

	No.	Part / Value	Attributes	Designation	Note	Rapid Electronics					
						Code	Unit Price	Total			
Main Board											
Capacitors	2	33p	RAD0.2	C1,C2	ceramic disc	080-050	0.05	0.10			
	3	10uF	RB.1/2	C3, C7, C15	elect. 16v	110-825	0.05	0.15			
	1	150p	RAD0.2	C4	ceramic disc	080-150	0.05	0.05			
	1	10n	RAD0.2	C5	poly	103-210	0.07	0.07			
	7	100n	RAD0.2	C6,C8,C9,C10,C11,C14	ceramic disc	080-235	0.06	0.42			
	1	1000uF	RB.2/4	C13	elect. 16v	110-290	0.11	0.11			
Resistors	3	220R	AXIAL0.3	R1,R4,R5		* see notes					
all 0.6W	1	1k	AXIAL0.3	R2		* see notes					
	1	1k5	AXIAL0.3	R3		* see notes					
	4	150R	AXIAL0.3	R6,R7,R8,R9		* see notes					
	4	100R	AXIAL0.3	R10,R11,R12,R13		* see notes					
	5	4k7	AXIAL0.3	R14,R15,R16,R17,R22		* see notes					
	3	10k	AXIAL0.3	R18,R21,R26		* see notes					
	2	10R	AXIAL0.3	R19, R27		* see notes					
	2	22k	AXIAL0.3	R20,R25		* see notes					
	2	22R	AXIAL0.3	R23,R24		* see notes					
	1	10k hor. preset	VR-PRESET	VR1		670-130	0.08	0.08			
Diodes	1	5V6 zener	DIODE0.4	D1	optional	473-016	0.06	0.06			
	4	1N4148	DIODE0.3	D2,D3,D4,D5		473-308	0.04	0.16			
	1	1N4001	DIODE0.4	D6		473-130	0.04	0.04			
ICs	1	T89C51RD2	DIP40	U1	supplied with PCB						
	2	62256	DIP28	U2,U3		n/a			334-5919	4.16	8.32
	1	74HC573	DIP20	U4		830-152	0.45	0.45			
	2	74HC138	DIP16	U5,U8		830-084	0.28	0.56			
	1	DS1210	DIP8	U6		820-516	4.7	4.70			
	4	74HC574	DIP20	U7,U10,U11,U15		830-154	0.45	1.80			
	1	74HC245	DIP20	U9		830-124	0.32	0.32			
	2	74HC241	DIP20	U12,U13		830-120	0.45	0.90			
	1	ADC0804	DIP20	U14		820-474	2.95	2.95			
	1	4051B	DIP16	U16		830-384	0.36	0.36			
	1	6N139	DIP8	U17		580-602	0.65	0.65			
	1	7805	TO-220	U18		473-290	0.32	0.32			
	2	BC547B	TO-92B	Q1,Q2		810-064	0.07	0.14			
Misc	1	500ma FUSE	AXIAL0.2	F1	electronic fuse - optional	264-610	0.6	0.60			
	3	3 PIN CONN	SIP3	J1,J6,J7		220-955	0.11	0.33			
	1	4 PIN CONN	SIP4	J8		220-960	0.13	0.13			
	4	16 PIN CONN	IDC16	J2,J3,J4,J5		190-510	0.35	1.40			
	1	18 MHZ	XTAL1	XTAL1		n/a			639-540	1.14	1.14
	1	CR2032		VB		180-386	0.85	0.85			
	1	PCB CELL HOLDER				180-498	0.4	0.40			
	1	TO220 Heatsink				360-280	0.35	0.35			

Switch/LED									
Diode	16	DIODE	1N4148	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16		473-308	0.04	0.64	
	16	LED	TRI-COLOUR LED	D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32	common cathode, 3 pin tri-colour (red/green)	550-170	0.11	1.76	
Misc	1	CONN	IDC16 RA	J1	right angled	190-560	0.44	0.44	
	16	KEYSWITCH		S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16		* see notes			
Keypad									
Diode	9	DIODE	1N4148	D1, D2, D3, D4, D5, D6, D7, D8, D9		473-308	0.04	0.36	
Misc	1	CONN	IDC16	J1		190-510	0.35	0.35	
	9	KEYSWITCH		S1, S2, S3, S4, S5, S6, S7, S8, S9		* see notes		0.00	
Function									
Diode	4	Red LED		D1,D3,D5,D7		550-102	0.07	0.28	
	4	Yellow LED		D2,D4,D6,D8		550-110	0.09	0.36	
	2	1N4148		D9,D10		473-308	0.04	0.08	
Misc	2	KEYSWITCH		S1,S2	multimec tact switch	780-655	0.75	1.50	
	1	Switch cap - red		for S1	10mm circular cap	780-675	0.16	0.16	
	1	Switch cap - blue		for S2	10mm circular cap	780-665	0.16	0.16	
	1	CONN	IDC16	J1		190-510	0.35	0.35	
	1	CONN	SIP2	J2		220-950	0.07	0.07	
Pot Boards * all designations duplicated on upper and lower boards									
Resistor	32	10k linear	16 mm pot	VR1, VR2, VR3, VR4, VR5, VR6, VR7, VR8, VR9, VR10, VR11, VR12, VR13, VR14, VR15, VR16		650-715	0.38	12.16	
Capacitor	4	100n	RAD0.2	C1, C2	ceramic disc	080-235	0.06	0.24	
IC	4	4051	DIP16	U1, U2		830-384	0.36	1.44	
Misc	2	CONN	IDC16 RA	J1	right angled	190-560	0.44	0.88	
	8	Red knob				320-450	0.08	0.64	
	8	Blue knob				320-465	0.08	0.64	

