	014640	464R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R114	008054	220R 5% 1/5W CARBON	MULLARD	CR16	4
R115	090148-1	100k (MATCHED PAIR WITH R121)	DATRON	SEE DRG	1

NOTES.

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 6 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R116		NOT USED			—
R117		NOT USED			—
R118	080095	1k1 1% 1ppm M.FOIL	VISHAY	S102C	1
R119		NOT USED			—
R120	080075	10k 1% 1ppm M.FOIL	VISHAY	S102C	2
R121	090148-1	10k (MATCHED PAIR WITH R115)	DATRON	SEE DRG	—
R122	066103	10K POT 3/8 SQ VERT CERMET	BECKMAN	72XW	1
R123	080075	10k 1% 1ppm M.FOIL	VISHAY	S102C	—
R124	080043-2	1k ·1% 3ppm M.FOIL	VISHAY	SEE DRG	1
R125	008054	220R 5% 1/5W CARBON	MULLARD	CR16	—
R126	008054	220R 5% 1/5W CARBON	MULLARD	CR16	—
R127		NOT USED			—
R128		NOT USED			—
R129		NOT USED			—
R130		NOT USED			—
R131		NOT USED			—
R132		NOT USED			—
R133		NOT USED			—
R134		NOT USED			—
R135		NOT USED			—
R136		NOT USED			—
R137		NOT USED			—
R138		NOT USED			—

NOTES.

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R139		NOT USED			—
R140		NOT USED			—
R141	011580	158R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R142	063104	100K POT 3/8 SQ. CERMET	BECKMAN	72P	1
R143	014752	47k5 1% 1/8W 50ppm MF	HOLCO	H8C	1
R144		NOT FITTED			—
R145	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	—
R146	008054	220R 5% 1/5W CARBON	MULLARD	CR16	—
R147	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	1
R148	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R149	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R150	012002	20k 1% 1/8W 50ppm MF	HOLCO	H8C	1
R151		NOT USED			—
R152		NOT FITTED			—
R153		NOT FITTED			—
R154	011000	100R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R155		NOT USED			—
R156	014021	4k02 1% 1/8W 50ppm MF	HOLCO	H8C	—
R157	008064	33R 5% 1/5W CARBON	MULLARD	CR16	1
R158	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R159	000105	1M 5% 1/3W CARBON	MULLARD	CR25	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN1	090136	2k × 8 ±·5% DIL NETWORK	BECKMAN	698-3-R2kD	2
AN2	090144	1k × 8 1% DIL NETWORK	BECKMAN	698-3-R1kF	1
AN3	090136	2k × 8 ±·5% DIL NETWORK	BECKMAN	698-3-R2kD	–
AN4	090096	1M × 8 2% NETWORK	BECKMAN	L09-1-R1M	2
AN5	090096	1M × 8 2% NETWORK	BECKMAN	L09-1-R1M	–
AN6	090137	3k3 × 8 ±·5% DIL NETWORK	BECKMAN	698-3-R3k3D	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	4
C2	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C3	101103	10nF 25% 250V CER DISC	ITT	CD10	3
C4	102220	22pF 5% 500V CER DISC	ITT	CD10	1
C5	110030	1nF 20% 100V POLYESTER	WIMA	FKS2	2
C6	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	20
C7	102102	1nF 10% 500V CER DISC	ITT	CD10	4
C8	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C9	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C10	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C11	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C12	120014	2µ2F 10% 63V POLYCARB	ASHCROFT	A2B2221B	2
C13	120014	2µ2F 10% 63V POLYCARB	ASHCROFT	A2B2221B	–
C14	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C15	102100	10pF 5% 500V CER DISC	ITT	CD10	16
C16	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C17	110030	1nF 20% 100V POLYESTER	WIMA	FKS2	–
C18	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C19	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	8
C20	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C21	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C22	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–
C23	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C24	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C25	120025	4µ7F 10% 63V POLYCARB	ASHCROFT	A2B4721B	2
C26	120025	4µ7F 10% 63V POLYCARB	ASHCROFT	A2B4721B	—
C27	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C28	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C29	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C30	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C31	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C32	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C33	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C34	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C35	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C36	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C37	102471	470pF 10% 500V CER DISC	ITT	CD10	4
C38	102471	470pF 10% 500V CER DISC	ITT	CD10	—
C39	100102	1nF 10% 100V CER PLATE	MULLARD	2222 630 19102	1
C40	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C41		NOT USED			—
C42	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C43	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	—
C44	102470	47pF 5% 500V CER DISC	ITT	CD10	2
C45	150020	10µF 20% 25V DIP TANT	UNION CARB	K10E25	—
C46	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	—
C48	101103	10nF 25% 250V CER DISC	ITT	CD10	—
C49	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C50	100330	33pF 2% 100V CER DISC	MULLARD	2222 683	5
C51	100330	33pF 2% 100V CER DISC	MULLARD	2222 683	—
C52	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	1
C53	150024	47µF 20% 16V DIP TANT	UNION CARBIDE	K47E16	2
C54	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C55	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	—
C56	150024	47µF 20% 16V DIP TANT	UNION CARBIDE	K47E16	—
C57		NOT USED			—
C58		NOT USED			—
C59		NOT USED			—
C60	102338	3p3F ±·5pF 500V CER DISC	ITT	CD08	1
C61		NOT USED			—
C62	102150	15pF 5% 500V CER DISC	ITT	CD10	1
C63		NOT USED			—
C64	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C65	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C66	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C67	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C68	100330	33pF 2% 100V CER DISC	MULLARD	2222 683	—
C69	100330	33pF 2% 100V CER DISC	MULLARD	2222 683	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C70	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C71	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C72	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C73	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C74	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C75	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C76	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C77	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C78	100330	33pF 2% 100V CER DISC	MULLARD	2222 683	—
C79	101103	10nF 25% 250V CER DISC	ITT	CD10	—
C80	102100	10pF 5% 500V CER DISC	ITT	CD10	—
C81	102471	470pF 10% 500V CER DISC	ITT	CD10	—
C82	102471	470pF 10% 500V CER DISC	ITT	CD10	—
C83	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C84	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C85	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C86	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C87		NOT FITTED			—
C88	102222	2n2F 20% 500V CER DISC	ITT	CD10	1
C89	140063	6n8F 5% 63V POLYPROPYLENE	WIMA	FKP2.	1
C90	102101	100pF 10% 500V CER DISC	ITT	CD10	1
C91	102221	220pF 10% 500V CER DISC	ITT	CD10	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C92	102470	47pF 5% 500V CER DISC	ITT	CD10.	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	213006	5V 5W ZENER	UNITRODE	TVS505	2
D2	213006	5V 5W ZENER	UNITRODE	TVS505	–
D3		NOT USED			–
D4		NOT USED			–
D5	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	21
D6	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D7	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D8	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D9	213022	10V 5W ZENER	UNITRODE	TVS510	4
D10	213022	10V 5W ZENER	UNITRODE	TVS510	–
D11	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D12	213022	10V 5W ZENER	UNITRODE	TVS510	–
D13	213022	10V 5W ZENER	UNITRODE	TVS510	–
D14	213009	15V 5W ZENER	UNITRODE	TVS515	2
D15	213009	15V 5W ZENER	UNITRODE	TVS515	–
D16	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	5
D17	210200	20V 400mW ZENER	MULLARD	BZY88C20	1
D18		NOT USED			–
D19		NOT USED			–
D20	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	7
D21	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D22	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D23	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D24	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D25	210130	13V 400mW ZENER	MULLARD	BZY88C13	1
D26	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D27	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D28	213002	5V1 5W ZENER	MOTOROLA	IN5338B	2
D29	213002	5V1 5W ZENER	MOTOROLA	IN5338B	–
D30	213023	6V4 100ppm ZENER	MOTOROLA	IN4575	1
D31	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D32	210091	9V1 400mW ZENER	MULLARD	BZY88C9V1	1
D33	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D34	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	2
D35	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	–
D36		NOT USED			–
D37	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D38	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D39	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D40	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D41	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D42	213011	1V5 250mW ZENER	MULLARD	BZV46-1V5	2
D43	213011	1V5 250mW ZENER	MULLARD	BZV46-1V5	–
D44	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D45	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D46	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D47	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	—
D48		NOT USED			—
D49	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D50	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D51		NOT USED			—
D52	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D53	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D54	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D55	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D56	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D57	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	2
D58	220010	Si HOT CARRIER DIODE	HP	HSCH1001/IN6263	—
D59	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
D60	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	—
Q1	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	9
Q2	230069	N-CHAN JFET	SILICONIX	2N4416	2
Q3	230069	N-CHAN JFET	SILICONIX	2N4416	—
Q4	230003	N-CHAN JFET	TELEDYNE	U1899JF	8
Q5	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q6	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q7	230003	N-CHAN JFET	TELEDYNE	U1899JF	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q8	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q9	250027	Si DUAL PNP TRANSISTOR	MICRO POWER SYSTEMS	MP351	1
Q10	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	7
Q11		NOT USED			—
Q12	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q13	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q14	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q15	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q16	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	2
Q17	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q18	240038	Si NPN DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP318	—
Q19	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q20	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q21	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q22	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	3
Q23	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q24	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	5
Q25	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q26	240025	DARLINGTON	MOTOROLA	MPSA13	1
Q27	240013	Si NPN TRANSISTOR	NATIONAL	BC184C/TO18	—
Q28	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	—
Q29	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q30	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q31	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q32	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q33	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO18	—
Q34	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q35	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	—
Q36	230042	N-CHAN I LIM 3·0mA	SILICONIX	J509	—
Q37	250008	Si PNP TRANSISTOR	NATIONAL	BC214C/TO18	1
Q38	239072-1	N-CHAN JFET SEL	DATRON (2·5V ≤ Vp ≤ 3·5V)	U1899JF (GREEN)	2
Q39	239072-1	N-CHAN JFET SEL	DATRON (2·5V ≤ Vp ≤ 3·5V)	U1899JF (GREEN)	—
Q40	230070	N-CHAN DUAL JFET	SILICONIX	2N5911	2
Q41	230070	N-CHAN DUAL JFET	SILICONIX	2N5911	—
Q42	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	2
Q43	230065	N-CHAN I LIM 4·7mA	SILICONIX	J511	—
Q44	239075-1	N-CHAN JFET SEL	DATRON (3·5V ≤ Vp ≤ 4·5V)	U1899JF (BLUE)	2
Q45	239075-1	N-CHAN JFET SEL	DATRON (3·5V ≤ Vp ≤ 4·5V)	U1899JF (BLUE)	—
Q46	230035	N-CHAN JFET	TELEDYNE	U1897JF	1
Q47		NOT USED			—
Q48, Q51, Q52.	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q49, Q50		NOT USED			—
M1	260053	7650 OP AMP	INTERSIL	ICL 7650 CPD	1
M2	260073	411 OP AMP	NATIONAL	LF411CN	2
M3	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	1
M4	260066	11 OP AMP	NATIONAL	LM11CN	2

NOTES.

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 19 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M5	260066	11 OP AMP	NATIONAL	LM11CN	—
M6	260075	2903 DUAL COMPARATOR	NATIONAL	LM2903N	2
M7	280025	QUAD ANALOG SWITCH	MOTOROLA	MC14066BCP	4
M8	280025	QUAD ANALOG SWITCH	MOTOROLA	MC14066BCP	—
M9	280124	HEX D-TYPE FLIP-FLOP	MULLARD	HEF40174P	2
M10	280079	QUAD 2 I/P OR	MOTOROLA	MC14071BCP	1
M11	280032	DECADE COUNTER/DIV.	MOTOROLA	MC14017BCP	2
M12	260050	412 DUAL FET I/P OP AMP	NATIONAL	LF412CN	2
M13	280085	QUAD 2 I/P AND	MOTOROLA	MC14081BCP	1
M14	280025	QUAD ANALOG SWITCH	MOTOROLA	MC14066BCP	—
M15	280032	DECADE COUNTER/DIV.	MOTOROLA	MC14017BCP	—
M16	280025	QUAD ANALOG SWITCH	MOTOROLA	MC14066BCP	—
M17	280124	HEX D-TYPE FLIP-FLOP	MULLARD	HEF40174P	—
M18	280122	TRIPLE 3 I/P OR	MOTOROLA	MC14075BCP	2
M19	260050	412 DUAL FET I/P OP AMP	NATIONAL	LF412CN	—
M20	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	3
M21	260075	2903 DUAL COMPARATOR	NATIONAL	LM2903N	—
M22	290135	HV TRANSISTOR ARRAY	PLESSEY	SL3183	1
M23	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	—
M24	260027	714 OP AMP	FAIRCHILD	μA714HC	1
M25	280035	BCD/DECIMAL DECODER	MOTOROLA	MC14028BCP	1
M26	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	—
M27	280122	TRIPLE 3 I/P OR	MOTOROLA	MC14075BCP	—

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 20 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M28	290090	7X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2002A/XR2202CP	2
M29	290090	7X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2002A/XR2202CP	—
M30	280125	PHASE DETECTOR	NATIONAL	MM74C932N	1
M31	260073	411 OP AMP	NATIONAL	LF411CN	—
M32	260087	BIFET OP. AMP	MOTOROLA	MC34081P	1
RL1		NOT USED			—
RL2	330030	RELAY 4P N/O	SDS	S4-24V	5
RL3	330032	RELAY 1P2W MINIATURE	TAKAMISAWA	MZ24HSC	1
RL4	330029	RELAY 2P2W	SDS	DS2E-DC24V	11
RL5	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL6	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL7	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL8	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL9	330030	RELAY 4P N/O	SDS	S4-24V	—
RL10	330030	RELAY 4P N/O	SDS	S4-24V	—
RL11	330031	RELAY 2P N/O 2P N/C	SDS	S2-24V	1
RL12	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	1
RL13	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL14	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL15	330029	RELAY 2P2W	SDS	DS2E-DC24V	—

NOTES

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
RL16	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL17	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
RL18	330030	RELAY 4P N/O	SDS	S4-24V	—
RL19	330030	RELAY 4P N/O	SDS	S4-24V	—
RL20	330029	RELAY 2P2W	SDS	DS2E-DC24V	—
L1	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	6
L2	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L3	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L4	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L5		NOT USED			—
L6	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L7	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	—
L8	370027	47μH ± 10% RF CHOKE	SIGMA	SC30-10-2533-10	1
F1	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275 001	2
F2	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275 001	—
	410172-11	PCB - AC			1
	400639-1	ATTENUATOR/CAGE ASSY	DATRON		1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	450442-1	HEATSINK			1
	540002	22 SWG B.T.C. WIRE			A/R
	512999	7/·2 PTFE WIRE			A/R
	560002	7/34 AWG CO-AX			A/R
	590007	LACING CORD		MW/062 BLACK	A/R
	590031	HEATSHRINK SLEEVE 3·2mm	HELLERMANN ELECTRIC		A/R
	590032	HEATSHRINK SLEEVE 4·8mm	" "		A/R
	604056	4 WAY ·1" PCB PLUG GD PL	MOLEX	22-10-2041	10
	605059	8 WAY DIL SOCKET	JERMYN	J23-18008	12
	605060	14 WAY DIL SOCKET	JERMYN	J23-18014	12
	605061	16 WAY DIL SOCKET	JERMYN	J23-18016	8
LKA, LKB.	605127	2 WAY ·1" 'SHORTING' SKT.	ASSMANN	AKSPL-G	2
	611012	M3 x 12mm POZI-CSK STEEL	ZN PL		3
	611004	M3 x 6mm POZIPAN STEEL	ZN PL		2
	612030-1	M3 x 14mm STANDOFF	DATRON	SEE DRG 612***	1
	612026-1	M3 x 6mm STANDOFF	DATRON	SEE DRG 612***	1
	614001	M3 CLEAR x 4mm STANDOFF	DATRON		3
	613005	M3 INT SHAKEPROOF	ZN PL		1
	613029	M3 WAVY WASHER S.S.			1
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	44
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº 2 (LARGE)	24

NOTES.

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 23 OF 24

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	630036	STEATITE BEAD 18 SWG	PARK ROYAL PORCELAIN	Nº 1	10
	630121	PCB EJECTOR GREEN	RICHCO	CBE	2
	450424-1	TOP GUARD SHIELD			1
	450425-1	BOTTOM GUARD SHIELD			1
	900003	HEATSINK COMPOUND	RS	544-311	A/R
	590001	SLEEVE Ø3·0 MAX.	HELLERMANN ELECTRIC	H15 x 20mm BLK. HELSYN	2
	590004	SLEEVE Ø1·0 PTFE	HELLERMANN ELECTRIC	FE10	A/R
LKA, LKB	604046	3 WAY ·1" PCB PLUG GD PL.	MOLEX	22-10-2031	2
	620003	SOLDER PIN	HARWIN	H2105A01	3
	900004	SILICONE RUBBER COMPOUND	RS	554-311	A/R
	590006	HEATSHRINK SLEEVE Ø 2·4			A/R
	630243	GLASS BEAD 2.4 O/D x 0.8 I/D x 1.8.	MANSOL (PREFORMS)	M5363B/3	40
	510000	7/·2 PVC INSULATED BLACK WIRE			A/R.

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TITLE 4700 AC PCB ASSY

DRAWING NUMBER 400663 SHEET 24 OF 24

DRAWING No. 400614											
		CHK'D	RMC								
		DATE	10.3.86	11.4.86	14.4.86	28.4.86	20.5.86	25.6.86	18.7.86	2.9.86	
		ECO	2162	2199	2210	2235	2229	2256	2323	2365	2386
		REVISION / ISSUE	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
DESCRIPTION	**DRAWING NUMBER**	**SHEET NUMBER**	**ISSUE . REVISION**								
COMPONENT LAYOUT	480614	1	1.0		1.1		1.2		1.3	1.4	
COMPONENT LAYOUT	480614	2	1.0		1.1	1.2			1.3		
SCHEMATIC	430614	1	1.0	1.1							
SCHEMATIC	430614	2	1.0				1.1				
SCHEMATIC	430614	3	1.0						1.1		
FUNCTIONAL TEST PROC.	460614/FT	1–5	1.0								
FUNCT. TEST TICK LIST	470614/FT	1–2	1.0								
PCB	410347		1.0								

NOTES

☐ INDICATES NO CHANGE TO DOC. AT ISSUE LEVEL CHANGE

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DRN	CHK'D	APP'D	TITLE	DRAWING No.
IL	R.K.COGGAN		4700 I/Ω PCB. ASSEMBY	400614
DATE 13.8.85	DATE 18/3/86	DATE 18.3.86		SHEET 1 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	008037	OR18 10% 2W5 WIREWOUND	WELWYN	W21	1
R2	000820	82R 5% 1/4W CARBON	MULLARD	CR25	1
R3	000821	820R 5% 1/4W CARBON	MULLARD	CR25	1
R4		NOT USED			
R5	000688	6R8 5% 1/4W CARBON	MULLARD	CR25	1
R6	000103	10K 5% 1/4W CARBON	MULLARD	CR25	2
R7	000103	10K 5% 1/4W CARBON	MULLARD	CR25	–
R8	080084	90R00 ·1% 3ppm M.FOIL	VISHAY	S102C	1
R9	080085	900R0 ·1% 3ppm M.FOIL	VISHAY	S102C	1
R10	067502	5k POT 20TURN CERMET	BECKMAN	68X	2
R11	000101	100R 5% 1/4W CARBON	MULLARD	CR25	9
R12	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R13	000393	39K 5% 1/4W CARBON	MULLARD	CR25	2
R14	000104	100k 5% 1/4W CARBON	MULLARD	CR25	3
R15	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R16	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R17	000104	100k 5% 1/4W CARBON	MULLARD	CR25	–
R18	012001	2K00 1% 1/8W 50ppm MF	HOLCO	H8C	2
R19	012001	2K00 1% 1/8W 50ppm MF	HOLCO	H8C	–
R20	011302	13K0 1% 1/8W 50ppm MF	HOLCO	H8C	2
R21	011302	13K0 1% 1/8W 50ppm MF	HOLCO	H8C	–
R22	000393	39K 5% 1/4W CARBON	MULLARD	CR25	–
R23	067202	2K POT 20TURN CERMET	BECKMAN	68X	1

ISS.	ECO	DATE	CHKD	ISS.	E.C.O.	DATE	CHKD.

DATE	DRAWN	CHK'D	APPROVED	DATE
7.5.85	IL			

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TITLE 4700 I/Ω PCB ASSEMBLY.

DRAWING NUMBER 400614 SHEET 2 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24		NOT USED			
R25		NOT USED			
R26	011001	1K00 1% 1/8W 50ppm MF	HOLCO	HBC	2
R27	012670	267R 1% 1/8W 50ppm MF	HOLCO	HBC	1
R28	011001	1K00 1% 1/8W 50ppm MF	HOLCO	HBC	–
R29	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R30	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R31	066200	20R POT 3/8 SQ. VERT.CERMET	BECKMAN	72XW	1
R32		NOT USED			
R33		NOT USED			
R34	000102	1K 5% 1/4W CARBON	MULLARD	CR25	3
R35	000102	1K 5% 1/4W CARBON	MULLARD	CR25	–
R36	NOT USED				–
R37	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R38	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R39	013401	3K40 1% 1/8W 50ppm MF	HOLCO	HBC	1
R40	012002	20K0 1% 1/8W 50ppm MF	HOLCO	HBC	1
R41	000104	100K 5% 1/4W CARBON	MULLARD	CR25	–
R42		NOT USED			
R43	080083	2k0000 ·01% 3ppm M.FOIL	VISHAY	S102C	3
R44	080096	18k000 ·01% 3ppm M.FOIL	VISHAY	S102C	1
R45	080082	20k000 ·01% 3ppm M.FOIL	VISHAY	S102C	2
R46	080083	2k0000 ·01% 3ppm M.FOIL	VISHAY	S102C	–

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TITLE '4700' I/Ω PCB ASSEMBLY
DRAWING NUMBER 400614
SHEET 3 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	080082	20k000 ·01% 3ppm M.FOIL	VISHAY	S102C	–
R48	080083	2k0000 ·01% 3ppm M.FOIL	VISHAY	S102C	–
R49	000100	10R 5% 1/4W CARBON	MULLARD	CR25	2
R50	000100	10R 5% 1/4W CARBON	MULLARD	CR25	–
R51	000105	1M 5% 1/4W CARBON	MULLARD	CR25	2
R52	000153	15K 5% 1/4W CARBON	MULLARD	CR25	1
R53	067201	200R POT 20TURN CERMET	BECKMAN	68X	1
R54	067502	5K POT 20TURN CERMET	BECKMAN	68X	–
R55	067503	50K POT 20TURN CERMET	BECKMAN	68X	1
R56	067504	500K POT 20TURN CERMET	BECKMAN	68X	1
R57	067205	2M POT 20TURN CERMET	BECKMAN	68X	1
R58	067100	10R POT 20TURN CERMET	BECKMAN	68X	1
R59	000101	100R 5% 1/4W CARBON	MULLARD	CR25	–
R60 (FSV)	041655	16M5 1% 1/2W 150ppm MF.	MEPCO	5053YL	1
R61 (FSV)	011698	16R9 1% 1/8W 50ppm MF	HOLCO	HBC	1
R62	070134-3	99K980 50ppm WIREWOUND	MANN	SEE DRG.	1
R63	070133-3	10K0060 50ppm WIREWOUND	MANN	SEE DRG.	1
R64	070132-3	1K00040 50ppm WIREWOUND	MANN	SEE DRG.	1
R65	070131-3	100R040 50ppm WIREWOUND	MANN	SEE DRG.	1
R66 (FSV)	012493	249K 1% 1/8W 50ppm MF	HOLCO	HBC	1
R67	000105	1M 5% 1/4W CARBON	MULLARD	CR25	–
R68 (FSV)	042264	2M26 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	1
R69 (FSV)	011503	150k 1% 1/8W 50ppm MF	HOLCO	HBC	1

NOTES.

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DRAWING NUMBER 400614
SHEET 4 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70 (FSV)	012672	26K7 1% 1/8W 50ppm MF	HOLCO	HBC.	1
R71 ✳	080097-1	99MB 0·1% 15ppm MF	CADDOCK	SEE DRG.	1
R72	070130-3	10R0040 50ppm WIREWOUND	MANN	SEE DRG.	1
R73	070136-3	9M9940 50ppm WIREWOUND	MANN	SEE DRG.	1
R74	070196-1	999K70 50ppm WIREWOUND	MANN	SEE DRG.	1
R75 (FSV)	014991	4K99 1% 1/8W 50ppm MF	HOLCO	HBC.	1
R76 (FSV)	012670	267R 1% 1/8W 50ppm MF	HOLCO	HBC.	1
R77	064104	100k POT 15TURN CERMET	BECKMAN	89P	1
R78	064202	2K POT 15TURN CERMET	BECKMAN	89P	1
R79	080081-1	10R00 0·1%	VISHAY	SEE DRG	1
R80	080022-1	0R100 1%	ISABELLENHUTE	SEE DRG	1
R81	000471	470R 5% 1/4W CARBON	MULLARD	CR25	1
R82	041825	18M2 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	2
R83	041825	18M2 1% 1/2W 100ppm CF	ALLEN BRADLEY	CC	–
R84		NOT USED			
R85	000222	2k2 5% 1/4W CARBON	MULLARD	CR25	1
R86	000102	1k 5% 1/4W CARBON	MULLARD	CR25	–
AN1	090096	1M x 8 2% NETWORK	AB	850-91-1M	2
AN2	090085	12K x 8 2% NETWORK	AB	761-3-12K	1
AN3	090096	1M x 8 2% NETWORK	AB	850-91-1M	–
AN4	090131	10K X4 2% NETWORK	AB	L08-3-R10K	2
AN5	090131	10k x4 2% NETWORK	AB	L08-3-R10K	–

NOTES. ✳ R71 ALTERNATIVE R71 A AND B 49M9 ·1% 25ppm 2 OFF 080098-1

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TITLE '4700' I/Ω PCB ASSEMBLY

DRAWING NUMBER 400614 SHEET 5 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R87	000274	270k 5% 1/4W CARBON	MULLARD	CR25	2
R88	000274	270k 5% 1/4W CARBON	MULLARD	CR25	–
R89	000220	22R 5% 1/4W CARBON	MULLARD	CR25	1
R90		NOT USED			–
R91	014322	43k2 1% 1/8W 50ppm MF	HOLCO	H8C	2
R92	014322	43k2 1% 1/8W 50ppm MF	HOLCO	H8C	–
R93	012742	27k4 1% 1/8W 50ppm MF	HOLCO	H8C	2
R94	012742	27k4 1% 1/8W 50ppm MF	HOLCO	H8C	–
R95	012212	22k1 1% 1/8W 50ppm MF	HOLCO	H8C	1
R96	014992	49k9 1% 1/8W 50ppm MF	HOLCO	H8C	1
R97	019091	9k09 1% 1/8W 50ppm MF	HOLCO	H8C	1

NOTES.

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DRAWING NUMBER 400614 SHEET 6 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	17
C2	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C3		NOT USED			-
C4	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	2
C5	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C6	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C7	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C8	NOT USED				-
C9	NOT USED				-
C10	NOT USED				-
C11	NOT USED				-
C12	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C13	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	2
C14	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C15	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	3
C16	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	-
C17	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	-
C18	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	-
C19	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	4
C20	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C21	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C22	150004	100µF 20% 6V3 DIP TANT	UNION CARBIDE	K100E6V3	1
C23	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	-

NOTES.

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TITLE '4700' I/Ω PCB. ASSEMBLY

DRAWING NUMBER 400614

SHEET 7 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C24	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C25	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C26	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	-
C27	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C28	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	-
C29	150005	2µ2F 20% 16V DIP TANT	UNION CARBIDE	K2R2E16	2
C30	150005	2µ2F 20% 16V DIP TANT	UNION CARBIDE	K2R2E16	-
C31	102100	10pF 5% 500V CER DISC	ITT	CD10	1
C32	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	-
C33	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C34	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C35	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C36	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	2
C37	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	-
C38	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C39	104026	47nF +50% -20% 50V CER DISC	SIEMENS	B37449	-
C40	140054	1nF 20% 1kV DC 400V AC POLYPROP	WIMA	FKP1	3
C41	140054	1nF 20% 1kV DC 400V AC POLY PROP	WIMA	FKP1	-
C42	140054	1nF 20% 1kV DC 400V AC POLY PROP	WIMA	FKP1	-
C43	102330	33pF 5% 500V CER DISC	ITT	CD10	2
C44	102470	47pF 5% 500V CER DISC	ITT	CD10	2
C45		NOT USED			
C46	102101	100pF 10% 500V CER DISC	ITT	CD10	1

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DRAWING NUMBER 400614

SHEET 8 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	102330	33pF 5% 500V CER DISC	ITT	CD10	-
C48	102270	27pF 5% 500V CER DISC	ITT	CD10	1
C49	102470	47pF 5% 500V CER DISC	ITT	CD10	-
D1	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	5
D2	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	-
D3	210062	6V2 400mW ZENER	MULLARD	BZY88C	2
D4	210062	6V2 400mW ZENER	MULLARD	BZY88C	-
D5	213012	2V0 250mW REG DIODE	MULLARD	BZV46 - 2V0	1
D6	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	1
D7	213009	15V 5W ZENER	UNITRODE	TVS515.	4
D8	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	-
D9	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	-
D10	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	-
D11	213009	15V 5W ZENER	UNITRODE	TVS515	-
D12	213009	15V 5W ZENER	UNITRODE	TVS515	-
D13	213009	15V 5W ZENER	UNITRODE	TVS515	-
D14	NOT USED.				-
D15	NOT USED.				-
D16	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	2
D17	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	-
D18	213006	5V 5W ZENER	UNITRODE	TVS505	2

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DRAWING NUMBER 400614

SHEET 9 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D19	213006	5V 5W ZENER	UNITRODE	TVS505	-
					-
					-
Q1	250011	Si PNP TRANSISTOR	NATIONAL	BC327/TO18	1
Q2	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	3
Q3	250004	Si PNP TRANSISTOR	NATIONAL	2N3906 / TO92	1
Q4	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	-
Q5	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO92	2
Q6	230031	N-CHAN DUAL J FET	SILICONIX	U404	1
Q7	230036	N-CHAN J FET	SILICONIX	J108	1
Q8		NOT USED			-
Q9	230001	N-CHAN I LIM 1·4mA		J506	-
Q10		NOT USED			-
Q11	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO92	-

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SHEET 10 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M1	260069	411 OP AMP	NATIONAL	LF411CH	2
M2	NOT USED				–
M3	260083	LTC1052CN OP AMP	LINEAR TECHNOLOGY	LTC 1052 CN	1
M4	260065	OP27 OP AMP	PMI	OP27FZ	2
M5		NOT USED			–
M6	280035	BCD/DECIMAL DECODER	MOTOROLA	MC14028 BCP	2
M7	260069	411 OP AMP	NATIONAL	LF411CH	–
M8	260065	OP27 OP AMP	PMI	OP27FZ	–
M9	280045	TRIPLE 3 I/P NOR	MOTOROLA	MC14025BCP	2
M10	260086	DUAL POWER AUDIO AMP	NATIONAL	LM1877N	1
M11		NOT USED			–
M12	290050	7X DARLINGTON DRIVER	SPRAGUE / EXAR	ULN2002A / XR2202CP	1
M13		NOT USED			–
M14		NOT USED			–
M15	260039	324 QUAD OP AMP	NATIONAL	LM324N	1
M16	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	1
M17	280017	HEX INVERTER	MOTOROLA	MC14069UBCP	1
M18		NOT USED			–
M19	280045	TRIPLE 3 I/P NOR	MOTOROLA	MC14025BCP	–
M20	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	1

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SHEET 11 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
RL1	330042-2	RELAY 3P N/O 1P N/C		SEE DRG	1
RL2	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	4
RL3	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	–
RL4	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	–
RL5	330012-2	RELAY REED 1A GUARDED	HAMLIN	HE721A5134	–
RL6		NOT USED			–
RL7	330039	RELAY 4POLE N/O	SDS	S4-L-6V	12
RL8	330029	RELAY 2P2W	SDS	DS2E-M-DC24V	2
RL9	330029	RELAY 2P2W	SDS	DS2E-M-DC24V	–
RL10	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL11	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL12	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL13	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL14	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL15		NOT USED			–
RL16	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL17	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL18	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL19,20,23	330039	RELAY 4P N/O	SDS	S4-L-6V	–
RL24,25	330030	RELAY 4P N/O	SDS	S4-24V	2
RL26	330040	RELAY 1P 2W	SDS	DS1E-SL-6V	1

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SHEET 12 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
L1	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	2
L2	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	-
	400669-1	I/Ω CLAMP ASSY	DATRON		1
	410347-1	I/Ω PRINTED CIRCUIT	BOARD		1
	450419 - 2	CURRENT HEATSINK			1
	512000	7/0·2 PTFE WIRE BLACK			A/R
	512222	7/0·2 PTFE WIRE RED			A/R
	512333	7/0·2 PTFE WIRE ORANGE			A/R
	512444	7/0·2 PTFE WIRE YELLOW			A/R
	512555	7/0·2 PTFE WIRE GREEN			A/R
	512666	7/0·2 PTFE WIRE BLUE			A/R
	512888	7/0·2 PTFE WIRE GREY			A/R
	540002	22 SWG TINNED COPPER WIRE.			A/R
	512999	7/0·2 WHITE PTFE INSULATED WIRE			A/R
	540006	1/0·4 BLK. PTFE INS^L WIRE		TO BSQ210 TYPE A	A/R
	560008	4 CORE PTFE SCREENED 19/0·15 CABLE		SEE DRG.	370mm
	590001	SLEEVE Ø3 MAX CABLE	HELLERMANN ELECTRIC	H15 x 20mm BLK	12
	590029	HEATSHRINK SLEEVE POLYOLEFIN Ø9	HELLERMANN ELECTRIC	SFM9-3BK	40mm
	590007	LACING CORD			A/R

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DRAWING NUMBER 400614

SHEET 13 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
J1	604033	4 WAY ·1" PCB PLUG GD. PL.	MOLEX	22-29-2041	2
	602001	FSV TERMINAL	MOLEX	02-04-5114	16
	605059	8 WAY DIL SOCKET			3
	605060	14 WAY DIL SOCKET			7
	605061	16 WAY DIL SOCKET			3
	605052	8 WAY ·1" HOUSING	MOLEX	22-01-2085	1
	611008	M3 X 10mm POZI-CSK STEEL ZN PL			2
	611004	M3 X 6mm POZI-PAN STEEL. ZN. PL.			3
	611015	M3 X 8mm POZI-C.S.K STEEL. ZN. PL.			2
	605057	CRIMP TERMINAL GD. PL.	MOLEX	4809-GL	8
	605070	20 WAY DIL SOCKET			2
	613029	M3 WAVY WASHER SS			5
	613017	M3 FLAT WASHER NYLON			34
	615002	M3 FULL NUT STEEL ZN.PL.			4
*	618001	INSULATING BUSH TO 220	MULLARD	56359C	2
	620001	CLOVERLEAF PTFE INSUL.	SEALECTRO	FTE12P59	16
	620003	SOLDER PIN	HARWIN	H 2105 A01	9
	620005	CLOVERLEAF PTFE INSUL.	SEALECTRO	FTE 15P59	20
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	11
**	620005	CLOVERLEAF PTFE INSU	SEALECTRO	FTE 15P59	1

NOTES. * INSULATING BUSH REQUIRED ONLY WHEN VISHAY RESISTOR ALTERNATIVE USED. (R79)

** CLOVERLEAF REQUIRED ONLY WHEN R71 'A' AND 'B' ALTERNATIVE USED

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SHEET 14 OF 15

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	630003	'P' CLIP ϕ 4·8 mm	SES	CN6	2
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº2	18
	630036	STEATITE BEAD 18 SWG	PARK ROYAL PORCELAIN	Nº1	12
	630122	PCB EJECTOR BLUE	RICHCO	CBE	2
	630167	FOAM TAPE 6mmT x 9mm W	TESA	TESAMOLL 761/4763	A/R
	900003	HEAT SINK COMPOUND	RS	554-311	A/R
F1		NOT USED			
F2	920124	FUSE 375mA 125V 7mm	LITTLE FUSE	275 · 375	2
F3	920120	FUSE 1A 125V 7mm	LITTLE FUSE	275 001	1
F4	920124	FUSE 375mA 125V 7mm	LITTLE FUSE	275 · 375	–
F5	920125	FUSE 2½A 125V 7mm	LITTLE FUSE	275 02·5	1
	613005	M3 SHAKEPROOF WASHER	STEEL		2

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DATE	DRAWING NUMBER 400614 — SHEET 15 OF 15

DRAWING No. 400618	CHK'D	RKS					
	DATE	11.3.86	11.4.86	21.4.86	4.7.86	25.9.86	25.9.86
	ECO	2162	2211	2175	2305	2386	2395
	REVISION	1.0	2.0	2.1	2.2	2.3	3.0
	ISSUE						

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION					
COMPONENT LAYOUT	480618	1	1.0	2.0			2.1	3.0
SCHEMATIC	430618	1	1.0	2.0				3.0
SCHEMATIC	430618	2	1.0	2.0				3.0
SCHEMATIC	430618	3	1.0	2.0				3.0
SCHEMATIC	430618	4	1.0	2.0				3.0
SCHEMATIC	430618	5	1.0	2.0				3.0
SCHEMATIC	430618	6	1.0	2.0				3.0
FUNCTIONAL TEST PROC	460618/FT	ALL	1.0	2.0				3.0
FUNC. TEST TICK LIST	470618/FT	ALL	1.0	2.0				3.0
PCB	410339		1.0	1.0				1.0

NOTES

☐ DENOTES NO CHANGE TO DOC AT ISSUE LEVEL CHANGE.

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DRN	CHK'D	APPD	TITLE	DRAWING No.
IL	R.R. COGGAN		4700 PA PCB ASSY	400618
DATE 11.3.86	DATE 17/3/86	DATE 18.3.86		SHEET 1 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	3
R2	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	2
R3	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	2
R4	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	–
R5	000152	1k5 5% 1/3W CARBON	MULLARD	CR25	1
R6	000330	33R 5% 1/3W CARBON	MULLARD	CR25	1
R7	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	2
R8	013161	3k16 1% 1/8W 50ppm MF	HOLCO	H8C	–
R9	007100	10R 2% 2W MET-OX	ELECTROSIL	FP2	2
R10	015620	562R 1% 1/8W 50ppm MF	HOLCO	H8C	3
R11	007393	39k 2% 2W MET-OX	ELECTROSIL	FP2	2
R12	007474	470k 2% 2W MET-OX	ELECTROSIL	FP2	1
R13	001561	560R 5% 1/2W CARBON	MULLARD	CR37	1
R14	000123	12k 5% 1/3W CARBON	MULLARD	CR25	3
R15	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	–
R16	018251	8k25 1% 1/8W 50ppm MF	HOLCO	H8C	2
R17	018251	8k25 1% 1/8W 50ppm MF	HOLCO	H8C	–
R18	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	–
R19	000101	100R 5% 1/3W CARBON	MULLARD	CR25	4
R20	000103	10k 5% 1/3W CARBON	MULLARD	CR25	14
R21	000101	100R 5% 1/3W CARBON	MULLARD	CR25	–
R22	000103	10K 5% 1/3W CARBON	MULLARD	CR25	–
R23	000103	10K 5% 1/3W CARBON	MULLARD	CR25	–

NOTES.

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DATE	DRAWING NUMBER 400618	SHEET 2 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	070066	10k0 0.1% 5ppm W/W	MANN	MX125B	3
R25	080041	750R 0.1% 50ppm MF	VISHAY	VSRC1	1
R26	070066	10k0 0.1% 5ppm WW	MANN	MX125B	–
R27	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R28	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R29	070066	10k0 0.1% 5ppm WW	MANN	MX125B	–
R30	070170	1k0 0.1% 5ppm WW	MANN	MX125B	1
R31	000821	820R 5% 1/3W CARBON	MULLARD	CR25	1
R32	011542	15k4 1% 1/8W 50ppm MF	HOLCO	H8C	1
R33	013002	30k0 1% 1/8W 50ppm MF	HOLCO	H8C	1
R34	007100	10R 2% 2W MET-OX	ELECTROSIL	FP2	–
R35	015620	562R 1% 1/8W 50ppm MF	HOLCO	H8C	–
R36	007393	39k 2% 2W MET-OX	ELECTROSIL	FP2	–
R37	015110	511R 1% 1/8W 50ppm MF	HOLCO	H8C	3
R38	000123	12k 5% 1/3W CARBON	MULLARD	CR25	–
R39	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R40	000104	100k 5% 1/3W CARBON	MULLARD	CR25	16
R41		NOT USED			–
R42		NOT USED			–
R43		NOT USED			–
R44		NOT USED			–
R45		NOT USED			–
R46		NOT USED			–

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TITLE 4700 PA PCB ASSY

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SHEET 3 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000473	47k 5% 1/3W CARBON	MULLARD	CR25	3
R48	000473	47k 5% 1/3W CARBON	MULLARD	CR25	–
R49	008051	43k 5% 9W W.W.	WELWYN	W23	1
R50	000824	820k 5% 1/3W CARBON	MULLARD	CR25	2
R51	006204	200k 2% 1W MET-OX	ELECTROSIL	FP1	1
R52	011000	100R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R53	016198	619R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R54	000331	330R 5% 1/3W CARBON	MULLARD	CR25	1
R55	000102	1k 5% 1/3W CARBON	MULLARD	CR25	6
R56	012000	200R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R57	000470	47R 5% 1/3W CARBON	MULLARD	CR25	3
R58	015620	562R 1% 1/8W 50ppm MF	HOLCO	H8C	–
R59		NOT USED			–
R60	000473	47k 5% 1/3W CARBON	MULLARD	CR25	–
R61	000824	820k 5% 1/3W CARBON	MULLARD	CR25	–
R62		NOT USED			–
R63	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	4
R64	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	–
R65	008058	22k 5% 12W W.W.	WELWYN	W24	1
R66	015111	5k11 1% 1/8W 50ppm MF	HOLCO	H8C	1
R67	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	–
R68	011002	10k0 1% 1/8W 50ppm MF	HOLCO	H8C	–
R69	000223	22k 5% 1/3W CARBON	MULLARD	CR25	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R71	011001	1k0 1% 1/8W 50ppm MF	HOLCO	H8C	2
R72	015110	511R 1% 1/8W 50ppm MF	HOLCO	H8C	–
R73	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R74	011001	1k0 1% 1/8W 50ppm MF	HOLCO	H8C	–
R75		NOT USED			–
R76	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R77	066502	5k POT 3/8SQ VERT CERMET	BECKMAN	72XW	1
R78	000621	620R 5% 1/3W CARBON	MULLARD	CR25	1
R79	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R80	000105	1M 5% 1/3W CARBON	MULLARD	CR25	4
R81	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	–
R82	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R83	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	3
R84	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	3
R85	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R86	000226	22M 5% 1/3W CARBON	MULLARD	CR25	2
R87	000226	22M 5% 1/3W CARBON	MULLARD	CR25	–
R88	005204	200k 2% 1/2W CARBON	ELECTROSIL	TR5	2
R89	000100	10R 5% 1/3W CARBON	MULLARD	CR25	3
R90	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	–
R91	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R92	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R93	016190	619R 1% 1/8W 50ppm MF	HOLCO	H8C	3
R94	013320	332R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R95	012800	280R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R96	019090	909R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R97	012211	2k21 1% 1/8W 50ppm MF	HOLCO	H8C	1
R98	014421	4k42 1% 1/8W 50ppm MF	HOLCO	H8C	1
R99	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R100	000105	1M 5% 1/3W CARBON	MULLARD	CR25	–
R101	000474	470k 5% 1/3W CARBON	MULLARD	CR25	1
R102	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R103	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R104	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R105	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R106	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R107	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R108	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	–
R109	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R110	000393	39k 5% 1/3W CARBON	MULLARD	CR25	1
R111	000472	4k7 5% 1/3W CARBON	MULLARD	CR25	–
R112	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R113	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R114	001278	2R7 5% 1/2W CARBON	MULLARD	CR37	1
R115	011302	13k0 1% 1/8W 50ppm MF	HOLCO	H8C	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R116	011101	1k1 1% 1/8W 50ppm MF	HOLCO	H8C	2
R117	011302	13k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R118	011101	1k1 1% 1/8W 50ppm MF	HOLCO	H8C	—
R119	000332	3k3 5% 1/3W CARBON	MULLARD	CR25	2
R120	000153	15k 5% 1/3W CARBON	MULLARD	CR25	1
R121	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R122	012002	20k0 1% 1/8W 50ppm MF	HOLCO	H8C	1
R123	012001	2k0 1% 1/8W 50ppm MF	HOLCO	H8C	2
R124	015110	511R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R125	016190	619R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R126	016190	619R 1% 1/8W 50ppm MF	HOLCO	H8C	—
R127	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R128	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R129	000102	1k 5% 1/3W CARBON	MULLARD	CR25	—
R130	000270	27R 5% 1/3W CARBON	MULLARD	CR25	2
R131	000220	22R 5% 1/3W CARBON	MULLARD	CR25	2
R132	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R133	000271	270R 5% 1/3W CARBON	MULLARD	CR25	2
R134	000271	270R 5% 1/3W CARBON	MULLARD	CR25	—
R135	000470	47R 5% 1/3W CARBON	MULLARD	CR25	—
R136	000220	22R 5% 1/3W CARBON	MULLARD	CR25	—
R137	000270	27R 5% 1/3W CARBON	MULLARD	CR25	—
R138	007184	180k 2% 2W MET-OX	ELECTROSIL	FP2	2

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R139	000180	18R 5% 1/3W CARBON	MULLARD	CR25	2
R140	000221	220R 5% 1/3W CARBON	MULLARD	CR25	2
R141	000108	1R 5% 1/3W CARBON	MULLARD	CR25	2
R142	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R143	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R144	000338	3R3 5% 1/3W CARBON	MULLARD	CR25	1
R145	000100	10R 5% 1/3W CARBON	MULLARD	CR25	—
R146	000101	100R 5% 1/3W CARBON	MULLARD	CR25	—
R147	000108	1R 5% 1/3W CARBON	MULLARD	CR25	—
R148	000221	220R 5% 1/3W CARBON	MULLARD	CR25	—
R149	000180	18R 5% 1/3W CARBON	MULLARD	CR25	—
R150	001182	1k8 5% 1/2W CARBON	MULLARD	CR37	—
R151	008005	1R 5% 2½W W.W.	WELWYN	W21	1
R152	000183	18k 5% 1/3W CARBON	MULLARD	CR25	2
R153	000561	560R 5% 1/3W CARBON	MULLARD	CR25	1
R154	000183	18k 5% 1/3W CARBON	MULLARD	CR25	—
R155	007184	180k 2% 2W MET-OX	ELECTROSIL	FP2	—
R156	018250	825R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R157	016811	6k81 1% 1/8W 50ppm MF	HOLCO	H8C	2
R158	000104	100k 5% 1/3W CARBON	MULLARD	CR25	—
R159	012001	2k0 1% 1/8W 50ppm MF	HOLCO	H8C	—
R160	000332	3k3 5% 1/3W CARBON	MULLARD	CR25	—
R161	016811	6k81 1% 1/8W 50ppm MF	HOLCO	H8C	—

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R162	000102	1k 5% 1/3W CARBON	MULLARD	CR25	–
R163		NOT USED			–
R164		NOT USED			–
R165	017500	750R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R166	000150	15R 5% 1/3W CARBON	MULLARD	CR25	2
R167	000150	15R 5% 1/3W CARBON	MULLARD	CR25	–
R168	000182	1k8 5% 1/3W CARBON	MULLARD	CR25	1
R169	000102	1K 5% 1/3W CARBON	MULLARD	CR25	–
R170	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R171	011621	1k62 1% 1/8W 50ppm MF	HOLCO	H8C	1
R172	000518	5R1 5% 1/3W CARBON	MULLARD	CR25	2
R173	000518	5R1 5% 1/3W CARBON	MULLARD	CR25	–
R174	000228	2R2 5% 1/3W CARBON	MULLARD	CR25	1
R175	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R176	005204	200k 2% 1/2W CARBON	ELECTROSIL	TR5	–
R177	000105	1M 5% 1/3W CARBON	MULLARD	CR25	–
R178	000105	1M 5% 1/3W CARBON	MULLARD	CR25	–
R179		NOT USED			–
R180	011741	1k74 1% 1/8W 50ppm MF	HOLCO	H8C	1
R181	012492	24k9 1% 1/8W 50ppm MF	HOLCO	H8C	1
R182	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R183	000123	12k 5% 1/3W CARBON	MULLARD	CR25	–
R184		NOT USED			–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN1	090132	4k7 x 4 2% SIL NETWORK	BECKMAN	L08-3-R4k7	1
AN2	090095	47k x 4 2% SIL NETWORK	BECKMAN	L08-3-R47k	1
AN3		NOT USED			–
AN4	090096	1M x 8 2% NETWORK	BECKMAN	L09-1-R1M	2
AN5	090096	1M x 8 2% NETWORK	BECKMAN	L09-1-R1M	–
AN6		NOT USED			–
AN7		NOT USED			–
AN8	090090	47k x 8 2% NETWORK	AB	761-3-47k	1
AN9	090144	1k x 8 1% DIL NETWORK	BECKMAN	698-3-R1KF	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy
C1	150023	33µF 20% 25V DIP TANT	UNION CARBIDE	K33E25	1
C2	104018	1nF 20% 1kV CER DISC	ITT	HD10K101N0MS-SS1K0DSC	2
C3	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	4
C4	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	6
C5	150012	100nF 20% 35V DIP TANT	UNION CARBIDE	KR10E35	4
C6	150012	100nF 20% 35V DIP TANT	UNION CARBIDE	KR10E35	–
C7	104018	1nF 20% 1kV CER DISC	ITT	HD10K101N0MS-SS1K0DSC	–
C8	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	13
C9	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C10	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	5
C11	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C12	104021	15pF 20% 1kV NPO CD	ITT	HD10C615P0MS-SS1K0DSC	1
C13	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C14	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C15	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	2
C16	150012	100nF 20% 35V DIP TANT	UNION CARBIDE	KR10E35	–
C17	102222	2n2F 10% 500V CER DISC	ITT	CD10	1
C18	102100	10pF 5% 500V CER DISC	ITT	CD10	2
C19	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C20	110015	15nF 20% 63V POLYESTER	WIMA	MKS2	3
C21	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C22	110044	680nF 20% 630V POLYESTER	WIMA	MKS4	2
C23	102221	220pF 10% 500V CER DISC	ITT	CD10	3

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C24	102221	220pF 10% 500V CER DISC	ITT	CD10	–
C25	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	3
C26	180041	100µF 40V AL ELECT	STEATITE	EKM 00FD 310G	1
C27	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C28	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C29	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	–
C30	102471	470pF 10% 500V CER DISC	ITT	CD10	2
C31	110044	680nF 20% 630V POLYESTER	WIMA	MKS4	–
C32	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C33	100182	1n8F 2% 100V CER DISC	MULLARD	2222 683	1
C34	110015	15nF 20% 63V POLYESTER	WIMA	MKS2	–
C35	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C36	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C37	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E35	–
C38	110035	220nF 20% 63V POLYESTER	WIMA	MKS2	–
C39	150022	2µ2F 20% 35V DIP TANT	UNION CARBIDE	K2R2E35	5
C40	102338	3p3F ±·5pF 500V CER DISC	ITT	CD08	1
C41	150022	2µ2F 20% 35V DIP TANT	UNION CARBIDE	K2R2E35	–
C42	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C43	104026	47nF +50 -20 % 50V CER DISC	SIEMENS	B37449	–
C44	110015	15nF 20% 63V POLYESTER	WIMA	MKS2	–
C45	101103	10nF 25% 250V CER DISC	ITT	CD10	4
C46	101103	10nF 25% 250V CER DISC	ITT	CD10	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C47	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C48	102221	220pF 10% 500V CERDISC	ITT	CD10	–
C49	180051	22µF 20% 350V AL. ELECT	ECC	SMVB	2
C50	100101	100pF 2% 100V CER DISC	MULLARD	2222 683	2
C51	180045	47µF 63V AL. ELECT.	MULLARD	031–38479	2
C52	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C53	100338	3p3F ± ·25pF 100V CER DISC	MULLARD	2222 683	1
C54	180045	47µF 63V AL. ELECT.	MULLARD	031–38479	–
C55	102228	2p2F ± ·5pF 500V CER DISC	ITT	CD08	1
C56	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C57	100101	100pF 2% 100V CER DISC	MULLARD	2222-683	–
C58	100332	3n3F 2% 100V CER DISC	MULLARD	2222-63019	1
C59	180051	22µF 20% 350V AL. ELECT	ECC	SMVB	–
C60	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	–
C61	150022	2µ2F 20% 35V DIP TANT	UNION CARBIDE	K2R2E35	–
C62	150022	2µ2F 20% 35V DIP TANT	UNION CARBIDE	K2R2E35	–
C63	101103	10nF 25% 250V CER DISC	ITT	CD10	–
C64	101103	10nF 25% 250V CER DISC	ITT	CD10	–
C65	110046	1µF 20% 50V POLYESTER	WIMA	MKS2	1
C66	150012	100nF 20% 35V DIP TANT	UNION CARBIDE	KR10E35	–
C67	100102	1nF 2% 100V CER DISC	MULLARD	2222 63019	3
C68	110026	6n8F 20% 100V POLYESTER	WIMA	FKS2	1
C69	150008	470nF 20% 35V DIP TANT	UNION CARBIDE	KR47E35	1

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C70	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	–
C71	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	–
C72	102100	10pF 5% 500V CER DISC	ITT	CD10	–
C73	102102	1nF 10% 500V CER DISC	ITT	CD10	1
C74	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C75	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	4
C76	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	–
C77	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	–
C78	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	–
C79	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	–
C80	150020	10µF 20% 25V DIP TANT	UNION CARBIDE	K10E25	–
C81	110041	10nF 20% 100V POLYESTER	WIMA	FKS2	–
C82		NOT USED			–
C83	100102	1nF 2% 100V CER DISC	MULLARD	2222 63019	–
C84	100102	1nF 2% 100V CER DISC	MULLARD	2222 63019	–
C85	104026	47nF +50 -20% 50V CER DISC	SIEMENS	B37449	–
C86	110020	47nF 20% 63V POLYESTER	WIMA	MKS2	1
C87	150022	2µ2F 20% 35V DIP TANT	UNION CARBIDE	K2R2E35	–
C88	102471	470pF 5% 500V CER DISC	ITT	CD10	–

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TITLE 4700 PA PCB ASSY

DRAWING NUMBER 400618

SHEET 14 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	210100	10V 400mW ZENER	MULLARD	BZY88C10	7
D2	210047	4V7 400mW ZENER	MULLARD	BZY88C4V7	1
D3	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	23
D4	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	7
D5	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D6	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D7	210160	16V 400mW ZENER	MULLARD	BZY88C16	2
D8	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D9	214012	2V45 30ppm ZENER	FERRANTI	ZN458	4
D10		NOT USED			–
D11	220008	L.E.D RED	PYE-TMC	521-9165	2
D12	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D13	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D14	210160	16V 400mW ZENER	MULLARD	BZY88C16	–
D15	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D16	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D17	214012	2V45 30ppm ZENER	FERRANTI	ZN458	–
D18	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D19	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D20	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D21		NOT USED.			
D22	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D23	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–

NOTES.

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TITLE 4700 P.A. PCB. ASSY

DRAWING NUMBER 400618 SHEET 15 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D24	210150	15V 400mW ZENER	MULLARD	BZY88C15	1
D25	214012	2V45 30ppm ZENER	FERRANTI	ZN458	–
D26	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D27	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D28	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D29	214012	2V45 30ppm ZENER	FERRANTI	ZN458	–
D30	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D31	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D32	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D33	213009	15V 5W ZENER	UNITRODE	TVS515	1
D34	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D35	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D36	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D37		NOT USED			–
D38		NOT USED			–
D39	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D40	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D41	211150	15V 1·3W ZENER	MULLARD	BZX61C15	1
D42	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D43	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D44	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D45		NOT USED			–
D46	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	12

NOTES.

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TITLE 4700 P.A. PCB. ASSY.

DRAWING NUMBER 400618 SHEET 16 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D47	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D48	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D49	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D50		NOT USED			–
D51	210300	30V 400mW ZENER	MULLARD	BZY88C30	1
D52		NOT USED			–
D53		NOT USED			–
D54	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D55		NOT USED			–
D56	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D57	213005	75V ½W ZENER	MOTOROLA	BZX79C75	1
D58	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D59	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D60	213019	200V 5% ½W ZENER	MULLARD	BZX79C200	2
D61	213019	200V 5% ½W ZENER	MULLARD	BZX79C200	–
D62	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D63	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D64	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D65	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D66	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D67	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D68	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–
D69	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	–

NOTES.

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TITLE 4700 P.A. PCB. ASSY.

DRAWING NUMBER 400618 SHEET 17 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D70	220008	L.E.D. RED	PYE – TMC	521-9165	–
D71	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D72	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D73	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D74	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D75	210120	12V 400mW ZENER	MULLARD	BZY88C12	1
D76	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	2
D77	210033	3V3 400mW ZENER	MULLARD.	BZY88C3V3	–
D78		NOT USED			–
Q1	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	4
Q2	230063	N-CHAN TMOS JFET	MOTOROLA	MTP2N85	2
Q3	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	4
Q4	230064	P-CHAN TMOS JFET	MOTOROLA	MTP2P50	2
Q5	250027	Si PNP DUAL TRANSISTOR	MICRO POWER SYSTEMS	MP3S1	1
Q6	230036	N-CHAN JFET	SILICONIX	J108	4
Q7		NOT USED			–
Q8	230064	P-CHAN TMOS JFET	MOTOROLA	MTP2P50	–
Q9	230073	N-CHAN TMOS JFET	MOTOROLA	MTP1N100	1
Q10	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	–
Q11	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	–
Q12	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	–
Q13	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	–

NOTES.

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TITLE 4700 P.A. PCB. ASSY

DRAWING NUMBER 400618 SHEET 18 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No	No. USED Per Assy.
Q14	230036	N-CHAN JFET	SILICONIX	J108	—
Q15	230036	N-CHAN JFET	SILICONIX	J108	—
Q16		NOT USED			—
Q17		NOT USED			—
Q18	230036	N-CHAN JFET	SILICONIX	J108	—
Q19	230003	N-CHAN JFET	TELEDYNE	U1899JF	6
Q20	230063	N-CHAN TMOS JFET	MOTOROLA	MTP2N85	—
Q21	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	2
Q22	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO18	2
Q23	250004	Si PNP TRANSISTOR	NATIONAL	2N3906 / TO18	2
Q24	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	—
Q25	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q26	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q27	250009	Si PNP TRANSISTOR	NATIONAL	2N5401 / TO18	2
Q28	250004	Si PNP TRANSISTOR	NATIONAL	2N3906 / TO18	—
Q29	240009	Si NPN TRANSISTOR	NATIONAL	MPSL01/2N5550 TO18	2
Q30	240006	Si NPN TRANSISTOR	NATIONAL	2N3904 / TO18	—
Q31	250009	Si PNP TRANSISTOR	NATIONAL	2N5401 / TO18	—
Q32	240030	Si NPN TRANSISTOR	MOTOROLA	BD389	1
Q33	250019	Si PNP TRANSISTOR	MOTOROLA	BD390	1
Q34	240009	Si NPN TRANSISTOR	NATIONAL	MPSL01/2N5550 TO18	—
Q35	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q36	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	—

NOTES.

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DRAWING NUMBER 400618 SHEET 19 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q37		NOT USED			—
Q38		NOT USED			—
Q39	230019	PMOS ENH FET	G.I.	MEM806	1
Q40	230035	NCHAN JFET	TELEDYNE	U1897JF	1
Q41	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	—
Q42	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
Q43	230003	N-CHAN JFET	TELEDYNE	U1899JF	—
M1	290077	7X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2004A/XR2204CP	1
M2	260049	319 DUAL COMPARATOR	NATIONAL	LM319N	1
M3	260039	324 QUAD OP AMP	NATIONAL	LM324N	1
M4	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	1
M5	280011	DUAL D FLIP-FLOP	MOTOROLA	MC14013BCP	1
M6	280008	QUAD 2 I/P NAND	MOTOROLA	MC14011BCP	1
M7	280090	DUAL BINARY DECODER	MOTOROLA	MC14555BCP	1
M8	260074	LH0032C FAST FET OP. AMP	NATIONAL	LH0032CG	1
M9	280045	TRIPLE 3 I/P NOR	MOTOROLA	MC14025BCP	1
M10	260027	714 OP AMP	FAIRCHILD	μA714HC	2
M11	280009	HEX INVERTER	MOTOROLA	MC14049UBCP	1
M12	280079	QUAD 2 I/P OR	MOTOROLA	MC14071BCP	1
M13	290089	7X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2003A/XR2203CP	1
M14		NOT USED			—
M15	260046	2525 OP AMP	HARRIS	HA32525-5	2
M16	220018	Hi-SPEED OPTO ISOLATOR	HP	6N136	1

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TITLE 4700 PA PCB ASSY

DRAWING NUMBER 400618 SHEET 20 OF 23

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M17	260027	714 OP AMP	FAIRCHILD	μA714HC	–
M18	260042	5532 DUAL OP AMP	SIGNETICS	NE5532N	1
M19	260046	2525 OP AMP	HARRIS	HA32525-5	–
M20	260028	1458 DUAL OP AMP	FAIRCHILD	μA1458CTC	1
M21	260079	12V REGULATOR	NATIONAL	LM78L12	1
M22	260075	2903 DUAL COMPARATOR	NATIONAL	LM2903N	2
M23	260075	2903 DUAL COMPARATOR	NATIONAL	LM2903N	–
RL1	330029	RELAY 2P2W	SDS	DS2E-DC24V	8
RL2	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL3	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL4	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL5	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL6	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL7	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
RL8	330029	RELAY 2P2W	SDS	DS2E-DC24V	–
L1	370025	2μ2H 665mA CHOKE	SIGMA	SC30	2
L2	370025	2μ2H 665mA CHOKE	SIGMA	SC30	–
L3	370001	10μH 0.85Ω RF CHOKE	PLESSEY	58/10/0011/10	3
L4	370001	10μH 0.85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
L5	370001	10μH 0.85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
L6	370007-1	40mH CHOKE	SIGA	SEE DRG	1
L7	370012	470nH 0.1Ω RF CHOKE	SIGMA	SC10	2
L8	370012	470nH 0.1Ω RF CHOKE	SIGMA	SC10	–

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No	No. USED Per Assy.
L9	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
L10	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
LP1	920148	NEON 200/250V T1¼ BI-PIN	RS	586-431	2
LP2	920148	NEON 200/250V T1¼ BI-PIN	RS	586-431	–
	410339-1	PCB			1
	540002	22 SWG B.T.C. WIRE			A/R
J1-J5	604033	4-WAY ·1" PCB PLUG GD.PL.	MOLEX	22-29-2041	10
	605059	8-WAY DIL SOCKET	JERMYN	J23-18008	7
	605060	14-WAY DIL SOCKET	JERMYN	J23-18014	7
	605061	16-WAY DIL SOCKET	JERMYN	J23-18016	4
	611006	M3x10mm POZI-PAN STEEL	ZN. PL.		2
	611016	M3x8mm POZI-PAN STEEL	ZN.PL		2
	613005	M3 INT. SHAKEPROOF	ZN.PL.		3
	613007	M3 WASHER STEEL	ZN.PL.		1
	615002	M3 FULL NUT STEEL	ZN.PL.		4
	618001	INSULATING BUSH TO-220	MULLARD	56359C	1
	613029	M3 WAVY WASHER			1
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	32

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TITLE 4700 P.A. PCB. ASSY.

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SIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº 2	52
	630123	PCB EJECTOR - VIOLET	RICHCO	CBE	2
	700081	SWITCH IP 2 POS" SLIDE	ALCO	SLS-121-PC	1
	920091-1	HEATSINK TO220	SEE DRG		1
	920151	HEATSINK TO202 SLIP CLIP	THERMALLOY	6046 PB	2
	920152	HEATSINK TO220	AAVID	5425B-TT	1
	920153	HEATSINK TO220	ASSMANN	V4330	1
	630036	STEATITE BEAD 18 SWG	PARK ROYAL PORCELAIN	Nº 1	5
	630243	GLASS BEAD 2.4 o/D x 0.8 I/D x 0.8	MANSOL (PREFORMS) LTD	M5363 B/3	26.
	590004	SLEEVING PTFE Ø1.0			A/R
	618004	TO18 MOUNTING PAD	JERMYN	TO18-008D	4
	618010	SIL PAD TO220			1
	605124	10 WAY SOCKET STRIP	AUGAT	510-AG91D	1.33
	920149	HEATSINK TO8	SOURIAU	TXBF 2-050-033B	1
	604046	3 WAY ·1" PCB PLUG GD.PL	MOLEX	22-10-2031	2
	605127	2 WAY ·1" SHORTING LINK	ASSMANN	AKS PL-G	2
	590031	HEATSHRINK Ø3.2	RS		15mm
	590032	HEATSHRINK Ø4.8			15 mm
	512999	7/.2 PTFE WHITE WIRE			40 mm
	560002	7/34 AWG CO-AX			300 mm

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DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400561	MD	4-7-85	1958	2.0	
	MD	14-10-85	2034	2.1	
	MD	31.7.86	2338	2.2	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION	
COMP LAYOUT.	480561	1	2.0	2.1
SCHEMATIC	430561	1	2.0	
FUNCTIONAL TEST PROC.	460561/FT	1-3	2.0	
FUNCT. TEST TICK LIST	470561/FT	1	2.0	

NOTES

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DRN	CHK'D	APPD	TITLE	DRAWING No.
B. JACKSON	MJD		4200	400561
DATE 4-7-85	DATE 10.7.85	DATE 23.7.85	OUT GUARD PSU ASSY	SHEET 1 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	008024	OR27 10% 2½W WIREWOUND	WELWYN	W21	1
R2	000330	33R 5% ⅓W CARBON	MULLARD	CR25	1
R3	000102	1k 5% ⅓W CARBON	MULLARD	CR25	3
R4	000182	1k8 5% ⅓W CARBON	MULLARD	CR25	1
R5	013922	39k2 1% ⅛W 50ppm MF	HOLCO	H8C	1
R6	013742	37k4 1% ⅛W 50ppm MF	HOLCO	H8C	1
R7	090001	PTC THERMISTOR	MULLARD	VA8650	1
R8	000470	47R 5% ⅓W CARBON	MULLARD	CR25	2
R9	000470	47R 5% ⅓W CARBON	MULLARD	CR25	–
R10	011003	100k 1% ⅛W 50ppm MF	HOLCO	H8C	2
R11	011003	100k 1% ⅛W 50ppm MF	HOLCO	H8C	–
R12	066205	2M POT ⅜ SQ VERT.CERMET	BECKMAN	72XW	1
R13	008069	180k 5% ½W CARBON	AB	EB	1
R14	000102	1k 5% ⅓W CARBON	MULLARD	CR25	–
R15	000102	1k 5% ⅓W CARBON	MULLARD	CR25	–
R16	000221	220R 5% ⅓W CARBON	MULLARD	CR25	2
R17	008022	OR27 10% ½W MF	ITT	RN05	2
R18	008022	OR27 10% ½W MF	ITT	RN05	–
R19	000104	100k 5% ⅓W CARBON	MULLARD	CR25	1
R20	000221	220R 5% ⅓W CARBON	MULLARD	CR25	–

NOTES.

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TITLE 4200 PS (OG) PCB ASSY

DRAWING NUMBER 400561 SHEET 2 OF 5

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DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1		NOT USED			–
C2	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	1
C3		NOT USED			–
C4	150017	100µF 20% 16V DIP TANT	UNION CARBIDE	K100E16	1
C5	180004	4700µF 16V AL. ELECT	WIMA	PRINTILYT 1	1
C6	101103	10nF 25% 250V CER DISC	ITT	CD10	1
C7	180026	10µF 350V AL. ELECT	ITT	EN12.12 10/350	1
C8	104030	100pF 10% 4kV CER DISC	ITT	HD16	1
C9	102222	2n2F 20% 500V CER DISC	ITT	CD10	1
C10	110005	10nF 20% 250V POLYESTER	MULLARD	C280AEP10k	1
D1	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	2
D2	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	–
D3	210027	2V7 400mW ZENER	MULLARD	BZY88C2V7	1
D4	214012	2V45 30ppm ZENER	FERRANTI	ZN458	1
D5	213006	5V 5W ZENER	UNITRODE	TVS505	1
D6	210068	6V8 400mW ZENER	MULLARD	BZY88C6V8	1
D7	213004	180V 1/2W ZENER	MOTOROLA	IN5279B	1

NOTES.

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TITLE 4200 PS(OG) PCB ASSY

DRAWING NUMBER 400561 | SHEET 3 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
W1	209013	1A5 600V BRIDGE RECT	MICRO-ELECTRONICS	W006	1
Q1	250011	Si PNP TRANSISTOR	NATIONAL	BC327/TO18	1
Q2	240024	Si NPN TRANSISTOR	NATIONAL	TIP31A	1
Q3	240018	Si NPN TRANSISTOR	MOTOROLA	MJE340	2
Q4	240018	Si NPN TRANSISTOR	MOTOROLA	MJE340	–
Q5	250016	Si PNP TRANSISTOR	MOTOROLA	MJ2955	2
Q6	250016	Si PNP TRANSISTOR	MOTOROLA	MJ2955	–
M1	260061	3140 OP AMP	RCA	CA3140E	1
	410179-6	PCB			1
	604042	4 WAY WAFER PIN ·156"	MOLEX	09-72-2041	2
	605059	8 WAY DIL SOCKET	JERMYN	J23-18008	1
	611006	M3x10mm POZIPAN STEEL	ZN PL		6
	611004	M3x6mm POZIPAN STEEL	ZN PL		1
	613005	M3 INT. SHAKEPROOF	ZN PL		7
	613007	M3 WASHER STEEL	ZN PL		6
	615002	M3 FULL NUT STEEL	ZN PL		7
	618004	MOUNTING PAD TO18	JERMYN	TO18-008D	1
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	9
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº 2 (LARGE)	6
	900003	HEATSINK COMPOUND	RS	554-311	A/R
	900004	SILICONE RUBBER COMPOUND	RS	555-588	A/R

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS												
ECO												
DATE												
CHKD												

DATE 29.2.84 | DRAWN IL. | CHECKED | APPROVED | DATE

datron ELECTRONICS LTD

TITLE 4200 PS (OG) PCB ASSY

DRAWING NUMBER 400561 | SHEET 4 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	920088-1	HEATSINK TO-3	SEE DRG		2
	920126	FUSE HOLDER 20mm PCB	BELLING LEE	L1426	1
F1	920128	FUSE 4A 250V 20mm SLO-B	BELLING LEE	L2080A/4	1
	920144	HEATSINK TO-220	REDPOINT	TV1500	2

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS												
ECO												
DATE												
CHKD												

DATE 29. 2. 84	datron ELECTRONICS LTD
DRAWN IL.	TITLE 4200 PS OG PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400561 — SHEET 5 OF 5

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400554	MD	4-7-85	1958	4·0	
	MD	18.9.85	1981	4·1	
	MD	5.2.86	2139	4·2	
			2320	4·3	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION				
COMP. LAYOUT.	480554	1	4·0	4·1			
SCHEMATIC	430554	1	4·0	4·1			
SCHEMATIC	430554	2	4·0				
FUNCTIONAL TEST. PROC.	460554/FT	1-2	4·0				
FUNCT. TEST TICK LIST.	470554/FT	1	4·0				

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APP'D	TITLE	DRAWING No.
B. JACKSON	MJD	JST	4200 PS(IG) PCB ASSY	400554
DATE 4-7-85	DATE 10.7.85	DATE 27.7.85		SHEET 1 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000102	1k 5% 1/3W CARBON	MULLARD	CR25	1
R2	015230	523R 1% 1/8W 50ppm MF	HOLCO	H8C	1
R3	021402	14k 1% 1/4W 50ppm MF	HOLCO	H4C	1
R4		NOT USED			–
R5		NOT USED			–
R6		NOT USED			–
R7	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	2
R8	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	–
R9	000103	10k 5% 1/3W CARBON	MULLARD	CR25	2
R10	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
C1	180042	3300µF 25V AL ELECT	STEATITE	EG. 00MG. 433E	2
C2	180042	3300µF 25V AL ELECT	STEATITE	EG. 00MG. 433E	–
C3	180047	1000µF 40V AL ELECT	ECC	SMVB	7
C4	180047	1000µF 40V AL ELECT	ECC	SMVB	–
C5	110020	47nF 20% 63V POLYESTER	WIMA	MKS2	1
C6	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	7
C7	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	–
C8	180047	1000µF 40V AL ELECT	ECC	SMVB	–
C9	180047	1000µF 40V AL ELECT	ECC	SMVB	–
C10	180048	470µF 63V AL ELECT	ECC	SMVB	2

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	2	3	4
E.C.O.	1576	1647	1743
DATE	7.2.84	11.6.84	24.10.84
CHKD.	KP	MD	SD

DATE	29.2.84	datron ELECTRONICS LTD	
DRAWN	IL	TITLE	4200 PS(IG) PCB ASSY
CHECKED	MJD		
APPROVED	S. Thomas	DRAWING NUMBER	400554
DATE	6.3.84	SHEET	2 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C11	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	–
C12	104026	47nF 50/20% 50V CER DISC	SIEMENS	B37449	3
C13	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	–
C14	180024	10µF 63V AL ELECT	MULLARD	016-18109	1
C15	150021	22µF 20% 25V DIP. TANT	UNION CARBIDE	K22E25	–
C16	150021	22µF 20% 25V DIP. TANT	UNION CARBIDE	K22E25	–
C17	104026	47nF 50/20% 50V CER DISC	SIEMENS	B37449	
C18	150001	22µF 20% 16V DIP TANT	UNION CARBIDE	K22E16	2
C19	150001	22µF 20% 16V DIP TANT	UNION CARBIDE	K22E16	–
C20	104026	47nF 50/20% 50V CER DISC	SIEMENS	B37449	–
C21	180048	470µF 63V AL ELECT	ECC	SMV8	–
C22	180047	1000µF 40V AL ELECT	ECC	SMV8	–
C23	180047	1000µF 40V AL ELECT	ECC	SMV8	–
C24	180047	1000µF 40V AL ELECT	ECC	SMV8	–
C25	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	2
C26	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	–
C27	150021	22µF 20% 25V DIP TANT	UNION CARBIDE	K22E25	–
D1	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	4
D2	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	–
D3	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
F.C.O.												
DATE												
CHKD.												

DATE 29.2.84
DRAWN IL.
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4200 PS(IG) PCB ASSY

DRAWING NUMBER 400554 SHEET 3 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D4	200022	3A 400V GP Si DIODE	MOTOROLA	BY252	–
D5	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	4
D6	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D7	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D8	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D9	210200	20V 400mW ZENER	MULLARD	BZY88C20	2
D10	210200	20V 400mW ZENER	MULLARD	BZY88C20	–
D11	210033	3V3 400mW ZENER	MULLARD	BZY88C3V3	1
W1	209003	1A5 100V BRIDGE RECT	MICRO-ELECTRONICS	W001	4
W2	209003	1A5 100V BRIDGE RECT	MICRO-ELECTRONICS	W001	–
W3	209003	1A5 100V BRIDGE RECT	MICRO-ELECTRONICS	W001	–
W4	209003	1A5 100V BRIDGE RECT	MICRO-ELECTRONICS	W001	–
Q1	240037	Si NPN TRANSISTOR	MOTOROLA	TIP141	1
Q2	250026	Si PNP TRANSISTOR	MOTOROLA	TIP146	1
Q3	230047	N-CHAN I LIM 5·3mA	TELEDYNE	TCR513	2
Q4	230047	N-CHAN I LIM 5·3mA	TELEDYNE	TCR513	–
M1	260051	-15V 1A REGULATOR	MOTOROLA	MC79.15CT	2
M2	260006	15V 1A REGULATOR	MOTOROLA	MC7815CT	2

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
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DATE												
CHKD.												

DATE 29.2..84
DRAWN IL.
CHECKED
APPROVED
DATE

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TITLE 4200 PS(IG) PCB ASSY

DRAWING NUMBER 400554 SHEET 4 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M3	260070	317 ADJ. REGULATOR	NATIONAL	LM317 HVK	1
M4	260006	15V 1A REGULATOR	MOTOROLA	MC7815CT	–
M5		NOT USED			–
M6	260005	5V 1A REGULATOR	MOTOROLA	MC7805CT	1
M7	260051	-15V 1A REGULATOR	MOTOROLA	MC79.15CT	–
M8	260072	-8V 1A REGULATOR	NATIONAL	LM7809CT	1
M9	260071	8V 1A REGULATOR	NATIONAL	LM7808CT	1
L1		NOT USED			
L2	370013	4μH 6A RF CHOKE	ERO	F1756-004-601	2
L3	370013	4μH 6A RF CHOKE	ERO	F1756-004-601	–
L4	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	4
L5	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	–
L6		NOT USED			
L7	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	–
L8		NOT USED			
L9	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	–
L10	370019	PS COMMON MODE CHOKE	SIGA	SEE DRG	1
F1	920128	FUSE 4A 250V 20mm SLO-B	BELLING LEE	L2080A/4	2
F2	920128	FUSE 4A 250V 20mm SLO-B	BELLING LEE	L2080A/4	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE 29.2.84
DRAWN
CHECKED
APPROVED
DATE

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TITLE 4200 PS(IG) PCB ASSY

DRAWING NUMBER 400554 SHEET 5 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
F3	920143	FUSE 3·15A 250V 20mm SLO-B	BELLING LEE	L2080A/3·15	2
F4	920143	FUSE 3·15A 250V 20mm SLO-B	BELLING LEE	L2080A/3·15	–
F5	920116	FUSE 1A 250V 20mm SLO-B	BELLING LEE	L2080A/1	2
F6	920116	FUSE 1A 250V 20mm SLO-B	BELLING LEE	L2080A/1	–
	540002	22SWG TINNED COPPER WIRE			A/R
	410282-2	PCB			1
	590004	SLEEVE-PTFE	HELLERMANN ELECTRIC	FE10	A/R
	604042	4WAY ·156" PLUG GD. PL.	MOLEX	09-72-2041	5
	611006	M3×10mm POZIPAN STEEL	ZN PL		10
	613005	M3 INT SHAKEPROOF	ZN PL		10
	613007	M3 WASHER STEEL	ZN PL		3
	615002	M3 FULL NUT STEEL	ZN PL		10
	618010	INSULATING PAD SIL TO-220	WARTH	3223-07FR-54	2
	618001	INSULATING BUSH TO-220	MULLARD	56359C	2
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	12
	900003	HEATSINK COMPOUND	RS	554-311	A/R
	900004	SILICONE RUBBER COMPOUND	RS	555-588	A/R
	920088-1	HEATSINK TO-3	SEE DRG		1
	920089-1	HEATSINK TO-220	SEE DRG		1
	920105-1	HEATSINK TO-202	SEE DRG		3
	920126	FUSE HOLDER 20mm PCB	BELLING LEE	L1426	6
	920142	HEATSINK 2 X TO-220	REDPOINT	TV35H19	2

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE 29.2.84
DRAWN
CHECKED
APPROVED
DATE

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TITLE 4200 PS(IG) PCB ASSY

DRAWING NUMBER 400554 SHEET 6 OF 6

DRAWING No.	CHK'D		
400653	DATE	26.2.86 RWC	2.4.86
	ECO	2162	2175
	REVISION	1·0	1·1
	ISSUE		

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION
COMP. LAYOUT.	480653	1	1·0
SCHEMATIC	430653	1	1·0
FUNCTIONAL TEST PROC.	460653/FT	1-4	1·0
FUNCT. TEST TICK LIST.	470653/FT	1	1·0
P.C.B.	410254	–	2·0

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	R.K. COGGAN		4700 PS (38V) PCB ASSY	400653
DATE 12.2.86	DATE 3/3/86	DATE 3.3.86		SHEET 1 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	004752	7k5 2% 1/4W MET-OX	ELECTROSIL	TR4	2
R2	011300	130R 1% 1/8W 50ppm MF	HOLCO	H8C	2
R3	000682	6k8 5% 1/3W CARBON	MULLARD	CR25	2
R4	000563	56k 5% 1/3W CARBON	MULLARD	CR25	2
R5	000104	100k 5% 1/3W CARBON	MULLARD	CR25	2
R6	000103	10k 5% 1/3W CARBON	MULLARD	CR25	2
R7	000471	470R 5% 1/3W CARBON	MULLARD	CR25	2
R8	004752	7k5 2% 1/4W MET-OX	ELECTROSIL	TR4	–
R9	011300	130R 1% 1/8W 50ppm MF	HOLCO	H8C	–
R10	000682	6k8 5% 1/3W CARBON	MULLARD	CR25	–
R11	000563	56k 5% 1/3W CARBON	MULLARD	CR25	–
R12	000104	100k 5% 1/3W CARBON	MULLARD	CR25	–
R13	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R14	000471	470R 5% 1/3W CARBON	MULLARD	CR25	–
R15	006392	3k9 % 1W MET-OX	ELECTROSIL	FP1	2
R16	006392	3k9 % 1W MET-OX	ELECTROSIL	FP1	–
R17	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	2
R18	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	2
R19	000308	3R0 5% 1/3W CARBON	MULLARD	CR25	2
R20	012741	2k74 1% 1/8W 50ppm MF	HOLCO	H8C	2
R21	013922	39k2 1% 1/8W 50ppm MF	HOLCO	H8C	2
R22	000272	2k7 5% 1/3W CARBON	MULLARD	CR25	–
R23	000222	2k2 5% 1/3W CARBON	MULLARD	CR25	–

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4
ECO	—	1684	1694	1776
DATE	7.12.83	1·8·84	5.9.84	30·11·84
CHKD.	MD	MD	MD	MD

DATE		
12.2.86	datron ELECTRONICS LTD	
DRAWN IL.	TITLE	
CHECKED	4700 PS (38V) PCB ASSY	
APPROVED	DRAWING NUMBER 400653	SHEET 2 OF 5
DATE		

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	000308	3R0 5% 1/3W CARBON	MULLARD	CR25	–
R25	012741	2k74 1% 1/8W 50ppm MF	HOLCO	H8C	–
R26	013922	39k2 1% 1/8W 50ppm MF	HOLCO	H8C	–
C1	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	3
C2	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C3	110042	100nF 20% 63V POLYESTER	WIMA	MKS2	–
C4	120028	4n7F 20% 100V POLYCARB	WIMA	FKC2	2
C5	120028	4n7F 20% 100V POLYCARB	WIMA	FKC2	–
C6	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	2
C7	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	2
C8	150015	10µF 20% 35V DIP TANT	UNION CARBIDE	K10E35	–
C9	150016	1µF 20% 35V DIP TANT	UNION CARBIDE	K1R0E35	–
C10	180040	10µF 100V AL ELECT	ECC	SMVB	2
C11	180040	10µF 100V AL ELECT	ECC	SMVB	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS												
ECO												
DATE												
CHKD												

DATE 12.2.86
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 PS (38V) PCB ASSY

DRAWING NUMBER 400653 SHEET 3 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	210270	27V 400mW ZENER	MULLARD	BZY88C27	2
D2	210270	27V 400mW ZENER	MULLARD	BZY88C27	–
D3	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	2
D4	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	–
D5	214012	2V45 30ppm ZENER	FERRANTI	ZN458	2
D6	214012	2V45 30ppm ZENER	FERRANTI	ZN458	–
D7	210068	6V8 400mW ZENER	MULLARD	BZY88C6V8	2
D8	210068	6V8 400mW ZENER	MULLARD	BZY88C6V8	–
Q1	250026	Si PNP TRANSISTOR	MOTOROLA	TIP146	1
Q2	240037	Si NPN TRANSISTOR	MOTOROLA	TIP141	1
Q3	250018	Si PNP TRANSISTOR	MOTOROLA	BC556/TO18	–
Q4	250018	Si PNP TRANSISTOR	MOTOROLA	BC556/TO18	3
Q5	240029	Si NPN TRANSISTOR	MOTOROLA	BC546/TO18	–
Q6	240029	Si NPN TRANSISTOR	MOTOROLA	BC546/TO18	3
Q7	250018	Si PNP TRANSISTOR	MOTOROLA	BC556/TO18	–
Q8	240029	Si NPN TRANSISTOR	MOTOROLA	BC546/TO18	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
ECO.												
DATE												
CHKD												

DATE 12.2.86
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 PS(38V) PCB ASSY

DRAWING NUMBER 400653 SHEET 4 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
MI	260043	358 DUAL OP AMP	NATIONAL	LM358N	1
F1	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275 001	2
F2	920120	FUSE 1A 125V 7mm	LITTLEFUSE	275 001	–
	410254-2	PCB			1
	605059/A	8 WAY DIL SOCKET			1
	611016	M3x8mm POZIPAN STEEL	ZN.PL.		2
	613005	M3 INT. SHAKEPROOF	ZN. PL.		2
	615002	M3 FULL NUT STEEL	ZN.PL.		2
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	8
	900003	HEATSINK COMPOUND	RS	554-311	A/R
	920141	HEATSINK TO-220	AAVID	50418	2

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD												

DATE 12.2.86	datron ELECTRONICS LTD
DRAWN	TITLE 4700 PS(38V)PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400653 — SHEET 5 OF 5

DRAWING No.	CHK'D			
400637	DATE	4.9.86	22.4.86	13.6.86
	ECO	2162	2220	2276
	REVISION	1·0	1.1	1.2
	ISSUE			

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION		
COMPONENT LAYOUT	480637	1	1·0	1.1	
SCHEMATIC	430637	1	1·0		1.1
FUNCTIONAL TEST PROC.	460637/FT	1-2	1·0		
FUNCT. TEST TICK LIST	470637/FT	1	1·0		
PCB	410245		4·0		

NOTES

☐ DENOTES NO CHANGE TO DOC. AT ISSUE LEVEL CHANGE.

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DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	R.K.COGGAN		4700 PA (POS) H/S ASSY.	400637
DATE 20.12.85	DATE 5/3/86	DATE 4.3.86		SHEET 1 OF 7

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1		NOT USED			—
R2	008057	22k 5% 9W WW RES	WELWYN	W23	1
R3	000101	100R 5% 1/3W CF RES	MULLARD	CR25	3
R4	000101	100R 5% 1/3W CF RES	MULLARD	CR25	—
R5	000221	220R 5% 1/3W CF RES	MULLARD	CR25	2
R6	000221	220R 5% 1/3W CF RES	MULLARD	CR25	—
R7	008055	2R2 1% 1/2W MET GLAZE	NEOHM	RGP0207	4
R8	008055	2R2 1% 1/2W MET GLAZE	NEOHM	RGP0207	—
R9	008055	2R2 1% 1/2W MET GLAZE	NEOHM	RGP0207	—
R10	064105	1M 15 TURN V CM POT	BECKMAN	89P	1
R11	090155-1	10k NTC THERMISTOR	DALE ELECTRONICS	SEE DRG	2
R12	090155-1	10k NTC THERMISTOR	DALE ELECTRONICS	SEE DRG	—
R13	008055	2R2 1% 1/2W MET GLAZE	NEOHM	RGP0207	—
R14	008021	0R47 5% 2·5W WW RES	WELWYN	W21	1
R15	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	4
R16	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R17		NOT USED			—
R18		NOT USED			—
R19	000101	100R 5% 1/3W CF RES	MULLARD	CR25	—
R20	000102	1K 5% 1/3W CF. RES	MULLARD	CR25	1
R21	000470	47R 5% 1/3W CF RES	MULLARD	CR25	1
R22	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	—
R23	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	—

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4	5	6	7	8	9
E.C.O.	—	1668	1706	1716	1741	1777	1818	1830	1869
DATE	29.5.84	25.7.84	20.9.84	4.10.84	25.10.84	28.11.84	14.1.85	29.1.85	19-4-85
CHKD.	MD	MD	MD	MD	MD	MD	MD	AP	

DATE	datron ELECTRONICS LTD	
20.12.85		
DRAWN IL.	TITLE 4700 PA (POS) H/S ASSY	
CHECKED		
APPROVED		
DATE	DRAWING NUMBER 400637	SHEET 2 OF 7

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	110043	10nF 20% 630V POLYESTER	WIMA	MKS4	1
C2		NOT USED			–
C3	150002	10µF 20% 16V DT CAP	UNION CARBIDE	K10 E16	1
C4		NOT USED			–
C5	102471	470pF ±10% 500V CER DISC	ITT	CD10	2
C6	102471	470pF ±10% 500V CER DISC	ITT	CD10	–
C7	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	1
C8	101103	10nF 25% 250V CER DISC	ITT	CD10	2
C9	101103	10nF 25% 250V CER DISC	ITT	CD10	–
C10	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	4
C11	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–
C12	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–
C13	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 20.12.85
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700. P.A. POS H/S. ASSY.

DRAWING NUMBER 400637 SHEET 3 OF 7

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	210100	10V 400mW ZENER	MULLARD	BZY88C10	4
D2	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D3	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D4	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D5	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	1
D6	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	1
D7		NOT USED			
D8	214012	2V45 30ppm ZENER	FERRANTI	ZN458	1
Q1	239067-1	MTM 2N85 MATCHED	DATRON	SEE DRG.	2 PAIRS.
Q2		PAIR.			–
Q3	239067-1	MTM 2N85 MATCHED	DATRON	SEE DRG.	–
Q4		PAIR.			–
Q5	240021	Si NPN TRANSISTOR	NATIONAL	BD135	1
Q6	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	2
Q7	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 20.12.85
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700. PA (POS) H/S ASSY

DRAWING NUMBER 400637 SHEET 4 OF 7

ESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
28	240001	Si N.P.N. TRANSISTOR	NATIONAL	BC184/TO18	—
29	230001	N-CHAN I LIM 1·4mA	SILICONIX	J506	1
A1	260048	7611 CMOS OP AMP	INTERSIL	ICL7611DCPA	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 20.12.85
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700. P.A. (POS) H/S ASSY

DRAWING NUMBER 400637

SHEET 5 OF 7

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	410245-4	PCB			1
	450454-1	HEATSINK 64mm			1
	450455-1	HEATSINK 91mm			1
	420080-1	HIGH VOLTAGE LABEL			2
	512000	7/·2 PTFE INSULATED (BLK) WIRE			A/R
	512111	7/·2 PTFE INSULATED (BRN) WIRE			A/R
	512222	7/·2 PTFE INSULATED (RED) WIRE			A/R
	512444	7/·2 PTFE INSULATED (YEL) WIRE			A/R
	512555	7/·2 PTFE INSULATED (GRN) WIRE			A/R
	512666	7/·2 PTFE INSULATED (BLUE) WIRE			A/R
	512777	7/·2 PTFE INSULATED (VIO.) WIRE			A/R
	512888	7/·2 PTFE INSULATED (GREY) WIRE			A/R
	512999	7/·2 PTFE INSULATED (WHITE) WIRE			A/R
	512333	7/·2 PTFE INSULATED (OR) WIRE			A/R
	560001	2 CORE 7/·2 BRAIDED SCN. CABLE			·22M
	590001	SLEEVE MAX CABLE ⌀3·0	HELLERMANN ELECTRIC	H15 x 20mm BLACK HELSYN	6
	590003	HEATSHRINK SLEEVE ⌀6·4	RS OR HELLERMANN	399-524 OR LVR64	40mm
	590002	SLEEVE MAX CABLE ⌀6·0	HELLERMANN ELECTRIC	H30 x 25mm BLACK HELSYN	3
J1	605052	8 WAY ·1" HOUSING	MOLEX	22-01-2085	1
	605057	CRIMP TERMINAL GD. PL.	MOLEX	4809-GL	12
	605118-1	SOCKET ⌀1·02	CAMBION	SEE DRAWING A4	8
	611006	M3 x 10mm POZIPAN STEEL	ZN PL		8
	611027	M3 x 20mm POZIPAN STEEL	ZN PL		4

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 20.12.85
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700. P.A. (POS) H/S ASSY

DRAWING NUMBER 400637

SHEET 6 OF 7

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	612004-1	M3x4mm STANDOFF	HARWIN	CS2116/B	8
	613029	M3 WAVY WASHER SS			16
	615002	M3 FULL NUT STEEL ZN PL.			4
	620003	SOLDER PIN	HARWIN	H2105A01	12
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	4
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº2	2
	630126	'P' CLIP ø 7·9mm	RICHCO	N5	1
	613017	M3 WASHER NYLON			1
	900003	HEATSINK COMPOUND	RS	554-311	A/R
FB1	920145	FERROXCUBE BEAD	MULLARD	FX4026	1
	590033	SLEEVE. MAX CABLE ø 10	HELLERMANN ELECTRIC	H50 × 25mm BLK. HELSYN	2
	605059	8 WAY DIL SOCKET			1
J3	605053	12-WAY ·1" HOUSING	MOLEX	22-01-2125	1
	613007	M3 WASHER STEEL ZN PL			4
	614001	M3 CLEAR x 4mm STANDOFF	HARWIN	CS2117B	4
	540002	22 SWG B.T.C. WIRE			A/R
	590004	SLEEVE ø1.0 P.T.FE	HELLERMANN	FE10	A/R

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD													

DATE 20.12.85	datron ELECTRONICS LTD
DRAWN IL.	TITLE 4700. PA (POS) H/S ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400637 — SHEET 7 OF 7

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400539	MD	5.7.85	1958	7.0	
	JP	15.11.85	2056	7.1	
	JP	29.1.86	2118	7.1	
	JP	22.4.86	2218	7.2	
	JP	2.5.86	2237	7.3	
	JP	3.6.86	2276	7.4	
	JP	4.6.86	2262	7.5	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION							
COMPONENT LAYOUT	480539	1	7.0	7.1		7.2	7.3		7.4	
SCHEMATIC	430539	1	7.0	7.1	7.2			7.3		
FUNCTIONAL TEST PROC	460539/FT	1-2	7.0							
FUNC. TEST TICK LIST	470539/FT	1	7.0							
PCB	410246	1					4			

NOTES

☐ DENOTES NO CHANGE TO DOC AT ISSUE LEVEL CHANGE

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
IL	WJD		4200 PA (NEG) H/S ASSY.	400539
DATE 10.7.85	DATE 12.7.85	DATE		SHEET 1 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1		NOT USED			–
R2	008057	22k 5% 9W WW RES	WELWYN	W23	–
R3	000101	100R 5% 1/3W CF RES	MULLARD	CR25	3
R4	000101	100R 5% 1/3W CF RES	MULLARD	CR25	–
R5	000221	220R 5% 1/3W CF RES	MULLARD	CR25	2
R6	008055	2R2 1% 1/2W MET-GLAZE	NEOHM	RGP0207	4
R7	008055	2R2 1% 1/2W MET-GLAZE	NEOHM	RGP0207	–
R8	000221	220R 5% 1/3W CF RES	MULLARD	CR25	–
R9	090155-1	10k NTC THERMISTOR	DALE ELECTRONICS	SEE DRG	2
R10	090155-1	10k NTC THERMISTOR	DALE ELECTRONICS	SEE DRG	–
R11	008055	2R2 1% 1/2W MET-GLAZE	NEOHM	RGP0207	–
R12	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	4
R13	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	–
R14	008055	2R2 1% 1/2W MET-GLAZE	NEOHM	RGP0207	–
R15	008021	0R47 5% 2·5W WW RES	WELWYN	W21	1
R16	000101	100R 5% 1/3W CF RES	MULLARD	CR25	–
R17	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	–
R18	012743	274k 1% 1/8W 50ppm MF	HOLCO	H8C	–
C1	110043	10nF 20% 630V POLYESTER	WIMA	MKS4	4
C2	110043	10nF 20% 630V POLYESTER	WIMA	MKS4	–
C3	110043	10nF 20% 630V POLYESTER	WIMA	MKS4	–
C4	110043	10nF 20% 630V POLYESTER	WIMA	MKS4	–

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4	5	6	7
E.C.O.	–	1669	1717	1741	1777	1817	1869
DATE	29.5.84	24.7.84	4.10.84	25.10.84	28.11.84	16.1.85	19.4.85
CHKD.	MD	MD	MD	MD	MD	MD	MD

DATE	datron ELECTRONICS LTD
22.2.84	
DRAWN IL.	TITLE 4200. PA (NEG) H/S ASSY
CHECKED Stella Birch	
APPROVED WJD	DRAWING NUMBER 400539
DATE 29.5.84	SHEET 2 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C5	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	4
C6	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–
C7	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–
C8	110053	47nF 10% 630V POLYESTER	WIMA	MKS4	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD												

DATE 15. 11. 85
DRAWN IL.
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4200. P.A. (NEG.) H/S ASSY.

DRAWING NUMBER 400539 SHEET 3 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	6
D2	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	–
D3	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	–
D4	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	–
D5	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	–
D6	213019	200V 5% 1/2W ZENER	MULLARD	BZX79C200	–
D7	210100	10V 400mW ZENER	MULLARD	BZY88C10	4
D8	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D9	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D10	210100	10V 400mW ZENER	MULLARD	BZY88C10	–
D11	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	1
D12	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	1
Q1	239068-1	MTM2P50 MATCHED	DATRON	SEE DRG.	2 PAIRS.
Q2		PAIR.			–
Q3	239068-1	MTM2P50 MATCHED	DATRON	SEE DRG.	–
Q4		PAIR.			–
Q5	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	1
Q6	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE 22.2.84
DRAWN IL.
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4200. PA (NEG) H/S ASSY

DRAWING NUMBER 400539 SHEET 4 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	410246-4	PCB			1
	420080-1	LABEL 'DANGER HIGH VOLTAGE'			2
	450454-1	HEATSINK 64mm			1
	450455-1	HEATSINK 91mm			1
	605118-1	SOCKET Ø1·02	CAMBION	SEE DRAWING. A4.	8
	590005	SLEEVE MAX. CABLE Ø4.0	HELLERMANN ELECTRIC	H20 x 20mm BLACK HELSYN	1
	590001	SLEEVE MAX. CABLE Ø3·0	HELLERMANN ELECTRIC	H15 X 20mm BLACK HELSYN	3
	590002	SLEEVE MAX. CABLE Ø6·0	HELLERMANN ELECTRIC	H15 X 25mm BLACK HELSYN	3
FB2	920145	FERROXCUBE BEAD	MULLARD	FX4026	1
J1	604033	4 WAY ·1" PCB PLUG GD. PL.	MOLEX	22-29-2041	2
J2	605053	12 WAY ·1" HOUSING	MOLEX	22-01-2125	1
	605057	CRIMP TERMINAL GD. PL.	MOLEX	4809-GL	5
	611006	M3 x 10mm POZIPAN STEEL	ZN PL		9
	611027	M3 x 20mm POZIPAN STEEL	ZN PL		3
	612004-1	M3 x 4mm STANDOFF	HARWIN	CS2116/B	8
	613029	M3 WAVY WASHER SS			15
	613007	M3 WASHER STEEL	ZN PL		3
	615002	M3 FULL NUT STEEL	ZN PL		3
	620003	SOLDER PIN	HARWIN	H2105A01	5
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	4
	630003	'P' CLIP Ø4·8mm	SES	CN5	1
	900003	HEATSINK COMPOUND	RS	554-311	A/R

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 23.2.84.
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4200. PA (NEG) H/S ASSY

DRAWING NUMBER 400539 SHEET 5 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	512222	7/·2 PTFE INSULATED (RED) WIRE			A/R
	512444	7/·2 PTFE INSULATED (YEL) WIRE			A/R
	512666	7/·2 PTFE INSULATED (BLUE) WIRE			A/R
	512999	7/·2 PTFE INSULATED (WHITE) WIRE			A/R
	512333	7/·2 PTFE INSULATED (OR) WIRE			A/R
	630024	STEATITE BEAD 16SWG	PARK ROYAL PORCELAIN	Nº 2	2
	614001	M3 CLEAR x 4mm STANDOFF	HARWIN	CS2117B	4

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 22. 2. 84
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4200. PA (NEG) H/S ASSY

DRAWING NUMBER 400539 SHEET 6 OF 6

DRAWING No.	CHK'D						
400540	DATE	10.7.85	29.10.85	3.12.85	22.4.86	11.7.86	
	ECO	1958	2048	2069	2219	2315	2356
	REVISION	6·0	6.1	6·1	6.2	6·3	
	ISSUE						6·4

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE - REVISION					
COMPONENT LAYOUT	480540	1	6·0		6·1	6.2	6·3	
SCHEMATIC	430540	1	6·0					
FUNCTIONAL TEST PROC.	460540/FT	1-5	6·0					
FUNC. TEST TICK LIST	470540/FT	1	6·0					

NOTES

☐ DENOTES NO CHANGE TO DOC AT ISSUE LEVEL CHANGE

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APP'D	TITLE	DRAWING No.
IL.	NSO	JST	4200 P.S./I H/S ASSY	400540
DATE 10.7.85	DATE 12.7.85	DATE 23.7.85		SHEET 1 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000101	100R 5% 1/3W CF RES	MULLARD	CR25	2
R2	008037	0R18 10% 2·5W WW RES	WELWYN	W21	2
R3	008037	0R18 10% 2·5W WW RES	WELWYN	W21	–
R4	000101	100R 5% 1/3W CF RES	MULLARD	CR25	–
R5	008045	10k 1% 1/2W MET-GLAZE	NEOHM	RGP0207	2
R6	000102	1k 5% 1/3W CF RES	MULLARD	CR25	1
R7	000220	22R 5% 1/3W CF RES	MULLARD	CR25	1
R8	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	4
R9	014991	4k99 1% 1/8W 50ppm MF	HOLCO	H8C	2
R10	016811	6k81 1% 1/8W 50ppm MF	HOLCO	H8C	2
R11		NOT USED			–
R12	000821	820R 5% 1/3W CF RES	MULLARD	CR25	2
R13	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	–
R14	007204	200k 2% 2W MET-OX	ELECTROSIL	FP2	4
R15	011821	1k82 1% 1/8W 50ppm MF	HOLCO	H8C	2
R16	016192	61k9 1% 1/8W 50ppm MF	HOLCO	H8C	2
R17	008062	10R 1% 2½W WW RES	WELWYN	W21	2
R18	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	–
R19	007204	200k 2% 2W MET-OX	ELECTROSIL	FP2	–
R20	011821	1k82 1% 1/8W 50ppm MF	HOLCO	H8C	–
R21	016192	61k9 1% 1/8W 50ppm MF	HOLCO	H8C	–
R22	006105	1M 2% 1W MET-OX	ELECTROSIL	FP1	–
R23	008062	10R 1% 2½W WW RES	WELWYN	W21	–

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4	5	6
E.C.O.	–	1891	1731. 1740	1775. 1805	1869	1902
DATE	29.5.84	20.8.84	18.10.84	9.1.85	19-4-85	30-4-85
CHKD.						

DATE	datron ELECTRONICS LTD
23.2.84	
DRAWN IL.	TITLE 4200. PS/I H/S ASSY
CHECKED RC	
APPROVED JST	DRAWING NUMBER 400540
DATE 29.5.84	SHEET 2 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	008045	10k 1% ½W MET-GLAZE	NEOHM	RGP0207	—
R25		NOT USED			—
R26	000821	820R 5% ⅓W CF RES	MULLARD	CR25	—
R27	014991	4k99 1% ⅛W 50ppm MF	HOLCO	H8C	—
R28		NOT USED			—
R29	016811	6k81 1% ⅛W 50ppm MF	HOLCO	H8C	—
R30	007204	200k 2% 2W MET-OX	ELECTROSIL	FP2	—
R31	007204	200k 2% 2W MET-OX	ELECTROSIL	FP2	—
R32	005470	47R 2% ½W MET-OX	ELECTROSIL	TR5	2
R33	005470	47R 2% ½W MET-OX	ELECTROSIL	TR5	—
R34, R35	013920	392R 1% ⅛W 50ppm MF	HOLCO	H8C	2
C1	104025	100nF +80 -20 % 50V CER DISC	SIEMENS	B37449	1
C2		NOT USED			—
C3		NOT USED			—
C4		NOT USED			—
C5	180045	47µF 63V AL. ELECT.	MULLARD	031-38479	2
C6	180045	47µF 63V AL. ELECT.	MULLARD	031-38479	—
C7		NOT USED			—
C8	120033	2n2F 20% 1kV POLYCARB	WIMA	FKC3	2
C9	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	2
C10	120033	2n2F 20% 1kV POLYCARB	WIMA	FKC3	—
C11	150006	4µ7F 20% 16V DIP TANT	UNION CARBIDE	K4R7E16	—
C12		NOT USED			—

NOTES.

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E.C.O.												
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TITLE 4200. PS/I H/S ASSY

DRAWING NUMBER 400540 SHEET 3 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C13	104043	100pF 10% 500V CER DISC	STC	CD10KWK100PMSSS500DSC	2
C14	104043	100pF 10% 500V CER DISC	STC	CD10KWK100PMSSS500DSC	—
C15	150010	330nF 20% 35V DIP TANT	UNION CARBIDE	KR33E35	2
C16	150010	330nF 20% 35V DIP TANT	UNION CARBIDE	KR33E35	—

NOTES.

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TITLE 4200. PS/I HS ASSY.

DRAWING NUMBER 400540 SHEET 4 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	2
D2	210150	15V 400mW ZENER	MULLARD	BZY88C15	4
D3	213020	30V 5% 1/2W ZENER	MULLARD	BZX79C30	2
D4	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	4
D5	213021	56V 2% 400mW ZENER	MULLARD	BZX79B56	2
D6	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D7	214014	1V22 100ppm ZENER	TELEDYNE	9491BJ	2
D8	210150	15V 400mW ZENER	MULLARD	BZY88C15	–
D9	210150	15V 400mW ZENER	MULLARD	BZY88C15	–
D10	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D11	213020	30V 5% 1/2W ZENER	MULLARD	BZX79C30	–
D12	213021	56V 2% 400mW ZENER	MULLARD	BZX79B56	–
D13	200006	1A 600V GP Si DIODE	FAIRCHILD	IN4005	–
D14	210150	15V 400mW ZENER	MULLARD	BZY88C15	–
D15	210056	5V6 400mW ZENER	MULLARD	BZY88C5V6	–
D16	214014	1V22 100ppm ZENER	TELEDYNE	9491BJ	–
Q1	240036	Si NPN DARL. TRANSISTOR	MOTOROLA	MJ1000	1
Q2	250024	Si PNP DARL. TRANSISTOR	MOTOROLA	MJ900	1
Q3	230063	N-CHAN T.MOS JFET	MOTOROLA	MTP2N85	1
Q4	250001	Si PNP TRANSISTOR	NATIONAL	BC214/TO18	1
Q5	240006	Si NPN TRANSISTOR	NATIONAL	2N3904/TO18	1

NOTES.

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TITLE 4200. PS/I H/S ASSY

DRAWING NUMBER 400540 SHEET 5 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q6	250004	Si PNP TRANSISTOR	NATIONAL	2N3906/TO92	1
Q7	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO92	2
Q8	230001	N-CHAN I LIM 1·4mA	TELEDYNE	TCR506	2
Q9	230062	P-CHAN T.MOS JFET	MOTOROLA	MTM2P50	1
Q10	230001	N-CHAN I LIM 1·4mA	TELEDYNE	TCR506	–
Q11	230064	P-CHAN T.MOS JFET	MOTOROLA	MTP2P50	1
Q12	230061	N-CHAN T.MOS JFET	MOTOROLA	MTM2N85 TO3	1
Q13	240001	Si NPN TRANSISTOR	NATIONAL	BC184/TO18	–
M1	220018	Hi-SPEED OPTO ISOLATOR	HP	6N136	2
M2	220018	Hi-SPEED OPTO ISOLATOR	HP	6N136	–
	410247-2	PCB			1
	420080-1	LABEL 'DANGER HIGH VOLTAGE'			1
	450456-1	HEATSINK			1
	512111	7/·2 PTFE INSULATED (BRN) WIRE	RS		A/R
	512222	7/·2 PTFE INSULATED (RED) WIRE	RS		A/R
	512444	7/·2 PTFE INSULATED (YEL) WIRE	RS		A/R
	512555	7/·2 PTFE INSULATED (GRN) WIRE	RS		A/R
	512666	7/·2 PTFE INSULATED (BLU) WIRE	RS		A/R

NOTES.

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TITLE 4200. PS/I H/S ASSY.

DRAWING NUMBER 400540 SHEET 6 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	512777	7/·2 PTFE INSULATED (VIO) WIRE	RS		A/R
	530000	24/·2 PVC INSULATED (BLK) WIRE	RS		A/R
	530111	24/·2 PVC INSULATED (BRN) WIRE	RS		A/R
	530222	24/·2 PVC INSULATED (RED) WIRE	RS		A/R
	530333	24/·2 PVC INSULATED (OR.) WIRE	RS		A/R
	530444	24/·2 PVC INSULATED (YEL) WIRE	RS		A/R
	530555	24/·2 PVC INSULATED (GRN) WIRE	RS		A/R
	530666	24/·2 PVC INSULATED (BLUE) WIRE	RS		A/R
	530777	24/·2 PVC INSULATED (VIO) WIRE	RS		A/R
	530888	24/·2 PVC INSULATED (GREY) WIRE	RS		A/R
	605059	8 WAY DIL SOCKET	JERMYN	J23-18008	2
	605052	8 WAY ·1" HOUSING	MOLEX	22-01-2085	1
	605057	CRIMP TERMINAL GD. PL.	MOLEX	4809-GL	6
	605077	CRIMP TERMINAL GD. PL.	MOLEX	08-56-0106	11
	605099	5 WAY ·156" HOUSING	MOLEX	09-91-0501	2
	605100	9 WAY ·156" HOUSING	MOLEX	09-91-0901	1
					1
	611016	M3 X 8mm POZIPAN STEEL	ZN PL		2
	611017	M3 X 16mm POZIPAN STEEL	ZN PL		5
	611027	M3 x 20mm POZIPAN STEEL	ZN PL		3
	612022-1	M3 x 3mm STANDOFF	DATRON	SEE DRG. 612***	8
	613007	M3 WASHER STEEL	ZN PL		3

NOTES.

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TITLE 4200 PS/I H/S ASSY

DRAWING NUMBER 400540 SHEET 7 OF 8

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	613029	M3 WAVY WASHER	ZN PL		13
	615002	M3 FULL NUT STEEL	ZN PL		5
	606010	POLARISING KEY	MOLEX	15-04-0219	1
	618008	INSULATING BUSH TO3	MULLARD/ASSMANN	56201C/V5358	8
	618009	INSULATING PAD SIL TO3	WARTH	3223-07FR-06	4
	620003	SOLDER PIN	HARWIN	H2105A0	18
	630004	'P' CLIP Ø 6·4mm	SES	CN6	1
	605118-1	SOCKET Ø 1·02	CAMBION	SEE DRAWING. A4	8
	920087-1	HEATSINK TO-92	SEE DRG		1
	630126	'P' CLIP Ø 7·9 mm	RICHCO	N5	1
	590001	SLEEVE. MAX CABLE Ø 3·0	HELLERMAN ELECTRIC	H15 X 20 BLACK HELSYN	3
	590005	SLEEVE. MAX CABLE Ø 4·0	HELLERMANN ELECTRIC	H20 X 20 BLACK HELSYN	6
	590032	SLEEVE. HEATSHRINK Ø 4·8			0·5M
	590033	SLEEVE. MAX CABLE Ø 10	HELLERMANN ELECTRIC	H50 x 25 BLACK HELSYN	3
	590004	SLEEVE. Ø1·0 PTFE	HELLERMANN ELECTRIC	FE10	A/R

NOTES.

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TITLE 4200. PS/I H/S ASSY

DRAWING NUMBER 400540 SHEET 8 OF 8

DRAWING No. 400537	CHK'D	RHC				
	DATE	12.3.86	21.3.86	3.6.86	4.7.86	
	ECO	2162	2184	2260	2311	2326
	REVISION	1.0	1.1	1.2	1.3	1.4
	ISSUE					

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION				
COMPONENT LAYOUT	480537	1	1.0	1.1	1.2	1.3	
SCHEMATIC	430537	1	1.0	1.1			
FUNCTIONAL TEST PROC	460537/FT	ALL	1.0				
FUNC. TEST TICK LIST	470537/FT	ALL	1.0				
PCB	410327		1.0				

NOTES

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DRN	CHK'D	APPD	TITLE	DRAWING No.
11.	R.H. COGGAN		4700 HV. PCB. ASSY.	400537
DATE 12.3.86	DATE 13/3/86	DATE 13.3.86		SHEET 1 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	008032	270R 5% 2½W W/W	WELWYN	W21	1
R2	008029	18R 2% ½W MET GLAZE	NEOHM	RGP0207	2
R3	000103	10k 5% ⅓W CARBON	MULLARD	CR25	5
R4	000103	10k 5% ⅓W CARBON	MULLARD	CR25	—
R5	000103	10k 5% ⅓W CARBON	MULLARD	CR25	—
R6	000105	1M 5% ⅓W CARBON	MULLARD	CR25	1
R7	000103	10k 5% ⅓W CARBON	MULLARD	CR25	—
R8	008029	18R 2% ½W MET GLAZE	NEOHM	RGP0207	—
R9	000472	4k7 5% ⅓W CARBON	MULLARD	CR25	1
R10	001151	150R 5% ½W CARBON	MULLARD	CR37	1
R11		NOT FITTED			—
R12	000103	10k 5% ⅓W CARBON	MULLARD	CR25	—
R13		NOT FITTED			—
R14	006272	2k7 2% 1W MET-OX	ELECTROSIL	FP1	1

NOTES.

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ECO													
DATE													
CHKD													

DATE	datron ELECTRONICS LTD
3.6.85	
DRAWN 11.	TITLE 4700 HV PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400537 — SHEET 2 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN1	090131	10k x 4 2% SIL NETWORK	BECKMAN	L08-3-R10k	2
AN2	090131	10k x 4 2% SIL NETWORK	BECKMAN	L08-3-R10k	—
AN3	090096	1M x 8 2% NETWORK	BECKMAN	L09-1-R1M	1
C1	140047	33nF 10% 1k5V POLYPROP	STEATITE	MKP1841	3
C2	140047	33nF 10% 1k5V POLYPROP	STEATITE	MKP1841	—
C3	180048	470µF 50V AL. ELEC.	ECC	SMVB	2
C4	180048	470µF 50V AL. ELEC	ECC	SMVB	—
C5	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	3
C6	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C7	104026	47nF $^{+50}_{-20}$% 50V CER DISC	SIEMENS	B37449	—
C8	102102	1nF 10% 500V CER DISC	ITT	CD10	1

NOTES.

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DATE 3.6.85
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TITLE 4700 HV. PCB. ASSY.

DRAWING NUMBER 400537 SHEET 3 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C9	102221	220pF 10% 500V CER DISC	ITT	CD10	1
C10	140048	47nF 10% 1k5V POLYPROP	STEATITE	MKP1841	1
C11	102821	820pF 10% 500V CER DISC	ITT	CD10	1
C12	102332	3n3F 20% 500V CER DISC	ITT	CD10	1
C13	140047	33nF 10% 1k5V POLYPROP	STEATITE	MKP1841	—
C14	104044	680pF 10% 2kV CER DISC	ITT	HD09	1
D1	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	8
D2	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D3	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D4	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D5	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D6	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D7	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D8	200020	1A 1k5V FR Si DIODE	MOTOROLA	BY339	—
D9	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	1
D10	213009	15V 5W ZENER	UNITRODE	TVS 515	1
D11	213006	5V 5W ZENER	UNITRODE	TVS505	2
D12	213006	5V 5W ZENER	UNITRODE	TVS505	—

NOTES.

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TITLE 4700 H.V. PCB. ASSY.

DRAWING NUMBER 400537 SHEET 4 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q1	250011	Si PNP TRANSISTOR	NATIONAL	BC327/TO18	1
M1	290089	7 X DARLINGTON DRIVER	SPRAGUE/EXAR	ULN2003A/XR2203CP	1
M2	280039	QUAD EXCLUSIVE NOR	MOTOROLA	MC14077BCP	1
M3	280023	QUAD 2 I/P NOR	MOTOROLA	MC14001UBCP	1
RL1		NOT FITTED			
RL2	330033	RELAY 2P N/O 5A 2kV	SDS	JC2a DC24V	3
RL3	330033	RELAY 2P N/O 5A 24V	SDS	JC2a DC24V	–
RL4	330033	RELAY 2P N/O 5A 24V	SDS	JC2a DC24V	–
RL5	330044	RELAY 2P 2W 5A	DATRON		1
L1		NOT USED			–
L2	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	3
L3	370007–1	40mH CHOKE	SIGA	SEE DRG	1
L4	370015–1	26m5H CHOKE	SIGA	SEE DRG	1
L5	370016–1	24m1H CHOKE	SIGA	SEE DRG	1
L6	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
L7	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	–

NOTES.

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TITLE 4700 HV PCB ASSY

DRAWING NUMBER 400537

SHEET 5 OF 6

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	400563	CONSTANT I PCB ASSY			1
	410327–1	H.V. PCB.			1
	420080–1	HIGH VOLTAGE LABEL			1
	450461–1	H.V. PCB SAFETY SCREEN	DATRON		1
	512999	7/0·2 PTFE INS. WHITE WIRE	RS		A/R
	590031	HEATSHRINK Ø3.2 YEL.	HELLERMANN ELECTRIC	YELLOW OPACUE	A/R
J2, J3, J4	604033	4 WAY ·1" PCB PLUG GD.PL	MOLEX	22-29-2041	7
LKA/B	604046	3 WAY ·1" PCB PLUG GD.PL.	MOLEX	22-10-2031	1
	605127	2 WAY ·1" 'SHORTING' SKT.	ASSMANN	AKSPL-G	1
	611006	M3×10mm SCREW POZIPAN ST.	ZN.PL.	GKN	2
	613029	M3 WAVY WASHER SS.			2
	615002	M3 FULL NUT STEEL ZN.PL.			2
	613005	M3 SHAKERPROOF WASHER	ZN.PL		2
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	8
	630024	16SWG STEATITE BEAD	PARK ROYAL PORCELAIN	Nº 2	8
	605060	14 PIN DIL SOCKET	JERMYN	J23-18014	2
	605061	16 PIN DIL SOCKET	JERMYN	J23-18016	1

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TITLE 4700 HV PCB ASSY.

DRAWING NUMBER 400537

SHEET 6 OF 6

DRAWING No. 400563		CHK'D				
		DATE	4.3.86	21.4.86	13.6.86	15.9.86
		ECO	2162	2213	2260	2296
		REVISION	1.0	2.0	2.0	2.1
		ISSUE				

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION			
COMPONENT LAYOUT	480563	1	1.0	2.0	2.1	2.2
SCHEMATIC	430563	1	1.0	2.0		
FUNC. TEST PROC.	460563/FT	ALL	1.0	2.0		
FUNC. TEST TICK LIST	470563/FT	ALL	1.0	2.0		
PCB	410285	–	3.0	3.0		

NOTES

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DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	R.K. COGGAN		4700 CONSTANT I ASSY.	400563
DATE 15.8.85	DATE 5/3/86	DATE 6.3.86		SHEET 1 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	000102	1K 5% ¼W CARBON	MULLARD	CR25	2
R2	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	6
R3	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	–
R4	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	–
R5	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	–
R6	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	–
R7	005124	120k 2% ½W MET-OX	ELECTROSIL	TR5	–
R8	000105	1M 5% ¼W CARBON	MULLARD	CR25	1
R9	000104	100k 5% ¼W CARBON	MULLARD	CR25	1
R10	000470	47R 5% ¼W CARBON	MULLARD	CR25	1
R11	000102	1k 5% ¼W CARBON	MULLARD	CR25	–
R12	008046	10R, 5%, 2½W WIREWOUND	WELWYN	W21	1
R13	000221	220R 5% ¼W CARBON	MULLARD	CR25	1
R14		NOT USED			–
R15	000223	22k 5% ¼W CARBON	MULLARD	CR25	1
R16	000222	2k2 5% ¼W CARBON	MULLARD	CR25	1
R17	000103	10k 5% ¼W CARBON	MULLARD	CR25	1
C1	150012	100nF 20% 35V DIP TANT	UNION CARBIDE	KR10E35	1
C2	101103	10nF 25% 250V CER DISC	ITT	CD10	1

NOTES.

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DATE 4.10.85	datron ELECTRONICS LTD	
DRAWN IL.	TITLE 4700 CONSTANT CURRENT SOURCE PCB ASSY	
CHECKED		
APPROVED		
DATE	DRAWING NUMBER 400563	SHEET 2 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
D1	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	12
D2	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D3	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D4	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D5	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D6	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D7	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D8	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D9	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D10	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D11	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D12	213026	120V 3.25V ZENER	MULLARD	BZT 03C120	-
D13	210100	10V 400mW ZENER	MULLARD	BZY88C10	1
D14	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	4
D15	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	-
D16	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	-
D17	200008	200mA 125V LL Si DIODE	FAIRCHILD	IN458A	-
D18	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	2
D19	200001	75mA 75V GP Si DIODE	FAIRCHILD	IN4148	-
D20	200020	1A 1K5V FR Si DIODE	MOTOROLA	BY339	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE
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APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 CONSTANT CURRENT SOURCE PCB ASSY

DRAWING NUMBER 400563 SHEET 3 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
Q1	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	12
Q2	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q3	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q4	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q5	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q6	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q7	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q8	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q9	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q10	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q11	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q12	240032	Si NPN TRANSISTOR	MOTOROLA	BF393/TO18	-
Q13	230039 B	P-CHAN JFET	SILICONIX	J175	1
Q14	250011	Si PNP TRANSISTOR	NATIONAL	BC327/TO18	1
M1	220015	5kV OPTO ISOLATOR	MOTOROLA	MOC1005	1
	590004	PTFE SLEEVE ϕ1·0		FE10	25 mm
	410285-3	PCB			1
	604003	11 WAY PCB PLUG	AMP	163740-9	5/11
	605066	6 WAY DIL SOCKET			1
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 CONSTANT CURRENT SOURCE PCB ASS

DRAWING NUMBER 400563 SHEET 4 OF 4

DRAWING No. 400541							
CHK'D	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DATE	3-7-85	6-12-85	11-12-85	10.4.86	11.7.86	5.9.86
ECO	1958	2061	2072	2201	2321	2375
REVISION	0	0	1	2	3	4
ISSUE	3	4	4	4	4	4

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION
COMP. LAYOUT.	480541	1	3.0, 4.0, 4.1, 4.2, 4.3
FUNCTIONAL TEST PROC.	460541/FT	1	3.0, 4.0
FUNCT. TEST TICK LIST.	470541/FT	1	3.0, 4.0

NOTES

☐ INDICATES NO CHANGE TO DOCS AT ISSUE LEVEL CHANGE

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
B.JACKSON	MJD	[illegible]	4200 MAINS TRANSFORMER. ASSY	400541
DATE 3-7-85	DATE 9.7.85	DATE 23.7.85		SHEET 1 OF 3

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	008043	120K 5% 50W AL. W.W.	DALE	RH-50	1
	300023-2	4200 MAINS TRANSFORMER	SIGA	SEE DRG.	1
	450413-2	4200 HV SWITCH BRACKET			1
	450434-4	4200 MAINS TX PLATE.			1
	521006	16/0.2 PVC INSULATED WIRE. GREEN/YELLOW			A/R
	521002	16/0.2 PVC INSULATED WIRE. WHITE/RED.			A/R
	530111	24/0.2 PVC INSULATED WIRE. BROWN.			A/R
	530444	24/0.2 PVC INSULATED WIRE. YELLOW.			A/R
	530555	24/0.2 PVC INSULATED WIRE. GREEN.			A/R
	530666	24/0.2 PVC INSULATED WIRE. BLUE.			A/R
	530999	24/0.2 PVC INSULATED WIRE. WHITE.			A/R
	512999	7/0.2 PTFE INSULATED WIRE. WHITE.			0.35M
	590005	SLEEVING H 20 X 20 BLACK			10
	590006	SLEEVE HEATSHRINK Ø 2.4			A/R
	590033	SLEEVING H50 X 25 BLACK			14
	590031	SLEEVE HEATSHRINK Ø3.2			A/R
	605052	8WAY 0.1" HOUSING	MOLEX	2201-2085.	1
	605057	CRIMP TERMINAL GD PL	MOLEX	4809-GL	2
	605077	CRIMP TERMINAL GD PL	MOLEX	08-56-0106	31
	605099	5WAY 0.156" HOUSING	MOLEX	09-91-0501	1
	605100	9WAY 0.156" HOUSING	MOLEX	09-91-0901	4

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS	1	2	3
ECO	RELEASED	1772	1935
DATE	2-10-84	22-11-84	4th JUNE 85
CHKD	[illegible]	[illegible]	[illegible]

DATE 6th MAR 84	datron ELECTRONICS LTD	
DRAWN B.JACKSON	TITLE 4200 MAINS TRANSFORMER ASSY	
CHECKED [illegible]		
APPROVED [illegible]	DRAWING NUMBER 400541	SHEET 2 OF 3
DATE 2.10.84		

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	605136	0·093" MALE CRIMP TERM.GD.	MOLEX	02-09-6123	5
	606010	POLARISING KEY	MOLEX	15-04-0219	4
	604068	6WAY 0·093" PLUG	MOLEX	03-09-2062.	1
	611015	M3x 8mm POZI-CSK STEEL	ZN PL		5
	611081-2	M5x12mm STEEL SCREW.		SEE DRAWING.	2
	613005	M3 INT SHAKEPROOF			3
	613009	4BA SOLDER TAG BRASS	TIN PL		5
	613013	M5 FLAT WASHER			2
	615002	M3 FULL NUT STEEL	ZN PL		3
	700093	SWITCH 4P 2P C/O.	ARROW-HART	CTS12 BP4	1

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS													
E.C.O													
DATE													
CHKD													

DATE 6th MAR 84	datron ELECTRONICS LTD
DRAWN B.JACKSON	TITLE '4200' MAINS TRANSFORMER ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400541 — SHEET 3 OF 3

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400651	MD	4.3.86	2162	1·0	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE - REVISION
COMP LAYOUT.	480651	1	1·0

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	MD	[illegible]	4700 LF TRANSFORMER ASSY	400651
DATE 22.1.86	DATE 4.3.86	DATE 4.3.86		SHEET 1 OF 3

400651

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	300025-2	L.F TRANSFORMER	SIGA		1
	450402-2	4200 LF. TX MTG. PLATE			1
	450405-1	4200 LF. TX PLATE SUPPT.	BAR.		2
	450408-1	4200 CONN. MTG. BRK'T.			1
	540002	BTC WIRE			A/R
	510000	WIRE 7/·2 BLACK PVC INS.			A/R
	510111	WIRE 7/·2 BROWN PVC INS.			A/R
	510220	WIRE 7/·2 RD/BK PVC INS.			A/R
	510330	WIRE 7/·2 OE/BK PVC INS.			A/R
	510333	WIRE 7/·2 ORANGE PVC INS.			A/R
	510444	WIRE 7/·2 YELLOW PVC INS.			A/R
	510555	WIRE 7/·2 GREEN PVC INS.			A/R
	510888	WIRE 7/·2 GREY PVC INS			A/R
	510999	WIRE 7/·2 WHITE PVC INS.			A/R
	510666	WIRE 7/-2 BLUE PVC INS.			A/R
	510777	WIRE 7/·2 VIOLET PVC INS			A/R
	560012	1 CORE 1/0·64 CO-AX			A/R
	590003	SLEEVE HEATSHRINK Ø6·4	RS OR HELLERMANN ELECTRIC	399-524 OR LVR6·4	A/R
	590006	SLEEVE HEATSHRINK Ø2·4	RS OR HELLERMANN ELECTRIC	399-495 OR LVR 24	A/R
	590032	SLEEVE HEATSHRINK Ø4·8			A/R
	510222	WIRE 7/·2 RED PVC INS.			A/R
	605051	4WAY 0·1" HOUSING	MOLEX	22-01-2045	1
	605052	8WAY 0·1" HOUSING	MOLEX	22-01-2085	1

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4
E.C.O.	–	1594	1630	1631
DATE	22-2-84	8-3-84	9-5-84	31-7-84
CHKD.	MD	MD	MD	MD

DATE		
22. 1. 86	datron ELECTRONICS LTD	
DRAWN IL.	TITLE 4700 L.F. TRANSFORMER ASSY	
CHECKED		
APPROVED		
DATE	DRAWING NUMBER 400651	SHEET 2 OF 3

400651

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	605057	CRIMP TERMINAL GD PL	MOLEX	4089-GL	4
	605116-2	32+32WAY PCB EDGE SKT.		SEE DRG. A4.	1
	611007	M3x6mm POZI-CSK STEEL	ZN PL		7
	611016	M3x8mm POZI-PAN STEEL	ZN PL		3
	611069	M5x8mm HEX HEAD STEEL	ZN PL		2
	613005	M3 INTERNAL SHAKE PROOF			4
	613007	M3 WASHER STEEL	ZN PL		1
	613009	4BA SOLDER TAG BRASS	TIN PL		1
	613028	M5 INTERNAL SHAKE PROOF			2
	615002	M3 FULL NUT STEEL	ZN PL		1
	630004	P'CLIP Ø 6·4mm	SES	CNG	1
	630170	PCB GUIDE	RICHCO	RCG2	2
	900009	LOCKING COMPOUND	LOCTITE	222	A/R
	510992	WIRE 7/·2 WH/RED PVC INS			A/R
	510001	WIRE 7/·2 PINK PVC INS.			A/R
	510225	WIRE 7/·2 RED/GRN PVC INS			A/R
	512999	WIRE 7/·2 WHITE PTFE INS			A/R
	510226	WIRE 7/·2 RED/BLUE PVC INS			A/R

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD												

DATE	22. 1. 86
DRAWN	IL
CHECKED	
APPROVED	
DATE	

datron ELECTRONICS LTD

TITLE '4700' L.F. TRANSFORMER ASSY

DRAWING NUMBER 400651 SHEET 3 OF 3

DRAWING No.	CHK'D		
400578	DATE	3-7-85 MD	19-7-85 RV
	ECO	1958	1953
	REVISION	4·0	4·1
	ISSUE	4·0	4·1

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE - REVISION	
COMP LAYOUT	480578	1	4·0	4·1
FUNCTIONAL TEST PROC.	460578/FT	1	4·0	
FUNCT. TEST TICK LIST	470578/FT	1	4·0	

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
B. JACKSON	MJD		4200	400578
DATE 3-7-85	DATE 9.7.85.	DATE	HF. TX ASSY	SHEET 1 OF 3

400578

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	008042	GRB 5% 9W WIREWOUND	WELWYN	W 23	1
	300026-2	HF TRANSFORMER	SIGA	SEE DRG.	1
	410256-6	HF TX MOUNTING PCB.			1
	512222	7/0·2 PTFE INSUL. WIRE	RED.		0·35 M
	512666	7/0·2 PTFE INSUL. WIRE	BLUE.		0·35 M
	512000	7/0·2 PTFE INSUL. WIRE	BLACK.		0·26 M
	512111	7/0·2 PTFE INSUL. WIRE	BROWN.		0·31 M
	512444	7/0·2 PTFE INSUL. WIRE	YELLOW.		0·25 M
	512999	7/0·2 PTFE INSUL. WIRE	WHITE.		0·21 M
	590001	SLEEVING H15x20 BLACK.			2
	590005	SLEEVING H20x20 BLACK.			3
	590063	295mm CABLE TIE.	PANDUIT	PLT 3I	1
	605051	4 WAY 0·1" HOUSING	MOLEX	22-01-2045	1
	605053	12 WAY 0·1" HOUSING	MOLEX	22-01-2125	1
	605057	CRIMP TERMINAL GD. PL	MOLEX	4809-GL	6
	611055	M4x40mm SLOT-PAN BRASS	Ni PL		1
	612029-1	M3x12mm STANDOFF	HARWIN	SEE DRG 612***.	4

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4
E.C.O.	RELEASED	1757	1828	1934
DATE	28SEP84	15NOV84	25.1.85	4-6-85
CHKD.	MD	MD	RV	RV

DATE		
26 APR 84	datron ELECTRONICS LTD	
DRAWN B JACKSON	TITLE 4200	
CHECKED MJD	HF TRANSFORMER ASSY	
APPROVED		
DATE 28.9.84	DRAWING NUMBER 400578	SHEET 2 OF 3

400578

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	613020	M4 WASHER STEEL.	ZN. PL		2
	613021	M4 INT. SHAKEPROOF.			1
	615011	M4 FULL NUT STEEL	ZN PL		1
	630024	STEATITE BEAD 16SWG	PARK ROYAL PORCELAIN	N°2	2

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 26-4-84	datron ELECTRONICS LTD
DRAWN B. JACKSON	TITLE '4200' HF TRANSFORMER ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400578 — SHEET 3 OF 3

DRAWING No. 400604		CHK'D				
		DATE	26.2.86	10.6.86	24.7.86	30.9.86
		ECO	2162	2279	2333	2394
		REVISION	1·0	1·1	1·2	1·2
		ISSUE				

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION			
COMPONENT LAYOUT	480604	1	1·0	1·1	1·2	1·3
COMPONENT LAYOUT	480604	2	1·0	1·1		
SCHEMATIC	430604	1	1·0			
SCHEMATIC	430604	2	1·0			
SCHEMATIC	430604	3	1·0			
SCHEMATIC	430604	4	1·0			
SCHEMATIC	430604	5	1·0			
PCB	410361			1·0		
PCB	410348		2·0			

NOTES ☐ DENOTES NO CHANGE TO DOC'S AT ISSUE LEVEL CHANGE.

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
DATE 13.8.85	DATE 6/3/86	DATE 7.3.86	4700 MOTHER PCB. ASSY.	400604 SHEET 1 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R1	001822	8k2 5% ½W CARBON	MULLARD	CR37	24
R2	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R3	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R4	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R5	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R6	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R7	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R8	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R9	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R10	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R11	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R12	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R13	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R14	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R15	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R16	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R17	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R18	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R19	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R20	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R21	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R22	001822	8k2 5% ½W CARBON	MULLARD	CR37	–
R23	001822	8k2 5% ½W CARBON	MULLARD	CR37	–

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.											
ECO											
DATE											
CHKD											

DATE	datron ELECTRONICS LTD	
DRAWN	TITLE 4700 MOTHER PCB ASSY	
CHECKED		
APPROVED	DRAWING NUMBER 400604	SHEET 2 OF 10
DATE		

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R24	001822	8k2 5% 1/2W CARBON	MULLARD	CR37	–
R25	063205	2M POT 3/8 SQ CERMET	BECKMAN	72P	1
R26	000104	100k 5% 1/3W CARBON	MULLARD	CR25	1
R27		NOT USED			–
R28	000103	10k 5% 1/3W CARBON	MULLARD	CR25	33
R29	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R30	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R31	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R32	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R33	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R34	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R35		NOT USED			–
R36	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R37	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R38	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R39	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R40	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R41	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R42	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R43	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R44	000473	47k 5% 1/3W CARBON	MULLARD	CR25	8
R45	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R46	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

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ECO													
DATE													
CHKD													

DATE
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DATE

datron ELECTRONICS LTD
TITLE 4700 MOTHER PCB ASSY
DRAWING NUMBER 400604
SHEET 3 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R47	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R48		NOT USED			–
R49		NOT USED			–
R50	000820	82R 5% 1/3W CARBON	MULLARD	CR25	2
R51	000820	82R 5% 1/3W CARBON	MULLARD	CR25	–
R52	000101	100R 5% 1/3W CARBON	MULLARD	CR25	1
R53		NOT USED			–
R54		NOT USED			–
R55		NOT USED			–
R56		NOT USED			–
R57		NOT USED			–
R58	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R59	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R60	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R61	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R62		NOT USED			–
R63	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R64	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R65	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R66		NOT USED			–
R67	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R68	000103	10k 5% 1/3W CARBON	MULLARD	CR25	–
R69	000473	47k 5% 1/3W CARBON	MULLARD	CR25	–

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
ECO													
DATE													
CHKD.													

DATE
DRAWN
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD
TITLE 4700 MOTHER PCB ASSY
DRAWING NUMBER 400604
SHEET 4 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
R70	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R71	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R72	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R73	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R74	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R75	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R76	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R77	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R78	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R79	000473	47k 5% 1/3W CARBON	MULLARD	CR25	—
R80	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R81	000103	10k 5% 1/3W CARBON	MULLARD	CR25	—
R82	000108	1R0 5% 1/4W CARBON	MULLARD	CR25	2
R83	000108	1R0 5% 1/4W CARBON	MULLARD	CR25	—
R84	008035	33R 5% 2½W W.W.	WELWYN	W21	2
R85	008035	33R 5% 2½W W.W.	WELWYN	W21	—
AN1	090090	47k x8 2% NETWORK	AB	761-3-47k	6
AN2	090095	47k x4 2% NETWORK	BECKMAN	L08-3-R47k	3
AN3	090090	47k x8 2% NETWORK	AB	761-3-47k	—
AN4	090095	47k x4 2% NETWORK	BECKMAN	L08-3-R47k	—
AN5	090095	47k x4 2% NETWORK	BECKMAN	L08-3-R47k	—
AN6	090090	47k x8 2% NETWORK	AB	761-3-47k	—

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

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DATE													
CHKD													

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DATE

datron ELECTRONICS LTD

TITLE 4700 MOTHER PCB ASSY

DRAWING NUMBER 400604 SHEET 5 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
AN7	090090	47k x8 2% NETWORK	AB	761-3-47k	—
AN8	090090	47k x8 2% NETWORK	AB	761-3-47k	—
AN9	090090	47k x8 2% NETWORK	AB	761-3-47k	—
AN10	090085	12k x8 2% NETWORK	AB	761-3-12k	3
AN11		NOT USED			—
AN12	090085	12k x8 2% NETWORK	AB	761-3-12k	—
AN13	090085	12k x8 2% NETWORK	AB	761-3-12k	—
C1	140045	1μF 20% 1k5V POLYPROP	NORTRONICS (MFD)	NSC2027	1
C2	180050	150μF 385V AL. ELECT	MULLARD	052-58151	4
C3	180050	150μF 385V AL. ELECT	MULLARD	052-58151	—
C4	180050	150μF 385V AL. ELECT	MULLARD	052-58151	—
C5	180050	150μF 385V AL. ELECT	MULLARD	052-58151	—
C6	104023	2n2F 20% 1kV CER DISC	ITT	HD16	2
C7	104023	2n2F 20% 1kV CER DISC	ITT	HD16	—
C8	180049	330μF 100V AL. ELECT	ECC	SMVB	2
C9	180049	330μF 100V AL. ELECT	ECC	SMVB	—
C10	110013	100nF 20% 250V POLYESTER	MULLARD	C280AE P100k	2
C11	110013	100nF 20% 250V POLYESTER	MULLARD	C280AE P100k	—

NOTES.

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DATE

datron ELECTRONICS LTD

TITLE 4700 MOTHER PCB ASSY

DRAWING NUMBER 400604 SHEET 6 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C12	104032	220pF 10% 2kV CER DISC	ITT	HD09	1
C13	102102	1nF 10% 500V CER DISC	ITT	CD10	3
C14	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C15	102102	1nF 10% 500V CER DISC	ITT	CD10	–
C16	110054	220n, 10%, 630V, POLYESTER	WIMA	MKS4	2
C17	110054	220n, 10%, 630V, POLYESTER	WIMA	MKS4	–
C18		NOT FITTED			
C19		NOT FITTED			
C20		NOT FITTED			
CN1	104033	1nF x7 20% 50V CAP NWK	SPRAGUE	470C7X7R102M5DG	3
CN2	104033	1nF x7 20% 50V CAP NWK	SPRAGUE	470C7X7R102M5DG	–
CN3	104033	1nF x7 20% 50V CAP NWK	SPRAGUE	470C7X7R102M5DG	–
CN4, CN5, CN6		NOT FITTED			
CN7, CN8		NOT FITTED			
D1	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	2
D2	200002	1A 50V GP Si DIODE	FAIRCHILD	IN4001	–
D3	200024	3A 1k3V GP Si DIODE	MOTOROLA	BY255	8
D4	200024	3A 1k3V GP Si DIODE	MOTOROLA	BY255	–
D5	200024	3A 1k3V GP Si DIODE	MOTOROLA	BY255	–
D6	200024	3A 1k3V GP Si DIODE	MOTOROLA	BY255	–
D7-D10	200024	3A 1k3V GP Si DIODE	MOTOROLA	BY255	–

NOTES.

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datron ELECTRONICS LTD

TITLE 4700 MOTHER PCB ASSY

DRAWING NUMBER 400604 SHEET 7 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
W1	209014	1A5 400V BRIDGE RECT	MICRO-ELECTRONICS	W004	1
RL1	330038	RELAY 2P N/O 2P N/C	SDS	S2-L-6V	1
L1	370024-1	COMMON MODE CHOKE 5W	SIGA	SEE DRG	1
L2	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	2
L3	370014	8μH 3A RF CHOKE	ERO	F1756-008-301	–
L4	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	2
L5	370001	10μH 0·85Ω RF CHOKE	PLESSEY	58/10/0011/10	–
	410361-1	DIODE LINK BOARD.			1
J4, J5, J7, J8, J9	605090-2	6+6 WAY PCB EDGE SKT	SEE DRG		8
	410348-2	PCB			1
	512999	7/·2 WHITE PTFE INS 1kV rms		TO BSG210 TYPE C	A/R
	560002	7/34 AWG CU. COV. STEEL CO-AX			A/R
	590031	HEATSHRINK SLEEVE Ø3·2			A/R
J19, J31, J32, J33	604042	4 WAY ·156" PLUG GD PL	MOLEX	09-72-2041	6
J2, J3, J4, J6, J7	605087-2	24+24 WAY PCB EDGE SKT	SEE DRG		13
J3, J5, J8, J9	605088-2	18+18 WAY PCB EDGE SKT	SEE DRG		6
J2, J4, J6, J7, J8, J9	605089-2	12+12 WAY PCB EDGE SKT	SEE DRG		7
J5, J7, J8, J9	605091-2	6+6 WAY PCB EDGE SKT	SEE DRG		9
J7, J8, J9	605092-2	3+3 WAY PCB EDGE SKT	SEE DRG		5
J30	605114-2	12+12 WAY PCB EDGE SKT	SEE DRG		1

NOTES.

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datron ELECTRONICS LTD

TITLE 4700 MOTHER PCB ASSY

DRAWING NUMBER 400604 SHEET 8 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	612004-1	M3 × 4mm STANDOFF	DATRON	SEE DRG	13
	612027-1	M3 × 8mm STANDOFF	DATRON	SEE DRG	10
	617010	NYLATCH PLUNGER 3/16"	HARTWELL CORP	HN3P-32-4-1	20
	617011	NYLATCH GROMMET 3/16"	HARTWELL CORP	HN3G-32-1	20
J26	620005	CLOVERLEAF PTFE INSUL.	SEALECTRO	FTE 15P59	5
	620006	SOLDER TURRET	HARWIN	H9001-01	71
	620007	TEST POINT TERMINAL	MICROVAR	TYPE C30	9
	630036	STEATITE BEAD 18 SWG	PARK ROYAL PORCELAIN	Nº 1 · (SMALL)	4
F1	920116	FUSE 1A 250V 20mm SLO-B	BELLING LEE	L2080A/1	2
F2	920116	FUSE 1A 250V 20mm SLO-B	BELLING LEE	L2080A/1	—
F3	920125	FUSE 2·5A 125V 7mm	LITTLE FUSE	275 02.5	2
F4	920125	FUSE 2·5A 125V 7mm	LITTLEFUSE	275 02.5	—
	920126	FUSE HOLDER 20mm PCB	BELLING LEE	L1426	2
J1	605111	24 + 24 WAY · 1" PCB SKT	AMP	2-141592-4	3
	612024-1	M3 X 12·7mm STANDOFF	DATRON	SEE DRG	1
	630024	STEATITE BEAD 16 SWG	PARK ROYAL PORCELAIN	Nº 2 (LARGE)	4
	630131	CAPACITOR CLIP Ø45mm	RS	543-068	1
	512000	7/0·2 PTFE INSULATED BLACK WIRE.			A/R
	512111	7/0·2 PTFE INSULATED BROWN WIRE.			A/R
	512222	7/0·2 PTFE INSULATED RED WIRE.			A/R

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
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DATE	datron ELECTRONICS LTD
DRAWN IL.	TITLE 4700 MOTHER PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400604 — SHEET 9 OF 10

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	611006	M3 × 10mm POZI-PAN STEEL	ZN PL.		1
	611016	M3 × 8mm POZI-PAN STEEL	ZN PL		1
	613005	M3 INT. SHAKEPROOF			1
	613029	M3 WAVEY WASHER SS			1
	615002	M3 FULL NUT STEEL ZN PL			2
	590001	SLEEVE. MAX. CABLE Ø3.	HELLERMANN ELECTRIC	H15 × 20mm BLK. HELSYN	2
	620003	SOLDER PIN	HARWIN	H2105A01	2

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD													

DATE	datron ELECTRONICS LTD
DRAWN IL.	TITLE 4700 MOTHER PCB ASSY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400604 — SHEET 10 OF 10

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400439	MD	4-7-85	1958	2·0	3·0
	MD	9-12-85	2061	3·0	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION	
COMP. LAYOUT.	480439	1	2·0	3·0
SCHEMATIC	430439	1	2·0	3·0
PCB	410167	–	3.0	

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APP'D	TITLE	DRAWING No.
B. JACKSON	MJD		4000 / 4200 INTERCONNECTION PCB.	400439
DATE 7-4-85	DATE 9.7.85	DATE		SHEET 1 OF 2

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	410167-3	PCB			1
	450540-1	CONNECTOR SUPPT. BRACKET			1
	450296-2	EARTH SCREEN			1
C1	101103	10nf 25% 250V CER DISC	ITT	CD10.	1
J3-J4	604033	4 CCT POLARISING WAFER	MOLEX	22-23-2041 GOLD	2
J1, J2	605002	16 WAY DIL SOCKET	CA	CA-16S-10SD	2
J27	605086	24 WAY PCB MNT RECEPTACLE	AMPHENOL	57-20240-8	1
	611004	M3X6 POZIPAN SCREW	GKN	ZINC PLATED	2
	612004	M3X4 STANDOFF 1/16" PCB	HARWIN	CS 2116-B	2
	612008	M3X6 STANDOFF 1/16" PCB	CAMBION	350-5138-09-07	2
	613029	M3 CRINKLE WASHER			2
S1	700046	SWITCH 6 POSN D.I.L S.P.S.T	AMP. OR CONTRAVES	435166-4 OR DSS-6	1
	700047	SWITCH COVER	AMP	435238-3	1
S2	700080	SP3P SLIDE P.C.B MNT	ALCO	SLS-131-PC	1
S53	700081	SPDT SLIDE P.C.B MNT	ALCO	SLS-121-PC	1
	614003	STANDOFF 3·3 CLEAR X 6mm BRASS	HARWIN	CS 2117-A	2
	900004	SILICONE RUBBER COMPOUND	RS.	544-311	A/R
	611007	M3X6mm POZI-CSK SCREW	ZN. PL.	—	2

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	B	1	2
E.C.O.	–	RELEASED	1466
DATE	5-8-81	25-3-82	11-4-83
CHKD.	–	MD	MD

DATE	datron ELECTRONICS LTD
27. 7. 81	
DRAWN JK	TITLE 4000 INTERCONNECTION P.C.B ASSY
CHECKED B. JACKSON	
APPROVED B. Jackson	
DATE 27th AUG 81	DRAWING NUMBER 400439 — SHEET 2 OF 2

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400640	RKS	25.2.86	2162	1.0	
	AP	18.7.86	2301	1.1	
	AP	24.7.86	2324	1.2	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE • REVISION		
COMP LAYOUT.	480640	1	1.0	1.1	1.2
SCHEMATIC	430640	1	1.0		
PCB	410309	—	5.0		6.0

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
B.S. JACKSON	A.K. COGGAN		4700	400640
DATE 12 FEB. 86.	DATE 25/2/86	DATE 3.3.86	TERMINAL PCB ASSY	SHEET 1 OF 3

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
C1	120037	330pF 20% 400V POLYCARB	WIMA	FKC3.	1
C2	104037	22pF 10% 2KV CER DISC	STC	HD10	2
C3	104037	22pF 10% 2KV CER DISC	STC	HD10	—
C4	104032	220pF 10% 2KV CER DISC	STC	HD10	3
C5	104032	220pF 10% 2KV CER DISC	STC	HD10	—
C6	104032	220pF 10% 2KV CER DISC	STC	HD10	—
L1	370027	47μH RF CHOKE	SIGMA	SC30-10-2533-10	2
L2	370027	47μH RF CHOKE	SIGMA	SC30-10-2533-10	—
RL1	330029	RELAY 2P2W	SDS	DS2E DC 24V	—
	400576-2	FRONT OUTPUT CABLE ASSY			2
FB1	920181	FERRITE BEAD	MULLARD	FX4029	2
FB2	920181	FERRITE BEAD	MULLARD	FX4029	—
FB3	920145	FERRITE BEAD	MULLARD	FX4026	4
FB4	920145	FERRITE BEAD	MULLARD	FX4026	—
FB5	920145	FERRITE BEAD	MULLARD	FX4026	—
FB6	920145	FERRITE BEAD	MULLARD	FX4026	—
	410309-6	P.C.B.			1
	450269-1	TERMINAL PLATE	DATRON	SEE DRAWING A4	1
	540002	22 SWG TINNED CU. WIRE			A/R
	590032	HEATSHRINK SLEEVING	4.8 Ø		A/R
	620003	SOLDER PIN	HARWIN	H2105A01	13

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS	A
ECO	
DATE	19.9.85
CHKD	

DATE	datron ELECTRONICS LTD
12 FEB 86.	
DRAWN B.S. JACKSON.	TITLE TERMINAL BOARD ASSEMBLY.
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400640 — SHEET 2 OF 3

400640.

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	400686-1	SAFETY TERMINAL ASSY. BLACK	DATRON	SEE DRAWING A4	1
	400687-1	SAFETY TERMINAL ASSY RED	DATRON	SEE DRAWING A4	1
	400688-1	SAFETY TERMINAL ASSY. BRN	DATRON	SEE DRAWING A4	1
	400689-1	SAFETY TERMINAL ASSY. BLU.	DATRON	SEE DRAWING A4	1
	400690-1	SAFETY TERMINAL ASSY. WHI	DATRON	SEE DRAWING A4	1
	400691-1	SAFETY TERMINAL ASSY. GRN.	DATRON	SEE DRAWING A4	1
	613009	M3 SOLDER TAG.			1
	613021	M4 SHAKEPROOF WASHER.			12
	613020	M4 WASHER STEEL	ZN PL		6
	613039	M2 SOLDER TAG.	ROSS COURTNEY	201002	1
	400184	EARTH BRAID ASSY	DATRON		1
	512999	7/0·2 PTFE INSUL. WHITE	WIRE		0·18M.
	521006	16/0·2 PVC INS. GRN/YLW	WIRE		A/R
	590001	SLEEVE ϕ3·0	HELLERMANN.	H15x20	7
	590006	HEATSHRINK SLEEVE	ϕ 2·4		A/R
	512444	7/0·2 PTFE INSUL. YELLOW	WIRE		0·14M
	512888	7/0·2 PTFE INSUL. GREY.	WIRE.		0·14M
	590003.	HEATSHRINK SLEEVE ϕ	6·4		A/R
	590017	HEATSHRINK CABLE MARKER	('1')		1
	590018	HEATSHRINK CABLE MARKER	('2')		1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.												
E.C.O.												
DATE												
CHKD.												

DATE	12. FEB. 86.
DRAWN	B.S. JACKSON
CHECKED	
APPROVED	
DATE	

datron ELECTRONICS LTD

TITLE: TERMINAL BOARD ASSEMBLY.

DRAWING NUMBER: 400640

SHEET 3 OF 3

DRAWING No. 400556

400556

CHK'D	DATE	ECO	REVISION / ISSUE
MD	19.3.86	2162	1·0
[illegible]	15.5.86	2242	1.1
[illegible]	30.7.86	2334	1.2
[illegible]	12.8.86	2360	1·3
[illegible]	20.8.86	2244	1.4
[illegible]	28.8.86	2352	1.4
[illegible]	3.9.86	2372	1.5
[illegible]	17.9.86	2374	1.5
[illegible]	26.9.86	2399	1.6
[illegible]	15.10.86	2428	1.7
[illegible]	4.11.86	2409	1.7
[illegible]		2465	1.8

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE · REVISION
~~COMPONENT LAYOUT~~	~~480556~~	~~1~~	~~1·0~~
COMPONENT LAYOUT	480556	1	1·0 1.1
COMPONENT LAYOUT	480556	2	1·0 1.1
COMPONENT LAYOUT	480556	3	1·0 1.1
COMPONENT LAYOUT	480556	4	1·0 1.1
INST. TEST PROC.	460556/IT	–	1·0 1.1 1.2 1.3
INST. TEST TICK LIST	470556/IT	–	1·0 1.1

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
IL.	MJD	[illegible]	4700 MAIN ASSEMBLY.	400556
DATE 8.8.85	DATE 19.3.86	DATE 19.3.86		SHEET 1 OF 3

400556

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	400446-9	4200 SINE SOURCE PCB ASSY.			1
	400663-4	4700 A.C. PCB ASSY.			1
	400618-3	4700 POWER AMP PCB ASSY.			1
	400557-1	4700 CHASSIS ASSY.			1
	400559-1	4700 DIGITAL PCB ASSY.			1
	400652-2	4700 REFERENCE DIVIDER PCB ASSY.			1
	400653-1	4700 3BV PSU. PCB ASSY.			1
	400536-3	4700 D.C. PCB. ASSY.			1
	400554-4	4200 POWER SUPPLY PCB ASSY (IN GUARD).			1
	400561-2	4200 POWER SUPPLY PCB ASSY (OUT GUARD).			1
	400648-1	4700 ANALOGUE INTERFACE PCB ASSY.			1
	400539-7	4200 PA (NEG) HS ASSY			1
	400637-1	4700 PA (POS) HS ASSY			1
	400540-6	4200 PSU/I HS ASSY			1
					1
					1
	450231-4	CARD SUPPORT BRACKET			2
	450233/M-1	4700 INSTRUCTION CARD			1
	450273-2	TOP COVER			1
	450274-2	BOTTOM COVER			1
					1

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1
ECO	RELEASED
DATE	28 SEP 84
CHKD.	MD

DATE	8. 8. 85
DRAWN	IL.
CHECKED	
APPROVED	
DATE	

datron ELECTRONICS LTD

TITLE '4700' MAIN ASSEMBLY.

DRAWING NUMBER 400556 SHEET 2 OF 3

400556

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	450400-1	MOULDED FOOT			6
	450430-2	4200 HEATSINK RETAINER			1
	410288-1	I/Ω LINK PCB			1
	510222	7/0·2 PVC INSULATED RED WIRE			A/R
	590001	SLEEVE MAX. CABLE ϕ 3·0.	HELLERMANN ELECTRIC.	H15X20. BLK.	1
	590002	SLEEVE MAX. CABLE ϕ 6·0	" "	H30X25. BLK.	1
	900016	CLEANING FLUID	RS	556-654	A/R.
	920101	BATTERY LITHIUM AA	TADIRAN	TL 2100 SOLDER TAGS	1
	611076	M3X6mm SLOT PAN STEEL	ZN PL		12
	611005	M3X12mm POZIPAN STEEL	ZN PL		13
	611007	M3X6mm POZI-CSK STEEL	ZN PL		10
	611016	M3X8mm POZI PAN STEEL	ZN PL		8
	611038	M4X12mm SKT CSK HTS.	CHEM. BLK.		16
	611058	M4X8mm POZI-CSK STEEL	ZN PL		20
	611012	M3×12mm POZI-CSK STEEL	ZN PL		6
	613005	M3 INT SHAKEPROOF	ZN PL		21
	613007	M3 WASHER STEEL	ZN PL		8
	630122	P.C.B EJECTOR BLUE	RICHCO	CBE	1

NOTES.

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ISS.													
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DATE													
CHKD													

DATE 8.8.85	datron ELECTRONICS LTD
DRAWN IL.	TITLE '4700' MAIN ASSEMBLY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400556. SHEET 3 OF 3

DRAWING No. 400557		CHK'D				
		DATE	11-3-85	13-6-86	26.9.86	
		ECO	2162	2288	2363	2465
		REVISION	1.0	1.1	1.2	1.3
		ISSUE				

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION			
COMP. LAYOUT	480557	1	1.0			1.1
COMP. LAYOUT	480557	2	1.0			
COMP. LAYOUT	480557	3	1.0	1.1	1.2	1.3
COMP. LAYOUT	480557	4	1.0			1.1
COMP. LAYOUT	480557	5	1.0			1.1
COMP. LAYOUT	480557	6	1.0			1.1
COMP. LAYOUT	480557	7	1.0			
SCHEMATIC	430557	1	1.0			
SCHEMATIC	430557	2	1.0			

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
11.	ASD	SR.	4700 CHASSIS ASSY.	400557
DATE 6.8.85	DATE 12.3.86	DATE 12.3.86		SHEET 1 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	400462-4	MAINS SWITCH CABLE ASSY			1
	400463-2	DIGITAL PSU CABLE ASSY			1
	400471-1	RIBBON CABLE ASSY			2
	400636-1	4700 REAR PANEL ASSY			1
	400604-1	4700 MOTHER PCB ASSY			1
	400558-1	4700 FRONT PCB ASSY			1
	400640-1	TERMINAL PCB ASSY	DATRON		1
	450550-1	GUARD SHEET STEEL			1
	400541-4	4200 MAINS TX ASSY			1
	400560-1	4200 IN/GU. PSU. CABLE ASSY.			1
	450467-1	FOAM GASKET.			1
	450265-4	MOULDED CHASSIS			1
	450478-1	4700 FRONT PANEL			1
	450542-1	MADE IN ENGLAND BADGE.			1
	450271-1	FILTER GRILLE			1
	450272-1	TX BOLT PLATE			2
	450277-1	FOAM FILTER			1
	450280-1	HANDLE			2
	450477-1	GUARD/EARTH SPACER WASHER.			1
	450293-1	PCB SUPPORT.			3

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	1	2	3	4	5	6	7
E.C.O.	RELEASED	1721	1771	1834	1805	1864	1880	1882	1918
DATE	28-9-84	9-10-84	11-12-84	29-1-85	15-3-85	29-3-85	13-5-85
CHKD.							

DATE 6.8.85	datron ELECTRONICS LTD	
DRAWN 11.	TITLE '4700' CHASSIS ASSEMBLY	
CHECKED		
APPROVED		
DATE	DRAWING NUMBER 400557	SHEET 2 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	450300-1	REAR SPACER			2
	450301-2	EARTH BRACKET			1
	450310-1	SIDE EXTRUSION R.H.			1
	450311-1	SIDE EXTRUSION L.H.			1
	450316-1	P.S. GUARD SCREEN			1
	450452-3	CABLE BRIDGE			1
	450406-1	40V PSU BRACKET			1
	450414-2	EARTH SHEET			2
	450415-2	GUARD SHEET ALUM.			1
	450418-1	M5 BOLT SPACER			2
	450549-1	PCB GUARD SCREEN STEEL.			1
	450431-1	4200 HEATSINK GU. SCREEN.			1
	450436-1	TRANSFORMER BOLT PLATE			1
	450446-1	PCB GUARD SCREEN ALUM			5
	450447-1	PCB EARTH SCREEN			1
	512999	7/0·2 PTFE INSUL. WIRE.	WHITE		0·08M
	510999	7/0·2 PVC INSUL. WIRE.	WHITE.		A/R
	590006	SLEEVE HEATSHRINK ϕ 2·4			A/R
	590013	STD CABLE TIE 3·6x140mm			3

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 6.8.85
DRAWN IL.
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE '4700' CHASSIS ASSEMBLY

DRAWING NUMBER 400557 SHEET 3 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	560002	CO-AX CABLE 100pf/M			0·8M
	540009	EARTH BRAID	HEAD BRAIDING LTD.		50mm
	590031	ϕ 3·2 HEATSHRINK SLEEVE			A/R
	606005	DIL SOCKET CLIP 16W	CA	CA16-200-DL	2
	611004	M3X 6mm POZI-PAN STEEL	ZN PL		34
	611008	M3X 10mm POZI-CSK STEEL	ZN PL		4
	611054	M3 X 6mm SLOT-CSK STEEL	ZN PL		1
	611015	M3X 8mm POZI-CSK STEEL	ZN PL		2
	611016	M3X 8mm POZI-PAN STEEL	ZN PL		15
	611023	M2·5X 10mm POZI-PAN STEEL	ZN PL		2
	611038	M4X 12mm SKT.C'SK HTS.	CHEM. BLK.		6
	611047	M5X 12mm POZI-CSK STEEL	ZN PL		8
	611078	M4X 12mm TAPTITE POZI-CSK	STEEL ZN PL BLACK CONV.	LANOLIN DIP	8
	611051	M8X 110mm HEX STEEL	ZN PL		4
	611045	M5X 65mm POZI-PAN STEEL	ZN PL		2
	590032	ϕ 4·8 HEATSHRINK SLEEVE			A/R.
	611006	M3X 10mm POZI-PAN STEEL	ZN PL.		1
	613005	M3 INT SHAKEPROOF			24
	613007	M3 WASHER STEEL	ZN PL		5
	613009	4BA SOLDER TAG BRASS	TIN PL		2
	613012	M2·5 WASHER STEEL	ZN PL		4
	613013	M5 WASHER STEEL	ZN PL		4
	613014	M2·5 INT SHAKEPROOF			2

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 6.8.85
DRAWN IL.
CHECKED
APPROVED
DATE

datron ELECTRONICS LTD

TITLE '4700' CHASSIS ASSEMBLY

DRAWING NUMBER 400557 SHEET 4 OF 5

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	613025	M8 WASHER STEEL	ZN PL		4
	613028	M5 INT SHAKE PROOF			2
	613029	M3 CRINKLE WASHER	S.S.		29
	613027	M2 INT SHAKEPROOF			1
	615002	M3 FULL NUT STEEL	ZN PL		4
	615007	M5 FULL NUT STEEL	ZN PL		2
	615015	M8 NYLOCK NUT STEEL	ZN PL		4
	615016	M2 FULL NUT STEEL	ZN PL		1
	617013	Ø2·4 POP RIVET DOMED HD	GEORGE TUCKER EYELET	TAP/D/33/BH	2
	630003	'P' CLIP Ø 4·8mm	SES	CN5	2
	630004	'P' CLIP Ø 6·4mm	SES	CN6	3
	630042	CABLE CLIP	RICHCO	CFCC-8	1
	630029	TAPE DOUBLE SIDED 1/4" x 1/32"	3M	4032	A/R
	630167	FOAM TAPE 6mmT x 9mmW	TESA	TESAMOLL 761/4763	A/R
	630168	POLYESTER TAPE 50mm WIDE	3M	683	A/R
	630175	PCB GUIDE	RICHCO	RCG1	2
	900009	LOCKING COMPOUND	LOCTITE	222	A/R.

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.													
E.C.O.													
DATE													
CHKD.													

DATE 6.8.85	datron ELECTRONICS LTD
DRAWN IL.	TITLE '4700' CHASSIS ASSEMBLY
CHECKED	
APPROVED	
DATE	DRAWING NUMBER 400557 — SHEET 5 OF 5

DRAWING No.	CHK'D					
400603	DATE	11-7-85	21-5-86	11-7-86	18.7.86	19.11.86
	ECO	1958	2150	2318	2301	2465
	REVISION	3-0	3-1	3-2	3.3	3.4
	ISSUE					

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION				
COMP LAYOUT.	480603	1	3-0		3-1		3.2
COMP LAYOUT.	480603	2	3-0		3-1	3-2	3.2
COMP. LAYOUT	480603	3	3-0	3-1	3-2	3.3	
COMP. LAYOUT	480603	4	3-0	3-1	3-2	3.3	3.4
COMP. LAYOUT.	480603	5				3.0	3.4
COMP. LAYOUT.	480603	6.				3.0	

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
B. JACKSON	MJD		4200/4700/4707 OPTIONS.	400603
DATE 11. JULY 85.	DATE 26.7.85	DATE		SHEET 1 OF 2

400603.

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
OPTION 30	400555-8	CURRENT PCB ASSY	DATRON.		A/R
OPTION 90.	440094-1	RACK MOUNTING KIT.	DATRON.		A/R
OPTION 42.	440117-3	REAR OUTPUT KIT.	DATRON.		A/R
OPTION 80.	440096-1	115V 60 Hz KIT	DATRON.		A/R
OPTION 20./27	400614-1	CURRENT/OHMS PCB ASSY	DATRON.		A/R
OPTION 10/17	440136-1	HIGH VOLTAGE KIT.	DATRON.		A/R

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS.	3-0
E.C.O.	1958
DATE	11-7-85
CHKD.	

DATE	11th JULY 85.
DRAWN	B JACKSON
CHECKED	MJD
APPROVED	
DATE	

datron ELECTRONICS LTD

TITLE 4200/4700 OPTIONS.

DRAWING NUMBER 400603 SHEET 2 OF 2

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400636		25.2.86	2162	0	1

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION
COMPONENT LAYOUT	480636	1	1.0

NOTES

datron INSTRUMENTS NORWICH ENGLAND

DRN	CHK'D	APPD
IL	MJO	
DATE 13.8.85	DATE 24.12.85	DATE 3.3.86

TITLE 4700 REAR PANEL ASSY

DRAWING No. 400636 SHEET 1 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	400184-2	TAG + BRAID ASSY			1
	400439-3	INTERCONNECTION PCB. ASSY	DATRON		1
	400641-1	CAL. I/O PORT CABLE ASSY	DATRON		1
	450268-6	REAR PANEL			1
	450309-2	IEEE MOUNTING SCREW			2
	450541-1	BNC ADAPTOR PLATE			1
	510333	7/·2 PVC INS (ORANGE) WIRE			550mm
	510999	7/·2 PVC INS (WHITE) WIRE			250mm
	530000	24/·2 PVC INS (BLACK) WIRE			100 mm
	530111	24/·2 PVC INS (BROWN) WIRE			110 mm
	530222	24/·2 PVC INS (RED) WIRE			120 mm
	530333	24/·2 PVC INS (ORANGE) WIRE			120 mm
	530444	24/·2 PVC INS (YELLOW) WIRE			110 mm
	530555	24/·2 PVC INS (GREEN) WIRE			130 mm
	530666	24/·2 PVC INS (BLUE) WIRE			110 mm
	530777	24/·2 PVC INS (VIOLET) WIRE			115 mm
	530888	24/·2 PVC INS (GREY) WIRE			120 mm
	530999	24/·2 PVC INS (WHITE) WIRE			110 mm

NOTES.

SEE SHEET 1 FOR LATEST ISSUE

ISS	ECO	DATE	CHKD.

DATE 22. 11. 85

DRAWN IL

CHECKED MD

APPROVED

DATE

datron ELECTRONICS LTD

TITLE 4700 REAR PANEL ASSY.

DRAWING NUMBER 400636 SHEET 2 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	590001	SLEEVE MAX. CABLE Ø3.0	HELLERMANN ELECTRIC	H15 x 20 BLK. HELSYN	3
	590029	HEATSHRINK SLEEVE. POLYOLEFIN Ø	HELLERMANN	SFM9-3BK	40 mm
	590031	HEATSHRINK Ø3.2 YELLOW			275 mm
	590005	SLEEVE MAX CABLE Ø4.0	HELLERMANN ELECTRIC	H20 x 20 BLK. HELSYN.	5
	601001	BNC 50Ω BULKHEAD SKT.	GREENPAR	GE35027S	1
	605051	4-WAY POLARISED SOCKET	MOLEX	22-01-2045	1
	605057	CRIMP TERMINAL	MOLEX	4809-GL	2
	605135	6-WAY CHASSIS MNT. 0.093" SKT.	MOLEX	03-09-1061	2
	605136	0.093" MALE CRIMP TERM. GD.	MOLEX	02-09-6123	5
	605137	0.093" FEMALE CRIMP TERM. GD.	MOLEX	02-09-5123	5
	606013	'D' CONN. JACKSCREW	T+B ANSLEY	609-004	1 PAIR
	606014	'D' CONN. JACKSOCKET	T+B ANSLEY	609-006	1 PAIR
	611005	SCREW M3×12mm STEEL	POZIPAN ZINC PLATED GKN		1
	611016	SCREW M3×8mm STEEL	POZIPAN ZINC PLATED GKN		4
	611017	SCREW M3×16mm STEEL	POZIPAN ZINC PLATED GKN		2
	611049	SCREW M4×20mm STEEL	POZIPAN ZINC PLATED GKN		4
	613005	WASHER M3 INT/SHAKEPROOF	STEEL ZINC PLATED GKN		7
	613007	M3 FLAT STEEL WASHER	ZINC PLATED GKN		2
	613009	SOLDER TAG 4BA			1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS													
ECO													
DATE													
CHKD													

DATE 22.11.85
DRAWN IL
CHECKED MD
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 REAR PANEL ASSY

DRAWING NUMBER 400636 SHEET 3 OF 4

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
	613021	M4 INT. SHAKEPROOF			4
	615002	M3 FULL NUT STEEL ZN PL			3
	615011	M4 FULL NUT STEEL ZN PL			4
	630133	HOLE PLUG ¼" BLACK	HEYCO	DP250	6
	700071	SWITCH 1POLE KEY	LORLIN		1
	900009	LOCKING COMPOUND	LOCTITE	270	A/R
	920150	FAN 119mm 115V BALL-B	REDPOINT.	RCF 162/115	1
	920086	POWER INPUT MODULE	POTTER	7100-0002	1
	920098	FUSE 3A 250V 1¼" SLO-B	LITTLEFUSE	313 003	1

NOTES

SEE SHEET 2 FOR LATEST ISSUE

ISS													
ECO													
DATE													
CHKD													

DATE 22.11.85
DRAWN IL
CHECKED MD
APPROVED
DATE

datron ELECTRONICS LTD

TITLE 4700 REAR PANEL ASSY

DRAWING NUMBER 400636 SHEET 4 OF 4

DRAWING No.	CHK'D	DATE	ECO	REVISION	ISSUE
400716.		18 Nov/86		1.0	

DESCRIPTION	DRAWING NUMBER	SHEET NUMBER	ISSUE . REVISION
COMP. LAYOUT.	480716	1	1.0
FINAL CAL TEST. PROC.	460716/FC		NR

NOTES N R = NOT RELEASED.

datron INSTRUMENTS LTD NORWICH ENGLAND

DRN	CHK'D	APPD	TITLE	DRAWING No.
B.S.J.			4705 INSTRUMENT ASSEMBLY.	400716
DATE 18 Nov. 86.	DATE	DATE		SHEET 1 OF 2

DESIGNATOR	DATRON PART No.	DESCRIPTION	PRINCIPAL MANUFACTURER	MANUFACTURER'S PART No.	No. USED Per Assy.
M18	290151-3	2532 EPROM PROGRAMMED	DATRON.	SEE DRG.	1
M19	290152-3	2764 EPROM PROGRAMMED	DATRON.	SEE DRG.	1
M20	290153-3	2764 EPROM PROGRAMMED	DATRON.	SEE DRG.	1
M21	290154-3	2764 EPROM PROGRAMMED	DATRON.	SEE DRG.	1
	400556-1	4700 MAIN ASSEMBLY.			1
	400614-1	CURRENT / OHMS ASSEMBLY.			1
	420093-3	RATING LABEL.			1
	440136-1	HIGH VOLTAGE KIT.			1
	450307-2	PACKING BOX			1
	450367-1	POLAROID			2
	450583-1	4705 OVERLAY.			1
	630109	2·5mm A/F HEXAGON KEY	UNBRAKO	2·5mm A/F	1
	630163	POLYTHENE BAG GUSSETTED.	ABBOTTS.	18"x28"x42". 500g	1
	850054-1	4705 USERS HANDBOOK			1
	850063-1	4705 SERV. HANDBOOK	VOL I		1
	850065-1	4705 SERV. HANDBOOK	VOL II		1
	850908-1	4700 IEEE CARD			1

NOTES.

SEE SHEET 2 FOR LATEST ISSUE

ISS.	ECO.	DATE	CHKD

DATE	DRAWN	CHECKED	APPROVED	DATE
18 NOV. 86.	B.S. JACKSON.			

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TITLE 4705 INSTRUMENT ASSY.

DRAWING NUMBER 400716 SHEET 2 OF 2