

PCLONE2

Thank you for buying this kit! PCLONE2 is an analog percussion synthesizer based closely on the original schematics of the Boss PC-2 (which was also sold as Amdek PCK100).

PCLONE2 is a treasure trove of analog bleeps and bloops, and is designed to be easily modified with three sockets ready for CV inputs (a set of easy mods are documented online)

This kit is of medium complexity. While this sheet contains all the information needed to know which component goes where, I really recommend that you follow the expanded online instructions, complete with build photographs, that you can find at <https://six4pix.com/product/pclone2>

I hope you have fun building and using this kit. If you have any problems, you can email me at sixtyfourpixels@gmail.com and I will try to assist.

Cheers
Jason

Component Designators

| | |
|---|-------------------------------------|
| R37 | 330r Resistor |
| R6, R7, R17, R21 | 1k Resistor |
| R14, R20, R22, R44 | 4k7 Resistor |
| R15 | 10k Resistor |
| R13, R26, R27, R39, R43 | 22k Resistor |
| R8, R19 | 33k Resistor |
| R1, R2, R4, R5, R23, R28, R29, R33, R34, R38, R41, R42 | 47k Resistor |
| R18 | 56k Resistor |
| R9, R11, R12, R24, R25, R30, R31, R35, R36, R40 | 100k Resistor |
| R32 | 220k Resistor |
| R10 | 1M Resistor |
| R16 | 4M7 Resistor |
| (pre-soldered surface mount) | 470R Resistor |
| R45 | 10k Trimmer Pot |
| D1 | 1N5817 Schottky Rectifier Diode |
| D2, D3, D4 | 1N4148 Small Signal Diode |
| C1, C2, C6 | 47nF Polyester Box Capacitor |
| C13 | 22nF Polyester Box Capacitor |
| C16 | 3.3nF Polyester Box Capacitor |
| C4, C5, C7, C15 | 1nF Polyester Box Capacitor |
| C3, C11, C12 | 1uF/50V Electrolytic Capacitor |
| C8 | 2.2uF/50V Electrolytic Capacitor |
| C9 | 10uF/16V Electrolytic Capacitor |
| C10, C14 | 100uF/16V Electrolytic Capacitor |
| PWR | 3mm LED |
| Q1, Q2 | 2SC945P NPN Transistor |
| Q3, Q4 | 2N3906 PNP Transistor |
| Q5, Q6 | 2N3904 NPN Transistor |
| IC1 . | RC4558 Dual Op-Amp DIP8 + Socket |

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| IC3, IC4, IC5 | LM2904 Dual Op-Amp DIP8 + Socket |
| IC6 | BA6110 Single Op-Amp SIP9 |
| HEADER 1 | Six pin female single-in-line 2.54mm pitch |
| HEADER 2 | 23 pin female single-in-line 2.54mm pitch |
| SENSIVITY, PITCH, RATE, DEPTH | 100K Logarithmic Potentiometer + Knob |
| DECAY | 1M Logarithmic Potentiometer + Knob |
| SWEEP | 470R Linear Potentiometer + Knob |
| CLICK, VCO WAVE, MOD WAVE | SPDT Toggle Switch |
| SWEEP DIR | DPDT Toggle Switch |
| TRIG. CV1*, CV2*, CV3*, OUT | Panel Mount 3.5mm Switched Mono Jack Socket (* unconnected, ready for mods) |
| 9VDC IN | 2.1mm Power Socket |
| PIEZO DISC | With adhesive foam pads |
| HOOKUP WIRE | Insulated wire Uninsulated tinned copper wire |
| ACRYLIC CASE PANELS | Top panel Bottom Panel 1 x 3mm front panel 1 x 3mm rear panel with hole for power socket 2 x 3mm side panels 2 x 5mm side panels Printed faceplate |
| CASE FIXINGS | 4 x 11mm M3 standoff 6 x 8mm M3 hex head machine screw 4 x 12mm M3 hex head machine screw 4 x M3 pozi head machine screw. 4 x M3 nylon washer 4 x M3 flanged nut, 2 x M3 hex nut, 4 x self adhesive rubber feet |
| MAIN PCB | |
| PANEL PCB | With attached surface mount headers |



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Handmade in Brighton, UK