Lil' Mono Synth (Sebastian Jazura / 2022)

Qty Value	Parts	Package	Description	Notes
2 100	C6, C11	000_4MM_CAP_STANDARD	POLARIZED CAPACITOR	
1 303	C13	000_4MM_CAP_STANDARD	POLARIZED CAPACITOR	Envelope Generator Timing Cap
3 100N	C10, C14, C15	000_5MM_DISC_STANDARD	CAPACITOR	
1 33P	C12	000_5MM_DISC_STANDARD	CAPACITOR	
1 10N	C4	000_7,5MM_F0IL_STANDARD	CAPACITOR	
3 220N	C1, C5, C9	000_7,5MM_F0IL_STANDARD	CAPACITOR	
2 33N	C7, C8	000_7,5MM_FOIL_STANDARD	CAPACITOR	
1 4N7	C2	000_7,5MM_FOIL_STANDARD	CAPACITOR	
10 100K	R1, R4, R11, R16, R21, R24, R25, R27, R33, R34	000_7,5MM_STANDARD	RESISTOR	*1
6 10K	R2, R18, R19, R23, R26, R41	000_7,5MM_STANDARD	RESISTOR	
1 1K	R22	000_7,5MM_STANDARD	RESISTOR	
1 1K5	R7	000_7,5MM_STANDARD	RESISTOR	
2 1M	R15, R42	000_7,5MM_STANDARD	RESISTOR	
1 22K	R40	000_7,5MM_STANDARD	RESISTOR	
1 2M2	R3	000_7,5MM_STANDARD	RESISTOR	2M2 gives you around a semitone of fine tuning
2 330K	R36, R37	000_7,5MM_STANDARD	RESISTOR	
1 33K	R39	000_7,5MM_STANDARD	RESISTOR	
1 470K	R12	000_7,5MM_STANDARD	RESISTOR	
5 47K	R9, R10, R13, R14, R30	000_7,5MM_STANDARD	RESISTOR	
2 4K7	R31, R35	000_7,5MM_STANDARD	RESISTOR	
156K	R38	000_7,5MM_STANDARD	RESISTOR	
15K6	R17	000_7,5MM_STANDARD	RESISTOR	
1 75K	R29	000_7,5MM_STANDARD	RESISTOR	
1820K	R8	000_7,5MM_STANDARD	RESISTOR	
1820R	R32	000_7,5MM_STANDARD	RESISTOR	Not pooded
1 R NTC	RNTC	000_7,5MM_STANDARD	RESISTOR	Not needed
178L09	IC4	000_78LXX_STANDARD	VOLTAGE REGULATOR	Sub miniatural
1 100U 3 1N4148	C3	000_7MM_CAP_STANDARD	POLARIZED CAPACITOR DIODE	Sub miniature!
3 1 1 4 1 4 8	D1, D7, D8 JP1	000_MOD_7MM_BAT_4148 1X02	PIN HEADER	DC jack (NEBJ21C) connected to those pins
1 500K (log		9MM_SNAP-IN_POT	9mm vertical snap-in pot	ATTACK
1 100K (10(VR1	9MM_SNAP-IN_POT	9mm vertical snap-in pot	COARSE
1 100K	VR8	9MM_SNAP-IN_POT	9mm vertical snap-in pot	CUTOFF
1 100K	VR10	9MM_SNAP-IN_POT	9mm vertical snap-in pot	CVAMT
1 100K	VR2	9MM_SNAP-IN_POT	9mm vertical snap-in pot	FINE
15K/10K	VR5	9MM_SNAP-IN_POT	9mm vertical snap-in pot	PEAK
1500K (log		9MM_SNAP-IN_POT	9mm vertical snap-in pot	RELEASE
1 100K	VR9	9MM_SNAP-IN_POT	9mm vertical snap-in pot	SUBOSC
1 100K (log		9MM_SNAP-IN_POT	9mm vertical snap-in pot	VOLUME
1 NE5532	IC7	DIL08	Generic Dual Op Amp	1025 <u>.</u>
4 TLC272	IC2, IC3, IC5, IC6	DIL08	Single Supply Dual Op Amp	Can be replaced with the cheaper LM358
1 HEF4046N		DIL16	NXP/PHILIPS	*2
1Z12V	D5	D034Z7	Z DIODE	_
2 BAT85	D2, D4	D041-7.6	1.0A SCHOTTKY BARRIER RECTIFIER	
12.0-Vf	LED1	LED5MM	LED	LED with around 2.0V Forward Voltage
1 DRONE	S2	M9040P	TOGGLE SWITCH	
1 NTC	R5	640-10K	VISHAY NTC	B25/85: 3977K
11K	VR4	RTRIMT93YA	Trimm resistor	
1BS250	Q1	S0T54E (T092)	P-CHANNEL MOS FET	Other TO92 p-channel mosfets will work too
3 BC547B	T1, T4, T5	T092-CBE	NPN Transistror	, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1BC557B	T2	T092-EBC	PNP Transistror	
1 GATE	U\$5	WQP-PJ301M-12_JACK	THONKICONN	
1 OUT	U\$2	WQP-PJ301M-12_JACK	THONKICONN	
1V/OCT	U\$1	WQP-PJ301M-12_JACK	THONKICONN	
1VCFCV	U\$6	WQP-PJ301M-12_JACK	THONKICONN	
1			1590BB enclosure	
320-25MM			M3 screw / nut / washer / 10mm standoff	
8			Knobs	
	I .	L		I .

^{*1} Use a bit lower value for R24 if you get a ,dead spot' on the lowest cut off setting
*2 Needs to be NXP/PHILIPS! Those are obsolete if you can't find them you can use NXP SOIP version with an adapter. Usually you find the obsolete ones at ebay