1222 Performance VCO BOM 1.0					
Designator	Package	Quantity	Designation	Supplier and ref	
C4,C6	Ceramic Capacitor	2	1nf	https://www.rapidonline.com/suntan-ts15001h102ksbpa0r-1nf-10-50v-y5p-2-5mm-ceramic-disc-capacitor-08-0200	
C7	Ceramic Capacitor	1	10nf	https://www.rapidonline.com/suntan-ts15001h102ksbpa0r-1nf-10-50v-y5p-2-5mm-ceramic-disc-capacitor-08-0200	
C1,C2,C3,C5,C10,C11,C12,C16	Ceramic Capacitor	8	100nf	https://www.rapidonline.com/suntan-ts15001e104msbfbor-100nf-20-25v-5mm-y5v-ceramic-disc-capacitor-08-0235	
C8,C9,C15	Electrolytic Capacitor	3	10uf	https://www.rapidonline.com/forever-10uf-20-16v-85-c-7mm-micro-miniature-radial-aluminium-electrolytic-11-0825	
D1,D2,D3	3mm LED's 2 red 1 green, or whatever its up to you!	3	LED	https://www.rapidonline.com/kingbright-l-424hdt-3mm-2-25v-red-led-cylindrical-56-0300	
DS1	display! SC56-11EWA	1	SC56-11EWA	https://www.rapidonline.com/kingbright-sc56-11ewa-14-2mm-high-efficiency-red-led-display-cathode-57-0127	
R27	Resistor (preferable metal film 0.25W)	1	100R	https://www.ebay.co.uk/itm/1280pcs-Metal-Film-Resistors-Assortment-Kit-Set-64-Values-1-10M-ohm-1-4W-UK/372820956458?_trkparms=aid%3D555018%26algo%3DPL.SIM%26ao%3D1%26asc%3D20131003132420%26meid%3	
R42 CHECK BOTTOM OF PAGE	Resistor (preferable metal film 0.25W)(CHECK BOTTOM FOR R42INFO)	1	220R		
R2,R7	Resistor (preferable metal film 0.25W)	2	470R		
R6	Resistor (preferable metal film 0.25W)	1	680R		
R10,R36	Resistor (preferable metal film 0.25W)	2	1K		
R8	Resistor (preferable metal film 0.25W)	1	1.8k		
R28,R29,R30,R31,R32,R33,R34,R35,R37,R38,R39	Resistor (preferable metal film 0.25W)	11	2K		
R15	Resistor (preferable metal film 0.25W)	1	4k7		
R5	Resistor (preferable metal film 0.25W)	1	5K6		
R3	Resistor (preferable metal film 0.25W)	1	24K		
R9	Resistor (preferable metal film 0.25W)	1	10k/47k		
R14,R19,R22,R23,R24,R25	Resistor (preferable metal film 0.25W)	6	100K		
R11,R12,R13,R20	Resistor (preferable metal film 0.25W)	4	470K		
R1,R26	Resistor (preferable metal film 0.25W)	2	1M		
R4	Resistor (preferable metal film 0.25W)	1	1M5		
R16,R18,R21,R17	Resistor (preferable metal film 0.25W) precision.. watch vid	4	10k	https://www.rapidonline.com/arcol-mra0207-10kbta15-10k-0-1-15ppm-precision-metal-film-resistor-63-2305	
RV1	Potentiometer_Vertical preset pot	1	10k Vertical Preset Pot	https://www.rapidonline.com/suntan-tsr-3296w-103r-10k-wr3296w-10-3-8-cermet-trimmer-pot-68-1946	
RV3,RV6	Potentiometer_Vertical preset pot	2	100k Vertical Preset Pot	https://www.rapidonline.com/suntan-tsr-3296w-104r-100k-wr3296w-10-3-8-cermet-trimmer-pot-68-1949	
RV8	Potentiometer_Vertical preset pot	1	20k Vertical Preset Pot	https://www.rapidonline.com/suntan-tsr-3296w-203r-20k-wr3296w-10-3-8-cermet-trimmer-pot-68-1947	
RV2,RV4,RV5,RV7	Potentiometer_pcb mount style I use 6.35mm round shaft, up to you	4	Potentiometer B100k Linear	https://www.thonk.co.uk/shop/alpha-9mm-pots/	
U1	14 pin IC quad opamp	1	TL074	https://www.rapidonline.com/Catalogue/Search?Query=tl074&Size=20	
A1	Arduino_Nano , linked is a real one, you can get away with a cheap one	1	ARDUINO NANO	https://www.rapidonline.com/arduino-nano-a000005-board-v3-73-4448	
U2	8 pin IC dual opamp	1	TL072	https://www.rapidonline.com/Catalogue/Search?Query=tl072&Size=20	
U3	16 pin IC VCO chip read more on my site page on this matter	1	AS3340/CEM3340	https://www.thonk.co.uk/shop/curtis-cem3340-ic-vco-chip/	
U5	TO-220 package 5v voltage regulator	1	L7805	https://www.rapidonline.com/st-l7805cv-5v-1a-voltage-regulator-47-3290	
U4	TO-92_Inline_Wide precision voltage regulator	1	LM4040AIZ 4.1	https://www.ebay.co.uk/itm/Texas-Instruments-LM4040AIZ-4-1-NOPB-Fixed-Shunt-Voltage-Reference-4-1V-0-1/113344333366?hash=item1a63d94636:g:OBsAAOSwxy5cXARo	
R40,R41	Ferrite cores, if you aint fussy like me just use some wire!	2	FERRITE	https://www.rapidonline.com/murata-bl01rn1-a62-axial-ferrite-bead-inductor-26-4860	
J1	Multicomp_MC9A12-1034_2x05_P2.54mm_Vertical	1	POWER INPUT	https://www.rapidonline.com/truconnect-10-way-idc-straight-boxed-header-2-54mm-pitch-19-0033	
J11	PinHeader_1x12_P2.54mm_Vertical	1	PCB INTERCONNECT MAIN	https://www.rapidonline.com/truconnect-single-row-header-36-way-pcb-plug-22-0545	
			And	https://www.rapidonline.com/truconnect-10-way-single-row-pcb-socket-2-54mm-pitch-19-0085	
J12	Multicomp_MC9A12-1034_2x05_P2.54mm_Vertical	1	LINK	https://www.rapidonline.com/truconnect-10-way-idc-straight-boxed-header-2-54mm-pitch-19-0033	
J13	Molex connector (or just solder wire directly) for rotary switch	1	Conn_01x06_Male	https://www.rapidonline.com/molex-22-27-2061-6-way-2-54mm-kk-straight-header-22-0846	
				https://www.rapidonline.com/molex-22-27-2061-6-way-2-54mm-kk-straight-header-22-0846	
				https://www.rapidonline.com/rvfm-ht-225d-ratchet-action-crimp-tool-ht225d-85-0262	
				https://www.rapidonline.com/jyk-h2500-06-6-pole-crimp-housing-22-0925	
Rotary switch	12 Way Rotary Switch single pole	1	Octave	https://www.rapidonline.com/taiwan-alpha-sr2611f011238f5bdnl-break-before-make-rotary-switch-1-pole-12-way-79-0220	
M3 bolt 20mm and nut	This is to add rigidity	1			
Knobs				https://www.rapidonline.com/sci-rn-117b-arrow-control-knob-23mm-32-0250	
				https://www.rapidonline.com/sci-rn-114b-arrow-control-knob-37mm-32-0120	
Ic sockets				https://www.rapidonline.com/-tube-34-truconnect-14-pin-dil-socket-7-62mm-no-central-support-tube-22-0108	
				https://www.rapidonline.com/-tube-60-truconnect-8-pin-dil-socket-7-62mm-no-central-support-22-0107	
				https://www.rapidonline.com/-tube-30-truconnect-16-pin-dil-socket-7-62mm-no-central-support-22-0109	
				https://www.rapidonline.com/-tube-15-truconnect-32-pin-dil-socket-15-24mm-no-central-support-22-0116	
Power cable	A video on how to make them to come			https://www.thonk.co.uk/shop/eurorack-power-cables/	
Jack sockets	Switch craft or truconnect			https://www.rapidonline.com/truconnect-3-pole-box-style-jack-socket-20-1397	
A QUICK NOTE! R42	It has been suggested to put a 1K resistor in place of R42 220r so if you can! Please put in a 1k				
	If you have the latest board this change has been made for you!				